Best Knowledge-Intensive Business Intranets 2001–2018

37 Case Studies of Award-Winning Intranets from Consulting Companies, Design Agencies, Publishers, Pharmaceutical and Biotech, and Other Research-Driven or Knowledge-Focused Organizations, Reprinted from the *Intranet Design Annuals*

By Kara Pernice, Amy Schade, Jakob Nielsen, Patty Caya, Mathew Schwartz, and Candice Goodwin

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Nielsen Norman Group

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The research for this report was done in from 2001 to 2017, but the majority of the advice may still be applicable today, because people and principles of good design change much more slowly than computer technology does. We sometimes make older report editions available to our audience at no cost, because they still provide interesting insights. Even though these reports discuss older designs, it's still worth remembering the lessons from mistakes made in the past. If you don't remember history, you'll be doomed to repeat it.

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About This Report

Many the winners of Nielsen Norman Group's annual design competition for intranets with great usability came from knowledge-intensive companies. This makes sense, because knowledge workers are highly paid, providing a high return on investment for improved intranet usability. Knowledge workers also demand the best support tools, and so will tend to push for better intranets.

The current report presents the case studies of winning intranets from the knowledge-intensive sector since the first *Intranet Design Annual* in 2001. Of course, some of these profiles are fairly old by now, and the winning intranets have been redesigned and don't look like the screenshots in their write-ups anymore. But even the oldest winners still contain many good ideas that the vast majority of intranets today would do well in emulating. And the war stories of what it took the winning teams to persevere and get a great design done certainly continue to ring true today, as they will ten years from now.

Note that software development companies are covered in our report on the technology sector, even though such companies are certainly also highly knowledge-intensive.

THE WINNERS

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2018

- Archer Malmo
- GSK

You can find the *Intranet Design Annual* for the current year at http://www.nngroup.com/reports/intranet-design-annual/

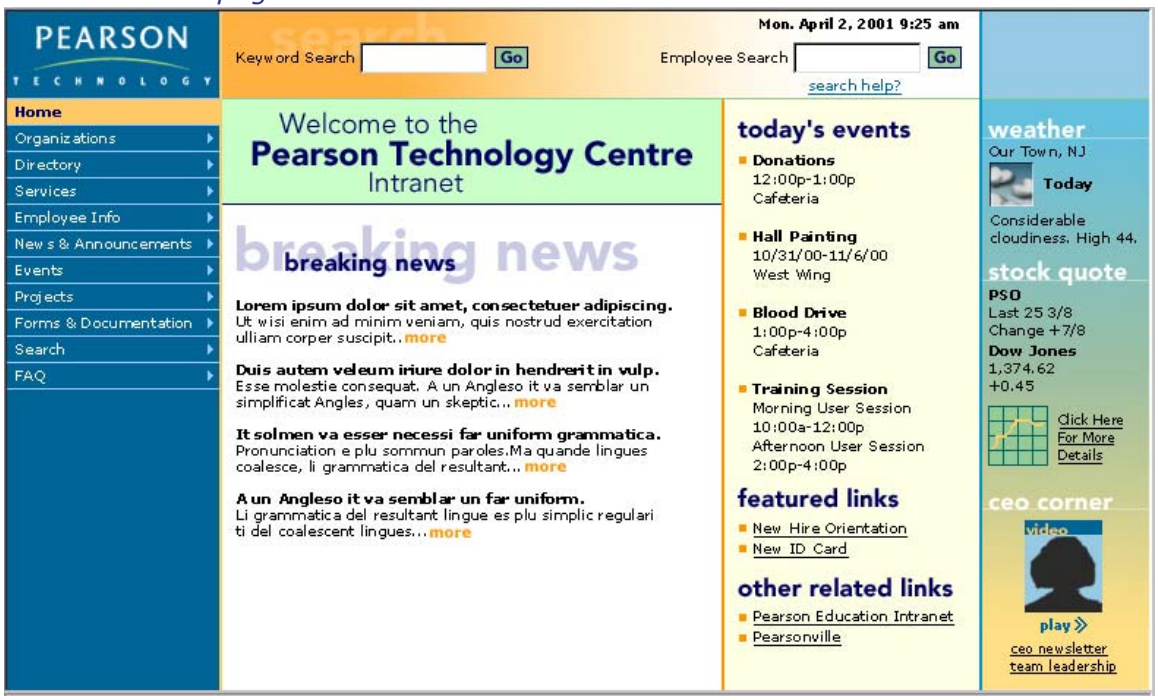
Past *Intranet Design Annuals* available at https://www.nngroup.com/reports/past-intranet-design-annuals/

Pearson Technology Centre

Pearson PLC is an international media company providing education, strategic business information, international television production, and consumer publishing products, including Penguin Books and the U.K.'s *Financial Times*. The Pearson Technology Centre is the focus for technology resources and expertise across the Pearson companies.

DESIGN TEAM:
Electronic Ink

Pictured: homepage



SUMMARY

To achieve this usable design, the Electronic Ink team collected usability data and employed a systematic, four-stage development methodology: Inform, Discover, Design, and Develop. Their achievement was no small feat, as PTC's existing organizational culture and politics were initial barriers to creating a central design. In design discussions, the team realized that the previous site design was difficult to use because it was arranged by organizational structure, rather than technology services. Thus, users needed to be very familiar with each group's particular services in order to locate the service they needed.

We often see this exact issue and similar issues in our Internet website reviews, where different parts of the site are obviously designed by different teams, and organizational politics dictate the overall website structure. In this situation, the designers succeeded in persuading all 16 service groups that a single, simple design would surpass their many unique offerings.

This site does an admirable job pushing current information to the users, as exemplified by the *Today's Events, Stock Quotes,* and *Weather* sections. The navigation is straightforward, with well-named headings in the navigation bar on the left side. Also, the area currently selected is clearly denoted by a prominent color change. Breadcrumbs help users note their history and jump back to previously visited pages. Also, both the site search and employee search are clearly presented and always visible.

The *Organizations* section of the site is (what else?) very organized. Starting with the group name and the group leader's name and picture really personalizes the information — far better than the traditional org chart boxes.

Pictured: Organizations *section*

The navigation items are labeled well, which makes it easy to make the right choices. The site does use too many cascading menus, however, which can be tedious to navigate, especially for users with low vision or motor skill issues.

Scoring

Simple look	Simple navigation	Consistent navigation across pages	Visible search bar (or button)	Simple search	Limited (and well-presented) page text	Clear labels	Clear links (name and marks)
3	1.5	2	2.5	2.5	2	2	1.5

INTRANET

The intranet contains information about PTC services. Typical tasks carried out on the intranet include searching for and requesting services, sharing technical information and IT project metrics and data, and finding general company information.

BACKGROUND

In 1996, PTC launched an intranet to provide employees with information about the center's services. The intranet failed to attract enough users, however, and the information in it gradually become outdated. Furthermore, service groups were free to publish content using any tools they liked, with results ranging from basic layouts created with FrontPage to quite elaborate designs. The head of PTC wanted to replace the outdated site with a consistent, well-designed, up-to-date site that would provide true value to the company and promote PTC's offerings to existing and new Pearson staff.

GOALS AND CONSTRAINTS

One major goal was to create a redesigned intranet with a coherent look and feel that would both unify PTC's diverse groups and be used by employees on a daily basis. A second goal was to give content providers a content management tool to help them keep content up-to-date and consistent with style guidelines. To achieve these goals, designers needed to carefully consider the political issues involved. The 16 service groups that contributed content to the PTC intranet were used to having complete control over their information. The design team had to persuade them of the value of centrally agreed-upon design standards. "The service groups were used to doing their own thing; they felt pride and uniqueness in what they were offering," says Jenny Smith, human factors director of Electronic Ink.

PTC wanted the project completed on a fairly short deadline, with just nine months between the September 2000 start date and going live in May 2001. From a design point of view, Pearson had an established identity and logo that had to be integrated with the site's overall aesthetic. The company browser standard was IE 5.0 and above.

PROCESS

Electronic Ink uses a four-stage development method. The first stage, Inform, involves spending time getting to know the client's business, strategy, and design requirements. During the Discover stage, the team talks to the system's target audience to find out what they need and want, and to tease out any new business opportunities the intranet could support. Then, in the Design stage, the team designs the site, and finally, in the Develop stage, it builds and implements it.

USABILITY

During the first stage, which lasted about two weeks, Electronic Ink talked to the vice president of Pearson's e-commerce/e-business division and the site's prospective webmaster and developers. The Pearson team already had some ideas for changing the site based on its own "town hall" survey.

In the second stage, which lasted about a month, Electronic Ink set up a series of interviews with a total of 36 employees, representing a range of users, including end users and representatives of Pearson's 16 content provider groups. The designers then held a two-day brainstorming session.

The most important finding from these meetings was that the previous site didn't work well because it was based on the group's organizational structure rather than technology services. "You really had to know the groups well in order to locate the services you needed," says project manager Kate Fierce. "If you were new to the company, or from a subsidiary it had recently acquired, you didn't know who to call or how to get the information." A decision was made to design the site around services, but also to give users the option of browsing the old organizational model as they had previously done.

Following these discussions, Electronic Ink spent two weeks developing a site map (which it calls a "product map"), showing the site's information hierarchy and the links between the different levels. Using the product map as a foundation, it spent a further three weeks building a series of structural designs (which it calls "wire-frames") in PDF format. These showed the pages' shell and structure, the knowledge hierarchy, and the type of language that would be used, but without such elements as color, specific typefaces, or graphics.

These structural designs were then taken to five end users representing a cross-section of the company and tested in a series of structured walkthroughs, using typical tasks identified in the initial interviews. The tasks ranged from looking up information about the company's dental benefits plan to checking out the canteen menu. Users were also asked to verify the language used on the "wire-frame" prototype pages. For example, the team asked the users about the type of information they'd expect to find behind specific labels.

At this stage, Electronic Ink also gave a presentation to the content provider groups to sell them on the idea of a site structured by services rather than by organizational division.

The wire-frame designs formed the basis for the aesthetic page designs, which were presented to the client in four stages. The first stage was to show the client a selection of three concept boards, which design director Sandy Greene describes as "visual experiments to capture the essence of a company brand." These were presented both on screen and on paper (for easy comparison) and represented three possible visual flavors for the site.

The team then used the client's preferred concept to create the initial page layouts, which they refined in three further stages.

An important part of the project was to build a template-driven content publishing system and an associated content management solution. Together, these would let various PTC content managers (who had varying technology skills) maintain more than 300 unique intranet pages. "We have users ranging from people who know nothing about anything apart from writing prose, to developers who can write code," Sandy explains.

Electronic Ink realized that usability was key to ensuring that the CMS met its goals. "One reason the old site was not widely used was that it wasn't kept current," points out Greg Picarelli, Electronic Ink's technology director. "So our human factors team looked at the language and instructions very carefully. We paid a lot of attention to making sure the content management tool was not intimidating and to ensure that the jargon of people who use those tools all the time was not creeping in."

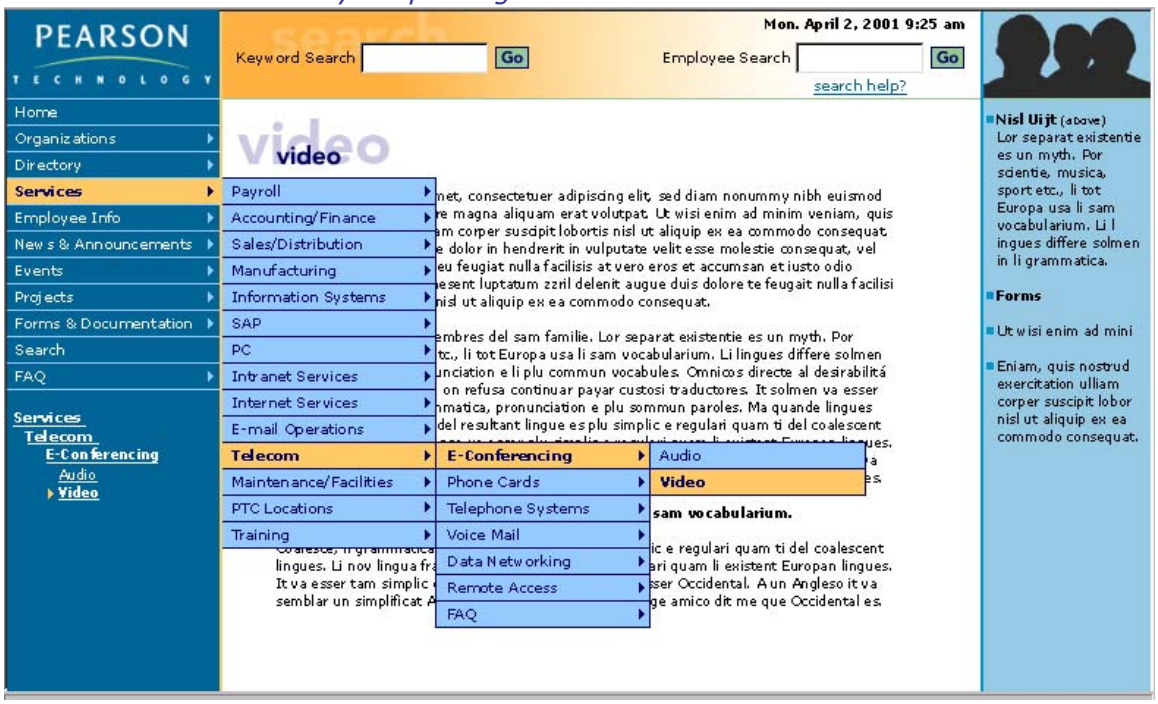
DESIGN

The final design is understated and functional. Pearson had a number of existing design standards covering colors, typography, and so on, but they were basically print-based and had to be adjusted for Web presentation. "For example, we had to enlarge the 'technology' part of the Pearson logo, which was originally in four to five point type that wouldn't show up well on screen," says Sandy. "The subtle pastel-like colors Pearson used in its printed material didn't hold in this medium, so we had to work with the saturation and contrast. We had to create some totally new elements, like the headlines the *Breaking News* section."

The homepage includes real-time information such as weather and stock prices to draw users to the site. "Part of our user study was to find out what kind of information would be of value on the homepage," Sandy says.

One of the design issues was to make it easy for users to navigate through the site's voluminous content. Exploding menus let users see the total content of each site section in a single mouse movement.

Pictured: a hierarchically "exploding menu"



The bold, underlined white links beneath the left-hand navigation function as a breadcrumb trail that appears as soon the user navigates to a sub-section of the site, showing the user's location on the site. All parts of the trail were clickable so that users could jump back through the trail.

To make it easy for employees to publish content that fits with the site design, there are 16 different templates aimed at different types of information. These create consistency across groups while still being flexible enough to accommodate individual group identities. To enhance the feeling of ownership and identity, Electronic Ink also created zones of information where employees could post any information they

wanted, including their own imagery. "The right-hand columns pretty much belong to the group," says Sandy.

The team also created a set of design guidelines to help ensure the intranet stayed consistent. Training PTC content providers to use the content management tool was an important part of the implementation phase.

RESULTS

The new intranet has been greeted with a very positive reaction from users and content providers alike, and the client is convinced that having a single look and feel across the intranet has helped strengthen the organization itself.

TIMELINE

- August/early September 2000: Project started late.
- First half of September: Inform.
- Mid-September to mid-October: Discover.
- Mid-October to March: Design.
- February to May 2001: Develop/Implement/Train.

LESSONS LEARNED

WORK WITH THE CONTENT PROVIDERS

"From a usability perspective, getting the content providers onboard and continuing to talk to them throughout the development was important," says Kate. "There were change management issues to deal with; even though the content providers had signed off the new designs and aesthetics, they sometimes still wanted to use the old page, and we had to remind them of the change and reinforce the notion of moving to a new structure."

"The users were our fourth partner in all this," says Sandy. "Their data helped convince the client to be confident in the new design and move it along in a short timeframe. We could have been struggling with internal approval, but the client felt confident because usability data was behind the redesign."

silverorange

silverorange is a small Web development firm based in Prince Edward Island, Canada. It has a core team of six. It works for clients throughout Eastern Canada.

DESIGN TEAM:
In-house
(employees at silverorange)

Pictured: silverorange homepage

SUMMARY

In the usability field, we often remind ourselves and the developers we work with that "You are not your user." In the case of silverorange design, however, this is not true. These designers found themselves in the unique situation of designing a system for themselves. The user group for this system is small, and the profile is relatively experienced, with the possible exception of some of their clients. Still, this site is straightforward, mostly uncluttered, and has some pleasantly original functions, such as the picture tool.

This site has the cleanest and most simple look of all those submitted. The navigation is straightforward, and the ever-present breadcrumbs help user stay oriented. The left-side navigation bar has clearly named categories and is always visible. The *Search* function looks simple, yet is advanced enough for those who want to refine search queries.

The team's approach to collaboration actively facilitates getting work done. The method they use for managing projects and discussions is innovative, and their calendar tool has a usable implementation.

Even though this was the number one intranet, there are still some usability issues we noted — we believe every design has at least a few. In this case, when looking at pages, it's difficult to tell which items are links and which are not. As the designers themselves noted, they should improve their nonstandard representation of links. With some interaction, however, a user can overcome this issue relatively quickly. The expand-collapse icons in the left-side navigation bar are also somewhat difficult to understand.

In terms of very basic accessibility, the contrast in color between most text and page backgrounds is very good. The spaces between links, as well as text size, however, are mostly very small, problems that impact both people with low vision and people with motor skill impairments. It's difficult for people with low vision to decipher this kind of text, and it's frustrating and tiring for people with motor skill impairments to hit such tiny targets.

*Left: Jakob Nielsen presents the award for best intranet design to Dan James from silverorange during the **User Experience 2001/2002** conference in Washington, DC*
Right: silverorange design team with members of Nielsen Norman Group.

Scoring							
Simple look	Simple navigation	Consistent navigation across pages	Visible search bar (or button)	Simple search	Limited (and well-presented) page text	Clear labels	Clear links (name and marks)
2.5	2.5	2.5	2.5	2.5	2.5	2	2

INTRANET

The intranet is an internal communications tool for silverorange and its clients. It enables people to post messages, events, tasks, work reports, and news.

BACKGROUND

As a small firm of just six developers, silverorange had never found day-to-day communication a particular problem until three of its developers went to work on a project in New Zealand for eight months. Since all six people are partners in the company, they needed a way of holding discussions on major company decisions, but found email wasn't up to the job. "We tried to make decisions by email, but you run into problems as soon as more than one or two people are involved – you end up having to send everything to everyone, and people get out of sync," says Steven Garrity, the firm's creative director. The intranet evolved from this need for a better communication channel for the silverorange partners, their employees, and clients.

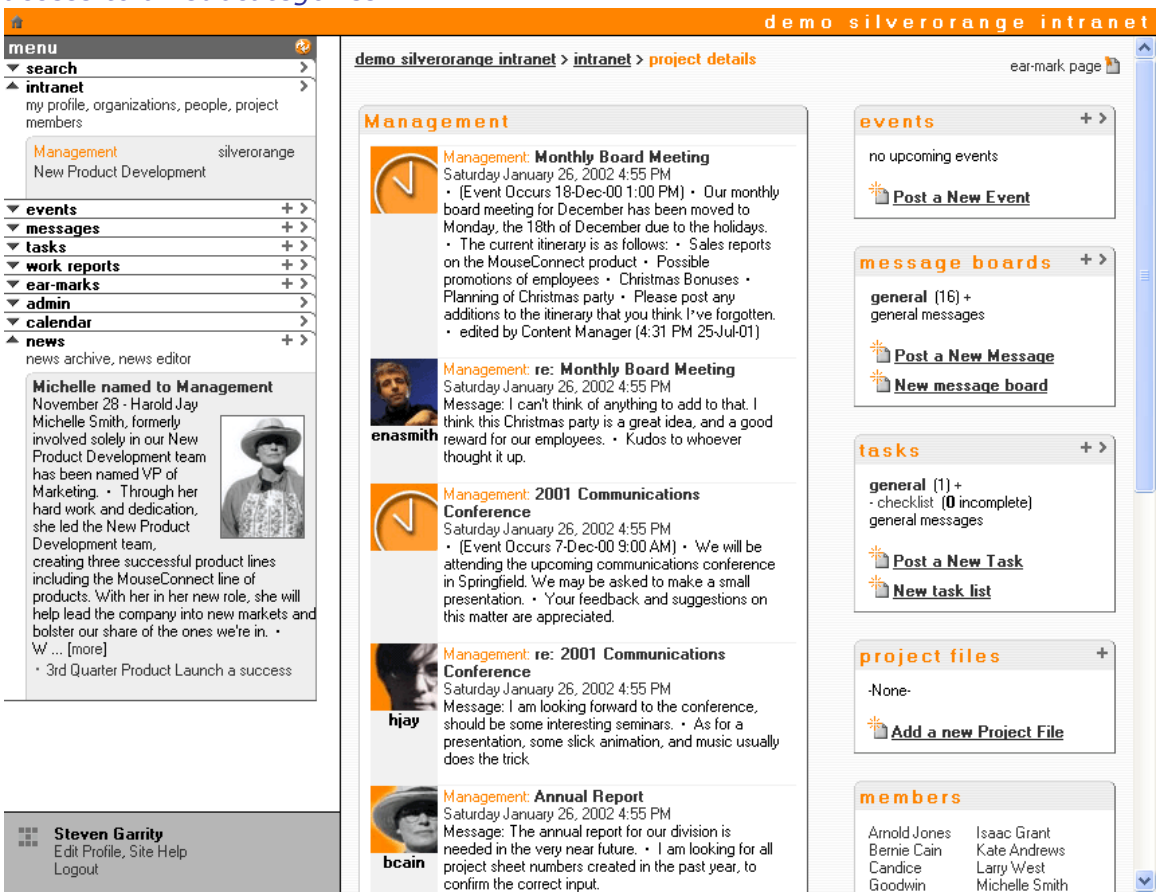
PROCESS

In October 1999, silverorange built a basic electronic discussion board system to supplement email by providing a forum for threaded group discussions. Initially, all discussion threads were accessible to all users. In the following January, they added some horizontal access control, enabling the partners to have private discussions.

Use of the discussion groups took off rapidly and silverorange decided to add more functions to the application. In June 2000, the full version of the intranet was launched. It built on the existing discussion boards by introducing the ability to post messages, tasks, news items, and work reports, edit user profiles, and record events in a group calendar.

The discussion group metaphor is used throughout; any item posted can start a thread, have replies, or contain attachments. At this stage, the intranet was reorganized as a potential communication tool for projects. Information is attached to a particular project, with vertical and horizontal access control, so that only users with access to that project will see it. With the appropriate permissions, a user can become a member of any number of projects.

Pictured: Project page, offering an overview of recent items as well as access to all subcategories



Any user can be given authorization to be a content manager for a particular project. Content managers can modify project posts, add new message boards and task lists, and create new users.

More powerful access control has meant that the discussion groups have largely replaced email for company communication. The ability to have multiple permutations of projects and users gives silverorange considerable flexibility to, for example, open up the intranet to clients who then see only information relevant to their particular job.

silverorange is a small company, and the site has been designed mainly for internal use. The system has evolved gradually, influenced by constant input from the partners and other users. "Part of the reason it's gone so well is that we're not trying to come up with ideas for some other audience — we're building something we want and need ourselves," Steven says. "Ideas just bubble up from the team as we work, or the whole team will sit down and discuss an idea. That helps us avoid including features that aren't particularly useful."

New features introduced since the main version was launched include earmarks, which work rather like a bookmark. For example, users can earmark the checklist for key projects they're working on and go straight to it.

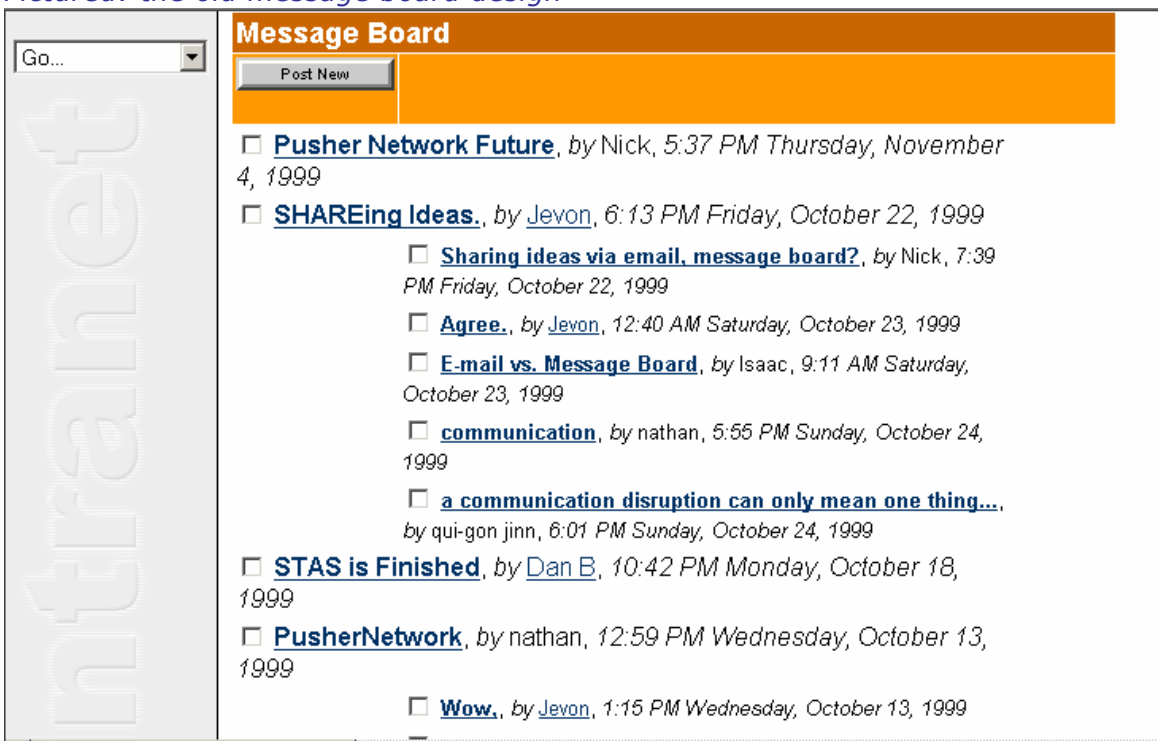
The company also stepped back every six months or so and completely reviewed the overall design. "As we used it every day, if there were features we wanted, like the ability to attach files, we just added them one by one. That's not always the most efficient way of building a system — it can end up like just a bundle of tools, with a design that's not optimized for the content," Steven says.

DESIGN

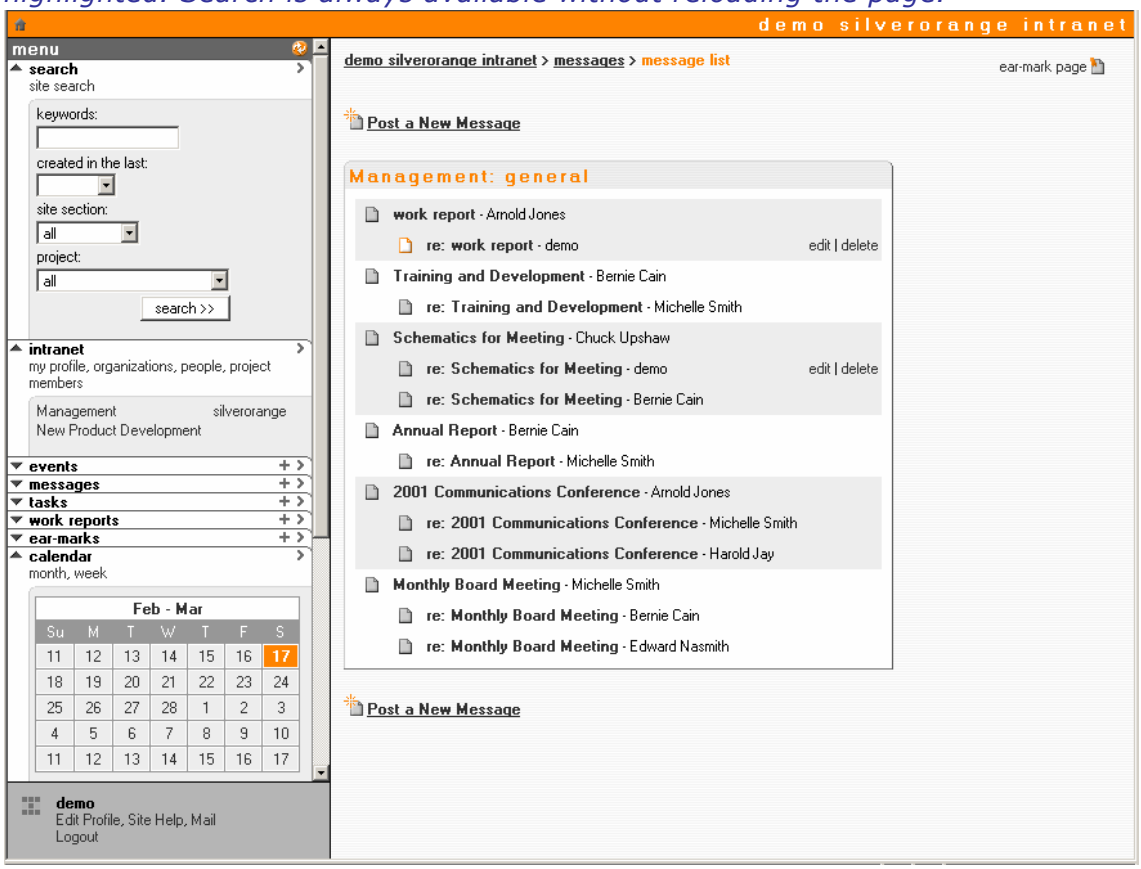
"Our main guiding principle for design and usability was to build something that we wouldn't get sick of looking at 20 times a day," explains Steven. The intranet was intended to be a tool that silverorange staff would use as an integral part of their work, and some of the team members keep it open in their browser all the time.

Because of this, busy design is out; unobtrusive simplicity has been the key. "Looking at previous versions of the intranet, what we thought was simple at the time doesn't look simple at all now," Steven points out. "Though most of the key elements remain, there's a very clear progression in the design, which gets simpler and simpler."

Pictured: the old message board design



Pictured: the new silverorange message board design. Recent items highlighted. Search is always available without reloading the page.

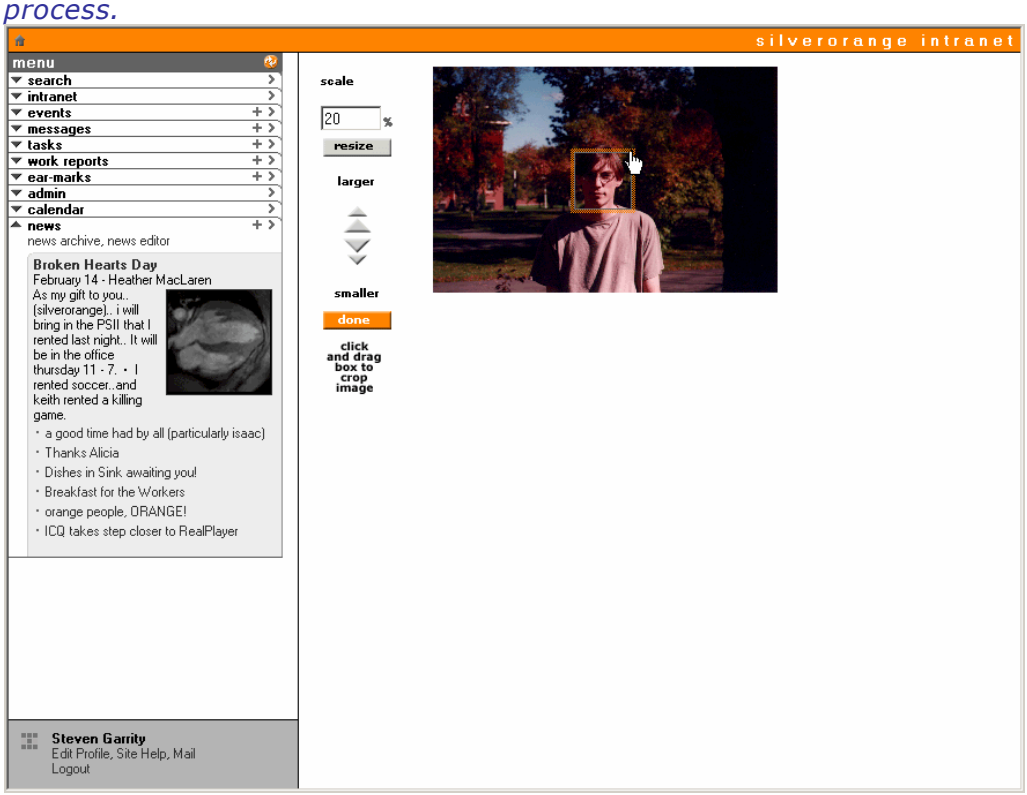


The site's basic color scheme is obviously suggested by the company name, but silverorange had another reason for choosing it. "We initially built it with one highlight color that can be changed throughout the entire site. The thinking was that if we decided to try and sell the product outside the company, it would be easy to customize," Steven says.

However the company is starting to feel restricted by the single highlight color. They are now considering a broader palette that would let them use color throughout the site in a more intuitive way.

One of the intranet's innovative features is a simple tool that lets users upload photos of themselves, scale, and crop them to fit a 50 x 50 pixel frame. It may sound gimmicky but, says Steven, "It really adds a personal element to communication, and also provides a visual cue to associate posts with the people who've made them. When we first introduced it, everyone just uploaded joke photos. Over time, however, they've been replaced with actual photos because people have found them useful."

Pictured: the picture tool. Visual aids are used to help associate postings with their authors. A simple utility to crop and size images simplifies the process.



silverorange opted to deliver the left-hand navigation menu as a frame, with sections that pop open using dynamic HTML. Once the frame is loaded, it's resident in the browser window, avoiding the need to reload the whole navigation each time the page changes. Using frames also makes it easy to change the left-hand column's default width to fit computers with different-sized monitors.

The team initially optimized the intranet for a specific user group with the same browser (IE 5.0 or higher), high-resolution monitors, and a fast network connection. Part of the benefit of having a corporate intranet tool be Web-based rather than LAN-based, however, is that the team can keep in touch while on the road, using varied computers, browsers, and bandwidth. The system therefore has to work well on a dial-up connection and a small monitor.

Until recently, most of the intranet's users have also all been highly Web-aware. "When people are using a system every day, you don't have to keep things that obvious," says Steven. "We were aiming at efficiency and convenience of use."

Thus, on the front page, rather than conventional news stories, users simply see the most recent messages posted on any topic, listed in chronological order. "That helps avoid things slipping through your fingers because they were hidden deep in the message board," Steven explains. To see a message's context, users move to the discussion area.

Pictured: the Beta version of the News page.

Since the team extended the application to clients, however, they've had to make concessions to less expert users. To help people who don't use the system daily, a new feature sends out email notifying users each time there's a new post in projects they have an interest in.

They've also added the option of viewing discussion threads as a long thread view, which shows only one post at a time with links to other posts in the thread, rather than showing all posts at once. This view permits quicker downloads of long threads. "When people outside the company started to use the intranet, we found that their posts and threads were often quite a bit longer than our own," Steven explains. "As a result, some conversations led to pages that were quite enormous."

In the next version of the intranet, silverorange will replace the current subtle link style with a more consistent and traditional link convention: all links will be blue and underlined. "It's not a problem for us, we know exactly where the links are, but it's not as obvious as it could be for users," Steven admits.

RESULTS

About 72 people use the intranet, though most of the activity comes from a core group of 10 to 12 frequent users.

"Having the intranet has made it possible for us to work with clients that we couldn't otherwise have worked with," says Steven. Increasingly, the company is taking on projects where the client is at a distance and face-to-face communication is expensive and time consuming. One client, for example, is in Newfoundland — a few hours' flying time away.

Using the intranet as an extranet enables silverorange to keep in touch with its clients without having to get on a plane and is opening up business opportunities as far abroad as New England and central Canada. The discussion boards provide a flexible way of communicating within a group, particularly since users have been able to attach files to any message.

"Clients can easily see the progression and change in the mockups we show them, and that's been a very powerful communication tool," Steven says. "The intranet has basically replaced email for communication within the company and with clients."

Having a well-designed intranet that's accessible to clients has the spin-off benefit of providing a tangible demonstration of the firm's ability to design effective, usable Web tools.

For silverorange, the system also acts as a repository of its work in progress and its communication with clients, archived and searchable by data, type, user, project, and so on.

Pictured: an old version of the horizontal access control

TIMELINE

- October 1999: Initial message board went up.
- Late December 1999/January 2000: Horizontal access control added, major overhaul to the (now gaudy looking) silver version.
- June 2000: Current version launched, most significant overhaul to date; took the intranet to version 2.0 and added the majority of current functionality, with news, calendar, and vertical and horizontal access (minor features like earmarks added since).

LESSONS LEARNED

KEEP IT SIMPLE

"The major lesson we've learned is keep it simple — the simpler the better — and subtle," says Steven. "When we redesign it, it will be even simpler."

silverorange, 2003 Update

Using the Intranet:

silverorange is a small team of Web developers who produce user-focused Web systems. The firm, located in eastern Canada, sells and leases intranets to various organizations.

Design Team:

In-house

Members:

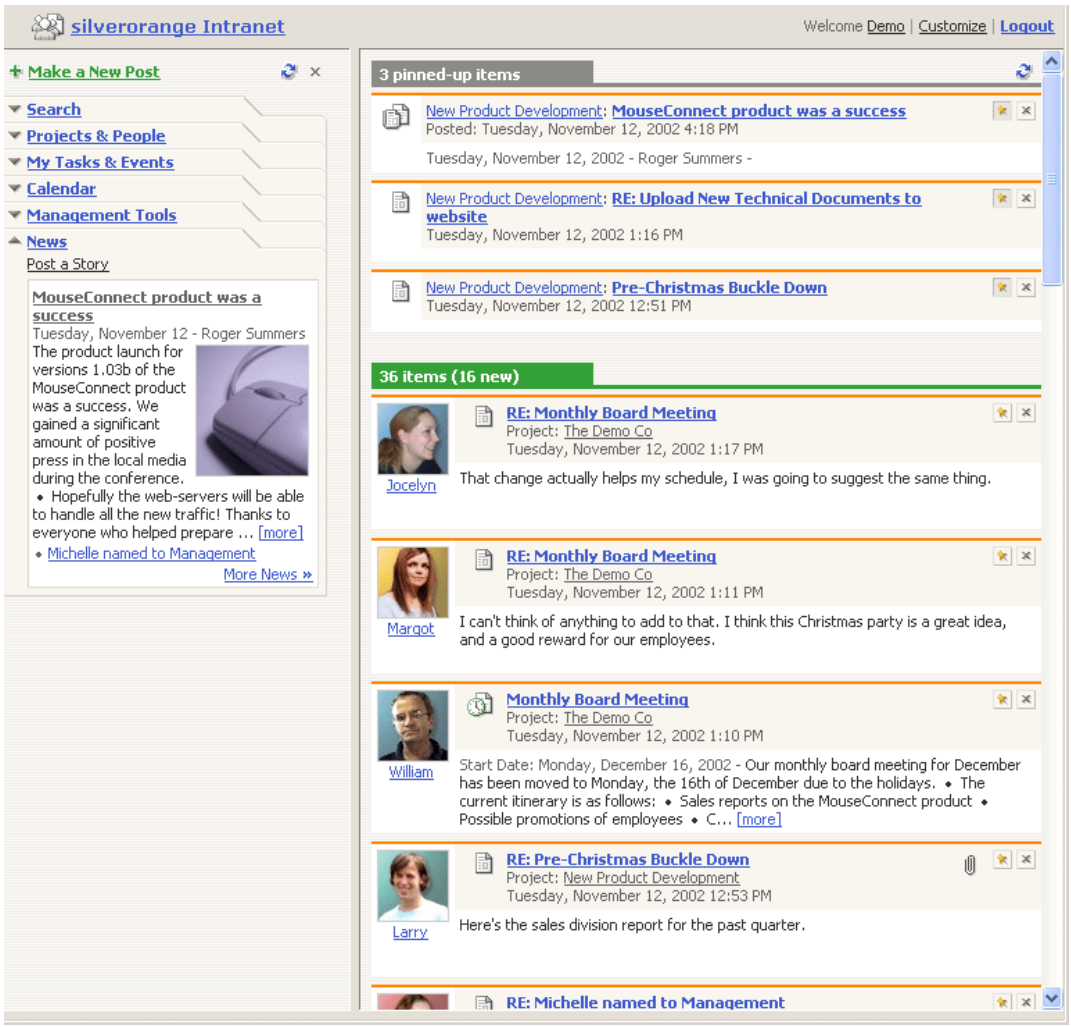
Nathan Fredrickson, technical director; Steven Garrity, creative director; Daniel Burka, lead designer; Dan James, CEO; Stephen DesRoches, Web developer; Isaac Grant, programmer; Nick Burka, programmer; Dave Peck, sys-admin/programmer; Mike Gauthier, programmer; Brad Pineau, programmer.

SUMMARY

In our first design annual in 2001, we selected ten winners and from them, one best intranet — silverorange. Now, two years later, this same company has produced yet another excellent intranet, it's third version, that we feel deserves a very honorable mention among this report's winners.

So why change an already winning design? While the intranet's first two versions worked well for silverorange users, the company was branching out and selling to companies with employees who were not Web developers. They thus had to tailor the design to make sense for those people. Also, after the 2001 design annual was published, several large companies and government organizations expressed interest in the silverorange intranet. However, the previous versions did not scale well. The company decided to create a version that would work for not only ten people, but for hundreds or thousands of people. To do this, they basically revealed what individual users need to know, rather than cluttering workspaces with information and choices they don't need.

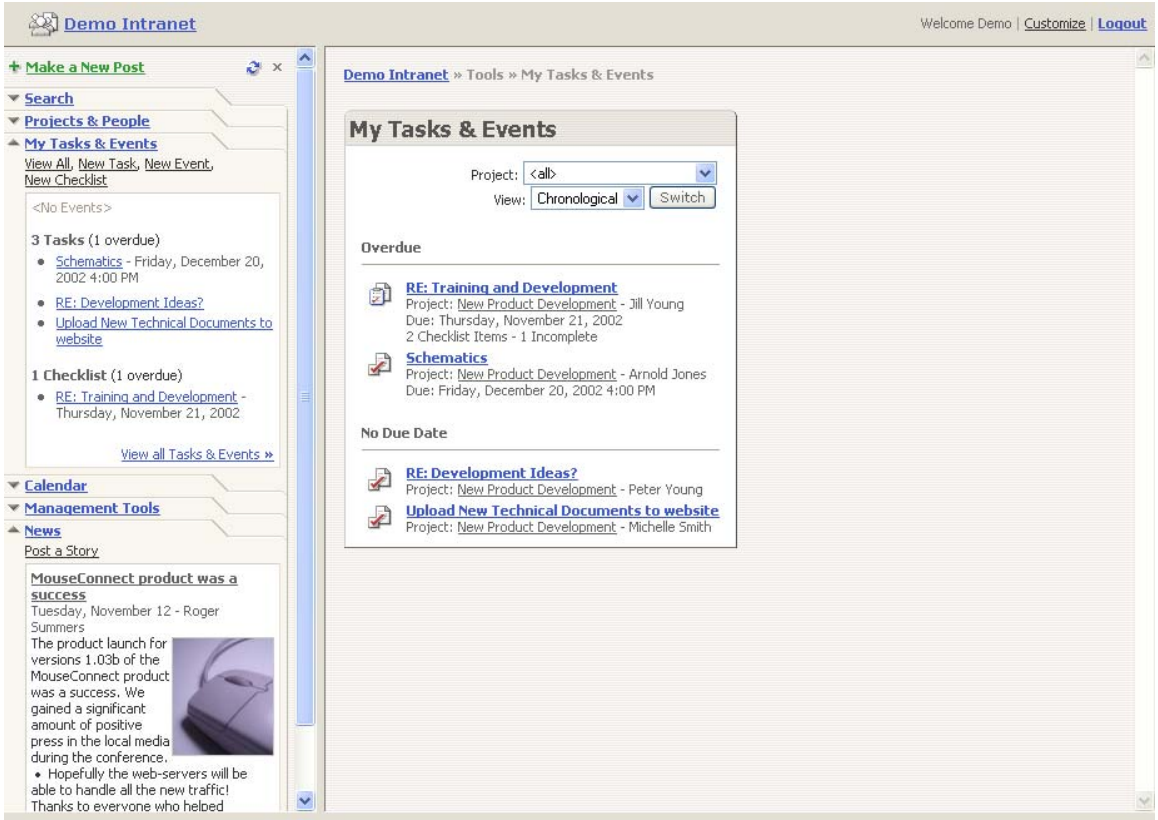
The homepage shows recent news items and the author's photo. Each user can configure the types of items displayed on the front page.



Pictured: The homepage shows recent items with the author's photo. Users can configure the types of items displayed on the front page.

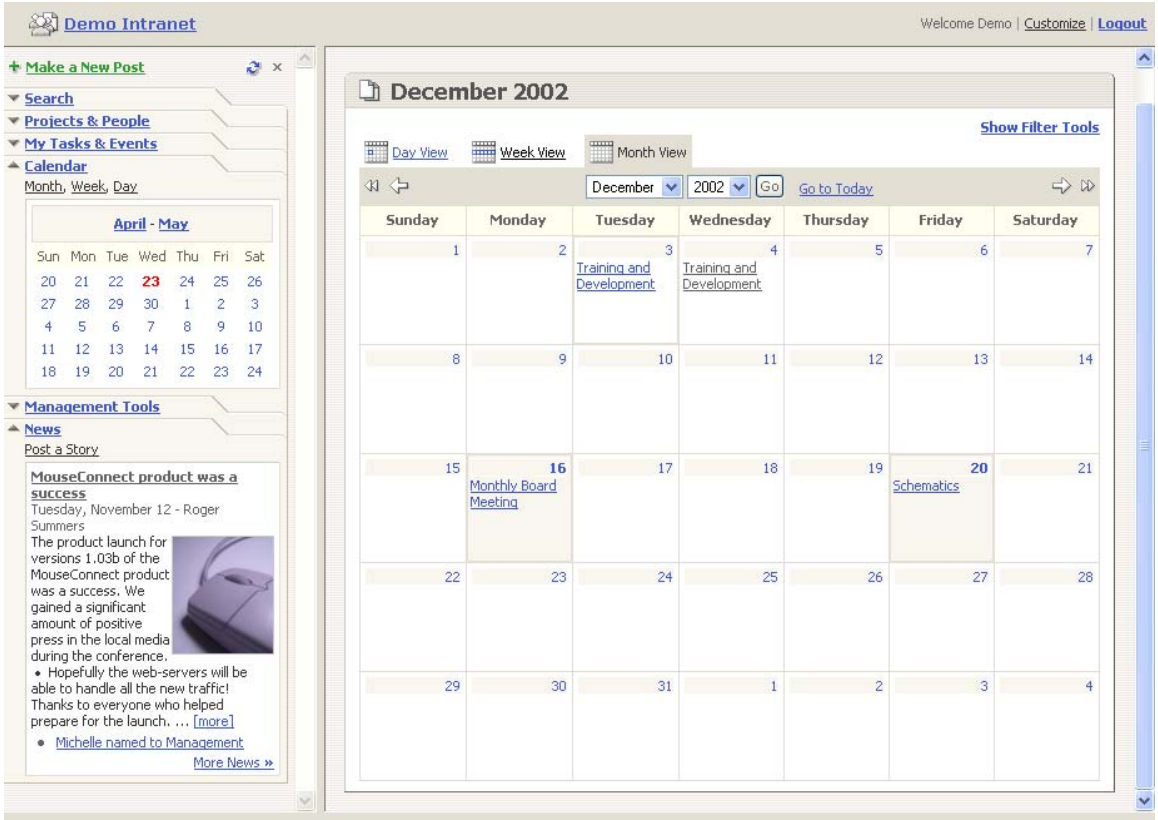
The silverorange Intranet consists of a set of tools and work areas called *Projects*. Each user is given access to particular projects, and users only see the projects to which they belong. This allows the same intranet to be used on various levels, including client communication and high-level management. For example, a user working on three client projects, two internal projects, and one management committee would see only the content pertinent to those particular projects and only see the users with which he or she shares common projects. All intranet functionality is controllable on a per-user basis, with a powerful set of fine-grained permissions on each component.

Users can also review the tasks, events, and checklists assigned specifically to them or, occasionally, their workgroup. The items are intelligently divided by date — *Overdue, Today, Yesterday, This Week, This Month,* and so on.



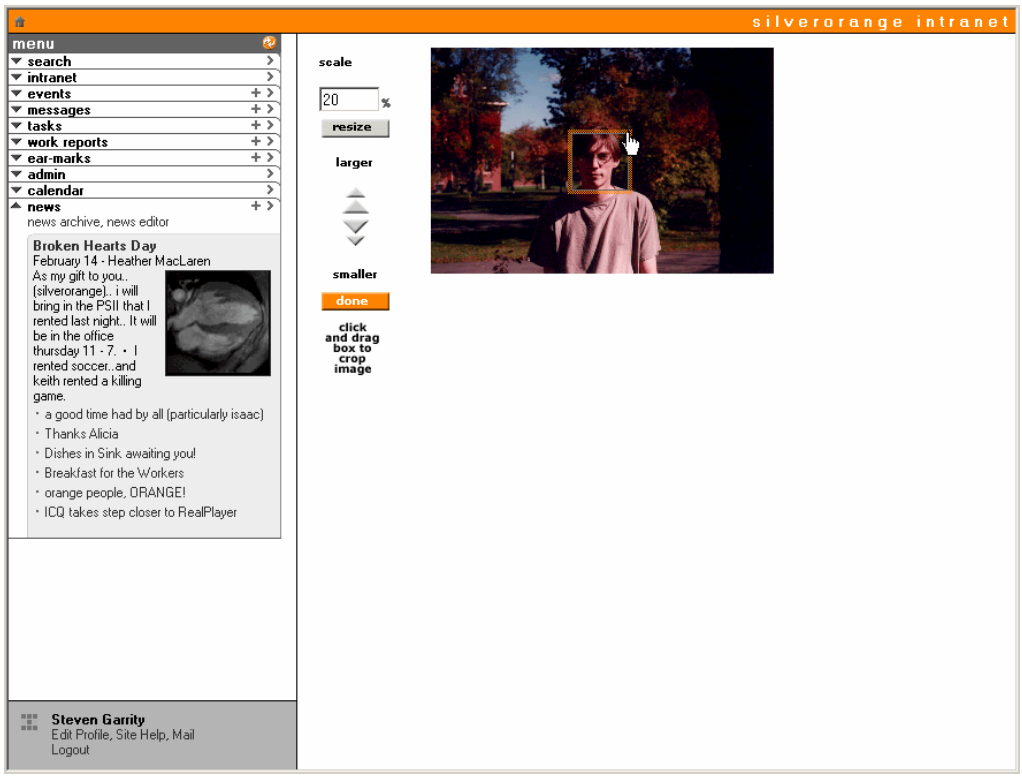
Pictured: A page with tasks, events, and checklists that are assigned specifically to a particular user.

Users can display the robust calendar by day, week, or month views so they can use it as a scheduling tool. In *Month View*, the filter tools to show only items of a certain type, from a certain project, or assigned to a particular person. Users might show tasks assigned only to them, for example.

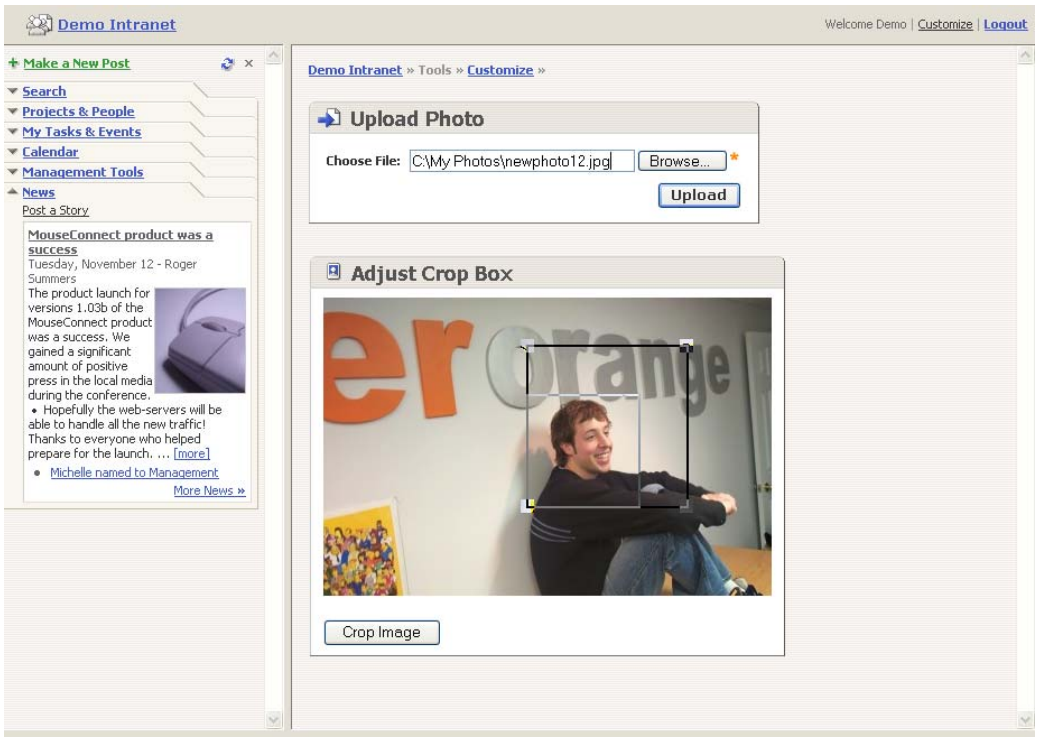


Pictured: The calendar in *Month View.* The filter tools to show only items of a certain type, from a certain project, or assigned to a particular person.

A feature that most caught our attention in 2001 was the ability to not only post photos to the intranet, but to crop or resize them there without additional tools. Users love this. This feature got a facelift in the new design.



Pictured: The previous winning design's tool that posts and crops pictures using the intranet.



Pictured: The current photo tool. Users can post, crop, and resize photos using the intranet, without other tools.

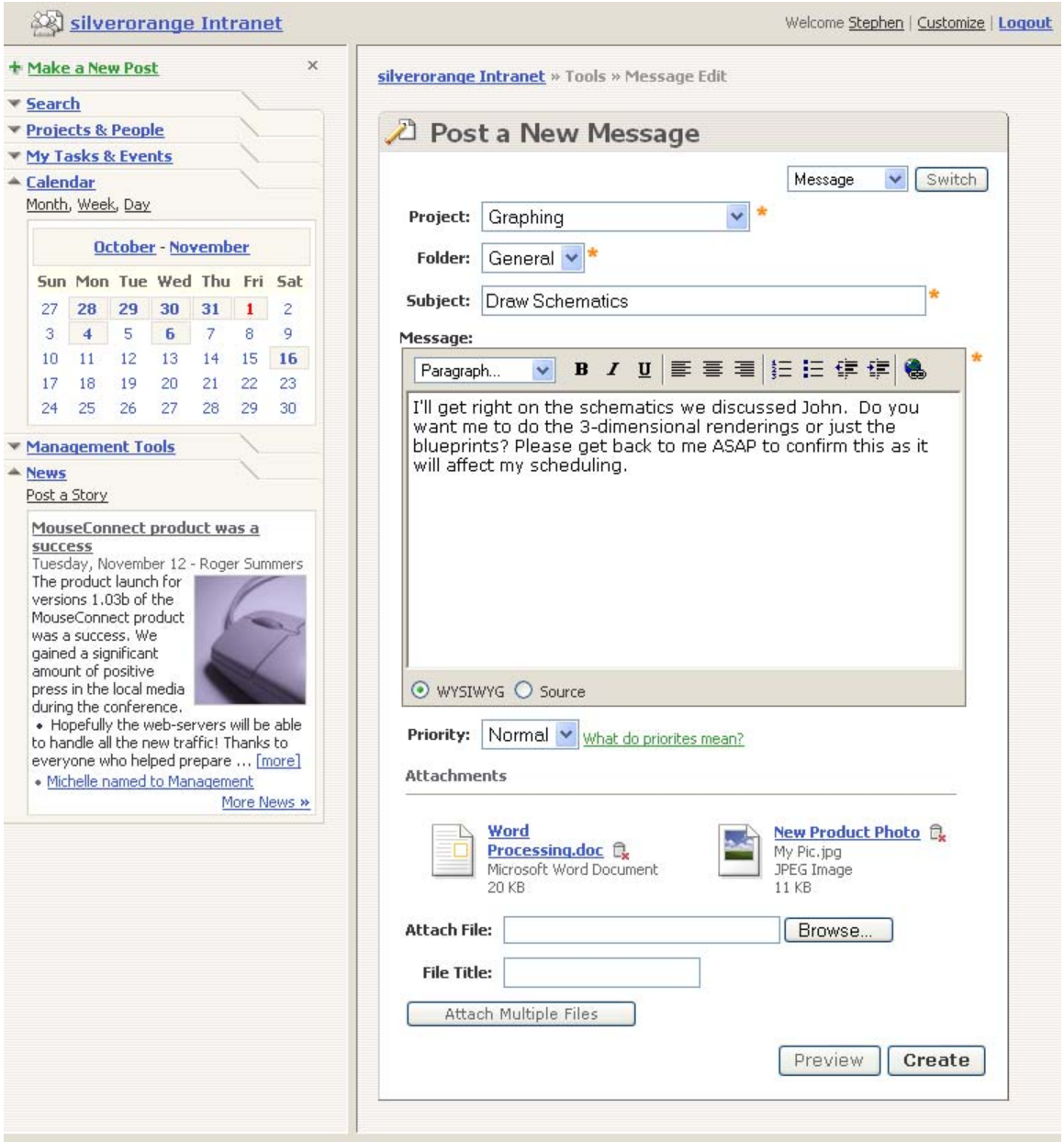
The new design's look has changed from the orange theme of 2001 to a more subdued one with blues and grays. The navigational elements, though also changed, are still very understandable, making use of tabs and obvious links. All in all, the new intranet design is an impressive revision that's worthy of the original.

URL AND ACCESS

Users enter a simple domain (usually "intranet.companyname.com") to access the intranet from anywhere on the Web. The site also uses SSL encryption for security. URLs within the site have been kept as simple and clean as possible (for example: intranet.companyname.com/projects/projectname).

CONTENT MANAGEMENT

Users of the silverorange intranet enter content through the Web browser. A visual text editor built into the intranet simplifies link creation and simple text formatting.



Pictured: The Web form that lets users post new content. All posts can have file attachments of any type.

In keeping with the email metaphor at the heart of this site, all intranet posts can have any type of file attachment. There's also a "file" item type, introduced at the request of a client, which works like a more traditional document library.

TECHNOLOGY

Started as a mostly ColdFusion-based Web development shop, silverorange has since moved to PHP. "We felt we were pushing the limits of ColdFusion's capabilities," Steven explains. "PHP offered performance advantages, the advantages of open source, and support for object-oriented programming. This allowed us to do much more with our code base."

When it comes to selling its intranet to other companies, relying on an open-source platform gives silverorange a lot more flexibility. Previously, a customer would have to buy a copy of a Windows Server operating system and a ColdFusion server license, adding thousands to the intranet cost. With PHP freely available, clients can run in an Apache/Linux environment at much lower cost.

GOALS AND CONSTRAINTS

1) Work well for the company — a small team of ten who rely *heavily* on the intranet to run the day-to-day business. 2) Work well for other companies like theirs. 3) Work well for larger organizations. After the 2001 NN/g intranet design annual, several large companies and government organizations expressed interest in the silverorange intranet. However, the previous versions did not scale well.

BASIC INTRANET FEATURES

The silverorange intranet consists of a set of tools and work areas. Some tools and features include: Posting of items, including messages, tasks, events, checklists, work reports, files, and news (other custom item types are also available, including any special forms a company may use frequently); alerts and notifications, which users can customize; easy uploading and display of photos for use with user posts (a simple cropping and resizing tool is included so users can add appropriately sized photos without special software); user preferences; a fast-loading and standards-compliant interface; internationalization; and management tools.

USERS

The team of ten consists of managers, Web designers and developers, and programmers.

USER TASKS

- Read and post news
- Create and look up appointments
- Uses checklists and tasks lists
- Update or be updated on a specific project
- Have a discussion
- Communicate with clients

BACKGROUND

The silverorange intranet grew out of the need for a better communication channel for the Web development firm's partners, employees, and clients.

It started life in October 1999 as a basic electronic discussion board system; in June 2000, it was launched as a full-blown intranet that let team members post messages, tasks, news items, and work reports; edit their user profiles; and record events in a group calendar.

Although it's based in Prince Edward Island, Canada, many of silverorange's clients are on the Canadian mainland or in the US. The intranet lets team members working at client sites stay in close touch with head office. Clients can also be given

remote access to parts of the site, which lets silverorange support them with the latest information on their project, despite a comparatively remote location.

Since we last profiled silverorange in the Intranet Design Annual 2001, the company has grown from six to ten employees, several of whom spend at least some of the year working from remote locations. Its client base has also grown, with new clients coming mostly from the US. Last but not least, since winning our intranet competition in 2001, the company has seen growing interest from external organizations wanting to use its intranet technology. All these factors have reinforced the importance of the intranet in silverorange's business and increased the need for a clean, highly usable design.

"We see our intranet more as a communications tool than a publishing tool," says Steven Garrity, creative director at silverorange. "It works more like a more powerful email system than like a traditional website. As a result, it was quite a natural extension for us to bring our external clients and users into our intranet. The structure and security of our intranet was designed with this in mind."

DESIGN PROCESS AND USABILITY ACTIVITIES

In designing version three, silverorange aimed to combine smart planning and abstraction with real-world experience. Since the new intranet version was an upgrade, albeit a major one, the team could build on its experience with the previous version to inform the design.

"Knowing that we would eventually build a significant upgrade, we had compiled a running list of issues and ideas," Garrity explains. "Whenever a client complained about something, or we found ourselves having trouble with a particular task, we made a note of it. We actually had a discussion thread on version two of the intranet called 'Ideas for version three,' and anytime someone had an idea, or ran into an issue, it got posted there."

When the firm began work on version three in spring 2002, its first step was to review all these notes. Several issues emerged. In the previous version, for example, the functionality to manage users and their relationship to intranet projects was limited and not scalable. The new version addressed this.

When the most recent intranet was released, the user base mainly consisted of the silverorange team and close clients, who were used as the test group. Throughout development, the team carried out small ad hoc tests, trying different design ideas out on each other.

Because the new version retained many of the existing interface features, introducing clients to it was relatively painless. "The new intranet tested very well with our clients — smoothing over areas that were rough in the previous version," Garrity says.

RESULTS

The redesigned intranet, with its clearer interface and more standard navigation, has opened up new commercial possibilities for silverorange, enabling it to easily sell or lease the intranet to other firms, thereby generating new revenue streams.

"There were enough rough edges in our previous version that having someone else manage a version of our intranet wasn't quite realistic; there were too many tricks

and hacks," says Garrity. "Our new version addresses these issues and is much more refined throughout."

LESSONS LEARNED

Insights from Steven Garrity:

Beware the over-ambitious redesign. "Many great projects have grown organically, only to have an unrealistically ambitious redesign kill what made the project successful in the first place. We were careful to stay grounded through the development process."

Make the transition gentle. "Since the upgrade maintained many of the user-interface concepts of the previous version, we were able to switch our clients over to the new version without any training."

Separate layout and design from functionality. In addition to increasing flexibility and scalability for internal use, this "has allowed us to provide an implementation of our intranet to a client that did not use frames and had a visual brand that was completely distinct from ours."

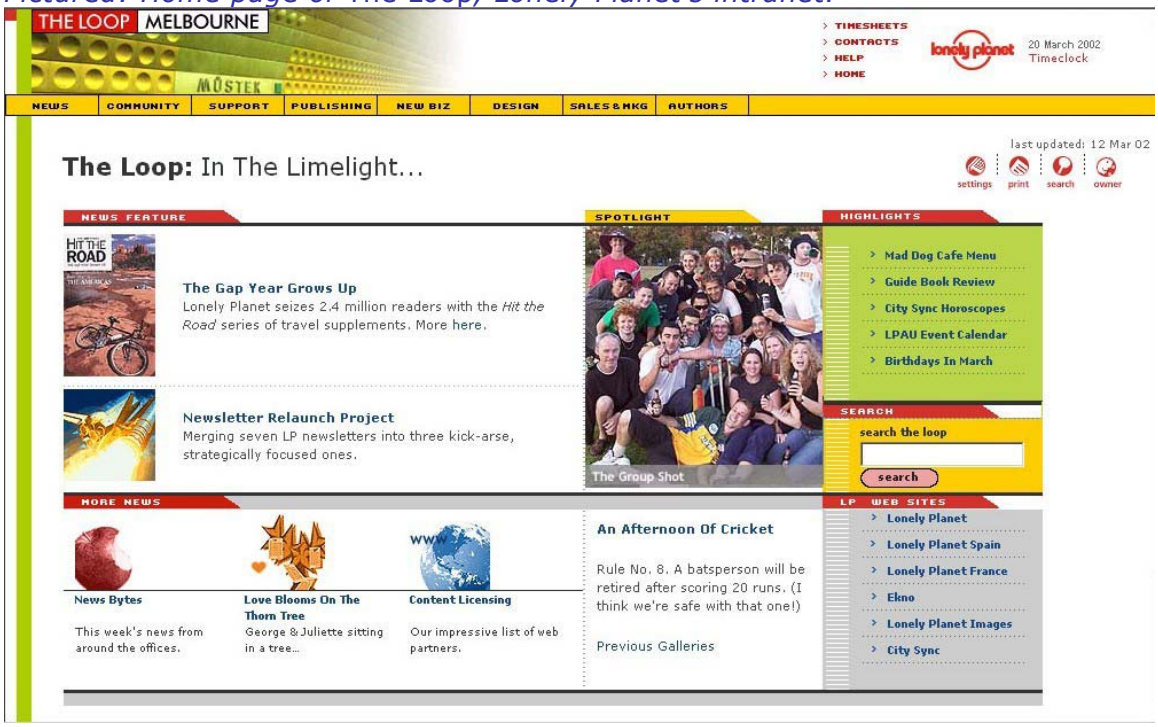
Lonely Planet Publications

USING THE INTRANET:
Lonely Planet is an independent travel publishing company with offices in Australia, France, the U.K., and the U.S. Based in Melbourne, Lonely Planet boasts a publication list spanning over 600 titles, plus new media enterprises such as award-winning Internet sites, the ekno communication service, a Web-based photography agency (Lonely Planet Images), and Lonely Planet Television.

DESIGN TEAM:
Lonely Planet

MEMBERS: MELISSA MCVEIGH, INTRANET MANAGER; ALAN KOENINGER, WEB DESIGNER; ANDREW STEVENS, DEVELOPER; CAROL BARTON, EDITORIAL MANAGER

Pictured: Home page of The Loop, *Lonely Planet's intranet.*



SUMMARY
Lonely Planet employs 450 people in offices in Melbourne, the U.S., the U.K., and France. It also has an extensive network of over 150 authors and cultivates relationships with a broad range of business partners and alliances worldwide. The intranet, named *The Loop,* unifies the company by providing a service that is not only entertaining, but is an essential one-stop shop for communication about company news, initiatives, business interests, social endeavors, and personal development. It also lets different global offices share working files and documents.

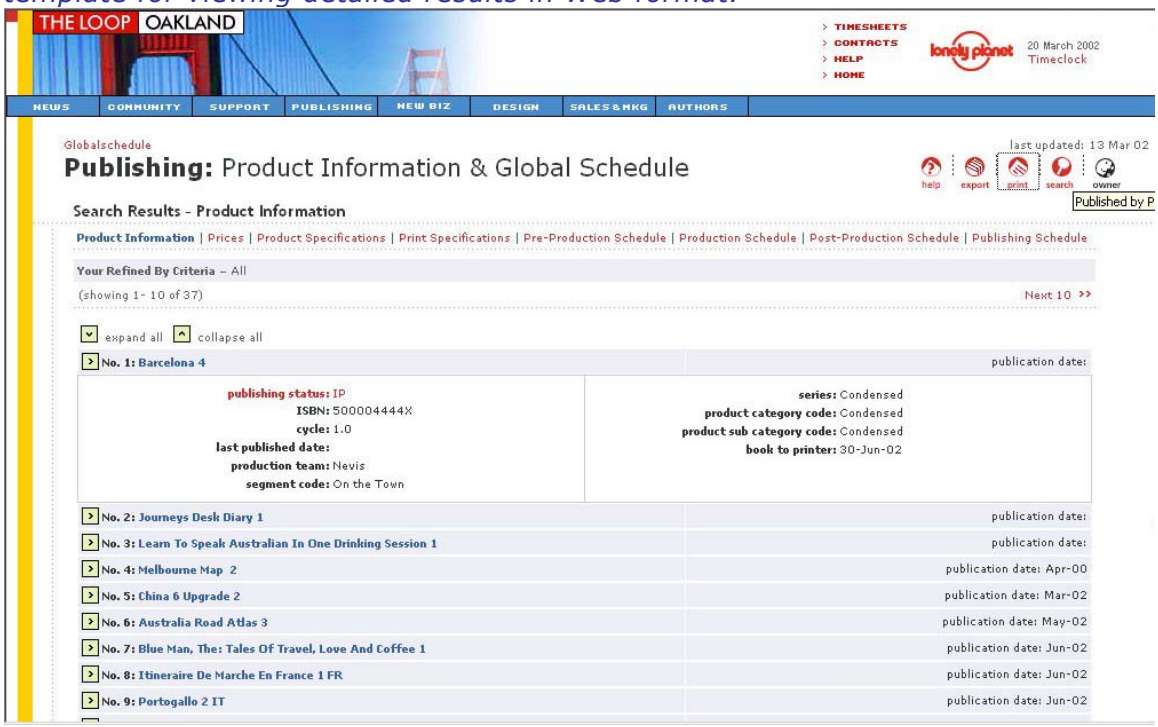
The home page conveys the fun, young atmosphere at the company, with crisp graphics and information sound bites. The graphics add to the messages and even the navigation. Also, no scrolling is necessary to see the content.

The intranet comprises both light personal touches, such as horoscopes and birthdays, and more business-related data, such as schedules and product information.

A single page template ensures that each page has the same core navigational features, such as horizontal navigation, print, search, and contact the page owner.

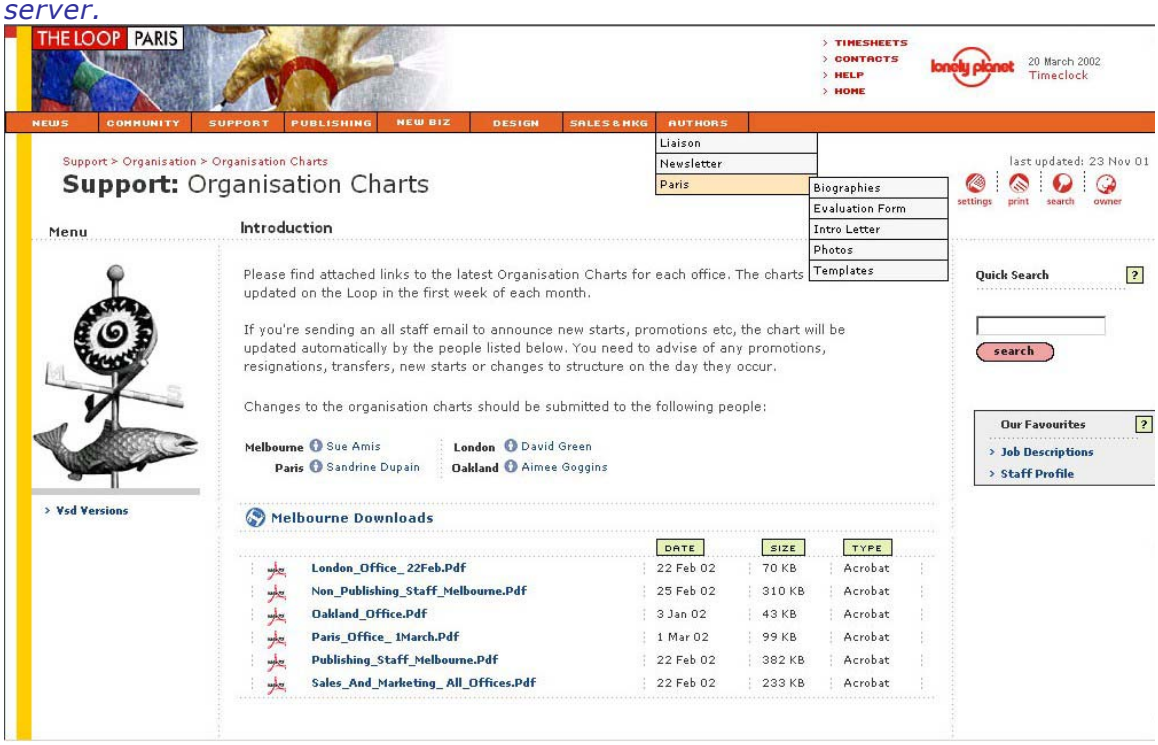
The *Publishing Information* database provides a standard template for viewing detailed results in Web format. Thorough labeling and date stamping of content lets users reach higher levels of efficiency. The most common tasks, such as export and print, are reachable via simple icons in the upper right, and the print template automatically converts data into printer-friendly format.

Pictured: The Publishing Information *database, which provides a standard template for viewing detailed results in Web format.*



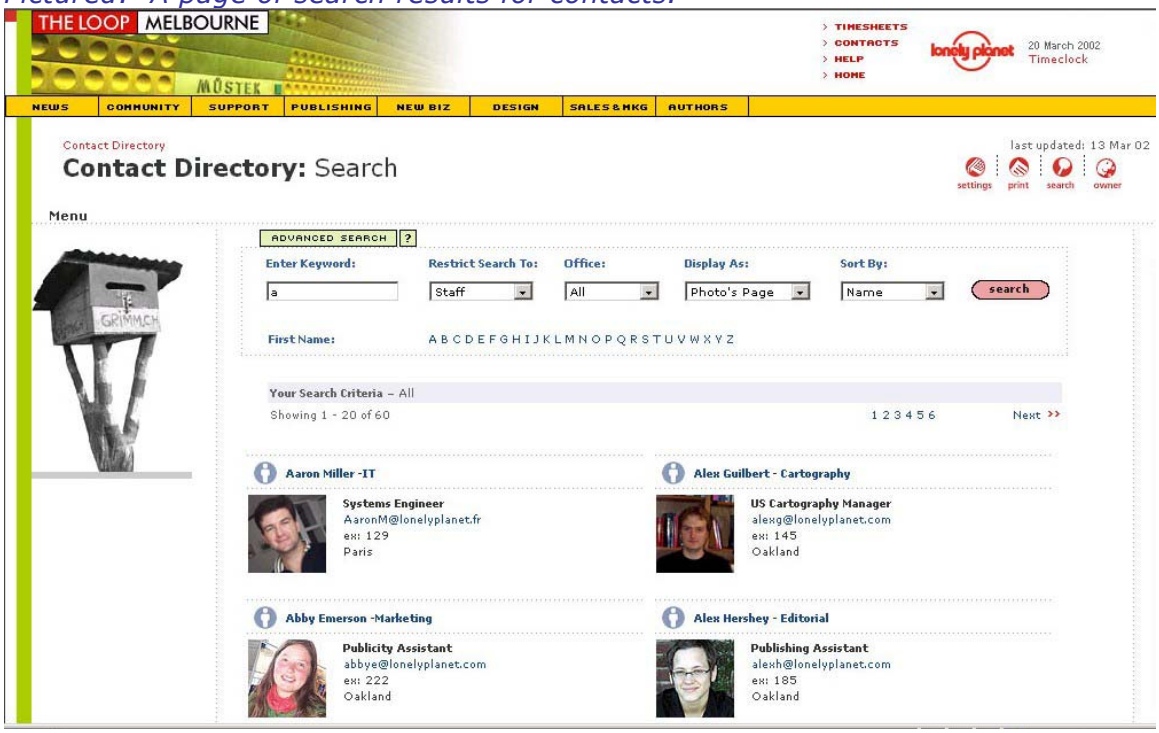
Many companies have issues with finding, storing, and downloading documents. At a company where publishing is key, the intranet designers have solved that problem. The content download pages have a *Quick search*, making it easy to find specific documents. The document lists show the most important information about the documents, such as title, size, and date, making it easy for users to locate the right document. Users can download documents from a file server, regardless of location. As each category in the main menu is clicked, vertical expanding menus appear, letting users quickly jump down through three levels of the site. A toolbar and expandable menu show the key navigational features, such as *Print* and *Settings,* in the download area.

Pictured: An area where users can easily download content from the file server.

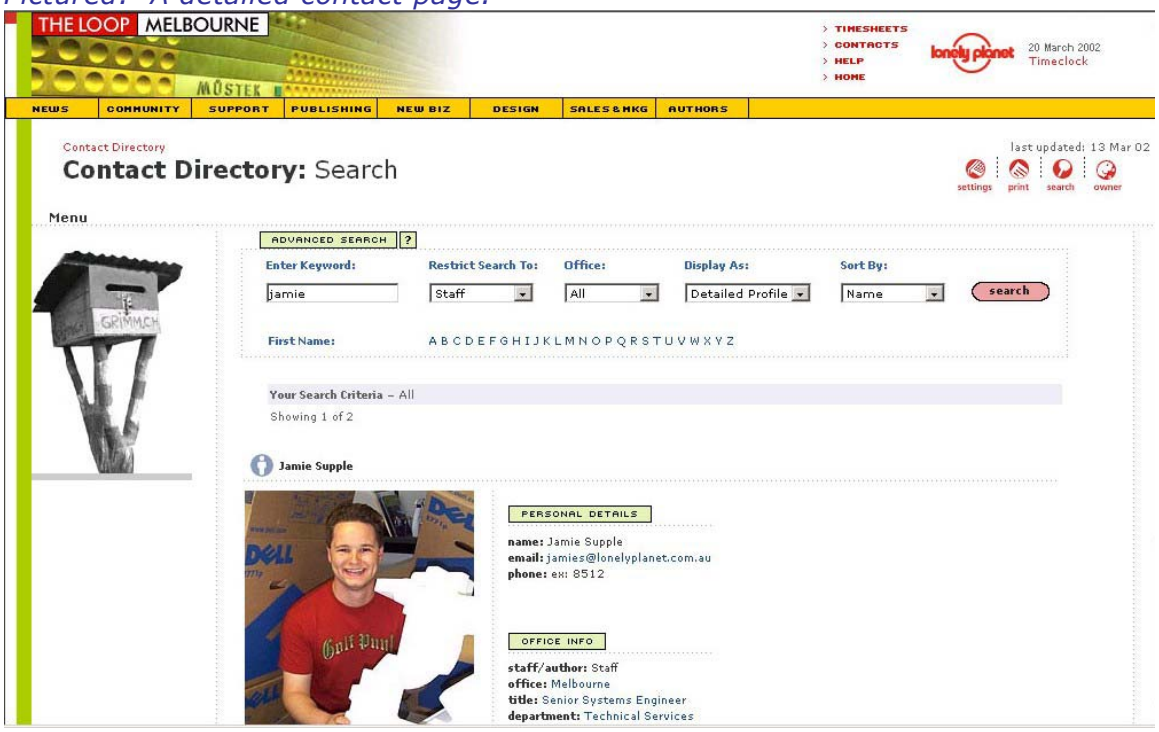


The contact information pages combine business needs with whimsy, with important information packaged in an enjoyable design. Candid photos of employees help users recognize each other.

Pictured: A page of search results for contacts.



Pictured: A detailed contact page.



The top horizontal menu is static and makes navigation predictable and simple. Icons specific to the selected area consistently appear in the upper right corner,

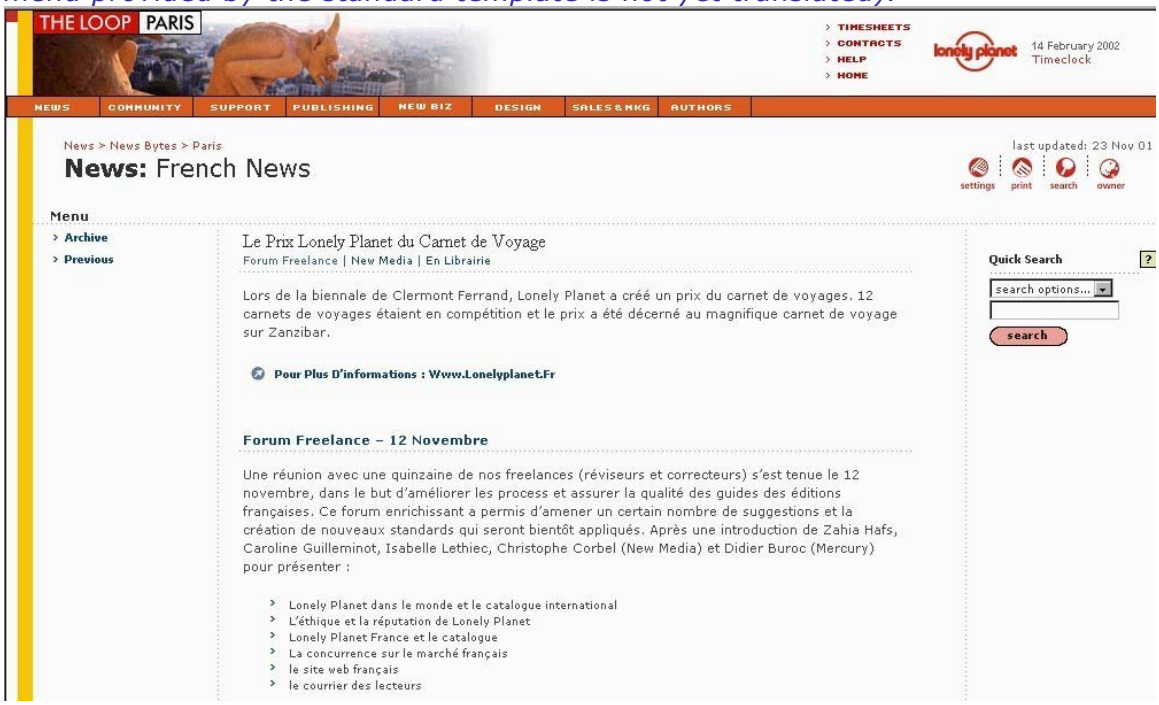
making it easy to perform the most common tasks in that area. Unlike some intranet designers, whose default is to organize their menu structure based on the organizational structure, these designers instead structured the menus around tasks and user processes — a good idea.

The design also lets different locations localize the pages. The main panel can be customized to give a regional identity. The team took an inclusive approach by inviting designers from many locations to a meeting where they each presented their design ideas and favorite websites. Involving all those people helped ensure against imposing an uninformed, provincial design on the many locations.

Country design managers were each given a selection of 100 images and asked to pick eight to represent each main menu category in the top page banner. "The Paris office picked images of Paris, the U.S. tended to pick images showing the U.S. flag or Golden Gate Bridge, but Melbourne picked images from all around the world. It was an amazing test of cultural differences," says Melissa McVeigh, intranet manager. Photography is used in the main banner and elsewhere to customize sites. Country offices can also pick their own color scheme, and have come up with very distinctive identities, with the U.S. and France picking red, white and blue, while Australia selected yellow and green and the U.K. chose purple.

The country offices can provide content in their own language, but as yet the standard template's menu is untranslated. The appropriate regional look and feel is applied automatically according to the user's IP range. However, users can manually change the settings themselves and edit location, language, and text settings.

Pictured: A country office in France provides content in French (but the menu provided by the standard template is not yet translated).



The overall look of the intranet corresponds with the company mood: fun and communicative. No matter their location, users can access pages for other locations. This not only inspires a feeling of unity across the company, it leads to increased efficiency.

Scoring (3 = best)						
Simple look	Simple navigation	Consistent navigation and design	Visible search	Simple search	Limited (well-presented) text on pages	Home page
2.8	3	3	2	2.5	3	3

DESCRIPTION OF THE INTRANET

BASIC FEATURES

The Loop intranet has over 50,000 pages. Key features include:

- A customized look and feel for each office, to promote ownership and address cultural differences
- Core navigational features on every page
- A toolbar feature that lets employees customize the look, language, and accessibility needs; print clean, user-friendly versions of any Web page; and view every page's content owner and email address
- The use of candid staff photos to encourage socializing and celebrate the unique workplace culture
- A searchable global contact directory
- A search engine on every page that lets users conduct an advanced Web and document search
- Customizable hot links and library items for each business unit
- A collapsible menu that provides three links into the site in one click
- Ability for all staff to add content locally, without relying on the intranet team

Among the team's future plans are to expand the intranet to include authors on the road, and to launch a comprehensive publishing information database.

BACKGROUND

Lonely Planet's Production Services had already started to put its documentation online when, in August 2000, the idea emerged for a company-wide electronic system for sharing company news and information. "Lonely Planet had never had a staff newsletter, just an author newsletter," says McVeigh. "So we decided to create an online newsletter and take all the documents we share and put those online too."

GOALS AND CONSTRAINTS

The Loop was designed in-house using limited resources. This prompted the team to seek innovative solutions to address users' disparate needs, without the support of a sophisticated CMS. The designers wanted to facilitate the constant and ever-

expanding exchange of ideas and information within Lonely Planet's diverse global community.

Lonely Planet is a publishing company, not a technology company, and employees are not necessarily very technologically literate. Thus, one of the main goals was ease of use. *The Loop* had to be a system that anyone could pick up and use without training.

Because Lonely Planet wanted a system that was truly global and not just a mouthpiece for the head office, it was important to get support and buy-in from all of its worldwide offices.

Also, because the intranet contains crucial documentation, information had to be available locally even if the Web server was down. All Web content is stored on a single server in Melbourne, but each office also has its own central server for storing documents; data from the three overseas offices is replicated to Melbourne every four hours.

DESIGN PROCESS AND USABILITY ACTIVITIES

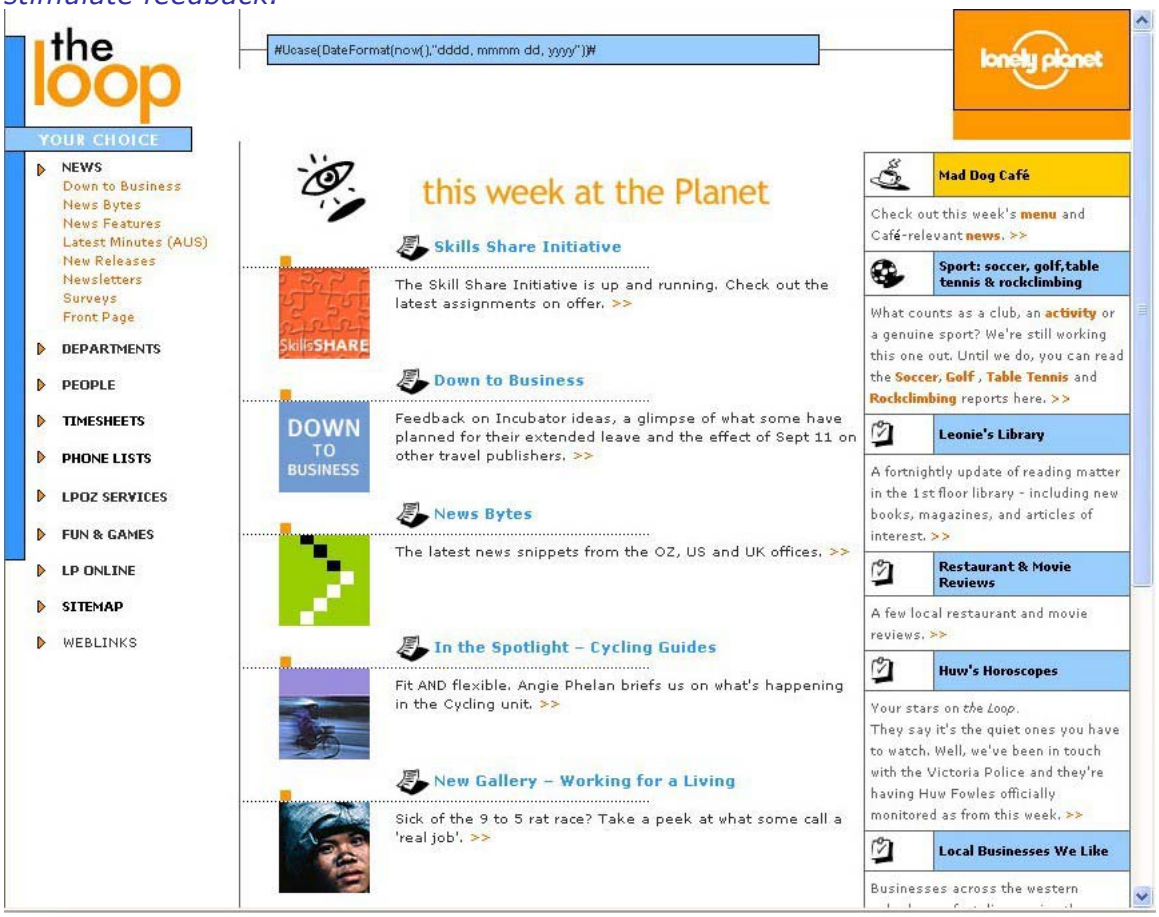
During December 2000, McVeigh visited Lonely Planet's four offices, interviewed as many people she could, and collected their ideas. "I interviewed about 150 people, every unit manager as well as some other key individuals who'd worked on the Web and who had ideas for the intranet," she recalls.

She then distilled their feedback into a strategy document and presented it to the senior management team. One of the document's suggestions was that, to get employee buy-in, the intranet should leverage Lonely Planet's corporate culture, which emphasizes social activities alongside work.

"My pitch was, rather than trying to jump straight into the heavy duty applications, it would be better to start off with the social stuff," she says. "People will always use an intranet if has fun stuff, then they will already know how to use it when they start trying to use it to help them do their jobs."

Shortly after presenting the strategy paper, McVeigh went on maternity leave and things slowed down, but the company's Web designer, Alan Koeninger, made some initial pages and put them online for staff in Melbourne. His goal was to get people used to the idea of a weekly Web newsletter and also to stimulate feedback.

Pictured: Some initial pages put online for the Melbourne staff. The goal was to get people used to the idea of a weekly Web newsletter and also to stimulate feedback.



When McVeigh returned in July, she found this had worked almost too well. "The intranet was almost unmanageable because it had grown so much and everyone wanted to launch their departments online," she explains. So she started work on scoping out the intranet, using the feedback from the December survey. The scoping took from July to mid-September, and involved creating a detailed site plan and infrastructure, as well as all user and functional requirements. All documentation was developed with input from the entire development team, and each of the company's departments nominated a key stakeholder.

The company also decided to launch new sections for two key departments: design, and sales and marketing. These departments operate globally, and so were critical in getting overseas support. User representatives were closely involved in the process. "Our belief was to get two important users involved in all aspects to help with our credibility as well as their understanding of how it works," McVeigh explains.

All the programming, from server setup to application development, was completed in two weeks by developer Andrew Stevens. McVeigh, Koeninger, and editorial manager Carol Barton then spent five weeks working intensively to convert the existing content and launch the two new sections — *Design* and *Sales & Marketing* — from scratch.

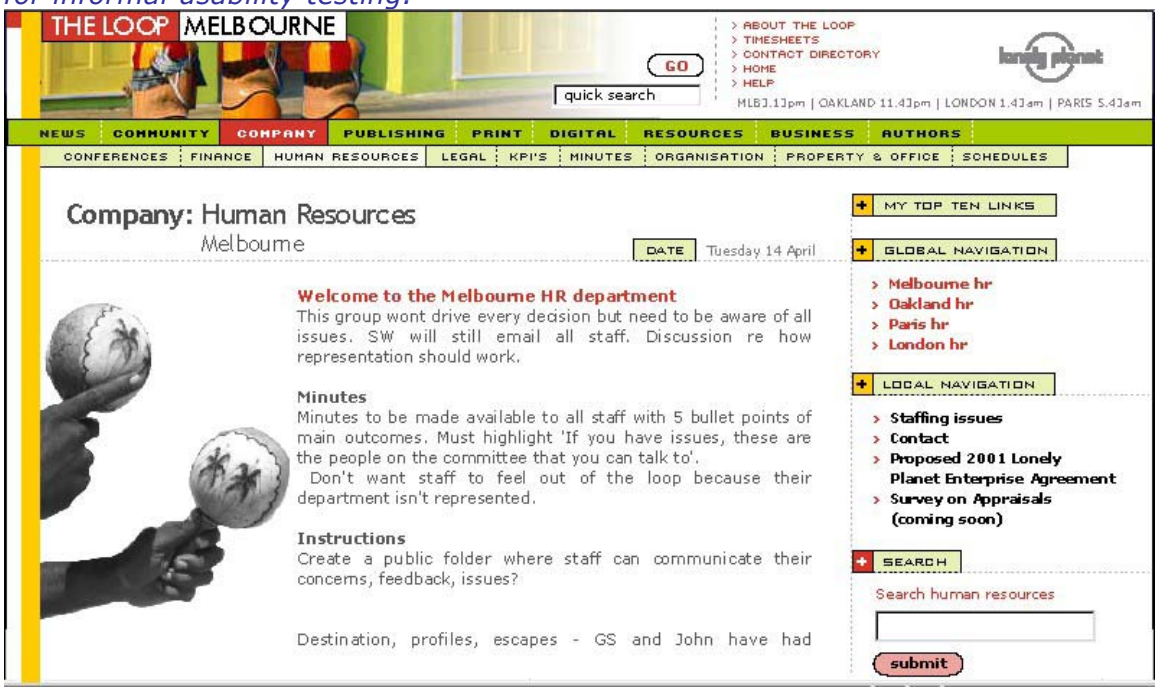
They broke the design into two distinct areas: look and feel, and content and navigation. Discussions about navigation started as far back as December 2000. "I had to get people thinking firstly about knowledge and content, and how best to structure it," McVeigh says. "This was hard because knowledge is such an intangible asset, and people generally are not that good at wanting to share it."

While planning the site navigation, there were long-running discussions about whether it should be structured around business units or functional content. Content won, which McVeigh believes makes for a more flexible system. "If your intranet mirrors the corporate structure and you restructure the company, as we've just done, then you have to change everything."

Because the information categorization was not finalized until application development had already started, many design sessions involved prototypes that did not reflect the end result. "It's hard to explain things to people without an image to relate to," McVeigh says.

McVeigh grouped the content into nine categories — which are now the main horizontal navigation on each page — then presented the categories as part of a Photoshop page mockup to the senior management team and senior line managers for discussions and briefing.

Pictured: A Photoshop page mockup grouping the content into nine categories, now the main horizontal navigation. This mockup was used for informal usability testing.



Her conceptual structure echoes the book-making process: workplace news and community; support processes that help employees do their jobs; the publishing and production processes; visual design; postproduction sales and marketing activities; and, finally, an author-related area.

The original categories are still more or less in place today, though some have been renamed, and some categories were merged. "Even after our restructure, those categories still hold because they're about process, not departments," McVeigh says. File servers throughout the organization now use the same eight categories and navigation system to store content.

In earlier designs, team members planned to have a second horizontal hidden menu appearing under the main one as categories were clicked, but they ultimately felt this would be hard to maintain as site information expanded. "When people saw it, we all realized that it would not grow and scale well as the intranet grew in content," McVeigh explains. "The hidden menu could expand out to a maximum of thirteen categories, but areas such as publishing, design, sales, and marketing are such big units, there's no way we could get all of the information in." Now, as users click each category in the main menu, vertical expanding menus appear that let users quickly drill down through three levels of the site.

Running concurrently with work on the content structure was the process of designing the look and feel. In August, Koeninger, McVeigh, and Lonely Planet's international design manager wrote an initial brief on how to create the feeling of a strong global brand with local identities. "The thing I found very hard as a designer was trying to meet all those needs," McVeigh says. "Someone in the U.K. office can have a whole different way of thinking from someone in Melbourne. We had to be very careful with terminology, too."

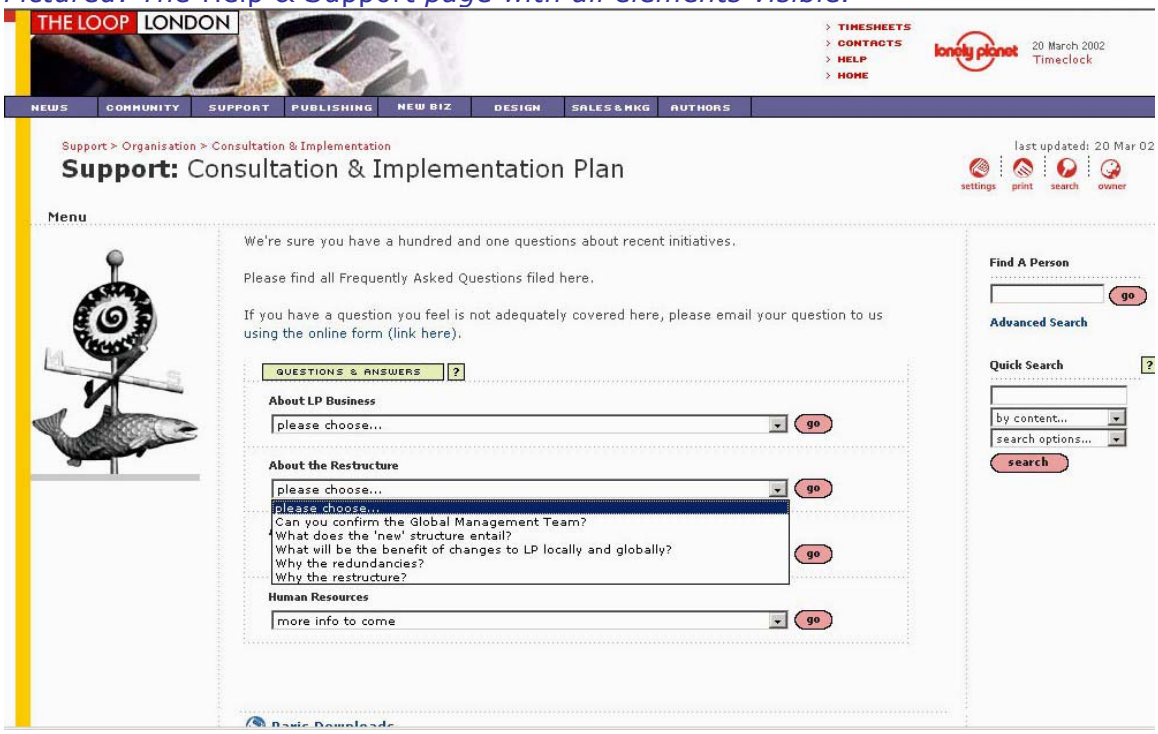
To ensure that all the regions were represented, designers from all four offices attended a design meeting. Everyone sat around the table and gave a twenty-minute presentation on their favorite websites, and the navigation and design features that impressed them. Then, each designer had to produce three visual designs: 1) text-only, 2) photographic, and 3) graphical. Each also wrote a design brief discussing visuals, branding, and the core elements on each page. It took about three weeks to complete the mock-ups. Although the graphical design concept never got off the ground, designers presented the photographic and text-only designs to a core group of key stakeholders from each office and their local design managers.

These designs were combined into a single page template, which ensures that the same core navigational features appear on every page, including the horizontal navigation and buttons to print, search, and contact page owners, and settings to customize the look, language, and accessibility needs. The main panel, however, can also be customized to give a regional identity.

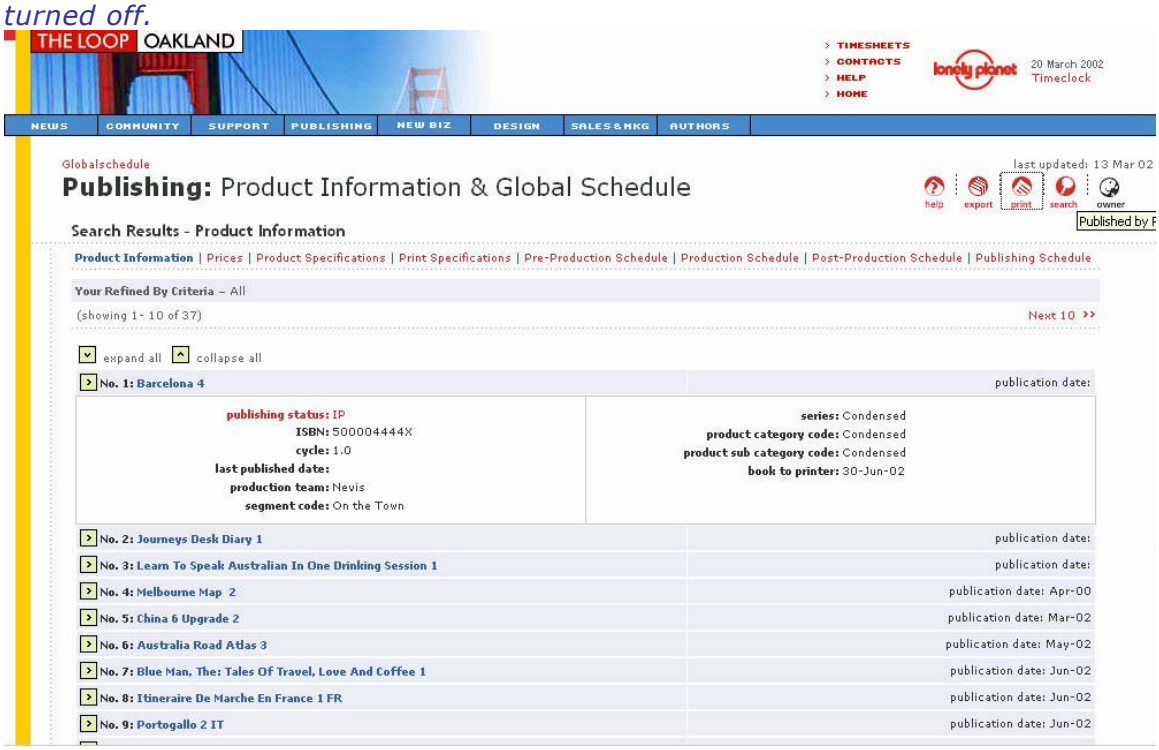
When the photographic version was approved, Koeninger applied a navigational framework and further developed the photographic design in consultation with the local design managers. As the design progressed, each section was allowed to have its own visual style.

The design also allows for user customization. Users can modify the navigation image, the left side's subnavigation, the *Favorites* and *Library* features, the right side links, and the center content.

Pictured: The Help & Support *page with all elements visible.*



Pictured: An application results page with left- and right-hand navigation turned off.



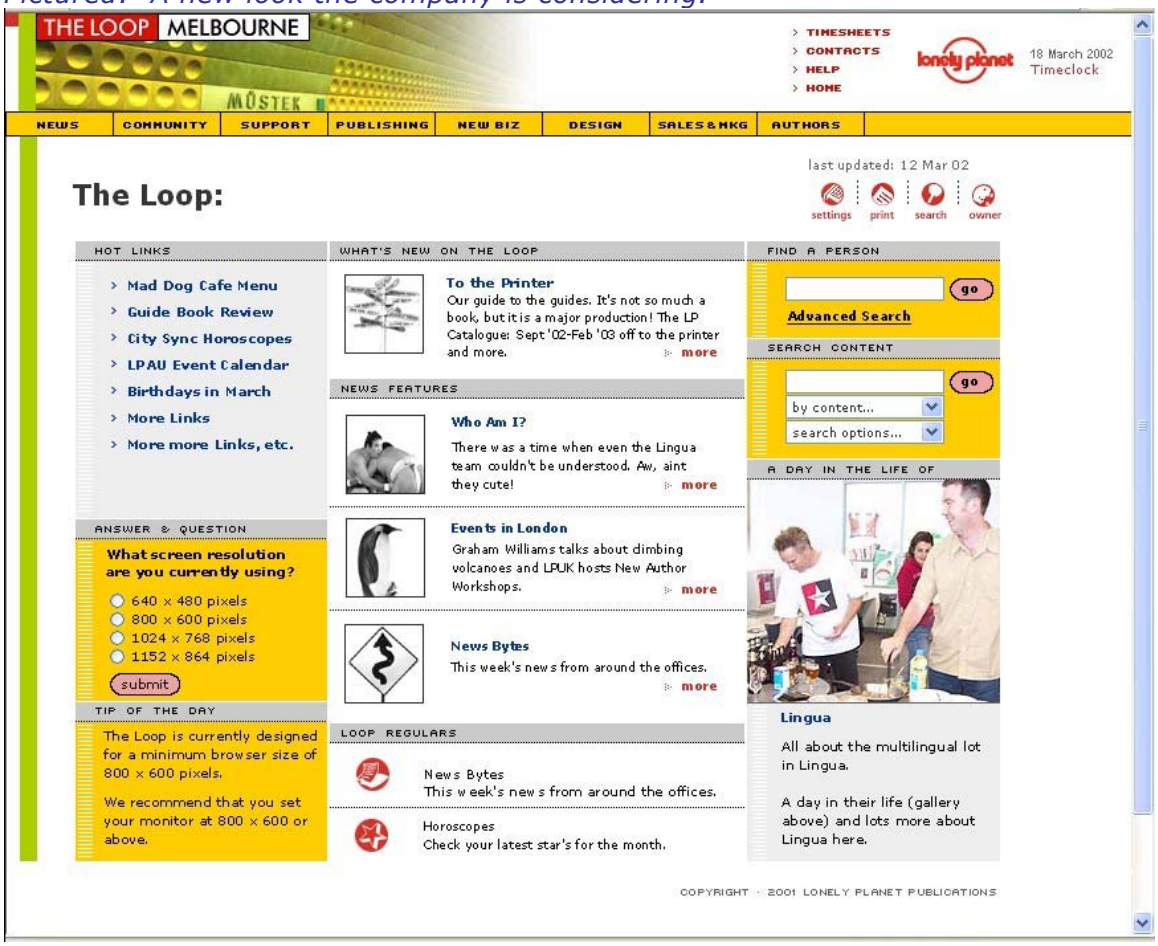
McVeigh and the company's international design manager signed off on the final design, with agreement from local design managers. A working HTML prototype, showing how the actual navigation and other core features would operate, was then

presented to all staff at open sessions in Melbourne. For overseas staff, there were dedicated meetings and telephone conferences with key stakeholders. Once the core design was finalized, the team created templates of each core page, the programmer built the application, and, in late September, the final design was approved.

Since the launch, the team has modified the front page design to make it easier for the editorial manager to update without having to rely on a designer. The new design also allows for more interactive features, including a quick poll, tip of the week, and photo gallery. The new front page took about four weeks to design and test. Testing involved a group of core users with differing intranet exposure and requirements. The team also got ideas from the 2001 Nielsen Norman Group intranet report[2] and by talking to other companies with proven expertise in the area.

Refining the design is a continuous process, and the company is now considering a new look. Also, it plans to add remote access for its network of over 150 authors in early 2003.

Pictured: A new look the company is considering.



[2] *Intranet Design Annual 2001: 10 Best Intranets of the Year*; www.nngroup.com/reports/intranet/2001

TIMELINE

- August 2000: Concept of *The Loop* is broached.
- December 2000: McVeigh interviews users in four offices, and sends strategy paper to senior management team.
- Early 2001: Prototype site for Australian staff launched.
- July 2001: McVeigh returns from maternity leave; starts scoping out intranet.
- July–September 2001: Design work on intranet completed.
- October 2001: Construction.
- November 2001: Existing content converted to electronic form.
- December 2001: *The Loop* goes live worldwide.

RESULTS

Though Lonely Planet has not put any figures on business gains from the intranet, information duplication within the company has already been reduced and files previously kept in four different places are now in one location. Communications have also improved. Once the internal database is up and running, the team plans to do a cost-benefit analysis.

McVeigh feels that the greatest gain from the intranet has been improved inter-office communication. In early 2002, for example, Lonely Planet went through a major restructuring during which almost all the publishing staff had to reapply for their jobs. "*The Loop* provided a place where all staff could find information on the new structure, timelines, updates, job descriptions, and so on," says McVeigh. "We also offered access to staff on maternity leave and holidays. It was a stressful time for the whole company, but at least all staff could be reassured that the information was there whenever they needed it. I believe that the fact the process ran smoothly and we did not get many complaints is proof of the intranet's value."

LESSONS LEARNED

Insights from Melissa McVeigh:

Start with the fun stuff. "People will always use an intranet if has fun stuff; then they will already know how to use it when they start trying to use it to help them do their jobs."

Give people something to look at. "It's hard to explain things to people without an image to relate to."

Share experiences. "A great source of inspiration is to talk to other companies with Web-based intranets."

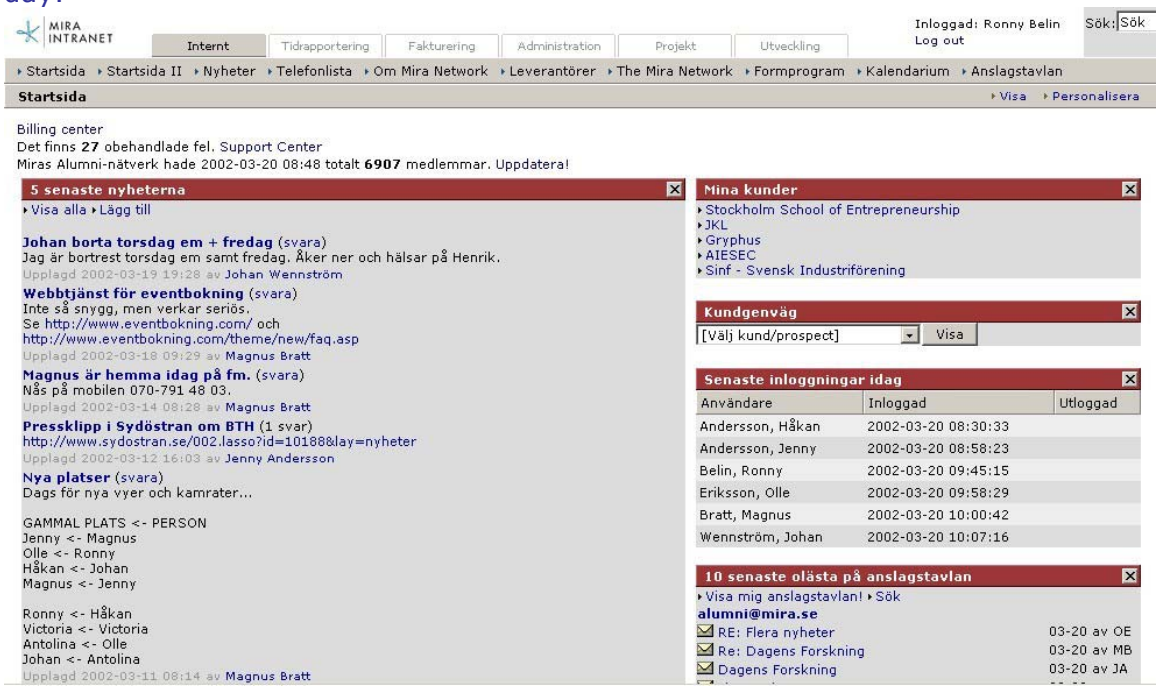
Mira Network AB

USING THE INTRANET:
Mira Network, started in 1998, is a Swedish Internet consultancy with twelve employees, headquartered in Stockholm. The company helps other companies use the Internet to transform their business by focusing on systems that are closely integrated with the clients' core business. Mira Network is also an incubator for Internet-related business ideas.

DESIGN TEAM:
Mira Network

MEMBERS: HÅKAN ANDERSSON, TECHNICAL CONSULTANT, INTRANET COORDINATOR; RONNY BELIN, BUSINESS CONSULTANT; MAGNUS BRATT, BUSINESS CONSULTANT; OLLE ERIKSSON, TECHNICAL CONSULTANT; JOHAN WENNSTRÖM, BUSINESS CONSULTANT

Pictured: The home page, which contains news and shortcuts to the specific responsibilities for the person logged in. It also pushes important information such as a link to the time-reporting function with a comment: You haven't reported your time for three days. You should do this every day.

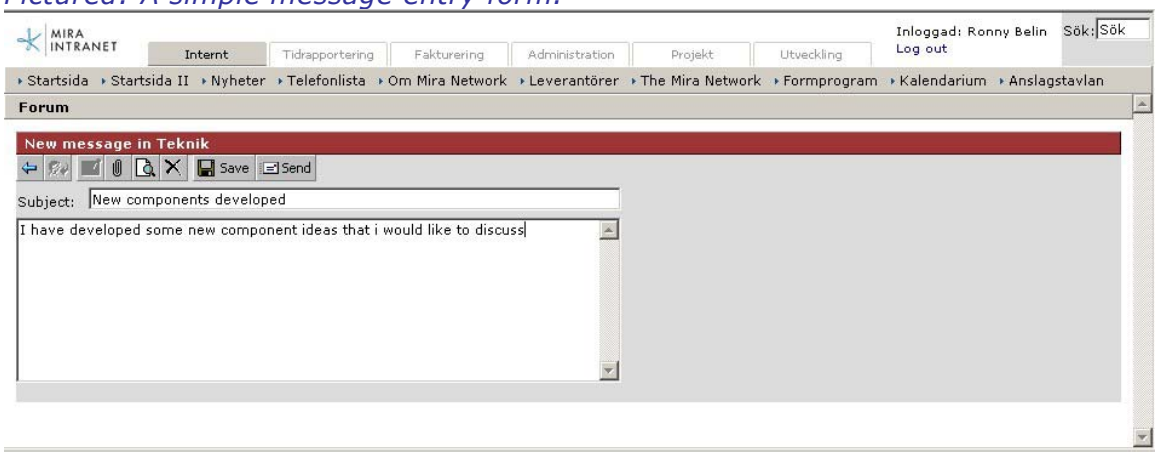


SUMMARY
The users of this intranet are primarily the employees who work with system development, project management and administration, customer contact, and sales. Some users frequently access the intranet from other locations, such as client sites, their home office, or when traveling. Meeting the needs of these different users, especially those who travel and those who deal with customers, cuts right to the core of their business. The intranet, organically developed by the users, meets this important challenge. The employees use spare resources to create functionality that suits their needs. The designers boldly decided to involve all users, which creates high usage and functionality over a wide range of areas.

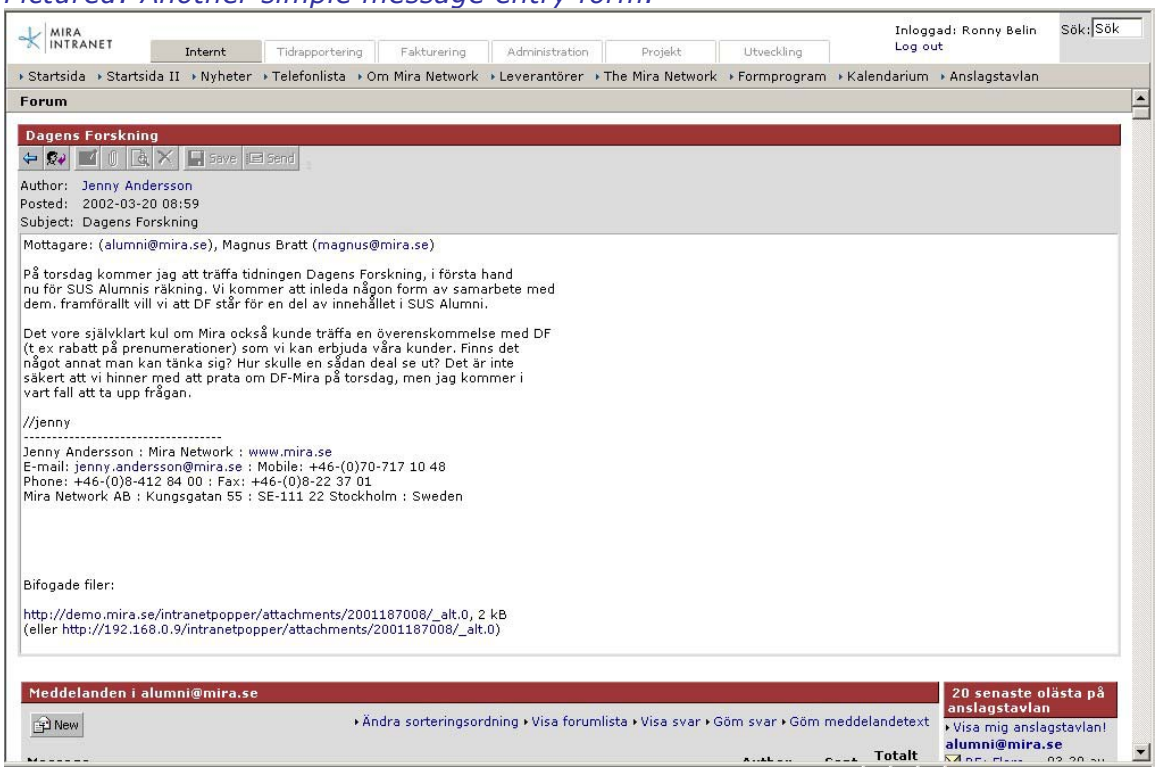
While some intranets are strong on content, and others are strong on data collection, this intranet excels in both areas. The site combines information that users can consume with text entry and reporting features that streamline corporate processes; employees can exploit both to thoroughly communicate with each other. Much of the site's functionality is based on the bulletin board, which works as a universal message management machine that users can easily customize for multiple purposes, making input verification possible.

Understanding that users transfer knowledge from one interface to the next, the designers created the intranet such that all data input uses an email metaphor familiar to all users. Further, users can submit messages via ordinary email or SMS straight into specific intranet locations.

Pictured: A simple message entry form.



Pictured: Another simple message entry form.



The time-reporting function provides an easy way for the employees to report their hours, independent of where they are at the moment. Ironically, reporting time daily could take up much of an employee's time if the system is not well designed. Worse, employees could rebel against reporting time consistently or at all if they do not like using the system. In this case, however, the month report is the basis for salary payout and hence the time-reporting function works as a usage booster on the intranet. Also, the simple design makes for a painless time-reporting experience.

Pictured: A time-reporting form.

MIRA INTRANET

Internt | Tidrapportering | Fakturering | Administration | Projekt | Utveckling

Inloggad: Ronny Belin
Log out

Sök: Sök

Tidrapportering ▸ Månadsrapport ▸ Personalsammanställning *

Tidrapportering: 2002-03-18

Feb | Mar | Apr

Tidrapportera

--- Mina projekt ---

Tid:

Faktureras: Ja Nej

Komponenter:

Spara | Avbryt

Dagrapportera

Arbete
Sjukdom
Semester
Ej arbete

Kommentar:

Spara

Tidrapporteringar

Projekt	Tid	Faktureras	Beskrivning	Komponenter	Id
Alumni - sälj & mfö	3,5	0	Möte på Ottsjö	-	Ändra / Ta bort
Mira övrigt	1	0	Måndagsmöte	-	Ändra / Ta bort
JKL Löpande support och koordinering	0,5	1	Telefonsamtal med Martin Ågren (eg. 0:20)	-	Ändra / Ta bort
Gryphus Alumninätverk	0,5	0	Koordinering inför lördagens möte.	-	Ändra / Ta bort
Sinf, U1: Koordinering	0,5	1	Samordning med Mary-Anne inför improt till XOR.	-	Ändra / Ta bort
Övrig arbetstid	1	0	-	-	Ändra / Ta bort
Mira övrigt	0,5	0	Hjälpte Jenny m. fotografering.	-	Ändra / Ta bort
Mira övrigt	0,5	0	Fikade för min födelsedag.	-	Ändra / Ta bort
Summa	8	-	-	-	

Minnesanteckningar, kontaktnoteringar och inlägg i anslagstavlor under dagen

Tidpunkt	Rubrik	Kund	Anslagstavla
2002-03-18 13:47:00		Ottsjö	Kunder
2002-03-18 14:35:00	Medlemsnätverket LibNet	Ottsjö	Kunder
2002-03-18 15:27:00	Import av medlemsföretag till webbtjänsten	Sinf	Kunder

Pictured: The month report, used as basis for salary payout.

MIRA INTRANET

Internt | Tidrapportering | Fakturering | Administration | Projekt | Utveckling

Inloggad: Ronny Belin
Log out

Sök: Sök

Tidrapportering ▸ Månadsrapport ▸ Personalsammanställning *

Månadsrapport: Mars 2002, Ronny Belin

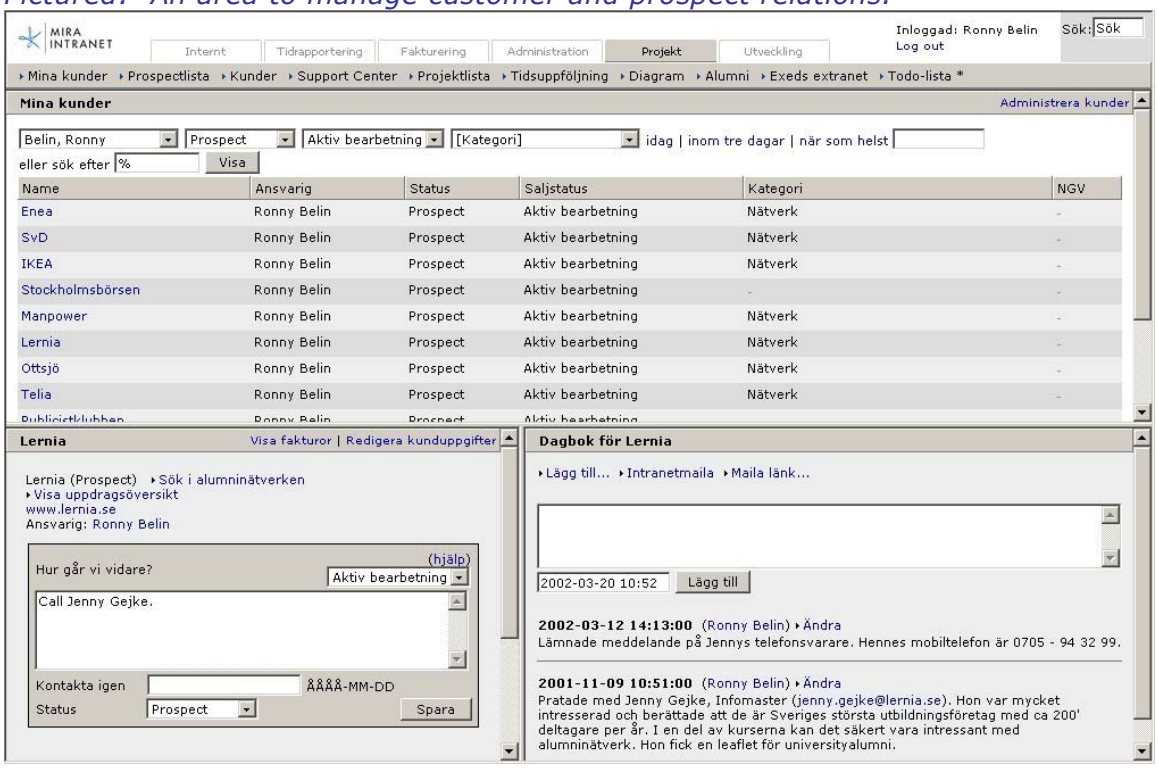
2002 | 3

Månadsrapport

	Dagrapportering	Fakt. projekttid	Övr. projekttid	Övr. arbetstid	Total tid	Egen tid		
1. F	Arbete	5	1,5	1	7,5	0	INFO	TID-RAPPORT
2. L		0	0	0	0	0		TID-RAPPORT
3. S		0	0	0	0	0		TID-RAPPORT
4. M	Arbete	6	1,5	1,5	9	0	INFO	TID-RAPPORT
5. T	Arbete	0,5	6,5	1	8	0	INFO	TID-RAPPORT
6. O	Arbete	1	6	1	8	0	INFO	TID-RAPPORT
7. T	Arbete	2,5	2,5	1	6	0	INFO	TID-RAPPORT
8. F	Arbete	0,5	6	1,5	8	0	INFO	TID-RAPPORT
9. L		0	0	0	0	0		TID-RAPPORT
10. S		0	0	0	0	0		TID-RAPPORT
11. M	Arbete	0	8	0	8	0	INFO	TID-RAPPORT
12. T	Arbete	0	6	3	9	0	INFO	TID-RAPPORT
13. O	Arbete	7	2,5	1	10,5	0	INFO	TID-RAPPORT
14. T	Arbete	0	7	1	8	0	INFO	TID-RAPPORT
15. F	Arbete	0	7	2	9	0	INFO	TID-RAPPORT
16. L		0	0	0	0	0		TID-RAPPORT
17. S		0	0	0	0	0		TID-RAPPORT
18. M	Arbete	1	6	1	8	0	INFO	TID-RAPPORT
19. T	Arbete	5,5	4	0,5	10	0	INFO	TID-RAPPORT
20. O		0	0	0	0	0		TID-RAPPORT
21. T		0	0	0	0	0		
22. F		0	0	0	0	0		
23. L		0	0	0	0	0		
24. S		0	0	0	0	0		
25. M		0	0	0	0	0		

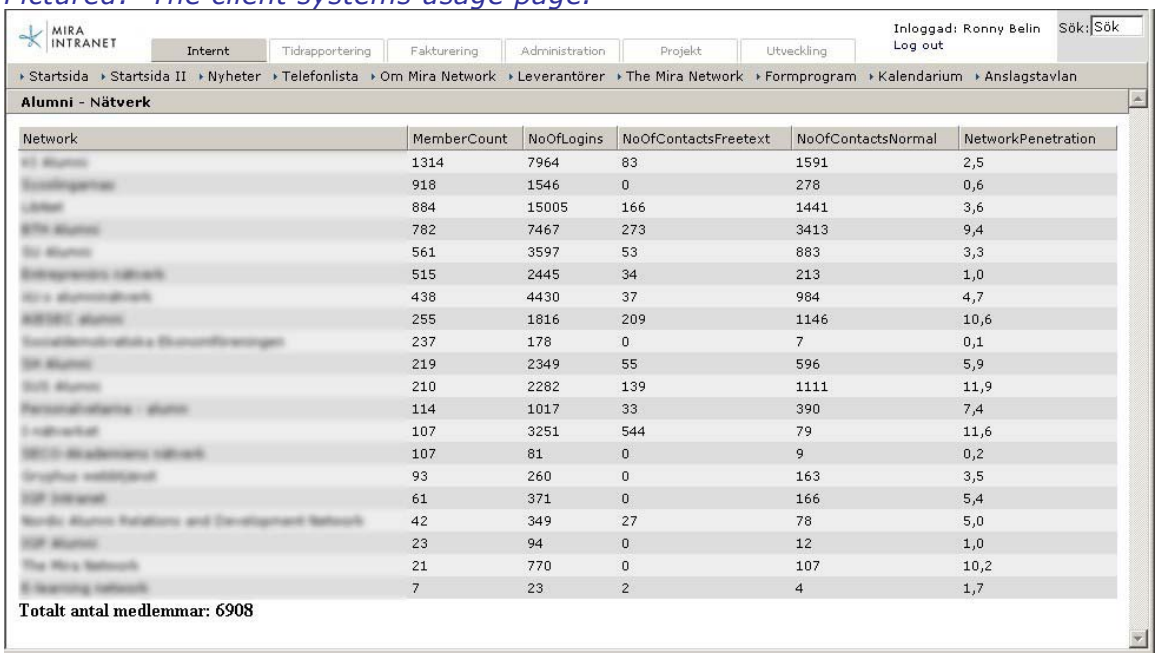
Employees can also use the intranet creatively to keep abreast of customer and potential customer relations. The site provides an area for management of customer and prospect relations. The site includes a diary for each customer, in which employees can record contact events.

Pictured: An area to manage customer and prospect relations.



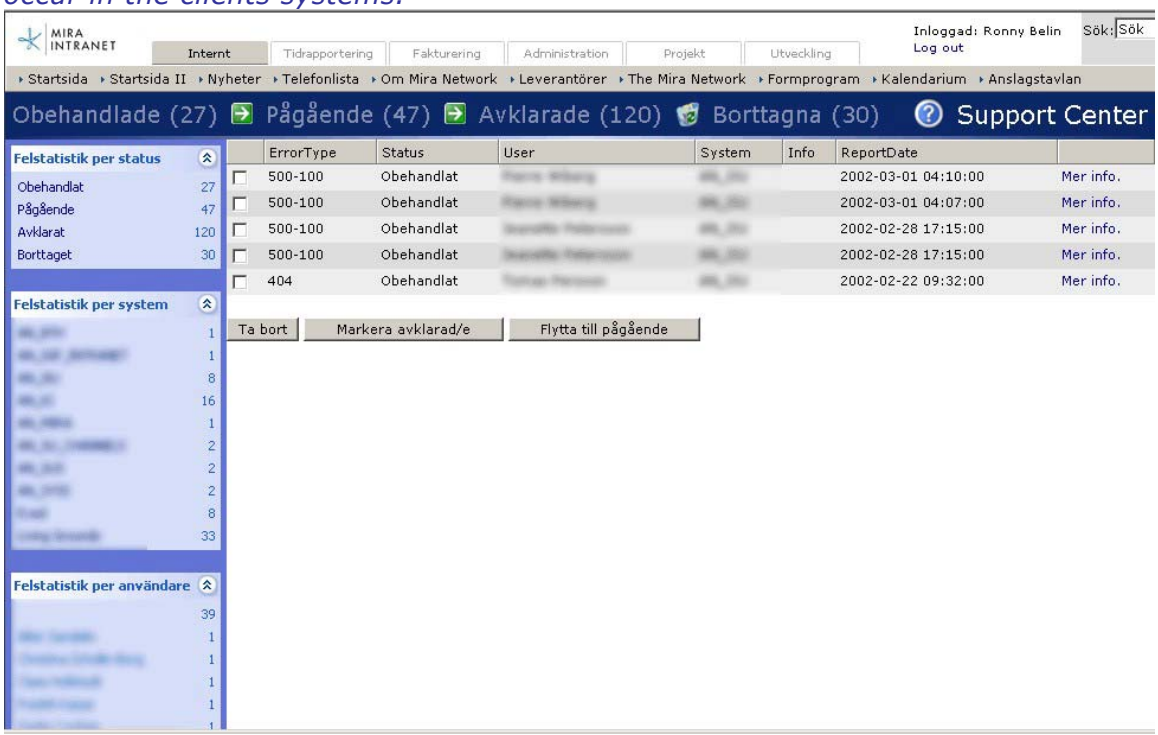
Once clients are signed, the intranet provides information about the status of the clients' systems, how many users they have, and how active they are. And, to expedite efficient maintenance for client systems, the intranet provides a function that issues automatic alerts when errors occur in clients' systems. This leads to better relationships with clients.

Pictured: The client systems usage page.



Network	MemberCount	NoOfLogins	NoOfContactsFreetext	NoOfContactsNormal	NetworkPenetration
[illegible]	1314	7964	83	1591	2,5
[illegible]	918	1546	0	278	0,6
[illegible]	884	15005	166	1441	3,6
[illegible]	782	7467	273	3413	9,4
[illegible]	561	3597	53	883	3,3
[illegible]	515	2445	34	213	1,0
[illegible]	438	4430	37	984	4,7
[illegible]	255	1816	209	1146	10,6
[illegible]	237	178	0	7	0,1
[illegible]	219	2349	55	596	5,9
[illegible]	210	2282	139	1111	11,9
[illegible]	114	1017	33	390	7,4
[illegible]	107	3251	544	79	11,6
[illegible]	107	81	0	9	0,2
[illegible]	93	260	0	163	3,5
[illegible]	61	371	0	166	5,4
[illegible]	42	349	27	78	5,0
[illegible]	23	94	0	12	1,0
[illegible]	21	770	0	107	10,2
[illegible]	7	23	2	4	1,7

Pictured: A function that automatically alerts employees when errors occur in the clients systems.

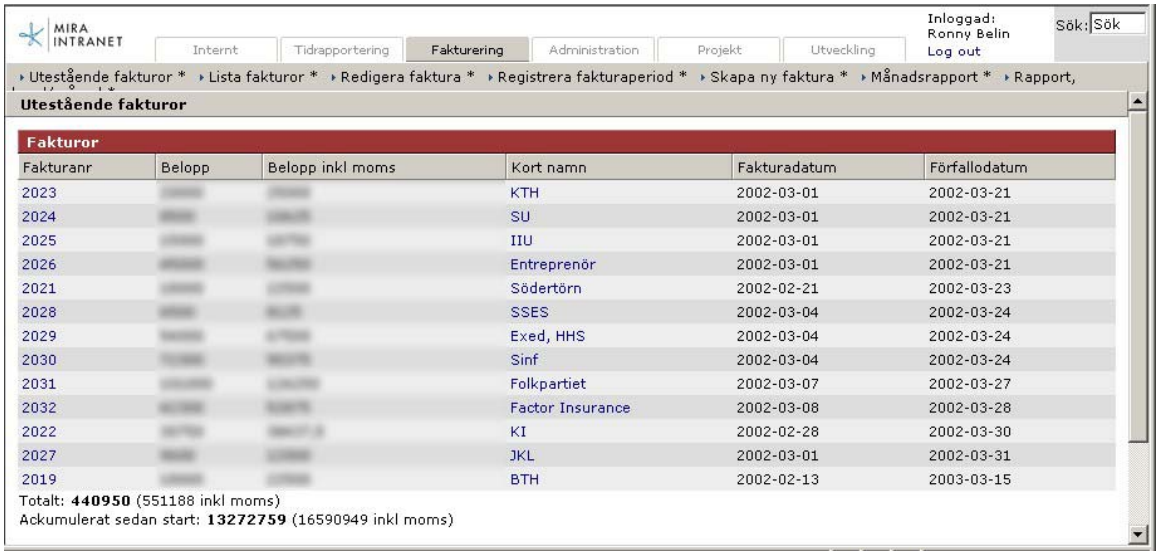


	ErrorType	Status	User	System	Info	ReportDate	
☐	500-100	Obehandlat	[illegible]	[illegible]		2002-03-01 04:10:00	Mer info.
☐	500-100	Obehandlat	[illegible]	[illegible]		2002-03-01 04:07:00	Mer info.
☐	500-100	Obehandlat	[illegible]	[illegible]		2002-02-28 17:15:00	Mer info.
☐	500-100	Obehandlat	[illegible]	[illegible]		2002-02-28 17:15:00	Mer info.
☐	404	Obehandlat	[illegible]	[illegible]		2002-02-22 09:32:00	Mer info.

The error reporting feature is only one way that the intranet designers provide innovative, up-to-the-minute information to employees. For example, the site provides a simple method for creating, modifying, and following up on invoices. Keeping accounts up to date is key to any well-run business, and using the home-

grown intranet to do this in a way that suits your company processes and culture is clever.

Pictured: A simple method for creating, modifying, and following up on invoices.



The employee contact feature lists all company employees, with links to more detailed information about them. This function is also integrated with mail programs using vCards, and the list notes when each person last logged in to the intranet, so users know who has started working that day.

The intranet's look and feel is comforting, with consistent tab navigation and an always-present search box. The color scheme is uncomplicated, using maroon for delineation lines and a splash of color, legible black text on white pages, and standard blue text for links. The welcoming graphic design compliments the inventive productivity features that employees can use throughout their workday.

Scoring (3 = best)						
Simple look	Simple navigation	Consistent navigation and design	Visible search	Simple search	Limited (well-presented) text on pages	Home page
3	3	2.9	3	3	2.5	2.8

DESCRIPTION OF THE INTRANET

Mira Network's intranet provides the company's staff with tools to make their work more efficient.

BASIC FEATURES

The intranet supports the administrative parts of the users' work as well as the more creative and educational parts. Features include:

- Time reporting
- Customer relationship management (CRM)
- Bulletin board (with support for Web, email, and SMS input)

- Invoice administration
- A support tool that automatically reports errors in clients' systems
- Client, project, and project team administration
- Executive information support
- Maintenance tools for client product updates
- User statistics from clients' systems
- Office equipment ordering
- Phone list
- News
- Calendar
- To-do list
- Information about Mira Network
- Micro features for several miscellaneous functions

URL AND ACCESS

The intranet is hosted externally by a professional hosting company and is accessed by the URL http://www.mira.se/intranet/. Log-in requires a username and password, making the intranet available from any computer with Internet access. From the company's personal computers, most users use an "autologin" feature to avoid having to type username and password each time they access the system. The log-in is not integrated with Windows normal network log-in since some intranet users do not have access to the local area network. Some LAN users (employees of other companies sharing the same facilities) do not have access to the intranet.

BACKGROUND

Mira has had a basic intranet since the company was set up in 1998. Initially, some of the company's employees worked at home and others worked in separate offices, so it was important to have a way of exchanging information easily and creating a sense of common purpose. The intranet was originally created to support time reporting, a function that is essential for generating Mira's revenues. Since then, new functions like bulletin boards and company news have been added.

There have been three distinct versions of the intranet; the most recent was introduced for two reasons: user dissatisfaction with the previous design, and the need to add several major new functions. These included an invoicing system; a search function, which was needed to handle a growing volume of intranet information; and improved navigation for selecting time-reporting dates.

GOALS AND CONSTRAINTS

The intranet's main goal is to provide users with tools to improve their work efficiency. The company achieved this goal by providing a platform that makes it easy to add suitable functionality.

Mira encourages its employees to add new intranet functions. The only constraint is that they be able to justify the time needed to build a function in terms of the business benefit it will deliver.

The site's design reflects Mira's corporate branding, and is intended to work on a wide range of browsers and platforms so it's easily accessible when employees are traveling. "It's important to use very simple technology," says Ronny Belin, business consultant. "We only use JavaScript if we have to."

DESIGN PROCESS AND USABILITY ACTIVITIES

Mira has a philosophy of continuous development, not only for its own intranet but for projects it works on for external clients. Users gradually add new functionality to the intranet themselves, in response to a business need and when they have the time to work on it. "The employees use spare resources to create the functionality that suits their needs. If you want a new function, you just build it yourself or get someone else to build it," explains Belin.

He estimates that time spent on intranet development can range from zero to forty hours a month, with most new functions taking ten to twelve hours to build. The entire development time for the intranet is probably 400 hours in total.

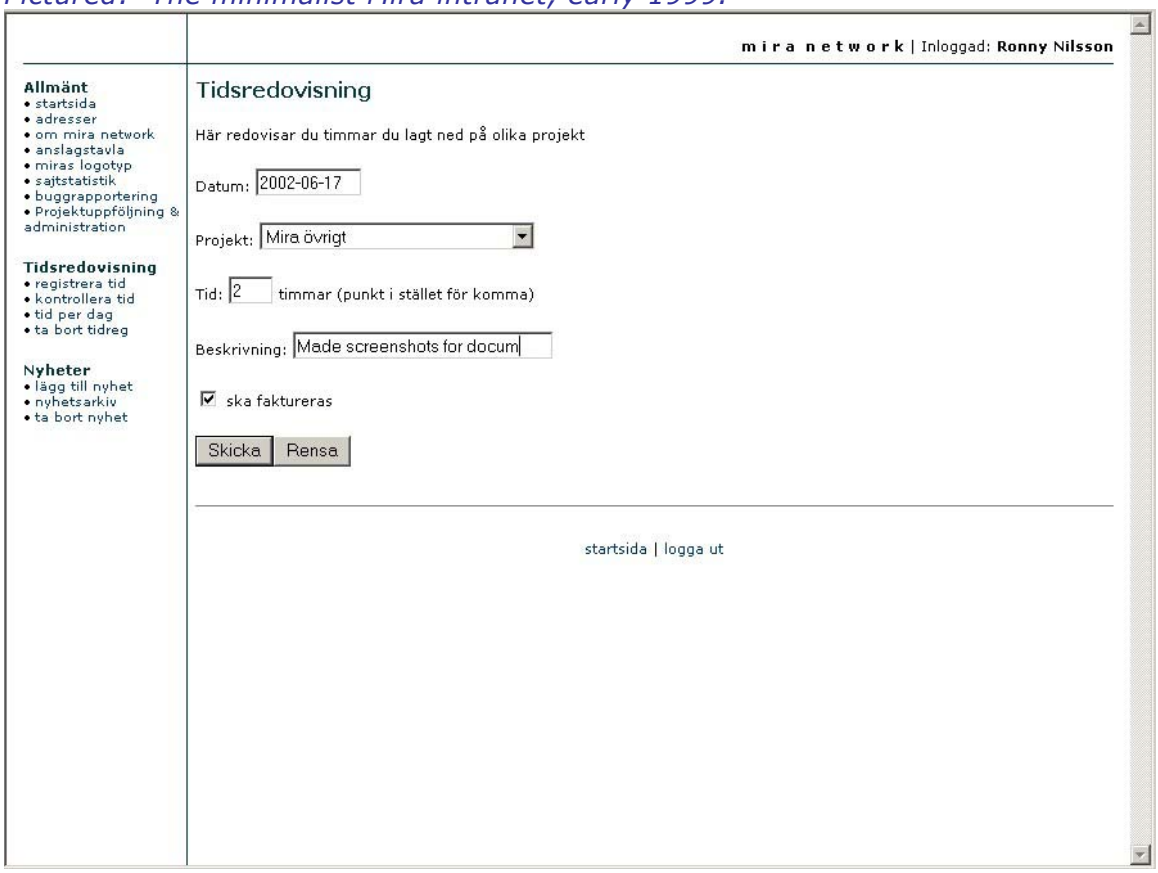
Because Mira is a small company, and all of the staff is closely involved in building the intranet, user feedback is a natural part of the development process. "We have a culture where it's natural to seek feedback from the users and for users to give feedback," Belin explains.

The high user involvement in building the intranet also encourages high system usage. New functions are tested in the most practical possible way. "If the function proves to be useful, we keep it; if not, we disable it," Belin explains. In practice, only a few minor features have actually been disabled.

In addition to the ongoing feedback, the company has a regular meeting every Friday afternoon to discuss usability improvement across all its projects, including the intranet. "It's a very informal meeting. Sometimes we just have a beer and a chat," according to Belin.

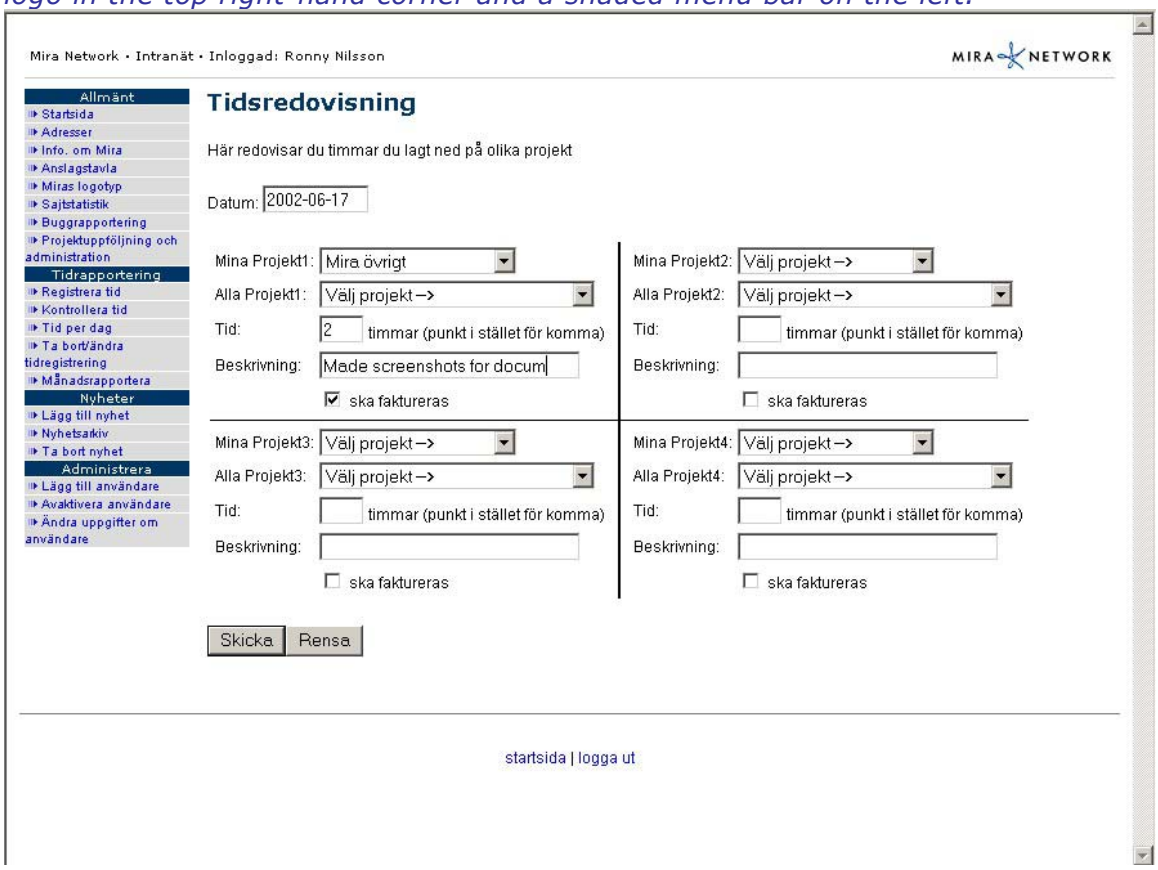
In early 1999, the Mira intranet was somewhat minimalist. "We had no design at all!" comments Belin. Nonetheless, the intranet serves its purpose of providing common tools for employees who do not work out of one office.

Pictured: The minimalist Mira intranet, early 1999.



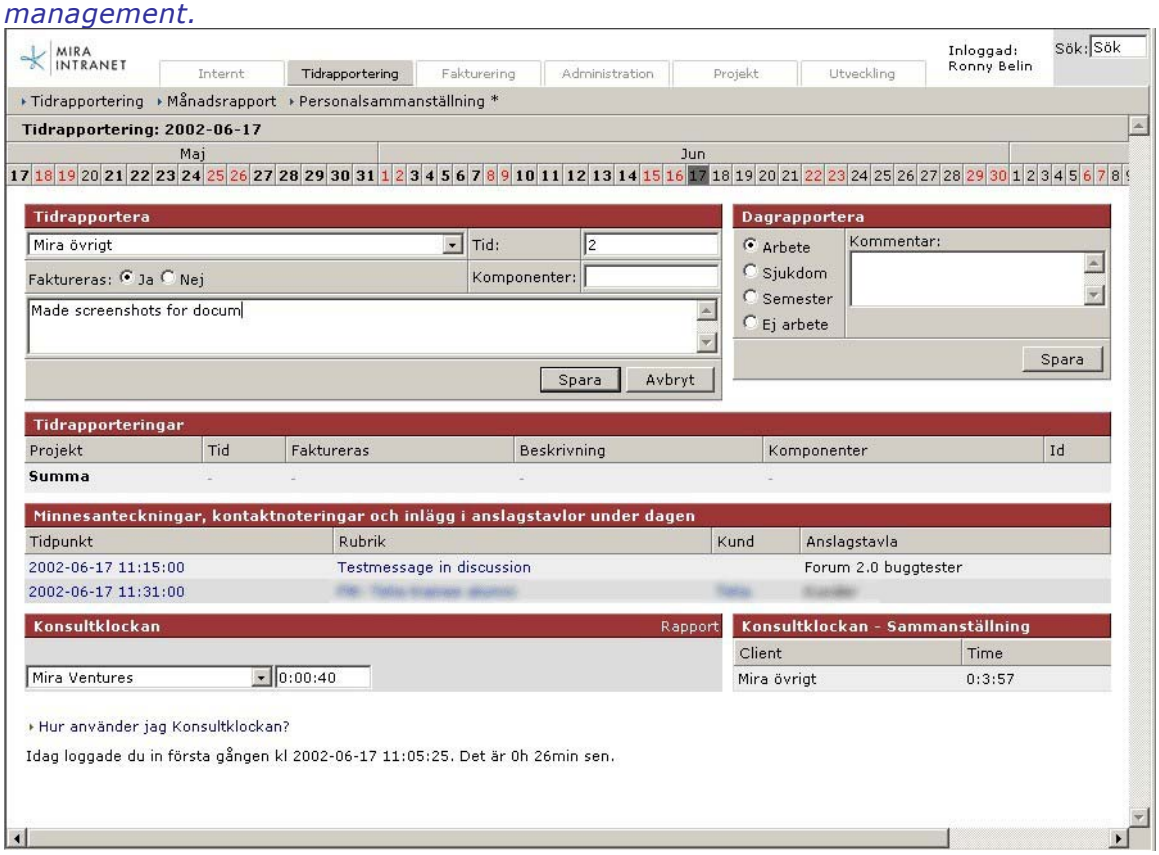
Later the same year, the intranet still had a very simple layout, but did feature some design elements, such as the company logo in the top right-hand corner and a shaded menu bar on the left; the left-hand menu content remained the same. The extra section, *Administrera*, was only shown to users with a higher access level, and enabled them to add, deactivate, and edit system users. One major change let users fill in and submit four different time reports at once, rather than doing them sequentially, thereby saving time and making it more appealing to use the function.

Pictured: Another iteration of the intranet in 1999. It still had a very simple layout, but included some design elements, such as the company logo in the top right-hand corner and a shaded menu bar on the left.



In the summer of 2000, the intranet underwent a major rewrite, partly to improve the design (which was unpopular with users), and partly to add new invoicing, *Fakturering,* and search functionality. Also, a new CRM function, *Projekt,* was added prior to the new design's release.

Pictured: The summer 2000 intranet design featured a major rewrite, with added functionality for invoicing, search, and customer relationship management.



"The aim with the design was that it should feel like a tool, not a brochure," Belin recalls. "We wanted it to look like Office." For example, the bulletin board message composition feature uses standard Outlook icons.

To minimize the area needed by navigation, the left-hand navigation bar was replaced with horizontal tabs across the top of the screen (the application uses full screen width, regardless of screen resolution). Clicking on either the company logo or the *Internt* tab takes the user back to the start page.

The time-reporting page includes a new navigation for selecting dates by clicking on the appropriate day, and users can now do project-based time reporting and day reporting on the same page.

Users also have a wider range of information to help them do their jobs, including a summary of all time reports submitted, *Tidrapporteringar,* and a record of all potentially billable activities carried out on the intranet, such as discussions in the technical bulletin boards. This is automatically populated from relevant areas of the site. "If you post a message in the development bulletin board, it automatically appears in this section," Belin explains.

The *Konsultklockan* function at the bottom of the page is a stopwatch, which employees can use to determine how much time they spend on work for each client.

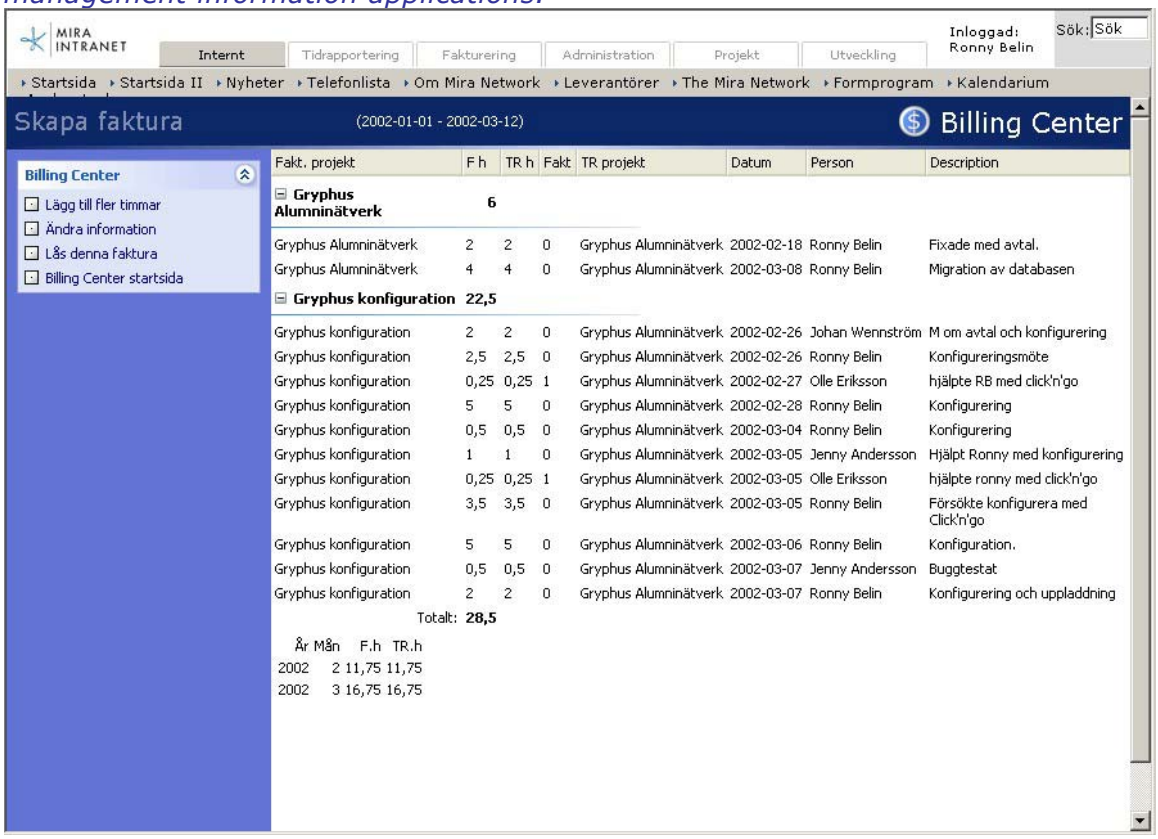
"It's not widely used. You tend to forget to switch it on, or off, but it works for some people so we haven't disabled it," Belin says.

Similarly, the current start page draws together several information sources, including a list of which employees are logged into the intranet, and can thus likely be contacted. The start page also includes the most recent news and bulletin board messages, and direct links to information on each employee's clients.

Both the current time-reporting application and home page have a layer of secondary navigation for each section under the main section tabs — a feature introduced to deal with the growing quantity of intranet information. "This was an idea we stole from other sites. We find it very effective in making navigation compact," says Belin. The most commonly used secondary functions are positioned under the section tab. For example, news and the telephone list are near the main start page tab, and the CRM application is near the project management, *Projekt,* tab.

Mira's intranet is continuously evolving; the proposed design for one of its management information applications shows a more striking design using contrasting colors and Windows XP-like look and feel.

Pictured: A proposed, more striking design for one of the intranet's management information applications.



TIMELINE

- 1998: Mira founded; Web-based time-reporting application created.

- Early 1999: News, bulletin board, and project information applications added.
- Late 1999: Design elements introduced, time-reporting function enhanced.
- Summer 2000: Major redesign.

RESULTS

"The intranet is now a critical tool for Mira. Each employee uses it every day, several times a day," says Belin. The company has not tried to quantify the business benefits, but believes there have been clear gains from automating core functions such as time reporting. In Belin's own experience, for example, the recently introduced invoicing feature halved the time it took him to produce an invoice.

LESSONS LEARNED

Insights from Ronny Belin:

Arrange your intranet around your business structures. "Because we modeled the system around the structures in our business, it was easy to communicate what the various functions did. They were functions users were already familiar with."

Keep it simple. "It can be good to trade flexibility for less complexity. There's no point having a good-looking browser if it won't work in your hotel room."

Learn from other designs. "Amateurs borrow, artists steal. We try to steal ideas from existing interfaces because the user will feel comfortable with them, and because we know someone has already put a lot of thought into designing them."

Look for the killer app. "You need a killer app in your intranet to create usage. In our case, it was time reporting."

Design Matters, Inc.

Using the Intranet:

Design Matters, Inc. is an interactive agency that has designed and developed Web solutions since 1994. The company has designed, developed, and implemented data-driven intranets (and other controlled-access Web applications such as extranets, "leadership sites," and business-to-business sites). The company has pioneered implementations of content management solutions, personalized content delivery, online relationship management technology, e-catalogs, streaming media, recommendation engines, and portals for more than eight years. As a result, Design Matters was able to draw from deep and broad experience to build its own integrated intranet, extranet, and websites.

Design Team:

In-house

Members:

Tom Skelly and Marie Chen, visual interface designers; Tim Stuart, software engineer; Olivier Le Gouanvic, software engineer; Adrien Zamani, software engineer; Dmitriy Buslovich, Web developer; Robert Fornesi, project manager.

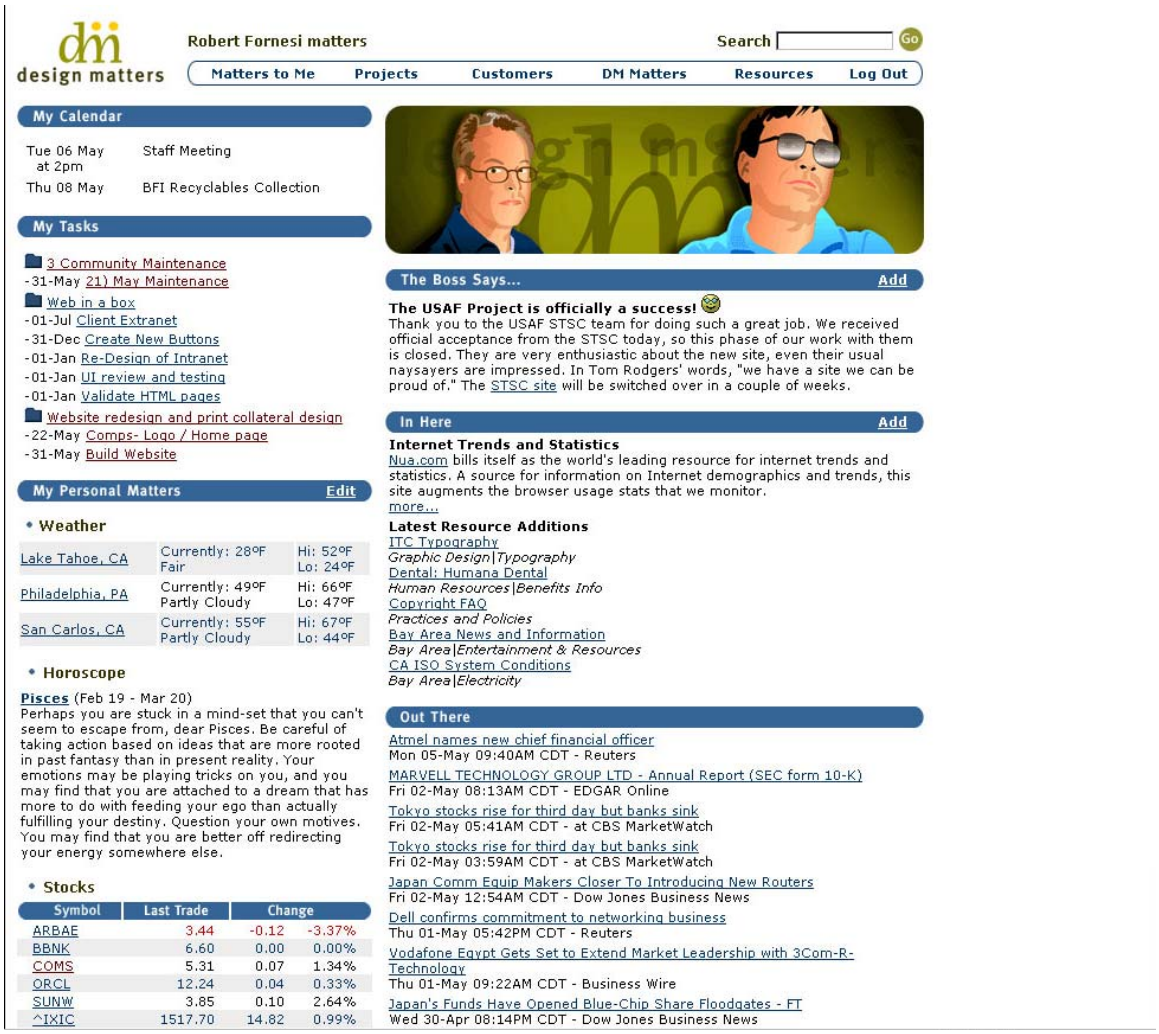
SUMMARY

The Design Matters' intranet is proof that intranets can be both entertaining and efficient. This intranet homepage reveals the site's appealing, strong, professional, and yet carefree style. Users are first greeted by illustrations of actual employees, which rotate randomly. (How fun for employees to have an illustration of themselves.) News from the company partners typically changes weekly and is labeled *The Boss Says,* to match the intranet's blithe style. In this arena, the casual title is far better than something seen on more formal intranets, such as *CEO's Message*.

A clever play on words takes "matters" from the company name and injects it into titles, such as the witty *My Personal Matters*. And, when intranet users log in, the homepage shows their name followed by the word "matters," as if to say, "You, Joe Smith, are important."

In addition to the amusing morsels peppered throughout, the intranet streamlines employees' work by giving them the information they want and need in a neat package. The homepage presents a personalized overview of employees' projects, their exclusive tasks, and customer information. *My Calendar* and *My Tasks* are specific to the logged-in user, making it easy for employees to plan their day. Employees can review their tasks on the homepage or drill down into project-specific information.

The homepage dedicates significant space to company news and news in related industries. Again, the labeling, *In Here* and *Out There*, reinforces the overall style.



Pictured: The Design Matters intranet homepage reflects the company style while still communicating news and increasing employee efficiency.

On a more private level, users can customize their homepage's *My Personal Matters* section, selecting items such as stocks, horoscopes, and international weather, as well as personal bookmarks to restaurants, theatres, or other subjects of interest.

Pictured: Users can customize the *My Personal Matters* section on their homepage, adding items such as stocks, horoscopes, and international weather.

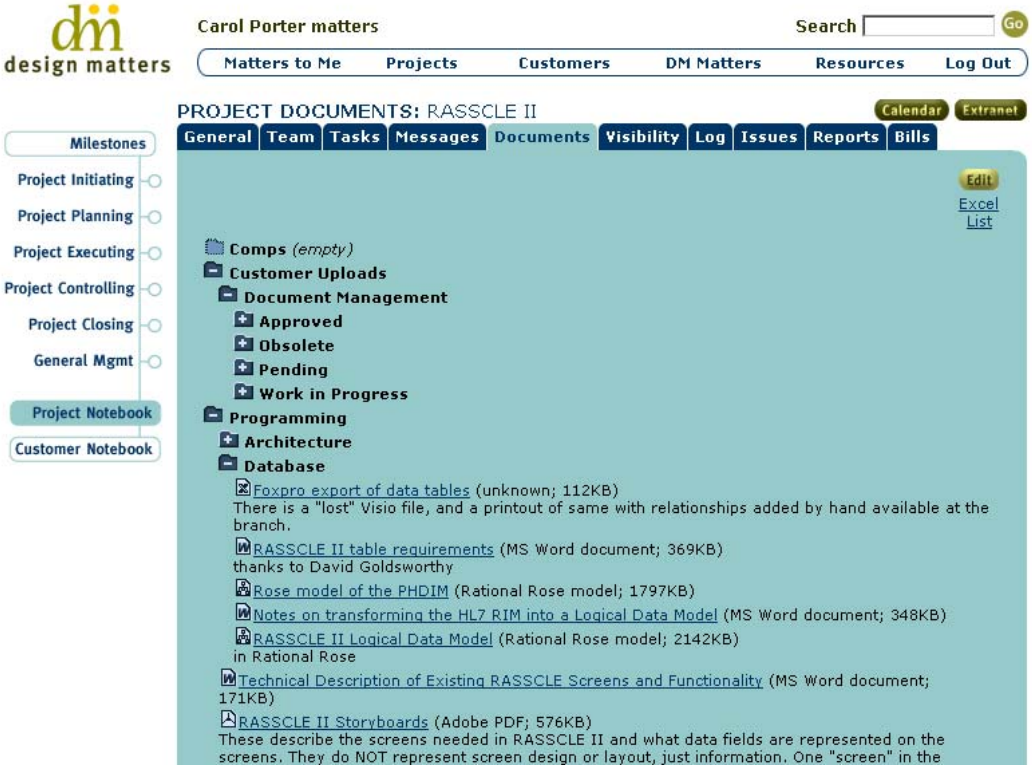
Each day, employees enter the time they spent on projects by selecting from a drop-down menu of their assigned tasks and projects. Each task is tracked, showing employees how many hours are left before and after they enter the day's time. Users can configure this page to indicate how many task entry boxes to show (two, three, or four). On the time card entry page, employee photos rotate randomly, which adds an amusing element to the often-dreaded necessity of time tracking. Time card entries aggregate to management reports and customer invoicing.

In addition to time tracking and project status, the intranet supports general HR features and functions. Employees can update personnel information, view benefits and vacation information, and search for forms, processes, or other information.

Some employees can publish information on the homepage, including professional tips, latest news, or personal information. All submitted content goes through a workflow and must be approved by a company partner before it's published. Employees can also publish tips in the intranet's *Resources* section. This area houses general guidelines for HTML, graphics, and programming, along with company information, presentations, collateral, and customer and industry information.

In addition to supporting employees' everyday tasks, the intranet also supports management-related tasks, tracking project information such as the team, deliverables, tasks, documents, and goals.

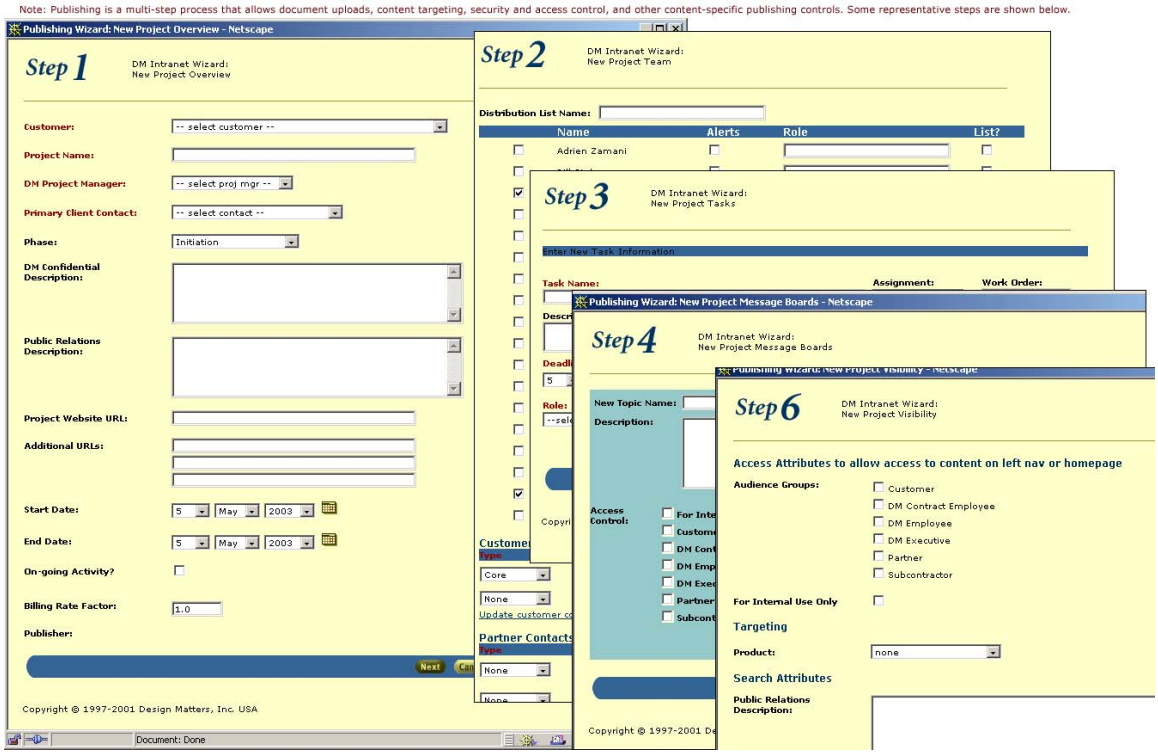
All documents published to a project are categorized and presented clearly, so it is easy to tell the status. These documents can also be linked to other projects and non-project categories in the knowledge base.



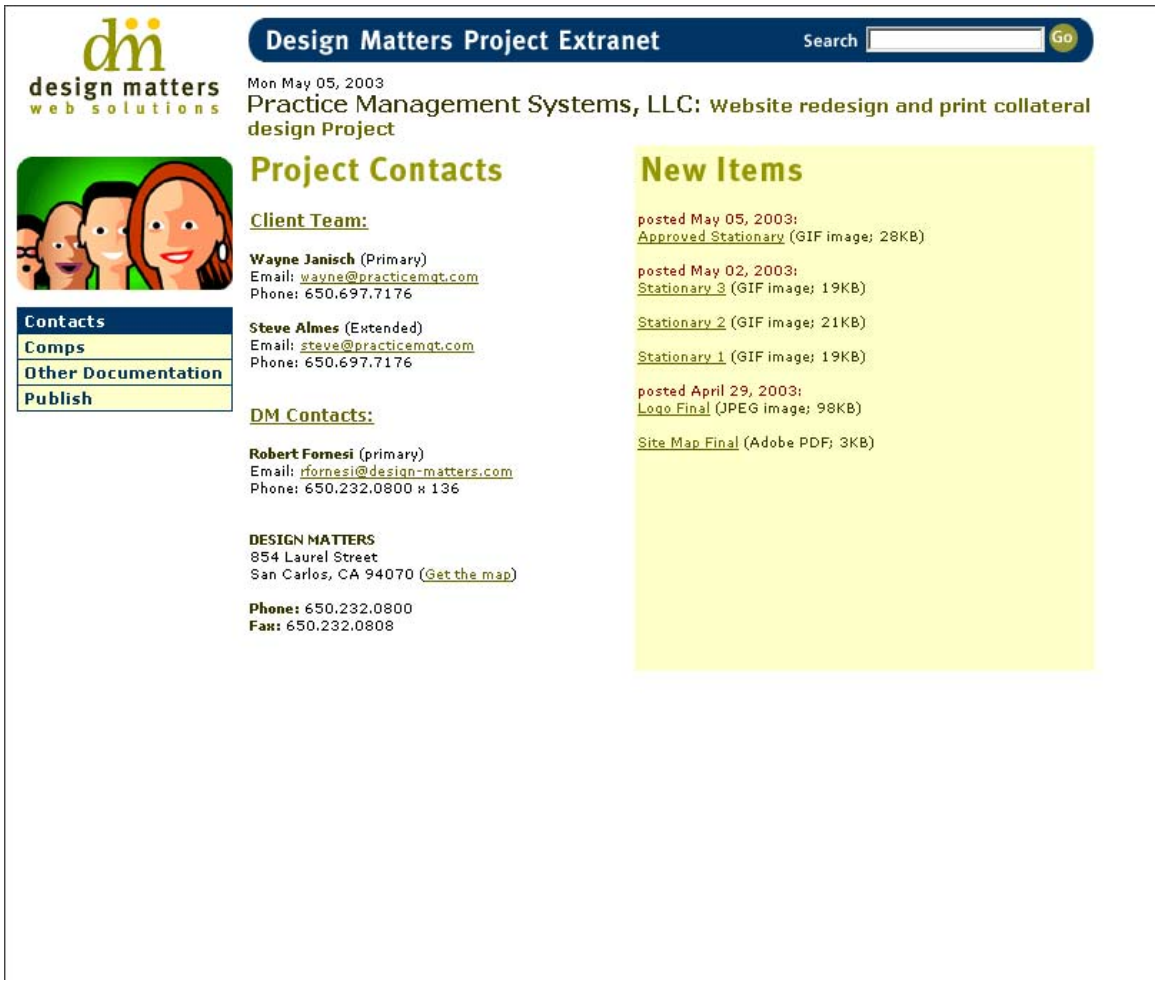
Pictured: An example of a project-level information page showing all of the documents published to this project.

Project managers can view reports showing a project's current progress, notes from project employees, and time remaining. To help busy managers see status at a glance, tasks are color-coded green, yellow, or red (plus blue for completed tasks).

For better client communication, project work is captured and made viewable to customers on their own private and searchable extranets. There are also views for Design Matters employees only. These include more message boards, and more restricted views for the customer's extended team members.



Pictured: An example of some steps involved in adding a new project.



Pictured: The customer's view of a specific project's homepage. Customers can also view message boards for their projects.

Like the successful Google site, this intranet does a terrific job of supporting central tasks and also injects the fun factor, which makes using it even more pleasurable.

URL AND ACCESS

The URL for the intranet is www.design-matters.com/dm. Within the company, people can choose which URL to have as their default browser page.

CONTENT MANAGEMENT

Design Matters uses Vignette 5.5. Users who have permission to publish get dynamically generated *Add* buttons in their particular publishing areas. A few users are authorized to publish to the live site without review. All other content is sent to the publishing desk, which sends pending-content notifications to authorized individuals, letting them know that content is queued and awaiting approval.

For employees publishing program tips in the *Resources* section, for example, they see a *publish* icon wherever they are authorized to publish tips (following the standard approval process). The *Resource* section's five most recent entries are

displayed on the homepage's *In Here* section under the *Latest Resource Additions* section.

TECHNOLOGY

The DM intranet runs on Sun servers, with Oracle 8 as the primary server. The application was partly written in TCO TcL (Vignette's programming language), with newer code written in Java (which Vignette recently began supporting).

GOALS AND CONSTRAINTS

1) Make time tracking more engaging so that employees are motivated to use it. 2) Improve customer and employee communications. 3) Guide employees through standard project management practices. 4) Automatically generate customer extranets for each new project. 5) Provide training materials for each company job category. 6) Provide interactive tools to assist employees and customers. 7) Support multiple platforms and browsers via LDAP integration. 8) Make the intranet fully searchable, and provide the ability to publish once to multiple category references. 9) Design for performance on a slow connection, but keep it interesting. 10) Improve management reporting. 11) Create a demonstration of the company's capabilities. 12) Create a central knowledge bank that captures the knowledge that creates the company's value. 13) Give customers better visibility of their projects via an extranet that's published using the same database engine as the intranet.

BASIC INTRANET FEATURES

The company's basic intranet features include: a single publishing source for the company's Internet (public website), intranet, and extranet that lets the publisher target content visibility, access control, and content expiration; personalized pages, including a homepage with generic portal features (such as customer and industry information and news, horoscopes, personal favorites, and stock tracking); the ability for all users to publish content, based on roles and authorizations; standardized company information, including processes, marketing materials, and project archives; discipline-specific subsites for graphic and user interface designers, software engineers, Web developers, project managers, and sales and marketing professionals; automatically generated customer extranets, with controlled customer publishing and features to assist in account management (such as customer-access reports); personnel information, vacation tracking, and time tracking; interactive capabilities, including survey and poll generator (with results measurement), message boards, and weblogs; project management and tracking (Project Management Institute compliant); document and knowledge management; reporting, accounting, and billing; alerts, calendars, and meeting scheduling; search facilities; role-based administration; security; and access control.

USERS

DM employees include graphic designers, user interface designers, software engineers, Web developers, project managers, administrative personnel, and management. Access for the company's customers is restricted to customer-specific and project-specific information on the extranet. The company's partners also have access to the intranet and extranet, restricted according to its particular relationship with DM. The general public has access to the website only; the exception to this is sales prospects, who can be granted very limited access to preview internal facilities.

USER TASKS

Project Managers

- Create and edit customer and project information such as deliverables, tasks, team, and goals.
- Access reports showing current progress of projects, notes from project employees, and time and hours remaining.

Employees

- Enter time spent on projects each day, selecting from a drop-down menu of projects and tasks.
- Publish professional tips, the latest news, or personal information to the homepage.
- Publish program tips in the intranet's *Resources* section.

Accounts Receivable

- Manage outstanding tasks and projects.
- Generate bills.
- Track payments.

Customer teams

- Core team members publish content, and indicate whether content is private or accessible to extended team members.

BACKGROUND

DM has had a homegrown Web-based application to track projects and customers for billing purposes since 1996. Originally built in ColdFusion, it was basically a project management system that let staff members enter tasks, hours, and descriptions and view company project listings. In 1998, the company moved the application to a Sun/Oracle/Vignette platform, and two years later added a basic homepage.

However, this "quick and dirty" application did not scale, and did not let employees capture and share other information, such as job-related knowledge, standard processes, and company materials.

By 2001, DM was like the classic case of the cobbler's child who didn't have shoes. Although its own intranet was still rudimentary, the firm had built many complex intranet projects for clients, and gained a wealth of knowledge about how to do it right. "We had learned from their mistakes, and we felt that now we needed to build this thing right for ourselves," explains Carol Porter, a DM partner.

So, DM finally decided to scrap its old system and build a new intranet that would centralize knowledge capture and improve time tracking by providing a more engaging tracking application. After an intensive six-month development effort, its current intranet was born.

DESIGN PROCESS AND USABILITY ACTIVITIES

DM is a small company, so it was feasible to involve the entire workforce in the intranet design process. Over a few months, the firm held four meetings followed by

lots of emails to create a list of functions and information that people thought would add value. Anyone in the firm could attend these meetings, though they weren't obliged to.

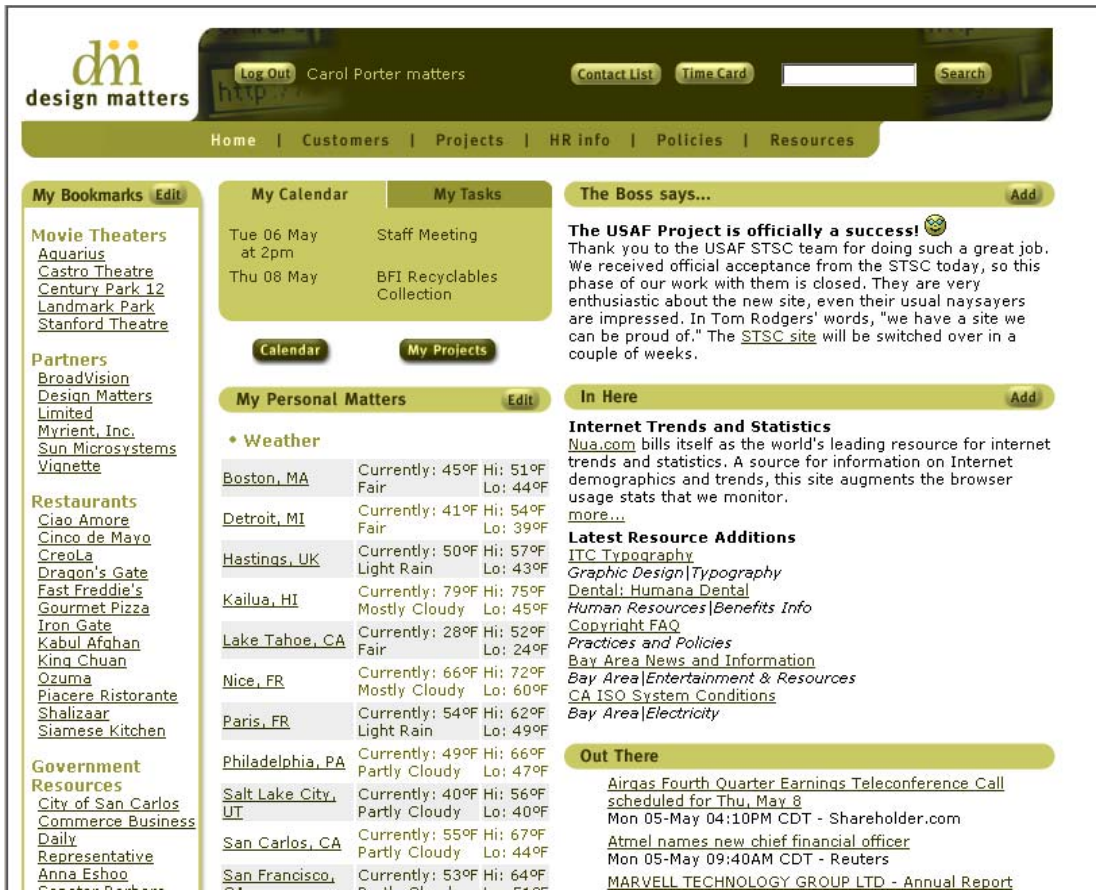
As designers collected content ideas, they categorized them according to subject. "We had one giant sheet of paper for each category, each a different color, and we stuck colored post-it notes representing different items on to those," Porter recalls.

Soon after the discussions began, DM's designers started to build prototypes for people to look at. "As a small shop, we just start prototyping and iterating pretty much straight away," says Porter. The designers came up with several alternative versions, then short-listed six.

The final design, chosen by a workforce vote, incorporated the best features from several different prototypes. It wasn't Porter's first choice — "I didn't really like it, but I was outvoted!" — but she democratically went along with the decision. She did, however, request an alternative "skin" that let users choose between a jazzy and a more subdued look and feel.

The skins apply to all pages, except for some administrative functions that users don't see. On the time card page, users can also choose from multiple layouts.

DM's designers have since come up with several other intranet skins, but have yet to implement them.



Pictured: One of the two alternative "skins" that DM intranet users can choose between. The site is designed so that the look and feel can be easily changed.

DM's intranet and extranet have the same general design. The extranet, however, caters to clients with varying technological skill, and thus doesn't have the drop-down menus that the DM staff voted to include on the intranet. "Our staff are all Web-savvy, and they saw drop-downs as a quick way to go around the site," Porter explains.

Because the site's extranet caters to external users, it was very thoroughly tested to work with a range of different browsers and over different quality connections.

In June 2001, the intranet was launched and got a positive response from DM employees. "The feedback was great — people liked getting the personalized stocks and horoscopes on the homepage, and they also liked the tasks and color-coded priorities," Porter says.

This year, DM launched a new version with minor modifications. For example, the task and calendar displays were previously on a tab and appeared only when clicked; they're now permanently visible on the homepage. "Most employees have only a limited number of tasks, so they wanted them to be more visible," Porter says. "But I hate it — I have a lot of tasks!"

TIMELINE

- 1996: DM launches a custom-built Web-based application for project tracking and customer billing.
- Early 1998: The intranet moves to a Sun/Oracle/Vignette platform.
- 1999: Launch of secure customer extranet tied into project tracking.
- 2000: Homepage added.
- June 2001: New DM intranet launched; new designs run in parallel.
- 2003: DM moves to a single design.

RESULTS

"Now, when a customer asks us why something took so long or cost this much, we have easy access to the data," says Porter. "The intranet lets us easily see why people did something and when. Plus, we now have a great knowledge base, and that's the value of our company. To me, it's a great measure."

LESSONS LEARNED

Insights from Carol Porter:

Keep your options open. "With hindsight, we probably wouldn't have used any vendor-specific platform to build the intranet — we would have used PHP or some other open technology, for future portability."

Make a splash. "It's critical to have a communicated, orchestrated launch for your intranet. It's the best way to get user buy-in to the project, and it's the only way you'll ever be able to measure the results."

Stay lean and fit. "People tend to want to put more and more graphics and Java applets into their intranets. Don't do things just because you can — think about speed and the guy in Asia accessing the intranet over a dialup line."

FIGG Engineering Group

Using the Intranet:

FIGG Engineering Group is a family of engineering firms specializing in design, construction engineering, and innovative financing services for bridges. Headquartered in Tallahassee, Florida, the firm is recognized as the industry leader in the design of concrete segmental bridges. FIGG has offices in Colorado, Minnesota, Pennsylvania, and Texas.

Design Team:

In-house designer

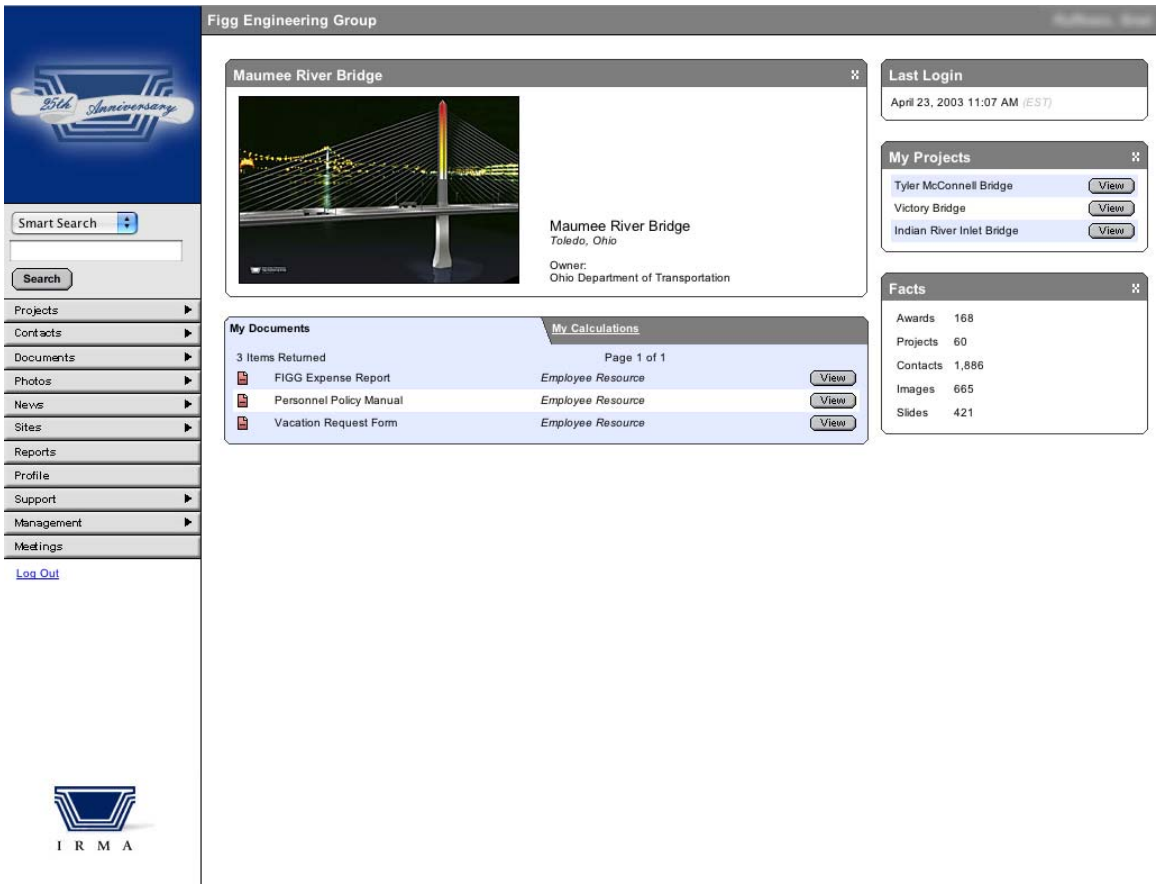
Member:

Brad A. Ruffkess

SUMMARY

Like a ship's captain, the FIGG team christened their intranet with a woman's name, IRMA, which stands for Information Resource Management Assistant. The intranet is welcoming to employees, with a no-frills look and helpful features. The homepage is uncluttered, and has effective headings and obvious navigation.

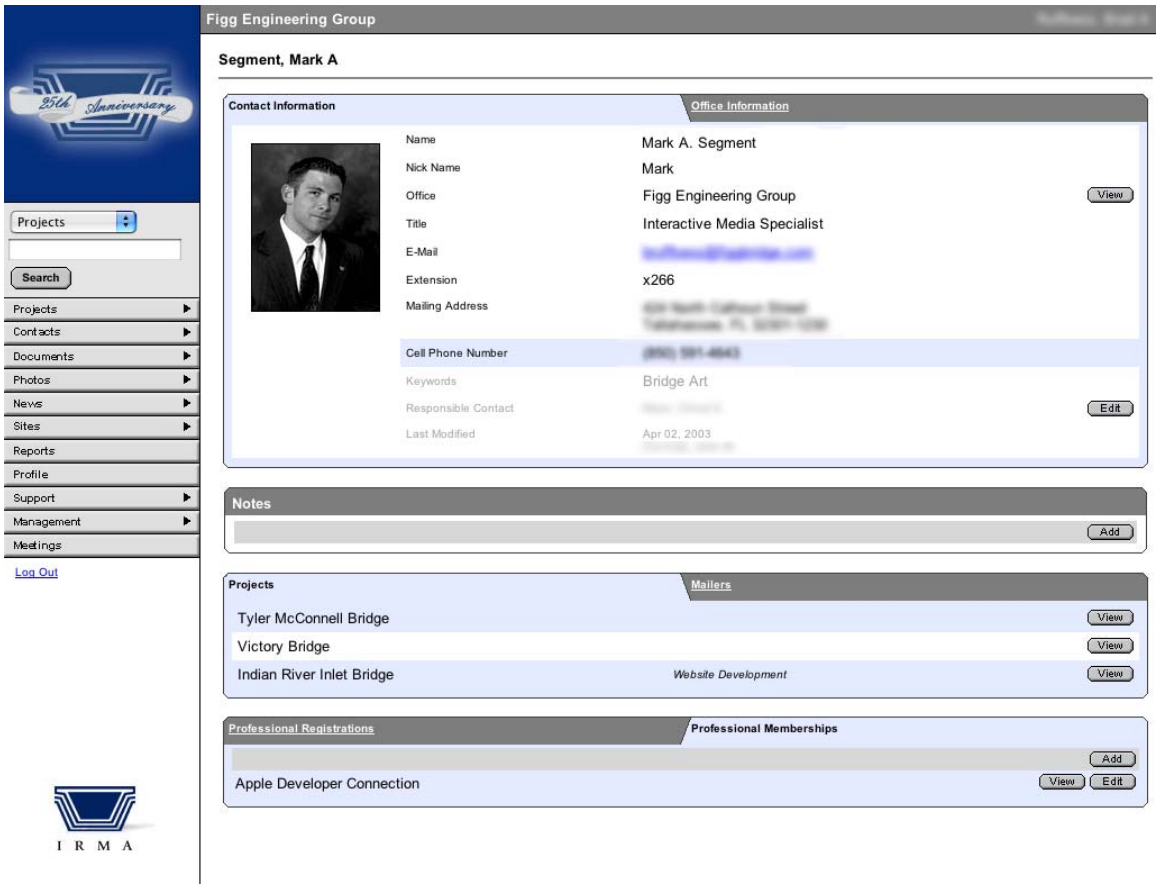
Employees can customize their homepage, displaying commonly used projects, documents, and calculations.



Pictured: The elegant FIGG homepage lets users customize it to display items they're interested in, such as *My Projects, My Documents,* and *My Calculations.*

At any organization, completing a successful project can involve many different people with different jobs and domain knowledge. Designing a bridge is an incredible undertaking that engages several groups within the company; finding the right person in the right place can be crucial. With employees in offices around the US, FIGG's employee directory is a very useful resource. The company's original design ideas make it even more valuable.

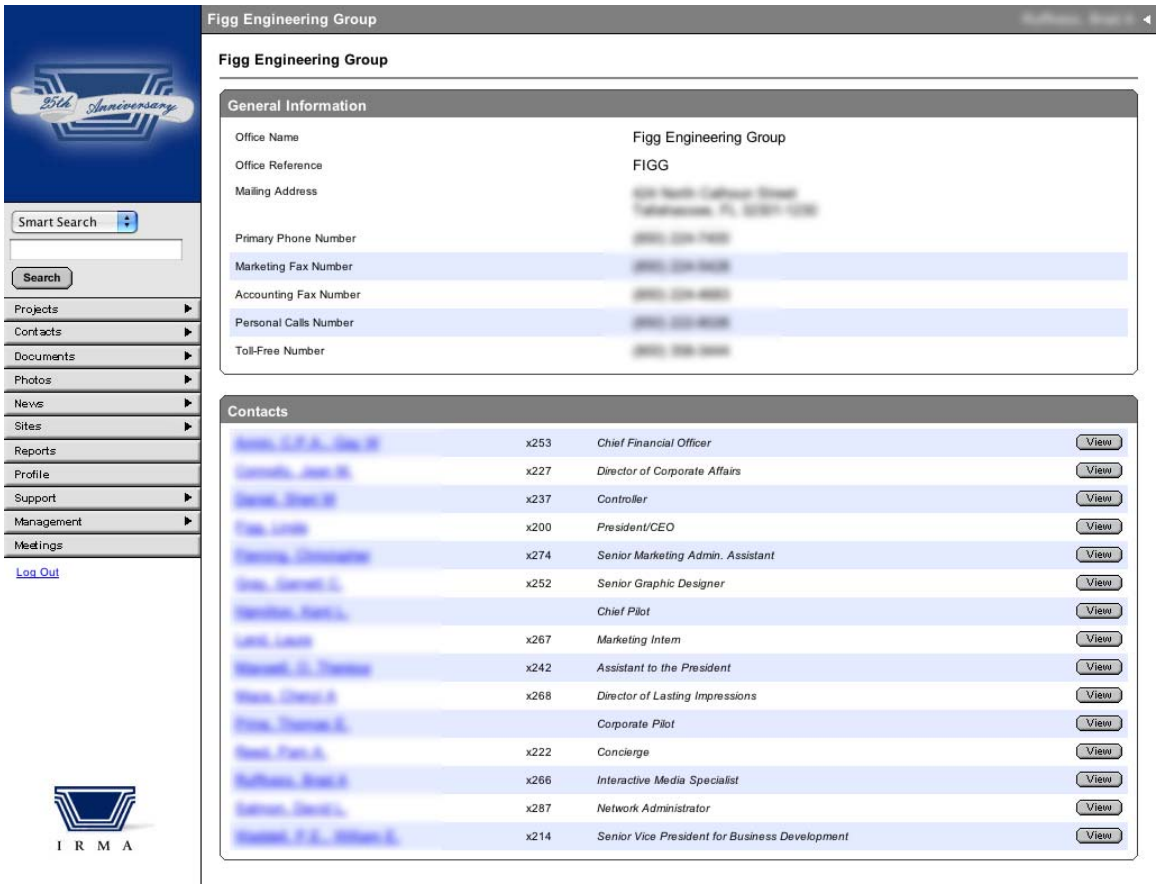
FIGG's individual contact pages are particularly well done. The pages include all the basic employee contact information: name, phone, mobile phone, and location. A picture of the person adds a human element, and can help others match the name with the face at meetings. *Keywords*, which employees add to their own contact information, can help other employees know their affinities, as can information they provide in the *Notes* section. The page also includes a list of projects the person has worked on, which is a wonderful resource for anyone looking for background. Finally, the page lists the person's professional affiliations.



Pictured: An individual contact page includes basic employee contact information, such as name, phone, mobile phone, and location, plus a picture of the person.

Employees can also search for contact information by office, which is great if they're looking for a person in a specific location. The office pages list the office name, main phone number, mailing address, and the names of its employees, along with a link to more information about them. Each office maintains its own contact information and

dynamically generates a list of associated projects that the office's staff has worked on.

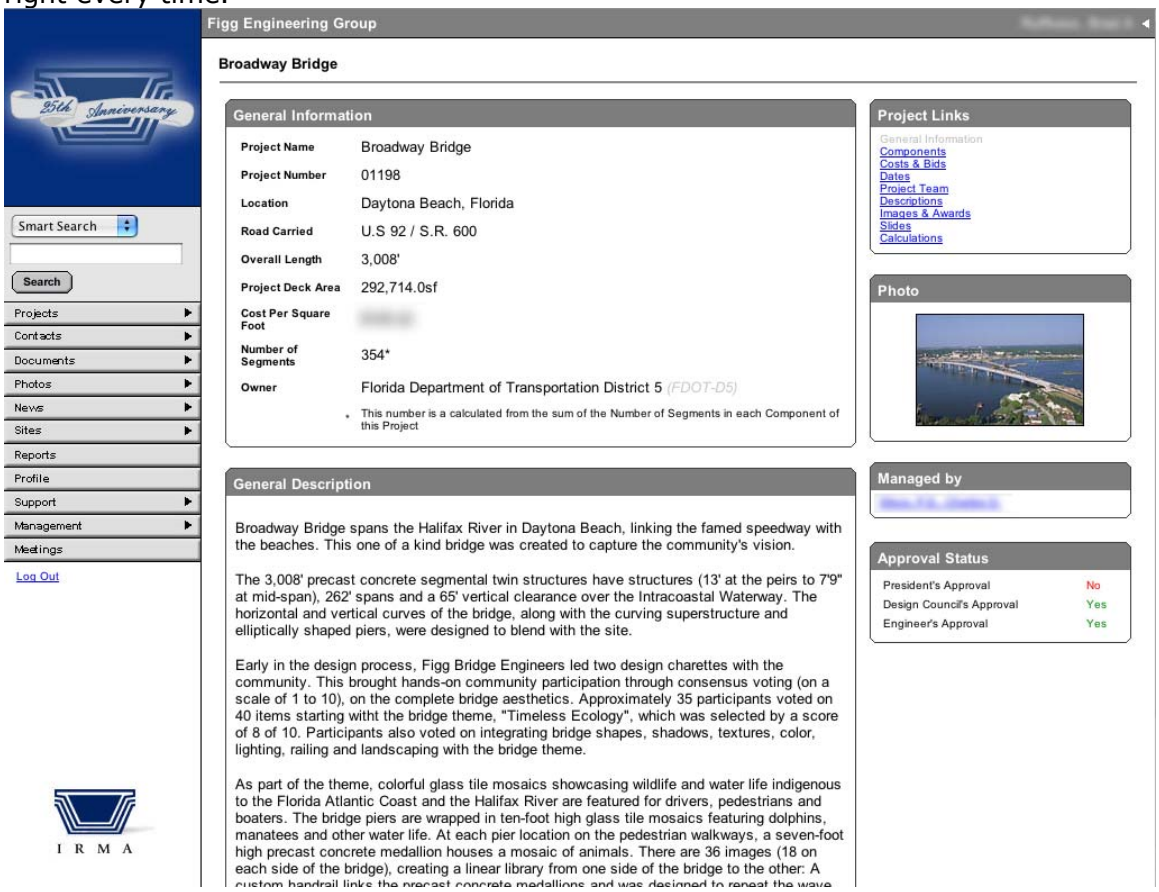


Pictured: The FIGG intranet's office pages list the office name, main phone number, and mailing address, along with the names of employees and information about them.

Each project has its own intranet area, where everything employees might want to know is at their fingertips. The main project page gives a project snapshot, including the bridge's size, cost per square foot, location, owner, and so on. The general project description is short, yet gives the background and a clear idea of the project and its subject. In the *Project Links* section, there are links to areas such as costs and bids, project team, and calculations. The section also includes the project manager's name and the approval status list (posted information must be approved through a three-tiered process that includes the engineer, Design Council, and company president). This approval process helps ensure the accuracy of the information FIGG team members find on the intranet. Users can retrieve project information in highly customizable reports that help them analyze information for use in future projects, proposals, and marketing materials.

Additionally, the intranet designers integrated a bit of PR and marketing by adding links to images, awards, and slides. Collecting all this information and making it available can be invaluable to a marketing team, helping them get complex facts

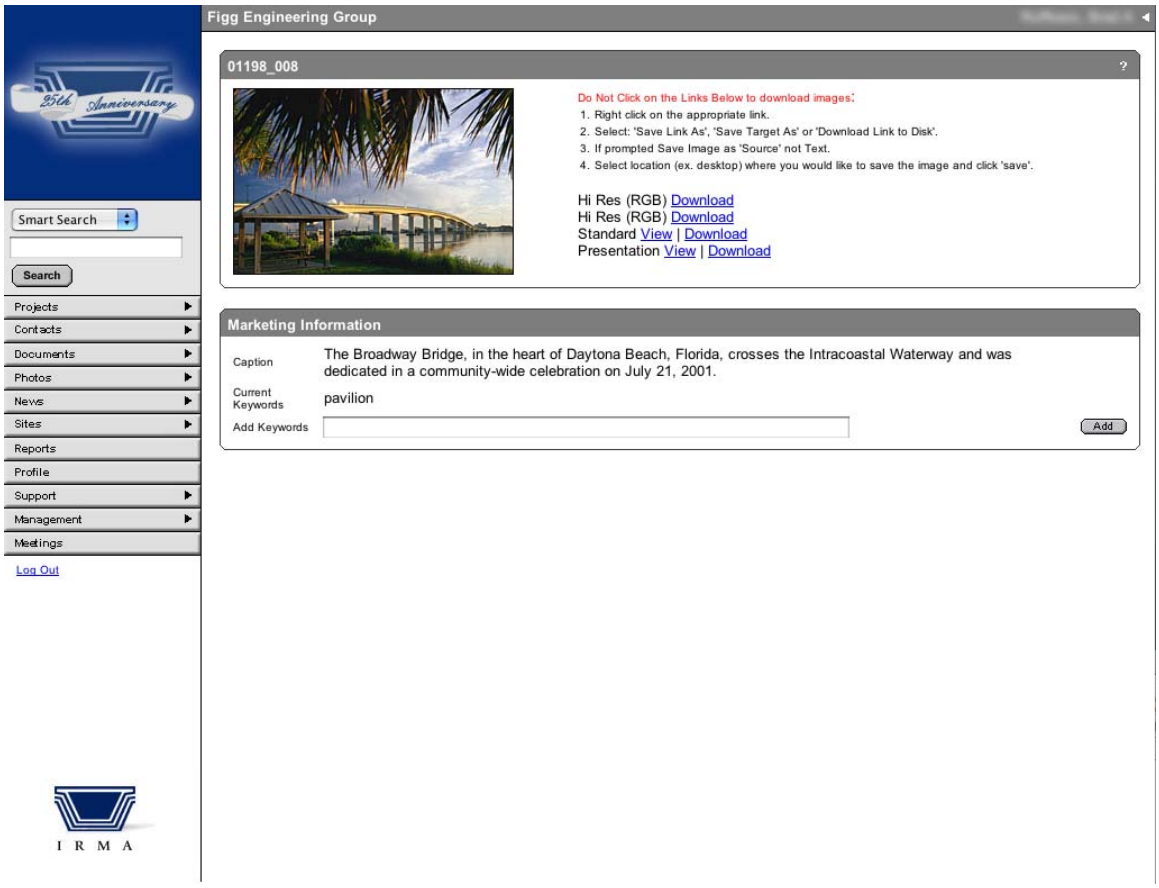
right every time.



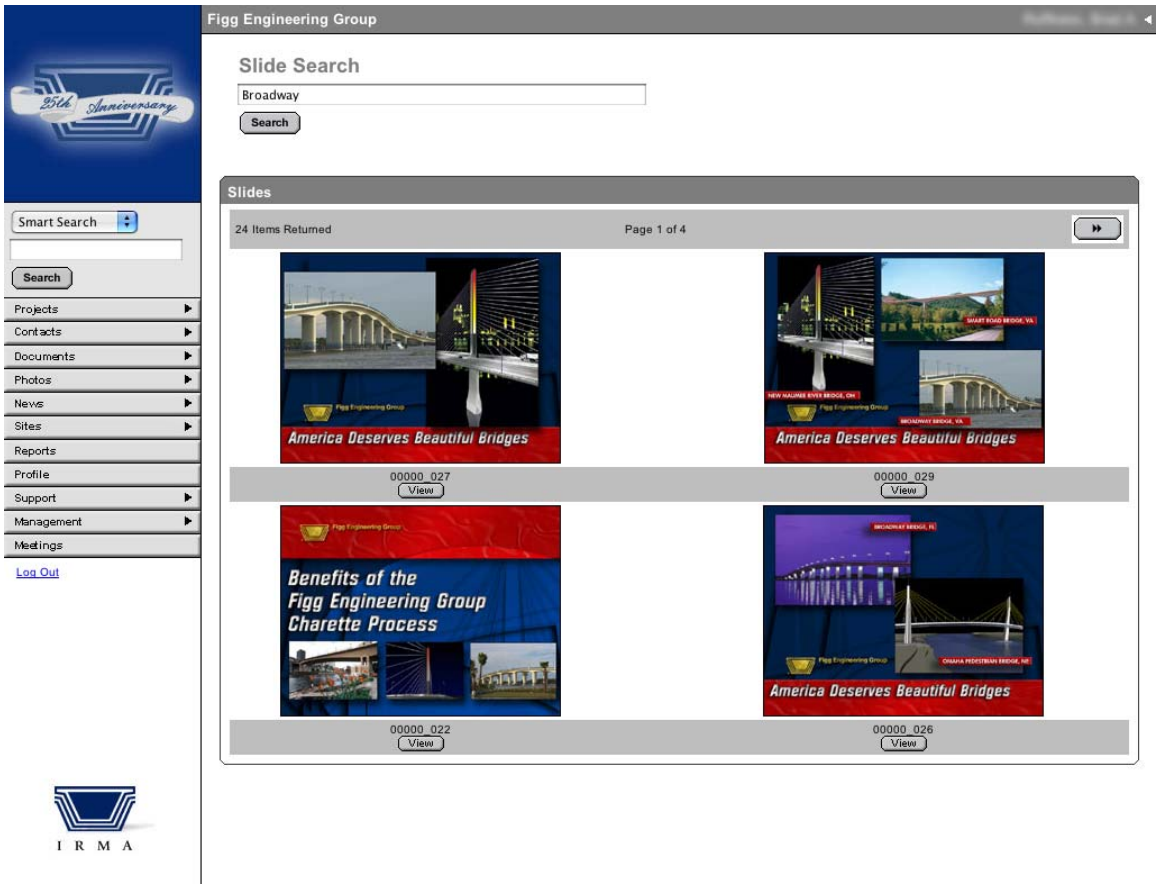
Pictured: A project page on the FIGG intranet shows all the important stats and a picture of the bridge. These pages are very helpful to marketing teams.

Other features help streamline FIGG processes. For example, the *Drop-Box* provides functionality similar to an FTP site with a Web-based interface. Some consultants and customers can access *Drop-Box* sections through a secure, separate portal that prohibits unlimited access to IRMA's available content. Employees can bookmark documents for easy reference, and a comprehensive browser helps engineers locate previous calculations and calculation templates.

For FIGG employees, simply talking about a world-class bridge is impressive. But for potential clients, it's much more striking to actually see a picture of a magnificent bridge that's 3,000 feet long. Knowing this, the intranet designers created a space that houses high-quality, downloadable images and slides. Thus, without interrupting the team's marketing department, employees can find high-quality slides or photos and import them into their presentations. The photos come in four file formats, which help provide images at the correct resolution and color space for most applications. Step-by-step instructions lead users through the process of downloading images.



Pictured: The FIGG intranet offers high-quality photos that users can easily download into presentation files. The photos are available in four different file formats.



Pictured: The FIGG intranet offers high-quality slides that users can easily download into presentation files.

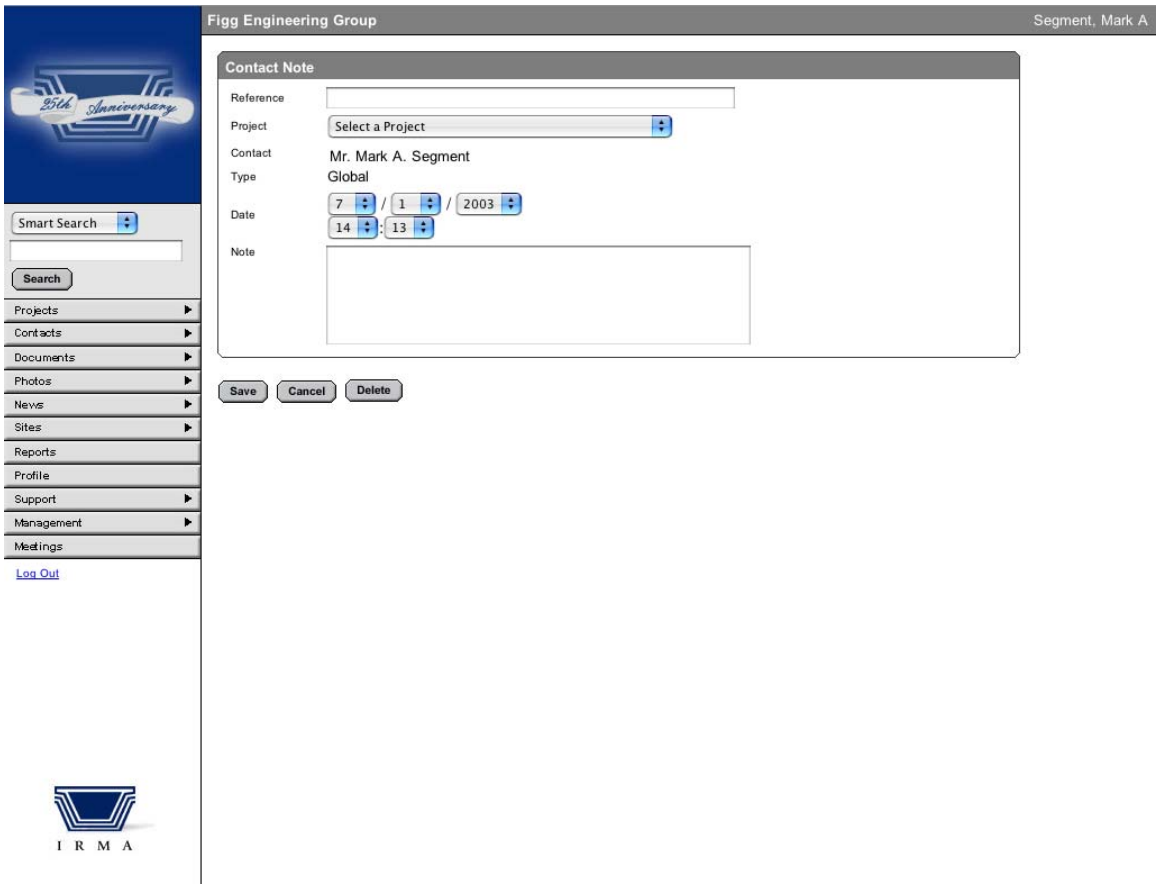
Every page on IRMA provides a search box that lets users search the site. They can also search for content by type in the drop-down menu.

URL AND ACCESS

Users access IRMA through a publicly available URL.

CONTENT MANAGEMENT

The marketing department uses predefined templates to add new presentation material. To enter news items, the marketing staff uses a Javascript text editor. Anyone in the firm can enter contact notes using a simple editing page.



Pictured: The contact-note editing page lets users add and update contact notes.

TECHNOLOGY

FIGG used Adobe Photoshop to build design mockups and Adobe GoLive for interactive prototyping. The live intranet was built using Apple's WebObjects.

GOALS AND CONSTRAINTS

1) Provide a common system to organize FIGG's information into a consistent and easily retrievable format. 2) Help the entire FIGG team with marketing, communication, and efficiency.

BASIC INTRANET FEATURES

IRMA is a centralized source for the information developed and collected throughout FIGG's twenty-five years of award-winning bridge experience. Basic features include: project information and reports, contacts, photos, presentation materials, employee resources, company library, CMS for public sites, and interactive meeting portal.

USERS

Intranet users at FIGG include people in administration, marketing, and accounting, and engineers and CADD technicians.

USER TASKS

- Create marketing presentations (pull technical information and pictures, such as photos of bridges they have designed, into a PowerPoint template)
- Enter, edit, and find company contacts
- Enter and edit customer contacts and create mailing lists
- Look up technical project information
- Log and address IT support incidents
- Schedule and host meetings
- Publish news

BACKGROUND

FIGG's business depends on successfully competing for very large projects, and it invests heavily in producing highly professional sales presentations to prospective clients. These presentations involve pulling together multiple resources from within the firm, including photography, technical specifications, and information on past projects.

Until last year, however, the firm had no centralized source for the information developed and collected in its twenty-five years of bridge-building experience. Most information was held in spreadsheets and word-processing documents on individual computers throughout the firm, and each new presentation involved much time-consuming phoning round and hunting down material.

The initiative behind IRMA came from FIGG's New Business Development Council, which initially saw it simply as a way of sharing marketing information. In 2000, however, the firm realized that a more complex intranet could be useful for other departments and for sharing firm-wide information.

DESIGN PROCESS AND USABILITY ACTIVITIES

In January 2002, Brad Ruffkess, FIGG's interactive media specialist, worked with project managers to develop ideas for expanding the site to hold project information, company contacts, and images.

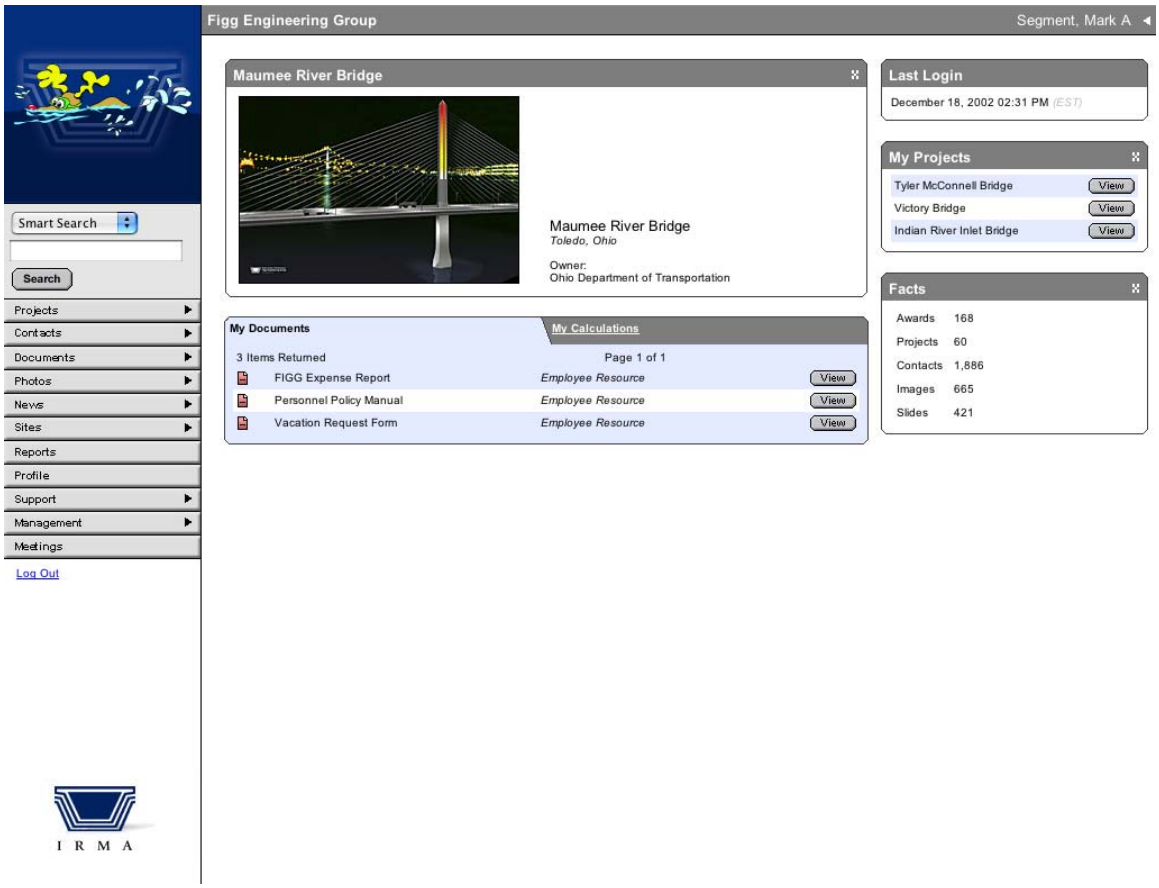
Ruffkess got ideas for the site's structure and design by researching other sites with a similar amount of content and features, and then decided what worked and what didn't. Many of the sites he looked at were too fussy for FIGG's requirements: "We didn't want clutter; the site has been designed so that you don't see information until you want to use it," he says.

For example, though it's possible to carry out a scoped search, advanced search options are concealed behind a drop-down and the default is a simple site search.

In August, Ruffkess presented an initial intranet concept to the New Business Development Council. The design featured conventional horizontal navigation, but this was jettisoned as Ruffkess continued work on the site.

One of Ruffkess's inspirations was the silverorange intranet, winner of Nielsen Norman Group's 2001 Intranet Design Annual. A fairly small service company, silverorange uses its intranet for project information and customer communication. Like the silverorange intranet, IRMA has strong left-hand navigation and no horizontal navigation. "We decided that horizontal navigation didn't give us enough flexibility," Ruffkess explains. "As the site grew, the options could have exceeded the width of the screen; it's one thing to scroll vertically, but quite another to have to scroll vertically *and* horizontally."

IRMA also echoes the silverorange site's simple, restful color scheme, jazzed up with bright photographic images. Eye-catching images of bridges FIGG has worked on are displayed randomly on the homepage to create added interest. Ruffkess also used a design idea from the Google site, varying the image in the top left-hand corner from time to time to reflect external events.[4] On St. Patrick's Day the image turns green, and in the run-up to Christmas 2002 it featured a seasonal reindeer.



Pictured: A seasonal reindeer takes a swim, adding interest to FIGG's homepage in December 2002.

The homepage usually contains little besides links to the basic information employees need to do their jobs. It occasionally includes news items, but as a small, closely connected firm, news travels fast and communicating firm-wide news

[4] For more information on celebrating and recognizing holidays and special occasions in online design, please see our separate report on this topic: www.nngroup.com/reports/holidays

typically occurs in team meetings. When the firm wins new design projects or a major design award, a team meeting and celebration are often quickly scheduled.

The intranet's design began taking shape toward the end of 2002, with user feedback coming mainly from the project managers who were working with Ruffkess to enter the first projects into the system. As new functionality was added, Ruffkess also carried out user testing with four of the local admin staff, holding one-on-one interviews to discover their views on how easy the system was to use and get recommendations about how he could further improve it.

One of the features that Ruffkess changed as a result of user feedback was the contact database. Originally, users could only enter one contact phone number, which staff members found too restrictive. It's now possible to store unlimited numbers. Ruffkess also added a feature to override the default FIGG mailing address for staff members who worked mainly from home or a client site.

Pictured: An old contact page design allowed only one phone number per person. Users found this too restrictive.

(Page 60 shows IRMA's current contact page, which has multiple phone numbers for each user.)

Another major modification Ruffkess made was to streamline the wizard that let project managers add new projects to the site. This wizard walked managers through the process of entering information associated with their project, but didn't actually add the project until the manager had entered every possible project detail. "It was really tedious — it took about an hour!" Ruffkess recalls.

Users found the wizard too time consuming. It's now shorter, and an administrator sets up projects by entering minimum information, such as the project's name and number. Project managers can then enter more detailed project information at their leisure.

Security was also a concern, since FIGG works on some major government projects. The site is protected by secure login facilities, and personalization features ensure that only authorized staff can access certain information; customer contacts, for example, are only visible to members of the New Business Development Council.

Since IRMA went live in August 2002, there have been gradual changes, but no major new releases. "Mostly we go through a rapid development cycle for new releases, then just deploy them," Ruffkess says. Changes to project functionality are approved at the monthly meeting of FIGG's Design Council, made up of senior engineers representing each office within the firm. One recent new feature is the mailing list manager, which generates address lists for marketing mailings from the contact database.

TIMELINE

- Aug. 2001: Initial concept for intranet presented.
- Nov. 2001 to Aug. 2002: IRMA development.
- Aug. 2002: IRMA launched.
- Sept. 2002 (ongoing): Data migration and integration into daily workflow, and constant minor improvements.
- May 2003: Contacts rewritten to focus more on information associated with the person than on the office. Additional mailing list functionality incorporated.

RESULTS

IRMA's existence has sped up the previously tedious, labor-intensive process of creating presentations for prospective clients. "We're a service company, and all time is money," says Ruffkess. "It could easily take three people from sales, marketing, and design a couple of days to put a presentation together. Now, our sales executives can quickly pull presentation templates off the site, and drag prebuilt slides into presentations to create a professional-looking result with minimal involvement from our small marketing department."

Though its original purpose was merely to make it easier to create presentations, IRMA also lets FIGG make better use of its information resources. Since launching IRMA, the firm has standardized the way it gathers project information, and makes it available to everyone in a consistent, easy-to-use format. It's now much easier to analyze information for use in future projects, proposals, and marketing materials.

The intranet is also helping FIGG hold down licensing costs. "We use a lot of technical specifications from organizations like the Department of Transportation that we have to distribute around the firm, and to buy site licenses and distribute them via IRMA is much cheaper," Ruffkess points out. "It also minimizes our risk, because we can make sure that only the most recent copy is held on the network."

LESSONS LEARNED

Insights from Brad Ruffkess:

Don’t neglect documentation. “The intranet was developed at breakneck speed, and some of the documentation steps got left out. With hindsight, it would have been much easier to write it as I went along.... now there are some great features that won't get used properly until the documentation gets written!”

Be a good listener. “Someone isn't going to go through the effort of telling you something about the intranet just for the sake of telling you. Listen to what people have to say.”

Landor Associates

Using the Intranet:

Landor Associates is a global brand strategy and design consultancy. Founded in 1941, Landor has more than twenty offices in sixteen countries. The company has created brands for organizations such as Frito-Lay, BP, Procter & Gamble, FedEx, NYSE, Microsoft, Delta Air Lines, France Telecom, and the Olympic Games in Atlanta, Nagano, and Salt Lake City. Landor is a division of Young & Rubicam, Inc, which is part of WPP — one of the world's leading global communications services groups.

Design Team:

In-house

Members:

Spencer Mains, chief technology officer and worldwide director, knowledge sharing; Rebecca Titcomb, senior designer; Matt Sherman, senior worldwide applications developer; Jesse Silver, worldwide applications developer; Jennifer Connor, worldwide knowledge-sharing specialist.

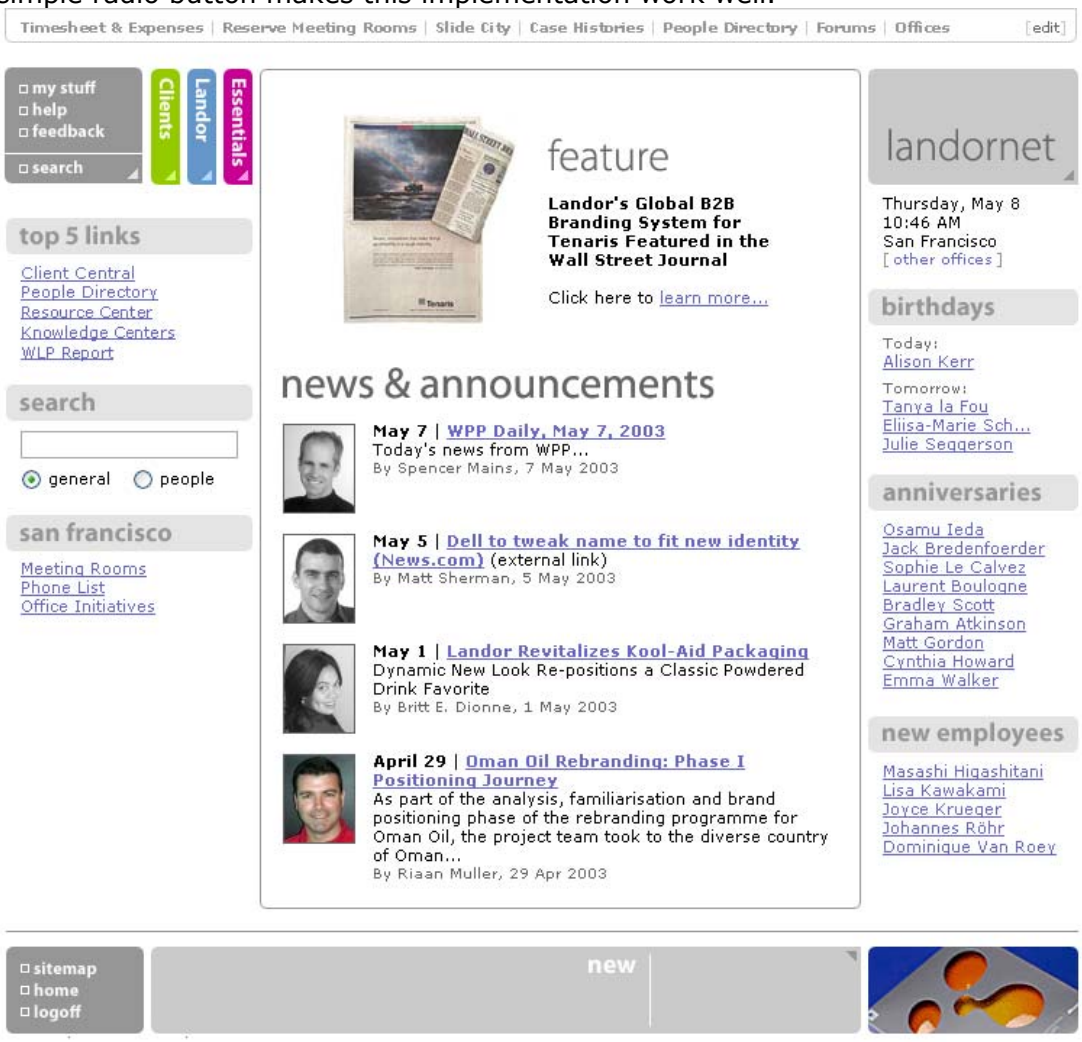
SUMMARY

The Landor intranet, *landornet*, has an uncluttered and airy feel. These designers did not succumb to the temptation to pack the abundant white space.

On the homepage, the showcased area is *News and Announcements*, with content that caters to all offices, based on the user's login. For example, there are links for the local office's meeting rooms, phone list, and office initiatives. A status message in the upper right notes the selected office and shows the *Other offices* link. The homepage's main *Feature* is either global or local to an office. To ward off staleness, the feature is updated every week.

To promote employee contentment and unity, sections for *Birthdays* and *Anniversaries* appear on the right of the homepage. A list of *New Employees* is also available for anyone who wants to offer a friendly hello or welcome. Anyone on staff can publish news, URL links, or press releases on the intranet using a straightforward publishing system. Employees post news daily, with topics ranging from promotions to client launch announcements to holiday parties.

An open search field doubles as a site search and a people search. A visible and simple radio button makes this implementation work well.



Pictured: The Landor intranet homepage. The page is airy, and offers personalization and good news coverage.

In a design consultancy such as this, many employees need access to client information. Thus, all offices have access to the *Client Relationship Management* environment. All of this environment's imaginative, yet well-organized features contribute to increased service for the client.

Pages provide a top line overview of each client, including: address, phone number, contacts, most recent correspondences, and general relationship information. Also, officers in charge are easy to find here.

Employees can access these pages by doing a simple search. Alternatively, by simply clicking the *Add to My Clients* link in the *Actions* area, users can add the pages as part of their *My Clients* organizer.

Timesheet & Expenses | Reserve Meeting Rooms | Slide City | Case Histories | People Directory | Forums | Offices [edit]

my stuff
help
feedback
search

Clients

Landor | Essentials | landornet

Spencer's Landornet > Clients > **Client Central**

Main Menu | Search | Clients | Contacts | New Business | Assets | Reports | Help

FedEx Services > Contacts | Correspondence | Leads | Assets | Projects | Case Histories | Images

FedEx Services

P.O. Box 727
3610 S. Shady Grove Rd.
Memphis, TN 38194
United States

(901) 369-3600 phone

http://www.fedex.com

Ticker: FDX
More info at Hoover's

Related Companies and Brands
Related brands include FedEx Corporation, FedEx Custom Critical, FedEx Express, FedEx Freight, FedEx Ground, FedEx Logistics.

At a Glance

Most recent correspondence: 7 Mar 2002 with Gayle Christensen

:: Contacts (85) :: Images (151)
:: Leads (180)
:: Case Histories (6)

Relationship with Landor
In addition to the visual aspects of the identity program, Landor looked at FedEx's verbal identity. Changing the "Federal Express" name to "FedEx" was an essential component of the program. We were also asked to develop a powerful corporate tagline to signal FedEx's most important point of differentiation < exactly timed deliveries < while building consumer awareness of FedEx's global operations. Another objective of the program was to simplify FedEx's confusing product and service naming system, making it easier for customers to understand and use.

Officers In Charge
Clay Timon

Client Leaders
Bill Smith

Client Managers
Caroline Somary

Client Team Members
Rachel Wear, Peter Wise

FedEx Express

Actions:
:: Create New Company
:: Edit Company Info
:: Edit Client Leaders
:: Edit Brands
:: Add Parent Company
:: Add to My Clients

Most Recent Search:
:: Found 1 Clients
:: Advanced Search of Clients

Search Clients:
GO

sitemap
home
logoff

new

Pictured: A page in the *Client Relationship Management* environment. Pages provide a top line overview of each client.

Editing these pages is a snap: Employees with proper access simply click the *Edit Company Info* link on the right of the profile page to open a very simple form.

Main Address | Landor Team | Industries | Brands

FedEx Services

save & close | cancel

Company Name
FedEx Services

Also known as...

Main Address
P.O. Box 727
3610 S. Shady Grove Rd.

☑ KCR ☐ Add to My Clients ☐ Hit List Client
☐ WPP ☐ Landor Competitor ☐ Out of Business

City Memphis
State TN
Zip/Postal Code 38194
Country United States

Main Phone 901-369-3600
Main Fax

Web Site URL http://www.fedex.com
Hoovers URL http://www.hoovers.com/co/capsule/2/C

Industry Transportation/Delivery Svcs.
Ticker Symbol FDX

Notes on Landor's relationship with this company
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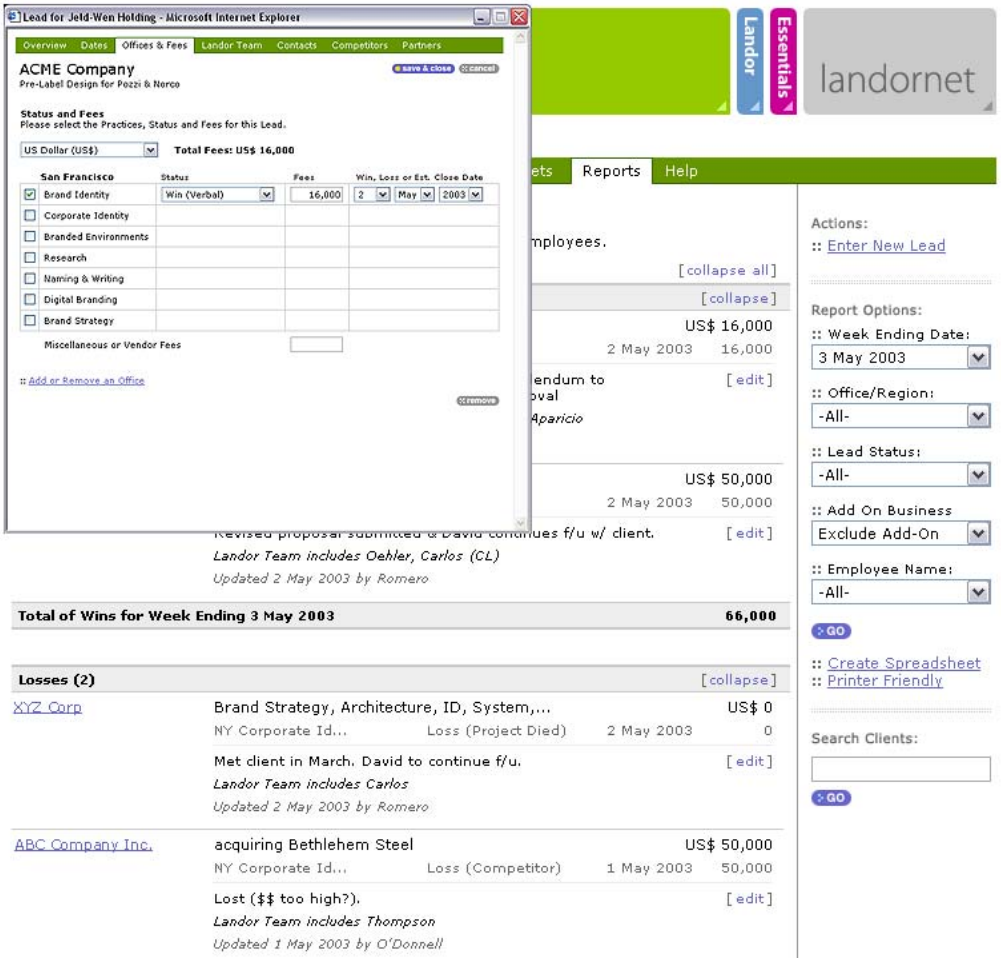
Pictured: The simple form to edit client information.

Customer reports are yet another way to track and consolidate customer information. These reports include information such as lead status, services won, and prices. When bidding for a job, having this information at your fingertips is especially priceless. It's also valuable for internal communication. In fact, all offices in North America and Europe participate in a weekly new business conference call and all participants use the customer reports as a reference during the call. Employees can download a pre-formatted report into MS Excel on the fly using a third-party application. Employees can search for reports in various ways, including by industry, status, office, or people.



Pictured: A typical customer report in the client database and an edit screen for one of the client records. Both pre- and post-sales staff use customer reports.

The more distant past is also a significant aspect of consulting work. Over its 60-year history, Landor has had numerous client engagements, and having an easy-to-use system to capture and share its intellectual property is critical. The intranet helps with this in several ways. Employees use the intranet to create and submit case histories, as well as to get them approved for publication. Users can create pre-formatted PDF documents on the fly using a third-party application and either download them to the desktop or attach them to an email. All active case histories are automatically published to the public website, making this the general content management interface for that process.

Timesheet & Expenses | Reserve Meeting Rooms | Slide City | Case Histories | People Directory | Forums | Offices [edit]

my stuff
help
feedback
search

Clients

Landor Essentials landornet

Spencer's LandorNet > Clients > Client Central > **Clients**

Main Menu | Overview | My Cases | Search | Recent | Submit | Pending | Guidelines

Coleman BackHome

Extending a Heritage to a Broader Audience
Case Number 2351

Click on images to enlarge

Case History details

Brand Driver: ""
Power Application: Packaging

Office(s): San Francisco
{ EDIT }

Retained: 5.23.99
Implemented: 8.22.99
{ EDIT }

Published: 9/17/2002

Originally Submitted By:
Amy Sherman

more

Quick case search: GO

Browse by: [select category]

Options:
:: Add to basket
:: View current basket
:: Download PDF
:: Edit this case
:: Publish PDF
:: Admin
:: Retrieve images
:: Create alternative

Background: For more than 100 years, the Coleman Company has been a leading purveyor of camping and outdoor gear and equipment. The company and its brand enjoy an excellent reputation among consumers for quality and trust. In a move to extend its considerable expertise in outdoor recreation and appeal to a broader range of consumers, Coleman developed a new integrated system of patio furniture, lights, sun shelters, heaters, fireplaces and personal accessories for the backyard.

Challenge: The goal for the new name, branding and packaging system was to leverage the positive equities of the Coleman brand and appeal to American families who desire to make the time they spend in their yards as pleasurable and comfortable as possible. Coleman research findings segmented consumers into seven clusters, which meant that the product line would have to meet the multiple needs of a range of consumers. Likewise, the new identity needed to signal " backyard" without limiting itself to consumers who have conventional backyards.

Solution: Landor created the name "BackHome" for the new product line — communicating a return to family and relaxation, where one feels most comfortable. The BackHome name was

Pictured: A client case history page. The intranet provides an easy-to-use system to capture and share intellectual property from the company's numerous client engagements.

Landor's intranet and extranet are highly integrated. The extranet runs on the same platform, hardware, and database as the intranet. Both Landor staff and clients can upload and download certain items. Examples include client assets and employee biographies, which are stored in a single database table and can be written and edited from the extranet or intranet.

Pictured: A page on the extranet, which is highly integrated with the intranet. Items on this client assets page can be uploaded or downloaded either by Landor employees or clients.

The designers' approach to this intranet was to keep the design very simple, elegant, predictable, and consistent. They certainly accomplished this, creating a fast, straightforward method for publishing content and a way to capture large amounts of metadata. All of this makes the content rich, scaleable, and searchable. And the graceful design makes it pleasurable.

URL AND ACCESS

Within Landor, the intranet is the browser default page; users enter their username and password to access their personalized homepage. Externally, users can log on to the site via a secure link protected by 40-bit encryption. The URL is landornet.com. "That URL was created on our first intranet, and it resonates with everyone in the company," says Spencer Mains, project leader and co-art director for landornet.

Timesheet & Expenses | Reserve Meeting Rooms | Slide City | Case Histories | People Directory | Forums | Offices [edit]

my stuff
help
feedback
search

Clients

Landor Essentials landornet

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Browse by: [select category]

Options:
:: Add to basket
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management, and design and support services such as IT, HR, and finance. The extranet currently supports nearly 1,500 individual clients around the world.

USER TASKS

- Use internal employee directory and external client contact management
- Create and manage content (such as case histories, news, press, bios, and awards), which is multilingual and integrated with public website
- Track and manage projects
- Track and archive media assets
- Report on global business activities (win, loss, pending, pursuits)
- Use online help guides and employee orientation materials
- Review comprehensive Human Resource Information and Tracking System (employee records)
- Read company and industry news
- Review corporate standards and guidelines

BACKGROUND

Landor's first intranet was launched in September 1996, with the aim of making it easy for staff members to create and publish content. A major new version was released in 1998, following extensive work on the site IA and design. The latest version, which came out in January 2003, was intended to present a cleaner, fresher look. "The previous site had been up for about four years. It was getting tired, and we were getting feedback on the need to simplify the architecture," says Mains.

DESIGN PROCESS AND USABILITY ACTIVITIES

Landor makes extensive use of the intranet's feedback channel to collect users' views about and requirements for the intranet. "All feedback is typically collected online," Mains says.

User feedback indicated that despite the company's IA exercise four years before, added material was once again making the site too complex.

"The old site had an abundance of categories where you could get information, but users found it too confusing," Mains explains. "The mistake we made was to build the architecture and then add on to it. After four years, it got so complicated that no one could understand where they should go."

To make matters worse, the search facility was inadequate. Created in-house, it was essentially a spider that followed all the links it could find and captured the pages into Microsoft SQL Server. Initially, the search produced reasonable results. But, as content grew, the overhead of the cataloguing process led to performance problems. "The results became inconsistent and generally unreliable, leading to confusion and disappointment," explains Mains.

Pictured: The old landornet homepage. The long list of links on the left-hand side pushed the entire page well below the fold, hiding important information such as employee birthdays.

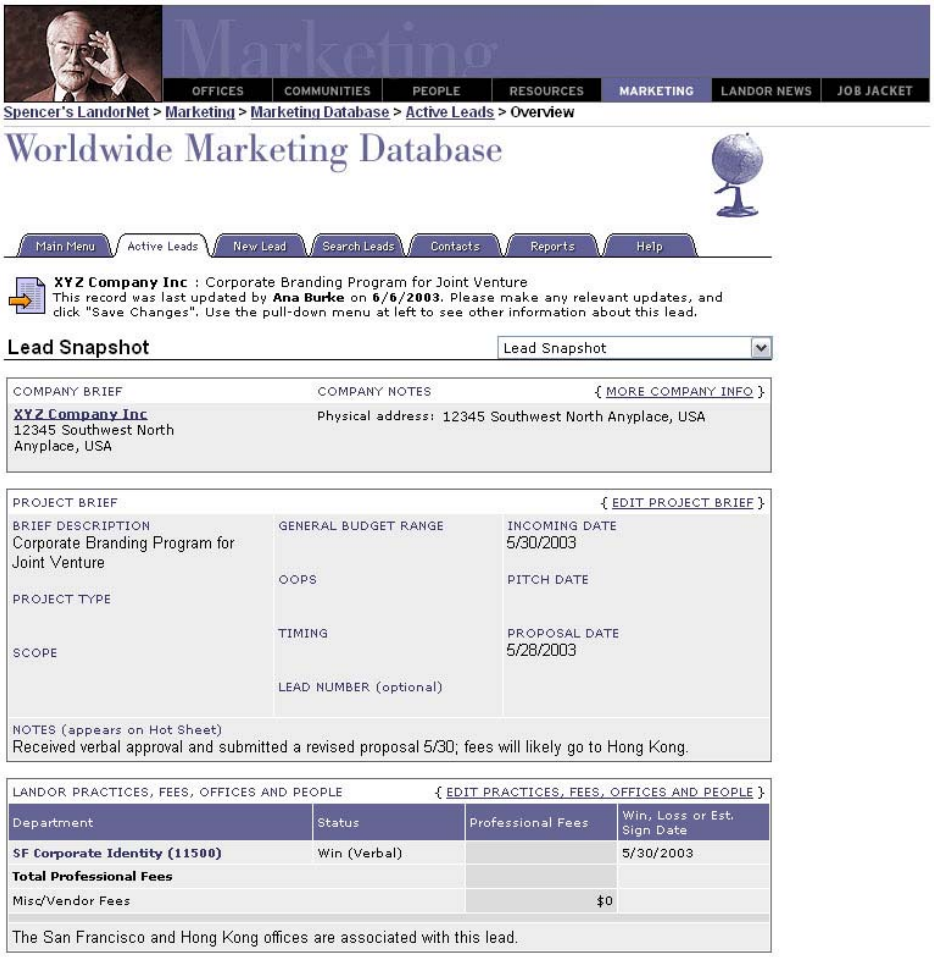
Design-wise, Landor's management felt the increasingly messy intranet did not reflect well on the company's core business of branding and design. "Because we're in the branding business, it's important for us to stay true to our own look and feel," Mains points out.

In the old intranet, each of the six different main sections was a different color so that users could instantly identify where they were on the site. This was a good idea in theory, but the logic of it started to break down as different company functions became increasing integrated.

"A lot of our data integrates several different departments; for example, the marketing and production teams may be in touch with the same people and keep the

same client contacts. Before, this same data was being held in different databases that even looked different."

The old site's "job jacket" application was used for projects with established clients (as opposed to housing pre-sales information about prospective clients), but a lot of the information it contained was duplicated in the marketing database. For the new intranet, Landor decided to integrate all the information into a single application called *Client Central.* However, this broke the logic of having a different color scheme for different departments.



Pictured: The client details in the old marketing database duplicated information used in the post-production environment, but the different interfaces caused confusion.

"People find it hard to understand that the interface is different from the data," Mains explains. "If they see one purple and one blue page for the same contact, they will refuse to believe it's the same information on two different pages. We realized we had to be much more consistent."

It was clear that Landor had to again address the site's IA. In June 2002, the company assembled a working group of ten people from the San Francisco office. The group represented all major company areas, including the digital design department, the naming department, and the HR and facilities groups.

"The most important thing was getting the right people," Mains says. "We wanted people who used the site and were interested in usability for its own sake. We're a small enough company that we could know who they were — we literally went through the directory. It's also important to have a good cross-section of disciplines, not just IT people."

The working group first spent three weeks thrashing out a new IA for the site, based on the members' experience of tasks within their group. "We've learned that having an understanding of common tasks in the company drives usability," Mains says. "We look at what people do today in terms of workflow and how they solve problems."

For example, much of the site's structure is based on folder metaphors, which is a familiar way of working for the company's employees. "We don't think it's our role to change that; we're here to make it more efficient. Intranets shouldn't be a new activity, they should support existing activity," Mains says.

During this time, the group carried out about five sessions of user testing using card sorting. Each session of testing lasted from two to three hours. "We got all the content on index cards, and tacked them up on giant boards," Mains says. "After the sessions were over, we left them there for a couple of weeks. We encouraged the group to stop by the room and mess around, think about things people would want."

The team also involved two landornet users from Europe via a series of conference calls. Landor used WebEx, a third-party online meeting technology, to facilitate this part of the process. "It was important during our conference calls that we controlled the meeting and that end users could see what we were talking about and referencing," says Mains.

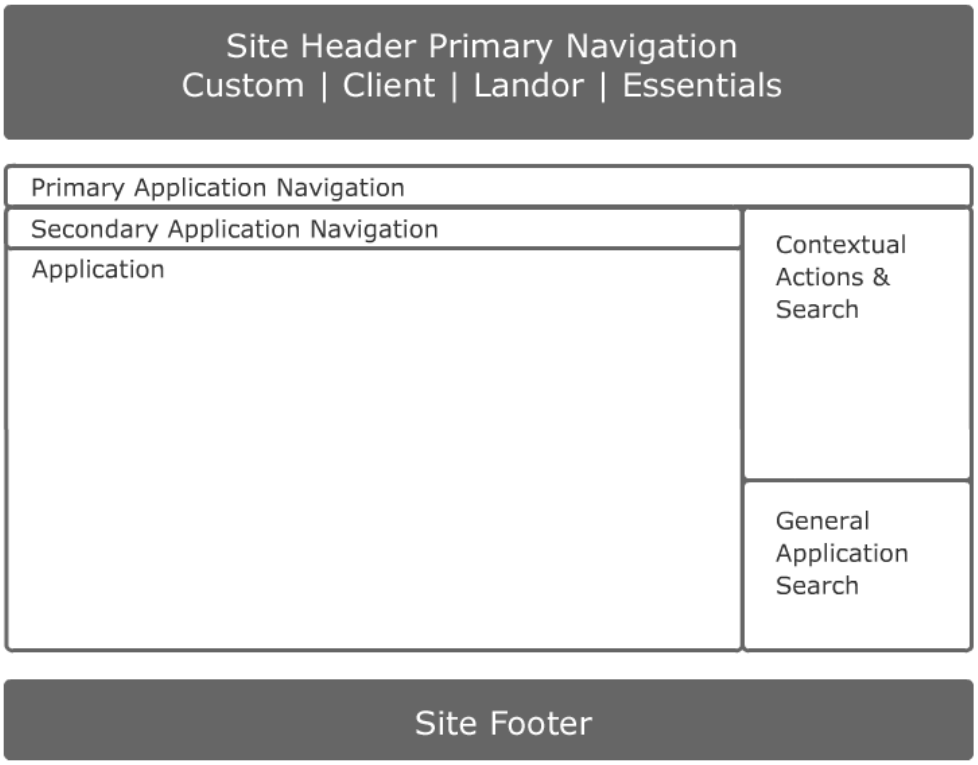
By July 2002, the working group had cut the top navigation's seven items down to three core areas that it felt would remain constant as the company grew. Those were:

- *Clients*: tools and information needed to help Landor staff work effectively with clients, such as slides, case histories, and the *Client Central* database.
- *Essentials*: items such as expense reports and timecards — as Mains puts it, "anything you need to get paid."
- *Landor*: internal Landor information such as applications and identity guidelines.

The nomenclature for these sections came about through a series of interviews and observations in different Landor offices, and — along with customization and search — they make up the site's primary navigation.

During trips to Landor's offices in New York, San Francisco, London, Hamburg, and Cincinnati, team members were also able to observe local users at work on the intranet and note their needs. In two of the offices — London and San Francisco — they carried out specific interviews with local users. "Both offices are main drivers of best knowledge sharing practices; also, London generally would represent the European region, while San Francisco tends to represent North American needs," Mains says.

The team based the secondary navigation on specific applications, each consisting of standard elements: primary and secondary navigation, contextual actions and search, and application-specific search.



Pictured: The ultra-simple page layout of landornet today.

Employees enter a login and password to enter the site, which is personalized according to their profile so that sensitive information — such as client fees — is accessible only to authorized users. "We can design the site to hide information items or even parts of items," Mains explains. "If someone doesn't have access to certain information, they just don't see it. We don't want to have locks on doors. If you have areas that people can see but can't get into, they start asking about getting into that area, and that's a productivity loss."

Users can also customize the site to some extent by choosing the bookmarks that, unusually, run across the very top of the page.

The intranet's simplified structure makes it easier to find information, and the improved search engine (also built in-house) takes advantage of the fact that all site data is structured. The search engine, which is simply a series of queries into database tables, is effective.

The new site is also a complete CMS, and manages a wider variety of content than either of the company's previous sites.

All of the new site's data is stored in Assets, an object-oriented data model designed in-house for flexibility and manageability. Everything from standard Web pages, to files and images, case histories, and discussion groups are driven by a common infrastructure. The search engine is now much faster and more accurate than anything they had developed before. It also lets the company create new asset types very quickly.

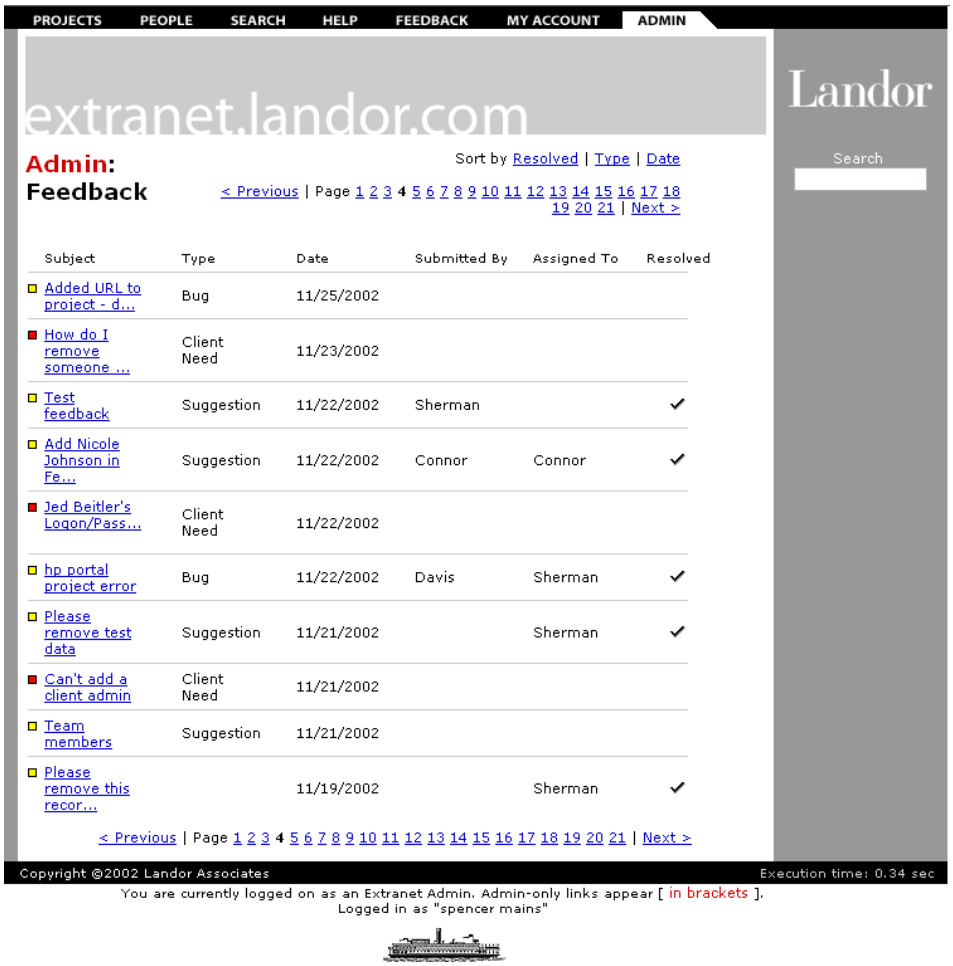
Landor's designer, Rebecca Titcomb, worked full-time to produce a series of site mockups in Photoshop. "We must have had 150 mockups," Mains recalls. "We had a series of concepts for the homepage, then the first and second levels."

Titcomb came up with four different visual treatments, one of which the working group immediately identified as the best. The design is "something that really embraces who we are as a company," Mains says.

The mockups were presented as finished artwork rather than sketchy designs, and Mains believes that this was very helpful both in getting user buy-in and facilitating the working version. "Having a design that looked like a final version, not just a mockup, went a long way to getting good collaboration," he says. "And implementation based on an actual design is just *so* fast — it was a no-brainer for our technical people, they just had to build the back end."

Users found the site easy to learn. "We haven't had to do much training because the site was already tested against a large group," Mains explains. "We used the right terminology, put things in predictable places, the site behaves predictably, and that's critical."

The site's feedback link is widely used, and users are encouraged to use it rather than the telephone. "We've educated them to use that exclusively, because then we know exactly where the feedback is coming from," Mains says. "People are encouraged to use it because we get back to them so quickly, literally within minutes usually — not necessarily to solve the issue immediately, but to tell them what we're doing about it or why we aren't doing something."



Pictured: The feedback management screen helps the intranet team keep on top of user feedback and requirements.

Landor is now using email to foster intranet use within the company. "We know that 100% of end users use email, but not 100% use the intranet, so we're trying to bring them together. People can subscribe to channels such as new business, airlines, and so on, and get news about them by email as a way of driving traffic back into the site," says Mains. "For example, they might get the name of a client in their chosen area, a description of the opportunity, and who's pitching the work. The email is HTML-enabled, so they can click through to the site to get an expanded view of the lead."

The intranet is also closely integrated with the Landor extranet, which was officially launched in June 2001 to provide a way to share media assets between Landor and its clients. The extranet and intranet are built on the same technical platform and are tightly integrated, reducing unnecessary redundancy and increasing information accuracy.

TIMELINE

- June 1996: Work begins on first version of landornet.
- Sept. 1996: Formal launch of landornet.

- Jan. 1998: Revision of the site's IA and design begins.
- Mar. 1998: New IA and design implemented, introducing a task-based vs. organizational structure
- June 2002: Work begins on complete IA and design overhaul.
- Sept.-Nov. 2002: Database and application development.
- Nov. 2002: New IA and design released to a limited audience for usability validation and testing.
- Jan. 2003: Incremental functional, usability, and design changes based on user feedback; the intranet team holds design meetings weekly for two months to ensure proper implementation of changes.
- Apr. 2003: Latest version of landornet released.

RESULTS

So far, Mains admits, Landor hasn't had the time or perceived business need to cost-justify its intranet project. It has, however, derived benefits that have clearly saved the company money and improved collaboration and customer service.

"For example, not long ago it took nearly a month for all offices to report their local office wins, losses, pending, and pursuit status into corporate headquarters using spreadsheets, emails, Word documents and so on. By the time the data was compiled and distributed, many collaboration opportunities would be lost. We created an application that streamlined the existing process, which has decreased the overall time spent collecting and distributing from around thirty days to five days — a 500% increase in overall time saved!"

LESSONS LEARNED

Insights from Spencer Mains:

Make education part of the deliverable. "Training and induction is the single best way to communicate the intranet's value, ensure data integrity, and get critical feedback."

Use common sense and keep it simple. "If an application or solution can't be easily explained or understood, then it's probably too complicated or is not addressing a need."

Respond to feedback immediately. "Within minutes if possible. It doesn't matter if you don't have an immediate solution, but it does matter to the end user if you don't acknowledge the issue or need. By responding quickly, you build loyalty, good will, and trust."

Email integration is key. "Our entire user base uses email on a daily basis. Capture the content held in the intranet/extranet and push it to your audience through a subscription system or through other workflow solutions."

Put a human face on it. "Insist that everyone has his or her photo taken and made available in a people directory. It builds community and really warms and personalizes the site."

Mayo Clinic

Using the Intranet:

Mayo Clinic is a non-profit academic medical center whose mission is to provide the best care to every patient every day through integrated clinical practice, education, and research. Specialists provide diagnosis and treatment in virtually every medical and surgical specialty, and are organized as a "group practice" so they can interact and support each other while remaining dedicated to patient welfare. To support that care and interaction, advanced programs in medical education and research promote higher standards of medical care, learning, and discovery.

Design Team:

In-house collaboration between Publishing and Media Technology Services (PMTS), Communications, and Section of Illustration and Design (SID). Additional support provided by the Human-Computer Interaction (HCI) team and Marketing.

Members:

Julie Prigge, PMTS, systems analyst; Liz Daube, SID, Web art director; Tom Suther, HCI, senior analyst programmer; Judy Samson, communications specialist; Mike Woodcock, PMTS, systems analyst; Steve Sponsel, PMTS, section head.

SUMMARY

The design of the Mayo Clinic's MayoWeb intranet is predictable but not humdrum. It supports the patient care process in creative ways, from being a notification system for IT application outages to reporting hospital-bed availability.

As a physician-led organization, committees are the Mayo Clinic's fundamental decision-making bodies. Designers understood this process and created an intranet that supports it. The electronic committee management system lets staff create minutes and agendas, entering pertinent information such as title, description, duration, and status into a simple form. They can also add attachments, and view other items for that day.

Practice | Education | Research | Employees/Staff | Depts/Groups | Resources | Library | Mayo Health System

PMTS Test Committee

Home
Administrator
New Committee
Search
Old Application
Help

Preview

Add/Edit Agenda for 05/06/2003

Duration: Hours 30

Title: Testing copying from Word into eWeb

Description

- DONE NEW as of 3 pm on 4/28: For notations: If there are no notations for a particular agenda, then when I click on Notation, I should go directly to the add new page. If there are notations, then I should go to the list of notations…just how the agenda piece works. *(It works fine for me – we tested on April 29 and it did work as it should. Will see if any others see the same thing.)*
- COMPLETED 4/28 NEW as of 3 pm on 4/28: On the print preview of the agenda, the

-->

Draft Item

Attachments: upload edit

Speaker

Submit Delete

Agenda Items for 05/06/2003

Title	Sort	Time	Description	Transfer	Edit	Delete
Testing copying from Word into eWeb		7:00 AM		Copy / Move	Edit	Delete
No copying done here		7:30 AM	User-interface design is	Copy / Move	Edit	Delete

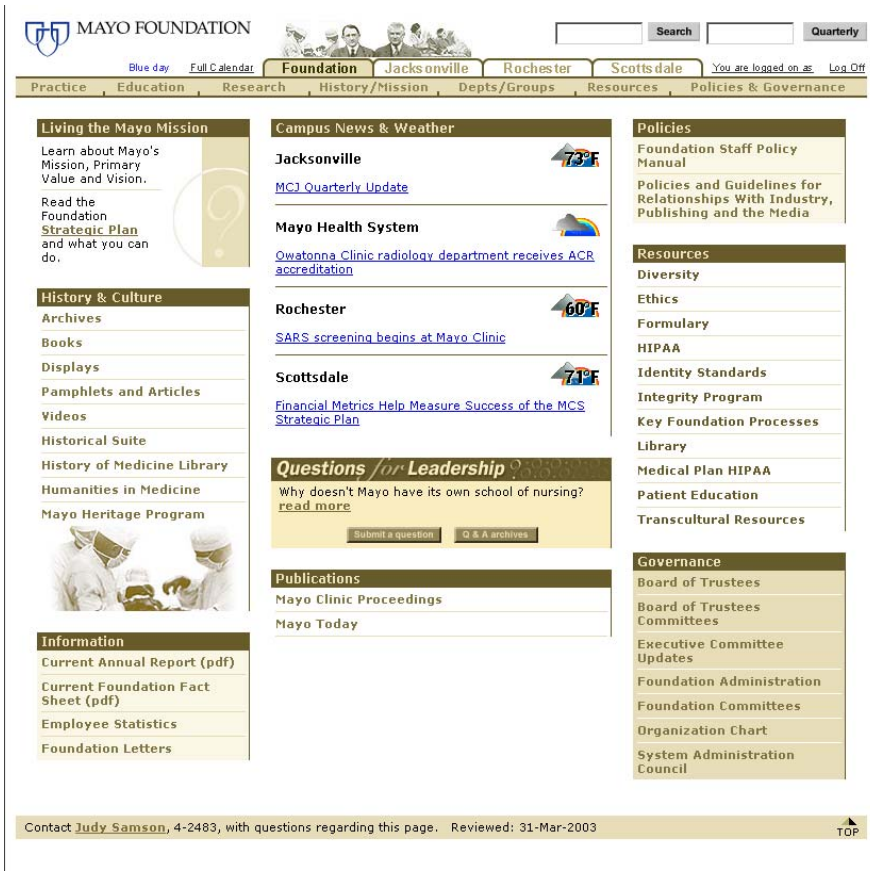
Add New 1 of 1

Administrator | Agenda | Notation | Guest | Minutes | Attendance | Publish

Contact Ravindra Kadiri with questions regarding this page. Reviewed: Dec-2002

Pictured: An electronic committee application page that lets users add agenda items.

Surgeons alternate between days seeing patients in the clinic and days performing surgery in the operating room. If surgeons are designated as *orange*, they're scheduled to operate on orange days; surgeons designated as *blue* are scheduled to operate on blue days. This blue/orange calendar designates day-to-day assignments for the year and has proven to be an effective way to manage busy clinical and surgical schedules. To keep all staff updated, the *Clinic* pages' navigation bar shows whether it's an orange or blue surgical day. The *Full Calendar* link leads to a PDF file of the surgical calendar. Also, short news blurbs for each location are displayed, as are links to many more human-resource, administrative, and cultural resources. The main navigation tabs and the secondary horizontal and vertical navigation bars are simple to decipher and use. Each page has both an intranet search and an employee directory, which is invaluable in a large organization.



Pictured: The Mayo Foundation homepage, which indicates whether it's an orange or blue surgical day and displays a surgical calendar link, navigation tabs, intranet search engine, online employee directory, and user log-on notification.

Each Mayo Clinic site has its own intranet tab. At a glance, employees can get news, safety, and resource information, and access other areas' portal pages. The status panel in the upper left has two sections. The first is devoted to each hospital's bed availability. With close to 2,000 licensed hospital beds (in Rochester, Minnesota) the clinic uses the intranet to help manage the patient flow. In the past, all of the physical buildings had lights in the ceilings, which indicated if the hospitals had enough patient beds. If the hospitals were nearing capacity, green lights would change to yellow. And if the beds were full, the lights would change to red. The status panel uses the same indicators. Clicking a status light or a designated hospital takes users to a Web application that describes the reason for the status change.

The status panel's second section shows the status of electronic systems that support the clinical practice. Mayo Integrated Clinical Systems (MICS) is a group of integrated medical systems, and at any given time they can all be operating normally (green), impaired (yellow), or unavailable (red). A blue dot indicates that a scheduled outage notice is available for review.

Using real-world metaphors on MayoWeb lets employees check conditions and status at a glance.

Pictured: The status panel in the upper left indicates bed availability and the application status of electronic medical record applications (RMH is Rochester Methodist Hospital; SMH is St. Mary's Hospital). Portal pages for other areas are also accessible from this page.

An online news application provides employees timely information about everything from parking to medical procedures. To meet all staff preferences, the organization disseminates the information in paper, Web, and email formats. All paper-based forms are also created in PDF format and available on the Web. Another method for disseminating news is through a newsletter application, which lets groups publish targeted periodicals simultaneously to the Web and in print.

MayoWeb also lets staff members have discussions online. Web-based forums are available for discussing medical, legal, and administrative concerns.

MAYO CLINIC

Search | Quarterly

Blue day | Full Calendar | Foundation | Jacksonville | Rochester | Scottsdale | You are logged on as | Log Off

Practice | Education | Research | Employees/Staff | Depts/Groups | Resources | Library | Mayo Health System

This Week *at Mayo Clinic* online

Search

- This Week Home
- People
- Calendar
- Cafeteria Menus
- Show Entire Issue
- Subscription
- Submit News
- Archive
- Voting/Consulting Staff News
- Mayo Today

Temp 55°F

April 25, 2003

News Headlines

SARS screening begins at Mayo Clinic
In accordance with the recommendations and guidelines of the Centers for Disease Control and Prevention (CDC), Mayo Clinic has begun screening outpatients for Severe Acute Respiratory Syndrome (SARS).

Pediatric Code 45 team added at Rochester Methodist Hospital
Beginning May 5, Rochester Methodist Hospital will have an emergency response team dedicated to pediatric patients. You can call for a hospital emergency response team by dialing 145.

Use of Inpatient Electronic Transfusion Orders expands May 8
Beginning May 8, Inpatient Electronic Transfusion Orders will be available for blood orders less than one unit, including Mary Brigh 5B/G and the Neonatal Intensive Care Unit (NICU).

Change in parking spaces for Mayo Surface Lot 33
Mayo has designated up to 40 parking spaces in Surface Lot 33 for Ronald McDonald House guests beginning late April. Parking for staff remains available in surface lot 32.

More News Headlines

When to use the International Appointment Office

Internal Medicine residency program receives full accreditation

Bike helmet fitting and sale May 5

Benefits News

Universal Life Insurance Cash Accumulation Fund interest rate change

Electronic Environment

Temporary Pathology Report process changes

MICS LastWord Flowsheets for PM&R Therapists

MICS InBox for certifying initial therapy for PM&R and Speech Pathology outpatients

Pictured: *This Week at Mayo Clinic* electronic newsletter. The same database is used to create print version for rack distribution.

With many different types of users at the clinic, designers decided to create role-based portals for nurses, residents, supervisors, desk attendants, and others. As we've seen with other intranets, a role-based approach can be challenging because any particular job category can include many different roles. For example, a physician might have patient care, administrative, educator, and researcher roles, and must be able to switch between them quickly and seamlessly. In general, this role-based implementation is simple to work with because the obvious navigation and context helps users easily tell where they are and which role they are logged in as.

In the medical field, it's important that staff keep abreast of the latest research and procedures. MayoWeb aids in this area by providing *Education* pages that house everything from academic information to committee membership information and general career development.

Pictured: Educational tools and resources for students, instructors, and clinicians.

MayoWeb has no centralized restrictions or control aside from policing the use of the Mayo Clinic brand and logo. Web authors have a great deal of autonomy and can construct a website to their own specifications given the particular needs of their clinical, research, or educational area. Few limitations or rules exist regarding content, design, or functionality. What works in one department may not meet the needs of another. On other intranets, this type of decentralized model has often resulted in incoherent designs.

MayoWeb, however, maintains consistency because authors and developers are asked to follow minimum design and implementation guidelines. Authors are provided with and encouraged to use templates and page parts, such as local site search, feedback forms, and copyright notices. All pages have a basic three-column design with a row of tabs and another horizontal navigation menu. Designers' ability to change sections, colors, and headings is enough to satisfy different groups' needs. And, a security system lets authors and developers provide personalized or confidential information to users.

MAYO CLINIC

Search | Quarterly

Blue day | Full Calendar | Foundation | Jacksonville | Rochester | Scottsdale | You are logged on as | Log Off

Practice | Education | Research | Employees/Staff | Depts/Groups | Resources | Library | MH System

- See the new WWW site for research
- Research Effort Certification Policy and System Enhancements
- to Replace for Publishing to www.mayo.edu

Equipment Available

· Revco Light and Temperature Programmable Plant Growth Incubator. Contact @mayo.edu

News

Alert Communications about research publicity opportunities. More...

· Research News
· Grant Prep News
· Rochester Daily News

Search and Find

· Biospecimens Projects
· Clinical Trials
· Financial Statements
· IRB Projects
· MayoAuthors
· PubMed
· WWW ( )

User Guide

Get Funding
Alerts, Deadlines, Funded Research, Grant Writing, Industry Sponsored Research, Online Forms, more...

Access Resources
Core Facilities, IACUC, IRB, Research Accounting, Research Secretary Advisory Group, Research Services, Study Coordinators, Technology Commercialization, more...

View the Organization
Centers and Programs, Committees, Departments and Divisions, Interdisciplinary Research, Research Staff Directory, more...

Get Help with Clinical Research
Clinical Trials, CPOR, GCRC, MPACT, NRC, Peds Resources, REP, Research Studies, more...

Obtain Research Training
CRTP, Clinician-Investigator, Postdoctoral Positions, more...

Download Software
Anti-virus, AutoWeb, Effort Certification, RCF, more...

Forms

· Submit Postdoc Ad
· Research Forms
· Safety Forms
· Mayo Forms Library

Employee Information

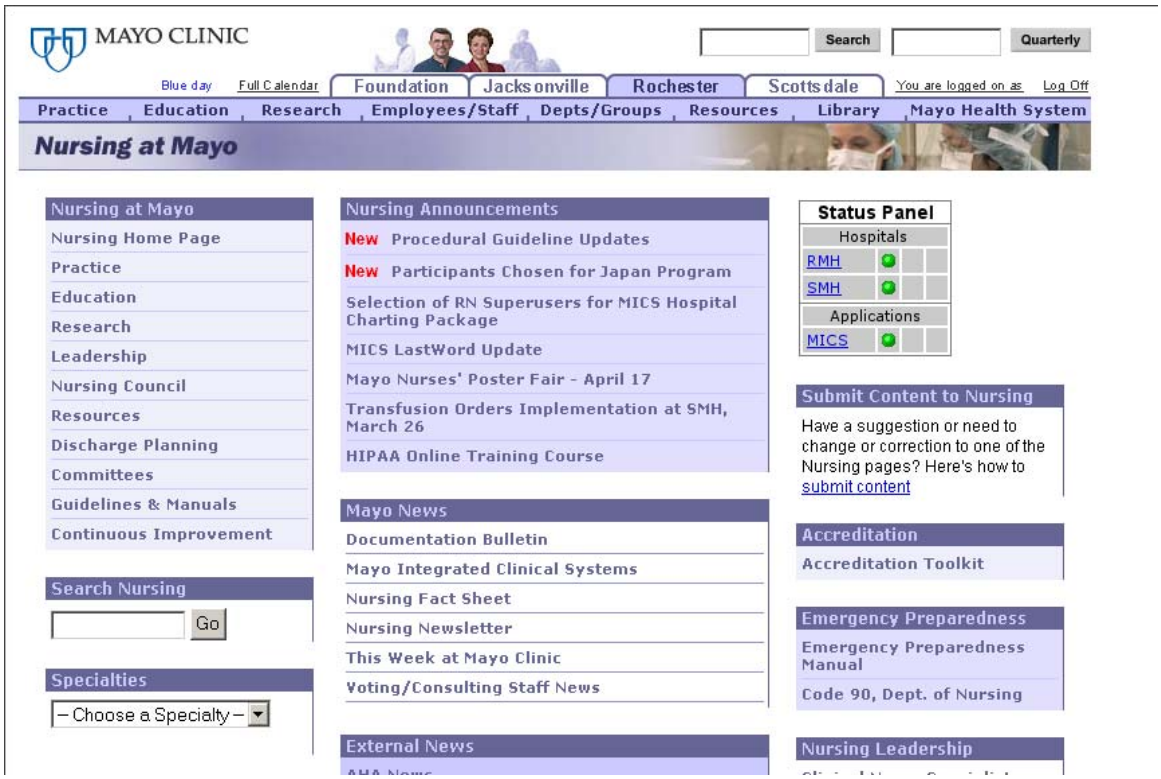
· Classifieds
· Credit Union
· Job Postings
· Lab Safety
· Postdoc Openings
· Temp Park Tags
· Timecard

References

· Committee E-minutes
· Patent Information
· Policy Manual
· Research Safety
· Research Staff Directory
· ResearchWeb Usage
· Strategic Plan

Contact: @mayo.edu | Updated: 18 April 03

Pictured: A portal page created for scientists and researchers.



Pictured: The umbrella website for nurses. The drop-down list gives users access to pages for nursing specialties, such as anesthesia, orthopedics, and so on. The page includes the required common banner and footer, and a separate application dynamically generates links to top news stories.

In addition to having set templates and guidelines, the Web service bureau (part of Publishing and Media Technology Services) helps departments and groups create and maintain websites. It also helps employees with items they might not consider or have the skills to deal with, such as audience identification, content development and organization, workflow analysis, HTML coding, and how Web resources help contribute to overall patient care. The Web service bureau includes people from various disciplines, such as systems analysts, Web art designers, programmers, and HTML coders. Communication specialists, along with analysts from the HCI team, provide additional services to the Web team. End-user feedback is gathered with help from marketing, the HCI team's usability lab, and research methodologies such as contextual design.

MayoWeb also supports corporate functions through employee classified ads, cafeteria menus, employee manuals, job postings, and prescription refill systems, for example. Employees can also fill out time cards, request vacation, change taxable withholding amounts, re-direct pay checks, and view their training history through a Web-based HR application.

The intranet team researched the challenge of designing for a diverse user base with overlapping, but largely differing needs. The intranet they produced rises to this challenge.

URL AND ACCESS

Access routes to MayoWeb vary throughout the organization. At the main Rochester site, around 90% of network browsers have the intranet set as their default page, though users come in via different homepages. Within the organization, the site's URL is *mayoweb*. For security reasons, external access is available only through a VPN.

CONTENT MANAGEMENT

The publishing and media technology team supplies minimum design and implementation guidelines, and author templates to encourage a consistent look and feel. These guidelines are not mandatory, however, and the organization's 300 or so content contributors can create pages as they wish.

Currently, authors can choose their coding tool and put their content on the development server to preview it. A secured script then transfers the content to the "production" server after the author has been authenticated.

Mayo is evaluating third-party CMSs, but is conscious of the need to retain flexibility. "We have regulatory issues that require us to print out information, so even in the age of the paperless office, our designs have to be easily printable," explains Mike Woodcock, a PMTS systems analyst. "We don't want to buy into a CMS that doesn't give us the flexibility we need."

TECHNOLOGY

MayoWeb runs on two Sun Ultra II servers with Solaris operating systems. Each server has software RAID and 106Gb of hard drive space, of which 41Gb has been used so far.

GOALS AND CONSTRAINTS

1) Disseminate institutional knowledge and services to more than 41,000 allied health staff, physicians, and scientists worldwide. 2) Make the Web the first choice for finding organizational information. 3) Enhance job functions by providing operational, procedural, and contact information. 4) Provide personalized tools for completing tasks and organizing information. 5) Push relevant business knowledge to employees based on who they are, what they do, and where they work. 6) Provide anytime, anywhere access to designated portlets via an extranet.

BASIC INTRANET FEATURES

MayoWeb offers communication and news capabilities. Basic features include: templates and guidelines to support consistent design; news sections to provide staff with timely information in paper, Web, or email formats; forums to support staff discussions of medical, legal, and administrative concerns; an electronic committee management system; department pages; a security system that lets authors and developers segment content for different groups; employee classified ads; cafeteria menus; employee manuals; job postings; prescription refills; and time cards.

USERS

Users have varied backgrounds and jobs, including: physicians/scientists, allied health staff, clinical residents and research fellows, and students in graduate and health-specialty programs.

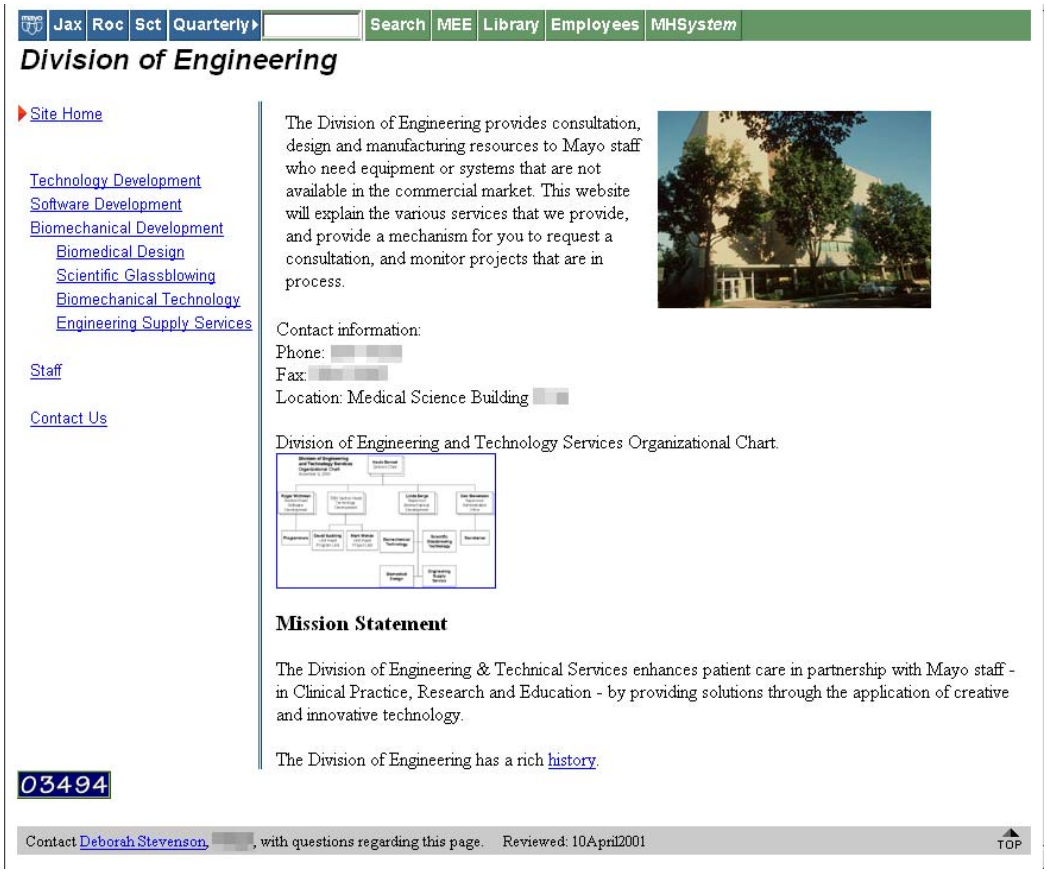
USER TASKS

- Get bulletins and news
- Participate in committees and discussions/forums
- Fill in time cards, request vacation, and do other payroll-related tasks
- View cafeteria menus, job postings, and employee manuals

BACKGROUND

Change happens slowly within the Mayo Foundation. The foundation is large and complex, and decisions made too hastily in one part of the organization can easily have an adverse effect on another. Any changes in technology must serve the needs of users who, in some cases, might be making life-or-death decisions on behalf of Mayo's patients.

In the 1990s, the Mayo Foundation built up a collection of independent departmental websites containing at least 150,000 pages. Its intranet was rudimentary — basically just a homepage featuring a long list of internal sites, and a standard top navigation bar that sites could use.



Pictured: The *Division of Engineering* page shows the top navigation introduced in 1996.

In 1999, the foundation saw the need to use the Web more effectively, and set up a Web team within the PMTS department. The team members soon realized that to make it easier for users to find reliable, up-to-date information, they'd have to create a meaningful structure for the intranet.

DESIGN PROCESS AND USABILITY ACTIVITIES

In June 2000, Mayo's newly formed Web team pulled together a multidisciplinary committee, the Intranet Organization and Content Management Workgroup, to decide how to organize the intranet. This workgroup included nurses, physicians, researchers, educators, and administrative staff.

The workgroup defined the seven content categories that make up the secondary navigation level: practice, education, research, employees/staff, departments/groups, resources, and library. The workgroup also designed a new top-level navigation bar, which was tested in the Mayo usability lab in October 2000. There were ten participants, five with more than one year of Mayo service, and five who'd been there less than a year.

Participants found the information categories usable and they liked the new visual design. The color scheme, however, made some of the links hard to see, and as a result of the study, the designers came up with a modified version. Users also felt that the top navigation took up a lot of page space, so the designers built two versions of the top-level navigation bar: a larger navigation bar for the top-level pages and a smaller navigation bar for all subsequent pages.

Pictured: A proposed homepage design shown to users in 2000. Feedback indicated that the dark blue color made links hard to see, so the team modified the design.

"The biggest discovery was the fact that people have many names for the same thing," says Julie Prigge, a PMTS systems analyst. "As a result of this, we cross referenced many links from various categories and used terminology people were used to. For example, our helpdesk is referred to as *helpdesk*. However, the department responsible for that is Communications Technology Services. No one could find the helpdesk under that name. So we pulled out certain functions and listed those as well as the department that might be responsible for the service."

The workgroup also discovered that people tend not to spend much time navigating for information, preferring to go straight to the search facility. However, because the intranet pages were not tagged with metadata, the search results left a lot to be desired, and improved search was put high on the priority list.

The design included a dark blue bar across the top of the page and down the left side. The left side featured navigation items, but many participants missed these links because of the darkness and richness of the blue. After the study, the designers tamed down the intranet, but still kept the new visual theme. Again, they developed two versions of the top-level navigation bar: a larger bar for top-level pages and a smaller version for all subsequent pages. Real estate was a main concern with the larger navigation bar.

Pictured: The Mayo homepage from 2001, before the current intranet project began. The homepage is still just a list of links — albeit structured into categories.

Version 1 of MayoWeb was launched in January 2001, and had an area for feedback on the changes. This feedback resulted in several further changes. For example, users were very vocal about wanting a link to the Mayo Foundation library within the subnavigation. "The library is accessed by many groups at Mayo — researchers, physicians, students, residents and so on — and is a valuable resource," says Prigge. "When we took this away, we heard about it. These groups wanted quick access to this resource and didn't want to click several times to find it."

Meanwhile, the workgroup was discussing changes to the site's IA, including "chunking" information to create a more manageable structure and navigation, and improving the top menu bar. In July 2001, the workgroup published a report with recommendations for further intranet work, including work on portal pages, personalization, a better search engine, and page templates. At this stage, the workgroup disbanded and handed the intranet project over to the Web team.

For phase two of the portal project, the Web team ran focus groups, sent out email surveys, and carried out a usability study in the lab to test the intranet's chunked content categorization against the former alphabetical listings. Predictably, the study showed that participants were better able to work with the chunked format, since there were fewer choices in the list to deal with. Organizing the content was the next biggest challenge, and the usability study indicated that doing it properly would require careful thought.

"We found through user interviews, usability laboratory studies, and surveys that staff resort to the Web to accomplish a task," says Woodcock. "So task-oriented content like procedure manuals, links to applications, and medical reference information tended to bubble to the top pages of our sites, while mission statements and staff biographies and pictures became less prominent."

MayoWeb reflects the flat structure of the Mayo Foundation itself. Organization-wide resources are held in the main portal pages, which have a brown color scheme. Behind the portal pages, practice, education, and research each have their own subsites, and each needed a redesign to bring it into the new look and feel.

The design team tackled the practice subsite first. In designing the practice site's structure, the team found a conflict between the information users wanted to see and the messages management wanted to get across. "The leadership wanted initiatives such as quality of care and wise use of resources to be navigational items, but we felt those terms were too vague," says Lizabeth Daube, Web art director for SID.

Fourteen people tested the practice portal's prototype design. Participants represented a range of potential users, including residents, staff physicians, pharmacists, nurses, therapists, dietitians, unit and medical secretaries, and clinical assistants. "With all of these various specialties involved, we really learned a lot about how these types of employees function throughout the day, the resources they utilize, and how they use the Web," Prigge says.

In addition to the usability study, the team sent email questionnaires to staff physicians and held some face-to-face interviews. The Clinical Practice Committee also reviewed the prototypes and gave the Web team feedback.

The team's goal was to introduce a task-oriented structure that helped users more easily find what they needed from an increasingly long list of resources. However, they discovered that while users welcome major improvements in design and functionality, they also resist too much change too soon, fearing that it will prevent them from doing their jobs effectively. On the basis of user feedback, the team developed and introduced a task-based navigation model that users were happy with.

During phase two of MayoWeb's makeover, the Web team experimented with contextual design techniques to restructure its *Identity Standards* website, which is where users go for marketing and brand information. In addition to Mayo's HCI team, which works on various online projects, the foundation has about twenty-five people trained in contextual design, and they led the process.

"The goal for using contextual design was to better understand the various audiences the site was being developed for," Prigge explains. "Part of the discovery process uncovered various work processes that occur even before the website is accessed. This was very helpful in understanding not only the website's role, but Media Support Services' role. Our goal is to utilize this process more in the future because of the information it provides about our customers and how they do their work."

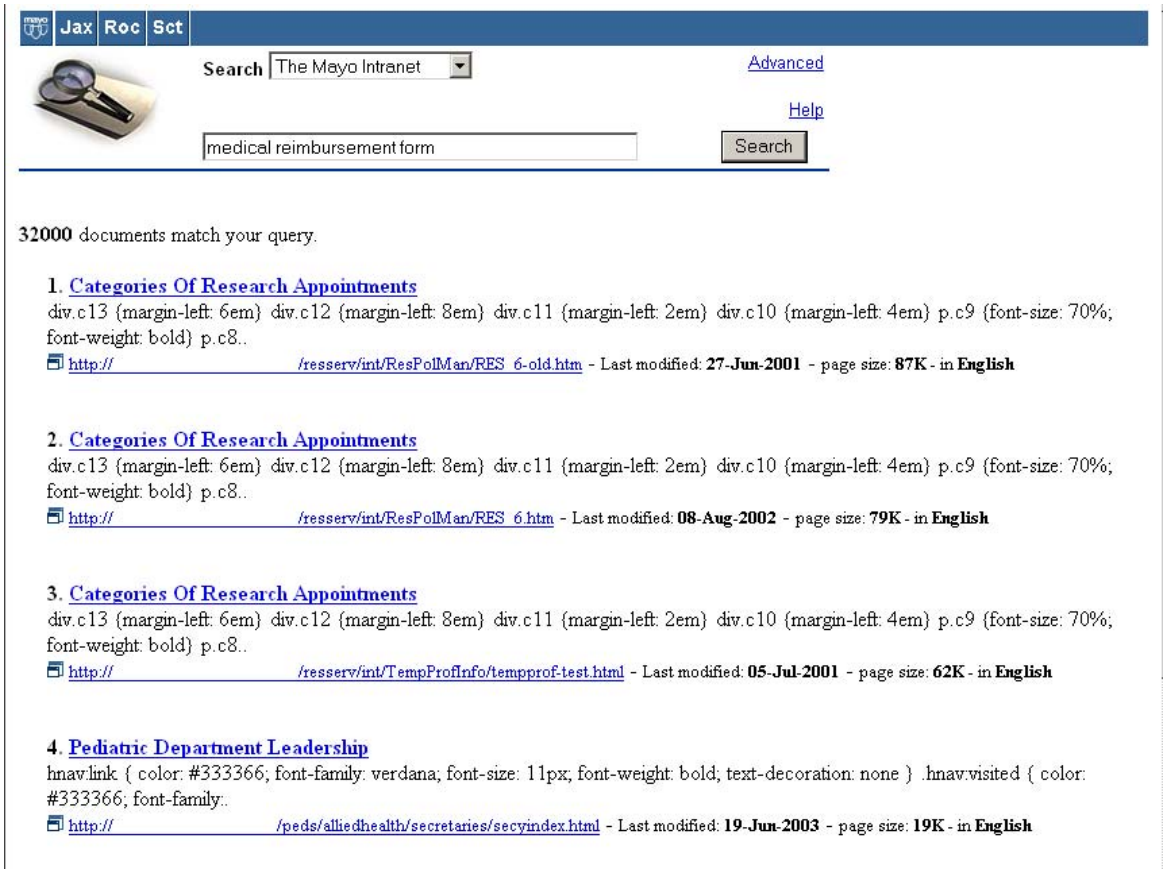
Another goal of phase two was to create templates that content creators could use to give the intranet a more unified look and feel. The Web team created two types of templates: one for the many static pages, and one for dynamic pages such as the *Quarterly Directory*, news publishing system, stationery request system, surgical schedules, absence calendar, online forms library, and meeting room reservation system. In both cases, the team accommodated Mayo's consensual, non-hierarchical

culture by including a degree of customization in the templates that lets authors create their own identity within the corporate look and feel.

Much of MayoWeb is still developed in HTML, and the team has started to involve HTML coders in any discussions about new design and functionality. A new design that looks great on paper might be impossible for less-skilled page authors to work with. "Our HTML coders have insight into the capabilities of the authors they support, and are able to create templates that incorporate design, usability, and functionality," Woodcock says.

MayoWeb's previous search engine used AltaVista technology and had an expected lifespan of two to five years. It was also installed as a set-up-and-forget engine. As the institution moved more line-of-business applications and information on to the intranet, leaving the search engine to its own devices was no longer satisfactory.

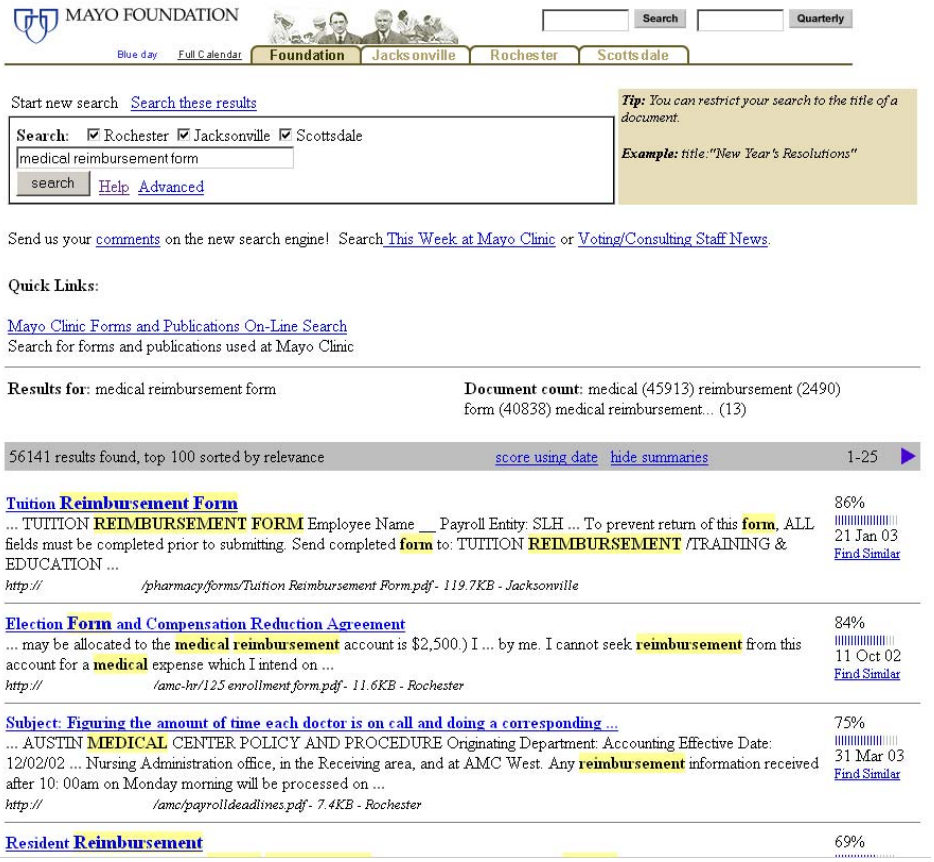
"Most intranet search engines were copies of popular Internet ones, and it took a while for the search community to recognize the particular needs of intranets," Woodcock explains. "We needed tools within the search engine for authors to submit and update their sites themselves, and to add suggested links after analyzing what was being searched. We also wanted an engine that could work within our intranet security model, and more granular control over what the search engine spider would index."



Pictured: A page of results returned by Mayo's previous search engine. The HTML and CSS code formed part of the page banner, and often appeared at the top of results because the spider picked it up as the page's first chunk of

"readable" content. The new search engine lets Mayo use <noindex> tags around specific page content.

In March 2002, Mayo introduced a new Ultraseek search engine based on word-frequency and link analysis, which offered better control over spidering, results presentation, and relevancy. Since then, the daily query average has climbed from 250 to more than 2,000. The team monitors search requests and, based on frequent queries, creates suggested links that appear above the results.



Pictured: The new search engine improved relevancy and encouraged more users to take advantage of the search facility.

However, introducing a universal site search has proved impossible. "Many Web-based applications — like our news applications — were not created with search engines in mind," Woodcock explains. "Result pages from a search returning those listings contained no meaningful information. We had to rework some of those applications so they provided their own search capability, and then we added links to those search pages on the institutional search engine. We then stopped attempting to spider the news application sites."

In the future, the team plans to explore automatic content classification, taxonomies, and "intelligent agents" that learn how individual users search and derive relevancy.

The latest MayoWeb was launched in late 2002, and acceptance of its design and navigation standards is growing within the organization. Early on, according to Steve Sponsel, PMTS section head, "the team had a huge uphill battle to establish a standard top nav, but now the standard top navigation bar is now almost universally

used. It has even been adopted by subsites like *Research*, which have retained their own style for other aspects of the page."

The new version caught on quickly, according to Sponsel. "The payback for page authors of following the guidelines is high enough, in terms of increased usability, to establish why people should use them."

The team is now working on new HTML template files that will address different page- and site-layout requirements, let them introduce new page authoring tools, and reflect new usability standards.

"Moving towards task-oriented websites meant that we had to display content and Web applications for both individuals and departments," Woodcock explains. "Our traditional work unit templates will still accommodate organizational units, collaborative work groups, and special project teams. We have also created an umbrella template based on the work unit template that is meant to provide access to multiple work units. The umbrella template is intended to be more text-oriented than a work unit page, yet not as link-rich as a portal page."

Pictured: Mayo's proposed new umbrella template for work units.

Alison Andrews, an HCI specialist at Mayo, helped design the new templates after paper prototyping with users. Her goal was to feature important content at the highest level, yet still let users easily access the core information below. To meet this challenge, she had to list buried items and align them with the site's bigger picture.

The new templates are optimized for Dreamweaver and Macromedia's Contribute, but also let advanced authors code in any text editor. If this template-driven

process passes usability and technical testing, it will become Mayo's recommended authoring platform.

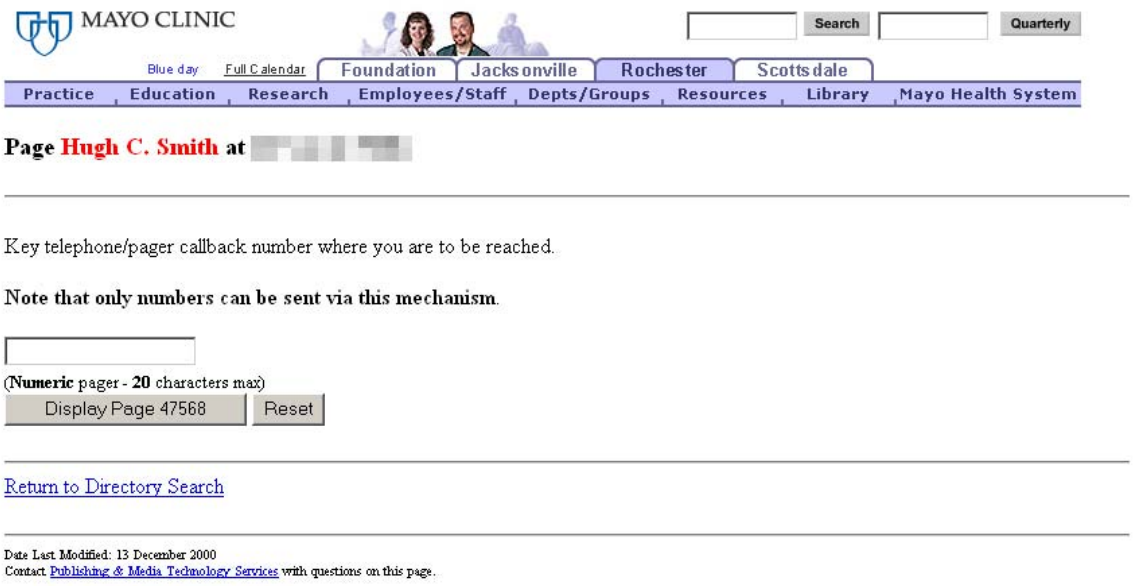
TIMELINE

- June 2000: Mayo's Intranet Organization and Content Management Subcommittee formed; work on MayoWeb begins.
- Jan. 2001: Phase 1 launch of MayoWeb.
- June 2001: The Intranet Organization and Content Management Workgroup issues next step recommendations.
- Mar. 2002: New search engine introduced.
- Oct.-Dec. 2002: Rollout of current MayoWeb version, with updated navigation bar and portal pages.

RESULTS

Over 70% of Mayo's cost base comes from people rather than supplies or capital, and MayoWeb's goal is to help those people use their time more cost-effectively.

Sending pager messages via the intranet is just one example of how it met this goal. Users in Rochester alone send about 1,500 pager messages a day, and the team calculated that it's about 20 seconds faster to send a message online. The time savings add up to eight hours a day — the equivalent of a full-time staff member.



Pictured: The online pager application, which is helping Mayo achieve significant time savings.

As another example, the online telephone and pager application allowed for smaller press runs of the bound directory. Currently, Mayo prints 100,000 copies of a 600-page directory each year. The success of the electronic quarterly has made it possible to print 20,000 fewer copies per year, saving on printing costs.

LESSONS LEARNED

Insights from Mike Woodcock:

Do not move too fast with design changes. "The Mayo Clinic intranet was created to support patient care, and while major improvements in design and functionality are welcome, they should not burden users with finding new content locations or figuring out how to use an application."

Allow folks some self-expression. "You need to incorporate some degree of customization into your templates so authors feel they can create an identity of their own, yet still fall under the overall corporate look and feel."

Don't forget the content creators. "Sometimes we've had to sacrifice design and usability considerations to accommodate the varying levels of expertise among our page authors."

Put usability first. "Create internal competitiveness for usability, rather than technology or appearance. Keep communicating the question "How does this page or site support patient care?"

Practice what you preach. "It's important to follow your own rules and guidelines. Nothing hinders acceptance of the institutional look, feel, or branding so much as the proponents not practicing it themselves."

And from Julie Prigge:

There's no such thing as too much feedback. "The more feedback you can get, the better. You will always learn something important from a usability study or from just simply asking questions of your users."

The Integer Group

Using the Intranet:
The Integer Group is one of ten biggest promotional marketing agencies in the United States. The agency creates campaigns to support retail, field, and promotional marketing for clients in market categories such as beverages, packaged goods, telecommunications, financial services, fast food, home shelter, home appliances, sports apparel, eyewear, and retail jewelry. An Omnicom company, The Integer Group has agencies in Dallas; Denver; Des Moines, Iowa; and Cleveland, Ohio; as well as multiple field offices. The Integer Group is headquartered in Denver.

Design Team:

In-house

Members:

Anne Mitchell, director of knowledge management; Christiaan van Woudenberg, senior developer; Jill Kliger Saliba, usability consultant; Tim Bock, interactive design director; Sarah Herold, director of corporate communications

SUMMARY

The Integer Group's intranet serves some 850 users in various agencies throughout the United States, including its agencies in Dallas, Denver, Des Moines, and Cleveland, and its coast-to-coast field offices. Users include managers, art directors, account supervisors, sales people, and various support personnel. By providing a central location for company information and facilitating employees' communication and collaboration — especially across agencies — the intranet helps users more easily do their jobs.

When users first log in, the intranet streamlines several tasks for them. First, it logs appropriate users into secure areas, and secures these areas against people who shouldn't have access. Second, the intranet pre-populates many form fields. This is a major employee timesaver — not to mention headache-reducer — because it frees employees from entering their name, job title, and office number umpteen times. In addition, the system queries important information employees might need but not remember, such as the date they were hired. Again, this saves time and energy.

On the homepage, the intranet recognizes users and greets them with a *Welcome.* Important announcements are readily available in the middle of the page, and users can easily view past announcements by clicking the *See Previous Announcements…* link at the bottom of the page. Also, users can easily submit their own announcements by clicking the *Submit a New Announcement…* link, also at the bottom of the page. This links to the intranet team's e-mail account, automatically adding the "Intranet News Submission" subject line.

The intranet is personalized, with announcements filtered by agency. The *Quicklinks* also change according to the user's agency, geographical location, and department assignment. For example, users in different offices might see local restaurants or links to local weather based on zip code.

In addition to internal announcements, the homepage helps employees stay informed, and even competitive. *Industry News* has a prominent space on the homepage in the left-side column. The *Useful Sites* list links out to informative publications that employees should be reading.

The homepage also has whimsical elements to engage employees. Birthdays, job-hire anniversaries, and new employee hires are all listed on the right side of the page. (Only listings relevant to the user's location appear.) The top banner artwork is Flash, and the image changes depending upon date, time of day, and user location.

While homepage announcements are concise, in places they can also be light, playful, and even quirky. For example, the description for the Denver office's Halloween-party photos reads: "The strange, the beautiful, and the bizarre. See it all." The writing style and supported features all sustain the company's culture and fun-loving atmosphere.

Toolbox: Encoda MeetingMaker WebEx WebMail

Welcome, Anne | Home | Log Off

Search: GO

People Resources Forms & Templates Clients HR About Integer

Quick Links

- Edit My Profile
- Faces of Integer
- People Directory
- Power Users
- Site Updates & Help

Popular Areas

- Belmar Move
- Got a Minute?
- I-Connect
- Integer Brand Standards
- Integer State

Useful Sites

- CIO Magazine
- DexOnline
- Dictionary/Thesaurus
- Local Restaurants
- Local Weather

Industry News

Jaguar Launches Review Of Global Ad Accounts
Advertising Age Nov 5 2004 6:18PM GMT

Experts: Advertisers Need Simplicity; Consumers Want Choice
ClickZ Today Nov 5 2004 12:49PM GMT

Jaguar Launches Review Of Global Creative Ad Account
Advertising Age Nov 5 2004 12:38PM GMT

WPP Group Announces Cannondale Acquisition
Dow Jones via iWon Nov 5 2004 10:15AM GMT

Intel, Microsoft Team Up for Ad Campaign
Technology Marketing Nov 5 2004 4:24AM GMT

Announcements

Do people know when your birthday is?

By Intranet Team on Friday, 05 November 2004

If you want your name to show up in the Birthday list, be sure to enter your birthday in your profile under Personal Info (and no, you don't have to share the year!). Go to People: Edit My Profile: Personal Info. Don't forget to add your gift preferences too!

Big Idea Day

By Big Idea Team on Thursday, 04 November 2004

Guess what? Integer's Big Idea Day is now re-invented as T2: The Trends and Technologies Expo. And this year, the whole event is bigger than ever!

So set aside a few hours either day, Tuesday November 16th (9 a.m. to 6 p.m.), or Wednesday, November 17th (9 a.m. to noon), for T2.

If you weren't here last year, or just want to learn more, click here

Denver's Halloween Party photos

By Intranet Team on Thursday, 04 November 2004

The strange, the beautiful, and the bizarre. See it all at Agency Events: 2004 Integer Denver Halloween Party

Only 58 days till 2005!

By Intranet Team on Thursday, 04 November 2004

Ready to make your New Year's resolutions? You can start early by resolving to update your intranet profile. Go to People: Edit My Profile to share information about yourself.

Massive library of royalty-free images

By Intranet Team on Wednesday, 03 November 2004

Need a beautiful scenery photo like the one at left? Over 33,000 high-resolution images of business tools, cities, finances, food, holidays, technology, textures, and more can be found at Resources: Photo CD Library.

- See previous Announcements ...
- Submit a new Announcement ...

Friday, Nov 05

OMC 80.21 ↓ -0.64

Birthdays [All]

Today:
Doug Frisby
Julie Halsted
Susan Weispfennig

Tomorrow:
Carley Piper

Anniversaries [All]

Amy Hazen, 3 years

New Employees [All]

Melissa Mizer
Laura Bodtker
Lauren Nikolich

Quick Poll

The next thing I'd like to see on the intranet is ...

- Custom Quick Links
- Employee Classifieds
- IT Ticket Status Info
- Personal Reminder Notes
- Personal Phone List

Vote Results

Site Log On/Off

Change My Password
Log off

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Pictured: The Integer Group intranet's homepage offers important industry news and announcements, along with fun elements that employees can relate to, such as quirky announcements, birthdays, and anniversary dates. The image in the top bar changes according to the time of day.

To be a good communication tool, the intranet must include a thorough employee directory. Integer Group employees can sort their directory by any column title, including departments. Clicking a name shows the employee's office location, building-map location, and other relevant information, including experience and skills. When users click *save Excel file*, the intranet saves the file as users see it sorted. (All search results also let users view results in a table format, which they can then sort.)

Toolbox: Encoda MeetingMaker WebEx WebMail

Welcome, Anne | Home | Log Off

Search: GO

People Resources Forms & Templates Clients HR About Integer

Home ▸ People

People Search Results

Viewing basic information for all 520 associates at Integer Denver.

View for another agency: Integer Denver

Save Excel File

(click on a column heading to sort by that field)

Last Name	First Name	Agency	Title	E-Mail	Fax	Phone
Abbott	Keri	Integer Denver	Account Director	[illegible]	[illegible]	[illegible]
Abel	Robyn	Integer Denver	Group Account Director	[illegible]	[illegible]	[illegible]
Akers	Mark	Integer Denver	Material Handler	[illegible]	[illegible]	[illegible]
Alawusa	Adepeju	Integer Denver	Street Source	[illegible]	[illegible]	[illegible]
Albert	Jill	Integer Denver	Account Executive	[illegible]	[illegible]	[illegible]
Albrecht	Sandra	Integer Denver	Billing Specialist	[illegible]	[illegible]	[illegible]
Aldashi	Rojiar	Integer Denver	Regional Acct Supv	[illegible]	[illegible]	[illegible]
Alishio	Reyna	Integer Denver	Group Account Director	[illegible]	[illegible]	[illegible]
Alvarez	Elizabeth	Integer Denver	Account Executive	[illegible]	[illegible]	[illegible]
Alvarez	Ralph	Integer Denver	Account Director	[illegible]	[illegible]	[illegible]
Anderst	Heidi	Integer Denver	Administrative Assistant	[illegible]	[illegible]	[illegible]
Arace	Denise	Integer Denver	Accounting Specialist	[illegible]	[illegible]	[illegible]
Aragon	Michelle	Integer Denver	Field Marketing Rep	[illegible]	[illegible]	[illegible]
Armstrong	Jane	Integer Denver	Assistant Buyer	[illegible]	[illegible]	[illegible]
Arriola	Fernando	Integer Denver	VP Media Director	[illegible]	[illegible]	[illegible]
Askins	Cooper	Integer Denver	Field Marketing Representative	[illegible]	[illegible]	[illegible]
Austin	Christopher	Integer Denver	Senior Art Director	[illegible]	[illegible]	[illegible]
Bailey	Camilla	Integer Denver	Director of Communications	[illegible]	[illegible]	[illegible]
Ballew	Paul	Integer Denver	Group Account Director	[illegible]	[illegible]	[illegible]
Barajas	Mario	Integer Denver	Latino Street Wise TX	[illegible]	[illegible]	[illegible]
Barberis	Lisa	Integer Denver	Asst. OOH Media Planner/Buyer	[illegible]	[illegible]	[illegible]
Barnes	Darcy	Integer Denver	Associate Media Director	[illegible]	[illegible]	[illegible]
Barnett	Kristen	Integer Denver	Regional Acct Supervisor	[illegible]	[illegible]	[illegible]
Barnette	Jennifer	Integer Denver	Studio Artist	[illegible]	[illegible]	[illegible]
Barnhill	Seth	Integer Denver	Jr. Copywriter	[illegible]	[illegible]	[illegible]
Barry	Erin	Integer Denver	Digital Sales Tool PM	[illegible]	[illegible]	[illegible]
Bebber	Jamie	Integer Denver	Senior Acct Exec Mdse	[illegible]	[illegible]	[illegible]
Beck	Thomas	Integer Denver	Graphic Artist	[illegible]	[illegible]	[illegible]
Beck	Kathy	Integer Denver	Retail Clerk	[illegible]	[illegible]	[illegible]
Bek	Anna	Integer Denver	Account Executive	[illegible]	[illegible]	[illegible]
Belenkova	Katya	Integer Denver	Account Executive	[illegible]	[illegible]	[illegible]

Next: >>

<< First < Previous 1 2 3 4 5 6 7 8 Next > Last >>

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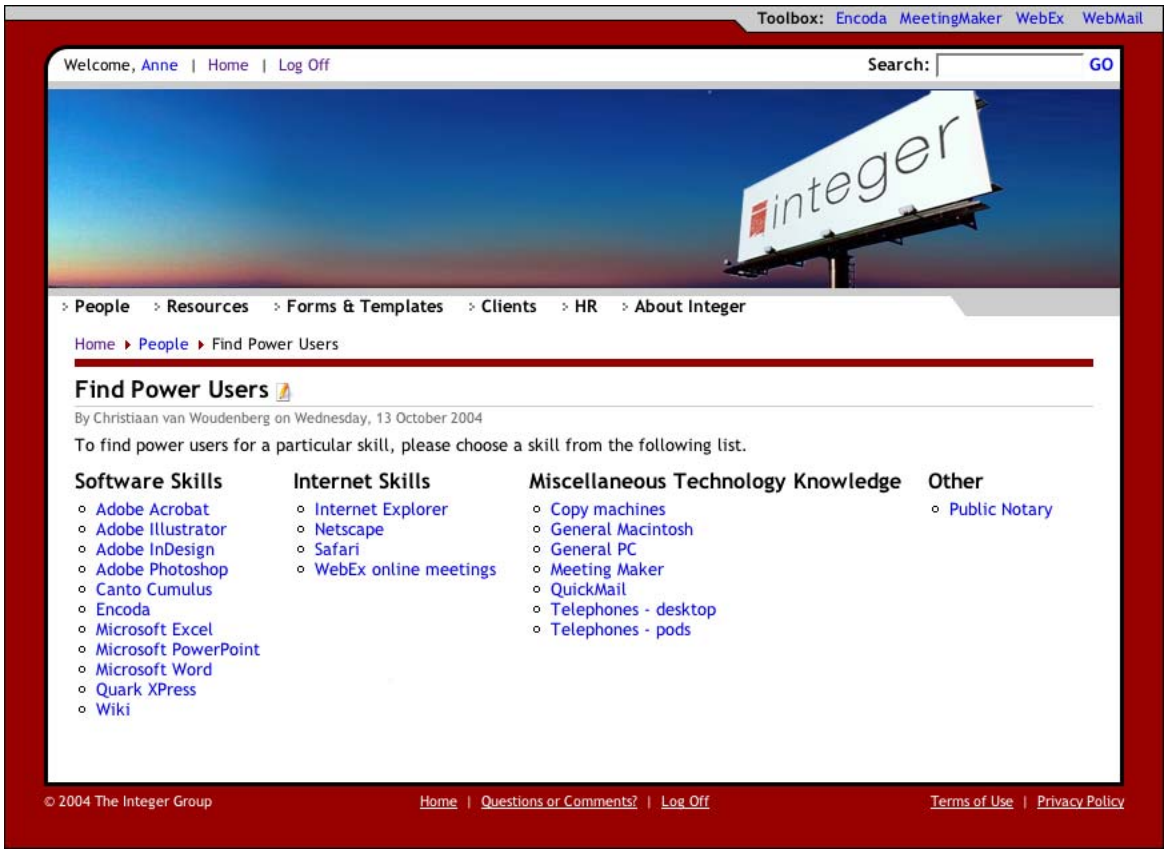
Pictured: The employee directory is straightforward and searchable, and can be sorted by clicking on any column. The above picture is sorted to show only employees in the Denver office. If users click *save Excel file*, the file will be saved as sorted.

Like its employee-search feature, Integer's corporate directory isn't the "same old" employee list. Instead, users can browse by various skills — everything from specific job competencies to whether or not the person is a notary public.



Pictured: Users can locate fellow employees with the needed technical or application-based skills to help solve specific problems.

Users contribute some of the directory information themselves. They use the *Edit Profile* form to add to or edit their information. Because there are so many possible fields to attend to, the form is broken up into several parts: *Contact Information*, *Position Information*, *Work History*, *Client Experience*, *Industry Experience*, *Other Experience*, and so on.

While the section includes serious business questions, the design team "decided to insert some levity into what could be the tedious process of filling out a user profile," says Anne Mitchell, The Integer Group's director of knowledge management. Accordingly, along with questions about industry, clients, and agency experience — which helps Integer address client and new-business needs — users can answer questions of a more esoteric nature. For example, there are birthday-gift preferences (one example: "love, chocolate, cash"), the employee's "real" title ("queen of paperwork"), a personal e-mail or website address, and their self-stated personal-hygiene habits. To the latter question, "we were being funny, but it turns out most people answered it," says Mitchell. "Now we tell users how many others answered the question like them." Another popular question regards little-known facts. "We get some interesting answers here, such as, 'used to be a clown,' " she says.

Toolbox: Encoda MeetingMaker WebEx WebMail

Welcome, Anne | Home | Log Off

Search: GO

People | Resources | Forms & Templates | Clients | HR | About Integer

Home ▸ People ▸ Edit My Profile ▸ Position Information

Editing Profile — Position Information

Last updated on Oct 23 2004

Help me with this page

You're a part of Integer's "Who's Who".

Date of Hire: 06/27/1994 mm/dd/yyyy

Official Title *: Director Knowledge Management

But my real title should be...: Cumulushead (like Airhead but more fluffy)

Have some fun with this answer. Have a look at some examples.

	... Select from	Currently assigned to ...
Department(s) * Add all that apply. My dept. isn't listed.	Account Planning Account Service Administrative Support APS—Digital Imaging Add & Save	Knowledge Management Remove & Save
Supervisor(s) * Enter last name and Search to retrieve a list of available supervisors.	Search	Christine Stoeber Remove & Save
Administrative Assistant(s) * Enter last name and Search to retrieve a list of available assistants.	search	Remove & Save

* Changing these items will NOT notify HR to update their records. You must ALSO contact HR so they can make any needed changes.

Save Profile | Save & Continue Profile

Edit My Profile

Section	Updated
Contact Information	Jun 20 2004
Position Information	Oct 23 2004
Work History	Sep 10 2003
Client Experience	Jan 30 2003
Industry Experience	Feb 10 2003
Other Experience	Oct 11 2002
Special Skills	Nov 12 2003
Photos	Mar 30 2004
Personal Information	Oct 26 2004
Change My Password	

Preview My Profile

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Pictured: When a user logs in, the system saves time by pre-populating many form fields. The above form is used for entering searchable user profile information for display in the employee directory and elsewhere.

As the personal-information pages show, cross-employee communications don't have to be flat or boring. Take the monthly video messages from The Integer Group's Denver-agency president, Mike Sweeney. Among his repertoire: a range of characters, and often some relevant hilarity. While these important communications could be conveyed through a few paragraphs on an intranet page, instead he employs humor and video to convey the messages quickly and effectively, and amuse people along the way. Videos like these — as long as they convey a message and aren't too long — are often well received among employees. People appreciate leaders who are willing to give of themselves, and laugh at themselves.

In a recent video on corporate culture, for example, Sweeney stops by the cafeteria — "Where else can you get a breakfast burrito and not leave work?" He subsequently visits a local ice cream truck, bums money off the person behind him in line, then gets a shoulder massage (cue alarming crunching noise). The video then cuts to Sweeney losing his golf cart at the annual Integer golf tournament and later visiting Integer's hockey team.

In another video on agency communications, barely disguised employees — their faces in shadow profile, their voices altered — discuss agency rumors. It's all reminiscent of a bad TV show. Then, Mitchell recalls, someone labeled "Mike" begins talking "about how he thinks communication at Integer is great, much better than the last place he worked, and the *Got A Minute?* [video] segments have changed his entire perception of the company. The light starts to get brighter and we see that it is Mike Sweeney." From there, Sweeney switched to a more-serious discussion of communication successes, as well as areas still needing improvement.

"I'm not sure if these written descriptions translate as being funny, but I can assure you they are very engaging to watch," says Mitchell.

The *Got A Minute?* area presents the current video in the middle of the page. The video automatically plays when the users hit the page; this works well, since the videos are only about a minute long. If users have technical problems, the intranet team's e-mail address is visible, along with the instructions and a page description. The page is dated, so users know how recent the message is. Other recent videos appear, with dates, on the right.

Toolbox: Encoda MeetingMaker WebEx WebMail

Welcome, Anne | Home | Log Off Search: GO

People Resources Forms & Templates Clients HR About Integer

Home ▸ About Integer ▸ Got A Minute?

Got A Minute?

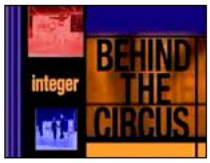
By Intranet Team on Monday, 13 September 2004

Each month, Mike Sweeney addresses new ideas and initiatives that are shaping Integer and our industry. Spend a minute with Mike! The most recent message is a video, which should begin playing in a moment. To view other months' messages, just click on the corresponding link. If you encounter trouble, please contact the Intranet team at intranet.team@integerdenver.com.

Previous "Got a Minute?" Messages

July 2004 video (11.0 mb)
Mike talks about corporate culture.

June 2004 video (9.3 mb)
Mike introduces the Concept Team.



May 2004 video (16.3 mb)
Mike takes a look behind the circus.

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Pictured: This page provides monthly videos from the Denver agency's president, Mike Sweeney, who gives employees informative and often humorous updates on various agency issues and topics.

Another interesting aspect of this intranet is its use of a CMS as its core development platform. Specifically, the team uses Mambo, which offers features that enable employee collaboration on the intranet. The open-source code makes this a very cost-effective approach, which is important because the intranet team's budget was, and continues to be, limited.

As its use of open-source software illustrates, The Integer Group chooses efficient, creative, and often amusing ways to make its intranet the backbone of cross-employee communications and job support.

URL AND ACCESS

The Integer Group intranet's URL is http://intra.integer.com, though the site can also recognize and redirect entries such as http://www.intranet.integer.com. All new users have the intranet set as their default homepage. The intranet offers employees the option to remember their passwords via browser cookies. If users forget their passwords, a forgotten-password feature will e-mail the password to the user's e-mail address.

Users can also access the site from any Web browser, using the above URL, then authenticate with a username and password.

Clients can access portions of the intranet via a secure extranet.

CONTENT MANAGEMENT

The intranet runs the open source Mambo 4.5 (http://mamboserver.com) as its CMS. Technically, Mambo is an application framework that can run a large library of free components (http://mamboforge.net). "We chose Mambo because of its strengths in time-sensitive content publishing, its large developer community, and its very open framework that we were able to extend easily," says Christiaan van Woudenberg, a senior developer at The Integer Group. The Integer Group also adapted a number of the free components for its intranet-specific needs.

The basic Mambo installation includes a CMS with distributed content authoring capabilities, a user authentication and permission system, page caching, several WYSIWYG- and Web-based content editors, and content syndication through Really Simple Syndication (RSS). Mambo also creates pages with URLs that can be indexed by search engines, a crucial feature for The Integer Group's intranet searching.

Using free Mambo components, The Integer Group added such things as stock prices and image galleries to its intranet. The organization also developed components for Mambo itself, including an employee profile manager, corporate training tools, and a client database.

Toolbox: Encoda MeetingMaker WebEx WebMail

Welcome, Anne | Home | Log Off Search: GO

People | Resources | Forms & Templates | Clients | HR | About Integer

Home ▸ Resources ▸ Integer State

Integer State

Upcoming Courses

Click on a course to view full course description and to enroll.

Coors Business-Understanding the Distributor Network
- Nov 05 2004 at 3:00 pm
  No spaces left

Coors Brand Marketing
- Nov 09 2004 at 2:00 pm
  No spaces left

Supervisor Boot Camp 6-Disciplinary Policies
- Nov 11 2004 at 9:00 am
  No spaces left

Merchandise 101
- Nov 12 2004 at 9:00 am
  No spaces left

Encoda Workshop
- Nov 15 2004 at 9:00 am
  21 spaces left

Encoda Time Sheet Training
- Nov 15 2004 at 10:30 am
  25 spaces left

Retail 101
- Nov 17 2004 at 1:00 pm
  No spaces left

view complete course list

view course calendar

Getting Started

Welcome to Integer State! If you're just getting started, you'll want to check the upcoming courses at left, or view the complete course list to choose a course. You may also view the courses on a calendar. Once you've enrolled for a course, you can keep track of your course enrollments.

Campus Life

Integer State is at the center of it all. Situated on three acres in the prestigious Lakewood area of metro Denver, the scenic Integer State campus enriches the educational experience for all of its students. The peaceful setting that's made for learning (more ...)

See pictures of Biff as he romps through the halls of Integer State.

Marc Ducnuigeen, Dean

Letter from the Dean

Welcome to Integer State.

It is with enormous pride and pleasure that, on behalf of the Integer State Board of Trustees, I accept the esteemed position of Dean at this fine institution. Who would have thought that my years of dedication to the diverse fields of geology, phrenology, and mixology would result in (more ...)

INTEGER STATE

it's a state of mind

- Professor Bios
- Complete Course List
- Course Calendar
- My Enrollments
- Download Evaluation Form
- Download WebEx Instructions for Professors
- Return to Integer State Home

3205 enrollments and counting!

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Pictured: Integer's corporate training tools — the tongue-in-cheek-entitled *Integer State* — also runs atop its CMS.

While most of the intranet revolves around Mambo, The Integer Group has a paid subscription to Moreover.com, which provides users with industry news via RSS feeds.

TECHNOLOGY

Mambo is an Apache, PHP, and MySQL-based application. The Integer Group runs it on a dual-processor Apple Xserve G5 with 2 GB of memory and a 250 GB disk.

Site graphic design is done with Adobe Photoshop and Macromedia Flash Professional. For handling scripting and development, "we use Allaire Homesite 4.5, an old but good HTML editor," says van Woudenberg.

For version control of code and text, the intranet team uses the open source Concurrent Versions System (https://www.cvshome.org). The team also uses DotProject (http://dotproject.net) for managing intranet projects and defect resolution, and Canto Cumulus Enterprise for managing digital assets.

GOALS AND CONSTRAINTS

Goals:

1. Create an engaging homepage with dynamic content to encourage daily intranet use.
2. Centralize company information and internal announcements.
3. Improve content organization.
4. Build an intuitive, persistent, menu-based navigation system with single-click access to selected corporate initiatives.
5. Introduce personalized links to encourage users to keep the intranet as their homepage.
6. Find a new CMS that gives employees greater control of intranet content and thus improves its quality.
7. Improve the intranet's graphic design.
8. Consolidate the agency's two intranets, yet preserve existing features and functions for all users.

Constraints:

1. Having fewer resources than needed to execute the redesign team's ideas and the intranet-redesign needs they identified.
2. Meeting the goal of creating single solutions usable by all agencies, which was complicated by technological incompatibilities between agencies; this continues to be a challenge.
3. Feeling pressure to quickly complete the project, despite a small budget and the reliance on donated time from the Denver agency's employees.

BASIC INTRANET FEATURES

Among the Integer Group intranet's basic features are a news area, team pages, Wiki-like collaboration areas, FAQs, and customizable quick links.

The intranet supports employees' promotional marketing activities through features such as a comprehensive phone list containing employee account assignments, work experience, and category expertise (useful for finding "power users"). It also lets employees' share market research materials and industry-related information.

USERS

The Integer Group intranet supports about 850 users in the company's Denver headquarters; its agencies in Dallas, Denver, Des Moines, and Cleveland; and its coast-to-coast field offices.

USER TASKS

Frequent user tasks include:

- Find contact and basic profile information about other employees
- Read current news and search news archives
- Download forms and templates
- Conduct research using the online resource library and employee profiles
- Download client assets and logos
- Locate employees to assist with technical needs
- Enroll in training classes
- Learn about the company and its benefits, events, and opportunities
- And, for senior managers, share new business information and collaborate on business initiatives

BACKGROUND

The need to redesign The Integer Group's intranet arose from its history of acquisitions.

The Integer Group started in 1993 as a Denver-based promotional marketing company. In 1996, the agency added a Dallas office to serve Texas-based clients and, by 2000, had acquired three more agencies: one in Des Moines (now called The Integer Group — Midwest), one in Cleveland (Stern Advertising), and a second Denver agency (Karsh & Hagan).

In 1998, "the Denver agency launched a simple intranet with a primarily cultural focus," says Sarah Herold, The Integer Group's director of corporate communications. An all-volunteer team of "creatives" and technologists developed this intranet, and in 1998 and 2000, brought in two vendors to standardize the software. Both efforts, however, "failed to produce the desired results," she says. The problems: lack of executive buy-in and difficulty finding a product that met The Integer Group's needs. In the latter case, the problem may have been related to a problem in defining those needs, and/or the lack of in-house programmers to evaluate new technology.

Meanwhile, in 2000, a Denver-based corporate office was formed to manage the five-agency network. "The corporate office's first communication initiative was creating an intranet to serve as a single source of information, and to promote a sense of the agencies as one entity," says Mitchell, who was charged with building the new intranet in collaboration with the corporate office.

The corporate intranet, introduced in 2000, subsequently underwent radical and effective transformations to better meet users' needs. After the 2002 intranet version was introduced, for example, user visits increased by 450%.

Nonetheless, the intranet wasn't The Integer Group's one-stop shop. The Midwest office's 100 employees had created their own intranet in 1998, prior to that agency's acquisition by The Integer Group. The Midwest office kept up development, eventually using the intranet to standardize their accounting, workflow, and information-sharing processes. "It is now used daily by everyone in that agency," says Herold.

integer

Fri, Aug 13 2004 OMC 66.7

home | my profile | help | log off

directory search go

advanced directory search

advertising news

Giant Calif. Utility Puts Ad Account In Review
Advertising Age, Aug 13 2004 5:21PM

List Council Plans Outreach to Ad Agencies
dmnews.com, Aug 13 2004 5:19AM

Bacardi Launches Global Ad Account Review
Advertising Age, Aug 12 2004 0:50AM

Leo Burnett Wins Pam Cooking Spray Ad Account
Advertising Age, Aug 12 2004 0:28AM

Western Union Looks For New Agency Partner
Advertising Age, Aug 11 2004 10:50PM

$83 Million Claritin Ad Account Moved To Euro Rscg
Advertising Age, Aug 11 2004 11:19AM

Emap Acquires Cannes Lions Ad Festival
Advertising Age, Aug 9 2004 9:07PM

see more advertising headlines ...

see beverage headlines ...

integer updates

Keep up to date on what's happening.

belmar move
calendars
creative circus 2004
esat surveys
fat i awards
got a minute?
news
omnicom/das
open positions

team work centers

Document libraries, news, & more.

< select team >

Some are members-only.
Submit access request.

resources & reference

Essential materials & information.

client assets & logos
denver machine
employee purchase plan
forms, manuals, & more
i-connect – research library
organization chart
photo cd library
who to go to

remote tools

encoda
meeting maker online
meeting maker help
webex online meetings
webmail

directory

View agency phone directories.

< select agency >

birthdays & anniversaries
faces of integer
main numbers & info
my directory profile
my traveler profile

network of agencies

View agency profiles.

< select agency >

INTEGER STATE

it's a state of mind

integer standards, logos, & templates

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Pictured: The previous version of the Integer intranet, which was used by all employees except the Midwest office. The company decided to design a new intranet to bridge the various offices' needs and expectations.

In 2003, the company decided to merge the two intranets. "We were also on schedule to do a redesign that year, because the previous design was over eighteen months old," says Herold. The plan: all five agencies would standardize on a single, new intranet, thus creating a more consistent user experience, making corporate communications easier, and allowing all agencies to share intranet tools and development. "The corporate goal was to integrate the contents and functions of both intranets without degrading the user experience at any agency," says Herold.

Various agencies agreed to split the workload, with headquarters underwriting the venture. Because Denver was the largest agency (with 500 employees) and most needed the new intranet, it would helm the project. The Midwest office agreed to share its independent intranet's content and use the newly developed intranet.

Many Web-based conferences ensued, during which all agencies hammered out an acceptable development plan, including the intranet's structure and the technology to run it. "The agreed-upon solution was to have a single entry page with common main navigation, but personalization at login that would serve up agency-specific content and applications, depending on the user's location," says Herold. "This ensured that there would be one intranet for the entire network, delivering on the business objective of a shared communication medium and a single branding experience for all 850 employees throughout the five agencies."

DESIGN PROCESS AND USABILITY ACTIVITIES

The design process began as a collaborative effort between the intranet redesign team and users in multiple agencies. "All of the agency people involved agreed to come to the table and contribute to a shared solution," says Herold. The goal was to get everyone on board and contributing, and to make that the model for all ongoing intranet development — not just for the redesign.

The redesign effort was funded by all agencies, which contribute to a pool for developing agency-wide solutions. "From 2000 to 2004, some of this budget was allocated to Denver to underwrite outsourced and in-house intranet development," says Herold. Beyond the salaries and related overhead costs for two full-time intranet staff members and occasional support personnel, the intranet-redesign development team used about $20,000 worth of outside resources.

At the start of the redesign, the intranet team opted not to test the existing intranets due to time and budget constraints. "Because we intended the change to be radical, we felt spending time on the new site was more critical," says Mitchell. In addition "before the development of this new intranet, we had never undertaken extensive user testing," she says. Given what the team knows now, "we will probably make user testing of the existing site a bigger priority before developing our next one."

However, the redesign team did take several other steps to ascertain what worked and didn't work for intranet users. Team members collected user feedback about the old site; conducted detailed, heuristic evaluations of the existing homepage and key intranet sections; and solicited additional intranet feedback from employees in the lunchroom.

After studying that research, the redesign team wrote a functional-requirements document. "This became the blueprint we used to ensure key objectives would be met," says Mitchell.

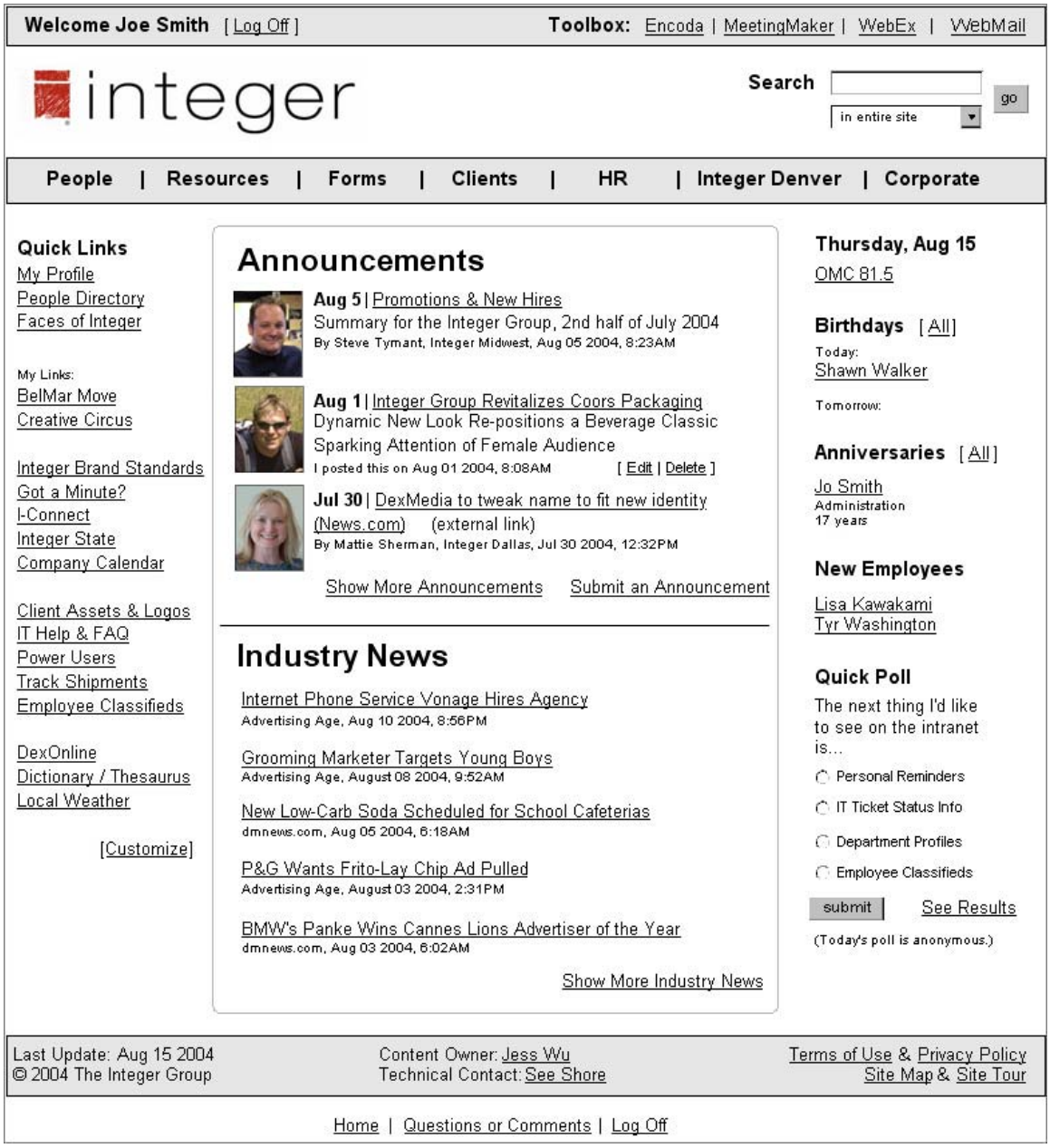
With the blueprint as a guide, the team conducted card-sorting exercises with users, asking them to group and name intranet features and content buckets. "These card-sorting exercises were conducted informally, with items written on 3x5-inch index cards and laid out on tables," says Mitchell.

With that testing complete, the redesign team outlined the homepage and secondary pages' structure. "The results of the card sorting and the planning stages led the team to the development of a wireframe layout for the intranet homepage and a few inside pages. A detailed navigation document was also developed," says Mitchell.

The team generated ideas and assembled an initial homepage plan by studying various external resources, including past Nielsen Norman Group design annuals and heuristic guidelines, and by attending two NNg conferences in early 2003. "We came away with new ideas and tools for planning a more useful intranet for our users," says Mitchell.

As for the homepage redesign, "from the outset, we were focused on exposing some links in the left sidebar, placing news in a large area down the center, and displaying birthdays and a poll in the right sidebar," says Jill Kliger Saliba, a usability consultant. Using the heuristic guidelines, the team iterated paper prototypes, adjusting layouts where necessary.

The redesign team then tested wireframe models of the site online. Users submitted feedback through in-person user tests and an online tool. The team used the results to identify areas still needing improvement, then improved the paper prototypes. "We went through this cycle about five times, and when we decided that we had a wireframe layout that would work well, we engaged a graphic designer to apply an attractive look and feel," says Mitchell.



Pictured: A wireframe-model prototype of the redesigned intranet. Users could test it and submit online feedback.

The Denver office lent one of its graphic designers. With the intranet's objectives in mind, he used Adobe Photoshop to translate the paper prototypes into page design, abiding by certain constraints dictated by the CMS. "As soon as we could, we held user testing on the live prototype intranet, asking users to comment on the site and perform specific tasks. Gathering feedback from these exercises, we went through a rapid iterative-development process in which we made changes between user tests," says Mitchell.

The intranet team limited testing to two or three users per day, "to allow for the team to regroup and make changes before the next day of testing," says Kliger Saliba. The team paid special attention to navigation, because the previous intranet lacked persistent pull-down menus. In general, users' responses to the intranet were positive; the team attributes this to the site being not only attractive, but easier to use.

Most user testing took place at the Denver agency, but, because the testing involved navigation, "the test results were considered to be universal and not agency-specific, and were readily acceptable to the Midwest agency," says Herold.

Along the way, the team kept other agencies informed of redesign progress. "The Midwest agency team especially was included at key points along the way to ensure that they were agreeable to the overall design and that it was compatible on multiple levels with Midwest's intranet content," says Herold.

User testing produced myriad changes. For example, many users expected to see recent news in the news section. "Almost every tester mentioned the importance of fresh information appearing on the homepage at least once a day," says Kliger Saliba. As a rule of thumb, the team now adds one to three new announcements per day.

In terms of the amount of news content users expect, "we learned people consistently resonated with seeing five announcements in the center area," she says, but for heavy news days, they wanted to see all the day's announcements.

The redesign team encountered various surprises while testing users. "We were especially surprised during the usability testing by how many people would try to use the search field for non-traditional queries," says Kliger Saliba. "For instance, they wanted to type 'home,' 'people directory,' 'my profile,' or 'client logos' into the search field. In fact, just about any item that was listed under a pull-down menu was a ripe choice for someone to try to enter into the search field." Users also tried to enter departmental names when searching for department contact information. As a result, she says, "our decision was to hard-code some of these items so that a special link would appear above the regular search results to take users to the specified area."

One user also suggested increasing font size in the left-hand navigation, to make the links easier to read. "Changes were made overnight to try to increase the font size on the left, but they were visually problematic, so subtitles were added instead," says Kliger Saliba. While only two more people were tested with the proposed homepage design, neither mentioned a problem with the left-hand font size, so the redesign team moved the subtitles into production.

Another interesting surprise was "how pleased the users were to be able to see birthdays, anniversaries, and new employees' names," says Mitchell. Her explanation: "Users were excited about the personal touches that helped foster a sense of community within the company." Engaging photographs were also popular with users.

TIMELINE

- January 2004: Began planning the new intranet
- February 2004: Examined logs and began writing functional requirements
- March 2004: Developed and conducted initial card-sorting exercises, attended usability conferences, and conducted heuristic evaluations of the existing intranet
- April 2004: Continued card-sorting exercises, fine-tuned functional requirements, and began investigating CMS options
- May 2004: Developed paper prototypes and began user testing
- July 2004: Finalized functional requirements and tested various CMS products
- August 2004: Selected and began implementing Mambo CMS
- September 2004: Continued Mambo development, launched prototype site, migrated content, conducted user testing with live beta of site, and introduced new graphic design
- October 2004: Launched new intranet

RESULTS

From start to finish, redesigning The Integer Group's intranet took ten months, and included extensive paper prototype testing with users, and subsequent user testing to hone navigation and overall usability.

The work paid off: With the redesign complete, The Integer Group now has a single intranet for all employees. "The result is a very user-friendly site that is excelling in its objective as a central company communication tool," says Mitchell, with an 86% increase in daily use. "We believe this large increase is primarily due to the constantly updated announcements," as well as a better look and improved searching.

For the first time in The Integer Group's history, employees have an intranet tailored to their needs, and it's largely driven by the open source Mambo software. With Mambo, for example, the intranet team can now allocate content-authoring permissions so content managers can independently maintain intranet sections and documents.

Mambo also allows employees to search site-wide. "On the old intranet, people could look up other employees to get their contact information, but users had to know where to find specific content items," says Mitchell. By contrast, the redesign introduced a clearly visible search box on every page that returns results from all site content, as users expect.

By and large, users have reacted positively to the new intranet. One user described it as "awesome," while another said "I have put it as my homepage instead of Google, which says a lot."

As befits a promotional marketing company, the intranet includes features tailor-made for its audience. For example, users gave high marks to the Flash-based banner atop every page, which changes based on factors such as the time of day and season. "User reaction was particularly favorable to the slow animation in the daytime and nighttime 'cloud' versions," says Kliger Saliba. In hindsight, "the banner's popularity justified the design decision to allow it be to rather tall."

The intranet team plans to use the banner in other creative ways as well. For example, it plans to have an in-house photography contest, with the best photos becoming banner images. "This is an easy way for users to get involved in the intranet," says Kliger Saliba.

The new announcements area has also been a hit with users, who both enjoy reading the news and having a centralized outlet for their announcements. "People can now easily submit news items that go through an administrator for final approval before bring posted on the site," says Mitchell.

The intranet team is still developing some of the intranet's other features. In user testing, for example, the quick poll "drew varied reviews," says Kliger Saliba. Still, the team plans to use it to gather feedback to help prioritize future features and gauge employees' reaction to corporate events. Another possibility includes "fun questions — such as predicting how much snow Denver will receive in May," she says. "Realistically, however, there will only be eight to twenty new polls in a year, so we expect to frequently replace the quick poll with a 'tip of the day' or cultural 'thought of the day.'"

As part of the redesign, the intranet team had to surmount several time and technology constraints. One hoped-for feature, put on hold due to time restrictions, is the ability for users to add personal links to the homepage, "so users can really make the homepage their own," says Kliger Saliba.

Using the Mambo CMS also entailed some restrictions. For example, "there is a vestigial login and logoff box in the right sidebar of the homepage that cannot be removed without upgrading the CMS," says Kliger Saliba. "That space would be better suited to a suggestion box." Newer versions of Mambo can eliminate the login and logout box; the intranet team will eventually upgrade.

Another technology restriction makes it difficult to search or present certain types of information. With the redesign, for example, industry news moved to the left-hand navigation bar to create center space for the announcements page — and to simplify the homepage's look. While moving industry news "was well received, more than once users mentioned the need for a link to get to 'More Industry News,' or to the news for each major news source," says Kliger Saliba. Yet incorporating information from different back-end systems can be difficult with Mambo, she says, without extensive, custom coding. The group hopes to address this in a future redesign.

Today, however, the intranet team is helping employees transition to using the new intranet. "We are helping employees who send broadcast e-mails learn to use the intranet as their primary vehicle for news and announcements," says Mitchell. The rule of thumb: "announcements with high interest or historical value should be placed on the intranet," she says. For group e-mails with little long-term or archival value, or for urgent group messages, however, the intranet team still advocates using e-mail.

Already, recent management decisions are laying the next redesign's foundation. "The agencies that use the intranet the most derive the greatest value from having a platform and forum with which they can deliver location-centric solutions," says Herold. "For this reason, corporate will turn over all intranet decision-making authority to each individual agency in 2005, as a strategy for encouraging user-driven ideas, input, and development." The intranet team, however, will still maintain and enforce a consistent intranet look.

LESSONS LEARNED

Insights from Anne Mitchell:

Build in extra time. "Always allot extra time — beyond your best estimate — for fine-tuning the redesign during the final stages of development, especially when transferring content from an old intranet to a new one. Such a project requires tremendous organization, and often more time than you might anticipate."

Keep end users in the loop. "Invite input, early on, from whomever will be affected by intranet changes, then keep them appraised of progress. This approach, while time-consuming, greatly improves the final product and users' buy-in."

Insights from Jill Kliger Saliba:

Define criteria for navigation links. "One ongoing debate involved which links to put in the left sidebar. While some links aligned with corporate initiatives — such as user-profile updating and linking to brand standards — others had fleeting importance, including one for a special summer celebration. Simply put, the latter type of link doesn't belong in persistent menus. To apply a consistent approach, we eventually defined criteria for deciding which links should appear prominently. In the future, however, users will have more flexibility, via an area for customizable links."

Management buy-in is key. "While we kept upper management well-informed during all design stages, they nevertheless trusted us to autonomously make large decisions. That approach allowed the project to move forward rapidly. If our team had been less empowered, redesigning the intranet may have taken much longer."

Empower small teams. "We aimed to launch a radical redesign in six to nine months. While upper management was aware of each design stage, they trusted our small team to make decisions autonomously. Our size allowed us to communicate and make progress quickly, and iterate the redesign each night of our multi-day usability testing cycles. The next day's subjects could provide input on whether our latest modifications were successful. By contrast, a larger team might not have met our tight schedule — more time would be required to maintain specification documents, hold meetings, and write detailed reports. One disadvantage of our small team, however, was that, with only one developer, we had to delay some features and design improvements."

Schematic

Using the Intranet:

Schematic is one of the nation's leading interactive agencies. Headquartered in Los Angeles, with offices in New York and Atlanta, the firm provides award-winning design, user interface, and technology solutions for the Web, advanced devices, and television. Schematic serves clients in multiple industry verticals including media and entertainment, healthcare, and consumer electronics. The company develops across an array of platforms, including set-top boxes, game consoles, mobile devices, and the Internet. Recent projects include the new Microsoft Xbox Live Arcade service, application development for Nielsen Media Research, Cablevision's new set-top gaming service, the Gold's Gym Web site and customer relationship management system, and broadcast design for the National Football League.

Design Team:

In-house

Members:

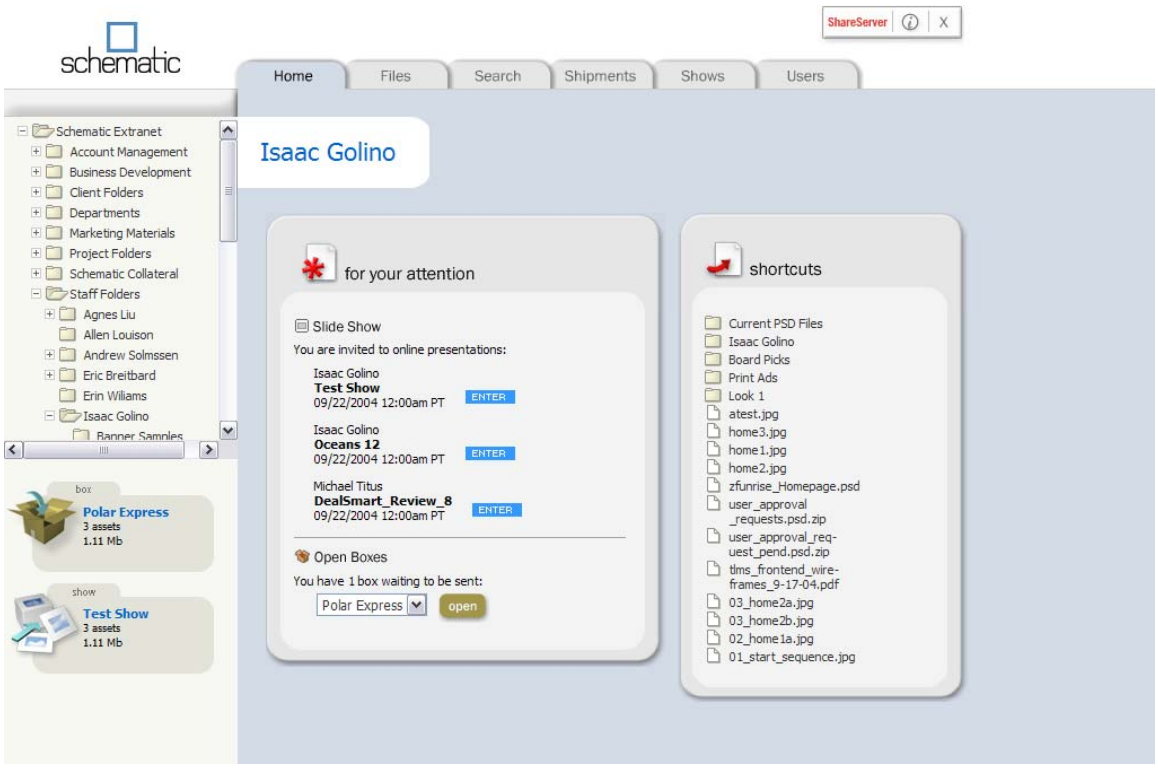
Trevor Kaufman, CEO, visionary, architect, and iconographer; Isaac Golino, design director and interface designer; Jason Brush, director of interface engineering and client-side developer; Lisa Smith, director of software development

SUMMARY

At an interactive agency, it's imperative that employees be able to quickly and easily store files, then share them with colleagues and clients. ShareServer, Schematic's extranet, supports hundreds of users inside and outside the company, including designers, contractors, clients, vendors, executives, and salespeople. Yet ShareServer not only shares files, but organizes them as well — an asset-management dream.

For example, ShareServer lets users download individual files, or select a discrete group of files and put them into a single Asset Box, in the compression format of their choice. Links to Asset Boxes can be e-mailed to external users, letting them retrieve items without giving them full-fledged system access. Schematic's ShareServer can even assemble files as slideshows for remote, real-time presentations.

ShareServer looks as it were designed by a contemporary artist. The muted colors are pleasant and easy on the eyes. Even so, there is good contrast between text and background, which is difficult to achieve when working with pastels. Overall, pages are sparse, but in a welcoming — not cold — way.



Pictured: Schematic's ShareServer extranet is beautifully designed. Besides being easy on the eyes, the site lets users — whether employees or clients — personalize it for easy access to a variety of assets.

From the homepage, ShareServer grabs you by the collar, calling out *For Your Attention*. This list is customized for each user, deliverable based on login, and displays all open boxes (client shipments) and slideshows the user is invited to view. These slideshows contain design work and drafts, which are often shared with several people.

At other organizations, the asset-management process is not typically so streamlined. Often, designers must figure out which files they need, find them on an external server or FTP site, then download them for review. Reviewing or updating the wrong files because they're misnamed can waste time and lead to miscommunication — or worse, if it happens during a client presentation. Similar problems occur when designers send files to clients, plus clients don't always have the required software to view files. ShareServer eliminates all of these issues, and modernizes the process.

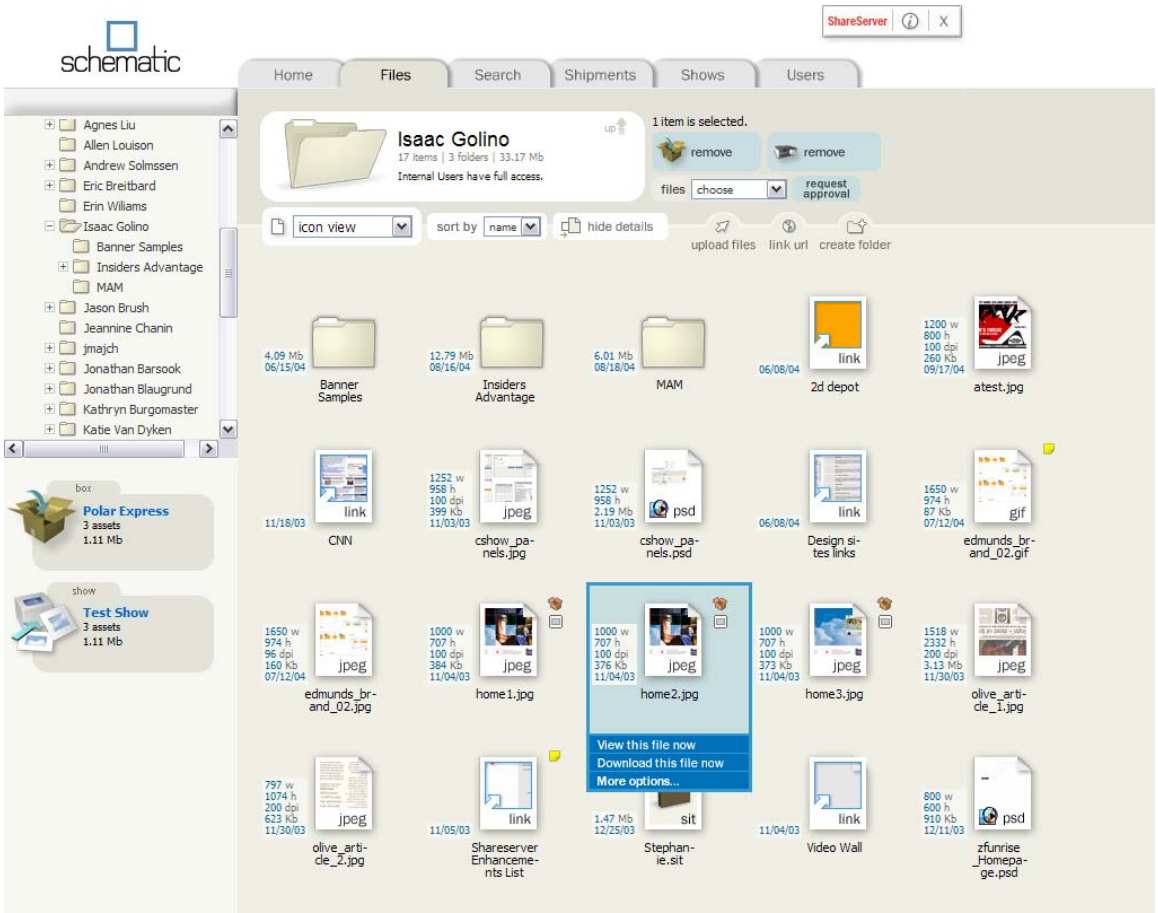
With ShareServer, users can see which files were most recently uploaded, which assets are receiving the most download activity, and which documents have new comments. These new comments are indicated by a small, yellow "sticky note" icon that appears in the file view. Each asset also carries its own log, so users can see when it was created, overwritten, or downloaded, and by whom.

ShareServer can handle any file type, and its built-in media intelligence understands characteristics of most major media types.

When working with many different projects and files, it can be challenging to keep track of them and keep them in order. The homepage helps with this, too. The *Shortcuts* area lists the user's most recently accessed folders and assets, and any slideshows the user needs to finish before posting for others to review.

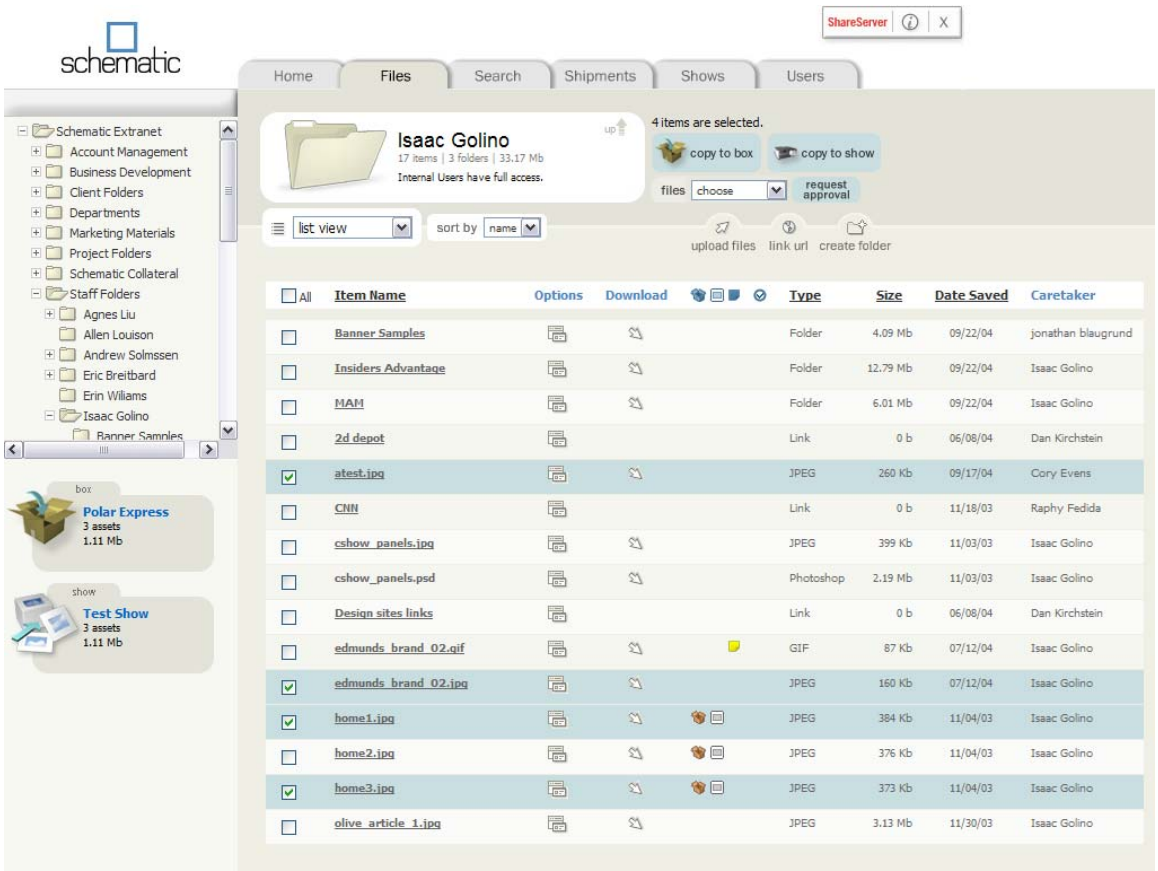
A comprehensive filing system, under the *Files* tab, also helps users maintain order. Users can view items by icons, list, or images.

The *icon view*, for example, is the default view for browsing files (it's also available from the *Files* drop-down menu). The *icon view* displays individual folders and files within a graphically rich environment that's similar to an Apple Macintosh GUI. In addition to folders, the view displays related information. For a JPEG image, for example, users see the height, width, dots per inch (DPI), file size, and last date modified. Users can also click the blue tab to view or download the file. By clicking the *Hide Details* link, users will see only icons. Note that the server dynamically generates the icon graphic and file metadata.



Pictured: The *icon view* under the *Folders* tab displays individual folders and files, plus related information.

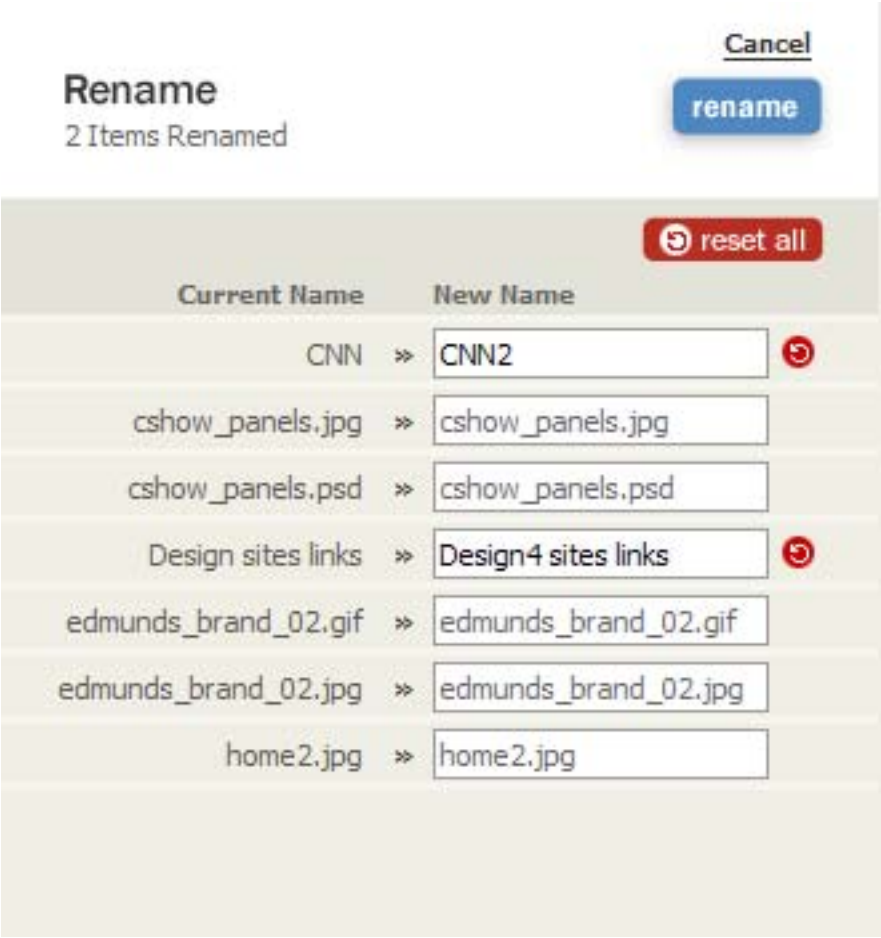
Selecting *list view* from the *Files* drop-down menu gives users a standard-looking tabular list for sorting assets by specific metadata, including name, type, size, and last-date saved. In this view, users can manipulate large groups of files at once by simply selecting their related checkboxes. Users can then create folders, upload, move, delete, or ship out the group of files.



Pictured: The *list view* is one of three ways of viewing files under the *Files* tab. Here, users can select multiples files from the list and create folders, upload, move, delete, or ship out the group of files. The small yellow icon indicates a file has new comments.

ShareServer is an homage to designers, making their lives easier by building in the image-manipulation functionality lacking in today's graphical operating systems. "Most GUIs don't provide particularly convenient ways to rename more than one document at a time," says Trevor Kaufman, Schematic's CEO. "ShareServer, however, has a specific interface that enables users to very rapidly append a suffix to lots of file names, for example, or to delete a part of a name from a group of files."

The extranet also gives users sophisticated rollback functionality in case they make a mistake or change their mind. "Users can see at a glance which file names they've changed, and roll them back to the original before committing the changes to the group," says Kaufman. "It's an easy interface for novices, but we find that expert users appreciate it even more. It's a system that combines the best components of GUIs and command-line interfaces."

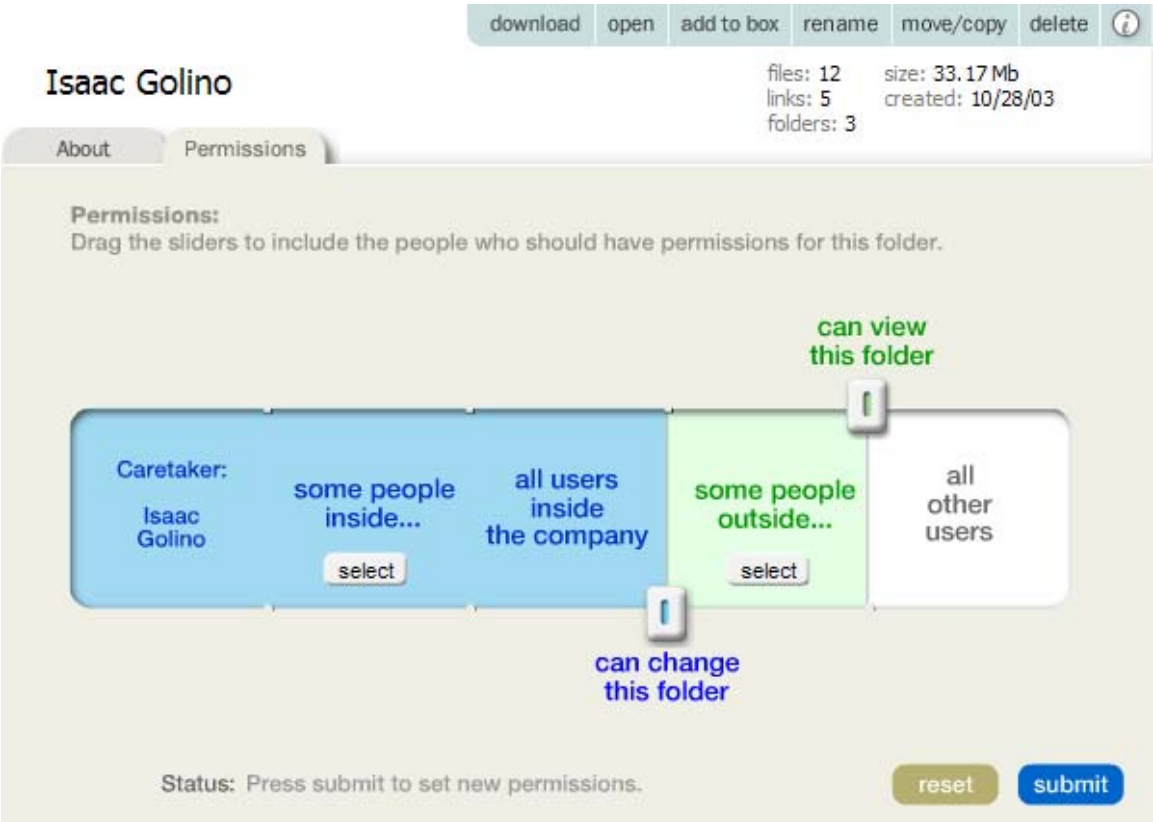


Pictured: After selecting one or more files or folders, users can rename them. Similar screens will also move, copy, or delete all selected files and folders. (Note: "Design4 site links" is the name of a file.) ShareServer lets users enter a URL, which it then screen captures to create a thumbnail of the page in the file view — a kind of bookmark.

Combining security and usability, ShareServer gives asset creators an easy, slider-based method for determining who can access or edit a folder or file. Designers did not try to choose one-word descriptions for the permission levels, which is very nice. Instead of cryptic names, they chose easily understood phrases such as *can view this folder* and *can choose this folder*.

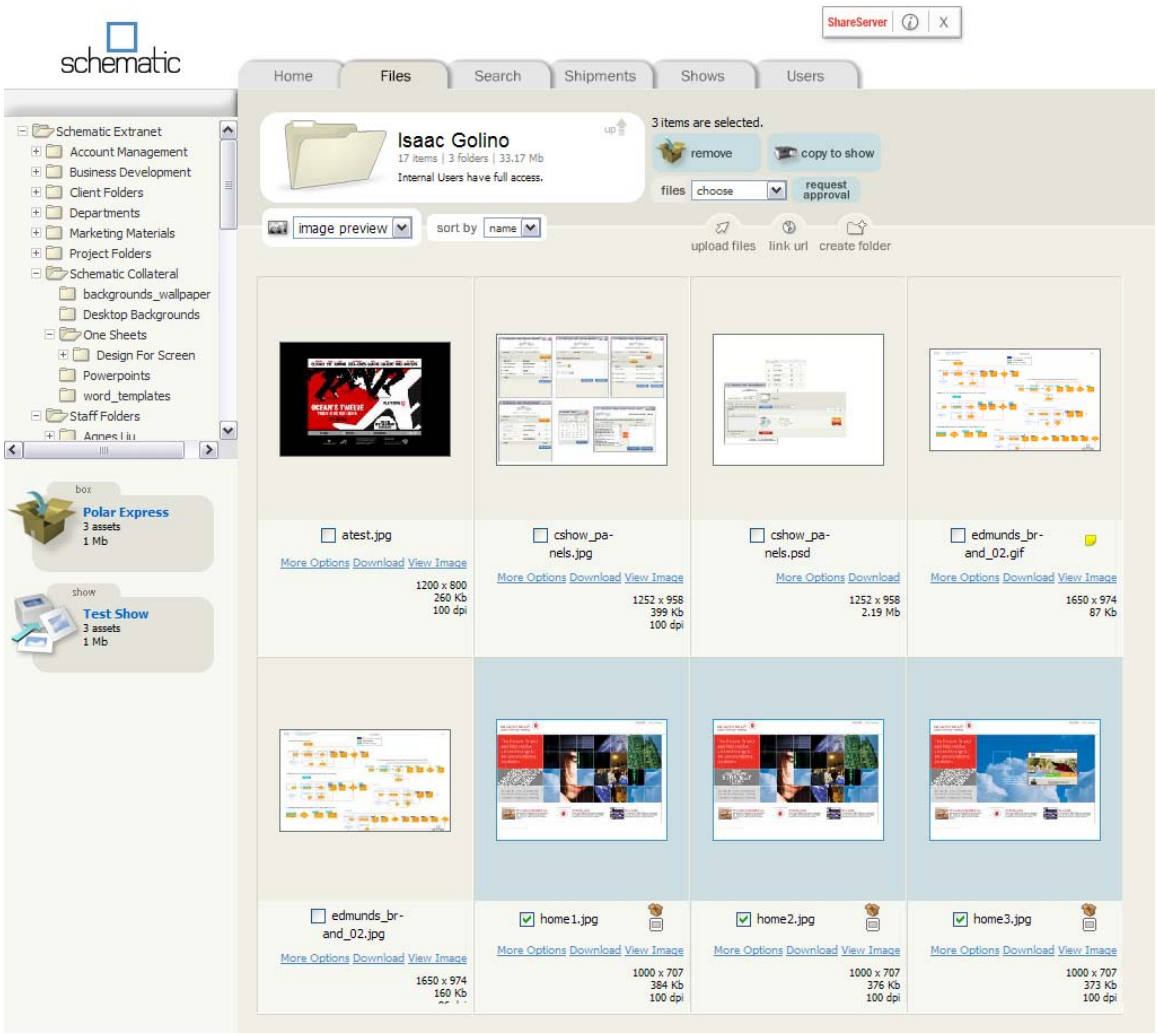
ShareServer's security features further reflect the software's designer orientation. "Most digital asset management systems are awkward because of elaborate roles and responsibilities that must be set in a granular way, and through check-in and check-out procedures that put barriers between users and their documents," says Kaufman. When it comes to security and usability, there's a simple rule: If you make security difficult for users, they will attempt to route around it.

Hence, Schematic opts for a visually and textually clear approach. "ShareServer allows users to set permissions on directories with a simple pair of sliders — slide left for more open, slide right for more secure. One slider controls which groups can view the folder; the other dictates who can change the folder's contents," says Kaufman. "One simple interface element not only shows all the potential complexity of permissions in a simple form, but enables users to set complex rules in an intuitive way." Setting a permission for a folder also sets identical permission levels for everything inside it — all child folders and files.



Pictured: Too often, security sacrifices usability. Here, however, asset creators can use a simple slider bar to easily manage permissions for files and folders.

Selecting *image preview* from the *Files* drop-down menu shows previews of all assets, including related information. While similar to the *icon view*, *image preview* lets users view comps (preliminary designs or sketches), logos, and other graphics files without having to open the file.



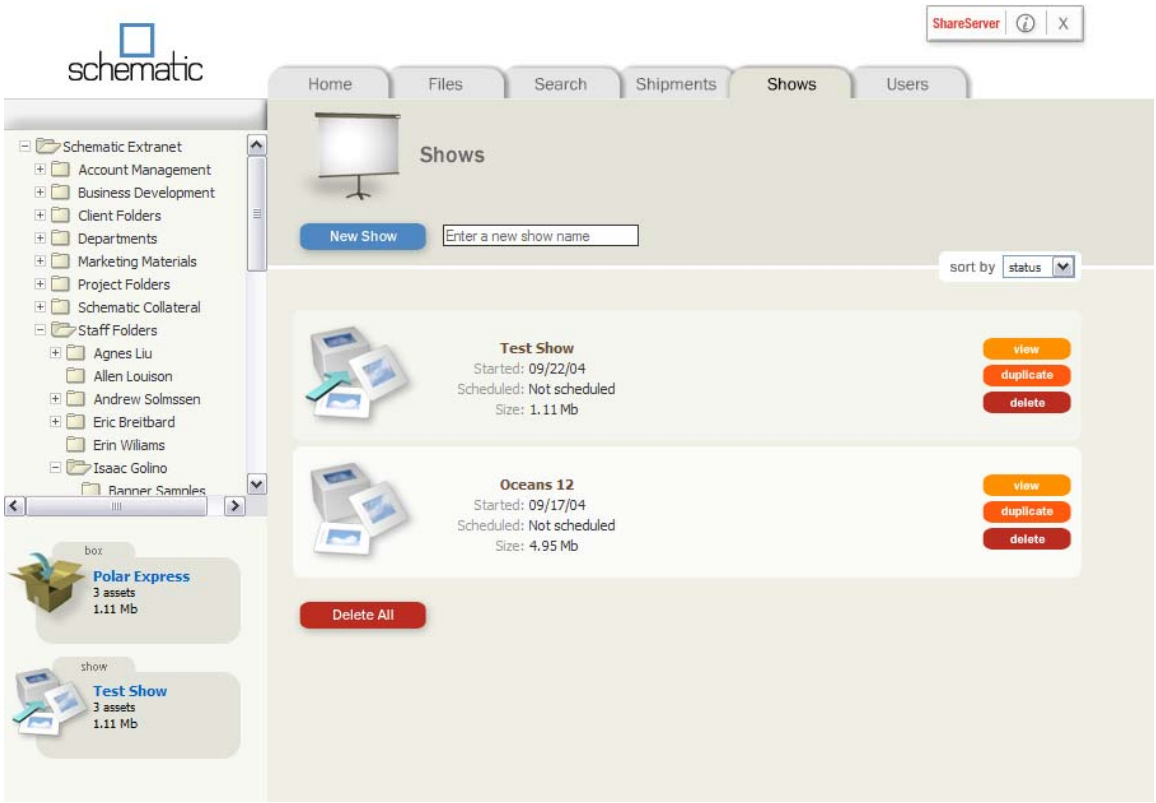
Pictured: The *image preview* view on the *Files* tab shows previews of all assets, including related information. This view makes it easy to quickly review comps without having to open files.

Beyond image handling, one frequent ShareServer use is to present slideshows to other team members or clients. Slideshows tend to contain "creative work, or diagrams, or Flash animation," says Isaac Golino, Schematic's design director and interface designer. These shows can contain any number of JPEG and .swf (Flash) files.

On the homepage, users see an easily visible list of slideshows they're invited to view. The list includes the slideshow's name, the name of the person who posted it, and the post date and time. Users simply click the *Enter* button to instantly review the show. Invitees can view a show at its specific show time, then access it afterwards for a length of time specified by the show's administrator.

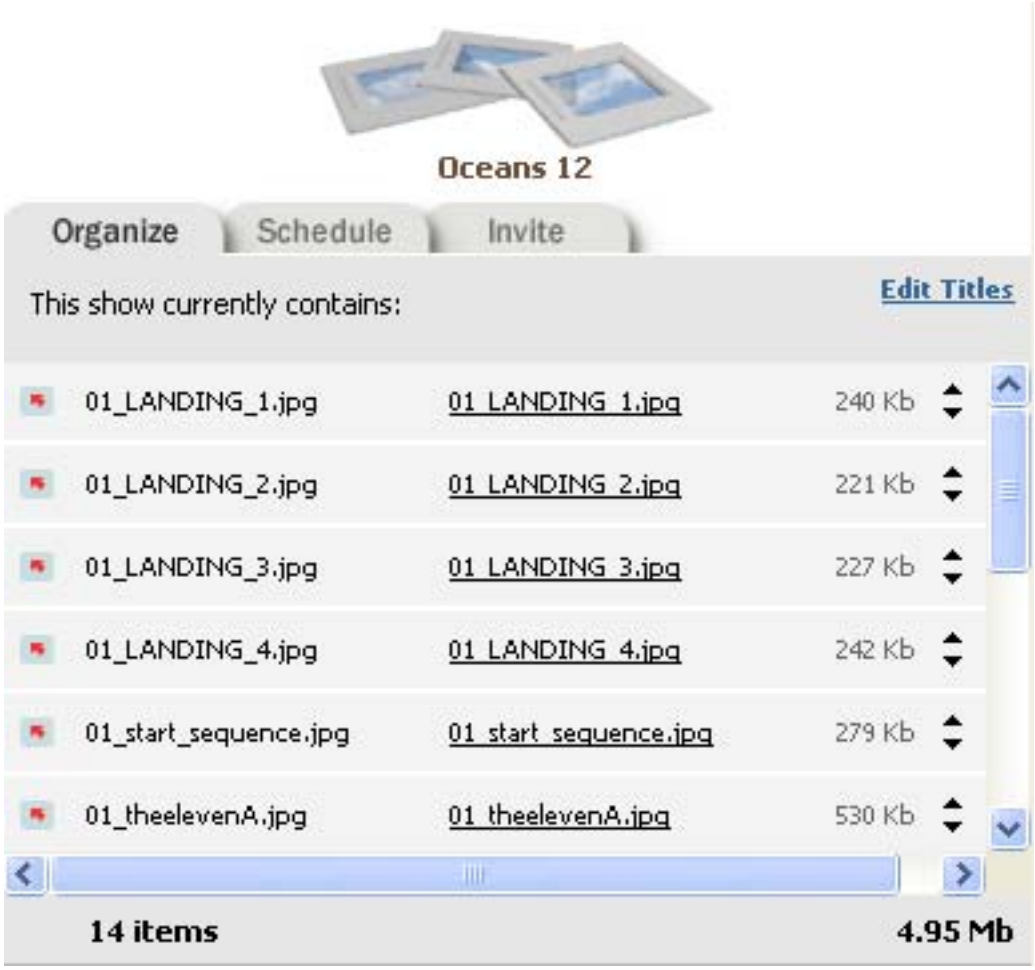
Users can also access slideshows via the minimalist navigation. The universal global tabs make it easy for users to know where they are. For quick navigation, users can access the familiar folder tree on the left.

The *Shows* tab is where the user creates, organizes, and schedules slideshows. Users can also sort shows by various criteria, including name, status, and size. When creating a show, users can add JPEG and Flash assets from ShareServer; the back-end software handles the related storage and presentation.



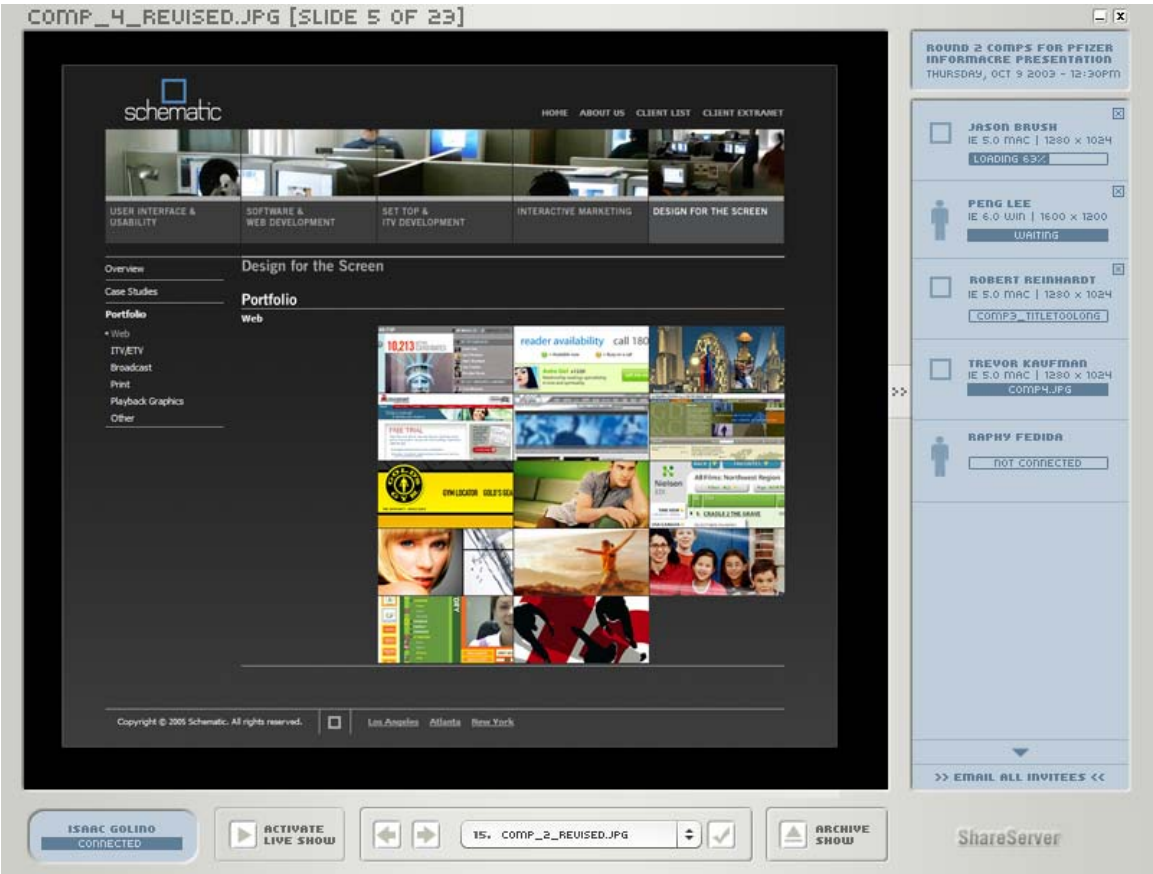
Pictured: Under the *Shows* tab, users see a list of current shows and can easily view, delete, and duplicate them.

Pictured: Once users create a show, they can invite others to view it. The user enters the e-mail addresses of all recipients, then clicks the *Invite* button.



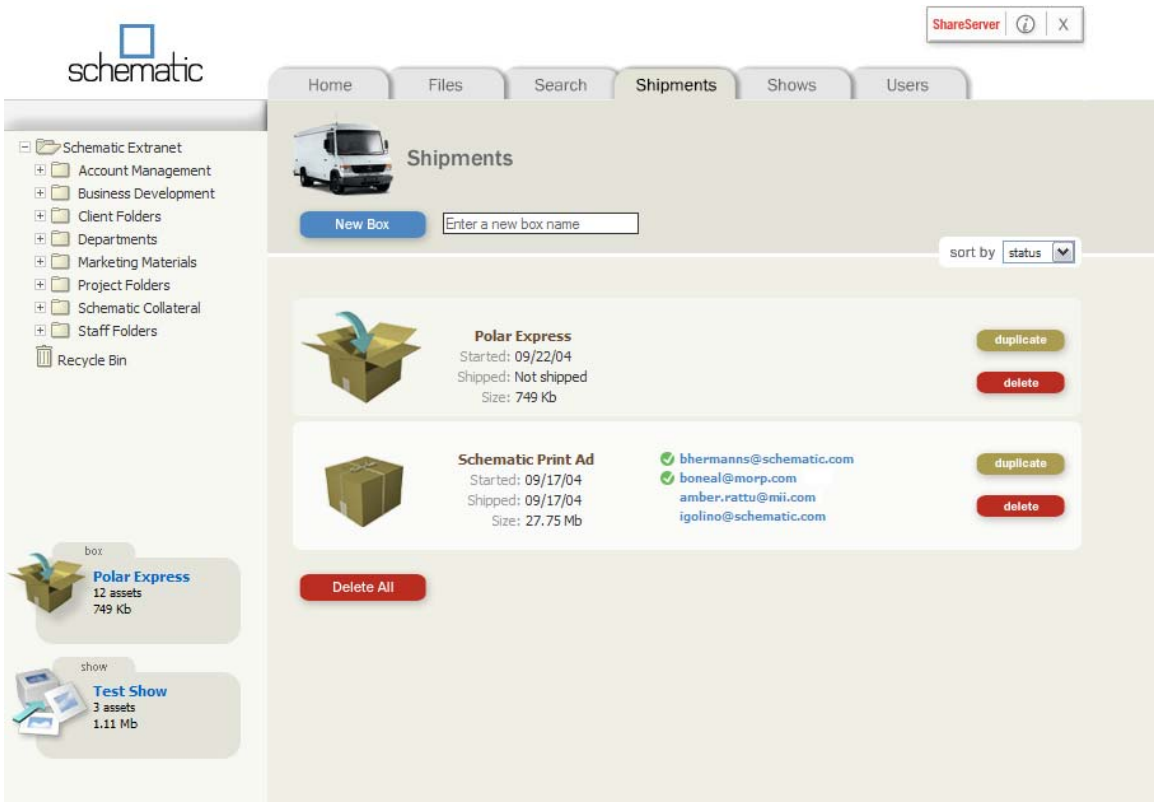
Pictured: Users can edit the titles or contents of their slideshows. The black up-and-down arrows also let them rearrange the content display sequence.

To keep design reviews simple and focused, the administrator controls the slideshow and what participants see on their computers. In the administrator's view, there are simple controls at the bottom to activate the show and scroll pages, as well as for archiving the show. Names of the participants in the show, as well as their status, are listed down the right side of the view. What's nice here is that most of the screen's real estate is reserved for the star of the show — the page designs.



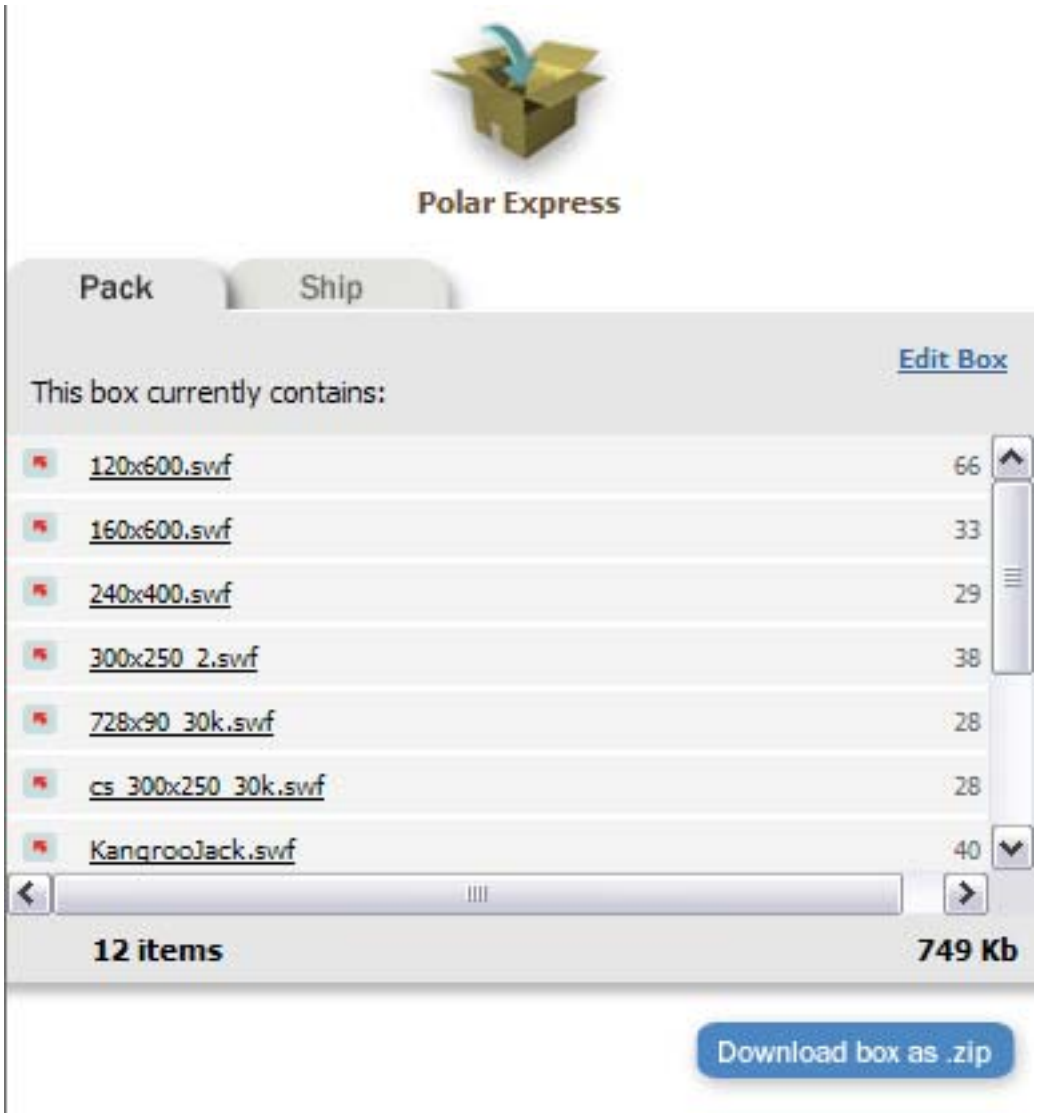
Pictured: The slideshow view for the controlling administrator. Participant names and their status are on the right, and controls are placed horizontally, across the bottom. The slide itself rightfully occupies most of the screen.

Beyond asset management, users can also easily manage entire slideshows and shipments. Shipment and slideshow creators get information about the status of all shipments, and can create a new "box" on the *Shipments* tab. The cardboard box metaphor helps the user see the status at a glance. An open box indicates that a shipment is still being assembled; the closed box indicates a shipment has been sent. Green checkboxes next to e-mail addresses indicate which target recipients have viewed the shipment.



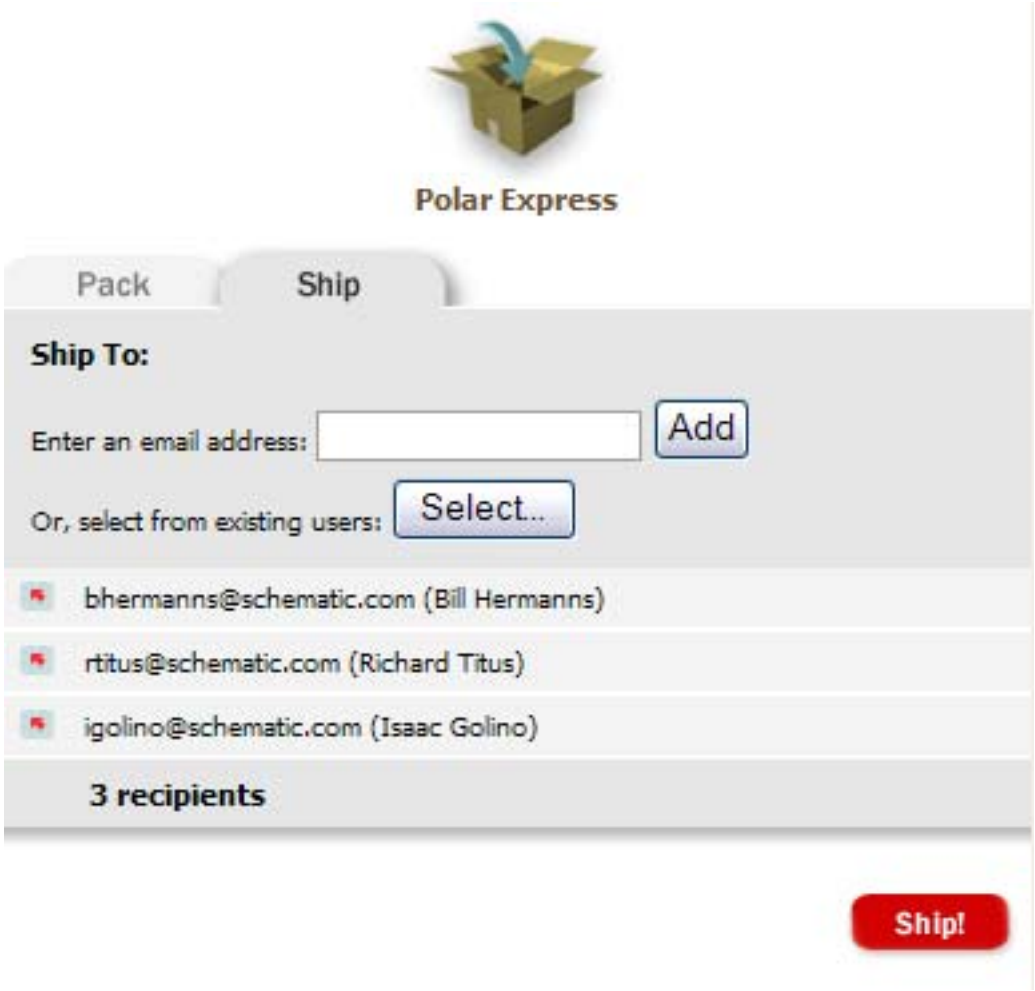
Pictured: The *Shipments* tab uses a cardboard box metaphor to show the status of all shipments. An open box hasn't been shipped, while a closed box indicates all recipients have been e-mailed a link to the shipment or show. A green arrow indicates that the recipient has downloaded a shipment.

After selecting one or more items, users can pack them into a shipment.

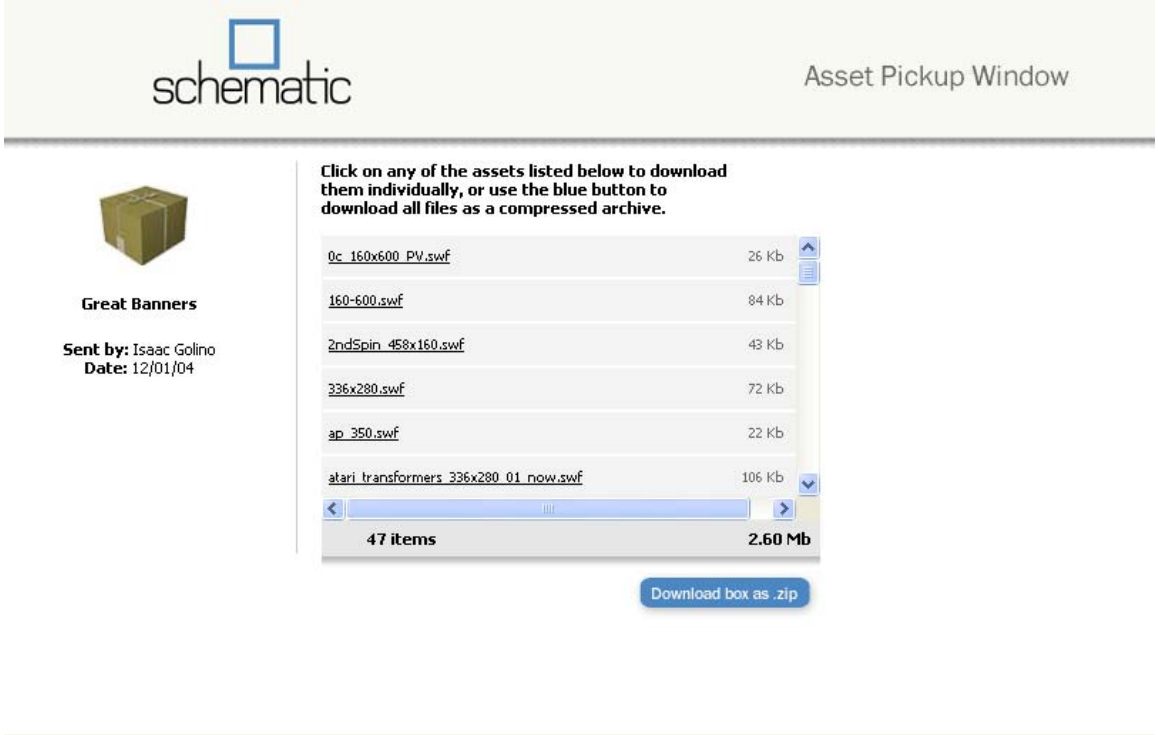


Pictured: Users select images and pack them to prepare for shipping.

After packing images into a shipment, a user selects recipients and presses the *Ship!* button to send the shipment. The server helpfully zips all files into a single archive before shipping them.



Pictured: Once the files are packed, the user enters the e-mail addresses of all recipients, then clicks the *Ship!* button. Behind the scenes, the server zips the shipment into a single archive before sending it.



Pictured: Shipment recipients get an e-mail with a link to the shipment. The link takes them to a screen such as the one pictured; no login is required. Recipients can download the box as a zip file.

Using a simple, appealing design that removes interaction and usability barriers, ShareServer brings clients closer to designers, making it easy for everyone to share files in a fast and safe way.

URL AND ACCESS

The default URL for the intranet, ShareServer, is extranet.schematic.com. The site is meant as an extranet — both for internal use and for clients and partners, so the site, while password-protected, is publicly available.

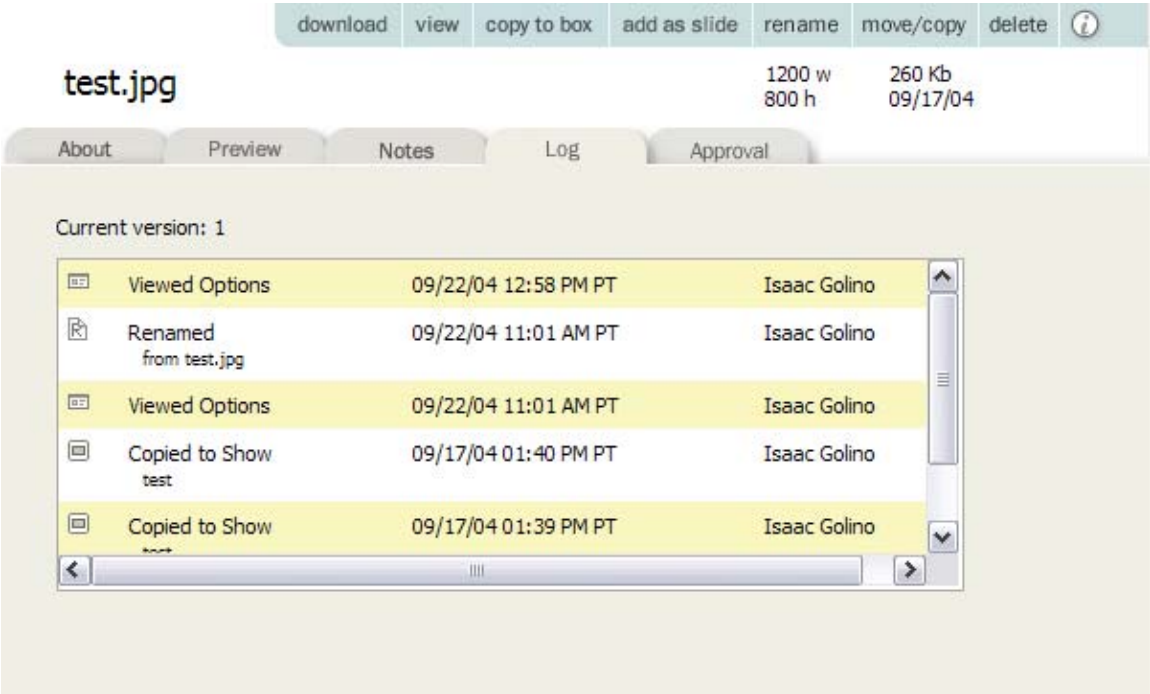
Upon login, users see a portal page with all recently accessed files and an activity guide to all files they have permission to view.

CONTENT MANAGEMENT

The ShareServer file and folder structure mimics internal departments, and each department owns the content in its folders. "As ShareServer is, fundamentally, a file repository, there's been no issue with users having to interact with content templates — they just post documents as they see fit," says Kaufman.

Behind the scenes, ShareServer generates the relevant icon graphic for each asset to help designers visually distinguish between JPEG images, Photoshop PSD files, and PDFs. The server also maintains the file metadata, and a log for each file that tracks all events — such as moving, copying, deleting, and viewing the file.

"While ShareServer doesn't expose this distinction to users, our development team makes very specific distinctions between metadata, and what we call 'summary data,'" says Golino. "Summary data is how we refer to characteristics about the file we've obtained from opening the binary, whereas metadata is based on user entry."



Pictured: ShareServer maintains a log for each file, noting what occurs to a file and when, including moving, copying, deleting, or viewing.

TECHNOLOGY

ShareServer is a Web-based application built in PHP. Application elements use Flash MX technology, PostgreSQL, and open-source server applications such as ImageMagic. It runs on Linux and Apache, on a dedicated server that Schematic hosts at its data center.

GOALS AND CONSTRAINTS

Goals:

1. Provide a simple, reliable way to access, archive, and share digital assets.
2. Start the project without any assumptions about the way it should work.
3. Reduce travel costs and lost time related to client visits.

Constraints:

1. Creating a system that Schematic's staff, clients, and partners could use without any training and without reading documentation of any kind.

2. Keeping pages light, while also creating the complex DHTML needed to make ShareServer behave like a GUI within the constraints of a browser.

BASIC INTRANET FEATURES

ShareServer is asset management software for storing and organizing media assets. For ease of use, ShareServer resembles a classic, desktop GUI, complete with Mac-like graphics. The software understands most file types, and displays relevant information, such as image dimensions.

When users first log in, their personalized portal page links to all recently accessed files, and includes an activity guide for all files they have permission to view. "You can see which documents have new comments, which sets of files were most recently uploaded, and which assets are receiving the most download activity," says Kaufman. ShareServer maintains a log for each asset so users can see when a file was created, downloaded, or overwritten, and by whom.

Users can view individual folders and files and modify their attributes singly or in batches, as well as move, delete, or ship groups of files with a click. "There are also some workflow features that allow users to trade notes about a particular file, and an approval process for design work," says Golino.

Access rights revolve around the familiar concept of users and groups. "Users and groups can be assigned three different levels of access: internal, external, and superuser (admin), and the permissions work much like most operating systems," says Golino. "In addition, we included the concept of a 'caretaker,' who is the creator of a folder or the uploader of a file. The caretaker has special permissions and rights concerning their files."

USERS

ShareServer has 386 users, including designers, executives, and salespeople on staff, plus contractors, clients, and partners.

USER TASKS

Typical user tasks include:

- Store files
- Present files to clients
- Exchange files
- Modify or delete large groups of files

BACKGROUND

Schematic is an Internet design and technology company that develops software and interfaces for such corporate clients as Turner, Comcast, Disney, Pfizer, and Nielsen.

ShareServer, however, was a project designed to meet Schematic's own needs. "ShareServer is the first software project we started just for our internal use," says Kaufman. "We began with the idea that clients would be exposed to our technology and design services, in an interesting way, just by interacting with the software."

"The initial idea for a sophisticated company extranet existed as early as 2002, and we put together a four-person task force to start conceptualizing the software with no associated timeline," says Golino. "That group kicked around some loose ideas and designs over the next year or so until we landed on the appropriate structure. Once we settled on the psuedo-desktop model, and created a proof of concept of the interface in HTML, we knew we had what we wanted and started in earnest."

Planning and design started in January 2003. As ShareServer development began, however, "we realized it might be something flexible enough that other companies would want to license it," says Kaufman. A beta went live in March 2003, then the software launched in May 2003, followed by a couple of months of revisions based on initial user feedback.

Since then, while the underlying technology hasn't changed, "we've continued to add new components to the software as we introduce new features," says Kaufman.

DESIGN PROCESS AND USABILITY ACTIVITIES

The core ShareServer team is four people who set about to solve the company's asset-management problem. They eventually settled on a Web-based asset management tool and a tool for delivering work to clients. "We created a few very early prototypes, but they were completely different than what you see now," says Golino.

Along the way, four other people helped with development: a project manager, a production artist, and two Flash programmers.

Throughout the project, "the testing and iterating was mostly based on what felt right," says Golino. "We drew upon resources throughout our company — which is in the Web and software interface development business — in order to design and redesign each interface until it was exactly how we wanted it."

One design challenge was ensuring the software would be easy to use — so easy that clients wouldn't need training. "This project serves as our client extranet, and we don't have the luxury of going to each client and training their personnel on our system," says Golino.

First, however, Schematic would have to entice internal users to adopt ShareServer. "It's tough to get people to change the way they work, and equally tough to get people to learn new software," says Golino. In short, any new approach would have to be at least as easy as the old method: e-mail. "We knew that if the system was too hard to use, people inside Schematic would circumvent it and our clients would become frustrated by it. And there's no return on investment for software no one uses."

So, most user testing focused on internal users. "The thing we learned right away is that people want instant responsiveness. They want the application to move as quickly as they can and keep up with them," says Golino.

Testing also revealed how users approached the GUI, which resembles a traditional desktop operating system interface. "One thing that surprised us is that, since ShareServer looks so much like a desktop, people forget they're using a Web page, and try to drag files out of their browser into their operating system folders," says Golino. Schematic is currently designing drag-and-drop file moving and downloading — at least for some browsers — to address that.

While ShareServer makes it easy for designers to work with images and shows, maintaining such functionality is an ongoing task, since applications and file formats evolve. Take the software's automatic generation of thumbnails. "Every time a new version of PhotoShop is released, we need to tweak our code to properly thumbnail the updated .psd file format," says Golino. "When you consider that ShareServer thumbnails and previews literally dozens of different file formats, keeping up can be a challenge."

Since ShareServer's initial launch, Schematic added the "shows" component, along with support for additional file types. The company also maintains a separate site for ShareServer user feedback. "We've been very careful to make it like a suggestion box — not a threaded message board — because we want to get users' opinions in the purest way possible, unaffected by the shouts and murmurs of their peers," says Kaufman. "Keeping those discussions separate means we get some conflicting requests, but we find that's a constructive way to get varied inputs and to infer the underlying problems."

If users have difficulties while using ShareServer, they can click the small *i* icon in the upper-right corner of every page, which leads to site feature descriptions, and a short help and FAQ section. "Most users have no problem with the interface, and are right at home using the application after only a few minutes," says Golino.

The core team typically implements changes to ShareServer. Severe bugs, security flaws, and performance and stability issues are dealt with first, followed by tweaks, improvements, and efforts to address user annoyances. "We maintain a long wish list of other features and improvements that we plan to make in early 2005," says Golino, in what will be the single biggest redesign of ShareServer since it launched.

TIMELINE

- 1999: Schematic founded
- 2002: Four-person design team began conceptualizing new asset-management software, and eventually settled on an appropriate structure
- January 2003: Began ShareServer planning and design
- March 2003: Launched ShareServer beta version
- May 2003: Launched ShareServer
- June–July 2003: Refined software based on user feedback
- Current: Ongoing site revisions and feature improvements

RESULTS

As a busy design firm, Schematic was driven to build a mechanism to make working with images and shows easier. "With the number of projects we're working on, we share files with project teams and clients two or three times each day," says Kaufman.

Previously, sharing those files meant segmenting them into bite-sized pieces to send over e-mail; creating custom Web sites for clients to visit to download the files; or sending them via courier. "Trafficking that media with outside parties used to cost us over $100,000 per year," says Kaufman. "We also save about $100,000 in regained time that we used to spend internally searching for or recreating files that are now easily accessible and archived on our extranet."

Schematic worried that its ShareServer software wouldn't be adopted by enough employees or customers to hit critical mass. "If people found it to be too difficult to use, they'd circumvent it, and keep managing their files on the fileserver and sending them through e-mail," says Kaufman.

The software, however, turned out to be a success. "What surprised us most is how successful the application is, and how much we rely on it in our day-to-day work. It really is at the heart of our business," says Golino. "I'm also continually surprised and delighted by how comfortable our clients — who can be impatient and demanding — are with ShareServer."

While Schematic earns money selling ShareServer as a stand-alone product, the company also saves money by reducing employees' travel costs. That's because the company uses ShareServer not only for storage, but also for presentations. "ShareServer shows are synchronized slideshows that we can run full-screen on the clients' computers, without them having to download or install any software. When coupled with a conference call, they're almost as good as presenting in person," says Kaufman. "As client visits costs us over $1,000 on average in lost time and travel, we're saving about $200,000 per year, even if only a fraction of our ShareServer shows were direct substitutes for client visits."

As the sheer number of files to manage grows, Schematic also needs to find new methods for navigating all those assets. "One way of finding things in a large universe of data is through Google-style, text-based search," says Golino. "But that's not an inherently browsable way of looking for things — you don't have as many happy accidents in that model as you would when, say, drilling through nested folders."

Maintaining easy browsing and the potential for happy accidents is Schematic's current usability project. "The fact that you can get a search slightly wrong and still have it come up with results that are right has been a great advance in text-based search in recent years," says Golino. "While people tend to believe that Google is, in many ways, exact, its fuzziness is more valuable."

Going forward, Schematic will try to implement directory structures with more than one type of categorization. "Criteria such as file type, date, pixel width, or frame rate are all other ways to categorize," says Golino. "So we're now looking at ways that we can allow users to keep assets in a certain consistent virtual 'place,' dictated by a traditional, nesting-folder pathname, but also browse to them with other structures."

As an example of alternate browsing, he says "the 'history' panes in Web browsers are starting to use these kinds of techniques."

Another idea is a pull-down menu listing all files and folders accessed in the last week, which "would immediately cut down on the number of folders you'd see in any average visit by a factor of ten, yet still give easy access to a large array of files — and all without resorting to textual search," he says.

Beyond tackling next-generation navigation, "we have a huge list of things we want to add," says Golino. "We want to improve performance, add even more file type support, develop more views and previews of assets, enable better search, include more personalization and customization — the list goes on and on." Schematic also just tied ShareServer in with its local file servers and Active Directory.

LESSONS LEARNED

Insights from Trevor Kaufman:

Launch with the smallest scope possible. "While we did a good job in our user-interview process determining which features should be included, the software includes some features which are rarely, if ever, used. In retrospect, we should have launched the site sooner, leaving more development available for feature additions later on."

Give users what they expect. "The ShareServer interface is designed like a Web-based desktop. Yet it has limits — during user testing, some users try to drag icons off of the browser page and onto their own desktops. Of course, they're using a Web site; you can't do that. So now we're now trying to come up with an alternative: either interfaces with standard GUI functionality, or interfaces able to clearly delineate what users can and cannot do."

Plan for success. "We didn't anticipate that ShareServer installations would get the amount of use they do, and we didn't plan for truly massive amounts of assets. As we start thinking about installations with millions of discreet files, the traditional directory structure of files and folders becomes unwieldy, and a Google-style search box alone gives users no way to browse. So, we're now looking at different ways of creating a matrix for the directory structure, based on additional categories, so that browsing thousands of directories is as easy as browsing twenty folders is today."

ALTANA Pharma AG

Using the Intranet:

ALTANA Pharma AG is the pharmaceutical division of ALTANA AG, and is headquartered in Konstanz, Germany. ALTANA Pharma is an international pharmaceutical group concentrating on innovative pharmaceutical products in therapeutics, imaging (contrast media), and OTC medication. Therapeutics, its most important business area, focuses on prescription drugs for gastrointestinal and respiratory diseases. ALTANA Pharma has more than 8,200 employees and thirty subsidiaries in Europe, North and South America, Asia, South Africa, and Australia. In 2004, the company achieved sales of about €2.1 billion, up 7% from 2003.

Design Team:

namics AG

Members:

namics:

Bernd Schopp, senior consultant; Thomas Link, designer and site architect; Michael Pertek, consultant; Harry Preis, senior software engineer; Ernst Ammann, senior developer

ALTANA Pharma AG:

Nicola Winterstein, project manager; Matthias Rohrbach, IT project manager

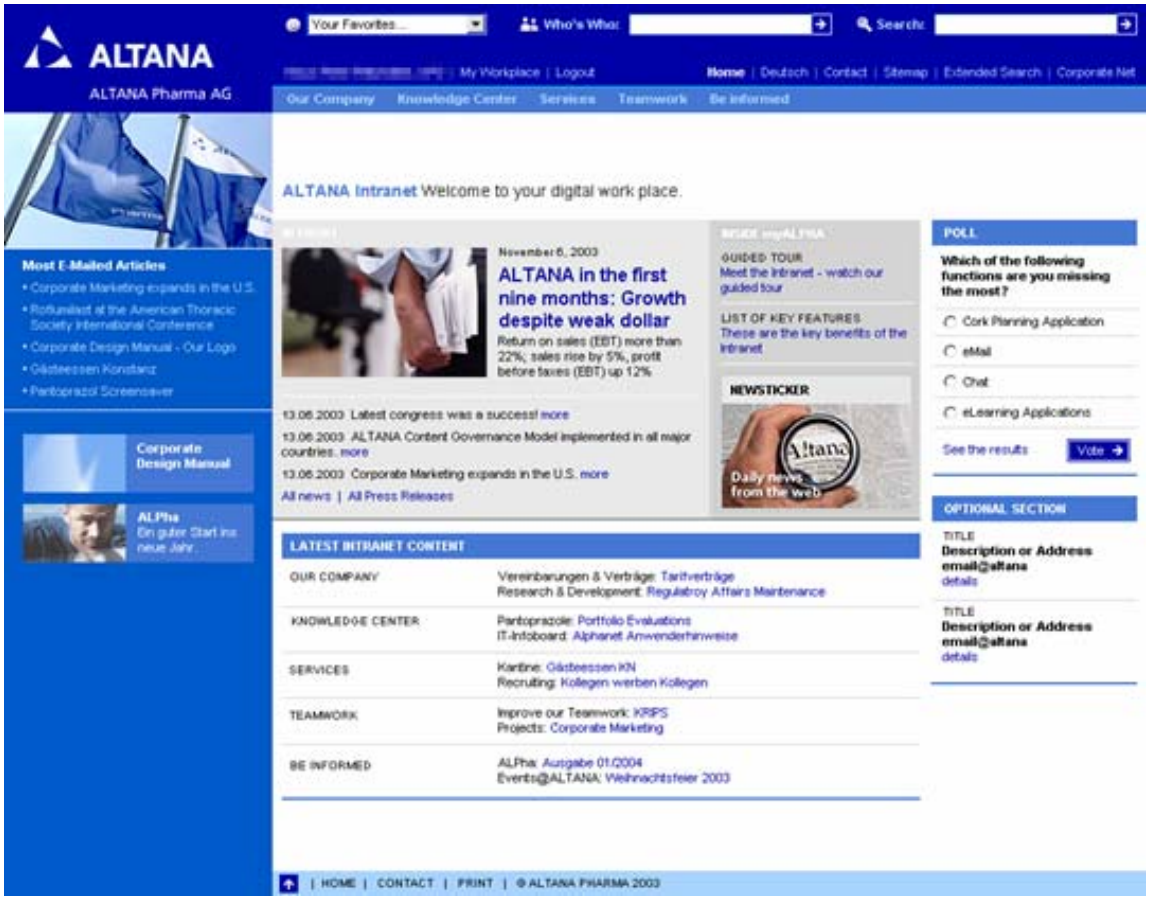
SUMMARY

Sharing knowledge is a critical aptitude for ALTANA Pharma AG. Like many pharmaceutical companies, ALTANA Pharma's future depends on research and development (R&D), and the company invests about 20% of all corporate revenues in that area. Research, however, cannot occur in a vacuum. The company's success depends on maintaining a close relationship between R&D and marketing and various other groups, from sales to HR and beyond.

As a company focused on research, discovery, and knowledge sharing, ALTANA Pharma encourages intense communication and teamwork. Because of that, the company has given its intranet a well-defined goal: to provide an overview of the organization that's so transparent that using it is intuitive not only for employees, but also for new hires. The intranet delivers on this goal, supporting users with its well-executed design and myriad features.

Homepage

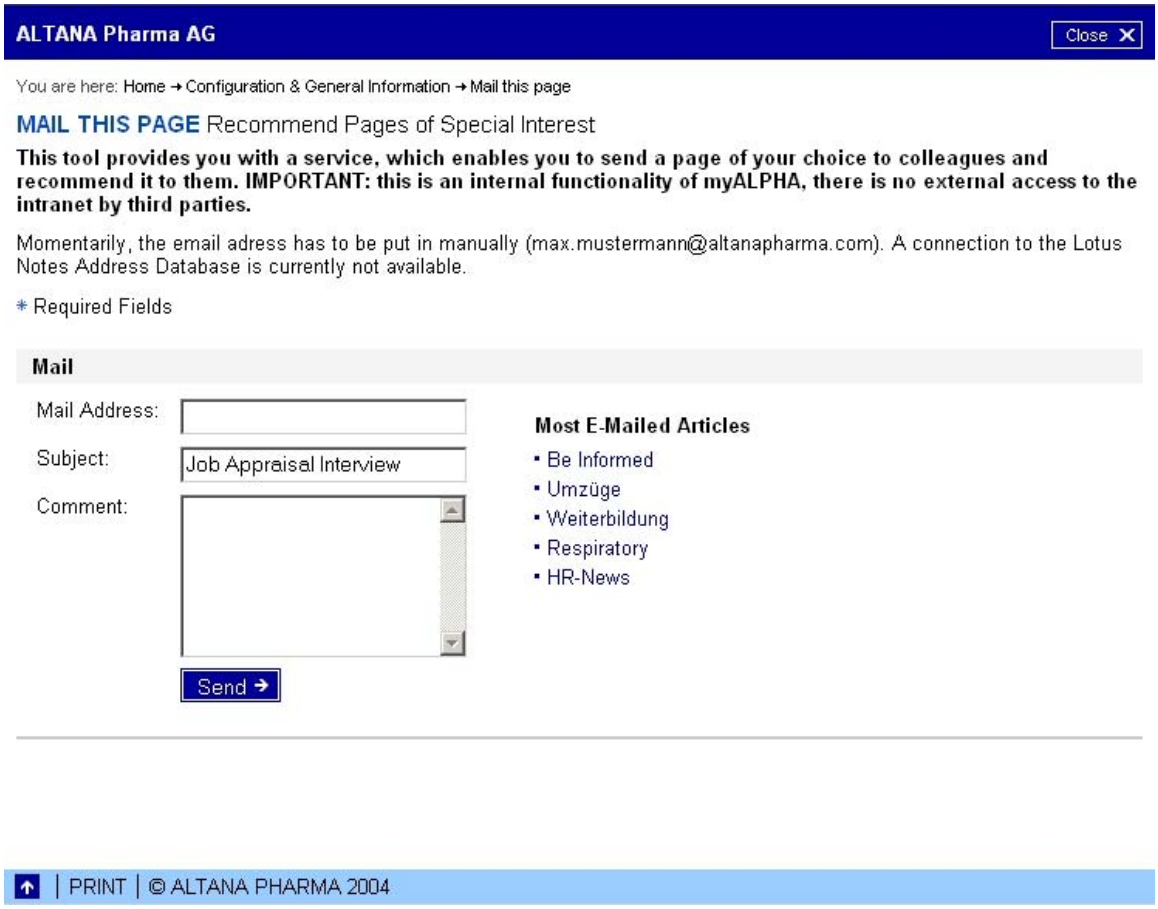
The ALTANA intranet homepage houses a significant number of features in a relatively compact space. Many of these features lead users to content they want or need. Along the way, the design also attempts to educate them about other intranet features they might not know about.



Pictured: The ALTANA intranet's homepage offers myriad features, from news to a list of most commonly emailed pages. (For confidentiality reasons, we've altered information displayed in this and many subsequent images.)

The *Inside the Intranet* section houses a clickable *Guided Tour* of the intranet. The tour consists of ten slides and typically takes five to ten minutes to view. For more information about the intranet, users can also explore the *List of Key Features* area.

The intranet offers a *Mail this page* link in the upper-right part of each page. This permits—and reminds—colleagues to share knowledge. Behind the scenes, software automatically tracks which pages are emailed, then lists the most popular ones as *Most E-Mailed Articles* on the homepage. This list, a social filter for all intranet content, captures content users find interesting and also provides visibility into content stored in locations that users might not have discovered yet.



Pictured: ALTANA Pharma employees can email most intranet pages to other employees. Behind the scenes, software automatically tracks the most popular pages, then runs a shortlist on the intranet homepage.

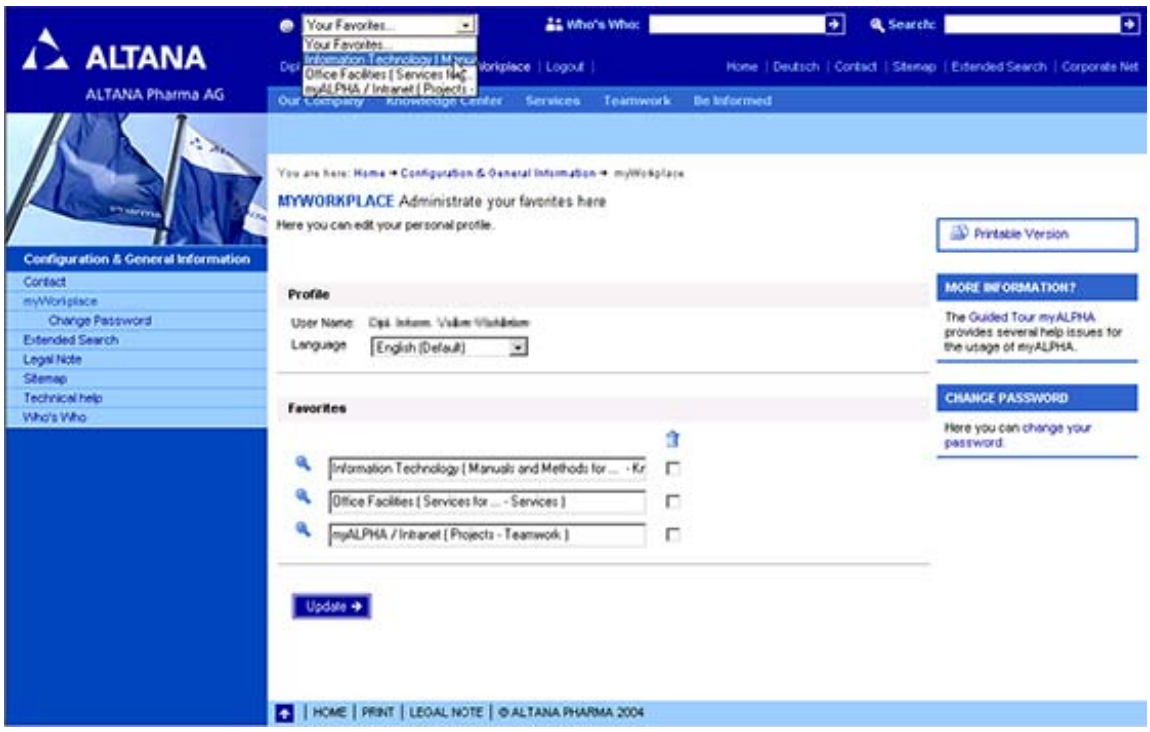
Not surprisingly, news headlines are the most prominent homepage element. Headlines are dated and lead to full articles and corporate press releases. The latter is especially notable, since linking to corporate press releases can be a tremendous eye-opener for employees. Many employees don't track their own company's press releases, and so miss out on the company's external-facing persona. If anyone should stay knowledgeable about the most recent corporate messages, it's the employees themselves.

Personalization

Users can personalize the intranet and select a preferred language in the *My Workplace* area. While ALTANA Pharma promotes English as the company's sole scientific language, it also offers more local, bilingual intranet content. This is useful given the company's highly distributed operations and the number of employees who have a different primary language.

Users can also set specific search preferences, access a site map, or reset their intranet password. Further, they can add favorites to the "*Your Favorites ...*" drop-down list, which appears in the upper-left part of the homepage and on all subsequent pages. These favorites help users easily and quickly jump to the pages they want. This feature is also very easy to use: just click the *Add page to favorites*

link in the upper-right part of any page. Thanks to single sign-on, users don't have to re-authenticate every time they access these features.



Pictured: The *My Workplace* area lets users personalize the ALTANA Pharma intranet by adding or removing favorites, defining a preferred language, setting individual options, and more. Users can also reset their own passwords here.

Navigation and Search

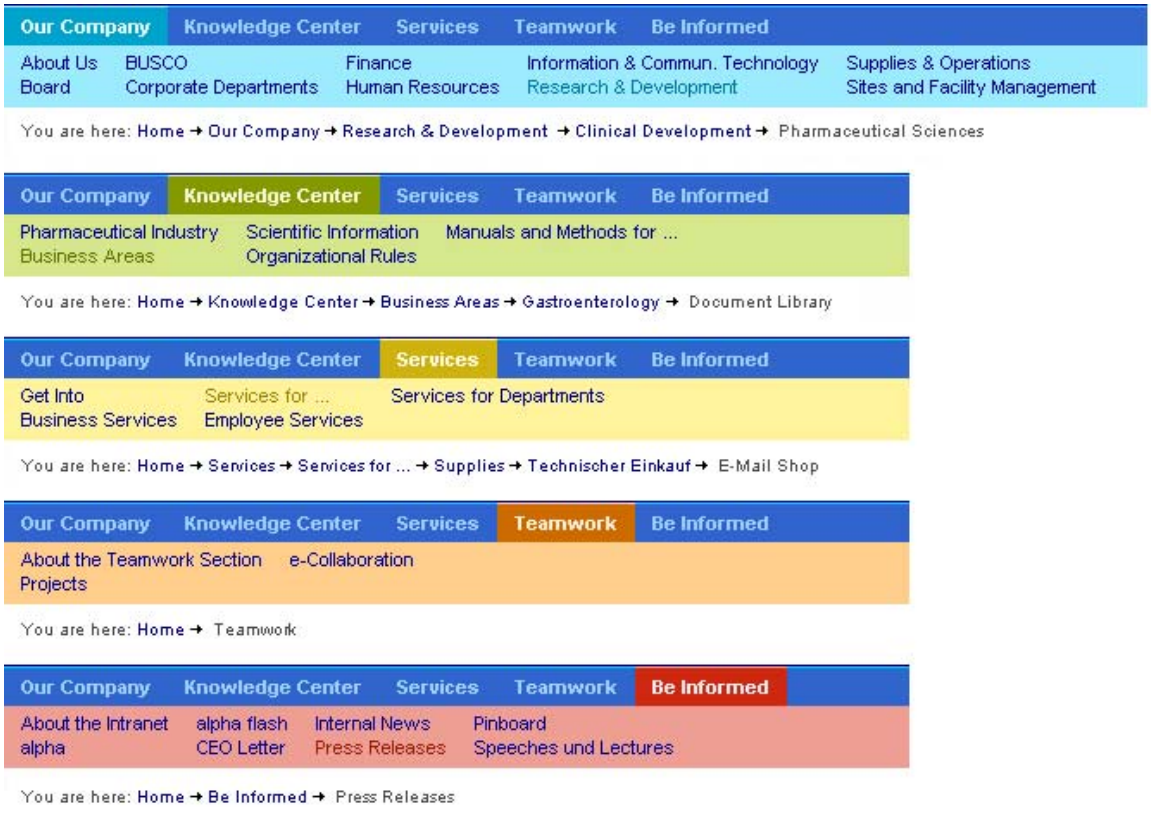
Above all other intranet features, traversing an intranet should be easy to ensure a good user experience and boost employees' productivity. At an organization such as ALTANA Pharma, however, the importance of knowledge sharing coupled with the regular influx of new employees requires that navigation be seamless. One excellent technique for ensuring usability that scales with the organization: Design an information architecture and search capabilities that help users through common tasks and typical situations.

Again, ALTANA Pharma delivers on this need. For starters, the company *Who's Who* search and the overall intranet search are both clearly labeled and use open fields. They're also well located in the upper-right part of all pages, including the homepage. Placing the two fields close to each other is important: it lets users see both fields at once, while labels ensure that they can quickly differentiate between the two search types.

The intranet also offers more advanced search features, such as *Extended Search*. Most pages feature a *Search similar pages* link on the upper-right part of the page. Users can also search by document type, including .pdf, .doc, or .xls.

The main navigation bar is located horizontally across the top of pages. Different colors are assigned to the page borders for each of the sections: *Our Company* (cyan), *Knowledge Center* (lime green), *Services* (honey yellow), *Teamwork*

(orange), and *Be Informed* (maraschino red). A breadcrumb trail also displays a page's full intranet location.



Pictured: "Snips" of four different navigation bars in the ALTANA Pharma intranet. Each intranet section features a top-level navigation bar in a different color to help users determine where they are in the intranet. Breadcrumb trails add additional context.

The colors help users quickly determine which section they're in. Vertical navigation on the left side of the page changes depending on which of the top-level navigation choices users select. The left-hand navigation space displays the current page, parent page, and all child pages.

For the new ALTANA Pharma intranet, the design team transitioned from an information architecture based on business units to one focused on users' tasks. This progression can be a challenge.

Should all companies move from a business unit information architecture to a task-focused one? Well, the business unit model can work, but there are two requirements. First, a company must be very small (less than 200 people). The second requirement: every employee must know what every business unit does, and in most organizations—even very small ones—the latter is simply not true. While this might seem counterintuitive, few employees really understand what everyone else in their organization does.

The ALTANA Pharma intranet illustrates why a task-focused information architecture is typically much more elegant than a business-unit one. For example, rather than forcing users to differentiate between HR, travel, and accounts payable tabs—not unusual tabs to find on an intranet—the ALTANA Pharma intranet instead offers a

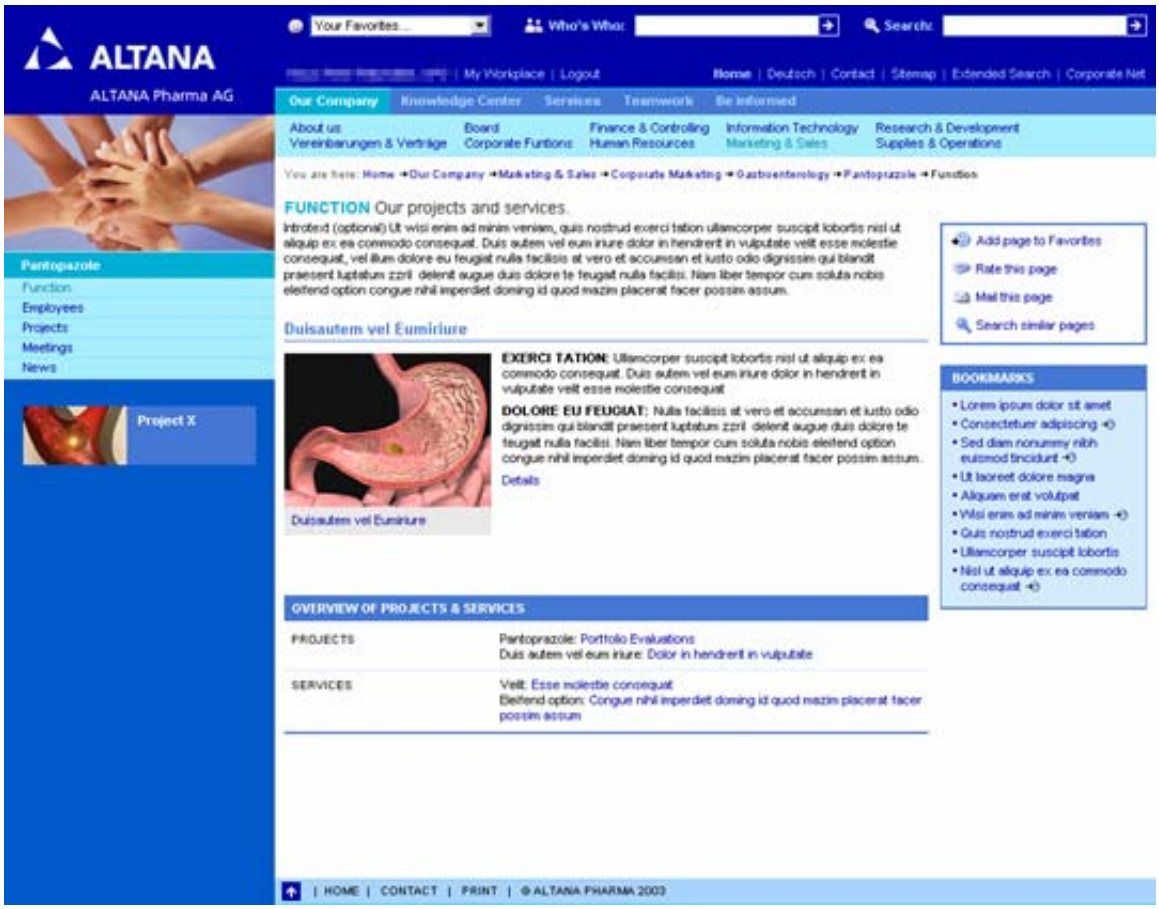
simple *Services* tab. This is a one-stop-shop for items such as the help desk, room resources, obtaining supplies, booking travel, accessing management tools, or referring to new-employee services. The site's straightforward approach to links continues on the *Services* page itself, even though it houses a variety of diverse services.

Pictured: The *Services* tab has a simple name that precisely describes what the page offers. The two-level directory also gives users an easy way to skip between pages, while supplemental navigation allows them to further browse services or products alphabetically. (So far, the supplemental navigation is available only for content managers. Site-wide rollout is forthcoming.)

Of course, navigation is not just about menus, tabs, and site maps. It's also about the way the pages themselves are laid out. The ALTANA intranet has a distinct look and feel, and a defined structure for page sections. In other words, pages look quite similar, but the content stands out. Consistent design and navigation help users quickly master how the intranet works, then apply this knowledge to any intranet page. It takes only a few simple, consistent items to engender this: bookmarks and page-level items in boxes in the right margin, breadcrumbs at the top of every page, and navigation in the left, vertical column. The page title appears at the top, in bold text, and a short summary follows. Content follows from there, complete with subtle, colored-bar accents.

Pictured: Consistency counts: the *Knowledge* index page is very similar to the *Services* index page (above), which helps users quickly and intuitively learn to browse the intranet.

Pictured: A department page designed using the basic page template.



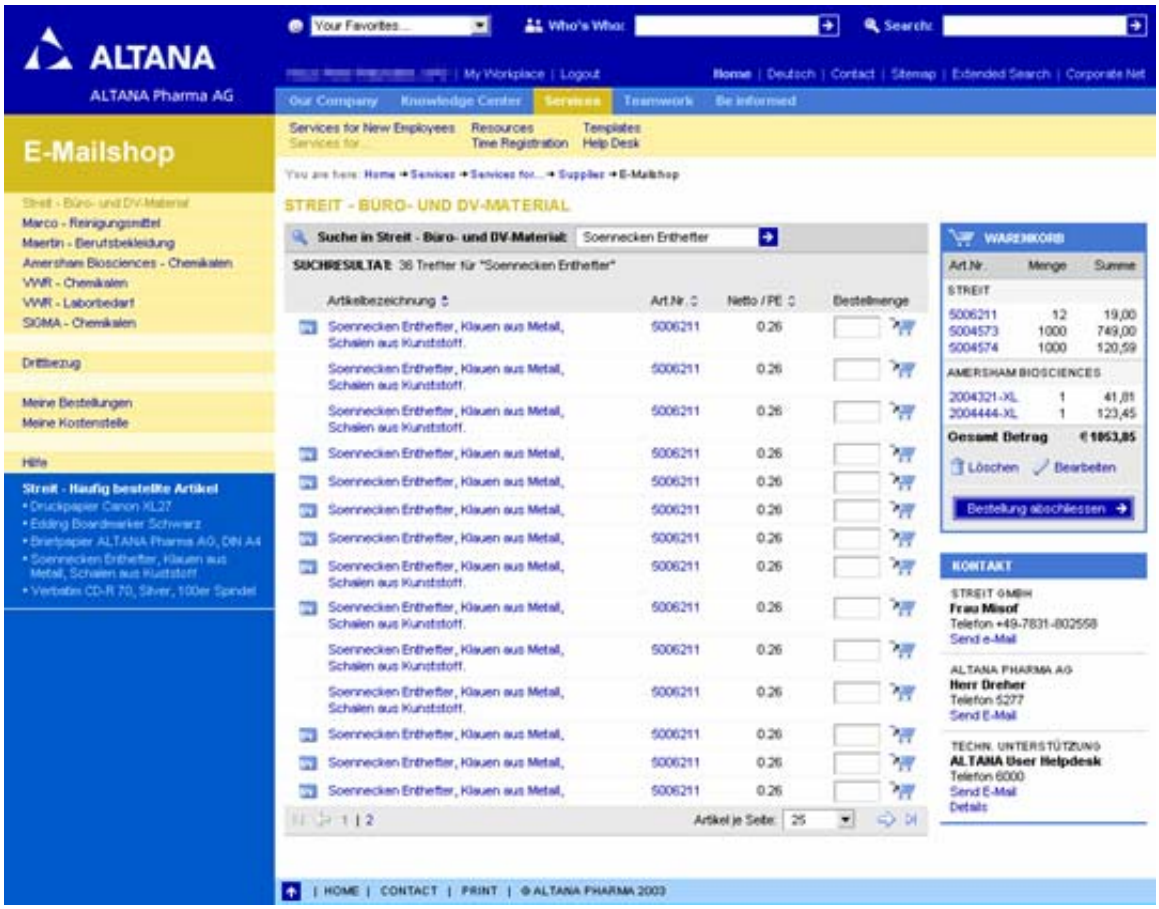
Pictured: A content page built with the basic page template.

Procurement

When you think of an intranet that provides critical business services and that all employees rely upon, one feature might not come to mind: shopping. In the pharmaceutical arena, however, employees need innumerable items to run lab experiments—never mind ordering ever-necessary office products.

To let employees order needed supplies, this intranet uses a tried and true e-commerce metaphor: the online catalog, complete with shopping cart. Users can search, read descriptions, add items to their cart, and then check out. A *Deputy* function even allows people to order products for colleagues.

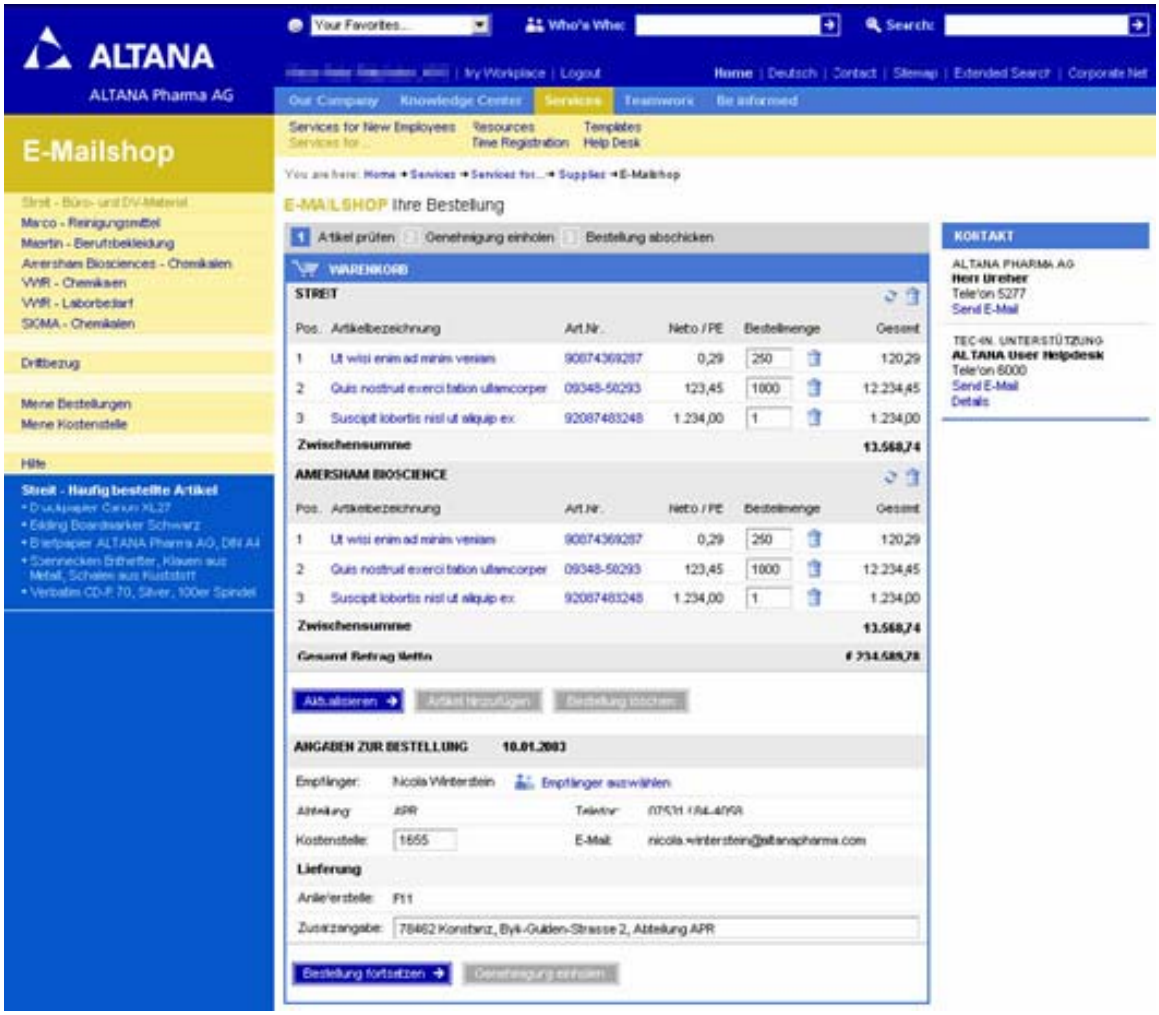
Employing well-known Web metaphors such as the shopping cart on an intranet is always a sage approach.



Pictured: *E-Mail Shop* functionality mirrors that of the average e-commerce website. From a usability perspective, this helps users draw on well-known website metaphors to easily accomplish their goals.

One extremely useful aspect of the intranet shopping cart is that it bridges multiple catalogs. To order an item, users don't have to locate its catalog; all items from the different product catalogues show up in one consolidated catalog and end up in one shopping basket. After checkout, notifications are routed to the appropriate people for sign-off.

To make this work technologically, the intranet team tapped existing Lotus Notes workflows, but created a new, more usable interface consistent with the intranet's design.



Pictured: Pharmaceutical companies rely on a variety of supplies, and the ALTANA Pharma *E-Mail Shop* shopping cart system lets employees get what they need. The online catalog and cart integrate items from various catalogs, without forcing users to browse from catalog to catalog to find what they're looking for.

Throughout the intranet, designers encourage collaboration in strong yet subtle ways. That's not a surprise: Given the research-intense environment, all pharmaceutical companies must count knowledge sharing and collaboration as core competencies.

ALTANA Pharma is no exception. Its intranet is a critical tool for enabling the company's success by supporting its business requirements with straightforward navigation and effortless collaboration features.

URL AND ACCESS

The intranet's URL is http://myALPHA.ap.ALTANA. It's the default start page for all users, and is bookmarked in their browsers. Users can access the intranet via a VPN when away from the corporate LAN.

ALTANA also offers some users intranet access via kiosks. "The kiosks are located at specific and well-frequented places, such as the central entrance of the main buildings, or the entrance area of the cantinas," says Michael Pertek, a namics ag consultant. (The namics ag consulting firm, based in St. Gallen, Switzerland, led design efforts for the new ALTANA Pharma intranet.)

Pictured: An ALTANA Pharma kiosk. In general, kiosks are placed in well-frequented areas.

Pictured: Using an ALTANA Pharma kiosk

CONTENT MANAGEMENT

ALTANA uses Opentext Livelink WCM Server 9.2.1 for its CMS, though an upgrade to version 9.5 is underway. WCM is running on Microsoft IIS 6 on Windows Server 2003, and also relies on an Oracle Database Server. While WCM is off-the-shelf software, namics customized many of the related templates and intranet functionality, though not the generic CMS features.

ALTANA Pharma takes various approaches to content ownership. For example, each department owns its own part in the site's *Our Company* section. Although corporate communications runs the *Be Informed* section, many other departments—especially marketing and HR—also contribute. Content owners for *Knowledge Center* and *Services* are drawn from throughout the organization, especially the marketing, HR, and corporate library services groups. Finally, for individual *Teamwork* sections, the content owner is the project or workgroup manager who oversees the team.

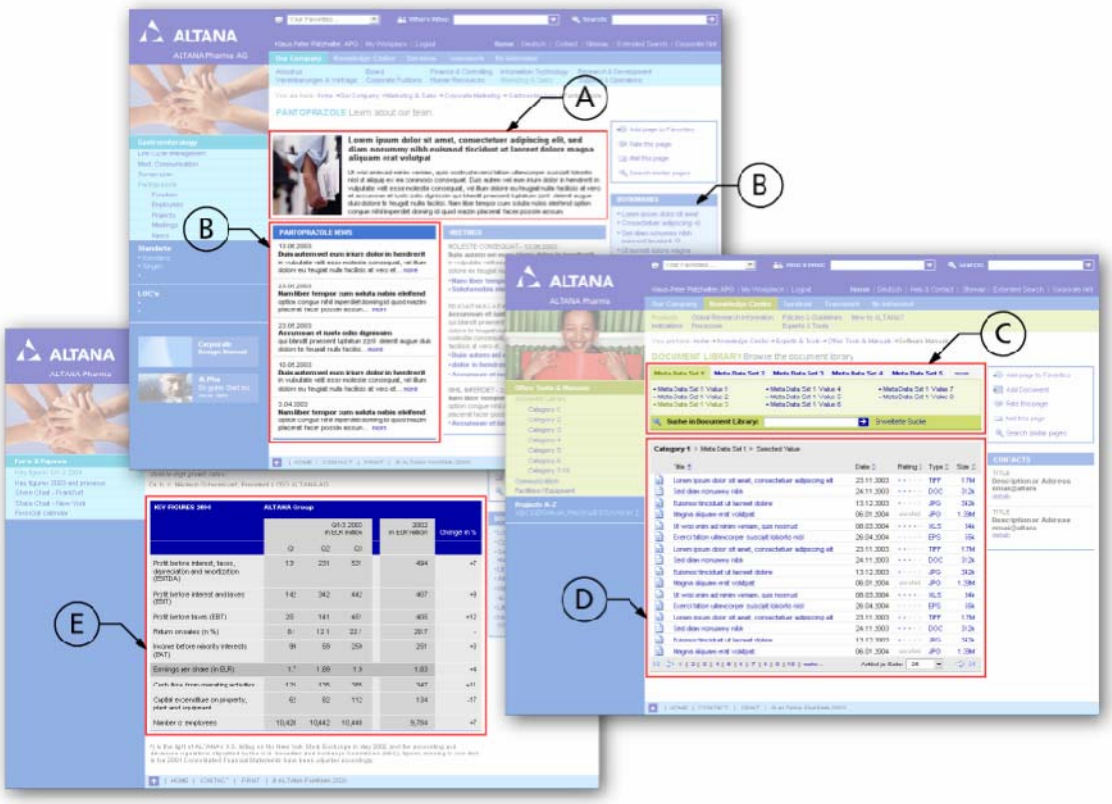
To maintain a consistent-looking intranet, ALTANA Pharma employs a style guide. The guide was originally developed while the intranet was still being planned; it was then used to develop all the intranet's applications and its content templates, which are now built into the CMS.

Today, "all editors are trained and educated to use the rules out of the style guide," says Pertek. The guide, along with additional training information and a CMS technical guide, is readily available to any employee in the intranet's *Knowledge Center*.

Even with templates and style guides, however, maintaining a consistent intranet look and feel can be difficult. "Templates still allow users to apply layouts and styles slightly differently," notes Pertek. "Therefore, supervisor and author training has focused on how to best apply templates." Even so, content creators frequently rely on the intranet team for additional design guidance.

Beyond the style guide, page templates help further maintain a consistent-looking site. "The most common design elements relating to content are simple content sections, which might have a combination of text and imagery, and separate sidebars or boxes, which often contain links or information summaries," says Pertek. "Other elements include navigation areas, lists, and tables."

Even so, "due to ongoing developments, not all ALTANA intranet functionality is finalized. Some functions are still developed but not rolled out until end of 2005. Other concepts are just in the pipeline and awaiting implementation," says Ernst Ammann, a senior developer at namics.



Pictured: At ALTANA, content managers can build pages using a variety of pre-made pieces, including simple content sections (A), which might include text and images; and separate sidebars (B), which often contain links or summaries. Additional elements include navigation areas (C), lists (D), and tables (E).

In general, the style guide advocates using these different elements in discrete ways. Here's a relevant excerpt from the style guide itself:

- **To present and communicate content**, always choose content sections of type (A) and the layout options they offer. Content sections can be combined very effectively with tables (E).
- **To refer to other pages**, choose a separate sidebar/box format (B). In the case of different page types, e.g. News and Events, you can create a separate box for each one.
- **To present Lotus Notes database content** in the easiest possible way, choose the list format (D).
- **To refer to related links**, choose a sidebar (B) in the right-hand column of the content area.

TECHNOLOGY

Beyond the CMS software, namics used a variety of tools to plan and create the intranet's design, according to Bernd Schopp, a senior consultant at namics. "We use Microsoft Excel for content gathering and building the top-level information architecture, and PowerPoint as a companion to create wireframes for the page

structure. Adobe Illustrator is the best tool to transform the wireframes into a first design—and of course to make a precise grid system. Final design mock-ups of all templates are done with Adobe Photoshop," Schopp says.

Intranet search is handled by Autonomy software. Search was implemented in two steps. First, users got simple search capabilities. Later, namics added more complex search capabilities. Now users can search the entire site, in various categories, or for specific document types, including Microsoft Word and Excel files, PDFs, or even HTML pages.

GOALS AND CONSTRAINTS

Goals:

- Move from multiple Lotus Notes intranets to one CMS-driven intranet with a consistent, corporate design.
- Maintain a consistent intranet design using content templates.
- Designate one department to manage the overall intranet.
- Move from multiple, department-focused information architectures to a single, user-friendly information architecture, while continuing to draw content from relevant business units.
- Provide a common start page for all employees, filled with relevant content.
- Provide one search tool capable of indexing the entire intranet.
- Offer content in both German and English.
- Introduce quick and efficient knowledge-sharing tools.
- Make the organization's structure and offerings look transparent to new employees.
- Create a service center for employees focused not on corporate offerings, but on meeting employees' objectives.

Constraints:

- Common restrictions: budget and time limits.
- Enticing users to transition from their organically developed intranets and document collection systems to a centralized intranet and new CMS.
- Minimal transition time from old to new intranet, despite the radically different new design.

BASIC INTRANET FEATURES

One of the main intranet redesign goals was to create navigation that let users find relevant information on the intranet without having specific knowledge about ALTANA Pharma's organizational structures or workflows. So, the ALTANA Pharma intranet offers users an objective-oriented—rather than department-based—intranet. In other words, employees get a task-oriented, situation-focused information architecture.

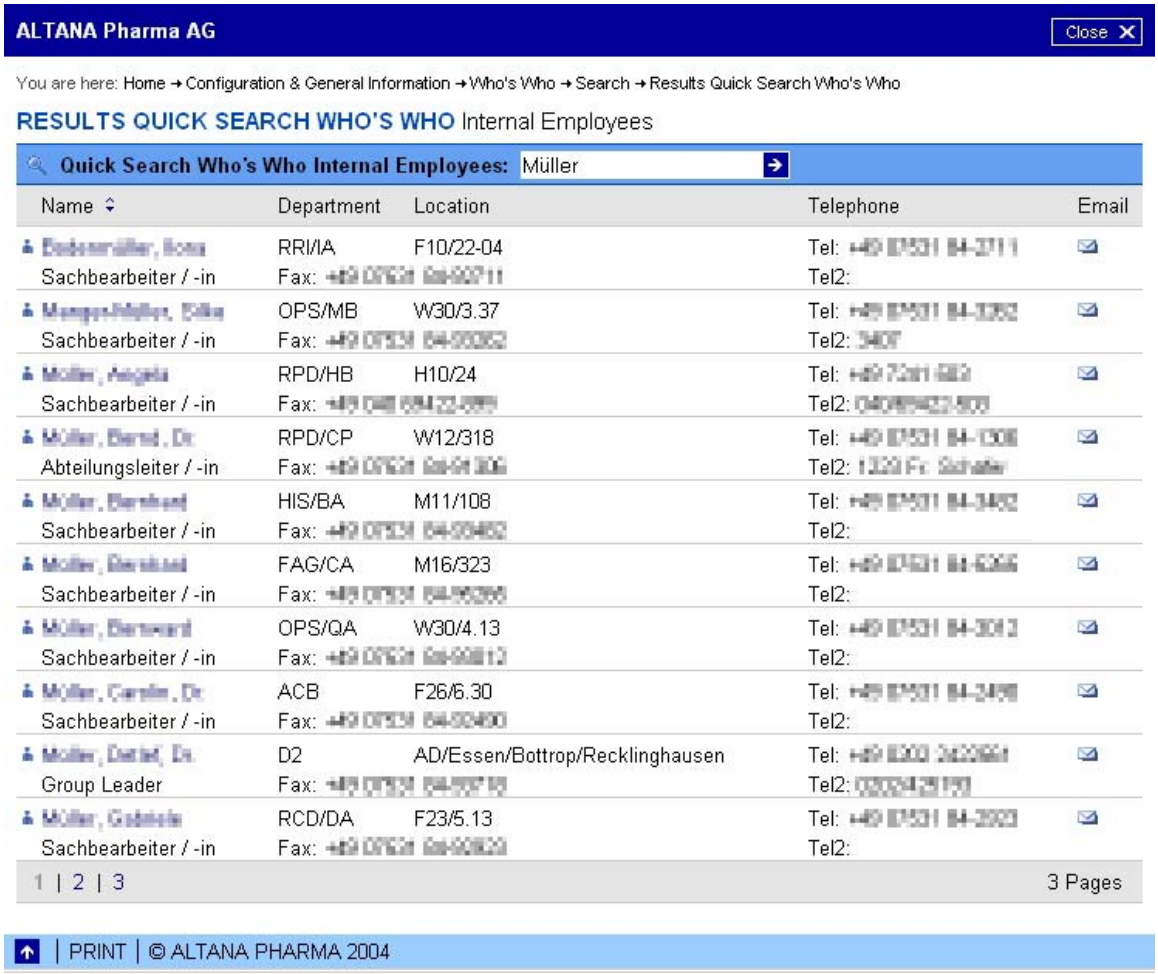
From the homepage, employees can easily read or search both industry and company-specific news.

As a pharmaceuticals company, ALTANA Pharma's success relies heavily on knowledge sharing. To that end, a document library lets employees easily upload, maintain, share, and retrieve any documents or guidelines.

Behind the scenes, enterprise content management software gives content owners an easy way to contribute and maintain content, and gives content editors an easy way to ensure content quality.

The intranet also offers users several new capabilities. Employees can search the entire site from a single search box available at the top of every intranet page. From the search results page, employees can also click a link to see similar pages. Each content section lets employees limit searches to that section. For all searches, employees can also restrict searches to a specific document type.

Another type of search, *Who's Who*, lets employees search for people by organizational and competence criteria. Results include multiple contact options, such as phone, fax, and email.



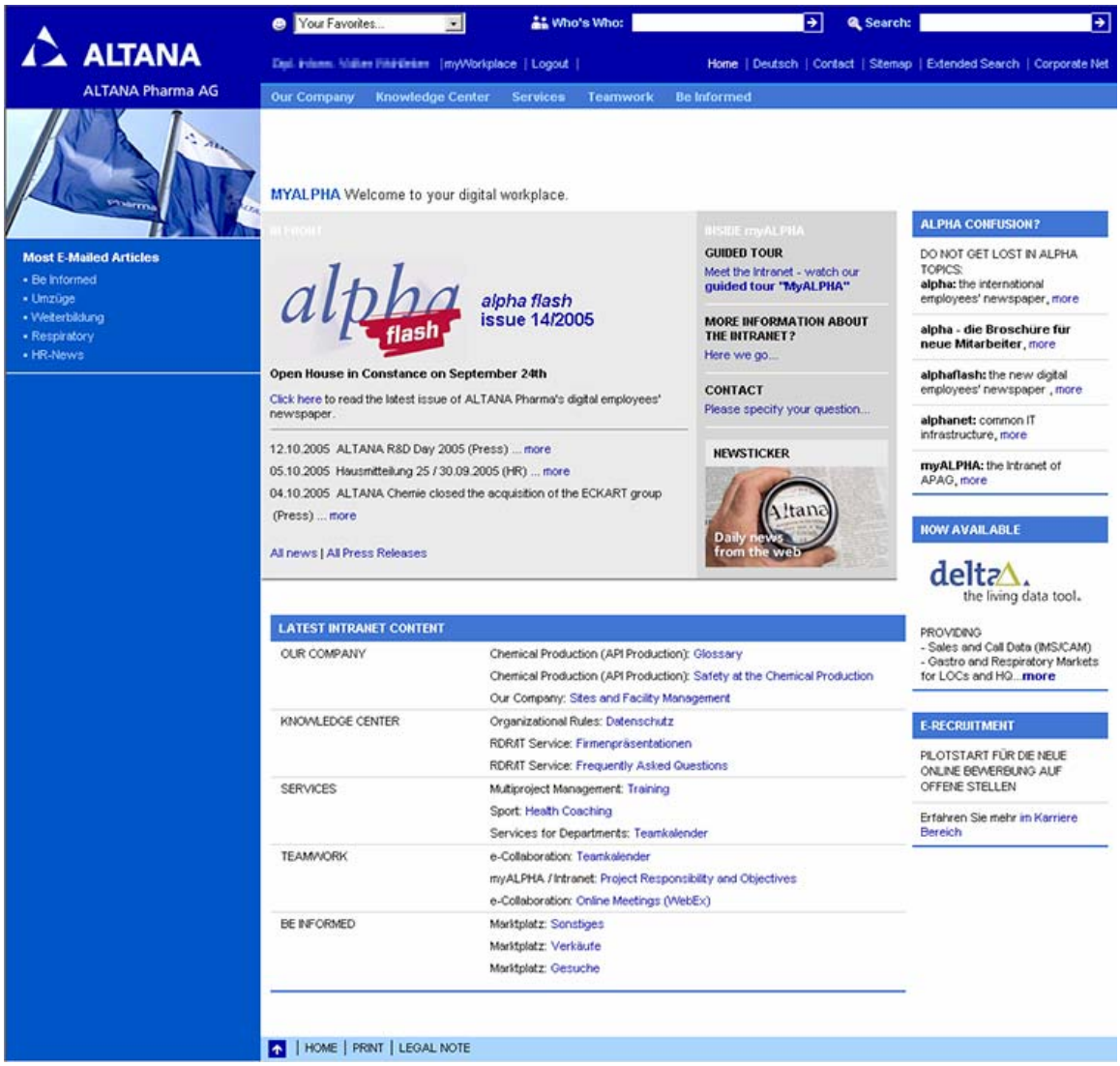
Pictured: Results from a *Who's Who* search include multiple contact options.

On each page, users have access to a variety of useful functions, including *Mail this page* and a list of the most-emailed pages. "Generating a printable version of a page is a very commonly used function," notes Pertek. These features help employees

promote content, and benefit from other employees' view of what's important on the site.

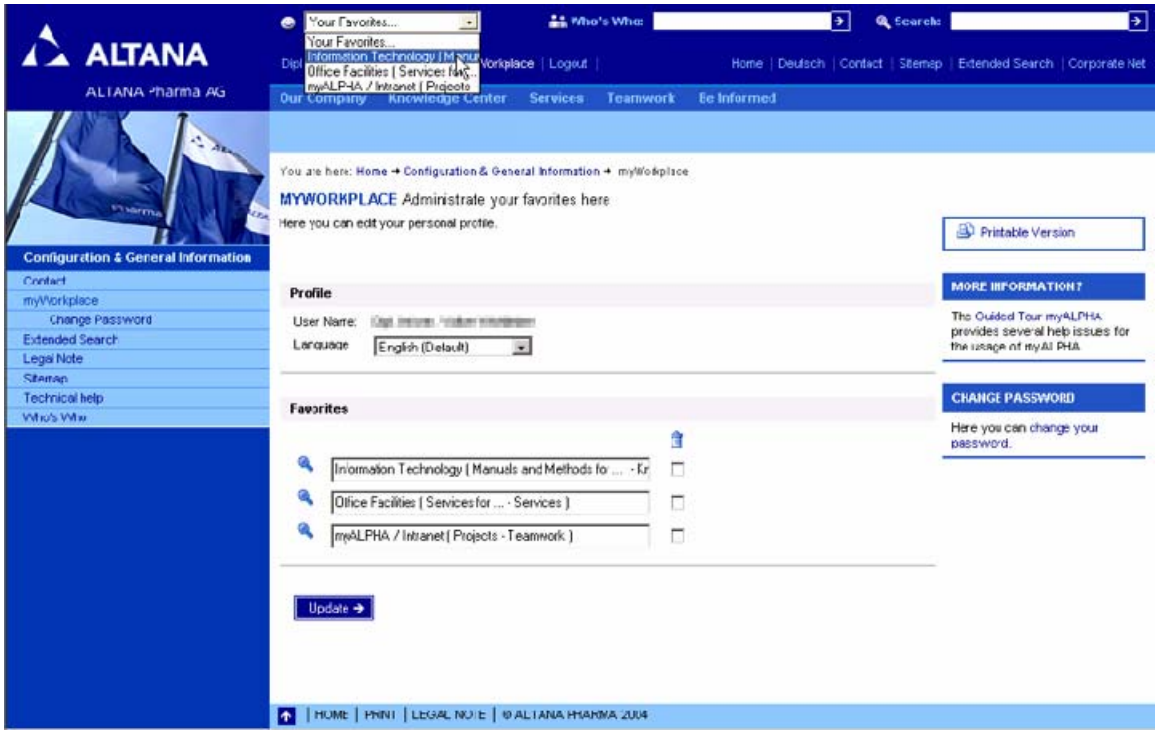
Pictured: *My Workplace* tools let employees easily share, print, or add pages to their lists of favorites.

To further alert users to new, potentially relevant information, the *Latest Intranet Content* page lists the most recent changes by section.



Pictured: This page gathers the most recent changes to each section, to help users quickly pinpoint new information of potential interest.

Users can customize the intranet via *My Workplace*, which lets them adjust language and "favorites" settings.



Pictured: *My Workplace* allows users to personalize the intranet through such things as adding or removing favorites, defining a preferred language, and changing passwords.

Another important intranet requirement was to promote collaboration through such things as team rooms and project places, which are organized around document libraries and offer employees closed user groups and dedicated document sharing. The process of implementing team-room technology is underway; not all collaboration features are currently available, and more user groups are being created.

Using the library function, however, a user can sort team room and project place contents by date, topic, or category. "From the start, the library functionality was developed to make content—documents and information—accessible by virtue of their individual properties and metadata, instead of by using predefined structures. This approach enables users to have multiple and different ways of accessing documents and information," says Thomas Link, namics designer and site architect.

Pictured: A document library. Users can sort content by date, topic, or category.

Pictured: Accessing a document in the document library.

USERS

ALTANA Pharma employs more than 8,200 people and has more than thirty subsidiaries and affiliates in Europe, North and Latin America, South Africa, Australia, and Asia.

USER TASKS

- Find people in the corporation, perhaps by competency
- Access intranet-based tools
- Read research information and product documentation
- Use project websites
- Read about company events, access corporate press releases, and read internal news
- Locate and use internal services such as travel management, reordering supplies, planning meetings, ordering catering, and accessing scientific information
- For new employees: learn to use the intranet
- Read industry news

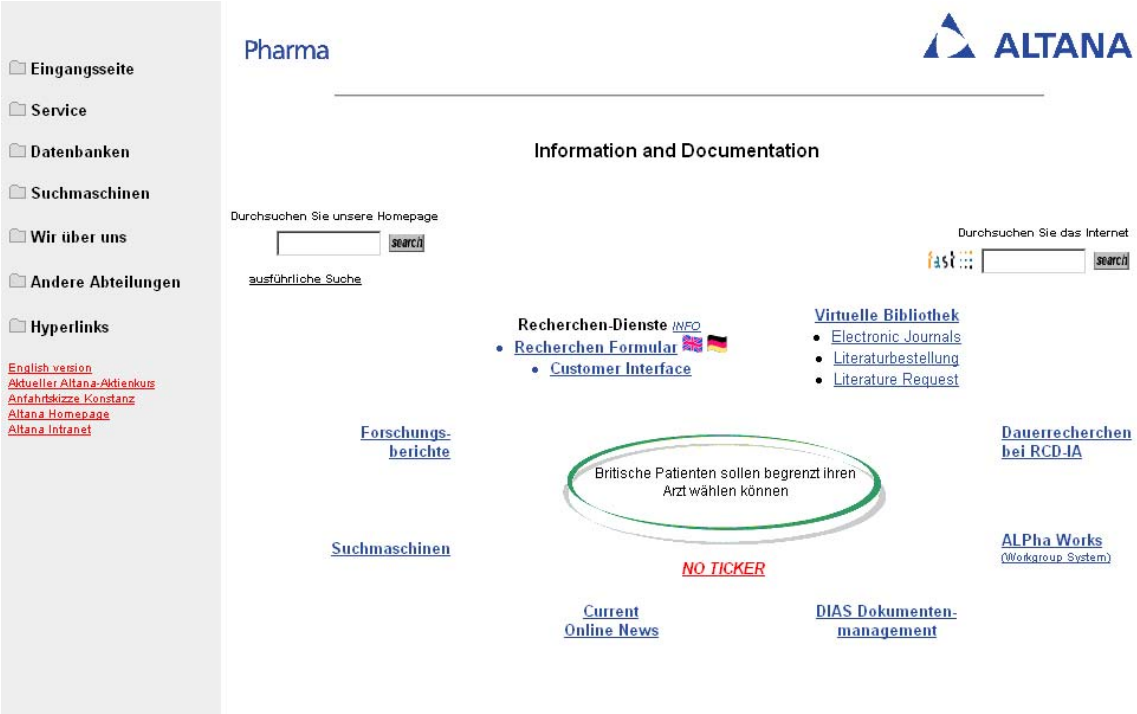
BACKGROUND

During the 1990s, multiple standalone intranets—built out of static HTML or located in Lotus Notes—began appearing around ALTANA Pharma, especially in the research departments. Soon, many different departments created their own intranets, focused on department-level document sharing.

Eventually, ALTANA had about fifteen different intranets and numerous different Lotus Notes environments. Nonetheless, much of the company's valuable information—documents, services, or scientific information—was largely inaccessible because it was hidden in multiple databases and on multiple departments' unconnected intranet pages. "Imagine a corporation that is based on science, that does not have the ability to search for knowledge," says Schopp. That was ALTANA Pharma's problem.

Each department's intranet also varied—sometimes radically—in its design, information architecture, and technology. Furthermore, no search tools bridged the different departmental intranets, and no processes were in place for information sharing. Thus, content and intranet applications on one department's intranet were created and maintained solely for that department. In short, the lack of a centralized approach to maintaining content and applications made for a lot of duplicated effort.

Eventually, a design team was formed to remedy the problem. "The intranet project was started because interviews with users and a content analysis of existing intranets revealed that finding any information in each of the isolated intranets was almost impossible," notes Schopp. "This is mainly because the information architecture was based on the organizational structure, and not on users' tasks and users' needs."



Pictured: The former intranet homepage for ALTANA Pharma's Corporate Libraries Services. Previously, each department maintained its own intranet, resulting in about fifteen different intranets and numerous Lotus Notes environments. Their design, information architecture, underlying technology, and content often differed dramatically.

DESIGN PROCESS AND USABILITY ACTIVITIES

For the new intranet, corporate communications led the charge. The corporate IT department also assisted, especially with content-related issues and technological enhancements.

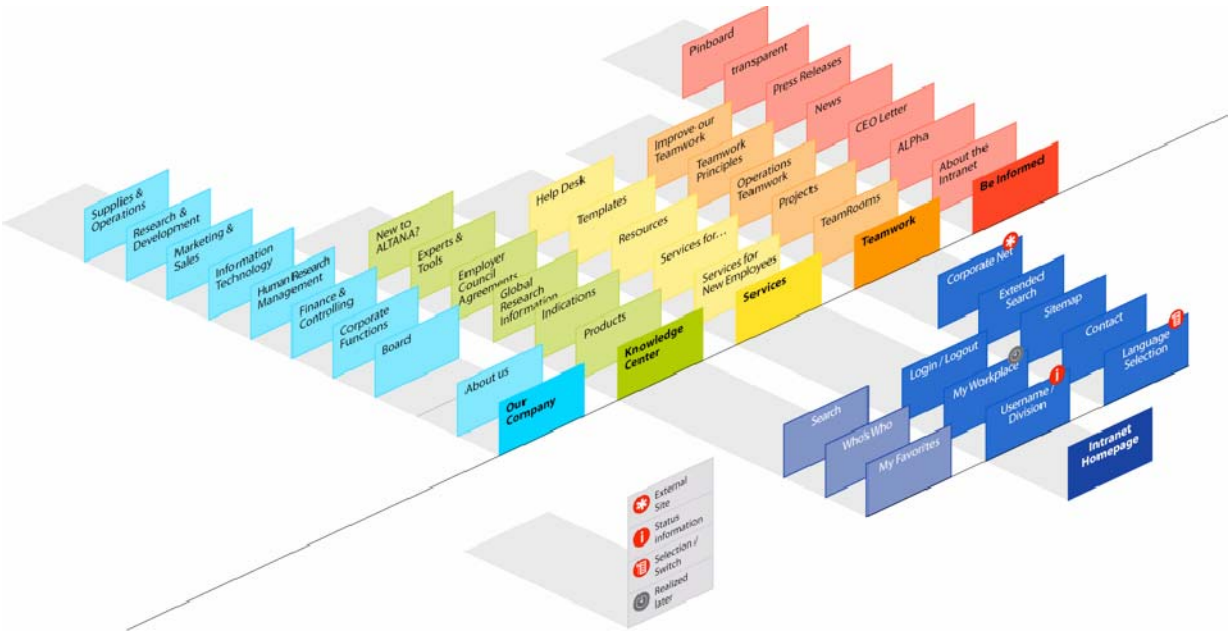
The main goals of the new intranet—which was technically not a redesign, since there was no existing, centralized intranet—were to consolidate the many existing, unstructured, and evolving ALTANA intranets based on Lotus Notes. "The main goal was to establish a homogenous corporate design, a single content management system, plus content templates, as well as a consistent information architecture and centralized search capabilities," says Schopp.

A design team was assembled with roughly equal numbers of namics and ALTANA employees, and included not only interface experts, but also people proficient in other disciplines, including usability.

Ultimately, the design team opted to migrate the most important Lotus Notes environments and the most important intranets. For the pilot stage, it aimed to bring at least 50% of the relevant and most-used content into the new intranet.

To help guide the design, the development team first conducted interviews with ALTANA employees. "With the interviews, we analyzed the user tasks, asking people about their daily business tasks and usage of one of the various intranets," says Link. "The interviews were held at the desk of each user, to investigate the actual behavior of people in their offices."

These interviews gave designers multiple ideas for creating an information architecture, which they honed in subsequent workshops with employees by using "a very basic type of open-group card sorting," says Link. "The goal of these card sorts was the definition and naming of the top-level information architecture, based on the mental models of users. It was an intense but essential phase to construct a usable information architecture."



Pictured: The initial version of the new ALTANA information architecture, subsequently honed by conducting numerous card-sorting workshops with users.

These interviews took the place of surveys. "Instead of surveys, we found the initial interviews—one-on-one—much more efficient to find out about users' thoughts, goals, and ways to accomplish tasks," says Link.

Knowing which variables to include in the information architecture was largely the result of a substantial content inventory. "Several days were spent auditing the existing content," says Link, though first "redundant and outdated information had to be eliminated." The namics team then created a classification of content types.

While building the information architecture, namics identified the new intranet's five main goals, which it then used to develop the site's main sections:

TRANSLATING GOALS TO INFORMATION ARCHITECTURE	
INTRANET GOAL	**RESULTING SECTION**
Present users with a transparent overview of the fast-growing organization's structure	*Our Company*
Provide access to the corporate knowledge base through a generic information architecture	*Knowledge Center*
Indicate relevant, location-specific internal services	*Services*
Support teamwork with collaboration technology	*Teamwork*
Communicate corporate values, plus current internal and external news	*Be Informed*

With the information architecture in hand, the design team began creating wireframes of pages and immediately "started to carry out expert reviews to refine and improve the interface," says Link.

Personas

As a result of interviews with ALTANA employees, namics opted to create personas to help the whole intranet design team have "an idea of the people in front of the screen," says Link.

ALTANA Pharma Intranet

Anwenderprofil **Mitarbeiterin Produktion**

Ursula Knödler

Alter	Breites Spektrum > 30
Geschlecht	Überwiegend weiblich
Herkunft	Nicht akademisch, ggf. höherer Ausländerantel
Arbeitsumfeld	Keinen eigenen Computer, sondern zentrale Workstations, PC kein tägliches Arbeitsmittel
Sonstiges	Internet- und Sprach-Kenntnisse begrenzt
Informationsbedürfnis	Informationen aus dem Betriebsrat, Gehalt & Soziales, Mitarbeiter-Vorteile, Freizeitangebote

ALTANA Pharma Intranet

Anwenderprofil **Forscher**

Dr. Wolfgang Klee

Alter	40
Geschlecht	Männlich, zunehmend auch Frauen
Herkunft	Universität, Promotion
Arbeitsumfeld	80% am PC, Anwendung spezieller Software
Sonstiges	Englisch-Kenntnisse immer vorhanden
Informationsbedürfnis	Informationen zu Produkten und Projekten, Datenbankanbindungen über den Infopoint von RDR/IT

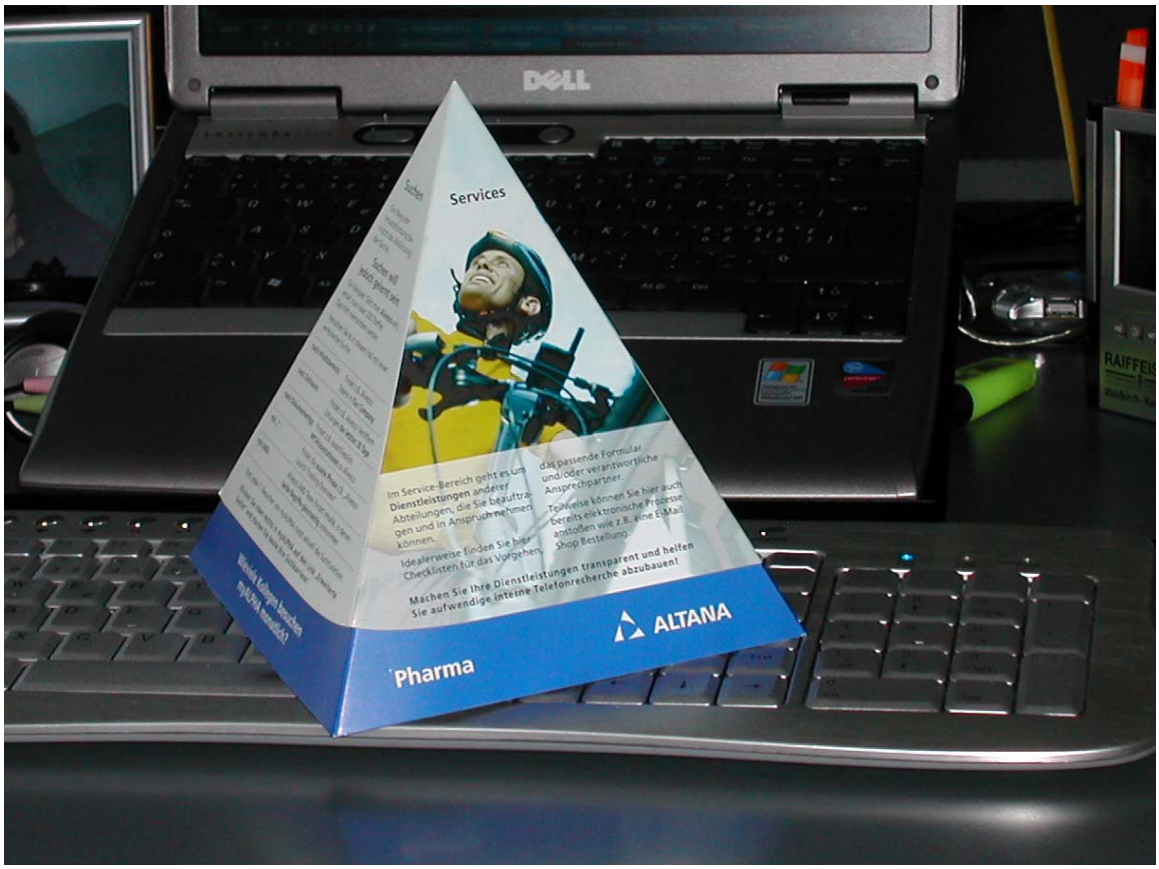
Pictured: The namics team created personas to help guide intranet designers.

When crafting personas, the design team was surprised to learn that not every employee has their own computer. "We found that a large number of employees share—or even have no access to—a computer," notes Link. One eventual result of this finding: ALTANA Pharma began using existing intranet-connected kiosks in many locations.

As designers completed new sections, they began unveiling them, but in stages. "The intranet was launched with a pilot range of content focused on human resources and facilities management," says Link. "Step by step, other content sections were added and new departments were required to use the intranet infrastructure."

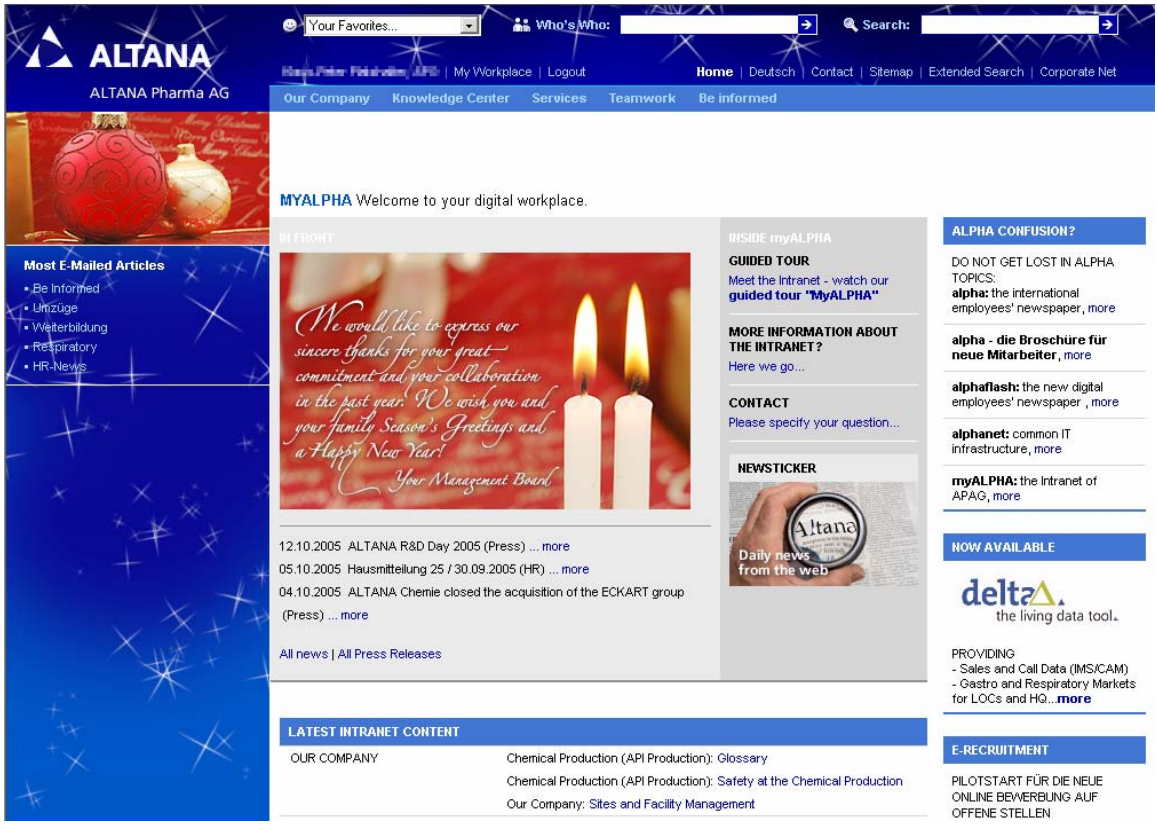
To promote intranet uptake, the corporate communication department launched a variety of related promotions, including internal advertisements, intranet games and quizzes, and hosted, informational events.

To promote the intranet's content areas and new search functionality, the ALTANA Pharma project team worked with the namics team to create a fold-up pyramid to replace the existing intranet informational flyer. Simply put, the pyramid is something users can keep around that reminds them to use the intranet. All four sides of the pyramid explain the intranet's main content areas, including pointers on intranet searching.

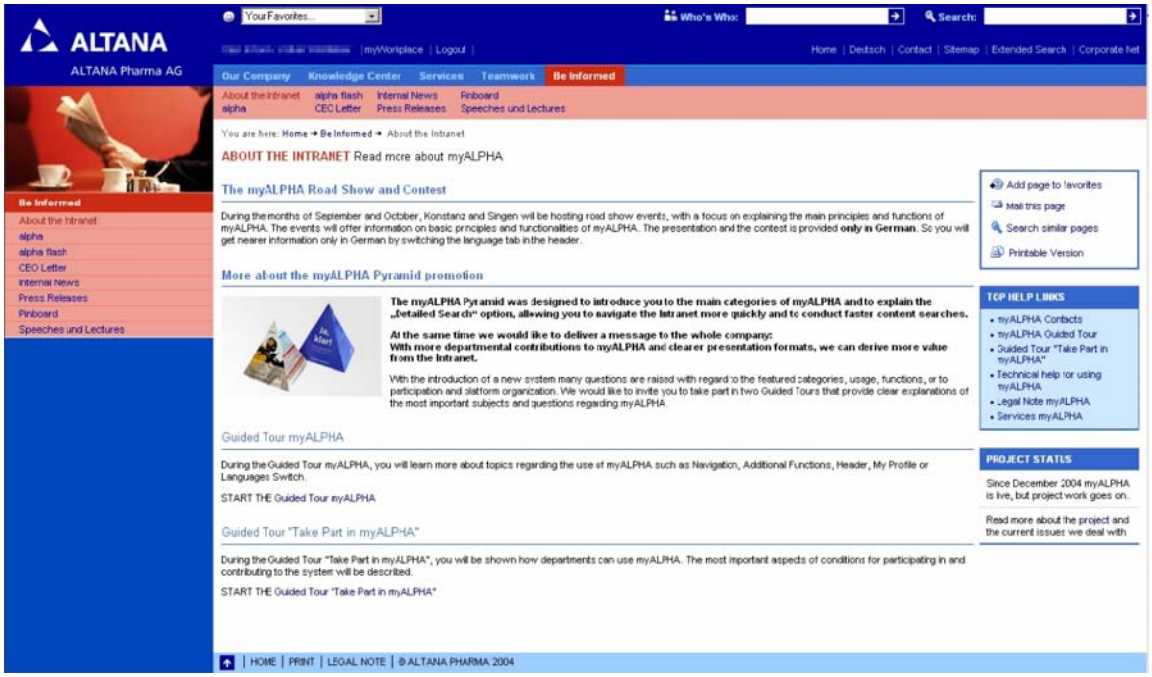


Pictured: To help promote the intranet and direct users to its main content areas and search capabilities, ALTANA gives users this informational pyramid.

Beyond releasing the pyramid, ALTANA Pharma also organized informational events with question and answer sessions at several company branches. All intranet users were invited to pose specific questions or relay intranet difficulties to ALTANA Pharma's intranet project leader, Nicola Winterstein, as well as to Bernd Schopp of namics.



Pictured: A seasonal intranet design.



Pictured: ALTANA launched and continues to run internal marketing campaigns to promote the intranet.

Thanks to the radical new design, however, user acceptance took longer than expected. Employees with more tenure had particular difficulty, while, interestingly, "new employees seem to have fewer difficulties getting familiar with the new intranet," says Schopp.

TIMELINE

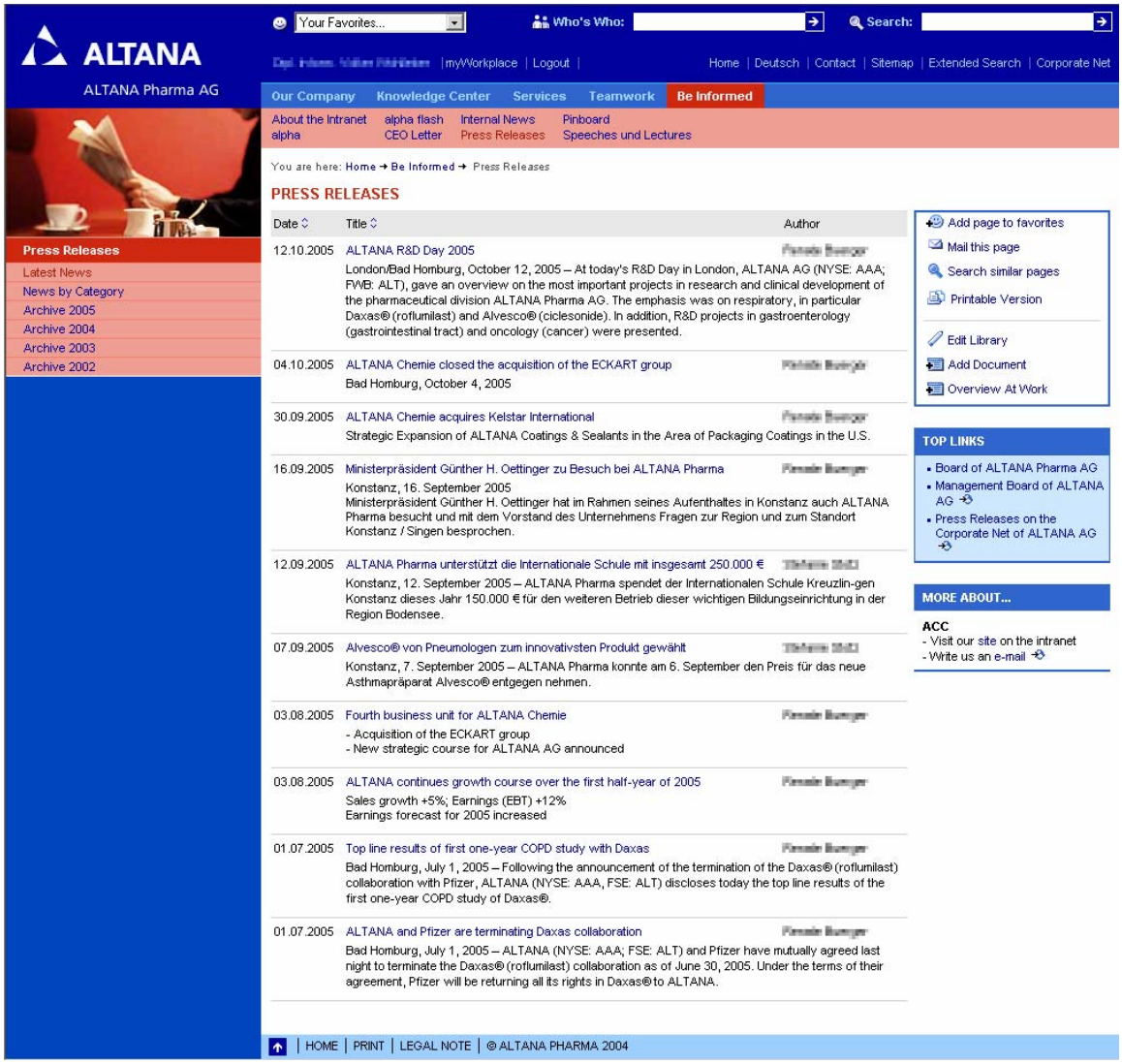
- 1990s: Multiple single-system intranets established, largely based on Lotus Notes or built out of static HTML. Most intranets were department-based; there were numerous Lotus Notes environments and approximately fifteen standalone intranets.
- March 2003: Efforts began to create a single corporate intranet, including plans to migrate content to the new intranet from the most important intranets and Lotus Notes environments.
- March–July 2003: Conducted initial user interviews and evaluated content.
- September–October 2003: Evaluated intranet technology.
- September–December 2003: Designed intranet and created a design style guide for content contributors.
- February–October 2004: Implemented intranet.
- August–December 2004: Launched pilot content project.
- December 2004: Launched intranet.

RESULTS

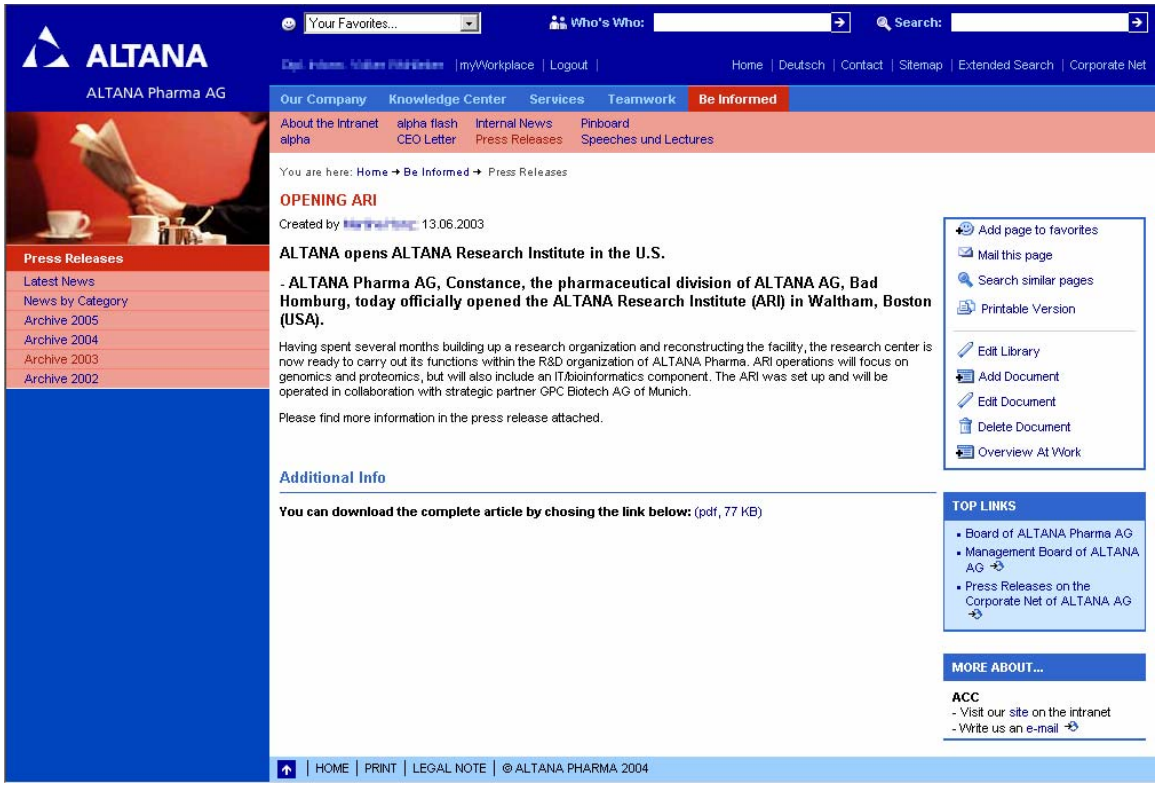
From start to finish, the intranet design took about a year and a half. Today, ALTANA Pharma employees have a consistently designed, centralized intranet that gives them needed access to a wide variety of tools, plus a single location for accessing important corporate and HR information, ordering supplies, and more.

"Lots of information is now available for every user," says Pertek, "Whereas in the former system, much of the information had been available for only those who knew exactly where to look for it."

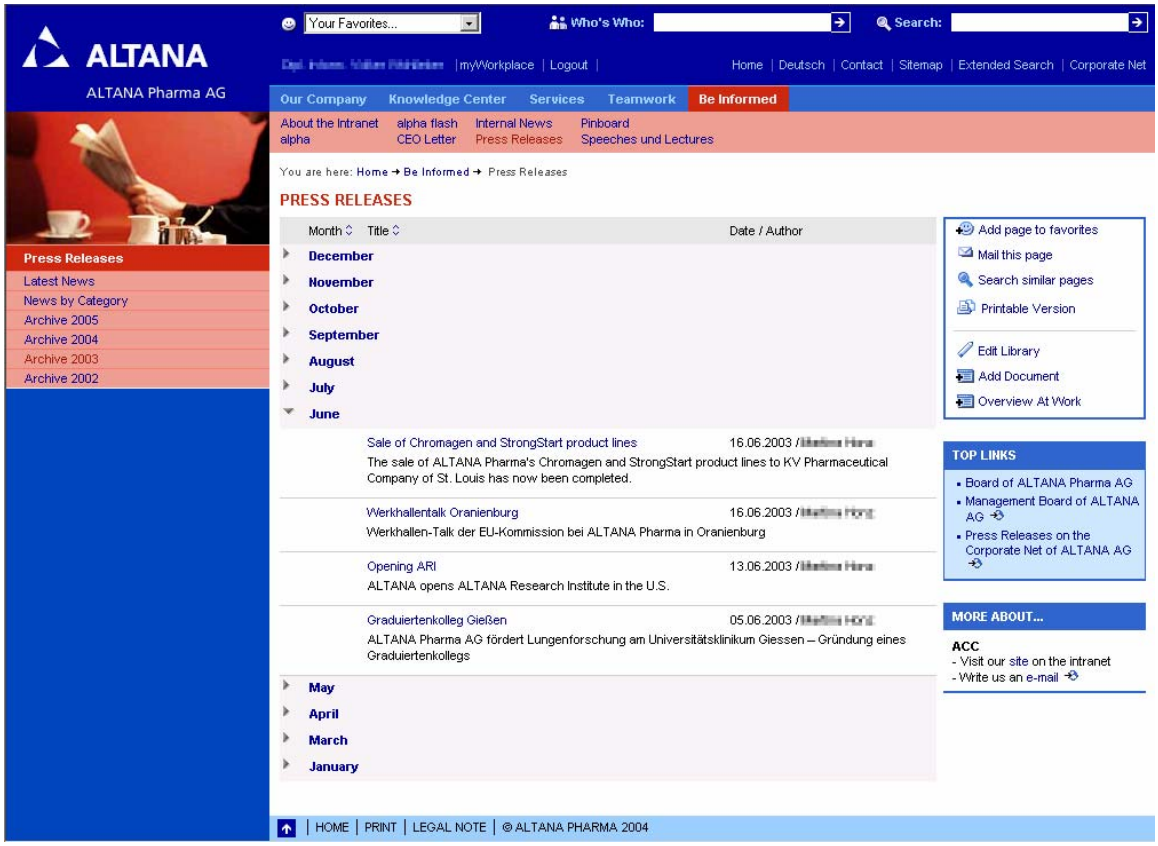
One example of this is the *Be Informed* section, which delivers corporate, external, internal, and other types of news to users in one location. Here, "different departments are able to publish their news, or general media or press information. The archive of these articles can be accessed by category or in chronicle order—sorted monthly," added Schopp.



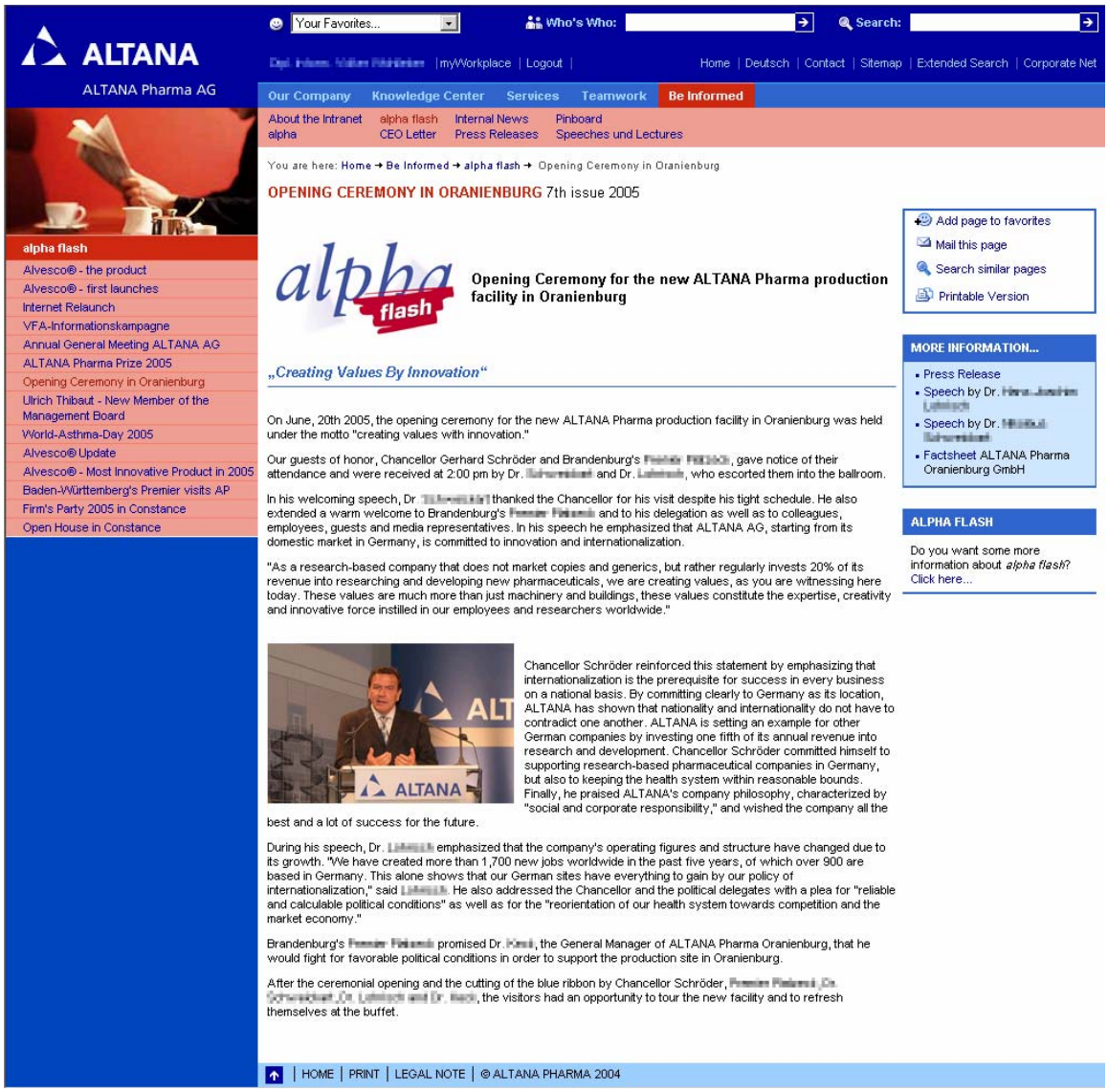
Pictured: From the *Be Informed* section, employees can easily access this ALTANA press release page.



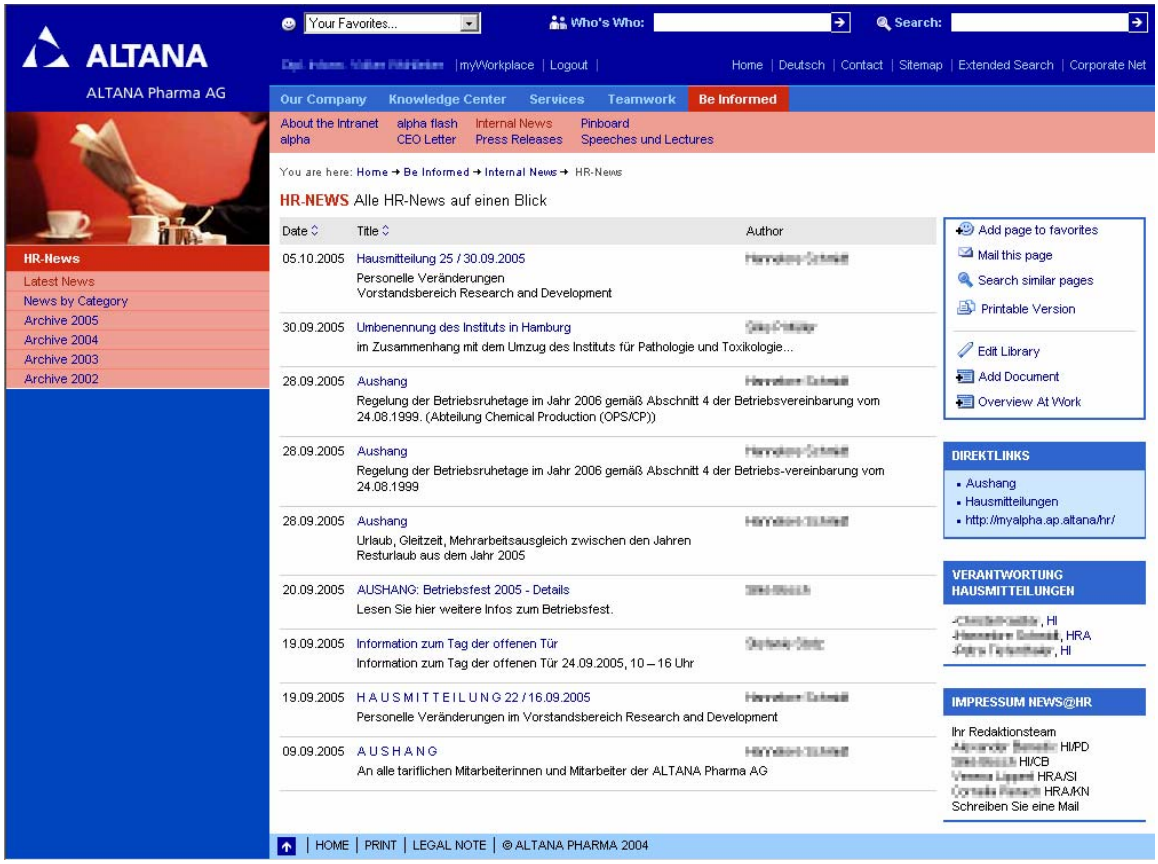
Pictured: A specific ALTANA press release.



Pictured: Employees can sort ALTANA press releases by date



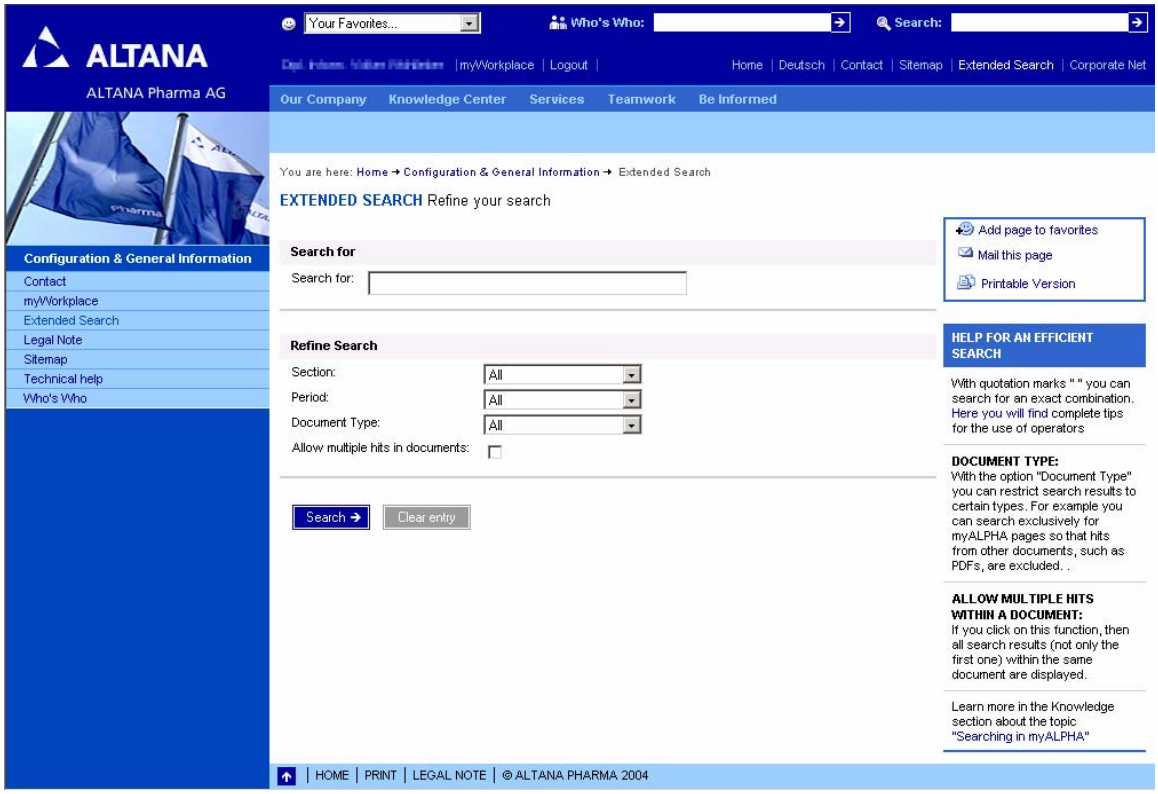
Pictured: News about an opening ceremony for a new ALTANA Pharma production plant. A variety of ALTANA Pharma departments use *Be Informed* to share information about their own efforts.



Pictured: *Be Informed* also gives users access to the HR news library.

Pictured: Users can browse the HR news library archive by month.

On the new site, search capabilities have markedly improved, thanks to brand new search technology and content-writing guidelines that include tips for creating search-engine-friendly text. At the same time, ALTANA Pharma is trying to encourage content authors to think of content not just from an author's perspective, but also from an employee's viewpoint, and how an employee might search for that content.



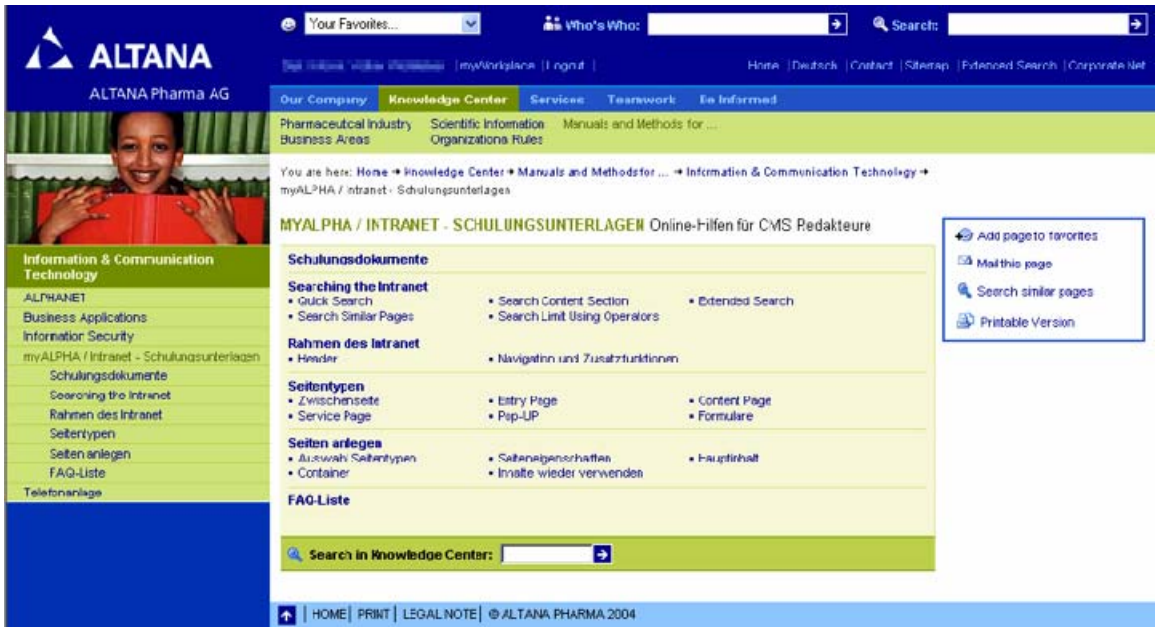
Pictured: The extended search tool. The new intranet provides employees with a single search tool able to return site-wide results.

Pictured: Results from an extended search.

The new, task-focused information architecture makes it easy for employees to find what they're looking for, and is reinforced by color schemes for different sections and

different types of navigation. "Since the intranet was filled with a tremendous amount of unstructured content, the navigation design needs to provide different navigation methods," notes Schopp. For example, horizontal navigation (top of page) provides the first two entry-level points into the site. Vertical navigation (left side of page) shows the current page, plus the parent and all child pages. For easy skipping, the in-page navigation displays the subsequent two page levels. Finally, a breadcrumb path shows the entire path—all clickable—down to the current page.

To help employees acclimate to the new intranet, the design team created a CMS instruction manual.

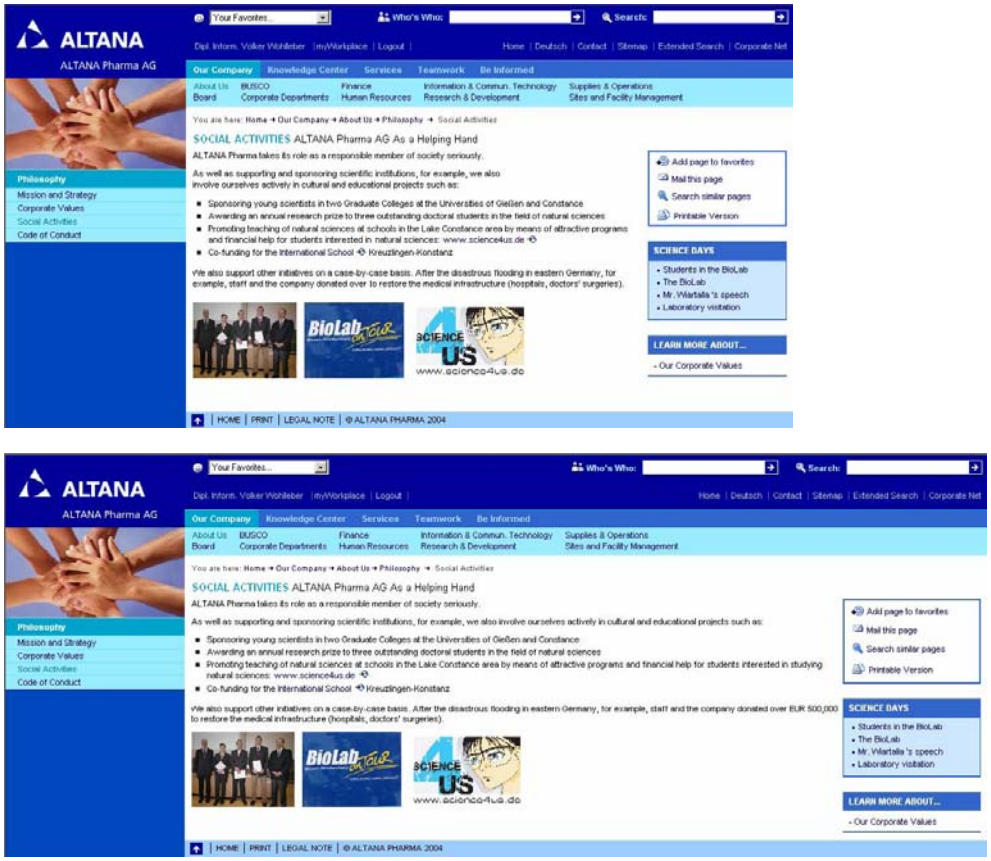


Pictured: Employees have easy access to information about how to use the CMS.

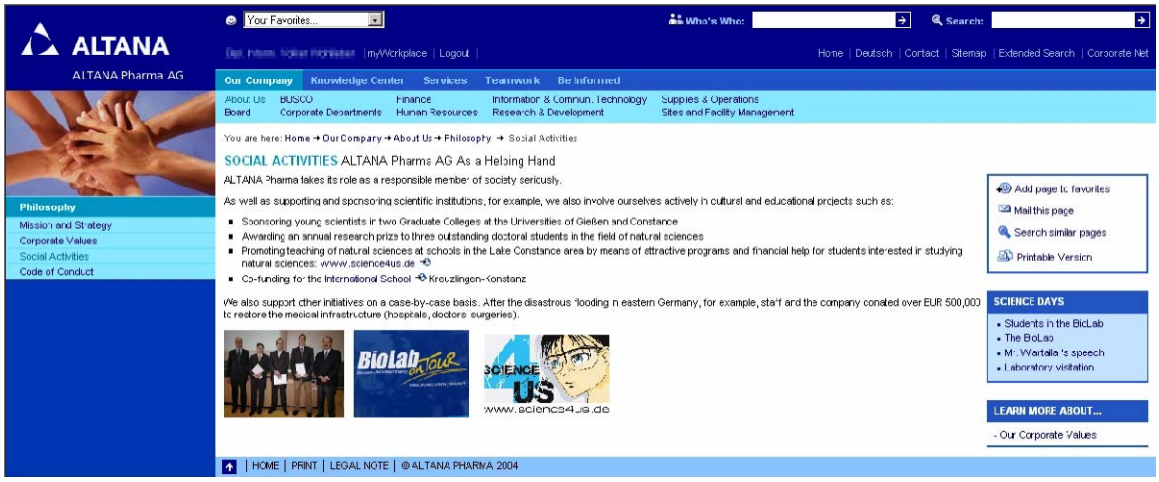
One especially interesting new feature of the intranet is the "liquid layout," which lets users resize any intranet screen to their liking. "The fluid content area enables the clean display of tables and lists, and—on reasonable screen sizes—there will never be annoying horizontal scrolling," says Link. "Users can also adjust their preferred font size without hassle, and use multiple windows."

To create the liquid layout feature, the designers used Cascading Style Sheets.

While users can choose any page size they like, there are some real-world limits. For example, if users size pages too small, "the readability of some pages is far from being optimal," he says. Optimally resized pages would have about 60 characters per line.



Pictured: The "liquid layout" feature of the ALTANA intranet, which lets users resize pages to any size they want, without displaying a horizontal scroll bar. This shows the page set to a width of 1024 pixels.



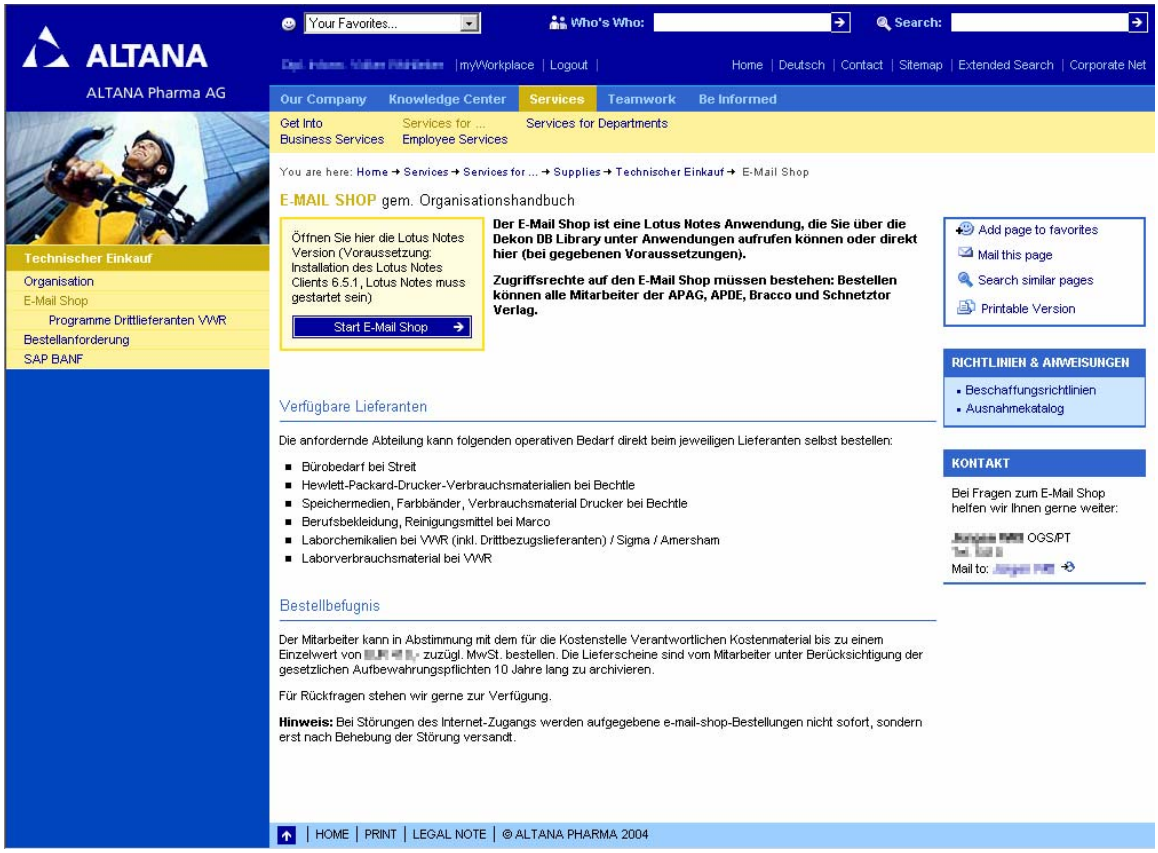
Pictured: The "liquid layout" of a page set at a width of 1280 pixels.

With the new intranet now live, a team of four ALTANA Pharma employees maintains it, assisted by more than 100 trained content editors. For the future, ALTANA

Pharma plans to continue to move applications onto the intranet, add new department content, and implement single sign-on.

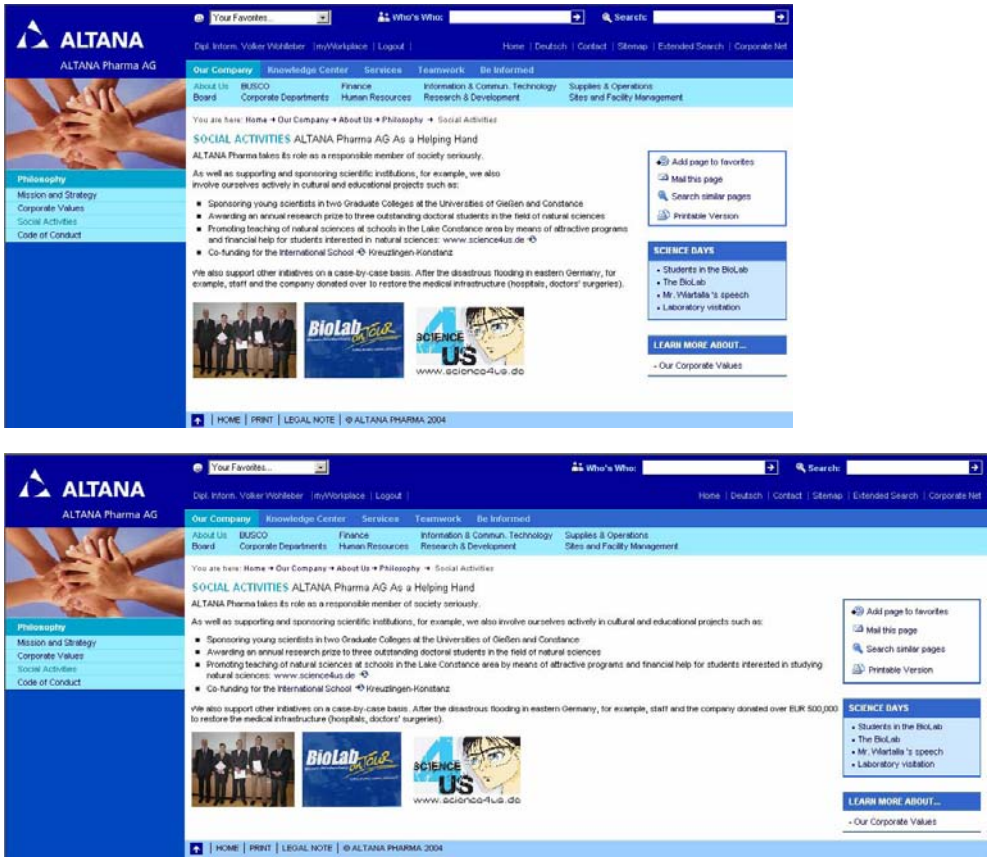
For applications that don't yet reside completely on the intranet, the design team manages to maintain a relatively consistent user experience. For example, take the corporate-wide, intranet-based e-catalog and e-shopping cart employees use to order supplies. While the start of the shopping experience resides in the CMS and is thus part of the intranet, a link from the page leads to the actual shopping cart, which is an external application. Even so, keeping the catalog's start page—which describes what the shopping cart does and where a relevant link leads—on the intranet means that the search engine indexes the content, making it easier for employees to find the shopping engine.

The intranet team uses the same strategy—creating a start page with a rich text description of the application the page links to—whenever an intranet page will pass users to non-intranet applications.



Pictured: Using the *E-Mail Shop*, employees can order needed office supplies. This page resides in the CMS, though the link leads to an external application. Keeping the start page on the intranet means the search engine will index the content, making it easier for employees to find it.

The design team is also continuing to implement teamwork functionality. Eventually, "people will be able to organize themselves and work together in virtual team rooms," says Schopp. So far, the intranet doesn't restrict access to team areas, though that is a future goal.



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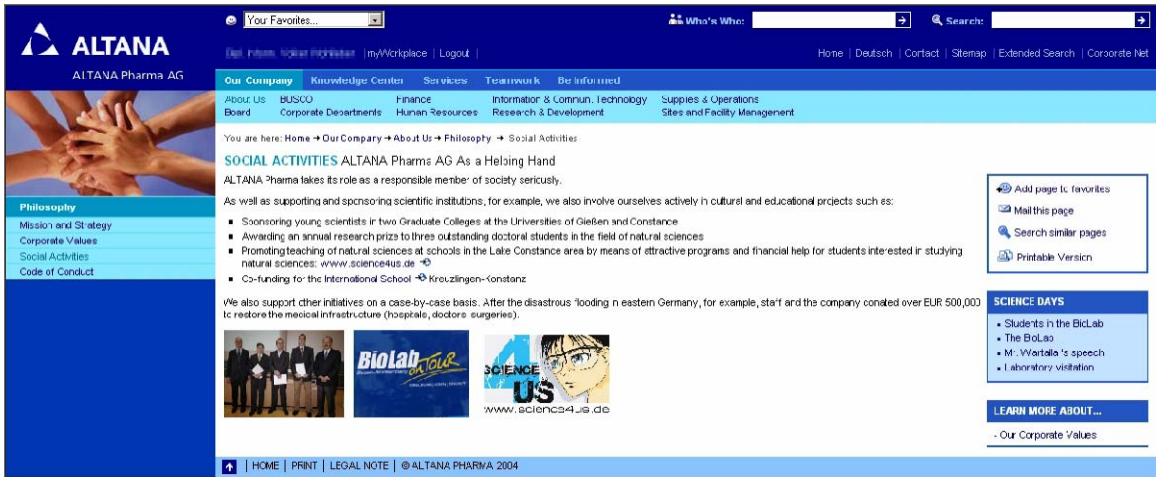

Pictured: The "liquid layout" of a page set at a width of 1280 pixels.

With the new intranet now live, a team of four ALTANA Pharma employees maintains it, assisted by more than 100 trained content editors. For the future, ALTANA

National Geographic Society

Using the intranet:
The National Geographic Society is one of the world's largest nonprofit scientific and educational organizations. Founded in 1888 to "increase and diffuse geographic knowledge," the Society works to inspire people to care about the planet.

National Geographic reaches more than 350 million people worldwide each month through its official journal, *National Geographic*, and four other magazines; National Geographic Channel; television documentaries; radio programs; films; books; videos and DVDs; maps; and interactive media.

National Geographic has funded more than 8,000 scientific research projects and supports an education program combating geographic illiteracy.

Headquarters:
Washington, D.C. (US)

Number of employees the intranet supports:
1,500

Sales: Nonprofit organization

Design and development team:
In-house and Barbara Morris, contract graphic designer/consultant

Members:

Libraries & Information Services: Karen Huffman, manager of knowledge initiatives, intranet application developer, Webmaster, and current chair of intranet team; Barbara Ferry, director of business and editorial research, and chair of the intranet team during redesign/migration; Susan Fifer Canby, vice president, and first chair of the intranet team; Suzan Eaton

Communications: Cathy Healy, (former) intranet editor; Karen Gilmour, intranet editor; Barbara Moffet, communications director

Information Systems & Technology: George Hubbs, director; Kevin Hiscock, senior architect; Robert Harris, senior application developer; Kathy Escamilla; Tom Puckett

NG Digital Media — Archive Research: Gary Carter, curator, National Geographic Digital Media

SUMMARY

For an intranet, taking cues from the organization's existing retail products can save time, boost focus, and help foster an incredible user experience. Witness the National Geographic Society's corporate intranet, NG Insider, whose clarity and design echoes the Society's well-known flagship, *National Geographic* magazine.

National Geographic knows how to capture a reader's attention by using engaging, well-written articles, and most of all, by employing spectacular photography. The articles on NG Insider also share these traits. Indeed, look no further than the intranet's captivating imagery and scintillating articles, and you'll find it.

News is an especial standout. On many intranets, all news is lumped into one area, co-mingling industry news, corporate communications, and intranet announcements. This approach requires users to decipher news story origins, perspectives, and basically to think more than they should have to. On NG Insider, however, designers make it easy for users to quickly know exactly what type of article they're being offered: at the top of each news page, a bold header indicates the feature type — news, perspective, notice, memo, and so on. This large, bold title orients users before they begin reading the story, as does an optional summary accompanying some articles. The articles also display mandatory items, such as the date written and author's name. Content itself is well written and concise, as are image captions. On that note, caption-writing is, relatively speaking, a more difficult art than news writing. However, taking extra editorial time to ensure that an intranet has high-quality captions is a good time investment for any intranet that relies on images.

NATIONAL GEOGRAPHIC INSIDER

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National Geographic News & Reports

Friday, September 29, 2006

Editor's Picks:

Life with the Internet

Internet trends and demographics are among the topics of a presentation today by Lee Rainie, director of the Pew Internet & American Life Project. Raine also will address how lives are being changed by the Internet and who's left out of the online revolution. His talk will be at 10 a.m. in the 9th Floor Conference Room of the 17th Street Building. Details

NGM's Grand Central Station exhibit: Opening tomorrow, large format photos and two WildCams. Photo by Michael Melford

Immigrants and Refugees: A special presenatation today from 12:30 - 2 p.m. in the north end of the cafeteria. Photo by Jodi Cobb

News Coffee break on world danger spots (09/29/2006)

NG in the News All Roads Festival coverage continues; Dallas Arboretum plants Wollemi pine. (09/29/2006)

BIR World Resources Institute and MTV partner on Global Warming Promo; Video stories transforming newspaper websites and reporting; Yahoo aquires Jumpcut, an online video editing site. (09/29/2006)

Podcast Listen up! Weekly news podcast now available. Wiley Visualizing textbooks launched with NG; Podcast walking tour promotes Discovery HD Atlas; Hysteria now called "conversion disorder" (09/29/2006)

News New NG book reveals the back lines of war Examines lives of women in 6 war-torn countries (09/14/2006)

Recent News

News BBC features NGM's Brazil editor in chief Matthew Shirts interviewed on life of an expatriate (09/28/2006)

Notice Staff invited to enter drawing for gala NG to have table at Lombardi Cancer Center event (09/28/2006)

BIR Missions Missouri science museums offer stem cell exhibits; Motorola supports the Chicago Science Exhibition; New Smithsonian exhibit reveals Earth's appearance from space (09/28/2006)

NG in the News Webcam of Australia's Kakadu National Park developed in conjuction with NGM; Wiley and NGS launch image-driven textbook series; NG titles available for Sony eBook reader (09/28/2006)

BIR Discovery launches downloadable walking tour of NYC's Chinatown; Yahoo and MySpace lead the way in streaming video; People prefer PCs to MP3 players for listening to podcasts (09/28/2006)

Perspective StyleMaven: One singular sensation (09/28/2006)

BIR Online ads climbed 37% to a new record--nearly 8 billion; Text messaging brings in a new revenue stream for TV; Pluggd lets users search podcasts (09/27/2006)

(Read All...)

Washington, DC

Get the 10 day forecast

60°F
Partly Cloudy
Feels Like:60°F
Humidity: 62%
Wind: NW at 18 mph

Enter city/zip GO!

The Weather Channel
weather.com

Airport Delays
Sporting Events
Pollen Reports

Download Desktop Weather

CNN Top Stories XML

Massive search for cop killer
Sep 29, 2006 9:15 AM Source: CNN.com
The sheriff said Friday he would "put in jail" anyone who helps an unidentified man who is the focus..

Report: Abramoff had 485 White House contacts
Sep 29, 2006 8:45 AM Source: CNN.com
Read full story for latest details.

Robert Downey Jr.: I am 'Iron Man'
Sep 29, 2006 8:36 AM Source: CNN.com
Read full story for latest details.

Hussein trial judge relative shot dead
Sep 29, 2006 8:32 AM Source: CNN.com
Police say the brother-in-law and nephew of the new judge in Saddam Hussein's genocide trial have be..

more...

Opportunities @ NG More

TV NGCUS Oct. 2-8: The Eye of the Leopard 2 hr. premiere on Oct. 8

Event All Roads Film Festival underway Updates on NG All Roads Blog

Learning October's UPS Training Classes

TV NGCUS tune in: "Ultimate Cat" tonight and NG "Most Amazing Moments" on Friday

Lecture Hold the Date: Thurs., Oct. 5 at 10am Speaker from Pew Internet & American Life at HQ

Job Postings
Menus
Perks
Submit Calendar Item

Photo of the Day

ENLARGE

Communications

Press Release Encyclopedia of Animals, a richly illustrated and detailed reference for children

Press Release Dog Whisperer moves to Monday eve with new canines to cure

Press Release Actor Martin Sheen compiles music mix for NG's World Music Web site

Press Release Traveler announces award for excellence in the travel industry

Press Release Books' Eyewitness to the Civil War: compellling personal accounts revealed in diaries, journals and letters

Press Room
PR Boilerplates

News Feeds Go to LIS
Staff News Read All
Classifieds Read All

News & Perspective | Intelligence Reports | Search Archives

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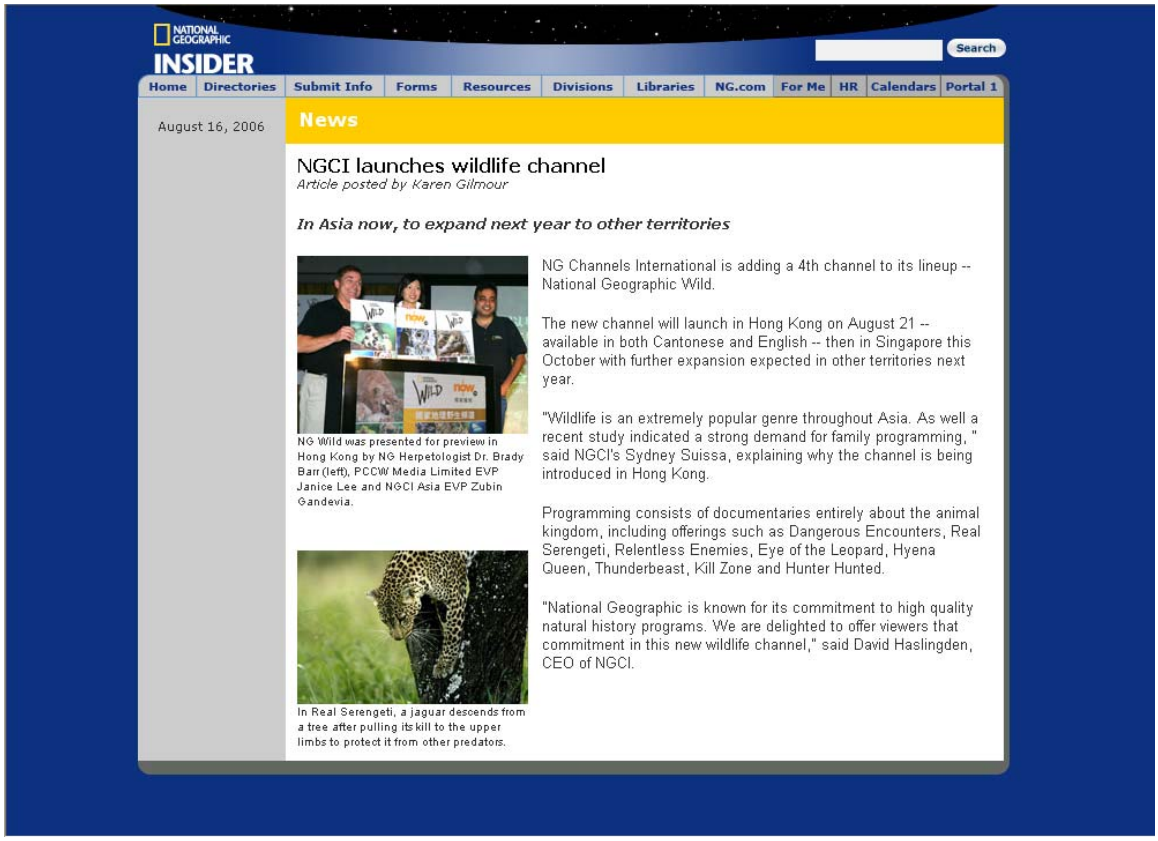
Pictured: Homepage of NG Insider, National Geographic's corporate intranet. The intranet is branded as NG Insider via the National Geographic logo in the banner beneath a star-filled sky. The staff recognizes this sky because outside the NGS Cafeteria is a ceiling with twinkling stars that people often meet under; it represents the night sky in 1888 when the Geographic was founded. The logo thus mirrors the place for staff to meet each other "under the stars" within the intranet.



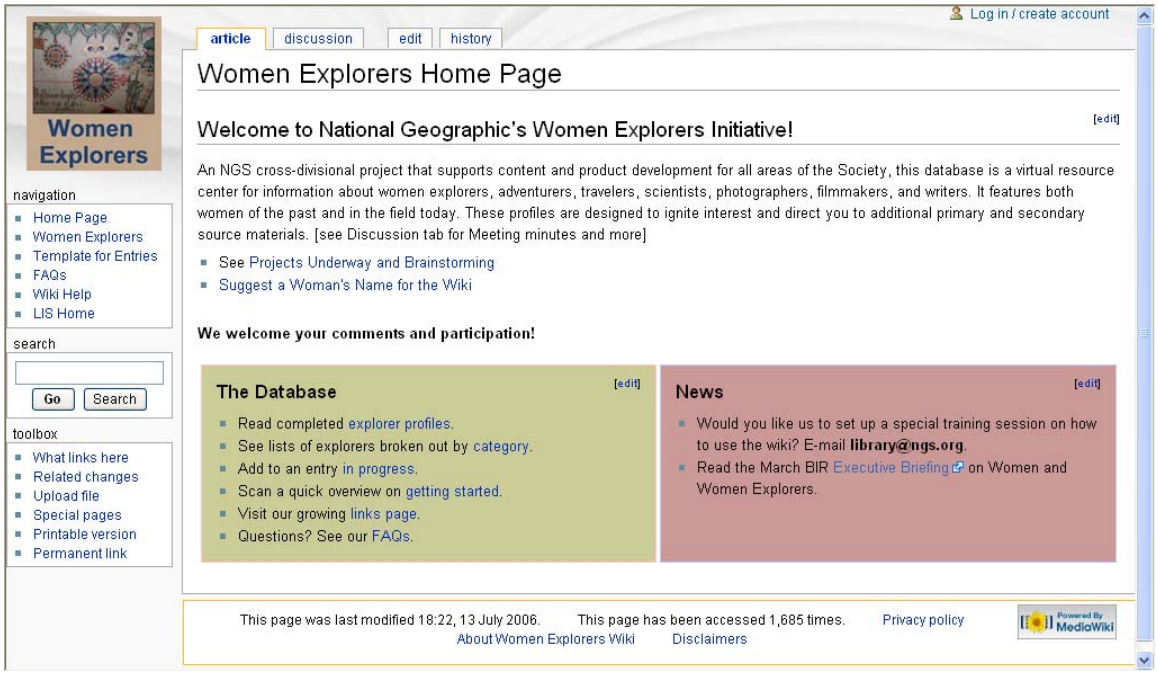
Pictured: A sample news article, which includes concise text and high-quality, engaging images. Note that the header indicates story type, while the left sidebar automatically displays the date posted. Articles include the title, author's name (automatically added), an option for a summary note, and a region for additional content, images, and links.

In addition to reading corporate news, NG Insider lets employees communicate a surfeit of additional information via division and team sites, staff news, and classified areas, as well as through a series of wikis that let employees add or edit whatever they want. NG Insider does put a clamp on the potential chaos of this organic approach by requiring employees to create a username and log in before contributing to wikis. "Social contracts" also prevail: each wiki's organizer sets or maintains rules or guidelines, including page-naming conventions and how to add content to keep the wiki relevant. This helps keep wikis consistent.

An example is the *Women Explorers* wiki, a research portal with 20 contributors, plus academic interns, from various National Geographic divisions. The wiki's welcome page contains especially useful information for anyone interested in browsing or contributing to the wiki. The page clearly states, at the top, the wiki's purpose; it also lets users create an account, find an overview on how to use the wiki's

information database, and e-mail a request for a wiki training session. These items communicate important information for users — especially new users.

A wiki's clarity pays off in numerous ways. For example, when users or content contributors feel confident about how to use an interface and know that their contribution matches a wiki's mission, they will likely be "good wiki citizens," adding content — insights — from which everyone can benefit. This also helps to keep wikis fresh, interesting, and relevant.



Pictured: The *Women Explorers* wiki welcome page explains to users the wiki's purpose and how to get help in reading and contributing to it.

Once users surf past the wiki's welcome page, they can read about women explorers, edit existing information, or add additional women explorers to the database. Currently, the database accessed by the wiki includes entries on more than 250 women, most of whom were somehow related to National Geographic Society, including Louise Leakey, Eugenie Clark, and Jane Goodall. At the top of the page, a note encourages readers to add more information, while the alphabetical list of all entries facilitates easy browsing.

Log in / create account

category | discussion | edit | history

Women Explorers

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Category:Women Explorers

Thanks for your interest! Entries here are considered complete, though you may always add additional information to enrich an entry.

Please contribute by adding to an entry in progress.

Articles in category "Women Explorers"

There are 113 articles in this category.

A

- Constance Adams
- Rosalind Alp
- Liv Arnesen
- Bettina Arnold
- Alexandra Avakian

B

- Florence Baker
- Ann Bancroft
- Kathryn Bard
- Renee Barlow
- Dorothea Bate
- Daisy Bates
- Carol Beckwith
- Ana Beker
- Gertrude Bell
- Annie Griffiths Belt
- Isabella Bird Bishop
- Arlene Blum
- Louise Arner Boyd
- Sisse Brimberg

C

- Mildred Cable
- Nathalie Cabrol
- Harriet Chalmers Adams
- Priscila Chaverri
- Eugenie Clark
- Jodi Cobb
- Jacqueline Cochran
- Catherine L. Craig

D

- Catherine D'Andrea
- Aparajita Datta
- Alexandra David-Neel
- Diane Davidson
- Robyn Davidson
- Catherine Destivelle
- Phaedra Doukakis

E

- Amelia Earhart
- Sylvia Earle
- Jessica Eberhard

E cont.

- Gretel Ehrlich
- Susan E. Evans

F

- Angela Fisher
- Rosita Forbes
- Dian Fossey
- Jane Franklin
- Kathleen Hargrave Frantz
- May French Sheldon

G

- Biruté Galdikas
- Alison Gannett
- Zulma Gasparini
- Rosemary Gillespie
- Mica Glantz
- Jane Goodall
- Elizabeth Graham
- Lauren Greenfield
- Elsie May Bell Grosvenor

H

- Katerina Harvati
- Malvina Hoffman
- Louise Dorothy Hose
- Heidi Howkins

I

- Salima Ikram

J

- Nathalie Jaquet
- Mae Jemison
- Osa Johnson

K

- Karen Kasmauski
- Mary Kingsley
- Margaret Kinnaird
- Cheryl D. Knott
- Katia Krafft

L

- Louise N. Leakey
- Meave Leakey
- Mary Leakey
- Anne Morrow Lindbergh
- Shannon Lucid

M

- Margaret Mead
- Beryl Markham
- Mireya Mayor

M cont.

- Margaret Ursula Brown Mee
- Ynes Mexia
- Yva Momatiuk
- Lady Mary Wortley Montagu
- Karin Muller
- Dervla Murphy
- Caroline Mytinger

N

- Nalini M. Nadkarni
- Anne Nekaris

O

- Darcy L. Ogada

P

- Francine Patterson
- Carolyn Bennett Patterson
- Annie Smith Peck
- Ida Pfeiffer
- Jeannette Piccard

Q

- Harriet Quimby

R

- Losang Rabgey
- Sally Ride
- Ruth Robertson

S

- Sacagawea
- Kira Salak
- Eliza R. Scidmore
- Hester Stanhope
- Dame Freya Stark
- Gene Stuart

T

- Junko Tabei
- Valentina Tereshkova
- Helen Thayer
- Tierney Thys

U

- Carmen Ulloa Ulloa
- Miriam Underhill

V

- Patricia Vickers-Rich
- Barbara Voorhies

W

- Beth Wald
- Barbara Washburn
- Rebecca West
- Fanny Bullock Workman

Y

- Jeana Yeager

This page was last modified 22:09, 20 March 2006. This page has been accessed 1,783 times. Privacy policy

About Women Explorers Wiki Disclaimers

Powered By MediaWiki

Pictured: In this wiki, users can browse or edit a list of *Women Explorers* who worked with the National Geographic Society.

Each explorer's page includes clear, large headings; substantial chunks of text; and a high-quality photograph of the woman explorer. The content section details such essential information as birth date and primary research focus and, where applicable, offers links highlighting the explorer's particular National Geographic connections (such as works authored for the Society), any works about the explorer herself, and grants awarded to the explorer. The pages also offer informative and inspiring stories. For example, Dian Fossey's entry describes her efforts to study and save Rwandan gorillas; how she was given the nickname *Nyiramachabelli* ("the old lady who lives in the forest without a man"); and how she was ultimately murdered for her efforts.

Women Explorers

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Dian Fossey

Lifespan: 1932-1985

Primary Focus: Primatologist; Africa; studied African mountain gorillas (Zaire, Rwanda, Uganda).

Contents [hide]

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2 Important Dates
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2.2 Death Date/Location
2.3 Other Notable Dates
3 Biographical Sketch
3.1 Country of Citizenship
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3.3 Organizational Memberships/Affiliations
4 Select Bibliography of Works
5 Related Resources/Links
6 Sources for This Entry
7 Contributor(s) to This Entry
8 Disclaimer: Please Read

NGS Connection [edit]

- Click here to view records for NGS works authored by Dian Fossey.
- Click here to view records for NGS works discussing Dian Fossey.
- Click here to view CRE grants awarded to Dian Fossey.

Important Dates [edit]

Birth Date/Location [edit]

January 16, 1932, San Francisco, California

Death Date/Location [edit]

December 26, 1985, Karisoke, Rwanda

Other Notable Dates [edit]

1967: Began study of mountain gorillas; established the Karisoke Research Centre, Rwanda.

Biographical Sketch [edit]

Dian Fossey's career was launched by paleoanthroplogist Louis Leakey, who also mentored Jane Goodall and Birute Galdikas. Leakey thought that women--particularly women with an untrained eye--were the best observers of primate behavior because they were less impatient than men and possessed better qualities of perception. In 1963, Fossey first saw mountain gorillas and met Leakey on a safari to East Africa. In 1967, with Leakey's backing, she initially went to Parc National des Virungas in what was then known as Zaire and set up camp. After run-ins with soldiers, she relocated to the Rwanda side of the park. Funded by the NGS and the Wilkie and Leakey Foundations, Fossey observed the rare gorillas and recorded their behavior in detail in the forests atop six dormant volcanoes with the Virungas, a mountain range that spans the Democratic Republic of the Congo (then Zaire), Rwanda, and Uganda. Following up on the work of famed naturalist George Schaller, Fossey would be the first "to describe important phenomena such as infanticide as well as female transfer in gorillas, which laid the foundation for today's understanding of gorilla behavioral biology."

In 1977, Fossey's favorite gorilla, Digit, died at the hands of poachers. By 1978, Fossey's focus had shifted from research to conservation, as a census revealed that the gorilla population had dropped by 50 percent in 20 years due to habitat encroachment and poaching. She became obsessed with thwarting poachers, adopting vigilante tactics that alienated the local population and--eventually--funding support. In 1979, the Rwandan government asked her to leave. After teaching and lecturing for a couple of years, she returned in 1983 and was found brutally murdered two years later--likely by individuals opposed to her conservation efforts. Dead at the age of 53, her remains were laid to rest in the gorilla cemetery she had created. Her gravestone is inscribed with her Rwandan nickname "Nyiramachabelli" and states "No one loved gorillas more."

Education:
San Jose State College, 1954 BS, occupational therapy
Cambridge University, 1976, Ph.D, Zoology
Taught at Cornell University, NY from 1980-1982

Country of Citizenship [edit]

United States

Nicknames/Aliases [edit]

"Nyiramachabelli" (the old lady who lives in the forest without a man)

Organizational Memberships/Affiliations [edit]

National Geographic Society; Wilkie Foundation; Leakey Foundation

Select Bibliography of Works [edit]

Gorillas in the Mist, 1983. 1989 film based on this work.

Related Resources/Links [edit]

- The Dian Fossey Gorilla Fund International
- Virtual Exploration Society--Dian Fossey
- Dian Fossey Fund
- Encyclopedia Britannica profile
- Virginia Morell. "Called Trimates, Three Bold Women Shaped their Field." *Science* 260 (1993) pp. 420-25.
- Farley Mowat. *Woman in the Mists: The Story of Dian Fossey and the Mountain Gorillas*. Warner Books, 1988.
- Glenn Hausfater and Kenneth Kenney, "Dian Fossey." *American Anthropologist* 88 (1986) pp. 953-56.
- NGS Timeline: "Rwanda and the National Geographic Society"

Sources for This Entry [edit]

- Ware, Susan (editor). *Notable American Women*. Harvard University Press, 2004. (Quotes taken from pp. 220-221.)
- Hayes, Harold. *The Dark Romance of Dian Fossey*, Simon & Schuster, 1990.
- Virtual Exploration Society

Contributor(s) to This Entry [edit]

Susan Fifer Canby

Disclaimer: Please Read [edit]

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All Categories: Women Explorers | Nationality: United States | Location: Rwanda | NGS Grantee | NGS Relationship

This page was last modified 20:14, 10 March 2008. This page has been accessed 119 times. Privacy policy
About Women Explorers Wiki Disclaimers

Pictured: The *Women Explorers* wiki page for Dian Fossey contains vital, inspiring, and poignant information.

Wikis at National Geographic support a number of groups. For example, the *Libraries* wiki was created to encourage library staff to collaborate on and communicate about projects. Library staff use the wiki to post items such as status reports, quick reference and training material, and 20-minute "coffee-break" handouts.

Other parts of National Geographic have also begun to adopt wikis. For example, the Think Tank and Trends Analysis groups are using a wiki to brainstorm ideas and reduce e-mail overload, and the *Traveler Magazine* staff uses a Bliki (blog plus wiki) to brainstorm and collaborate on ideas and share resources. An in-house television researcher is also building a research page of interesting plants and animals.

Another interesting wiki, *NG Lingo*, decodes acronyms and terminology — which is especially useful for new employees. In this wiki, the entire lingo list appears on one page, sorted alphabetically. Using the alphabet-letter links at the top of the page, users can jump to all entries for a particular letter. Helpful links at the top of the page also direct users to relevant, external resources.

Khuffman my talk preferences my watchlist my contributions log out

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NG Lingo

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | XYZ

Alphabetized in letter-by-letter order. Email Anne Marie Houppert ahoupper@ngs.org with updates and additions to the list.

For non-NGS acronyms and terminology, consult one of these external websites, or the print acronym dictionary or other references in the NGS Libraries & Information Services reference room.

- **Network Acronym and Abbreviation Server** www.ucc.ie/acronyms/acro.html
- **GIS and cartographic acronyms** www.lib.berkeley.edu/EART/abbrev.html
- **Dictionary of PC Hardware and Data Comm. Terms** www.ora.com/reference/dictionary/
- **TechWeb Technology Encyclopedia** www.techweb.com/encyclopedia/

- A - [edit]

Account#=number assigned to types of allocations or special projects for billing purposes; the account# contains the cost center#

Africa Room=private dining room off cateteria

AGB=Alexander Graham Bell

AL=annual leave

Alexander Graham Bell Medal (presented by NGS)=named for the second Society President, and given for extraordinary achievement in geographical research, broadly construed

AP=Accounts Payable

Approval (made on a Kodak Approval device)=a high-quality color proof that allows for instruction about color corrections as well as for final OK of color

ARC=Archives Research Catalog

Arc/Info=GIS software that analyzes and displays geographic data in digital form

Arnold Guyot Memorial Award (awarded by NGS)=named for a geology professor at Princeton, this award was established from a bequest to recognize outstanding accomplishments in geology and paleontology

Asia Room=private dining room off cafeteria

AV=Audiovisual

- B - [edit]

Back matter=see Departments

Base Camp=Headquarters complex consisting of 16th St., 17th St., and M St. buildings, also referred to as Campus

Bee=National Geographic Bee (annual event)

BGN=Board on Geographic Names

BIR=Business Intelligence Report, posted daily on Inside NGS

Bleed page=one on which a picture is printed to the trimmed edge of the magazine. On a nonbleed page, the picture is surrounded by white space on all sides

Blueline=often, but not always, blue, it is made as a contact print from negatives; it is signed off on as an OK to print the job (see also Redprint)

Boilerplate=in a press release, standardized up-to-date information about the National Geographic that is included at the end of each press release

Byline=credit listing for author, photographer, etc. (see also Credit)

- C - [edit]

Campus=Headquarters complex consisting of 16th, 17th, and M St. buildings, also referred to as Base Camp or HQ

Cap card=photographer's field notes identifying the subject on each roll of film

CC=close caption for hearing impaired

CEO=Chief Executive Officer

CFO=Chief Financial Officer

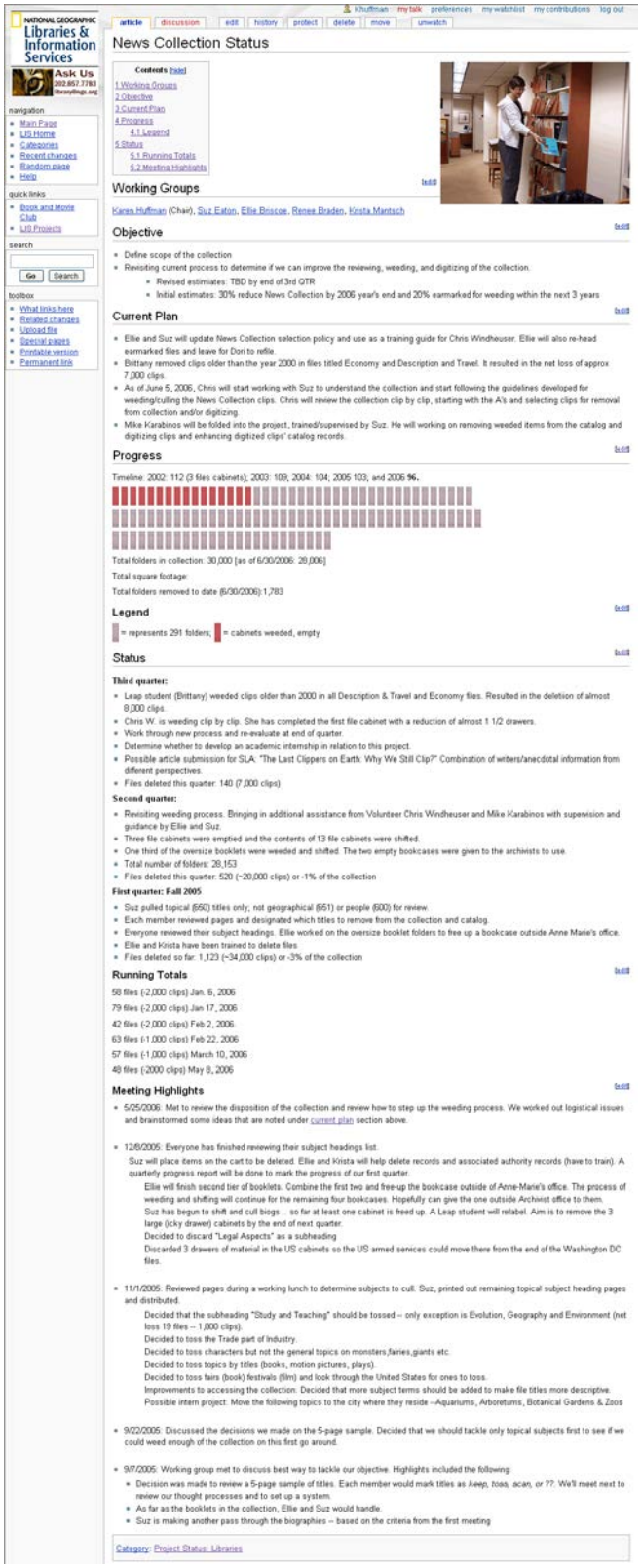
Chairman's Award (awarded by NGS)=created in 1991 to honor individuals or organizations that "significantly advance knowledge of the world and all that is in it" and who provide the means for others to do important environmental and conservation work around the world

Channel=National Geographic Channel which premiered in January 2001, available on some cable television and satellite stations

Clips/Clippings=newspaper clippings collected and organized by topic by LIS staff

CNG=Complete National Geographic CD-ROM, a set of CDs containing images of every page of every issue of the NGM, from 1888 to 2001,

Pictured: A wiki devoted to internal lingo and acronyms. This is especially helpful for new employees.



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khuffman · my talk · preferences · my watchlist · my contributions · log out

article | discussion | edit | history | protect | delete | move | unwatch

News Collection Status

Contents [hide]
1 Working Groups
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Working Groups

[edit]

Karen Huffman (Chair), Suz Eaton, Ellie Briscoe, Renee Braden, Krista Mantsch

Objective

[edit]

- Define scope of the collection
- Revisiting current process to determine if we can improve the reviewing, weeding, and digitizing of the collection.
  - Revised estimates: TBD by end of 3rd QTR
  - Initial estimates: 30% reduce News Collection by 2006 year's end and 20% earmarked for weeding within the next 3 years

Current Plan

[edit]

- Ellie and Suz will update News Collection selection policy and use as a training guide for Chris Windheuser. Ellie will also re-head earmarked files and leave for Dori to refile.
- Brittany removed clips older than the year 2000 in files titled Economy and Description and Travel. It resulted in the net loss of approx 7,000 clips.
- As of June 5, 2006, Chris will start working with Suz to understand the collection and start following the guidelines developed for weeding/culling the News Collection clips. Chris will review the collection clip by clip, starting with the A's and selecting clips for removal from collection and/or digitizing.
- Mike Karabinos will be folded into the project, trained/supervised by Suz. He will working on removing weeded items from the catalog and digitizing clips and enhancing digitized clips' catalog records.

Progress

[edit]

Timeline: 2002: 112 (3 files cabinets); 2003: 109; 2004: 104; 2005 103; and 2006 **96.**

Total folders in collection: 30,000 [as of 6/30/2006: 28,006]

Total square footage:

Total folders removed to date (6/30/2006):1,783

Legend

[edit]

= represents 291 folders, = cabinets weeded, empty

Status

[edit]

Third quarter:

- Leap student (Brittany) weeded clips older than 2000 in all Description & Travel and Economy files. Resulted in the deletion of almost 8,000 clips.
- Chris W. is weeding clip by clip. She has completed the first file cabinet with a reduction of almost 1 1/2 drawers.
- Work through new process and re-evaluate at end of quarter.
- Determine whether to develop an academic internship in relation to this project.
- Possible article submission for SLA: "The Last Clippers on Earth: Why We Still Clip?" Combination of writers/anecdotal information from different perspectives.
- Files deleted this quarter: 140 (7,000 clips)

Second quarter:

- Revisiting weeding process. Bringing in additional assistance from Volunteer Chris Windheuser and Mike Karabinos with supervision and guidance by Ellie and Suz.
- Three file cabinets were emptied and the contents of 13 file cabinets were shifted.
- One third of the oversize booklets were weeded and shifted. The two empty bookcases were given to the archivists to use.
- Total number of folders: 28,153
- Files deleted this quarter: 520 (~20,000 clips) or -1% of the collection

First quarter: Fall 2005

- Suz pulled topical (660) titles only; not geographical (651) or people (600) for review.
- Each member reviewed pages and designated which titles to remove from the collection and catalog.
- Everyone reviewed their subject headings. Ellie worked on the oversize booklet folders to free up a bookcase outside Anne Marie's office.
- Ellie and Krista have been trained to delete files
- Files deleted so far: 1,123 (~34,000 clips) or -3% of the collection

Running Totals

[edit]

58 files (-2,000 clips) Jan. 6, 2006

79 files (-2,000 clips) Jan 17, 2006

42 files (-2,000 clips) Feb 2, 2006

63 files (-1,000 clips) Feb 22, 2006

57 files (-1,000 clips) March 10, 2006

48 files (-2000 clips) May 8, 2006

Meeting Highlights

[edit]

- 5/25/2006: Met to review the disposition of the collection and review how to step up the weeding process. We worked out logistical issues and brainstormed some ideas that are noted under current plan section above.

- 12/6/2005: Everyone has finished reviewing their subject headings list.
  Suz will place items on the cart to be deleted. Ellie and Krista will help delete records and associated authority records (have to train). A quarterly progress report will be done to mark the progress of our first quarter.
  Ellie will finish second tier of booklets. Combine the first two and free-up the bookcase outside of Anne-Marie's office. The process of weeding and shifting will continue for the remaining four bookcases. Hopefully can give the one outside Archivist office to them.
  Suz has begun to shift and cull biogs ... so far at least one cabinet is freed up. A Leap student will relabel. Aim is to remove the 3 large (icky drawer) cabinets by the end of next quarter.
  Decided to discard "Legal Aspects" as a subheading
  Discarded 3 drawers of material in the US cabinets so the US armed services could move there from the end of the Washington DC files.

- 11/1/2005: Reviewed pages during a working lunch to determine subjects to cull. Suz, printed out remaining topical subject heading pages and distributed.
  Decided that the subheading "Study and Teaching" should be tossed -- only exception is Evolution, Geography and Environment (net loss 19 files -- 1,000 clips).
  Decided to toss the Trade part of Industry.
  Decided to toss characters but not the general topics on monsters,fairies,giants etc.
  Decided to toss topics by titles (books, motion pictures, plays).
  Decided to toss fairs (book) festivals (film) and look through the United States for ones to toss.
  Improvements to accessing the collection: Decided that more subject terms should be added to make file titles more descriptive.
  Possible intern project: Move the following topics to the city where they reside --Aquariums, Arboretums, Botanical Gardens & Zoos

- 9/22/2005: Discussed the decisions we made on the 5-page sample. Decided that we should tackle only topical subjects first to see if we could weed enough of the collection on this first go around.

- 9/7/2005: Working group met to discuss best way to tackle our objective. Highlights included the following:
  - Decision was made to review a 5-page sample of titles. Each member would mark titles as *keep, toss, scan, or ??*. We'll meet next to review our thought processes and to set up a system.
  - As far as the booklets in the collection, Ellie and Suz would handle.
  - Suz is making another pass through the biographies -- based on the criteria from the first meeting

Category: Project Status: Libraries

Pictured: The *News Collection Status* wiki page tracks news-related planning information and objectives, notes key players, and tracks the status of the news collection culling project.

NATIONAL GEOGRAPHIC Libraries & Information Services

Ask Us
202.857.7783
library@ngs.org

navigation
- Main Page
- LIS Home
- Categories
- Recent changes
- Random page
- Help

quick links
- Book and Movie Club
- LIS Projects

search
Go Search

toolbox
- What links here
- Related changes
- Upload file
- Special pages
- Printable version
- Permanent link

Khuffman my talk preferences my watchlist my contributions log out

article discussion edit history protect delete move unwatch

Metrics Status

Contents [hide]

1 Tracking
- 1.1 Monthly Web Metrics
- 1.2 Yearly LIS Metrics

2 Monthly Web Metrics Reports
- 2.1 NG Insider
- 2.2 Libraries Website

3 EdNet

4 Other Resources

Tracking [edit]

Monthly Web Metrics [edit]

- LunarPages
- Omniture

Yearly LIS Metrics [edit]

- LIS Cumulative Statistics (eDocs)
- Vendor Usage Statistics (eDocs)

Monthly Web Metrics Reports [edit]

NG Insider [edit]

- **NG Insider Metric Reports**
- Total hits
- Breakdown by site area
- Top 10 sites
- Top 10 entry pages
- 10 most and 10 least popular pages
- Hits by hour, by weekday; weekly page views
- Show user patterns: For example, where people come from and where they go (e.g., from NG Insider to LIS Home, from LIS Home to ??) for the top ten sites charted

Libraries Website [edit]

- **LIS Metric Reports**
- Total hits
- Breakdown by site area
- 10 most and 10 least popular pages
- Hits by hour, by weekday
- Specific resources; Podcasts (MP3 files), Viewlets
- Note: BIR, Future Events, and Periodicals Finder - pages are primarily on other servers from where our LIS site is hosted. Also, javascript of Periodicals Finder was added to external server 8/15/2006, so June/July report is low for this resource.

EdNet [edit]

- EdNet Membership & EarthCurrent (Subscribers)
  - August 2006 (eDocs/PDF)
  - July 2006 (eDocs/PDF)
  - January 2006 - June 2006 (eDocs/PDF)
  - October 2005 - December 2005 (eDocs/Email)
- Web Traffic
  - August 2006 (eDocs/PDF)
  - July 2006 (eDocs/PDF)

Other Resources [edit]

- **Links to Site**
  - Google link: EarthCurrent - Shows any page that links to domain even if included within same domain.
  - Alexa - Shows by domain; not granular to page (e.g., EarthCurrent), but advantage is that it doesn't include pages within same site like Google.

Category: Project Status: Libraries

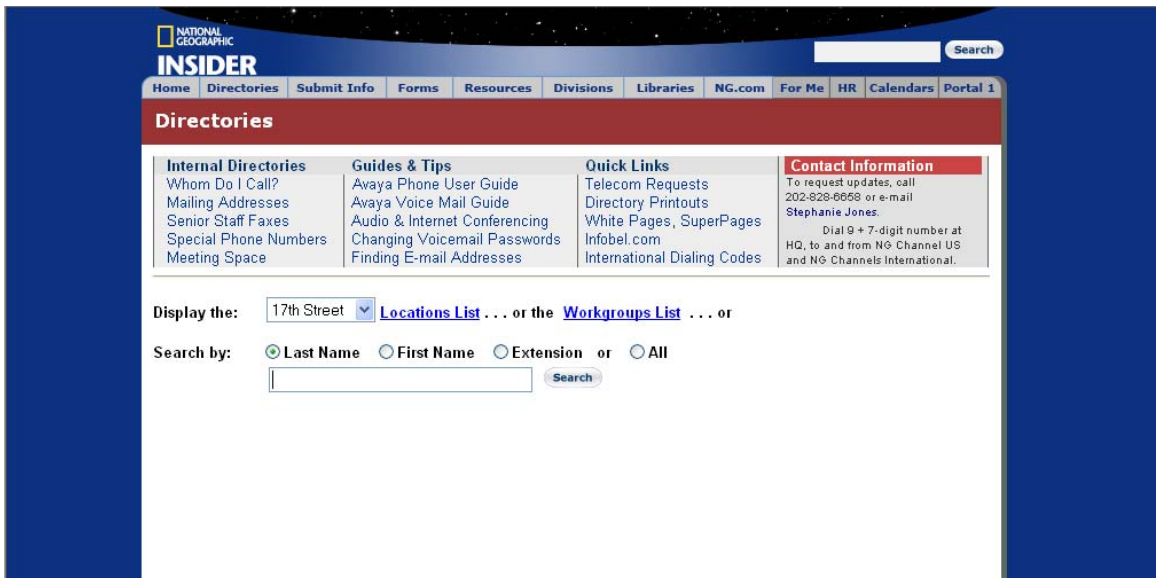
This page was last modified 10:14, 12 September 2006. This page has been accessed 120 times. Privacy policy
About NG Libraries Wiki Reference Disclaimers

Powered By MediaWiki

Pictured: A wiki start page for exploring and monitoring intranet usage statistics.

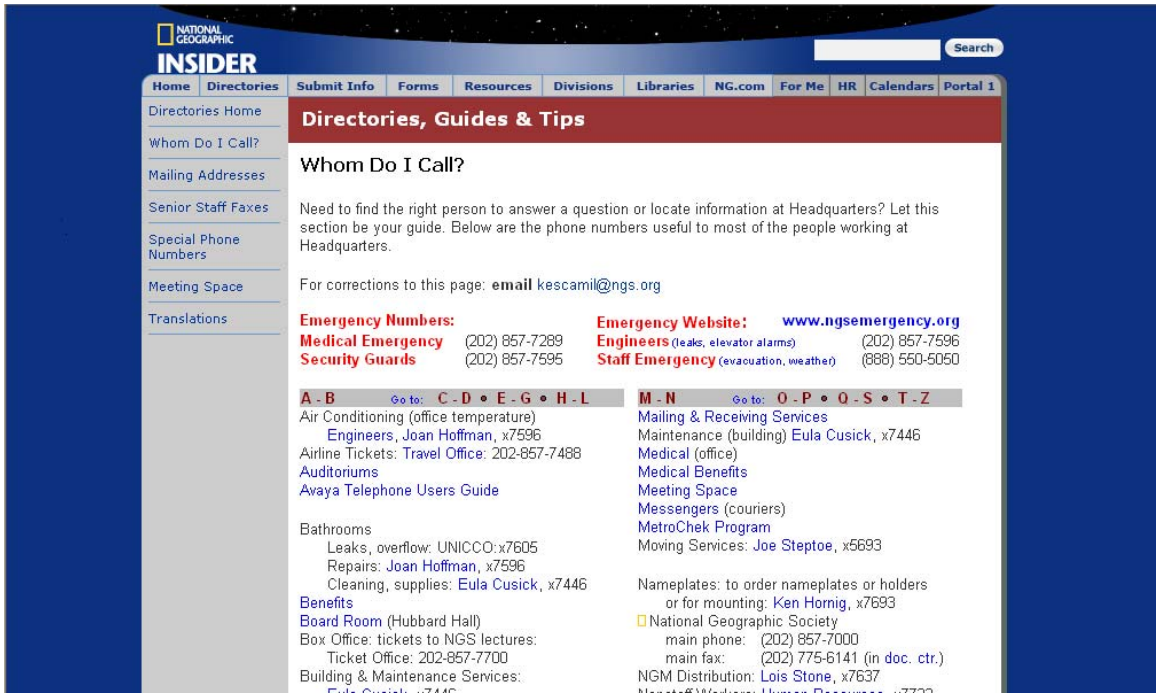
In most organizations, the directory is a critical intranet tool. Yet, finding the right phone number for a particular person, team, or task can be difficult. NG Insider takes a user-centered approach to this problem, providing a corporate directory that sorts contact information in various ways, such as *Categories for Internal Directories*, *Guides & Tips*, and *Quick Links*. This helps users quickly scan results and retrieve likely "hits."

The search form itself is also very well designed. Appropriately, the most common and basic search — by a person's last name — is the default selection in a list of radio buttons. This good default selection enables users to just begin typing. Additional search capabilities — radio buttons for searching by first name, telephone extension, or "all," and links for a locations list or workgroups list — are also clearly labeled and accessible.



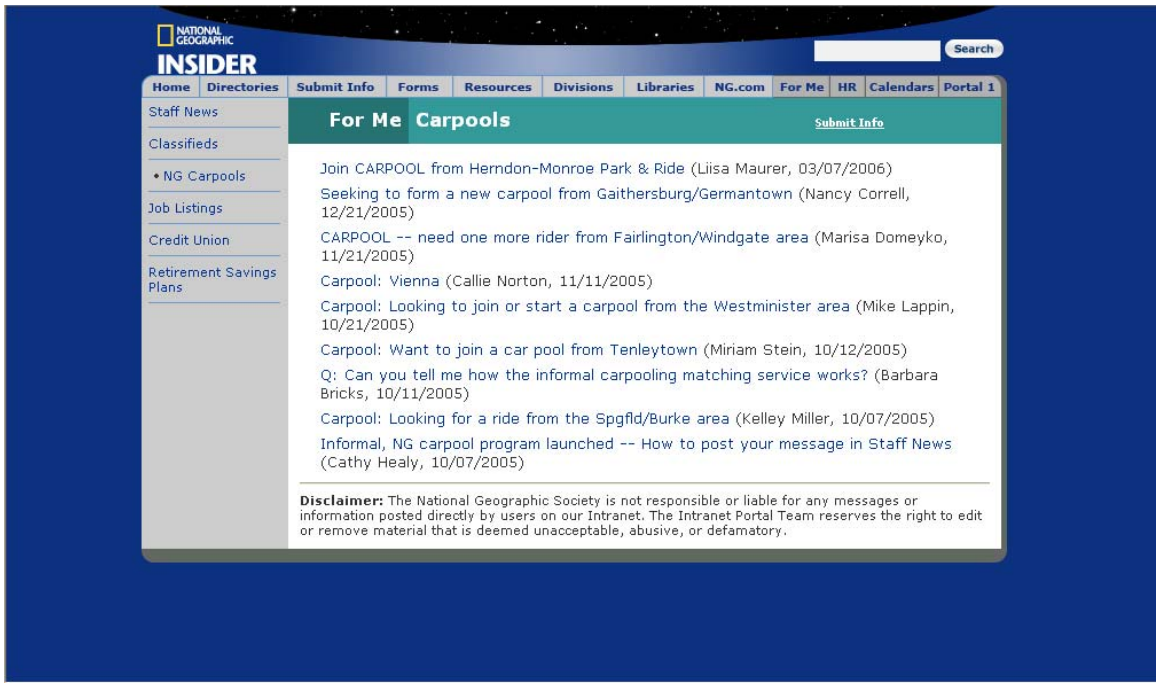
Pictured: NG Insider's *Directory* page groups essential information for tracking down coworkers and features a well-designed search tool with various search options.

Another search tool of sorts is *Whom Do I Call?*, which lists topics (ranging from plumbing to reserving conference rooms), employees available to help with each topic, and (usually) their phone numbers. Some sections also contain links to additional information on the topic.



Pictured: The intranet's *Whom Do I Call?* section helps employees find the right person to help with almost anything at National Geographic Society — from plumbing problems to reserving conference rooms — without having to first specify a person's name or department.

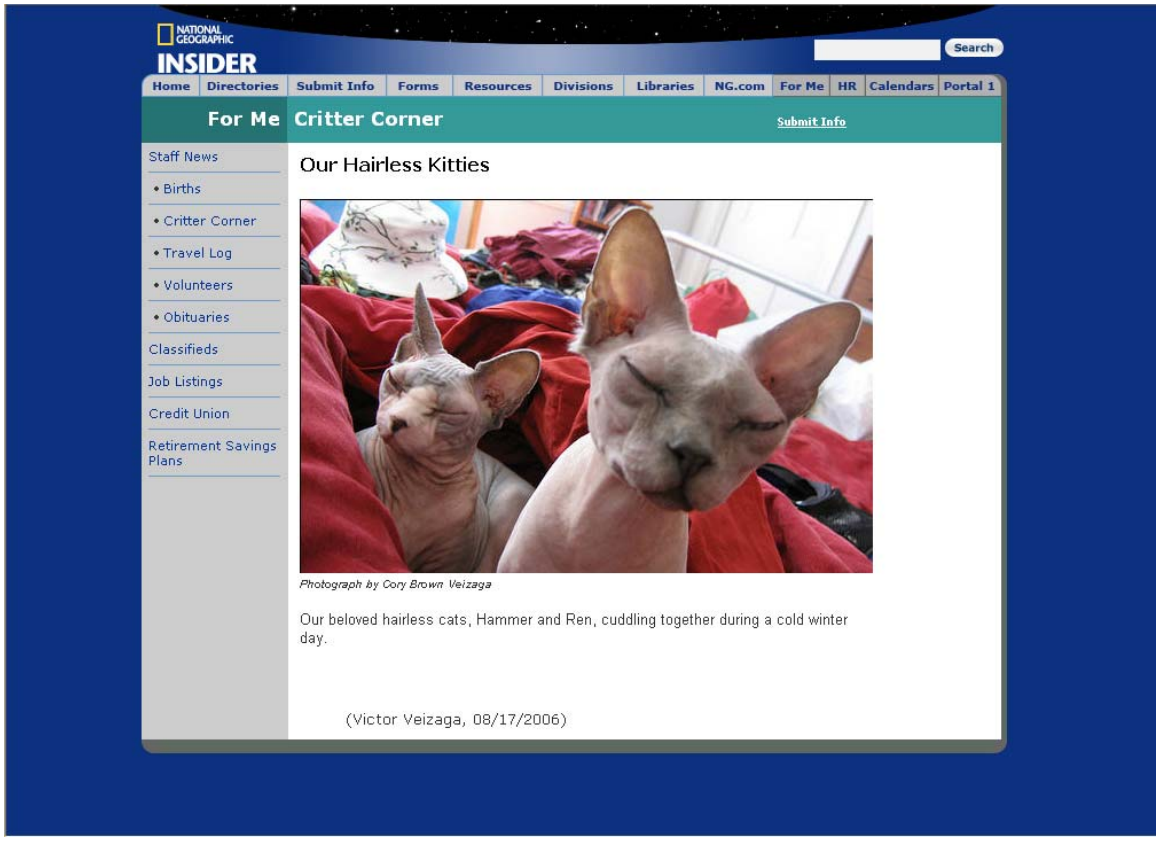
With substantial amounts of work-related information on the intranet, NG Insider's designers wisely spent time honing the site's work/life balance. One result: the *For Me* pages. These offer employee-to-employee classified advertisements, carpool matching, job listings, staff news, information about retirement savings plans and the credit union, and more.



Pictured: In the *For Me* section, users can create, read, and respond to carpooling requests.

Another excellent user-oriented feature is *Critter Corner*, located in the *Staff News* section, which provides employees with a forum for showing off their pets or other interesting animals. Given the National Geographic Society's well-known efforts to document the animal kingdom, employees' animal-related passions come as no surprise.

Pictured: Employees share animal stories on *Critter Corner*.



Pictured: For many National Geographic Society employees, wildlife starts at home. This *Critter Corner* page illustrates how NG Insider's template-driven pages make it easy for employees to submit content, such as one employee's photo of the household's hairless cats, Hammer and Ren.

NG Insider's pages — from the homepage, to news pages, to wikis — sport an extremely clean, easy-to-use design. Pages offer clear navigation, with a top-level, tabbed horizontal bar labeled with short, relevant, and clearly understood terms. This menu is consistent across NG Insider, as is the NG Insider brand.

Designers also delineate intranet sections by using a thick, colored bar tied to a particular section at the top of each page. For example, *Resources* is lime green, while *Directories* is burgundy. In addition to using different colors, the area's name appears within the top banner in large, bold white letters. All of these information clues help employees quickly move through the intranet, make the right choices, and feel confident that they've done so.

Hence, by providing interesting content, offering employees many different ways to continue moving through the site, and maintaining a remarkably consistent design and look across the site, NG Insider's designers help make exploring the National Geographic Society's intranet a very pleasant expedition indeed.

URL AND ACCESS

NG Insider (http://inside.ngs.org) is the default start page for most employees' browsers — set when the computers are first configured. This URL has remained constant for eight years.

Employees can access the intranet from home using a secure, SSL VPN connection, or by using a National-Geographic-issued BlackBerry.

All National Geographic staff and non-full-time employees working in the headquarters office can access, view, and post content to NG Insider. In fact, "our Web statistics indicate that the staff uses the intranet more than they use their telephone," notes Karen Huffman, National Geographic's manager of knowledge initiatives.

Employees have one of three access levels:

- **Content approvers:** The lowest access level is automatically assigned to all staff with Lotus Notes access. They can access selected templates, and create and publish content to parts of NG Insider's homepage and certain news and classifieds areas.
- **Content administrators:** Content managers can create, publish, or archive content on sites they oversee.
- **Site administrators:** Assigned to only a handful of people with strong technical skills who administer the database and wikis running the intranet, including workflow stages and systems settings, development of page design elements, and management of site architecture and content.

Note that while affiliates and international partners can see selected intranet content, they cannot create content.

CONTENT MANAGEMENT

Content Authors

National Geographic relies on a decentralized system of content authors. "Our portal team encourages, supports, and has incorporated a decentralized approach to the management and distribution of content by training staff to build division and team sites and post relevant content through the main page, which helps to keep information fresh and engaging," says Huffman. "We incorporate photos and images whenever possible to communicate our message."

Content management is handled by a custom-designed installation of IBM Lotus Workplace Web Content Management (ILWWCM) version 2.0 Domino Edition. "We use the available tools in the system to design and manage our corporate intranet and limited customizations, to enable upgrades as they are available," she says. ILWWCM allows for various document types and categories, says Huffman, as well as style sheets, dynamic content displays, and an automated retention/archiving schedule.

Site administrators develop and manage content organization and categorization; the entire intranet is organized in a heavily content-centric manner. For example, the site architecture is composed of three key areas: site framework, document types, and categories. Here is how each is handled:

Site Framework (Information Architecture)

INFORMATION ARCHITECTURE			
Examples of sub-site homepages, and their sub-pages			
Sub-site:	***Forms***	***Division* site**	***Team* site**
Sub-site pages:	*Benefits*	*Home*	*Home*
	Corporate and legal	*About us*	*About us*
	Employment	*Forms*	*Learning*
	Research	*Products*	*Policies*
	Services	*Services*	*Resources*
	Technical support	*FAQs*	*Reports*
	Training		*FAQs*
	Miscellaneous		

"The site framework is a site map of our corporate intranet," notes Huffman. "All major areas within our corporate intranet have a site framework, which is composed of a main site area (parent) plus related sub-site areas (children and grandchildren). Every new document or content object must be assigned to a site or sub-site area." National Geographic currently has 50 different site areas, which comprise the intranet's information architecture.

IA, Doc Types, and Information Categories

- **Administrative**
  - Division Information
  - Goals
  - Job Description
  - Organization Chart
  - Resume
  - Staff Information
- **Article Types**
  - Article
  - Biographical Information
  - Course Description
  - FAQs
  - Hot Topic
  - Letter of the Week
  - News
  - Notice
  - Perspective
  - Photo
  - Press Release
  - Quick Links
  - Research Material
  - Top Story
- **Forms**
  - Benefit
  - Corporate and Legal
  - Employment
  - Miscellaneous
  - Research
  - Service
  - Technical Support
  - Training
- **Index Page**
- **Learning and Events**
  - Event
  - Learning
  - Lecture
  - Movie
  - Screening
  - Training Class
  - Tune in
  - TV
  - Wellness
- **Memo Types**
  - Alert
  - Memo
  - Offer
  - Outreach
  - Product
  - Question of the Day
  - Question of the Week
  - Staff Benefit
- **Policies, Procedures and Guidelines**
  - Guideline
  - Instructions
  - Policy
  - Policy Announcement
  - Procedure
- **Presentation Types**
  - Handout
  - Manual
  - Photo Gallery
  - Podcast
  - Presentation
  - Speech
  - Training Material
  - Tutorial
- **Report Types**
  - Annual Report
  - BIR
  - BIR Exec
  - BIR Missions
  - BIR Travel
  - Budget
  - EarthCurrent
  - LIS Special Report
  - Management
  - Market Reports
  - Minutes
  - NG in the News
  - Report
  - Statistical
  - Survey
  - Trends
- **Staff Personals**
  - Births
  - Carpools
  - Classifieds
  - Critter Corner
  - Obituaries
  - Staff News
  - Travel Log
  - Volunteer

Documents Types & Categories

Administrators also index each document by document type and one or more category to generate "a taxonomy-like structure," says Huffman. This lets the system dynamically serve content via a combination of site area, document type, and category.

The following table illustrates how document types and categories map to some specific site areas:

DYNAMICALLY DISPLAYING CONTENT VIA DOCUMENT ATTRIBUTES	
Document types and categories map to specific intranet areas	
Intranet Area	**Document Types and Categories**

NG Insider homepage (center region)	• Articles
	  o News
	  o Notice
	  o Letter of the Week
	  o Perspective
	  o Press Release
	  o Top Story
	• Memos
	  o Alert
	  o Memo
	  o Question of the Day
	  o Question of the Week
	• Presentation
	  o Photo Gallery
	  o Podcasts
	• Reports
	  o BIR
	  o BIR Exec
	  o BIR Missions
	  o EarthCurrent
	  o NG in the News
	  o Trends

***Opportunities @ HQ* (right sidebar) on NG Insider home**	• Learning & Events
	  o Event
	  o Learning
	  o Lecture
	  o Movie
	  o Screening
	  o Training Class
	  o Tune in
	  o TV
	  o Wellness
	• Memos
	  o Offer
	  o Outreach
	  o Product
	  o Staff Benefit

***Forms* page**	• Forms
	  o Benefit
	  o Corporate & Legal
	  o Employment
	  o Research
	  o Service
	  o Technical Support
	  o Training
	  o Miscellaneous

Page Designs

Site administrators use the page design area of the intranet to help develop and maintain the intranet's look and feel. Major areas include:

- **Page layouts.** For establishing overall page structure. This area includes HTML-based panes for header, body, and footer regions.

- **Page styles.** For setting default page properties, style sheets, JavaScript, and page components.
- **Attachments.** For adding image files, documents (including Word, Excel, PowerPoint, and PDF files), and media (MP3, video).
- **Page components.** For example, table components can reference content stored in block or menu components, or menu and navigators can generate content based on designated parameters.

Templates help content creators quickly get their content onto the intranet by letting users select from pre-designed components such as page layouts, styles, site areas, document types, and categories.

Lotus. Workplace Web Content Management Page Layout Form

3-column layout

Identification

Title *	3-column layout (unique)
Display Title *	3-column layout
Summary	3-column layout
Author *	ContentManagementUser
Owner *	ContentManagementUser

Presentation

Header Pane

```
<a name="top"></a><table align="center" border="0" cellpadding="0" cellspacing="0"><tr><td valign="top"><!-- Header -->
☑ Include Header Components
```

Body Pane

```
<!-- Body --><table width="755" border="0" cellpadding="0" cellspacing="0"><tr>
```

Left Pane

```
<!-- Left column -->
<td align="left" valign="top" width="128"
bgcolor="#CCCCCC">
☑ Include Left Pane Components
</td>
```

Middle Pane

```
<!-- Content column -->
<td valign="top" align="left" width="422" bgcolor="#FFFFFF">
☑ Include Pre-Body Components
<table width="100%" border="0" align="center" cellpadding="10"
cellspacing="0"><tr><td>
Web Page Body (always included)
☑ Include Post-Body Components
</td></tr></table></td>
```

Right Pane

```
<!-- Right column -->
</td><td align="left" valign="top" width="1"
bgcolor="#5F6960"><img
src="[ImageDir]/space/$FILE/space.gif" width="1"
height="1"></td>
<td align="left" valign="top" width="199"
bgcolor="#F1F1F1">
☑ Include Right Pane Components
</td><td align="left" valign="top" width="5"
bgcolor="#5F6960"><img
src="[ImageDir]/space/$FILE/space.gif" width="5"
height="1"></td>
```

```
</tr></table>
```

Footer Pane

```
<!-- Footer --><table width="755" border="0" cellpadding="0" cellspacing="0"><tr><td valign="top">
☑ Include Footer Components
</td></tr></table>
</td></tr></table>
<p> </p>
```

Sharing

This document is not participating in sharing

Modification History

09/22/2006 12:03:18 PM EDT Karen Huffman
09/22/2006 12:02:44 PM EDT Karen Huffman
02/27/2006 10:30:56 PM EST Karen Huffman

Pictured: This page layout form allows site administrators to control page structure via HTML-based panes for header, body, and footer regions.

Lotus. Workplace Web Content Management Page Style Form IBM.

3-column layout

Identification

Title *	3-column layout (unique)
Display Title *	3-column layout
Summary	3-column layout
Author *	Karen Huffman/HQ/NGS
Owner *	Karen Huffman/HQ/NGS

Access

Page Style can be used by * (asterisk (*) means all users may use style)

Properties

Cached ☐ Yes

Background Image

Left Margin	0
Top Margin	0

	Red	Green	Blue	Hex Equivalent
Background Colour	12	50	127	0C327F
Text Colour	51	51	51	333333
Unvisited Link Colour	51	51	51	333333
Active Link Colour	0	51	102	003366
Visited Link Colour	51	51	51	333333

User-Defined HTML (optional - can be used to enter validation scripts, and other advanced features)

Presentation

Page Layout * 3-column layout

Add/Edit/Remove	Number	Type	Component	URL
HTML Head	1	Block	JavaScript: NG Insider General	?
	2	HTML or Plain Text	<style type="text/css">[CR]<!--	?
	3	Block	CSS: NG Insider Default Styles	?
	4	Block	CSS: NG Insider Menus	?
	5	HTML or Plain Text	-->[CR]</style>	?
Header Pane	1	Table	Banner: NG Insider ver2	?
	2	Block	Top Nav: NG Insider	?
Left Pane	1	HTML or Plain Text	[SiteAreaInfo:block1]	?
	2	HTML or Plain Text	[SiteAreaInfo:img1]	?
	3	HTML or Plain Text	[SiteAreaInfo:nav1]	?
Pre-Body Pane	1	HTML or Plain Text	[SiteAreaInfo:header]	?
	2	HTML or Plain Text	[DocInfo:breadcrumb]	?
	3	HTML or Plain Text	[DocInfo:title]	?
	4	HTML or Plain Text	[DocInfo:summary]	?
Post-Body Pane	1	HTML or Plain Text	[DocInfo:form1]	?
	2	HTML or Plain Text	[DocInfo:body menu]	?
Right Pane	1	HTML or Plain Text	<img src="[ImageDir]/space/$FILE/space.gif"	?
	2	HTML or Plain Text	width="1" height="2">	?
	3	HTML or Plain Text	[SiteAreaInfo:menu1]	?
	4	HTML or Plain Text	<img src="[ImageDir]/space/$FILE/space.gif"	?
	5	HTML or Plain Text	width="1" height="3">	?
	6	HTML or Plain Text	[SiteAreaInfo:menu2]	?
	7	HTML or Plain Text	<img src="[ImageDir]/space/$FILE/space.gif"	?
			width="1" height="3">	
			[DocInfo:menu3]	
			<img src="[ImageDir]/space/$FILE/space.gif"	
			width="1" height="2">	
Footer Pane	1	Table	Footer: Articles	?
	2	Block	Top Nav: NG Insider Map	?
	3	Block	Metrics Tracking	?

Sharing

This document is not participating in sharing

Modification History

08/03/2006 02:02:51 PM EDT Karen Huffman
06/07/2006 07:17:39 AM EDT Karen Huffman
03/02/2006 03:05:31 PM EST Karen Huffman
02/27/2006 10:18:12 PM EST Karen Huffman

Pictured: Site administrators use this page to set default page properties, style sheets, and JavaScript, and add page component placeholders.

Lotus. Workplace Web Content Management Menu Component Form IBM.

NG Insider: Opportunities at NG ver2

Identification

Title * NG Insider: Opportunities at NG ver2 (unique)
Display Title * NG Insider: Opportunities at NG ver2
Summary Learning, events, special offers, etc.
Author * Karen Huffman/NG/NGS
Owner * Karen Huffman/NG/NGS

Properties

Multilingual Translations ☐ Yes (This will disable all other menu items)
Excluded Languages
Exclude Duplicate Languages

Custom fullText Search ☐ Yes
Search Query String

Include Any of the following site areas

Menu Site Areas
Current Site Area ☐ Yes
Match Type ○ Exact ○ Exact and Descendants ◉ Ancestors and Descendants

Include Any of the following document types

Menu Document Types
Match Type ◉ Exact ○ Exact and Descendants ○ Ancestors and Descendants

Include ○ All ◉ Any of the following categories:

Menu Categories Event, Learning, Lecture, Movie, Screening, Training Class, Tune in, TV, Wellness, Offer, Outreach, Product, Staff Benefit
User Categories (All) ☐ Yes
User Doc Type Categories ☐ Yes
Current Doc Categories ☐ Yes
Match Type ◉ Exact ○ Exact and Descendants ○ Ancestors and Descendants

Include Any of the following Languages

User Languages ☐ Yes
Menu Languages
Current Language ☐ Yes
Include URL Search Parameters ☐ Yes

Include Current Document ☐ Yes

Use External Database ☐ Yes
External DB Location

Alternate View NGS\Opportunities (If Publishing database then this can be ignored)

Presentation

Maximum Number Items * 5
Sort By * User Defined
Sort Type ◉ Standard ○ Scalable

User Defined Sorting Keys (in order of importance)	Key	Type	Format	Length	Order
	EffectiveDate	DateField	yyyymmdd AM\PM hh:mm:ss	20	DescendingOrder

Freeform Layout ☐ Yes
Width * 100% align="center" (pixels or percentage)
Cell Spacing 2
Cell Padding 0
Border
Orientation * ◉ Vertical ○ Horizontal
Number of Columns 01
Column Widths (carriage return separated)

	Red	Green	Blue	Hex Equivalent
Background Colour	241	241	241	F1F1F1

Add/Edit/Remove		Number	Type	Component	URL
Menu Header		1	HTML or Plain Text	- Opportunities @ NG More	?
Menu Footer		1	HTML or Plain Text	<hr width=75%>[CR] Job Postings [CR] Menus [CR] Perks [CR] Submit Calendar Item [CR]<img src="[ImageDir]/space/$FILE/space.gif" height="12" width="1"> 	?
Item Header					
Item Divider					
Item Footer					
Item Layouts		1	HTML or Plain Text	<table width="95%" align="center" valign="top" border="0"><tr><td> [DocCategory] [DocDisplayTitle][DocSummary] </td></tr></table>	?
No Display Items		1	HTML or Plain Text	<img src="[ImageDir]/space/$FILE/space.gif" height="5" width="1">	?
Bad Query Items					

Sharing

This document is not participating in sharing

Modification History

08/16/2006 10:15:31 AM EDT Karen Huffman
08/07/2006 11:58:00 AM EDT Karen Huffman
08/07/2006 11:54:48 AM EDT Karen Huffman
08/03/2006 03:33:53 PM EDT Karen Huffman

Pictured: Page components are the building blocks of National Geographic's Lotus CMS. For example, table components cab reference content stored in block or menu components; and menus and navigators can generate content based on selected parameters.

Lotus. Workplace Web Content Management Template Document Form IBM.

For Me: Staff News with photos

Identification

Title * For Me: Staff News with photos (unique)
Display Title * For Me: Staff News with photos
Summary Articles 2-column with left sidebar
Author * Karen Huffman/HGINGS
Owner * Karen Huffman/HGINGS

Access

Template can be used by * (asterisk (*) means all users may use template)

Identification

Title Step 1: REPLACE ALL THIS HELP TEXT WITH YOUR UNIQUE TITLE e.g., Staff News kh mypups 20060920. Reminders: In this field only, DO NOT include any of these special characters: + / \ ? [ ] < > & ".
Display Title Step 2: Make your display title descriptive, grabbing, but not too long. Go to Step 3: In BODY field add your content. ☐ Hide
Summary ☐ Hide
Author ☐ Hide
Owner ☑ Hide

Workflow

Approval Cycle * Quick Workflow ☑ Hide
Additional Readers ☑ Hide
Current Approvers ☑ Hide
Next Approvers ☑ Hide
Effective Date ☐ Hide
Update Effective Date in final Workflow stage ☐ Yes
Review Options ◉ No review ○ Review required ☑ Hide
Review Date ☐ Hide
Expiry Options No expiry ☑ Hide
Expiry Date ☐ Hide
Expiry Parameter ☐ Hide

Profiling

Site Area FMSite Staff News ☑ Hide
Document Type Staff Personals ☑ Hide
Categories Staff News ☐ Hide
Restrict Category choices ☑ Yes
Allowed Category Branch Staff News, Births, Critter Corner, Obituaries, Travel Log, Volunteers
Additional Allowed Categories
Keywords ☐ Hide
Restrict Keywords to pre-defined ☑ Yes
Language of this page ☑ Hide

Presentation

Page Style * For Me: 2-column layout with left sidebar ☑ Hide
Priority ☑ Hide
Hide from Search And Menus ☐ Yes ☑ Hide
Allow Menu Links to this Page ☐ Yes ☑ Hide
Alternative Link ◉ No ○ Web page ○ Attachment ○ External link ☐ Hide
Web Page
Attachment
URL (specify http:// for URLs external to this site)
Hide Attachments ☐ Yes ☑ Hide
Word Import from Web ☑ Hide

Body

Replace above image with your picture and caption! Photograph by Sheid Huuffut

Step 3: Add staff news article text...

Reminders:
Text
- Article text, 9pt Arial
- Photo caption and credit, 7pt Arial, Italics

Images
- **Acceptable image formats:** JPGs or GIF's
- **Landscape:** 400 pixels wide (or two side-by-side images 200 pixels wide)
- **Portrait:** 350 pixels wide (or two side-by-side images 175 pixels wide)

Don't forget to preview your work BEFORE you publish your article. Rememeber to remove these instructions/reminders before you post.

Additional Information

Hide Additional Information ☑ Hide

Number	Placeholder	Type	Component	URL
1	title	Table	Article title	?
2	summary	Table	Article summary	?

Sharing

Hide Content Sharing ☑ Hide
This document is not participating in sharing

Modification History

09/20/2006 09:44:44 AM EDT Karen Huffman
09/20/2006 09:42:15 AM EDT Karen Huffman
09/20/2006 09:32:35 AM EDT Karen Huffman
09/20/2006 09:27:26 AM EDT Karen Huffman
08/07/2006 08:29:34 AM EDT Karen Huffman

Pictured: This shows an admin view of templates. Site administrators select pre-defined components such as page layouts, styles, site areas, document types, and categories; hide pre-set fields from content creators' view; and set up "helpful hints" on formatting images and text.

Lotus. Workplace Web Content Management Web Page Form

Step 1: REPLACE ALL THIS HELP TEXT WITH YOUR UNIQUE TITLE e. Draft

Identification * Indicates a required field

Title * Step 1: REPLACE ALL THIS HELP TEXT WITH YOUR UNIQUE TITLE e.g., Staff News kh mypups 20060920. Reminders: In this field only, DO NOT include any of these special characters: + / \ ? [ ] < > & '". (unique)

Display Title * Step 2: Make your display title descriptive, grabbing, but not too long. Go to Step 3: In BODY field add your content.

Summary

Author * Karen Huffman/HQ/NGS

Workflow

Current Approval Stage Draft

Next Approval Stage Publish

Effective Date 09/29/2006 12:00:29 PM m/d/y h:mm AM/PM

Profiling

Categories --Staff News
(Category Choices have been limited by Template)

Keywords

Presentation

Alternative Link No Web page Attachment External link

Web Page

Attachment

URL (specify http:// for URLs external to this site)

Body

Replace above image with your picture and caption! Photograph by Brent Houston

Step 3: Add staff news article text....

Reminders:

Text

- Article text, 9pt Arial
- Photo caption and credit, 7pt Arial, Italics

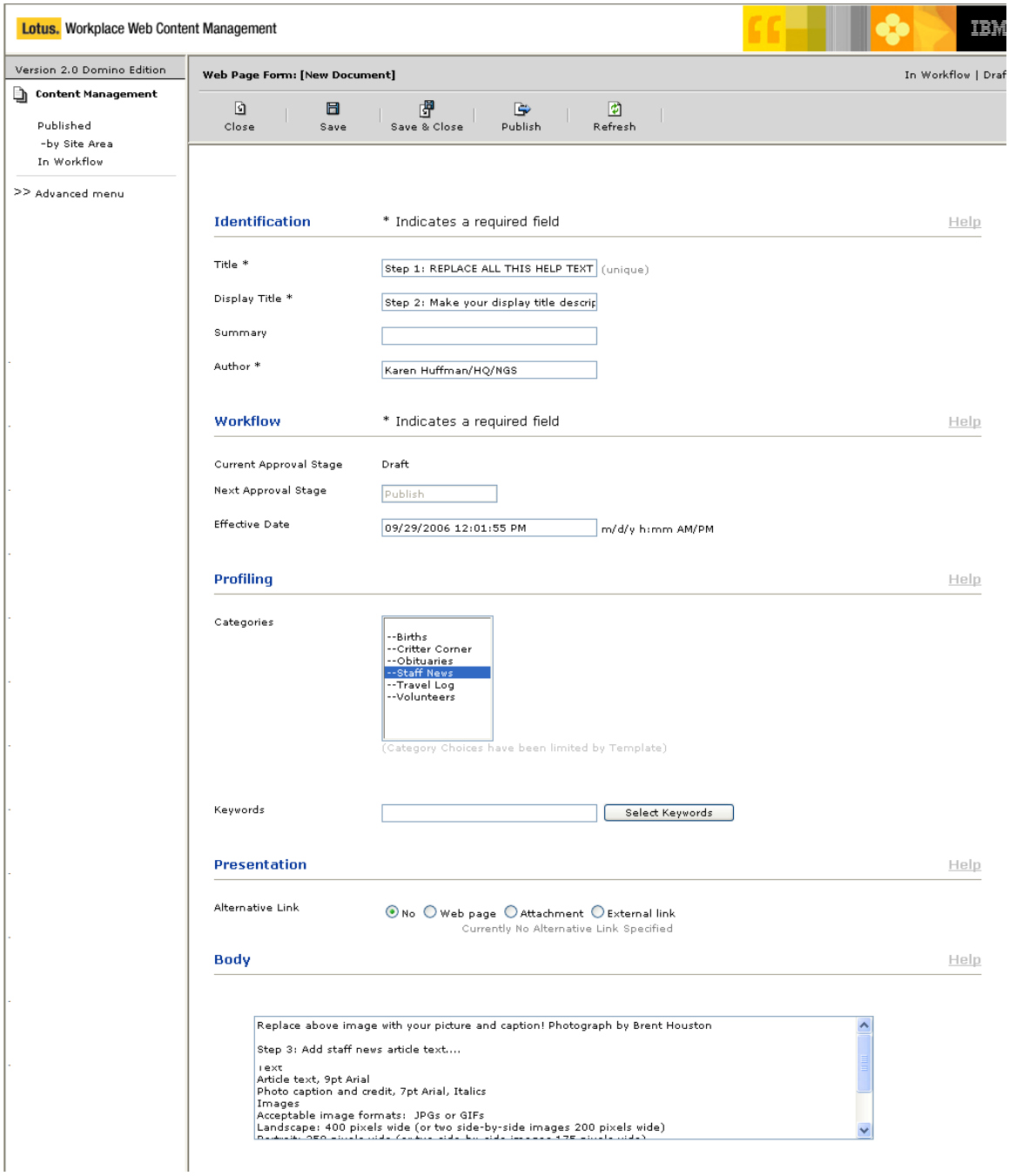
Images

- **Acceptable image formats:** JPGs or GIFs
- **Landscape:** 400 pixels wide (or two side-by-side images 200 pixels wide)
- **Portrait:** 350 pixels wide (or two side-by-side images 175 pixels wide)

Don't forget to preview your work BEFORE you publish your article. Rememeber to remove these instructions/reminders before you post.

Modification History

Pictured: A content creator's Lotus Notes client view of page templates.



Pictured: A content creator's view of a Web form template.

TECHNOLOGY

Infrastructure

The corporate intranet runs on ILWWCM (version 2.0 Domino Edition), which runs on a Windows 2003 server with Domino 6.5.4.

Domino allows National Geographic to share parts of its intranet with appropriate third parties. "With our Domino infrastructure, we are able to build a replication formula, based on keyword values, to selectively replicate an appropriate subset of

data to servers that deliver the intranet to our external, strategic partners," notes Robert Harris, a senior application developer at National Geographic. "For example, our domestic (US) cable channel — The National Geographic Channel — is a business partnership with Fox. The employees at Fox who support our cable channel have access to a limited subset of our intranet on a Domino server in their environment that we replicate to them at 10-minute intervals. The same goes for a server we have set up that our Local Language Edition partners around the globe who publish the *National Geographic* magazine in over 30 different languages."

Search

The intranet uses the Lotus CMS's built-in search capabilities. "We set up a simple search box which appears on every page, but also let staff browse by categorized content," says Huffman. The intranet team is currently exploring new search technology that can index multiple content repositories because a substantial portion of National Geographic content is stored in the eDocs document management system, which doesn't integrate with the Lotus CMS.

NATIONAL GEOGRAPHIC
INSIDER

Search

Home | Directories | Submit Info | Forms | Resources | Divisions | Libraries | NG.com | For Me | HR | Calendars | Portal 1

About NG
News & Reports
Personal Tools
Research Tools
Work Tools

Search NG Insider Archives

Search Results

Perspective StyleMaven: Spelling by the book (Perspective, 11/28/2006)

Perspective StyleMaven: How to make sense of this, last, and next (Perspective, 11/17/2006)

Perspective Scary email facts for Halloween LIS's Janet Stauss on lawsuits and emails (Perspective, 10/31/2006)

Perspective StyleMaven: Meanings morph when English is jerry-written (Perspective, 10/17/2006)

Perspective StyleMaven: One singular sensation (Perspective, 09/28/2006)

All Categories 1974: Arnold Guyot Memorial Award (1974: Arnold Guyot Memorial Award, 08/29/2006)

Perspective The Most Important Thing (Perspective, 08/18/2006)

Perspective StyleMaven: Conjunction injunction was kids' stuff (Perspective, 08/16/2006)

Perspective Focus: NG in London Under one roof (Perspective, 07/21/2006)

Perspective Trends Analysis Group quarterly trends posted; Report covers technological, social, demographic, and market trends affecting NG businesses. (Perspective, 07/18/2006)

Perspective An intern says goodbye "The only coffee we've made has been our own" (Perspective, 07/14/2006)

Perspective StyleMaven's slant on italics (Perspective, 07/06/2006)

Perspective "Alright" is All Wrong; StyleMaven Spells It Out (Perspective, 06/12/2006)

Perspective Susan Fifer Canby reports from the field Croatian libraries in a post-communist world (Perspective, 05/31/2006)

Perspective Tuning in for the Bee (Perspective, 05/22/2006)

Perspective Are A.D. and B.C. Dated? No, They Still Belong in the Common Era (Perspective, 05/19/2006)

Perspective What three "tipping points" are going to change consumer behavior? Find out in this new DYG report. (Perspective, 05/04/2006)

Perspective How do I know when the next UPS Class will be held? (Perspective, 05/02/2006)

Perspective Katrina refugee in LA competes in State Bee Mother thanks head of competition for boosting daughter's self-esteem (Perspective, 04/20/2006)

Perspective "Mika Kasumov '09 is a freshman from Azerbaijan, and no one seems to understand what that means..." Harvard Crimson op-ed calls for return of geography (Perspective, 04/17/2006)

Perspective Questions, questions, and more questions about UPS (Perspective, 04/13/2006)

Perspective Trends Analyis Group posts 1st Quarter report; Rise of Internet video; Travel hot spots, etc. (Perspective, 04/11/2006)

Perspective To "But" or Not to "But": It's All So Perplexing, Says StyleMaven (Perspective, 04/10/2006)

Perspective Q of the Day: Is there anywhere at HQ that I can buy tickets for Monday night's lecture about the Judas Gospel? (Perspective, 04/07/2006)

Perspective StyleMaven: Meaning gets mangled when modifiers dangle. (Perspective, 03/16/2006)

1 through 25 of 194 matching documents.

<< Previous Page **Page: 1** 2 3 4 5 6 7 8 Next Page >>

Enter your search terms and hit the search button. To narrow your search, select one or more categories. If you want to browse by categories, leave the search box empty and select one or more categories; then hit the browse button. Search results are sorted in descending, chronological order. For articles posted before 2004, please search eDocs.

Enter your search terms:

Search

Google-like search. Do not use and, or, not to combine terms.

Categories:

Browse

----FAQs
----Hot Topic
----Letter of the Week
----News
----Notice
----Perspective
----Photo

Ctrl+Click OR Apple+Click to select more than one category

Opportunities @ NG More

Event Your turn with Toys for Tots Donation drive to begin Monday, Dec. 11

Tune in Boyd Matson to appear on Weekend Today Tune in Sunday at 8:30 AM

Event Toot & Puddle kick off a cross-country tour in LA Join them soon at the Borders in Silver Spring

Tune in NGCUS tune-in tonight, Dec. 7: Footage from In the Womb on The Insider

Tune in NGCUS tune-in: In the Womb vet on Fox Dec. 9

Job Postings
Menus
Perks
Submit Calendar Item

Photo of the Day

ENLARGE

Communications

Press Release NGCUS presents a trip down candy lane Dec. 20

Press Release NGCI launches Nat Geo Wild, new channel dedicated to wildlife programming

Press Release NG Kids sets Guinness record for largest collection of plush toys

Press Release NG Books to publish Etched in Stone: Enduring Words from Our Nation's Monuments

Press Release NGM #1 in readership satisfaction survey

Press Room
PR Boilerplates

News Feeds Go to LIS
Staff News Read All
Classifieds Read All

Pictured: In addition to using an intranet search tool, employees can browse the intranet by categories.

GOALS AND CONSTRAINTS

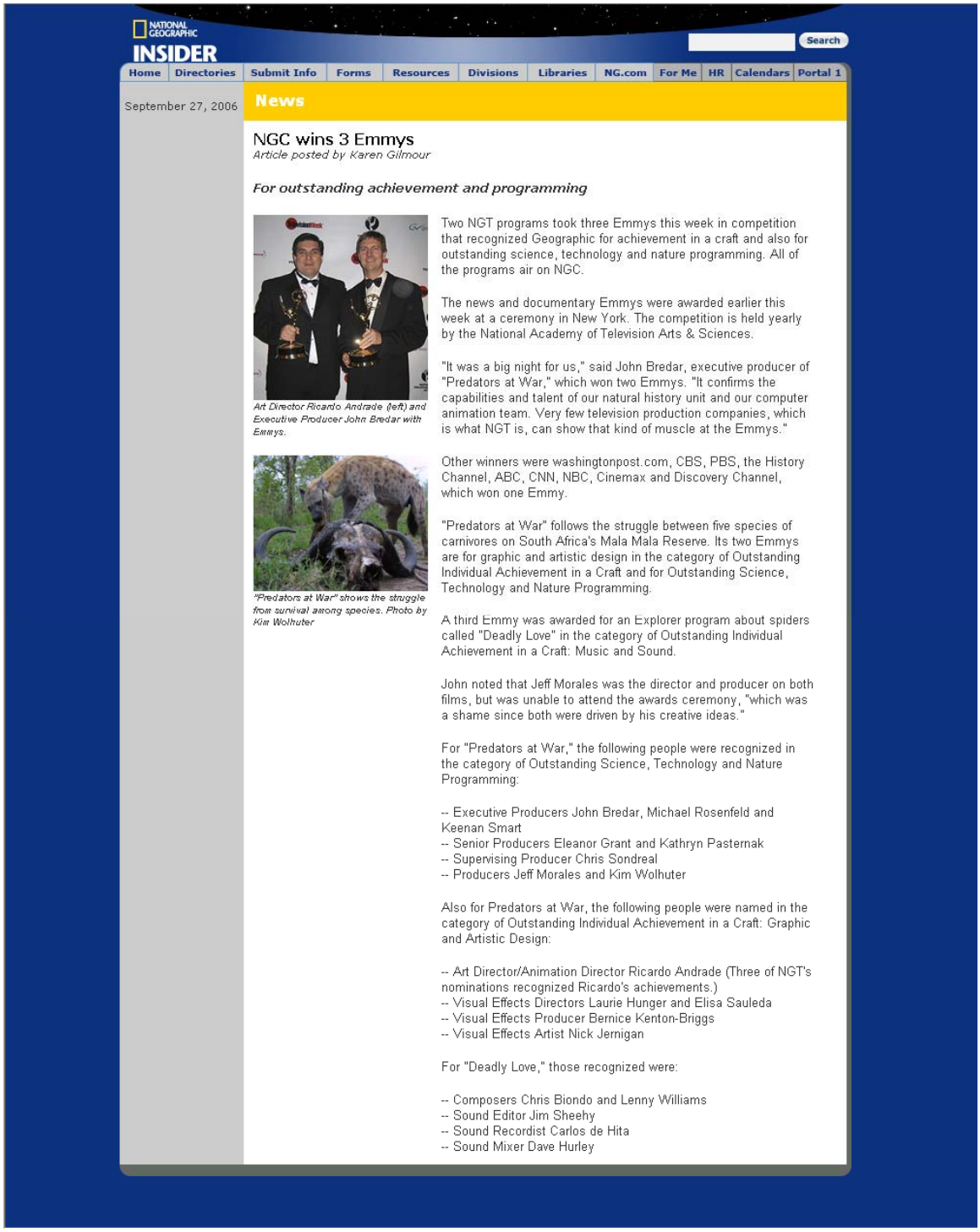
Goals:

- Use a decentralized approach to keep content fresh and engaging.
- Listen to users to increase the intranet's reach and effectiveness.
- Expand the intranet's reach and relevance for international and domestic affiliates.
- Help National Geographic Society staff search for and contribute to intranet content.
- Tap a small group of younger staffers to brainstorm possible intranet uses and developments.

BASIC INTRANET FEATURES

News

From NG Insider's homepage, staff members can read news stories, notices, perspectives, intelligence reports, and press releases; learn about upcoming events, lectures, and learning opportunities; and more.



NATIONAL GEOGRAPHIC INSIDER

Search

Home | Directories | Submit Info | Forms | Resources | Divisions | Libraries | NG.com | For Me | HR | Calendars | Portal 1

September 27, 2006

News

NGC wins 3 Emmys

Article posted by Karen Gilmour

For outstanding achievement and programming

Art Director Ricardo Andrade (left) and Executive Producer John Bredar with Emmys.

"Predators at War" shows the struggle from survival among species. Photo by Kim Wolhuter

Two NGT programs took three Emmys this week in competition that recognized Geographic for achievement in a craft and also for outstanding science, technology and nature programming. All of the programs air on NGC.

The news and documentary Emmys were awarded earlier this week at a ceremony in New York. The competition is held yearly by the National Academy of Television Arts & Sciences.

"It was a big night for us," said John Bredar, executive producer of "Predators at War," which won two Emmys. "It confirms the capabilities and talent of our natural history unit and our computer animation team. Very few television production companies, which is what NGT is, can show that kind of muscle at the Emmys."

Other winners were washingtonpost.com, CBS, PBS, the History Channel, ABC, CNN, NBC, Cinemax and Discovery Channel, which won one Emmy.

"Predators at War" follows the struggle between five species of carnivores on South Africa's Mala Mala Reserve. Its two Emmys are for graphic and artistic design in the category of Outstanding Individual Achievement in a Craft and for Outstanding Science, Technology and Nature Programming.

A third Emmy was awarded for an Explorer program about spiders called "Deadly Love" in the category of Outstanding Individual Achievement in a Craft: Music and Sound.

John noted that Jeff Morales was the director and producer on both films, but was unable to attend the awards ceremony, "which was a shame since both were driven by his creative ideas."

For "Predators at War," the following people were recognized in the category of Outstanding Science, Technology and Nature Programming:

-- Executive Producers John Bredar, Michael Rosenfeld and Keenan Smart
-- Senior Producers Eleanor Grant and Kathryn Pasternak
-- Supervising Producer Chris Sondreal
-- Producers Jeff Morales and Kim Wolhuter

Also for Predators at War, the following people were named in the category of Outstanding Individual Achievement in a Craft: Graphic and Artistic Design:

-- Art Director/Animation Director Ricardo Andrade (Three of NGT's nominations recognized Ricardo's achievements.)
-- Visual Effects Directors Laurie Hunger and Elisa Sauleda
-- Visual Effects Producer Bernice Kenton-Briggs
-- Visual Effects Artist Nick Jernigan

For "Deadly Love," those recognized were:

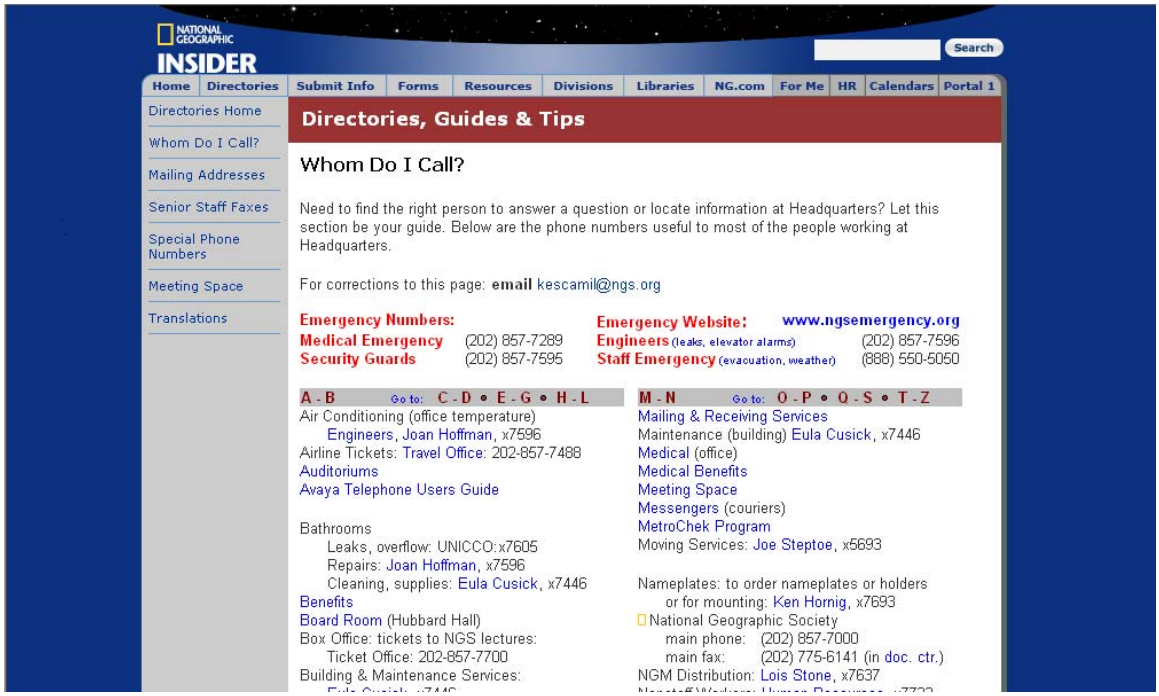
-- Composers Chris Biondo and Lenny Williams
-- Sound Editor Jim Sheehy
-- Sound Recordist Carlos de Hita
-- Sound Mixer Dave Hurley

Pictured: A news page.

Directories and *Whom Do I Call*?

When they need to find a colleague, staff members can search the employee directory or consult Whom Do I Call? — the organization's "yellow pages," which organizes content topically. The employee directory lets users search by last name,

first name, or telephone extension, and also allows for browsing by workgroup or division.

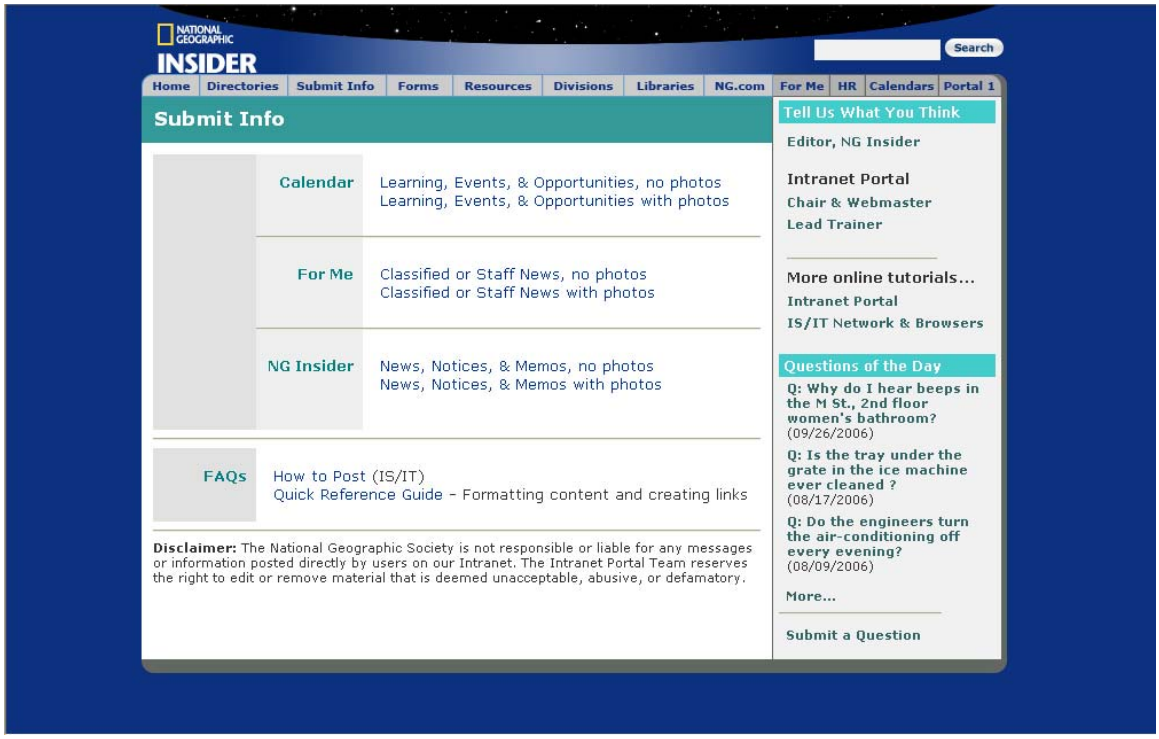


Pictured: Like a "yellow pages" directory, the *Whom Do I Call?* page includes topically organized information and services.

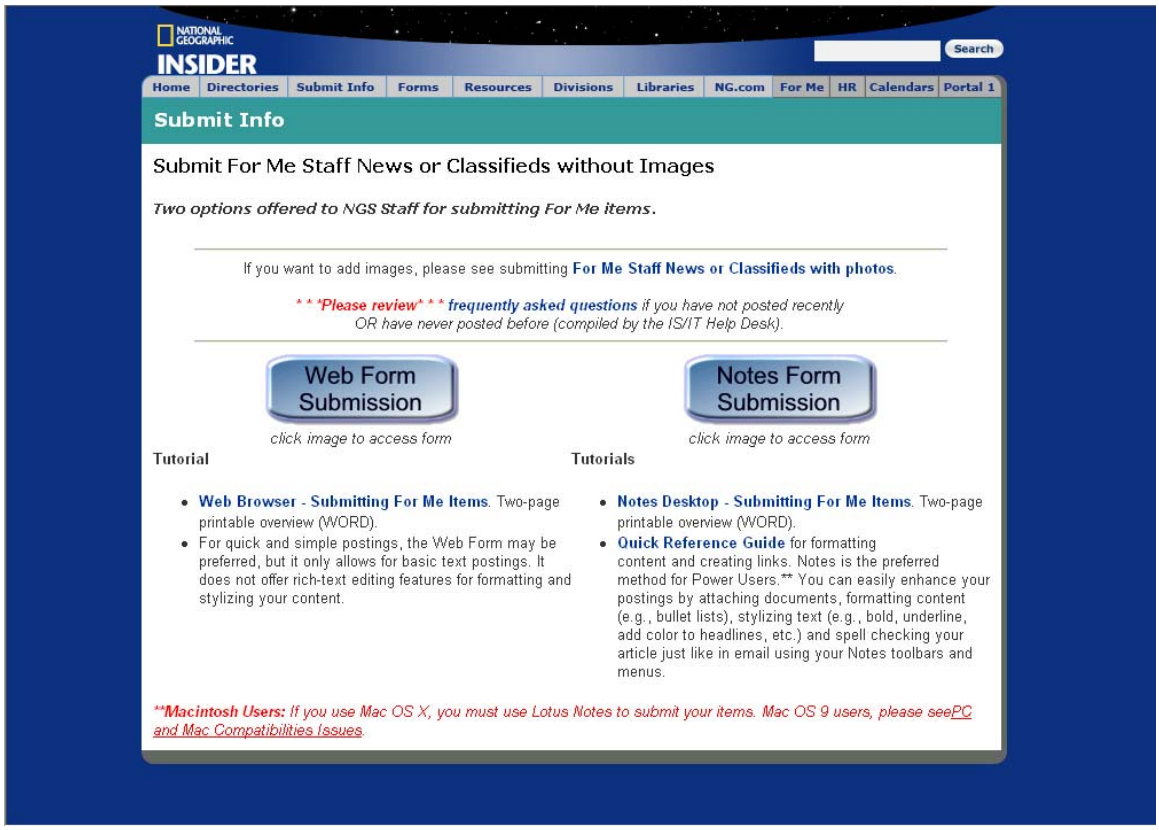
Submit Information

Given the National Geographic's decentralized approach to content authoring, allowing employees to easily submit content is itself a feature. Accordingly, staff can use the *Submit Info* page to post to three main areas: the homepage's main content/news region, the *Opportunities @ NG* (right sidebar), and the *For Me* staff news and classifieds, which includes the *Critter Corner*, *Travel Log*, and *Volunteers* areas.

To post content, employees have two options: they can use a Web-based intranet form or post directly using a Lotus Notes client. Templates ensure content appears in the correct place and is properly designed and categorized. Printable directions on how to post content also help (and were recently simplified down to just two pages). In addition, the intranet team is exploring Flash-based tutorials for training purposes.



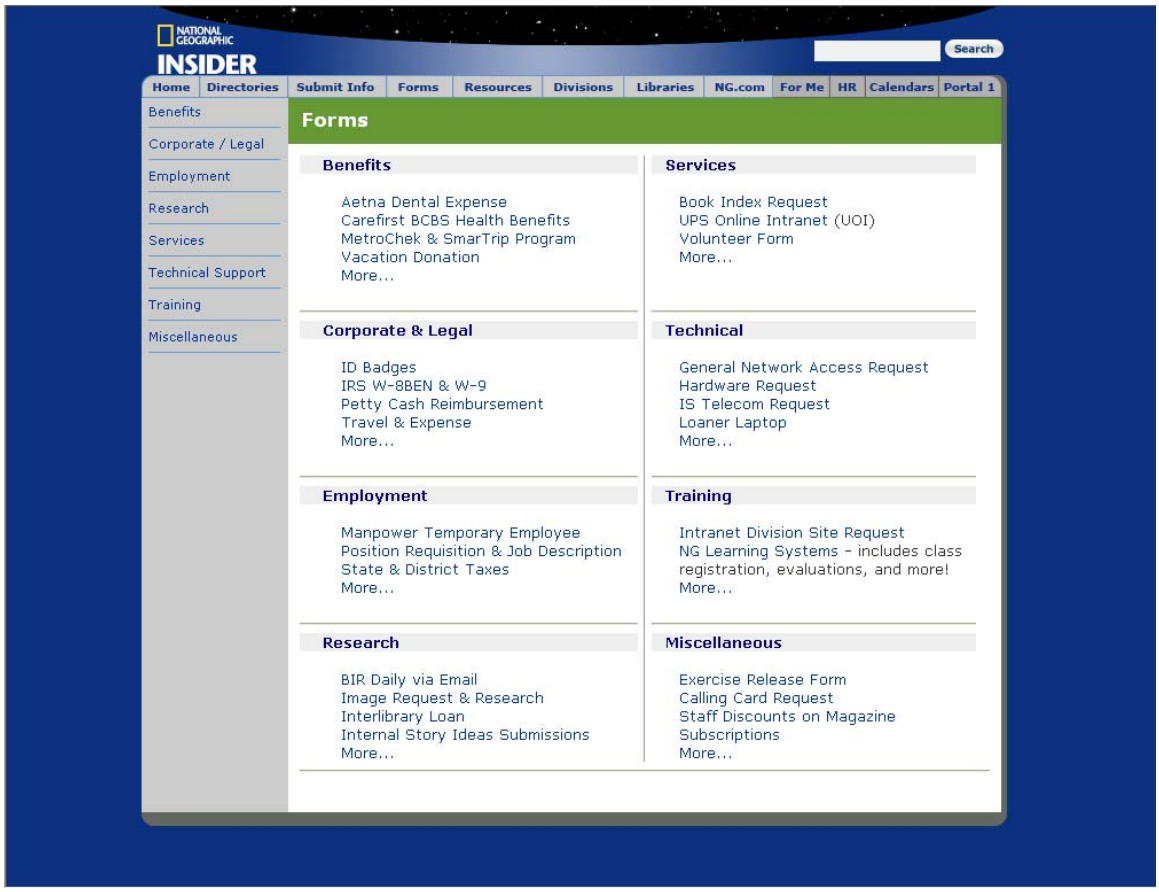
Pictured: Staff members use the *Submit Info* page to post to any one of three site areas.



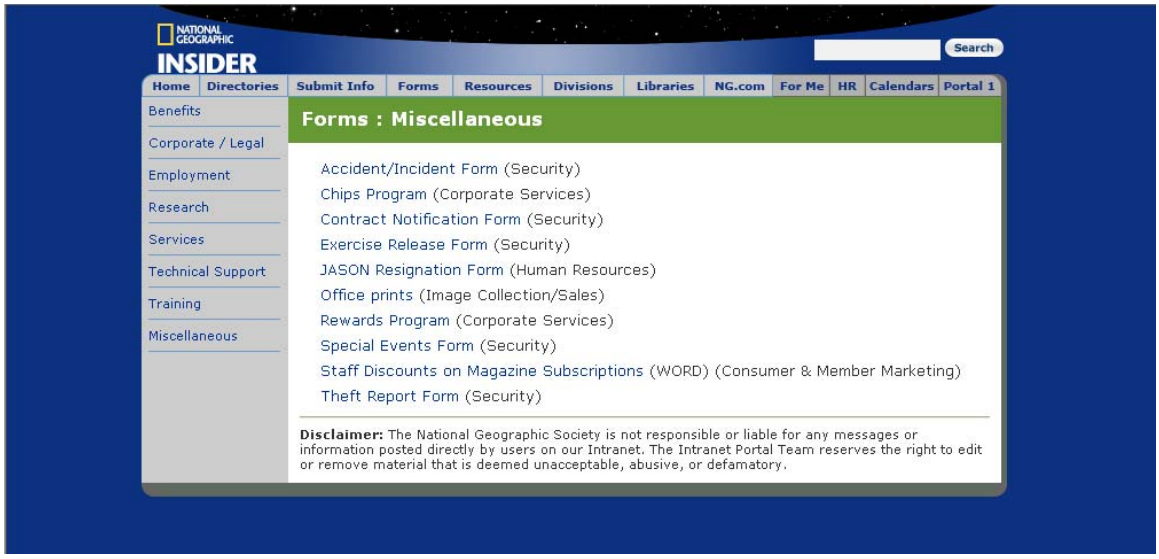
Pictured: Most staff can submit intranet content using either an intranet-based Web form or a Lotus Notes client.

Forms

The *Forms* page includes links to the most-used forms in eight categories. Each category name links to a standalone page with all forms relevant to that category.



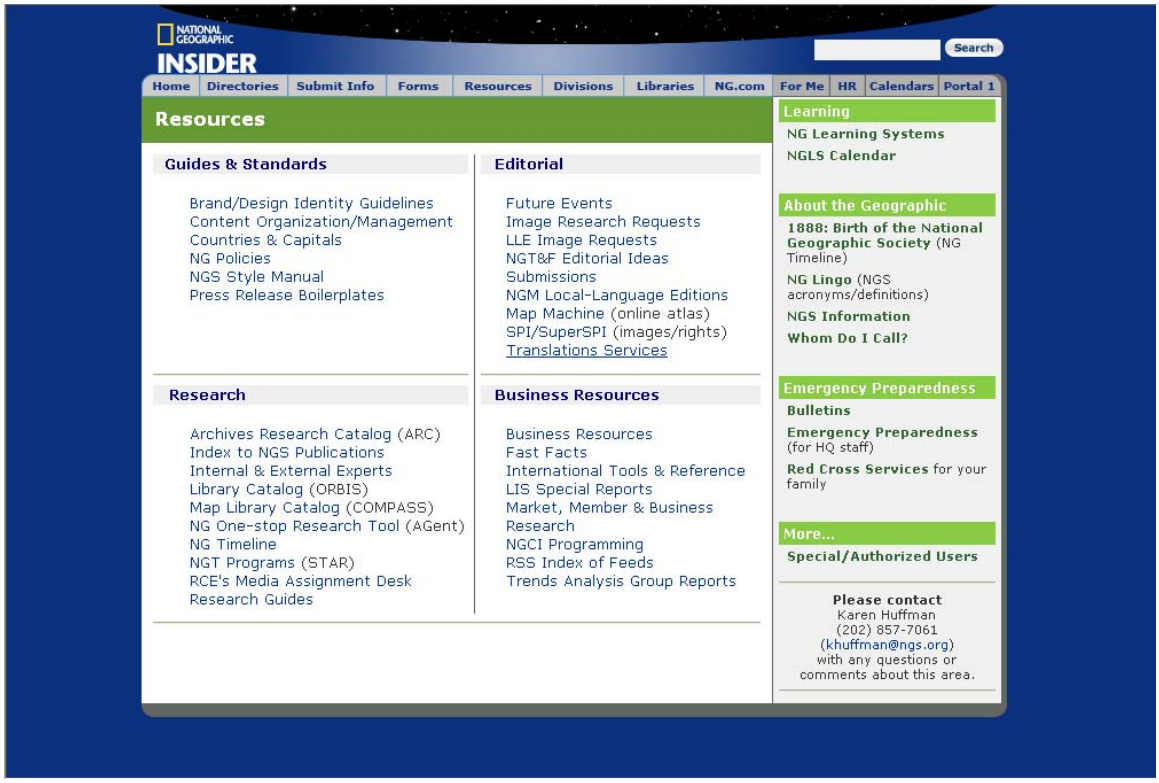
Pictured: The *Forms* page organizes all available forms in eight categories, with this top-level page listing the most popular forms in each category.



Pictured: A list of forms classified under *Miscellaneous*.

Resources

The *Resources* page aggregates the most frequently used resources and databases. Content is grouped into four areas. The right sidebar includes additional, learning-related links to more information, such as *NG Learning Systems* (NGLS), National Geographic history, *Emergency Preparedness*, and secured/password-protected areas.

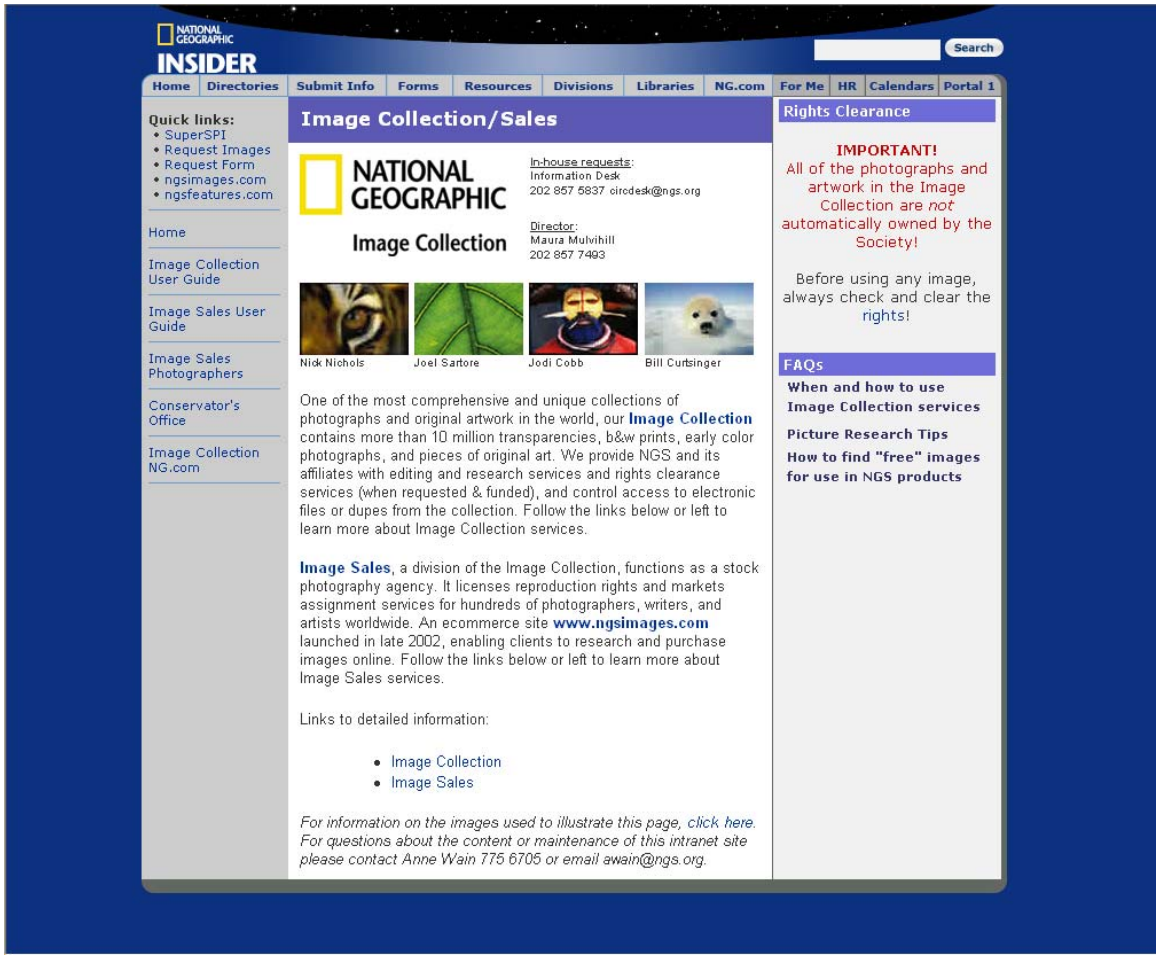


Pictured: The *Resources* page aggregates the most frequently used resources and databases.

Divisions

The *Divisions* page alphabetically groups internal and external (indicated with an asterisk) division sites. These are not all of National Geographic's divisions and workgroups, but rather only those with a site on the organization's intranet or Internet (nationalgeographic.com). The right sidebar includes links to team and community sites.

Pictured: Employees can browse intranet content by division.



Pictured: Employees can tap the National Geographic's extensive image collection.

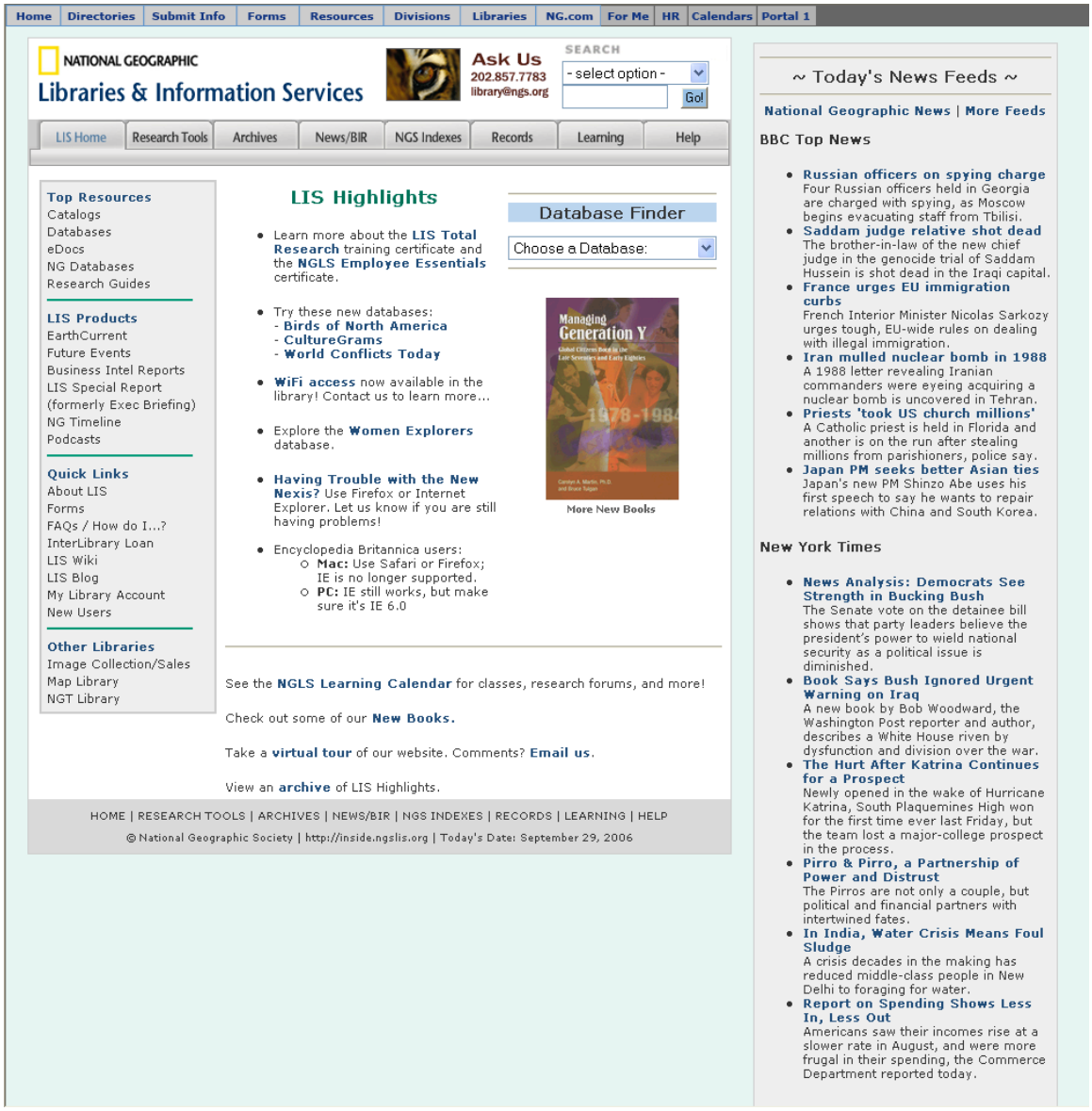
Pictured: Employees can access a variety of educational resources on the National Geographic intranet.

Libraries

The *National Geographic Libraries & Information Services* (*LIS*) site was redesigned and launched in September 2005 and currently encompasses about 600 pages. "It is primarily HTML-based, with Web 2.0 applications integrated in various ways," says Huffman. "Although the NG Insider's top navigational bar was incorporated for easy access back to the corporate intranet, the libraries used an external Web host that offered industry standard Web server and hosting configuration to enable it to explore emerging technologies."

The *LIS* homepage features the current week's highlights, including a list of new books and resources; a *Database Finder* drop-down list that guides staff to the top databases and catalogs; streaming news feeds from the BBC and *The New York Times* delivered using MagpieRSS, a PHP-based RSS parser; a categorized list of

recommended RSS feeds; a podcasts page; and several wikis, running on MediaWiki version 1.8.2.



Pictured: The NG Insider's *Libraries & Information Services* sub-site homepage.

Home | Directories | Submit Info | Forms | Resources | Divisions | Libraries | NG.com | For Me | HR | Calendars | Portal 1

NATIONAL GEOGRAPHIC

Libraries & Information Services

Ask Us
202.857.7783
library@ngs.org

SEARCH
- select option -
Go!

LIS Home | Research Tools | Archives | News/BIR | NGS Indexes | Records | Learning | Help

LIS home » research »

Databases
Databases by Subject
Databases - Alphabetical

NG Databases
Library Catalog (ORBIS)
NGS Publications Index
NGS Detailed Index
Archives Catalog (ARC)

Find Books
Library Catalog (ORBIS)
WorldCat
Books In Print

Find Articles
FirstSearch
Nexis Quick Search
Periodicals Finder
Proquest

People & Experts
Biography Resource Ctr.
Nexis Biography Search
Community of Science
World of Learning

Business
Associations - Nexis
Company Dossier - Nexis
Hoovers

Research Tools

Choose a Research Database:
Choose an NG Database:

Databases — Sources for books, journals, statistics, news...

NG Databases — NG One-Stop, Indexes, Timeline, ARC, SuperSPI...

Research Guides — Subject-specific databases and websites...

Fast Facts — Almanacs, dictionaries, quotations...

Finding Books — ORBIS, Books In Print, ILL...

Finding Articles — ProQuest, Nexis, Periodicals Finder...

People & Experts — Celebrities, Scientists, Politicians...

Business Resources — Companies, Associations, Market Research...

Image credits: CD - Stephen St. John; Flag - James P. Blair; Watch - Jim Gensheimer; Books - James L. Amos; Magazines - Michael Jourdan; Scientist/Bones - O. Louis Mazzatenta; Buildings- Sam Abell

HOME | RESEARCH TOOLS | ARCHIVES | NEWS/BIR | NGS INDEXES | RECORDS | LEARNING | HELP

© National Geographic Society | http://inside.ngslis.org | Last updated: August 16, 2006

Pictured: Library research tools.

Pictured: The Libraries & Information Services sub-site offers a categorized list of recommended RSS feeds.

Home | Directories | Submit Info | Forms | Resources | Divisions | Libraries | NG.com | For Me | HR | Calendars | Portal 1

NATIONAL GEOGRAPHIC

Libraries & Information Services

Ask Us
202.857.7783
library@ngs.org

SEARCH
- select option -
Go!

LIS Home | Research Tools | Archives | News/BIR | NGS Indexes | Records | Learning | Help

LIS home » news » podcasts »

News
Business Intel Reports
Earth Current
Reading Room
NG & LIS News
News Online
News in Print
News Alerts
RSS
Podcasts

Business Intel Reports
Today's BIR
NG in the News
Missions Report
Travel Report
Special Report (formerly Exec Briefing)

Reading Rooms
Headline News
Business News
Company News
Travel News
Science News

Quick Links
Quick News Search
Wash Post / NYT Search
Nexis
Proquest

Podcasts Archive

Podcast Home | Listen Up! News | NG History Moment
Trends | Reports and Presentations

Listen Up! News Archive

Top news relevant to NGS - from the Business Intelligence Report (BIR), NG in the News and EarthCurrent.

September 22, 2006 | September 15, 2006 | September 8, 2006 | September 1, 2006

NG Moment

And learn a bit of NG history in the NG moment!

- August 11, 2006 Alexander Graham Bell and Beinn Bhreagh, Baddeck, Cape Breton Island, Nova Scotia.
- July 14, 2006 George Shiras, 100th anniversary of the first wildlife photograph in NGM.
- June 9, 2006 The World in Your Garden with artwork by Else Bostelmann.
- May 12, 2006 75th anniversary Citroen-Hart Trans Asiatic Expedition, Part II
- April 14, 2006 Citroen-Hart Trans-Asiatic Expedition: 1931
- March 17, 2006 Women's History Month: Eliza Scidmore
- February 24, 2006 February 1920 NGM issue "Classic Geographic Cover"
- January 13, 2006 Founding of the National Geographic, 118 years
- October 20, 2005 Gilbert Hovey Grosvenor

Trends

1st Quarter 2006

Reports and Presentations

China - April 2006

HOME | RESEARCH TOOLS | ARCHIVES | NEWS/BIR | NGS INDEXES | RECORDS | LEARNING | HELP

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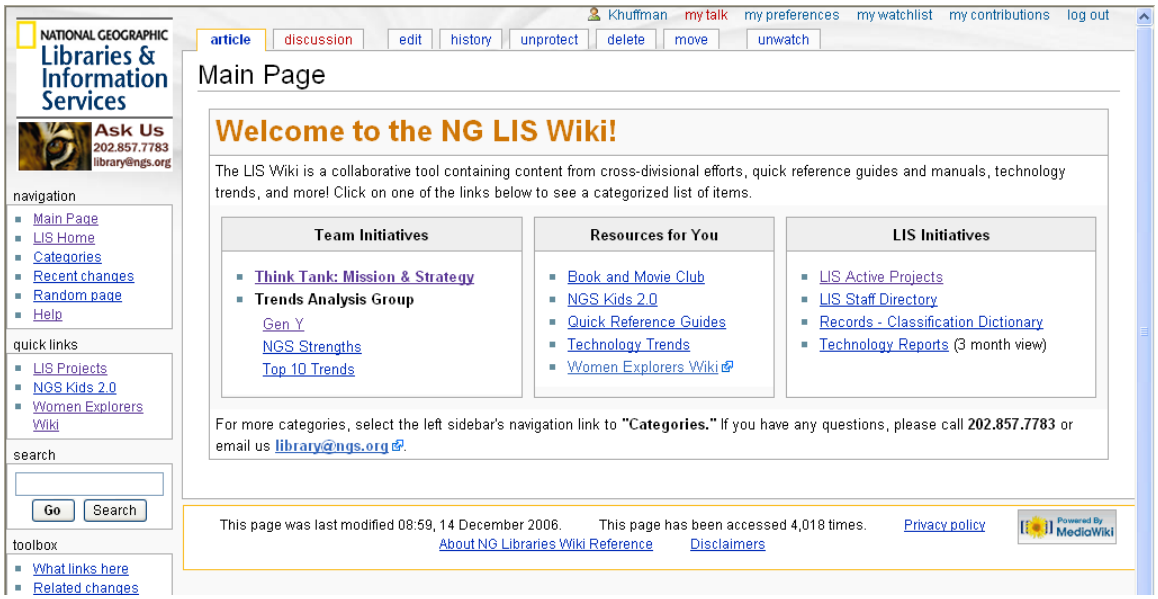
Pictured: An archive of Libraries & Information Services podcasts.

Wikis: Libraries Start the Trend and Facilitate Cross-Organization Adoption

How well have wikis — which any user can add or subtract content from — worked? According to Huffman, "the organic nature of wikis is both their strength and weakness. Allowing anyone to add or edit anything creates the risk of an ultimately chaotic information space."

To help diminish the potential chaos, all users must create a username and log in before they can contribute, and all content is tracked by author. Inevitably, each wiki also develops its own norms — for socializing, adding content, and naming — which helps keep the wikis useful and organized.

National Geographic's foray into wikis began with its library staff. "Our first wiki was initially set up as a learning environment for libraries staff to practice collaborative and project management skills," notes Huffman. To get started and learn basic conventions, staff members each added their resume and pictures to the wiki. They now use the LIS wiki for project status reports, quick reference and training material, and 20-minute "coffee break" training sessions, on narrowly focused topics, such as finding old news, Nexis updates, eDocs tips, and maps.



Pictured: The main page of the Libraries & Information Services wiki. The library group has taken the lead in learning to master wikis. Other business groups are now following suit when they require better collaboration capabilities.

The library staff later added two additional areas within the LIS wiki. One tackles National Geographic's internal lingo, including acronyms, and is especially helpful for new employees. Another one, records classifications, is still under development; its purpose is to help staff manage records and archive-related retention policies.

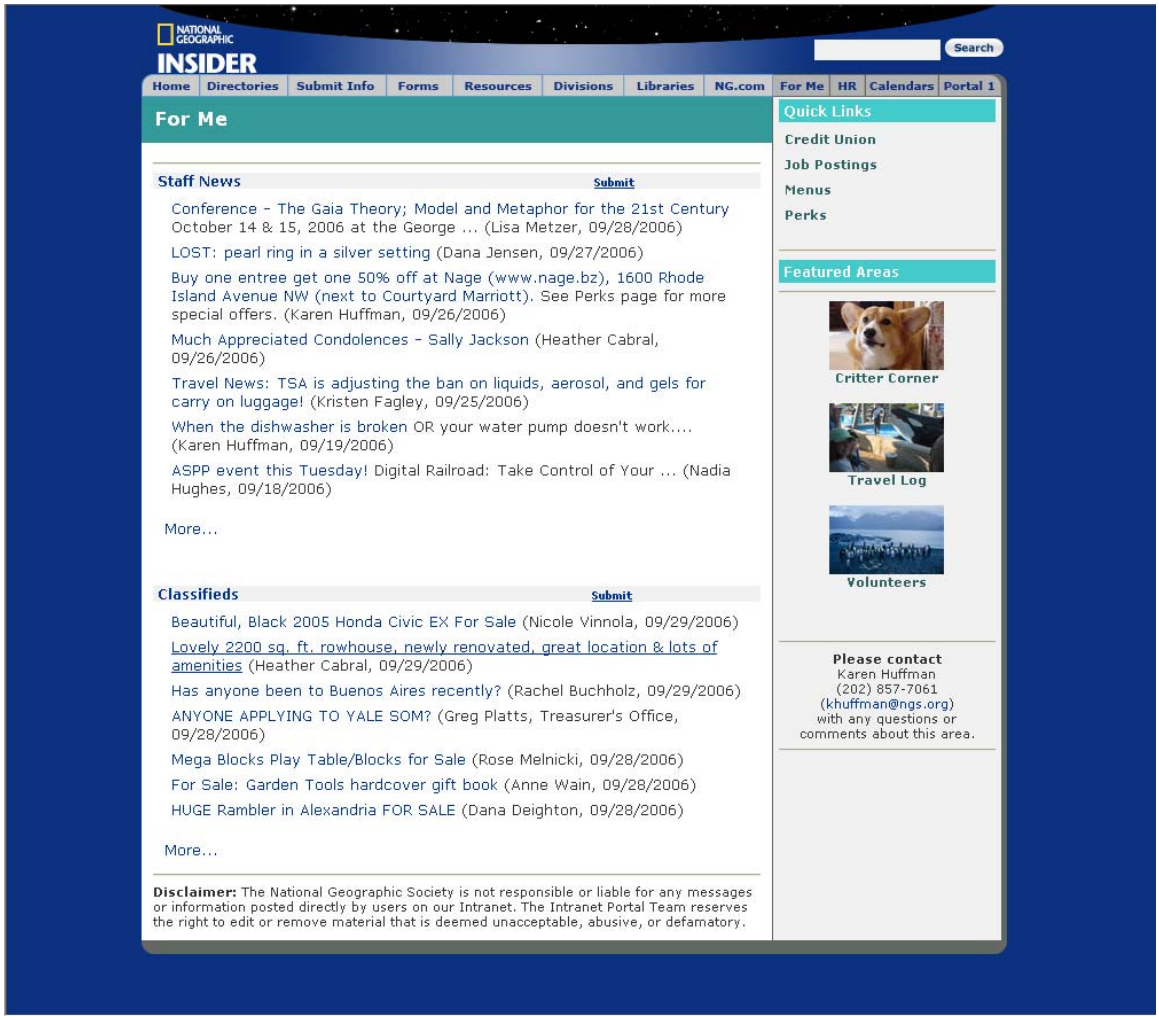
Women Explorers Wiki

Another interesting wiki supports a cross-divisional Women Explorers Initiative launched in the spring of 2006, aimed at supporting content and product development. "This research portal for internal staff has 20 contributors from various divisions, and academic interns also assist with research and authoring entries," notes Huffman. As noted previously, the wiki now contains more than 250 entries on

women who have worked with National Geographic, including Louise Leakey, Eugenie Clark, and Jane Goodall.

For Me

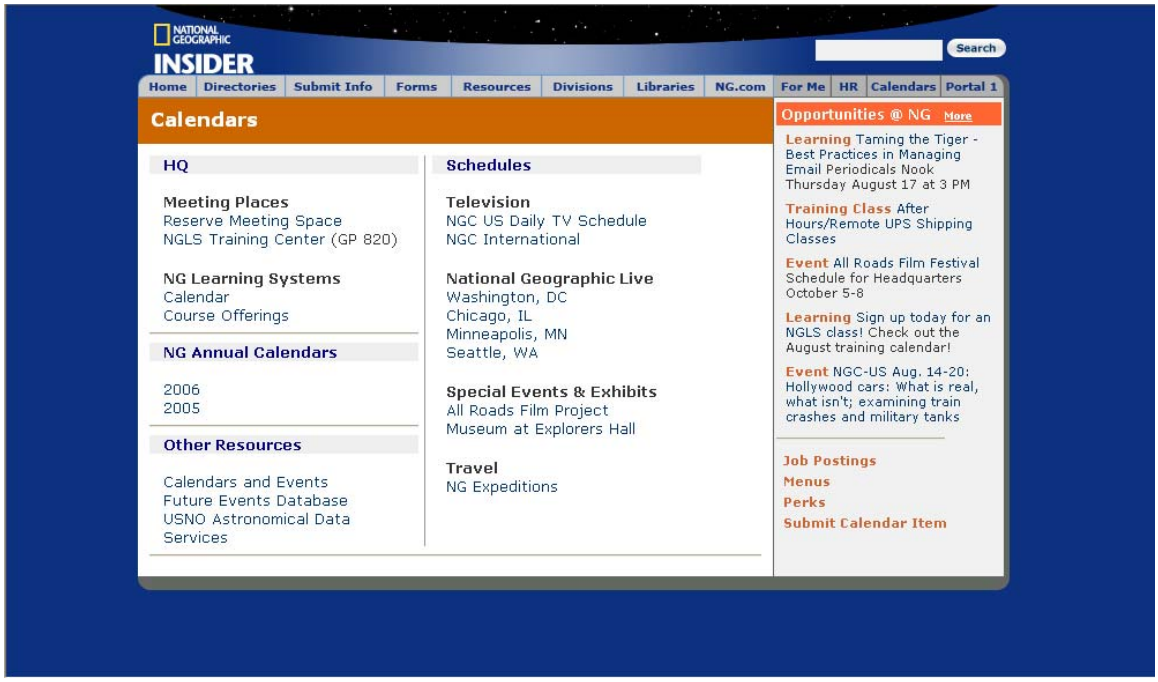
One intranet area is devoted strictly to employees. "*For Me* is a place staff can share NG staff accomplishments and involvements, post birth announcements and obituaries/remembrances, as well as post classifieds ads to advertise items for sale, apartments, carpooling opportunities," says Huffman. Some newer, post-redesign content categories feature volunteer experiences, as well as offering a place to share travel pictures and ideas, and favorite animal pictures. Streaming feeds from external sites share National Geographic customers' content with the organization's employees.



Pictured: The *For Me* section gives employees a place to share accomplishments, post classified advertisements, arrange carpools, and share animal stories.

Calendars

The *Calendar* page displays National Geographic's internal and external calendars, and includes relevant, dynamic content drawn from learning and event categories.



Pictured: This page aggregates National Geographic's internal and external calendars. The right sidebar includes *Opportunities @ NG* (also found on the homepage).

USERS

NG Insider serves about 1,500 staff at National Geographic's headquarters, and about 300 more people in affiliate offices. "In 2006 we began providing access to our domestic and international partners," notes Huffman. The intranet serves business areas (advertising, marketing, finance, and so on), which primarily use Intel-based PCs, as well as editorial product areas, which use a mix of Intel-based PCs and Apple computers. The latter areas produce National Geographic's magazines, books, educational products, maps, website, and television shows.

USER TASKS

Employees use the intranet in a variety of ways, including such tasks as:

- Access information about the Society (including its divisions) and read news stories, press releases, and perspectives, as well as competitive intelligence and special reports.
- Learn about upcoming corporate learning and training seminars, special events, staff product offers, perks, television screenings, and more.
- Obtain current corporate training schedule, register for classes, review class descriptions, and locate e-learning materials.
- Reference subscription databases, such as LexisNexis.
- Research rights and digital contracts.
- Use wikis for project collaboration and research.

- Access eDocs for sharing contracts, rights, and legacy digital content.
- Use the staff directory.
- Share news and remembrances.
- Report time worked and schedule weekly leave for approval.
- View compensation history and paychecks.
- Update beneficiary and personal information or W-4 tax information.
- Complete yearly performance evaluations.
- Submit travel and expense reports.
- Order PCs.
- Sell items and locate roommates.
- And more…

INTRANET TEAM

Pictured: (front row, from left) Robert Harris, Susan Fifer Canby, Lisa Metzer, Karen Huffman, Karen Gilmour, Kate Baylor; (back row, from left) Gary Carter, Barbara Ferry, Suzan Eaton, Victor Veizaga. (Photograph by Eduardo Rubiano, National Geographic Society.)

The intranet team is primarily comprised of staff from four divisions: Communications, LIS, Information Systems & Technology, and NG Digital Media.

The team manages high-level activities on the corporate intranet, including:

- Development of intranet strategic goals and evolution
- Content management through retention/archival policies
- Server maintenance
- Application development and design
- Metrics tracking
- Training

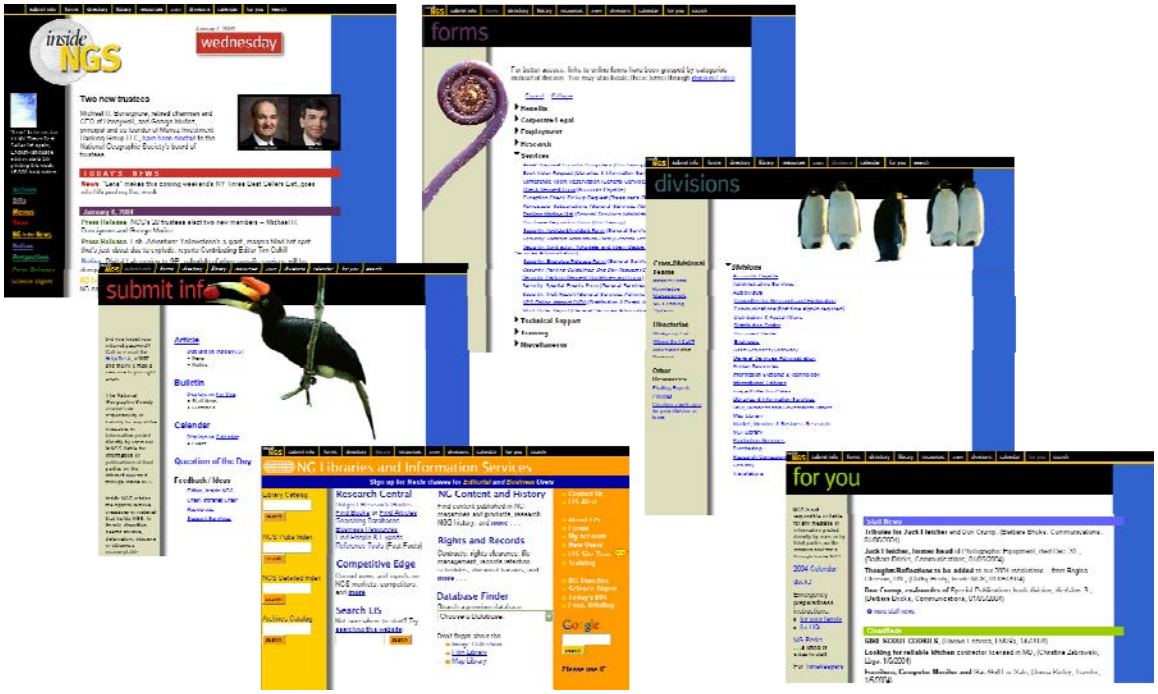
For many intranet team members, however, "the intranet is either a very small part of their formal job responsibilities, or it may not be technically part of their job," notes Huffman. The budget is also quite small. "The intranet now has a limited annual budget — approximately $8,000/year — that is used primarily for seminars and training, design work/consultation, and purchasing added-value reports."

BACKGROUND

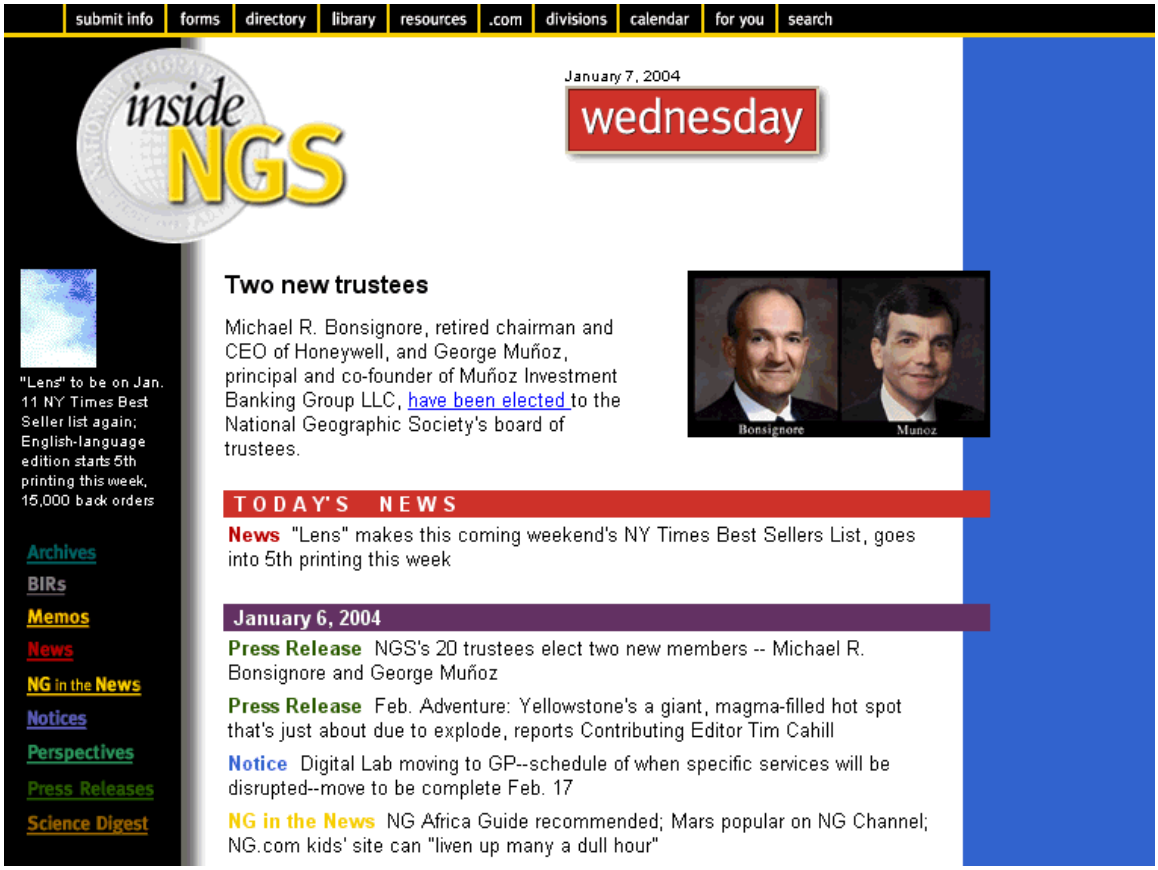
The Society's intranet began as a grassroots project involving five departments — LIS, Information Systems & Technology, Corporate Communications, NG.com, and Administrative Services — who wanted to solve enterprise-wide communication challenges. Their project began with no dedicated resources.

Later, the library director organized a team that ultimately launched Inside NGS in December 1999 using a Notes Domino back end (Lotus Notes version 4.6). The site included new template design features and functionality. Library staff members published daily reports on the intranet and ensured that news stayed fresh.

"Members of the intranet team designed the site; trained other divisions to create their division sites, share resources, and post news; promoted the usage; gathered and organized content; maintained metrics; and reported on usage," says Susan Fifer Canby, vice president of LIS and the original intranet team chair.



Pictured: Pages from the National Geographic intranet's 1999–2005 design.



Pictured: Intranet homepage, 2004.

In late 2004 and 2005, the intranet team held brainstorming sessions to prepare for development of a new design with improved functionality. "One of the major goals for the new design was to make the most heavily used and/or important sites only one click away from the homepage," says Huffman.

The new design would ultimately emphasize searching from any page, and allow editors to more easily promote events, training, and other opportunities. Furthermore, consistently applying style sheets to each intranet site would lead to lower maintenance and custom-design costs.

By the end of 2005, the intranet averaged one million page views a month by 1,500 people. "Although National Geographic's intranet content and usage grew exponentially, the intranet team was restricted by the initial customization of the software, which locked us into the initial software application version," notes Huffman. So, the team had planned for when it would have additional resources, and in the meantime set about re-organizing existing pages to help manage the ever-expanding amount of content.

By the end of 2005, however, the situation became dire. "The eight-year-old server was severely degrading and the application was several iterations out of date," she says. Accordingly, "the core work for our new intranet — i.e., application development and content migration — occurred within a three-month timeframe, from December 2005 to March 2006." The intranet team began introducing page redesigns, while also upgrading to ILWWCM, version 2.0 Domino Edition, which National Geographic's IS group recommended.

DESIGN PROCESS AND USABILITY ACTIVITIES

The intranet redesign team used several methods for developing new design and functionality, including card sorting, evaluating server logs, holding focus groups, and conducting research.

Card-Sorting and Survey Exercises

In 2004, to help gauge employees' needs and wants for a portal, the intranet portal team commissioned a card-sorting exercise with a random sample of employees. Ultimately, 12 randomly selected employees performed the exercises.

Each completed four tasks, as summarized here:

- On a sheet of paper labeled "Expectations for Intranet Portal Homepage," write in the types of information you would expect to be on, or want to access from the homepage.
- On the sheet labeled "Expectations for Intranet Portal 'My Page'/Personal Page," write in the types of information you would expect to be on, or want to access from a personal page (irrelevant to items listed in Task #1).
- Take the stack of 12 cards, each representing a pagelet/information grouping, and sort them as you would want to see them on the homepage and personal page layouts. (Facilitators told participants that they were not required to use all of the cards, and that they could edit them.)
- Indicate with a "1" which item on each page (homepage or personal page) is the top priority.

Susan White Frazier, part of the National Geographic Marketing Services group, managed the card-sorting exercises. Regarding participants' (unprompted) responses to the first question — elements they'd expect to see on a homepage — Frazier says that, "portal 1/payroll information was mentioned by half of participants." The second most-mentioned element was HR information. After that, agreement was sparse.

People were in even less agreement over which features should appear on the personal page. "Overall, participants suggested topics and types of information for the homepage and personal page that are either present in existing navigational elements, or that appeared in pagelets," says Frazier. (In general, this is a limitation of surveys: users only know what they already know.)

Likewise, for the card-sorting exercises, "in terms of top priorities, none emerged as a clear winner on either the homepage or the personal page" aside from ones that already lived there, she says.

CARD-SORTING EXERCISE RESULTS		
What belongs on the homepage or personal pages?		
Number selecting…	**Homepage**	**Personal page**
About NGS	10	1
News	8	2
Business Resources	7	1
Editorial Resources	6	5
Policies & Rights	6	5
Help	6	6
NG Media Assets or Collections	5	5
For You	5	7
Calendar	5	4
Learning	4	5
Portal 1	3	8
Applications	1	9
N=12; changes and write-ins allowed		

One notable result from the card-sorting exercises, however, was that participants made few changes to pagelet names and information. "Participants tended to leave the pagelets unchanged in terms of both titles and subcategories of information included," says Frazier.

Some participants did suggest slight changes to the information, yet "since none of these were suggested by more than a single participant, and participants left the pagelet titles unchanged, it is safe to assume the team is on the right track in terms of naming and content for these groupings."

Frazier offered the following examples of change requests:

- *NG Media Assets or Collections*: "One changed *Photo Archive* to *Image Collection*. Another added *Blogs*, though it was unclear whether these would be internal (staff) or external (customers). One deleted the *Photo Archive*, *Maps catalog*, and the *Photo Research Guide*."
- *Applications*: "One participant added *Help Desk* and *Tutorials*. One deleted *PeopleSoft*."
- *For You*: "One added *Memos*, *Notices*, and *E-mail*."
- *Help*: "One deleted *Telephone System Users Guide*."
- *Editorial Resources*: "One added *Links to Paleontology Press Releases*."

Participants also suggested adding some new pagelets, including one dedicated to the weather and another for "immediate-attention building notices" that would detail snow-related closures, early café closings, and when new Metrocheck cards were available for pick up.

Project Databases

"To reduce e-mail glut, prioritize ideas, and track progress, the intranet team uses two Lotus Notes databases, accessible from the team's intranet site, that can be bookmarked via our Lotus Notes desktop," says Huffman." One database manages projects and lets team members: group ideas as big ideas, little ideas, or new sites; prioritize projects; and mark items as completed. "This database enables the team to manage limited resources as well as to track progress. When larger projects warrant

more discussion — such as team goals or a document retention policy — the Lotus Notes discussion database is used to develop ideas."

TIMELINE

- 1999: Original intranet redesigned (version 2).
- 2004: Minor homepage and site pages redesigned/reorganized and launched.
- April 2005: Information Systems & Technology selected and demonstrated ILWWCM, version 2.0 Domino Edition, to Intranet Portal Team.
- Summer 2005: Intranet team began designing new site architecture — on a white board — and reorganizing content based upon user studies and industry standards.
- Fall 2005: Intranet team finalized new intranet design and the site's information architecture and framework (including content buckets, categories, and document types).
- December 2005: Intranet averaged one million page views per month, and the old back-end infrastructure couldn't keep up. Old content (eight years' worth) migrated to new site.
- March 2006: Redesigned NG Insider site launched. All employees trained in three months.
- August 2006: Updated version of redesigned site launched.

RESULTS

Redesign, Part 1

On March 7, 2006, the new corporate intranet, NG Insider (previously called Inside NGS) launched. "The team completed migration of eight years of content from the existing intranet, redesigned and developed the new application and provided staff training within three months," notes Huffman. The technology team also introduced servers to replicate portions of the site for some third-party affiliates.

The redesigned site featured eight major changes:

- NG Insider banner (included on all pages).
- Search box (top-right banner region) on every page lets users narrow searches by document type.
- Navigational bar links to all major site pages.
- Header region for site area name lists current date.
- Left sidebar links to useful information and links; editors can also run thumbnails and links here to promote articles.
- Center region for lead stories and postings of news, notices, press releases, perspectives, and intelligence reports.
- Right sidebar for calendar-related items and opportunities.
- Footer region with links to content (grouped by categories) and advanced search capabilities.

NATIONAL GEOGRAPHIC
INSIDER

Enter Search Terms
All Document Search

Home | Directories | Submit Info | Forms | Resources | Divisions | Libraries | NG.com | For Me | HR | Calendars | Portal 1

About NG
News & Reports
Personal Tools
Research Tools
Work Tools

(WildCamGrizzlies)

News Thursday, August 03, 2006

Tut draws 2 million in 3 cities

Three-quarters of the way through a 4-city U.S. tour, the NG-organized Tutankhamun exhibit has sold more than 2.1 million tickets. Currently Tut is in Chicago, where ticket sales have already exceeded 510,000, with five months remaining. After Chicago, Tut moves to Philadelphia, where pre-sales are greater than expected, then to London. **Press release**

BIR Missions Charity begins on the homepage; Nonprofits should check their Wikipedia entries; Museum blogs on the rise (08/03/2006)

NG in the News "Mountain Patrol:Kekexili" "opens eyes to distant lands"; "Dog Whisperer" is "more than mere entertainment. It is now a way of life..." (08/03/2006)

BIR Discovery CEO to step down; "BusinessWeek" ranks the world's most valuable brands; Not much call for cell phone gadgets; Green Press Initiative pushes for environmentally-friendly publishing (08/03/2006)

Recent News

Notice Metro delays likely again today All lines and all stations affected (08/02/2006)

BIR Travel Anti-U.S. feelings on the rise according to Pew poll; Adults discover their childlike side with "rejuveniling" vacations. (08/02/2006)

BIR Online news audience growth slows; "Consumer Report" tests portable navigation systems; Gen Y integrates technology faster; Home Depot website sells streaming video ads. (08/02/2006)

NG in the News NGTV's use of surround-sound highlighted; Adventure photographer Chris Anderson gives tips on avoiding thieves; NGS "has taken preventive care up a notch". (08/02/2006)

Notice FREE Financial Management Workshop, Wednesday August 9th (08/02/2006)

Press Release Declan Moore named international publisher, NGM (08/01/2006)

BIR AOL retools video site; Watch the PGA championship online for free; Pearson reports strong first half; New search engine "Cranky" for older users (08/01/2006)

(Read All...)

News & Perspective | **Intelligence Reports** | **Search Archives**

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Today @ NG More

Menus

Upcoming More

Learning August Training Calendar

TV Boyd Matson on Craig Ferguson tonight Late Late Show begins at 12:35 a.m.

TV NGC-US July 31- Aug. 8: Dog Whisperer week

Opportunities More

Offer Movie tickets now available at Oasis shop No restrictions on showtimes for AMC Loews and Regal

Job Postings
Perks

News Feeds Go to LIS
Staff News Read All
Classifieds Read All

Pictured: NG Insider's homepage, March 2006.

Redesign, Part 2

After releasing the new site in March 2006, the intranet team began tweaking the design. In August 2006, it released version 2 of the redesign. Some of the enhancements included:

- Simplifying the search area, removing the drop-down box for narrowing search types.
- Adding an *Editor's Pick* list to elevate key resources like the eDocs electronic document management system.
- Making it easier to feature major and minor stories in the lead content regions.
- Streamlining the right sidebar's information, combing three menus into a single *Opportunies @ NG* area.
- Integrating nationalgeographic.com (NG.com) features like *Photo of the day*, as well as non-National Geographic information, such as a weather forecast and a CNN news feed.

The redesign's second version "allows more flexibility for our NG Insider editor," says Huffman. "She has several options for featuring a lead story and sub-lead stories."

In general, the site also makes better use of external content. For example, "we have featured our NG.com webcams — specifically Alaskan grizzlies and Pete's Pond from Botswana," notes Huffman. "We often try to feature items from NG.com, so that our internal staff is more connected with our external customers."

NATIONAL GEOGRAPHIC INSIDER

Search

Home | Directories | Submit Info | Forms | Resources | Divisions | Libraries | NG.com | For Me | HR | Calendars | Portal 1

Wednesday, August 16, 2006

National Geographic News & Reports

Editor's Picks:

NATIONAL GEOGRAPHIC WILD

New Channel for NGCI

National Geographic Wild debuts Monday in Hong Kong, an entire channel devoted to documentaries about the animal kingdom. Singapore follows in October, and by the end of next year, other NGCI territories will have the channel. Wild is the 4th channel for NGCI. **Article**

NG Wild's "The Real Serengeti"

Perspective StyleMaven: Conjunction injunction was kids' stuff (08/16/2006)

BIR Travel Generation Xers have become the fastest-growing group of RV buyers; Mediterranean beaches may get too hot for holidays by 2080; Four Pacific Region countries package themselves into one single, tourist destination (08/16/2006)

NG in the News Hallmark Channel plans huge ad promotion to plug "March of the Penguins"; NG documentary uses virtual reality to re-enact Amelia Earhart's disappearance (08/16/2006)

BIR BBC archive goes on line; Advertisers trace individual users with Yahoo search data; Discovery introduces new mandate after ratings decline (08/16/2006)

News NGCI launches wildlife channel In Asia now, to expand next year to other territories (08/16/2006)

Recent News

Alert All Dell Laptop users: Battery Recall by Dell for Laptops purchased between April 1, 2004 and July 18, 2006 (08/15/2006)

EarthCurrent More disasters in store for a warmer world; Women & AIDS policy; A new mathematical mystery; Deciding Pluto's fate... (08/15/2006)

BIR Starbucks moves into the book business; Big advertisers start placing ads in college newspapers (08/15/2006)

NG in the News NG's online MapMachine is "a must for anyone who is entranced by atlases"; NGC's "Inside 9/11" will return on Aug. 27 with updates (08/15/2006)

Alert US Cuts Threat Level for UK-US Flights (08/14/2006)

Letter of the Week Tom Abercrombie photo inspired reader to become photographer (08/14/2006)

BIR Use of Internet-based phone service up 21%; TNT moves into broadband video; Conde Nast develops teen site; Disney proceeds with Gibson film despite controversy (08/14/2006)

(Read All...)

Washington, DC

Get the 10 day forecast

84°F
Fair

Feels Like:83°F
Humidity: 39%
Wind: NE at 7 mph

Enter city/zip GO!

The Weather Channel weather.com

Airport Delays
Sporting Events
Pollen Reports

Download Desktop Weather

CNN Top Stories XML

Flight diverted after disturbance
Aug 16, 2006 11:09 AM Source: CNN.com
Read full story for latest details.

Ex-NBA pro arrested after gunfire reported
Aug 16, 2006 10:55 AM Source: CNN.com
Read full story for latest details.

Lou Dobbs: It's good to be a superpower
Aug 16, 2006 10:49 AM Source: CNN.com
The Soviet Union, Marxist Leninism, the Evil Empire and their ugly metaphor, the Berlin Wall, crumbl..

Flight diverted to Boston after disturbance
Aug 16, 2006 10:43 AM Source: CNN.com
Read full story for latest details.

more...

Opportunities @ NG More

Training Class After Hours/Remote UPS Shipping Classes

Event All Roads Film Festival Schedule for Headquarters October 5-8

Learning Sign up today for an NGLS class! Check out the August training calendar!

Event NGC-US Aug. 14-20: Hollywood cars: What is real, what isn't; examining train crashes and military tanks

Job Postings
Menus
Perks
Submit Calendar Item

Photo of the Day

ENLARGE

Communications

Press Release National Geographic announces winners of first international photography contest

Press Release National Geographic All Roads Film Festival celebrates contemporary stories of global cultures through film, photography, live music Sudanese Rap/Hip Hop Artist Emmanuel Jal Headlines Festival in First U.S. Appearance

Press Release National Geographic Adventure assembles retail advisory board

Press Release National Geographic releases Weekend Explorer 3D

Press Release National Geographic releases National Parks Explorer 3D

Press Room
PR Boilerplates

News Feeds Go to LIS
Staff News Read All
Classifieds Read All

News & Perspective | Intelligence Reports | Search Archives

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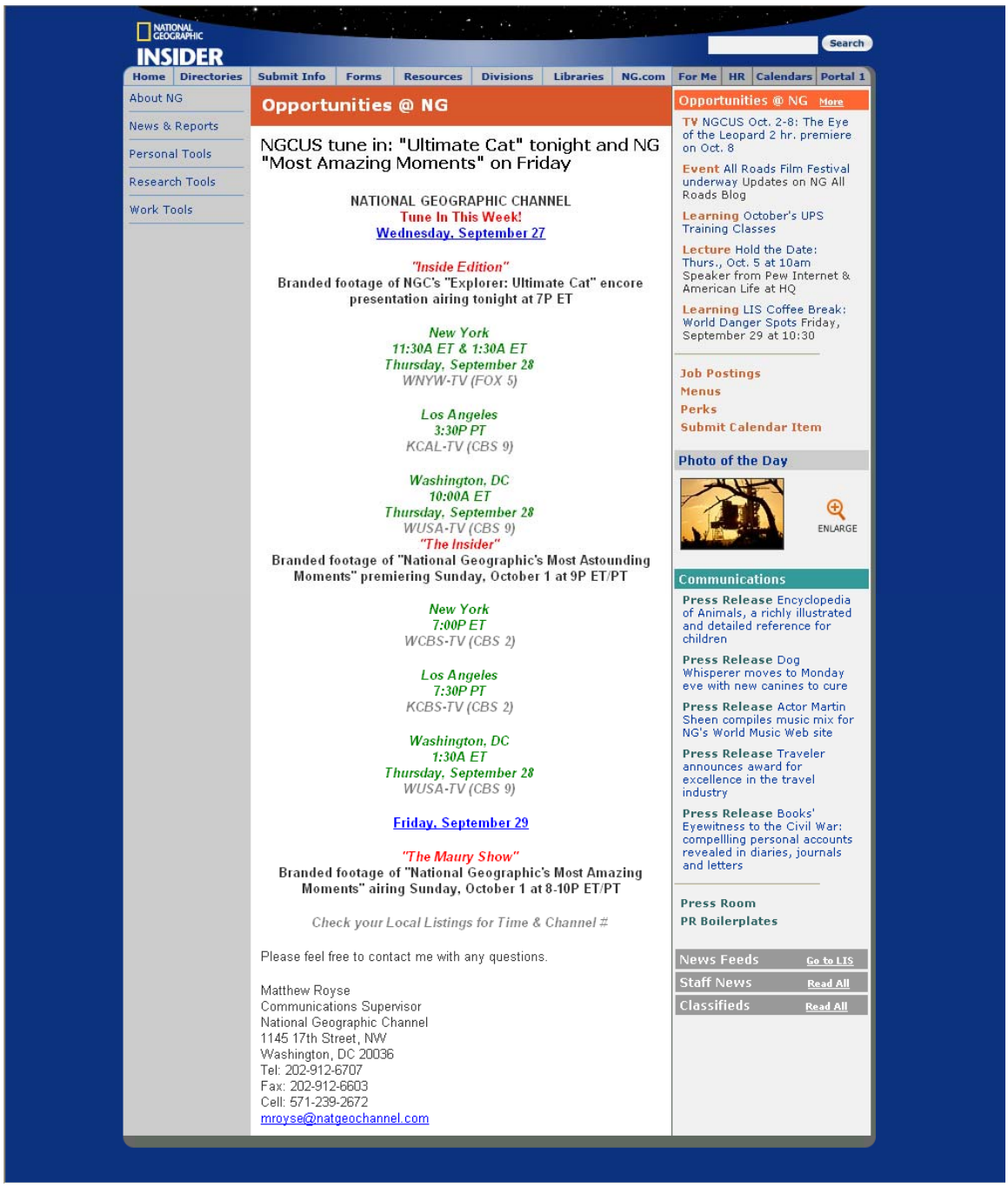
Pictured: Based on employee feedback, members of the intranet portal team began collaborating on new homepage design ideas. These improvements (version 2 of the new intranet) launched in August 2006.



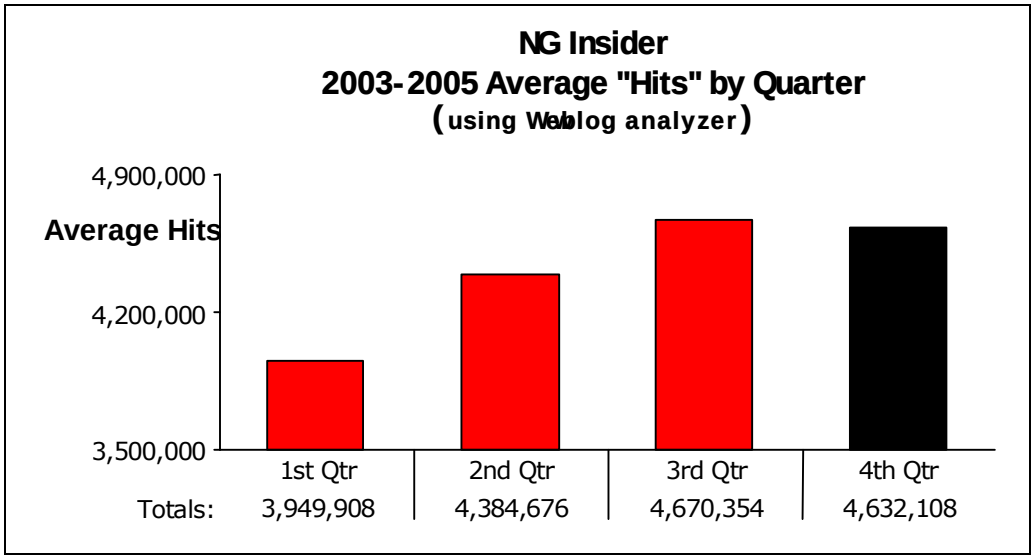
Pictured: The redesigned site features consolidated right-sidebar menus to simplify event and "opportunity" listings.

Gauging The Impact of Changes

How did users react to the redesign? "We have received positive feedback from staff on the redesign, and continue to make modification/adjustments to layout and

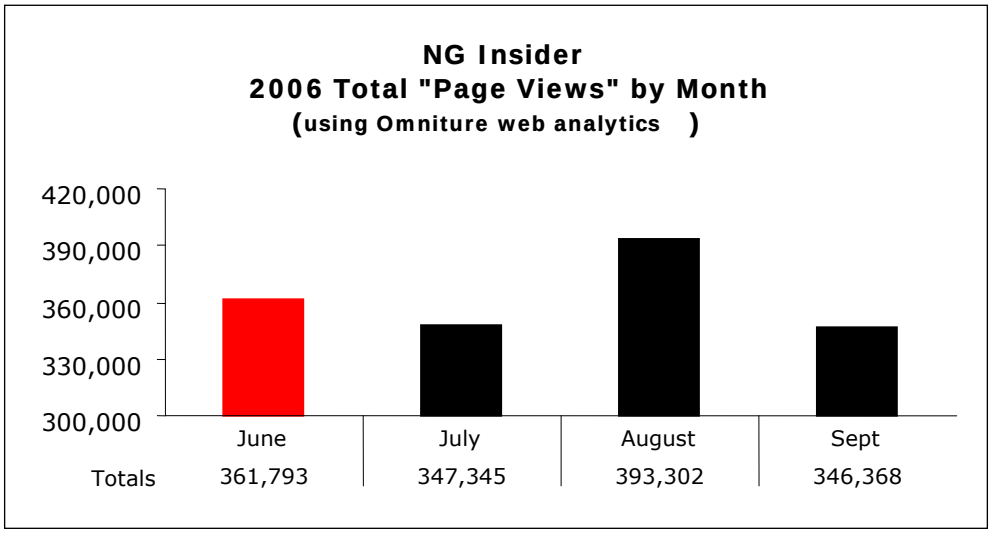
design, available resources, and training material and templates based on user feedback," notes Huffman.

To gauge the intranet's usability and determine how to continue to adjust it, National Geographic partially relies on Web metrics and analytics.



Interestingly, after the redesign, the number of page hits decreased — but only because of a shift in the software used to track Web browsing. "As the intranet has developed, so have our measurement techniques," says Victor Veizaga, who works in National Geographic's LIS group.

For example, the previously used tool analyzed Web logs and tended to regard every page element that loaded as a "hit." The number of hits per quarter hovered around 4 million. Since the redesign, however, National Geographic began using a tool called Omniture to track page views. Here are results from four months in 2006:



Comparing the two charts, the average number of page hits in the third quarter differs substantially — 4.7 million on average for 2003–05, yet only 1.1 million for 2006. Veizaga attributes this difference to Omniture being a more advanced Web analytics tool than the previous one, and thus it more accurately reports not hits per

se, but rather actual page views. "In this case, Omniture is using page-view traffic, which relies on the assumption that once a page is opened — loaded — it counts as one page view, and not multiple hits for each page element," he says. In short, "the pages on NG Insider have not changed, but the measurement techniques have, which makes our assessments more refined and accurate."

National Geographic also now tracks specific types of file downloads (including .doc, .xls, .pdf, and .mp3) as well as the average time someone spends on a particular page.

According to Web metrics, the most popular pages are currently:

Top Six NG Insider Sections for 2006		
Site section	**Page views**	**%**
NG Insider Homepage	844669	60
For Me	252800	18
LIS	141560	10
Directories	115317	8
Human Resources	49389	3
Forms	19897	1

For the future, National Geographic is planning to drill down into individual pages to discover, for example, pages with unexpectedly low traffic. They can then identify and reconcile any underlying usability issues. The organization is also exploring how they might potentially use Omniture to improve the internal marketing effectiveness of specific intranet pages and e-mail notifications.

LESSONS LEARNED

Insights from Karen Huffman, Barbara Ferry, and Susan Fifer Canby:

Change is slow, but strong project teams foster change. "Organizational cultures change slowly. When introducing new tools or changing your offerings, remember you can only do so much at once. To be successful, then, ensure you tackle the essential variables under your control: get the right people on the team, incorporate decision-makers and champions into the process, establish clear goals and a solid vision, and maintain good lines of communication throughout."

Communication is key. "This bears repeating: Work closely with all stakeholders, and keep them advised of progress."

Secure buy-in. "When redesigning an application, or introducing a new application, involve employees who have a stake in the application. Gauge their needs, prototype ideas, and get feedback. Frequently, these users will then champion the application to others, helping foster uptake."

Share the project load. "Involve as many skilled people as you can in the project team. To help, always clarify the WIIFM — 'what's in it for them.'"

New technology must improve things. "Technology for technology's sake is rarely successful. Furthermore, users won't take the time needed to master new technology if they don't see the benefit. New technology must support users' actual needs."

Don't over-customize. "Using applications in as off-the-shelf a format as possible speeds rollouts and upgrades. Over-customizing any application makes it much more difficult to upgrade when the inevitable security fixes or code base updates appear."

Double-check contracts. "Ensure that contracts and vendor agreements clearly specify dates and deliverables. A little effort spent sorting this out at the beginning of a project will help avoid some of the chaos inherent in any deadline."

Prepare for staffing emergencies. "Train the team so there are clear fail-over approaches for all tasks in the event of staff departure or reassignment."

Plan, then track changes thoroughly. "Carefully plan site redesign changes, trying always to privilege clear, simple designs and processes to make it easier for each team member to understand the goals and his or her part in the process. Also, provide a collaborative space to allow users to more easily collaborate on project work, and to help track all efforts."

Train all content providers. "Provide many opportunities for training the end users who will be submitting content. Train them even on the most seemingly simple application or ultra-intuitive interface. Remember, posting content is rarely anyone's primary job. Employees will have limited patience or time for mastering new technologies and interfaces."

Sell the redesign to users. "If you build it, users won't necessarily come. Instead, you must sell your redesign. Launch an internal marketing campaign. Demonstrate new concepts. Highlight changes. Most of all, be sure to show users how to use new or redesigned applications."

Altran

Using the intranet

Altran is the European leader in innovation consulting and high technology. The group's 16,000 consultants operate worldwide, covering the entire range of engineering specialties, including electronics, IT, quality, and organization. Altran offers its clients ongoing support throughout the innovation cycle, from technology watch, applied basic research, and management consulting to industrial systems engineering and information systems. Altran has six business lines: Aerospace & Defense, Automotive & Transportation, Energy & Industry, Financial Services, Healthcare, and Telecoms & Media.

Headquarters: Paris, France

Number of employees the intranet supports: 17,500

Company locations: Altran has offices in more than 20 countries. The intranet is accessible over http to any employee in the world. Most employees work in Europe, but the company also has employees in countries such as the US, Brazil, China, and Japan.

Annual sales: €1,591.4 million (May 2007).

Design team

Three people from the Marketing and Communication teams drove the project design.

Three people handled the technical design: an Enterprise Content Management (ECM) and SharePoint consultant from the Altran ECM practice, and two IT department employees.

The Web agency Tequila Rapido provided graphical design services.

Members

In-house: Olivier Siganos, program manager; Hervé Audouin, electronic content specialist; Amantia Kapo, internal communications specialist; Etienne Gonnaud, ECM practice leader; Thierry Pelé, information systems manager; Benjamin Rouard, information systems project leader.

Tequila Rapido: Toufik Lerari, managing director; Virginie Chelles, project Leader.

SUMMARY

If any designers understand the importance of creating a task-based, scalable IA, it is the Altran intranet designers. The organization comprises 200 different subsidiaries, all with different leadership, culture, and intranets. Work was duplicated many times across the organization and there was very little sense of unity. In 2005, the Altran group decided to move toward a new strategic, centralized organization and consolidate to 85 entities; that same year, the company's global intranet was born. This intranet enabled the organization to provide transactional applications and decentralized publication. Altran's designers created it with the solid foundation of thorough usability research and clear goals for both the intranet and the organization.

Because the organization had been through considerable changes already, the Altran intranet designers knew they needed to develop an IA that would accommodate the present as well as the future. They therefore conducted significant usability research and other organizational investigations to inform their design. Through this work, they developed Direct, Altran's new intranet, which demonstrates fluidity, knowledge, and empathy for users.

Homepage Features

Direct's homepage starts with a banner that (of course) includes the intranet's name, but also conveys movement and unity among employees around the world. To keep the design fresh, the team changes this banner at the beginning of each season. For summer 2008, for example, a bright yellow and orange banner shows a subtle sun and palm trees that mingle nicely with employee silhouettes and a world map.

Below the banner, a prominent open search field lets users search the whole intranet, search the Web (through Google), or search for employees. To the right of the search field, the *I need to find* list offers links to commonly accessed sections.

The homepage offers a mix of personalized and customizable features, some of which are dictated by the user's login profile. For example, the country where the employee is based dictates the country section. In the example below, the user sees *Italia*. Users can personalize the *My RSS* section content using the nearby *settings* link.

The homepage's right-hand column shows the user's list of communities, which are congregations of people and information related by a common interest. Employees can use the *Communities directory* to join a community, or create one using the nearby *Create a community* link.

The *World Knowledge* section features information that Altran employees around the world should know, including information about groups, people, policies, procedures, and benefits.

The *Weather* section defaults to a weather forecast for the Paris headquarters, but users can change it by clicking the section's *settings* link.

Picture of the Day

The *Picture of the Day* displays an employee-submitted photo and description. In the screenshot below, for example, the photo caption reads: *Boccaccio Street*, *Certaldo – Italy.* To submit photos, users click the *Send your picture of the day now* link. Submitted pictures go to Direct's editorial board, which selects and publishes the photos.

Altran's intranet team created two new and original twists on the standard "photo of the day" feature. First, designers made it possible for users to see a slideshow of the daily photos via the *Watch all the pictures* link. Second, they created a downloadable PDF calendar that showcases photos from the previous year.

User Research

The team's research identified the above features and areas as important to users. Team members also did some disciplined work in their task analysis. Specifically, they addressed four basic user needs by creating the following four global navigation tabs/sections:

What's new?: became the *News* tab/section in the global navigation

What service can I use?: became the *MyAltran* tab/section in the global navigation

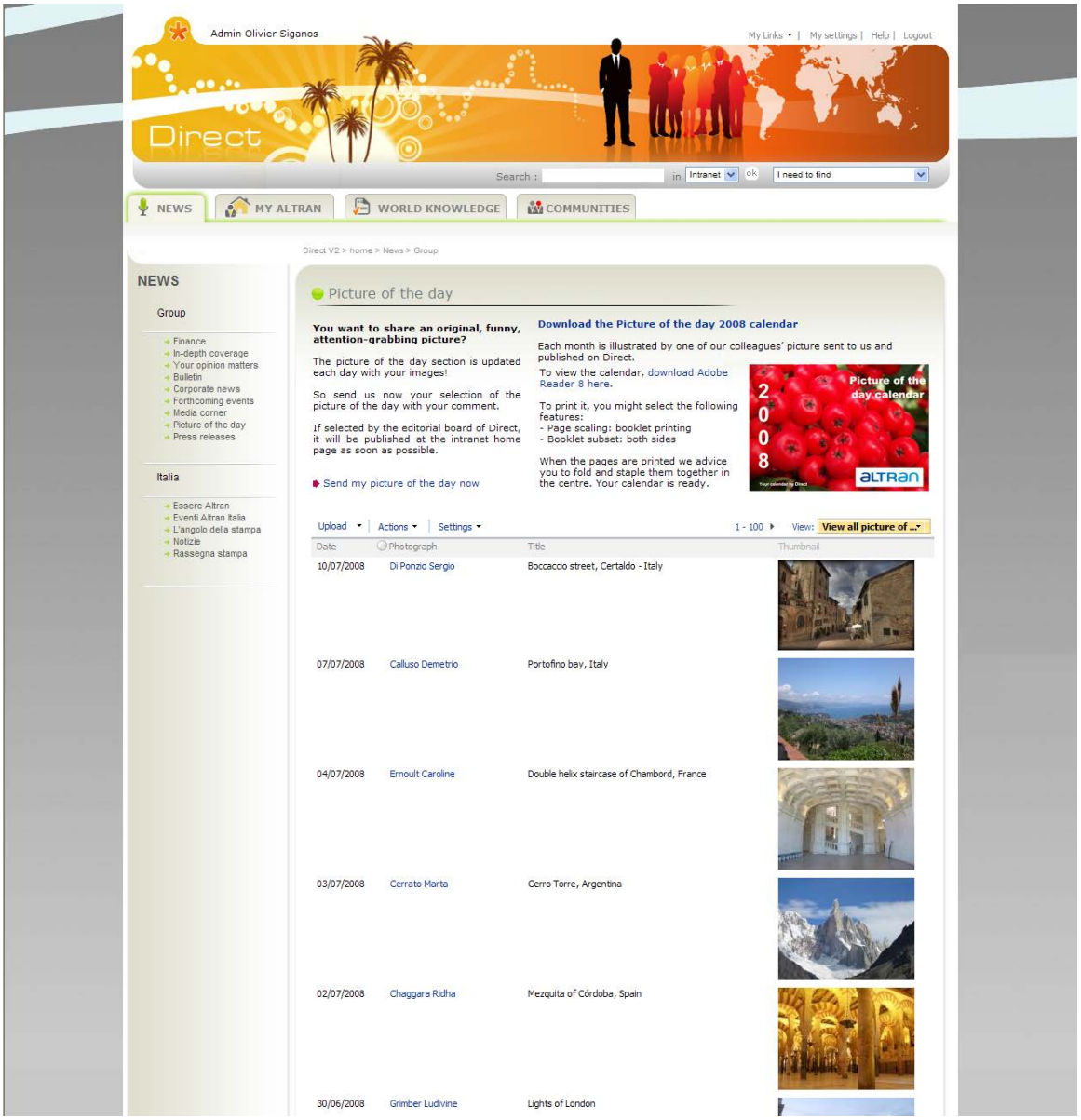
I want to know…: became the *World Knowledge* tab/section in the global navigation

- **I need to share and collaborate:** became the *Communities* tab/section in the global navigation.

This task-oriented navigation structure allows the organization to change the sections as needed, without having to update the intranet.

Pictured: Altran's Direct intranet homepage as an Italian employee would see it. The *Group* and *Italia* sections are based on this particular user's background. Users edit the *My RSS* and weather sections themselves.

The *Picture of the Day* section shows the picture of the day, notifies employees about how to submit pictures, and offers a downloadable calendar of previously displayed photos. It also shows a list of recent pictures of the day, as well as the date they were posted, who took the photos, the title of the photos, and thumbnail images.



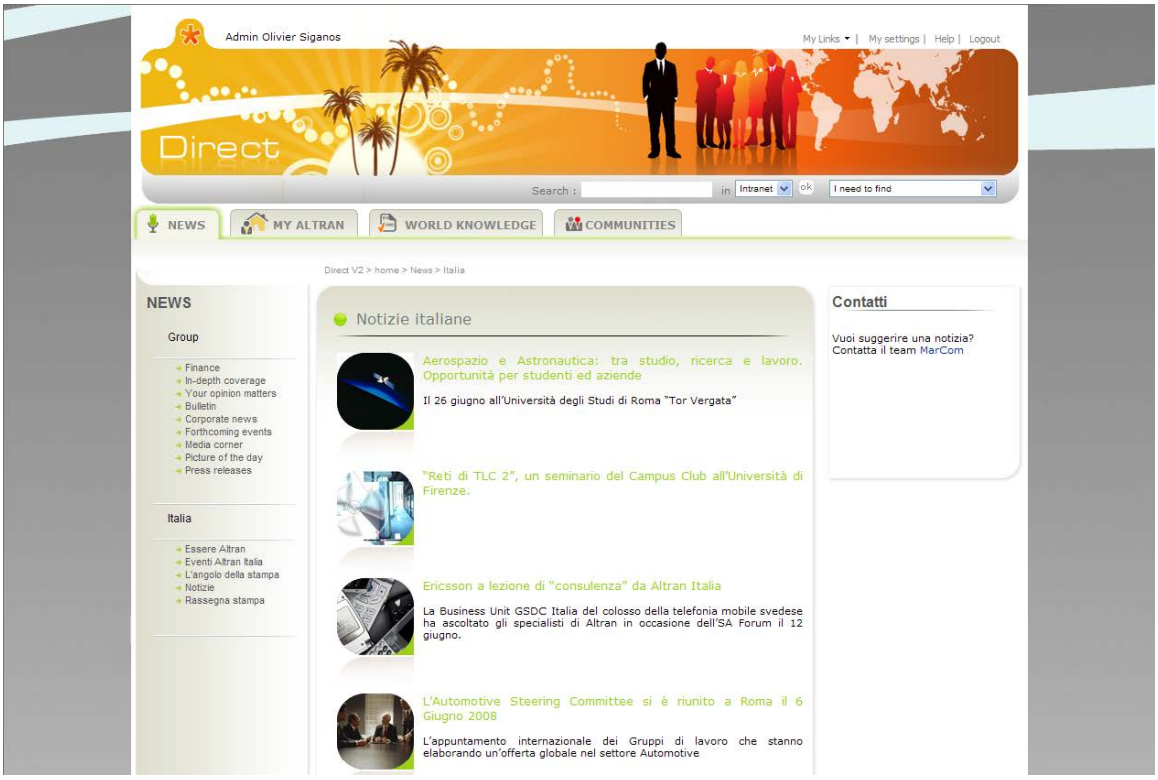
Pictured: The *Picture of the Day* section displays the date the photo was posted, the photographer's name, the photo's title, and a thumbnail of picture.

The *News*, *My Altran*, *World Knowledge*, and *Communities* sections are accessible via simple tabs that, when selected, display a green, yellow, orange, or red border, respectively.

Pages throughout these sections have the same style and look and feel, which sends the message to all employees that they're a coherent group.

In the intranet's *News* section, users see the same categories as they see on the homepage, plus *Group* and one for their respective country. Each of these sections has a category page and a category-specific news sub-section.

To suggest a news stories, users can select the link on the right: *Want to suggest a news story? Contact the team MarCom*. (In Italian, it says: *Vuoi suggerire una notizia? Contatta il team MarCom.*)

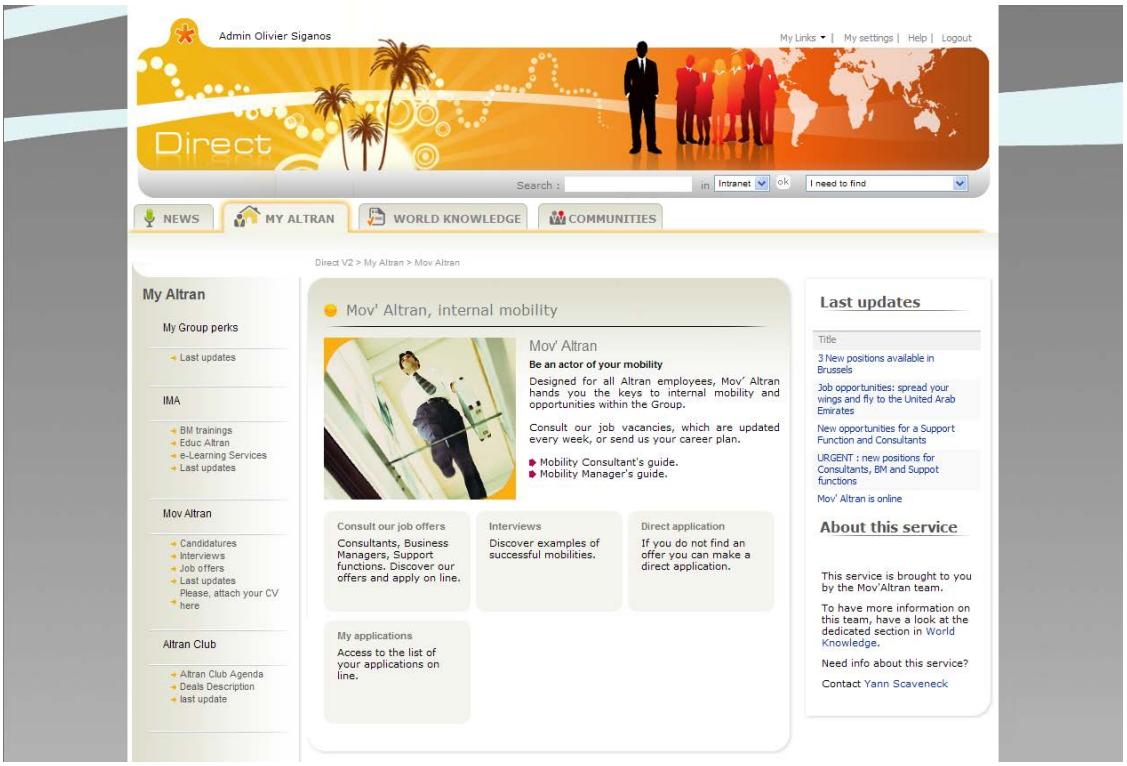


Pictured: The *News* section's main page on the intranet for Italian users includes a section for *Group* and *Italia.* Current news items appear in the page's content section.

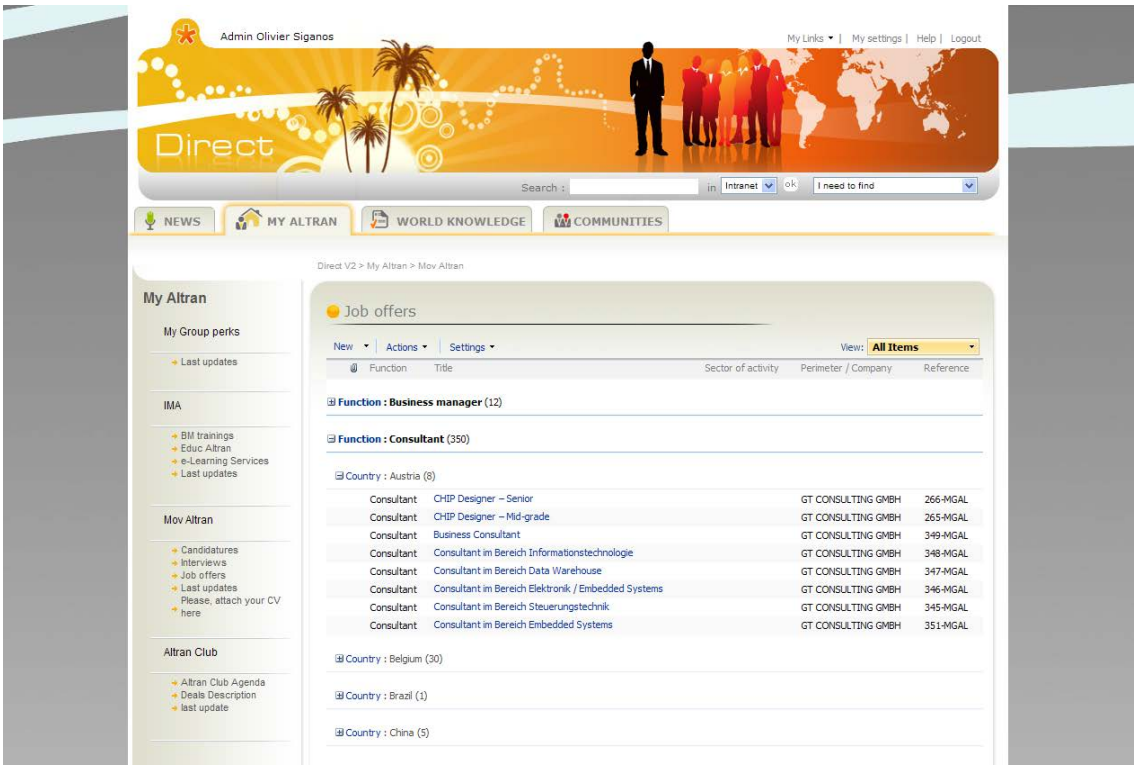
The second tab in the global navigation leads to *My Altran.* This links to all of the day-to-day services that people commonly need, such as webmail, hiring, benefits information, human resources (HR) forms, internal training, booking travel, filling out timesheets, and submitting expense reports. This list of features might change (plus or minus) based on services offered by the user's group, country, or subsidiary. The main page offers links to common activities, while the left-side navigation offers links to much more.

Pictured: *My Altran* offers links to all of the day-to-day services that people commonly need, including webmail, hiring, benefits information, HR forms, internal training, booking travel, filling out timesheets, and submitting expense reports.

Another feature in the *My* Altran section is the *Mov' Altran* area. Promoting and retaining good, happy employees is important. This section encourages and assists people in changing their jobs within the organization. The intranet posts "mobility" guides for employees and managers. These guides let users review job postings, apply, and manage applications. Users can also read case studies of people who have successfully changed positions within the organization.

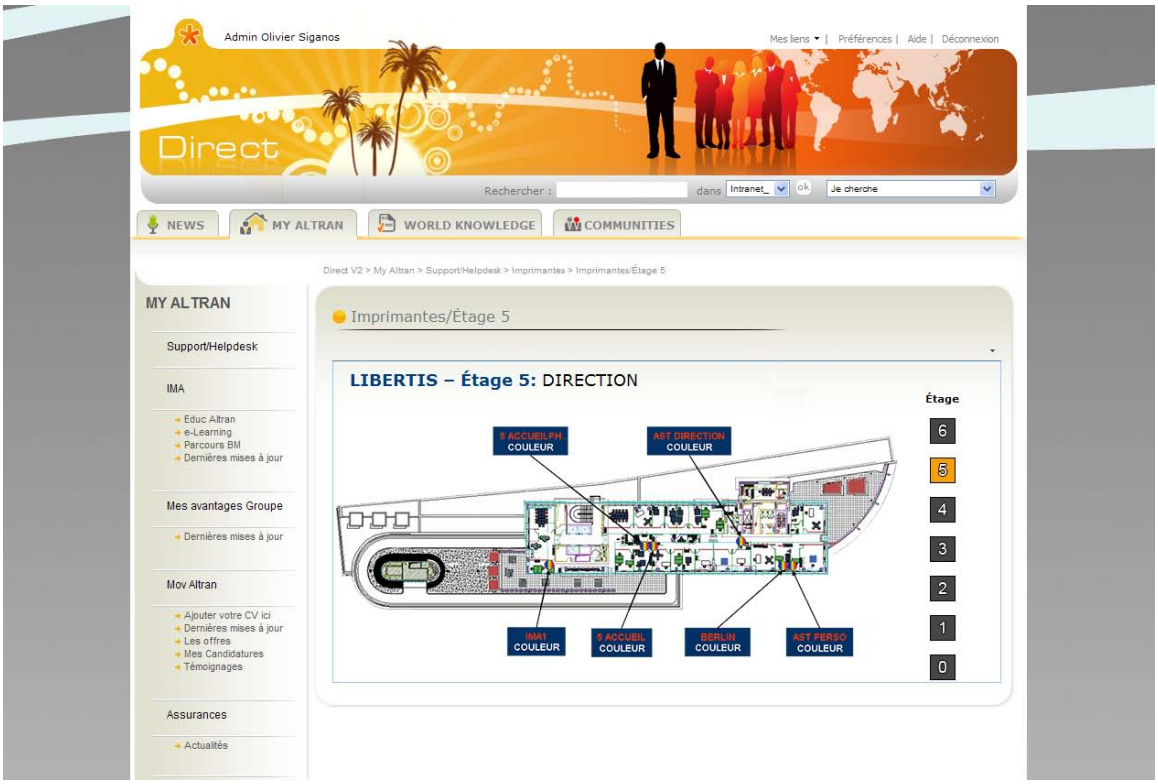


Pictured: The *Mov' Altran* area encourages employee retention by encouraging and instructing them on how to change jobs within the organization.



Pictured: The list of jobs can be sorted by several criteria, including country, function, and title.

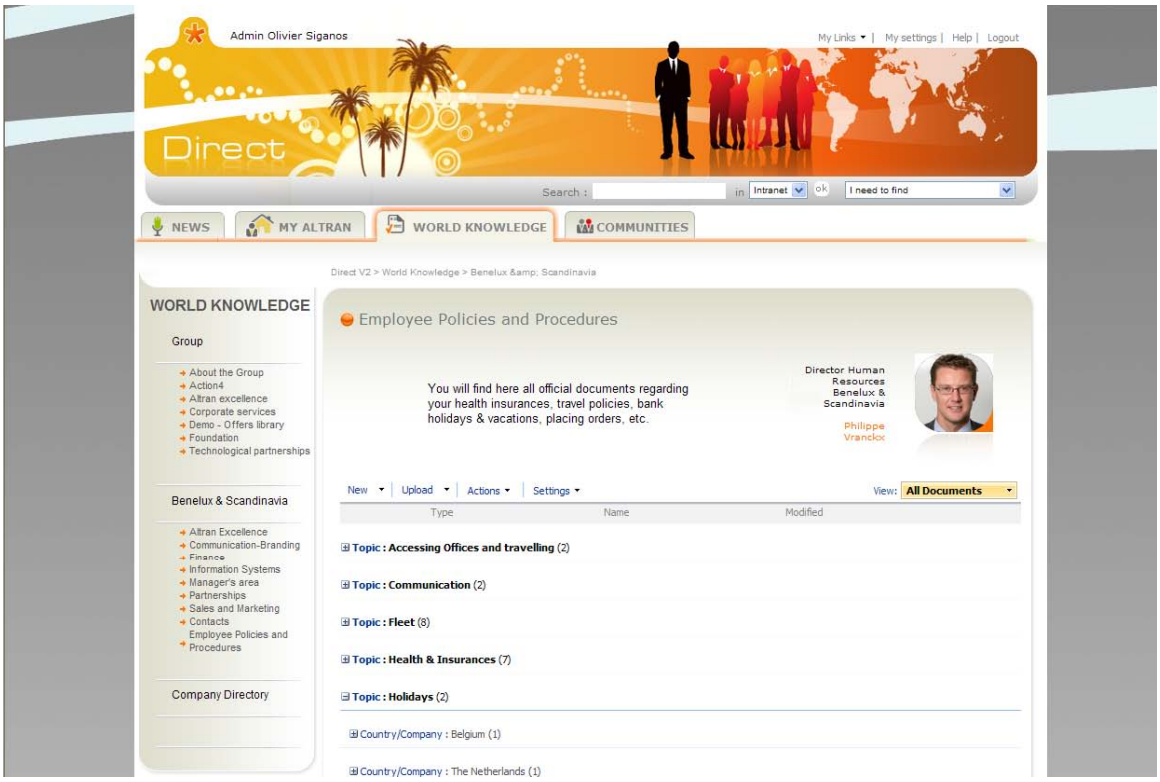
Among the *My Altran* section's many helpful features are its building maps. A nice additional touch that the design team added to traditional office maps is the locations of printers and associated drivers. The *Floor* (*Etage*) column on the right side allows users to choose any building floor and see the associated information.



Pictured: Maps of buildings include locations of printers and drivers. The image above shows the fifth floor for the selected building.

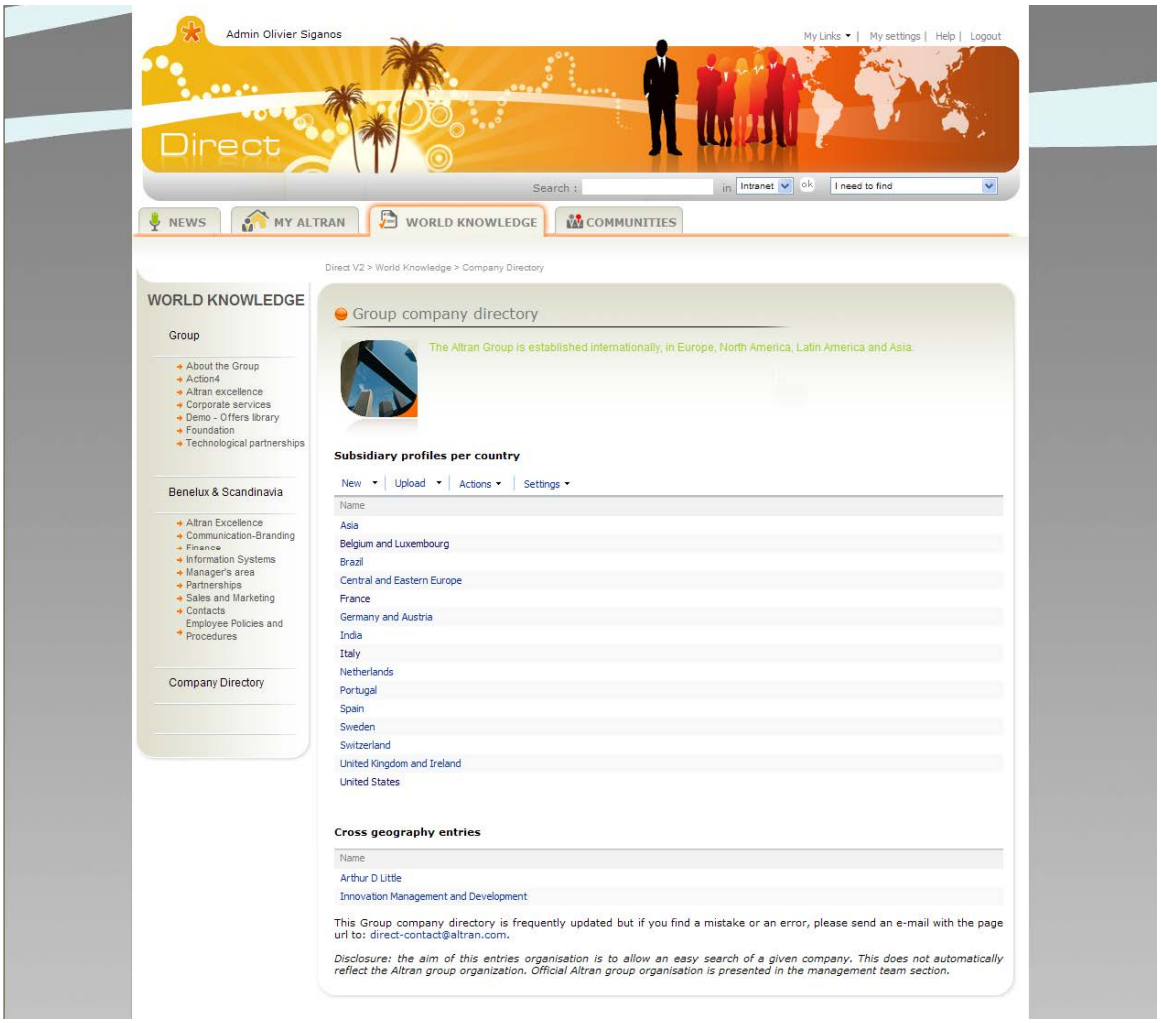
The intranet's *World Knowledge* section maintains a familiar look and houses reference information such as who is in governance, on the management board, in HR, or a part of the Altran Foundation and provides information on each group. The section offers access to business-critical knowledge such as project reference, business solutions, partnership, and project or commercial templates. It also houses technical documentation and IT support, organization charts, roadmaps, and libraries, among other things. All such information is accessible via the left-side navigation. And it's easy for users to retrace their paths using the gray breadcrumbs at the top of the page.

The *Employee Policies* and *Procedures* section houses official company information related to benefits and policies. Users can view this information by *All Documents* or by categories.



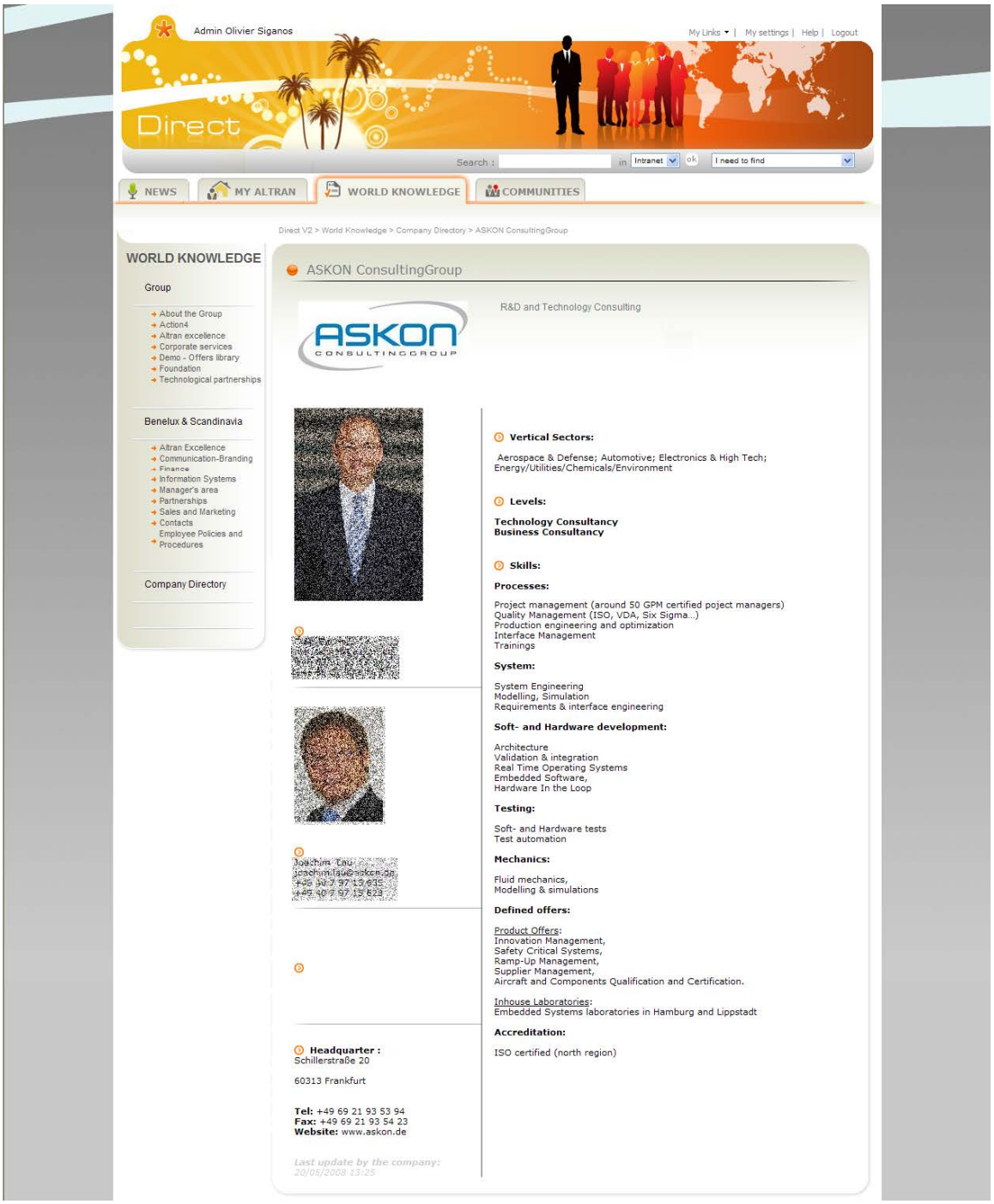
Pictured: Within the *World Knowledge* section, *Employee Policies and Procedures* houses official documents and information for the organization.

There are many Altran subsidiaries, and the intranet helps employees learn about the entire organization. The *Group company directory*—which is separate from the employee directory—helps users find information about the subsidiaries around the world.



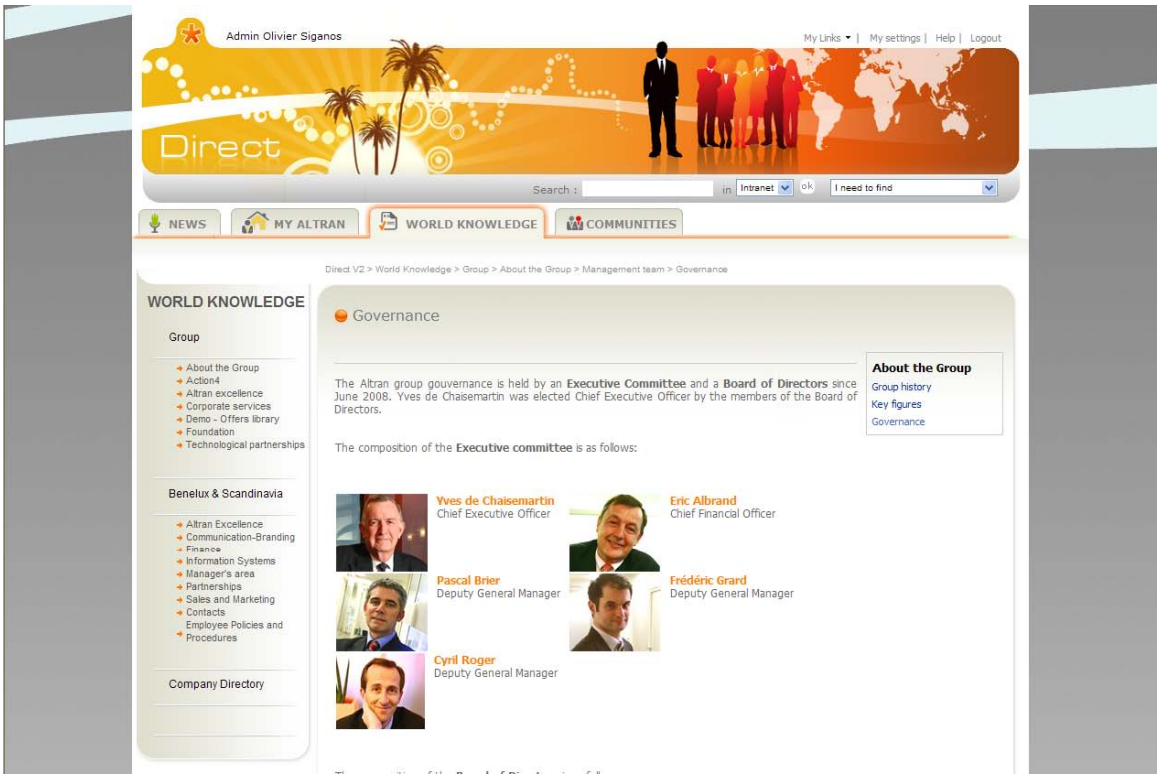
Pictured: The *Group company directory* helps users find information about the organization's many subsidiaries around the world.

Clicking through, users can get more detailed information about the subsidiaries. These pages encapsulate much information, including names and contact information for the people in charge, contacts for the headquarters, and the vertical sectors the subsidiary is involved in, as well as its skills, services, and accreditations.



Pictured: Some of the detailed information users can find out about the organization's subsidiaries includes names and contact information for the people in charge, contacts for the headquarters, and the vertical sectors the subsidiary is involved in, as well as its skills, services, and accreditations.

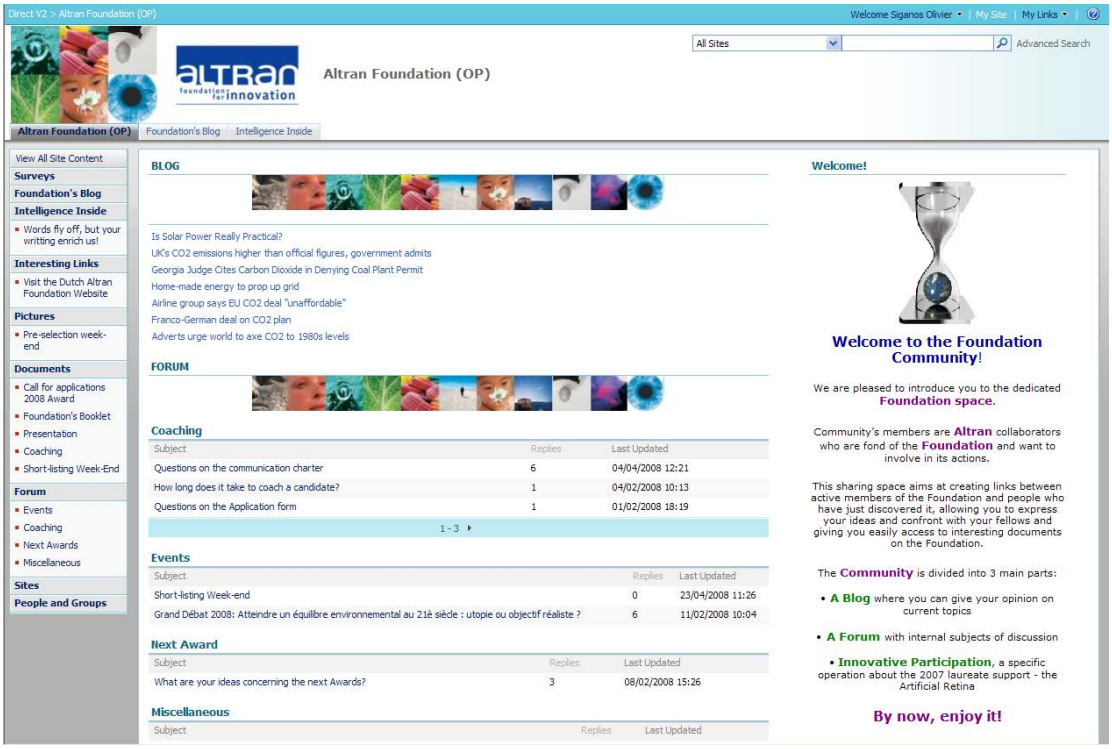
The *Governance section* (under *About the Group* > *Management Team*) briefly explains the Altran group's governance and lists the members of the Executive Committee. Each member's name and title is listed next to a good professional photo.



Pictured: The *Executive Committee* members are listed along with their titles and photographs.

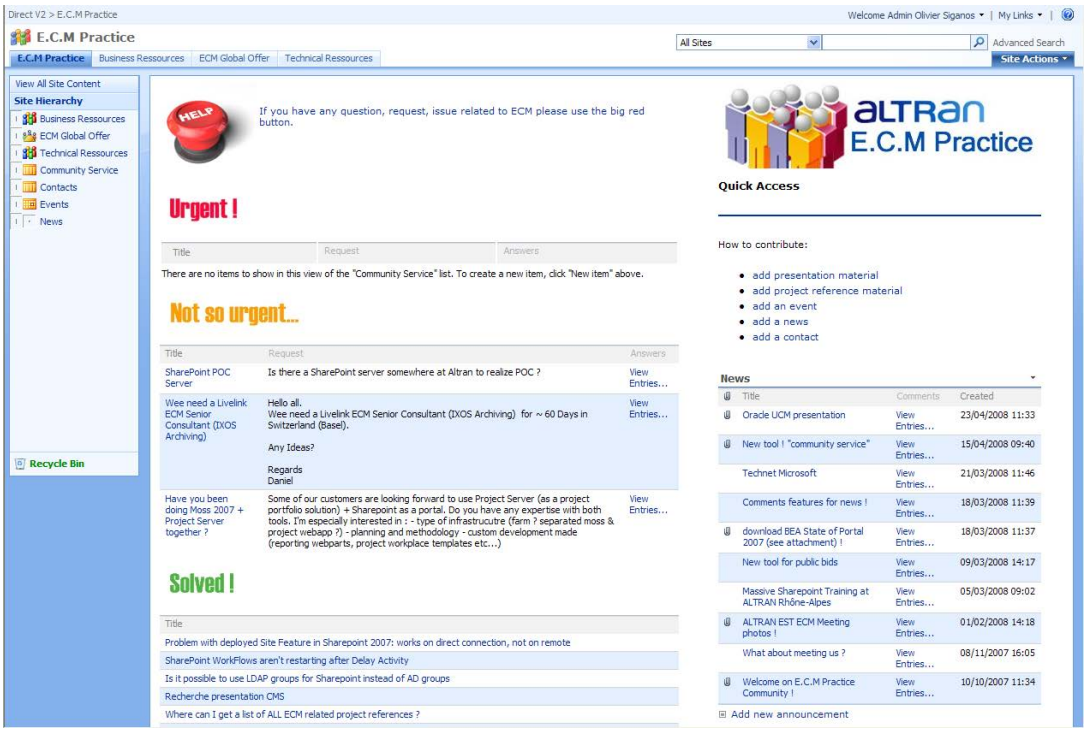
The intranet's *Communities* section is the only section that deviates from the rest of the Direct intranet in look and feel.

In this section, the team wanted to provide collaborative spaces to support transnational teamwork. Users can search for topics of interest and join an existing community or create a community of their own. Altran communities span a wide variety of topics and groups. For example, a community space for the Altran Foundation has information about the environment and related information. Parts of this and other communities, such as the ECM practice community, are open to everyone at Altran, while other areas offer access only to community members.



Pictured: Parts of the Altran Foundation community are open, while some sections are for members only.

In the ECM practice community, people can ask for and give help. Requesters can mark items as *Urgent*, *Not so Urgent*, or *Solved.*



Pictured: Parts of the ECM practice community are open, while other sections are for members only.

The Altran intranet team made some disciplined decisions, trusting their task analysis and user research to direct them. Their intranet's four main tabs have been a great success, as has allowing communities to exist for collaboration and unique identity. Sometimes, having a small team—even one that works part-time on the intranet—is enough, as long as they have direction and drive. This group obviously did.

BACKGROUND

In 2005, the Altran group decided to move from a very decentralized group of 200 subsidiaries—each with its own brand, organization, intranet, and so on—to a new strategic, centralized organization. Today, the company has only 85 entities, and they're organized in a real network with a single intranet uniting them.

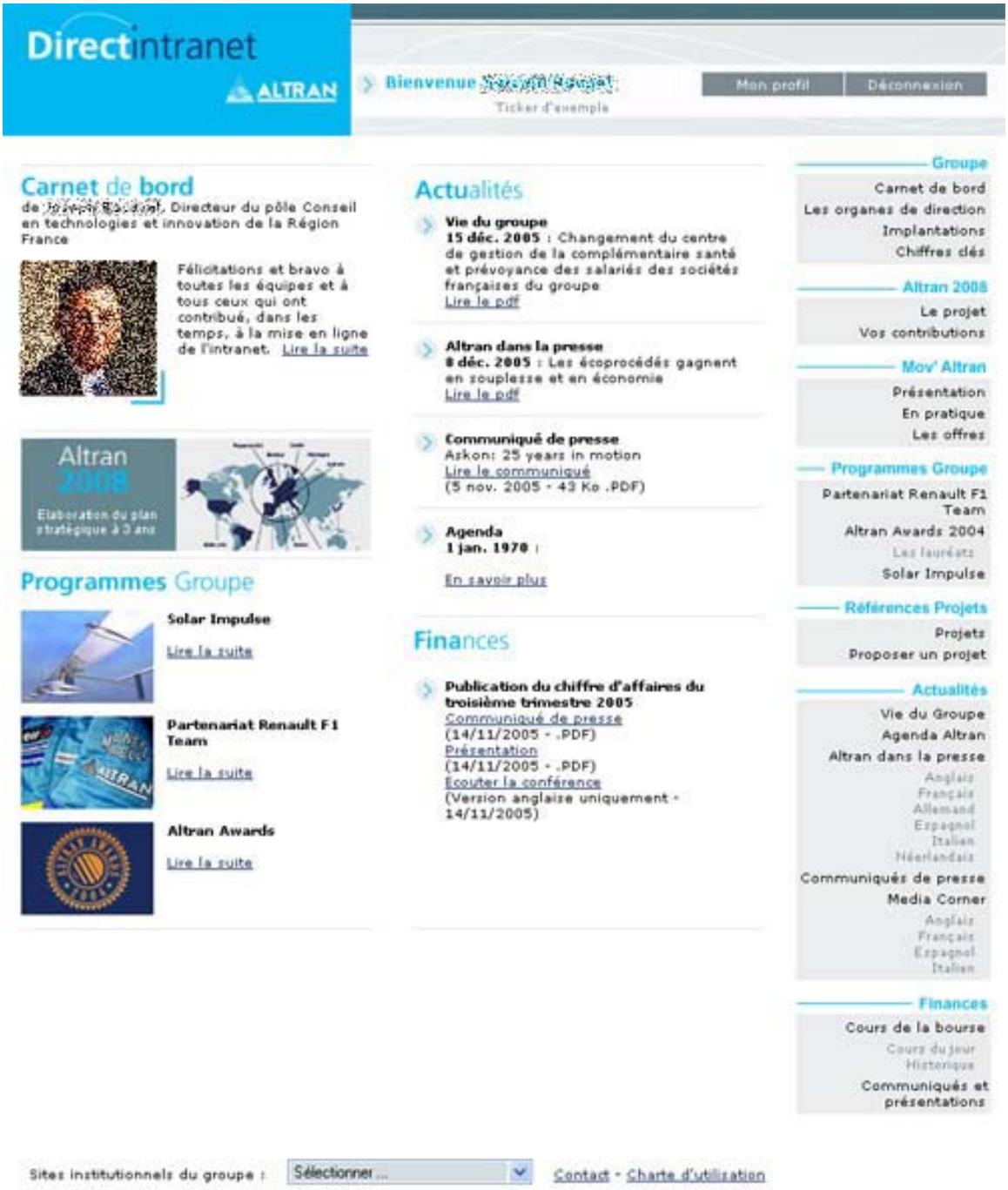
The very first version of the group intranet, Direct (v.0), went live in 2005. "This top down intranet was launched as the unique common media to address every single employee of the group and support change management," says Olivier Siganos, program manager. "We only had one month to design, manage content, and produce it."

Although the result of this initial effort was a very corporate, top-down intranet without a CMS, it was the beginning of an online group culture for the organization.

The site's next iteration (v.1) was launched in December 2005; it was based on Plone CMS technology and let the organization provide transactional applications and decentralized publication.

The current site (v.2) was launched in October 2007 with three major objectives:

- Provide local and national information (vs. global and corporate)
- Provide collaborative spaces
- Provide a framework that would eventually replace all local intranets



Pictured: The Direct v.0 homepage. This is how the intranet looked prior to the redesign; the original homepage is very similar to that of Direct v.1.

INTRANET TEAM

The Altran intranet team has four members. The project is a joint effort between the marketing/communications and IT teams and breaks down as follows.

Two people from the marketing/communications team provide:

- Management, governance, design, specifications, metrics, promotion, and support
- Editorial content, support for content managers

Two people from the IT team provide the development and technical support, including:

- A half-time project manager
- A full-time developer

Siganos says that launching the new intranet required organizational changes to support the new site. The first step of these changes was to launch an international network composed of marketing and communications managers.

"It was the best way for us to have their feedback in real time but also their support, even during the design phase," he says. "This network became the Direct country managers. We met by phone on a regular basis."

But this network was insufficient to reach all entities, so the team defined the role of local Direct manager—which is the same role as country manager, but on an entity level.

Finally, with decentralized publication, anyone who has been trained can publish information on the intranet. As a result, "we had to have 'content owners' who organized the work of their team around a section," says Siganos.

So, in the early project stages, the team set up the following reorganization, outlining various roles and responsibilities:

ALTRAN INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Corporate core team	• Provides governance, program management, coaching, support, and evaluation of Direct country managers • Is responsible for the content and features available on the group intranet level
Direct country managers	• Each is responsible for his or her own national intranet level, including: • Promotion • Content and features available on the country or local level • Training and support of the Direct local managers • Training and support of the content owners
Direct local managers	• Exactly the same role as the country manager, but at the subsidiary level
Content owners	• Responsible for the updates and consistency of their section • Delegates some part of the updates or changes to other members of the team/department

Pictured: The Direct v.2 team (from the left to right): Benjamin Rouard, Olivier Siganos, Jean-François Le Lezec, and Hervé Audouin.

Governance

The Altran intranet has benefitted from high-level management buy-in since its inception. Intranet governance has always been the marketing and communications department's responsibility and is under the supervision of Pascal Brier, vice president of the Altran Group. "This means we were able to convince the group's top management of the importance of a Direct redesign, and obtain the necessary funding for the redesign," says Siganos.

Marketing and communications has always been the central point for project management, design, and editorial strategy.

Outsourcing the Design

The new intranet needed a high-end graphical design that would bring it in line with the company's corporate identity. To help with this, Siganos and his team brought in design agency Tequila Rapido. Because the agency had worked on the company's public site, the intranet team knew it would know how to deal with the branding expectations for the new intranet.

Tequila Rapido continues to handle the intranet's ongoing graphical design work. Siganos says this is because Altran doesn't have in-house design expertise. "You can be wrong about a feature and correct it after the launch," he says, "but the general graphical look must really support the general design and be sufficiently appealing, especially if you are in a seduction phase with your users. This is one area where Tequila Rapido made a real difference."

The information design/architecture and editorial content is handled in-house, as is development and maintenance by the corporate teams. "We also do 'shared

development,'" says Siganos, explaining that doing so offers "a clear differentiation factor in the appropriation of the intranet by the subsidiaries in the group."

"The corporate team executes major new features, but others are done via the shared development program. This program allows a subsidiary to develop an entire new feature, under the sponsorship of the group, and then have it deployed on the intranet," says Brier.

As an example, Brier notes that Direct v.2 was technically designed and developed by the Altran ECM practice in Rhône-Alpes, France, while the new customer reference engine was designed and developed in Sweden and Belgium.

GOALS AND CONSTRAINTS

The Altran intranet's main goals are to:

- create a common group culture;
- support consultants and business managers by building a common knowledge base and content sharing (16,000 people across the company work onsite at client offices); and
- offer a single access to day-to-day applications

Because Altran is a three-tiered organization, the intranet has to support employees at all organizational levels:

- Corporate level
- Country level (about 20 countries or clusters of countries)
- Subsidiary level (there can be several subsidiaries per country)

The previous intranet offered only corporate information and services. To be closer to employees' needs, it was obvious that the new site had to offer information dedicated to a country (in its native language), as well as to a subsidiary.

The new design had to accomplish the following:

- Offer, in a single screen (the "one stop shopping" concept), group, national and subsidiary content and features such as:
    - local, national, and group news (internal or external);
    - local, national, and group services (such as time sheet, trainings, and travel booking, hosted in the intranet or by suppliers);
    - local, national, and group repository information (KM); and
    - collaborative spaces.
- Allow any subsidiary to migrate its former intranet to the "local" level of the architecture.
- Offer a logical and technical framework that facilitates the shared development concept.

Constraints

According to Siganos there were two main constraints in developing the Altran intranet's new release:

- **Budget:** To stay within the budget limits, Siganos says they focused much more on building a strong IA and foundations than on non-core features. The interface, for example, is available only in English or French—the company's two main languages—but national and local content can be written in any language.

- **Organization:** Because Altran has no full-time intranet staff, the team had to simplify everything. For example, says Siganos, they kept rules to a minimum and focused them on structure (10 golden rules for communities, 12 governance rules, and so on). "We built an organization and roles dedicated to the new version, from scratch," he says.

TIMELINE

The team completed the most recent intranet release in eight months. During that time, they redefined the IA; adopted a new CMS; organized, trained, and coached the Direct country managers on the governance rules; multiplied the site content by a factor of eight; added three major features; and re-deployed the intranet in 17 countries.

"Obviously, that is a lot of work to do in a short time frame," Siganos says. "It's feasible, but difficult." He recommends at least a year for this much work. "Your teams must be experts, and strong ones," he says. "If your management asks how much time it takes, ask at least one full year for a project of this type."

DIRECT V.2 PROJECT TIMELINE								
Corporate Core Team	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sept**
Program management	X	X	X	X	X	X	X	X
Specifications	X	X						
Storyboard		X						
Governance rules[1]			X	X	X	X	X	X
Training design and content producers on community support[2]						X	X	X
Promotion kit design[3]							X	
Production Team	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sept**
Graphical design (Tequila Rapido)		X	X					
Technical design (Altran ECM practice in Rhône-Alpes)			X	X	X			
Technical development (Altran ECM practice in Rhône-Alpes)					X	X	X	X
Technical lead (IT team)	X	X	X	X	X	X	X	X
Direct Country Managers	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sept**
Briefings		X	X	X	X	X	X	X
National-level design					X			

Training						X		
National-level production							X	X
Content manager training								X
Local promotion								X
Content Managers	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sept**
Trainings							X	X
Content migration (from the previous intranet) or production							X	X
End-User Milestones	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sept**
Announcement of the new version (V2)						X		
Inside Direct V2 blog						X	X	X
Beta testing phase (100 users)							X	X
Launch promotion								X

*1. **Governance rules:**

The previous intranet version had no governance. For release v.2, the team set up 12 very general rules to guide the intranet approach and protect it against major deviations on consistency.

*2. **Training design and content producers on community support**:

The team developed two types of training:

- "Summer Camp." A two-day train-the-trainer session for Direct country managers covering three main topics: Web 2.0 culture, metrics, and technical skills.
- Training for content managers. This training consisted initially of a three-hour session covering the basic skills needed to create and maintain a section. This three-hour introduction was supplemented with one-on-one training to address specific needs.

Also, both of these groups get ongoing support through a dedicated community.

*3. **Promotion kit design**:

The team designed a promotion kit to facilitate local promotion of the intranet. The kit was composed of the following:

- The ideal planning for a promotion campaign (milestones included announcement, teasing, and launch)
- A two-minute Flash movie that presents the intranet (suitable for any employee)

- A brief slideshow (five slides) that presents the intranet to decision makers
- Giant posters, flyers, and brochures

USERS

Altran intranet users have the following roles across the organization: consultants, business managers, support personnel, and executives. The intranet doesn't generally restrict access according to an employee's job function; consultants can access the same content as managers. However, it does grant access rights based on geographic criteria.

USER TASKS

"Our intranet has a task-oriented architecture," says Siganos. His team identified four basic needs in breaking down the user tasks—"What's new?" "What service can I use?" "I want to know…," and "I need to share and collaborate"—and mapped these expectations to four channels:

1. ***News*:** Allow users to read internal news at the group, national, or local levels.
2. ***My Altran*:** Give users access to a one-stop shop of day-to-day services available both through the intranet (such as timesheets, expense reports, and travel booking) and on the site itself (such as online training, internal mobility service, and HR forms).
3. ***World Knowledge* (and know-how), including:**
   - Facts and figures: Information on each group, national, or local department (including organization charts, road maps, libraries, and templates).
   - Access to business-critical knowledge such as project references, business solutions, partnerships, and project or commercial templates.
4. ***Communities* (collaboration), including the ability to:**
   - Search and join communities related to particular interests
   - Collaborate in those communities
   - Create a community
   - Independently create and manage a community architecture

Accomplishing the above tasks was an important step for the organization. "Realizing the possibility of having, on the same screen, the three levels of our organization was a clear message to our employees: 'We are a group!'" says Siganos. "This is when information architecture is a message."

At the country level, the four-channel architecture provides a very important advantage. The task-oriented architecture is independent of the current or future organization between the different departments. "This insures a very consistent navigation for end users," says Siganos. "The access to information and services is exactly the same at group, national level, or local level."

"When we designed this architecture, we thought this was perfect for our group," he says. "After a year now, we still think it's good—and the user feedback confirms that." At the country level, though, content owners sometimes still have real difficulties and, according to Siganos, "they slip their content into several channels."

Siganos explains that most content owners think about information in a very organization-oriented manner—focusing on their own organization. "For example," he

says, "the human resources department wants a *single* section called 'HR.'" In that section, says Siganos, the HR department wants:

- HR department news;
- services provided to employees (such as holidays reports, timesheet, and expense reports);
- an outline of the department's organization, along with fact and figures; and
- a collaborative space for the department.

"But, on the contrary," says Siganos, "on our intranet—which is task-oriented—the content listed above will be split into four channels." That split occurs as follows:

CONTENT CHANNEL DISTRIBUTION	
CHANNEL	**CONTENT**
News	HR department news will be published under the *HR* tag in the common news list
My Altran	A section for each employee service, categorized by need (training, travel, work remote, and so on)
World Knowledge	The department's organization, facts, and figures
Communities	Collaborative spaces

Siganos says that once he explains the system to content owners, they typically rethink their own experiences as users, and thereby understand the system very well. "We also provide a PowerPoint slide with multiple choices that helps the content owner determine in which channel the content must go," he says.

Planning for the Future

Etienne Gonnaud, ECM practice leader, says they planned the IA for both existing information (things they knew how to structure) and future information (things they couldn't anticipate). "Technically, this means that not only the content could be easily changed by 'end-users' but also the structure" including rights, navigation, and hierarchy, says Gonnaud. "As a consequence, we are using both templated and user-defined content."

DESIGN PROCESS AND USABILITY ACTIVITIES

Siganos says the site's previous versions had been rushed and were not satisfactory. "However, Direct had proved its importance," he says. Half of the group had adopted it, despite the fact it was not mandatory. "And so the time was right for a redesign which would allow us to build upon this basis.

"Direct v.2 was a response to our willingness to break new barriers in terms of common culture and audience, but also to integrate collaborative tools at a transnational level," says Siganos. "The v.2 was a really better response to the 2005-2008 strategic plan of the company compared to the v.0 or the v.1."

Monitoring Changes

Decisions about what to change were fueled by monthly traffic reports, which the team studied very closely. The team also defined a few key indicators and put together a scorecard to monitor each change.

And, every six months since launch, the team has conducted user satisfaction surveys. During the most recent survey, conducted during the summer of 2008, 10% of those surveyed responded.

"Most of the time, we take the oral feedback as a lead; we then verify with the traffic measures. For instance, we were very surprised that a lot of people had not yet discovered a lot of very nice features," says Siganos. "We decided then to launch a little program of video tips and tricks."

Tracking Monthly Indicators

The team chose three ratios as monthly key indicators:

- **Activated accounts:** The number of people, out of the total number of employees, who have visited the site at least once.
- **Monthly use:** The number of people, out of the total number of activated accounts, who use the site at least once during each month.
- **Visits:** The total number of visits relative to the number of active accounts.

These figures are detailed by country and sent to intranet teams and to the top management of each country. "This is the best way to show progress, of course," says Siganos, "but also to ensure the awareness of the management on the intranet impact."

These metrics let the team track the impact of local and global changes in terms of use—though not, of course, in terms of usability. "For usability," says Siganos, "we measure through funnels ratios such as people logged in versus people retrieving passwords, retrieving password success" and so on.

Focusing on Fundamentals

The Altran intranet team didn't conduct extensive usability activities in bringing v.2 to fruition; instead they focused their efforts on fundamentals.

"I would say that during the last year, we have focused much more on fixing the fundamentals of the group intranet culture for employees," says Siganos, adding that the coming year "will now be the time to slow down and improve each piece of the global framework through 'real' usability studies" and to build upon the basics they have in place. That said, the team did use two methods to involve users in their development process: surveys and prototype testing.

User Satisfaction Surveys

The user satisfaction survey is an anonymous survey conducted and promoted on the intranet and via follow-up e-mails. The team tested two versions during the past few years:

- A long survey available for one month
- A series of short surveys available for two months

"The second method has a lot of advantages," says Siganos, including that:

- Responding to a short survey requires less than a minute of a user's time, making it easier to promote.
- Subsequent surveys can be adapted based on a user's response to a previous survey. For example, they might delve deeper on a particular question or issue.

- Ultimately, it lets you collect much more information than if you offer only one "big" survey.

User Testing of New Design Prototypes

During the storyboarding phase, the team conducted user testing on the new design prototypes. Siganos explains the methodology: "Every important/key screen is designed on PowerPoint (mainly black and white forms and essential text). We picked the users and ask them to perform tasks."

What the team did here was key. They actually put prototype pages in front of people. They didn't ask what they thought or have them give a critique. They actually gave them tasks to complete and observed. This is a fabulous way to test the usability of new design ideas.

"We proceeded incrementally," says Siganos. "Each time a user made a comment, had difficulty proceeding to the next task, or did not understand the 'response'—the screen following his action—we reviewed the storyboard."

Basically, the designers were not trying to validate the design or get the users to "do it right" or like it. They truly wanted to learn about what worked and what did not work for real users.

URL AND ACCESS

The intranet's URL is direct.altran.com. Remote access is not a problem; 70% of the Altran workforce accesses Direct from customer offices or from home.

The site is set as every user's default start-up page, but they're allowed to change it. "If they decide to change it, it's our [the intranet team's] problem, not theirs," says Siganos. "This means we have to be better."

TECHNOLOGY

Design Tools

Microsoft Office SharePoint Designer 2007

Tools for Building

- Windows SharePoint Services 3.0
- Microsoft Office SharePoint Server MOSS 2007 Standard
- Visual Studio 2005 (Framework 3.0, Visual Studio 2005 Extensions for Windows SharePoint Services, Visual Studio 2005 Extensions for Windows Workflow Foundation)

System Information

Three servers (two front and one index):

- Windows Server 2003 R2 Enterprise and Service Pack 2
- MOSS 2007 Standard
- Web Server: IIS 6.0
- Framework .Net 3.0 RTM
- Processors: Bi-pro 2.2 GHz
- Memory: 4 GB RAM

Two SQL servers with a cluster (250Go) of storage space:

- Windows Server 2003 R2 Enterprise and Service Pack 2
- SQL Server 2005
- Processors: Bi-pro 2.8 GHz
- Memory: 4 GB RAM

Bug Tracking/QA Software

- Event Viewer (provided by Windows 2003)
- IIS log files
- Log Parser
- ISILOG (Bug tracking application)

SEARCH

The site uses the standard search engine provided by SharePoint. "We are improving the search results step by step," says Siganos. "We have not reached the limits of the search engine."

Search Technology

- SharePoint Shared Search Provider (SSP) (provided by Microsoft Windows SharePoint Services (WSS))
- Microsoft Live

Siganos says they regularly track the top search keywords. "This obviously helps us to understand what people are looking for and decide if it's an accessibility issue to solve, a topic to promote, or a legit search."

CONTENT MANAGEMENT

The site's CMS is SharePoint 2007. On top of this solution, the team developed a custom layout and a toolbox composed of several content type templates (including lists, libraries, and sites) for the content managers.

The content owner who owns the specific content in "real life" is also the content owner on the intranet. This means that employees who are responsible for subject areas in the organization are also in charge of the corresponding section on Direct.

"We promote the idea that using the intranet back office is just a new step on the democratization of the communications tool," says Siganos, adding that it's similar to how word processing introduced "a change of paradigm in the manager/assistant organization."

Adding a New Content Type

When content owners want to add a new type of content to the intranet, they engage in a defined process with the Direct country/local manager as follows:

- Identify goal
- Develop map of content definition
- The Direct country or local manager trains the content owner on the rules, guidelines, and so on
- Together, the content owner and manager create the new section
- Check before going live (at the corporate level, with the core team intranet, if needed)

Content owners can update or make minor evolutions autonomously, without feedback from the Direct country/local manager.

Enforcing Standards

Enforcing standards is not hard to do. "The system does most of the work," says Siganos. With the content templates, part of each page (navigation, background, and so on) is automatically created and content owners can't change it, so it's difficult for them to create something completely unusable or inconsistent. Still, the team provides tools and conducts a quality check of each section during the design phase and before it goes live.

Design Standards

The Altran intranet team has established support communities on the site where content managers can find information about the site's rules and structure and get answers from their co-workers.

These communities include:

- One for content managers containing information about architecture and graphics rules and technical how-to's (in text, PowerPoint, or video format), as well as message boards, discussion boards, and so on.
- One for local or country managers containing promotional material, training material, meeting minutes, PowerPoint templates, technical templates, and so on.

Both communities have two objectives:

- Facilitate exchange and support.
- Familiarize the Direct managers and contributors with how to work with collaborative tools as much as possible.

MOBILE

"Direct is accessible from mobile devices, but we have not optimized or created mobile-dedicated content," says Siganos. "There is no real demand to make the intranet compatible with mobile devices."

Siganos says that the alerts features, which are e-mail based, are enough for mobile users' needs. "They know what's going through the mobile mail, and then connect on a standard device to access the intranet."

FEATURES

Collaboration Tools

The site takes advantage of the native SharePoint community features, but the intranet team has also implemented some original rules and concepts for collaboration. Anyone within the group can create a community, as long as he follows 10 golden rules:

1. **Agree to the rules:** As the owner of a community, you automatically agree to all the rules stated below.
2. **Only professional communities:** Only communities with a professional goal and a sense of sharing are allowed.

3. **Approval required:** Creation of a community is by request only. Approval from your Direct country manager is mandatory for creating a community.
4. **Must be sponsored:** Each community is required to have at least one owner and one sponsor. Two owners are advised. Sponsor and owners are responsible for the respect in their community of all rules contained therein and in general use elsewhere in the group.
5. **Minimum three members:** A community must have at least three members, as soon as it is created.
6. **Maximum 500 members:** The size-limit for a community is 500 (except for official communities at the group level).
7. **No classified information:** Classified information entrusted to us by our clients cannot be made available in any community.
8. **Communities expire:** As soon as a community has reached its goal, the owner is committed to erasing it.
9. **Monitor inactivity:** If it remains inactive for more than three months, a community will be erased once its owner has received three e-mail alerts.
10. **All rules subject to change:** The creation and management rules for the communities may be subject to changes.

Altran employees can choose between three types of communities:

- **Open community (O):** Anyone can join this community and take part in its activities. The owners organize the content and contribution rules.
- **Private community (P):** Access is restricted to members. The owners organize content and contribution rules. To join such a community, an employee must either be invited or make a request to its owners.
- **Open/Private community (OP)**: A mix of both types. Part of it is open to anyone interested in the topic, while the rest is members only. This is the ideal community.

"This model is very appreciated in the group and the number of communities has grown very fast," says Siganos. He also notes that communities require local promotion and flourish best when local management has shown an interest in them.

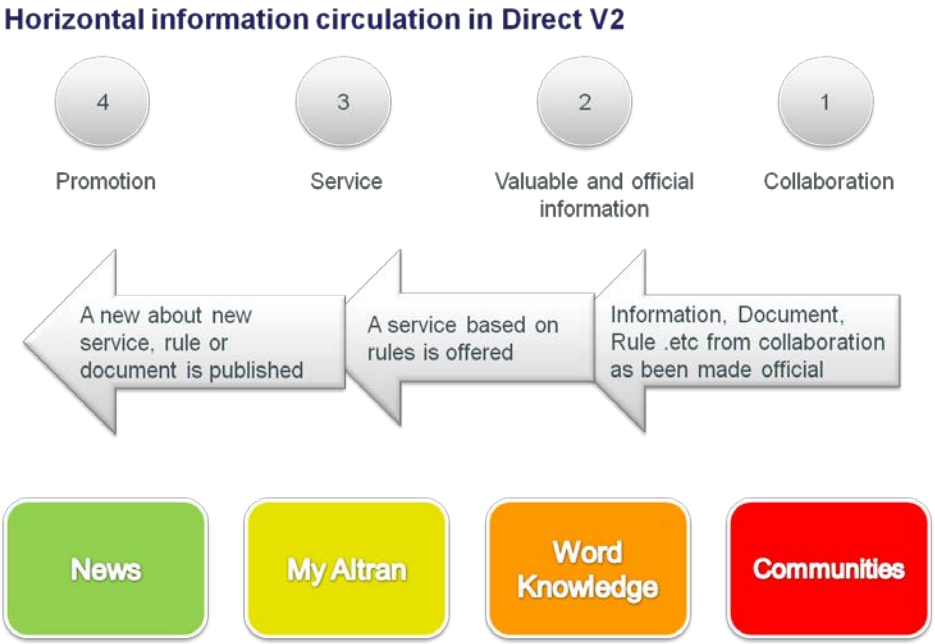
Knowledge Management

Knowledge management comes in two flavors on the Altran intranet. The *World Knowledge* channel offers users validated and structured information. This knowledge has as been collected from the communities (and other places) and has been reviewed, validated, organized, and so on by the appropriate people within the group.

The other type of knowledge management is more lightweight and is derived from within the communities, where members share a lot of informal information. "The collaborative communities are not controlled, except by the 10 rules," says Siganos. "It's a bit like the Internet: It's very easy to publish and share information [but] you are not obliged to trust the information." Basically, he says, it's a "one-to-one trust" and users must decide for themselves what is valid.

Siganos says the organization has also formalized pathways where they can promote the transition between informal and formal knowledge across the organization. "For instance," says Siganos, "a new business offer around aerospace is elaborated on in a community. Then, when it's time to evaluate new offers in the group, we set up another community that supports the evaluation of the maturity of each new offer in an official but collaborative way. When the evaluation is over, the result of the audit—as well as the granted offers—become official in the *World Knowledge* section. The promotion of this new audit is made in the news channel."

How this knowledge transfer works is illustrated here (following the chart from right to left.)



Pictured: How information transitions from informal to formal knowledge within the organization.

LESSONS LEARNED

Key team members describe some of the lessons learned in developing the Altran intranet.

Olivier Siganos, program manager:

- **Know your users.** "The more you know what's really important to your users and what's not, the better you can focus on features that count (and save your budget). The better your technical advisors are, the easier it is to understand the concepts at work in the CMS. Then you are able to provide better specifications, saving precious days of development."
- **The intranet has its own life.** "'Communicate early and often to end users' is a rule we try to respect. The development planning is public, and a new feature or major improvement is released every two months. Communication really pays off in terms of user confidence in their day-to-day tools."

Hervé Audouin, electronic content specialist:

- **Regularity is the key. "**Managing an intranet is like a marathon. You have to be constant (publishing new services and maintaining your intranet regularly, etc.) to produce results. No need to do a strong and temporarily action if the day-to-day job is not done. You will lose the benefit of both."
- **Listen to the users and take action. "**One single opinion is always interesting. The same comment expressed twice should be concretized as soon as possible. Never forget that many users may think the same but remain silent. Do regular surveys, too."

RESULTS / ROI

Like many companies with a successful intranet, Altran doesn't have hard numbers to prove the site's success, at least not yet. "The perceived ROI is amazing," says Siganos. "But we are only at the beginning of this journey."

Without hard numbers, companies can measure ROI by the tasks users can accomplish now that they couldn't prior to the intranet.

At Altran, one of the new site's first real metrics was an increase in the number of people who connected to the intranet at least once per month (compared to v.1). This figure rose 60% with the new site.

COWI Group A/S

Using the intranet

COWI is a leading international consulting group in the fields of engineering, environmental science, and economics. Since its founding in 1930, it has been involved in more than 50,000 projects in 175 countries. COWI employs 4,700 employees, including engineers, biologists, geologists, economists, surveyors, anthropologists, sociologists, and architects.

COWI leads some of the world's largest infrastructure projects. It has companies and offices in 35 countries, and project offices in all countries in which it operates.

Number of employees the intranet supports: COWI has 4,700 employees. So far, the portal has been rolled out to 3,000 employees in Denmark, Norway, Lithuania, the US, China, Belgium, and Turkey. Over the next two years, it will be rolled out to the rest of the COWI Group, including offices in Eastern Europe, the Arabian Gulf, and Africa.

Headquarters: COWI is located in Lyngby, Denmark (north of Copenhagen)

Sales: DKK 3,031,381,000 (year ended December 31, 2007).

Design team

Functionality and navigation by COWI staff. Graphic layout by Framfab, developed by Netcompany and COWI.

Members

Jan Johansen, chief project manager; Christine Rübner Hultmann, section manager, knowledge management; Nina Sonne Nikolaisen, knowledge management consultant; Henrik Steen Petersen, head of department; Jørgen Emborg, chief project manager; Jørg Losnedahl, IT manager COWI Norway; Trine Boe, communications consultant; Janne Toft Jensen, group Web editor; Josina Bergsøe, design manager; Arne Hougaard Nielsen, IT director and owner of the COWIportal.

SUMMARY

Consultancies get tremendous value from sharing knowledge among workers throughout the organization. Proposing a project, staffing it with the right people, planning and sharing knowledge and schedules throughout the project, ending the project, and providing history are all fundamentals of the consulting process. And, when the consultants deal with complex issues, it makes supporting them even more important—and more challenging. Expediting such processes will contribute to an organization's success; hindering them could be the end of the organization.

The COWI Group intranet, COWIportal, supports some 4,700 employees based in companies and offices in 35 countries, all working on complicated problems in the fields of engineering, environmental science, and economics. A wide range of users, engineers, biologists, geologists, economists, surveyors, anthropologists, sociologists, and architects, make COWI projects possible. As does the COWIportal, which does a remarkable job of shoring up the consulting process by:

- Working on the backend to personalize the site and show users the information and links they need
- Enabling knowledge sharing
- Targeting project areas for teams
- Communicating details about individuals

Homepage

The COWIportal homepage is a mix of targeted information and user-selected content types. The intranet designers decided to make the homepage suit individual needs so people wouldn't have to go hunting to get their needs filled.

The first news item in a graphic banner showcases one main article. In the example below, the article tells an exciting story about a COWI project manager who's also an Olympic athlete. The headline, summary, and picture of the person draw users in, and remind them of the rich tapestry of people at their company.

The first content section, *News for You*, shows news selected for the logged-in user based on the user's background and work. COWIportal aggregates information from other sites around COWI to find the most important information for each user. The title/link for the news item is telling, and the news item's category appears next to the title, offering helpful context. For example, the news title, "Guidelines for cooperation between the five COWI regions," takes on a new—or at least a clearer—meaning when you see that it's in the *Sales* category. The same is true of the title, "Building the Colossus of Copenhagen," and its source, *Building and Operation.*

The *My selected news* area—which appears to the right of the targeted news—displays titles from the user-selected news subscriptions. Below this area, a link for *How to subscribe to news* walks newcomers through the process.

The *Events for You* section is also targeted to the logged-in user, selecting and presenting events from calendars around the organization. This makes managing days and weeks effortless for users.

The right-most column continues the user focus, showing a user-selected list of sites, such as organizations users are apart of and projects they work on. This area also displays personalized tasks and alerts.

Further, the right column offers a personalized link to the time registration sheet, the travel registration sheet, and, if applicable, the manager's reports. So, when users open the intranet homepage, they can tap into much of what they need to know that day. This fact makes the COWI portal a truly amazing productivity tool.

Looking toward the top of the homepage, we see the logged-in user's name along with personal links to *My Site* and *My Links*. Users can edit these features to share information with colleagues and quickly locate often-used links.

The persistent global navigation is organized into understandable categories. When selected, a section changes from light gray to dark gray.

The *People Search* and site-wide search features are readily available in the upper right of the homepage, and appear on every page on COWIportal. Located together as two open fields is the most usable presentation of these important yet different intranet features.

Pictured: The COWI intranet, COWIportal, acts as a dashboard for users' daily tasks, such as reading targeted news and subscriptions, filling in timesheets, and accessing job-critical links.

News and Writing

The news is written by people in different areas of the organization, and thus is varied and can be fascinating. All news items have a clear title and a helpful summary of the story just below it. This helps users decide whether the story is something that might interest them. Also helpful are the headings within the news article. In the "Building the Colossus of Copenhagen" story, for example, the subheads, "Two decades of planning" and "Staying true to art," help users understand the section contents.

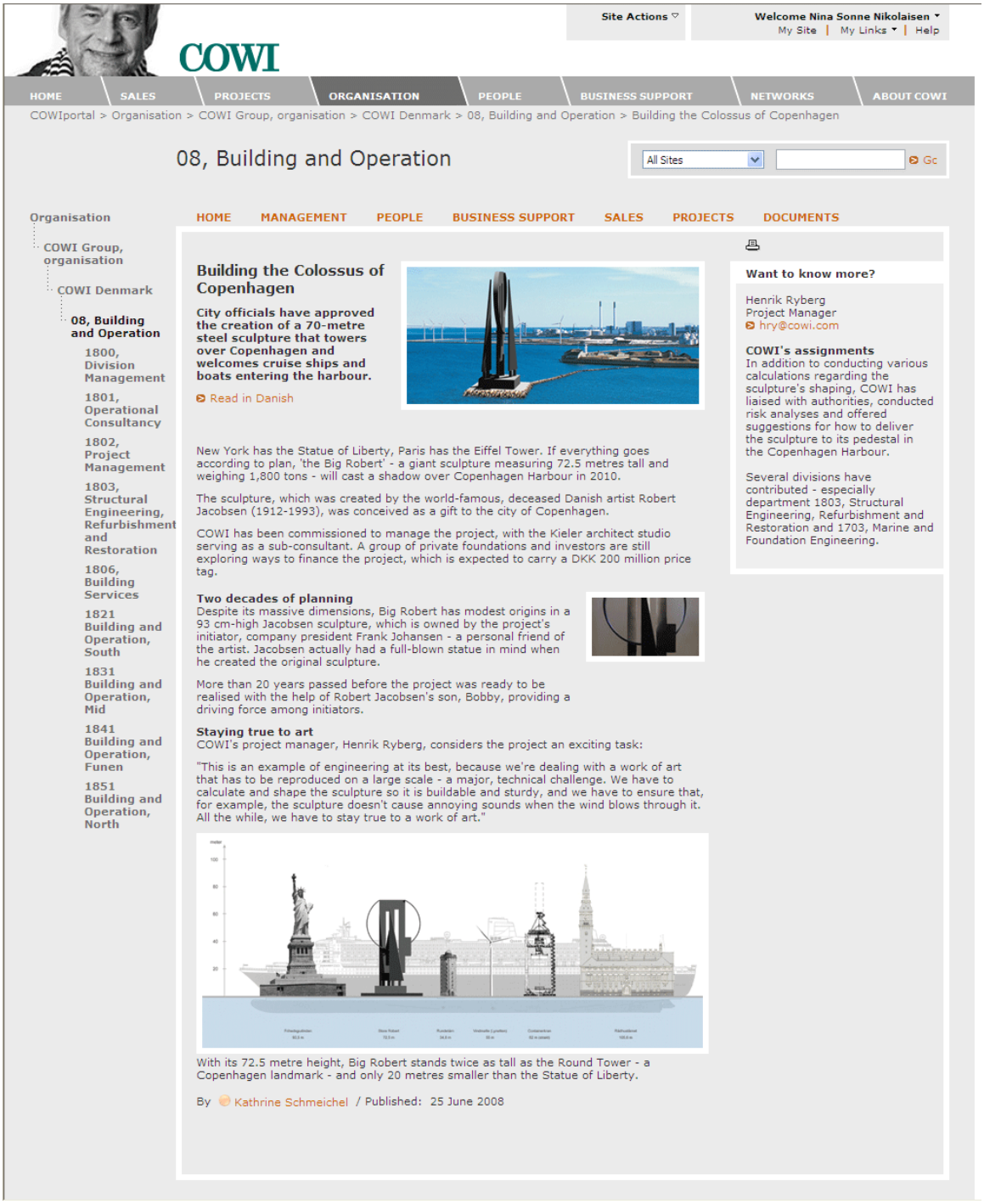
The article's topic is a high-profile job for both COWI and the Copenhagen skyline. It's exciting for users to see summaries of interesting and large-scale jobs like this.

Also, the article's graphics are not lame, stock-type artwork of people pretending to work or unrelated sketches from other jobs. Instead, the images depict what the Colossus, nicknamed "Big Robert," is planned to actually look like.

The article's text offers interesting information, such as that the tower will be a "70-meter steep sculpture." But how high is 70 meters? Writers took care of this by offering a very nice image at the end of the article that puts the building's size into perspective. The image shows a ruler on the left, then a small version of the Statue of Liberty, then the smaller Colossus, and the smaller still Round Tower (which is a Copenhagen landmark). The image's caption is also helpful: "With its 72.5 meter height, Big Robert stands twice as tall as the Round Tower, a Copenhagen landmark, and only 20 meters smaller than the Statue of Liberty."

The *Want to know more?* area on the right provides additional information about COWI's participation in the project, and also gives the project manager's name and e-mail address.

The *Read in Danish* link below the summary converts the article, on the spot, from English to Danish.



Pictured: This news item is well written, has simple bolded headings to alleviate scanning, and clear, related images.

As with the news article, the writing on the functional group pages is also interesting and free of poor marketese and redundancies. For example, users interested in learning about the Building and Operation team can click the *Organization* link in the global navigation, and work their way down the left-hand context navigation until they reach the *Building and Operation* main page. This page tells the most baseline information about what this team does:

> *"In Building and Operation we advise on all types of building projects, focusing on consultancy and sustainable development…"*

And scanning down to a section heading, again the information is quite helpful:

> ***"Specialist areas:*** *Our areas of specialist expertise include fire protection and acoustics, indoor climate, IT installations, and the working environment…"*

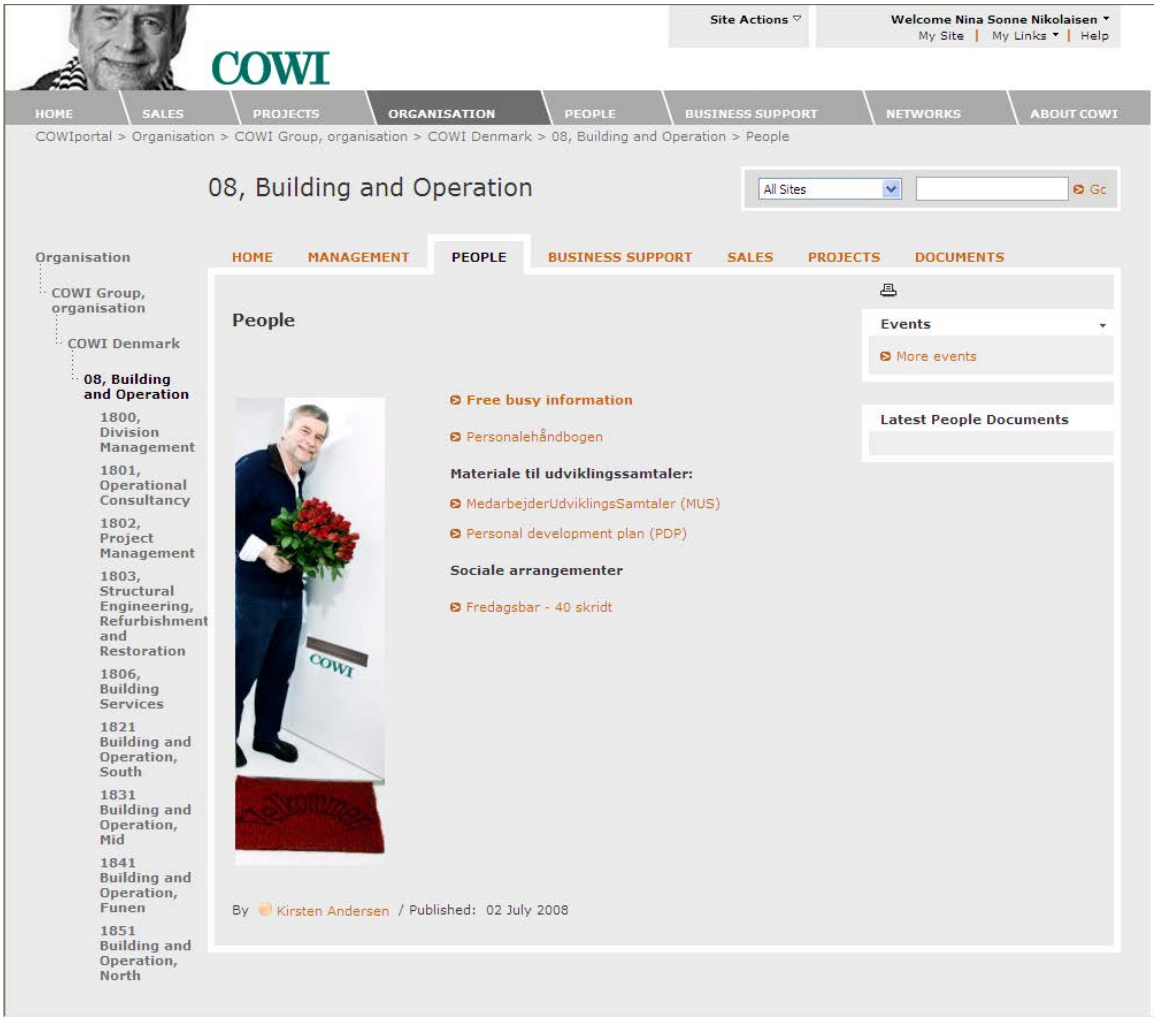
Good writing on intranets is not always readily available, but this organization does a very nice job of getting the main point across quickly.

The related-links sections lead the users to more helpful information, as does the *More Information* box. This provides contact names, titles, e-mail addresses, and phone numbers.

Information about Groups

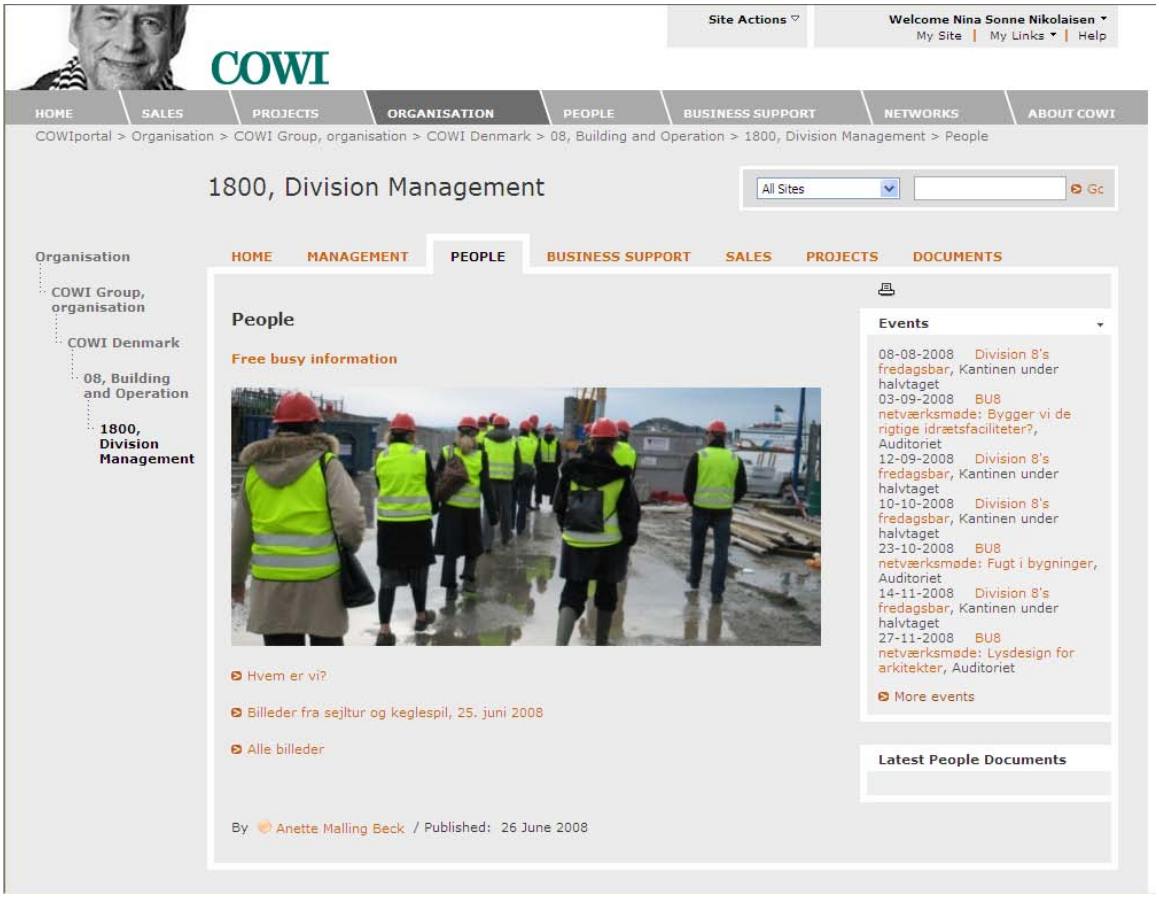
The *Organization* section offers users even more information about particular groups than they can find on the main section page. Here, users can access detailed information about teams by navigating the tabs for *Management*, *People*, *Business Support*, *Sales*, *Projects*, and *Documents.*

As the names indicate, the tabs contain information about management, people (including an overview of their availability from their Outlook calendars), business support specific to the unit, the unit's projects, and a document library. The tabs are easy to navigate, as is the sparse list of links.

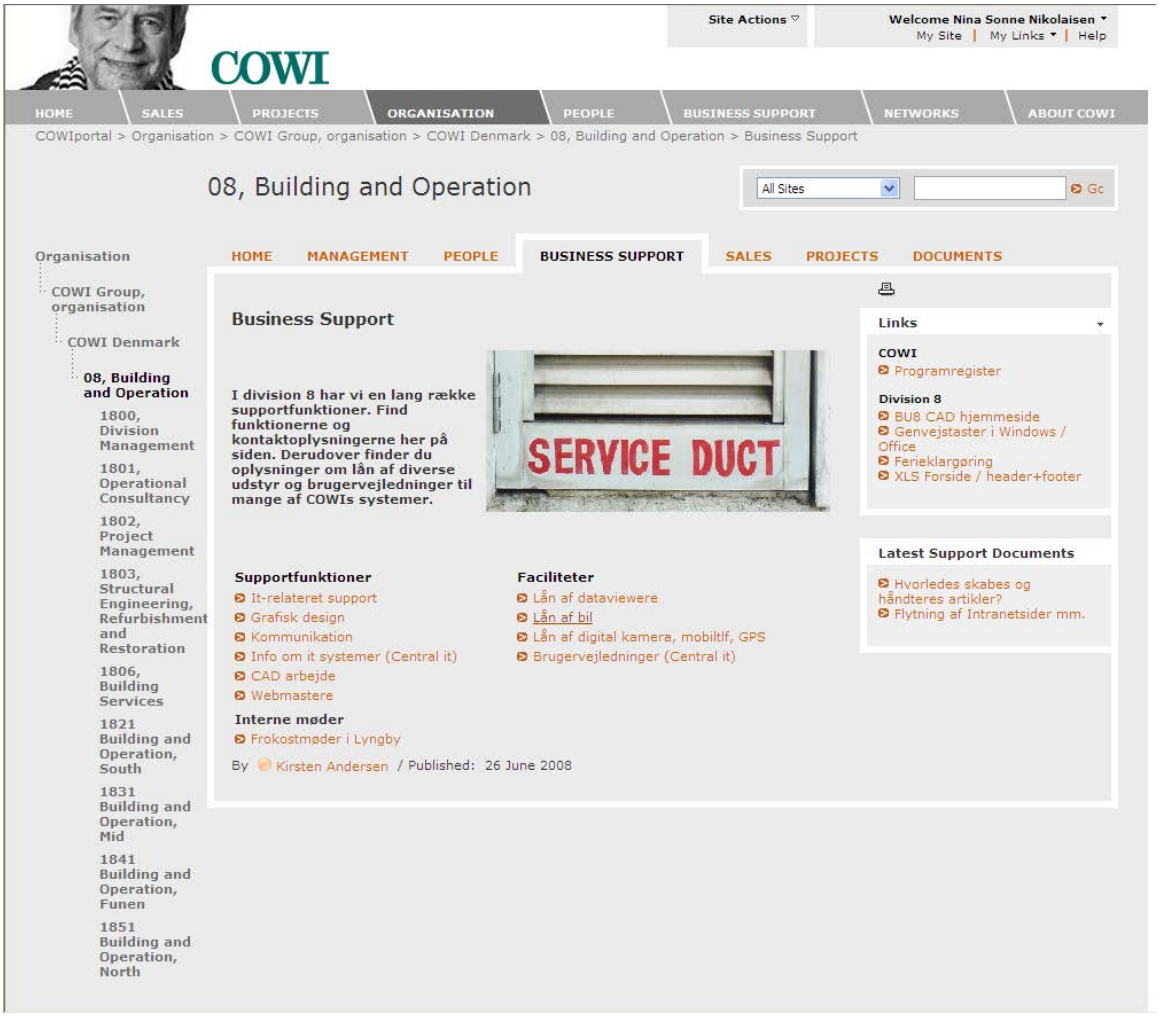


Pictured: The *People* page for this organizational site. The organizational sites have information about management, people (including, as this image shows, an overview of their availability from their Outlook calendars), business support specific to the unit, the unit's projects, and a document library.

10 Best Intranets: COWI Group A/S

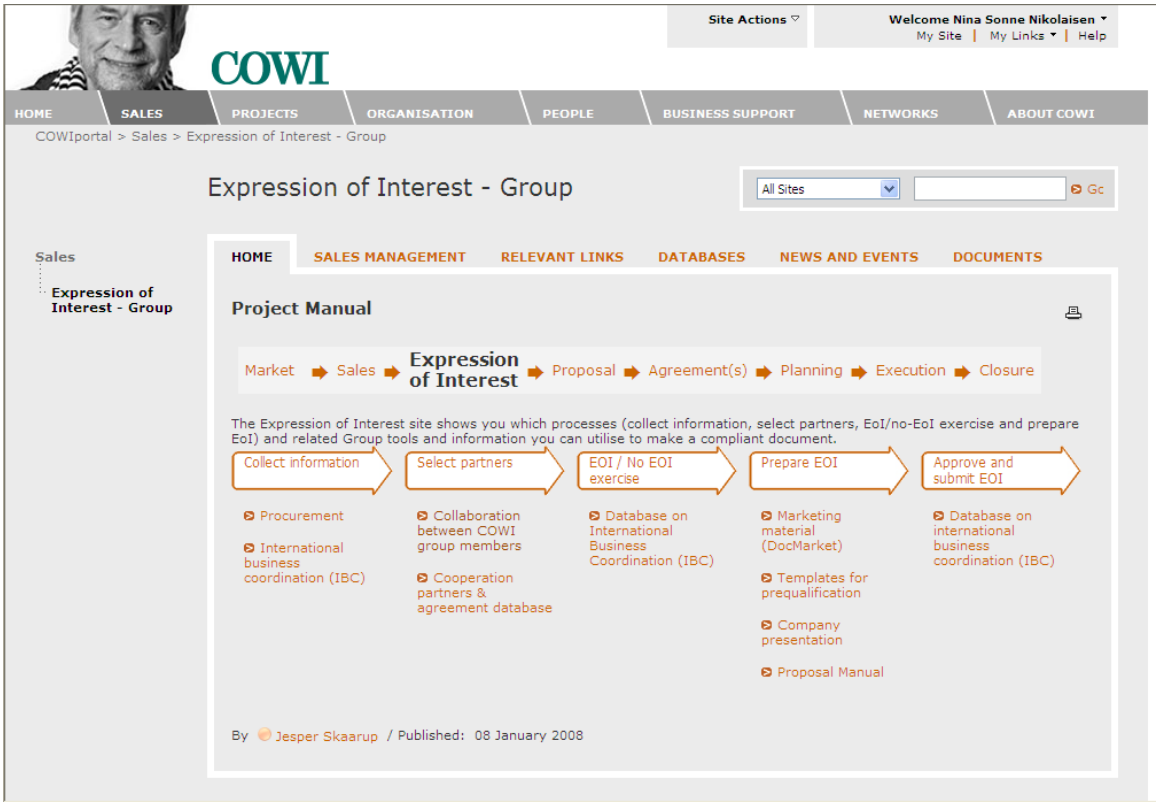


Pictured: An interesting picture adds a personal touch to the information about a project's staff.



Pictured: Another fun picture relates to the content of the *Building and Operations > Building Support* page.

In another example, a graphic describes the entire project process. The graphic and accompanying text can help people new to the organization; they can also help existing staff members recall steps in projects that they've not recently participated in.



Pictured: A graphic helps to describe the project process.

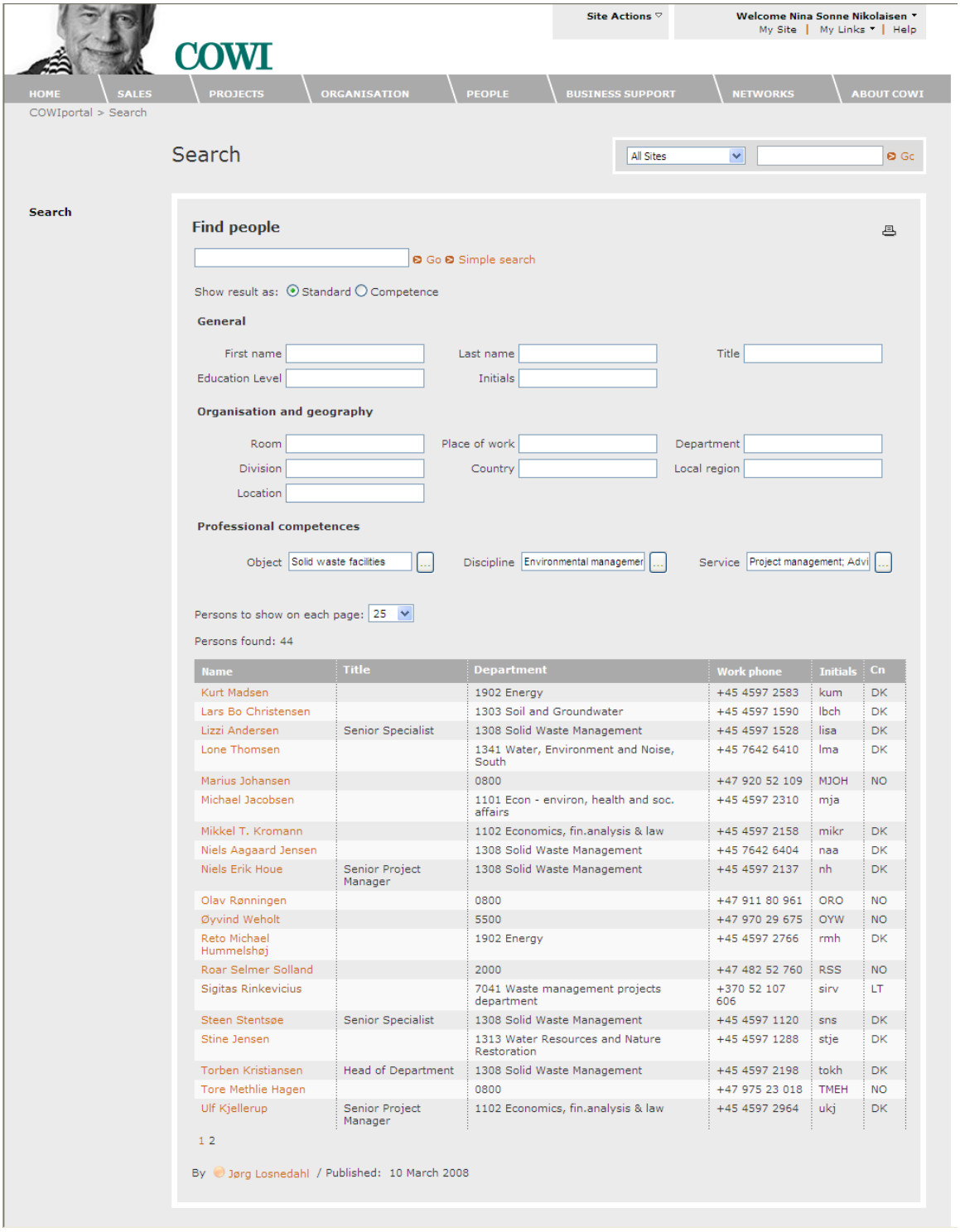
Throughout COWIportal, the graphics used are magnetic, with good subjects and equally good photography.

Finding People

With consulting jobs, finding the right people is one of the more important steps to success. Most users will find what they want via the simple people search field in the upper right of pages. But, if users want a more detailed search, that's available, too. They might, for example, select the small orange *Advanced People Search* link under the people search field. Clicking this link opens an array of choices to help users find that exact person they met once or heard about.

The form for advanced people search is appropriately titled *Find People.* Users can search by various criteria, including education level, title, division, location, and other geography-related fields. They can also search for people by *Professional competencies*, such as their discipline, services, and objects or areas of expertise.

Users can sort results by *Standard* or *Competence*, using the radio buttons toward the top of the page. The results appear in a table below the query fields, and users can click the names of people in which they are interested.



Pictured: The simple people search function is available in the upper left of the homepage and other pages on COWIportal. People who want to search by specific criteria can select the *Advanced People* Search link and search by location, country, division, and assorted other fields.

When users click a name, they're directed to a public part of the target person's own *My Site* section of COWIportal. The intranet designers did a great job here of not duplicating person documents between the "sanctioned" employee directory and the personal collaborative areas where users provide much more detailed information about themselves. Instead of making a user find and look at both pages, the design team selected the one most useful document to appear in the search results.

The information-rich page starts with the title, which is the person's name. A small but clear close-up confirms the person's identity. In the content area's first column, employees can find all of the expected basic information: the person's name, office, department, division, and so on.

The next column shows where the person fits in the organizational hierarchy. In the upper right, the person's competencies are listed; only that person can edit this list. Following it is a link to the person's curriculum vitae, located in the CV COWI database. *My Personal data* links to the employee's data in SAP; again, this is accessible only by the target individual, who can directly edit the data in SAP to correct or update information such as a street address or bank account number.

The *In Common With You* section attempts to call out some of the things the logged-in user might have in common with the person profiled. This kind of information can make people who have never even met feel connected, building team and organizational spirit.

Finally, the user's memberships and links/subscriptions are listed as the final elements on the page.

Clearly, much of this information—such as knowing a person's skills—is helpful to COWI consultants and their daily work processes; being able to locate such information effortlessly is a considerable bonus.

The *My Site* navigation also includes other elements, such as *Documents*, *Pictures*, *Lists*, *Discussions*, *Surveys*, and *Sites.*

Pictured: An employee profile page. The people search result inks to a public page in the person's *My Site* area. In addition to the basic data that the organization consolidates for them, employees can provide an assortment of personal information.

The COWIportal designers took great strides in the personalization features, making it easy for consultants to find their own information. Collaboration and knowledge sharing also ride in the front seat on this intranet. But let's not forget the unsung

heroes: fabulous graphics and simple, clean text. This is not just the result of the immediate intranet team's efforts, but also of its ability to harness great work by many other COWI employees. And that is what being a triumphant, enviable portal is all about.

BACKGROUND

The COWI intranet originated in 1997 in the company's IT department. Christine Rübner Hultmann, COWI section manager, knowledge management, says that first intranet was built by "enthusiasts" who wanted a Web-based interface to share news and files. The main navigation was based on results from an internal report, *Knowledge in COWI*, and divided the intranet into the following subject areas:

- Management
- Finance
- Staff
- Facilities
- Market
- Projects
- Know-How

"The first intranet was only used by the Danish part of the COWI Group supporting around 2,000 users," Hultmann says. This first company intranet was updated using Microsoft FrontPage.

In January 2008, the new COWIportal, based on MOSS 2007, was launched. "We went from an intranet that purely supported publishing content to an intranet that supports collaboration and business processes across the COWI Group," says Hultmann. "The COWIportal is a necessary tool to make our 20 companies around the world able to work together on projects and share knowledge and resources."

So far, the portal has been rolled out to 3,000 employees in Denmark, Norway, Lithuania, the US, China, Belgium, and Turkey. It will be rolled out to the rest of the COWI Group over the next two years, including offices in Eastern Europe, the Arabian Gulf, and Africa.

A Vision for the Portal

The journey from that first intranet to the current portal implementation began in 2006. Jan Johansen, chief project manager, and Arne Hougaard Nielsen, COWI's IT director, provided the vision of what the COWIportal could be. The overall COWI business strategy—to make the 20 companies work together as one group—required a common platform, and Johansen and Nielsen made the case that the intranet could be that platform. Their vision has become the COWIportal's strategic goals:

- Integrate the companies in the COWI Group via a corporate intranet/portal supporting shared business processes
- Support seamless cross-company project execution (primarily document and task handling)
- Improve knowledge sharing, communication, and use of IT solutions in general.

Governance

The most dramatic changes in both staffing and governance were introduced with the portal's rollout. "The old intranet did not get much attention from management," says Nina Sonne Nikolaisen, knowledge management consultant. "Now there is a Portal Governance Committee where the Executive Board is represented and it acts as a steering committee for the portal.

"The COWIportal project changed the intranet from being a content container for news and support to being the work place of every employee—and therefore a company-critical tool," she says.

Today, COWI's Portal Governance Committee (PGC) comprises the portal's internal owners. "The PGC funds and prioritizes (at a high level) the development of the portal," says Hultmann. Several members of the PGC are also members of the Executive Board. "This ensures that the portal continues to be a strategic tool that supports the company's strategy," she says.

The current intranet is divided into a number of sub-portals, each supporting a main business process within COWI, such as sales or project execution. The executive board member who is responsible for the business process that the sub-portal supports owns the corresponding sub-portal. And all of the sub-portals are built on a common platform called the Portal Framework. This comprises the functionalities used across all sub-portals, such as site templates, navigation functionality, knowledge sharing tools, and search functions.

Staffing

The Department of Knowledge Management owns the portal framework and operates the sub-portals on behalf of the internal owners. "We help the owners prioritize new links, content, campaigns, and IT development within their areas in the portal," says Hultmann. "We work as knowledge management consultants helping them to make the portal support business in the best possible way."

The department employs two full-time consultants and two assistants. A third full-time consulting position is shared by three consultants, each working part-time on the project sites. Another consultant works half-time on the new search engine, and a journalist in the Department of Communication works full-time, contributing articles to the COWIportal and advising content owners on how to write news.

Four IT developers work full-time with the COWIportal (intranet, project sites, and search engine) and several other IT people are involved in maintaining the servers and network access.

INTRANET TEAM

Staffing over Time

In 2000, the first webmaster was appointed (Christine Rübner Hultmann). She worked for the quality manager and was responsible for both the intranet and the company's website. Then, in 2003, "the knowledge manager took over the responsibility from the quality manager and a second person was appointed to help Christine update news on the website and on the intranet," says Nikolaisen.

In 2005, the responsibility of the website was transferred to the Department of Communication. The Department of Knowledge Management now reports into the IT Director and works in close operation with Johansen, the main business consultant in the IT Department.

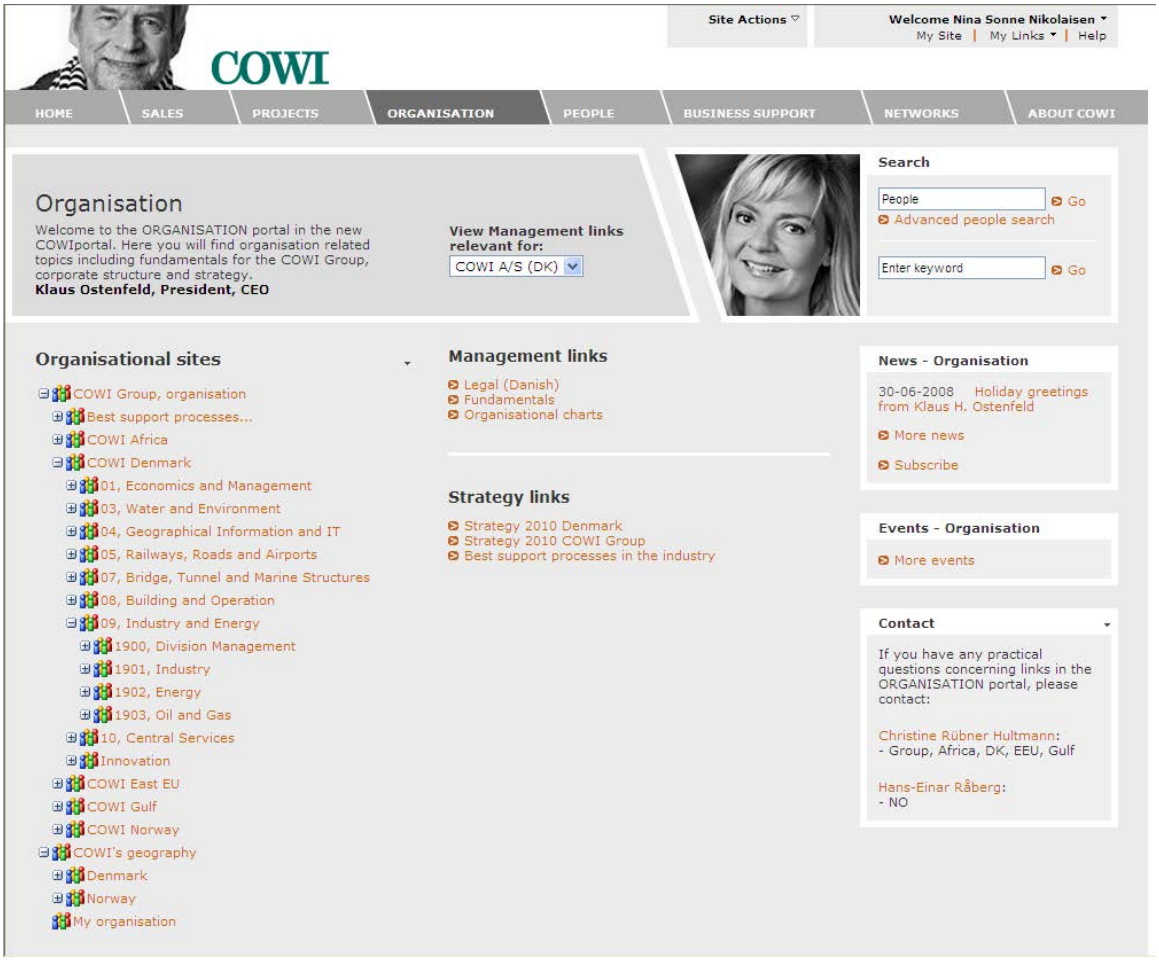
Today, the Department of Knowledge Management is responsible for giving strategic advice on the portal's development to the Executive Board and for consulting and advising all content owners on the COWIportal rollouts in the remaining COWI Group companies. "We also write requirement specifications for new features on the portal and test new features before they are rolled out," says Nikolaisen.

Working with Agencies

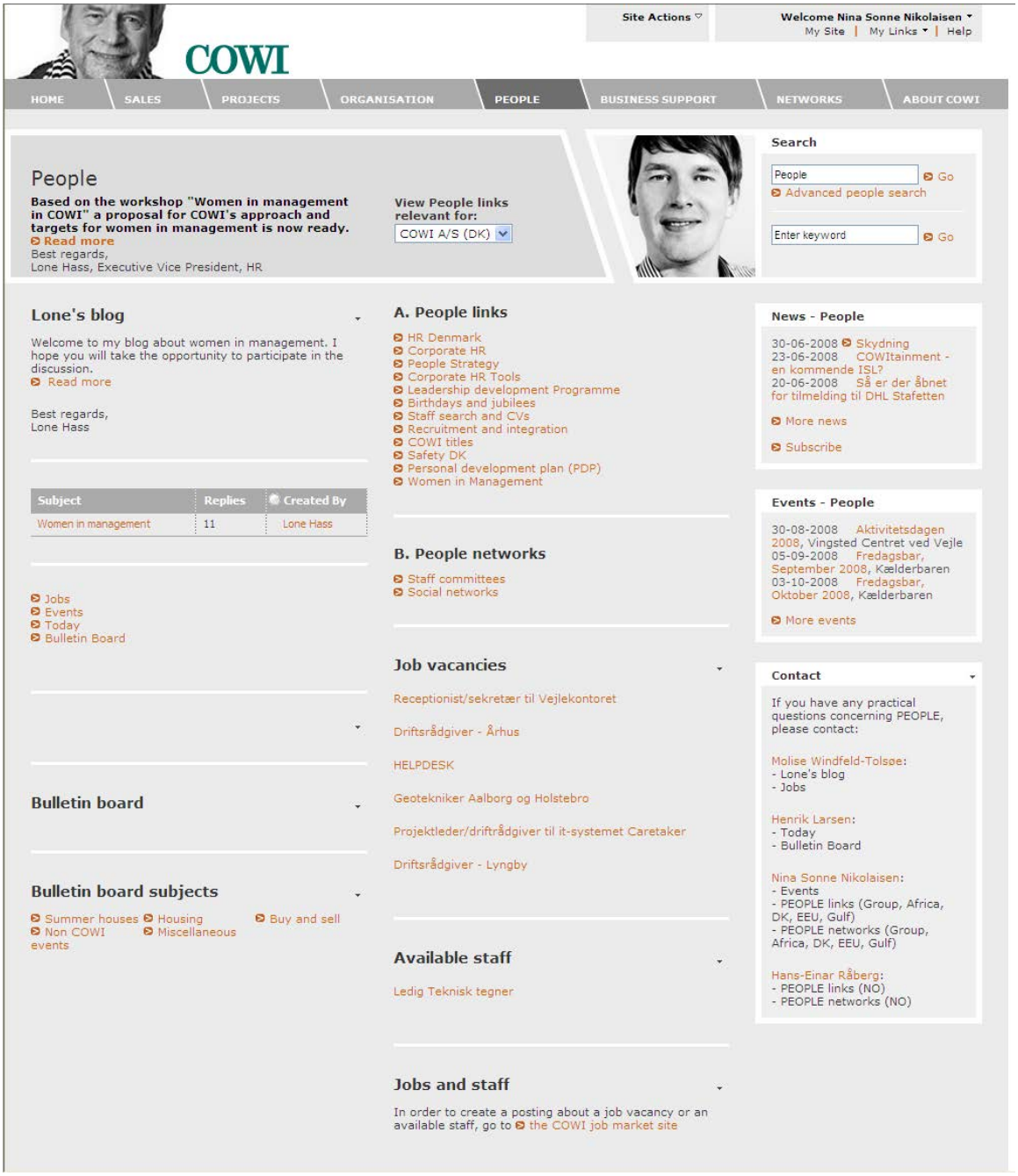
Approximately 15 COWI consultants created the requirements specifications for the COWIportal. This process took four months to complete and involved nearly 100 other COWI employees who participated in interviews and focus groups.

COWI hired Netcompany in March 2007 to bring the requirements specification to fruition. Netcompany worked hand-in-hand with COWI IT developers throughout the process. "In this way, COWI has ensured knowledge sharing and reduced project costs," says Nikolaisen. "Netcompany also contributed with valuable advice on how to make the project sites more user-friendly."

Framfab provided the graphic design and, according to Nikolaisen, provided some very useful usability suggestions about how to organize the portal's homepage. On the sub-portal front pages, Framfab brought together all elements with audience-dependent links and suggested the audience drop-down box that lets users see links from other regions. (By default, users see links targeted at their own region, for example, COWI Denmark or COWI Norway.)



Pictured: The main navigation displays on the top of every page. The navigation is modeled on COWI's main business processes: sales, projects, organization, people, business support, and networks. All activities are found under the relevant process. As such, a department site contains only issues concerning the management, financial status, and social life for this group of people. The group's sales activities are found under *Sales*, its projects under *Projects*, and its professional documentation across projects under *Networks*. The organizational sites appear in the left-side menu on the *Organization* portal's front page, while links to management issues are in the middle of the page.



Pictured: On the front page of the *People* portal, the Executive Vice President, HR, is blogging. There are also links to internal job advertisements, HR-related issues, and a bulletin board. Company VPs own the sub-portals (*Sales*, *Organization*, *People*, and so on); the owner's name is displayed in the top left field on the sub-portal's front page.

GOALS AND CONSTRAINTS

Strategic Goals

- Integrate the COWI Group companies via a corporate intranet portal that provides support for shared business processes

- Support seamless cross-company project execution (primarily document and task handling)
- Improve knowledge sharing, communication, and use of IT solutions in general

Constraints

All companies in the COWI Group must have COWI IT infrastructure implemented before all employees can share the COWIportal as their workplace. This means that global rollout will be affected by each region's ability to meet that mandate. "It will take approximately two years to have this implemented in all companies," says Nielsen. "It is an open question whether available Internet bandwidth in Africa will become fast and cheap enough to make it feasible to implement the COWIportal in all the African companies within the next two years."

TIMELINE

COWIPORTAL PROJECT TIMELINE	
2001	• The knowledge manager wrote a memo about a vision of a COWIweb comprising the intranet, extranet, and website.
2004-2005	• A new CMS-based system for the COWI websites was specified, developed, and launched.
2006	• The Executive Board was convinced that a COWIportal consisting of intranet and extranet (project sites) was a necessary tool to implement the company strategy of working across the world as one company. • **August–November:** Requirements specification. • **December–January 2007:** Call for vendors. Several consultant companies were asked to respond to the requirements specification. They were assessed and a company was chosen to contribute to the project.
2007	• **January–March:** Assessment of vendors and contract negotiations. • **March:** Contract signed with Netcompany. • **April–June:** Detailed functional design. • **July–September:** Intranet built. • **October:** Intranet tested. • **November**: Training courses held for editors. The courses covered basic editing skills, including how to edit and create a page, how to upload images and insert links, and how to publish news and events. • **December–January 2008:** The 150 editors built their sites. • **January 7:** The intranet was launched in COWI Denmark (2,200 employees). • **July–December:** The extranet (the project sites) was built.
2008	• **January:** The extranet was tested and four-hour courses were held for 70 project managers.

	• **February 4:** The extranet and the *Find People* application were launched. • **March 10:** The COWIportal was launched in COWI Norway (700 employees). • **April 7:** The COWIportal was launched in COWI Baltic (100 employees).
2009	• **January:** The new search engine, Autonomy, will be launched, replacing the Microsoft search engine in the COWIportal.

USERS

COWI portal users fall into three main categories:

- **Consultants and project managers** working on projects for customers worldwide (approximately 60% of the users). Most of them have laptops and work on VPN connections part of the time. These employees must be able to access project information at anytime, from anywhere in the world.
- **Support staff working in the office** (approximately 30% of the users). These employees often need to access information about procedures such as recruitment, travel, and work place information.
- **Managers** (approximately 10% of the users). Managers want to communicate their business goals to employees and make sure that they get heard.

USER TASKS

Meeting Organizational Goals

"The main challenge was to reach our ambitious goals in less than a year," says Johansen. "One of our main challenges was coordination and homogeneity between the different tracks in the project. One group worked on the project sites, another on the organizational sites. A third group worked with news and a fourth group worked with the IT infrastructure."

Because of this distributed work breakdown, decisions made in one group might affect the work of all the other groups. "It was very difficult to communicate enough between the groups and keep things on the same main track," he says.

"We have skilled project managers, but none of us had made an intranet before. I think what made us successful was our understanding of both the strategic goals of the top management and of the day-to-day operations of the project managers whom the intranet must support."

Because the site was designed to support the company's business strategy, the structure is based around the company's main business processes and activities, including sales, projects, management, people, business support, and networks.

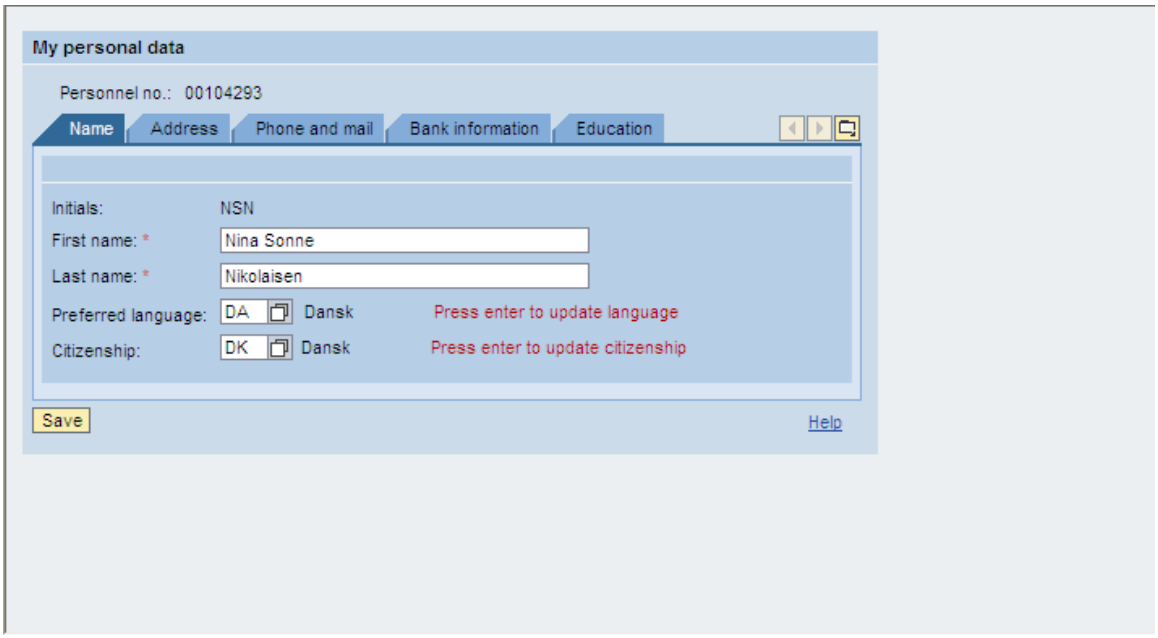
User tasks

The following are the most common user tasks supported by the COWIportal:

- **Project execution.** According to Henrik Steen Pedersen, head of Surveying & Land Administration, this is perhaps the most important task supported by the site. Project managers create a project site as soon as they create a

document related to a potential project. A project site can be used from this early stage throughout the proposal and contract phases to the execution phase. The project sites are structured in phases that ensure easy access to every phase and all documents. Customers can be given access to the project sites, creating a foundation for close cooperation.

- **People finding.** Finding people is a common user task on the portal.
- **Finding business support information.** This task encompasses getting an overview of the processes involved in recruitment or travel, completing order forms online, or registering changes in work place information (that is, online forms to handle all the practical details when a person or a department changes offices within the COWI Group).
- **Access SAP.** Employees can access SAP applications directly from the COWIportal, where they can fill out time sheets and travel expenses, and update personal data (address, bank information, education, and so on).



Pictured: The COWIportal's SAP interface.

DESIGN PROCESS AND USABILITY ACTIVITIES

The COWI design team conducted a number of user-related activities throughout the project. These included listening to users through user interviews, persona development, and prototype testing. And through each activity, the team listened, learned, and made modifications to the information design.

"When we did the requirement specification, we started out with interviews," says Nikolaisen. "The project group that worked with project sites conducted focus groups with project managers. The first groups were used to discuss needs and wishes, whereas later groups were presented with PowerPoint prototypes and use cases."

Nikolaisen's group interviewed users, asking them questions about what helped them in their daily work and what annoyed them. "We selected users from all parts of the

organization with different jobs and titles," she says. "After the 15 interviews, we condensed the results into the three personas [described below] and their needs."

The team then made PowerPoint prototypes of the main navigation pages and the site types (organizational, business support, and network sites) to test the information structure and the requirements for each site type. They asked five users representing the two most important personas to test the prototypes. "We asked the users where in the portal they would look for information about recruitment, IT support, marketing material, and so on," says Nikolaisen. "When they decided to click on a link, we provided them with the next page. It was very low tech, but it still helped us name the main navigation and decide how to group content and where cross-linking would be needed."

Listening to the Users: Monitoring Current Practices

All the consultants involved in the COWIportal's development had first-hand experience with either the old intranet or the old way of carrying out COWI projects (on a shared file drive) or both. "In COWI, we used to share all project documents on file shares," says Nikolaisen. "Each project had a folder with the project number. The file shares could only be accessed from other offices in the same region—in Denmark, for instance—so it was very difficult to work on a project with Danish and Norwegian project members, because we had to send files to each other by mail."

Knowing how the users worked with the existing systems helped designers come up with ideas for the intranet and with bigger and better ways of doing things. "We had been listening to the users for years and knew that some of the main obstacles to knowledge sharing and interaction were the technical barriers and the way in which information was found on a number of sub-sites instead of being prioritized and targeted," says Nikolaisen.

"Some of the project members had been responsible for the old intranet for years, supporting all the editors and publishing news every day, so we had first hand experience with all the possibilities and difficulties of the old intranet," she says.

Although it was possible for professional networks in COWI to have a network site on the old intranet, it required HTML skills to edit the pages. As a result, says Nikolaisen, it was much easier for a network to just share files on a file share than to upload them to the intranet and make an HTML link on Web page to the file.

"Our editors used FrontPage to edit the intranet pages, but this was not a very user-friendly tool and often resulted in errors on the pages and in the navigation," says Nikolaisen. "It was possible to post news on a network site and on an organizational site, but users had to visit these sites in order to see the news, so it was not a very effective way of pushing information to people."

Designing for Users: Personas

Personas can be a very powerful way to teach and remind team members about your users. It's important to come up with personas based on real usability feedback so that you can paint an accurate picture of your user types.

"We found the use of personas very helpful in order to summarize the points learned from the interviews and focus groups," says Nikolaisen. Often, one persona is not enough; to give the team good information about users, you need to create a few personas. The team created three personas to represent the COWI users:

- **"Peter"** represented the consultants and project managers working on projects for customers worldwide. Peter has a laptop and works on VPN

connections part of the time. He must have access to project information anytime, from anywhere in the world. (This persona represented approximately 60% of the users).

- **"Maria"** represented the support staff working in the office. Maria often needs access to information about procedures related to the workplace, as well as to recruitment, travel, and so on. (This persona represented approximately 30% of the users).
- **"Thomas"** represented the managers. Thomas wants to communicate his business goals to employees and make sure that they hear and understand them. (This persona represented approximately 10% of the users).

The team assigned design issues discovered during user research a relative importance based on the percentage of staff affected. Issues were considered high priority if they affected a large percentage of the staff, and low priority if they affected relatively few users. This helped the team to get to work and not be paralyzed looking at a long list of to-do items.

The "Peter" persona was the most important user to support, then came Maria, followed by Thomas. So, for example, changing "Management" to "Organization" in the main structure was considered a high impact change because both Peter and Maria would benefit.

Testing Prototypes

Nikolaisen and her team were able to make subtle, yet important site changes based on testing design prototypes with users.

Take, for example, the sub-portal name change from "Management" to "Organization." If named "Management," only managers would know that the sub-portal hosted all the organizational sites; it made sense to change the name and target the users.

"Organizational sites are a way to help managers communicate with their staff," says Nikolaisen, "but employees perceive it as a place to get information from the organizational units they belong to—such as department, business unit, and region. The point of view of the users is very important when naming parts of the intranet, and so is the courage to prioritize one group of users over another.

"You cannot please them all," she says.

Making Changes

The design team made a concerted effort to design the homepage to resolve some of its previous shortcomings. With the redesigned page, team members wanted to help each user get an overview of new and important information that was personally relevant. News, events, alerts, and tasks are pulled from many different sites, including project sites, network sites, organizational sites, sales sites, and people sites (staff committees and social networks). The items are then aggregated on the homepage. In addition, users can add their own shortcuts to the homepage.

Even with a thoughtful design approach, mistakes were made and the team realized this only through real-world interactions with the users. Below are some examples of the team's lessons learned and the changes made to accommodate this new understanding.

Users Will Create Work-Arounds

"When we launched the COWIportal, we had a notion that in order for people to grasp the information on the portal, the homepage should not be too full of information," says Nikolaisen. The team believed that users should be able to see everything in one screen display without scrolling; this informed the team's decisions about what to include and exclude from the page.

The team decided to post news on the homepage, but not events as it took up too much space. "But we kept being asked by users where they should look to get an overview of all events from the sites they were members of," she says.

Nikolaisen says when people realized that events were only displayed in the event calendar on the site where they were created, they developed a work-around to get them to display on the homepage. They began to make news items about the events.

Three months after the launch the team decided to allow scrolling on the homepage and implemented *Events for you.*

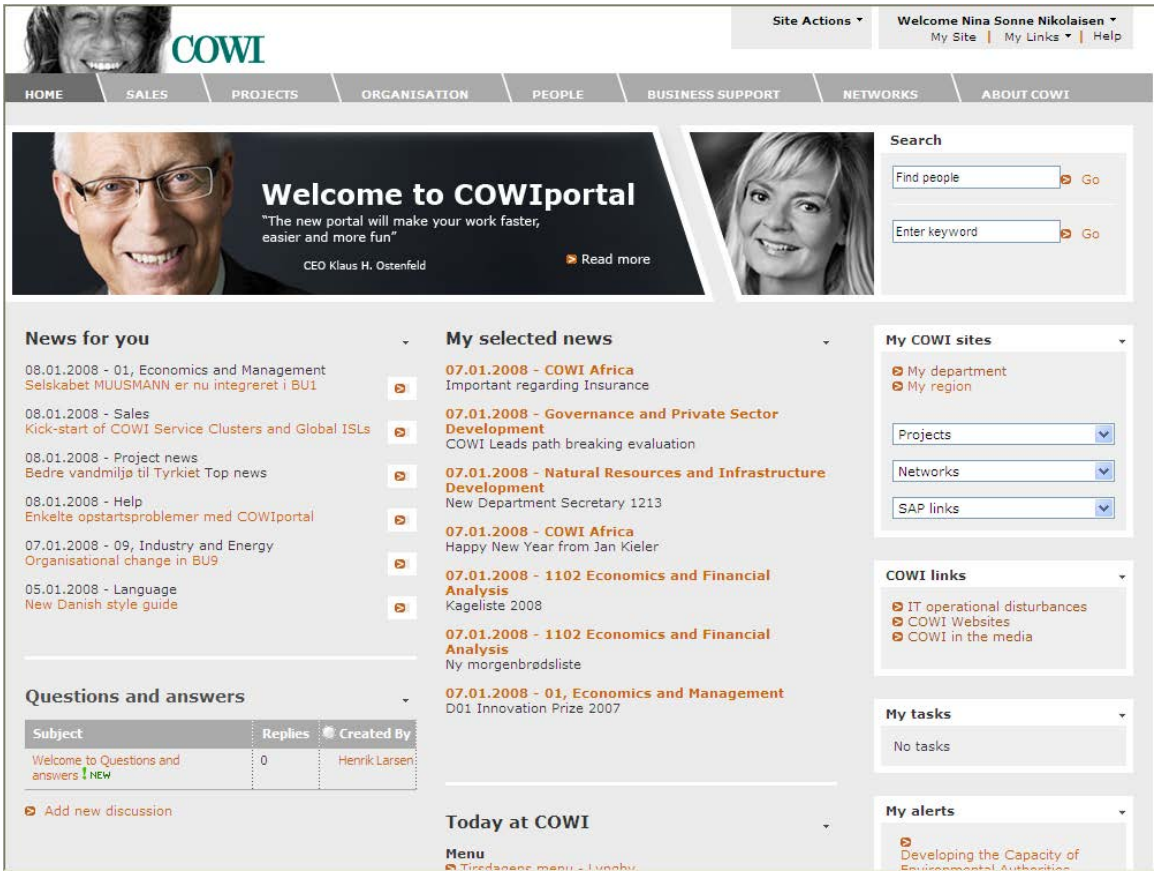
Users Reject Intermediary Pages

Another design change related to the news roll-up on the homepage. In order to help users get an overview of information from all their organizational units, the design team initially created a roll-up site, where information was gathered from all the organizational sites of which users were members. "We called the site 'My Organization,' and it showed the latest news, events, and documents from their department site, business unit site, and region site, as well as the summaries from the main pages on these sites," says Nikolaisen.

But users didn't like *My Organization*. The design team learned that users preferred to have all roll-ups on the homepage (news, events, alerts, tasks) plus direct links to their sites. The intermediary roll-up site fulfilled neither the purpose of giving a full overview of the latest information, nor of being the place where more static information from the organizational units could be found. So, six months after the site launched, the team removed *My Organization* and replaced the link with three direct links to the user's organizational units.

Changing the Template

"A third lesson learned was concerning the news template," says Nikolaisen. "We made a template with four different image fields, each with a specific size. It looked really great, but after the first few training courses we realized that this did not meet the user requirements, and we made a second more flexible template." Most of the users in the courses gave feedback on the template.



Pictured: An early version of the COWIportal homepage. In this design, the team was trying to keep all the important information above the virtual fold.

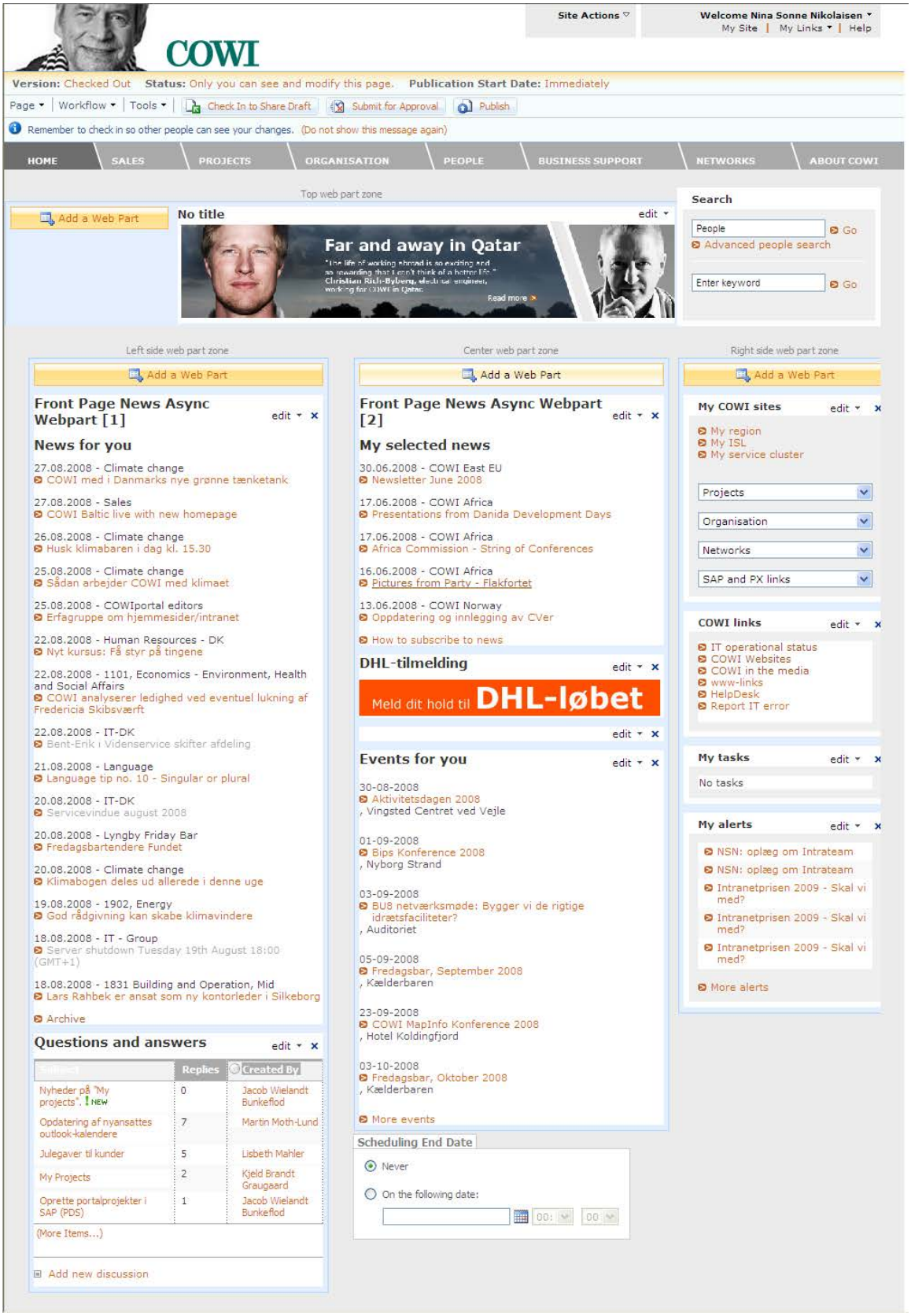
URL AND ACCESS

The URL of the homepage is www.cowiportal.com and it is every user's start-up page. Users can log in to specific project sites from non-COWI PCs using a username and password. "This winter, we will launch a 'key' that can be used by COWI employees working in COWI companies that do not yet have COWI infrastructure in order to log onto the COWIportal," says Nikolaisen. "It is not yet decided whether it will be a token or another solution."

TECHNOLOGY

The COWIportal is based on MOSS 2007.

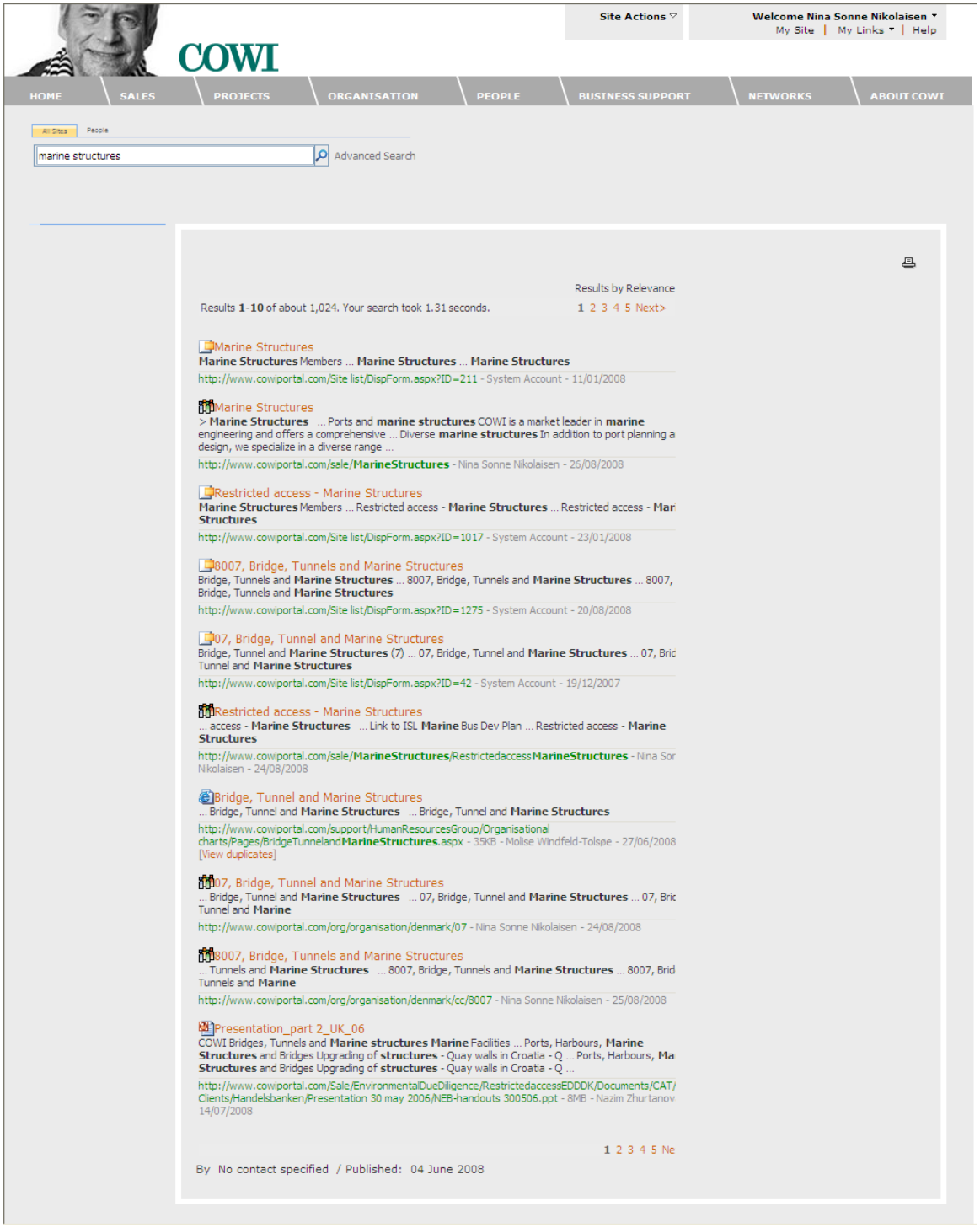
"A great advantage with MOSS 2007 is the easy way the user interface can be changed using Web parts," says Nikolaisen. "The above mentioned changes in the design of the homepage were made by configuring Web parts and did not require a developer."



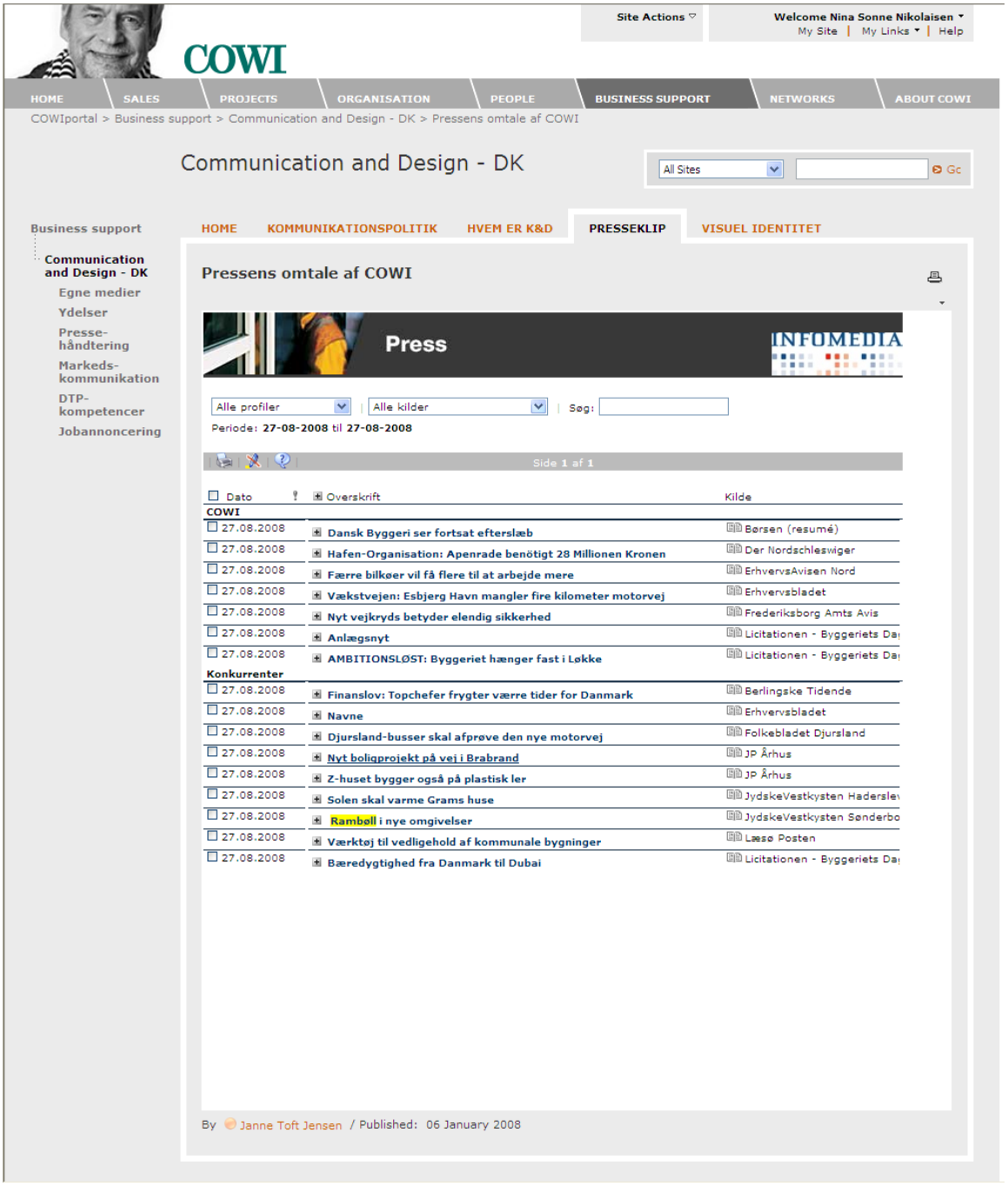
Pictured: The homepage in "Edit mode."

SEARCH

COWI is using the standard Microsoft search solution, but by the time this report goes to press, they will have implemented Autonomy. "With Autonomy, we expect to implement a feature like Google ad words where our search engine specialist can define search results triggered by specific search key words," says Nikolaisen. "But for now, we use the standard Microsoft search engine."



Pictured: A search results page for the term "marine structures," which is one of the company's key services. The second hit is the sales site for this service area; results eight and nine are two department sites—one from COWI Denmark and the other from COWI China. The sixth result is a sales site with restricted access; it appears in the results only because the user is logged in as an administrator. Apart from administrators, only members of this site will be able see it in the search result list and in the portal's navigation.



Pictured: The news feed from an external agent showing all press coverage in Danish media about COWI and its competitors.

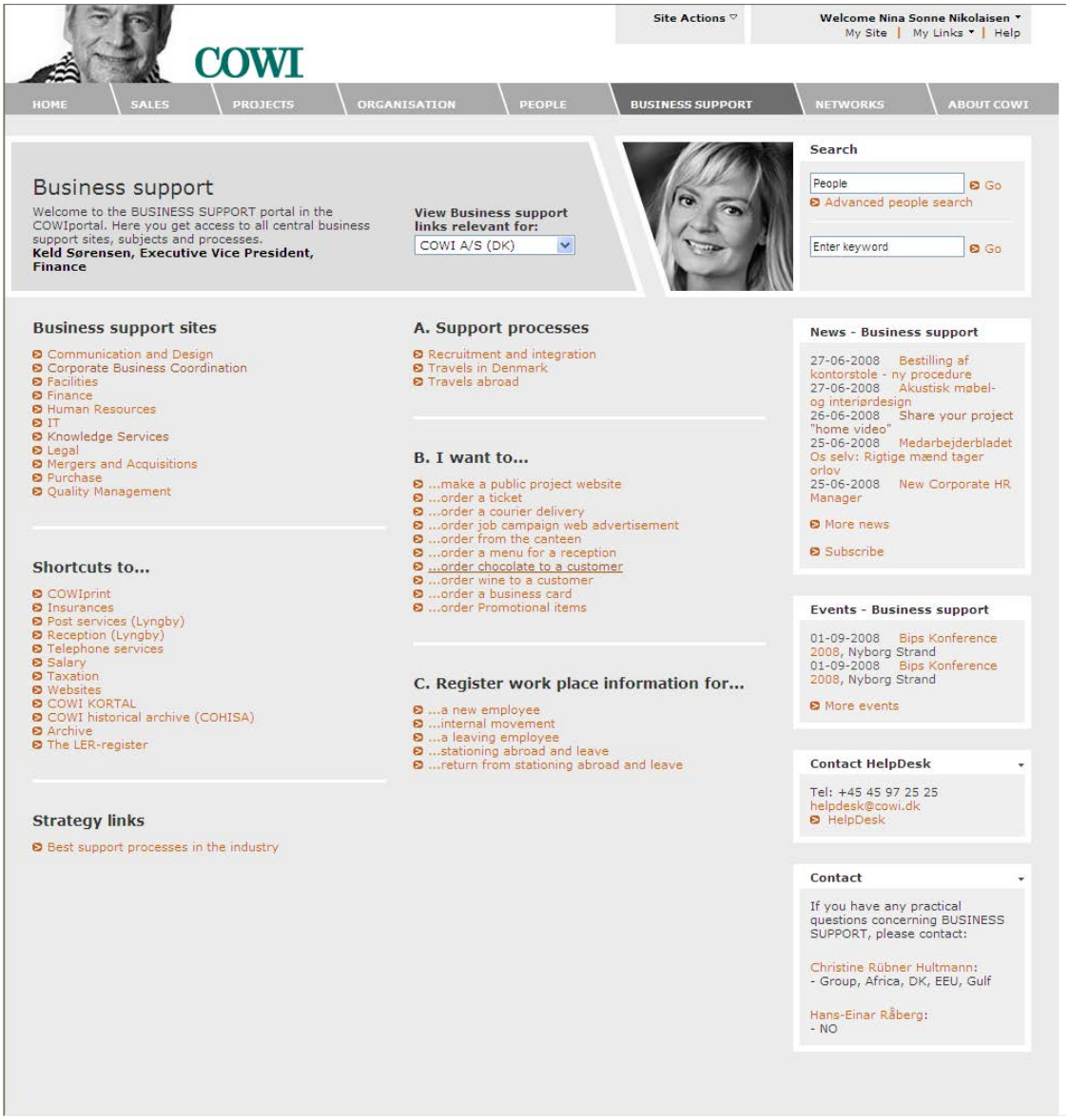
CONTENT MANAGEMENT

Content on the COWIportal is both centralized and de-centralized. Within the site's *Project* area, all employees can create project sites. Such sites are organized in a non-hierarchical manner and users can find them in the *Project* list.

The Department of Knowledge Management creates all other sites. Some are created in conjunction with roll-outs of the COWIportal to entire companies (such as organizational sites, including department sites, business unit sites, company sites, and regional sites). "Others are created because two people need a place to share professional information and request a network site," says Nikolaisen.

The portal's main areas are owned by the members of top management, each of whom has an appointed editor. *Sales*, for example, is owned by the corporate business coordinator, while *People* is owned by the executive VP, HR. According to Hultmann, "this governance structure is set in place to ensure that all the main areas develop in accordance with the business strategy."

In addition, the manager who is responsible for the site's strategic use owns each organizational site and sales site. The project managers own project sites.



Pictured: Links to online forms on *Business support*, a main navigation page. This support portal has links to frequently accessed tasks. Most of these tasks are supported by forms that users can fill out online.

Using Templates

Each site is based on a site template, and all new pages are made from available templates. It is only possible to create pages or sites that are based on the templates. The intranet team offers training courses and supplemental videos to support e-learning. "We cover editing and access rights administration, but also document management in the portal," says Nikolaisen. "It is standard SharePoint functionality, but we have realized that being able to use SharePoint document management is a skill that has to be acquired, just like using Office products. It is not something the users just learn by intuition—perhaps those below 30, but they are a minority."

MOBILE

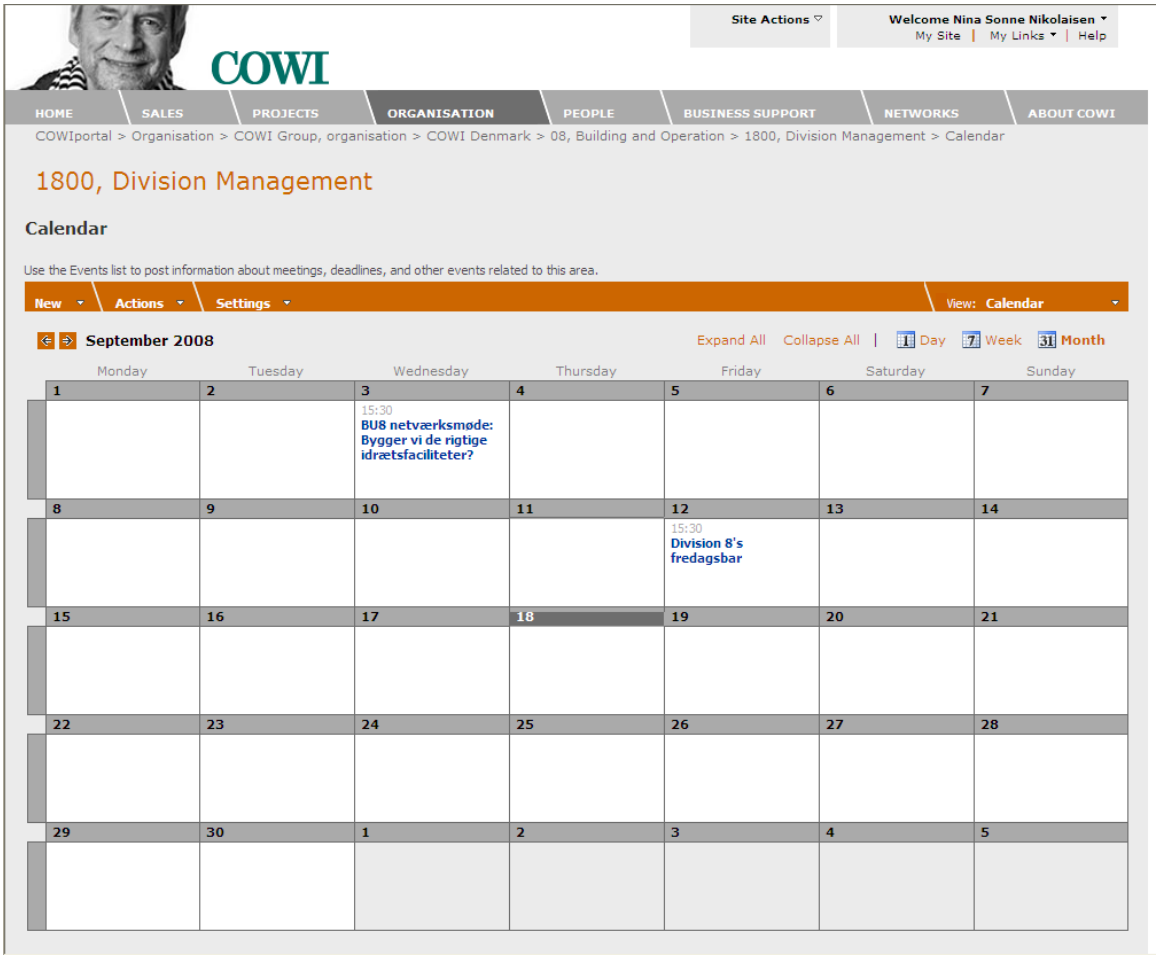
Mobile

The COWI portal is not available from mobile devices. Users can access their Outlook e-mail and calendar. "When asked, users have not expressed any wish to be able to work on projects from their PDA," says Nikolaisen.

FEATURES

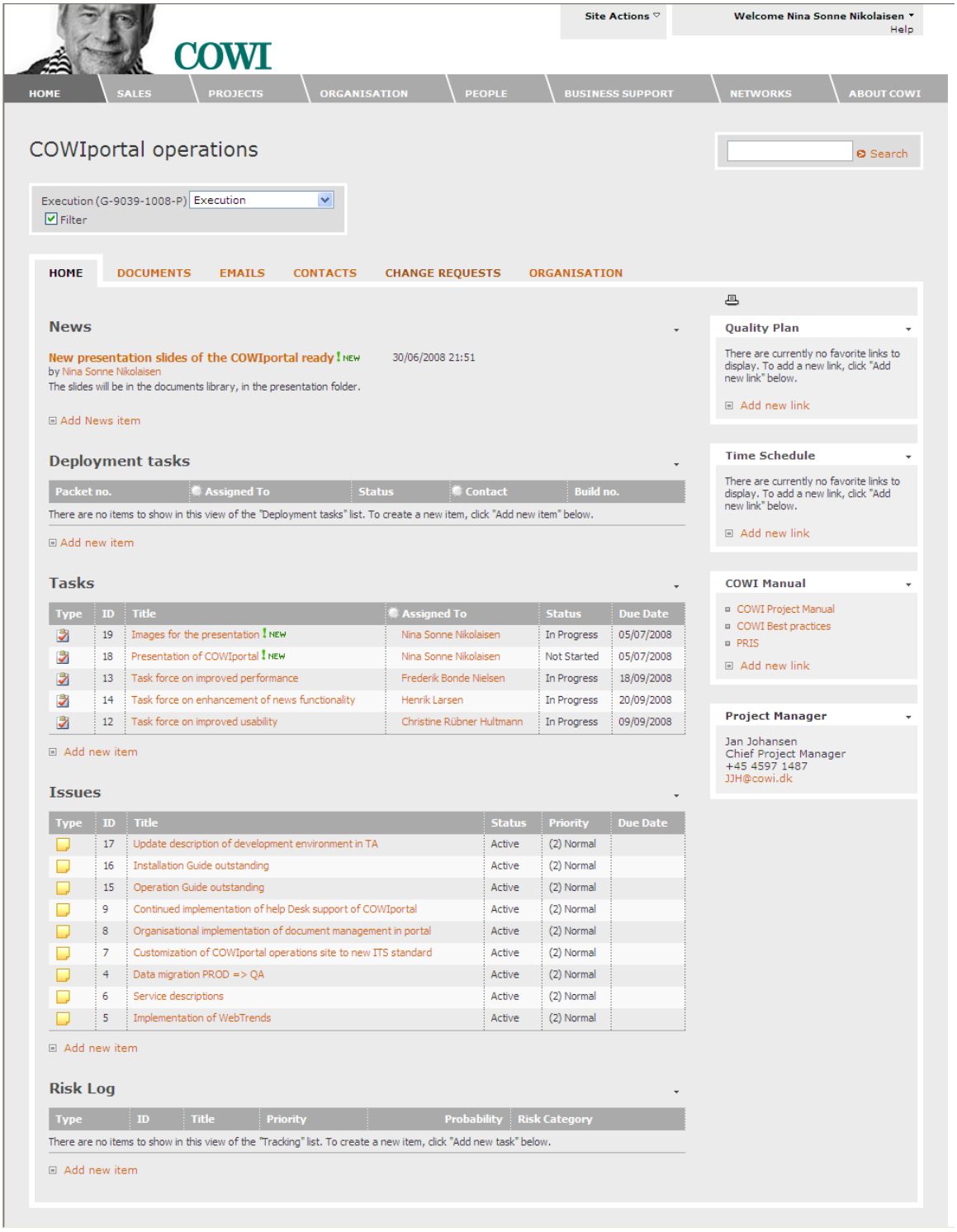
Basic features

- **Targeted communication:** News can be published from any site and will be seen on the front page of the COWIportal homepage by all employees in the target group. This news replaces e-mails to large groups. The target group (audience) is by default the site's members—such as all employees in a department—but any audience or group of audiences can be chosen. There is an audience for each department, each business unit, and each company, as well as one for the entire group. There are also cross-over audiences from specific organizational units and geographical locations (such as all employees in the city Århus from a certain department) and from organizational units and a specific function (such as all managers in a business unit).
- **Subscriptions:** A user can also subscribe to news from selected sites. This news will also appear on the homepage under *My selected news*.
- **Events:** Events can be published from the event calendar on any site and will be seen on the homepage by all employees in the audience. Events are published using the same affiliation as news.



Pictured: The full calendar. All events can be seen on the site's *People* page in the event box to the right. Everyone can see events for their audience group on the portal's homepage. The default audience for a news item or an event is the site's members, such as the entire business unit, but any audience can be chosen from any site.

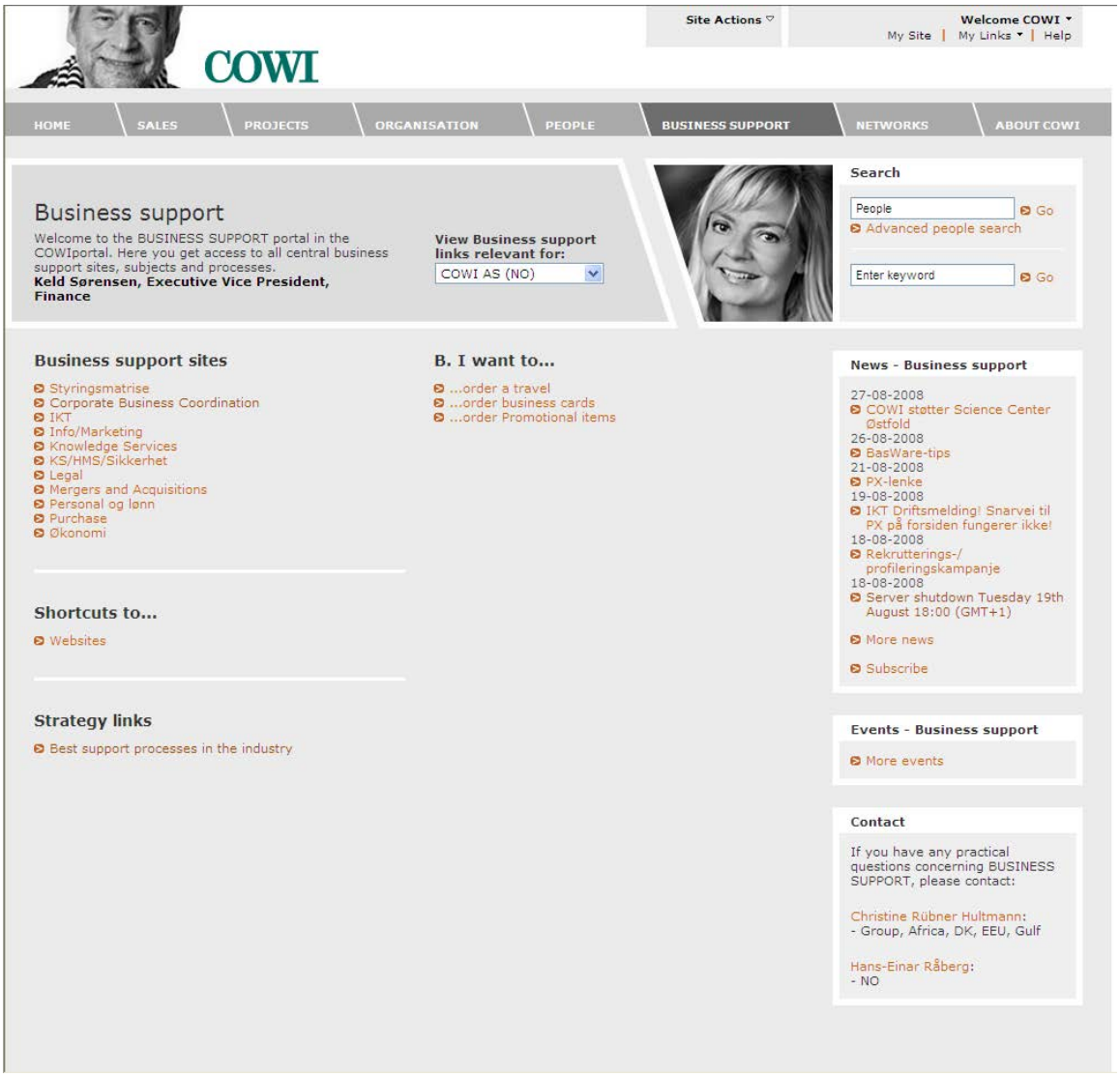
- **Tasks.** Tasks can be made on any site and will be seen on the homepage by the person it is assigned to.
- **Alerts.** Alerts can be created by the user on any item or list on the portal and will be shown on the homepage.
- **Shortcuts.** All users automatically have homepage shortcuts to all sites on which they are members; these *My COWI sites* include project sites, network sites, and organizational sites. The homepage also automatically displays shortcuts based on the user's audience affiliation.
- **People search.** It is possible to search for people or competencies across the COWI Group. This functionality helps managers find competencies across an entire group, helping them to staff projects with the right people.
- **Project sites.** COWIportal lets employees work on projects with colleagues across the company, as well as share selected documents, news, task, and issue lists with external people (customers and partners).



Pictured: Project sites offer default features that project managers (who are the site administrators) can change or delete. The site's front page shows the task, issue, and risk lists, along with short news items and links to relevant project documents, such as the quality plan and the time schedule. The boxes *Quality Plan*, *Time Schedule*, and *Project Manager* are part of the template and must be filled in by the project manager. On a project site, users can

store documents (and other files), Web pages, and e-mails. The site automatically generates a list of project members with their contact information (referring to their profile page). The project site template is available in different languages.

- **Graphic visualization of processes.** These graphics support intuitive understanding of business processes, including sales and marketing activities, recruitment, and travel.
- **Customized business support materials.** Links to business support materials located on the site's "front pages" or section main pages are customized based on the user's location. Users always see a mix of global links that everyone in their group sees, as well as links specifically aimed at their COWI region. They can see links from a different region by selecting that region in a drop-down menu.



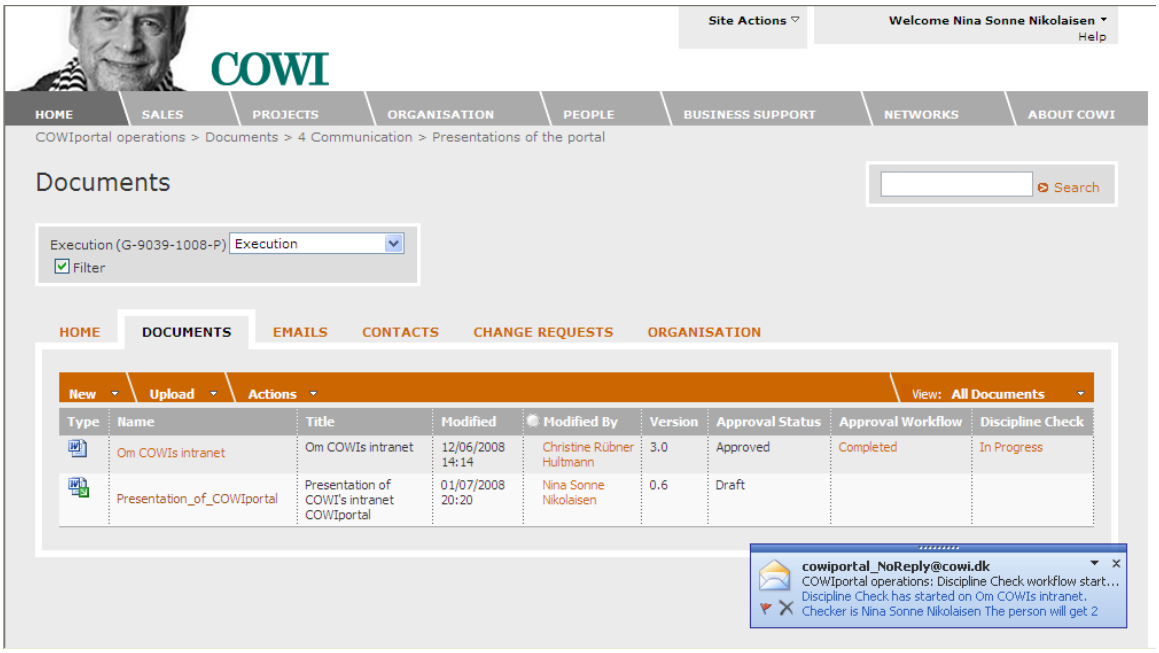
Pictured: A Norwegian version of a main navigation page.

Collaboration Tools

Project collaboration is enabled on the new COWIportal through project sites. These project sites are the new common project collaboration platform for all companies within the COWI Group. "They strongly support COWI's one-company-network strategy by making it possible for any project manager in the COWI group to include any employee, regardless of geographical location, as a member of the project team with full access to the project site of the project," says Johansen. "Thus, the entire pool of specialists within COWI's more than 4,000 employees is available to any project manager in COWI."

External parties can be included in the project group, making the portal the central collaboration point for the entire project. Johansen says the vision of the project site is to provide the project members with a collaboration platform that provides access to all relevant data, tools, and functionalities required to carry the project from beginning to end.

The project sites include robust document management functionality to support collaboration, including version-control management and workflow functionality. Multiple team members can collaborate, produce, control, and approve documents. This collaboration functionality is enabled through SharePoint with customizations by the COWI team.



Pictured: A document library. On a project site's document library, users can create documents in COWI's own Word templates. They can also see whether a document is in draft status or has been published. A user with read-access to the project site—such as a client—will see only approved documents, while site members with "contribute rights" can see draft versions of documents as well. When a document is ready for approval, it is send to workflow: first to *Discipline check*, then to *Approval workflow*. The person who is asked to check/approve the document receives an e-mail (as in this screenshot) with a link to the document. It will also appear as a task in the person's homepage task box. Users can always restore an earlier version of a document (this also goes for Web pages throughout the portal).

Collaboration Functionality

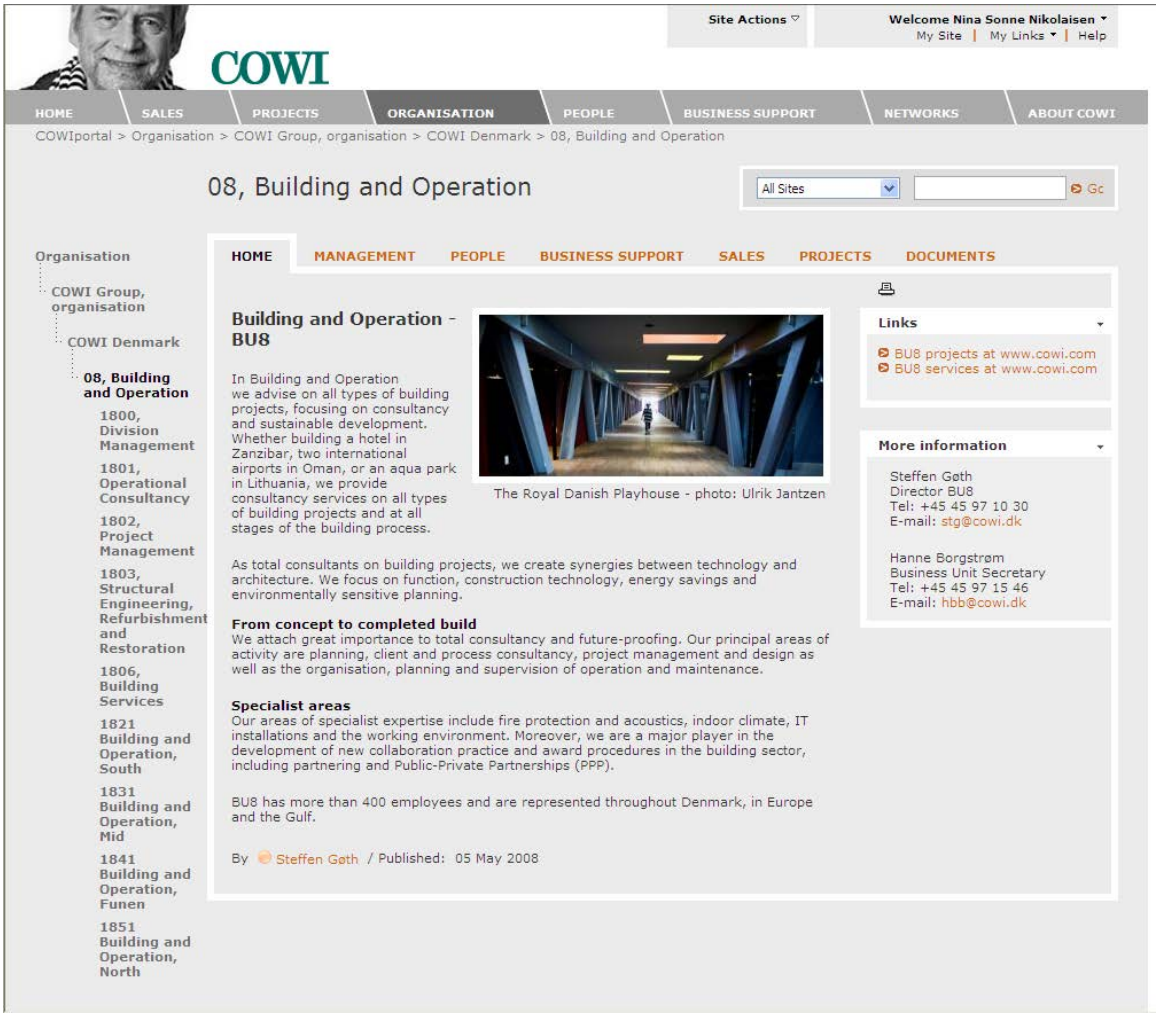
- Marking each piece of information on the project site with phase information (documents, news, and so on).
- Enabling simple filters to show only information relevant for a given project phase.
- Task management functionality to support assignment and task tracking. This gives each project member an overview of the task assigned as well as an overview of all the tasks defined in the project. It also allows task visualization in Gantt views.
- Contact and member lists provide an overview of all project members and stakeholders.
- List functionality lets team members assign and track issues, risks, and so on. The lists can easily be adapted to a project's specific needs.
- Functionality for giving external parties (such as customers, business partners, and authorities) access to selected parts of the project. Project managers can control the access level (rights and project site sections) in detail, right down to the document level.

Knowledge Management

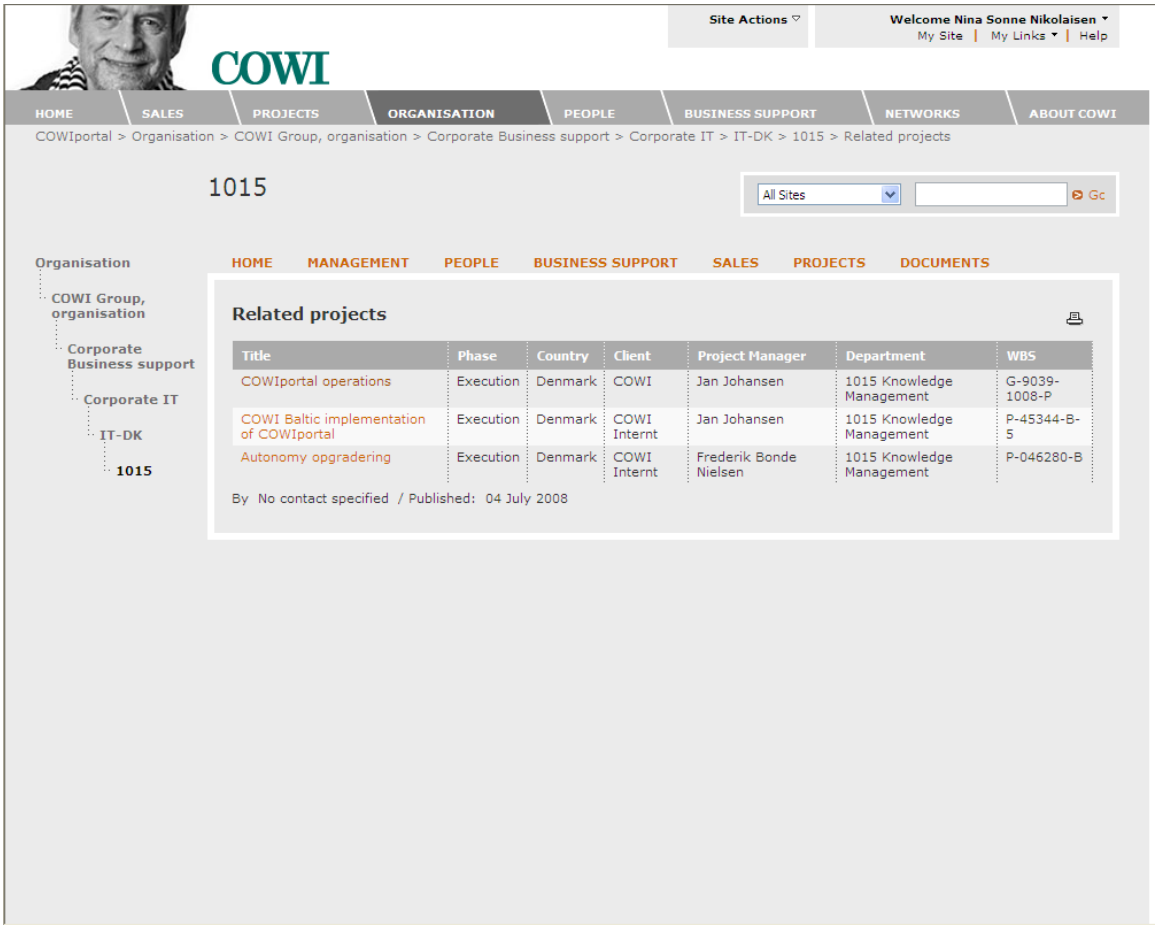
"We consider the entire COWIportal a knowledge management tool, as it is a strategic business tool," says Hultmann. "The information architecture of the portal ensures that professional knowledge is not hidden on a department site, but shared on network sites. Likewise knowledge and documents about customers are shared on sales sites and all project documentation is shared on project sites."

Department sites on the COWI portal serve only to support the particular organizational unit's management processes and people-related issues. Department sites contain links to the project sites, the sales sites, and the network sites that the people in the department work on. All department sites have an automatic list of department-related project sites that users can sort according to phase, country, customer, project manager, and so on.

The portal also links databases through which the organization handles customers, project references, CVs (linked to the *Find People* application), and best practices. These are directly accessible from relevant places on the portal; for example, every project site is born with links to the best practice database, the project reference database, and the project manual.



Pictured: An organizational site on the COWIportal. The front page serves to present the unit, division, or department to the rest of the organization. The same is true of the front pages of network sites. When a front page is edited for the first time, the editor must fill in controlled keywords to make it easier to find the page in the search engine.



Pictured: A list of *Related projects*.

Data Visualization

COWI uses SAP as the central ERP system for keeping track of project financials, such as budgets, actual person-hour costs, and expenses. A proof of concept for visualizing this data as business graphics (curves) in the project site was successfully done using Excel Service. Johansen says this functionality will be further enhanced and implemented in production in 2009.

At COWI, data visualization tools are in high demand. "Many project managers have expressed a wish for a graphic visualization of the progress of their project economy," says Johansen. "This tool will make it much easier to have a quick overview, rather than a detailed report in SAP."

LESSONS LEARNED

Following are some lessons learned in developing COWIportal.

Jan Johansen, chief project manager:

- **Aim for easy access and good performance.** "The two most important things for users are access and performance," says Johansen. "They seldom mention it in interviews, but it is the first thing they complain about if it does not work." As an example, Johansen sites the difficulty of providing access in Africa as a show-stopper for making the portal truly corporate. "We also

experience some performance problems at server level," he says. "Microsoft has helped us improve the performance, but it is still an important focus area for us. The importance of the infrastructure and the setup of the servers is thus of huge importance to the user experience."

- **Simplify design features.** "Two design features that can harm performance are excessive styling and roll-ups. Roll-ups from sites—of news, events, and tasks—can be made in many ways," he says. "It cannot be recommended to have every Web part on the front page check every site in the portal every time a user clicks on the front page of the portal. In order to make more efficient roll-ups, caching can be used to make the workload easier and the homepage load faster."
- **Avoid the impulse to overdesign.** "It is also recommended not to make the styling too heavy and different from the original Microsoft look," says Johansen. "Some changes 'cost' more than others, so take advice from the IT developers when developing the graphic design." One way the team learned this lesson was in the additional costs associated with designing angled (rather than vertical) buttons for the sites' main navigation.
- **Avoid complexity in document management.** Another lesson learned at COWI resulted from the difficulties users experienced with using SharePoint document management. "It is not intuitive, and some very basic operations—like saving an attachment from e-mail directly to a document library—are very difficult," says Johansen. "We are therefore considering introducing a third-party product to make document management more user friendly.

RESULTS / ROI

Though the company has not calculated a specific ROI for the portal project, the team has taken stock of improvements in COWI employees' ability to access information effectively.

Nielsen says that once the COWIportal has been rolled out to the entire organization—and all employees are using it to work on projects—they can easily sort the projects list to get an overview of:

- all projects being carried out for one specific customer or in one specific country,
- all projects related to one service area across the group and across the world, and
- all pipeline projects and proposals to one specific customer or related to one service area.

"It will also be possible by using the *Find People* function to search for any specialist in the COWI Group," he says. "We use the same system of classification with professional keywords for projects, people, and services. We have our own instant messaging solution that will be rolled out along with the portal and which will make it possible to chat or make an instant video Web meeting with a colleague elsewhere in the COWI Group. Thus, the portal will make increased communication easy between different geographical locations within the group."

Further, he says that the COWIportal is perceived by top management as a necessary tool to achieve COWI's strategic goal of working as a one-company network. Currently, achieving that key goal is more imperative than measuring the COWIportal's achievement with hard numbers.

Environmental Resources Management (ERM)

Using the intranet

ERM is one of the world's leading providers of environmental consulting services. Its 3,500 staff members in over 140 offices in more than 40 countries are committed to providing a consistent, professional service to leading business and government clients, offering innovative solutions to manage environmental and related risks.

Headquarters: ERM doesn't have a single head office; board members are based in various locations around the world.

Number of employees the intranet supports: 3,500

Locations: Last year, ERM worked in 161 countries.

Annual sales: US $638.5 million gross (year ended March 2008).

Design team

Bonnie Cheuk led the overall design of the intranet, informed by a user-oriented Sense-Making Methodology. The design team includes four additional core people.

Members

Bonnie Cheuk, global head of information and knowledge; Roddy Fiddes, global knowledge facilitator; Philippa K. Smith, global knowledge facilitator; Karen Perkinton, global knowledge facilitator; Christopher Long, systems analyst; Andrew Arvidson, global technical lead.

SUMMARY

Imagine being a consultant and having the knowledge of every other consultant at your organization just a click away. The intranet team at Environmental Resources Management (ERM) made this idea a reality for employees in the realm of environmental consulting services.

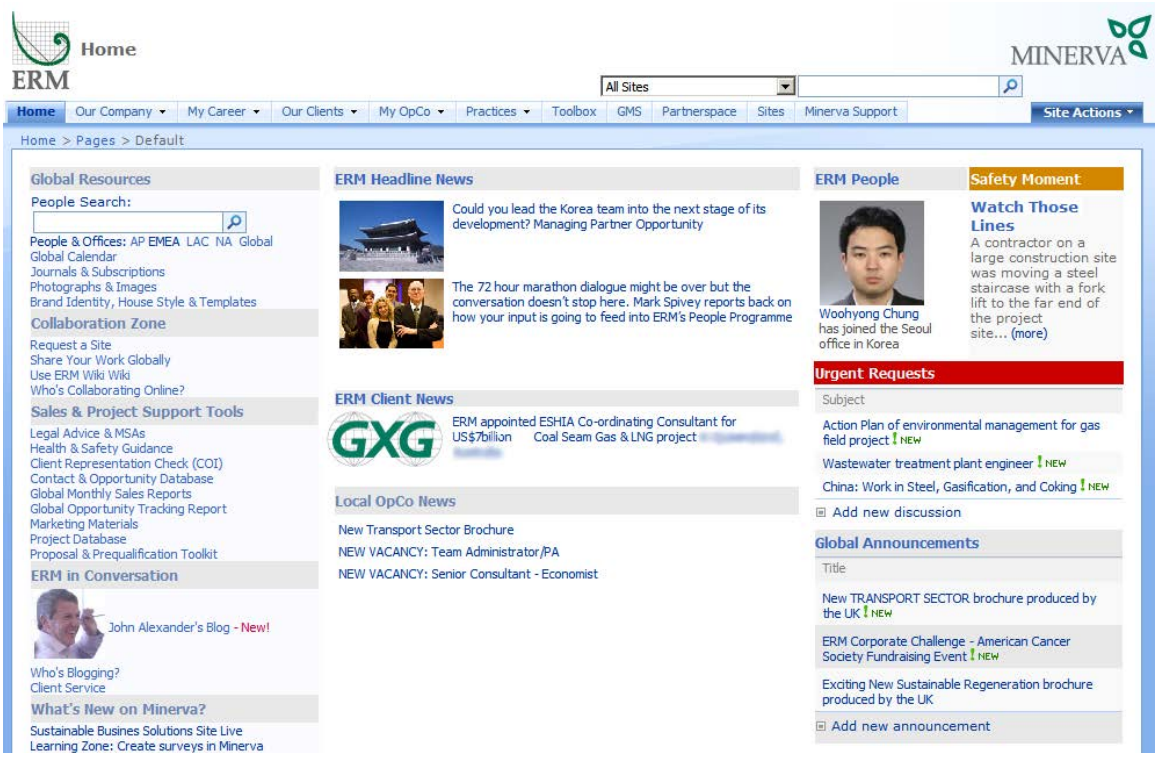
The intranet, *Minerva*, supports 3,500 international staff members located in more than 140 offices in more than 40 countries. One potential issue with such a distributed workforce is that knowledge might be stored in countless silos across the organization. But adding visible and simple features as part of the intranet's infrastructure prevented this problem. In fact, designers implemented several inventive collaboration features to enhance consultant collaboration, ultimately enabling them to give the best service to their clients.

Beginning on the homepage, employees get various types of news, information about new employees, safety information, requests for knowledge, announcements, and links that serve as a gateway to a multitude of information and features.

When employees turn on their computers, they see the latest news about the organization. Good summaries and enticing images make the news attractive to read. Client news, below the main headlines, offers information to motivate people about client wins. This type of information can also give consultants and salespeople ideas for future sales offerings.

Introducing new consultants to one another is another feature Minerva offers. The HR group manages the *ERM People* section, which appears in the homepage's upper right content area. Here, the name and a picture of all new employees and their locations give other employees a snapshot of new colleagues. Clicking through the link allows people to read more about the new hires.

To the right of this feature is the *Safety Moment* section. ERM work can be quite dangerous if done carelessly. Dedicating a top spot to this section on the homepage reinforces upper-management's commitment to safety for both workers and customers.



Pictured: The ERM intranet homepage offers various types of news, information about new employees, safety information, requests for knowledge, announcements, and links that serve as a gateway to other information and features.

The homepage's *Safety Moment* section leads to an area that lets employees share ideas and tips for on-the-job safety. The articles are short and simple. The writing is straightforward, telling a short story about a safety-related incident. Also, while it might provide details about a problem, it does so in a non-accusatory style. For example, one story tells of a forklift getting caught in some temporary power lines when the driver had to raise his forks higher than usual. But, rather than being severe, the writer empathizes with the driver, saying that this particular situation "required the driver to raise the forks near their maximum to keep them off the ground," while at the same time emphasizing that doing so was not good safety practice and should not be mimicked.

Later in the short article is a section titled *What did we learn and how can we prevent this from happening again?* A bulleted list outlines better safety practices for employees to follow. It then mentions the author's name and location.

At the end of the article, there is an invitation for users to share their own safety moments. This call to action asks: *Does anyone have a similar situation that you would like to mention for our benefit? Post a reply to this blog post.* The *Add Comment* section offers a *Title* and *Body* field for people to write their comments.

Finally, at the end of the post, there is a more formal reminder about the intranet's health and safety section: *Visit the Health and Safety Website on Minerva for guidance.* In addition to providing an inline link on that site's name, it gives users a link to a contact person to add a *Safety Moment* article.

H&S Moment

ERM

All Sites | Advanced Search

Home | Our Company | My Career | Our Clients | My OpCo | Practices | Toolbox | GMS | Partnerspace | Sites | Minerva Support | Site Actions

View All Site Content

Categories
- Category 1
- Category 2
- Category 3
- Add new category

Safety Moments
- Safety Moments Archive
- Add new link

Links
- Alert Me: New Post
- Alert Me: New Comment
- Photos
- Archive
- Archive (Calendar)
- Add new link

Home > Our Company > Global Support Services > Health & Safety > H&S Moment > Posts > Watch Those Lines

07/07/2008

Watch Those Lines

Edit

A contractor on a large construction site was moving a steel staircase with a fork lift to the far end of the project site. The staircase was attached to the fork lift with a sling and required the driver to raise the forks near their maximum to keep them off the ground. The fork truck operator had a laborer act as a spotter for him and began their trek across the site. Half way there, the raised forks got tangled in some temporary power lines that were feeding the construction trailers and began pulling them down. A safety officer ran out of the trailers shouting and was able to stop them from proceeding to pull down the power wires. Luckily, a breaker tripped at the transformer station across the street and prevented the operator and his spotter from being electrocuted or harmed. The power company was called and the electrical lines were repaired.

What did we learn and how can we prevent this from happening again?

- The use of the sling and raising the forks to their near limit was not the best safe work practice to move the staircase.
- The temporary power lines for the construction trailers had no visible flags or signage to warn personnel of their presence.
- Although the operator was trained in fork truck operations AND he was using a spotter, this did not prevent the accident from happening.
- Assess the pathway of any equipment that exceeds a height of 10 feet for aerial obstacles.

This Safety Moment was contributed by Bill Abraczinskas from RCM MidAtlantic.

Does anyone have a similar situation that you would like to mention for our benefit? Post a reply to this blog post.

Visit the Health and Safety Website on Minerva for more guidance. Please contact Joe Baker if you would like to submit a H&S moment.

Posted at 22:59 by Julee Shuck | Permalink | Email this Post | Comments (4)

Comments

Stop, hey, look up, look down, look all around Edit

It happens far more than you think- I just did a site project where more than half the incidents and accidents involved the forklifts... and all of the staff had the training records, sign in sheets, inspection logs etc. I also did have a forklift strike an overhead line on a project I worked on in California many years ago. Absolute focus and attention is needed. The WARN process should assess the risk for moving a piece of equipment as well, and the spotter should always have the way ahead cleared. Overhead obstructions and power lines are one of the easiest to spot- and thus avoid.

Tony Campbell at 10/07/2008 05:14

SSC... & more Edit

It is vital to consider overhead power lines and other obstructions when doing SubSurface Clearance prior to investigation and remediation activities.
I well remember a near miss on a site where the field geologist followed the SSC procedure to the letter yet failed to notice a high voltage cable running above the proposed drilling location. Fortunately a colleague did stop it before the rig was positioned or raised but it was a powerful reminder that obstructions and services are not just buried underground.
Look up, look down, look all around!

John Waters at 10/07/2008 10:01

Pay attention to voltage Edit

An important item to remember when working around power lines is to increase the distance of your no-entry zone as the voltage in the lines increases! The higher the voltage, the farther away you need to be...you dont necessarily have to touch lines either...under the right circumstances, electricity can arc to your location even though you are not in physical contact.

Jim Tatman at 10/07/2008 16:48

Good one... Edit

Jim,

It is important to understand that concept. Here is some quick FYI...I recently had to look up OSHA on working near power lines and they state that you should stay 10 feet away from power lines of 50,000 volts or less and add 1 foot for every 10,000 volts above 50,000...

William Abraczinskas at 10/07/2008 18:16

Add Comment

Title

Body *

Pictured: The *Safety Moment* articles discuss a real safety moment and how to prevent similar issues in the future. The writing's tone is helpful and non-accusatory. Users can respond to the stories and share their related comments, as well as click a link to the website's safety section.

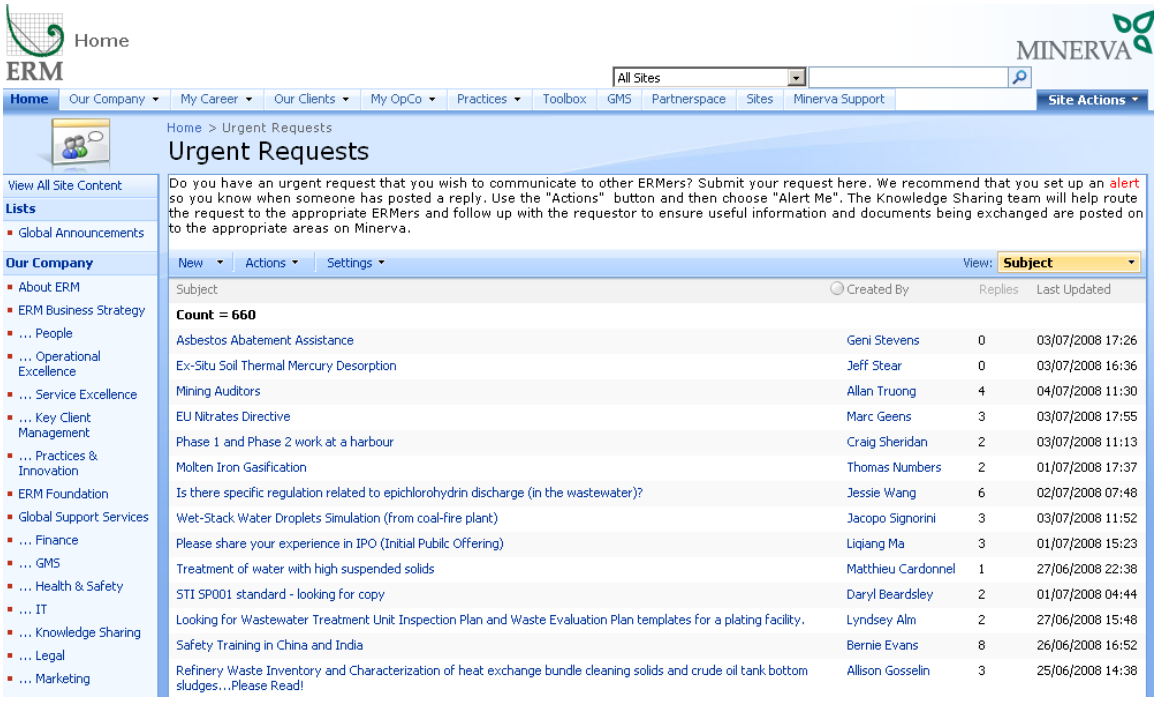
EMR consultants often face highly complex environmental issues. Rather that resolving problems in a vacuum, consultants are accustomed to using the intranet to ask for, and offer, help and expertise. The homepage's right-most column lists the three most recent help requests under the red *Urgent Requests* banner.

This feature has proven to be highly successful. In addition to having people share ideas more often, the posting area has reduced the amount of worldwide e-mails requesting assistance by 99%.

Several factors contributed to making this feature so well received.

- The feature was needed. Consultants need to reach out to other offices to learn and streamline their own work.
- Consultants want to help each other. Everyone likes to share good work they've done, especially if it can help a co-worker and, ultimately, the overall organization.
- People refer to the feature frequently and send in comments. In fact, people have come to expect responses from others within 24 hours of their posting. If there were a lot of requests that were never answered, who would ever write them again?
- Any employee can submit an urgent request, making the feature inclusive and popular.
- Reviewing and creating requests is a simple, visible process; people are not deterred from using the feature because it's too hard. Employees can add a request via an easy link on the homepage called *Add a New Discussion.*

The *Urgent Requests* area allows users to view, sort, respond to, and submit requests. People can choose subjects from a drop-down, and can view the subject, submitter, number of replies, and last updated date.



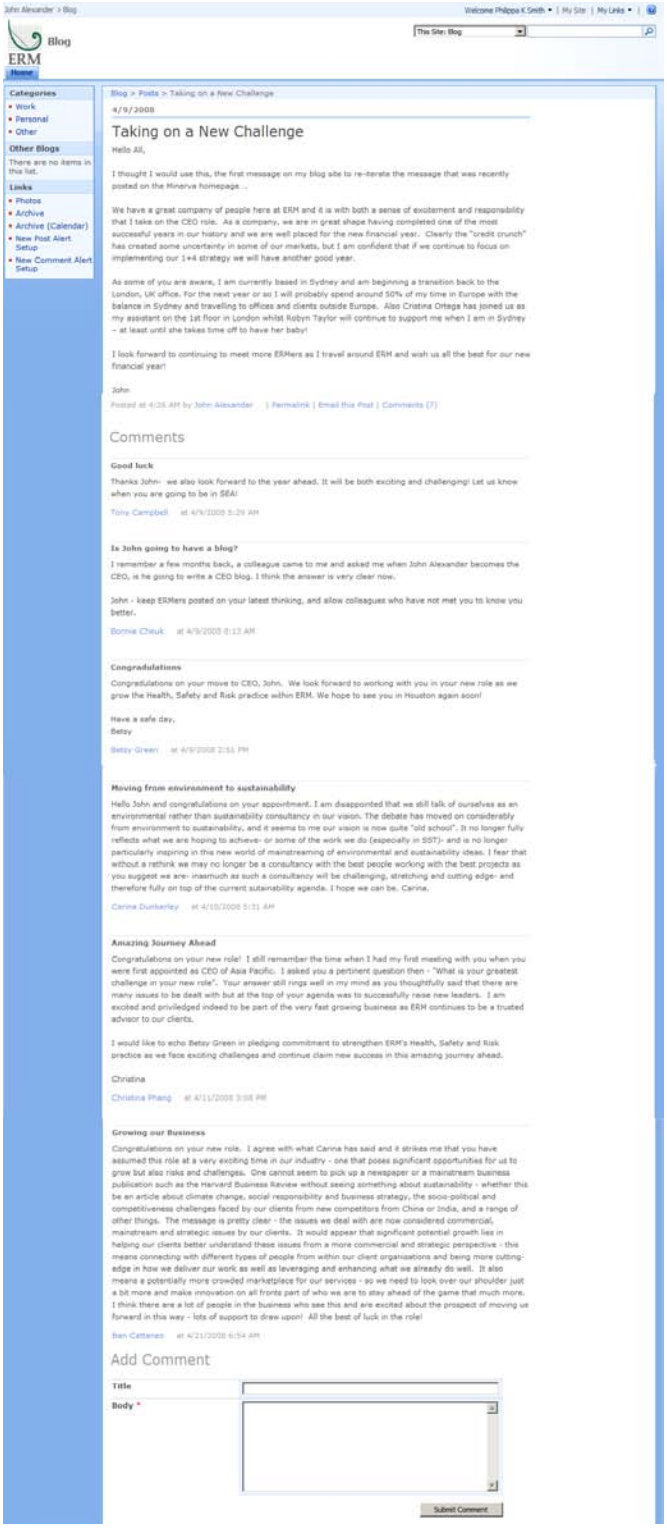
Pictured: The *Urgent Requests* area of the intranet allows users to view, sort, respond to, and submit requests.

While very valuable, *Urgent Requests* are not the only way the intranet's users can start a discussion or make a request from the entire workforce. The designers recognized that some requests and notices might be less urgent, but equally important. If users want to communicate with fellow employees without clogging the e-mail pipes, they can post a *Global Announcement.* This un-moderated announcement feature is visible on the homepage along with a link to *Add new announcement.*

So, ERM's intranet users can add and read announcements as well as timely information. And there is more. There is vision. This takes shape in *ERM Conversation*, a blog by CEO John Alexander. Every two weeks, Alexander updates employees about business direction or invites people to challenge the status quo. Alexander's goals are to encourage dialogue and give staff members insight into who he is and what his goals are for the organization. Having his letters posted as blogs enables people to read them at their convenience—and when they're most ready to take in the messages.

In the upper left hand corner of *ERM Conversation* is a summary of the current blog, plus a small picture of Alexander. Hits to this blog spike whenever the newest posting is highlighted on the homepage, with the word *New* next to the title.

Clicking on the *John Alexander's Blog* link leads to the latest post, which also features links to past blog entries. People can easily post a comment to the blog. All comments are visible to all users, and no anonymous postings are allowed.



Pictured: Every two weeks, the CEO takes the opportunity to update the employees about business direction or invite people to challenge the status quo. He posts these as a blog rather than e-mails so employees can read them at their convenience, when they are most ready to take in the messages. Employees can also respond to the blogs via a simple form.

The CEO is one of several leaders who take advantage of the ERM intranet as a two-way communication tool. For example, in addition to a personal blog, the company's people director set up *I'm Listening*, a special 72-hour marathon dialog with the entire staff to discuss what it's like to work at ERM and how to continually improve things.

Many people responded. All of their responses showed up in a list, with their pictures next to their postings.

Samantha Bouzan Communications Manager Europe, Middle East & Africa	From day one I have been inspired by the passion people have for what they do, whether they are consultants or working in a supporting role - and wherever in the world I might be I always end up meeting someone who knows someone who works for ERM!	I know I have been working with Mark and Bonnie in making this dialogue happen so I am pretty close to the topic, but what this has shown me is that we are doing more that just talking about people being the foundation of the company. We need to be as open as possible about activities and communicate this as best we can so that people continue to feel a sense of ownership for the company and be proud to say they work here.	Do you think there is a clear career path for ERMers working in supporting roles?
Pete Regan Chairman North America	ERM is unique in a million ways. One of them is that we are a curious and adaptable group of People...that is, even though the world is changing all around us, we continue to adapt and evolve everything we do. All of us get tired of the constant change (inside and outside ERM) wherever I go ERMers seem enthusiastic about our collective direction and the path we have chosen to get there.	By the way, if its rock and roll you are after, you gotta start with Stevie Ray Vaughan!	With all of the things that we have to do to continue to drive and improve our People programs, where are you going to start?
Ken Weiss Director	Where else could you make friends around the world? Even if some of my friends don't appreciate really excellent Rock and Roll. For example, a friend of mine recently bogged about Pink Floyd and Dark Side of the Moon (one of the more amazing rock concept albiums of all time).	The truth about Dark Side of the Moon is that The Dark Side of the Moon ablum spent 741 consecutive weeks (14 years) on the USA-based Billboard 200 album chart, the longest duration of any album in history.[2] Additionally, the album holds the record of spending the highest amount of time on the Billboard charts, staying there for more than 1,500 weeks (almost 29 years). It is one of three albums tied for the claim of second highest selling album globally of all time, selling forty million or more units.[3] In addition to its commercial success, The Dark Side of the Moon is often considered to be the group's defining work,[4] and is still frequently ranked by music critics as one of the greatest and most influential albums of all time.	What do you listen to? ABBA?
Mark Spivey Global HR Director Europe, Middle East & Africa	As we approach the final furlong, I'm feeling a little reflective as per my blog: --> http://minerva:48997/personal/mark_spivey/Blog/default.aspx I'm sure there's a joke in there somewhere.		
Coco Chen Office Administrator Asia Pacific	Knowledge sharing is not a difficulty in ERM. People are willing to help each other and their responses are so quick and efficient. I feel ERM is really a big family.	I am based in Sichuan, China, which the terrible earthquake struck in May. I feel very warm when I learnt the responses from ERMers allover the world.	Have you ever been to China or even Sichuan before?
Min Zhao HR Manager Asia Pacific	The supporting team here at ERM China is very supportive and growing up very fast. We work as a team and deliver team work. As in the fast pace of the global economy especially in China, we really need excellent team work to deliver high-quality services to both of our internal and external customers	Orientation program, management workshop, business trip	What is your perspective for the career path of the supporting staff with ERM. Most of them have been with ERM for a long time (5-12 years) , especially in China, we have a very young and loyal team who are working at ERM everyday to respond to our professionals internally and externally.
Douglas Mdachlin Director Asia Pacific	As a newcomer to ERM I am impressed by the genuine commitment to staff training, the excellent tools that connect ERMers, the timely and thorough responses to 'URGENT REQUESTS', the world-class expertise in the Climate Change Core Team available to all OpCos?!, the passionate commitment of colleagues to support one another to meet and exceed our client's expectations, integrity in the workplace, safety consciousness, and our response to the earthquake in Sichuan.	Orientation programme, Minerva, GMS Portal, Webex, Carbon Bitesize, late night phone calls, assistance (big time) with carbon neutral proposal, happy clients, laughter and team building and winning the orienteering challenge at Moganshan using cross-team collaboration, care and concern for ERMers in Chengdu and giving from the heart.	Along the lines of the 'Safety Moment' section of Minerva why not consider an 'HR Moment' (or equivalent) to showcase exemplars of collaboration that inspire and motivate?
John Waters Managing Director Europe Europe, Middle East & Africa	we have great people commited to serving our clients. We are getting better and better at working collaboratively to meet our client's needs across the globe. Most of recognise this is still work in progress. Sometimes we stumble, but there are some fantastic examples of partners and colleagues supporting each other to deliver the best of ERM to our clients.	When I first joined ERM 10 years ago, inter OpCo collaboration was the exception rather than the norm. Now I can think of numerous proposal and project teams that reach out for support beyond their OpCos and receive excellent help. I love working with colleagues around the region, and beyond, to make this happen.	Transfers from established to a smaller OpCos can be a win-win situation. They provide an experienced resource in a fast growing location and a new development challenge and exposure to cultural differences for the individual. Yet, they are painful for all parties to arrange. What are we going to go to do to make this a smoother and more effective process?
Manuel Ortiz Monasterio Operations Director Latin America & the Caribbean	It gives you a chance to (and also lets you face the challenge of) interact with many different people, from many different places and cultures and deal with many different environmental, health, safety, social and other issues. It is almost impossible to get bored here, something very important for people always wanting to learn more.	Within a month I think I must have met and/or talked to ERMers from 10 or 20 different OpCos in all four regions doing project work for aquaculture, chemical, manufacturing and infrastructure related clients, as well as marketing work, practice development, meeting clients, preparing proposals, doing admin stuff, etc, etc... If this wasn't enough, we get to learn too from new technologies and processes: GMS, Minerva, PIC-PM reviews, eXCEED, etc, etc.	(Long comment followed by the question) No doubt, a greater cultural awareness and cultural intelligence would be an asset for ERM employees. Most of the time something that is seen as a defect in a culture is also an asset (two examples: 1. time flexibility in meeting

I'm listening

Thanks to everyone for continuing to to post their thoughts on Minerva.

As well as the comments that have been placed here, I've also received a number of e-mails from ERMers with suggestions about various issues that we need to address in order to improve our current approach. I know that it can sometime be uncomfortable to make suggestions about improvements, particularly in a public forum, but I would like to encourage these so that we can start to build an understanding of what we need to be focusing on. As a result, we've updated the feedback form so that instead of just asking me a question you can also make a suggestion about any idea that you have around improving what it's like to work at ERM. I look foward to hearing from you. If you'd prefer to e-mail me directly, please feel free to do so.

In terms of some of the questions that have been posed recently, the easy questions to answer are around my travel plans; I'm hope to head out to AP in August for the PT induction session and I haven't yet been to China but hope to to do so soon. In terms of what we are doing to make it easier to move our people around the network, we are just starting some work to re-energise the formal transfer/secondment policy so that all ERMers understand how the company will support them in working outside their home country, in parallel with finding a way to share details of our resource requirements so that we can better match supply and demand. And as far as intercultural awareness is concerned, I agree that we would all benefit from understanding some of the differences between national cultures and we're already doing some thinking around what this might look like in practice.

Please do keep the comments coming in.

Posted at 5:11 AM by Mark Spivey | Permalink | Email this Post | Comments (1)

6/30/2008

How do you have a conversation with thousands of people?

I'm just back from an "Open Evening" at my daughter's school. We're going through the process of working out which school we would like her to go to in a year's time, which involves us taking her to visit a number of different schools and trying to work out which one will be the best for her. These events take place in the evening and tonight, in the process of trying to put her to bed, my daughter deployed the classic diversion technique of trying to engage me in conversation: she asked me what I was going to do before I went to bed. I told her that I was going to start a conversation with thousands of people across the globe - at which point she told me to stop being silly and asked me to leave.

Pictured: The people director's 72-hour *I'm Listening* dialog enticed responses for many employees.

While manager's blogs are important, the intranet team also realizes the potential of individual knowledge sharing. Enabling everyone, not just the CEO or managers, to blog shows the organization's commitment to hearing from everyone and sharing ideas. Thus, all staff members are encouraged to use the ERM wiki. There is no approval process, so employees can immediately create and use their own pages.

Derek Tomlinson > Blog

Welcome Philippa K Smith | My Site | My Links

This Site: Blog

ERM Blog

Home

Categories
- Work
- Personal
- Other
- LNAPL

Other Blogs

There are no items in this list.

Links
- Photos
- Archive
- Archive (Calendar)

RSS Feed

Blog of Derek Tomlinson, containing my thoughts, comments and questions.

8/8/2008

In the beginning... (Density)

...there was LNAPL. LNAPL is an acronym for Light Non-Aqueous Phase Liquid, which means that LNAPL is less dense or lighter than water, and is immiscible to water. LNAPL has many forms, but the most typical we see in the environmental sector is gasoline, diesel fuels (No. 2, No.6, etc.), mineral spirits, lubricating oil, heating fuels, residuum and crude. These oils have variable properties but the most basic that defines it as a LNAPL is the density, or in relation to the density of water, the specific gravity.

Density is the measure of the mass of the LNAPL over a unit volume. The units are typically g/cm³ or kg/m³. A more common variable to measure LNAPL is the specific gravity. The specific gravity is a normalized density to that of water. Water at 4°C has a density near 1,000 kg/m³. The specific gravity of water at 4°C would then be one. Something less dense than water would have a specific gravity below 1, and more dense would have a specific gravity greater then 1. Examples include the density of gasoline which is ~0.74 g/cm^3, diesel is ~0.8 g/cm^3, and fuel oils range from 0.85 to 0.95 g/cm^3.

Posted at 7:03 AM by Derek Tomlinson | Category: LNAPL | Permalink | Email this Post | Comments (0)

8/7/2008

Common LNAPL Misperceptions?

These are some of the common misperceptions I keep hearing and I will try to address in future blogs...

- If LNAPL leaves a well that means LNAPL went away
- LNAPL plumes can move indefinitely until they hit a barrier
- All the pores in an LNAPL plume are filled with LNAPL
- Thickness in the well is exaggerated by a factor of 4, 10, 12, etc
- You can recover all LNAPL
- LNAPL floats on the water table or capillary fringe
- LNAPL doesn't penetrate below the water table
- LNAPL thickness is not meaningful or too hard to understand
- LNAPL forms a pancake, like a lens of uniformly high saturation
- If you see LNAPL in a well it is mobile and migrating
- LNAPL volume can be equated to thickness
- LNAPL thickness in a well equals in thickness in the formation

As noted these are misperceptions, and are typically not true. In future blogs I will try to address these misperceptions.

Posted at 4:54 PM by Derek Tomlinson | Category: LNAPL | Permalink | Email this Post | Comments (0)

4/18/2008

LNAPL - Everything you wanted to know but where afraid to ask...

Yes I know you have been asking and I am finally delivering, a blog on LNAPL. I know, LNAPL!, yes LNAPL. There are many new methods to characterize LNAPL and I thought that I could post tid-bits and methods to assessing LNAPL in a blog to others that so desire to learn a bit or two about the more complicated immiscible phase liquid. Yes even more complicated than DNAPL or that vapor phase one. I am talking from the number of phases. Vapor intrusion is only one phase, air, DNAPL is only two phases, NAPL and water; whereas, LNAPL is three phases, air, water and NAPL. Additionally, DNAPL typically dissolves more readily into the formation water and diffusses into the formation matrix. LNAPL tends to stay as a separate phase even after the more volatile fraction is removed.

Coming in the next posting will be some basics about LNAPL...

Posted at 7:57 AM by Derek Tomlinson | Category: LNAPL | Permalink | Email this Post | Comments (0)

Pictured: Any employee can use the ERM intranet's wiki to create a blog. There is no approval process, so users can launch their blogs immediately.

Employees can publicize their blogs on the *Who's Blogging* page, a directory of blogs at the organization. This directory shows the name of the blog, the URL, and the blogger's name and job title.

A link to *Who's Blogging* appears on the homepage under the CEO's blog link. If users choose to publicize their blogs, they can find instructions for doing so in the right-side margin on the blog directory page.

Home

Welcome Philippa K Smith | My Site | My Links

Blog Directory

ERM

MINERVA

All Sites

Home | Our Company | My Career | Our Clients | My OpCo | Practices | Toolbox | GMS | Partnerspace | Sites | Minerva Support | Site Actions

View All Site Content

Recycle Bin

Home > Sites > Blog Directory

Strategy Blogs

John Alexander's Blog

Service Excellence Blog

It's happening all around ERM: PIC-PM

How the Austin, US office is redesigning its space to meet client needs

Guest Blog: UK Manchester Office Service Excellence Approach

Practices & Innovation Blog

Malcolm's updated Blog - 6 June 2008

Malcolm's Blog

Practice & Sector Specific Blogs

SIR Blog - Dick Brown

Is Technology Evil?

Battelle, What and Why

Make new friends but keep the old

Energy & Climate Change Blog

What's New?

Risk Blog - Malcolm Hutton

Risk Management Site – A top ten hit!!

Reaching out to all ERM risk practitioners!!

ERMBloggers

URL	About this Blog	Blogger	Job Title	Edit
Notes from a Graphics standpoint	Graphics in today's world and how to make life a little easier for people.	Eleanor Knopfle	Senior Graphic Designer	
LNAPL Blog	Discussion of the new light non-aqueous phase liquid (LNAPL) paradigm	Derek Tomlinson	Senior Project Manager/Engineer	
Anything Filipino	Debbie tries to satisfy the increasing hunger of her colleagues to know more about the Philippines, one blog entry at a time.	Debbie Yasay	Consultant	
Steve Laking's Blog	Thoughts on working at ERM in the UK	Steve Laking	UK MD	
The FeldBlog	Ruminations on life in ERM and the M&A practice.	Alan Feldbaum		
Richard's Blog	Software tips, data quality, technology, and whatever else piques my interest...	Richard Tallent	Consultant	
Mark's Blog		Mark Spivey	Global HR Director	
Jeff's Blog	Communication, Strategy, and Presentation	Jeff Gorham	Strategic Communication Manager	
Melinda's Blog	Knowledge Sharing . . . Atlanta Mtg . . .	Melinda Stephens		
Roddy's Blog	Bits of Minerva, bits of whats out there on the web, new tools, Web 2.0, Sharepoint, Grumbles about Microsoft....	Roddy Fiddes	Knowledge Manager	
Amy's Technical Writing Blog	Numerous tips on technical writing that I have compiled, composed, and corralled from various sources over the years	Amy Grant	Technical Editor	
Robert's Blog	Robert's Blog.....	Robert Kloepfer	Principal Partner	
Nicola's Blog	GIS.....	Nicola Clerici	Consultant	
Patrick's Blog	Libya.....	Patrick Arnell	Libya Director	
Sarah's Blog	Coastal Clean Up....	Sarah Wood	Project Engineer	
SST Blog	SST Blog.....	Keryn James	Principal Partner	
Cathy's Blog	Cathy's Blog.....	Cathy Adams	Office Manager	
Greg's Blog	Nanotechnology	Greg Wolfe	Senior Project Manager	
Tom's Blog	Tom's Blog.....	Tom Whitehurst	Partner Principal	
Zoe's Blog	Tales of relocating from London to Cape Town	Zoe Day	Consultant	
Soo Ting's Blog	Soo Ting's Personal Blog	Sooting Chung	Project Consultant	
Jacquie's Blog	Archaeological Blog	Jacquie Payette	Project Manager	
Elsie's Blog	Energy & Climate Change	Elsie Palabrica	Senior Consultant	
Bonnie's Blog	Updates on the Global Knowledge Sharing programme, Minerva and Knowledge Management	Bonnie Cheuk	Head of Global Knowledge Sharing Team	

Add new link

Blogging at ERM

This page is a directory of current bloggers around ERM. It is not definitive and if you would like your Blog to appear in this list then please take the URL of your MySite Blog and add it as a link to this page - add a decsription if your blog has theme so others know what you are blogging about!

If you are new to blogging or would like to learn more about how to set up your blog and blogging etiquette at ERM click here.

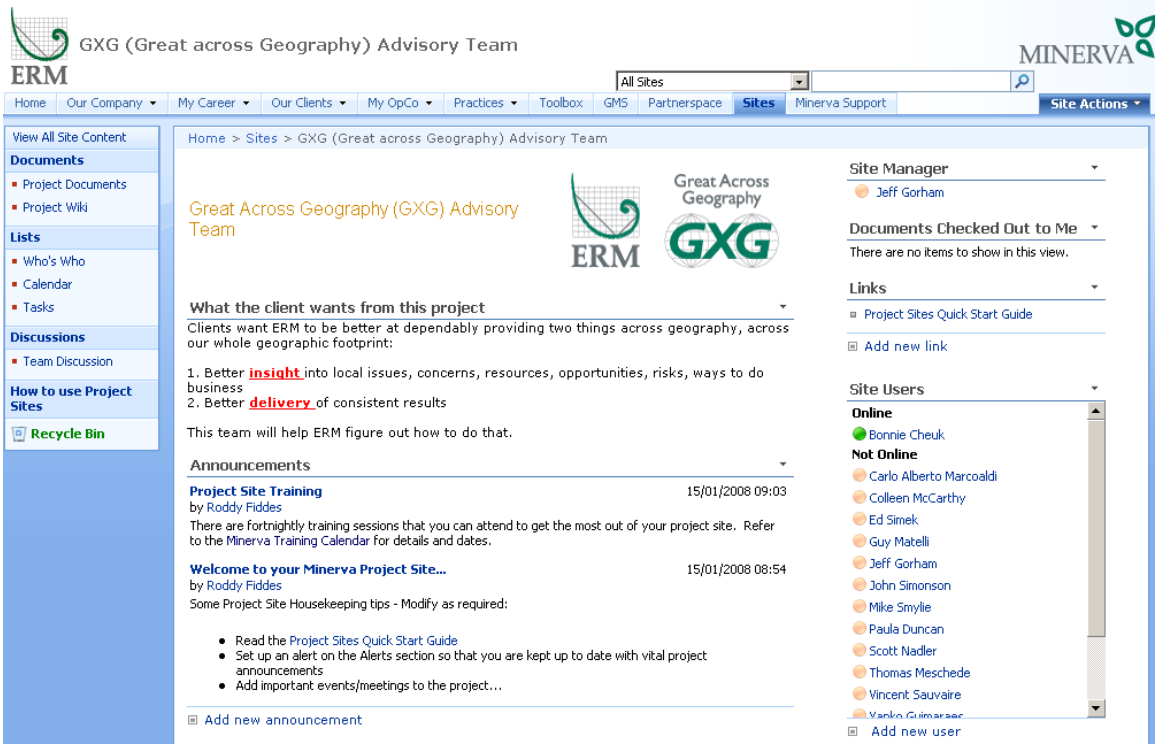
Manage your profile | Site Map | Knowledge Sharing Principles | How to use Minerva | Contact Us

Pictured: The *Who's Blogging* area serves as a directory page for bloggers on the intranet. Although blogs are not automatically added, people can easily add their blogs to this list.

In addition to blogging about topics of their choice, any employees who can articulate a clear business reason for doing so can set up a site for a specific project. They'll then receive a link to their new intranet area within three days. Such project areas let people participate in any number of project-related activities, such as assigning tasks using roles and a who's who list, sharing and reading news, using the project calendar, and managing documents.

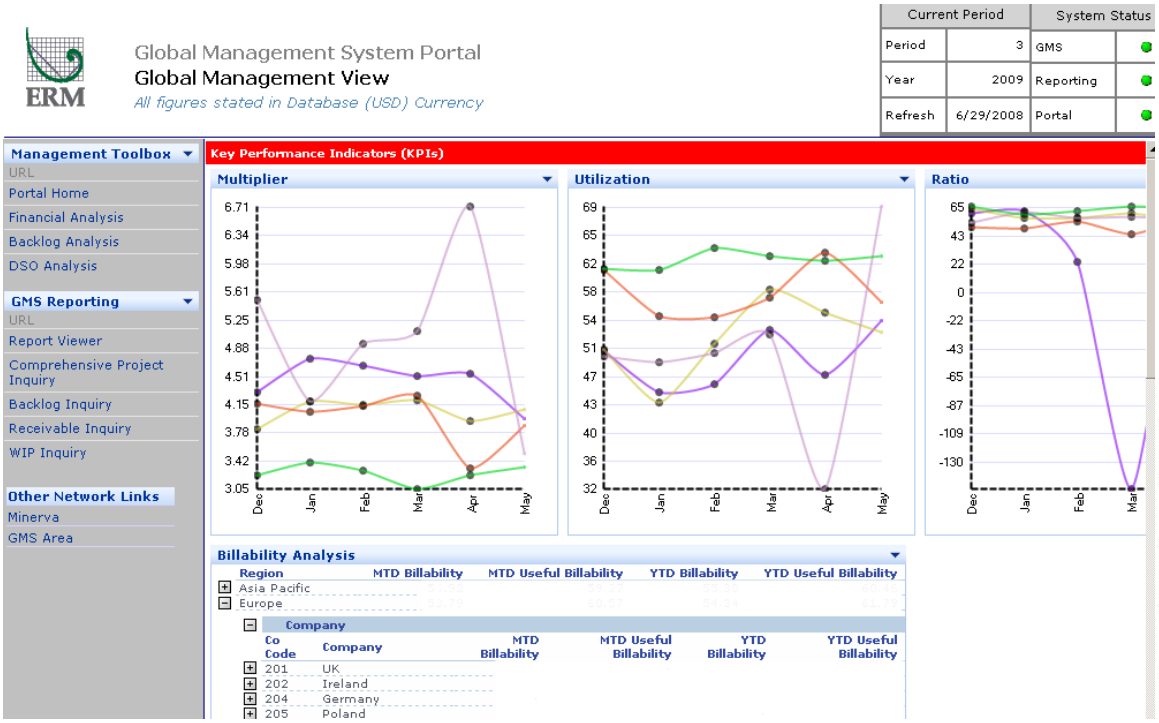
The main page clearly outlines the project's goals as a constant reminder to keep all team members on track. The *Announcements* section houses the most current news for the team. The *Site Users* lists all of the people working on the project who use the intranet project area, and notes whether people are currently online and available for chatting.

Using the *Documents* link in the left-side navigation, users can save any e-mails from team members or the client to a library, as well as create, edit, and track versions of any documentation required. The left-side navigation also lets users access and participate in discussions, view the calendar, and see the summary of team members.



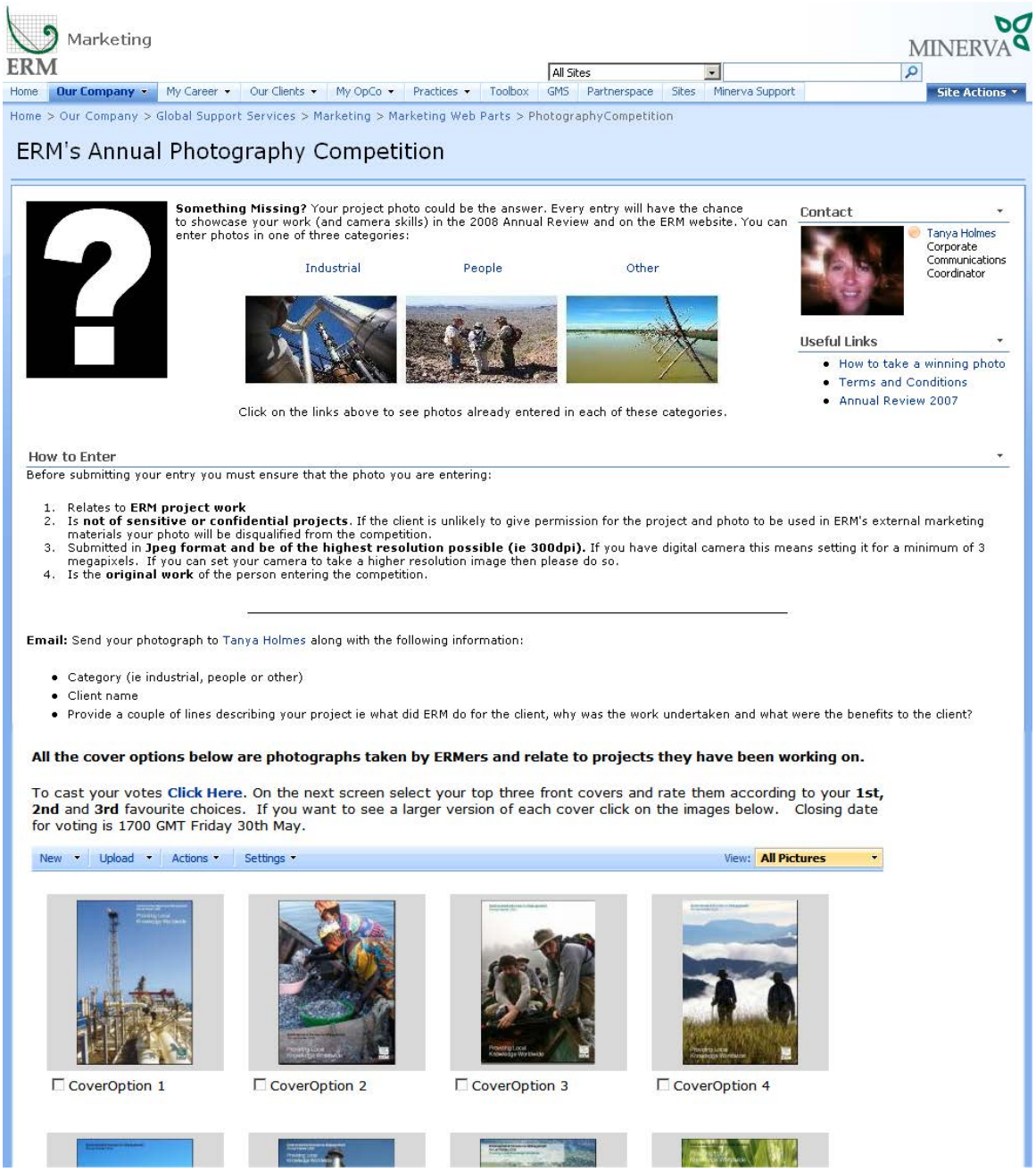
Pictured: Users can set up intranet project areas within three days. Project areas let team members communicate, make announcements, share and edit documents, view the calendar, and engage in other project-related activities.

Users can also view the *Project Accounting Portal*, which gives consultants an overview of a project's current status at a glance. The portal was custom built by the intranet team, and gathers current, relevant data from ERM's project management and accounting system. The data that users see depends on their job role. For example, global directors see overviews of all projects that fall under their purview. In contrast, first-level project managers see a detailed analysis of only their particular project or projects. (The screenshot below, for example, shows global management data for a finance director.)



Pictured: The *Project Accounting Portal* gathers current, relevant data from ERM's project management and accounting system. Users see different data, depending on their job role. This screen shows an overview of global management data appropriate for a finance director.

As another example of a "social" feature, ERM employees were encouraged to submit photographs they took to compete for the chance to be featured the cover of the organization's annual report. And those who are not photographers could participate in this contest as well—as voters, rather than contestants. In June 2007, the intranet team launched a poll on the homepage to encourage all employees to vote for their favorite picture.



Pictured: Employees participated in a photo competition for placement on the cover of an annual report. Employees also voted for the winner.

The ERM intranet started as the first product launched to support ERM's global knowledge sharing vision. It launched on 24 May 2007, and evolved according to changing business needs and user expectations. The intranet excels at collaboration features, not just enabling but also encouraging all employees to participate. The intranet team studied their users and found that their need to communicate coincided with upper-management's goals. The intranet designers exhibited patience, waiting until the market was right and introducing wikis and blogs only after the user group was primed and ready for them. This intranet team is made up of great designers who see the big picture.

BACKGROUND

Minerva was launched in May 2007 as an effort to support ERM's global knowledge sharing vision. Since its launch, it has evolved according to changing business needs. Among the first wave of changes was a homepage redesign. Other changes reflect a gradual evolution: adding features to sites and developing content over time.

The initial roll out of the site was with Microsoft SharePoint 2007 as an out-of-the-box implementation.

INTRANET TEAM

The intranet staff comprises a core team of nine people:

- **Pete Regan,** CEO (2000 to March 2008), chairman (Apr 2008 – present), executive sponsor
- **Tom Whitehurst,** initial partner in charge of the intranet pilot programme
- **Bonnie Cheuk,** global head of information and knowledge
- **Roddy Fiddes,** global knowledge facilitator (administrator)
- **Philippa Smith,** global knowledge facilitator (training and change management)
- **Karen Perkinton,** global knowledge facilitator (communities of practice)
- **Christopher Long,** systems analysts (global financial system)
- **Andrew Arvidson,** global technical lead—portals and collaboration
- **Samantha Bouzan,** global communications manager
- **Christina Apostolou,** global knowledge coordinator

The core team is augmented with approximately 80 site managers and 220 knowledge champions worldwide. These team members work in partnership with the core intranet team to collectively manage ERM's intranet.

Pictured: The ERM intranet team: (top, left to right) Bonnie Cheuk, Pete Regan, Tom Whitehurst, Roddy Fiddes, Karen Perkinton; (bottom, left to right): Pippa Smith, Chris Long, Andrew Arvidson, Samantha Bouzan, Christina Apostolou.

Governance

The Knowledge Sharing and Communications (GKSC) Team is "owned" by ERM's Chairman Pete Regan. The GKSC Team reports directly to Regan and works in partnership with (but does not report to) the Group IT and Group HR functions.

"The GKSC Team's close alignment with the company's chairman helps position the intranet as a rounded enabling tool which supports the overall business strategy," says Bonnie Cheuk, global head of information and knowledge. "The independent status of the Global Knowledge Sharing and Communications Team allows it to be truly multidisciplinary and sends a message that this is about breaking down silos with the aim of delivering benefits for the company as a whole."

The Minerva intranet team was originally established as part of the roll out of a Global Knowledge Sharing Program in 2006, led by then-CEO Regan. Cheuk was recruited as the global head of information and knowledge in order to establish both the overall ERM knowledge sharing strategy and how the intranet project would accomplish it.

The Evolution of a Platform

From September 2006 to January 2007, three team members—Pippa Smith, Roddy Fiddes, and Andrew Arvidson—focused on designing Minerva and getting the platform ready. When Minerva stabilized, Smith's role evolved into training and change management to help introduce Web 2.0 features to support cross-team collaboration. Fiddes' role evolved into understanding user needs and prioritizing change requests to further enhance and develop Minerva.

Minerva was officially launched on 24 May 2007. As it became more established (mid-2007), a new team member, Karen Perkinton, was recruited to advise on building communities of practice and ways to use Minerva effectively as an enabling tool to link up colleagues.

As Minerva became recognized as the one-stop shop to access company global resources, the Global Financial Management development team further enhanced the system and made it Web-based and fully integrated with Minerva.

Over time, Minerva was fully adopted by ERM staff and endorsed by senior leaders as the primary channel for internal communications, and the global internal communications manager become an official member of the intranet team.

External Resources

The intranet design was and is done in-house. An external development team was engaged only to improve SharePoint functionalities based on requirements developed by the in-house team in consultation with end-users.

Budget

Though the exact figure is confidential, according to Cheuk the annual budget for the ERM intranet is in the range of US$500K–US$900K per annum. This figure includes some IT infrastructure costs; additional costs are funded through the Group IT infrastructure budget.

Salaries for the five core team members are included in the budget range. Different offices across ERM fund the 80 site managers and 220 knowledge champions who support the core intranet team.

GOALS AND CONSTRAINTS

Minerva was envisioned primarily as a tool to support the organization's global knowledge sharing vision.

"We want everyone at ERM to be able to quickly tap into one another's expertise and access relevant information/documents in order to provide the best solution for our clients and to be successful in growing our own careers," says Cheuk.

The four specific goals of Minerva are illustrated in the cartoon below:

Knowing the importance of stating and communicating goals, the team commissioned an illustrator to create this cartoon. The strip was meant to summarize the goals in an understandable way, and act as a constant yet fun reminder to help keep the team focused.

Enabling Employees to Think for Themselves

"Minerva is designed to be a user-oriented intranet with the belief that 'employees can think for themselves,'" says Cheuk. "It enables employees to co-create meaning and have genuine dialogue on a peer-to-peer level and with senior managers."

To facilitate that dialogue, the Minerva team has employed Web 2.0 technologies.

Cheuk says, "The Minerva team believes that by using Web 2.0 to engage with the employees to develop shared understanding of the company direction, ERM employees are empowered to make decisions which are most beneficial to the company."

Creating an environment for this kind of active exchange required the team to make design decisions that would support the dialogue. Brenda Dervin's Sense-Making Methodology informed these decisions. Below are assumptions from Sense-Making about users and how they create meaning from information:

- Sense-Making assumes that reality is sometimes orderly and sometimes chaotic. There is no objective reality out there that can be separated from the employees.
- Employees, with different backgrounds and experience, have to make sense of their day-to-day working lives so as to come up with their own "observations" or create their own meaning when they interact with intranet information.
- Knowledge or information, defined as the sense being made or unmade, cannot be transmitted like water from one bucket to another.
- Different employees might come up with different "observations" and interpret the same piece of intranet information in different ways.
- In large organizations, the people in power (such as senior managers) very often decide whose observations are preferred. For example, they decide

what are considered "best practices" and how to interpret the company's strategy. Employees' voices, if different from those in power, are ignored or suppressed.

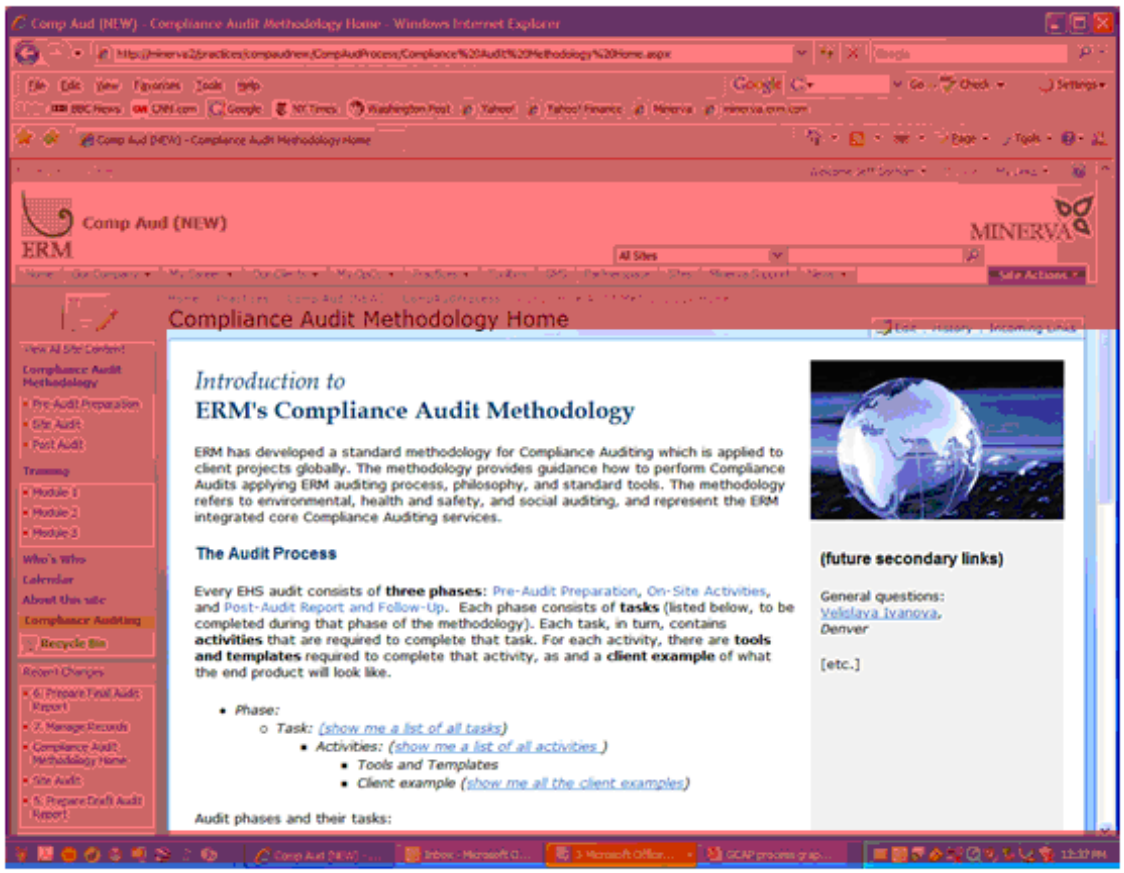
- However, if an employee doesn't share the same meaning as the people in power, no matter how much a message is polished and how many times it is shared on the intranet, it will not create any impact. Employees will just ignore the message.

Constraints

"The MS SharePoint system itself imposes constraints to the enhancement of Minerva," says Cheuk. "Our aim is to use out-of-the-box features as much as possible. However, if we want to design non-standard features, that requires additional development work."

Cheuk also noted that SharePoint's out-of-the-box screen size is quite small and both the global and left-hand navigation bars take up a lot of space.

For example, analysis has shown that only 50% of the available screen on most Minerva pages is available for content. This is as much an issue with IE7 as with MOSS, and although bigger screens mean more space, this is a typical laptop-sized window.



Pictured: The MS SharePoint system itself imposes constraints to the enhancement of Minerva. Although the team's goal is to use out-of-the-box features as much as possible, this screen shows how only 50% of the screen is available for content on most Minerva pages.

TIMELINE

Cheuk joined ERM at the end of July 2006 as the global head of information and knowledge. She carried out in-depth user studies that included user testing with prototypes, a heuristic evaluation, studying the server logs, and user interviews and surveys. These activities took place from September to December 2006, when a detailed specification was drawn up. Development took place from January to April 2007, leading to the launch in May 2007.

Key project milestones are outlined as follows:

MINERVA PROJECT TIMELINE	
Date	**Event**
Pre-2006	Discussions start on developing a knowledge sharing platform.
	Plans are drawn up and a budget is agreed upon.
2006	
January	Tom Whitehurst appointed partner in charge of the project, supported by Global Knowledge Facilitator Philippa Smith and Global Technical Lead Andrew Arvidson.
March	A High-Profile Environmental Impact Assessment Discussion Group is launched to discuss and decide on the best ways to share best practices, manage risk, and provide documents and so on that will support the practice worldwide.
May	*Mergers and Acquisition* pilot intranet site launched.
July	Cheuk joins ERM as global head of information and knowledge.
August	*Global Risk* network launched, having been developed in the same way as the *Mergers and Acquisition* site.
	Cheuk tours North America to gather user requirements.
October	Cheuk tours Asia Pacific to gather user requirements.
	Knowledge Sharing pilot portal area launched.
	Pilot *Climate Change* network launched.
	ERM establishes its Global Knowledge Sharing Strategy.
November	Global competition launched for ERM staff to name the portal. The vote results in the final name: Minerva.
2007	
January/February	Intranet team size increases by two: • Roddy Fiddes is hired to strengthen the team's technical capability to fully understand and exploit SharePoint features and to support content management and collaboration. • Karen Perkinton is hired to strengthen the team's capability to build and nurture global communities of

	practices—in particular, to introduce an approach and framework to link up practitioners worldwide to support business growth, delivery, and cross-team collaboration.
February 28	Pilot ends.
	Work begins on building Minerva and creating sites.
March	Migration of information from previous knowledge sharing database and pilot portal begins.
	Cheuk visits Latin America and Caribbean region to gather user requirements.
	User testing and feedback carried out to help shape Minerva for launch in May.
April	*Air Quality* site goes live.
	Begin training power users—a group of about 300 enthusiastic employees who are champions of the company and of what the Knowledge Sharing Program was aiming to achieve.
May 24	Official launch of Minerva.
August	Gather key feedback from colleagues in Asia Pacific.
November	Completed post-launch six-month review and demonstrate initial benefits.
December	Minerva wins *EBJ* (*Environmental Business Journal*) organizational innovation award.
2008	
January	Homepage redesigned to meet users' growing and changing demands and expectations.
February	Annual Knowledge Champions Meeting (17-19 Feb 2008).
March	Amalgamation of the Knowledge Sharing Team with internal and online communications team.
May	Celebration of Minerva's first birthday includes launch of 2008 Knowledge Sharing Awards.
June	Launch of *Global Financial System* portal, which integrates well with Minerva.
July	Launch of non-VPN access to Minerva.
October	ERM shortlisted for Global Most Admirable Knowledge Enterprise (MAKE) and won the Hong Kong MAKE Award.

USERS

Everyone at ERM uses Minerva—from consultants, administrators, and graphic designers to HR, IT, communications, and finance staff—to accomplish tasks such as sending an urgent request for information or announcing a new initiative to inform people about the latest performance figures.

USER TASKS

Minerva's features and functionality enable users to perform critical functions at every step of their day. Typical tasks it supports are listed below in order of business needs, based on user feedback:

1. **Finding colleagues:** Identifying phone numbers, area of expertise, CVs.
2. **Internal communications and staff engagement:** Company news and new hires are reported and updated on the Minerva homepage every day.
3. **Financial management and staff utilization:** Minerva directly linked to the company's global management system (GMS).
4. **Project management:** Project sites centrally manage projects and store documents and actions to help teams stay connected and informed.
5. **Key client collaboration sites:** These sites help users identify and pursue client opportunities.
6. **Community sites:** Help build capabilities in specific solution and technical areas, and are adaptable to specific needs.
7. **Coordinating training events.**
8. **Business strategy discussions:** These appear on the CEO and theme leader blogs as well as on interactive FAQs.
9. **Facilitating global competitions and campaigns.**

DESIGN PROCESS AND USABILITY ACTIVITIES

Overview

The Minerva team used a variety of methods to involve the users throughout the planning and design phases.

User testing of design prototypes: Minerva's launch used MOSS 2007, but the portal was initially designed on SharePoint Portal Server 2003. The pilot was accessible to the whole company and user feedback was gathered to help shape the 2007 development.

Studying the server logs: Usage stats are gathered and analyzed on an ongoing basis to both educate the team and shape feature development.

Heuristic evaluation (expert review): Conducted mainly by Cheuk, based on her previous experience.

User interviews: Interviews and narrative capturing carried out during site visits (see section below).

Leveraging evangelists: A group of approximately 300 enthusiastic employees were identified prior to the 2007 launch. These "power users" were champions of the company's vision and were enlisted for early training. The hope was that they could act as evangelists for the new intranet.

Initially, the power users group consisted of individuals who were nominated by local operating company heads and agreed to take on this role. Over time, the group has evolved as people's roles have changed and new people are employed. The current power users aren't technophiles, but rather are people interested the intranet team's goals and want to further Minerva's improvement. They are, according to Cheuk, "some of our greatest advocates." The power users also work to pass on the training they receive so that everyone has the potential to become a power user.

Pilot Phase Surveys

During the project's pilot phase, the team conducted surveys with users either via e-mail or in person. The first pilot, *Mergers & Acquisitions*, was used as a way to survey future users and find out how they would use the tool, what they wanted, and what they thought of it. The team used a Web-based survey to gather feedback and input. The survey was available to all M&A practitioners—about 400 people worldwide.

Once the survey went live, users could provide feedback and tell the team what they did and didn't like. Based on the success of this pilot, other practices saw what they could have and began requesting similar pilots for their groups.

It was about this time that Cheuk joined ERM and spent three months interviewing ERM staff to find out what they wanted from their knowledge sharing platform. The success of the M&A pilot resulted in similar pilot sites being rolled out for both the Risk Practice and Climate Change practitioners.

The pilot highlighted two unfulfilled requirements:

- The requirement for employees to collaborate across time-space using collaboration tools.
- The requirement for employees to interact with both information and one another rather than passively consuming information published by some authority source on the intranet.

During each office visit, a computer terminal was set up in a meeting room with a Minerva team member on hand to talk to staff members at all levels. The goal was to gain insight into users' reaction to Minerva design, particularly the homepage, which is set as a default page for all staff.

User Interviews: Collecting Thousands of Narratives

In late 2006, the Minerva team did in-depth user research, conducting interviews over a three-month period. Their goal was to identify the most pressing issues affecting ERM employees. The research activities focused on identifying the challenges that users encountered accessing information and expertise to support the sales effort, deliver client work, and grow their careers within ERM.

The team employed a methodology informed by Snowden's narrative research approach. This methodology involves asking indirect questions during informal conversations—"not focusing on asking what people want from the intranet through formal interviews, but informally discussing what employees do, think, and feel as part of their day-to-day work," explains Cheuk.

The researchers gathered over 1,000 narratives from more 300 colleagues based in 40 different countries. "The results of this research helped to shape the final design and implementation of Minerva," says Cheuk. "The findings of the three-month user study revealed employees' real needs."

As a result of these findings, the team decided to use SharePoint 2007 instead of SharePoint 2003, as the newer version provides additional collaboration tools and Web2.0 features that let users generate content.

Minerva team members continue to gather narratives from staff on a monthly basis to ensure they stay up to date with what ERM employees need. One year after Minerva launched, the team had collected 5,000 such narratives. New requirements are logged in a change-request log for analysis and prioritization.

The narrative process is supported by a Knowledge Sharing Champions Network made up of highly active knowledge facilitators/intranet site managers who collect and send the central team a constant stream of feedback from users based around the world. The site also features an on-line comment list, inviting all users to tell the team what they think.

Evolving the Homepage

Since its launch, the initial homepage has been completely revamped. User feedback directly informed these changes, as the following examples show.

> **Challenge:** Staff members are not aware of the availability of frequently needed resources, collaboration tools, databases, and sales reports.
> **Solution:** The team creates a list of quick links for these items on the left side of homepage 2.0.
>
> **Challenge:** Staff members should see country-specific company news on their homepages, rather than just global company news.
> **Solution:** The Minerva team introduces the Target Audience Web, part of which allows the staff to see their own local news, depending on their location.
>
> **Challenge:** Staff members report that they really like the *ERM Headline News* and *ERM People* areas and want both to be updated more often.
> **Solution:** The publishing calendar is shortened from a weekly update to updates every two days.
>
> **Challenge:** ERM's Health and Safety culture needs to be strengthened and promoted to all employees.
> **Solution:** The Minerva team introduces the *Safety Moment* feature, which is changed weekly.

Results that Surprised the Team

The user research yielded some results that surprised the research team. Cheuk discusses a few examples:

- Though transference is a common finding in these types of studies, the ERM team was somewhat surprised that users often transfer their experience of the Internet to their expectation of an intranet and therefore expect more from the system. For example, they expect a "Google" type search.

- When asked directly, all staff members generally say they welcomed the CEO blog. However, usability findings show an extreme result where some users read the CEO blog regularly, while others ignore it completely, even though it is on the homepage.
- According to usability stats, having core teams and/or facilitators within a practice work area seems to encourage higher usage for other staff within that practice work area.

Actionable Results

The Minerva team has made great efforts to act on specific user feedback. Following are some examples of specific changes the designers have made.

- To make navigation easier, they created clearly defined key sections.
- They added *Quick Links* to frequently used tools on the left side of the screen.
- At ERM, health and safety is a high priority, so the team gave it a prominent spot on the homepage. The section is updated weekly and is linked to a blog that everyone can comment on to share health and safety experiences and help prevent similar accidents from reoccurring.
- The *Urgent Requests* feature has been a huge success and thus has earned a prominent spot on the homepage. In this area, anyone can post a request for urgent information or resources; the feature has reduced the amount of worldwide e-mails sent by 99%.
- On the basis of user feedback, the team reduced the amount of homepage text, including to display only the headlines of featured *News* articles.

Continuous Feedback/Ongoing Improvement

A site is never really done, and the intranet team recognizes that changes will always be necessary. Team members are planning for this inevitability and have instituted mechanisms to make sure they continue to hear from the users.

The Minerva team continues to gather narratives from employees on a monthly basis. A year after Minerva launched, the team had already collected 5,000 narratives to help them identify what users do and don't like. Using this information, they've continued to change the site and log new requirements in a change request log for analysis and prioritization.

In addition to the narrative research, the team receives a constant stream of feedback from users around the world. This information is gathered via a Knowledge Sharing Champions Network made up of highly active knowledge facilitators/intranet site managers who gather and aggregate the feedback for the intranet team. In addition, an online comment list invites all users to tell the team what they think.

Other ongoing feedback/improvement efforts include:

- "We conduct a minor/content review of the homepage every three months," says Cheuk. "And we plan to undertake a major redesign of the homepage on an annual basis to ensure it is still fit to serve our staff and our business strategy. The next iteration will aim to make the homepage look less like SharePoint and more dynamic."
- The team produces an ongoing report detailing usage stats that highlight areas of low or heavy use. These stats are provided to knowledge sharing facilitators to stimulate discussion on an area's success or failure and to guide further development.

- An online list of change requests tracks the development progress of all such requests. The list is open to all users to read and offer contributions.

URL AND ACCESS

Minerva can be accessed at http://minerva or https://minerva.erm.com. The site is bookmarked in users' browsers and starts up automatically every time users turn on their computers and log on.

The IT team has developed non-VPN access for users to log on to Minerva when they have only an Internet connection. "This is useful for when they are on client sites and cannot access the VPN," says Cheuk.

TECHNOLOGY

Platform

Minerva is built on MOSS 2007. Prior to setting up Minerva, ERM had a pilot project using SharePoint Portal Server 2003. The requirements gathered during the research phase led the team to choose SharePoint 2007 instead of SharePoint 2003, because MOSS has additional collaboration tools and Web 2.0 features that allow user-generated content.

ERM uses MOSS for content management, design, and search on Minerva.

The company chose to use out-of-the-box MOSS functionality as far as possible. "The key customizations that were made were to the *My Profile* areas so that we could capture key information relating to employee expertise," says Cheuk. This customization involved developing five Web parts in addition to those available in the MOSS out-of-the-box *My Profile* feature. The team utilized SharePoint Designer to customize the homepage and to create custom views of data and workflows.

Hardware and Hosting

The Minerva SharePoint farm consists of four Dell servers, two in a highly available SQL server cluster and the other two in a Network Load Balanced (NLB) cluster providing Web front-end services and indexing/search. Access to Minerva via minerva.erm.com is provided by a reverse proxy server running Microsoft ISA Server 2006, again on Dell server hardware.

Site usage is reported on a monthly basis and includes details of the most common searches.

The operating system is Microsoft Windows Server 2003 Enterprise for the SQL cluster and Windows Server 2003 Standard for the Web front-end servers and reverse proxy.

SEARCH

The site uses MOSS 2007 Enterprise edition for search, which comes as part of the MOSS product on which the rest of the site is built. "The current search tool is an out-of-the-box basic search, which on its own is still very useful to users," says Cheuk. "Users can currently search the entire site collection, or specify a specific site in which they want the search to be carried out on."

They can also specify a particular document library or list. And users also have access to a predefined *People Search* where they can search for staff contact details and experience.

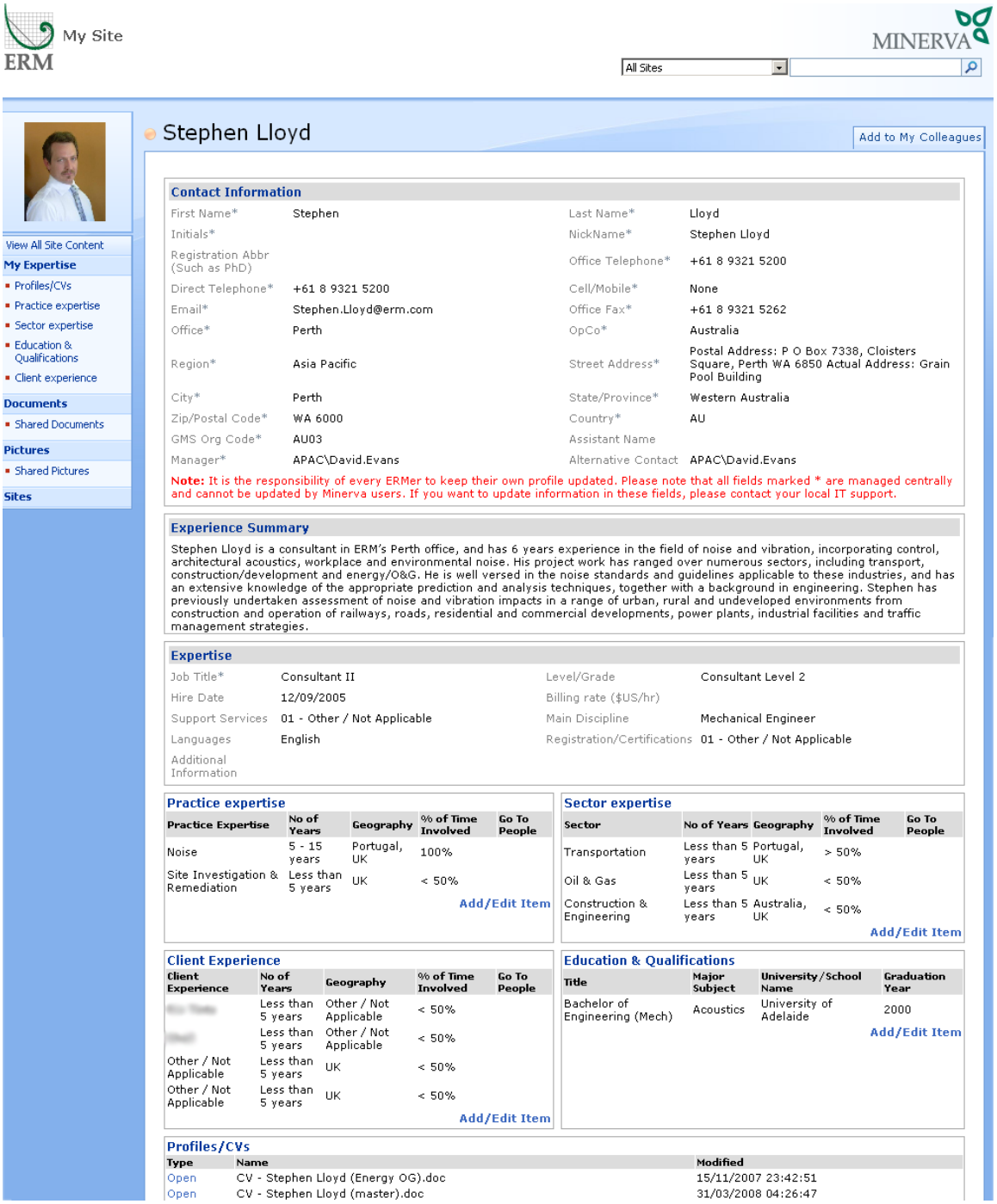
"As a result of talking to our users and getting insight into user behavior, the enhancement of search is our next high priority project in order to enable more advanced search functions," says Cheuk. "This will enable faceted search so that users can search specifically on the predefined metadata properties that they tag to a document upon upload, which will be driven by content types that govern how a document is classified."

"We will also be creating new predefined search scopes to allow users to quickly obtain relevant results whilst stripping out 'noise,'" she says, adding that, for example, they'll create a *CV Search* scope that will search only users' CVs and let them "zip these CVs quickly into a proposal."

People Search

At ERM, *People Search* is a heavily used intranet feature. "This is a vital tool for a consultancy like ours that works out of over 40 different countries across every time zone," says Cheuk.

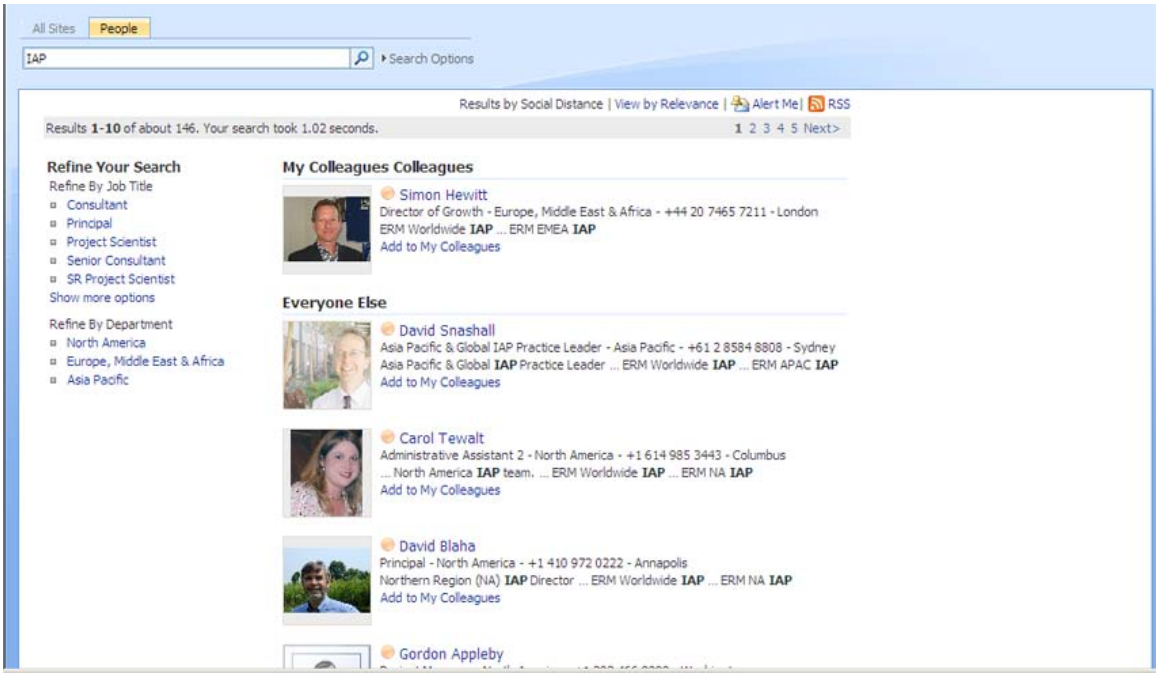
Every user has their own *My Site*, which consists of a profile containing CVs and experience summaries that can be downloaded and added to proposal documents.



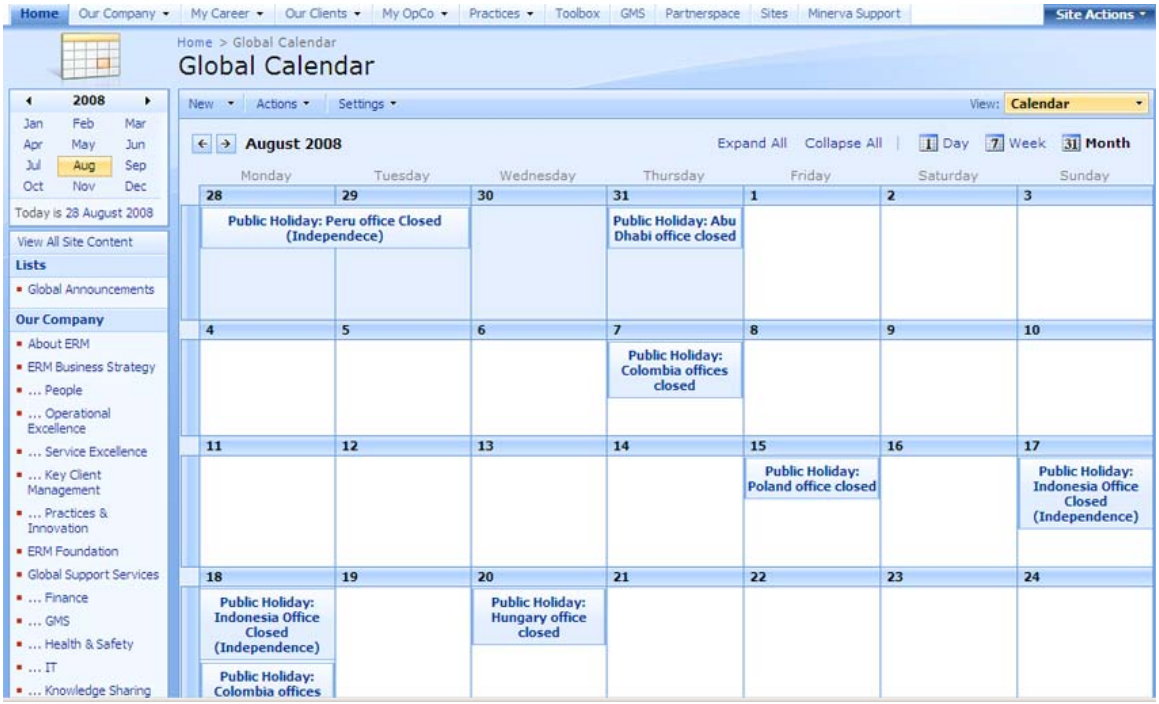
Pictured: A screenshot of a *My Profile Site*. Offering a *People Search* is vital for a consultancy like ERM with 3,500 people working in more than 140 offices in over 40 different countries across every time zone.

Users can sort the *People Search* results by "Social Distance" or "Relevance," which adds an extra layer of information to guide them to relevant results. Further, configuring best bets and keyword synonyms can enhance results. Security features of the various sites are transferred to the search results, so users see only those results that they have permission to access.

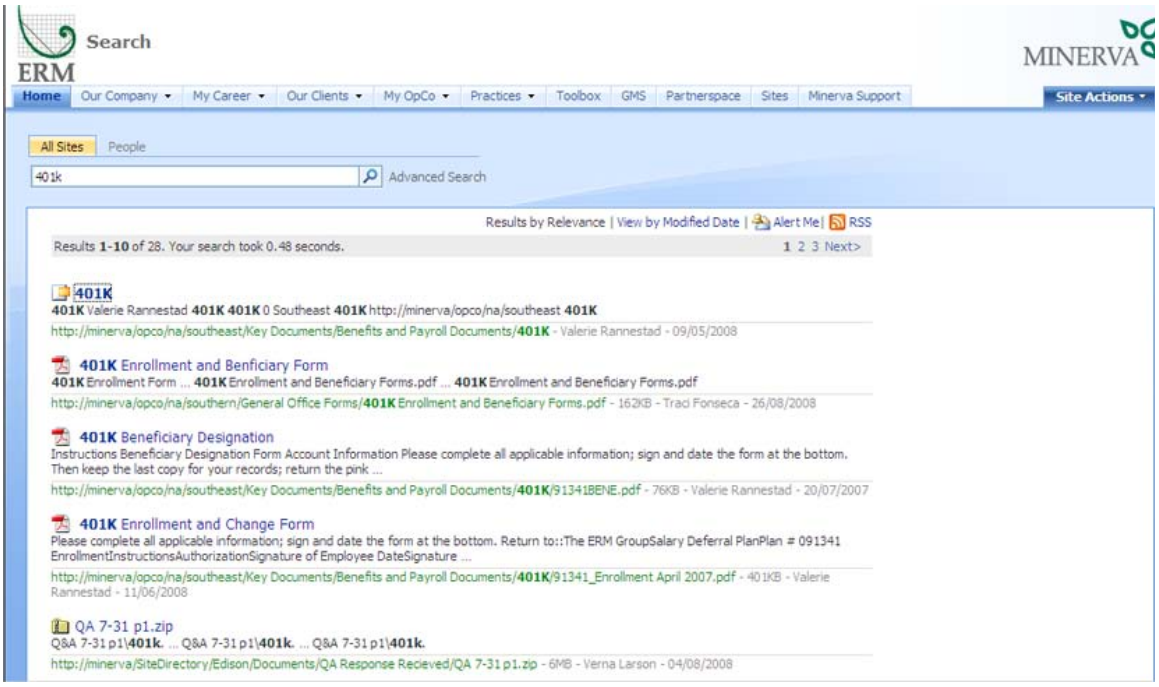
"We are looking to extend our basic search features to rollout a more advanced search interface later this year," says Cheuk, adding that it will let users "conduct specific searches based on our corporate taxonomy instead of just free text searching."



Pictured: Search results for people involved in ERM's unique Impacts Assessment and Planning (IAP) service. IAP focuses on assessing and mitigating the environmental, social, and health impacts of development projects in often challenging and sensitive regions of the world.



Pictured: ERM's *Global Calendar* records all public holidays, office closures, and so on for all of the company's global offices.



Pictured: A standard search results screen for the search term "401k."

Pictured: Search results for press mentions of ERM within the last month. In this case, ERM was mentioned on a BBC World news program. A list of press appearances and mentions is also featured in a regular round-up on the marketing site.

CONTENT MANAGEMENT

Content management is handled by MOSS. As part of the content creation process, users are required to complete pre-defined metadata information before they can upload the documents to MOSS. "These metadata items have been defined using content types at the top level to control the taxonomy," explains Cheuk.

Using Content Types

All content loaded onto Minerva is tagged and assigned to a specific content type. A content type is an object that is stored within SharePoint and defines elements of that content, such as document template, metadata, workflows, and information management policies.

"Using content types allows us to manage our taxonomy from the top level and filter down changes to all sites and libraries that use that content type," says Cheuk. "Each content type has an expiry date, and it is the content type that drives the workflow once the expiry date has been reached. At this stage, the workflow will assign a task to the content owner who then makes the call as to whether the content needs to be updated or deleted from the portal."

Another feature of assigning content types is that they can push and pull content from one site to another without creating duplicate copies.

The metadata assigned also allows users to create "views" so that only information relevant to them will be shown. This means that documents are not hidden away in folders, so users don't need to know the folder hierarchy to find the documents as they can appear in multiple views.

Content Expiration

Eventually, the team will also use this metadata to drive document retention and review/disposal of expired content. Every document by default has an expiry date of two years. "We are developing a custom workflow that will manage the expired content and route it to the document owner for disposition approval," she says.

Distributed Ownership

The Minerva team is small, so effective management requires a distributed ownership model. A new site is requested through a site request process. Then, each site within the portal is assigned an owner and a site manager.

Owners are responsible for the target business area and for providing direction and resources to support the site. Day-to-day management resides with site managers, under the lead of site owners. Site managers handle the content, design, and overall management of the site. This is especially true for local sites where the content must be pertinent to the region and not centrally controlled.

For practice area sites, subject matter experts (SMEs) manage the site content, and the design supports the practice's specific needs.

Individuals manage their own *My Site*/*My Profile* pages; this arrangement works well at ERM.

Working with Templates

The team has developed six base site templates—Corporate, OpCo, Practice/Sector, Client, Project, Event—and users can request a site be set up on any one of them.

Site managers are provided with a basic template, and the Minerva team offers training to give them the skills to customize the site to suit their needs. Guidelines and standards for the sites reside on the team's *Learning Zone* wiki.

Enforcing the standards has been relatively easy for the team. All site requests are managed by the core Minerva Team and a few "super users," and all sites use the base templates. "Templates are issued as a guide to help the site manager design their site with critical content in mind," says Cheuk. "The most challenging aspect on devolving the responsibility of site design to site managers globally is ensuring that sites are still user friendly and have appropriate content on them."

All sites are reviewed every six months, and practice site managers have one-to-one sessions with a member of the KSC team. "All site managers are invited to a fortnightly advanced ('therapy') training session where ideas are discussed and advanced features previewed," she says.

MOBILE

Minerva does not currently support mobile access. "There is demand for mobile access," says Cheuk. "This is on a change request list, which we plan to address in the coming year."

FEATURES

Dervin's Sense-Making Methodology informed many of Minerva's features, including:

My Site. All employees have a personal site containing contact information, details of expertise, photos, and CVs. All employees can also set up a personal blog if they want to express their personal views.

The company doesn't actively police any of these open forums. Instead, they rely on "peer review" to highlight any inappropriateness. "To date, we haven't had any issues with any of the open forums and no action has had to be taken to remove a posting or discipline staff," says Cheuk. "We have a blogging policy that underlines the need to respect both legal and ethical standards."

Integration with instant messaging. By clicking on any contact name on the intranet, an employee can initiate an online conversation with that colleague via IM. ERMers use this throughout the workday, and it has become part of the corporate culture.

Operating company (OpCo) sites. Each of the 40 operating companies has a portal on Minerva with detailed company information and a listing of key contacts in each office.

Communities of Practice (CoP) site. Each global practitioner's network has a portal area for practitioners to share news and resources, and collaborate with one another. Each site is managed by a business sponsor and a site facilitator.

Features that Increase Visibility

To support the objective of increasing the visibility of local work, the team implemented two key features.

***Document library*.** The document library lets any ERM employee share local work globally. Once users post work to this section, the content is reviewed and discussed with the appropriate communities of practice, then moved to the CoP site if appropriate.

***Global Announcement* feature on the homepage.** This unmoderated announcement feature lets employees easily share news, introduce new hires, and send out global announcements (replacing global e-mail to all staff).

Collaboration Features

Four features support the objective of making Cross-OpCo collaboration easy.

Online project sites. Any employee can request an online project site to enable collaboration on client projects with colleagues from other offices. Employees use these sites to share news, manage project documentation, assign tasks, and discuss business issues.

ERM Wiki Wiki. The ERM Wiki Wiki is designed to enable employees to be involved in collaborative writing. No approval is required to set up a wiki. Employees use it to set agendas and finalize project documents.

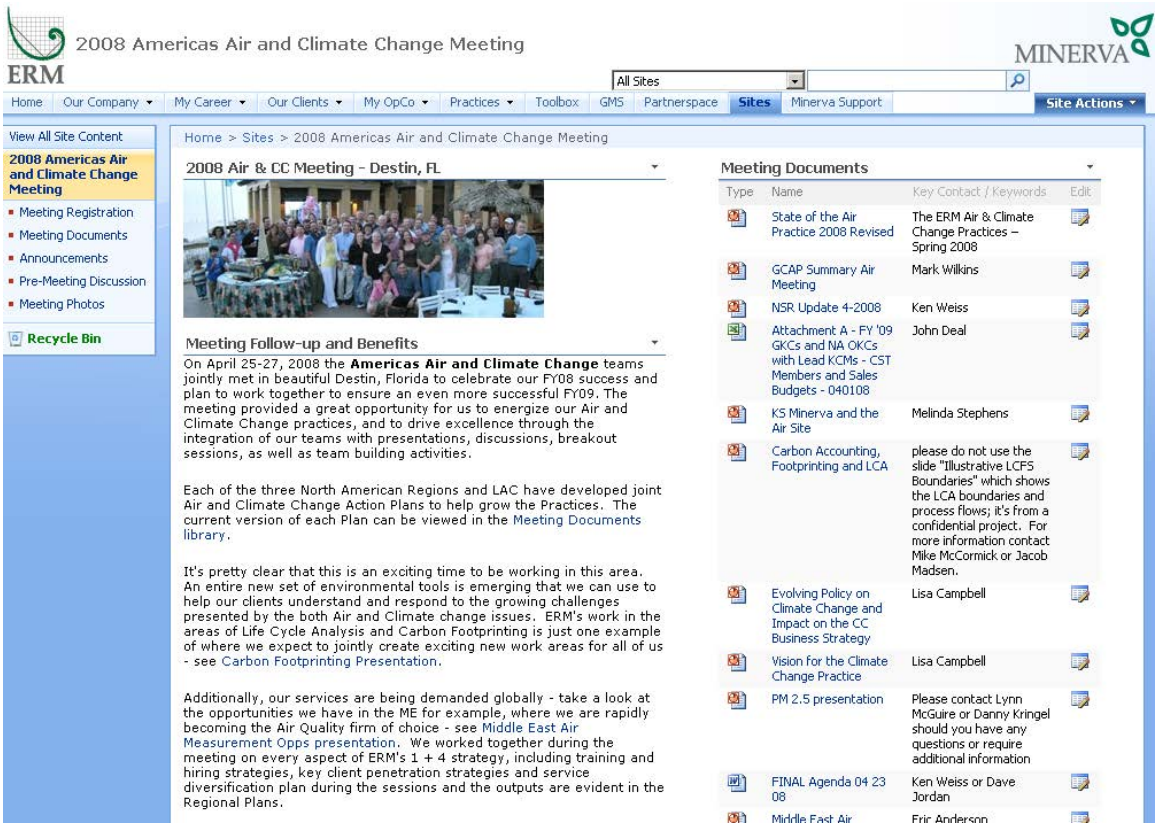
The CEO blog. The CEO blog has a prominent link on the homepage. Through this blog, the CEO can interact directly with staff at all levels. Comments and posts are unmoderated and are visible immediately.

***Urgent Requests*.** When consultants are trying to resolve highly complex environmental issues, they often need to utilize expertise from ERM offices other than their own. The *Urgent Requests* feature lets any employee submit an urgent request and expect responses within 24 hours. This feature is highlighted in the most prominent area on the homepage.

Global Information Features

To support the objective of providing quick and easy access to global information, Minerva offers the following features:

- Minerva's **homepage** launches when any employee's computer is switched on.
- An **ERM *Global Calendar*** features all major events happening in different parts of the world. The three latest events are displayed dynamically on the intranet homepage.
- All new employees can complete a **new hire exercise** online to learn about Minerva and its features.
- Minerva features **access to the Global Financial Management System** so that partners, project managers, and staff can get real-time information about utilization rate to aid resource planning and business decisions.



Pictured: Event sites help global teams prepare for events and provide a place for follow-up after an event. The sites offer attendee registration, attendance requirements (such as hotel booking and airport transfers), pre-reading, pre-meeting discussions, post-meeting outcomes and actions documents, meeting photos, and post-meeting task lists.

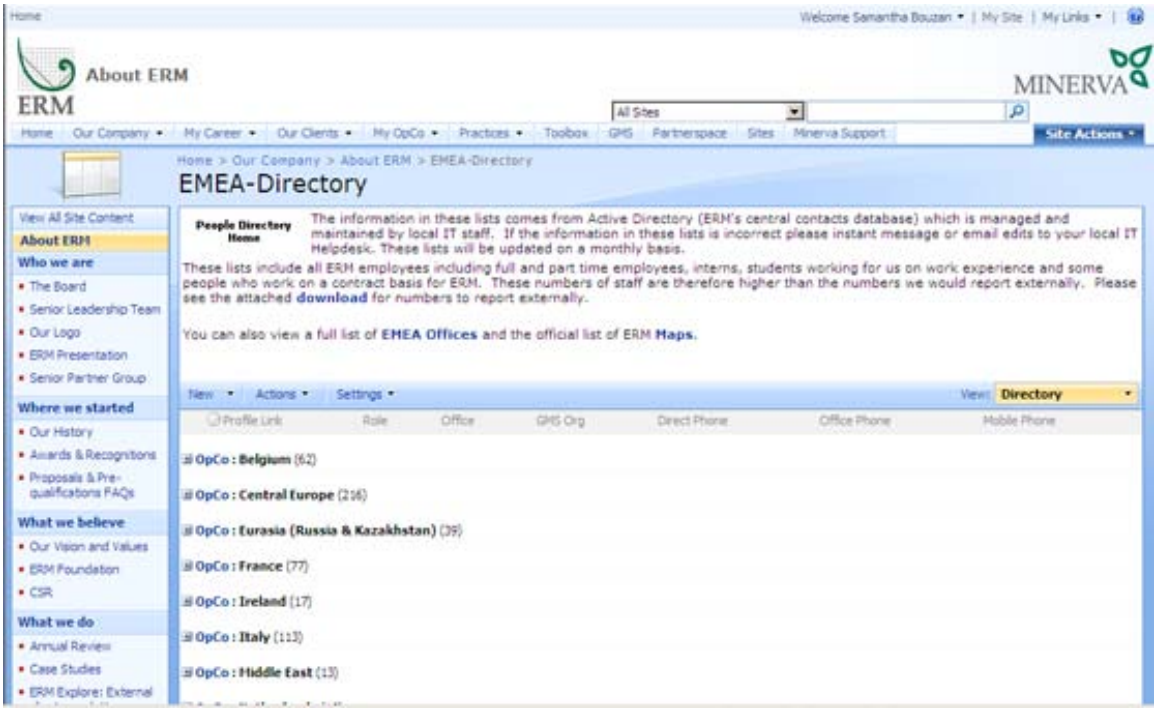
Features to Support Mission-Critical Tasks

- ***Urgent Requests*** enable anyone within the company to immediately post a request seeking expertise, knowledge, or anything else they need at very short notice. This area isn't regulated and, during Minerva's first year of operations, hasn't been misused once. Global e-mail use has reduced 99%; when employees do send a global e-mail, the team takes it as an opportunity to educate them about this feature.

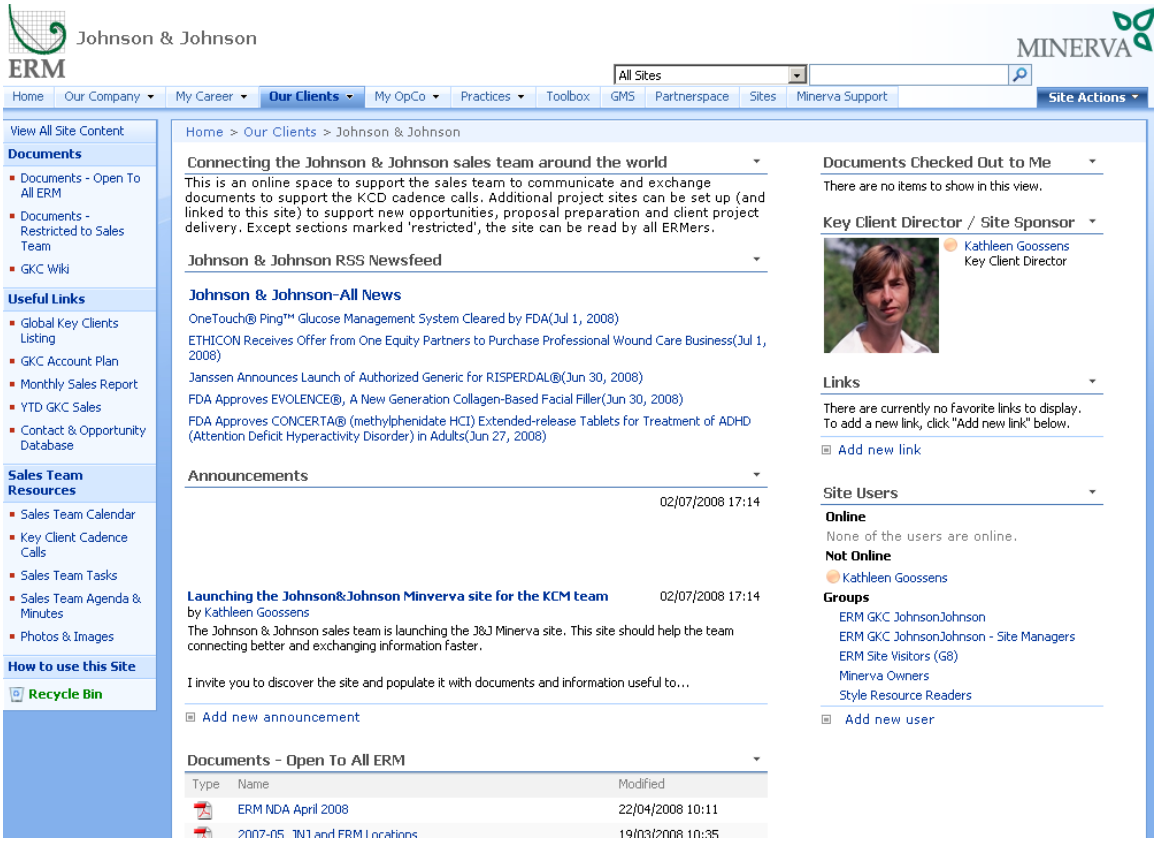
- **Project sites** let project managers scope out a project using a task list; assign and define roles for team members with a who's who list; announce any updates and client communication; save any e-mails from team members or clients to a library; and create, edit and track versions of any documentation required. The project site template also includes a calendar, a discussion forum, and a wiki.

- **The Global Financial Management System (GMS)** offers personalized views for logged-on Minerva users, displaying utilization and billability information that is most relevant to the user.

- **The people directory and profiles** include everyone at ERM—from the most junior intern to the CEO. Every employee has a Facebook-type contact and skills profile on their *My Site*, as well as an optional personal blog. *My Sites* are a standard SharePoint feature that the team customized to align with the company's needs, providing skill sets and information relevant to proposals and project work. The site lets employees add their practice and sector area experience; update their CVs; and provide an experience summary that can be cut and pasted directly into proposals for work that requires qualification detail. *My Sites* profiles are editable only by a profile's owner. The team strongly encourages all employees to fill in and update their profiles, but it's not required. As says Cheuk notes, the feature is similar to Facebook in that, "if you want to be in touch and be in line for great opportunities, you will keep your profile looking great and up-to-date so that you will come up in search results and look like a good candidate for exciting project work."



Pictured: ERM's *People Directory*. Everyone in the company who has created a profile is included in the list, which is sorted geographically and is searchable. All entries list the person's job title and links to their profile.



Pictured: Client intelligence sites offer a single area where consultants can learn about how ERM is serving its global clients. As such, it lets ERM provide a consistently high quality service to these clients, regardless of the geography.

Support Features

User support on Minerva is not merely to solve immediate problems but rather to provide a continuous feedback mechanism so that the site can be improved in an ongoing basis.

According to Cheuk, the support efforts are considered critical as they let the team collect intelligence and understand Minerva's strengths and weaknesses; they also drive continuous improvement.

Support comes in two types on Minerva: the *Minerva Support Site*, which offers a fully integrated support function, and a help desk.

The support site hosts all key contact information, training materials, and intranet policies related to Minerva use.

The help desk function has been recognized as a best practice in using the intranet. It has several key features:

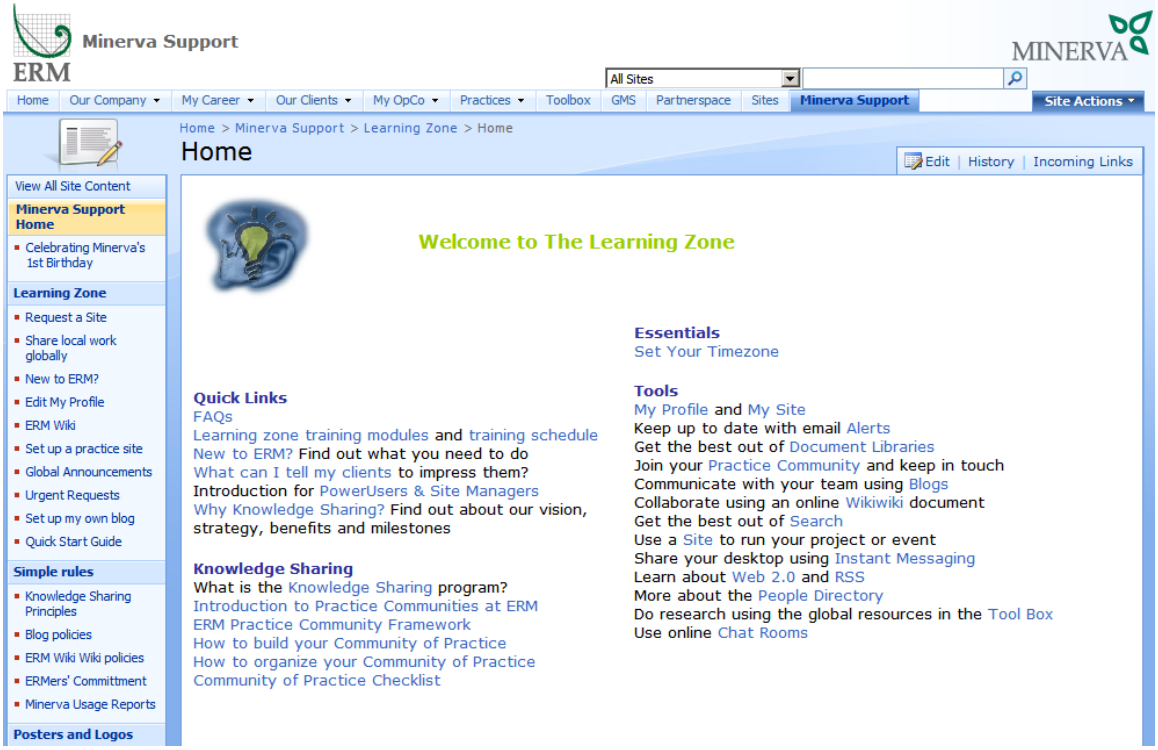
- It enables any user to submit a question for help or suggestion for improvement on the support site.
- The support team receives an alert when there is a new request.
- The requests are assigned to an appropriate team member who is notified by e-mail to take action.

- After the request is closed, a team member updates the case history, documents how the problem has been resolved, and changes the status of the request from "open" to "closed."
- An e-mail is generated to capture feedback from users.
- A report is generated to enable the team to capture the number of requests received, logged, and closed on a monthly basis.
- All issues that cannot be dealt with are logged as a "change request" to be reviewed and prioritised on a quarterly basis.

Supporting New Hires

Designers created a Minerva page specifically for incorporation into new hire induction around the world. The page consists of 12 topics, and includes questions and surveys.

The site also has a *Learning Zone*, which was developed based on user feedback to provide the answers to many of the questions people have about Minerva. The team developed *Learning Zone* using a wiki feature so that all Minerva team members can contribute and edit the instructions as required.



Pictured: The *Learning Zone* provides answers to questions people have about Minerva. The team developed it using wiki features to allow all Minerva team members to contribute and edit the instructions as necessary.

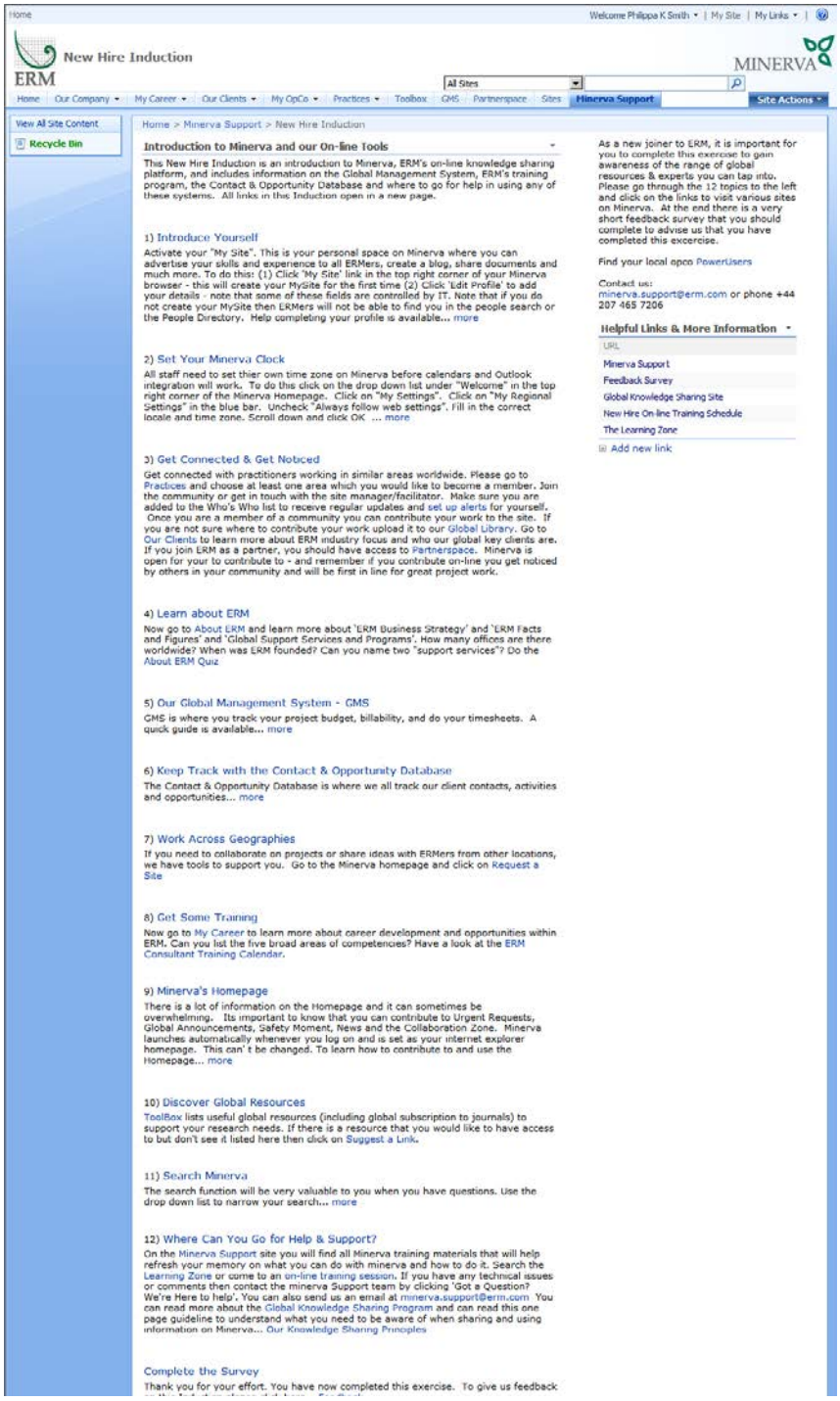
Minerva in Action

The following are examples of Minerva in action. They highlight how the site has been used to engage the staff and enhance the business.

- In July 2008, ERM's people director used a blog and online discussion forum to run a 72-hour marathon dialogue. The dialogue engaged with staff

worldwide, asking them to share their positive and negative views on working for ERM. Their input was used to shape ERM's people strategy.

- Senior partners jointly established an agenda for a two-day strategy meeting using a wiki page. Altogether, 47 partners from more than 40 countries were involved in setting the agenda and contributing their thoughts. Most partners were unfamiliar with Web 2.0, but they found the wiki extremely easy to use once they were shown examples of how others are using it in a business context.
- Minerva videos were launched in May 2007 along with the intranet's introduction. Two video clips on the homepage provided an introduction from the CEO and the global head of information and knowledge. The CEO used the video to officially launch his blog.
- The CEO's blog was launched in May 2007, enabling all employees to have direct conversations with the CEO. No anonymous posting is allowed, and all comments are visible to all users. The team has received positive feedback from consultants who reported that the blog has demonstrated real transparency and helped break down the organization's hierarchical structure.
- In July 2007, ERM launched a campaign to look at how the organization should address climate change. The Minerva team designed a section on the homepage that included a video clip, a blog post from an ERM climate change expert, and a poll to enable all staff to comment and have a genuine discussion with one another and with the senior leaders.
- To select the front cover of ERM's *Annual Report*, the team featured a homepage poll in June 2007 that let employees vote for their favorite photos taken by employees. The winning photo was featured as the front cover of the *Annual Report*.
- To welcome new hires into ERM and encourage them to learn about the company and its structure, culture, and people, Minerva provides an online e-learning site. The site provides new hires with a 10-step guide that goes through the various parts of the system and helps them to understand its features. At the end of the exercise, they must complete a survey to provide their feedback and comments. Once this feedback is registered, it triggers a workflow to the KS team, which follows up the training with more in-depth training and presents the new hire with a welcome gift.
- To help employees find the most relevant information on the homepage, one section is targeted to the user's own particular country. The information in this section is viewable only by staff from that country. Employees in Central Europe, for example, would be the only employees to see the *Central European management system*.



Pictured: A Minerva site that welcomes new hires into ERM and encourages them to learn about the company and its structure, culture, and people. Minerva's online e-learning site gives new hires a 10-step guide that goes through the various parts of the system and helps them understand its features. At the end of the exercise, the new employees fill in a survey to provide their feedback and comments. Once they save the survey, it triggers a workflow to a team member who then follows up the training with more in-depth training and presents the new employees with a welcome gift.

Collaboration

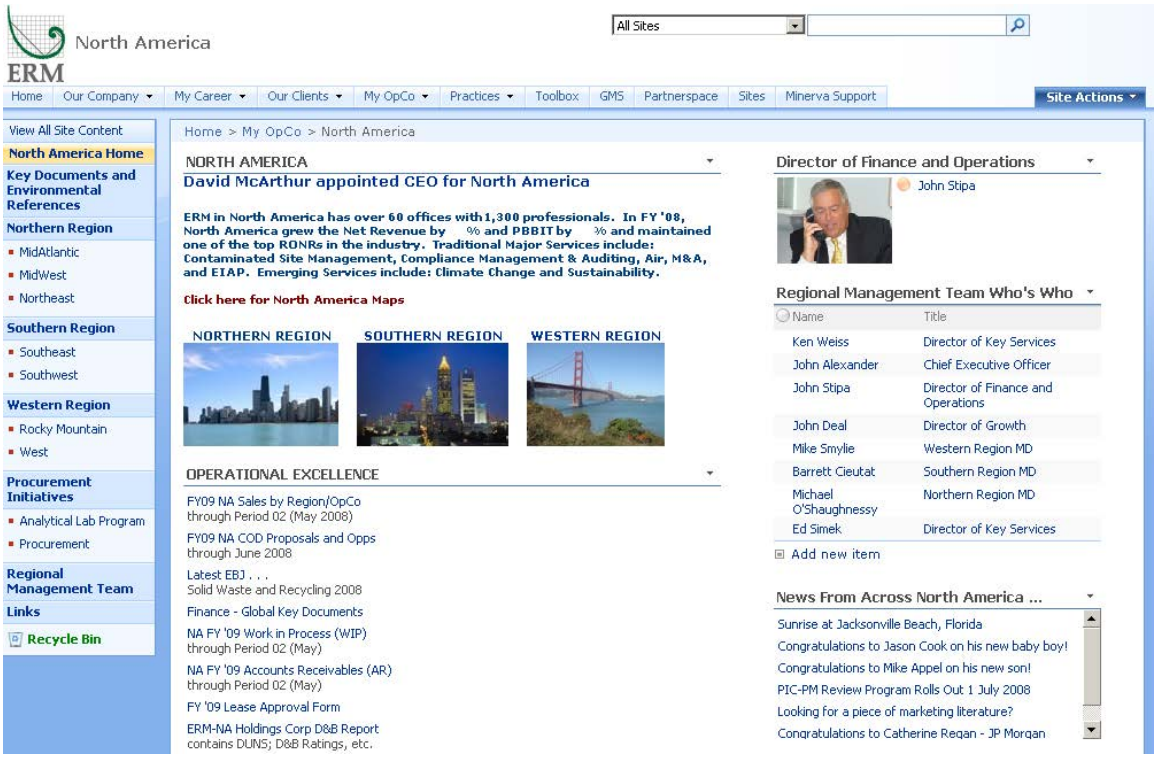
According to Cheuk, a key aim of the intranet is collaboration. "It [the site] is a tool that has been developed to network people within the company and better equip them to do their jobs, manage projects, and deliver the best possible service to our clients."

Achieving this goal involves the use of wikis, discussion groups, community areas, and knowledge bases with which to build up a collective memory/understanding of recurring problems. Many of these features were discussed in the *Features* section above.

"Each practice either has, is developing, or will develop its own site in addition to project sites being developed and utilized as a regular feature of project work," she says, adding that client intelligence sites show teams the work that's being done, which is "useful information that can help us provide a better service."

In addition to collaboration that helps users do their jobs better and easier, other types of collaboration can be just as important for building a sense of community that helps employees feel they are more a part of the organization. On Minerva, those tools include:

> ***Safety Moment*:** This blog is accessible through a link on the homepage and poses questions and possible answers about a specific topic. It focuses on real-life safety incidents, ranging from near-miss situations at natural gas facilities to tips for driving in bad whether and how to check for insects that bite before embarking on certain tasks. The blog features lessons learned and tips on avoiding the target situation, and encourages comments and discussion.
>
> Cheuk says this tool is helping the company build global health and safety awareness, and drives home the company's commitment to providing the highest possible standards of health and safety. This is the site's most successful blog, receiving approximately 2,000 hits every month.
>
> ***Urgent Requests*:** This feature lets all employees immediately post requests to ERM's global community to get urgent help on issues requiring particular expertise, knowledge, or experience. Using discussion thread technology, this feature lets employees easily seek advice/input from colleagues.
>
> Although *Urgent Requests* isn't regulated, Cheuk says its been operating for a year and hasn't been misused—not even once. In addition to providing employees with crucial assistance, the feature has reduced global e-mails by 99%.
>
> When a staff member does use worldwide e-mail instead of the *Urgent Request* feature, the team uses it as an opportunity to educate the person about *Urgent Requests*.
>
> **OpCo Community:** ERM has permanent bases—known as operating companies (OpCos)—in more than 40 different countries. Although many issues are dealt with globally, others require action at a regional level and OpCo communities serve as a central point of contact on which to draw and place this basic information. OpCos include financial, procurement, master service agreements, and reporting information in a clear and easily searchable way. Regional management teams are listed with links to profiles. OpCos also link to informal office sites and display a rollup of their news.



Pictured: The North American operational site's homepage. Operating company (OpCos) sites reflect the geographic and financial reporting structure of the organization. They include financial, procurement, master service agreement, and reporting information in a clear and easily searchable manner. Regional management teams are listed with links to profiles. OpCos link to office sites and also display a rollup of their news.

Knowledge Management

Informed by the Dervin methodology, ERM defines knowledge management as adopting good communications practices, building networks and communities, collaborating, and making global resources visible. Minerva is viewed as ERM's overall knowledge base.

Cheuk explains: "In 2006, ERM's leaders recognized the need to improve the company's global knowledge sharing and collaboration in order to meet a growing demand for both environmental consultancy services and clients' need for more innovative solutions to their problems. ERM also wanted to recruit and retain talented individuals so as to remain competitive. ERM's global knowledge sharing portal, Minerva, was rolled out after a nine-month joint project between the company's IT department and its Global Knowledge Sharing Team. The project ran from September 2006 to 24 May 2007, when Minerva was launched."

Minerva was specifically designed to improve operational excellence and to deliver its knowledge sharing vision. "We want everyone at ERM to be able to quickly tap into one another's expertise, and access relevant information/documents in order to provide the best solution for our clients and to be successful in growing our own careers," says Cheuk.

With about 80% of employees' knowledge stored within their own minds, Cheuk says that ERM recognizes the need for "a system and organization culture which enables

good internal communications and enables ERMers to be easily connected with one another to serve our clients."

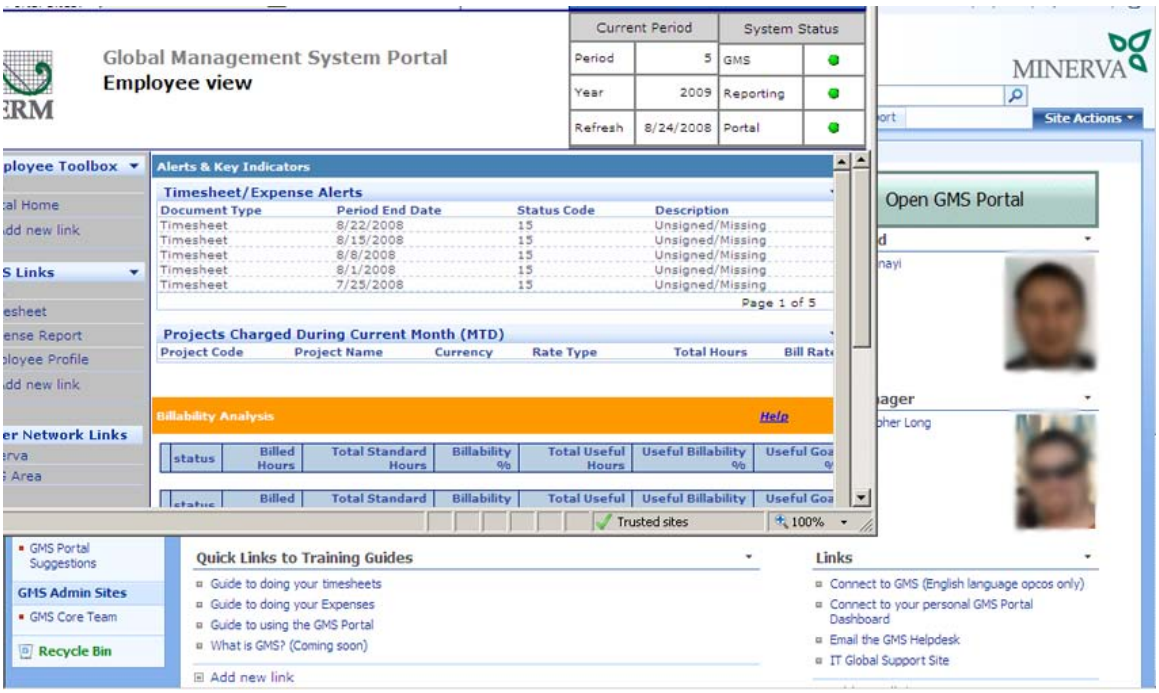
The Minerva team had four of the site's implementation goals printed on a bookmark and distributed them to all ERM staff. The following goals are also illustrated in the cartoon below:

1. To increase the social networking of staff worldwide by linking-up practitioners working in similar areas and to reduce the degree of separation felt by geographically dispersed staff.
2. To leverage on employees' collective knowledge and experience by making resources, tools, methodologies, proposals and documents accessible on a global basis.
3. To improve cross-office collaboration to serve our global clients' needs, including reducing the use of e-mails to support team collaboration.
4. To support internal communications and integrate new hires into the organization by making corporate resources and messages easily accessible.

Data Visualization

Data visualization can be an important tool for conveying information and allowing real-time access to information. ERM created a tool for their Global Management System (GMS). It was introduced to replace a legacy of local systems that were being used around the world. Instead of accessing data through these systems, users now have a single global project and account management system in GMS.

The GMS tool records the company's project work and enables users to pull accounting and billing data. The GMS Portal allows consultants to access real-time project budget and billability information that is directly related to the projects they are involved in. The information changes depending on the latest inputs from the project manager or other team members. It allows consultants a snapshot of what is going on in their projects at any particular time. Users can click on the particular areas to get more detail or to add their own information updates.



Pictured: The Global Management System (GMS) records ERM project work and lets employees pull accounting and billing data. The GMS Portal, accessible through Minerva, lets consultants access real-time project budget and billability information that is directly related to their projects. The information changes depending on the latest inputs from the project manager or other team members. As such, it allows consultants a snapshot of what is going on in their projects at any particular time.

LESSONS LEARNED

Following are some of the lessons learned from the Minerva project.

Bonnie Cheuk, global head of information and knowledge:

- **Planning is critical.** Consult representatives from every part of the business and make sure they contribute to the project. Also, says Cheuk, "information architecture is essential to get right from the start, as it is easier and less costly to make the changes in the planning stages than after implementation. In addition to IA, permission architecture needs to be mapped out, too. Think carefully as to who should have what access to which sites, how this will be applied and managed going forward? Who will control it? Will it be the responsibility of site managers or IT?"
- **Training is essential.** "Look out for those in your organization who are keen and able to get involved. Training needs to be sustainable throughout and they need to understand just how much time and effort will be required from them in being trained."
- **Users must feel a sense of ownership and be inspired to use it.** "Once people start to see the benefits of using it, they will be more likely to come on board, creating a snowball effect in gathering momentum and adding to the number of people both contributing and using it. However, you also need to be able to manage this response in order to prevent a Wild West approach of sites springing up all over the place with little if any guidance and support.

Governance is key to ensure that all sites have an owner and that content is kept up to date. Don't be afraid to close sites. Remember that everything has a lifecycle and communities both rise and fall."

- **Buy-in from senior leaders—leadership 2.0—is vital.** "Without commitment and/or support from the highest levels, others will not be encouraged to see the benefit."
- **Know the limitations of the tools.** "Early adopters of the technology had limited knowledge and understanding of it so that when unexpected bugs occurred there was confusion as to what to do with it, and this put some users off. A lot of time was spent researching and implementing workarounds in addition to educating users about these potential 'glitches.'"

RESULTS / ROI

Connected people is one of the biggest wins for the ERM intranet. "ERM employees have a culture of friendliness and willingness to help one another," says Cheuk, adding that a major problem in the past was that staff members simply didn't know when other employees had problems, and thus couldn't offer help or advice.

With the launch of Minerva, colleagues are much more connected and can readily offer help and advice to one another.

Real World Results

The best way to illustrate the positive effects of deploying an intranet portal such as Minerva is to hear how its features and functionalities have affected the day-to-day work of end users. ERM staff share a few of their experiences with Minerva:

Leveraging ERM's Global Green Building Knowledge

Graham Lane, OpCo head, Japan: "Very recently, I was on the road when a client called me for urgent advice on green buildings. I called my PA to have a look at what was available on Minerva relating to green buildings. Without me having to return to the office, she found information on an excellent page on the *Climate Change* portal, which listed all people who were responsible for green buildings, posted only a week before. That was superb. She was able to e-mail me some PowerPoint slides and a discussion thread. It was easy to find out what was going on and where we were as a company. It provided me with a really good snapshot, with the real benefit that it was totally hot-off-the-press—it was less than a week old, and Minerva gave me instant access to it. Actually, as it turned out, Peter Rawlings' name was listed on the site. I was able to get onto the phone to him this morning to follow up on those ideas and we've come up with a fantastic strategy and hopefully it generates a positive outcome."

Delivering the best solution for our clients using our global network

Steve Chang, partner, Taiwan: "About one month ago, we won a project from the central Environmental Protection Agency (EPA). The project's called DNAPL—a heavy contaminant, we're thinking. We had to give a presentation to the EPA because they have a review and evaluation committee to select the consultant. We showed them Minerva … because the project is for the DNAPL remedial technologies guidelines, we had to prepare that kind of remediation guideline for EPA. EPA will then give that guideline to the local Environment Protection Bureau, and give it to some of the

clients. So that's very important for the consultant to know lots of the information of other countries. We seek advice from the global SIR [Site Investigation and Remediation] network and got some useful responses.

"We also showed our client the SIR portal on Minerva and explained how easy it is to access and gather information from all over the world and get different kinds of remedial technology. It's easy to get this from Minerva, so we introduced that to the EPA. This is the first time we incorporated Minerva into our sales strategy. And it works."

Giving our best expertise and knowledge to our clients

Marco Gallego and Paula Gonzalez, Spain and Portugal (Aug. 2007): "In July, we were asked by an OpCo key client to develop a study on the impact of climate change on biodiversity in Portugal. The project would involve modeling the effects on biodiversity of the foreseen effects of climate change and assessing the economic value of the services ecosystems lost or reduced.

"We posted a question on *Urgent Requests* to seek expert advice. Within a couple of days, we received information about related projects in UK, Australia, the Mid-Atlantic region of the US, and Germany. We actually included some ERMers from UK in the proposal that went to the client.

"Douglas from the China OpCo was at that time speaking with a local client on a similar issue. He also posted a note on *Urgent Requests* and asked Marco and Paula to send him all the information so he could be prepared for the meeting with the potential clients."

Leadership 2.0

Projects often hinge on getting the buy-in of senior managers. As important as it is for end users to buy into a system, they often look to senior leaders and follow their lead. If senior managers use and rely on the intranet, it encourages the rank and file to do so as well. Cheuk wanted to make sure that the managers understood this imperative prior to launching the new site.

So, before Minerva's launch, Cheuk conducted a workshop with the top senior managers. The focus was not merely to train them to use Minerva, but also to discuss the new leadership required to encourage a true embrace of the intranet.

During the workshop, Cheuk offered them two options: (a) you are in it, or (b) you are still in it. The point she was trying to make was that the leaders had to be committed to supporting Minerva and its range of Web 2.0 features. They could not delegate the need for change. That is, they had to change themselves and—most importantly—lead by example and use the tool themselves.

Cheuk shares some of the highlights of the leadership workshop:

Be prepared for the consequences. "Allowing employees to share and communicate openly online comes with its pros and cons, and leaders/managers really need to be prepared for the consequences. On the one hand, it can allow new ideas and lead to innovation. On the other hand, it will surface diverse views, dissent, and challenges—and challenge people in power. Many organizations out there are struggling with the latter and have decided to 'suppress' and/or 'manage' these diverse views and have failed to implement Web 2.0."

Embrace Web 2.0. Cheuk says that to embrace Web 2.0, the organization has to open up communications and promote the following ways of working:

- New ideas/input
- Praise/support
- Innovation
- Engagement
- Dialogue
- Clarification
- Deeper understanding
- New learning
- Multiple perspectives

Be prepared for the challenges. "The organization has to be aware of the challenges that come from an open and transparent communication culture." Cheuk says that keywords that describe those challenges include:

- Diversity
- Challenge
- Dissent
- Sub-groups
- Surprise
- Uncertainty
- Emergence
- Inability to plan too much
- Less control

Be prepared for challenging dialogue. "Since the launch of Minerva, ERM has seen some controversial dialogue in the CEO's blog. Some comments were direct and blunt. Others outlined gaps they see which can hinder company's growth. The negative comments could be hard to hear, especially when they are posed in the public intranet space," says Cheuk, adding that when staff members aren't willing to share their views publicly, they're encouraged to e-mail senior managers directly. "This has also resulted in leaders having to face the questions and find ways to make improvement," she says.

Accept the "inconveniences." "ERM leaders truly believe that in order to grow the business to the next phase, we must connect all the 'brains' within the organization, and use them to serve our clients' needs. It may come with some 'inconvenience,' but the leaders truly believe the benefits can outgrow them. Our leaders are still learning. Most importantly, they are willing to learn. They see this as a way to increase competitive advantage and to allow ERM to deliver world-class solutions to the clients."

Proven Success

According to Cheuk, two months after its launch in May 2007, Minerva had already proven to be a successful global implementation. "All office intranet sites were in full operation," she says. "Staff worldwide has embraced the Web 2.0 features and an increasing number of staff are using the platform to connect with colleagues from other offices to exchange ideas, resources, and advice."

Other success measures include:

- ERM's senior leaders said that "Minerva has finally turned our vision into reality."
- The then-CEO Pete Regan described the launch of Minerva as "hitting the Jackpot."
- In October 2007, Minerva was showcased as a special case study in the *Inside Knowledge* magazine.
- In December 2007, ERM won the *Environmental Business Journal* (EBJ) 2007 Award for Organisational Innovation for its Minerva roll-out.
- As Minerva has matured, it has become a business critical platform.
- In August 2008, ERM was notified that Minerva was selected as one of the year's 10 best intranets in Nielsen Norman Group's *Intranet Design Annual* for 2009.
- ERM was shortlisted for Global Most Admirable Knowledge Enterprise (MAKE) and won the Hong Kong MAKE award.

McKesson Corporation

Using the intranet

As the nation's largest health care services company, McKesson provides pharmaceuticals, medical supplies, and health care information technologies. It is the largest pharmaceutical distributor in North America, distributing one-third of the medicines used in North America and supplying more than 40,000 U.S. health care locations. McKesson is also the nation's leading health care IT company, with software and hardware technology installed in more than 70% of the nation's hospitals that have more than 200 beds. McKesson has 32,000 employees worldwide.

Headquarters: San Francisco, California

Number of employees the intranet supports: Targeted toward 50,000 employees and contractors, the McKesson intranet (McKNet) is used by office workers, technologists, sales people, customer service, distribution, and most business functions throughout 30 business units in the US, Europe, and Canada.

Annual sales: $101.7 Billion (year ended March 31, 2008)

Design team

A core in-house project management and technology team of 15 people managed the launch and implementation of the McKesson Enterprise *Employee Portal*, the first of three releases on the company's Intranet Strategy Roadmap. Stakeholders from over 30 business units and corporate functional departments informed the design. Supplemental strategy, IA, and visual design services were provided by Logical Design Solutions (LDS). Analytics and online metrics services were provided by Peridot LLC.

Members

In house: Tracy Thomsic, director of online marketing; Vaughan Acton, senior director of corporate branding; David Seghers, Internet project manager; Drew Vecchione, Web production specialist; Jacob Covington, Web producer; Elana Keil, content strategist; Julie Person, program manager HR; Mary Jo Borges, McKesson provider technologies (MPT) customer operations sales; Esteban Borrero, VP solutions delivery, corporate IT (CIT); Anand Srinivasan, development manager; Glenn Conrad, support manager; Vijay Desai, director of IT; Stasia Lord, brand manager; Nicole Lee, manager of employee communications; Lisa LaVallee, IT managed services; Kate Rohrbach, (retired) VP corporate communications; Mark Fordyce, manager of applications development, CIT; David Cain, new media project manager, CIT; Jennifer Galloway, Web content strategist, MPT; Terrell Yelverton, Web content strategist, MPT; Erik Sprotte, VP of HR; Charles Fusco, HRIS development manager, CIT; Dennis Brice, director of HRIS, CIT; Susan Slater, VP talent acquisition, HR; Carol Wong, communications coordinator; Pat Moreira, director, employee communications; Nerissa Moore, multimedia specialist; Shyam Dasari, senior software engineer; Eric Deatrick, HRIS analyst; Todd Johnson, quality assurance manager.

Logical Design Solutions:

Dave Stoltzfus, chief operating officer; Susan Willett, senior communications consultant; Millicent Cooley, user experience specialist; Mark Benzkofer, creative consultant; George Armstrong, designer; Oliver Hickman, project manager.

Peridot LLC: Cynthia Kongorski, data analyst.

SUMMARY

An intranet that includes thorough information for 50,000 employees and contractors can get unwieldy pretty fast. And, in the case of the McKesson intranet, this fact was complicated by the potential unruliness of a varied user base. The McKesson Corporation's intranet, McKNet, serves a variety of employee types, including office workers, technologists, sales people, customer service, distribution, and most business functions.

To protect people from the clutter of information they don't need, and to ensure they get the information they do need, designers of this intranet made excellent use of personalization features. A well-planned and updated personalization model makes it easy for all employees at McKesson to find the information that is right for them.

The McKNet homepage provides personalized work-related content and tools, and news and content personalized by business unit/location. Upon logging into McKNet, employees are offered several timesaving, communication-related advantages, including:

- Single sign-on (SSO) to 33 internal applications
- Customized companywide alerts
- Business unit-specific branding and promotions
- Additional personalized content

The byproduct of these advantages is that people get the tools and information that are most important to them. They also protect people from having to deal with information and tools they don't need, which can create additional clutter and possibly overwhelming choices.

In the homepage example below, a user from the McKesson Provider Technologies (MPT) business unit is logged in. One visual indication of this is the text that appears below the McKNet logo in the upper left: *McKesson Provider Technologies.* The user's name appears below this, welcoming him, confirming who is logged in, and offering a link for *Sign Out.*

The main internal news, *Today at McKesson*, *Company News,* appears in the upper-left column. Here, users can read the top news headlines and see the date they were posted. The title links lead to the full stories. Note that each story's date is posted with the title, which helps people ensure that the news is current before they bother clicking it. Also, the month is written in an international format using alpha characters, not numbers, to represent months. For example, July fourth is written as *Jul 04*, instead of what is commonly seen in the US as *07/04* or in Europe as *04/07.* Designers chose to represent dates this way because they know that McKNet is used by office workers, technologists, sales people, customer service, distribution, and most business functions throughout 30 business units in the US, Europe, and Central America. Details like this help to ensure that all employees understand the information. Also, this kind of design helps everyone feel included and respected.

Depending on the user's background, specialized news sections might also appear on the homepage. The example below shows an additional news section for *MPT News*, appearing just below the *Company News* section. These news items are presented in the same format as the company news items, preventing users from having to learn or recall different interfaces.

In another personalized touch, the bottom section of the homepage's left-most column displays the *Inside MPT* section.

To summarize the content area, the three-column format provides news and content personalized by business unit/location on the left side and personalized work-related content and tools in the center. It also supports targeted promotions and sidebars in the right-most column.

10 Best Intranets: McKesson Corporation

Pictured: The Homepage of McKesson Corporation's intranet offers personalized content and links for the logged-in user.

The homepage also offers a *Guest View.* This version is presented to consultants and employees who have not yet signed in. There is still a great amount of information for them to access, but it is missing some of the personalized aspects. Among the elements that are visibly missing in this version are the:

- Branded logo in the upper left of the page
- User name and welcome message in the upper left
- Unit-specific news section beneath the main *Today at* McKesson section in the left-hand column
- Unit-specific information section, *Inside MPT*, at the bottom of the left-hand column

Pictured: The homepage's *Guest View* offers thorough information for guests, including consultants, but doesn't display personalized sections.

Looking beyond the content area and up to the top of the page, people can very easily search for employees or search the intranet. The way the designers have presented this search front-end is very usable. Some designers argue that two open fields take up more space than either a drop-down search scope or radio buttons. And they are right. Some say two fields are unsightly, but beauty is in the eye of the

user. Usability studies show that users more easily find employees search and intranet search when there are two open, well-labeled fields adjacent to each other.

And many intranets like McKNet offer *Express Links* or quick links, which lead to commonly accessed site areas. The user's eye, when looking for search, often goes to any area that looks like a type-in field. While there is text in the *Express Links* area, if not placed near and after the search, the eye might not be drawn to it. But McKNet designers made an astute choice in parking all of these elements near each other, and at the top of the page. This is a very usable intranet search front-end.

Pictured: The employee search and global intranet search functions appear as separate open fields adjacent to each other. This makes them easier to find and decipher, which is also true of the *Express Links* drop-down, which somewhat resembles a type-in field.

The *My* Site feature lets users create their own intranet areas with professional and personal information. Individual profiles offer so much more than the usual flat basics. On McKesson's intranet, people can write about their background as they see fit. More rigorously, they are asked to answer questions about *responsibilities*, *skills*, and *past projects.* This way, other employees can easily find the person with the skills they need. Users can also provide more personal information, such as the schools they attended and their interests.

A mini org chart shows the organization's hierarchy, and the name of the profiled person's assistant is also listed with the contact information.

The right-most column shows any memberships that the user and profiled person share. Below this are the user's own memberships and accessible sites. Users can post documents, photos, and more using the menu on the left-hand side of the page.

A blog at the bottom of the page lets users express their opinions. The option to add blogs, wikis, and RSS feeds on top of the portal helps make it a collective knowledge center.

10 Best Intranets: McKesson Corporation

My Site

Welcome Covington, Jacob D | My Site | My Links |

My Site

This Site: Srinivasan, Anand

View All Site Content
Documents
- Shared Documents

Pictures
- Shared Pictures

Lists
Discussions
Surveys
Sites
- Blog

Srinivasan, Anand

Add to My Colleagues

Alpharetta- Windward

I have been working at McKesson since Dec 2004, and have helped lead, and deliver several enterprise efforts on our Intranet and dotcom environments.

Prior to McKesson, I was with Georgia Pacific in a Portal Project Manager role. I have been in the business and technology consulting area working with Sapient Corporation, and a startup named Armedia. Clients I have worked for include Cingular, Southern Company, Verizon, Williams, Union Gas, Entergy etc.

On the personal front I was born in Bombay, India and moved to the United States in 1995 when I came here for higher education. I moved to Atlanta, GA in 1997 where I have lived ever since. My earlier years were spent between India and Saudi Arabia and boarding school.

I got married in 1999. My wife Kamini, and our children Dhruv and Medhini make up my immediate family.

I believe in having a well balanced life, and hence besides work and studies, I devote time to many extra-curricular activities. I enjoy playing tennis and basketball. I am a lead singer for a music group called Dhwani which plays mostly at fundraisers for charitable organisations.

Details

Responsibilities:	Management of Web Development on McKNet and McKesson.com using Java, Javascript, HTML, Vignette, Vignette CMS, Portal, Collaboration, Database, SQL Server, Business Objects etc.
Skills:	Management, Finance, Leading Teams, Program Management, Project Management, Facilitation, JAVA, Javascript, HTML, Vignette...
Past projects:	McKNet, Vignette CMS, Portal, McKesson.com Redesign, MPT Sales Portal, Streaming Media
Interests:	Leadership, Business Strategy, Technology, Web 2.0, Business Intelligence, Singing, Music, Movies.
Schools:	George Washington University, Georgia State University, University of Bombay, Kodaikanal International School
Birthday:	January 02

Contact Information

Assistant:
Work e-mail:
Mobile phone:

Organization Hierarchy

Srinivasan, Anand, Web Sol Development Manager

Recent Blog Posts

June 27, 2008

Anand's daily musings on Enterprise 2.0

The more I get to know about the capabilities of social networking and social intelligence the more I'm getting hooked on it.

I've been reading up and taking a look at offerings from Microsoft, IBM, BEA, Connect Beam, Google etc. The power to dramatically transform the enterprise and the healthcare industry is mindblowing.

The technologies and capabilities I'm referring to include capabilities for :

- Wikis
- Blogs
- RSS
- Social Tagging
- Communities
- Bookmarks
- Tag Clouds
- Social Search
- Ratings & Reviews
- Web Analytics etc.

Look for more on this over the next few weeks and months.

Posted By Srinivasan, Anand at 6/27/2008 10:18 AM | Permalink | Comments(0)

June 27, 2008

Welcome to your Blog!

To begin using your site, click **Create a Post** under Admin Links to the right.
What is a Blog?

A Blog is a site designed to help you share information. Blogs can be used as news sites, journals, diaries, team sites, and more. It is your place on the World Wide Web.

Blogs are typically displayed in reverse chronological order (newest entries first), and consist of frequent short postings. With this Blog, it is also possible for your site visitors to comment on your postings.

In business, Blogs can be used as a team communication tool. Keep team members in touch by providing a central place for links, relevant news, and even gossip.

Posted By Srinivasan, Anand at 6/27/2008 10:17 AM | Permalink | Comments(0)

Documents

My Site | Universal Inbox | McKesson.com | McKNet - CIT Portal | CIT Portal Project | More

Type	Name	Last Modified	Location	Properties
	MyCommunities	6/27/2008 10:59 AM	Web2.0	
	TagCloud	6/27/2008 10:59 AM	Web2.0	
	AnandPicProfessional	6/27/2008 10:01 AM	Profile Pictures	
	anand_passport_00	6/27/2008 9:55 AM	Profile Pictures	
	AnandPic	6/27/2008 9:54 AM	Profile Pictures	

Colleagues

General

Conrad, Glenn
Johnson, Todd
Schubert, Michael
Dasari, Shyam
Jose, Jubin
Thomsic, Tracy
Desai, Vijay
Pinkston, Doug
Todaboyina, Srinivas

In Common with Covington, Jacob D

Memberships we both share
- #McKesson Corporate Web Team
- McKNet CMS Users
- #DL Corp Deploy OC
- *DL LiveMeeting 2005 users
- Application Support Survey
- *DL All Collaborate Users
- # DL OARS Users
- McKesson Wiki

Memberships

Distribution Lists
- McKesson Web Reports
- *DL ATL All CIT Managers Alpharetta
- McKesson Corporate Web Content Committee
- #IT Corporate Services
- *DL DBQ OPS Flash (DBQ)
- #All CIT Managers
- *DL Collaborate Admins
- *DL LiveMeeting Rollout (CIT)
- *DL ATL All CIT Alpharetta
- *DL DBQ Patch Notification

Show 12 additional memberships

SharePoint Sites
- Universal Inbox
- McKesson.com
- CIT Portal Project
- McKNet - CIT Portal
- Web Solutions Internal
- My Expense View Project
- Web Solutions
- HR Portal

Links

General
- WS Development
- WSDev_TeamCalendar

Pictured: An individual's profile includes personal information, blog entries, and documents.

McKNet's information and pages are of course only as good as the navigation that gets users to them. This intranet's ever-present global navigation is straightforward and presented as understandable, selectable tabs. These tabs lead to tools, information, and personalized sections of McKNet. Once a tab is clicked, the selected area is highlighted and the left-side context menu for that section appears.

The top-level category tabs include: *Inside McKesson*, *My Work*, *Today@McKesson*, *Services Center*, and *My Life & Career.*

The *Inside McKesson* area gives a great deal of information about the organization, and in doing so supports a unified company culture. The *Inside McKesson* information includes a corporate overview, history, policies, the org chart, brand information, the executive team, strategy, and links to information about specific business units.

The writing on the pages is thoughtful and thorough. And, the editors endeavored to create text in sections instead of in off-putting walls. For example, the page depicted below shows sections and headlines within the text. Phrases such as *Customer Challenges*, *McKesson's Role*, and *What's Next* help users to find the section they want more easily. Subheads and bullets also help people readily read and retain important messages. And, instead of leaving employees to fend for themselves for more information, the *Learn More* section to the right of articles offers links to related content.

10 Best Intranets: McKesson Corporation

McKNet

Employee Search Advanced Search Go

Search McKNet Advanced Search Go

Express Links

Select a resource.....

Welcome, Kathy White [Sign Out]

July 11, 2008

Home | Inside McKesson | My Work | My Team | Today @ McKesson | Services Center | My Life & Career

- Inside McKesson
- Company Overview
- Meet the Executive Team
- Our Role in Healthcare
- Our Strategy
- Our Customers
  - The Hospital
  - The Payor
  - The Pharmacy
  - The Physician
- Our Impact
- Trophy Case
- Our History
- Brand Identity
- Org Chart
- Business Unit Links
- Corporate Departments
- Privacy Office
- McKesson Corporate Policies
- Six Sigma
- ICARE

key customer segments...

4 THE PHYSICIAN

Watch Video

View Demo

Over half a million office-based physicians practice in the United States today, and more than one-third of them use a McKesson product or service for supplies, technology or specialty drugs. McKesson is positioned to be the physician's source for a comprehensive offering of products, solutions and services that improve practice performance, providing more time to deliver care.

More than 1/3 of all physicians in the U.S. rely on a McKesson solution.

Customer Challenges

In addition to their primary role of providing care, many private practice physicians are essentially running small businesses. They constantly seek ways to improve patient care while looking for solutions to increase productivity and ease their financial pressures.

- Physicians struggle to find the time to focus on medicine and their patients. Valuable time that could be devoted to patients is spent on managing their practices.
- The reimbursement environment has threatened physicians' ability to generate revenue. They must find more efficient ways to document care, prepare and submit insurance claims, and actually collect payments with office staff that is often limited and inexperienced.
- Physicians rely heavily on other clinicians and hospitals for new patient referrals. They need ways to connect their practice with others: physicians, hospitals, payors, and their patients.

McKesson's Role

We help physicians run successful practices by helping to solve their clinical, operational and financial challenges. McKesson provides physicians with more products, services, and resources than any other company in healthcare – including medical supplies and equipment, pharmaceuticals and specialty pharmaceuticals, EMR and practice management software, outsourced or in-house billing systems and Internet connectivity.

Our solutions:

- **Improve patient care.** Our technology helps physicians easily access patient records, order tests and prescriptions, view lab results, and check drug and allergy information – all essential to patient care. We provide physicians with the clinical information, decision support and an electronic view of patient medical records necessary for quality care. Physicians may access up-to-date information from any point in the healthcare system, which is particularly helpful to specialists who see patients in both hospital and office settings.
- **Efficiently manage the practice and bottom line.** Every minute and every penny counts in the successful management of a physician practice. We help physicians run the day-to-day business with systems that include software for appointment scheduling, patient registration, and medical billing. We improve billing and collections processes to ensure physicians receive complete payments from insurance companies, Medicare and patients. McKesson's comprehensive offering helps physicians enhance performance and productivity, improve quality, reduce costs, and speed reimbursements, so they can spend more time delivering care.
- **Connect physicians to the healthcare system.** Physicians cannot work successfully work in isolation. We provide ways for physicians to connect securely with others in the healthcare system for both clinical and financial purposes. Our solutions allow physicians to communicate with hospitals and other physicians for things like patient referrals; with payors to process insurance claims and verify insurance eligibility, address and credit information; and directly with their patients.
- **Ensure safe and timely delivery of medications and supplies.** We provide vital supplies to maintain physician offices, including medical supplies, pharmaceuticals, and equipment. We are also the leading distributor of specialty drugs — medications for chronic illnesses such as cancer, asthma and diabetes — that must be administered in the physician office.

Learn More:

Ken Tarkoff on the future of online doctor-patient communication

Mark Boyar: Promoting the Paperless Physician Office

Taking Off: Airport Clinic Raises McKesson's Visibility

Detailed information on McKesson.com about our physician solutions

How McKesson helps clinicians provide higher quality care

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Pictured: A sample content page shows headlines, chunks of text, call-outs, related graphics, video, demos, and *Learn More* links, engaging readers on many levels.

The tab to the right of *Inside McKesson* is *My Work*. This section is specifically related to the user's job and provides tools and resources to support the employee. This section helps eliminate the many e-mails that teams previously sent around and that inevitably seemed to get lost or misfiled. Having these personalized tools and information helps all employees, from the sales person to the HR representative. For example, a sales manager is presented with sales reports, commission statistics, forecasts, team opportunities, and marketing materials. Updates are available in one place, ensuring that employees access the most accurate and up-to-date resources.

The main navigation in this section links to *My Success*, *Product Central*, *Events*, *Sales Education*, *Marketing*, *Message Center*, *Forms and References*, *Sales Process*, *Sales Support*, and *My Reports.*

McKNet
McKesson Provider Technologies

Employee Search | Advanced Search | Go
Search McKNet | Advanced Search | Go
Express Links
Select a resource.....

Welcome, Terrell Yelverton [Sign Out]
November 24, 2008

Home | Inside McKesson | MyWork | Today @ McKesson | Services Center | My Life & Career
MPT SiteMap

Make the Most of My Work

Find the resources and information you need to help you succeed in your Sales work.

- My Sales Portal Feedback
- What's **NEW** on the Sales Portal?
- **Who To Call** (Includes Services Contacts)
- 2008 Mid-Year Sales Meeting Presentations

Sales Tools

- My Expenses (SAP)
- My Travel (2FlyMcK)
- Quote Requests (QRA)
- Reporting (Business Objects)
- Sales Force Automation (Siebel)
- Sales Analytics

Related Resources

- Collaterals Catalog
- **NEW** - McKesson Video Showcase
- FY09 Compensation Plan
- Inside Healthcare Computing Archives
- Intralink
- McKesson Customer Portal
- One McKesson
- Performance Strategies
- Presentation Library
- Sales Executive Council
- Video Testimonials Library

My Favorites

There are no saved sites

Customize >

Groups & Departments

- McKesson's Executive Team
- McKesson Capital Org Chart
- McKesson Corporate Org Chart
- **NEW!** - McKesson Automation (MAI) Who To Call
- MPT Sales & Marketing Org Charts & Territory Maps
- Product Marketing
- Account Primary List - Client Executives

My Work

My Success | My Reports | Product Central | Events
Sales Education | Marketing | Message Center
Forms and References | Sales Process | Sales Support

My Sales Reports

My Current QTR Forecast | My Current FY Forecast

My Current Qtr Forecast

Forecasted and Non-Forecasted Active Opty Revenue and Closed Won Quotes quarter.
Report run time: 11/24/2008 9:12:33 AM Eastern

Source - Sales Analytics

Forecast	Calculated Forecast	Total SW	Total SVC	Total MY	Total HW	Total MNT
	Close and Won	$0	$100,000	$17,988,780	$0	$0
	Stretch	$483,635	$412,562	$0	$75,849	$217,404
Y Total		$1,108,659	$842,862	$17,988,780	$362,100	$342,428
N	Outside the Forecast	$0	$0	$109,800	$0	$0
N Total		$0	$0	$109,800	$0	$0
Grand Total		$1,108,659	$842,862	[illegible],580	$362,100	$342,428

Results

Note: This report includes only MPT and Automated pro

Refresh - Print

Additional Reports

- My Application Inventory Reports (Business Objects)
- My Opportunities (Siebel)
- My Commission Statement (Business Objects)
- My Forecast/Funnel Report (Business Objects)

Events Messages

- 'Power to Get Reimbursed Quickly' Theme of National Emergency Medicine Show *Oct 27*
- Discover How to Get Patients to Pay Bills with Patient Compass *Oct 27*
- Clinical Procedure Resource Solutions to be Showcased at MTORS Conference *Oct 27*

Archive >

Sales Process

Select a funnel stage in order to review how that part of the sales process works and to find the tools you need to complete that stage successfully.

Plan Territory | Generate Opportunity | Gain Sponsorship | Assess Opportunity | Confirm Solution | Close Opportunity | Expand Account

Sales Process >

National Sales Messages

- News for Your C-Suite! *Performance Strategies* E-Mailed November 24 *Nov 24*
- Horizon Practice Plus Customer Featured In Journal Cover Story *Nov 21*
- Customer Operations Sales Personnel Can Now Sign MIG Agreements *Nov 18*

Archive >

West Region Sales Messages

- The Source - 11/20/08 *Nov 20*
- December Forecast Deadlines *Nov 20*
- McKesson Partners with Strategic Healthcare Programs to Help Hospice Agencies *Oct 17*

Find more Regional Messages by going to the Message Center.

For the latest news and events for your region please go to your **West Regional Marketing** page.

McKESSON my SALES PORTAL

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Pictured: An example page for a sales manager in the central region. Notice the sales messages based on location and HR tasks, such as *HR for My Team* in the upper right, related to managing a team.

10 Best Intranets: McKesson Corporation

One of many topics that sales people might learn or be reminded of is how McKesson's sales process works. A link on the section's main page leads to a more descriptive page, with information depicted in text and graphics. Elements of the charts and graphics are clickable links that let users drill down to more information.

10 Best Intranets: McKesson Corporation

Pictured: This page helps the sales force understand and access the tools needed for each of the steps in the sales process. Each step is clickable, with tasks, information, and links to tools highlighted.

10 Best Intranets: McKesson Corporation

McKNet
McKesson Provider Technologies

Employee Search Advanced Search Go
Search McKNet Advanced Search Go
Express Links
Select a resource.....

Welcome, Terrell Yelverton [Sign Out]
November 24, 2008

Home | Inside McKesson | MyWork | Today @ McKesson | Services Center | My Life & Career
MPT SiteMap

Make the Most of My Work

Find the resources and information you need to help you succeed in your Sales work.

- My Sales Portal Feedback
- What's NEW on the Sales Portal?
- Who To Call (Includes Services Contacts)
- 2008 Mid-Year Sales Meeting Presentations

Sales Tools

- My Expenses (SAP)
- My Travel (2FlyMcK)
- Quote Requests (QRA)
- Reporting (Business Objects)
- Sales Force Automation (Siebel)
- Sales Analytics

Related Resources

- Collaterals Catalog
- NEW - McKesson Video Showcase
- FY09 Compensation Plan
- Inside Healthcare Computing Archives
- Intralink
- McKesson Customer Portal
- One McKesson
- Performance Strategies
- Presentation Library
- Sales Executive Council
- Video Testimonials Library

My Favorites

There are no saved sites

Customize >

Groups & Departments

- McKesson's Executive Team
- McKesson Capital Org Chart
- McKesson Corporate Org Chart
- NEW! - McKesson Automation (MAI) Who To Call
- MPT Sales & Marketing Org Charts & Territory Maps
- Product Marketing
- Account Primary List - Client Executives

My Work

My Success | My Reports | Product Central | Events
Sales Education | Marketing | Message Center
Forms and References | Sales Process | Sales Support

My Sales Reports

My Current QTR Forecast | My Current FY Forecast

My Current Qtr Forecast

Forecasted and Non-Forecasted Active Opty Revenue and Closed Won Quotes quarter.
Report run time: 11/24/2008 9:12:33 AM Eastern

Source - Sales Analytics

Forecast	Calculated Forecast	Total SW	Total SVC	Total MY	Total HW	Total MNT
	Close and Won	$0	$100,000	$17,988,780	$0	$0
	Stretch	$483,635	$412,562	$0	$75,849	$217,404
Y Total		$1,108,659	$842,862	$17,988,780	$362,100	$342,428
N	Outside the Forecast	$0	$0	$109,800	$0	$0
N Total		$0	$0	$109,800	$0	$0
Grand Total		$1,108,659	$842,862	[illegible]	$362,100	$342,428

Note: This report includes only MPT and Automated pro

Refresh - Print

Additional Reports

- My Application Inventory Reports (Business Objects)
- My Opportunities (Siebel)
- My Commission Statement (Business Objects)
- My Forecast/Funnel Report (Business Objects)

Events Messages

- 'Power to Get Reimbursed Quickly' Theme of National Emergency Medicine Show Oct 27
- Discover How to Get Patients to Pay Bills with Patient Compass Oct 27
- Clinical Procedure Resource Solutions to be Showcased at MTORS Conference Oct 27

Archive >

Sales Process

Select a funnel stage in order to review how that part of the sales process works and to find the tools you need to complete that stage successfully.

Plan Territory | Generate Opportunity | Gain Sponsorship | Assess Opportunity | Confirm Solution | Close Opportunity | Expand Account

Sales Process >

National Sales Messages

- News for Your C-Suite! *Performance Strategies* E-Mailed November 24 Nov 24
- Horizon Practice Plus Customer Featured In Journal Cover Story Nov 21
- Customer Operations Sales Personnel Can Now Sign MIG Agreements Nov 18

Archive >

West Region Sales Messages

- The Source - 11/20/08 Nov 20
- December Forecast Deadlines Nov 20
- McKesson Partners with Strategic Healthcare Programs to Help Hospice Agencies Oct 17

Find more Regional Messages by going to the Message Center.

For the latest news and events for your region please go to your West Regional Marketing page.

McKESSON my SALES PORTAL

Policies | Contact Us | Guidelines | Disclaimer

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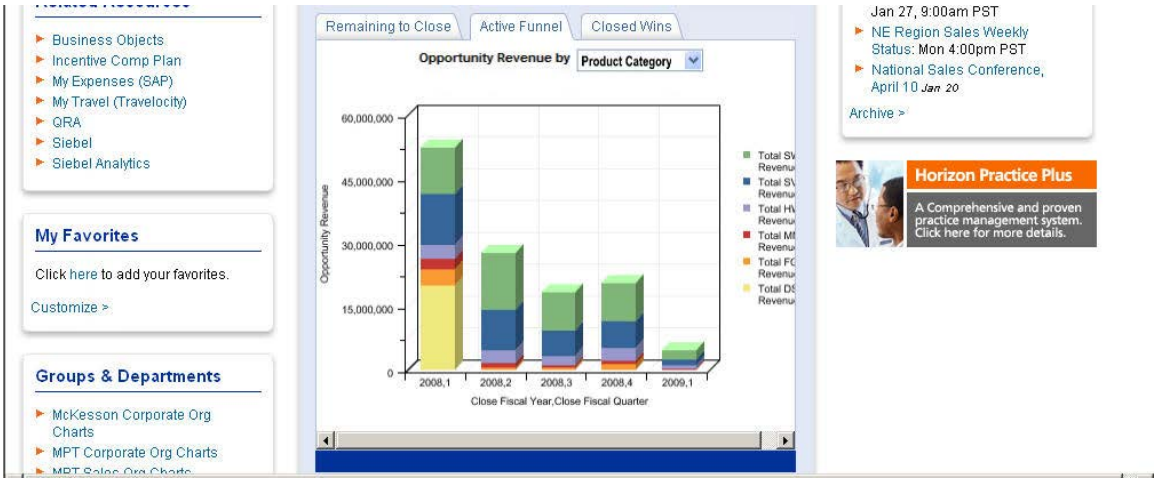
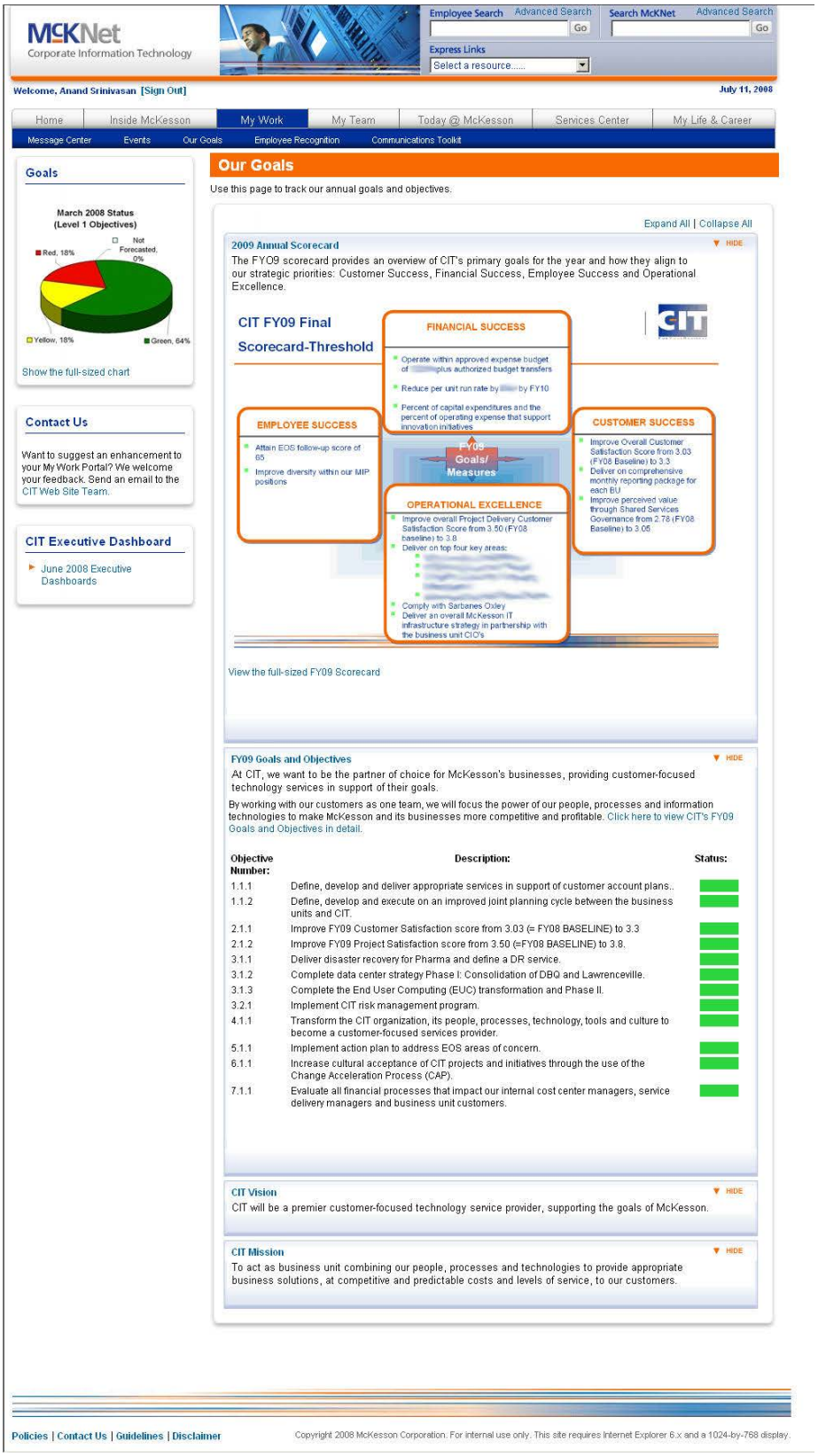
Pictured: An example of an application integrated directly into the portal interface. MPT sales personnel can view personalized sales reports—pulled dynamically from McKesson's CRM application—directly in the portal. Sales people can also access their e-mail in the portal to look up contacts and send e-mail.

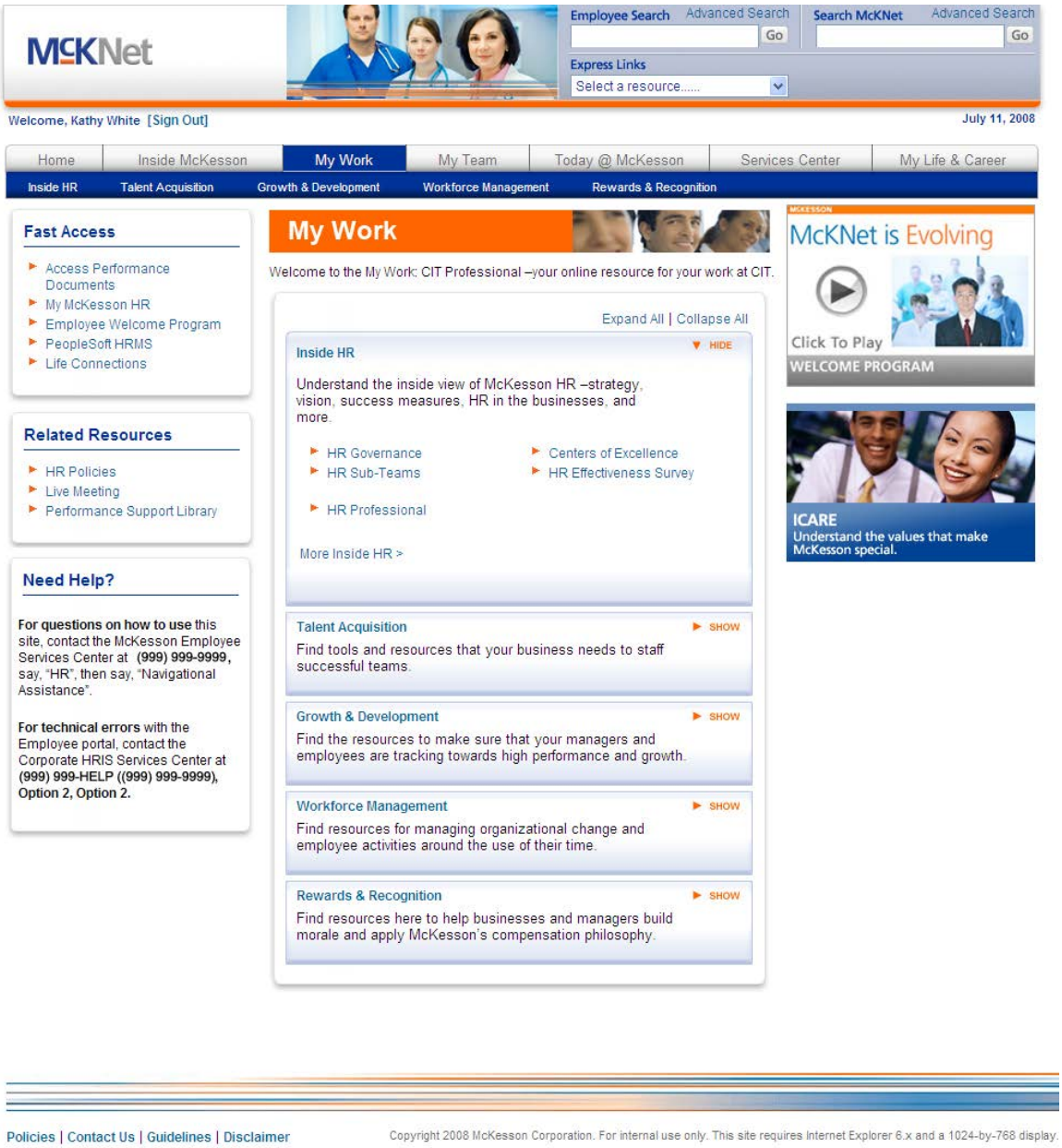


Pictured: This view of application integration shows further functionality available to MPT sales personnel: the integrated portal application's reporting capabilities pull the active sales status from the CRM and display dynamic charts for the user.

Another example of the *My Work* section's role-based personalized is depicted below for a person in the Central IT group. In this case, the user selected the *Goals* section, and is presented with text and charts summarizing the group's goals and how far group members have progressed toward meeting them. Each objective is numbered and summarized, and the status is kept up-to-date.



Pictured: A customized page based for the Central IT functional group displays the group goals and charts measuring success.



Pictured: The HR function's *My Work* page features customized information and links to the tools and resources needed for these professionals to perform their jobs.

Clicking the *Events* menu on the left brings the employee to the calendar of sales-related events—yet another personalized function on the McKesson intranet. In the example below, an employee in the MPT business unit filters information in the personalized calendar based criteria including date, *Event Type*, *Sales Role*, and *Sales Region. Events Messages* and *Related Resources* actually help employees make arrangements to attend events.

Pictured: Users can filter their personalized calendars based on date, type of event, sales role, and region.

The fourth tab in McKNet's global navigation is *Today@McKesson*, which houses news, personalized to function and location, and corporate-wide topics. Users can do a keyword search of news or sort news items by date, drilling down from the year level.

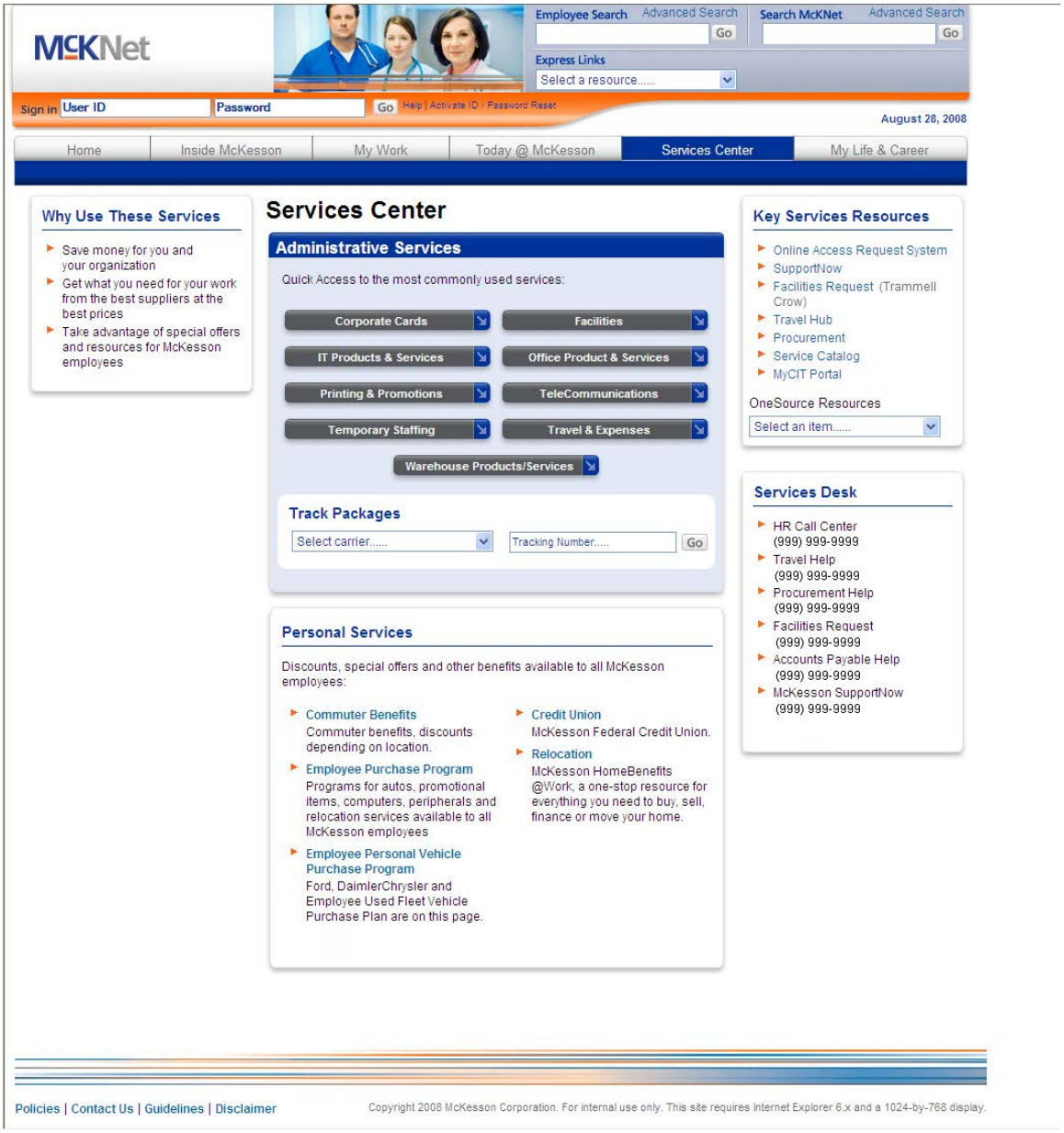
This news center ensures that employees are knowledgeable about the overall business and feel connected to their specific business unit. They can also choose from the new categories listed in the left-side navigation, such as *Company News*, *MPT News*, *Around McKesson*, and *In the Know*.

The news items themselves are to the point, giving users information quickly to maintain their interest. Supporting images, like the one below showing the McKesson employees ringing the opening bell on the NYSE, are fun for employees to see.

Pictured: *Corporate News* and news personalized by function can be found in the intranet's *Today*@McKesson section. Users can sort and search for news articles, which often include interesting images to support the text.

The fifth tab in the global navigation, *Services Center*, is the place to go for common employee service resources and applications. Users can make requests related to facilities, procurement, printing, IT, and travel, among other things. Necessary support contact phone numbers are readily available. The section also offers access to special deals, perks, and offerings for McKesson employees.

Like the other areas on McKNet, this area is also personalized—in this case, by location, which makes sense.

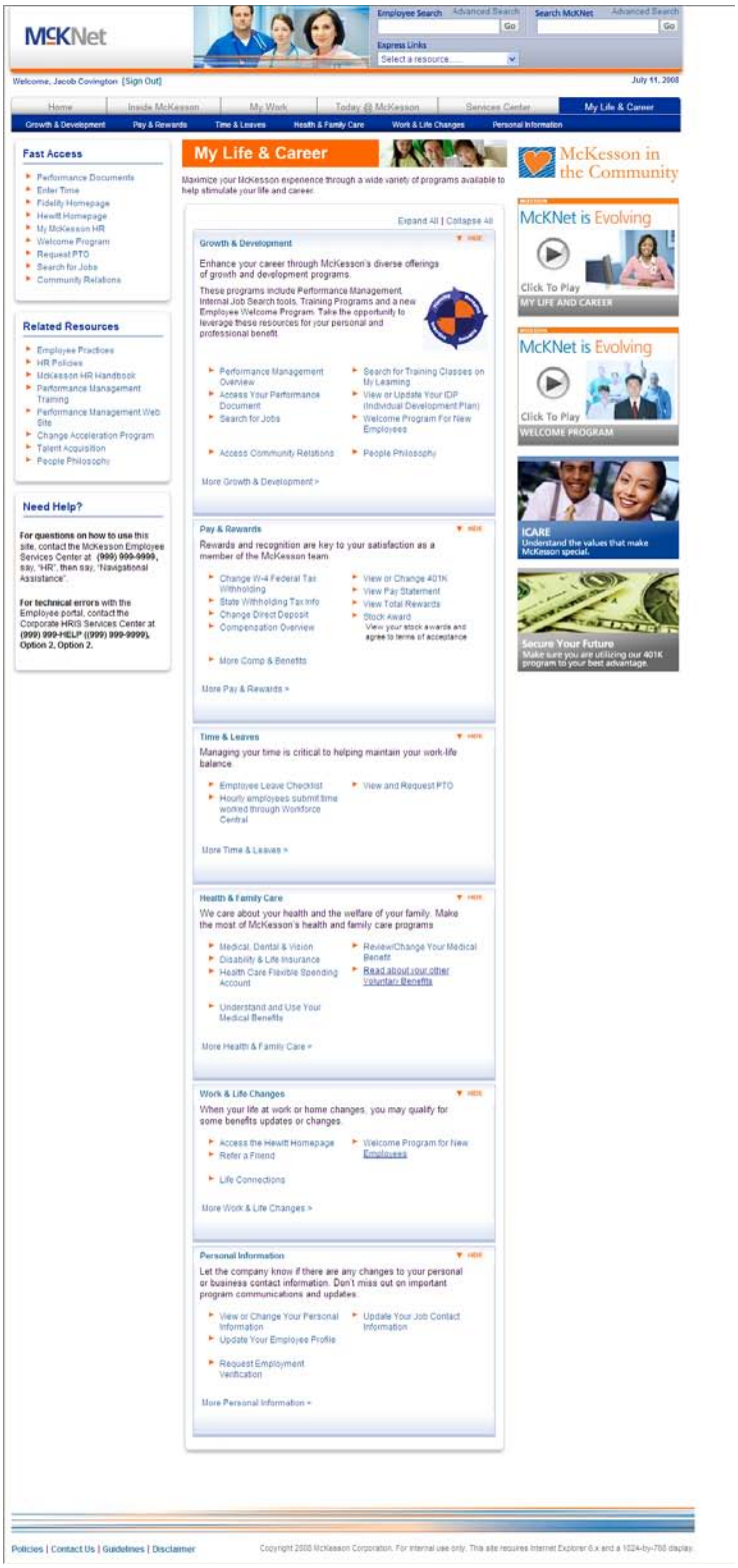


Pictured: The *Services Center* consolidates all common employee service resources and applications.

The sixth and final global navigation tab, *My Life & Career*, has an eye on management and HR functions. The main page for all employees consolidates all the essential functions employees need to manage their work and personal matters.

This page also makes good use of the expand/collapse functionality to enable employees to easily view and access all these functions in an organized and efficient way.

10 Best Intranets: McKesson Corporation



Pictured: The *My Life and Career* page consolidates all essential functions that employees need to manage their work and personal matters. This page also makes good use of the expand/collapse functionality to enable employees to easily view and access all of these functions in an organized and efficient way.

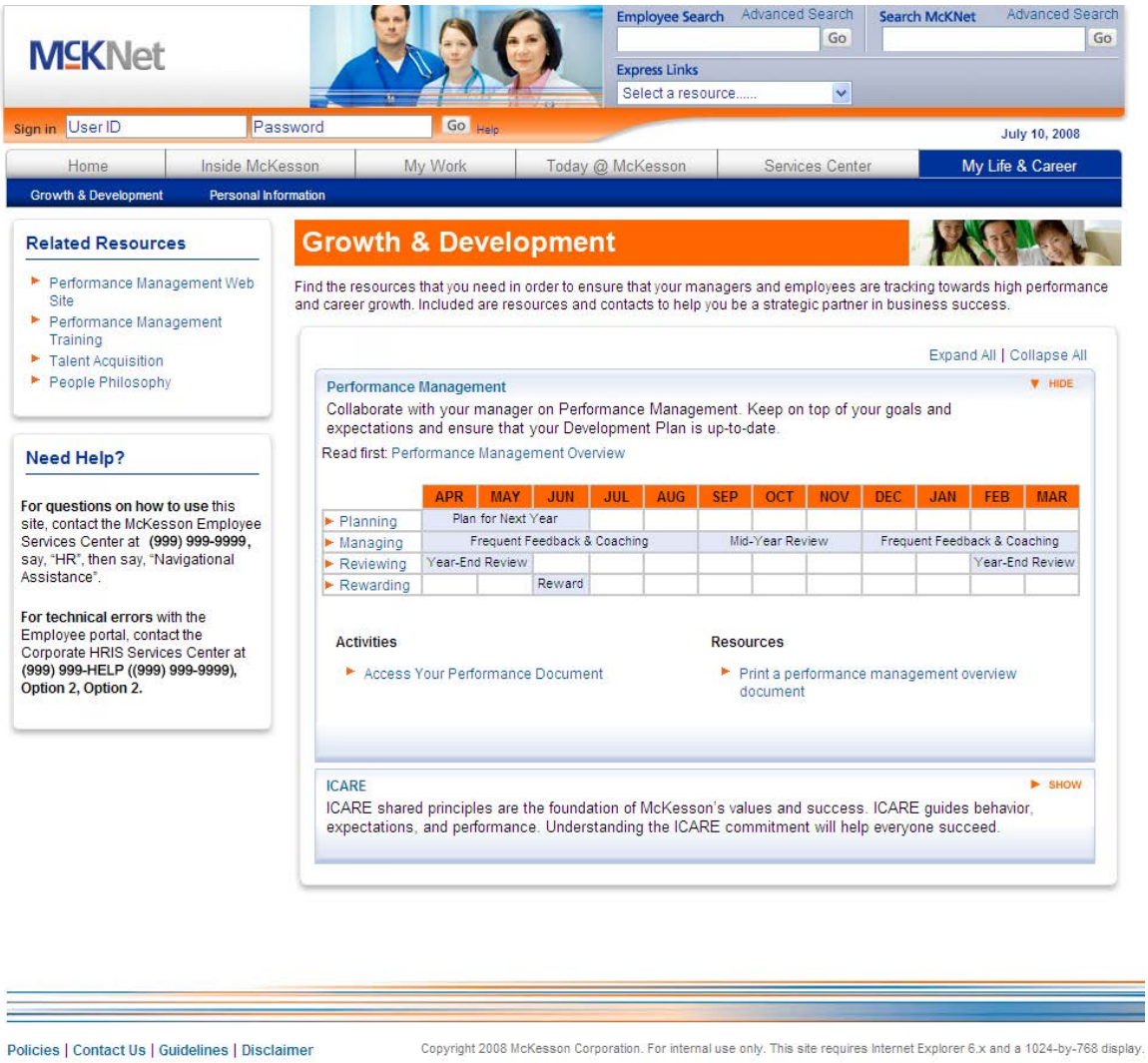
Like all of the other areas on McKnet, the *My Life & Career* area is individually personalized. Information presented here is based on the user's personal data and role, such as leader, manager, or employee.

Tools and information for performance management and hiring are a few of the HR-related areas consolidated in this central location.

One section specifically offers information and help for new employees so they can get started and feel comfortable and confident as quickly as possible.

Knowing that new processes can trip up any employee, another section is dedicated to explaining information related to all new processes. This area also helps guide employees through complex tasks.

An example page for HR professionals shows a process-flow of the performance management tool. Users can choose to *Show* and *Hide* page components (or expand/collapse all) to make the information on the page more manageable as they work through it.



Pictured: An example page for HR professionals shows a process-flow performance management tool. The *My Life & Career* area of the McKesson intranet is individually personalized, delivering information based on role (such as leader, manager, or employee) and personal data.

10 Best Intranets: McKesson Corporation

McKesson's intranet designers said that one of their goals was to "connect McKesson employees to essential resources that help them improve productivity." While no easy job, this was certainly done, about tenfold. Among other achievements, this intranet supports a truly inspiring amount of flawlessly implemented personalization features. In fact, it is so seamless that the intranet's users probably have no idea of the extent of work behind this personalization. Instead, each employee probably thinks that McKNet was created especially for him or her. And, in some ways, it was.

BACKGROUND

In the Beginning

In 2005, McKNet comprised over 100 different loosely connected internal websites and applications. A slide called the "many faces of McKNet" (shown below) features a collage of homepages for these sites. This slide became famous at the company for serving as an illustration of the confusing intranet environment and lack of visual identity that was McKNet in 2005.

These myriad sites existed on servers separate from the corporate intranet, and were displayed as links off of the McKNet homepage and secondary navigation pages. The user experience was further eroded by the cumbersome access the site provided to mission critical applications. The links offered access to more than 40 different applications, but each required a separate login. Those applications included PeopleSoft/Oracle HR, SAP (enterprise finance and supply chain systems), and business unit intranets. Content on these sites was maintained by business unit owners or corporate staff, with little or no coordination or established standards.

Pictured: "The Many Faces of McKNet" slide shows a collage of the homepages of the various sites that were loosely connected to form the original McKesson corporate intranet in 2005.

"The old intranet had a poor employee search experience where search results were inaccurate," says Tracy Thomsic, director of online marketing, adding that "results could include employees who had not worked for the company for several years."

There were no standards in place for visual design, content, navigation, or making improvements to McKNet. "Consequently, many employees found McKNet impossible to navigate, search results were inadequate, and the login experience and multiple passwords required for core functions resulted in untold hours of lost productivity and frustration," says Thomsic. "Another problem with the proliferation of many 'faces of McKNet' was the erosion of brand equity."

McKesson's Corporate Communications team and Corporate IT groups worked together to build a strategic plan to redesign McKNet and launch an enterprise employee portal. The initial team consisted of only four people—two in IT, and two in Corporate Communications—who were tasked with migrating the technology platform and building a business case for the redesign.

Starting Over

The business case to redesign the intranet and launch an enterprise-wide portal was based on six key findings:

- There had been no significant investment in McKNet since 1998.
- The site was difficult to navigate.
- There was a lack of standards.
- The site had no user/role authentication.
- It offered limited self-service.
- There were duplicated costs and processes across the organization.

These findings resulted from interviews with employees and executives from 35 groups across the company. These interviews further revealed that

- McKNet was the one tool at McKesson that spanned all organizations across the enterprise, and
- McKNet was dramatically under-utilized.

The solution the team proposed was to re-launch McKNet as an enterprise employee portal and integrate McKesson's many intranets into one platform over a three-year period. They determined that an interdisciplinary team, consisting of stakeholders from Corporate IT, Corporate Communications, and HR would govern the project. They also agreed on a strategic vision, mission, and objectives to gain support and funding for the project, and to guide its development.

Developing a Strategic Vision

According to Thomsic, "executives felt that if the employee portal's user experience improved, user adoption would increase. Also, if enterprise systems such as HR and finance were better integrated with McKNet, then the promise of self-service functionality could be realized."

Achieving that vision would require a solid plan that included achievable steps guided by a global strategy. To that end, the McKesson team developed a vision statement for the site: "to become a centralized, personalized entry point where all employees go to get work done and learn about McKesson." In achieving that vision, the site will:

- provide access to resources and enable collaboration to support specific job functions;

- help streamline administrative and managerial tasks that are not specific to job function; and
- be an integrated communications platform that helps McKesson promote a unified culture.

Supporting Business Objectives

The intranet's mission is to connect McKesson employees to essential resources that help them improve productivity, increase business literacy, and reduce costs by automating business processes, supporting mobility, and enhancing collaboration.

The following strategic business drivers inform this mission and will guide future releases as the site evolves.

- **A nimble and adaptive workforce.** McKesson requires a flexible and highly adaptive workforce to be a leader in healthcare evolution.
- **Top talent.** One of the most important company objectives is acquiring, developing, and retaining top talent.
- **Shared services.** Centralized corporate shared services help manage costs, drive efficiency, and improve consistency of services.
- **Unified culture.** Success depends on McKesson's ability to build a unified culture while preserving business unit autonomy. This will:
  - support engagement among employees, and
  - create alignment among the business units.
- **Business literacy.** Develop business literacy among the entire organizational community and thereby empower business units.

The company believed that the new intranet could help them score wins on these critical components. So, a new plan for governance was proposed that established an executive steering committee—with the chief information officer as executive sponsor—and an advisory council that included rotating members from McKesson's business units and corporate departments. Project benefits and risks of inaction were developed through consensus and subsequently communicated and socialized across the organization to obtain funding and project support. They are outlined as follows.

Project Benefits

- **Lower design costs** by implementing predictable cost model for portal development.
- **Reduce cycle times** for new project design and implementation.
- **Improve quality and predictability** of portal development projects.
- **Gain economies of scale** with established service levels and project key performance indicators (KPIs).
- **Leverage investments** in enabling technologies and workflow automation; standardize, re-engineer, and consolidate transactional work.
- **Increase adoption and heighten business literacy** through a unified, leading content strategy that keeps the portal relevant, consistent, and valuable.
- **Improve productivity and save time/costs** via user-centric design and functionality, rather than system- or organization-centric design.
- **Improve knowledge transfer and collaboration** across the enterprise.
- **Eliminate departmental silos** by reinforcing "One McKesson" initiative and culture.

Risks of Inaction

- **Inconsistent messaging** and **inaccurate content** across the organization.
- **Fractured, inconsistent intranet UX** that's **frustrating** to use and more **costly** to maintain.
- **Stunted intranet development** for lack of resources, slowing down projects.
- **Compromised quality** of intranet content and applications due to lack of UX and content expertise.
- **Poor utility** that decreases productivity and wastes employee time, **reducing ROI.**
- **Decreased credibility** that compromises perceived relevance and effectiveness of corporate HR, IT, and communications, encouraging business units and functional groups to pursue their own visions for intranet content and UX.
- **Increased cost** due to duplicated content development and publishing, piecemeal vendor management, and inconsistent UX.
- **Ineffective governance** leading to **development of redundant/conflicting applications, systems, and processes.**
- **Devolution** of the intranet into an increasingly disparate **hodgepodge of fractured sites** with no unifying UX or message.

The governance team also identified a number of critical success factors that would serve as tactical objectives for the new intranet.

Critical Success Factors

- Design and launch a user-centric, modular, and scalable portal
- Keep content up to date
- Improve user experience and navigation
- Provide intelligent search capability
- Reduce communications push; increase pull
- Target (personalize) content
- Streamline communication sources
- Reduce number of log-on prompts
- Involve active user representation and gain commitment from core businesses to enhance system acceptance, usability, and adoption

From Idea to Execution

Moving from dozens of loosely connected sites to a unified enterprise employee portal is a multi-step and multi-year process. The McKesson intranet project took nearly three years from inception to realization and played out as follows.

2005

The decision to redesign McKesson's employee portal was approved in late 2005 and funding was released in early 2006. Prior to redesigning the site, McKesson made some major technology infrastructure changes, including migration from the corporation's legacy CMS (Rhythmyx, used primarily by corporate communications)

and free-form HTML sites (used by many departmental sites) to Vignette CMS and Portal, as well as implementation of the Google Search Appliance.

2006

In April 2006, work on the redesign began in earnest, with the help of design agency, Logical Design Solutions (LDS). The project began with an initial strategic review of business requirements. The team interviewed 33 stakeholders in a variety of functional groups and at various levels (executives, managers, and staff) to get a balanced view of user requirements. A new IA and visual design for the employee portal was created, based upon feedback gathered in this initial study.

2007

In May 2007, the McKesson employee portal was launched with SSO and a "personalized view" for McKesson's four core group: three business units and corporate. At launch, 17 new applications used SSO. "The number of applications that use SSO has since increased to over 33, including core applications such as: a shared services catalog, Travelocity, Siebel, and PeopleSoft," says Thomsic.

Release I included a portal framework with flexible architecture and SSO technology to enable localized content. Users were encouraged to log in to McKNet to see both enterprise-wide content and localized content for their business unit.

In May 2007, MPT also launched its sales portal, which leveraged the new employee portal's visual design and IA, but included additional functionality to support targeted messaging to sales representatives, and additional sales reporting, marketing, education, and product information.

2008

In January 2008, six new business unit sites and 547 locations were migrated to the employee portal architecture and design. That same month, the Vignette platform was upgraded to enhance system performance, support scheduled publishing, in-context article editing, and the rotation of ads, articles, and headlines on the portal's homepage.

In March 2008, the redesigned HR portal was launched to adapt to the new employee portal's design. The HR portal provides a new dashboard for managers to manage their team information and activities, such as performance management. The HR portal also provides a personalized workspace for HR professionals and enhanced usability.

In June 2008, CIT launched its redesigned intranet presence along with a personalized workspace for IT employees.

Technology Evolution

As the portal has evolved, so has its underlying technology. The following are the main technology areas where changes have occurred:

- Replaced entire hardware infrastructure to support a new enterprise portal
- Implemented Computer Associates' Web SSO
- Enhanced employee search (white pages) application driven by corporate directory
- Provided personalization of content for authenticated users
- Implemented WebTrends platform for analytics
- Replaced Rhythmyx CMS with Vignette Portal and Vignette CMS, along with subsequent upgrades including:
    - Changed Vignette content types to improve online search results (meta tags, key words, title tags)

  - Upgraded Vignette to improve performance, implementation of scheduled publishing, and in-context editing.
  - Implemented rotation of homepage ads, articles, and headlines
  - Changed Vignette to support new "accordian" navigation paradigms (such as collapsible information lists) within portals
  - Implemented standard page templates to minimize variances across sites
  - Implemented a standard palette, iconography, and typography in Vignette's editing tool
- Planned retirement of legacy McKNet Host platform and free-form HTML sites (McKNet Host is one of the many legacy intranet platforms within the company, and historically hosted 273 different content sites and applications that will be decommissioned or migrated to the employee portal by March 31, 2009)
- Integration of SharePoint sites
- WebTrends SmartSource Data Collection was implemented in April 2008 (previously, site traffic was tracked through WebTrends using IIS logs)

INTRANET TEAM

Managing the Portal

Thomsic leads the McKesson corporate Web team. Five full-time employees—Thomsic, two producers, a portal content manager, and an external site manager—support both McKesson.com and the McKesson employee portal. Four part-time contractors provide additional content development, analytics, editorial, and design support. Thomsic and her team are in the company's Corporate Communications department.

The team manages several aspects of the intranet's ongoing operations including: gathering business requirements, maintaining the user experience and adhering to the strategic vision, establishing standards and guidelines for implementation, and training stakeholders and content owners across the company.

The CIT group dedicates three full-time employees and four contract employees (developers and support engineers) to support all of the software development and technology platforms that support McKesson.com and the McKesson employee portal.

Pictured: The intranet portal team: (standing, left to right) Drew Vecchione, Rajani Bobba, Jacob Covington, Brandt Wiley, Elana Keil, David Seghers; (sitting, left to right) Eric Deatrick, Tracy Thomsic, Anand Srinivasan, Vaughan Acton, Ying Lee, Stasia Lord.

Managing Sub-Portals

The site's different sub-portals, such as the MPT sales portal, are managed from within their own organizations. The MPT business unit manages the MPT sales portal. The team includes one full-time project manager, two full-time content strategists, and many content owners—ranging from product marketing to regional sales VPs. Mary Jo Borges leads the project, working closely with about 60 content owners and the CIT development team. "A year after the launch, they are constantly working to improve the portal and make it even more useful," says Thomsic.

Pictured: The MPT sales portal team: Web Content Strategists Terrell Yelverton (left) and Jennifer Galloway (center) and Project Manager Mary Jo Borges (right).

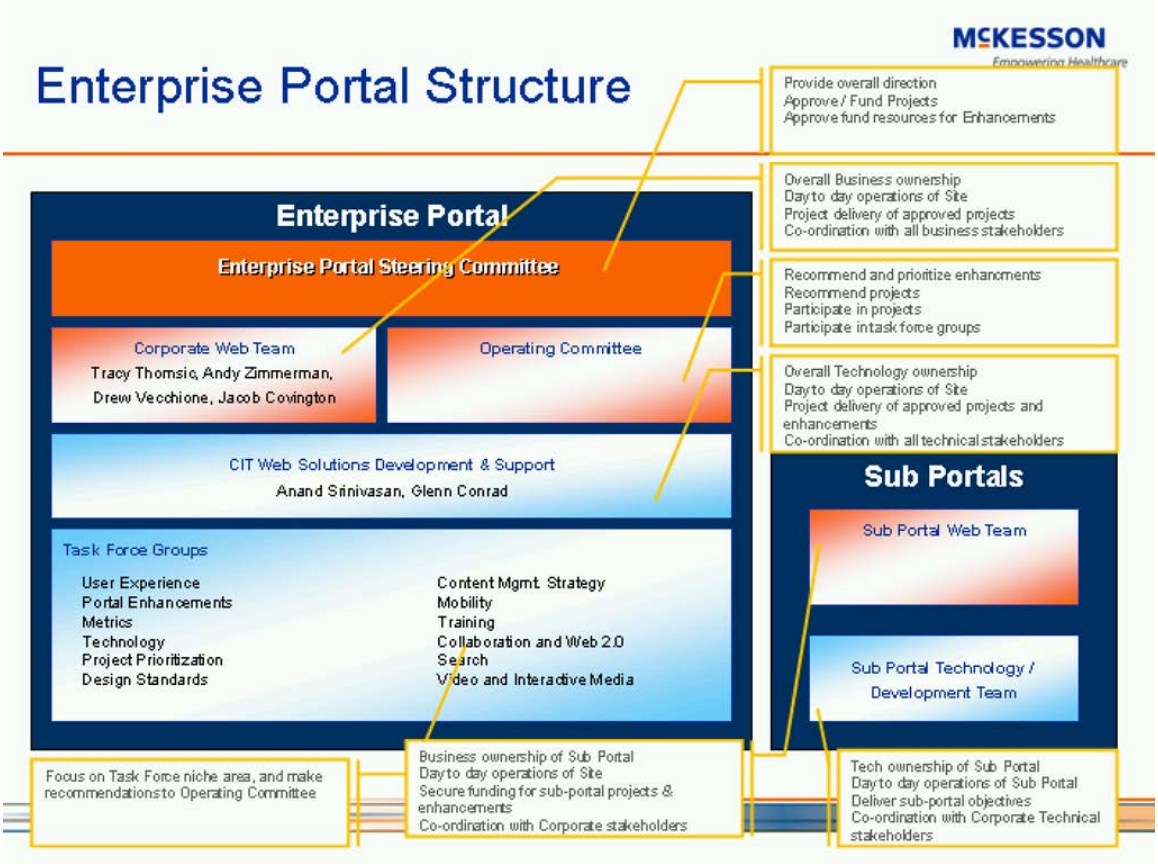
Governance

The employee portal's content and business strategy has always been managed by Corporate Communications, while CIT manages its technology (strategy and implementation). The core team consists of personnel in both the Corporate Communications and CIT organizations. Corporate Communications is a sub-organization of HR, while CIT reports directly to the corporate CIO.

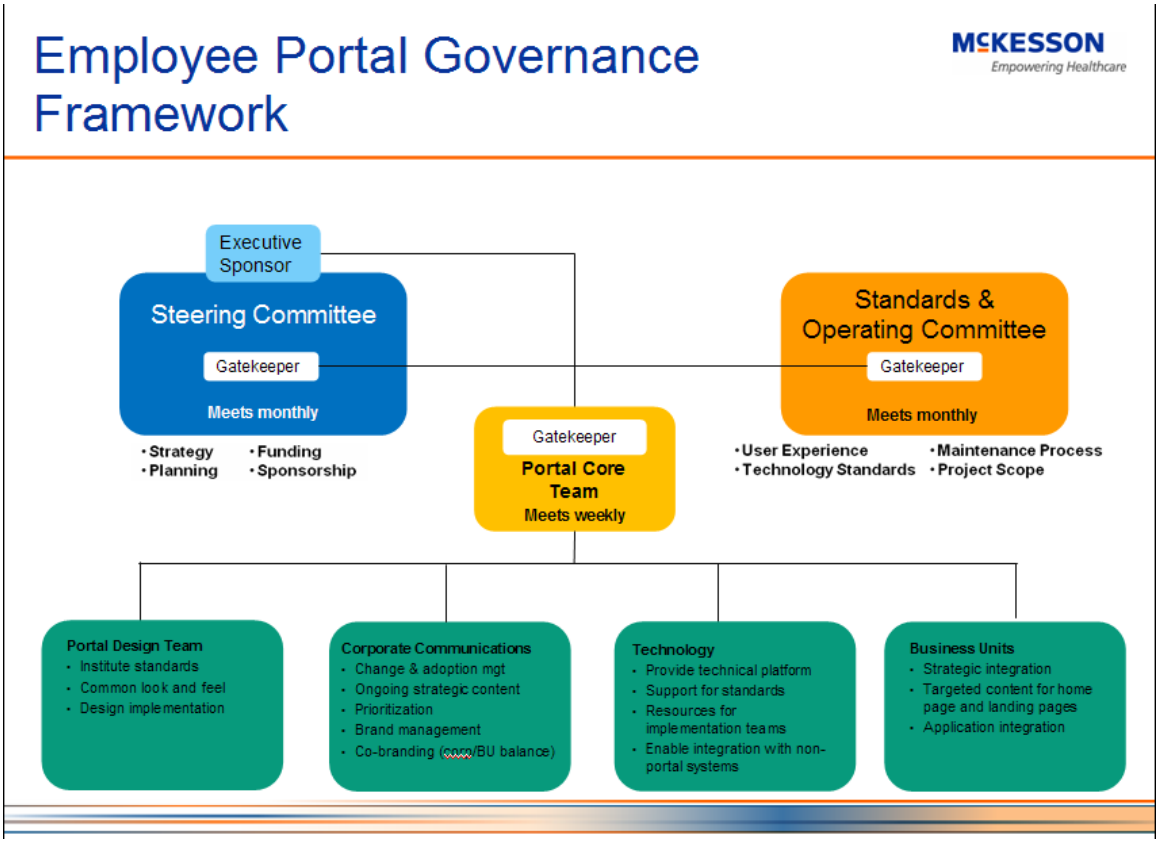
"This placement, for both groups, gives the intranet team easy access to executive management—as there are few intervening management layers—and facilitates coordinating executive approval and sponsorship for major initiatives," says Thomsic.

"For the intranet, this meant that it was easy to convince executive management of the need for the project and the justification for the budget and resource assignments," she says. "Since launch of the new portal, it has continued to be an executive priority."

McKNet is in its third phase of evolution. Two governance committees—strategic and operational—ensure that McKNet continues to meet the needs of the business and grows while keeping within the guidelines and standards set by the groups.



Pictured: The structure of the employee portal team. This team structure helps articulate how the site is governed. It also indicates how the team collects and prioritizes enhancement requests and larger projects for inclusion in future portal releases.



Pictured: The breakdown of the McKNet governance structure. It shows the dual organizational structures for McKNet: an executive steering committee that provides overall strategy and executive sponsorship for major initiatives, and a standards and operating committee that handles day-to-day governance issues. The Corporate Web Team coordinates the work of these two bodies, and is also responsible for implementation, assisted by CIT, other corporate departments, business unit representatives, and strategic agency partners.

Broad Representation

Governance and broad representation are the yin and yang of successful intranets. Steering committee representatives are nearly as important as who's governing the project, as broad representation can mean broad buy-in across the organization.

The original chairperson of the portal's strategic committee resided in the CIT organization. As of July 2008, the steering committee chair transferred to Corporate Communications. Members of the strategic committee include executives from Corporate Communications, CIT, Finance, Procurement, and HR, as well as representatives from each of the Pharmaceutical, Medical Surgical, and Provider Technologies business units.

The operational steering committee comprises content owners and technologists from 16 different business units and functional groups across the organization. This group has organized task forces to help drive enhancements to the portal. Some of the task forces that have been established include user experience, search, new media, portal enhancement prioritization, metrics, technology platforms, design and editorial standards, content management, mobility, training, collaboration, and Web 2.0 tools.

Supporting the Project with Budget *and* Staff

One thing most companies learn quickly is that large-scale portal projects don't come cheap. Successful sites are often the result of significant investment in terms of dollars *and* staff. The McKesson intranet is a good example of a company making a commitment and backing it up with both funding and staffing support.

"Since 2005, McKesson has consistently invested in our intranet platform," says Thomsic. "Our investment has exceeded $1 million annually since 2006. Regarding staff, we've doubled our staff in two years. We started with one intranet project manager in Corporate Communications, and now we have a dedicated producer and content manager."

Augmenting the Internal Team: Partnering with an Agency

For McKesson, hiring an outside agency for specific project tasks meant that the agency staff would augment the expertise of the internal team members, with each providing the project components that suited their capabilities.

McKesson employed the outside agency LDS to design and architect the site. Once LDS provided McKesson with page template specifications, all software development and implementation work was performed in-house and the internal team now manages day-to-day site operations.

LDS was heavily involved in the project's initial business requirements gathering and strategy phase, as well as its IA and visual design. The LDS technical architect was responsible for validating that the chosen technical platform (Vignette CMS and Portal technologies) could accommodate the new design.

"If McKesson decides to embark on another large scale portal project, such as launching a new business unit portal with sophisticated custom requirements," says Thomsic, "then it is likely that an agency would be engaged to help drive the requirements gathering and design phases of this project. Agencies are used where consultants with specific expertise can help McKesson to improve our processes to take the employee portal to the next level."

The McKesson team has utilized the LDS team for various initiatives over time. LDS was engaged in 2006 to redesign the MPT sales portal, in conjunction with the McKesson's employee portal redesign. MPT specified a functionally rich interface to support targeted role-based messaging to the sales force and rapid access to product, marketing, pipeline, and commission information.

In 2007, LDS was again engaged to redesign McKesson's HR portal to better align with the new McKNet user experience.

Ongoing Agency Support

Today, the employee portal is managed almost exclusively by internal staff, yet the company still hires agencies on an ad hoc basis to provide specific support services.

Agencies are sometimes hired on a contract basis to provide specific solutions, such as creating a portal standards and visual style guide. The company has also engaged specialty consulting firms to conduct customer satisfaction surveys and refine analytics reporting and measurement strategies. Finally, it periodically uses consulting agencies to gather independent analysis of the site's usability, to identify best practices in the industry, and to train content owners on areas such as writing for the Web.

GOALS AND CONSTRAINTS

The Ultimate Goal

Thomsic explains that the ultimate goal of the portal is: "to integrate and converge the way we work around a single set of capabilities." In one to three years, the portal should provide the following business improvements:

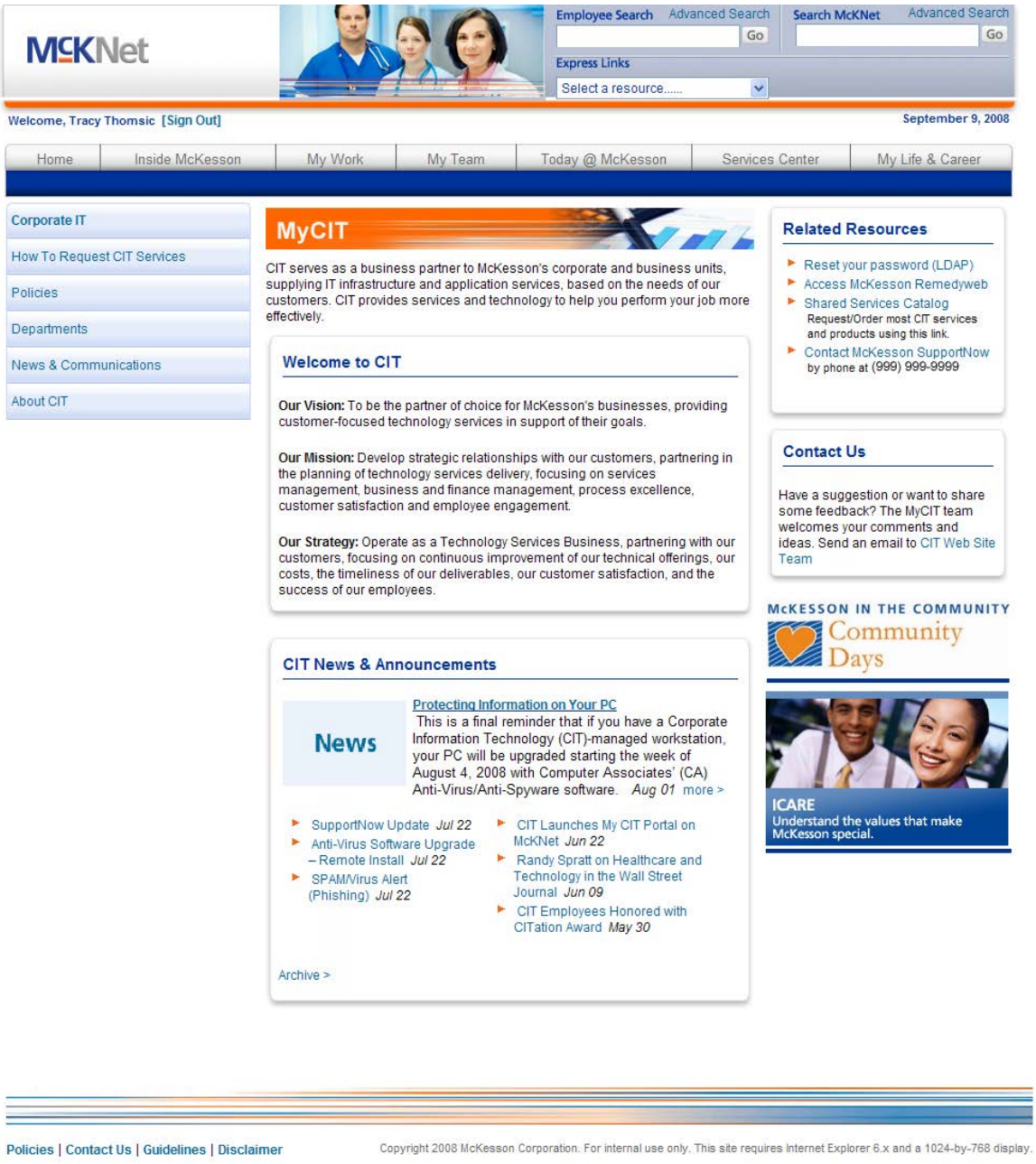
- **Facilitate collaboration** with social networking and community tools
- **Improve knowledge transfer** (for example, provide a wiki to capture and transfer communications)
- **Automate business processes** through improved workflow capabilities and project management across businesses
- **Reduce costs** by providing a single way of working/doing business (and thereby reducing costs and learning burdens)
- **Improve productivity** through precise information flows that customize and target information so employees get relevant information and tools for their jobs
- **Enable mobility** by supporting multiple devices, not just PCs
- **Gain global economies of scale** and hide McKesson's corporate complexities behind the scenes
- **Improve employees' ability to perform transactional work** irrespective of job function and role
- **Centralize procurement information** and provide feedback mechanisms for employees to drive improvements to corporate programs

Each of the employee portal's sub-portal implementations (for HR, MPT sales, and CIT) also aim to support these themes.

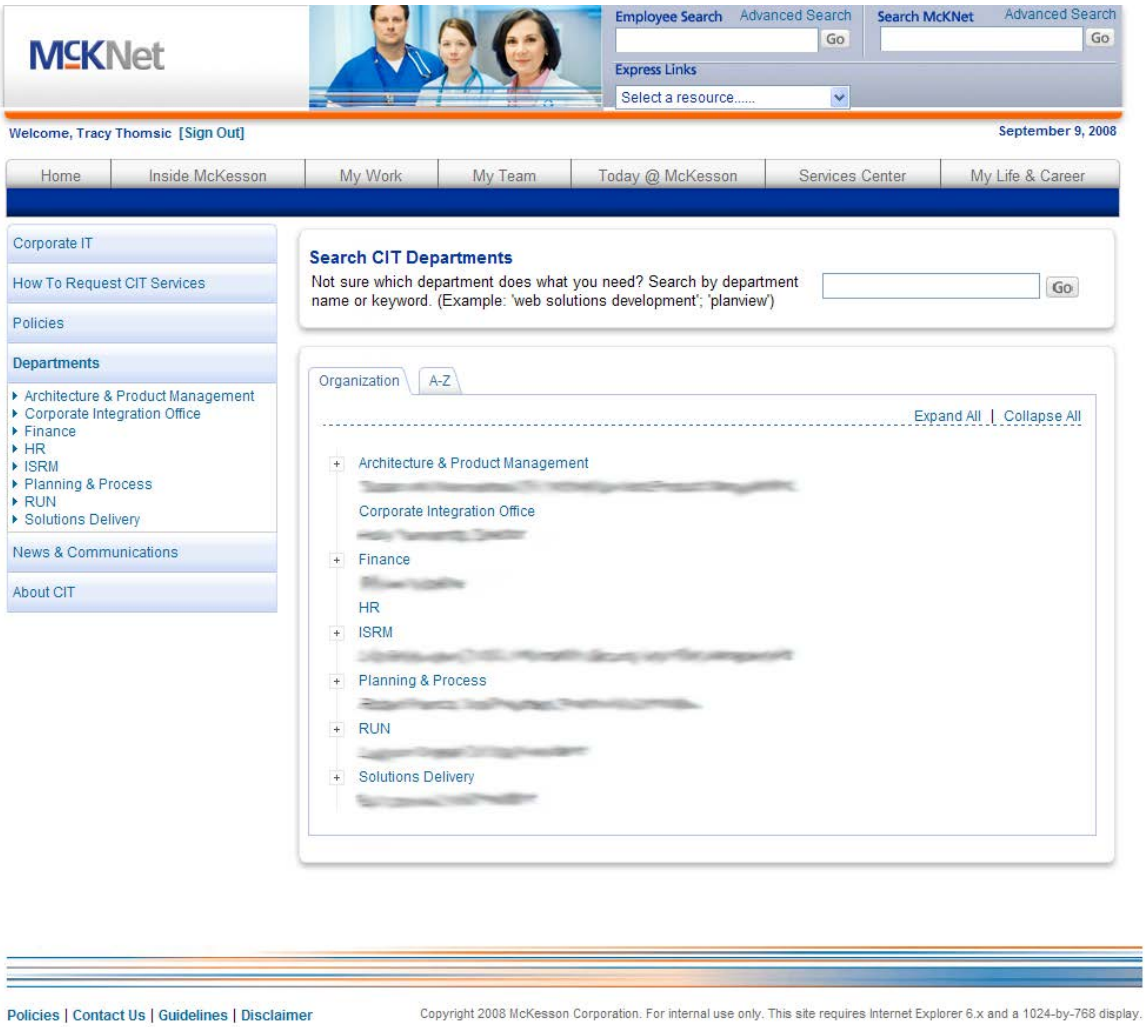
> **HR portal.** The HR portal was designed to support the needs of HR and employees. Managers and employees needed a place to go for people management tools, personal information, and professional development tools.
>
> "Over the past few years, we've received feedback that employees and managers would like personal and team information and tools to be easier to find and use. In the redesign, we've focused on putting content and tools together in logical groupings to make finding information and completing tasks easier," said Julie Person, program manager. "The HR portal enhancements are part of McKesson's overall plan to bring employees and managers better tools for performing quality work, allowing all of us to contribute to McKesson's success."
>
> **MPT sales portal.** "The portal is the primary channel for content and communication with the sales force, so it's very important for us to listen to our users and determine what content and functionality they need on the portal to make them more efficient and productive," says Borges.
>
> Borges says that the team works with content owners to ensure that portal information is always up-to-date. "We make more substantial changes—such as incorporating new pages, new technology and new tools into the portal—six times a year," she says. "We also wanted to streamline communications to sales by moving from a "push" to a "pull" environment, so that sales and marketing managers did not feel they had to e-mail sales everything they may need. E-mail could be used for critical things, but everything else would

be available in the sales portal. This allowed sales people to get the information they needed, when they needed it."

CIT portal. The CIT portal aggregates information for CIT personnel on processes and procedure, and includes a wiki for knowledge sharing.



Pictured: *My CIT*, the portal homepage for the Corporate IT service center. The portal's homepage gives employees access to CIT services and helps them find resources and learn how to best engage with CIT on different issues.



Pictured: The CIT *Departments* page. This guide to CIT structure lets users search CIT for the appropriate department, navigate an expandable org chart, and browse and filter a list of CIT departments organized alphabetically.

Constraints

As Thomsic notes, McKesson faces several constraints in undertaking a project of the employee portal's size, budget, and complexity.

- **Budget.** "The budgetary approval process for capital expenditures at McKesson typically requires a six-month lead time," says Thomsic. "In order to engage in projects of this magnitude, a business justification must be presented to McKesson, which clearly shows the expected value to the corporation, and its return on investment."

  Also, employee performance is often tied to achievement of tangible objectives met within a fiscal year, says Thomsic, which factors into any project of this scale.

- **Regulation.** The health care industry is highly regulated, so the company faces stringent security requirements that apply to an intranet project.

  Many of McKesson's employees use kiosks to access the intranet, creating another factor affecting the site and site security. And, like many companies

creating a large-scale intranet portal, they have many applications running on legacy platforms that must be factored into the site planning.

- **Security.** McKesson's pharmaceutical distribution business requires strict security over the dissemination of certain types of information, such as distribution center locations, identity of personnel in these locations, shipping schedules, routes, and manifests. In many locations, employees don't have individual computers, but share access to the intranet through kiosks, logging in via their employee ID to access personal data. Different employee classes also have access to different information on company policies and benefits.
- **Legacy systems.** Many of McKesson's internal applications run on legacy systems or on disparate platforms from acquired businesses. Thus, as Thomsic notes, "it's a challenge to provide integrated access to these applications through a single Web interface."

TIMELINE

HR portal

The HR portal project kicked-off in September 2007 and the site launched on March 24, 2008. With only six months from start to finish, the McKesson team had a lot of work to complete under an aggressive timeline.

The project began with a design phase; a visual proof of concept was completed by early December 2007. The build phase, which included the technical implementation and content development, started in December and was completed in March 2008.

Subsequent to launch, the team continued to refine the site's change leadership and communications plan, which was completed in early June 2008.

Employee Portal

The employee portal has evolved over multiple redesign phases, and a project roadmap guides the ongoing work. "We do one major release a year with enhancement releases every six weeks in between major releases," says Thomsic.

Following is an outline of the employee portal's project release cycles.

Release 1: May 2007 (10 months to complete)

Release 1 offered the following enhancements:

- **Web SSO** integrated sign-on to multiple intranet applications into one sign-on.
- **Modular, scalable IA** laid the foundation for future releases.
- **Improved user experience** included a new look and feel, redesigned navigation, and easier access to tools and resources.
- **Integrated strategic communications** combined multiple communications channels from different business units and corporate groups into a single news channel accessible company-wide.

Release 2: March 2008 (12 months to complete)

Release 2 offered the following enhancements:

- **HR self-service** integrated self-service tools and content via SSO.

- **Business unit integration** integrated over 500 McKesson locations to enable personalized communications channels specific to each location.
- **Process-driven workspace** delivered tools and content at appropriate points in a process.
- **Multi-channel content delivery** gave users access to rich media content (audio and video) and communication tools (including instant messaging).

Release 3, scheduled for March 2009

Release 3 has a 12-month schedule and will include:

- **An advanced collaboration platform** that will let employees throughout the company find other employees, share information, tag and bookmark internal and external resources, and participate in group discussion on relevant topics.
- **A universal inbox** will be a single, aggregated inbox for process-related messaging from internal apps, designed to streamline management functions such as invoice approvals, contractor and vendor resources, travel and entertainment expenses, performance, and procurement.

MPT Sales Portal

The MPT sales portal was also launched in May 2007. The design team leveraged the visual design specifications created by LDS, but changed the *My Work* portlet to adapt it to the needs of the sales force. The MPT sales portal team is located in Alpharetta, Georgia, and worked on a parallel track with the employee portal team, located at the company's San Francisco headquarters.

Technology Timeline

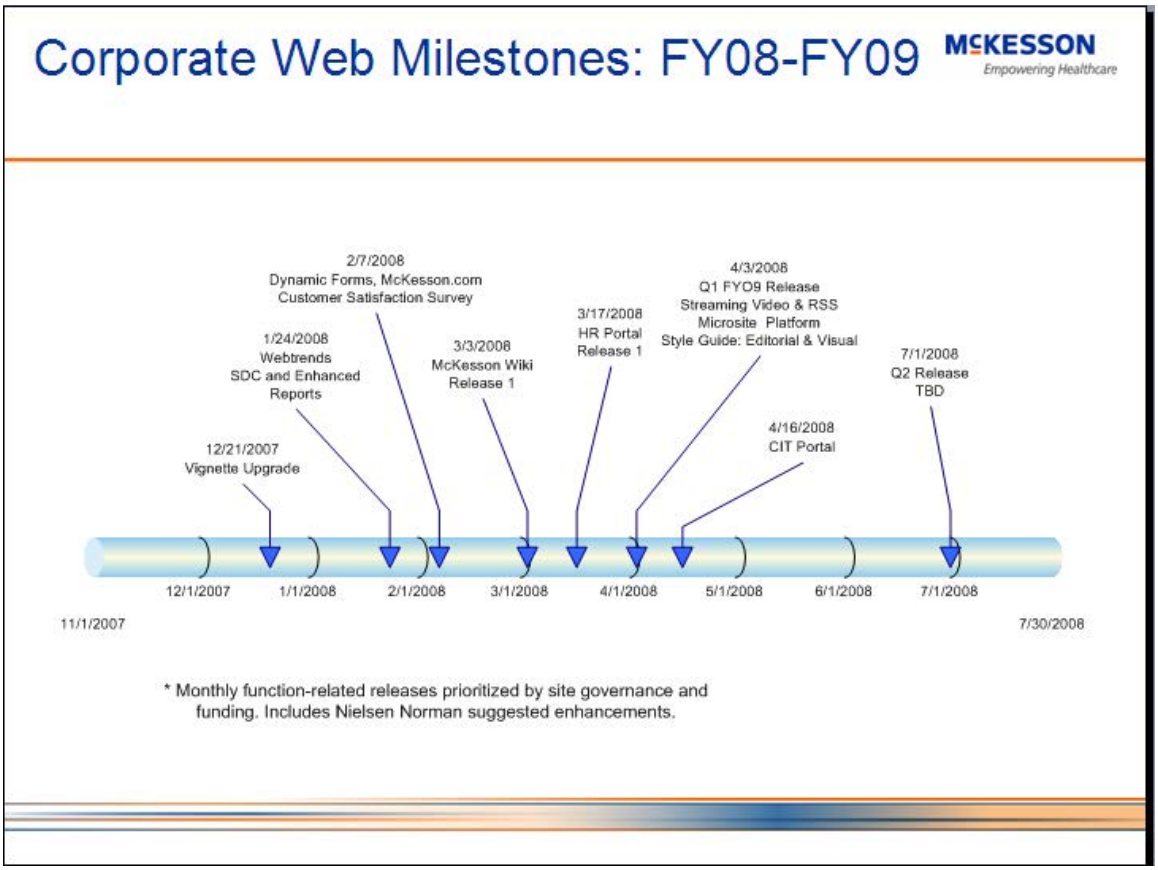
Following are the relevant milestones for the intranet's technology upgrades.

November–December 2007:

- Architecture redesigned, including replacing the hardware and software platforms
- Replaced the CMS
- Migrated portal content to the Vignette Portal and CMS.

January 2008:

- Implemented WebTrends



Pictured: The timeline for the intranet's redesign phases from November 2007 through July 2008.

USERS

The McKesson employee portal is targeted to 50,000 employees and contractors and is used by office workers, technologists, sales people, customer service, distribution, and most business functions across 30 business units in the US, Europe, and Canada.

USER TASKS

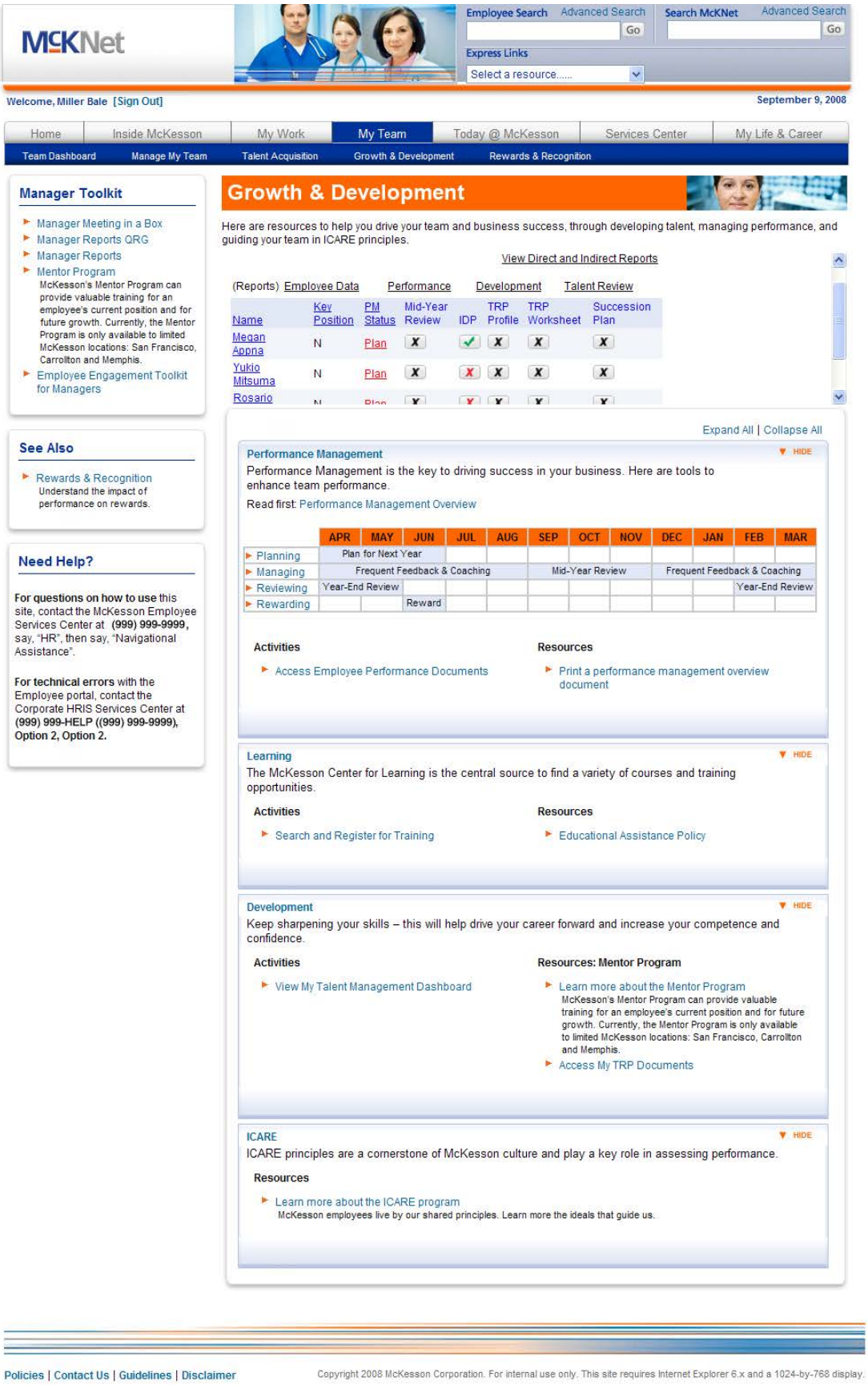
Employee Portal

Following are the most common user tasks on the employee portal.

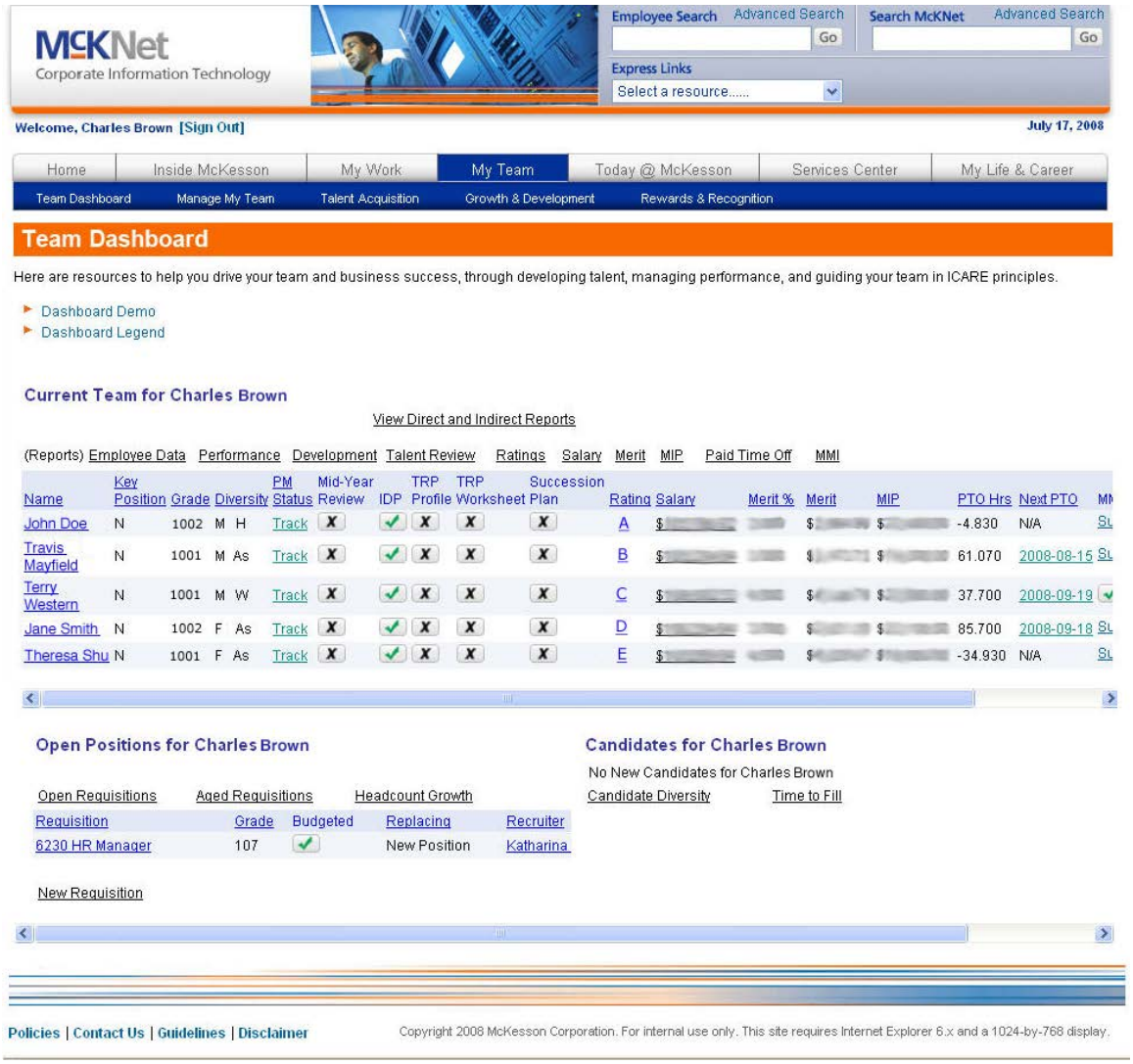
- Search the employee directory
- Access shared service applications for such tasks as ordering supplies and equipment, filing expense reports, booking travel, and requesting help from IT
- Manage employment-related functions such as performance reviews, benefits, and payment records
- Catch up with the latest company news
- Find other business units and corporate groups to work with or request information from

- Order equipment for new employees and help managers manage employee on-boarding in one place

10 Best Intranets: McKesson Corporation



Pictured: The *My Team* section's *Growth and Development* page. Managers and their team members can monitor their progress in completing performance management tasks, access resources for training and mentoring, and learn about the ICARE company values program.



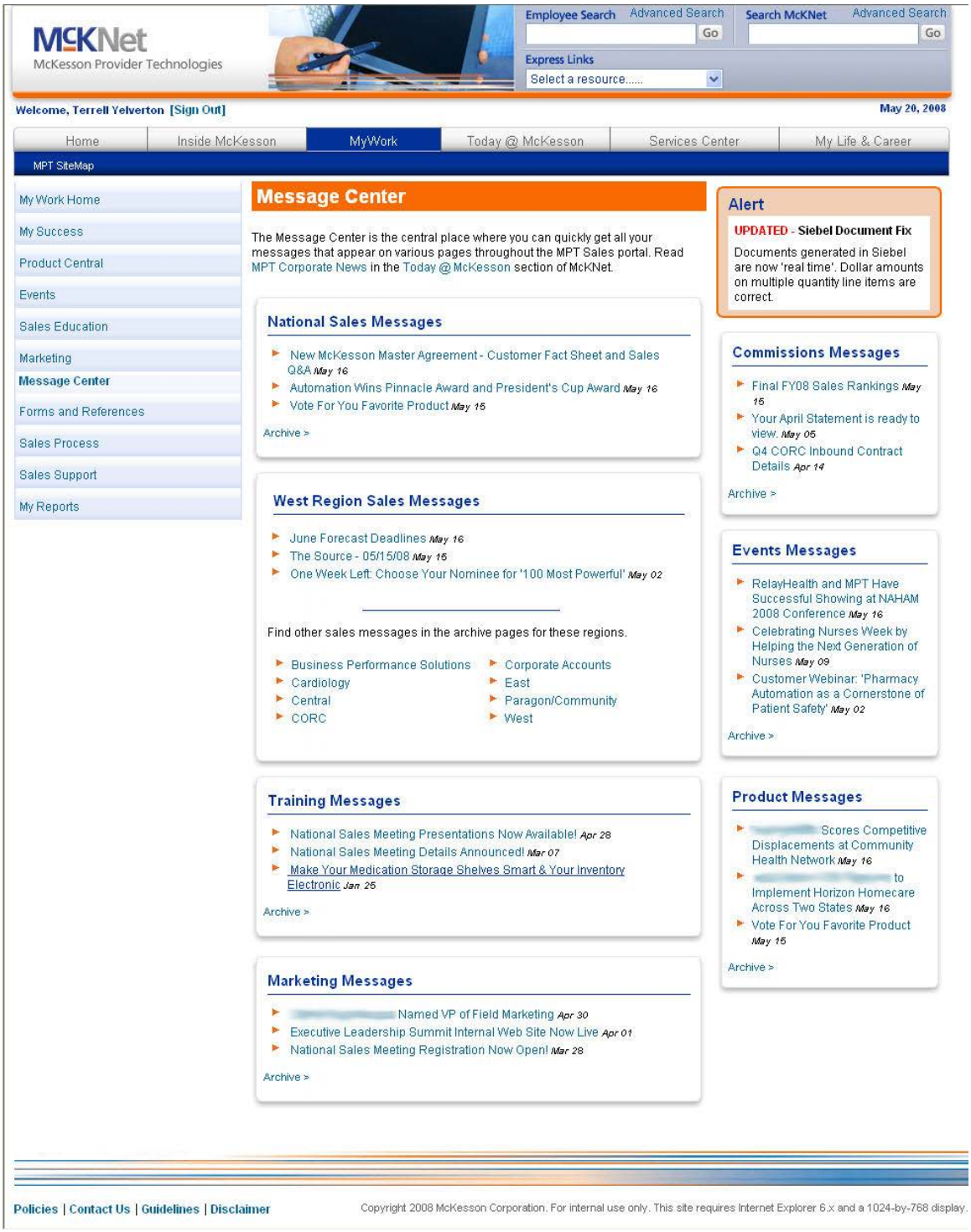
Pictured: The *Team Dashboard* for managers includes performance information about employees, as well as open positions and candidate status. The HR portal implemented this dashboard to give managers a snapshot of their entire team and thus help them better manage their direct reports to create high-performing work teams.

MPT Sales Portal

On the MPT sales portal, the most commonly used features include:

- SSO access to enterprise systems and sales tools
- Reporting integrated with Siebel and Business Objects

- Access to a central repository for messaging
- Centralized product collateral
- Sales education and events calendars with the option to add events to Outlook
- Sales process navigation through each funnel stage



Pictured: The *Message Center* offers personalized messaging for salespeople on the sales portal.

Pictured: The sale's portal's *Product Central* section gives users access to centralized product information.

McKNet
McKesson Provider Technologies

Employee Search Advanced Search Go
Search McKNet Advanced Search Go
Express Links
Select a resource.....

Welcome, Terrell Yelverton [Sign Out]
May 20, 2008

Home | Inside McKesson | MyWork | Today @ McKesson | Services Center | My Life & Career
MPT SiteMap

- My Work Home
- My Success
- Product Central
- Events
- Sales Education
- Marketing
- Message Center
- Forms and References
- Sales Process
- Sales Support
- My Reports

My Success

How successful are you this quarter? How successful are you this fiscal year? How well is your team performing? Leverage "My Success" as a central location for commissions, reports, sales rankings, performance, and more. Take action by linking directly into your team's Siebel Quotes, map out your plan for the rest of the year, or engage with your manager regarding questions related to your success.

Manage My Compensation

- Commission AR Hold Contract List
- CORC Inbound Closed Contracts Q2
- CORC Inbound Closed Contracts Q3
- NEW - CORC Inbound Closed Contracts Q4
- FY06 Contract Worksheet (Business Objects)
- FY07-FY08 Contract Worksheet (Business Objects)
- NEW - FY09 Compensation Plan
- FY08 Compensation Plan
- FY08 Comp Plan Reference Card
- FY08 Dispute-Issues Inquiries
- My Commission Statement (Business Objects) - Not Available

Reference Material

- FY 08 Commissions Calendar
- FY08 Regional Sales Training Presentation
- Understand Your Contract Worksheet
- Understand Your Statement
- Who To Call

My Sales Reports

100% 1 /1

Total Assigned Quota	

	YTD Attainment	% Attained
Other YTD Attainment		
Software YTD Attainment		
Total YTD Attainment		

Ranking Reports

- Sales Rankings

Commissions Messages

- Final FY08 Sales Rankings *May 15*
- Your April Statement is ready to view. *May 05*
- Q4 CORC Inbound Contract Details *Apr 14*

Archive >

Related Resources

- Manage My Performance
- McKesson Center for Learning
- Navigator Program
- NDLB Pharma Distribution Sales Kit
- View Paycheck
- Charitable Contributions

Pictured: The MPT sales portal's *My Success* page gives users a snapshot of their current status. It does this by integrating sales tools, reporting, and personalized sales funnel information.

DESIGN PROCESS AND USABILITY ACTIVITIES

Overview

The employee portal's redesign process began shortly after McKesson.com, the company's public website, was redesigned and launched. "McKesson.com's new look and feel leveraged a new brand identity for McKesson, says Thomsic, "but the intranet's design still appeared outdated and the user experience was disjointed as the site had grown organically, without any oversight or standards."

Thomsic says that executives in CIT, Corporate Communications, and HR all believed that the redesign could bring productivity gains for the corporation, as well as cultural gains for employees. McKesson's corporate Web team and the CIT development group shared responsibility for managing both sites from an architectural and operational level. "Much had been learned from the redesign of the public website, so this provided some momentum for getting started," she says.

Usability Activities

Employee Portal

In February 2008, the team kicked off the usability research with a benchmark usability test. Getting a benchmark helped the team see where they were already doing things right and where they needed improvement. The study included 21 intranet users at McKesson headquarters. They were asked to complete 14 key tasks. Some of the task areas included the employee directory, direct deposit, paid time off, W-4 form, training, technical support, job search, matching charitable contributions, annual report, checking McKesson's expense policy, and McKesson's Political Action Committee.

Thomsic reports that most people were able to complete all tasks during a 90-minute session. Employee search was identified as the portal's "killer app" as it both worked well and people knew how to use it efficiently.

Tasks in the HR area received good feedback, while search was an area identified for improvements. Thomsic says that the team is currently working on an initiative to make those improvements. "New tags for key words, alternate titles, and metadata have been added to several content types in Vignette to improve the quality of search results," she says.

Shortly after this study was concluded, in March 2008, the new HR portal was also released.

HR Portal

"We did multiple rounds of usability tests," says Person. "First, field tests were done by LDS using card sorts. Later in the project, close to going live, we did end-user testing—led by the McKesson team—which was to test the design using a test site"

"The last step we did was, we listened in on support calls, and provided training sessions to the support center," she says. "That way, we could use the support team immediately after we went live for daily feedback."

MPT Sales Portal

The Sales Advisory Board was heavily engaged with McKesson's design agency LDS on the sales portal's design process. LDS stepped the Sales Advisory Board through wireframes to ensure designs were on target. And, during the sales portal's initial design and rollout, LDS sponsored card sorting sticky notes activities.

"We have not done any formal usability testing," says Borges. "But we stay close in touch with our users via the Sales Advisory Committee and support. Also, a sales portal scavenger hunt activity is done with all our new hires every month, and we have sales portal kiosks available at our sales meeting and mid-year sales meeting."

Borges and her team are able to gather a lot of informal feedback during these activities.

Plans are under way to begin more formal usability testing in the next year.

URL AND ACCESS

McKNet is available at http://mcknet.mckesson.com/. Every McKesson laptop is provided with this page as the start-up in the browser.

Remote access is via the Web at webaccess.mckesson.com where employees can access the employee portal, along with other applications such as e-mail, SharePoint, SAP, and HR. Users must have a McKesson PIN and a token code to authenticate themselves prior to gaining access to these sites.

Because of their job roles, nearly half of the McKesson workforce accesses the intranet via kiosks. Among those employees are those at the company's distribution centers who pick and pack orders for shipment. Kiosk users are primarily interested in using the intranet to perform HR-related transactions and to learn about McKesson.

TECHNOLOGY

The McKesson intranet uses the following technologies: Vignette Portal, Vignette CMS, Weblogic, CA Site Minder, Novell eDirectory, Microsoft SQL Server, Adobe Flash, HTML, Javascript, AJAX, Java/J2EE, Microsoft .NET, Concurrent Versioning System, Eclipse IDE, WebTrends, Adobe Photoshop, EWebEditPro, Windows Media Server, and Google Search Appliance.

WEB SITE ANALYSIS AND SEARCH

Peridot LLC, a Web analytics firm headquartered in Bothell, Washington, helped McKesson measure the impact of changes made to the employee portal's user interface. Peridot helped McKesson analyze key performance indicators for the site, including traffic, reach, engagement, and top search terms. Peridot also modified the monthly WebTrends dashboard to align with McKesson's business needs.

With SDC, Java-code is used to measure McKNet site traffic and provide an enhanced ability to track behavioral data. "For example," says Thomsic, "the MPT sales portal business sponsors wanted to know who was accessing their site—and specific content—based on a user's functional role (manager, operations) and region."

The code-based implementation of WebTrends records the metadata so that it can now be tracked. In addition, using SDC code, WebTrends can track searches within and across its different portals. Historically, searches were tracked on the entire McKNet domain. Now, searches can be isolated for the individual portals, including the HR, CIT, and MPT sales portals.

Overall, the WebTrends SDC implementation has laid the groundwork for metrics tracking at McKesson, and is helping site owners optimize their content appropriately.

Site traffic and search analysis is reported monthly. Following are highlights from McKesson's July 2008 *Employee Portal Site Metrics Report*.

10 Best Intranets: McKesson Corporation

Site Metrics Report Highlights

July 2008

Traffic results:

- Overall, there were more than 1.5M page views and over 751,000 visits reported on McKNet during July 2008.
- Almost 640,000 of the total visits went to the McKNet homepage, which represents 85% of all visits across the site.

Traffic changes:

- There was a large increase in page views for both the *Inside McKesson* site's sections and the *Today@McKesson* site.
- There was a decrease in visits to each site as a whole, including the homepages.
- This decrease could be due to the timeframe (July is both a "vacationing month" and includes the 4th of July holiday).

Search changes:

- There were almost 30,000 site searches in July 2008, an increase of 15% from the previous month, and a 21% increase compared with the three-months trailing average.
- The top search terms on McKNet continue to be "mro" (an internal management process), "distops" (an internal tool for distribution operations), and "per-se" (a recently acquired business).

Engagement:

- About 70% of all visitors were on the site for one minute or less, with an average visit duration of a little more than 16 minutes. According to Thomsic, this reflects the portal's function as a gateway to internal applications. "Most users are looking for a specific tool. They find it, run it, and leave the portal, terminating their portal visit," she says. "To the extent that this statistic means people are finding the tools they want quickly, it's a good thing. We continue to investigate our users' behavior to determine if there are unmet needs."

JULY SITE METRICS REPORT (PARTIAL)
INCLUDING SEARCH TERM RESULTS

Rank	Query term	July '08		
		Visits	Rank	% of total search queries
1	Distops	183	1	0.71%
2	Mro	165	2	0.64%
3	per-se	102	3	0.39%
4	Oars	100	4	0.39%

5	job families	97	5	0.38%
6	job family	93	6	0.36%
7	six sigma	88	7	0.34%
8	SharePoint	85	8	0.33%
9	weight watchers	83	9	0.32%
10	live meeting	72	10	0.28%
11	Blackberry	69	11	0.27%
12	Weather	69	12	0.27%
13	ICARE	67	13	0.26%
14	Kronos	62	14	0.24%
15	CareBridge	60	15	0.23%
16	Support now	58	16	0.22%
17	Webmail	58	17	0.22%
18	Help desk	58	18	0.22%
19	Scoreboard	57	19	0.22%
20	Mcfs	57	20	0.22%
21	401k	56	21	0.22%
22	Mpower	55	22	0.21%
23	Office communicator	55	23	0.21%
24	DC INVENTORY	54	24	0.21%
25	Jobs	54	25	0.21%

Search Technology

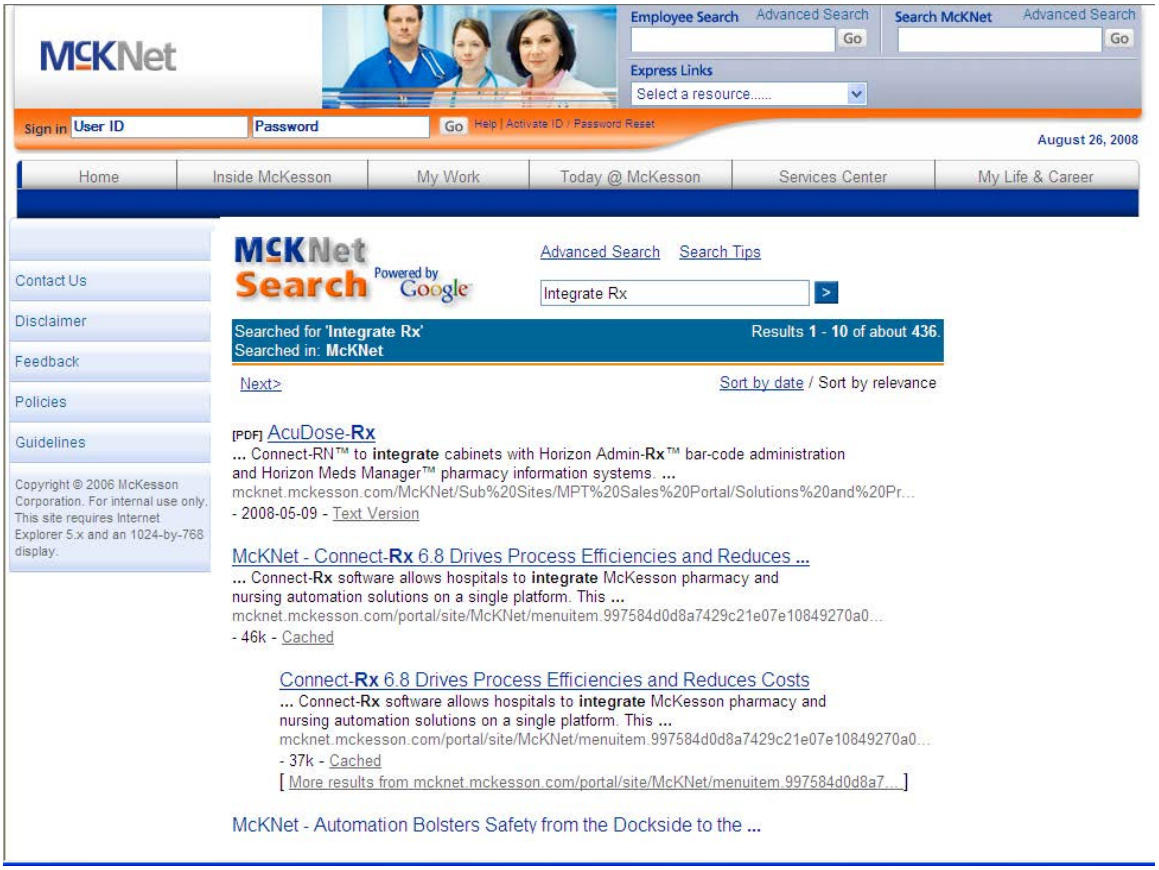
As part of the intranet project, the McKesson team replaced the underlying search technology, too. "On the old intranet, we had a Verity search engine that was very ineffective, and required manual configuration," says Thomsic. "Google Search Appliance had a proven technology and was bringing their product to the enterprise for a turnkey solution that automatically crawled the intranet and required little manual effort."

Search enhancements are underway to address the current challenge of finding authenticated and entitled content in the search results. This can be managed through the Google technology, but has not been addressed yet. The team plans to enhance the search in the coming year, including the introduction of search driven by users' tagged and bookmarked content.

"By default, the Google Search Appliance didn't have access to scan the intranet for content sitting behind authentication barriers," says Thomsic. "Enabling it to do so requires additional configuration that we haven't had the resources yet to address."

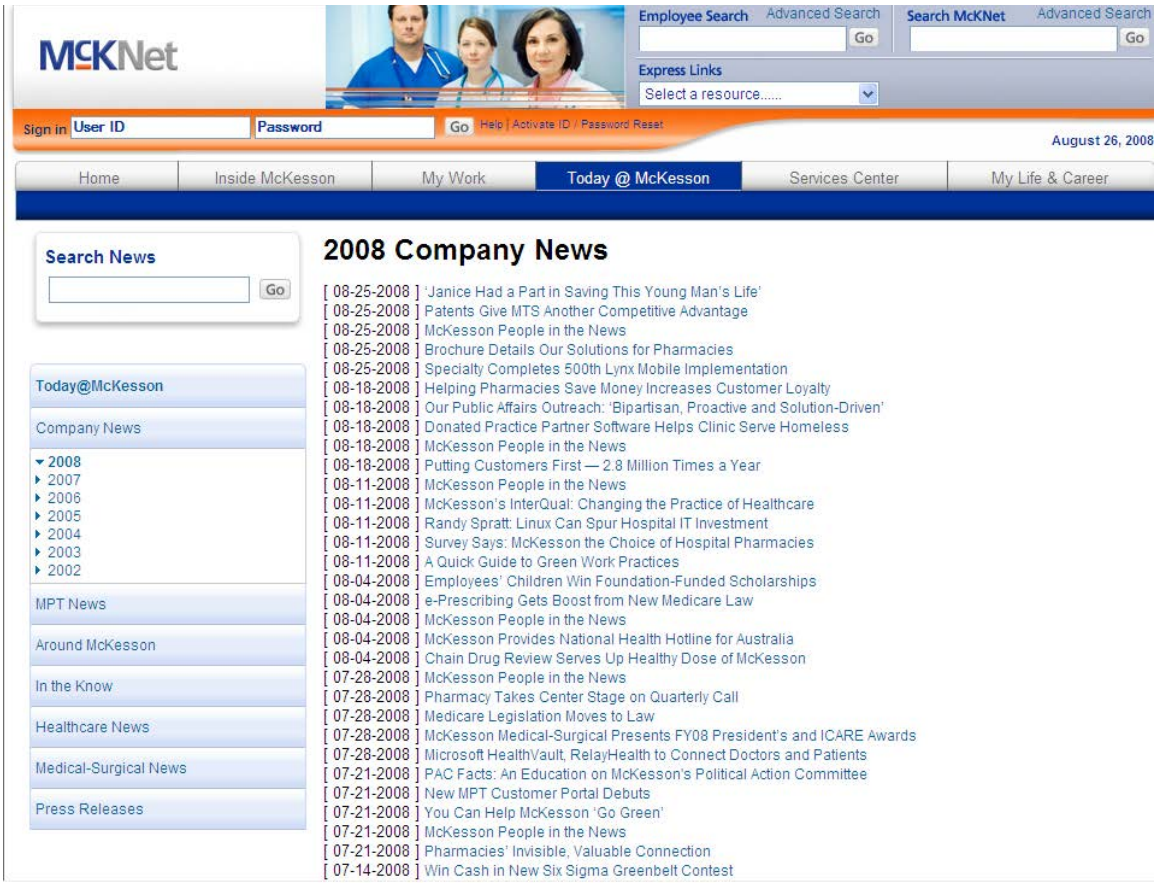
By the time this report is published, the team will have completed the search improvements.

10 Best Intranets: McKesson Corporation



Pictured: A sample search result for the term "Integrate Rx" (a McKesson product).

Pictured: The *Company News* portlet. This screen shows a recent mention of McKesson in the press. Users access this portlet landing page from a link in the homepage's *Today@McKesson* portlet.



Pictured: A *Company News* listing page. This screen shows a listing of all press mentions of McKesson in last month. Users access the page through the *Company News* (left nav) tab, by clicking on *2008*.

CONTENT MANAGEMENT

Technology

McKNet uses Vignette CMS version 7.3.1.

Content Ownership

Content ownership, administration, and maintenance are distributed differently for the three McKesson portals based on the particular site's needs.

McKNet employee portal. Content ownership is distributed across company groups, with core areas—including the homepage—owned by Corporate Communications. Business unit and functional group sub-areas are owned by someone within the target unit or group—typically, an internal communications representative or program manager. As Thomsic explains, these owners are content SMEs selected by their group's (director- or manager-level) representative to the McKNet Standards and Operating Committee.

MPT sales portal. The MPT sales portal team consists of a manager and two Web content strategists. The team works with three different groups:

executive sponsors, content owners, and sales users. The sales portal's executive sponsor is the group president of customer operations. The portal's steering committee consists of sales and marketing VPs. MPT has about 60 content owners with one designated business owner for each main area of the sales portal. Sales users are represented by the Sales Advisory Committee, which comprises sales users from various roles and regions.

HR portal. Within HR, the key content owners are the SMEs within each Center of Excellence. The four Centers of Excellence are Talent Management, Compensation and Benefits, Enterprise HR, and Diversity and Inclusion. The Employee Service Center has final approval on all content changes so that it's aware of the changes that it will need to support.

Creating Content

The intranet team has developed a content type library and a set of generic/default templates to assist content creators. Once the content is entered via the CMS, it automatically inherits the templates and styles.

"We have an editorial and design style guide for the enterprise portal, the sub-portals, and—as of June 2008—the SharePoint team sites," says Thomsic. "The intranet style guide and design guidelines are used to inform the users."

"Considering that we had no standards for McKNet two years ago, this is a huge leap forward," she says. "These guides were developed by our agency partners and are now maintained by in-house staff. We found that just showing users what pages and sites look like encourages adoption, reduces anxiety, and saves our team training and support time."

MOBILE

Mobile access is still a work in progress for McKNet. "The site can be accessed over a company-provided mobile device," says Thomsic. "However, the user interface is not specifically designed for this experience, and hence the user experience is very poor."

The team acknowledges that there is a demand for mobile access for certain content areas, especially on the MPT sales portal, and has placed a mobile initiative on the portal roadmap for inclusion in future releases.

"Eventually, our goal is to make the entire site accessible via mobile device," says Thomsic. "But the first areas in demand are travel planning and sales support. Right now, we don't have a definite schedule for mobile devices, but it's on our roadmap for a FY2010 implementation."

FEATURES

Following are some of McKNet's outstanding features:

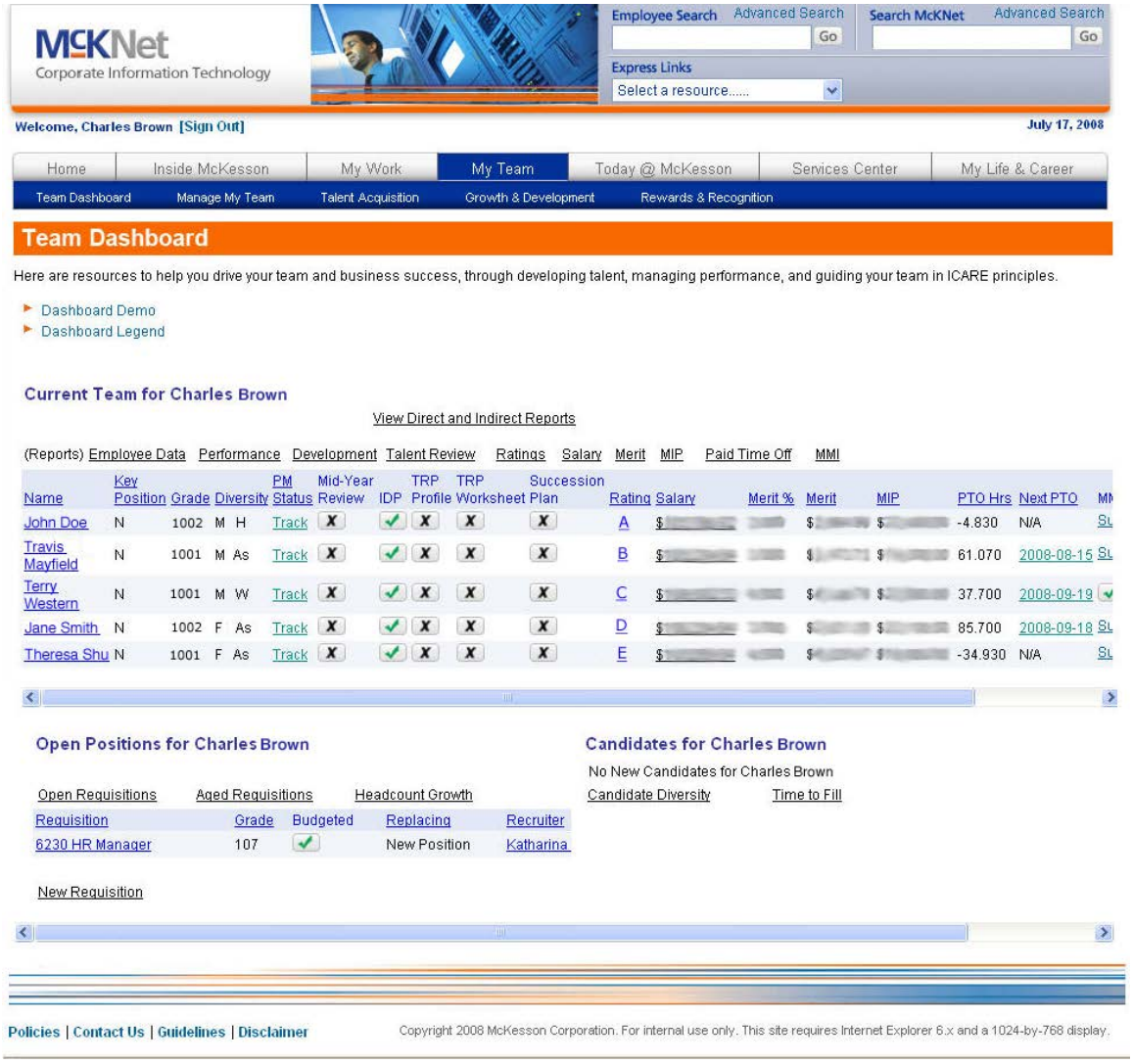
The homepage. The site's homepage offers a single access point to tools and information, providing news and content personalized by business unit/location, personalized work-related content and tools, and ad banners to drive users deeper within the site. Each of the sections listed below also has a presence on the homepage to encourage further exploration of the site.

Inside McKesson. This section is dedicated to business literacy and supporting a unified culture. It features company history and background, as well as news, programs, and policies.

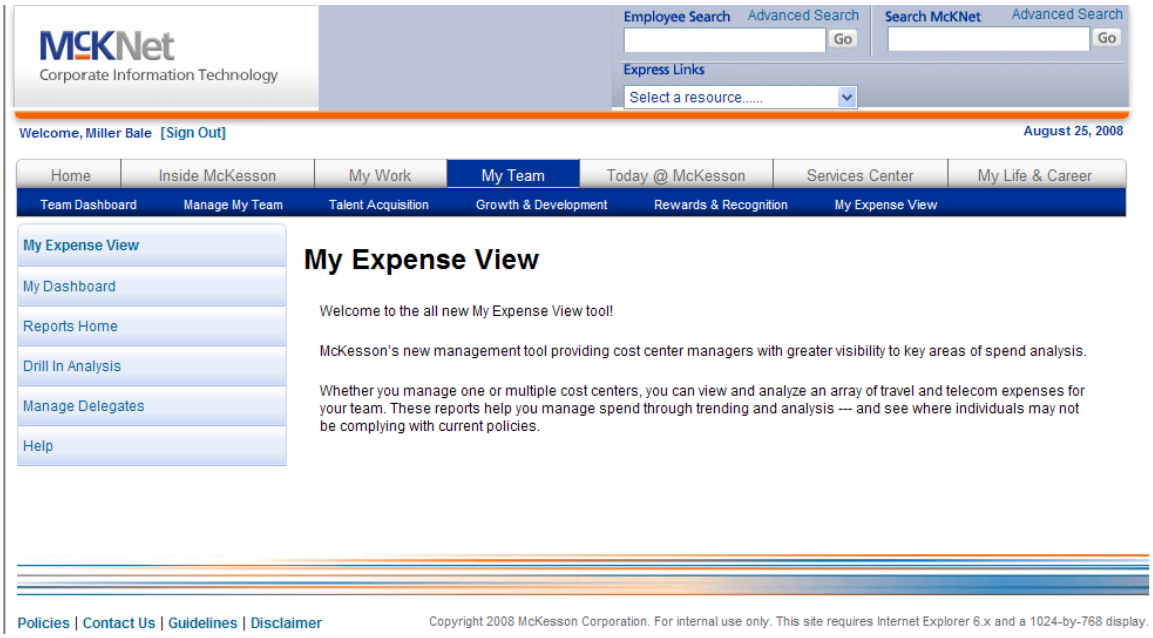
Pictured: The *Inside McKesson* page. This page contains company news and links to critical internal content, including sub-sites and portlets for business units and corporate departments.

***My Work*.** This section offers an access point for all resources pertinent to an individual employee's job, personalized by job function. For example, a sales manager would see sales reports, commission statistics, marketing materials, and updates available all in one place. This feature replaces the multitude of e-mails that bombarded salespeople prior to its arrival. Taking this information out of e-mails also makes it easier to track, search, or update.

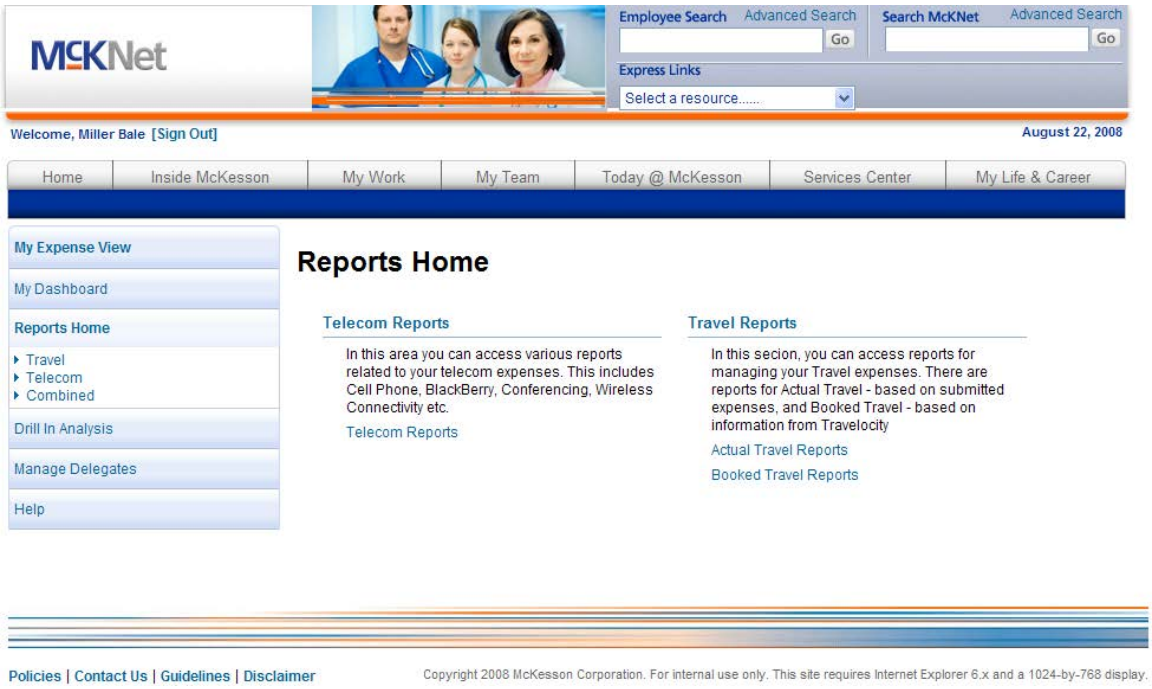
Expense View. The *Expense View* dashboard and application enables managers to view and analyze expenses in great detail, including travel, entertainment, and telecommunications.



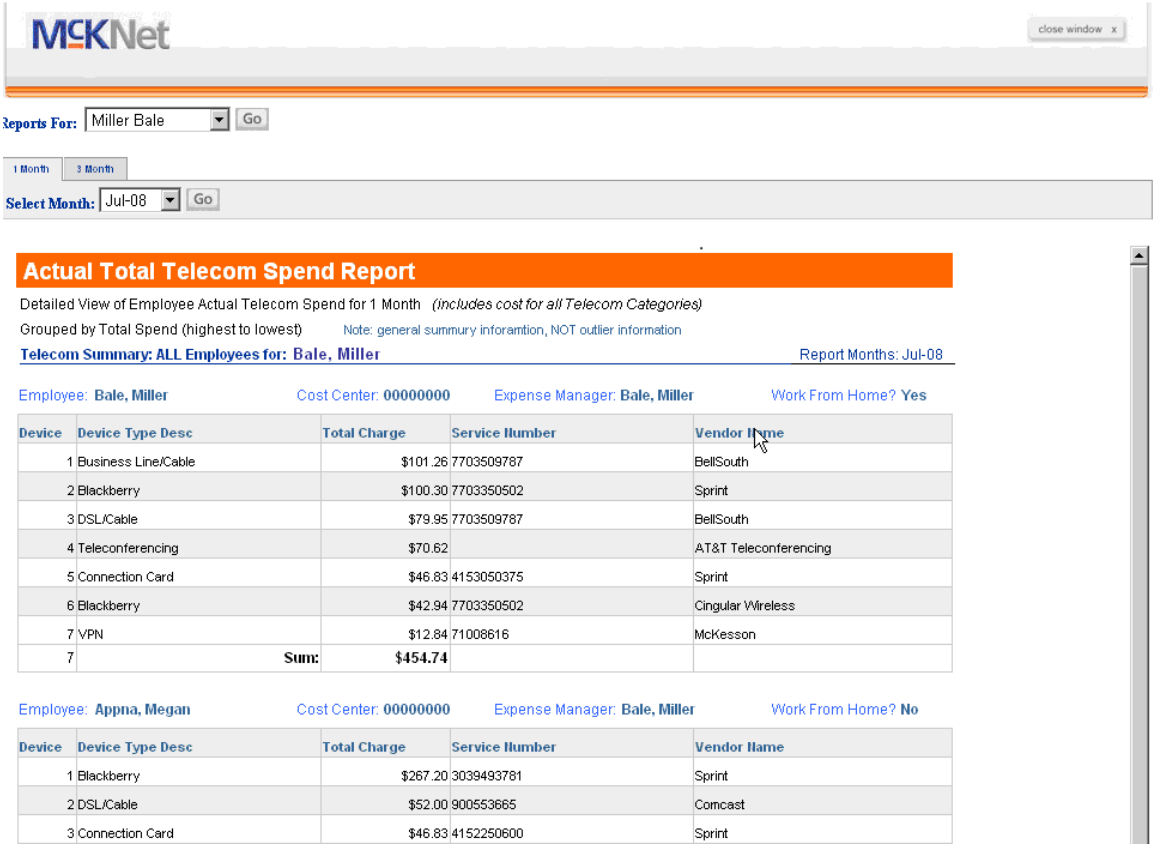
Pictured: The *Team Dashboard* for a manager. It includes performance information about employees, as well as open positions and candidate status.



Pictured: The *My Expense View* in the HR portal lets managers analyze expenses in detail.



Pictured: The *Reports Home* in the *Expense View* section. This page offers a manager access to reports on departmental expenses.



McKNet

close window x

Reports For: Miller Bale Go

1 Month | 3 Month

Select Month: Jul-08 Go

Actual Total Telecom Spend Report

Detailed View of Employee Actual Telecom Spend for 1 Month *(includes cost for all Telecom Categories)*

Grouped by Total Spend (highest to lowest) Note: general summury inforamtion, NOT outlier information

Telecom Summary: ALL Employees for: Bale, Miller Report Months: Jul-08

Employee: **Bale, Miller** Cost Center: **00000000** Expense Manager: **Bale, Miller** Work From Home? **Yes**

Device	Device Type Desc	Total Charge	Service Number	Vendor Name
1	Business Line/Cable	$101.26	7703509787	BellSouth
2	Blackberry	$100.30	7703350502	Sprint
3	DSL/Cable	$79.95	7703509787	BellSouth
4	Teleconferencing	$70.62		AT&T Teleconferencing
5	Connection Card	$46.83	4153050375	Sprint
6	Blackberry	$42.94	7703350502	Cingular Wireless
7	VPN	$12.84	71008616	McKesson
7	**Sum:**	**$454.74**		

Employee: **Appna, Megan** Cost Center: **00000000** Expense Manager: **Bale, Miller** Work From Home? **No**

Device	Device Type Desc	Total Charge	Service Number	Vendor Name
1	Blackberry	$267.20	3039493781	Sprint
2	DSL/Cable	$52.00	900553665	Comcast
3	Connection Card	$46.83	4152250600	Sprint

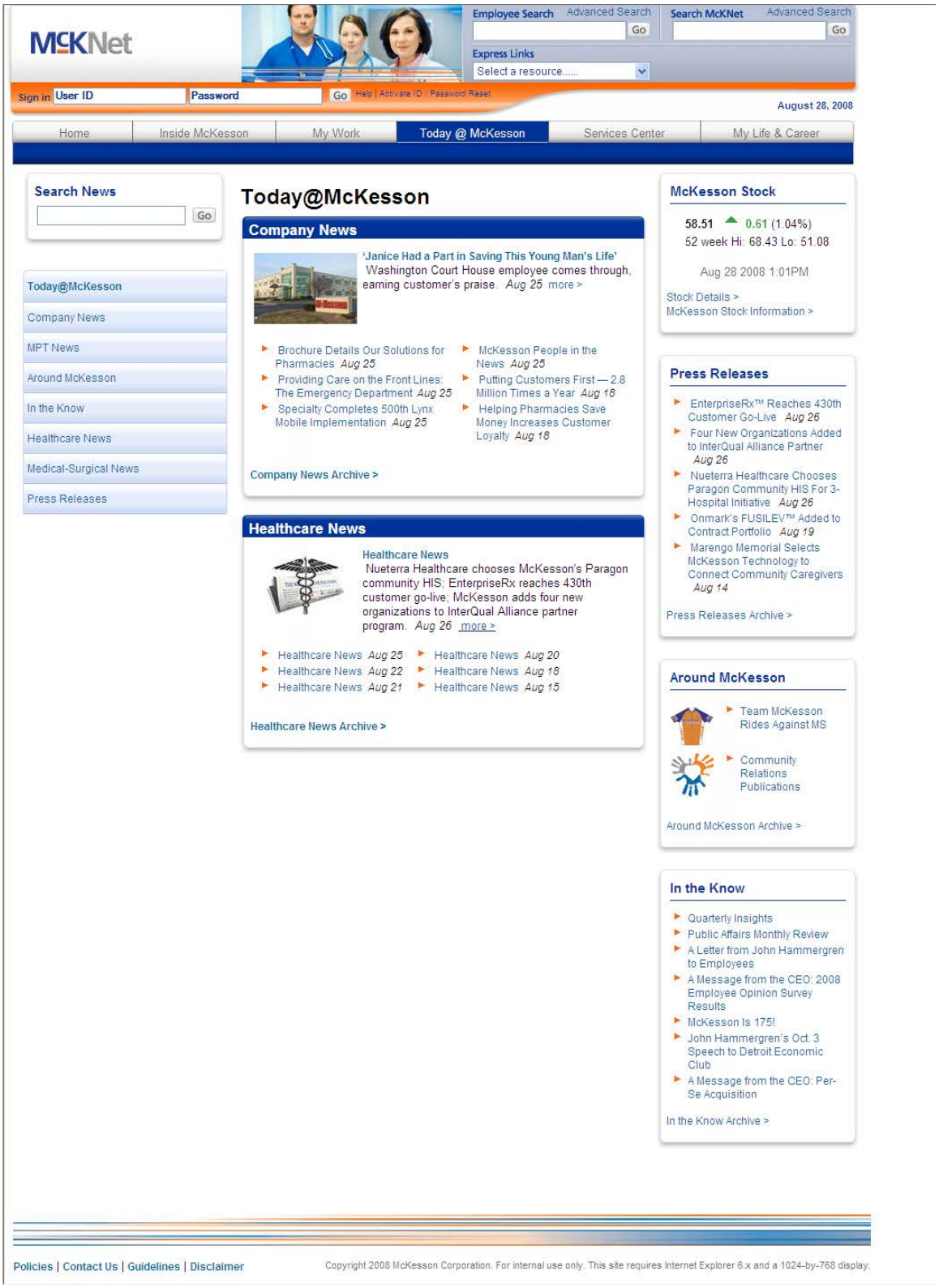
Pictured: A telecommunications spending report. This sample report from the *Expense View* shows a roll-up of all telecommunications expenses for a manager and his reports.

MPT sales portal. The *My Work* section is the sales portal's main landing page. The section offers users tabs for various kinds of information, including news, messages, reports, product information, forms, information about the sales process, and a calendar of events. "When I log onto the sales portal, everything is tailored to my role as a clinical solutions specialist," said Stefanie Abernethy, who is based in Phoenix, Arizona. "The portal has all of the information that I need to do my job. And because of the single-sign-on access, I don't have to remember a lot of different passwords. I can use the portal as one point of entry to get all of the information I need."

Another sales portal area, *Product Central*, contains information on all of the division's products. "Because I cover so many different products in my role as a clinical solutions specialist, I use *Product Central* a lot," said Abernethy. "I can usually find the information I need, and if I have specific questions, the names of the product managers are listed on the right side of every product page with their phone numbers and e-mail addresses."

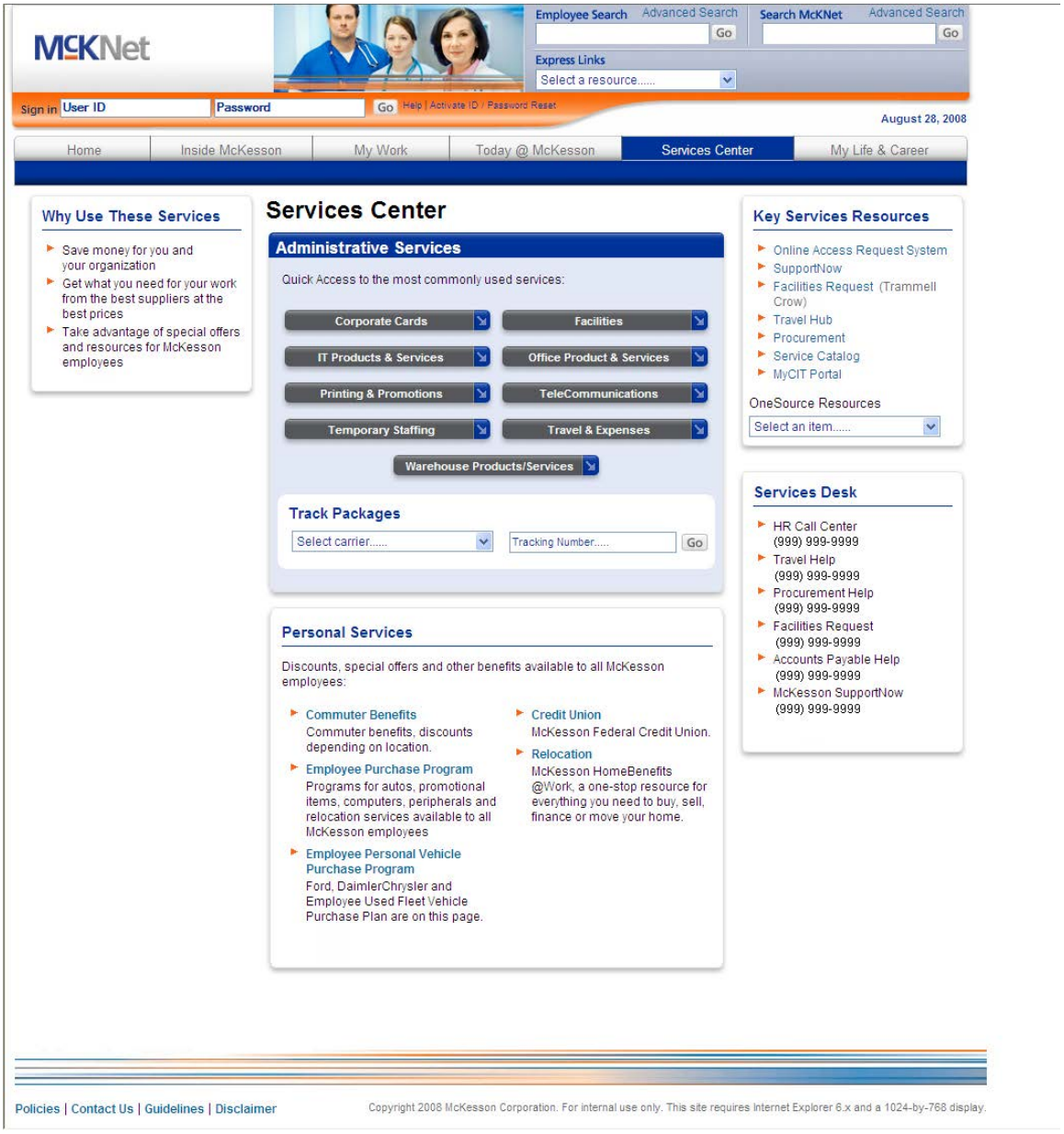
Today@McKesson. This news center offers up-to-date news—company-wide and personalizable by business unit and location—to ensure that employees are knowledgeable about the business overall and feel connected to their specific business unit.

10 Best Intranets: McKesson Corporation



Pictured: *Today@McKesson* features company news, industry news, and press releases all in one place.

Services Center. This section hosts centralized services that are personalized by location and give employees quick access to resources they need.



Pictured: The *Services Center*. This page offers access to a variety of administrative services, personal services, and links to enterprise applications for travel, procurement, and systems access request systems.

My Life & Career. Integrating HR tools, content, and support into one central location, this area is individually personalized, delivering information based on role (leader, manager, or employee) and personal data. Featured information supports the total value of employment, while new, process-related information helps guide employees through complex tasks. In addition, a new employee section makes sure new hires are well integrated into the organization.

Collaboration Tools

Web 2.0 Features

McKesson uses SharePoint technologies to enable wikis, blogs, file sharing, team sites, and integration of social media with the portal. These features benefit the site by enabling increased collaboration and soft knowledge management (with user-driven content). Unfortunately, the design of the SharePoint-based features is currently inconsistent with the portal UI.

"One persistent complaint and pain point around the SharePoint sites has been the unbranded look and different navigation paradigm," says Thomsic. "Users shouldn't have to think in terms of technologies and worry about where Vignette and SharePoint sites begin and end. They don't care about what technology is behind the intranet, they just want to get their jobs done and find what they're looking for."

In an attempt to reconcile the discrepancy between the portal and the SharePoint technology, the McKesson team is initiating a project to integrate the design of SharePoint-based features with the design of the portal.

"Rather than build new applications, we are leveraging our investment in SharePoint and other technologies and exploring partnerships with companies that provide an integrated set of social software applications for information sharing and team collaboration. ConnectBeam, IBM, and NewsGator are companies we are considering."

Using connecting technology to integrate the portal with SharePoint will be important for users because it will create a more cohesive user experience while also improving the searchability of portal content and content found within SharePoint sites. The plan is to display information in the same design and look and feel that they have tested and invested in.

"One of the benefits we've derived from the portal project, through governance at the executive and operational level, is the development of a coherent strategy for what uses to make of both the portal and SharePoint sites," says Thomsic. "We now have clear guidelines for where the portal makes most sense, particularly for communicating across the company and integrating with corporate internal applications, and when SharePoint is appropriate, such as for sharing among local teams or controlling access to information."

Creating a Sense of Community Online

For some companies, the "softer" aspects of online community—that is, the tools that connect users socially and create a sense of belonging within the company—are highly valued and an intrinsic part of the culture. For others, they are superfluous; merely the icing on a cake that are considered only after all the mission-critical features are up and running.

Stakeholders at McKesson are increasingly finding the value in creating stronger connection points between employees in the online environment.

"As we move into more and more situations where we're allowing people to work at home, and they lose the day-to-day, face-to-face interaction, we also see through surveys that they tend to become more dissatisfied with that job after a year or so because of the lack of social contact," says Randy Spratt, McKesson CIO and executive sponsor of the employee portal. "The ones who stay in the job find ways to replace it with electronic social networking. So, to that end, we're investing in collaboration tools, and bandwidth to be able to support video networking, and

network tools within our infrastructure that will allow people to communication more freely."

An advanced collaboration project is set to launch in March 2009 to augment the community and collaboration features the site currently offers. "We are realizing the difficulty of implementing social networking technologies in our environment, and that the portal is not a 'magic bullet,'" says Thomsic. "It's a veneer that requires hard work underneath to provide more convergent tools, processes, and so on."

Thomsic has found this to be a huge and potentially systemic problem for the company because the businesses were turning to SharePoint as a cheap and fast way to enable collaboration. This seems like a good band-aid, but without guidance, she says, SharePoint produces "chaos and confusion."

"Our objective is to evolve our platform with technologies that combine concepts of social bookmarking and tagging with those of social networking," she says. "As a B2B enterprise organization, we still need security settings, workflows, and roles/relationships."

LESSONS LEARNED

McKesson's team members have learned a lot from the portal project, including lessons that have informed their work as they've enhanced the project beyond Release 1.

Tracey Thomsic, director of online marketing, outlines the most important lessons learned by her team so far.

Lessons from Release 1:

- **Build it and they will come.** "We did the right thing to enable the platform first, then allow groups to join as they were ready," says Thomsic. "This culture would not have accepted a corporate-mandate or forced solution.
- **Evangelize.** "What we learned after Release 1 (May 2007) is that we have to invest heavily in evangelism and communication to move beyond a skunk-works model. "We learned that a launch communication strategy needs to be educational as much as evangelical; and it needs funding to be successful. Technology is cool and critical, but if people don't understand how it works and how it helps them, they will never get over adoption hurdles."
- **IT and communications departments must join forces.** "IT and Corporate Communications need to work together with a clear understanding that the business drives the requirements. Without a clear mandate from the business, new technology won't be adopted and the investment in development will be wasted.
- **Governance, governance, governance.** "Good governance by a committed board of the right executives from each business has given us both power and steering: the authority and budget to accomplish the work and the clear direction on priorities. Governance has really enabled us to balance corporate interests with [business unit] autonomy. Governance is also key to adoption because people in the business units and functional groups will respond much more readily to evangelism from their own managers.
- **Think about metrics early and involve the IT team and business stakeholders.** "If IT doesn't understand the importance of measurement, then the platform dependencies related to analytics issues—in our case,

WebTrends—will be ignored. This is another area where strong business leadership is critical."

- **Develop a strategic partnership with an agency that has a design philosophy and commitment to solving business problems.** "In our case, LDS helped us strategize the project and select the right group to focus on for our first release. We chose sales over HR for Release 1 because of the impact on the bottom line and the fact that the internal change management issues were less complex. LDS facilitated a formalized study of top 10 tasks creating the most problems across the company on the intranet, and then they did research to determine when/why people bail out and give up. From that data, we've developed KPIs."
- **Engage the brand team.** "Providing a standard footprint and consistent brand identity encourages adoption and puts a friendly face on the company. Even though we still have lot to do to integrate and converge the way we work around a single set of capabilities, the branded portal experience provides context and unity and people are less intimidated about using it."
- **Realize that you are not your target audience.** "It sounds obvious to Web professionals and designers, but we learned this after Release 1. We surveyed users for feedback on the new portal one week post-launch, and while much feedback was positive, we got some that was negative and definitely not encouraging. We moved their cheese and they let us know, but some of the latter has been the most helpful in determining our punch list for enhancements between major releases."

  "Just giving people the opportunity to engage and feel heard can make a difference."
- **MPT sales portal.** "As you are going through the designs, you also need to make sure some of your key content contributors are also involved, as they are the SMEs. The content work stream was started after the designs were reviewed for the sales portal. If our key content contributors had been involved up front, working through the designs with our Sales Advisory Board, the final designs may have been different. Now, we are starting to redesign a few areas that have been live for about 15 months to better balance the content available with the needs of the Sales team."

Lessons learned from the HR portal project:

- **Time matters.** "Six months is not enough time to redesign a portal."
- **Build it and they will come.** "For the initial launch of the HR portal, we didn't change a lot of content, but the new design has made content owners more interested in developing better content."
- **Make sure that the lines of decision-making are clear.** "There are many levels of stakeholders. Being clear about what is expected from each level keeps everyone on the same page and helps you stick to your timelines."
- **Hire a really good content manager.** "We did, and we were really lucky!"
- **Don't ignore analytics and site metrics in the planning phase.** If you do, "it will bite you later. The business will want to see numbers, and the executives love them. That saying about, 'you can't manage what you can't measure' is really true."

- **Get an executive sponsor who is engaged.** "McKesson's CIO, Randy Spratt, is a strong advocate and he's forward-thinking and understands the portal as a communication tool and every day work space."
- **Communicate business strategy with IT early and often.**
- **Listen to users.** "Invite feedback, and share it with the entire Web team. Encourage transparency in the team and respond with empathy to users when the feedback is negative."

RESULTS/ROI

Measuring User Satisfaction

In June 2008, Peridot conducted an online survey with Foresee Results to assess customer satisfaction on the employee portal. Through a proprietary methodology, the survey set out to identify the key attributes important to the portal's users, determine which site elements have the biggest impact on overall customer satisfaction, and generate a score based on an index of over 200 companies and government agencies.

The survey generated 1,425 completed responses—a 26.6 response right—from the period June 2–July 22, 2008. The overall customer satisfaction for the employee portal was 64 (out of 100). This result is considered on par with other intranets included in ForeSee's database.

Content was rated highest, with a score of 76. Navigation and tasks were rated slightly below average at 61. *Inside McKesson* and *Today@McKesson* received the highest satisfaction scores, while *My Life & Career* and *My Work* were the most-visited portal areas.

"The survey revealed some of the challenges that many enterprise portal teams have," says Thomsic. "Usage of the employee portal platform and other internal tools/sites that exist outside the portal are seamless to many survey respondents. The implication is that most respondents rate their level of satisfaction based on their overall online experience."

Though many of these online systems are not within the portal team's control, they nonetheless impact overall customer satisfaction. "The Corporate Web Team will focus on improvements to the site's look and feel and navigation in response to this survey," she says. The team will also continue to work with its internal partners to create a more integrated, user-centered experience to increase satisfaction levels.

Communication Wins

The company also experienced some big communication wins through the new portal:

- **Targeted communication.** Internal communications teams in various businesses can now target communications to specific audiences in a way that's meaningful, proactive, and relevant to employees' jobs and location. "The portal also enables communicators to manage and balance messaging among corporate and business unit groups, reducing duplicate or irrelevant information that employees used to see—or worse, that some didn't ever see because of outdated e-mail distribution lists," says Thomsic. "News, messages, announcements, job aids, tools, applications, and data are integrated across business units, delivered via the portal, and the design is attractive."

The team has found that click-through on company news articles is higher than prior to the redesign; this is validated by the success of headlines, which the team can now measure.

- **Engaging employees.** Thomsic says that one business unit HR team successfully used the portal to launch an employee engagement program for managers. "That has been tremendously successful," says Thomsic. "The team provided all of the communication and tools to a subset of managers for that business, and achieved a high completion rate for compliance with the program."
- **Increasing engagement.** "The ultimate measure of success will be increased engagement scores, which we can't measure yet," says Thomsic. "We'll have that information later this calendar year, when we have employee survey results. We can measure reach and tool usage, however, and those metrics show that using the portal ensured that all managers in the target audience saw and accessed the information."

  Prior to the portal roll-out, Thomsic says this type of program would have been cost ineffective for this group. "It would have required substantial budget and time for the team to rollout, requiring reliance on e-mail, a third-party hosted site with a unique login, and a design that was different from anything else in the McKesson intranet environment, and was not integrated with any relevant corporate HR content."

Members of the MPT sales organization site the following as top benefits of the redesign:

- **SSO to sales applications.** SSO was implemented for *My McKesson HR*, *Travel Hub*, Siebel, Siebel Analytics, and Business Objects. Direct links to Siebel were implemented for *My Opportunities*, *My Team's Opportunities*, *My Quotes*, and *My Team's Quotes*.
- **Automated access to commissions statements via Business Objects.**
- **Internet Explorer access to product and marketing information, including presentations**. *Product Central* is a "one-stop shopping" area for product content. Each product and solution page follows the same format, and displays contacts, customer references, and internal and external tools. *Product Central* also includes content addressing customer business needs and roles. Sales personnel can also create a *My Product List* as a personalization feature.
- **Sales analytics report integration.** The *My Reports* page includes integrated Siebel Analytics and Business Objects reports. *My Reports* automatically displays personalized forecast, funnel, closed win, and commission statement data. The *My Favorite Reports* personalization feature lets sales personnel pick their top three reports.
- **Reduction in e-mail volume.** The *Message Center* serves as a repository of messages. All national and regional sales messages can be stored centrally, with archiving. The *Message Center* also manages product, event, marketing, education, and commissions messages in one central location.

Management Wins

From a management perspective, the portal has already begun to make a difference across the organization. Measuring user satisfaction is important in gauging an intranet's success, but management often has its own litmus for a site's success. At the enterprise level, SSO has been identified as the portal's biggest overall benefit and is "by far considered the most useful feature launched," says Anand Srinivasan, development manager. "Also, offering a personalized view of content and functionality for business units and corporate functions is very high value."

Managers from the three main business areas explain what they consider to be the portal's biggest positive impact.

Corporate Communications: Aggregation
The big win here was corralling the disparate intranet presences of the different business units and functional groups within the company into a single interface managed through one publishing platform. This was the foundation that enabled the company to offer all the benefits of targeted and integrated communication, SSO, and access to applications.

CIT: Single Sign-On
Providing SSO was the big win for CIT, which had a capable team in place to deliver the executives demands.

HR Portal: Subtle Differences Make a Big Impact
Renaming and splitting a single top-level navigation tab from *HR* to become *My Team* and *My Life and Career* were important wins for the HR portal.

Howard Hughes Medical Institute

Using the intranet:

Howard Hughes Medical Institute (HHMI) is a nonprofit medical research organization that ranks as one of the nation's largest philanthropies and plays a powerful role in advancing biomedical research and science education in the US. Over the past two decades, HHMI has made investments of more than $8.3 billion for the support, training, and education of the nation's most creative and promising scientists. The Institute employs about 3,000 people, commits more than $700 million a year for research, and distributes $100 million in grant support for science education.

Headquarters: Chevy Chase, Maryland

Number of employees the intranet supports: 3,000

Company locations: Across the US

Locations where people use the intranet: More than 70 US locations

Annual disbursements:
HHMI commits more than $700 million a year for research and distributes $100 million in grant support for science education.

Design team:

TandemSeven did the design and requirements gathering for the project. TandemSeven and CapTech Ventures (subcontracted through TandemSeven) jointly handled the technical architecture and implementation. An in-house team assisted with all aspects of the project.

In-house team members: Leslie Forte, Director, Web Applications; Alycia Eck, Senior Intranet Editor; Kris Weinhold, Senior Web Applications Developer; Kate Forte, IT, Project Leader; Dave Tabor, Manager, Web Engineering; Bill Dorris, Senior Project Leader Oracle

TandemSeven design team: Kenneth McDowell, Principal User Experience Architect; Andrew Schechterman, Senior User Experience Architect; Paul Eisen, Principal User Experience Architect; Carrie Notte, Principal Visual Designer; Frank Donofrio, Senior Visual Designer

Technology team: Stephen Wyman, Vice President and Project Manager, TandemSeven; Alessandro Barroso, Technical Architect, TandemSeven; Ron DiFrango, Technical Architect, CapTech Ventures; Scott Duncan, Content Manager, CapTech Ventures; Niran Fajemisin, Principal Technical Architect, TandemSeven; Phil Kedy, Lead Technical Architect, CapTech Ventures; Mundi Morgado, Principal Technical Architect, TandemSeven; Vincent Schoenfelder, Solution Architect, CapTech Ventures

SUMMARY

Not every intranet team talks about fulfilling the "behavioral, intellectual, and emotional needs" of its users, but that's exactly what the team behind the intranet for Howard Hughes Medical Institute (HHMI) considered when building the site. Inspired by the Institute's philanthropic work, team members worked closely with employees to understand the needs of users, from biomedical scientists to researchers to support staff. Even "pre-employees" have limited access to the site, with access planned for outside vendors and collaborators as well. The team strove to create a site to support all users and fill the unique needs of the Institute.

Site use varies from users who manage large amounts of data to more traditional users who check benefits information and news headlines to users managing projects through the site or tracking vendors. Given the nature of the organization, much information on the intranet is sensitive, so providing the right information to the right audience is crucial. As such, personalization is integral to the site's structure, with permissions set for individuals and groups.

The HHMI homepage emphasizes the site's personal aspect, with information directed at the individual. The site is structured to allow quick access to personal content via the *My Home*, *My Department*, and *My Projects* tabs, making the most relevant information on the site easy to quickly access.

Users can customize the homepage to reflect their own priorities by moving content portlets or reorganizing the information within them. (The functionality to add and

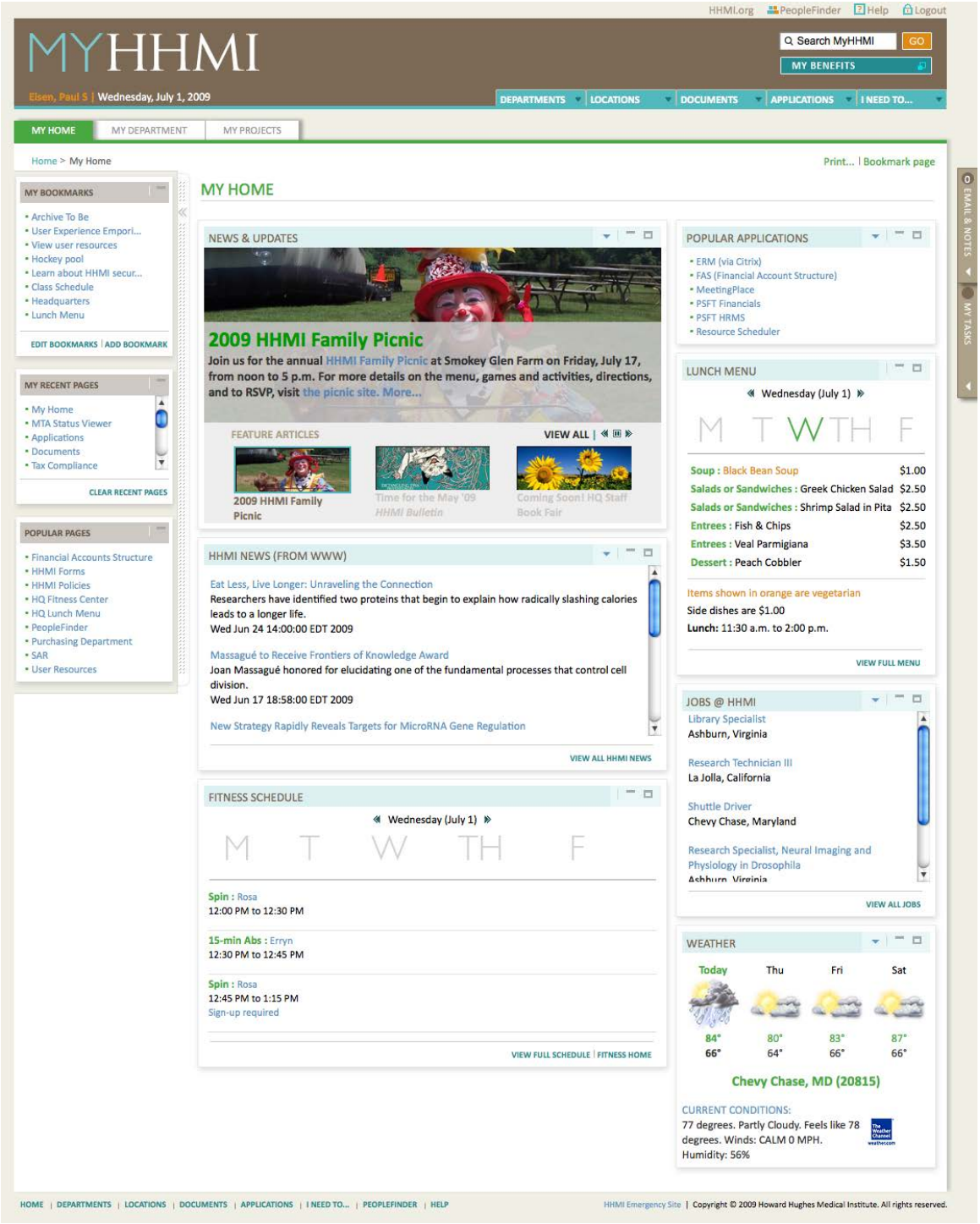
remove portlets is developed, but not yet in production.) For instance, users can customize a list of *My Bookmarks* with shortcuts to important content and can prioritize the links within that list. Tools such as *My Recent Pages* give users one-click access to pages recently visited, on the assumption that if users visit the page once, they might need that information again. A list of popular pages leads to commonly used site areas, including *Forms*, *Policies*, and the *PeopleFinder* employee directory.

The body of the *My Home* page contains *News and Updates* front and center, always providing new information for users to view. A rotating view shows users multiple featured stories. The area's design lets users see each featured article's headline. Users can click on any headline (whether it's in the main pane or not) or page through the headlines at their own pace. When headlines are featured in the main pane, they're accompanied by brief blurbs with key information and relevant links to more information.

HHMI news is featured below the update area, with concise headlines, clear blurbs, and the date and time the information was posted. Users can scroll through the latest headlines or follow the link to view all news headlines. Other areas feature up-to-date information, such as the fitness schedule, lunch menu, and weather. Everything on the page is relevant, personal, and up-to-date.

Navigational options appear in the upper right-hand corner of the page, with menus giving users direct access to content within those sections. There's also a prominent link to *Benefits* information at the top of the page. This placement, separate from all the other links, indicates that the benefits and payroll information is being drawn from a separate, third-party application. *MyHHMI* provides a number of convenient points of integration for this information, including the pervasive link in the header.

A link above the main site search lets users go directly to *PeopleFinder*, the employee directory. This link is accompanied by links to the public site, HHMI.org, *Help* information and a link to *Logout*—which is particularly important in a single sign-on environment where secure information can be accessed.



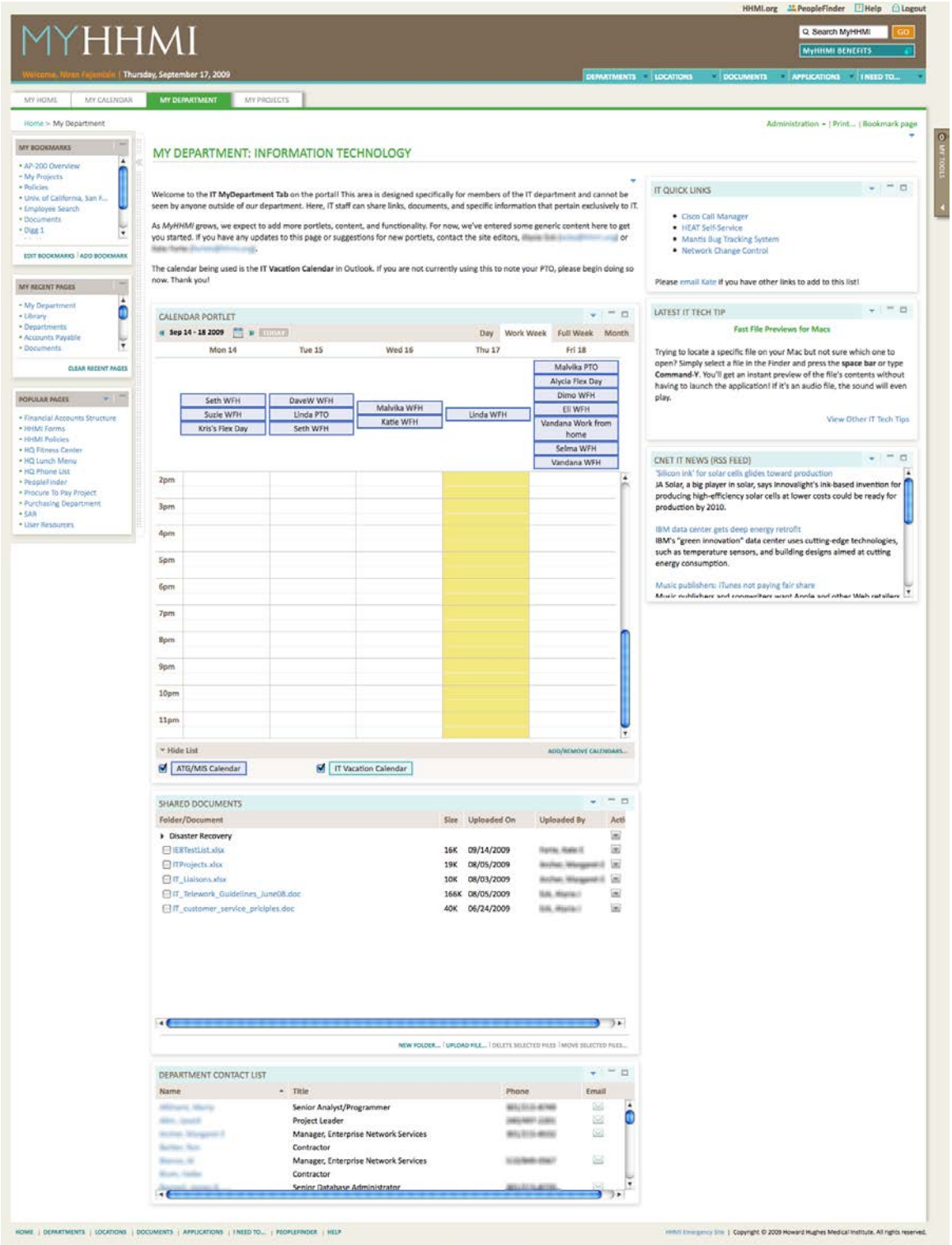
Pictured: The *MyHHMI* homepage presents relevant, personalized, and customizable information to the user, providing quick access to departmental content, project information, and areas of personal interest.

On many intranets, department pages simply define what the department does and link to contact information or forms created by the department. *MyHHMI* has similar pages, but also adds a feature called *My Department*. These workspaces are

intended for each department's internal use. Employees within a department are provided tools, information, and team collaboration spaces essential to their department. The page included below shows the Information Technology department page in its early stages, when, as the page notes, "we expect to add more portlets, content and functionality." Although the page shown was only recently added, it already contains helpful information, including a group calendar with employee schedules that indicates who's working from home, taking a flex day, or has personal time off. Shared documents are also featured, along with a full contact list for the department.

IT Quick Links direct employees straight to the tools of most interest to the group, such as *Cisco Call Manager* and *Network Change Control*. Messages on the page and in the portlets make it clear that content owners are open to suggestions for what to add, remove, or feature on the page. For instance, a note to *email Kate* if they want to add to a list of *Quick Links* shows employees that they can have an impact on what appears on the page. This changes the *Quick Links* from a potentially static piece of content to a list that can be influenced by employee needs. Asking for feedback on a site, even in little ways like this, can go a long way toward making users view the site as a helpful tool rather than something they have to use.

The page is rounded out by a tech tip and RSS feed from CNET, making it a nice combination of useful content, practical details, and helpful shortcuts.



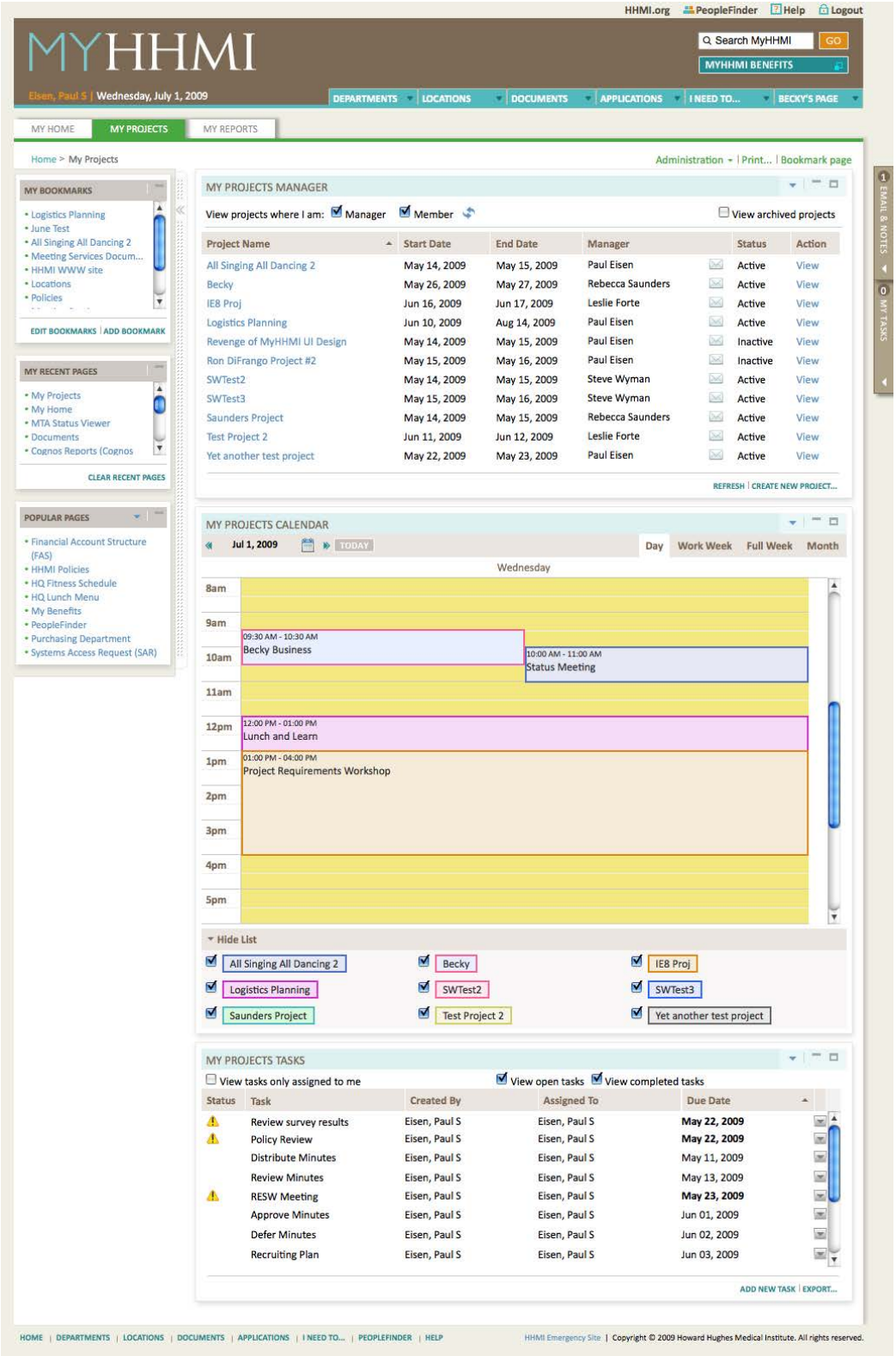
Pictured: Department pages are restricted to employees of that department, making it possible to share information to which the general *MyHHMI* audience doesn't have access. The screen here shows a *My Calendar* tab for the user's Microsoft Outlook calendar. Users who don't have an Outlook calendar won't see that tab.

A defining element of the HHMI intranet is that it allows users to create, share, and view project information through the site. Employees have a *My Projects* tab, which shows all projects for which the employee is a manager or a member. Employees can set up new projects as well. The employee who sets up the project is automatically the manager, and other members can be designated for the project and given specific permissions for seeing, using, or editing the project's content.

The *My Projects* page shows users all of their projects, with start and end date, manager's name and email link, and status information. A projects calendar lets users view all projects on a single calendar. Projects are color-coded to help users distinguish them from one another. Users can view all projects, no projects, or selected projects. This allows employees juggling multiple projects to see all meetings and calendar items in one view.

Project tasks are listed as well. Simple checkboxes let users choose whether they want to view only tasks assigned to them or view all tasks, as well as to view open tasks, completed tasks, or both. Completed tasks are indicated with a green checkmark next to them, while exclamation points indicate items that are overdue.

Each project page lists tasks for the specified project only; there's also an aggregated view of all of a user's projects and associated tasks on the landing page for the *My Projects* workspace. In the aggregated view, users can sort tasks by project.



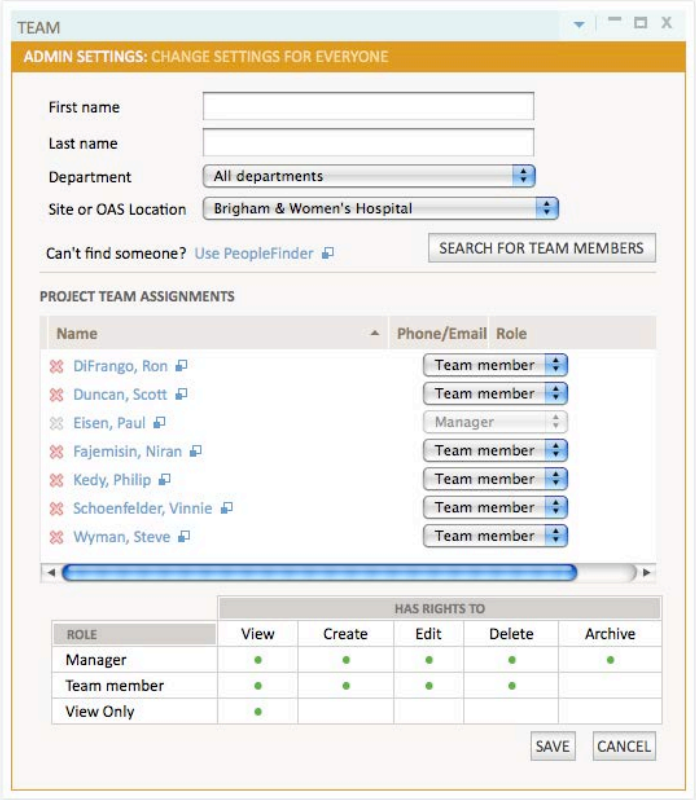
Pictured: The *My Projects* area of the site summarizes all projects that an employee participates in, either as a manager or member. Flexible tools allow users to see all projects at once or focus on specific projects.

Project managers can add or remove project members and assign particular permissions based on user types. The *Project Team Portlet* lets users search for team members based on first or last name, department, or site or OAS location. A link to *PeopleFinder*, the site's complete employee directory, is provided to help anyone having trouble locating a team member using the portlet.

Team members can be added to the project and assigned a role within the project. Employees can be designated as member or manager, or can be given *View Only* access, meaning that they can't make any changes to the project site, but they can view it. Managers have rights to view, create, edit, delete, or archive information. Team members can do everything other than archive.

The roles are predefined combinations of access. People's roles can be changed among the access levels: manager (full access), member (add, edit, and delete, but not manage or archive), and view-only, but a project manager can't subselect types of access within access levels.

Managing access rights can be a tricky and complex task, but the site has simplified it to a handful of roles with defined access. Managing team members on the project page is as easy as adding them, assigning a role, and clicking the *Save* button.

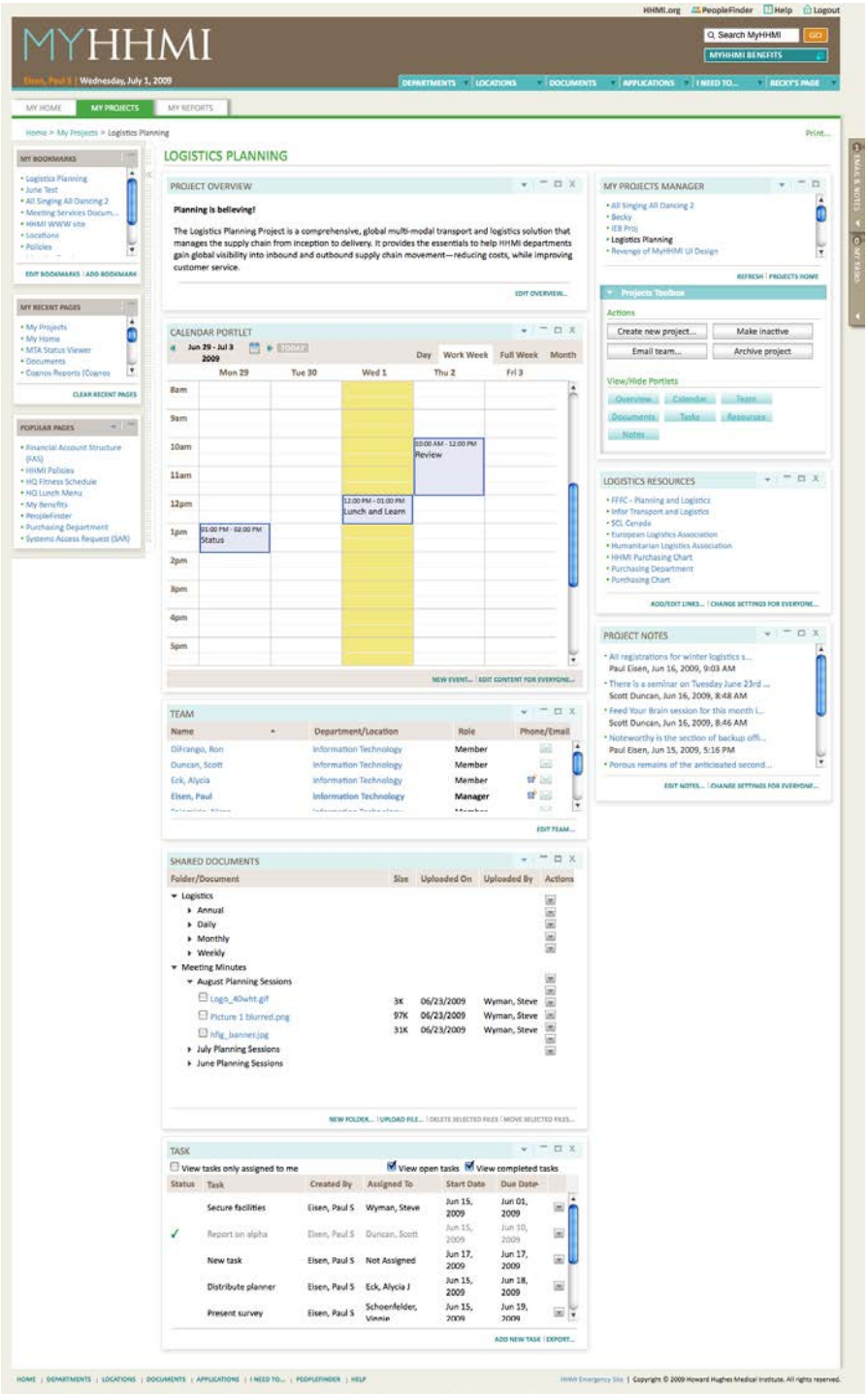


Pictured: The *Project Team Portlet* allows the project manager to easily add project team members and assign roles and their associated permissions.

Project pages are a central location for teams to share and collaborate. Project pages can incorporate team calendars, shared links to resources, project notes, shared documents, and complete project task lists. A list of all team members allows quick access to contact information for each member. Project managers can make a project inactive—meaning it's invisible to others—or archive the project at its

conclusion. A single button enables project managers to email the full team, allowing quick communication.

Having a single place to view information about the project helps keep all team members up-to-date and informed while sharing knowledge across the team.



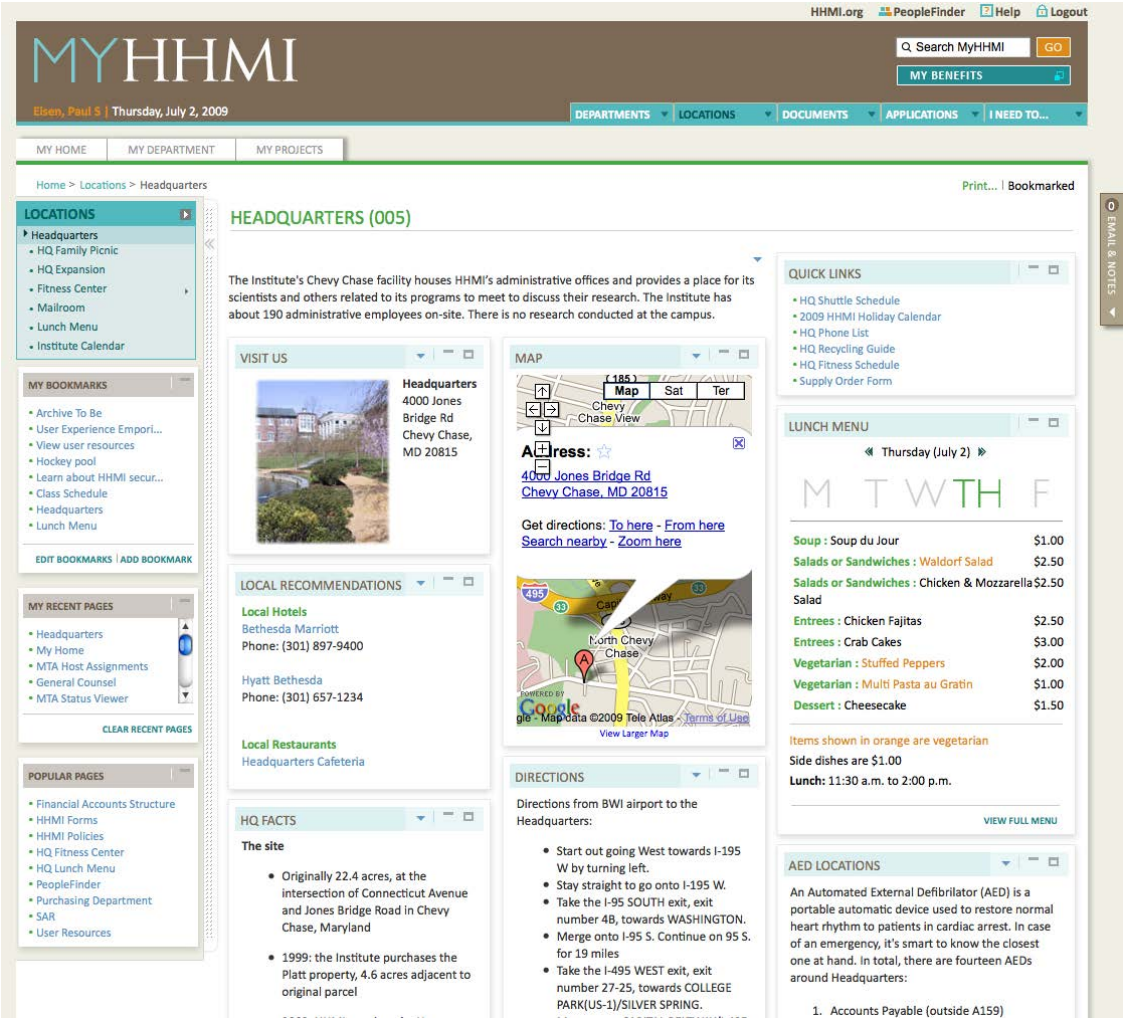
Pictured: Project pages summarize key information and allow for shared resources, including task lists, notes, calendars, and documents.

The site has a clean design throughout, making it easy for users to move from page to page without having to determine how each page works. Consistent navigation lets users know where they are on the site. The text color changes in the currently selected tab and local navigation appears on the side of the page, above the other page portlets. Breadcrumb navigation also shows users where they are in the site, indicating their current location. Breadcrumbs are nicely placed between the top navigation and side navigation.

The site makes it easy to find and use standard intranet information as well as the personalized content. Even pages with standard intranet fare are often enhanced with high-quality content. For instance, each location has its own page on the site, providing information both for and about that location. The Headquarters page shows a picture and address, but also offers information helpful to anyone coming to Headquarters, whether an HHMI employee, vendor, or visitor.

The page provides local accommodation and restaurant recommendations. Facts about the location give brief historical or interesting facts about the site, and directions and a map give users quick access to essential information for arriving at the office on time and without trouble. *Quick Links* lead to popular or important content, such as the shuttle schedule, holiday schedules, and recycling guides. The daily menu provides updated content on what could otherwise be a relatively static page.

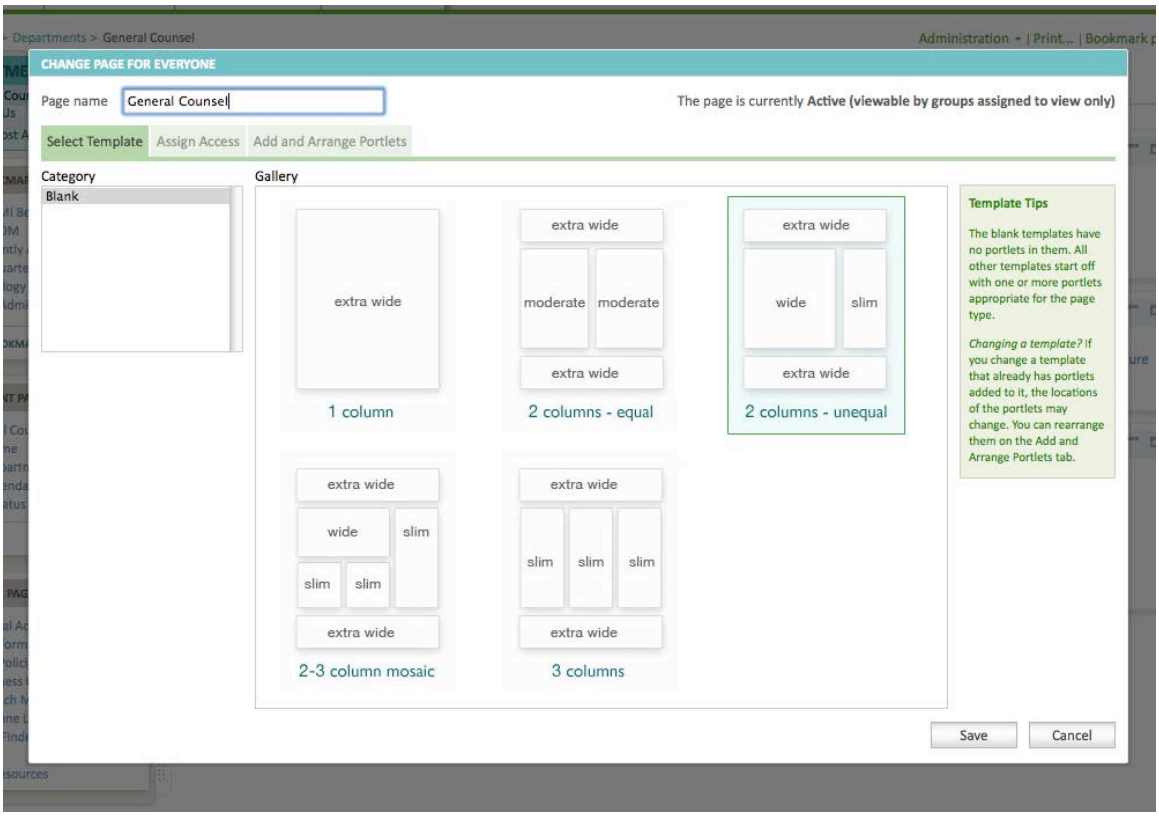
The use of portlets for conveying information gives every page a similar clean design. Each portlet has a clear title in the title bar, and consistent colors for text, links, and design elements make the page easy to scan and quickly understand.



Pictured: Location information goes beyond just an address. It includes location facts, directions, lunch menus, and more.

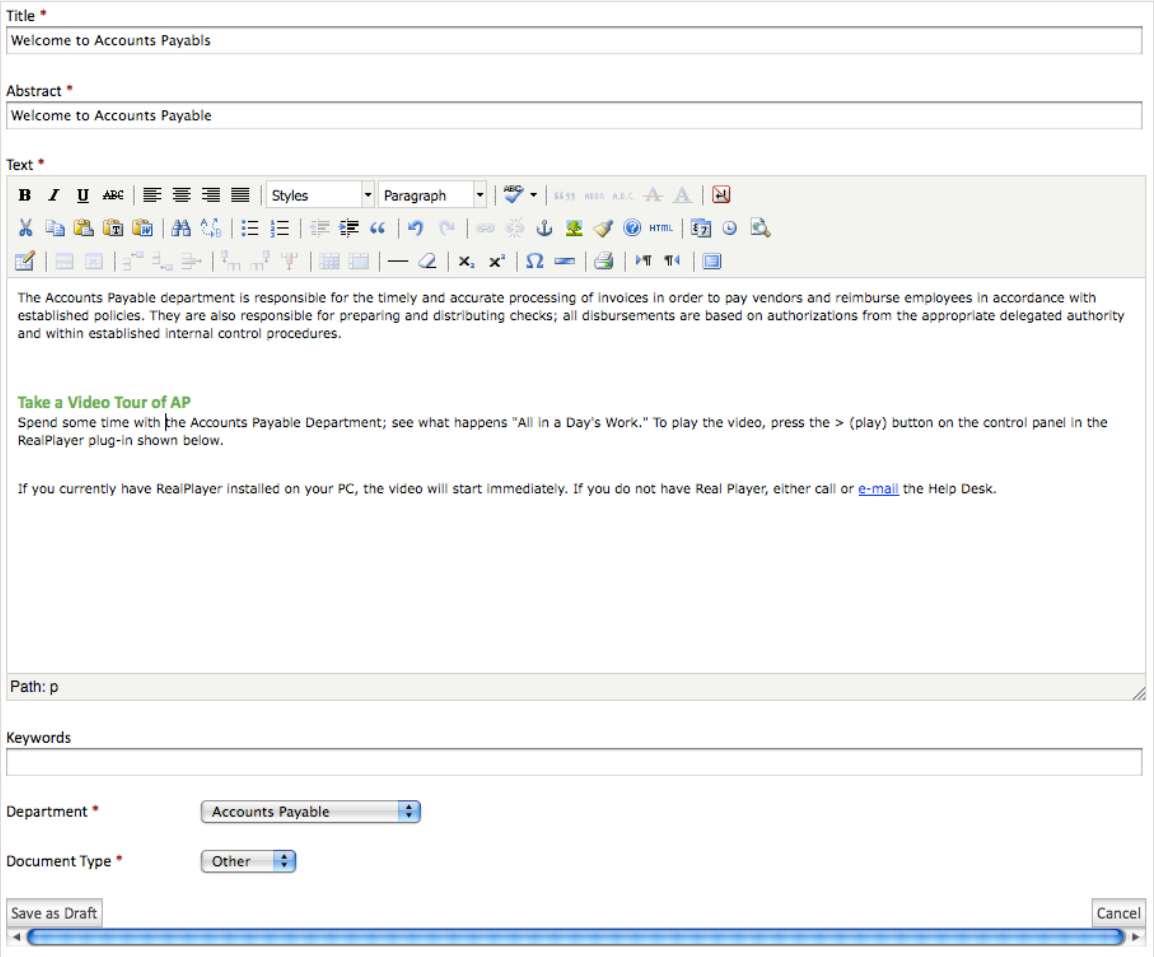
Content contributors are scattered throughout the organization. The team thought it essential that contributors could edit within the site itself, so making changes would be as simple as possible. Easy administrator interfaces and usable editing tools encourage contributors to take charge of their own content.

Content contributors can edit content through their site, and can send a preview of the changes to selected reviewers. Administrators can use the portal interface to select from one of several page templates, which allows some variety while still restricting page design to ensure site consistency. Simple diagrams show what each option looks like. Administrators can easily select a template, assign access to it, and then fill the template with content by adding content portlets.



Pictured: Administrators choose from a pre-defined selection of page templates.

Contributors don't need to learn a separate CMS to make changes. All options are within the site and are built with the user in mind. Content edits are simple. Users simply need to fill in a form. If users know how to use standard text editing tools, they can create areas of content on the site. The content form requests a title and abstract, and then provides a large open field for text entry. The WYSIWYG editing tool lets users change text colors, add links, use bold or italics, and many other actions through a simple interface. Users attach keywords to the content as well, which allows authors to tag content with terms not included in the text. Users can also select the appropriate department and document type. The tagging facilitates the faceted searching in the *Documents Catalog* and general search areas.



Pictured: Simple text editing tools make the task of updating or adding content to the HHMI intranet easy.

Knowledge, often in the form of documents, is essential to getting work done. At HHMI, the sheer number of documents and need for them to be easily accessible inspired the team to design a tool that they kept tweaking to ensure the best possible experience for users. The *Documents Catalog* allows users to search by both keywords and criteria. The tool is constructed around a faceted search that lets users select particular document criteria to narrow their search results. Users can search within a department or for a particular document format (such as Word) or document type (such as policy). Users can search unrestricted documents or protected documents, but see only the secure results that they have access to. Users can also search by publish date, recent documents, or all documents.

The faceted search acts as an advanced search, but in a simplified presentation. On most intranets, users need to click an *Advanced Search* link to see additional options for narrowing searches. By using faceted navigation, those advanced criteria are not only visible, but easy to understand and use. Users can choose to run the equivalent of a simple search by not selecting any criteria. Or, they can narrow their results to meet their specific needs by making selections. During the design testing, the team realized that it was important to users to not only select multiple criteria, but also to select several options within a specific criterion. For instance, users might want to

find secure Word and Excel files that had been recently updated. The presentation of the faceted search makes this easy and intuitive.

Users can make any selections from the criteria on the side of the page and use the *Go* button to submit the search. The search results page shows the total number of documents found, displaying 50 results at a time. In addition to filtering results, users can sort the documents found by title, department, format, publish date, or type.

HHMI.org | PeopleFinder | Help | Logout

MYHHMI

Search MyHHMI GO

MY BENEFITS

Elsen, Paul S | Wednesday, July 1, 2009

DEPARTMENTS | LOCATIONS | DOCUMENTS | APPLICATIONS | I NEED TO...

MY HOME | MY DEPARTMENT | MY PROJECTS

Home > Documents

Print... | Bookmark page

Refine document search

SEARCH

Document contains: Go

DOCUMENT TYPE

- All document types
  - Form
  - Policy
  - How To
  - Record
  - Other

Go

DEPARTMENT

- All departments
  - Accounts Payable
  - Application Security
  - Archives
  - Banking Office
  - Budget Office
  - Business Systems Support
  - Communications
  - Facilities
  - Finance
  - General Accounting
  - General Counsel
  - Grants
  - HHMI institute wide
  - Help Desk
  - Human Resources
  - Information Technology
  - Internal Audit
  - Investment
  - Library
  - Meeting Services
  - Office of the President
  - Payroll
  - Purchasing
  - Records
  - Science
  - Tax Compliance
  - Travel

Go

FORMAT

- All formats
  - Web Content
  - PDF
  - Microsoft Word
  - Microsoft Excel

Go

SECURITY

- Open
- Restricted

Go

PUBLISH DATE

- Any date
- Within the past week
- Within the past month
- Within the past 3 months
- Within the last year

Go

DOCUMENTS CATALOG

Narrow your search using the choices on the left.

We found 605 matches for all documents. Search again?

1 to 50 of 605 documents listed

PREVIOUS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | NEXT | VIEW ALL

Title	Department	Format	Published	Type
AD-200 Delegation of Authority Scope	Office of the President	Web Content	Jun 29, 2009	Policy
AD-205 Appropriations	Office of the President	Web Content	Jun 29, 2009	Policy
AD-210 Other Agreements	Office of the President	Web Content	Jun 29, 2009	Policy
AD-215 Banking Transactions	Office of the President	Web Content	Jun 29, 2009	Policy
AD-220 Government Filings	Office of the President	Web Content	Jun 29, 2009	Policy
AD-225 Table of Delegations	Office of the President	Web Content	Jun 29, 2009	Policy
AD-230 Policy Development Review and Approval	General Counsel	Web Content	Jun 29, 2009	Policy
AD-310 Scope of Policy and General Description	Office of the President	Web Content	Jun 30, 2009	Policy
AD-320 Activities Covered by this Policy	Office of the President	Web Content	Jun 30, 2009	Policy
AD-330 Approval and Implementation Procedures	Office of the President	Web Content	Jun 30, 2009	Policy
AD-340 Use of Confidential Information, and Communications with the Investment Department	General Counsel	Web Content	Jun 30, 2009	Policy
AD-341 Insider Trading - Appendix A	General Counsel	Web Content	Jun 30, 2009	Policy
AD-350 Prohibition Against and Reporting of Financial Fraud	Office of the President	Web Content	Jun 29, 2009	Policy
AD-400 Travel General Description	Finance	Web Content	Jun 30, 2009	Policy
AD-410 Travel Standards	Finance	Web Content	Jun 30, 2009	Policy
AD-420 Automobile Usage and Mileage Reimbursement	Finance	Web Content	Jun 30, 2009	Policy
AD-430 Travel Approval	Finance	Web Content	Jun 30, 2009	Policy
AD-440 Advance Payment for Travel	Finance	Web Content	Jun 30, 2009	Policy
AD-600 Use of HHMI Name	Office of the President	Web Content	Jun 30, 2009	Policy
AD-610 Use of HHMI Name - Attachment	Office of the President	Web Content	Jun 30, 2009	Policy
AD-700 Use of HHMIs Chevy Chase Campus By Other Organizations	Office of the President	Web Content	Jun 23, 2009	Policy
AD-700 Use of HHMIs Chevy Chase Campus By Other Organizations	Office of the President	Web Content	Jun 23, 2009	Policy
AD-701 Use of HHMIs Janelia Farm Research Campus by Other Organizations and Other HHMI Locations	Office of the President	Web Content	Jun 23, 2009	Policy
AD-800 Maintenance and Security of Personal Information	Office of the President	Web Content	Jun 23, 2009	Policy
AD-810 Reimbursement for Home Internet Access	Office of the President	Web Content	Jun 23, 2009	Policy
AD-820 Issuance of IT Equipment at Headquarters and OASs for Use Offsite	Office of the President	Web Content	Jun 23, 2009	Policy
AM-020 Asset Disposal and Transfer Request	Finance	Microsoft Excel	May 19, 2009	Form
AM-025 Property Donation Form Letter	Finance	Microsoft Word	May 19, 2009	Form
AM-030 Letterhead/Laser - Decal Notice	Finance	Microsoft Excel	May 19, 2009	Form
AM-090 Location Code Request Form	Finance	Microsoft Excel	May 19, 2009	Form
AM-120 Asset Classifications	General Accounting	Web Content	Jun 23, 2009	Policy
AM-130 The Use of Decals to Identify Certain Assets	General Accounting	Web Content	Jun 23, 2009	Policy
AM-175 Decal Action Request	Finance	Microsoft Excel	May 19, 2009	Form
AM-200 Fixed Asset Inventory Report	Finance	Microsoft Excel	May 19, 2009	Form
AM-200 PeopleSoft Asset Management System	General Accounting	Web Content	Jun 23, 2009	Policy
AM-300 Monitoring Equipment, Furniture, Fixtures, and Vehicles	General Accounting	Web Content	Jun 23, 2009	Policy
AM-310 Monitoring Leasehold Improvements	General Accounting	Web Content	Jun 23, 2009	Policy
AM-400 Depreciation, Amortization, and Closings	General Accounting	Web Content	Jun 23, 2009	Policy
AP Standard Comments	HHMI institute wide	PDF	Apr 27, 2009	How To
AP Standard Comments	HHMI institute wide	PDF	Apr 27, 2009	How To
AP-011 Payment Request Form	Accounts Payable	Microsoft Excel	May 19, 2009	Form
AP-012 Grants Payment Request Form	Grants	Microsoft Excel	May 19, 2009	Form
AP-013 Summer Student Payment Request Form	Accounts Payable	Microsoft Excel	May 19, 2009	Form
AP-015 Travel Advance Request Form	Accounts Payable	Microsoft Excel	May 19, 2009	Form
AP-020 Travel and Other Business Expense Report (TOBER)	Accounts Payable	Microsoft Excel	Jun 04, 2009	Form
AP-052 Non-PO Invoice Processing Form for Janelia Farm	Accounts Payable	Microsoft Excel	May 19, 2009	Form
AP-100 Overview	Accounts Payable	Web Content	Jun 23, 2009	Policy
AP-110 Standards of Business Conduct for Accounts Payable Personnel	Accounts Payable	Web Content	Jun 23, 2009	Policy
AP-110 Standards of Business Conduct for Accounts Payable Personnel	Accounts Payable	Web Content	Jun 23, 2009	Policy
AP-175 Request for Stop Payment/Void	Accounts Payable	Microsoft Excel	Jun 04, 2009	Form

1 to 50 of 605 documents listed

PREVIOUS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | NEXT | VIEW ALL

EMAIL & NOTES

MY TASKS

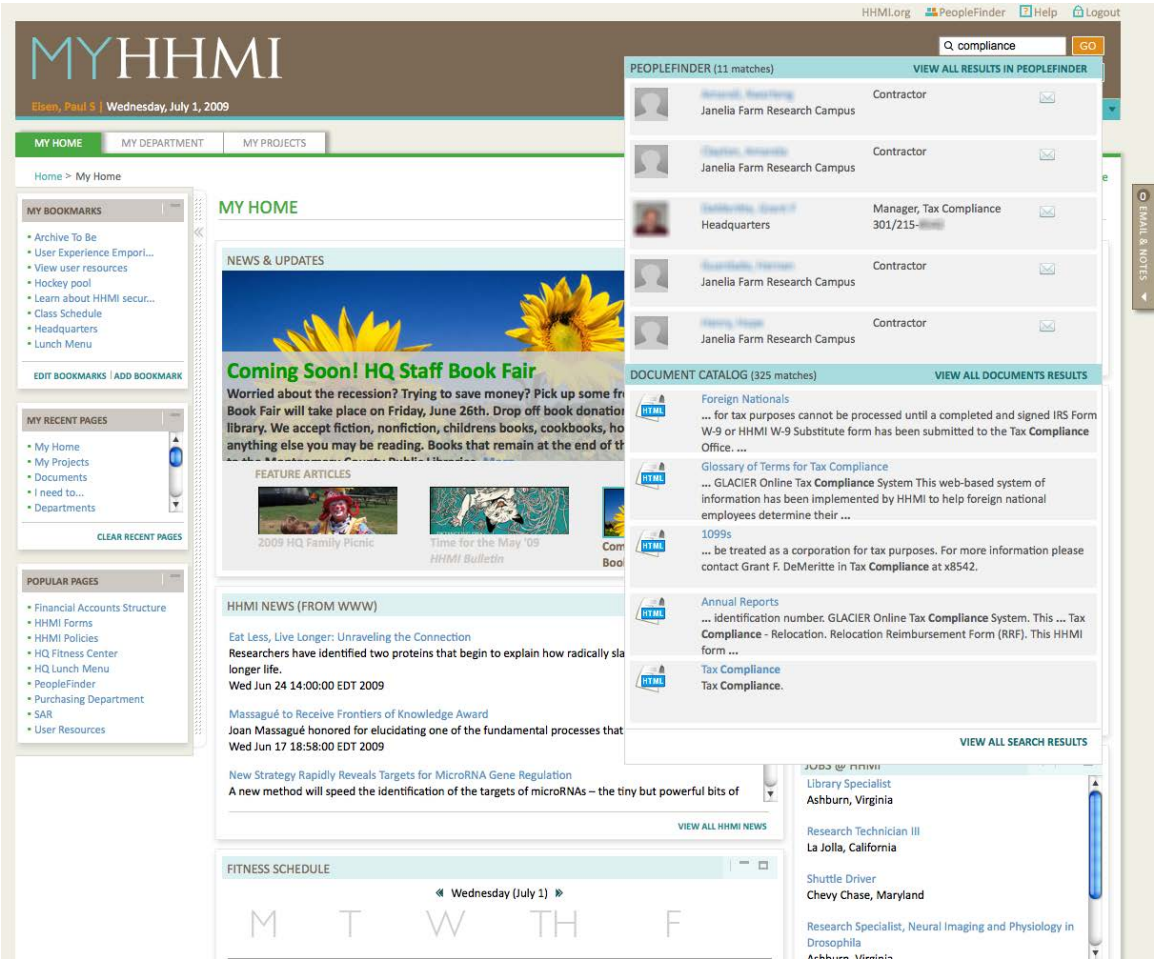
Pictured: The *Documents Catalog* lets users do a standard keyword search or specify certain attributes, such as document type or format.

The site also offers a federated site search. The team implemented "search as you type" results to give users quick access to the information they needed, with the

additional option to submit the search and see a complete search results page. The top five matching results appear in a box beneath the search box as the user types. Users can go quickly to one of these top results or click *Go* to submit the search and see the full search results page.

This added feature was particularly helpful for conducting speedy people searches or searches for particular pieces of information where a specific keyword was known. For instance, if users were looking for Becky Smith's phone number, they could see her result pop up as they were typing her name. If they were looking for a particular document with a known title, they could enter the title and see results without even having to click through to the search results page.

Designs like this, when well implemented, can go a long way toward making the site even easier to use. Attention to small design details goes beyond just letting users get the information they need; it makes the task as simple and quick as possible.



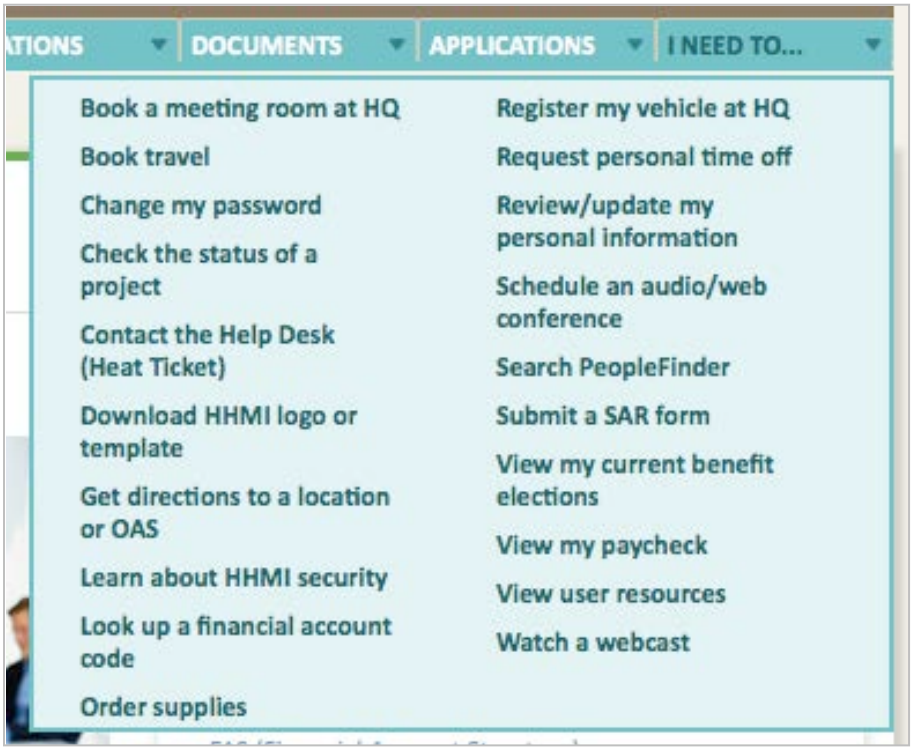
Pictured: The quick search panel appears as users type their search queries, presenting them with the top-five people and document matches for a particular query.

In creating the new site, the HHMI intranet team considered not only how the site would work on its own, but also how it would work compared to the previous site. Many intranet teams fail to adequately consider the full impact of a new intranet. No matter how bad a previous intranet might have been, employees were used to it.

Even if an intranet changes from a static, out-of-date, irrelevant tool to a dynamic, engaging, efficient one, users know how to use the old site and often react badly to the new site. The transition can be difficult, particularly if little is done to engage, prepare, or support users in the transition.

In addition to including various users from different areas of the organization in planning for the new site, the HHMI intranet team took several other steps to engage the audience.

When the new site launched, the team knew users would be reluctant to spend time "learning" the new site, no matter how intuitive the site structure was. To facilitate the transition, team members created an *I Need To* menu. They did this to help ease users' struggles to find information they previously knew how to locate and needed on a regular basis. The menu appears in the main site navigation and lets users do critical or common tasks like book travel, schedule a Web conference, or order supplies.

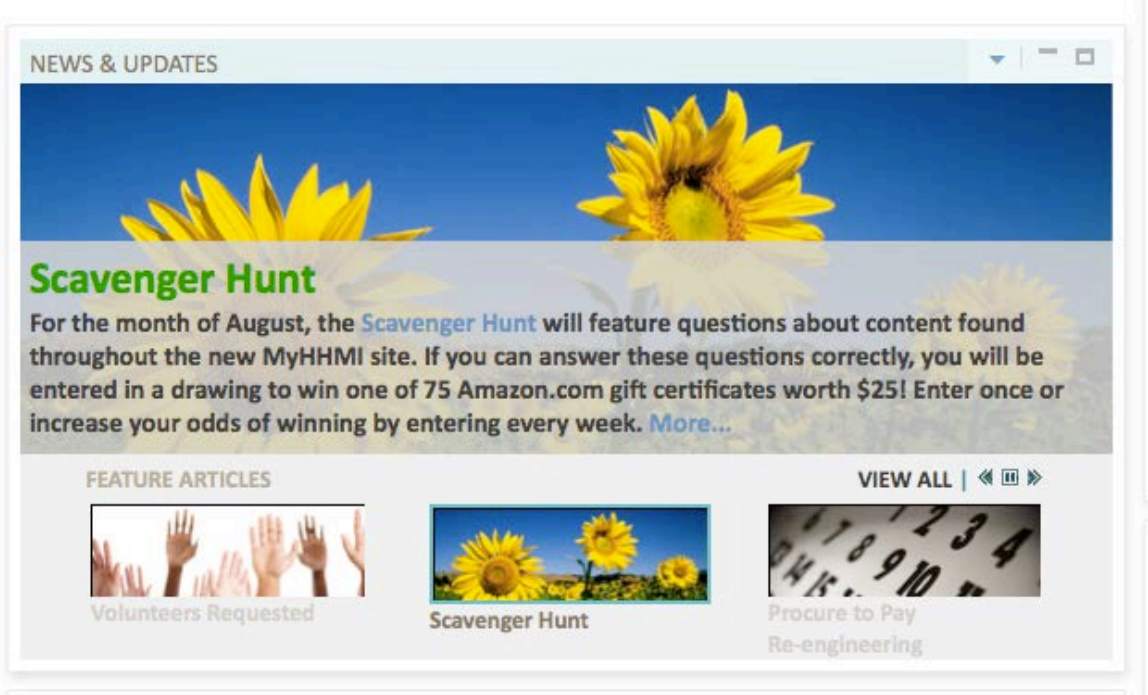


Pictured: The *I Need To...* menu was key to helping users find important content on the new site when it first launched.

The team also considered ways to encourage users to explore the new design. Users don't tend to browse an intranet, even if it's new and improved. They want to find the information they need and get on with their jobs. Because of this, users typically know only the features and content that they use regularly or that someone else mentions to them. They rarely stumble upon new content or tools they could use. In usability studies, we often hear users exclaim how useful a page of information or a tool on the site is, only to then complain that they never knew it was there.

There are several approaches that teams can use to gently persuade users to explore the site beyond their typical stomping grounds. One simple, yet potentially effective approach is to do a scavenger hunt on the site, offering prizes as an enticement for

participants. HHMI's intranet team held such a hunt, offering the possibility of winning a $25 Amazon gift certificate in exchange for users answering questions about information found throughout the site.



Pictured: A scavenger hunt encouraged users to explore the new site, introducing employees to new content areas.

Small touches as well as structural details throughout the site show the thought that went into the redesign. The search-as-you-type feature gives users quick access to results. Customizable pages let users see what they want. A focus on the user's own homepage, department, and project pages makes the site not just a reference resource, but also a work tool. Lists of recent pages viewed or recent employee searches give users information based on specific behavior on the site. The end result of the team's hard work shows their emphasis on users' needs—behavioral, intellectual, and emotional.

BACKGROUND

HHMI's first static intranet was built in 1993 and has gone through a number of relaunches, most of them focusing on design changes. The early site suffered from lack of use and outdated and often incorrect content. "It [the first intranet] was not heavily used, and most of the content updates were done in the IT department even though users could take training and update it themselves," says Leslie Forte, Director, Web Applications. "As IT is not always the first to know everything, the content was often outdated and incorrect."

In 2007, some of the company's VPs decided that a more modern site was needed to stay current with technology, enable collaboration, and provide a single access point to all HHMI network resources. At that point, the company reached out to a portal design firm, TandemSeven, to build the new portal. The resulting site was a giant leap forward for the company. "We went from a static and outdated site to a modern, clean, dynamic, and personalized site," says Forte.

INTRANET TEAM

The HHMI internal team is quite small. In fact, there's only one full-time person whose primary responsibility is the portal. A number of other developers and administrators provide assistance to the portal on an as-needed basis.

Pictured: (Top row, left to right) in-House HHMI Team Members: Leslie Forte, Alycia Eck, Kris Weinhold, Kate Forte, Dave Tabor, Bill Dorris; (middle row, left to right) TandemSeven Design Team: Frank Donofrio, Paul Eisen, Kenneth McDowell, Carrie Notte, Andrew Schechterman; (bottom row, left to right) Technology Team: Steve Wyman (TandemSeven), Alessandro Barroso, (TandemSeven), Ron DiFrango (CapTech Ventures- not pictured), Scott Duncan (CapTech Ventures), Niran Fajemisin (TandemSeven - not pictured), Phil Kedy (CapTech Ventures), Mundi Morgado (TandemSeven), Vincent Schoenfelder (CapTech Ventures).

Ownership

HHMI is learning what many large companies learn about intranet ownership: Although the project is often an IT initiative, IT isn't the department best suited to either own the intranet or be responsible for its content and communication needs. At HHMI, the portal is currently owned by IT, but a search is underway to hire a new communications staff member who will share ownership of the site with IT and keep the site's focus on communication.

"We have not historically had anyone focused on internal communications and the portal is a perfect match for that," says Forte. "Having it owned solely by IT has not worked for us in the past and we are hoping this new arrangement will provide more timely content updates for the site."

Working with Agencies

Right from the start of the redesign project, HHMI planned to engage an outside firm. The internal team partnered with the TandemSeven team, which contributed to everything from strategy to design. The visual design concept was provided by VSA Partners, who also designed HHMI's public website. TandemSeven brought in CapTech Ventures to assist the firm's technical team with development and implementation of *MyHHMI*.

Project management and oversight was handled by HHMI, while TandemSeven provided most of the design and implementation deliverables. HHMI IT staff members provided assistance with back-end server support and configuration. This partnership has been beneficial for the organization. "[Working with TandemSeven] provided us with a breadth of experience we would not have been able to provide on our own," says Forte.

The TandemSeven team executed on the following deliverables:

- Led creation of the vision and strategic roadmap
- Conducted user and stakeholder research to understand unmet needs, pain points, and opportunities
- Surveyed the existing technology environment, developed a vendor RFP, and defined technical requirements
- Created the information architecture, the interaction, and the visual design
- Designed, developed, integrated, and deployed the platform and supported applications

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Portal Stakeholder Group	• Provides governance, program management, and other executive support • Responsible for the content and features available on group intranet level
IT/Communications Portal Team	• Promotion • Major content updates • Usability • Communications • Training and support of the content owners
Content Owners	• Responsible for the updates and consistency of their sections • Able to delegate some part of the updates or changes to other members of the team/department

TIMELINE

The timeline for the redesign project included the following milestones:

- **October 2007:** HHMI began the process of finding a consulting team
- **January 2008:** HHMI hired TandemSeven to do an initial requirements gathering to determine the feasibility of a portal

- **April 2008:** Work began on the project
- **July 2009:** Portal launch

Future Plans

We often talk to intranet teams just as their redesigned sites launch. At that point, they're often just beginning to think about what needs to happen next. The HHMI team is now grappling with many of the follow-up details that come quickly on the heels of project completion. "We are still working on our roadmap for the portal as it has only just been launched," says Forte. "We are currently using an outsourced solution for our HR-related content and applications as we could not build them all internally before this season's open enrollment period."

"The plan is to move all of our HR-related materials to the portal and build custom pages and applications in that framework," she says. This migration will take place over the next two years. Other short-term goals include adding more social and collaboration features to the site, such as wikis, a blog, and discussion forums.

GOALS AND CONSTRAINTS

The overarching goal for the portal was to develop a secure, single point of access to all departmental and enterprise-wide information, knowledge, policies, and applications.

Among the specific goals were to give employees:

- A common interface for all content housed by various systems, providing employees with self-service access via single sign-on
- Real-time access to data and applications
- Secure project areas to increase engagement and foster collaboration among teams within the organization

Constraints

Budget is always an issue with intranet projects, especially for nonprofit organizations. But the HHMI project had a time constraint on top of the ever-present budget restrictions. "We had a firm deadline to get the portal launched a few months before our benefits open-enrollment period," says Forte. "We were changing out benefits packages and all 3,000 employees were now going to be doing their benefits elections online for the first time."

Because employees had to access the benefits application via the portal, the company wanted all employees to be familiar with the site and able to log in before open enrollment began.

USERS

Universal access for all employees was one of the design goals of the HHMI portal and a wide variety of users in a broad range of situations use the portal and its features. "The portal's ultimate goal was that it serve any employee of HHMI, at any location—at home in the evening or over the weekend, at the HHMI home office, regional and administrative offices, government and private organizations, universities, and scientific settings, such as laboratories," says Andrew Schechterman, Principal User Experience Architect, TandemSeven. "Even 'pre-

employees' (in the stages of ramping up) and students are given some access to the portal, facilitating a smooth and effective transition to their roles/jobs."

Supporting a Wide Variety of Users

HHMI users include executives; nonprofit business, organizational, finance, and legal professionals; scientists; and a full range of clinical management, executive, and frontline administrative support staff. A sampling of roles (and rights) include staff from the following areas: Records and Archives, Conference Services, Grants, Travel (domestic and international), IT, Business Systems, Legal Counsel, Education, Supplies, Food Services, Labs Management, Science, Executives, HR, and so on.

The major user groups for the site include: headquarters personnel (contract, hourly, salary, and emeritus), personnel located in regional offices throughout the US (primarily mid- to upper-level administrative), and scientists and their clinical and administrative teams, also located throughout the US.

The following five main groups use the intranet:

- **HHMI scientists and lab and administrative staff** who design and conduct research, administer and manage labs and staff, engage in lab procedures, make presentations, and publish research
- **HHMI Institute employees** including executives, directors, managers, administration, and other staff members who provide leadership, direction, management, and comprehensive support for all employees and the general public
- **Vendors, collaborative institutes, and organizations** who do business with HHMI; in future releases, these groups will have limited access (likely to the project workspaces)
- **Non-HHMI lab personnel** who might work in a lab with one of the organization's investigators, but who don't work directly for HHMI

USER TASKS

Supporting a Wide Variety of Tasks

How and why people use the HHMI portal varies almost as widely as the types of users. Most of the site's users provide the day-to-day support for scientists engaged in research efforts. "Many users rely heavily on tools provided within *MyHHMI*, such as those that structure, guide, or scaffold complex searches for different types and formats of information, searches for and the creation of employee groups (for communication, research and planning, volunteer and committee membership), for the creation and management of within-department and across-Institute projects, for rich collaborative calendars and group planning tools, tasks, and alerts, and for shared documents," says Schechterman.

Some of the site's users turn to the portal for specific, vertical purposes such as data management and analysis. Some users engage with the portal for broad purposes, such as managing employee benefits or vendors and supplies, including tracking requests, requisitions, and fulfillments. And finally, some users access the portal like

a personal homepage, as a source of communication and information. Such users participate in groups and committees, learn about employee accomplishments (such as the HHMI investigator who received a Nobel Laureate), and let others know about the work underway in their department.

Common Tasks

Some of the most common tasks the intranet supports include:

- Accessing local and network software, applications, and tools
- Accessing the World Wide Web (seamlessly)
- Adding, deleting, and editing bookmarks
- Assigning rights, roles, and access to the intranet
- Bookmarking pages as favorites
- Creating, editing, archiving, and distributing content
- Creating, editing, managing, and subscribing to calendars
- Creating, populating, editing, managing, and archiving projects
- Customizing a homepage, including moving and editing portlets
- Emailing an individual or group from within selected applications
- Finding a document, form, or policy
- Finding and researching a department, lab, office, or location
- Finding and researching a person, their department, and their affiliations
- Getting online support (help) via a range of flexible resources
- Accomplishing frequent tasks (quickly) via pre-built shortcuts (such as *I Need to…*)
- Requesting limited or ongoing access to applications and content that might be secure or confidential
- Reviewing and making changes to personal benefits
- Searching, sorting, and refining search results via traditional and faceted options (for example, searching news stories, documents, persons)
- Viewing, creating, and saving (favorite) reports
- Viewing popular pages
- Viewing recently viewed pages and recent searches across a range of content
- Writing quick notes and to-dos

DESIGN AND USABILITY

Applying Multiple Methods

As stated previously, TandemSeven was hired to provide guidance in the strategy, vision, roadmap, design, and development of the new portal. The HHMI team felt it was important to apply a variety of methods of user engagement to inform decisions

throughout the project. "HHMI was committed to TandemSeven's experienced-centered approach; this was their commitment to their employees who delivered biomedical research as 'products and services,' addressing, for example, cotemporary human diseases such as cancer," says Schechterman.

With that user-centric commitment in mind, the teams included many user research activities as part of the design process. These included:

Single Day Field Studies (Rapid Ethnography)

The teams used field studies to observe and learn from users who were outside of the immediate HHMI home office locations. Stakeholders concurred with the team's opinion that there was only a modest understanding of how, for example, scientists, lab staff, and to some extent, even regional administrators and teams, were utilizing the current intranet tools and doing their jobs. Stakeholders wanted to better serve this "family of constituents" and recognized that there were likely many latent opportunities that were still fully unknown. The only way to reach these users was to go where they work and learn from them.

Users who were identified for these studies allowed the researchers to spend time with them in sessions lasting anywhere from a few hours to a full day so they could learn "in situ." The team hoped to gain granular insights that are otherwise unseen or unknown.

Most volunteers were curious but unconvinced that these sessions mattered, until the researchers spent time with them. "At the end of the day, they were excited and sold," says Schechterman. Though users were not provided diaries or disposable cameras (or other survey instruments), team members did ask them to keep in touch. And many did, sharing insights as they occurred in the course of every day work over time. Some of these users even continued their relationship with the researchers by becoming part of subsequent usability studies.

This in-person research paid off for team members, who gleaned insights that would have never come to light without seeing the users in their native environments.

"One of the most revealing and perhaps sobering insights from field studies were that users were unaware of the existing tools available to them, had difficulty using or accessing the tools (such as multiple sign-on demands), could not use tools of systems in parallel reflecting their actual work, frequently and routinely made informal phone calls to HHMI home office staff to submits reports, make requests, obtain information, etc.," says Schechterman. "Additionally, we uncovered and better understood the very human elements of the 'us versus them' culture that exists.

"Well known is that such tacit, often intangible human elements will trump even the best-intended designs and technologies," he says.

Contextual Inquiries

The research team used a variety of contextual investigation methods, including iterative prototyping, informal user reviews, user surveys, use cases, screen flows and navigation model validation, and informal usability testing. To conduct this research, the team went out to their pool of users with tools in hand (clipboards, notebooks, cameras, and so on) to learn how users accomplished certain goals in context—at their desk, at their computer terminal, as they spoke with coworkers down the hall, or walked documents across the atrium to another office.

These contextual inquiries were focused on gathering the information necessary to map the requirements, flows, tasks, and goals (fulfilled or unfulfilled) that were identified as most critical for users to succeed based on their roles.

The study participants included stakeholders and subject matter experts who were also heavy users, and perhaps most important, users who were simply "end users"—that is, the many ground floor personnel who keep HHMI running smoothly. "These users offered remarkable insights into patterns of use, roadblocks, frustrations, opportunities, and workarounds, which could be properly designed for and integrated into the intranet over time," says Schechterman.

As a next step, the team brought some planning and architecture documents (conceptual diagrams, visualized use cases and flows, screen designs, and wireframes) to these users (as well as to new users) and gathered feedback on those.

The research activities provided team members with valuable data that informed their thinking and helped them throughout the project at critical times, such as when selecting among alternative design approaches. The data also helped them correct their assumptions and misinterpretations.

Development of User Types

Early on, the HHMI and TandemSeven teams discovered a large range of distinct users (such as executive vice president, department manager, legal secretary, senior scientist, administrative assistant, and more). "We agreed to build user types to capture the large breadth of cognitive, affective, and behavioral needs of these employees," says Schechterman. "Our user types also informed, for example, roles and rights for single sign-on governance. Because we had significant complementary user data available to us, and had easy access to users on a regular basis, our user types proved valid and reliable design and technology benchmarks."

"Management by exception would be great, what changed from last week, if any? Also 'effective dates' versus 'other dates' would help us."
– Allison Blair

- **Background** 12 years HHMI Southeast Region D, serving five OAS offices (TN, KY, NC, SC, GA), 400+ employees (including Scientists). Previously, one year at HQ, three years at Durham, NC OAS. Offers expertise in budget management, procurement, human resources.
- **Work environment** Primarily office, conference rooms, travels 1x/month within region, 1-2x/year to HQ.
- **Works closely with** OAS MAS. Supervises regional staff, immediate department (e.g., Purchasing Coordinator, Fiscal Manager, HR Manager, Administrative Assistants).
- **Usage patterns** On-going email, phone. 1-2x/day FedEx. Relies on PeopleSoft (all staff can view but not enter).
- **Triggers for action** and **Sample scenario of use** Purchasing issue where "an error can mushroom," has debt/credit implications. Problem with an order fulfillment going directly to a Lab. Paper inbox and voice mails accumulate quickly if not always attended to. End of month, request, review regional data, produce summary report for HQ.
- **Needs** Easy access to ERM, benefits ("self-service paycheck"), inventories, debt schedules. When producing monthly regional summaries, sometimes needs drill down capability.
- **Wants** Centralized purchasing. Color coding of calendars/reports to flag critical data/changes. Start of day to-do lists including items needing approvals. Move from paper based to digital. Ability to produce custom reports. Easier ways to design, implement policies/procedures, ensuring consistent interpretation. Detailed reports of specific region activities.
- **Tasks, Goals, Motivations** High level on-boarding and off-boarding processes, security clearance processes/flows across systems. Provide leadership, training, vision, motivation. Establish standards and measurements. Quality control.

Pictured: An example of the user types the HHMI team developed during the site redesign process.

Collaborative Planning (CLASS) Sessions:

Because the HHMI team gathered data through so many channels, it was inevitable that the data analysis would be fairly complex, but team members applied the same rigor to the analysis that they applied to their research activities.

They arrived at a set of potential features and functions through a process that began with developing requirements matrices and rankings and culminated in a series of collaborative planning (CLASS) sessions where the team worked with stakeholders to both convey the findings and guide the group to consensus. The CLASS sessions included guided PowerPoint presentations, colored Post-It Notes on posters and walls, and white boarding. During these sessions, stakeholders discussed, weighed pros/cons, and ultimately prioritized sometimes hundreds of variables and opportunities.

"As the stakeholders had already been exposed to some (but not all) of the user research, they were able to consider user needs along with business goals and technical parameters," says Schechterman.

Although it was a balancing act on the part of all parties, the planning sessions and ranking surveys paid off. Informal usability testing revealed that the team's collective efforts were largely on target.

"Applying multiple methods helped us be better informed where a user might be inadvertently denied access to something routinely or occasionally needed, or where a user might be afforded unnecessary access to a part of the system that would cause undue burden on both the user and the system," says Schechterman. "As such, one thing we were able to inform (and design for) was governance—a complex but overarching set of rules, assumptions, practices, and audit trails that were defined by feature and function matrices, rankings, and collaborative discussions."

Involving Stakeholders

The TandemSeven team worked hard to involve stakeholders throughout the design process to keep a steady flow of feedback coming into the project as it progressed through the design and development stages. This contributed to the project success on many levels.

"We first interviewed stakeholders at HHMI headquarters," says Schechterman. "Next, extensive and ongoing user research was conducted with a full range of employees, as well as within science labs with staff and investigators, to understand unmet user needs and connect them to business goals."

The team also surveyed the existing technology environment, developed a vendor RFP, and defined technical requirements. "After analyzing the findings," he says. "We created a vision consisting of two scenarios to illustrate the experience of the portal from a user perspective and a future technical architecture to deliver it."

Team members solicited and obtained user feedback on a regular basis—sometimes weekly, sometimes bimonthly—and often informally, in the context of use. "Input was constructive, instructive, sometimes confirming, sometimes negating," says Schechterman. "Frequent adjustments were made, some subtle, some more overarching."

Using multiple perspectives, an iterative approach, and creative methods, the team helped crystallize the organization's needs and created an effective roadmap to deliver an enterprise portal that meets the company's goals of fostering collaboration and supporting content creation among the geographically dispersed employees.

Engaging Beta Testers

Prior to release of the new intranet, 150 beta testers were engaged for a two-month period in a controlled release of functionality. "Scripts for beta testers were written so that these users could deliberately exercise elements of the intranet's features and functions, also allowing them to more easily submit their feedback to the team. Hundreds of results were sent in," says Paul Eisen, Principal User Experience Architect, TandemSeven.

Overall, results of the beta testing revealed that users were excited about the portal and anxious for it to go live. Their enthusiasm was tempered somewhat by the reality that what they were seeing was a first iteration. During this period, the testers provided many suggestions for future enhancements and applications, and the team listened carefully to the feedback. "We reviewed all the feedback and added as many of the quick changes as we could in the time frame," says Eisen.

Expert Reviews

Although the team didn't usability test the existing site prior to the redesign, they did employ informal expert review sessions at the beginning of the project. "We also routinely returned to the current intranet to learn what was working and what was not and why," says Schechterman. "We used the information to provide expert opinion to HHMI.

Additionally, during the stakeholder interviews, contextual inquiries, and user interviews, the team learned which features and functions were effective, and which were problematic.

They also had a significant opportunity to collaborate with subject matter experts who provided a unique perspective on the intranet's usability from an advanced user role.

All of these interactions with users informed the choices the team made as the project progressed and gave the them numerous data sources to rely on so that as questions or decisions arose, they could refer back to the users rather than relying solely on their own opinions or experience.

Success Factors

The HHMI team benefited from the depth of experience of many of the TandemSeven team members who have contributed to multiyear portal or intranet projects for other companies. Having intranet veterans on the team helps, but so does regular access to users.

"The team was also inspired by the scientists in the field we met with [and] their laboratory and support teams," says Schechterman. "Some of these teams provided us entry into their daily work lives that were in turn translated directly into the conceptual, tactical, strategic elements of the intranet."

Having repeated access to end users, many "just down the hall or just across campus" offered the team constant reminders, a steady stream of fresh eyes, and an

appreciation of the tacit and small design opportunities that are often overlooked. Interfacing with end users also provided a healthy dose of reality as the project progressed.

Surprising Results

Schechterman cites a number of surprising (or larger than expected) results. Through the research, the team learned that users wanted:

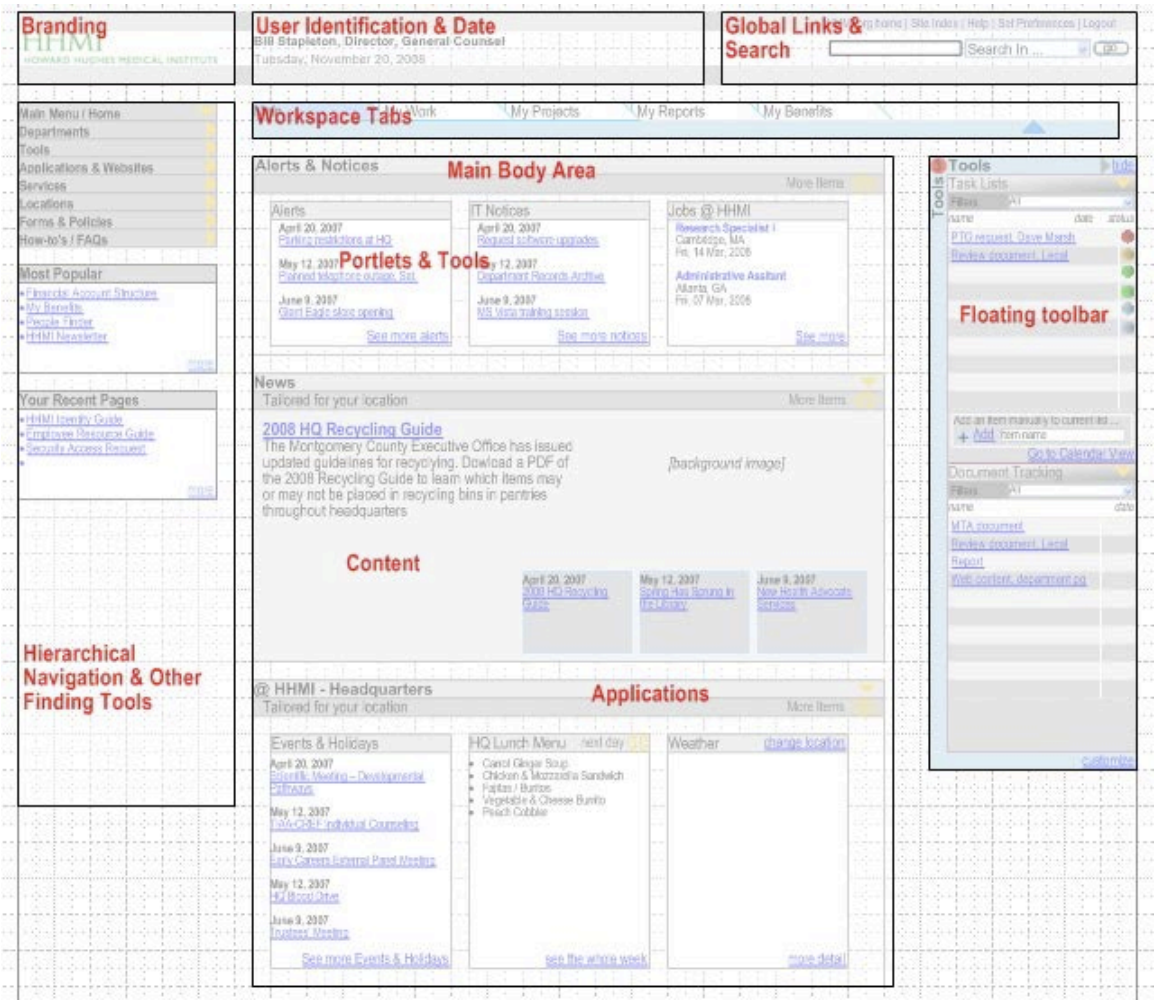
- Better/more community and communication among employees who were widely dispersed
- Tools that are easier to access and use on a daily basis (such as the ability to search for something very specific within multiple databases)
- More frequent updates (or access to) progress indicators, such as for events that users participate in or initiate
- Tighter integration of back-end resources, a personalized and highly customizable homepage, and the ability to easily modify content

Metrics

Throughout the project, team members obtained qualitative metrics, primarily via user reviews of architecture approaches, concepts, flows, screen layouts (see examples below), and interactions. Because they took both single measures (with a new user each time) and repeat measures (using the same users for some designs), Schechterman says the team was "able to better define failure, workarounds, and success."

The team didn't conduct formal usability studies. Nonetheless, Schechterman says "the team did see a diminishing number of problems with our designs over time, via 'fail-first-fast' contact with users. Sometimes on a daily basis."

The first sets of quantitative metrics are being obtained as of this writing. With those in hand, the team will have the opportunity to learn more about the outcome of its design and development efforts and will be able to gauge both next steps and possible enhancements.



Pictured: An early IA sketch of a page from the intranet showing how the information areas will divide the page.

Project Phases

The HHMI portal project was broken out into two main phases: Vision, and Design, Architecture, and Build.

Phase I: Vision

A combined design and technology team conducted the Vision Phase, which lasted four months and included the following tasks:

- Stakeholder interviews (both design and technical)
- User research
- Requirements gathering
- Current state definition
- Future state vision of the portal and roadmap definition

Phase II: Design, Architecture, and Build

The Design, Architecture, and Build phase had the added complexity of integrating the design team's efforts with the development team consuming their output. This phase took roughly a year to complete and contained the following tasks:

Design

- Conduct contextual task analysis at headquarters and various field locations
- Align requirements for pilot and future releases
- Design information architecture for the overall portal framework
- Create visual design for the framework
- Run multiple integrations of design sets—including wireframe creation, development team reviews, gathering and incorporating user feedback, detailed design annotations, and visual design—before turning it over to development

Architecture

- Select the vendor
- Design the physical architecture
- Set up the development environment
- Build technical proof of concept

Build

- Build portal framework (iteratively)
- Conduct multiple Agile portlet and framework sprints including wireframe and visual design review, user interface development, services development, integration of UI and devices, testing, and deployment
- Set up production
- Beta test (with iterations), including: test specific functionality, fix issues, QA, and redeploy
- Deploy production

Usability Best Practices

After conducting user research, teams often learn valuable lessons about what works and doesn't work. HHMI team members describe a few of the usability best practices they learned along the way:

- **Maintain frequent, informal contact with users through quick iterative reviews.** "'Low fidelity' mock-ups, and participatory prototyping was essential to 'moving the mountain one stone at a time.' Frequently assessing the intellectual and emotional needs of the users and not just the behavioral needs accelerated our ability to co-create a cohesive product and service that was a usable (behavioral), useful (intellectual), and meaningful (emotional) intranet. This was particularly important as HHMI's 'product and service' is the support and advancement of science—in part, to ameliorate human suffering and pain." (Schechterman)

- **Apply user-centered design.** "A user-centered and experience-centered design approach, with a fully delineated though flexible method and process, was fundamental to the success of the project. The freedom to dial-up and dial-down a particular phase allowed us to flexibly plan for and respond, rather than just engage in standard protocol. Two engagement leads (HHMI and TandemSeven) were critical to keeping a bird's eye view on the many moving parts of the project." (Schechterman)
- **Keep technology and design teams integrated.** "Having an integrated design and technology team helped keep the designs grounded. This approach enabled us to take advantage of strengths and avoid some of the weaknesses of the various technologies used to develop the portal. It is always critical to design not only with the end users in mind, but also the technologies that will implement the designs." (Stephen Wyman, Vice President and Project Manager, TandemSeven)

URL AND ACCESS

The site's URL is: https://my.hhmi.org/. Though many users make the portal their start page, they are not required to do so. Remote users account for most of the user population. They connect via a Juniper Networks SSL VPN.

TECHNOLOGY

The portal is built on JBoss Portal running on Red Hat Enterprise Linux, and content is stored in Alfresco running on the same. Java code for portlets, servlets, and so on is developed in Eclipse, and code is version controlled using an SVN repository. Bug tracking is handled using Mantis. Web content stored in Alfresco has versioning, so a change history is kept for each document.

Choosing the Technology Platform

The TandemSeven technology team facilitated a full vendor selection process for HHMI. JBoss was selected for its robust architecture, and because it offered a lightweight, easy to maintain platform. "There were several areas in which we had to enhance the platform," says Vincent Schoenfelder, Solution Architect, CapTech Ventures. "And, because JBoss is open source, we were able to directly extend the product."

The enhancements included:

- **Decentralized governance**. JBoss allows for a single administrator to maintain the portal; the custom extensions allow for decentralized administration. Department administrators can be limited to administer only their portal sections. This includes custom page creation, assignment of portlets to pages, and security administration.
- **Microsoft Exchange integration.** The custom extensions take advantage of the Exchange Web Services, providing email and calendaring information directly on the portal. The custom calendar portlets let users display multiple calendars in a single calendar view.
- **In-place editing and workflow.** This product enhancement lets content editors directly edit content from within the portal. Content changes can be made live immediately, or sent to another user for review. Options allow for reviewers to view current and draft content.

Also, the team extended the portal platform to support the interaction design. "In order to support the interaction design, our portlets had to utilize AJAX to make partial updates to the page," says Phil Kedy, Lead Technical Architect, CapTech Ventures. "We extended a well-known framework called 'Spring Portlet MVC' to be able to handle AJAX functionality (Portlet 2.0 specification)." With these types of custom extensions, the technical architecture was able to support the interaction design.

Visual Design Tools

The interactive design was created using MS Visio. Once the initial framework was agreed upon, the team designed tabs with corresponding portlets using annotated wireframes, also in MS Visio. All design documents were stored in a SharePoint folder with final documents being moved into an approved folder. TandemSeven, in conjunction with the HHMI team designed and developed the visual design in Photoshop. The combined TandemSeven, CapTech Ventures, and HHMI technical teams took the Photoshop files and annotated wireframes and coded them in HTML, JavaScript, and CSS so that they could be integrated with the portal environment.

Collaboration is Key

Many technology platforms have limitations when it comes to optimizing the user interface. Companies often choose a platform because it delivers the functionality they require, while knowing that there will be trade-offs when it comes time to customize the UI. This means that tight collaboration must exist between the design and development teams to ensure that the UI doesn't take a back seat to the functionality. The HHMI team knew that this collaboration would make the difference between good customization and bowing to the technology constraints.

"A primary take-away from this effort would be to place a high degree of emphasis on a tight collaboration between the visual designers, user experience architects, and technical resources as early in the process as possible," says Niran Fajemisin, Principal Technical Architect, TandemSeven. "This provides some boundaries around the final visual design output and vastly reduces the challenges of integrating the visual design into the portal infrastructure."

JBoss Portal, the portal product deployed for the HHMI intranet, provides a rich set of APIs to facilitate development of a strong visual design. Team members therefore developed a design theme to facilitate a consistent look and feel across the portal. Creating that theme required some compromise, however, as they had to strike a balance between keeping the original visual design and branding, and contending with the performance requirements and technical limitations inherent in HTML browser rendering capabilities. "An extensive amount of cross-browser testing was required to balance the compartmentalized nature of portlet development with varying levels of support provided in each version of targeted browsers," says Fajemisin.

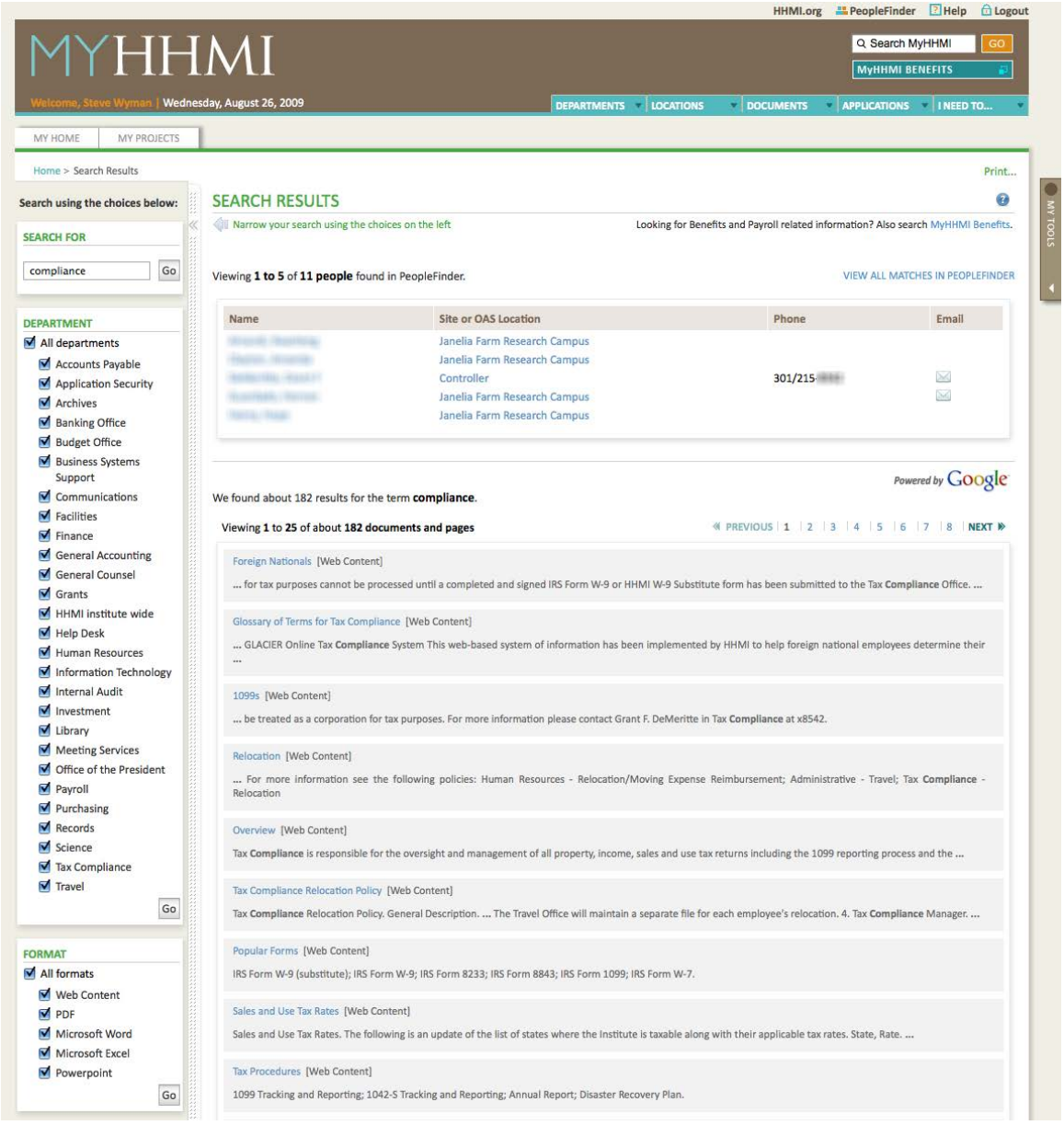
SEARCH

The HHMI site uses Google Search Appliance (GSA) and instead of a "crawl" approach, it takes advantage of GSA's ability to accept pushed content. In the crawling process, a search engine methodically and routinely gathers site information. Pushing allows for manual control, letting administrators send data to

the search engine and include more details that can support a more robust governance model, faceted searching, and other more advanced features.

"Although GSA is very good at crawling sites, enterprise portals introduce complexity [related] to role-based security and governance models. The basic crawl functionality isn't adequate for these purposes. In order to meet the business requirements, we developed custom feeds (pushing of information) that included metadata to support these business objectives," says Schoenfelder. "GSA provides a robust API that allowed us to push content into the search appliance while enforcing our governance model."

"Our push-based feed approach affords us sufficient control over what results get returned by searches to meet HHMI's business requirements," says Ron DiFrango, Technical Architect, CapTech Ventures. The site search utilizes GSA's robust APIs, and the team installed a search architecture to provide a gateway that could service all portal search capabilities. Searches ranging from documents and Web content to people data are presented in various formats to meet the high user expectations for search results. In addition to extending the search, GSA allows users to effectively limit search results as well, enabling them to find information much more quickly.



Pictured: The *Search Results* page provides text-string and facet-choices and is structured like the *Documents Catalog* to let users narrow and adjust their searches.

MOBILE

The site's technical architecture wasn't optimized for mobile devices, but the site is accessible to users on mobile platforms that support browsers, such as iPhone or BlackBerry devices.

CONTENT MANAGEMENT

CMS Technology

Content for the HHMI portal is stored in Alfresco 3.1, a third-party open-source product that TandemSeven recommended after conducting a requirements gathering and analysis effort. The Java-based Alfresco software uses a combination of a relational database and a file system with Lucine indexes to store content items. Alfresco exposes much of its functionality to clients via a RESTful services API.

Web content is stored using Alfresco's Web Content Management, while documents such as spreadsheets, PDFs, presentations, and Word documents are stored using Alfresco's Document Management.

Content Ownership: A Mixed Model

Many companies commit to either centralized content management or a decentralized model. HHMI's approach is more of a mixed model with some departments managing their own content and others working through a central content manager. Because the governance plan for *MyHHMI* is flexible, both approaches work simultaneously and successfully.

Content is displayed on *MyHHMI* via portlet windows. "Portlet windows are instances of portlets, where each instance has its own security rules," says Scott Duncan, Content Manager, CapTech Ventures. "For example, portlet windows on the *Human Resources* page are created using a Human Resources content portlet instance." People who manage content for their departments are placed in LDAP groups that have administration permissions on the appropriate portlet instances.

"This gives them access to *MyHHMI*'s inline editing feature," he says. "The inline editing feature allows a user to edit content from within a portlet window."

The *MyHHMI* content manager has the necessary access to edit content for any portlet instance, such as for any department or group.

Administration and content management are integrated right into the portal interface. "This allows creation and editing of pages and content directly from the portal," says Eisen, adding that the alternative would be to use "the very cumbersome UIs" provided by JBoss and Alfresco.

Instead, the approach the team chose offers "a huge benefit to the organization," he says. "The simplified editing process and mechanics will lead to increased frequency of content publishing, which increases the vitality and relevance of the portal, encouraging more user engagement."

Editing Workflow

Scott Duncan explains the workflow for editorial approvals on the site: "For document management content, there is no workflow," he says. "For Web content, the workflow model is loose.

"An author may choose reviewers from the corporate directory and invite them to comment on content before the author approves it," says Duncan. "The author may approve the content for publication at any time, and may even opt to not allow for any review at all."

The following screens illustrate a typical content-editing sequence:

The Accounts Payable department is responsible for the timely and accurate processing of invoices in order to pay vendors and reimburse employees in accordance with established policies. They are also responsible for preparing and distributing checks; all disbursements are based on authorizations from the appropriate delegated authority and within established internal control procedures.

Take a Video Tour of AP

Spend some time with Alva and the rest of the Accounts Payable Department; see what happens "All in a Day's Work." To play the video, press the > (play) button on the control panel in the RealPlayer plug-in shown below.

If you currently have RealPlayer installed on your PC, the video will start immediately. If you do not have Real Player, either call or e-mail the Help Desk.

Pictured: Editing step 1: In this example, there's content in a portlet ready to be edited.

The Accounts Payable department is responsible for the timely and ac
order to pay vendors and reimburse employees in accordance with es
responsible for preparing and distributing checks; all disbursements a
appropriate delegated authority and within established internal contr

ADMIN SETTINGS

- Change settings for everyone...
- Change appearance for everyone...
- Edit this content
- View your draft

Take a Video Tour of AP

Spend some time with Alva and the rest of the Accounts Payable Department; see what happens "All in a Day's Work." To play the video, press the > (play) button on the control panel in the RealPlayer plug-in shown below.

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Pictured: Editing step 2: A user with admin rights selects *Edit this content* from the dropdown menu. Note, if the user doesn't have admin rights, the choice isn't visible.

Title *

Welcome to Accounts Payabls

Abstract *

Welcome to Accounts Payable

Text *

The Accounts Payable department is responsible for the timely and accurate processing of invoices in order to pay vendors and reimburse employees in accordance with established policies. They are also responsible for preparing and distributing checks; all disbursements are based on authorizations from the appropriate delegated authority and within established internal control procedures.

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If you currently have RealPlayer installed on your PC, the video will start immediately. If you do not have Real Player, either call or e-mail the Help Desk.

Path: p

Keywords

Department * Accounts Payable

Document Type * Other

Save as Draft Cancel

Pictured: Editing step 3: The portal page presents the content item maximized and in edit view, essentially surfacing the Alfresco content editing feature inside the maximized portlet.

Title *

Welcome to Accounts Payabls

Abstract *

Welcome to Accounts Payable

Text *

Styles | Paragraph

The Accounts Payable department is responsible for the timely and accurate processing of invoices in order to pay vendors and reimburse employees in accordance with established policies. They are also responsible for preparing and distributing checks; all disbursements are based on authorizations from the appropriate delegated authority and within established internal control procedures.

Take a Video Tour of AP

Spend some time with the Accounts Payable Department; see what happens "All in a Day's Work." To play the video, press the > (play) button on the control panel in the RealPlayer plug-in shown below.

If you currently have RealPlayer installed on your PC, the video will start immediately. If you do not have Real Player, either call or e-mail the Help Desk.

Path: p

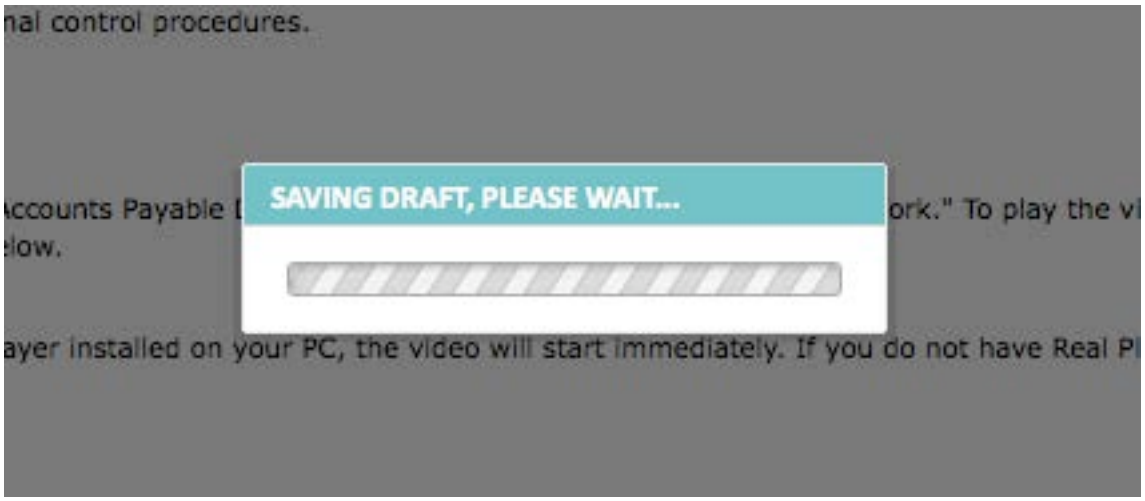
Keywords

Department * Accounts Payable

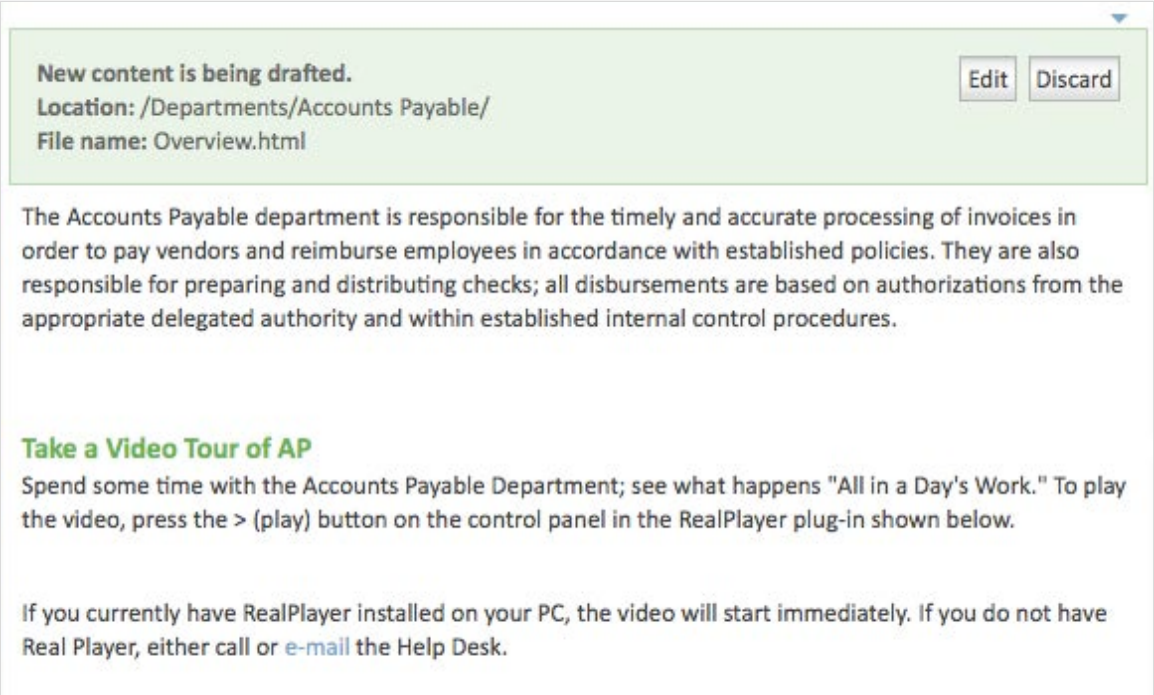
Document Type * Other

Save as Draft | Cancel

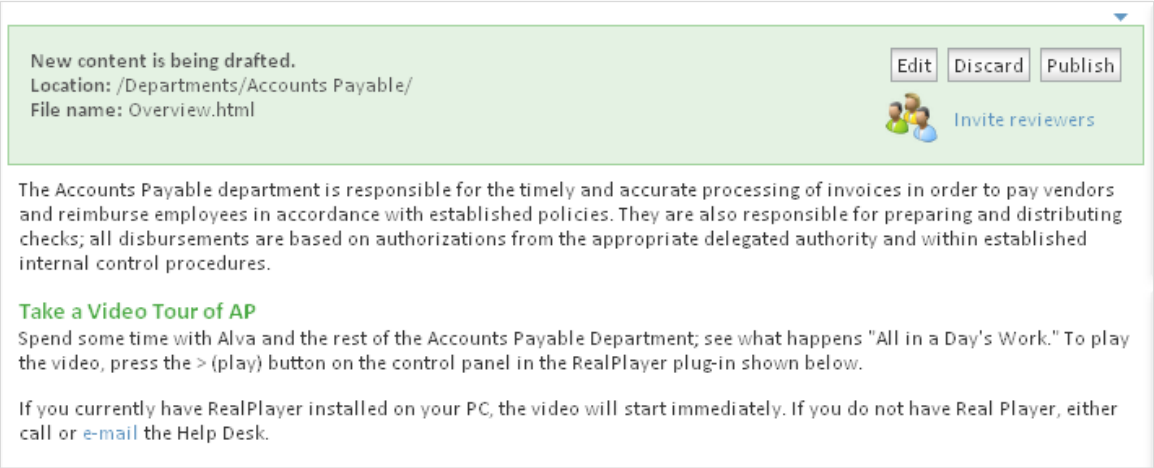
Pictured: Editing step 4: The user edits the content and selects *Save as Draft*.



Pictured: Editing step 5: The user sees a wait indicator while the changes are being saved.



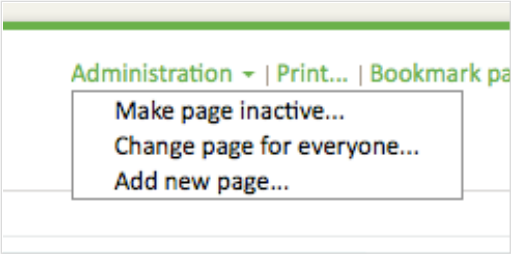
Pictured: Editing step 6: Draft content is shown in the original portlet (no longer maximized).



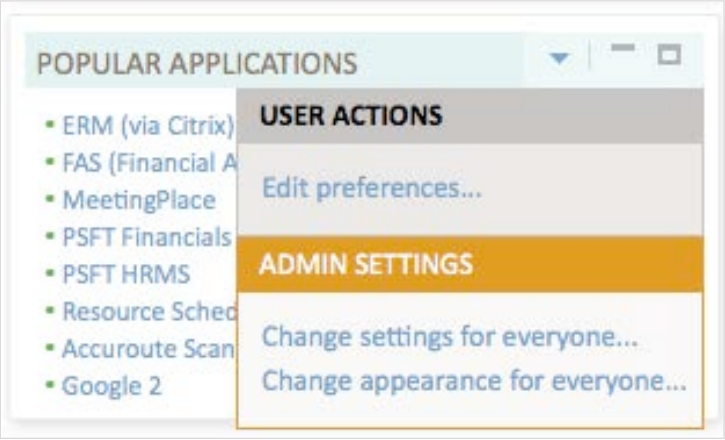
Pictured: Editing step 7: Users have additional options while content is in draft form. They can, for example, view the published content in place; continue to edit the draft; abandon the draft; or submit the draft for review.

Content Management: Administrative Functions

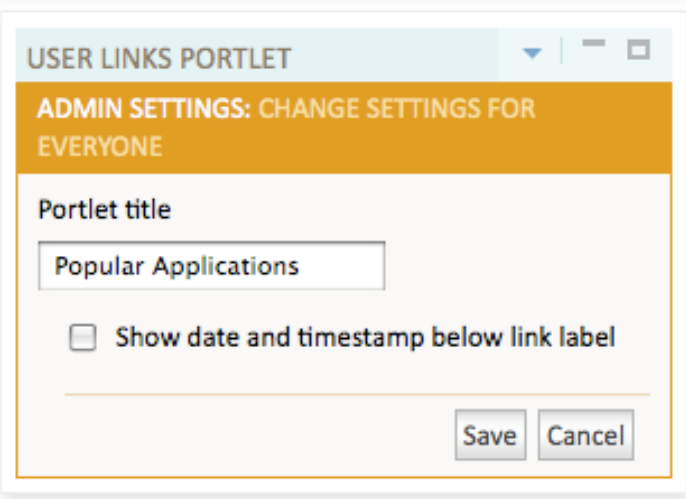
The screens below illustrate how some features of content management work on the site:



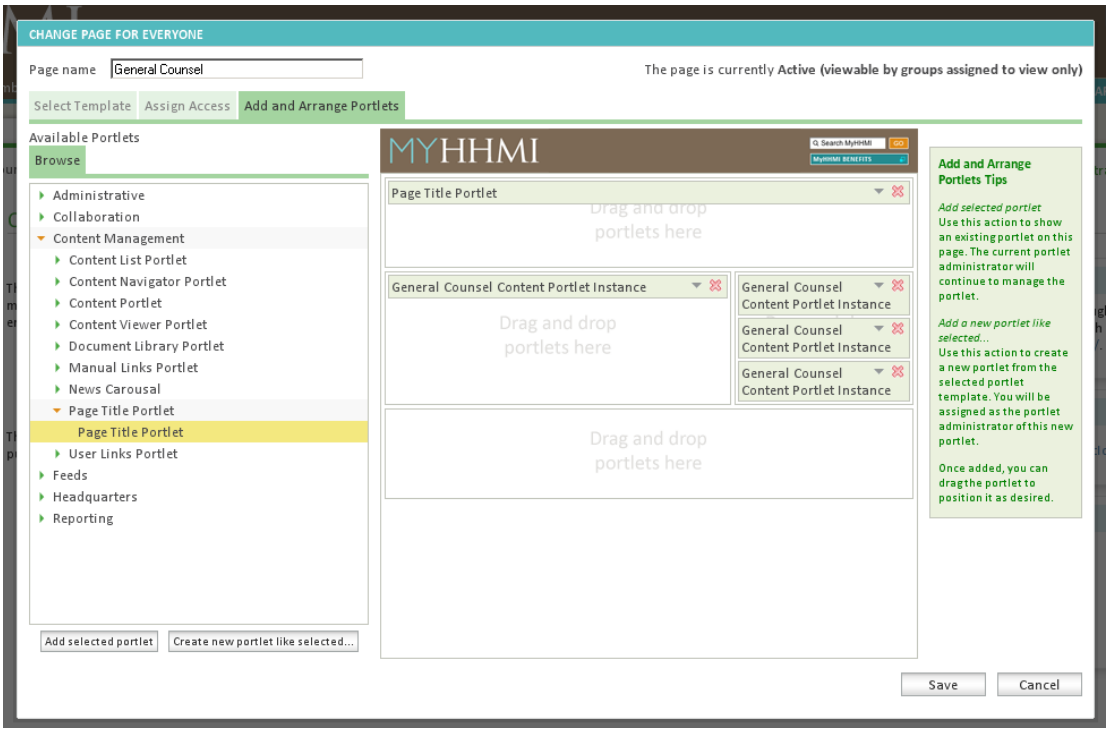
Pictured: For users with administrator access, a page-level menu contains the available *Administration* choices, including to set pages as inactive (invisible to others) until ready.



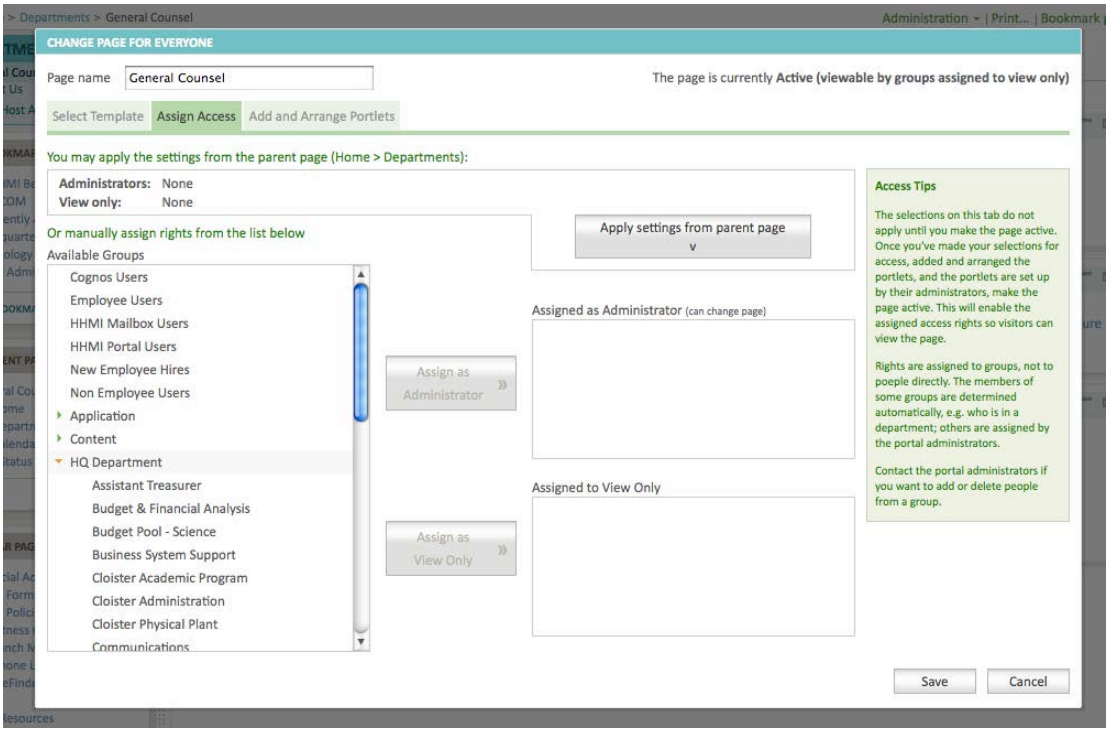
Pictured: The text "…for everyone" is commonly appended to administrative actions to reinforce the idea that the administrator's actions will be applied for all to see, as opposed to a customization of their personal experience. This distinction is also reinforced in the visual presentation of administrative settings (affecting all) versus personal settings, both in the portlet menu (shown here) and ensuing panels (shown below).



Pictured: The user preferences panel in the administrator's interface.



Pictured: Users can add portlets to the page and arrange the portlets through drag-and-drop functionality.



Pictured: Administrators can set the security for the page by identifying groups that can view or administer the page.

Working with Templates

Alfresco Web forms provide both authoring and rendering templates. "We have custom-defined Web forms using XSD schemas for the authoring templates (which Alfresco transforms into a content entry form) and XSL style sheets for rendering raw content (XML) into viewable mark-up (HTML)," says Duncan. "We created one Web form for each content type—for example, policies, newsletters, help items, and so on—in order to capture appropriate content data-specific for each type and to allow us the flexibility to simultaneously re-render all content of a given type as needed."

Distribution of the templates is automatic. "There really is no way for Web content to be created for *MyHHMI* without using one of the templates," says Duncan. "Whether an author creates content via Alfresco's Web client or through *MyHHMI*'s custom-built inline editing feature, they will be using one of the authoring templates." There is a risk that authors might choose an inappropriate template when creating content (for example, they might create a *Help* item using the Policy template), resulting in content that is styled incorrectly. "But," he says, "this kind of error should be caught by the workflow process."

FEATURES

MyHHMI provides several interactive workspaces that are both personalized and customizable. These include:

My Home

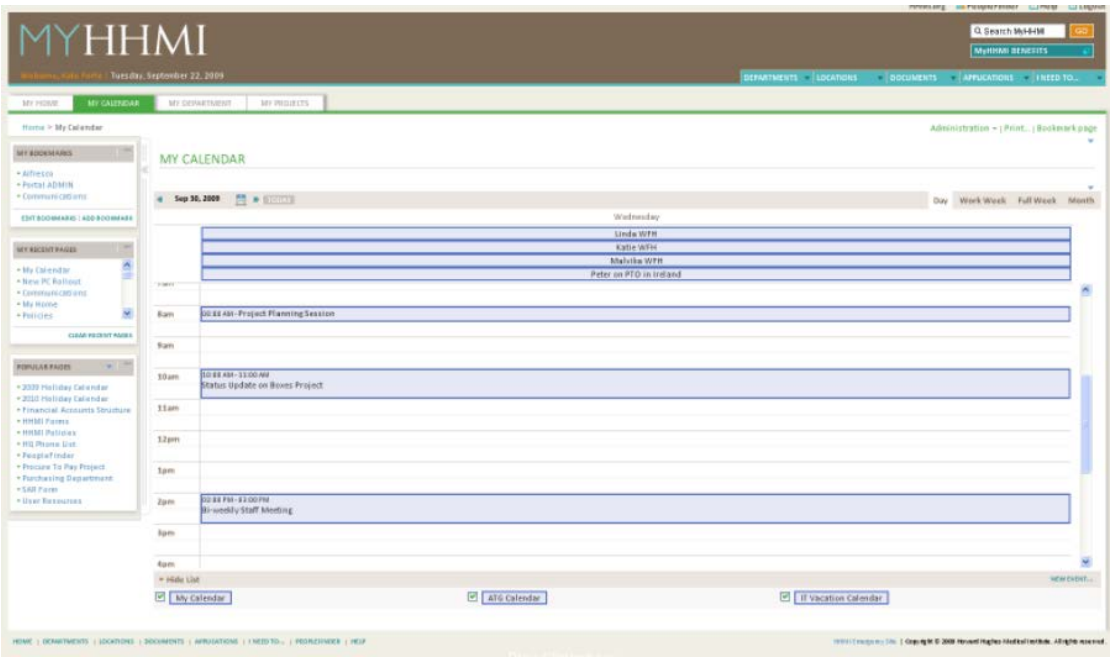
Every user has a homepage with the following characteristics:

- ***My Home* is personalized** based on users' location and employee status. For example, the initial content configuration is appropriate to their location at or outside of HHMI Headquarters. Also, new hires have links to on-boarding content that shows up on the homepage by default for two weeks after they begin work.
- ***My Home* is customizable** by using drag-and-drop interaction to place content portlets wherever users want on the grid. The content available for adding and removing includes any portlet that the user has access to anywhere in the portal, as well as Google gadgets. (Additional functionality that has been designed and will be implemented soon includes adding or removing content, and choosing an appropriate grid on which to lay the content.)

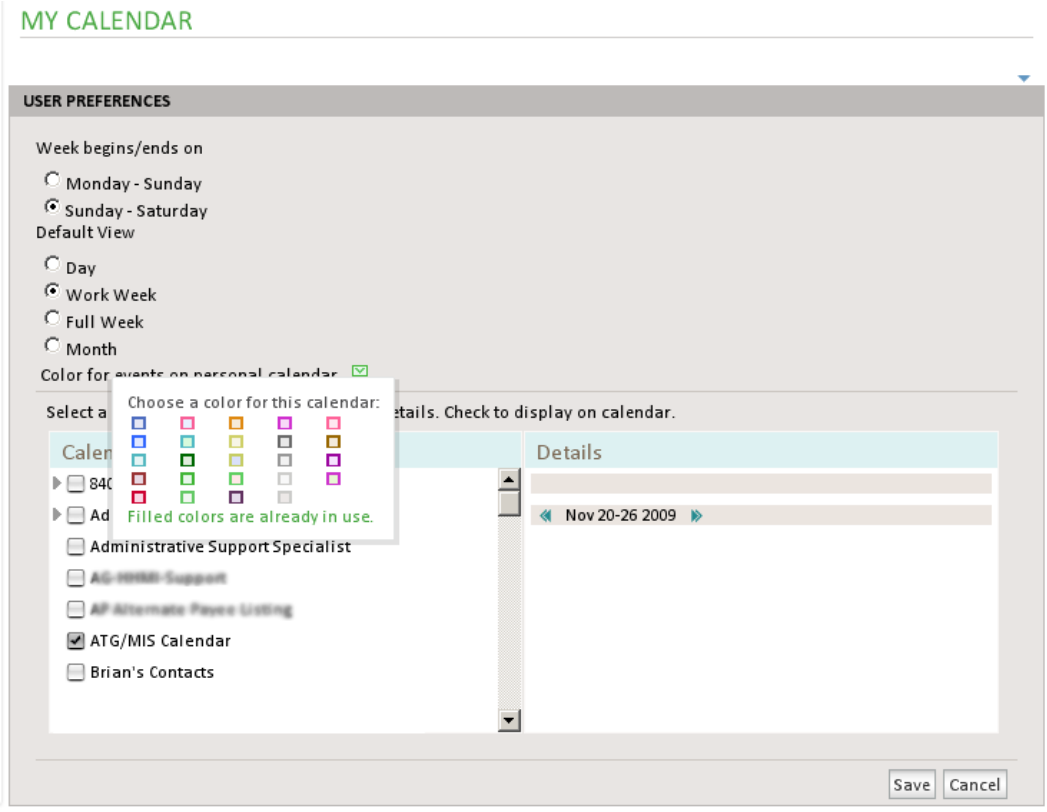
My Calendar

My Calendar is a custom tool that lets users overlay all of their calendars—including Microsoft Outlook, department, and project calendars—on a single grid. All calendars are housed in Microsoft Exchange and can be updated using traditional Exchange-supported clients.

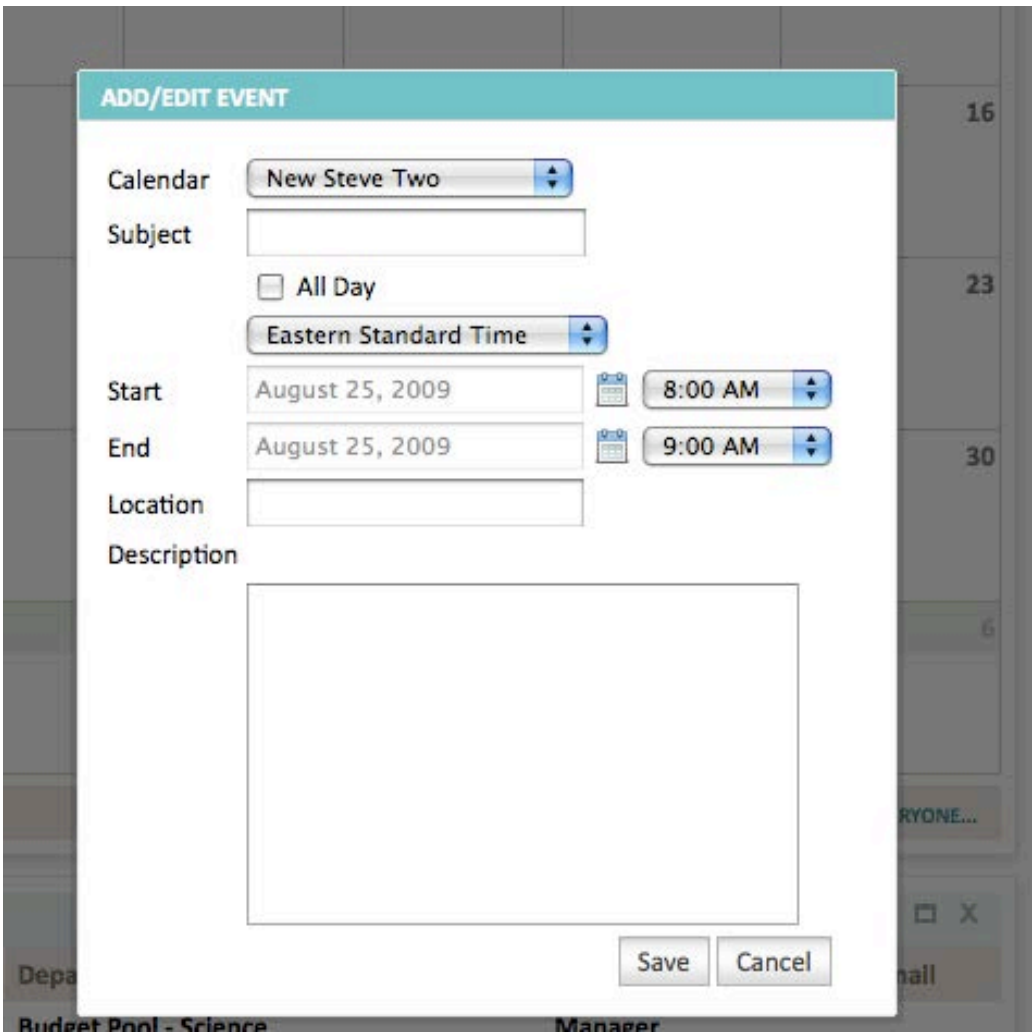
Originally *My Calendar* was intended as a default portlet to be shown on the *My Home* page. However, performance issues in loading the data caused several seconds of delay in loading *My Home*, so a separate workspace was created just for the calendar. Users can still add this calendar to their homepage if they'd like, and now can also get a clean view of their calendar with a single click of the workspace tab.



Pictured: *My Calendar* is a custom tool allowing the overlay of the user's Microsoft Outlook calendar, department, project, and other calendars on a single grid.



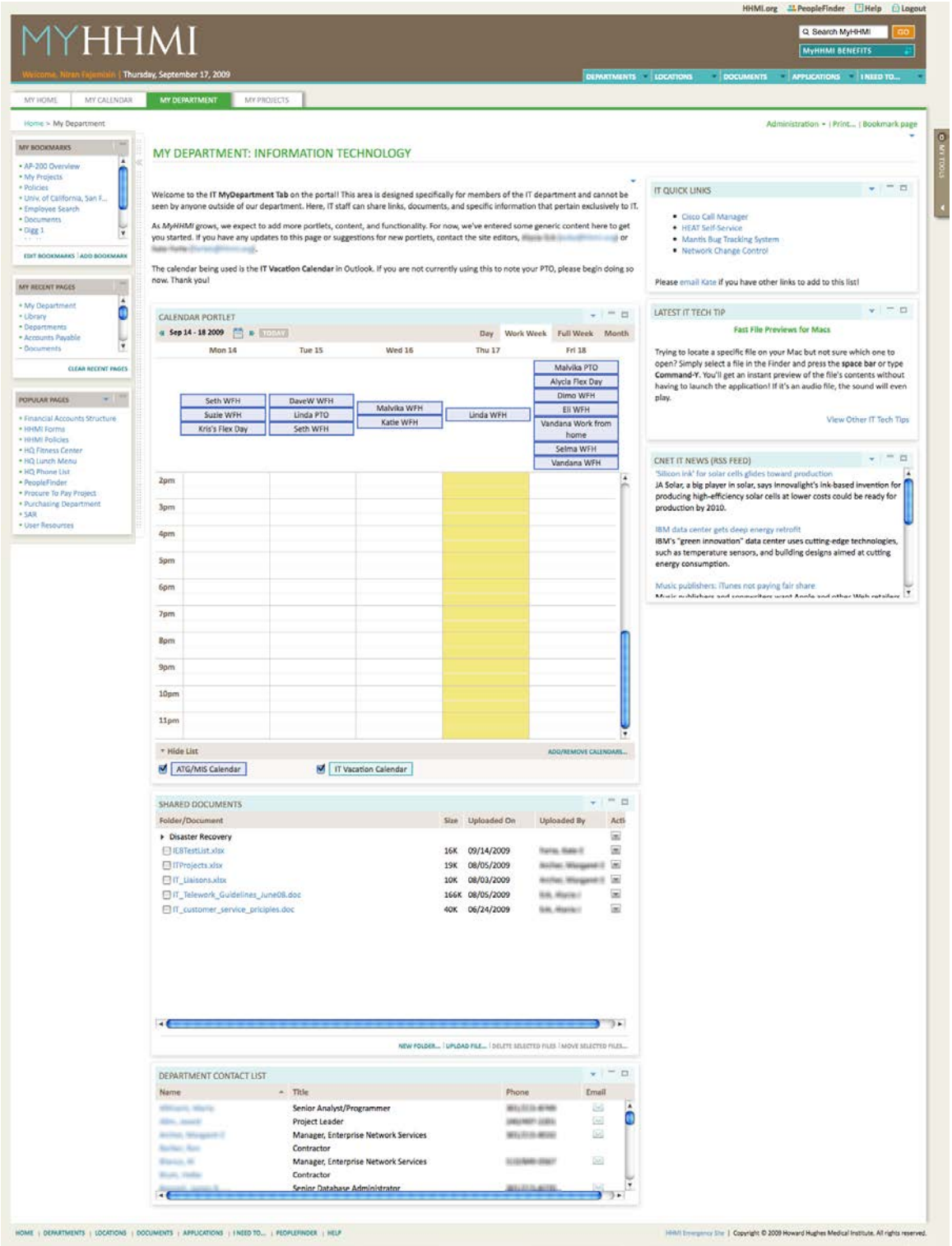
Pictured: The user preferences panel in the *My Calendar* tool lets users select the calendars to overlay and assign a color for each calendar's events.



Pictured: Users can create events using the portal interface in the *My Calendar* tool. Although not as fully functional as the Microsoft Outlook edit features, tool gives users a convenient way to add events and populate the core fields from right inside the portal.

My Department

Each user is assigned a default department workspace, which is a secure space for collaboration and sharing content within departments and administrative offices. This is a logical place to house content that needs to be secured to department personnel. It provides an effective and highly function alternative to a shared LAN drive, which is typically what departments use today to service this need. The department or Office of Administrative Services (OAS) will assign one or more individuals to administer their workspace.



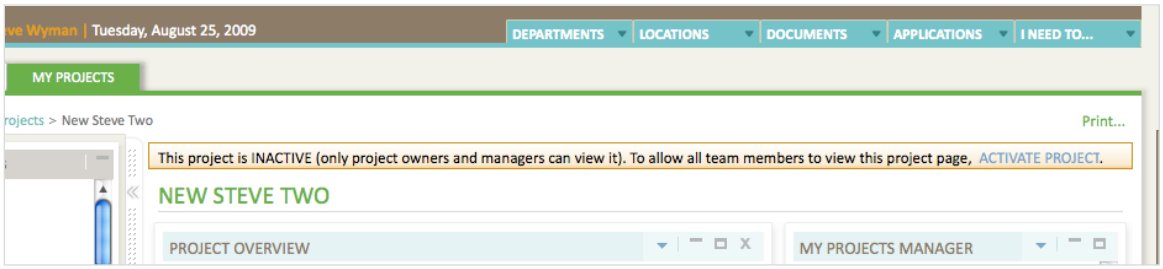
Pictured: Every user is assigned a default department workspace, which is a secure space for collaborating and sharing content within departments and administrative offices.

My Projects

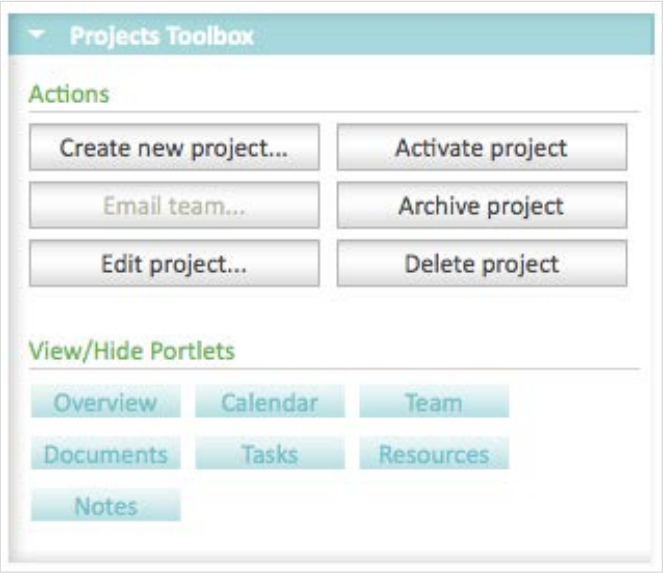
My Projects is a secure, highly configurable team collaboration space that lets users maintain notes, tasks, documents, events, and other resources.

Some of the user permissions in the *My Projects* area include:

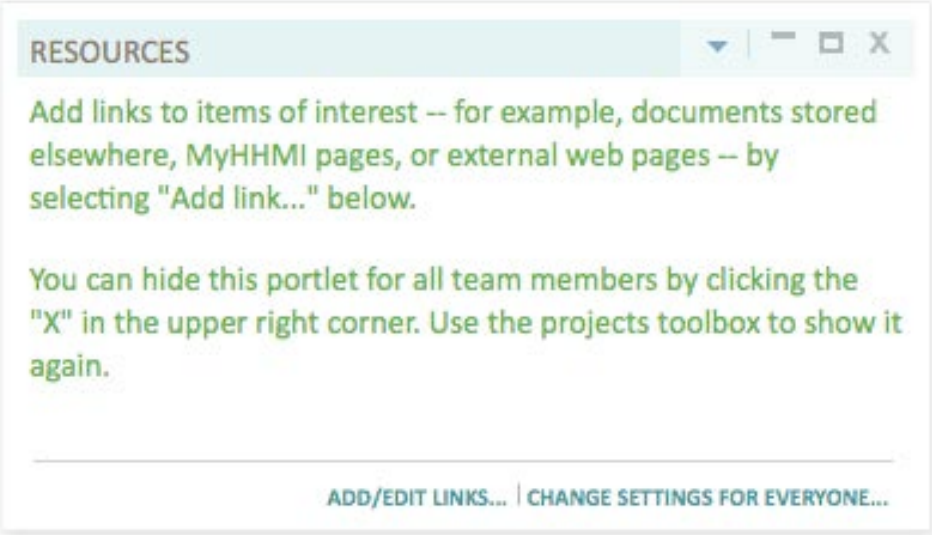
- All users have the power to create a project. When they do so, the full project page is created with all project assets (the available project portlets).
- The creator is automatically assigned as the project manager (PM), which gives them full authority to manage the project and its assets.
- The project page is initially inactive, which lets the PM set things up before exposing the page to other team members. Inactive pages are clearly marked at the top. The PM can easily toggle the project page between active and inactive using a button in the *Projects Toolbox*.
- PMs can archive projects using their *My Projects Manager*, an action that removes them from team members' views. Archived projects can be reloaded from *My Projects Manager*.
- PMs can hide any portlet using the toggle in the *Projects Toolbox*. If they choose to show that portlet later, it retains all of its content prior to being hidden.



Pictured: An inactive project page. The project page is initially set as inactive, which allows the PM to set things up before exposing the page to other team members. Inactive pages are clearly marked at the top.



Pictured: The *Projects Toolbox*. The PM can easily toggle the project page between active and inactive using a button in the *Projects Toolbox*.



Pictured: The initial state of each project portlet offers brief instruction on how to get started. This makes it very easy for novice users to set up projects without formal training.

Portlets

Portlets are powerful collaboration tools available on project pages. Following here are examples of some portlets in use on the HHMI intranet:

TEAM

Name	Department/Location	Role	Phone/Email
DiFrango, Ron	Information Technology	Member	
Duncan, Scott	Information Technology	Member	
Eisen, Paul	**Information Technology**	**Manager**	
Fajemisin, Niran	Information Technology	Member	
Kedy, Philip	Information Technology	Member	

EDIT TEAM...

Pictured: The *Team* portlet shows who's on the project team.

TEAM

ADMIN SETTINGS: CHANGE SETTINGS FOR EVERYONE

First name

Last name

Department: All departments

Site or OAS Location: Brigham & Women's Hospital

Can't find someone? Use PeopleFinder

SEARCH FOR TEAM MEMBERS

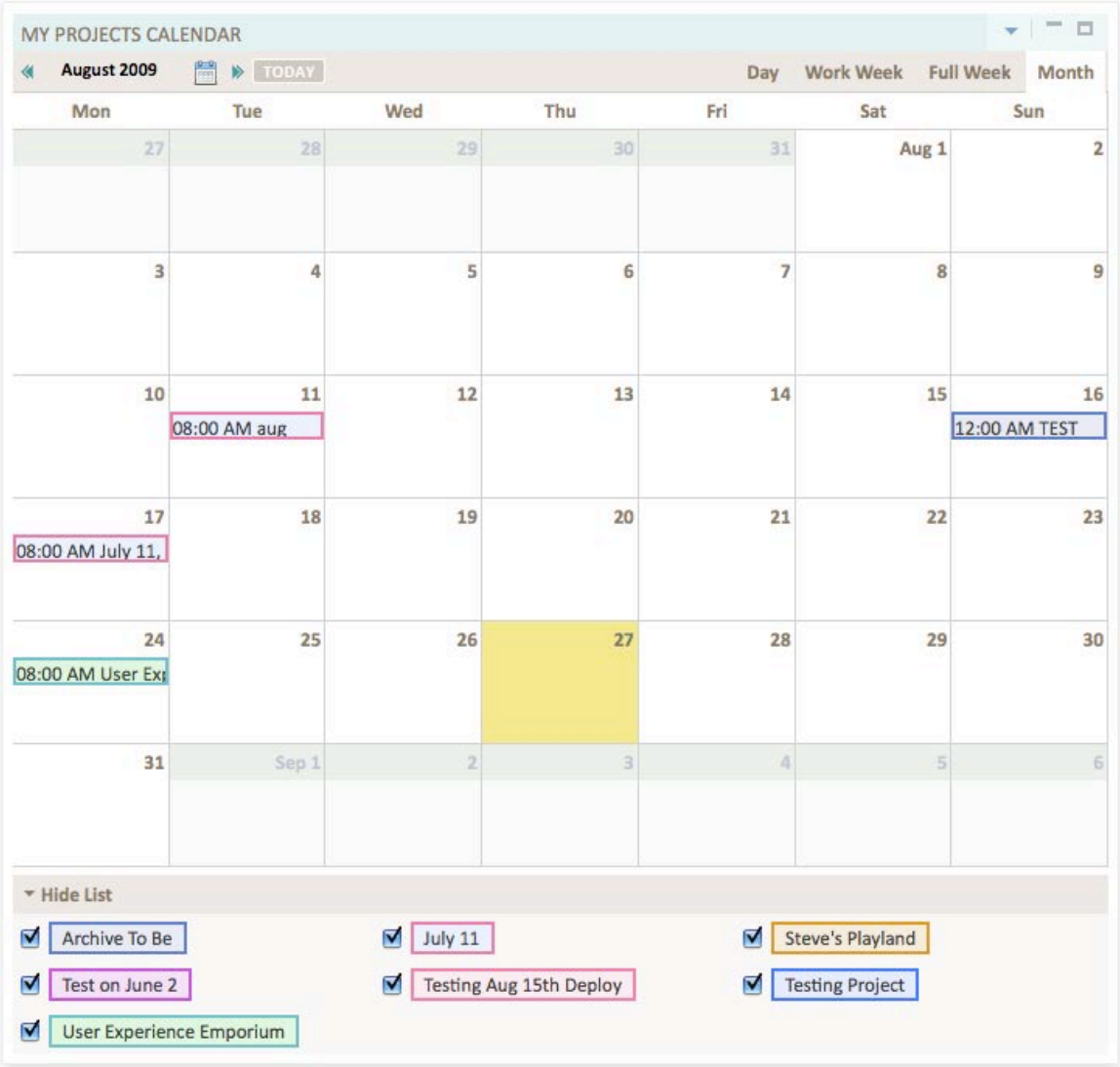
PROJECT TEAM ASSIGNMENTS

Name	Phone/Email	Role
DiFrango, Ron		Team member
Duncan, Scott		Team member
Eisen, Paul		Manager
Fajemisin, Niran		Team member
Kedy, Philip		Team member
Schoenfelder, Vinnie		Team member
Wyman, Steve		Team member

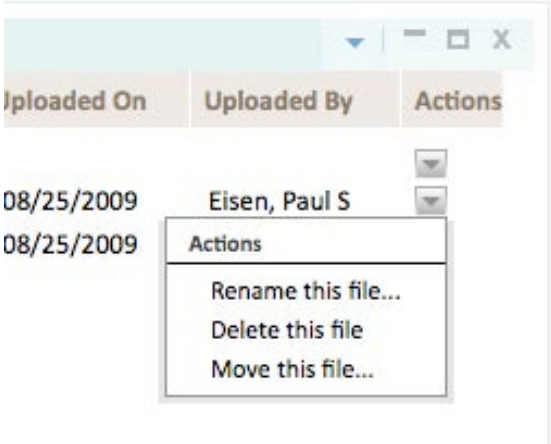
	HAS RIGHTS TO				
ROLE	View	Create	Edit	Delete	Archive
Manager	●	●	●	●	●
Team member	●	●	●	●	
View Only	●				

SAVE CANCEL

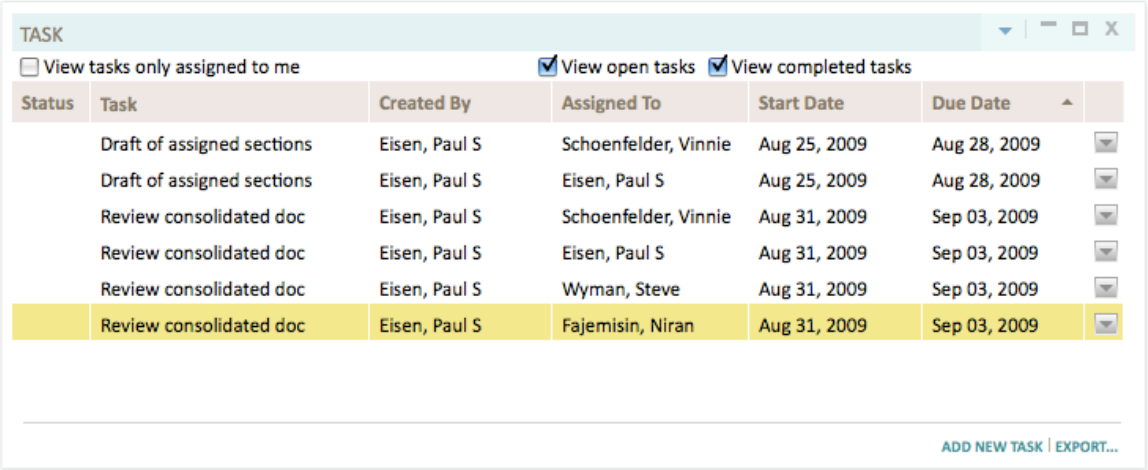
Pictured: Using the *Team* portlet, PMs can assign anyone in the HHMI directory access to the project page, as another PM (full access), a team member (add/edit/delete access), or with view-only access. The meaning of these access levels is made explicit for PMs as they make the assignments. PMs can quickly add groups of employees, such as all of those in a specific location, without having to select each employee individually. Also, a single action (*Email team* in the *Projects Toolbox*), lets PMs generate an email to all team members.



Pictured: The calendar portlet lets PMs and team members create events. These events will appear on each user's aggregated projects calendar. Users can also show desired project calendars on their *My Calendar* workspace.

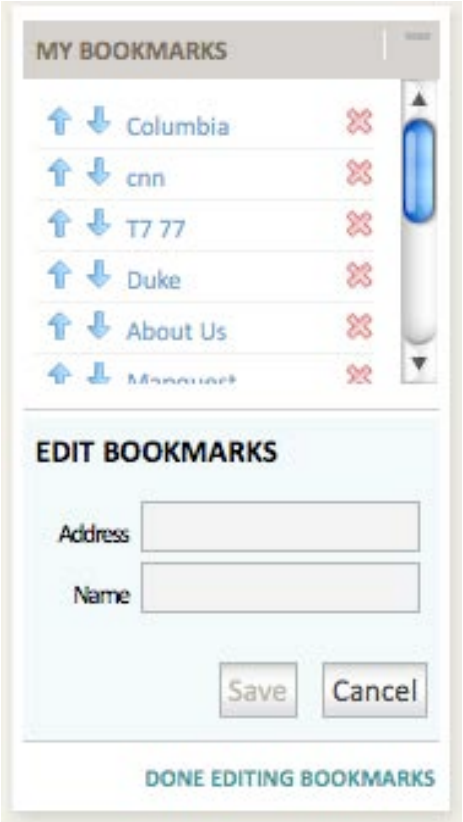


Pictured: Action menus are available to apply folder-level and file-level actions (shown here).



Status	Task	Created By	Assigned To	Start Date	Due Date
	Draft of assigned sections	Eisen, Paul S	Schoenfelder, Vinnie	Aug 25, 2009	Aug 28, 2009
	Draft of assigned sections	Eisen, Paul S	Eisen, Paul S	Aug 25, 2009	Aug 28, 2009
	Review consolidated doc	Eisen, Paul S	Schoenfelder, Vinnie	Aug 31, 2009	Sep 03, 2009
	Review consolidated doc	Eisen, Paul S	Eisen, Paul S	Aug 31, 2009	Sep 03, 2009
	Review consolidated doc	Eisen, Paul S	Wyman, Steve	Aug 31, 2009	Sep 03, 2009
	Review consolidated doc	Eisen, Paul S	Fajemisin, Niran	Aug 31, 2009	Sep 03, 2009

Pictured: The tasks portlet allows users to assign and track project tasks.

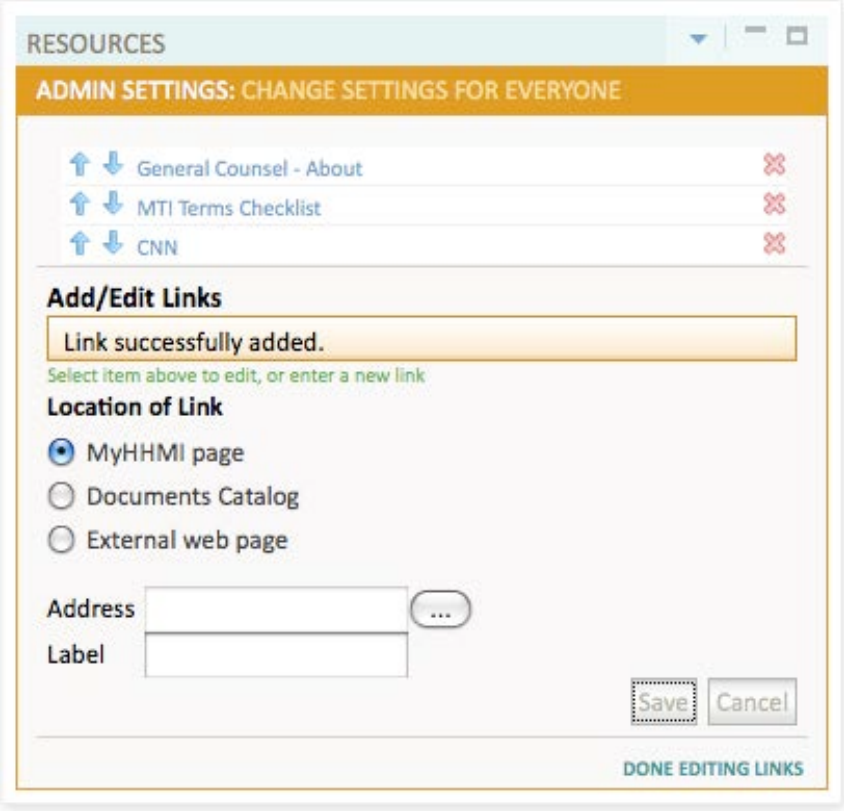


Pictured: The bookmarks portlet, a permanent fixture in the left panel, can be edited directly by the user.

User-customizable links lists

These links lists let users set up links to *MyHHMI* pages, *MyHHMI* documents, or external websites. In the settings panel, intuitive controls are provided to sort or delete links.

In addition to the manually specified links lists described above, a query-based links list allows the user (typically a section administrator) to quickly show a list of links to items based on predefined criteria (such as all documents that are tagged as "Form" and published by "Accounts Payable"). This is a powerful tool for the content administrator, as it continually updates as the underlying content matching the query changes.



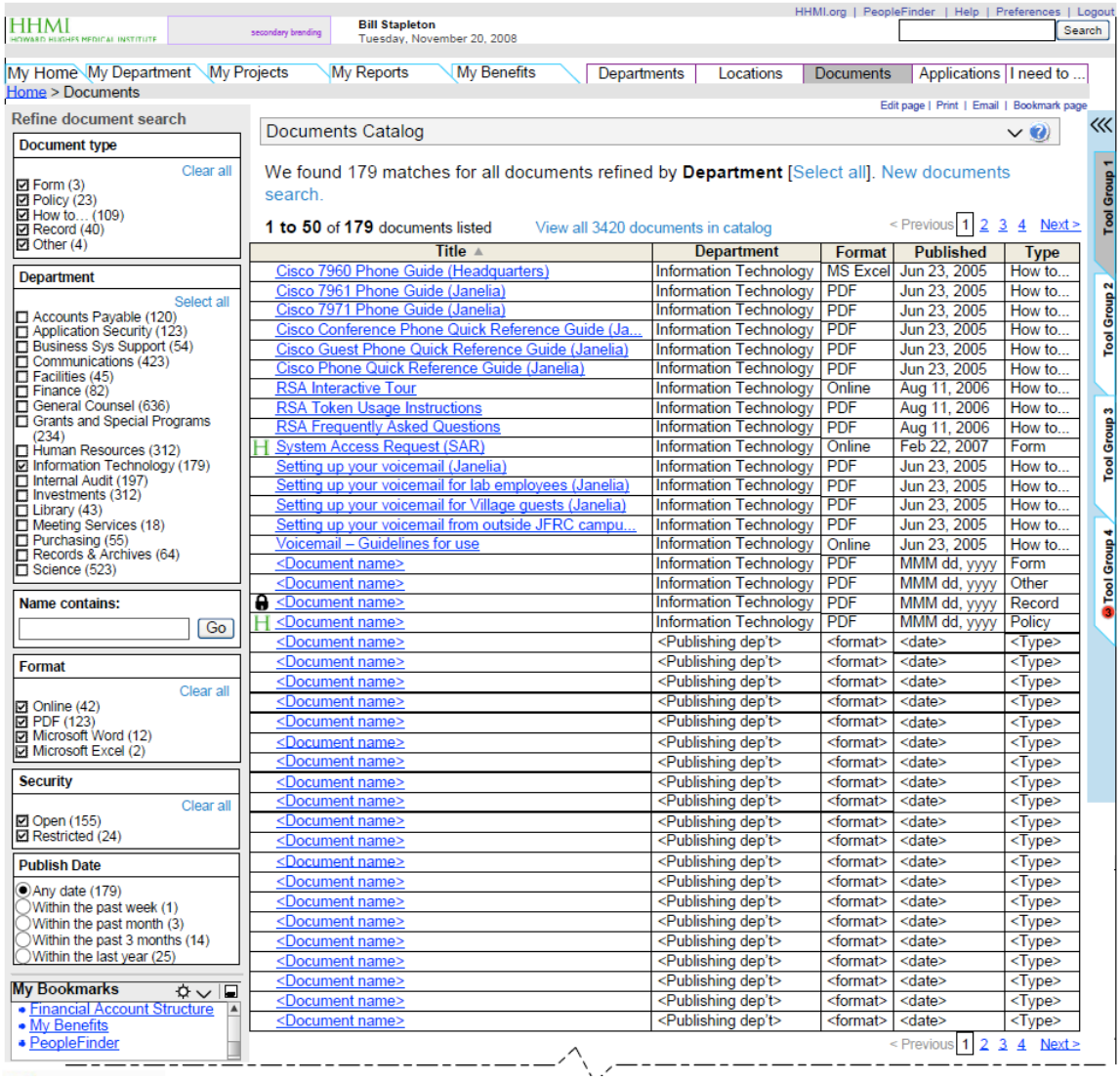
Pictured: The settings panel for the links list portlet that is available in all project pages. The same settings panel appears for similar link-list portlets available to section administrators and to end users who wish to customize a *My Applications* portlet.

Documents Catalog

This catalog is a repository of documents merging text-based and faceted search, as well as sorting. It allows users to search for documents based on keywords and on relevant criteria, such as the document type, issuing department, and publish date. The catalog conveniently aggregates all documents in the organization, while complementing the ability to link directly to specific documents from any page.

The catalog is very powerful in satisfying multiple search scenarios, such as:

- Finding a specific, known document
- Finding a document based on a general idea of what it contains
- Finding all forms published by HR
- Determining how many policies were published or updated in the past three months
- Sorting results by any desired column



Pictured: The *Documents Catalog* initial design. The interaction design for this feature required a bit of finessing to achieve user acceptance. During the initial design phase, team members tested six different approaches to the facets with end users. Test results showed that users preferred the solution that supported the selection of multiple values within each facet category.

Custom Workflow Status

The HHMI team built a custom application to view workflow status of legal contracts (Materials Transfer Agreements) of high importance to laboratories. According to Eisen, this is likely to prove a very compelling feature for users. It's expected that this particular functionality will draw traffic to *MyHHMI* from lab employees. This is important to the organization because historically many HHMI lab employees haven't felt much motivation to visit HHMI's intranet.

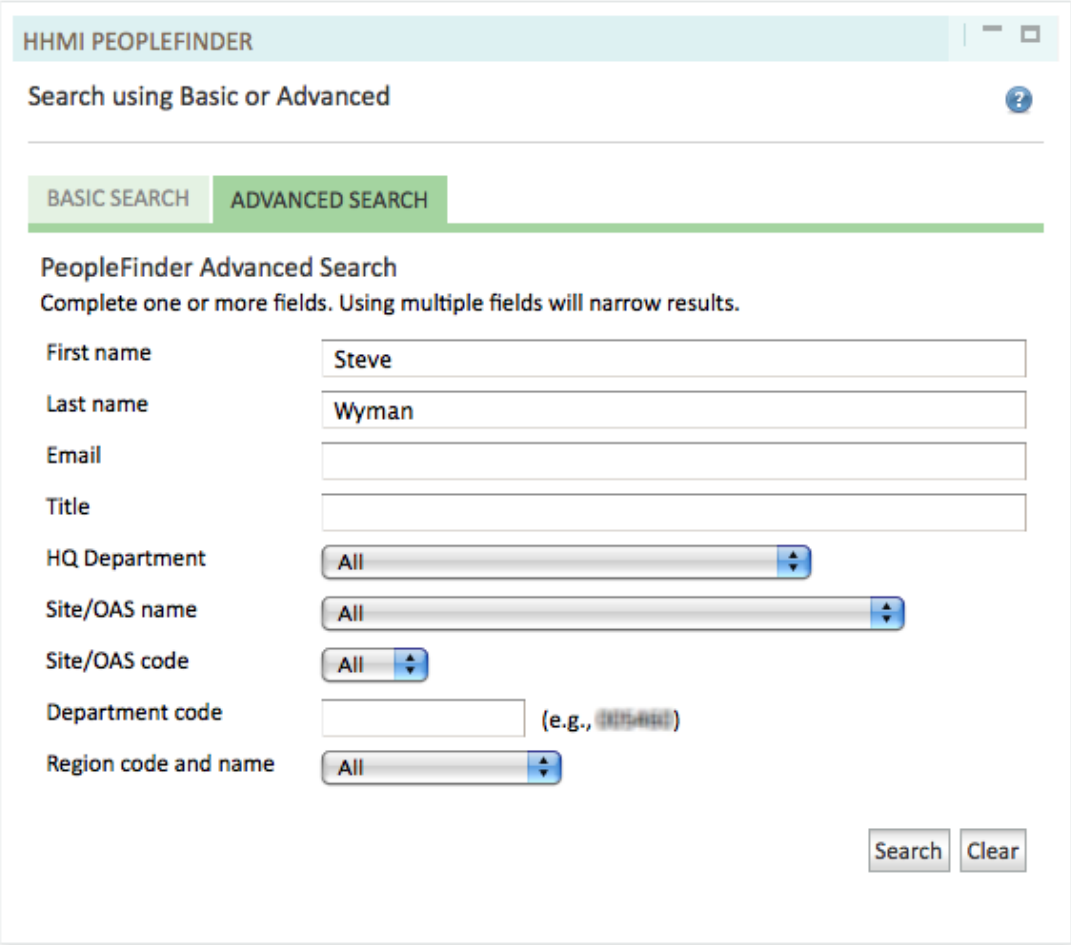
Easing User Transition

To ease the transition for employees accustomed to the former intranet, *MyHHMI* provides a task-based actions menu and other transitional support content, cross-linked to new content locations.

Employee Directory

HHMI's *People Finder* is a fully searchable employee directory, complete with user profiles. Some of its features include:

- Advanced search capability
- Functionality to display lists of employees based on site- and location-specific criteria
- Employee profile
- Recent searches portlet



Pictured: The HHMI employee directory has advanced search capabilities.

Search

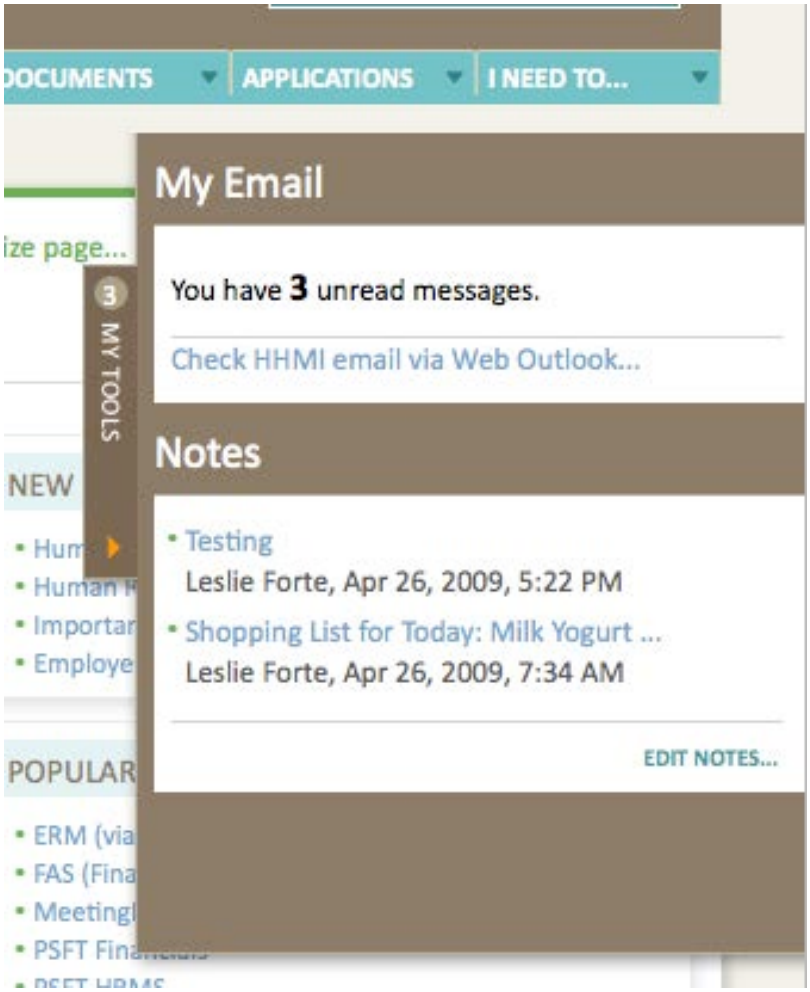
The site features a federated search facility that aggregates results from multiple data repositories, including the employee directory, documents repository, and all other content. It includes a quick-search panel of results as you type (inspired by the search facility at Apple.com).

Productivity Toolbar

This toolbar slides in from the right, and stays there as the user navigates. This leaves the tools always at users' fingertips, but easily moved out of the way. It features links to items such as email, notes, and tasks. Some features of this toolbar include:

- A tab that displays the number of items requiring the user's attention, so he or she can see it at a glance
- A portlet for email (at this point, it shows the number of unread messages and provides a link to Outlook Web Access for viewing them)
- A portlet for managing personal notes

The toolbar design also supports multiple tabs to allow extension to multiple tool groups. For example, the team plans to integrate task managers for personal, content-management, and project tasks in a separate toolbar.

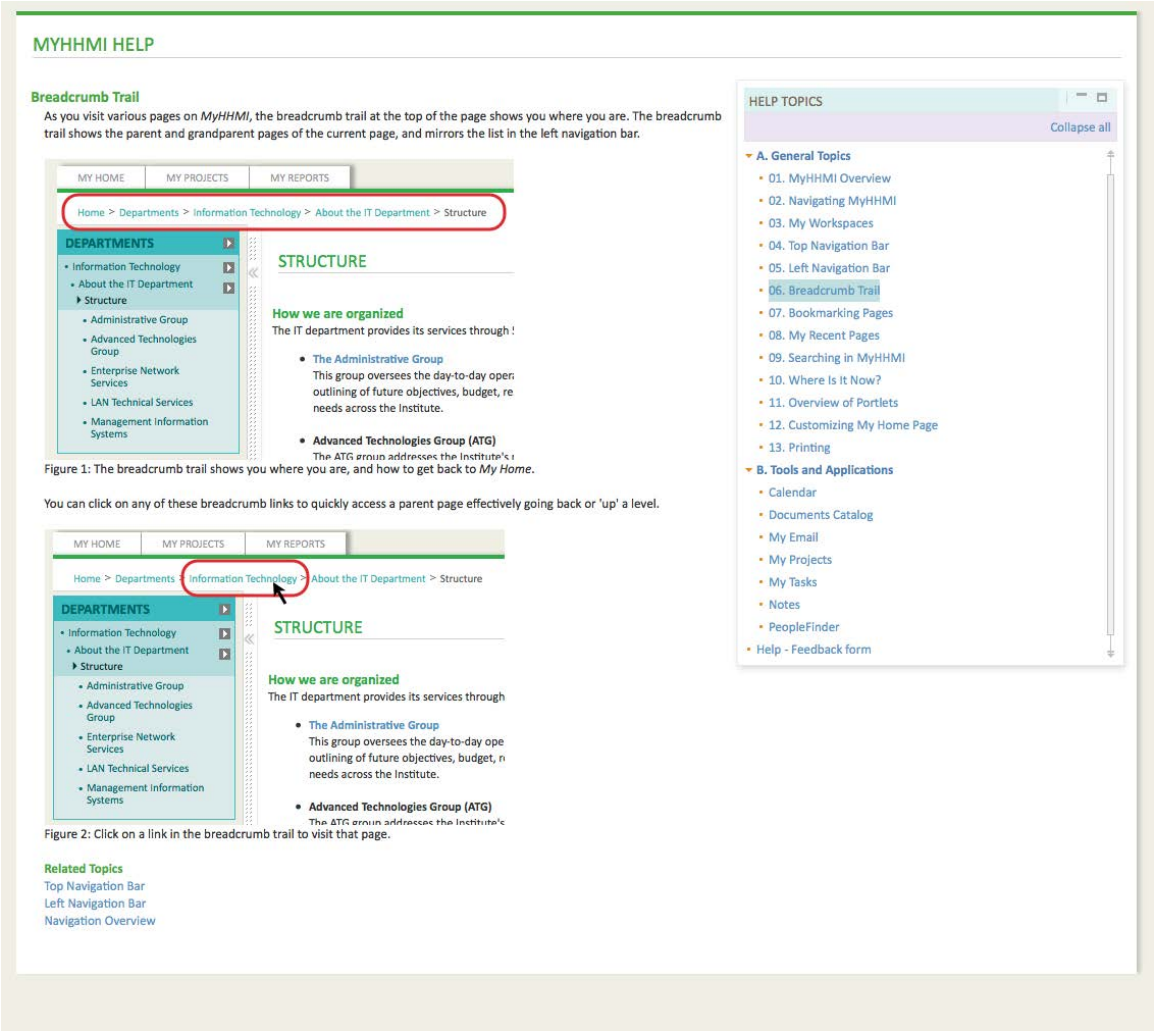


Pictured: The personal productivity toolbar on the HHMI intranet.

Help

An integrated *MyHHMI Help* facility supports novice users. It's accessible using the *Help* link in the utility bar, and also via *Help* icons throughout the portal, which

navigate directly to the related *Help* content. Additional help is provided through the generous use of tooltips.



Pictured: An integrated *MyHHMI Help* facility supports novice users. It's accessible using the *Help* link in the utility bar, and also via *Help* icons throughout the portal, which navigate directly to the related *Help* content.

PERSONALIZATION AND CUSTOMIZATION

Portal Administration

The technical architecture supports the following personalization features:

- **Group-specific content.** Users can access content based on their participation in certain groups.
- **Team-specific content.** Users, through their membership in certain teams, can create, manage, and participate in team collaboration spaces (project or department), and specify who else can access the content.

- **Role-specific access.** The portal administrators can limit who views what, at either the page or the portlet level. For example, once an employee has worked for more than two weeks at HHMI, they no longer belong to a *New Hires* group, and therefore won't see on-boarding content on their homepage. Security can be further controlled at the content level via Alfresco. Security is managed implicitly for *My Department* or *My OAS* workspaces, and by the project manager through the *Team* portlet for projects.
- **Default content controls.** The initial view of a user's homepage is based on his or her location. This approach reinforces the portal's relevance to each employee.
- **Workspaces.** In addition to *My Home*, the content of all other workspaces is also personalized. For example:
    - ***My Department / My OAS***: Users at Headquarters sees the *My Department* page for their department; users located elsewhere see the appropriate *My OAS* page for their location.
    - ***My Projects*:** The user's *My Projects* workspace contains a list of only those projects to which they have access. This provides a highly personalized and relevant experience.
- ***Notes*.** The *Notes* tool contains only the user's personal notes.

Customization

Users can customize the site to their own specifications in the following ways:

- Customize their homepage by selecting a layout and adding, moving, or deleting content
- Create lists of employees based on specified criteria, such as all administrators in Janelia Farm Research Campus or all lab managers at HHMI's Yale labs
- View all personal and group event calendars on a single grid, displaying or hiding individual calendars as desired

RESULTS

Although the HHMI team doesn't engage in formal ROI measurement, as Eisen points out in the following examples, the redesign has resulted in improved functionality and user experience.

Users can now:

- Access and view documents (such as forms, procedures, and policies) and other content via a single search engine
- Access secured content that is restricted to particular groups
- Access other HHMI network resources from one single point of entry
- Create, manage, and participate in team collaboration spaces (project or department), which includes the ability to:
    - Specify who can access content
    - Upload and view documents

    - Assign and track project tasks
    - Add and edit project events
    - Specify links to resources
    - Communicate with team members
- Customize their own homepage (add, move, and delete content)
- Create and administer pages that house any available content
- Administer content directly in one place—rather than in a separate, clumsy administrative interface—using a custom design based on user-centered principles and established best practices in design patterns
- Create lists of employees based on specified criteria, such as all administrators in a particular location
- View all of their event calendars on a single grid
- Experience a consistent, coherently branded singular system for accessing all content across the organization

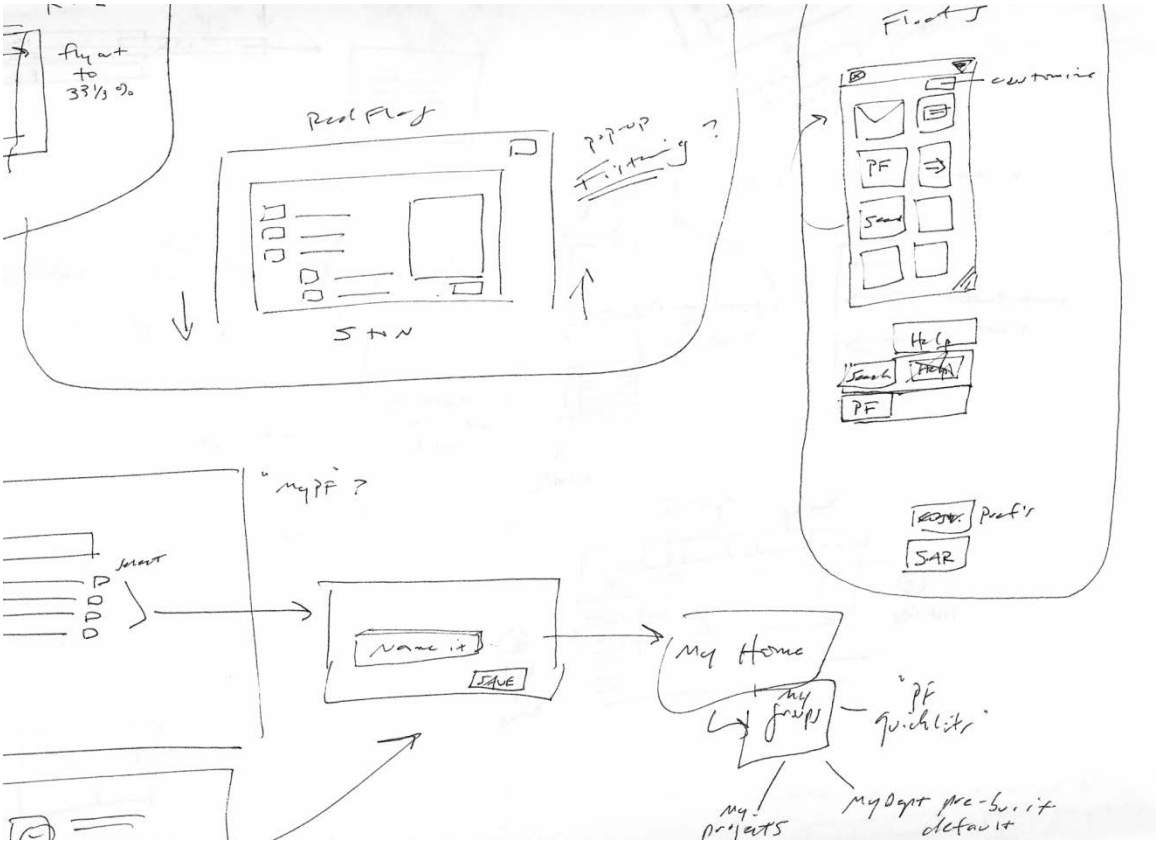
LESSONS LEARNED

HHMI team members share some of their lessons learned:

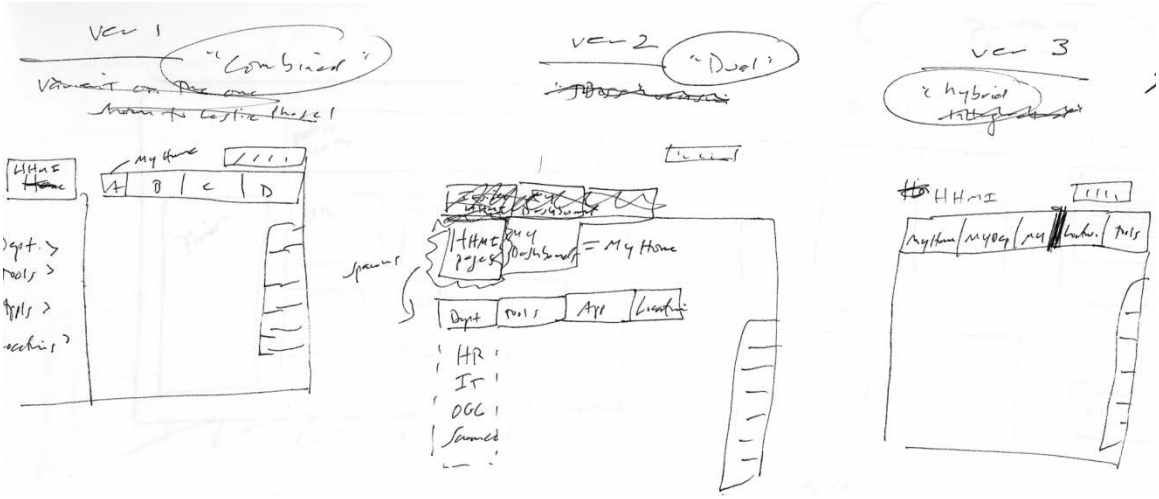
- **Design and technology must be tightly wed.** "Cater the interaction design to the strengths of the technology platform. This will maximize the capability and performance of the solution. For example, the interaction designers initially sketched out a wizard solution to support the creation of projects. However, all of the scaffolding for the wizard would have had to be custom coded, which would have taken significant resources (human and server) from the core functionality being supported. A better solution was suggested by the technical architects to capitalize on the portal framework by auto-generating all portlets for a new project in a default state. This was eventually implemented and now all the user does initially is assign a name to the project, and optionally select start and end dates. To support the user learning how to populate each content area on the project page, tips are provided at the portlet level." (Eisen)
- **Build a multidisciplinary core team.** "This is an old lesson, but one that bears repeating often: The integration of business, technology, and design resources into a single team will increase the creativity of the final design, and increase the likelihood that the design will get implemented as anticipated." (Eisen)
- **Don't underestimate the complexity of content migration.** It would be wise to cite the effort level involved in restructuring and migrating content at the lower level from an existing CMS to a new one, as this isn't a purely technical task and usually requires substantial manual labor and judgments. (Kenneth McDowell, Principal User Experience Architect)
- **Plan for it.** "We knew from the start that the organization of content, defining/tagging the content, assigning authors and approvers, designing a governance model, and content migration would be time consuming. With content management, it is typically the non-technical items that take the most time. We addressed this early and dedicated a resource to this effort." (Schoenfelder)

- **"Go slow to go fast" works.** "The project sponsor encouraged and afforded the team to take the time to sketch early, learn from users, think, collaborate, iterate, and integrate. Various times in the project, the client recognized the critical and long-term value in 'going slow to go fast,' and that design isn't production. Because of this, as the project progressed, there were times when many elements—seemingly disconnected from each other—elegantly coalesced due to the prior effort at design-planning and the time the team took to contemplate, white board, and experiment a bit. This lack of 'rush to market' and 'throw on the wall and see if it sticks,' was critical to an outstanding final design, still sensitive and responsive to timelines, deadlines, and cost. The opportunity to 'go slow to go fast,' seemingly contradictory to contemporary software development (and sometimes design) methods and processes, resulted in deliverables and integrated products that unfolded gradually and effectively, rarely requiring significant rethinking or rework, making our usability, information architecture, and interaction design studies (and related activities) much more perfunctory and confirming... a surprising, fresh, and underutilized approach that resulted in no major usability surprises. (Schechterman)

  The screens that follow show the team's early design sketches:



Pictured: An example of an early sketch.



Pictured: Another example of an early sketch.

- **Allow plenty of time for cross-browser testing.** "Because of the very interactive nature of this project, support and adequate testing of supported browsers were critical to a timely release. From a usability standpoint, Safari and Firefox significantly outperformed IE7 and significant effort was spent getting IE6 working." (Wyman)
- **When content editing is easy, users will be eager to contribute.** "We were surprised by how many people were so eager to have the ability to edit their own content. Our old intranet was so static and even though we encouraged our users to get some training and edit their own content, very few of them took advantage of that option. So, we figured they were not interested in updating their own content. When we launched the portal, we didn't make user content editing a top priority on rollout. But we soon learned that users were chomping at the bit to add their own pieces to the site. For the old intranet, they were a bit daunted by having to 'know HTML' or understand Web publishing. Now they don't, and that fact alone makes contributing content much more approachable and less intimidating. Also, the portal allows others [not just site editors] to contribute content in other ways." (Forte)

Huron Consulting Group

Using the intranet:

Huron Consulting Group helps clients in diverse industries improve performance, comply with complex regulations, resolve disputes, recover from distress, leverage technology, and stimulate growth. The company teams with its clients to deliver sustainable and measurable results. Huron provides services to a wide variety of both financially sound and distressed organizations, including leading academic institutions, healthcare organizations, Fortune 500 companies, medium-sized businesses, and the law firms that represent these various organizations.

Headquarters: Chicago, Illinois

Number of employees the intranet supports: Approximately 2,000

Company locations: US, Jordan, Singapore, and Tokyo.

Locations where people use the intranet: Amman, Atlanta, Boston, Chicago, Dallas, Detroit, Dubai, Houston, London, Los Angeles, New York City, Portland, Riyadh, San Francisco, Singapore, Tokyo, and Washington, DC

Annual sales: $615.5 million (2008)

Design team:

Sponsor: Mary Sawall, VP Human Resources

Subject matter experts: Diane Doherty, Marketing Director; John Sudduth, IT Director

In-house design team: Structured within Marketing Department: Brian Notz, Creative Director; Ciara de los Reyes, Senior Designer; Hugo Dominguez, designer; Liam Strain, Designer; Michael Saint-Aubin, Designer; Daniel Lynch, Web Production

In-house marketing: Sally Hunneke, Director and Lead Intranet Redesign

In-house IT: Rebecca Heckel, Lead IT Developer; Bryan Wells, IT Developer, Matt Cummings, IT Developer

Tahoe Partners: David Sidwell, Project Coordination and Development; Adriano Pezzella, Developer/Designer

SUMMARY

With employees who need information whether they're in an airport, at a client site, in the backseat of a taxi, or sometimes even in the office, Huron's intranet project team had to ensure the site it developed was available to everyone, anywhere. Although some intranets are built for consistent use in a common office, this intranet had to support the company's 2,100 employees scattered in offices worldwide, most of whom are consultants who travel extensively.

Being able to access the site isn't enough for such a demanding audience. Consultants who travel have little time or tolerance to rummage through unclear navigational categories or deal with a weak search engine. They need to find the information they need when they need it—and be confident they've found the right information. An easy experience is essential for any intranet, but is even more crucial when employees might be accessing the site on the way to or from a client site. Traveling employees don't have the option of being able to ask the person in the next cubicle where to find something or call an HR representative to get their questions answered.

To ensure the most important information is also the easiest to find, the iNet governance team centrally manages everything on the site's top two levels. These content areas must apply to 80 percent of the intranet population, helping to ensure that busy professionals have access to the information they need.

The site's homepage, with its clean, focused design, presents news headlines as well as links to new or updated information. Important announcements have a place at the top of the page, drawing users' attention to any items of unique or particular

interest. This area is followed closely by *Huron In the News*, where users can get quick glimpses of mentions of the company in the media. *New and Updated Content* is listed together with the date it was posted or updated, with a direct link to content and a brief description.

Some organizations muddle the news section by mixing headlines about the company and stories about the intranet itself, something that can confuse and frustrate users. This site does a nice job of highlighting both, while clearly separating the headline types, so users can see media coverage or new site content without having any confusion about which is which. Priority is given to mentions of Huron in the news, which is great for selling new engagements, keeping users informed about the company, and learning about successful client projects around the world.

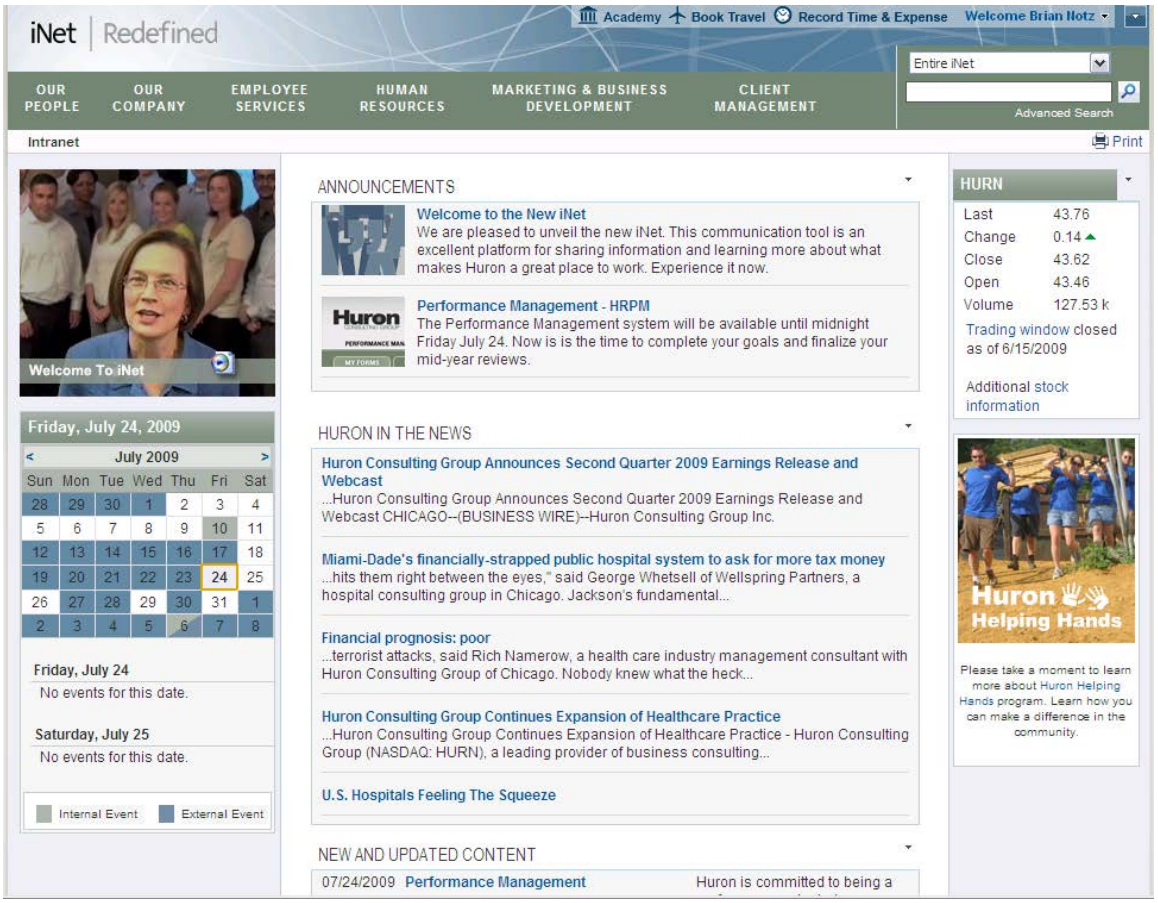
The intranet-focused news is secondary, but still prominent. These updates about the site itself can be key to users, alerting them to content changes and enhancements. Users tend not to browse intranets; they go to the site with a question or curiosity and find the information they need. If users don't explore the site, they tend to return to the same pages, applications, or sections repeatedly, and never see what other new, relevant, or even critical information is on the site. The *New and Updated Content* section gives the team a chance to inform employees—particularly time-strapped employees on the road—and offer a heads-up to important site changes.

A calendar lets users view current and upcoming events and deadlines. The color-coding indicates whether it's an internal (green) or external (blue) event. The calendar lets users see at a glance if there are any events or deadlines that day, and a brief listing of events appears beneath the calendar so users can see what's happening as well as link to more details when needed. Employees can always check the latest stock price on the homepage as well. The page also provides an area for a feature story that sometimes highlights employee-focused projects or initiatives to balance the page's main focus on getting work done.

When the site launched, the screen's upper corner showed a 30-second video of the Vice President of HR welcoming users to the new site. This site area changes regularly, but is focused on communicating messages from or about company leadership. User feedback indicated that employees were interested in hearing more information directly from company leaders. This area of the site allows those communications, whether through videos or text. Team members are experimenting with various messages and information templates for this area. They're monitoring feedback from employees, who've expressed interested in these messages and the team has high hopes for the section's content quality and message frequency.

Team members see this site area as an experiment in engaging leadership with the site and engaging employees with leadership. They're working hard to find the right mix of information, focused on providing high-quality content from the company's leaders. This area of the page appears when there is new content to share.

Links across the very top of all site pages direct users to critical information, such as training information available through the Academy, booking travel, and time and expenses—all key activities for consultants on the road.

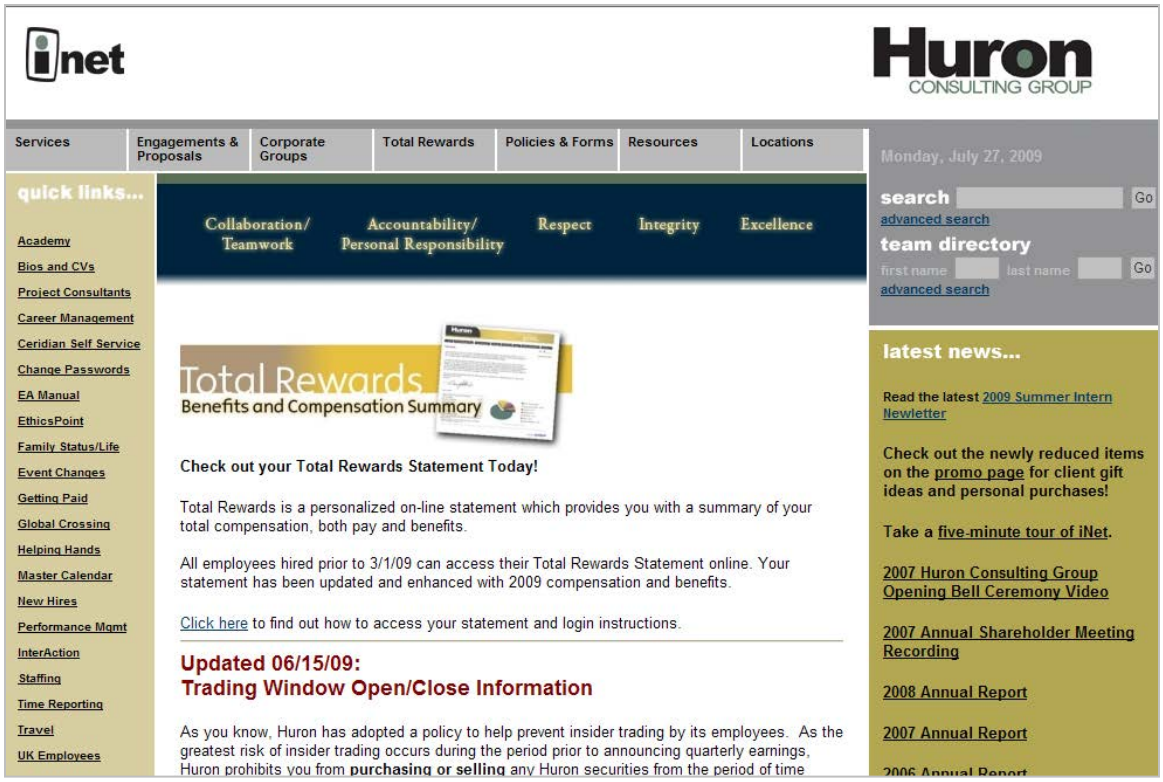


Pictured: The iNet homepage gives users a quick view of updated information as well as providing quick access to key site areas.

This design is a vast improvement over the previous site. The previous homepage provided news, but information was scattered between the middle and side of the page and there was no clear difference between the two news sections. Navigational links appeared all over the page, giving users no clear indication of how the navigation worked or even which links they were supposed to focus on.

The page had a prominent list of quick links on the side. Such links, when carefully edited or editable by users, can be helpful in providing shortcuts to important site areas. However, when dozens of quick links are listed, it's often indicative of a larger structural problem with the site. Such lists frequently emerge when users are unsuccessful using the site navigation. Quick links help users avoid the navigation altogether, which might get them to those particular site areas more quickly, but doesn't teach them how the site is organized or how to find something not listed in those links.

By contrast, the new design highlights just a few key areas and provides quick access to them—the links across the top of the site to training, travel, and time and expenses. These links were provided to offer quick access to prioritized information, rather than as a band-aid to try to fix failed navigation.



Pictured: The previous intranet homepage lost users in a sea of navigational options.

Striving to provide users with the right information, the team expanded the responsibility for content creation from approximately 30 employees to nearly 100. With the previous small number of contributors, there wasn't enough flexibility to create new content or update old content fluidly to meet employee needs. Simply adding more content creators went a long way toward creating the most compelling, relevant, and up-to-date information possible. However, the process of growing from 30 to 100 content creators isn't something that can happen easily or without a lot of planning. The team recognized the need to support their content contributors and build their skills.

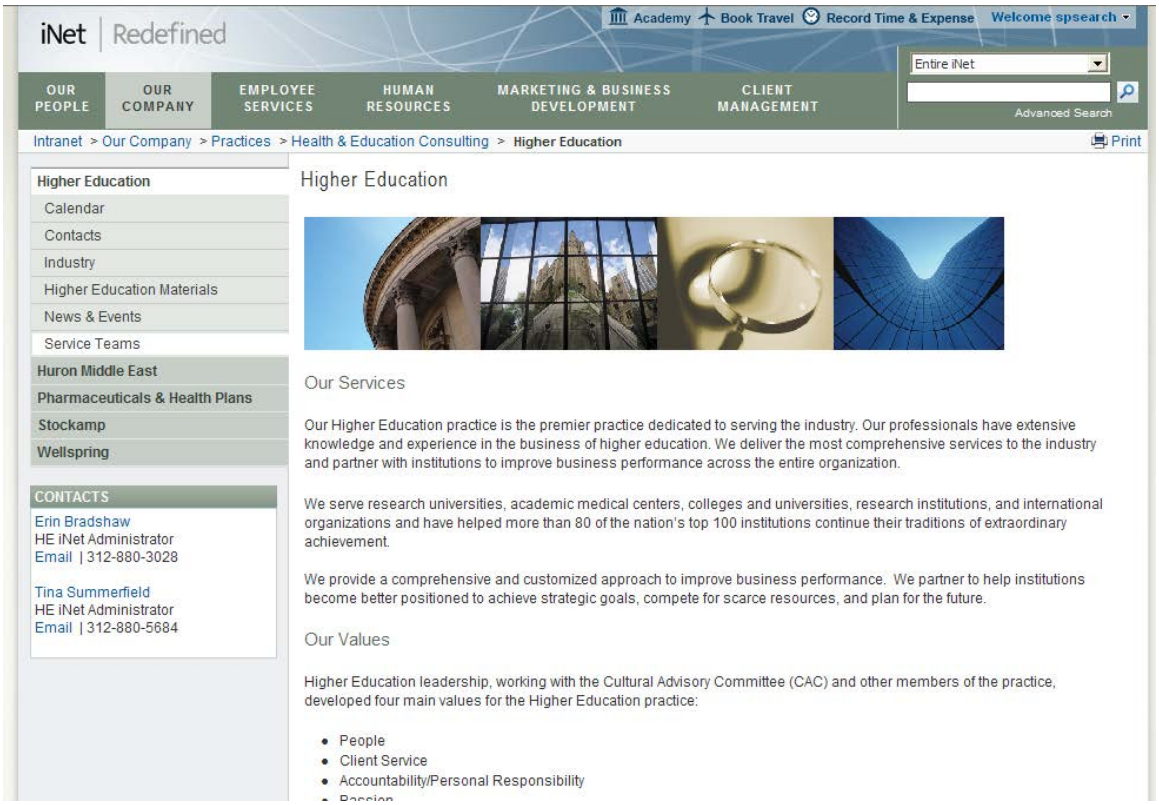
Content contributors aren't given completely free rein over the site; governance and approval processes are in the works to ensure a consistent and coherent experience. This is particularly important with so many voices contributing to the end product. The processes aim to shape the site's experience and retain consistency, rather than to limit content contributions.

Instead of seeing the numerous content contributors as a potential nightmare for site consistency, the team views contributors as a valuable resource to both the team and one another. Content providers were contributing content to employees previously, but may have been working with Word documents on a shared service or sending information via email. The contributors now can communicate the same information via the site. The switch to SharePoint has enabled those content creators to deliver their own content.

The team provides basic guidelines and training, but works hard to develop a sense of community around the content contributors. Contributors have quarterly

meetings, and are also encouraged to share success stories and lessons learned with one another. Building a sense of community around contributors not only helps make content stronger throughout the site, but also makes contributors feel appreciated for the work they do on the site. Now that content creators throughout the organization are "officially" recognized via their roles on the site, contributors from different areas of the organization are coordinating content with one another and communicating with each other more frequently. This helps improve the overall site experience for all users.

Another key aspect of the shared content is letting users know who is responsible for particular information. Contact information is listed on the side of each page, with the employee's name, email link, and phone number.



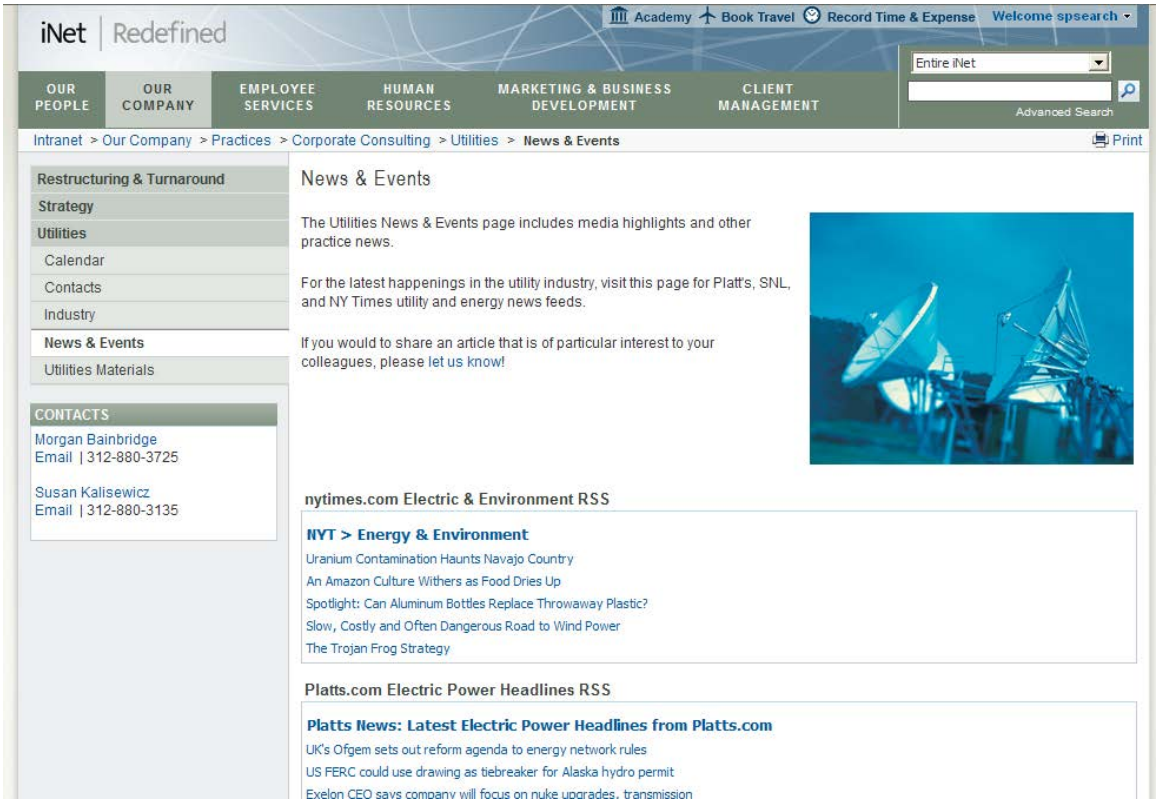
Pictured: The switch to SharePoint allowed the team to recognize all those involved in content creation throughout the organization, upping the number from about 30 employees to nearly 100. This helps contributors deliver their own up-to-date, relevant, and focused content.

A clear design and structure makes it easy for users to know where they are on the site at all times. The user's location in the top-level global navigation is clearly indicated by the change of color. Using clear color contrast in the navigation makes category names easy to read, and the color contrast between the currently selected section and the other sections emphasizes the user's location.

Breadcrumb navigation appears at the top of the page, showing users their exact location in the site. The breadcrumbs are nicely positioned between the top global navigation and the side secondary navigation. The breadcrumbs reflect the user's location in the site, rather than their path to content, which is key for successful breadcrumbs. Each category and subcategory listed is a clickable link, except for the

last in the list, which is the current page. This is an ideal presentation of breadcrumbs.

The site tries to get the most relevant information to users quickly. To this end, certain areas of the site include RSS feeds, consolidating trustworthy sources of information for employees. For example, the *News & Events* section of the site's *Utilities* area includes RSS feeds from *The New York Times* and Platts.com, among others. This gives users a quick way to read up on industry news without having to set up their own feeds or visit multiple websites.



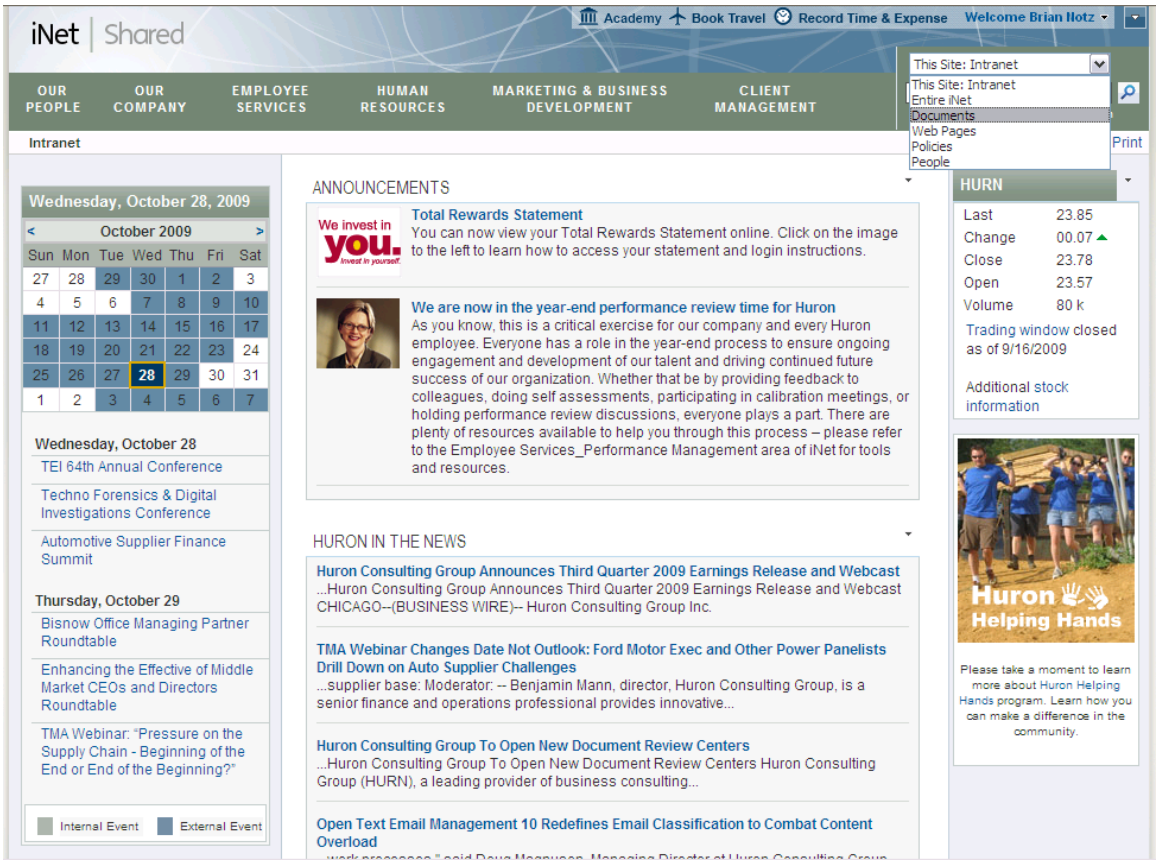
Pictured: Some pages offer RSS feeds, bringing together news headlines from trusted sources.

The site's *People Search* is more than your typical employee directory. Users can search by first or last name, as well as by various criteria—including industry experience, years of experience, and languages spoken—for locating the right consultant for a question or an engagement. Users can also search by more standard criteria such as title, practice, department, and office location. Keyword searches are incorporated so users can find employees who meet their specific criteria.

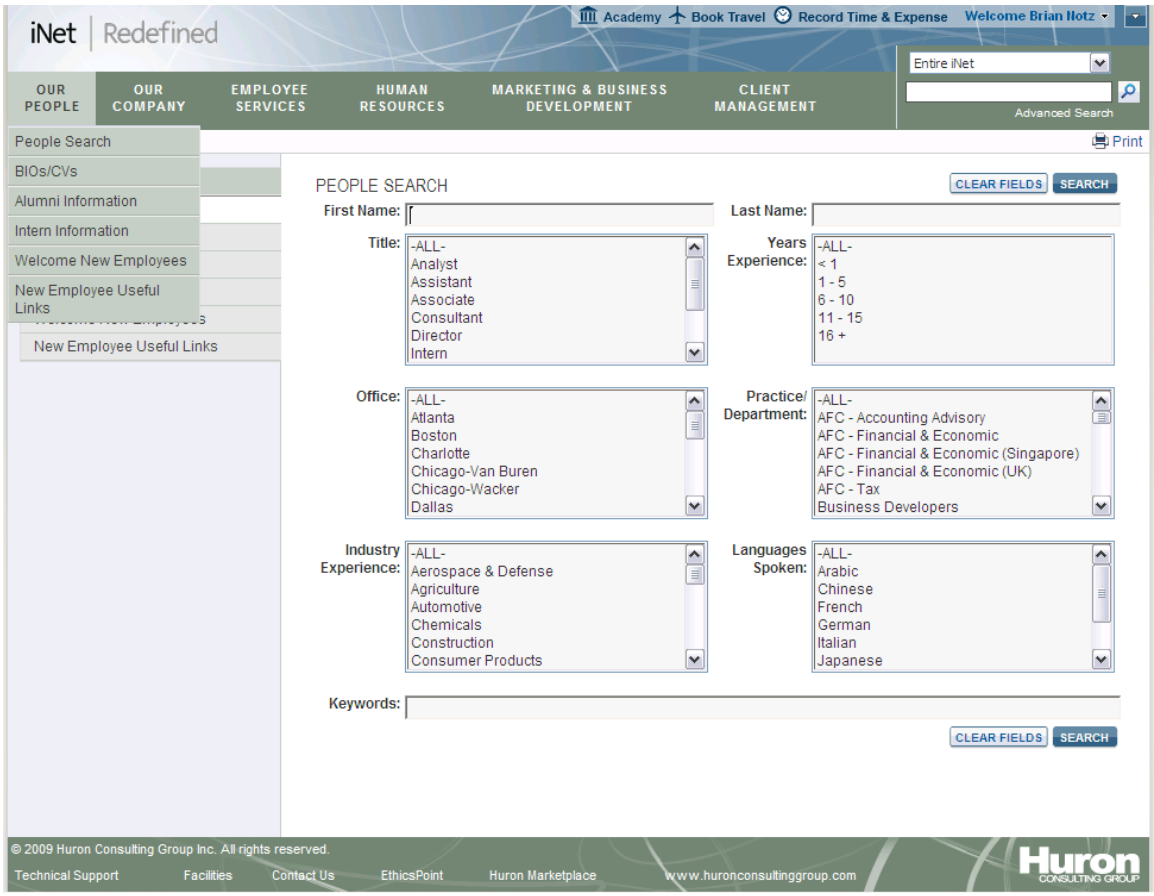
Employees can search for colleagues either by conducting a quick employee search via the main search box or by navigating to the *Our People* section. The main search box gives users options for the type of search they want to conduct, such as a people search, policy search, or a search of the entire intranet.

To see all the available criteria available in the search tool, users can navigate to *Our People*. For each category, all options are listed and users can select one or more criteria. Users can make selections in each category or none, making the directory a robust tool for knowledge sharing. As an example, seeing all employees in Dallas

with more than five years of agricultural industry experience can help locate the right person with the right expertise quickly.



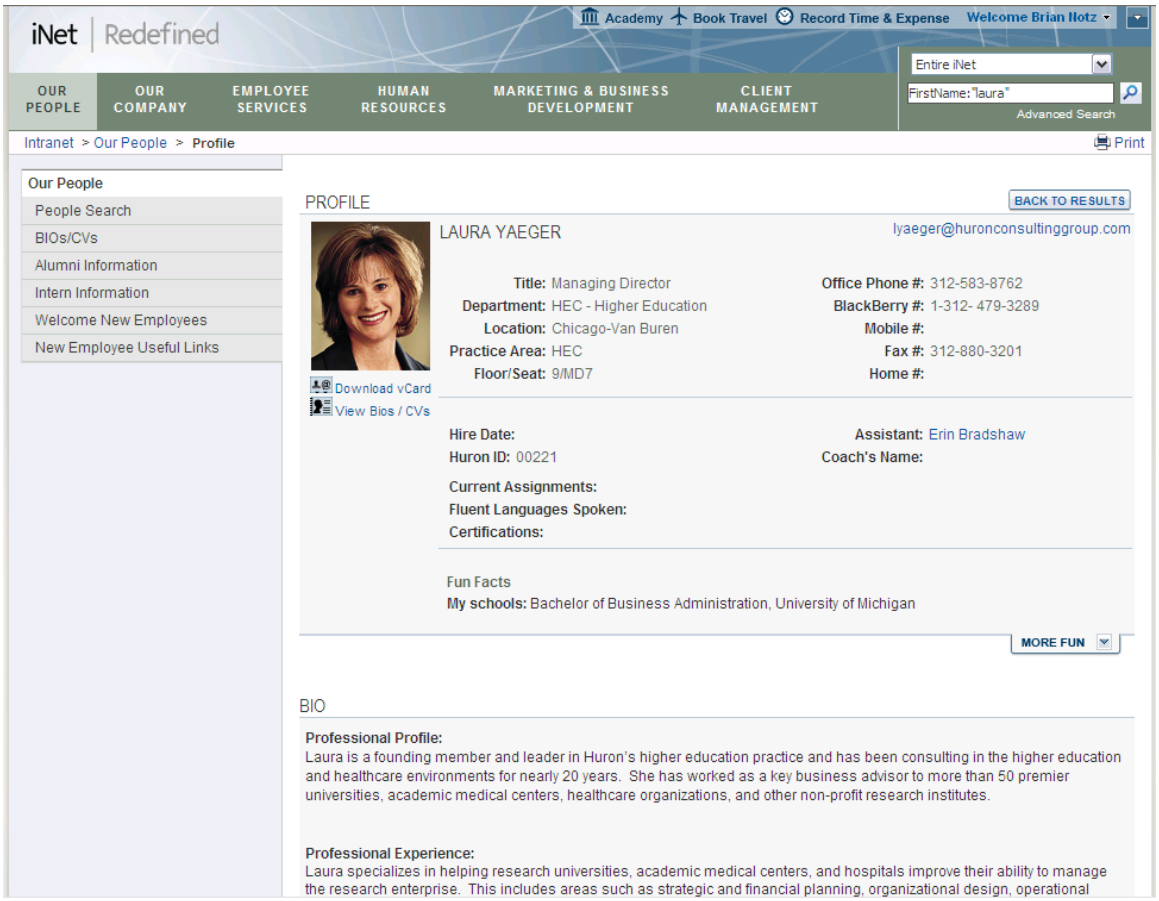
Pictured: The site's search box is a scoped dropdown that lets users limit their search to a specific site, the entire iNet, documents, webpages, policies, or people.



Pictured: If users navigate to the full *People Search* in the site's *Our People* section, they can run a more complex search, even selecting multiple criteria in each category.

Employee profiles provide all the essentials—contact information, picture, and location—but also include additional details such as hire date, current assignments, certifications, assistant name, and coach's name.

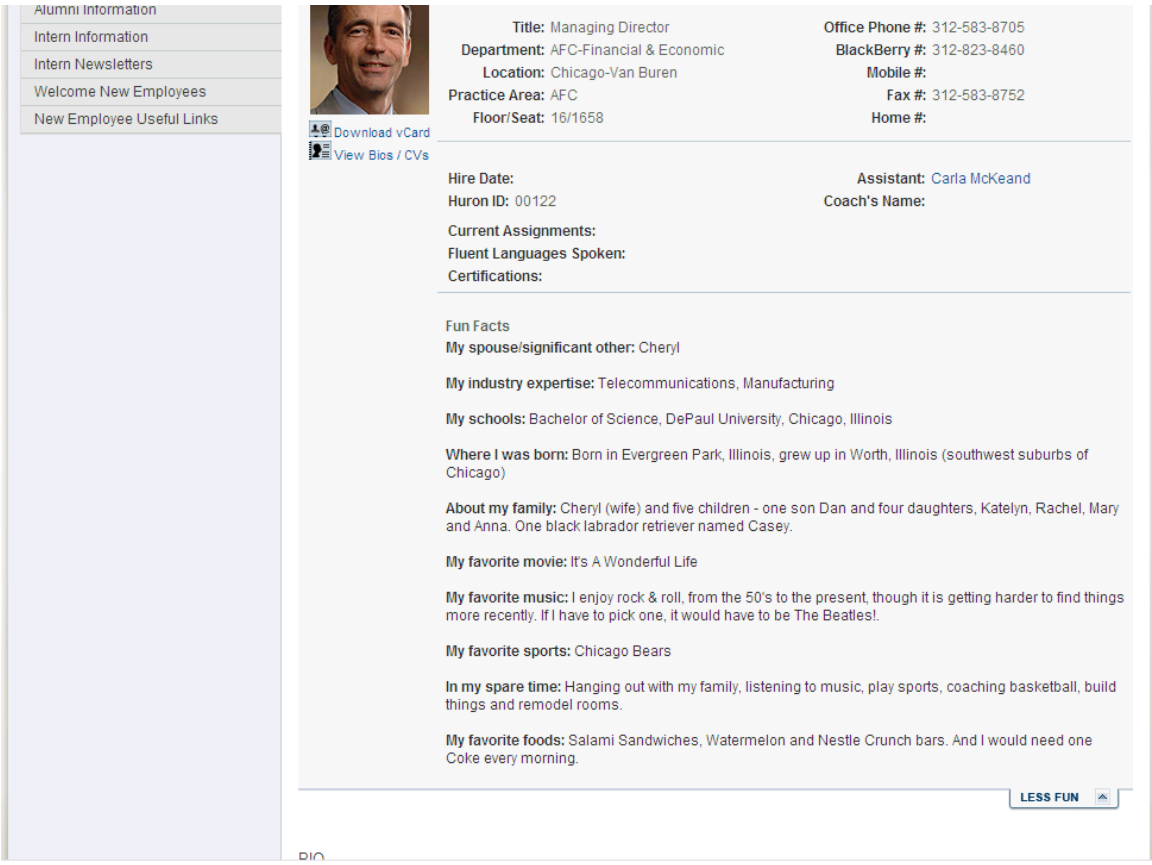
The site provides a professional bio as well, which helps people learn more about colleagues' backgrounds and expertise. Users can easily update their own information, though they must contact the IT department for any changes to non-editable fields such as name, title, and phone numbers.



Pictured: The employee profile provides all the essentials for contacting a colleague, as well as a professional bio. A *Fun Fact* is pulled from a list and displayed by default, and users can click *More Fun* to see additional personal information.

The profile also includes room for *Fun Facts* where users can enter particular categories of information, such as what schools they attended, where they were born, favorite foods, and other tidbits about themselves. When users arrive at a profile page, one *Fun Facts* item is pulled from the user's full profile. To see more, users can click the *More Fun* link at the bottom of the profile. This lets employees share personal information beyond the basic professional bio, which can help build relationships among employees.

The team decided to use the *More Fun* and *Less Fun* links to maximize page real estate. They wanted the professional bio to be visible, which it wasn't if all *Fun Facts* were displayed. So they decided to show one fact by default, enticing users to click through to see more through the *More Fun* link. The *More Fun* and *Less Fun* link labels were initially used in planning meetings as a joke, but the name stuck and is an effective way to describe the hidden content.



Pictured: When users click *More Fun*, the page displays additional information such as the movies, music, sports teams, and foods a colleague enjoys. If users want to return to the more condensed profile view, they can click the *Less Fun* link.

Serious work can be done on the intranet as well. A key component of work at a consulting firm is client management. Previously at Huron, employees who wanted to set up an engagement contacted one individual at the company with requests. Now, the process is summarized online, so users can access the information themselves. So, what used to be a somewhat hidden process is now accessible through the site.

Although the site's content about the engagement process takes the form of checklists and documents, the fact that it's now available makes the process more open. No formal analysis has been done on the effect of this change, but anecdotal evidence suggests that it not only lightened the workload for the individual supplying the information, but also opened up the process to employees who previously didn't have the time or access to learn more about setting up engagements. All necessary documents, and a checklist, are available in one place. This alone is progress.

iNet | Shared

Academy | Book Travel | Record Time & Expense | Welcome Aron Greenburg

Entire iNet

Advanced Search

OUR PEOPLE | OUR COMPANY | EMPLOYEE SERVICES | HUMAN RESOURCES | MARKETING & BUSINESS DEVELOPMENT | CLIENT MANAGEMENT

Intranet > Client Management > Engagement Set-up & Close

Print

Version: Published (26.0) **Status:** Published and visible to all readers

Page | Workflow | Tools | Edit Page

- Engagement Set-up & Close
  - Confidentiality Agreements
  - Conflict Search
  - Huron Risk Assessor
  - Billing Rates
  - Engagement Letters
  - New Engagement Form
  - Supplier, Vendor, Contractor Procedures
  - Closing an Engagement Number
  - Engagement Letters
- Staffing
- Quality Assurance & Risk Management
- Billing
- Client Satisfaction

CONTACTS

Jobsetup
Jobsetup Mailbox
Email

Veronica Garcia
Jobsetup Contact
Email | 312-880-3073

Josh Gutierrez
Jobsetup Contact
Email | 312-880-5686

Engagement Set-up

New Engagement Job Aid
This form is intended to identify the general steps that are followed in most engagements. The "Internal/Corporate Resources" are people who can help with the step(s) noted. Hyperlinks to the relevant policy/form are included as well. Additionally, your Practice or Service Line may have specific guidance related to new projects.

Confidentiality Agreements
This agreement is to be used in situations where Huron is reviewing confidential documents prior to entering into an engagement with a client (e.g., when reviewing confidential information before a proposal or during a diagnostic).

Conflict Search
A Conflict Search must be performed for each new engagement, regardless of the type of work you will be performing. Please complete the Conflict Search Form and email it to the Conflict Search mailbox. This form requires a description of the work and a listing of client(s) and all other parties involved in the engagement (make sure to include all possible acronyms, abbreviations, nicknames, etc). Please do not submit the acronym or abbreviation only.

Risk Assessor Form
The Huron Risk Assessor is a tool to help us identify and manage risk at the engagement level. That is, it goes deeper than simply assessing factors at the client level. This form is required to be completed for all engagements.

Engagement Letters
A signed Engagement Letter is required prior to setting up a job in Elite, unless you have approval from the appropriate Practice Leaders and a draft Engagement Letter. If you are not using the Huron standard Engagement Letter/General Business Terms, you must also obtain approval from the Practice Leader and Legal department.

A soft copy of the signed letter or draft should be emailed to the Jobsetup mailbox. Continuing work after 30 days without a signed letter requires approval from the CFO – without such approval, the job number will be closed.

Engagement Setup Form
Complete the Engagement Setup Form (instructions on the last tab of the Excel form), and email it to the Jobsetup mailbox. It is critical that the Engagement Setup Form is completed accurately to ensure that we are able to correctly bill our clients, recognize revenue, and track potential conflicts. Always download a new copy of the form each time you setup a new engagement in the event any updates have been made since you last used the form. From time to time, there may be a need to open an Assessment & Diagnostic matter number. These will require your Operations Director's approval.

Engagement Close Instructions
Before a job can be closed, a completed Engagement MD Certification Form must be submitted to Jobsetup. This completed form will be maintained centrally and become part of the Engagement Letter file. (AFC has its own form for this purpose and it should be submitted to Jobsetup for inclusion with the Engagement Letter file.

Engagement Set-up Documents

Type	Title	Description / Summary	Modified
	Engagement Setup Form	Engagement Setup Form	9/21/2009 4:34 PM
	Job Type Identification	Clarification on the various Job Types for each engagement/contract	7/2/2009 4:01 PM
	ENGAGEMENT MD CERTIFICATION	Engagement Certification Form to close an engagement number	7/2/2009 3:53 PM
	Conflicts Policy	Conflicts Policy	7/2/2009 3:54 PM
	Conflict Resolution Procedures	Conflict Resolution Procedures	7/2/2009 3:54 PM
	Huron Risk Assessor Tool	The Risk Assessor Form is required on all engagements. It must be sent to Jobsetup along with all email approvals	7/2/2009 4:01 PM
	Client-Serving Contra-ctor Policy	The Engagement Setup Policies and Procedures lists the steps and requirements for new engagement numbers	10/12/2009 10:38 AM
	Assessment & Diagnostic Form	If an Assessment & Diagnostic number are needed, please obtain your Operations Director Approval prior to requesting the number	7/2/2009 3:55 PM
	Engagement QCMD Role	This document describes the Roles and responsibilities of a QCMD	7/2/2009 4:01 PM
	Billing Rates	Billing Rates by Department/Currency	7/2/2009 4:01 PM
	Conflict Search Form	Conflict Search Form	9/21/2009 4:34 PM
	New Engagement Job Aid	New Engagement Job Aid: This form is intended to identify the general steps that are followed in most engagements. .	9/3/2009 3:40 PM

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Huron CONSULTING GROUP

Pictured: The intranet provides a central location for all documents and checklists surrounding setting up and managing a client engagement. This information was previously centrally managed by an individual at the company, but was not available on the intranet.

The team relied on user feedback to both guide development and to focus them on the light at the end of the tunnel. When they were bogged down in details or fighting tight deadlines, they relied on user feedback as inspiration to remember why they were working so hard and to refocus on the improvements the new site would provide.

BACKGROUND

When Huron Consulting was founded in 2002, a small intranet environment was created for the company's then 200 employees. The site utilized Ektron as a CMS platform. The new Huron intranet, iNet, was launched in 2009 and was created using SharePoint. "Our old platform has not been supported since 2007," says Brian Notz, Creative Director, "so the way we interact with the CMS and our information [now] is a complete transformation."

Reusing Existing Technology

The team chose SharePoint because it supported many of the project requirements; the company already had a SharePoint license, so it served as a cost-saving measure as well. By continuing to use SharePoint, the company was able to reduce development costs substantially. Huron had obtained SharePoint through acquisition of a company that happened to have a SharePoint license. So, the IT staff that had been supporting the platform at the other company got rolled into the Huron intranet project. And the timing couldn't have been better. The previous technology behind the intranet (a version of Ektron) had ended its lifespan, so they were overdue for a change anyway.

Supporting a Business Need

The technology platform was the backdrop to the company's decision to expand the intranet, but the business need was the guiding force in the project. The company's business had become so fluid and dynamic that the tool no longer fit its needs. "The organization was growing in such a way that there were so many experts dispersed across so many locations that it was becoming a burden to support," says Notz. So, an enhanced intranet made sense to accommodate the increasing need for communication across the organization and to support a broader content provider group.

And as the company looks at the ways the site will grow from here, the path is clear: toward a team collaboration environment. "The old system did not get anywhere close to a collaborative environment that we're looking for," says Notz. "It was there and it was a dumping ground for stuff. People never knew where to find anything. Everyone was just so frustrated."

INTRANET TEAM

Pictured: The intranet team. (Left to right): Bryan Wells, Rebecca Heckel, Daniel Lynch, John Sudduth, Sally Hunneke, Brian Notz, Ciara de los Reyes, Aron Greenburg, David Sidwell, Matt Cummings.

Taking a Team Approach

Historically, the Marketing department has run the intranet at Huron, but the redesign project was truly a shared effort across departments. The project was sponsored by HR and was a joint effort between Marketing and IT.

Now that the site has launched, iNet support is a shared responsibility between IT and Marketing. All support requests are received through IT and all content-related requests are forwarded to Marketing. Previously, the Marketing team relied on an outside vendor for site support.

Budget is never a trivial issue with companies, but this was especially true for the Huron team. Their budget constraints required the project to span two calendar years and thus draw from two budget allocations. The complexity of this situation required that the team remain vigilant as to how and when the deliverables rolled out. "Budget was paramount," says Notz. "We kept budget down by keeping a very close eye on milestones and deadlines. We never wavered on deadlines and knew we needed to adhere to all timelines. As with most in-house environments we were also very careful to acquire approval by our executive sponsors at every key milestone."

Relying on Internal and External Expertise

Working with agencies is standard practice for most companies, at least for part of most intranet development efforts. The Huron team, like many others, found that it had enough experience on the team to easily accomplish much of the design on its own. But the complexities of SharePoint led them to find an outside agency to provide the technical expertise.

During the design phase, team members relied on their own areas of expertise, but also looked to user feedback to guide their decisions. "We followed a very classic

template in the design process," says Notz. "[We] did months of due diligence. The requirements document became our bible throughout the design process. Wireframes were scrutinized for weeks before design was applied."

"'Out of the box' was always a great concern for budget, ease, etc.," says Notz. "But we knew based on our culture that much attention to design detail was important, so we developed a large amount of customization for data manipulation as well as interface layout."

Never losing site of what the users said they wanted and how they reacted during usability activities, such as card sorts, kept the team honest. "On the team, we truly feel that Huron's iNet is a result of a team that was very focused on delivering what our audience said they needed for business purposes and what made for a better user experience," says Notz. "We would constantly remind each other of the consistent remarks made from card-sorting exercises that occurred months earlier."

"Considering this project took about eight months, it was really easy to get lost in trouble-shooting and development issues," he says. "And all [we] had to do was to remind each other of the value we got out of those focus groups and exercises. It would bring the focus right back."

TEAM ROLES AND RESPONSIBILITIES	
Executive Sponsors	• Align strategic goals with Huron's overall direction
Content Owners	• Primary owners of specific content areas • Maintain ownership of approval process in their respective areas • Passively approve content as required
Content Approvers	• Subject matter experts who verify content accuracy, timeliness, and validity • Initiate secondary approval as necessary
Content Contributors	• Day-to-day authors of site content • Initiate workflows for approval • Cross-train other content contributors across the site
Overall Content Administrator	• Train contributors and approvers on site policies/process • Perform passive reviews of site to ensure alignment with site goals over time

TIMELINE AND BUDGET

As mentioned earlier, the Huron team had an unusual budget constraint: the project budget came out of the budget from two calendar years. So, milestones had to tightly match the dates set out in the project plan—otherwise, the project could be in jeopardy. "Our budget restrictions included an end-of-year overlap," says Notz. The project milestones were therefore based heavily on meeting the budget requirements of the overlap. "At the end of 2008, we were running out of budget and had to use it," he says. "Then there was budget in 2009, an additional amount to complete the project."

In working with their development vendor, the team members had to hit certain milestones by certain dates in order to use the budget in that manner.

Project phases included:

- Project planning
- Discovery phase
- Functional design phase
- Develop and deploy

The project planning and discovery phases were completed in three months utilizing the first part of the budget in 2008. In January 2009, the design and development phases began, with the approved budget already in place. "By the end of February, the team was working on both design and development stages in parallel," says Notz. "Lots of overlap was required in all phases of the project, but especially when we hit the prototype.

"Since we had made the platform decision well in advance of the prototype, we began development in SharePoint right away," he says. "We built custom modules and Web parts knowing that we could reuse them down the road. Our developers were especially looking for any way to not do anything that would become redundant."

The project began October 8, 2008, with a launch date set for the last week of July 2009. Most of 2009 was used for tech development.

GOALS AND CONSTRAINTS

Goal: Focus on Employees

The goal for the redesign was to design an intranet that focuses on the company's employees, providing a rewarding and favorable user experience. The resulting site, iNet, hosts and distributes content that is rich, intuitive, relevant, credible, and reliable. It acts as a portal for employees to access Huron's core applications, systems, tools, documents, policies, and content needed to excel in their jobs. "The site also compliments the overall enterprise and ensures proper securities to support risk management with workflow/content governance and approval," says Notz. "The new site is scalable and accommodates future growth."

Constraints

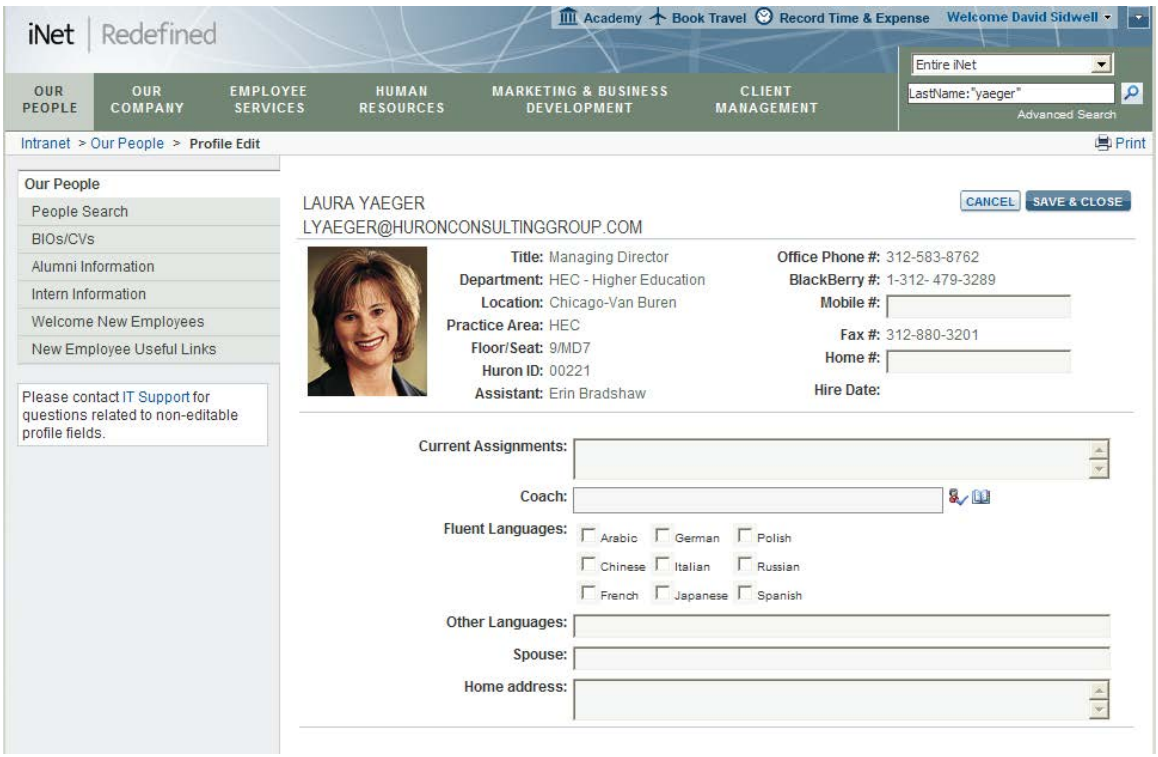
Like nearly every team we've interviewed for this annual report, the Huron Consulting team was under a tight time constraint for the redesign. "Our biggest restraint was time," says Notz. "We had a small team, and we were all running other projects along side this one. So all the meetings became heavily focused and almost all that I remember ran into overtime."

"We knew that with Tahoe Partners it would be important to keep us on time and to keep us alert to their expertise of the technology," says Notz. "Without that, we would have not met the constraints of the deadline."

USERS

Huron is a professional services company more than 2,100 employees in offices worldwide. The majority of users are consultants who work on client engagements and utilize iNet to stay connected with colleagues and keep abreast of company

events and news. Employees travel extensively and spend most of their working time on-site at client locations, so it was imperative that Huron's site be accessible from virtually any location be it client office, hotel, or airport.



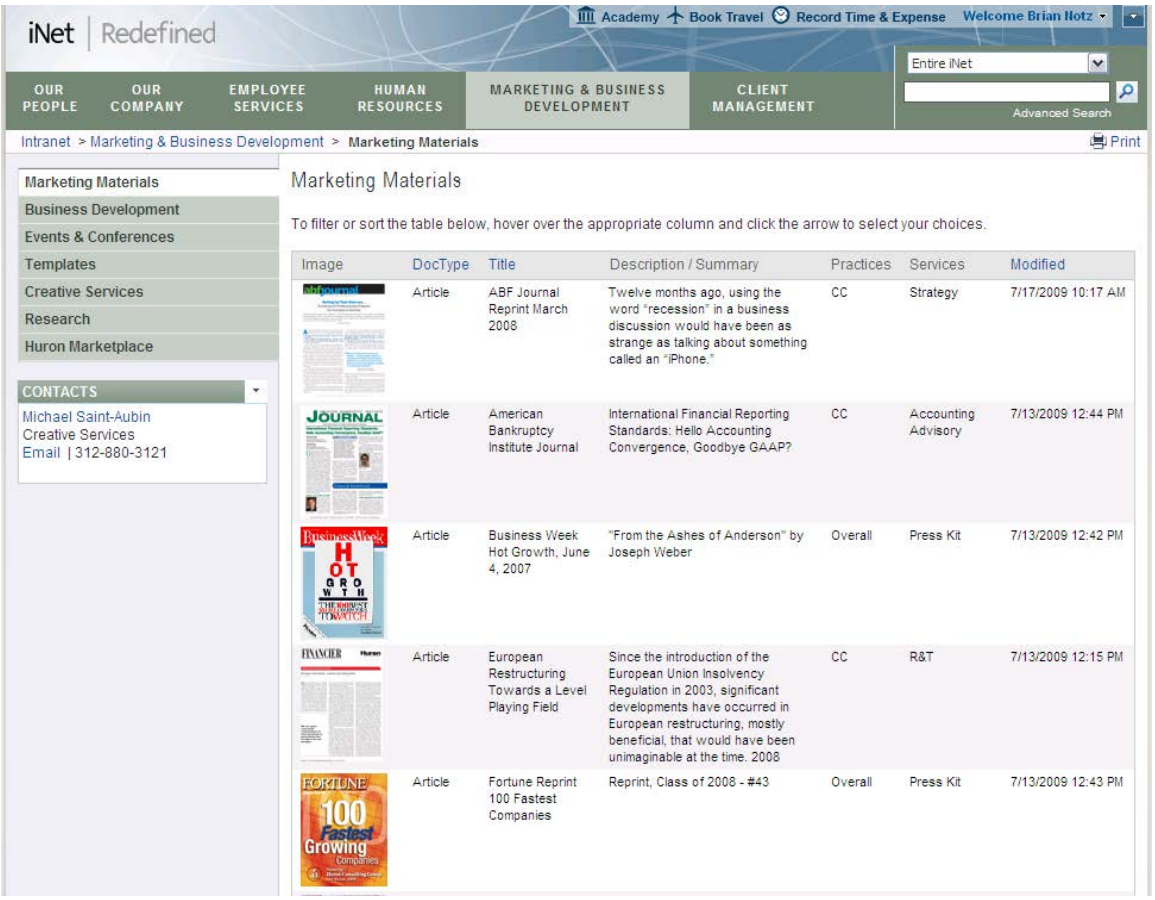
Pictured: When employees view their own profile page, they're given the option to update the information. Items coming from Active Directory are not editable, while SharePoint fields are. The easy interface allows employees to make quick updates, such as coaching changes as the year progresses.

USER TASKS

iNet supports the following user tasks:

- Manage and maintain content in the following areas: search colleagues/find their photo, contact information, industry and client experience, language fluency, and *Fun Facts*
- Manage the entire client management process from set up to close out
- View all corporate and practice marketing materials in one central location
- Enroll in and manage personal benefits
- View interactive leadership messages
- Manage online user bios and CVs
- Access Huron's latest news and events
- Order business cards
- Order corporate materials
- Order Huron promotional materials and apparel

- Enroll in online and classroom training
- Book travel
- Report time and expense
- Complete mid-year and annual performance reviews
- Read the *WSJ* and *The Economist*
- View open job postings
- View company calendar to include internal and external events
- Access various research tools and resources
- View Huron stock ticker
- Submit and review client satisfaction surveys



Pictured: The central repository for the electronic versions of the company's marketing collateral. Here, employees can access the latest brochures, sell sheets, and whitepapers to provide to clients. The material is filterable by type, practice area, and service area to provide a quick way to find documents. The thumbnails and descriptions provide an at-a-glance view of the particular material so employees can reference the documents visually as well.

Building a Robust Directory

As a consulting firm, it's important that Huron consultants have an easy way to become familiar with the organization and their consultant peers. The obvious tool for that purpose is the ubiquitous corporate directory. The company wanted to make sure that its staff directory was as dynamic as possible. "Executive bios are an important way for others to become familiar with their background and expertise," says Notz. So, on iNet, the company directory tool features *Fun Facts* for each employee in addition to the usual compendium of experience and expertise. Users can click on the *More Fun* tab to find out more about an employee's personality and history or choose the *Less Fun* link to review the person's consulting experience.

USABILITY

The team used extensive focus groups, user surveys, card-sorting exercises, and usability testing to ensure that the new iNet met user needs. "Huron's iNet is unique because the design process was completely focused on its users and reflects what employees viewed as priorities in feature and functionality," says Notz.

The team employed a range of user experience activities throughout the design process, including:

- Card sorting
- Field studies
- Email surveys
- User testing of the old intranet
- User testing of new design prototypes
- Studying the server logs

Daniel Lynch, Huron's Web Production Associate, breaks down some of the usability deliverables and discusses how they were administered during the project:

Surveys

The survey was available to any interested user through a link sent via email and posted on the iNet site. Additional efforts were made by Huron to drive users to the survey and increase the number of responses. This provided all iNet users the opportunity to voice their opinions about iNet's content, functionality, and ease of use to ensure that everyone was represented in the overall detailed requirements gathering.

Questions ranged from ones seeking general demographic/employee data to range-based queries on degree of satisfaction with features to questions requesting free-form responses.

The survey findings reported here are from surveys completed September 10 through September 24 in 2008. During this time, 628 surveys were completed, representing nearly 30 percent of the entire user base. This excellent response rate places this survey in the top three all-time Huron surveys in terms of responses received.

Field Studies

The overall goal of the requirements sessions was to gain a better understanding of how Huron representatives use iNet, how they'd like to use iNet, and where they see improvement opportunities. Results from a previously completed user survey were incorporated into the facilitated discussion to dig deeper into topics of interest. The high-level areas of investigation were:

- Content
- Functionality
- Navigation and ease of use
- Accessibility
- Content governance

While these were the main areas, discussion wasn't limited to these areas.

Session participants represented a wide range of corporate and practice personnel, including many geographic locations, varying time with Huron, and varying levels within the company. A total of seven sessions were held.

Card Sorting

At a high level, the card sort was fairly typical. Users were given a series of index cards with various items, tasks, or categories that could be incorporated in the reorganization of the intranet. These elements were often held together in the same pile. The users were then asked to sort cards into separate piles, placing cards that seemed similar into groups. Elements that were placed in the same pile by many users were deemed sufficiently similar and were ultimately placed in the same category for the redesign.

During the card sorting the team utilized several activities, including:

- **Group random content items.** Users first placed the cards in piles in random order. Later, the users named the piles. The users also were asked for reasoning and further clarification on what they interpreted the cards to mean.
- **Locate content items.** This activity sought to test the groups' ability to find items they'd placed in certain groups. This allowed the team to verify with the group that the piles were logical.
- **Attack content groups.** Facilitators asked participants to focus on prearranged groupings and determine any changes/rationalize the grouping.

User testing

The team conducted user test sessions of both the old intranet and the new design prototypes. "To balance and verify some of the findings in the previous requirements and design process activities, we leveraged the old intranet and some basic design prototypes," says Lynch.

"With the old intranet, users were asked to find certain key content—content we heard about most often in the focus groups and through the survey," he says. "A common response was, 'I didn't even know that existed on here.'" After some

struggling, some of the participants were able to find the content areas or indicated where they'd expect to find the content.

The next step was to utilize basic design prototypes with dummy content but using navigation that was driven by the information architecture developed in previous activities. Users were asked to find the same content that they were asked to find on the old intranet. The common response this time was, "that was easy, it's right where I'd expect."

"Once again, we focused on key pieces of information that employees told us were important in their day-to-day jobs," says Lynch.

Studying Server Logs

The team had no choice but to study the server logs as the old intranet had no analytics tool associated with it. Raw log data was all they had to work with. They used the server logs to determine activity and key pages on the old intranet.

Although this was a cumbersome process, the results of the analysis verified some of the responses the team had heard from users in the focus groups and added additional research to some of the team's design decisions. For example, people used the intranet to search for colleagues, benefits information, and some of the client management documents needed to begin engagements.

TECHNOLOGY

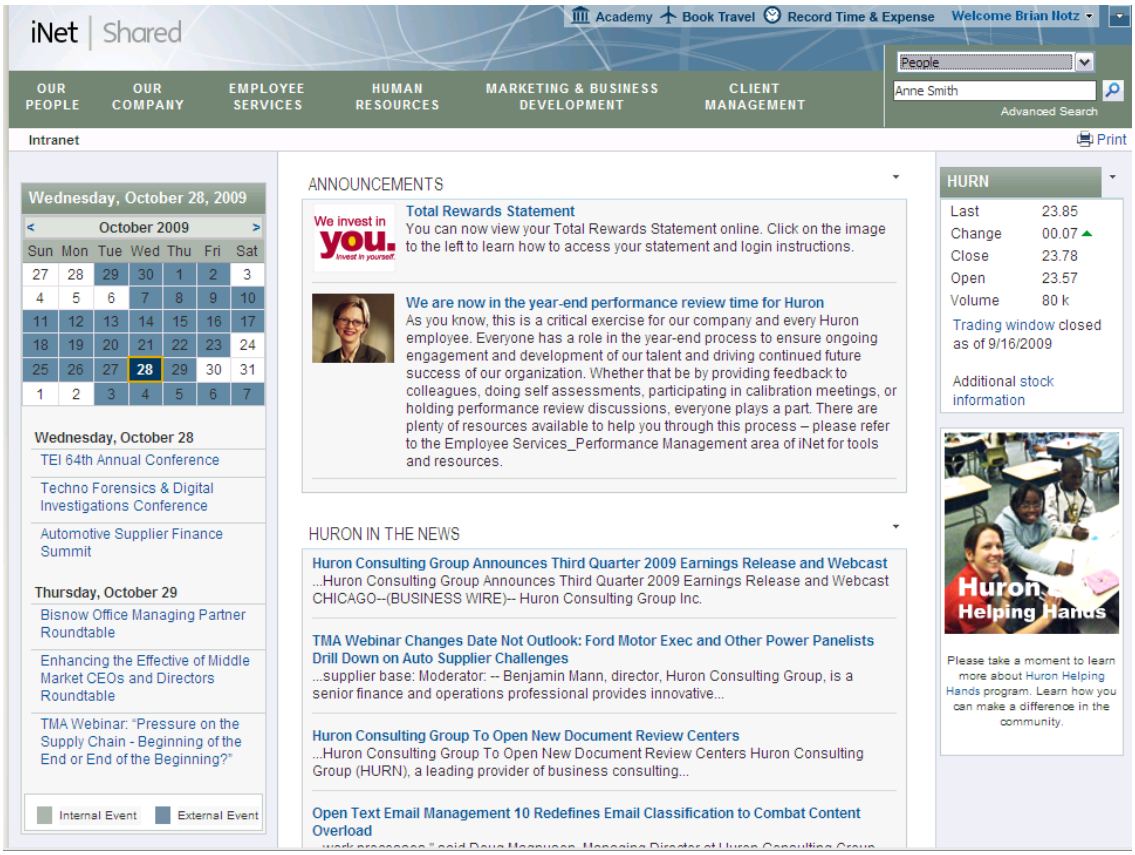
As mentioned above, the Huron intranet is on the SharePoint (MOSS 2007) platform because it met both the technology and business needs of the project.

SEARCH

Search was paramount to the new site's success. Because the previous intranet used "absolute search," users had to know exactly what they were looking for. "Our documents were also not searchable," says Notz. "In our focus groups, we determined what people were really looking for and that shows in our current views. Our users are typically looking for people within the company. They want to know who they will be working with on a project or find their career coach. Sometimes this is the first impression our people get of one another because our consultants typically are working remotely at a client."

So, at the main navigation masthead, users can now search for people in two ways:

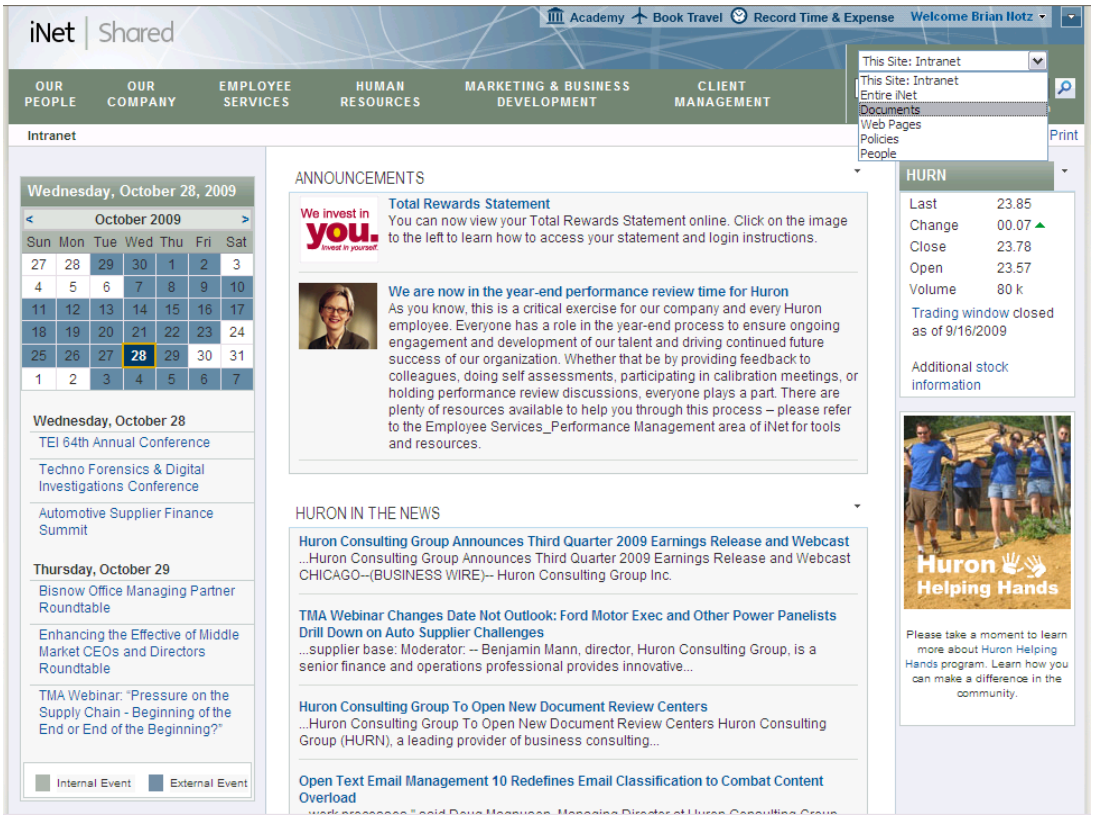
- By choosing *Our People*, users are given the advanced search
- Users can also enter a name in the masthead's *Search* field and then choose "people" from the search scope dropdown menu



Pictured: To find colleagues, users can enter a name in the masthead's search field and then choose "people" from the search scope dropdown. This option lets users conduct this search from anywhere on the site rather than having to navigate to the *Our People* section.

"Option two is important because this is available no matter where a user may be on the site, without having to navigate to *Our People*," says Notz.

The advanced search options include the other dropdown search scope listed above the search field; users can also navigate to the *Advanced Search* page.



Pictured: The site's search box as a scoped dropdown where users can limit their search to a specific site, the entire iNet, documents, webpages, policies, or people.

iNet | Shared

Academy | Book Travel | Record Time & Expense | Welcome Brian Hotz

Entire iNet

OUR PEOPLE | OUR COMPANY | EMPLOYEE SERVICES | HUMAN RESOURCES | MARKETING & BUSINESS DEVELOPMENT | CLIENT MANAGEMENT

Advanced Search

Intranet > Our People > Advanced Search

Print

ADVANCED SEARCH

CLEAR FIELDS | SEARCH

All of these words:

Any of these words:

The exact phrase:

Title:

Result Type: All Sites

Author:

Last Updated:

Updated between:

and:

Department:
-ALL-
Facilities
Finance & Accounting
Human Resources
Information Technology
Legal
Marketing

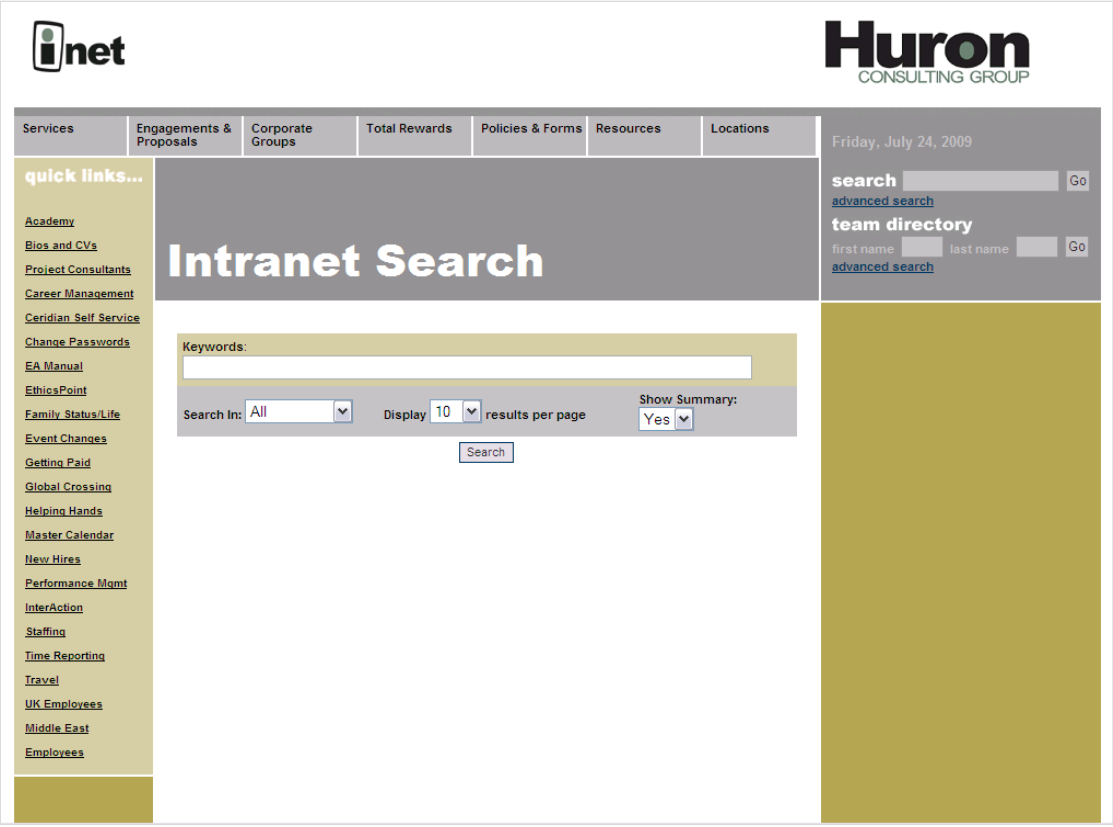
Category:
-ALL-
Brochure
Case Study
Contract
Form
Job Aid
Policy

Practice:
-ALL-
Corporate Consulting
Accounting and Financial Consulting
Health and Education Consulting
Legal Consulting

Industry:
-ALL-
Accounting & Finance
Clinical Research Solutions & Healthcare
Corporate Governance
Corporate Tax Solutions
Disputes
E-Discovery

Service Line:
-ALL-
Operational
Restructuring & Turnaround
Strategy
Utilities
Accounting Advisory
Disputes

Pictured: The *Advanced Search* page offers users a variety of criteria by which to narrow their search.



Pictured: Search on the previous intranet was limited to keyword searching. Although users could set some basic places to search, the overall experience was not robust. Now, the site's advanced search lets employees filter information by metadata associated with each piece of content.

CONTENT AND CONTENT MANAGEMENT

A Distributed Model

The new iNet shifted content management from a centralized content management model to a distributed model enabling nearly 100 content owners to manage their own content (where once only 30 people were content owners). These content owners ensure that content is relevant, updated, and timely.

"Previously the content published on iNet was a centralized process with most of the content being published by approximately 15 users," says Notz. "This model did not fit our fluid business needs, due to the amount of people providing content."

Now, with the distributed content model, the content owners are responsible for the authoring, approving, removal, and updating of all content on the intranet.

"Leveraging this approach has allowed us to also distribute training through the same channels to accelerate change management," says Notz. "So, the new platform requires the publishing of content by owners/creators of the materials. The dynamics of the business require the ease of publishing in small well-organized groups without too many obstacles. Our governance team would then monitor these various groups. We are phasing in the approval and governance processes."

Everything on the site's top two levels is approved/governed by the iNet governance team. All changes at these levels must be investigated to ensure that they fit with site guidelines and apply to at least 80 percent of the population. This ensures that this important top-level content is relevant to most of the organization. Less relevant or content geared toward a more specialized audience fits at the third level and is governed in a more decentralized manner.

"Everyone wants top billing, but the governance team must validate needs versus wants," says Notz. The main content areas are: *Our People*, *Our Company*, *Employee Services*, *Human Resources*, *Marketing & Business Development*, and *Client Management*.

At the third level and below, content owners/approvers act as subject matter experts on how to best delivery their content. With basic guidance (and aid when requested), the site becomes theirs to manage.

Writing for the Web

Each author is given some basic training/guidelines for authoring Web content. As best practices emerge, authors are encouraged to informally share what they learn among their peers. The team has also established quarterly "refresh" meetings with the group as a whole to provide an outlet for best practices, deliver new training, and focus the group to help them stay engaged in their tasks. For many, this isn't their only task on a day-to-day basis. "We are also establishing 90-second quick tutorials for delivery of training on items that may not be as common to everyone (leveraging the content contributors and approvers)," says Notz.

RESULTS AND ROI

Like many intranet teams we've interviewed, the Huron team measures typical site analytics, but has few resources to measure overall site ROI. Instead, the team relies on softer measures of the site's success, such as the fact that users can find people and information more quickly than before. Positive user feedback also provides insights into the site's relative success.

And, perhaps the most important measure of all, is that iNet is up and running and provides the company with a tool that it can grow as the business grows. The new intranet enables the organization to meet internal needs as they arise. Consulting is a very fluid industry and the importance of having a nimble tool in place shouldn't be underestimated.

"People are starting to see the potential for further development for other projects such as staffing, social applications, and custom group sites," says Notz.

LESSONS LEARNED

Huron team members share the key lesson learned on this project:

Don't rely on user enthusiasm. The biggest lesson the Huron team learned in building iNet was that they overestimated end users' enthusiasm for the new platform and their role in contributing vital site content. To support the new site and ensure that it would be of the highest quality, the team needed many content contributors and content owners. "We overestimated the excitement that we thought people would have to use 'this great new tool,'" says Notz. "Instead, many were

concerned about how this might affect their daily work load and how complicated it might be." Fortunately, he says, "most of those concerns are now behind us, and people really do see the value of how they participate in the site. We ended up spending more training time with our fellow content owners/providers then I think we thought we would." (Notz)

The MITRE Corporation

Using the intranet:

The MITRE Corporation is a not-for-profit organization that manages four federally funded research and development centers (for the US Department of Defense, the Federal Aviation Administration, the Internal Revenue Service/Virginia, and the Department of Homeland Security).

Headquarters: Bedford, Massachusetts, and McLean, Virginia

Number of employees the intranet supports: Over 7,000 scientists, engineers, and support specialists, 65 percent of whom have master's or PhD degrees. Staff members work on hundreds of different projects across the company, demanding a high level of technical, operational, and domain knowledge.

Company locations: The MITRE Corporation has two principal locations—one in Bedford, Massachusetts, and the other in McLean, Virginia. MITRE also has additional sites located across the US and around the world.

Locations where people use the intranet: The US, Belgium, Germany, Japan, Tokyo, Netherlands, Republic of Korea, Taiwan, UK

Annual sales: $1.2 billion revenue (2008)

Design team:

In-house team members from three different divisions bring unique skills in user-centered design, development, and knowledge management.

Team members: Tony Carlucci, Developer; Donna Cuomo, Chief Information Architect; Bill Donaldson, Department Manager; Dave Donegan, Portal Team Lead; Stan Drozdetski, Human Factors Engineer; Krista Kennedy Groenwoldt, Information Architect; Mike Phelan, Developer; Fran Yang, Developer

SUMMARY

Who would guess that, at a highly technical company where 65 percent of employees have advanced degrees, many users don't know how to use their company-issued smartphones? This sort of insight, uncovered in user research, gave the MITRE team something to work with as they developed their intranet and its mobile version.

It taught the team that nothing can be taken for granted. Although users might ask for a mobile version of a site, and it might seem like a logical step, the reality is that many users have no idea how to type a URL or enter a password into a phone. At MITRE, conducting user research helped the team identify and tackle issues like this as they develop and work on internal applications.

While the team does address new areas such as mobile access, they don't neglect working on the intranet portal itself. The customizable homepage features some areas that can't be changed, including corporate news, banners, navigational items, search, and access to the *Phonebook*. Other areas are customizable and users can choose from over 75 services to design a page for themselves. However, the team has found that few users go through the steps of customizing the page. Most leave the default view.

Knowing that customization was helpful to some but ignored by many, the team is moving toward developing more personalized content. The key difference between customized content and personalized content is effort: Personalization pushes information to the user and is seamless. Customization requires the user's

engagement with the site. If users don't see, understand, or have any interest in the option to customize content, customization will likely fail to draw users in.

The team has already moved toward more personalization, providing some information for users based on their login information. Users currently see information about their business unit and employee travel, along with a list of *Community Share* sites of which they are members. The team is moving in the direction of providing more personalized content in the future and hope to push content based on role, organization, and geographic location.

The homepage provides a combination of news, timely information, and links to move users directly to the site areas they need. Corporate news appears in the center of the page, with one story accompanied by an image and summary and others listed with headlines only.

Action items are also listed in this area of the page, highlighting any outstanding activities the user needs to complete. These messages are automated and are pulled from many different applications. For example, items might remind users to install software updates or patches, to approve or review material, or change their password.

The *MyMII* menu shows users the main site navigation. There is no overarching global navigation available throughout the intranet. As a result, the main site navigation appears in a box on the homepage rather than in a more standard location. The header at the top of the homepage is repeated throughout the intranet, as a first step toward building a consistent navigational experience. The standard bar includes a link back to the homepage and an open search field that allows users to submit a *FastJump* search (a search structured around Best Bet results), a *Phonebook* search, or a standard site search.

The *FastJump* search—available by entering a search term and selecting the *FJ FastJump* button next to the open search field—is the team's fix for full-text search, which has a diverse set of content and results, and navigation that sometimes confuses users. The standard site search offers a breadth of content, that may or may not include the specific results that users need. Like many intranet teams, MITRE's has discovered that search solutions can't simply be implemented and left alone. They require constant monitoring and adjusting to make them as effective as possible. To that end, team members monitor any queries that return zero results via the standard site search and try to fix the problem.

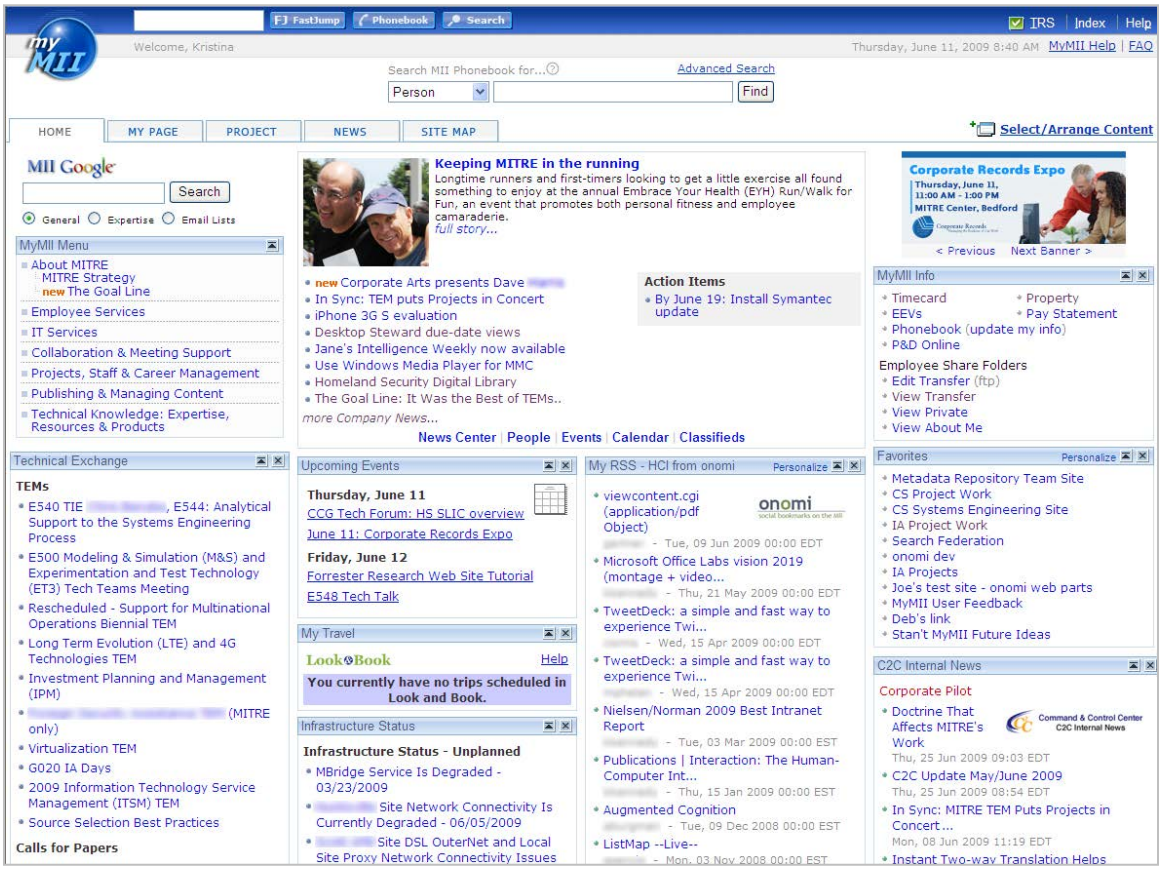
The *FastJump* tool combines keyword navigation and search. Users can enter a keyword that will jump them right to the content needed, such as entering "cafe" for information about the cafeteria.

FastJump is the primary way users navigate, which makes sense as the intranet is comprised of many different Web collections with no overarching navigational structure. *FastJump* keywords and results are updated nightly from a database to give users the "Best Bet" results. To further encourage use of the *FastJump* tool, many company communications and ads reference *FastJump* keywords. This lets users see a keyword in a communication and then go to the site, enter the keyword, and move directly to the information they need.

Elsewhere on the homepage, *MyMII Info* gives users quick access to relevant information, such as pay statements, personal information in the *Phonebook* tool, and timecards. Users can also customize a list of favorites to link to areas of interest on the site.

Users can add other pieces of content to the page, such as a list of personalized RSS feeds, infrastructure status, or department news—basically, whatever the user is interested in.

The page offers intranet Google search in the upper left-hand corner, and users can choose to search all content (*General*), to search for expertise within the company, or to search shared listserver-based messages. In addition, the search for the *Phonebook*, or employee directory, appears at the top of the page. This is in addition to the search tools available in the standard bar, which appears on every page.

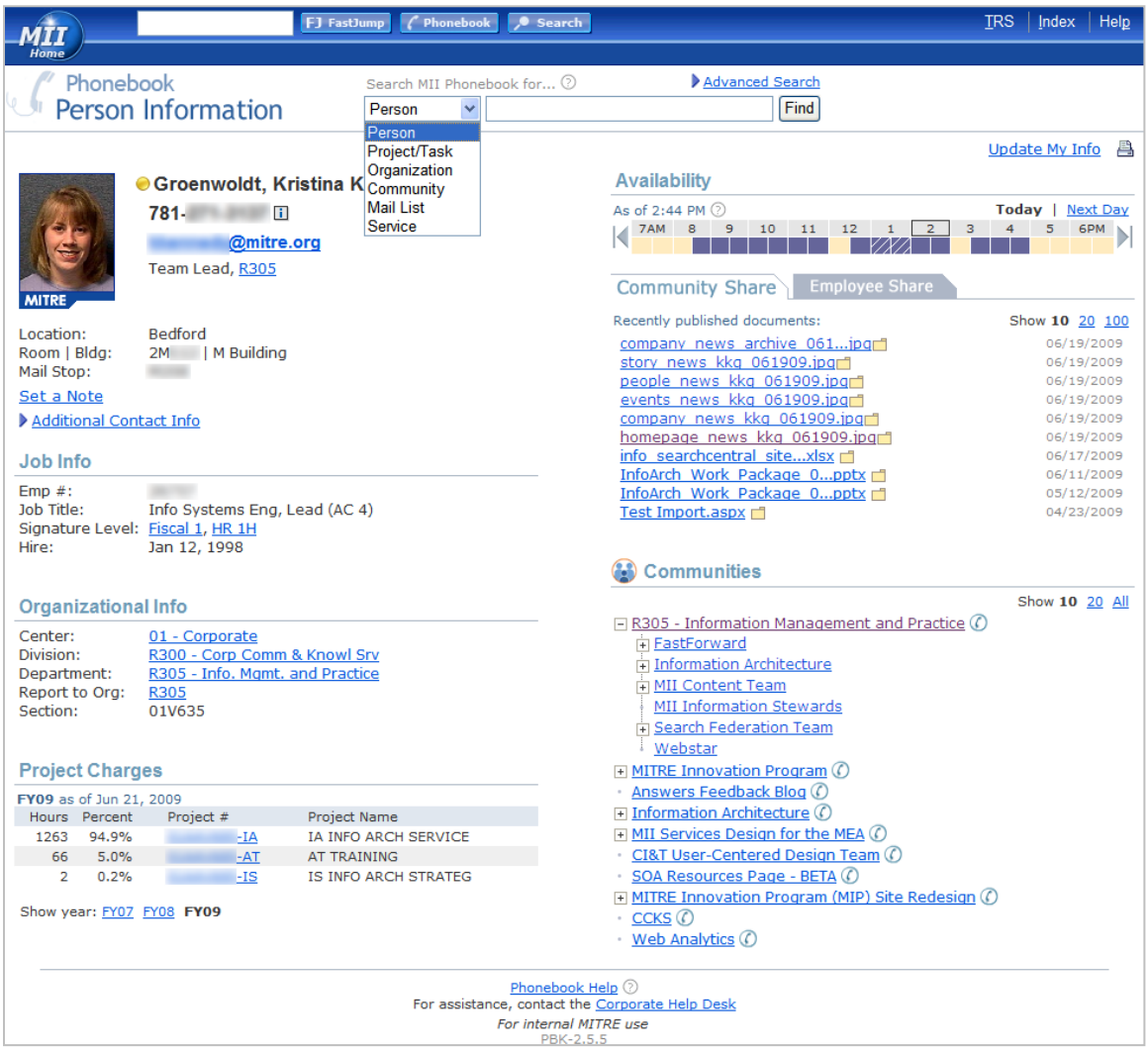


Pictured: The site's homepage presents navigational links, news, personalized content, and customizable content. Most navigation on the site is done via the *FastJump* tool, which returns hardwired results for keyword queries and appears at the top of the homepage and each page of the site.

A popular intranet application is the *Phonebook*, or employee directory. The tool offers standard location and contact information and displays each person's position in the organizational structure. But the profiles go beyond this standard information to become a knowledge-sharing tool. *Phonebook* shows employees' availability for the day, which helps with planning meetings and calls.

Phonebook also offers a *Community Share* section that shows documents the employee recently posted. This information gives people a view of the employee's work, as well as acting as an alternate way to find a document. Users who know the author of a document can use the *Phonebook* to find the author and then find the document. This allows users who don't know a document's name to find it within a small list of options, rather than running a full site search.

Communities content shows which groups the employee is associated with. Finally, *Phonebook* lists project information, showing not only what projects the employee is working on, but also the number of hours logged to the project and the percentage of time spent on each. Employees can use this project information to navigate from one employee to another. For instance, someone might look up a particular employee working on a project, see that she's unavailable, and use the *Project Charges* information to navigate to project information and find another available person on the project.

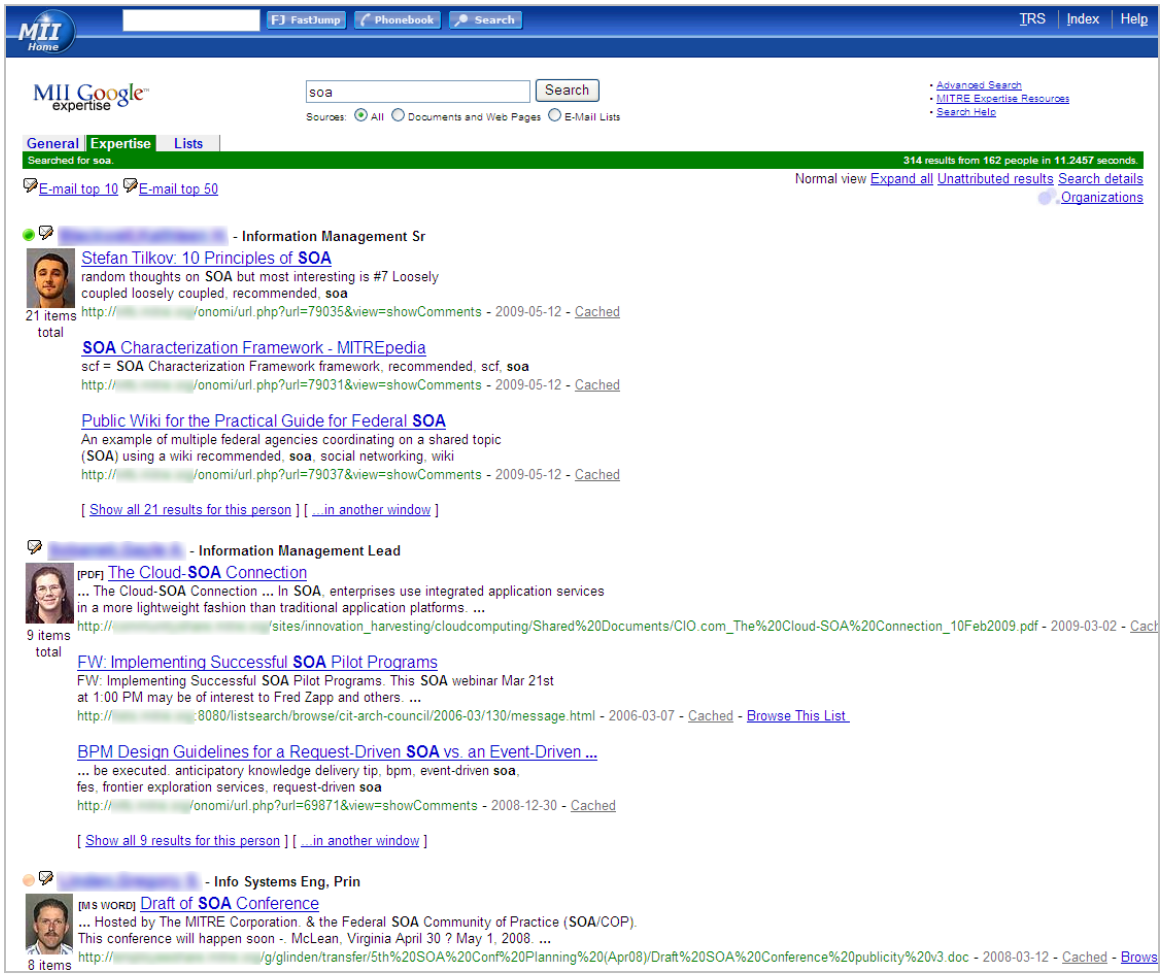


Pictured: The *Phonebook* employee directory. *Phonebook* acts as a knowledge-sharing resource as well, giving users information about the documents employees have published, communities they're associated with, and projects they're working on.

Another intranet application is the *Expertise Finder*. And it does just what it says. This search tool helps employees find colleagues with particular expertise. The tool works by searching content from a number of repositories and using metadata to associate the results with a person. So, a user can enter a topic and see the employees who work in that area. The results are displayed as a list of employees, with each employee's name, photo, and title. This information is followed by a list of

items that the employee has posted to the site that are related to the entered query. So, a search on, say, "zebras," will return the employee with the most zebra-related content first.

The tool shows employee information, followed by the employee's top three matching items or topic-related documents. The total number of relevant items associated with the individual is listed beneath his or her picture. Users can click through to see the full results for that person. This is a unique way of creating a tool that meets a specific organizational need. The tool takes advantage of the resources available and looks at the data in a different way, finding experts by examining documents.

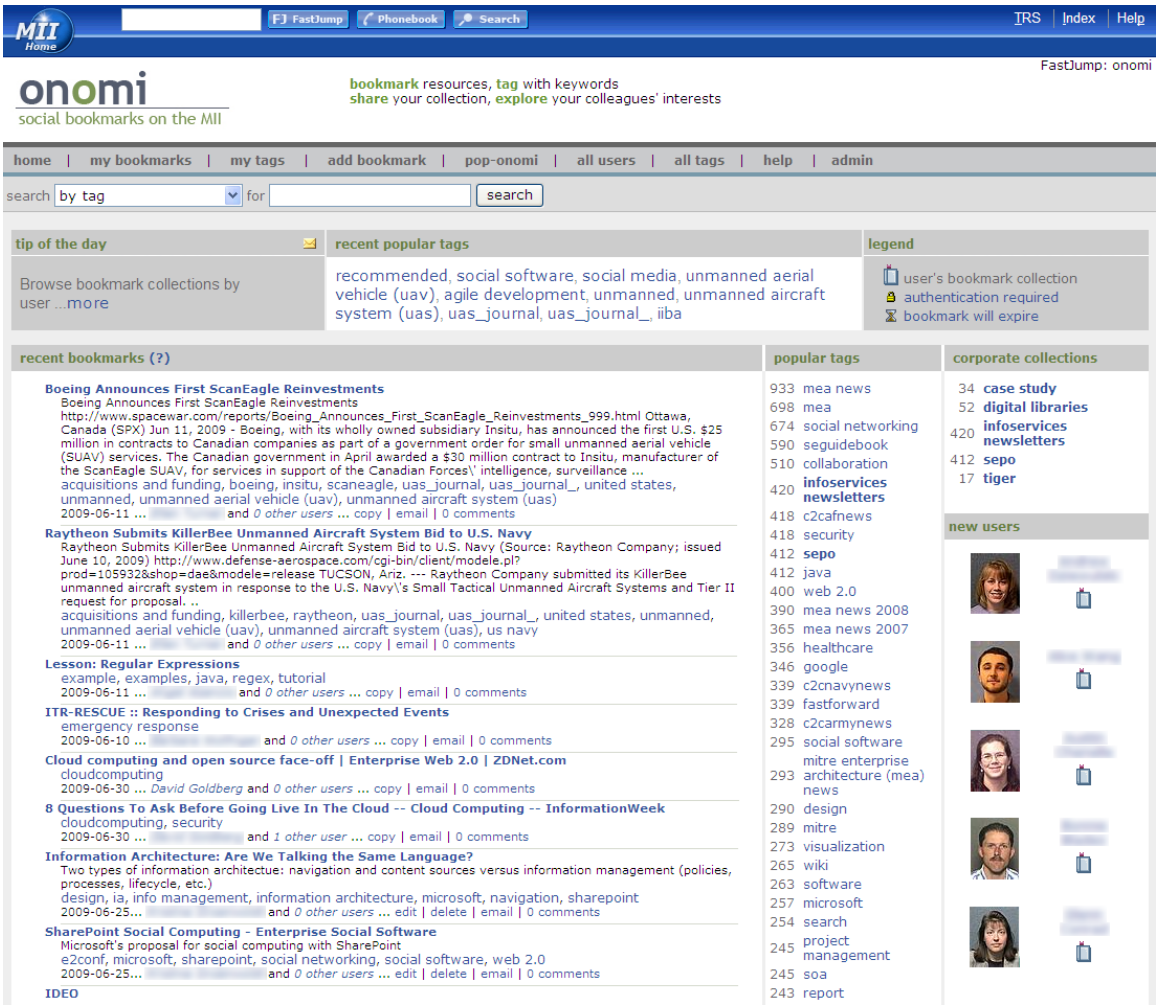


Pictured: The *Expertise Finder* helps users find colleagues with particular skills or knowledge. Users can enter a term or topic and see a list of employees who have produced topic-related content, as well as view that content to see whether the expert is a good match for their needs.

Another creative way to share information via the site is to use *onomi*, a social bookmarking tool. All site users can bookmark and tag any content, from anywhere on the Web, and add it to the site's *onomi* area. Users can go into this section and look for content associated with a particular tag or browse bookmark collections by user to see what colleagues are reading and bookmarking.

The page lists recent bookmarks as well as recent popular tags, providing a springboard for users to dive into the content. Popular tags are tracked on the side of the page so users can see what's currently of interest within the organization. This sort of social tool isn't just a curiosity, it's a way to use the organization' collective resources to provide relevant and timely information to the workforce. Users can also add a content module on their homepage to pull content from *onomi*.

This is just one area where the site is using social networking and collaborative tools to convey and share information. The intranet also includes blogs and wikis, and even has its own *MITREpedia*. The team also has a blog where users can comment on new intranet features or even provide feedback about ideas during the design stage. The team plans to continue moving toward more collaborative and social content. A plan for "social enablement" is in the works that will let users define a network of colleagues. This would, for example, let users see the newest documents posted by colleagues, rather than by the whole company.

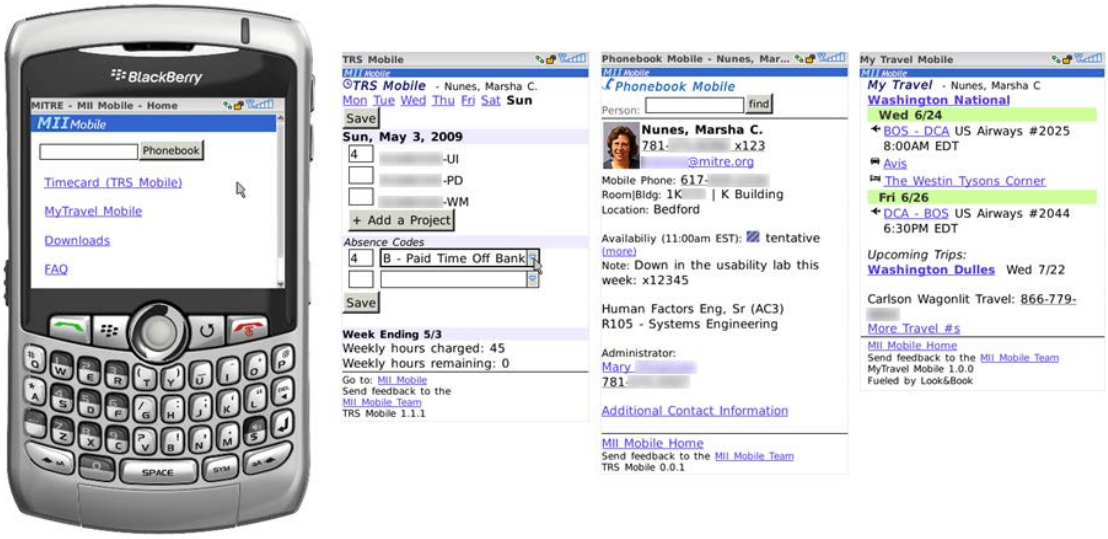


Pictured: The *onomi* social bookmarking tool. The tool lets users add links to external content. Tagging these links makes it easy for users to find information around a particular topic or area of interest.

Although the team found that many employees didn't know how to use their smartphones, they nonetheless designed a mobile website for those who wanted

mobile access. The mobile site is a separate site, designed with content aimed specifically for a mobile audience. The team considered which applications would make sense to access on a mobile phone, and selected a few to make into mobile versions. These include time reporting, the employee directory, and travel information.

The MIIMobile site has clear links directly to applications. The time reporting tool lets users enter hours and projects as well as absence information. The directory supplies basic information from the *Phonebook*, focused more on contact information and less on knowledge sharing. Travel information gives users a quick way to check flights and review reservations. All three applications are a great fit for mobile access. Users might need to report their time while away from the office, find a location or person on the way to a meeting, or check a hotel reservation and car rental information as they land at an unfamiliar airport.



Pictured: The MII mobile site and applications. The team designed a separate mobile website focusing on only the most appropriate applications, including time reporting, the employee directory, and travel information.

The intranet team strives to build practical solutions to fit users' needs. Inefficiencies with search led to *FastJump*. The importance of knowledge sharing led to a robust employee directory and expertise search. A recognition of the power of communication among employees led to social tools such as *onomi* social bookmarking and *MITREpedia*. When faced with challenges, the team strives to come up with creative, user-focused solutions.

BACKGROUND

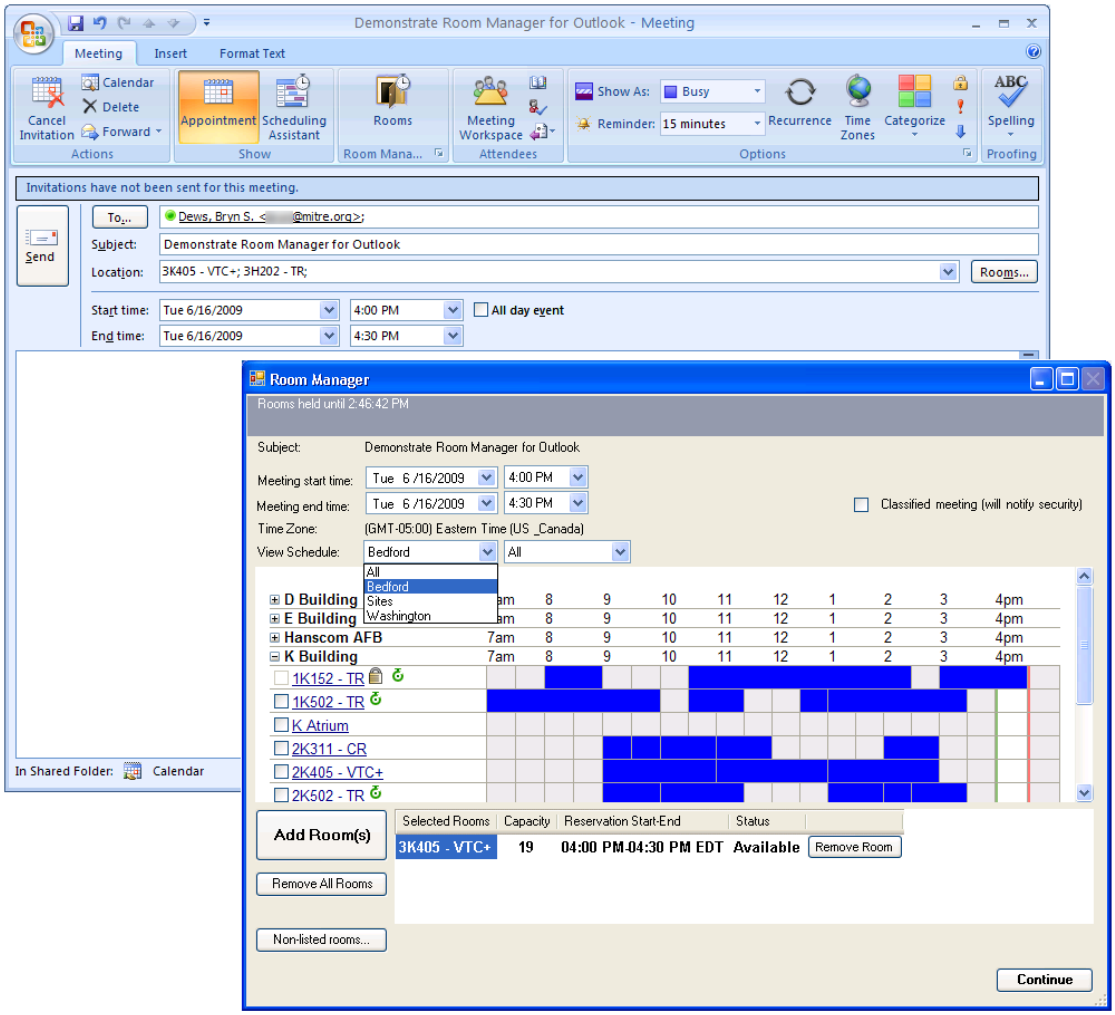
MITRE's intranet (MII), started in 1996 when then company president, Victor A. DeMarines, believed MITRE was not leveraging its expertise as well as it could. There was a feeling among the company's leadership that it needed to develop a culture of sharing.

Before MII, expertise at MITRE was a closely held commodity within each of the company's independent business units. This information was static. Not everyone

knew who MITRE's in-house experts were, never mind how to tap and share their knowledge.

When the MII was born in 1996, it offered three main functions:

- **Corporate directory.** The corporate directory was not just a collection of names and numbers. It included personal profiles and resumes of all MITRE employees as well as any material they may have published in their specific areas of expertise.
- **Knowledge sharing.** Knowledge at the company was amassed through two main repositories: the Systems Engineering Process Library (SEPL) captured best practices of key software systems deployed throughout MITRE, and the Risk Assessment and Management Program (RAMP) contained 10 years' worth of lessons learned from all MITRE projects.
- **Administrative tools.** Laborious HR documents such as timesheets and service requests could be filled out on MII, as well as property inventory and tracking forms (key documents in a government-funded organization). A facility-scheduling application let users locate, schedule, and equip meeting space throughout MITRE.



Pictured: Outlook's Room Manager tool. Because the MITRE team is always looking for integration points and opportunities to streamline processes, they created an application to reserve a conference room right from the user's Outlook client (as opposed to making them to go to a separate Web-based tool). The company has developed high-powered collaborative VTC rooms with multiple projectors and Web and audio conferencing. To maximize use of these facilities, a Web-based scheduling tool (Room Reservation System) lets users set up multipoint VTCs, private rooms, and proxies that are beyond Outlook's room scheduling capabilities. Room Manager for Outlook adds the ability to book rooms within an Outlook meeting proposal, leveraging MITRE's Room Reservation System on the back-end. Rooms are selected by clicking the *Rooms* button in the menu bar; the results of the room selection are auto-filled into the meeting's *Location* field.

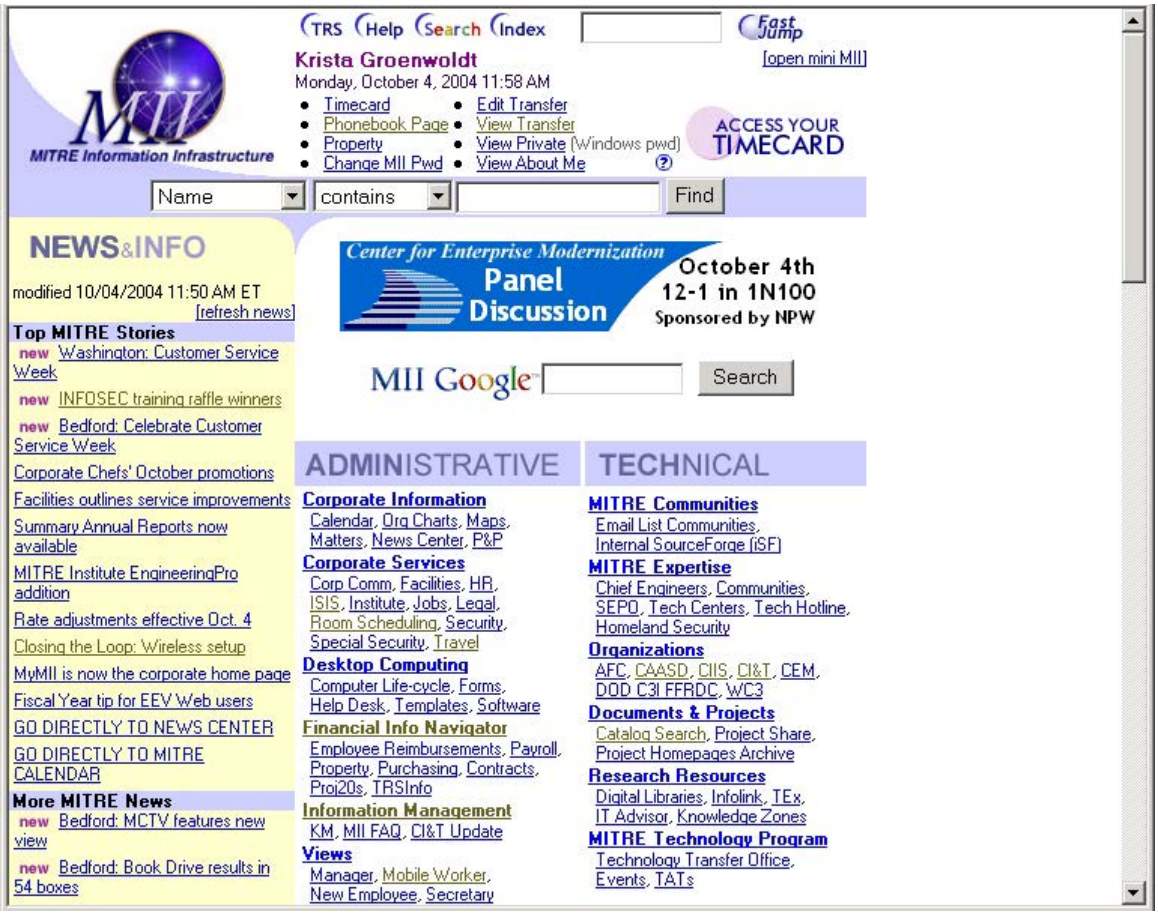
Evolution

As the MII has evolved over the years, the early tools have evolved, new tools have been added, and the content space has been expanded. The corporate directory now integrates with Microsoft Exchange to show a person's availability, and with

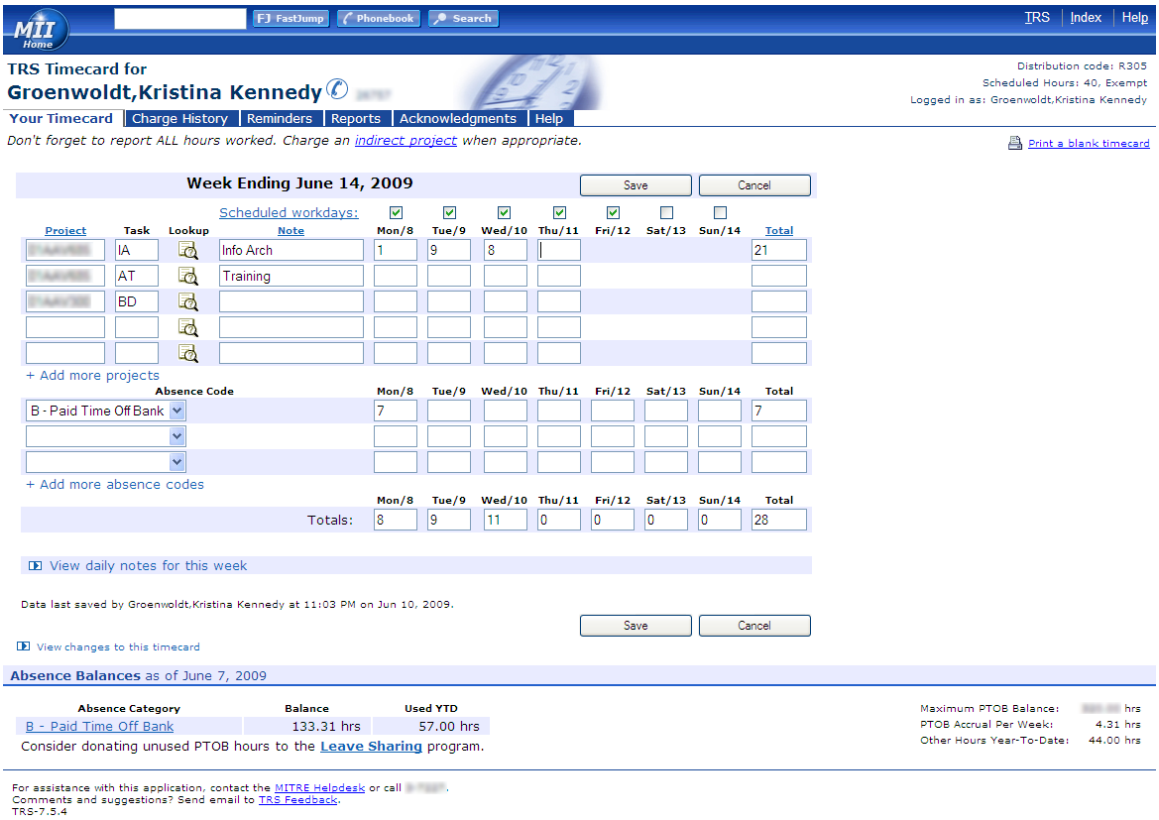
SharePoint, displays an employee's most recently published documents and community memberships. The portal homepage (*MyMII*) brings together content from countless disparate resources including corporate news, announcements of Technical Exchange events across MITRE, personal services targeted to an individual employee, such as *My Travel*, *My Traffic*, and *My RSS*, and project-related services, such as alerts when project colleagues are traveling and services produced by each business unit.

Today, MITRE employees do pretty much everything online, from participating in open enrollment, to monitoring their projects' financial reports, to creating development goals and writing performance reviews, to bookmarking internal and external resources in the internal social bookmarking system. The company is also experimenting with wikis, blogs, and other social networking tools, and continues to build mobile versions of popular site applications, such as time cards and the employee directory.

MII is available anytime from anywhere. Employees need only their SecureID token to log in to check email or fill out their timecard from an airport kiosk or a computer at their sponsor's location. It's this combination of comprehensive coverage, integrated tools, and easy access that makes the MII such a powerful resource.



Pictured: MITRE's intranet homepage design circa 2000. Keyword search at the top, personalized links in the middle, *Phonebook* search below links, a banner below *Phonebook* search, Google Search below the banner, and two columns of navigation: *Technical* and *Administrative*, as well as corporate news on the left. The intranet homepage was largely static. Aside from a few personalized links, the page was the same for everyone. It offered shortcut links to popular resources and news, along with the ability to use *FastJump* (keyword navigation), *Search*, or look up a person, project, or department in the *Phonebook*.



Pictured: The online time reporting system. To meet the government's contractual requirements, all MITRE employees must complete a daily timecard. MITRE's time reporting system has evolved from a paper form to the current Web-based system (shown here). This system is designed to be easy for new employees to "walk up and use" while still satisfying the government requirements. It was developed through many design iterations, user interviews, observations, paper prototypes, and online usability tests, all aimed at simplifying the process, making the navigation flow more efficient, and improving the administrative interface.

Future Plans

The major push for MII in the short-term is to increase automatic personalization on the site. For example, currently, portlets in *MyMII* use a Web service that provides information—such as an employee's department, division, business unit, or location—to automatically tailor the data they show. Simple examples of this functionality

include weather and traffic portlets, which are automatically configured with the employee's location.

The next logical step is what the MITRE team calls "social enablement"—giving users the ability to designate certain people as colleagues, which adds a social aspect to their MII navigation and creates a filtering mechanism for the enormous amount of information available on the intranet. A user's colleagues list could, for example, allow a portlet to display documents that have been recently edited by his or her colleagues, rather than everyone on the MII.

As enhanced social functionality is added, the team is expanding knowledge sharing beyond the confines of internal use. The company's first social pilot (known as *Handshake*), already encompasses MITRE's sponsors and partners. "The goal is to support cross-organizational collaboration in a secure manner," says Donna Cuomo, Chief Information Architect.

INTRANET TEAM

The MITRE intranet team involves small teams of project managers and developers, with some staff overlap between the teams. They support the major intranet applications (*MyMII*, *Phonebook*, *FastJump*, *Time Reporting System*, and so on). These applications undergo quarterly updates and a centralized User-Centered Design team lends user experience design and usability expertise to every major update. Information architects also support the development process with an eye toward integration opportunities between systems and services.

The intranet team has expanded and contracted as needed based on the phase of its lifecycle. During a redesign effort, there are additional UCD staff and developers. Corporate IT comprises a majority of the team, with augmentation from the business units. "Our ability to tap into the deep technical expertise of the corporation provides flexibility," says Bill Donaldson, Department Head.

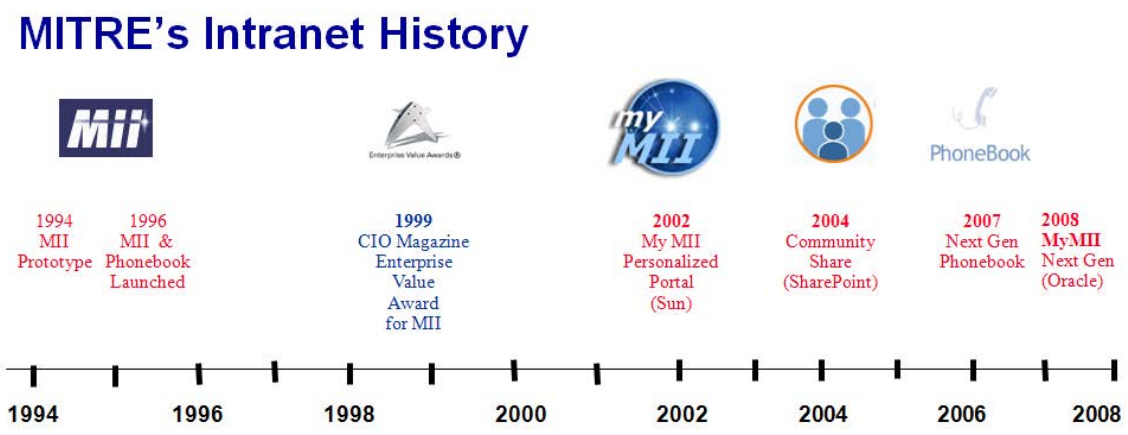
Pictured: MITRE's *MyMII* team (left to right): Donna Cuomo, Fran Yang, Tony Carlucci, Bill Donaldson, Bryn Dews, Mike Phelan, Stan Drozdetski, Krista Kennedy Groenwoldt, and Dave Donegan.

INTRANET OWNERSHIP

While corporate IT is responsible for building and maintaining many of the popular services on the site, including *MyMII*, *Community Share* (SharePoint), *Phonebook*, and *FastJump*, MITRE's intranet is a collaborative effort with a distributed development model and contributors from every business unit. The following chart outlines the roles and responsibilities of those involved in the site:

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Development Team	• Provide governance, program management of the content on the portal and the underlying infrastructure with the business units • Manage content and features
CIO Customer Council	• Provide business unit requirements • Prioritizes requirements
Remote Sites Council	• Provide and prioritize requirements for workers outside the main campuses in Bedford and Washington, DC

TIMELINE

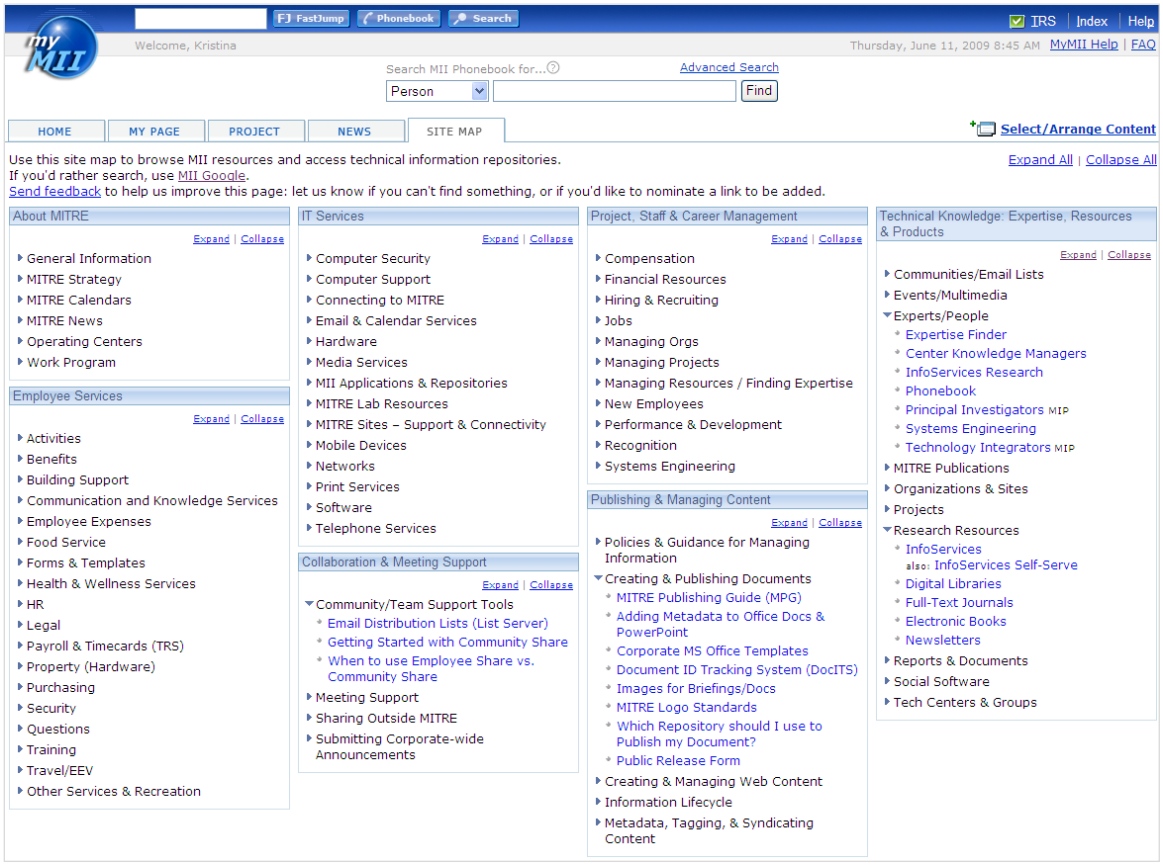


Pictured: A timeline illustrating pivotal points in MITRE's intranet history.

GOALS AND CONSTRAINTS

The goal of *MyMII* is to provide users with personalized information as the default and allow them the freedom to customize additional portlets and layouts to their own liking. The personalized information provided by the company includes links to key information, such as an employee's business unit news, travel, and *Community Share* (SharePoint) sites. Users can then customize their page, choosing from more than 75 services including items such as weather, traffic, RSS feeds, and a project dashboard. By default, all users see corporate news, banners, and navigational items such as *FastJump* (keyword navigation), search, *Phonebook* and a browsable menu based on the site map categories.

In the site's next release, users will be offered more personalized services based on their individual attributes such as role, organization, and geographic location.



Pictured: The extensive *Site Map*. As more and more resources were added to the intranet (over the course of 10-plus years), it became impossible to adequately highlight everything on the homepage. Because so many resources were completely hidden to users, the team tried to remedy the situation with this *Site Map*. It uses expand-and-collapse functionality to centralize all the links on one page. Each main category on the *Site Map* is built as an individual service so that users can add one or more of them to another *MyMII* tab if, for example, they want a shortcut link to *Employee Services* on their homepage.

Pictured: The *MITRE Innovation Program* (MIP) SharePoint community page. The MIP website is a customized SharePoint site that lets the company easily steward information such as *News* and *Events* in a SharePoint list and push that information automatically to the MIP homepage.

Constraints

Given that most intranet teams have limited budget and perhaps a limited timeline as well, it's not uncommon to have a surplus of great ideas and not enough time or money to bring them all to fruition. "We always have more exciting ideas than time and resources available to implement them," says Donaldson. "We have also faced numerous challenges with the portal technologies over the years. While portals have many rich features and capabilities, we are using only a subset of them."

"Going forward, our challenge is to select the platform that will allow for social computing and greater collaboration with government sponsors (our customers) while balancing the complexity of today's portals."

USERS

MITRE employees cover a wide range of disciplines, from traditional engineering disciplines such as electrical and computer engineering, to avant-garde fields such as biosecurity and nanotechnology. One common thread is the high level of education and technical skill among staff.

USER TASKS

Since MITRE is a not-for-profit corporation, it creates self-service applications where ever possible for administration, HR, and IT support tasks. For instance, MITRE employees can use an online reservation system to reserve video teleconference rooms for multipoint meetings with audio and Web collaboration.

The MITRE intranet also supports the deep collaboration MITRE employees need to do their jobs and work in teams, including:

- Identify experts in a particular field
- Contact people and set up meetings, either in person or via a multitude of remote collaboration options
- Create and share documents internally and with sponsors
- Submit deliverables for publication
- Retain valuable information for future use as part of MITRE's Knowledge Management practice

Most other tasks (accessing self-service applications, viewing HR information, and so on) are primarily accomplished using the *FastJump* application to locate the appropriate resource on the intranet. *FastJump* combines keyword navigation and search. Site administrators set up keyword pointers to their sites, such as "cafe" for the cafeteria information page, and *FastJump* keywords are used in company communications and advertisements. Users are so accustomed to the *FastJump* system that they typically identify it as their primary navigation mechanism, even though the site offers other navigation aides that support browsing.

The site's *Phonebook* is also a very popular tool, used for finding people with a particular expertise and learning about their organizational affiliation, work or professional interests, availability, and published documents. MITRE employees also rely on the site's "expertise finder" to locate experts in specific subject areas.

DESIGN PROCESS AND USABILITY ACTIVITIES

The last major redesign of *MyMII* (the intranet's portal centerpiece) was planned through a series of design meetings with stakeholders from each business unit. The findings were augmented through a usability test that benchmarked user performance on the portal's then-current version. To procure data that would inform its planning and design choices, the MITRE team drew from a variety of outlets, including:

- A comprehensive biannual user study
- Help desk data

- User representatives from business units and site locations
- Business unit IT equipment managers
- Internal IT training group
- Direct feedback from users

Stability and support issues meant that, during the redesign, the existing portal needed to be replaced before new designs were implemented. This complicated the rollout, as users were first faced with a portal page that looked the same but had a new customization workflow, and then—a few months later—with a new design altogether. But the team took great pains to ease users through the transition.

"A carefully crafted communications campaign helped make the transition less painful for the users," says Dave Donegan, Portal Team Lead. User feedback indicated that employees wanted a faster and more customizable portal, so the first wave of communications highlighted theses benefits of the new platform.

An animated tutorial educated users on the benefits (and the mechanics of) portal customization. And before the design's final version was released, a group of users participated in a usability test that identified specific barriers to acceptance of customization features. For example, "the out-of-the-box Oracle Portal user interface that used to add or move portlets was confusing to the point of being nearly impossible for most users," says Donegan. "Some [problems] were inherent to the platform and had to be handled with additional communications, while others had a technical solution."

Finding Inspiration

The MITRE team turned to a variety of sources of design inspiration, both inside and outside the company, and tapped into the wisdom of their own user population. "We get interesting insights from user studies," says Bryn Dews, Lead Human Factors Engineer. "But very often users come to us directly with questions, ideas, and yes, complaints." The intranet team is even experimenting with more efficient ways to engage the user community, such as through a blog moderated by team members, where users comment on new features or provide input on ideas during the design stage.

Members of the User-Centered Design Group often take advantage of the opportunity to collaborate or at least "compare notes" with employees from other organizations. "Boston is fortunate to have a very active UCD community, with several organizations hosting regular meetings and conferences," says Stan Drozdetski, Human Factors Engineer. "MITRE's not-for-profit status also helps, as other organizations do not have to fear competition from our company when exchanging ideas."

Usability Methods

Because of MITRE's strong commitment to the benefits of UCD, it strives to obtain a deep understanding of user needs, desires, and satisfaction levels, regardless of the project. The UCD Group (part of Corporate IT) runs a biannual user study that utilizes contextual inquiry, online surveys, and video diary reports. While the study isn't limited to the intranet, Dews says it does help highlight trends that the intranet team needs to focus on.

"The technique we use depends on the application, the product development team, time allotted for UCD contributions, size of the change, and targeted user population size," says Dews. "Normally, we start with a broader approach to target the scope better, and then involve users as we iterate the design. Very often, we test with paper prototypes or low-fidelity HTML prototypes to reduce development costs."

When embarking on the portal redesign, the UCD team followed the same "funnel-shaped" process by casting a wide net first, and working out the features through an iterative process. At the onset, the team engaged stakeholders in various parts of the organization to collect their input for the project roadmap in a series of focus groups. This data was then processed (with involvement from the development team) to identify features that could be created within the constraints of available time and technology.

For instance, the team identified the need for a better navigational mechanism to support browsing (as opposed to searching). Before a single line of "production" code was written, the UCD team prototyped three potential solutions and presented them to representative users to identify the preferred presentation. Because the prototypes evolved from static screen captures into dynamic webpages, the team could invite remote users to perform unmoderated testing in the final round.

Testing a Feature

Before the new *Phonebook* was released, the MITRE team performed a baseline usability test to time how long it would take users to accomplish a series of 13 tasks (using the old *Phonebook* and whatever other navigation mechanisms they normally used to find communities, documents, a person's availability information, cell phone number, and so on). The average time it took to complete a task in the baseline test was 40.7 seconds, and participants were unsuccessful at accomplishing (or quit before completing) an average of 4.2 tasks each.

In a follow-up study once the new *Phonebook* was available, the team reused the same tasks, but this time, participants took an average of 31.3 seconds to complete a task, and the success rate drastically improved to an average of only 2.0 unsuccessful tasks per person. Between the first and second test, there was also an average time savings of 9.4 seconds per task.

Surprising Results

Mobile is certainly the next big thing in enterprise communication, but research from a recent MITRE user study indicated that not all employees who are issued a corporate smartphone know how to use all of its features. "For instance," says Drozdetski, "we observed that several users did not know how to enter a URL into the mobile browser, which would mean that simply advertising mobile-accessible URLs would not be effective. This also reminded us that even the most technical users become novices when faced with a brand new technology and that any kind of a learning curve in a corporately provided solution carries the risk of excluding users."

This type of research is valuable for moving beyond widely held perceptions, such as: "Users want intranet access on their mobile devices." And the MITRE team was wise to conduct it. But the results didn't deter them from developing a mobile version of some of the site functionality. They simply used their time wisely.

"There are some inherent obstacles that mobile applications pose," says Drozdetski. "By monitoring the feedback streams, we found that users had trouble entering passwords on their smartphones—small screens and cramped key layouts do not make this an easy task." Research such as this helps teams make informed decisions about where and how to spend their limited time and development budgets to best serve the users.

URL AND ACCESS

MyMII (MITRE's intranet homepage) is the default homepage for all employees. The MII is used by all business units; the *MyMII* portal homepage is configured as the default homepage on every MITRE-issued computer. Although employees are free to change the homepage setting, most leave it set to *MyMII*.

Users outside of a MITRE office location can access the site using a SecureID card to VPN in. However, because some locations where MITRE employees work don't allow VPN access, the company provides near zero-footprint access via Citrix technology.

Also, there are Web-based versions of commonly used applications (time card, email, instant messaging) for employees who use Web browsers where Citrix isn't an option.

TECHNOLOGY

The MII started as a basic Web server with CGI applications and LDAP for the corporate directory. This has evolved to a robust infrastructure with single sign-on (SSO), Oracle Portal for personalization, Java Application Servers for custom developed application, a CMS, and SharePoint for documents and communities. Several open source technologies are used for wikis, blogs, social bookmarking, and social networking.

MITRE has standardized on Java-based Web applications for custom developed applications. It uses Jira for bug tracking and enhancement requests, HP Loadrunner for load testing, HP QuickTest Pro for automated functional testing, and JUnit for developer unit level testing. The development team has also started to use Scrum methodology for agile application development.

SEARCH

MITRE is a company that recognizes the power and importance of effective search, but also understands that making search effective is an ongoing effort that requires vigilance and commitment to change. It's never really a done deal.

Search results are tracked with monthly reports, showing top keywords and queries. For instance, "zero hits" queries are randomly evaluated so that the team can figure out why no results were returned and add or modify content as needed to meet user demand.

The MITRE intranet features several types of search to help users quickly get to what they want.

In addition to site search, the intranet content team manually maintains *FastJump* resources. *FastJump*s are loaded on a nightly basis from an Oracle database to the intranet search system to provide a "Best Bets" type of search result. "Also," says Robert Joachim, Information Systems Engineer, "key repositories and content releases are reviewed on a regular basis to identify specific content for promotion."

Expertise Finder is a custom Java-based application that uses search as a Web service to identify MITRE staff with expertise that matches a user's topical query. "Using search results from various content repositories, MITRE staff members are identified through the use of metadata attributes associated with retrieved content objects," says Joachim. "Our plans are to extend this feature to a community finder application, which would use both descriptive summary metadata and full-text content to identify online communities (SharePoint sites and Listserver groups)."

The site's main intranet search engine is the Google Search Appliance (GSA), in conjunction with customized applications using the GSA as a search service. Content and data repositories are integrated into the search engine via various methods, including conventional content crawls, direct SQL database crawls, and XML feeds.

"We leverage Google *KeyMatch* to promote *FastJump* (Best Bet) resources and OneBox for content promotion of information in key repositories," says Joachim.

Though many of the company's data repositories also have their own dedicated customized search interfaces, MII Google currently indexes the following:

- Shared content folders (*EmployeeShare*)
- Microsoft SharePoint (*CommunityShare*)
- Distributed Web servers, including blogs and wikis
- List messages from the company's corporate listserver
- Corporate shared social bookmarks (*onomi*)
- Metadata catalogs, such as technical report records, from the MITRE corporate library system
- The *Technical Exchange Meeting* (TEM) site, which houses event presentations, meeting minutes, and attendee lists

Beyond Full-Text Search

In addition to enterprise full text search, the team is also exploring the use of faceted navigation and information discovery techniques to provide additional retrieval capabilities for the site's users. "Using the Endeca information discovery platform, we are building common, persistent data models of more abstract information objects such as 'projects,' 'people,' and 'communities,'" says Cuomo. The technology lets the team combine structured data with mined concepts extracted from unstructured sources, which allows projects, people, and communities to be retrieved and analyzed, and relationships between them to be viewed in ways not possible with full text search alone.

Search as Evolution Rather Than Destination

Having a good search tool doesn't mean the work is done, and the MITRE team recognizes that fact. "We regard search as an evolution of technology platforms," says Joachim. "In our earlier intranet era, before 2002, we were not satisfied with search vendor products and the seeming lack of integration with Web-based models and went looking for a solution oriented to intranets, especially for Web-based relevancy ranking."

After early adoption of the GSA (version 3), the company has continued to enhance features via Google releases (currently, version 6). "That said, we continue to watch

and evaluate the search marketplace and do/will make adjustments as new platforms and technologies emerge and evolve," says Joachim.

MOBILE

MII Mobile is a separate homepage with links to the few select apps that have mobile versions. The applications chosen for mobile adoption were those that are important to the widest number of users and include time reporting, *Phonebook*, and *My Travel*. The mobile page also has a link to a short FAQ section and a downloads page that lists native BlackBerry applications that are supported but aren't available over the air.

The mobile applications that MITRE has developed are all tailored versions of the standard Web applications (as opposed to native BlackBerry apps). This approach will allow the applications to run on any smartphone (iPhones and Android, for example) without the team having to rewrite them as a native application. "While a native smartphone application could have a richer experience, we have not seen the need for this additional functionality for our users," says Dews.

The mobile versions of applications use the same core that the Web applications use, but have a separate user interface styled to reduce the need to scroll and provide only the necessary functions on a smaller screen. "We confirmed design decisions by showing mockups to potential users, and later inviting them to try out the application," says Dews. "In addition to the user interviews, we got ideas on presentation and what to include from other travel applications (TripIt, WorldMate, etc.) Mobile applications have been a huge hit with the users."

Pleasing the Users

The mobile applications have generated generous praise from the users. "The mobile applications have moved the users in ways not typically seen in corporation," says Dews.

"Imagine my surprise reading a user feedback message to the mobile *Phonebook* developer, 'OMG. This is fantastic. Will you marry me? <g>' after releasing a mobile version of the *Phonebook*," says Donaldson. "Corporate IT doesn't yield this type positive reaction."

User Testing for the Mobile Environment

The mobile pages were designed with BlackBerry devices in mind, since those are the only corporate devices with access to MII Mobile. Employees use a range of models and firmware versions, so the development team tested on emulators for the most common ones (8330 and 8830) plus a few other models to cover the older and newer operating systems, as well as the varied screen sizes. "Our biggest challenge was the varied support for CSS properties across the versions," says Donegan.

Early user testing on the mobile applications provided the team with great feedback regarding both use and user interest. "We did some early interviews showing paper mockups to current BlackBerry users when designing mobile versions of the *Phonebook* and *My Travel*," says Donaldson. "This was done to gauge interest and determine what content was most important to mobile users. In the *Phonebook*, for instance, we found that room numbers were vital, so we moved those above the fold."

When the mobile applications were piloted (that is, available in production, but not widely announced), the team performed some basic usability testing. Dews explains how this worked: "We met employees in their office and had them try a few tasks using their own BlackBerry. We did not have a good way to record the screen, so we just looked over their shoulder, occasionally asking them to show us the screen if we noticed a presentation issue. We wanted participants to use their own devices to see how the pages looked on the various models with their font settings."

During these sessions, the developers did find a few issues with functionality; for example, users wanted to be able to update project charges for the day if they worked extra hours or made a mistake. But there were also some issues with limits that had been set to keep the page size small. For example, showing the five most recent project numbers was not sufficient for employees who needed to charge many different projects.

"There were also some problems with how we tried to make the content fit on the small screen," says Dews. "Take 'availability' on the *Phonebook*, for instance. In the full *Phonebook*, one's availability is shown as a horizontal table with different colored squares for each half hour. In the mobile version, we tried showing a single square for the current half hour, but users did not always recognize it."

Frequently, as mentioned before, the team observed the difficulties people had with basic use and device functionality. "Many were not regular users of the mobile browser, so they weren't sure how to enter a URL or how to exit the browser without repeatedly hitting the back button," says Dews. "In most BlackBerry apps, the *Back* button does return you to the home screen; in the browser, it works like a *Back* button." The design for the mobile applications took these factors into account so users would have a better experience when accessing them on a BlackBerry.

CONTENT AND CONTENT MANAGEMENT

The MII follows a distributed (down to the individual employee) publishing model, and the number of content publishers dwarfs the number of dedicated designers, developers, and usability professionals. "Enforcing strict publishing standards would be next to impossible," says information architect, Krista Kennedy Groenwoldt. Instead, the intranet team focused on core requirements, such as standardizing on one navigational header.

"We also worked hard to feature the more usable/corporately supported design as the path of least resistance, with ready-to-go site templates reducing the need for custom development," she says. Along with the templates, the intranet team records and publishes design and usability guidelines that help content publishers produce more consistent, accessible, and usable work.

The site utilized a traditional CMS system (currently transitioning from Rhythmyx to Oracle) for corporate information that must be distributed in several different formats, such as corporate news that is published in HTML variants and RSS. Individual content publishers either use SharePoint or publish HTML documents.

FEATURES

The following features comprise some of the intranet's more robust and useful functionality.

My Actions

My Actions is an extensible portlet that resides on the *MyMII* portal. Using input from various applications, the portlet notifies users of time-sensitive actions that they need to take. Users get a visual alert when events are coming due or are overdue. Examples of actions that are pushed to users include:

- Security patches required for the user's computer
- Purchase orders that need approval
- Public release documents that need review
- Resource management assignments that need approval
- Passwords that are about to expire

Phonebook

MITRE's enterprise employee directory, known as the *Phonebook*, is the most popular tool on the intranet. "In usability testing, people told us they use the *Phonebook* anywhere from a few times per day to hundreds of times per week," says Groenwoldt.

From its inception more than 10 years ago, the *Phonebook* was always more than a typical corporate directory. On the *Person* pages, for example, in addition to the typical employee photo and contact information, the *Phonebook* provides detailed organizational information from the company's PeopleSoft system, fiscal and HR signature authority, the date the employee was hired, a detailed section on the employee's project charge information (obtained from the fiscal system), as well as links to that employee's resume and publishing repository.

"If a user wanted to find a document that someone else had published, he would look that person up in the *Phonebook* to easily access that person's publishing space," says Groenwoldt. "Similarly, if a user looked up an employee to ask a question about a project and that employee was unavailable, he could click through to the project page to see who the project Leader is, and who else supports that project as alternate sources of contact for that project.'

Some of the *Phonebook* functions include:

- **Encouraging collaboration**. Through integration of Microsoft Exchange, the *Phonebook* shows employees' availability. Also, the *Phonebook* shows an employee's current projects (from the time reporting system), published documents, and community memberships, including SharePoint *Team Sites*.
- **Simple look up.** Users can start their search with any piece of information and easily browse the greater information for all related object types. If users know, for example, that Jane Doe is a member of a community team site that they want to access, but they don't know the team's formal name, they can simply look up "Jane Doe," view her community memberships, and click the right name to access a page with its descriptive information, including the names of the community owners to contact for access information.

Remote Access

Because many of the company's employees travel for sponsors and work at sponsor locations behind firewalls, MITRE provides a webpage with the most commonly used tools for remote access (timecards, email, instant messaging, remote meeting desktop sharing, and secure FTP). For example, MITRE employees can check their email and calendar via Outlook Web Access by accessing the specific external URL and using a combination of authentication methods.

"Through repeated surveys and interviews of remote users, we have continued to refine the service offerings and the way we display them," says Dews. "The most current instantiation of the remote access portal (RAP) is the result of several rounds of testing and feedback." To access all of these remote services, MITRE employees need only an Internet connection, the RAP URL, and their SecureID.

Pictured: The *Remote Access Portal*. One of the nice things about MITRE's intranet is that employees can access it from anywhere, at any time. MITRE has employees working around the world and many have limited network connectivity from their government work locations. The *Remote Access Portal* offers quick access to top applications for working outside the firewall from any computer using remote desktop access via Citrix. While at sponsor locations, for example, employees can use the portal (http://remote.mitre.org) to access their email and calendar, timecard, instant messaging, *Meeting Place* (telephone and Web desktop sharing), secure ftp, or almost any other MITRE network resource. This is a powerful option for employees who work outside the main MITRE campuses, making it possible for them to be productive and "reach back" to MITRE for information.

Community Share

Because the company's collective knowledge is its most important asset, this knowledge must be easily accessible and easily shared across the company. One of the mechanisms to accomplish this is MITRE's *Community Share*, which is built on Microsoft's SharePoint platform. Communities across MITRE come in many forms, including organizations (such as departments or divisions), project teams, and groups of experts working in the same field but in different organizations across the company. *Community Share* offers these communities a place to store documents; it includes access and check-in/check-out controls, group calendars, linked lists, announcement/bulletin boards, and many other Web features. "To supplement the less than perfect browsing and searching in the native SharePoint environment, MITRE has created Web services which pull metadata from SharePoint's databases and serve that metadata in our corporate *Phonebook* directory," says Groenwoldt. "From the *Phonebook*, employees can access communities, files in those communities, or the directories where those files live, all with one click."

The metadata is linked to:

- Employees who publish the data
- Employees who belong to the communities
- Organizations who own the communities

Combined, they provide a rich and straightforward faceted search.

Role-Based Tools

MITRE's intranet offers a wide range of tools to support a variety of roles, including

- a new employee view that has everything new employees need to get started,
- a mobile view with the most popular resources for people on the road or working remotely, and
- project services to help project managers track their budgets and deliverables.

Recently, the *MyMII* team has also been making progress in presenting people with "smart defaults" based on attributes such as their business units or geographic location. If, for example, a user's primary location is McLean, Virginia, *MyMII* will now suggest neighboring Washington, DC weather and traffic as portlets he or she might want to add to the page.

KNOWLEDGE MANAGEMENT

MITRE's Knowledge Management program started about 10 years ago. "Its mission," says Jean Tatalias, Director of Knowledge Services, "is to foster knowledge-sharing culture, to support collaboration, and to champion the methods and practices to connect people and manage knowledge assets for sharing and reuse."

"It is *not*," she says, "one system, one initiative." Instead, she describes it as an accumulation of assets with many parts of the organization contributing in a process of continuous improvement. MITRE's intranet offers many tools and techniques for supporting knowledge sharing, including Google search capabilities, *Expertise Finder*, *Community Share* (SharePoint) team document sites, wikis, blogs, and the *onomi* social bookmarking tool, to name a few.

The intranet structure links employees, projects, communities, and documents, which provide both the context and the major method of knowledge sharing. Employees are also given guidance in the form of "Seven Essential Steps to MITRE Information Management" which reinforce both basic information sharing and protection policies as well as how to apply the knowledge management toolset for effective knowledge capture. The seven steps include tips such as "Keep project files in *Community Share* (SharePoint)" and "Share as broadly as possible *and* protect information according to policy, contractual requirements, and licensing agreements."

ENTERPRISE 2.0

In addition to more traditional team collaboration tools, MITRE intranet's has a wide range of social media tools. There are several wikis, including *MITREpedia* (running on *MediaWiki*) and a custom blogging tool that supports both personal and project blogging. Efforts are also underway to explore the potential use of WordPress as a sponsor-relationship management tool. In addition, the intranet features the *onomi* social bookmarking application, which is very similar in functionality to del.icio.us. The team is also developing a social networking prototype that will allow social networking opportunities between employees as well as between employees and the company's partners and sponsors.

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Welcome to **MITREpedia**, the corporate wiki with information on our people, projects, organizations, customers, technology and more. Enter non sensitive data with confidence - MITREpedia backs up, indexes, and adds revision control to all content automatically.

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Featured Article

SurveyGem

SurveyGem is a web-based survey tool funded as part of the ESC support for ENweb. It will play a critical role in collecting and publishing data for the 2009 Q1 UCI activity in December.

Surveys within MITRE are used to collect situational awareness of staff, customers, or contractors working for the customer. SurveyGem is designed to enable quick and reliable survey creation in customer-facing activities like ENweb or for improved situational-awareness of staff and their work.

Read full article or **Feature Your Article (new!)**

Getting Started

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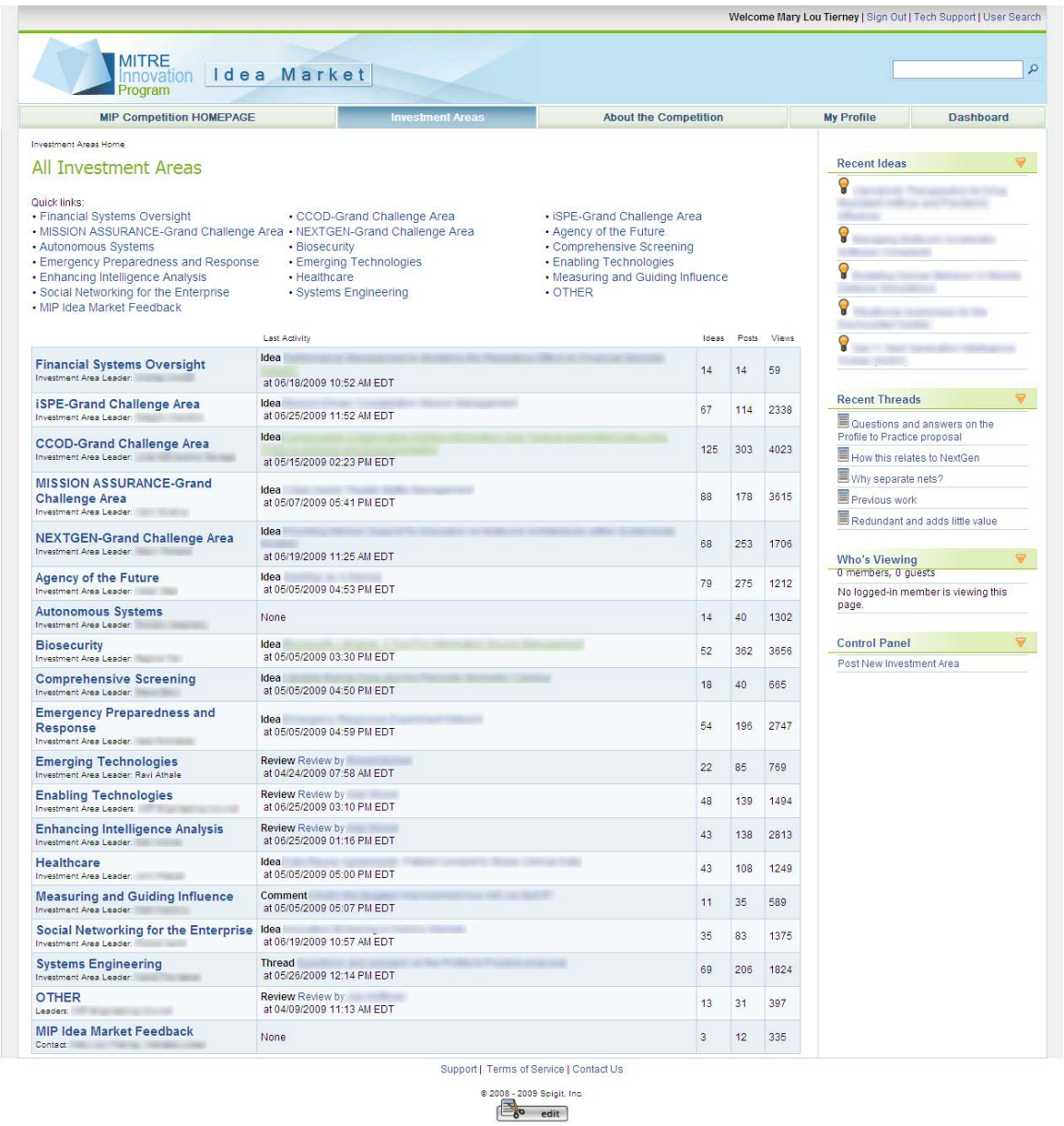
- How to Create Article
- **MITRE Wiki Users Group** (*new!*)
- **MITREpedia What's New WYSIWYG**(*new!*)

Newest Articles

- SOA Characterization Framework (Jlr) - [11:57, 13 October 2008]
- Gaming and Virtual Learning (Bdoyle) - [10:33, 13 October 2008]
- UDDI Property-Value Pairs (Pauld) - [14:58, 10 October 2008]
- RSS Advisory Board (Pauld) - [14:05, 10 October 2008]
- IRS Substitute for Return (Rdemery) - [14:05, 10 October 2008]
- North American Industrial Classification System (Pauld) - [13:47, 10 October 2008]
- QCL Pattern (Pauld) - [13:38, 10 October 2008]
- Value Definition Source (Pauld) - [13:37, 10 October 2008]

Pictured: *MITREpedia*, one of the company's wiki sites.



Pictured: The *MITRE Innovation Program* project proposal process was facilitated this year by a cloud-based tool called Spigit (shown here). The Spigit social networking tool connects company employees and aids in intranet-based idea generation and innovation. Using the *Idea Market* social networking tool, MITRE employees submitted and commented on ideas for the company's research competition, and for the concepts to be refined through collaboration. This tool helped make the research program more transparent, streamlined the process, and expanded opportunities for input into the research competition. More ideas (840) were submitted this year than ever before, with 750 comments received and more than 5,500 votes cast.

LESSONS LEARNED

The MITRE team offers a few lessons learned:

- **Personalized content is more effective than giving users customizable controls.** After eight years with a customizable corporate portal, the company still sees very little customization by the end user, with only about half of the employees making changes to their *MyMII* settings. This is why smart/well-researched defaults (such as personalized applications or portlets) are so important. End users cannot be counted on to customize their homepages, rather the organization needs to do the best it can to personalize the tools for them.
- **Templates provide both a good starting point and direction to users.** If your usability team is small, you can maximize your impact in the corporation by documenting your guidelines in a public place and try to teach publishers/developers to start from a common template. Teaching people about usability is important, but it's also very cost effective to provide them with a starting point, such as having some of the guidelines already coded in a template.
- **Guidance can come from outside the organization.** Look outside your company. It's important to baseline your intranet against other companies as part of your intranet health check. Use these external health checks to celebrate your successes and adjust future activities. The MITRE team found solace in communicating with other companies to find that it was not alone in trying to solve the issues that they faced.

BEST PRACTICES

Some words of wisdom from the MITRE team's experiences:

- **Listen to users.** Do not pass up any chance to hear from your users. Even the most informal interactions have the potential to improve your design.
- **Pilot new releases.** Releasing new features to a small group of users first helps the eventual rollout proceed more smoothly, if you are careful about collecting and acting upon feedback.
- **Learn from negative feedback.** Positive feedback is always nice to hear, but negative feedback gives you a chance to improve your product and maybe even win over a user along the way.

RESULTS

As example measures of the site's success, the MITRE team notes that:

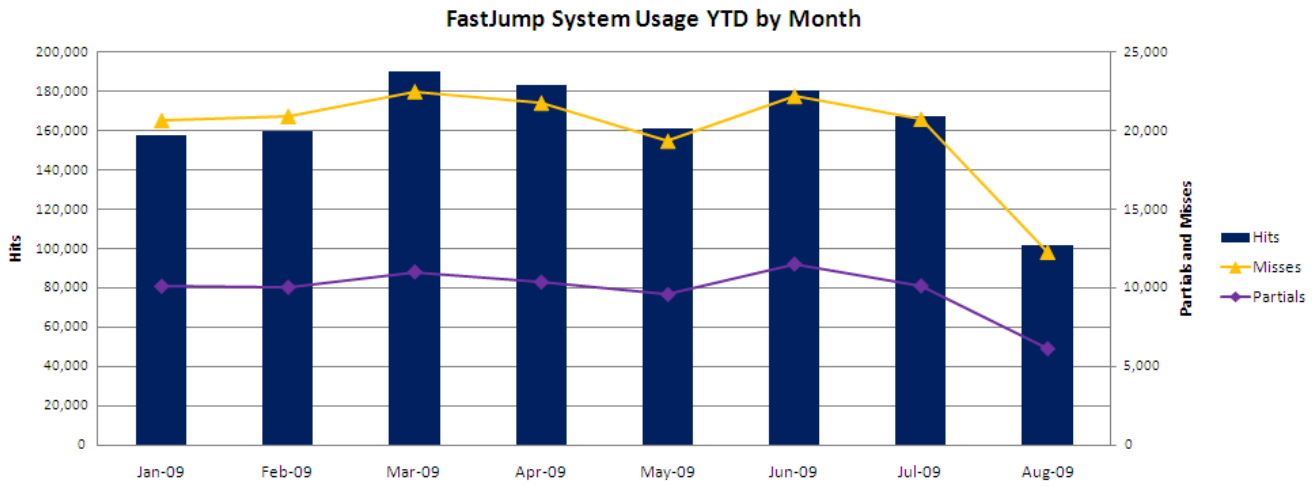
- The MII has been maintained as a showcase of intranet technology from its inception
- Lessons learned during its implementation are often used in assisting MITRE's government sponsors

Also, the team conducts many measurements on the site. The main measurement tool is WebTrends, which provides high-level usage statistics of hits and views.

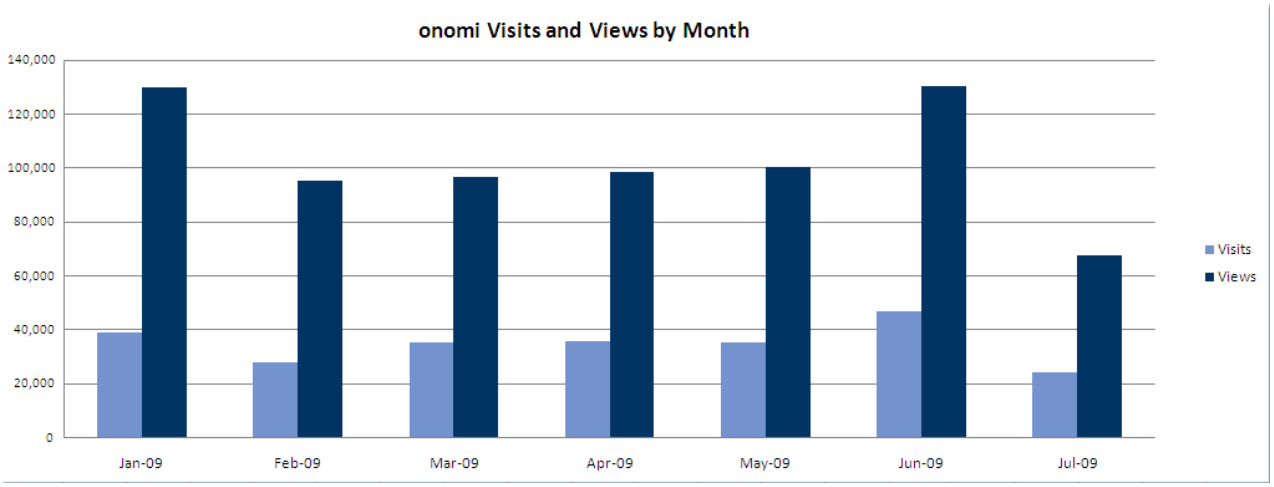
The team typically focuses on measurements when new features or applications are deployed so they can better manage the adoption. "We also use these measures for general trending of mature applications," says Donaldson. "One example was the *Mobile Travel* application. We noticed that after a period of adoption, usage started to drop."

Because team members were alerted to this trend, they could poll the users to find out the cause of the drop and address it with a campaign to drive usage back up.

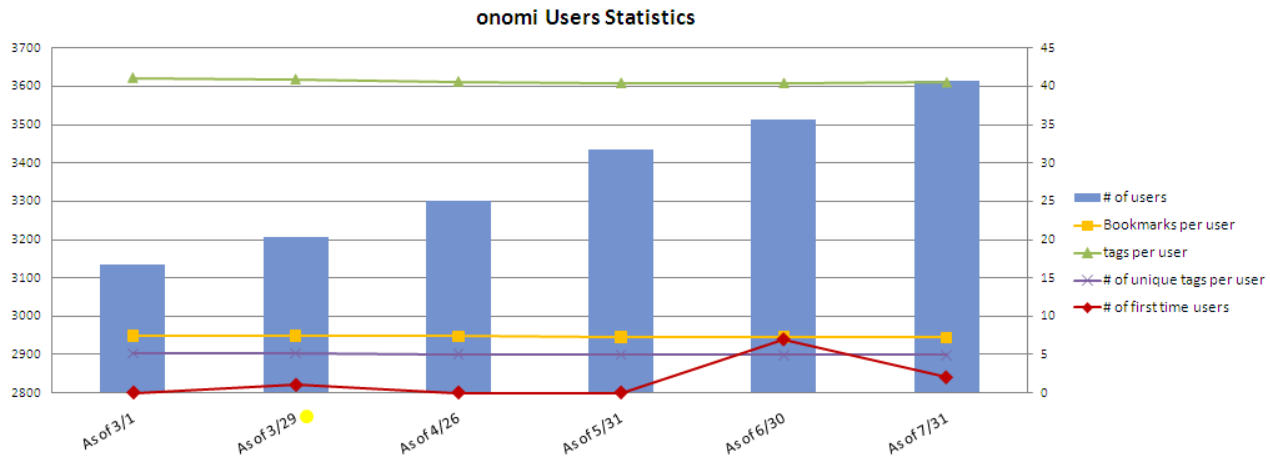
The following chart shows some measurement results for the 2009 calendar year:



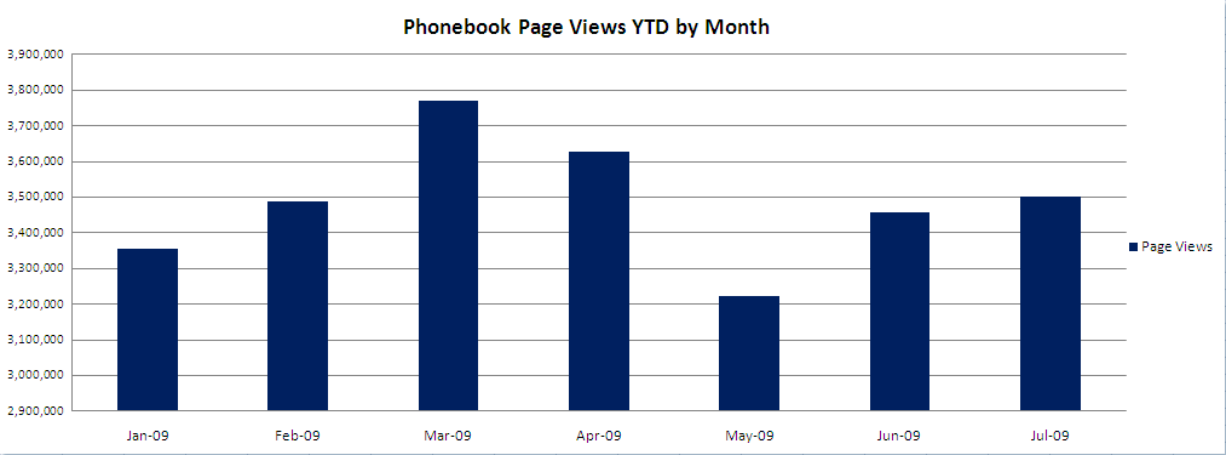
Pictured: Calendar year 2009 usage metrics of *FastJump* keyword navigation.



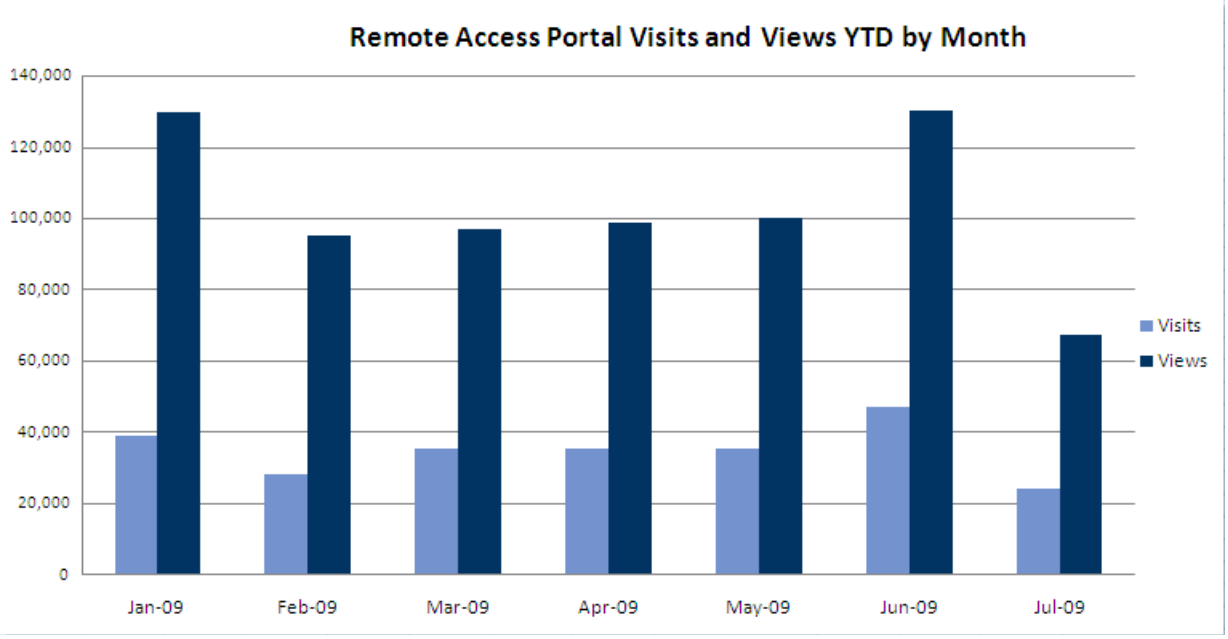
Pictured: Calendar year 2009 usage metrics of the *onomi* social bookmarking tool.



Pictured: Calendar year 2009 usage metrics of *onomi* user data.



Pictured: Calendar year 2009 usage metrics of the *Phonebook* (corporate directory) application.



Pictured: Calendar year 2009 usage metrics of the *Remote Access Portal*.

URS Corporation

Using the intranet:

URS Corporation is a leading provider of engineering, construction, and technical services for public agencies and private sector companies around the world. The company offers a full range of program management; planning, design and engineering; systems engineering and technical assistance; construction and construction management; operations and maintenance; and decommissioning and closure services. URS provides services for power, infrastructure, industrial and commercial, and federal projects and programs. The Sourse was URS' intranet prior to a major acquisition, and the company is currently in the planning stages of migrating all employees to one site.

Headquarters: San Francisco, California

Number of employees the intranet supports: More than 18,000

Company Locations: URS operates in more than 30 countries in the Americas, Europe, the Middle East, and Asia-Pacific.

Locations where people use the intranet: Argentina, Australia, Azerbaijan, Belgium, Bolivia, Brazil, Canada, China, Finland, France, Germany, Indonesia, Ireland, Italy, Mexico, Netherlands, New Zealand, Panama, Saudi Arabia, Singapore, Spain, Sweden, Switzerland, United Arab Emirates, the UK, the US, and US territories

Annual Sales: $10.09 billion

Design team:

The core team was comprised of personnel from two internal departments (Corporate IT and Corporate Communications), plus an independent consultant and an outside design firm.

In-house: Sue Kilgannon, Vice President, Corporate Communications; Tom Lynch, Corporate Vice President, Information Technology; Dave Tumminello, Director of Corporate Communications; Andy Aparicio, Creative Communications Manager; Brian Gendron, Sr. Manager, Executive Communication; Bill Bain, Intranet Manager; Don Roberts, IT Director; Carol Justice, IT Director; Linda Davis, Software Development Manager; Michael Wolf, Senior Developer; John Vaughan, Senior Developer; Sam Jivapong, Senior Developer; Bill Frank, Developer; Joe Zinn, Lotus Notes Operations Manager; Dan Ferner, Systems Architect Supervisor

Independent consultants: Tracy Beverly, Red Top Ranch Consulting; Ed Walter, Strategy Studio Design; Jae Yoon, Strategy Studio Design

SUMMARY

From modest roots as a way to let employees access Lotus Notes databases in 2001, The Sourse has come a long way, evolving into a Web-based tool for business.

The intranet team emphasized the user throughout the design process, listening to what users wanted and working through design iterations to make sure the end results met their needs and provided a usable and consistent experience.

The site's homepage shows the thoughtfulness of the new design. The page has a clear focus on new and updated information, but also reflects an awareness that URS is a company filled with people, not just departments and project teams. The *Employee News* and *After Hours* sections grew out of URS employees' desire to know more about one another and were unexpectedly successful when the new site launched. Employees appreciated and responded favorably to learning about others in the organization. Similarly, *After Hours* content emphasizes employees as people and not just workers.

The Sourse's team makes it a priority to publish up-to-date information on the homepage daily. Content managers in Europe and Asia-Pacific provide their own daily updates to the site for those international audiences, so employees see the information that is most relevant to them. The US team can override local content as

needed if a particular piece of information needs to be pushed to the entire company. All news items on the page, whether company news or employee news, are dated in an international format, with the month spelled out. Users can click on headlines or links to get more details, and they can view the news archives through a link near the section heading.

Users can even submit story ideas for *What's New*, *After Hours*, and *Employee News* directly from the homepage through a link at the top of each section. The presence of this link also acts as a reminder that users can contribute to Sourse content. This sign of the intranet team's openness to communication from employees can make employees feel that the site is truly a shared resource.

Important announcements are highlighted in the *Billboard* area, which allows the site to feature several items at once. The design of the *Billboard* exceeds other similar designs on intranets and websites. Many such designs force users to either wait as the site pages through each story, or gives users unlabeled ways to navigate between items, such as using numbers to represent stories or forward and back arrows. Neither lets users see the content of interest to them, and both force users to wait for desired content or blindly guess where the item they want might be hiding.

Avoiding these pitfalls, the URS *Billboard* area shows users each available headline, highlighting the one that's currently visible. All headlines are presented in full so users can see the complete headline without viewing the full item. Users can click a headline to view the *Billboard* summary and then follow a link to the full story if they want more detail. The first few lines of content are shown in the *Billboard* area, giving users enough information to decide whether they want more details or not.

The *Billboard* area is not only well designed, it's also successful: traffic spikes to areas featured in the *Billboard*. Also, when information from the company store is featured in the *Billboard* area, sales surge—not only for the featured item, but also for the store in general.

The homepage has several other features of note. One is the combination of *URS Favorites* and *My Favorites* on the left side of the screen. To balance the company's needs with individual employees' needs, the *My Sourse* section of the page provides a combination of corporate shortcuts and employees' personalized shortcuts. *URS Favorites* reflect the most frequently used resources as gauged by metrics and user feedback, as well as important site content from the corporate point of view; *My Favorites* allows users to create a custom list of links to either internal content or external websites.

A *World Clock* appears at the bottom of the page. A practical tool for the company, it's also a reminder about the global nature of their work and their organization. The clock shows the current time in seven principal regions where URS conducts business, as well as linking to a map with information about other cities where URS has permanent operations.

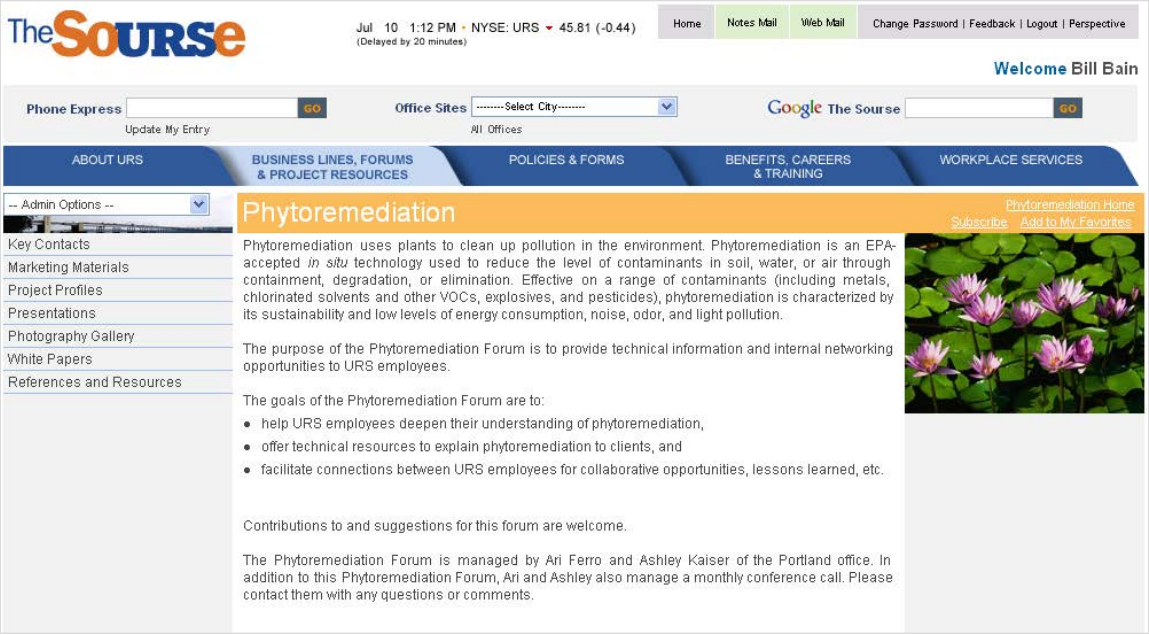
An intranet homepage, like any homepage, conveys a lot of information about the organization and its priorities. The combination of content and features on the URS intranet homepage shows consideration for the needs of the company from an individual, corporate, and global perspective. Stories about individuals are highlighted and personal shortcuts can be created. Corporate information is clearly conveyed and links to key business areas are provided. The *World Clock* and

customized homepage news in different regions show the global nature of the organization.

Pictured: The Sourse homepage is a well-designed blend of corporate, personalized, and practical information.

Users rely on the site for day-to-day operations, such as receiving company news, checking email, using the employee directory, and finding forms. However, the site also supports larger business-specific tasks, such as discussing best practices in technical forums, sharing performance information, and monitoring required training completion.

Seventy technical forums provide information and resources for specific audiences and provide an area for employees to share publications and practices. For instance, the *Project Manager Development* forum and the *Leadership In Energy and Environmental Design* forum provide resources to help employees becoming project managers or achieving LEED certification, respectively. Forums about technical topics provide information intended to further employees' knowledge, to help explain processes to clients, and to provide employees with a place to share information, solutions, or documents.



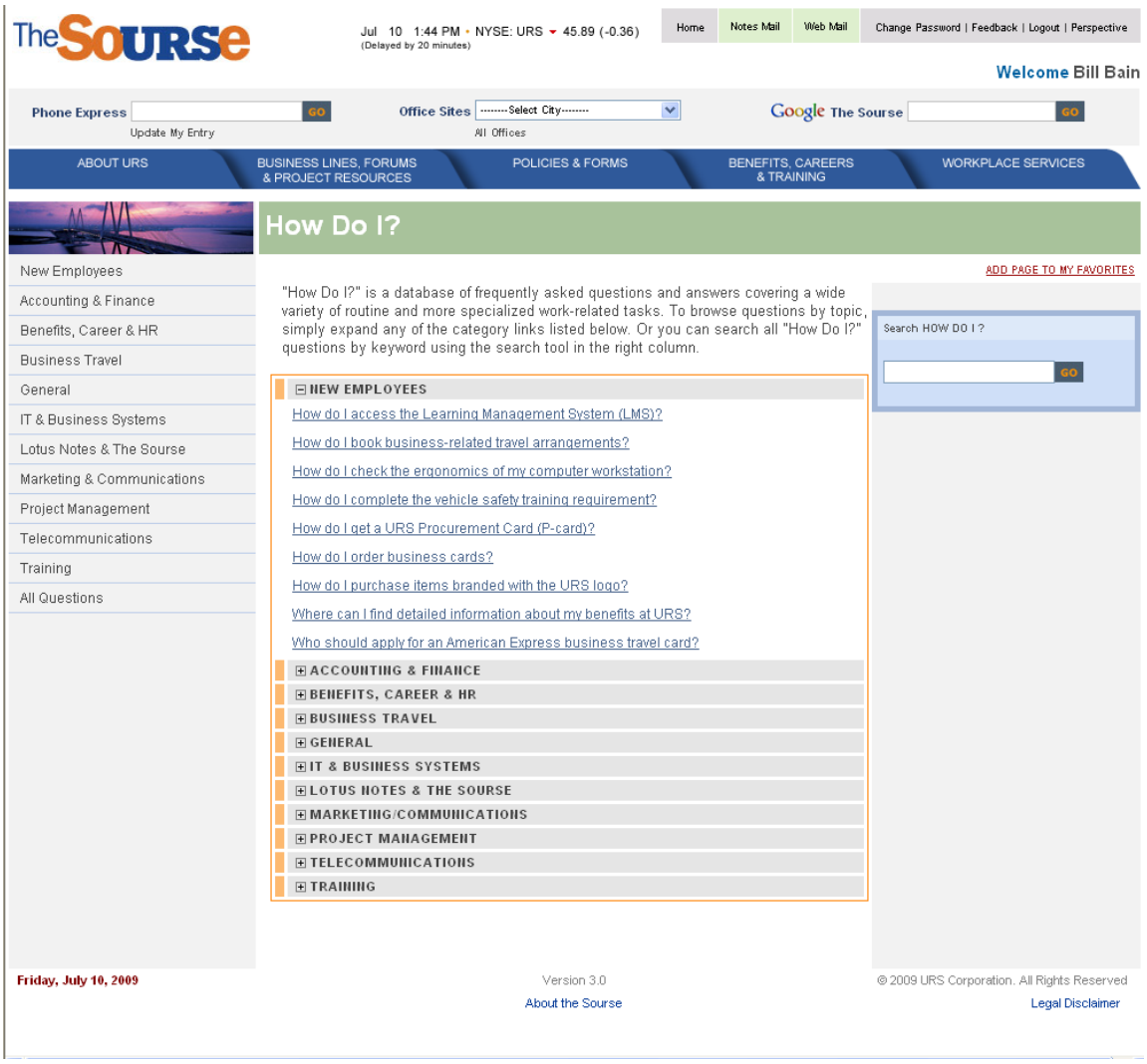
Pictured: The *Phytoremediation* forum. As this page shows, forums promote knowledge sharing by acting as central repositories for targeted information.

Forums focus on technical information, while the site's *How Do I?* feature focuses on the practical. *How Do I?* boxes appear throughout the site to promote tidbits of practical information and solutions relevant to the general content on the page. Both the question and answer are presented in the box.

This provides opportunities for learning throughout the site. Intranets are often faced with the conundrum of having to both provide a wealth of information to answer users' questions *and* making sure users can actually find that information and decipher the answers. Placing *How Do I?* boxes throughout the site is a helpful way to introduce users to information they might need, as well as to act as a reminder that the full tool is available.

Users can click through to view the full tool, which provides hundreds of questions and answers about the most common employee tasks. One section of questions is specific to new employees, answering key questions like how to book travel, get a procurement card, or order business cards. Other categories included questions about business travel, Lotus Notes, and project management.

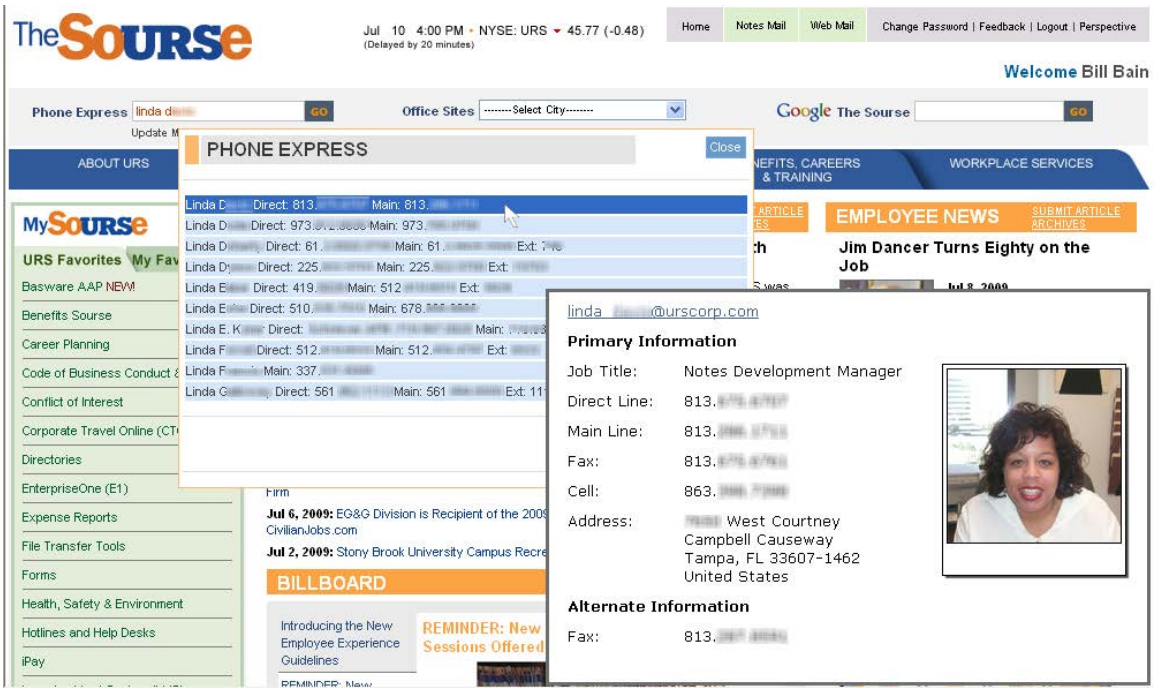
Users can browse questions or search for a specific piece of information using the search tool on the right-hand side of the page.



Pictured: The *How Do I?* database page. *How Do I?* questions and answers are featured in boxes on each page of the site. Users can also navigate to this page, where the full tool can help them find information they need by browsing or searching.

The site provides an open text field for *Phone Express*, the employee directory, on each page of the site. Three search and navigation tools are presented across the page, with the *Phone Express* search in a consistent left-hand location, a dropdown to quickly access *Office Sites* in the center, and the site search on the right. Separating the *Phone Express* search box and site search box may help users remember which box to use for which type of search.

Many organizations struggle with keeping employee content up-to-date, but URS updates the directory nightly, always providing users with current results. The tool uses type-ahead technology in which the site suggests similarly spelled employee names as the user types a query. These appear in a new window beneath the *Phone Express* search box, along with corresponding phone numbers. The user can then select a name from the suggested list, or finish typing the name and click *Go* or hit *Enter* to view an employee's full profile in a new window. Profiles include the standard information, such as job title, fax, email address, and a photo.



Pictured: The *Phone Express* tool gives employees quick access to contact information.

As the team developed the new site, they balanced the need for a consistent site experience with the need for distributed content management to keep site information interesting.

Sites that give too much control to users are often faced with a Wild West of an intranet, where every page, every link, and every piece of content has its own look, feel, and experience. Inconsistency doesn't benefit anyone and causes users to navigate from page to page wondering what the next page will look like and what will be clickable, while also struggling to understand where they are on the site. Retaining control over elements of design, structure, and content is critical to maintaining a usable site.

The Sourse team provides guidelines for contributors. Developing such guidelines is crucial when trying to retain a consistent experience while allowing contributors to have some creativity in creating content.

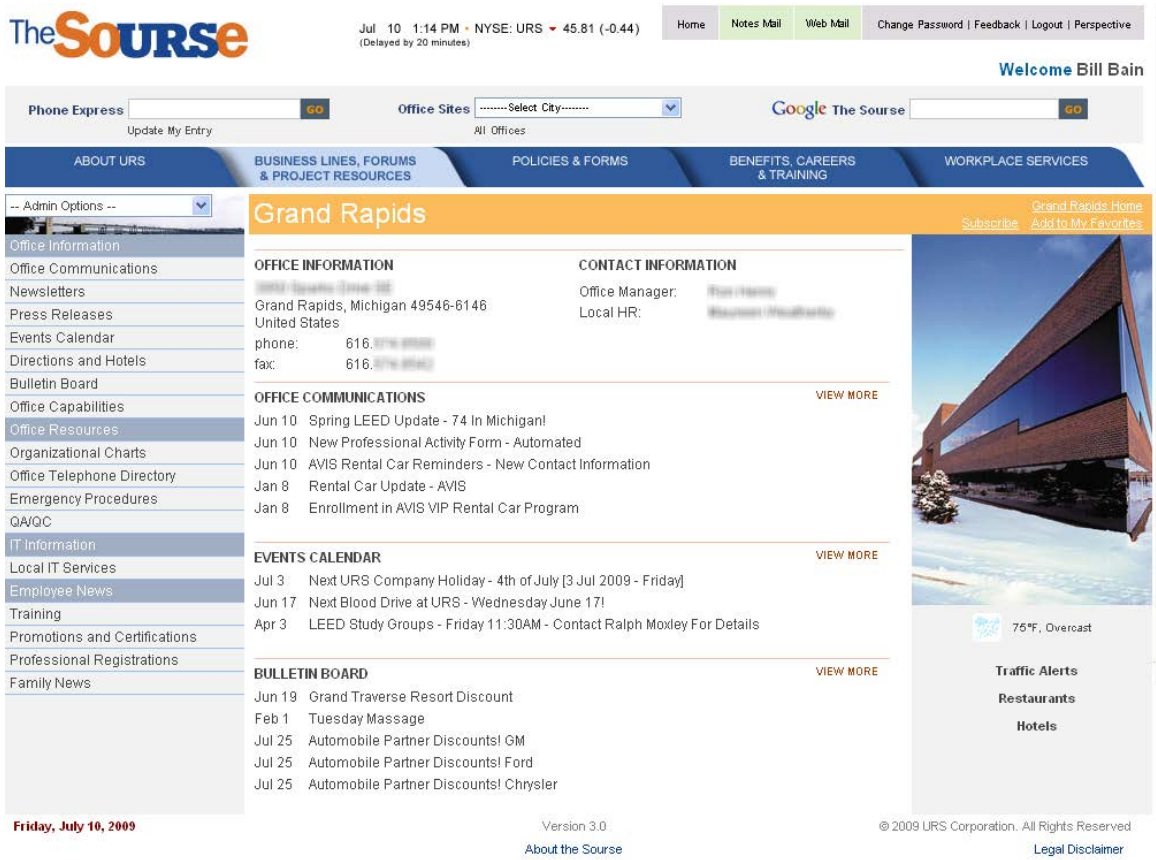
Going into the redesign, the team knew that some offices had developed their own intranets to provide information for their own employees. The team realized local offices were highly invested in these sites, and knew that the new Sourse had to accommodate those users' needs. The team therefore built local office sites within The Sourse to cut down on both duplicate sites and the work required to maintain and create them.

Office sites follow a template, but office leaders create their own content. This lets the leaders continue to provide site-specific content, but share it through the main intranet rather than building their own sites.

Users can navigate directly to the *Office Sites*, if desired, via a dropdown menu at the top of each site page. The team recognized that these sites would be an

important place for offices to share information for and about their specific location, so it made access quick and easy.

Each office has its own page and can publish its own collection of information. For instance, the *Grand Rapids* page provides all critical contact information, including address, phone, and fax, as well as the names of the local office manager and a HR contact. The main page features news and events and even provides links to local traffic information, restaurants, and hotels. Side navigation offers links to more in-depth content, including local press releases, directions, office capabilities, emergency information, and employee news. Such sections on The Sourse provide an opportunity to present localized information to employees on a site that supports a global workforce of 18,000 people.



Pictured: The *Grand Rapids* office site. Office sites are a way to present location-specific information, such as local promotions, certifications, and emergency preparedness procedures.

The team made an effort to include tools and resources that would make a practical difference in employees' days. One of these simple but powerful tools is a training progress reminder, which informs employees about outstanding required training. Employees have to complete a certain series of required training to meet federal or Occupational Health and Safety Administration (OSHA) regulations. The training progress is updated nightly, providing current information for employees. Users can click on *Learn More* at the top of the window to see more information about the requirements.

Pictured: The training dashboard in the site's *Training* section shows users up-to-date information about outstanding and completed training requirements.

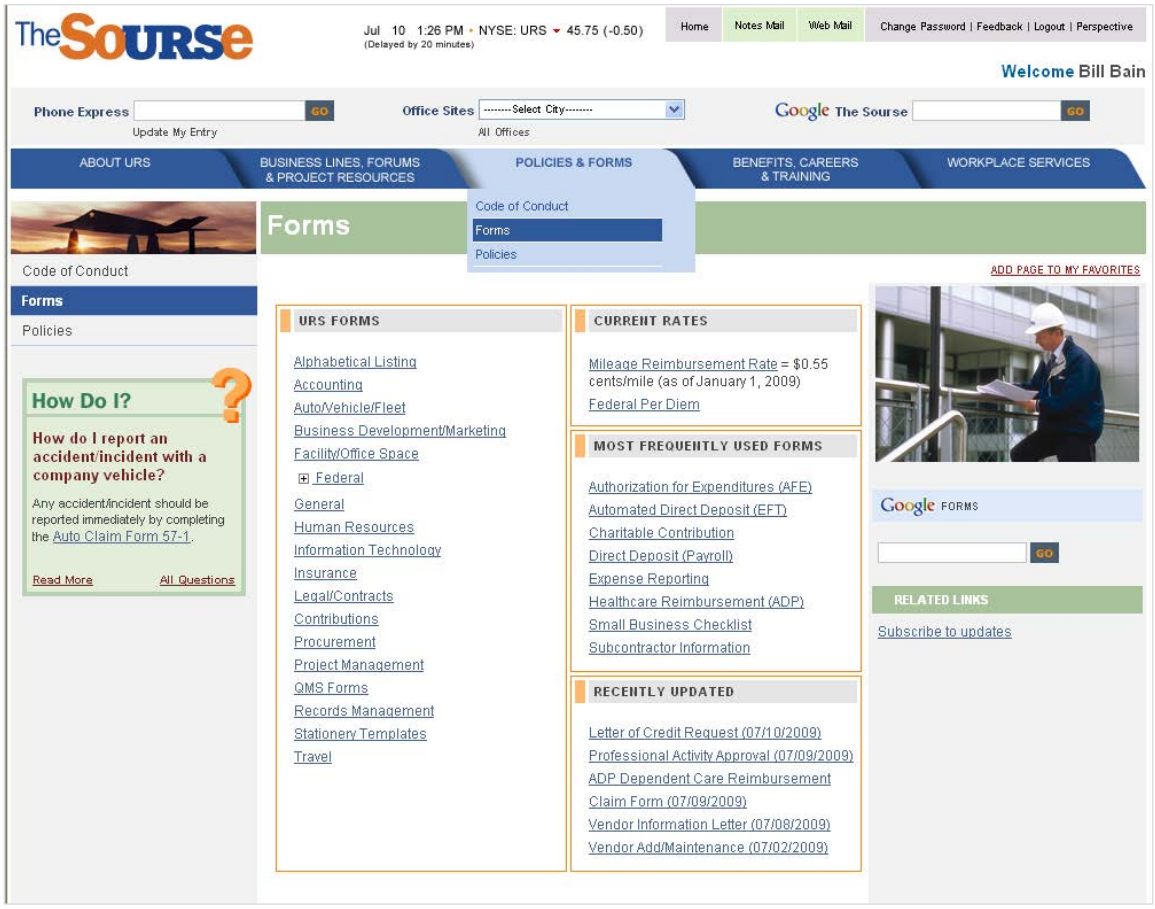
Many intranets struggle with how and where to present forms. Documents are often scattered throughout the site, appearing on departmental pages based on the department that created or maintains the form. This makes it nearly impossible for employees to locate the information they need, unless they know the entire organizational structure of the company. To address this problem, the intranet team created a central *Policies & Forms* section of the site, available via the global navigation, which gives users quick access to all policies and forms, as well as URS' *Code of Business Conduct and Ethics*.

The *Forms* page includes all forms divided by type—such as accounting, HR, and IT—as well as a link to an alphabetical listing of forms for users who know the exact name of the form they need. The page offers two additional views of individual forms, providing links to the most frequently used and updated forms. This gives

users quick access to common forms and also informs users if a form has changed. Updated forms are listed with the date they were updated.

The *Forms* page also includes its own search. The *Forms*-specific search box appears within the body of the page together with a clear heading to distinguish it from the site search shown on the top of each page.

A finishing touch on the page is access to the current mileage reimbursement rate and links to the *Federal Per Diem*—important information that is often used when completing certain forms.



Pictured: Employees can browse an alphabetical list of forms, find a form by topic, see frequently used or recently updated forms, or search within the forms area of the site.

As they were developing the new Sourse, team members realized that making drastic changes to a site that employees visit regularly has a big impact. They therefore made an impressive effort to not only "warn" users that a new intranet was coming, but to inform them about the new version to build excitement and help alleviate fear. Previews of content were offered early on via articles on the existing site. Soon after, office and branch managers were given access to a functional prototype to preview the new site.

The site was carefully tested leading up to its launch, and users could even preview the site the weekend before its official introduction on a Monday. The team also learned from past launches of new sites and applications to do a staged rollout, to

avoid creating an overwhelming amount of traffic—and subsequent bad user experience—caused by announcing and launching the new design to everyone at the same time.

These actions were indicative of the presence of and consideration for users throughout the design process. Surveys helped the team learn about how employees used the site, and the team also used the survey to recruit future usability test participants. Interacting with users, contributors, and key stakeholders throughout the entire redesign and keeping them informed and involved helped to create a site that reflects the needs of the organization. Further, by involving others, the team ensured that each group at the organization feels they have ownership in the site's development.

The team's work isn't done now that the site has launched. Team members collect feedback about the site and are actively working to improve site areas. With site search, for example, they collect data about successful and unsuccessful searches to continually tweak the Google Search Appliance (GSA) to return the most relevant results.

The team involved others, built excitement and anticipation around the launch, and responded to feedback about the site throughout its development, launch, and now through its daily use. Team members happily report that those areas of the site where employees were most involved are the most successful areas.

BACKGROUND

The URS intranet, "The Sourse," was originally created to serve as a central portal to give employees access to resources such as company news, executive communications, forms, marketing materials and discussion forums, and policies and procedures manuals. The original site was launched in 2001 and served as a point-of-access to the roughly 100 Lotus Notes databases being used by employees throughout the company. It was created using Lotus Domino technology and was accessed either through Lotus Notes desktop software or a Web browser.

The site had modest beginnings as a simple portal that gave users access to company news, their email, and other Lotus Notes databases. It has evolved to offer a more robust experience, providing users with more features and customization, and an improved user interface.

Evolution of the URS intranet:

- **Version 1:** The original version of The Sourse launched in 2001 as a simple portal into the company's Lotus Notes databases and provided most employees their first Web-based email access.
- **Version 2:** Launched in 2002, this version featured a new look and feel to the homepage and improved navigation. It also offered end-user customization capabilities with the addition of *MySourse*, a page where users could add links to the features and databases they used most. It also featured a more user-friendly interface for accessing email remotely via the Web.

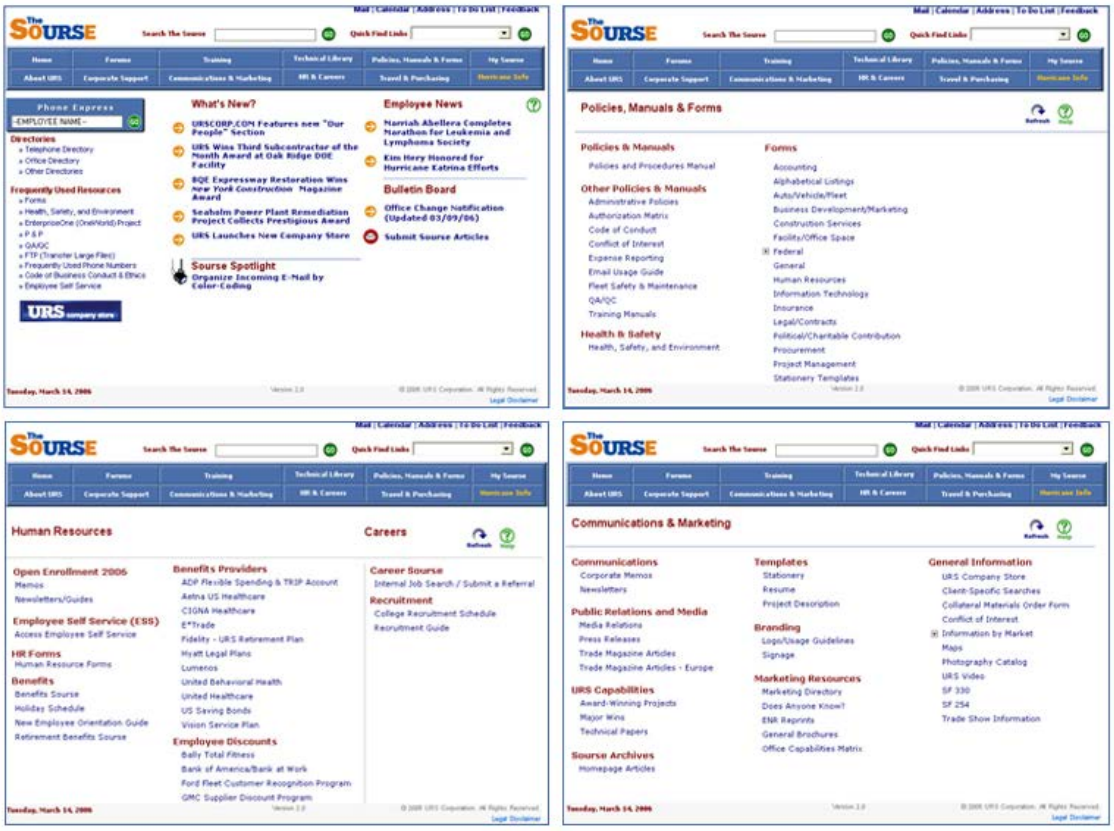
  In the two years after the launch of v.2, the team developed region-specific views for the company's Europe and Asia-Pacific operations. These views allow site managers in each region to publish content better targeted to their regions.

- **Version 3:** Two years after v.2, the team began work on The Sourse v.3, which takes end-user customization to a new level and gives the company's many stakeholders the ability to manage their content themselves. One of the top priorities for the site redesign was to create an intranet that would be accessed solely through a Web browser. The new version also was designed to provide functionality to help build online communities centered around office location, technical specialties, and business lines.

Following is a timeline of major development milestones for The Sourse:

URS INTRANET TIMELINE	
The Sourse—Version 1	
Early 2000	• Planning begins to create an intranet
March 21, 2001	• The Sourse is launched
The Sourse—Version 2	
May 19, 2003	• Version 2 of The Sourse is launched
January 13, 2004	• A separate version of The Sourse is launched for the European region
June 2006	• User research begins to guide future development of The Sourse. Over the next six months, 5,000 employees are surveyed. Interviews, card-sorting exercises, and usability tests are conducted with 50 people
July 13, 2006	• A separate version of The Sourse is launched for the Asia-Pacific region
The Sourse—Version 3	
January–December 2007	• URS completes a major acquisition, which more than doubles the size of the company. This event slows development of the site's new version • During this year, the first user interface designs for v.3 are completed for the homepage and most of the main navigation pages and the developers present proofs-of-concept for most of the new key applications
January 2008	• Development of The Sourse v.3 resumes at an accelerated pace.
February–May, 2008	• Unit testing of new applications and pages begins, including Google; main navigation tabs and pages; forums, office sites, and business lines; capabilities database; *How Do I?* database; *World Clock*; and *My Favorites*
April 1–15, 2008	• All forum managers are trained on functionality of new forums, and migration of content to new sites begins on first-come, first-served basis
May 2008	• A series of articles are published on the existing Sourse offering "previews" of the new version to all employees • A working prototype of The Sourse v.3 is presented to executive leadership, with a demonstration of its new features • All business line leaders and content managers are trained on the new business line sites • A test of the new CMS is conducted in all

	three regions (Americas, Asia-Pacific, Europe) • Code Freeze: All new development ceases • Developers focus on testing and fixing • Server load tests are conducted to verify that the infrastructure originally created to house The Sourse is sufficient to host the new design • Preliminary testing of The Sourse v.3 prototype is conducted among Corporate Communications and IT personnel
June 2008	• Pre-pilot testing (using a detailed test plan) of the new Sourse is conducted among a wider IT community and all employees who previously participated in usability tests • Office and branch managers are given access to a working prototype of The Sourse v.3 in order to preview it before the actual launch • A pilot test (using a detailed test plan) is launched in phases in 10 key American offices; fixes are implemented progressively • A "dress rehearsal" of the launch is conducted over the weekend. All employees logging into The Sourse over the weekend are able to view the new site • A deployment plan for Sourse v.3 is announced to all employees
July 2008	• A pilot test of the European and Asia-Pacific versions of The Sourse is conducted among personnel in each region • The final phase of the launch of Sourse v.3 is complete and all employees are live on the new version of the site



Pictured: Various pages from the previous version of The Sourse.

INTRANET TEAM

Within the company, The Sourse is supported by a team of personnel drawn from both the URS IT and Corporate Communications groups, including project managers, developers, systems administrators, writers, and designers, which comprise the equivalent of approximately six full-time employees per year.

To augment the internal team, the company looks outside its ranks to Tracy Beverly, an independent consultant, who provides the team with guidance on the information architecture and navigation models and usability testing on key site sections. An outside designer contributed graphic design direction and supplemental templates that were handed off to the internal team for implementation. While The Sourse's initial design and development plan (in 2001) was largely defined by outside consultants, with development done by URS personnel, today, nearly all development and management work is completed in-house. This evolution has helped them better meet the needs of their internal clients.

"Using an in-house development team has allowed us to define our own development style and better meet the needs of our internal clients, with a quicker response time," says Sue Kilgannon, Vice President of Corporate Communications.

Pictured: The URS Tampa, Florida team members. (Left to right): Dan Ferner, Don Roberts, John Vaughan, Tom Lynch, Carol Justice, Joe Zinn, Linda Davis, Bill Frank, Sam Jivapong, Michael Wolf.

Pictured: The URS New York team. (From left): Sue Kilgannon, Andy Aparicio, Dave Tumminello, Bill Bain.

GOVERNANCE

The Corporate Communications group is the champion for The Sourse, but both the Corporate Communications and IT departments share responsibility for the intranet and, according to Kilgannon, work seamlessly as The Sourse team. "This positioning has fostered a close collaboration between the two groups," she says. "And it has allowed us to consider our internal clients' needs from both a technical and content-oriented viewpoint. Because of our reporting structure, we also are able to ensure that development of The Sourse is in close alignment with the priorities of our corporate leadership."

The Communications and IT groups have managed The Sourse since its inception. In its early phases, two or three people coordinated the intranet on a part-time basis, but as the site grew and became a more integral resource for employees' day-to-day

work, positions were added to focus primarily on The Sourse. As the site expanded geographically, the Communications and IT teams in the company's European and Asia-Pacific operations have taken ownership of the content for their respective versions of the site, with content managers designated for each region. The following table shows the breakdown of roles and responsibilities in governing and managing The Sourse.

GOVERNANCE OF THE SOURSE	
Role	**Responsibilities**
Corporate Communications Group	• Formal owner for all Sourse applications • Strategic development of The Sourse as primary internal communications tool • Works with executive leadership to identify priorities and ensure that The Sourse supports: o New initiatives and programs o Business and operational needs o Quality and safety management programs o Consistent messaging o Ongoing communication with employees
The Sourse Team	• Monitors user feedback to guide improvements to existing applications and future developments • Creates daily updates to homepage content • Manages content for all pages supporting operations (such as HR, Finance & Accounting, and Quality Management) and for corporate information pages • Maintains the *Policies & Procedures* and *Forms* databases • Establishes standards, guidelines, and templates for customizable sections of The Sourse (business line sites, office sites, and forums) and future development • Creates new customizable sections upon request • Trains and supports content managers for customizable sections
Europe & Asia-Pacific Content Managers	• Create daily updates to content on the homepage in their respective regions • Manage content for all pages supporting operations (such as HR, Finance & Accounting, and Quality Management) and for corporate information pages in their respective regions
Business Line Directors	• Oversee the maintenance of content on their respective business line sites. This responsibility can be delegated to one content manager or to several site contributors • Promote the site within their groups
Office Managers	• Oversee the maintenance of content on their respective office sites. Usually, this is delegated to one or two content managers • Promote the site within their offices • Facilitate employee buy-in
Forum Managers	• Maintain content on their respective forums. • Work with the Corporate Communications team to promote their forums internally
Workplace Services Page Owners	• Work with The Sourse team to update their respective pages • Delegate updates or changes to other members

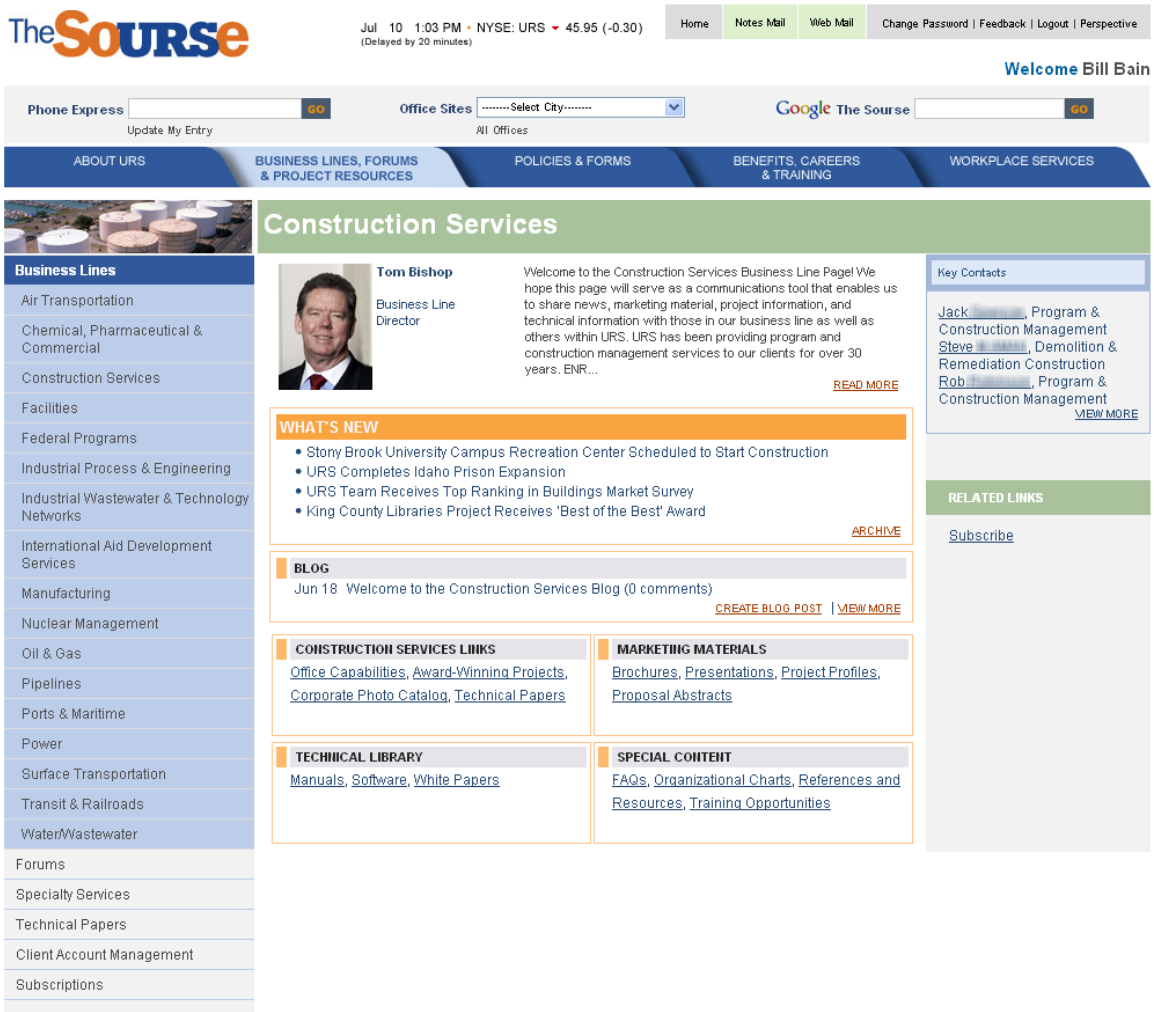
	of the team/department
End Users	• Customize sections of The Sourse, including *My Favorites* and users' personal directory entries • Contribute to collaborative applications such as forums, office sites, business line sites, and blogs • Provide feedback to The Sourse team regarding potential improvements

Pictured: The *Finance & Accounting* page is one of 12 pages listed under the site's *Workplace Services*. These pages house all information about each of the various operational support groups, including department *Key Contacts*, featured in the right column.

Centralized Administration: A Delicate Balance

The Sourse team administers much of The Sourse centrally. This lets the team reinforce standards for branding, editorial content, development, and security. "However," says Bill Bain, Intranet Manager, "one of the challenges of having such centralized administration is finding a balance between adherence to standards and giving our users the ability to customize content. One of our top priorities has been to give our employees—both individuals and business groups—ownership in The Sourse and its content."

The team has accomplished this through the development of customized features such as: office sites, business line sites, forums, and *My Sourse*. "Through user surveys and an email feedback feature, we continue to have a dialogue with our users in an effort to find ways to give them more say over future development of The Sourse, while enforcing our standards," he says.



Pictured: The *Construction Services* business line site shows the different resources that business line directors can use to create an online community for their business lines. Through the site, they can communicate with their reports, view the latest industry information, and post marketing materials. Key contacts for the business line appear in the upper-right corner.

USERS

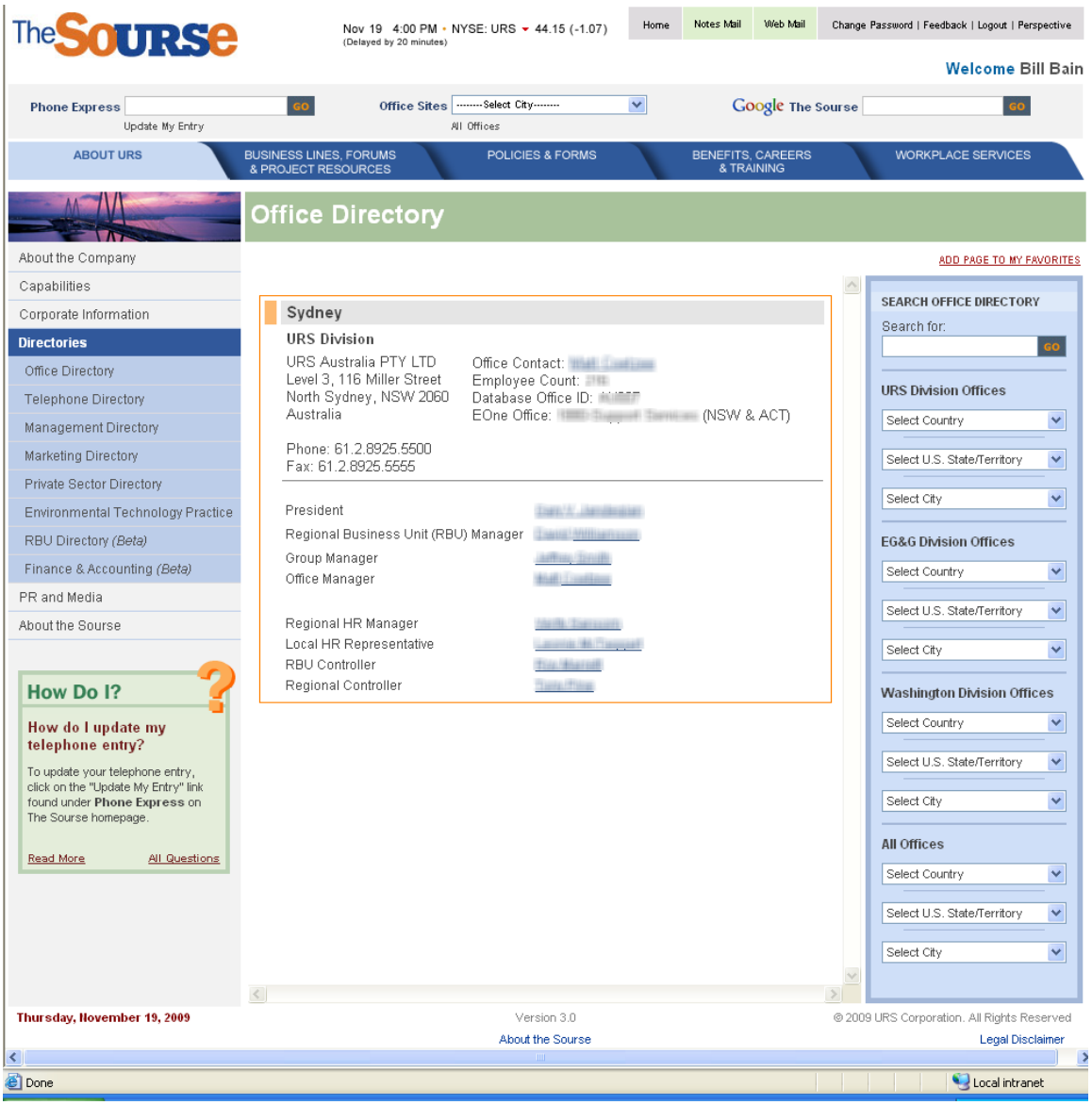
The Sourse is used by employees in every role and at every level of the company, from engineers and scientists collaborating on a project or sharing technical expertise to administrative assistants making travel arrangements or completing an expense report, to the CEO communicating with the company as a whole.

USER TASKS

With more than 18,000 users in the Americas, Asia-Pacific, and Europe, The Sourse is an integral part of each office-based employee's workday, providing access to day-to-day tools like email, timesheets, the latest company news, and the employee directory. Employees can use The Sourse to access the latest forms and training resources, external benefits management, and online travel-booking tools, and even resources for planning their careers. The Sourse also provides timely information about matters such as office closures, telephone outages, or events that might severely impact operations at any of the company's locations, including severe weather and natural disasters.

According to a recent survey, URS employees use The Sourse most often to:

- Get the latest company news
- Access the email system
- Locate employee information in the employee directory
- Look-up office information in the office directory
- Navigate to the *Benefits* self-service system
- Take advantage of *Career Planning* tools
- Connect to the accounting system and locate support information
- Find forms in the *Forms* database
- Consult the *Policies & Procedures* manual
- Access file-transfer tools
- Look-up personal payroll information
- Connect to the external timekeeping software
- Find training opportunities and training support



Pictured: The results of an *Office Directory* search for "Sydney."

Submit Close

Application Development Request

Request No: APPH-7VZP4C

Request Status:

General Information:

Requester: Bill Bain/NewYork/URSCorp

Date Request: 09/18/2009

Type of Request: New Development / Modify Existing Database

Name of Sponsor (if different than Requester): Bill Bain/NewYork/URSCorp

Has the development of this application been approved by your manager?: Yes / No

Your manager name: (An email notification will be sent to your manager when you submit this request)

« New Development Information »

What is the proposed title of the application?:

Who are the intended users?:

Is this application for a billable project? If so, please provide project's name and project's number:

Please list the primary and secondary manager for this database:

What should the application do (please provide functional requirements)?:

Enter time constraints (ASAP is not a valid entry):

Please specify how this application will benefit our business (metrics most useful):

Should this application be placed on The Sourse: Yes / No

*Please provide any supporting documents, diagrams, etc. which might facilitate the evaluation process:

Browse... Browse... Browse...

Comments:

It's important to use "Submit" button on the menu bar to submit this request for approval. You will receive an automated email confirming your submittal, please keep this email for future references.

Submit Close

Pictured: An example *Application Development Request*. This automated form can be completed, approved, and submitted to IT entirely online. Fields with required information such as "manager name" are populated by pulling names from the corporate email address book.

In addition to these day-to-day tasks, employees can also use The Sourse for a number of higher-level activities:

- **Engineers and technical personnel** can use the forums to collaborate and share best practices and technical advice with professionals in other offices—or even across continents. They also can post technical papers for the reference of other engineers or publicize their specialties internally.
- **Business line managers** can provide the latest information about the performance of their respective business lines and communicate with the employees on their teams.
- **Local offices** can update employees about office policies, safety practices, employee announcements, or upcoming events.

- **All employees** can access a number of resources from operational support groups such as Procurement, Finance & Accounting, Legal, and Quality Management. They can also monitor their progress in required training modules, and can report health and safety or nonconformance issues to an incident tracker application, which then allows investigation leaders to monitor and document corrective actions to prevent any similar incidents in the future.
- **Marketing personnel** can access a variety of marketing resources, including a searchable technical-capabilities database, brochures, press releases, history and fact sheet, presentations, resume templates, and videos. They also can connect with other URS marketers to share ideas and resources.
- **Project managers and business development personnel** can access a database of standard contracts and can find guidance on mandatory policies regarding contracts with the US federal government.

THE DESIGN PROCESS

The Sourse is a vital part of the work life of URS employees. And because it's such an important company asset, the intranet team tries to incorporate ongoing upgrades and enhancements to the site. Significant improvements are made every few years, while smaller, more incremental changes are regularly implemented. Over the years, the team identified several large initiatives they wanted to implement, such as an improved search function; an interactive database of technical capabilities by office; micro-sites specifically created for the company's local offices; and additional customization options for forums and business line sites. "We also wanted to address employee feedback stating that it was difficult to find the resources they needed," says Bain.

Based on the amount of work it would take to code these and other new applications for both Lotus Notes and the Web, the team determined that a new, Web-only version of The Sourse would better serve their needs. "This also would allow us to take advantage of the newest Web technologies and give The Sourse a more current look and feel," says Bain.

GOALS AND CONSTRAINTS

Here, Bain lists the goals the team had in mind when undertaking the most recent redesign:

- Eliminate the need to code for two clients (Lotus Notes and Web browser)
- Allow the most frequently used content to be accessed directly from the homepage
- Give users a simple way to populate a list of their favorites
- Create a section where local offices provide customized content to their employees
- Streamline and improve the navigation's usability
- Adopt a more contemporary Web-like look and feel, using the latest Web technology
- Implement a more robust search engine

- Acquire more detailed metrics reporting

An Unexpected Challenge

As is often the case with these types of projects, the team struggled to make the most of a limited timeline. Here, however, the version 3 redesign was greatly affected by a large company acquisition. "In the middle of the development of Sourse version 3, URS announced that it would be completing a major acquisition, essentially doubling the company's size," says Bain. Because staff resources were dedicated to the acquisition and integration during that time, the timeline for the redesign was reevaluated—and extended.

Reaching Everyone

Currently, The Sourse serves all URS corporate staff, its URS Division, and many employees from the company's EG&G and Washington Divisions, with the remainder using intranets from previously acquired firms. "Our next step," says Bain, "is to begin plans to migrate all employees to a single intranet."

In addition to this aggregation, the team is looking at solutions for reaching the company's field-based personnel. "Many of our employees work in the field and do not sit behind a computer," says Bain. "Once we have a single intranet for all employees, we will begin looking at solutions for reaching our field-based personnel, which could include the latest advances in mobile technology and social media. We also continue to look for ways to give users more personalization options."

USABILITY

Involving users

Changes to The Sourse, whether big or small, are made with the users in mind and with the users involved. "Since the very beginning of The Sourse, we have made it a priority to pay attention to user feedback, employing their input to guide its ongoing development," says Bain. "While we approached the redesign with several priorities already in mind (based on user feedback, best practices, and current technologies), we also felt it was important to conduct thorough user research to identify what changes needed to be made and how to implement them."

An email survey of approximately 5,000 users helped to identify the top priorities for the redesign, such as what intranet resources employees used the most, what type of content they felt was missing, and what features they found difficult to use. The team also asked for volunteers to participate in future usability studies.

Following the survey, team members sat down with a small group of employees to observe how they used the existing version (v.2) of the site. They presented the employees with approximately 25 common tasks, such as completing a timesheet, finding and completing an expense report form, locating a colleague's phone number, booking business travel, and consulting the *Policies & Procedures* manual. While they completed the task, facilitators asked them to verbalize their thinking process in order to understand their logic. Users were timed during this exercise.

"These user observations provided us with a clearer understanding of what was needed from our new navigation," says Bain. "In addition to input from the surveys, this information guided us as we created a series of wireframe prototypes of a new navigation system."

During interviews with volunteers from the first survey, the team presented participants with wireframes of the proposed navigation system and asked them where they would expect to find each of the site's 25 most frequently used resources. "We asked them to explain their logic and used the feedback to refine the proposed navigation," says Bain. "This resulted in reducing the number of tabs in the primary navigation from 10 (in version 2) to five (in version 3).

"Our research led us to choose a horizontal top-navigation with dropdown menus activated on hover," he says. "When tested among our users with mock-ups, we found this approach to be the most practical for our needs. The dropdown menu allowed users to identify what pages could be found under each tab, eliminating time wasted by hunting and clicking. As we made changes to the navigation, we continued to test to verify that we were on the right track."

The team tested this new layout in several ways. Approximately 50 phone interviewees performed card-sorting and paper-prototyping exercises to come up with a consensus on what type of resources they expected to find under each tab. The facilitators asked the interviewees to perform the same list of tasks from the earlier observation sessions. Using the new navigation, they found that users were able to complete most of the tasks straight from the homepage in a fraction of the time it had taken previously.

"These tests confirmed what users had been telling us in previous feedback and in our research," says Bain. "While the results were not surprising, they verified that we were progressing in the right direction."

Finding Inspiration

When designing the new site navigation, the team considered how many public websites had approached the challenge of categorizing a broad range of information. "When defining our new approach to navigation, we considered the best practices of many popular websites, such as Amazon, Yahoo!, and Best Buy," says Bain. "We turned to websites such as MSN, CNN, and BBC to consider their treatment of daily news items. Sites like these gave us the inspiration to create a rotating news section like *Billboard* in order to give us some flexibility with real estate."

"We also considered the recommendations of the Nielsen Norman Group's *Design Annual* and intranet standards, as well as other intranet design references," he says.

USABILITY BEST PRACTICES

Kilgannon and her team learned a lot while conducting their user activities. Here, they share some of their best practices recommendations:

- **Context is important.** It can be helpful to document the type and version of the participant's Web browser, how they are accessing the intranet, their location, and so on. This information can prove very useful should you encounter technical issues implementing the redesign at a later time.
- **Initial usability efforts don't need to be tightly structured.** When the team first began their employee observation sessions, they were conducted very informally at users' desks over lunch and took less than a half-hour. The results received from these "interviews" pointed to trends that they would see more clearly during subsequent, more formal testing.

- **There's no such thing as too much feedback.** The more you engage with your users, the more clearly you can identify potential issues and develop and test solutions.
- **Be flexible. Be willing to refine your approach.** Practice makes perfect. As you conduct more interviews and usability exercises, you will find better ways to ask for the information you need. Explaining the task you want the user to perform—without unknowingly giving tips or prompts—isn't always as easy as it sounds. Over time, you also may notice and eliminate subtle ways that you may be leading the participant. As you conduct more interviews and usability exercises, you may notice that the participant is confused—not by the task itself, but by the way you have presented it. Always look for ways to be clearer in your requests, without affecting their actions.
- **Let the user do the talking.** Ask the users to verbalize their thought processes, and react as little as possible to their comments and actions. When a user is struggling to perform a test, you may be tempted to nudge them in the right direction. However, it's at this moment that you may get a clear idea of your users' intuitive logic.
- **Be respectful of your users' schedule.** Accommodate the test participants whenever possible. Remember that they are helping you do your job better.

theSourse

Aug 29 4:03 PM · NYSE ▲39.50 (0.50)
(Delayed by 20 minutes)

Home | Notes Mail | Web Mail | Change Password | Feedback | Site Map

Welcome John Smith

ABOUT URS | FORUMS & TECHNICAL RESOURCES | POLICIES, MANUALS & FORMS | BENEFITS, TRAINING & CAREERS | WORKPLACE SERVICES

PHONE EXPRESS GO
Frequently Used Phone Numbers | Update My Phone Entry

OFFICE SITES
Bookmark My Office

Google THE SOURSE GO
Quick Links

- Office Information
- Organizational Charts
- Office Capabilities
- Office Procedures
- Lunch Menu
- Floor Plans
- Emergency Procedures
- Wilton Office
- Resource Management
- How Do I?
- Conference rooms
- Projectors, TVs, etc
- Meeting catering
- IT Help Desk
- Visiting Stamford?
- Maps & Driving Directions
- Transportation
- Hotels
- Weather
- Things to Do

How Do I?

How do I order office furniture?

The Stamford policy is to contact you administrative officer of your department and inquire about the update schedule.

Read More

Stamford

OFFICE INFORMATION

300 Atlantic Ave.
8th Floor
Stamford, CT 06901

Phone: 203 538 3000
Fax: 813 207 3999

STAMFORD CONTACT INFO

VP: Jonathan Miller
HR: I.M. Listening
MarComm: Sally Sales
IT: Joe Tech

EVENT CALENDAR MORE

Nov 1 - Nov 30	Open Enrollment, online and in the lobby
Dec 05	Accounting holiday party, The Rusting Nail 7-10pm
Dec 12	Marketing holiday party, The Rusty Nail 7-10pm
Dec 25 - 27	Office closed for year end holidays

OFFICE COMMUNICATION MORE

Dec 07 - 12	8th floor closed for renovations
Dec 29	All year end reports due
Jan 01	New FedEx Overnight shipping contract takes effect

OFFICE BULLETIN BOARD MORE

Dec 07	Need dentist who specializes in children
Dec 06	Catholic church near downtown?
Dec 02	Would like to buy set of women's golf clubs

STAMFORD'S OPEN POSITIONS (Virtual Edge Link) MORE

Dec 07	Project Manager
Dec 06	Architect with experience in . . .
Dec 02	Transportation Planner

MARKETING INFORMATION
(restricted access)
SOQ & Presentation
Resumes
Boilerplate
Awards
Success Stories

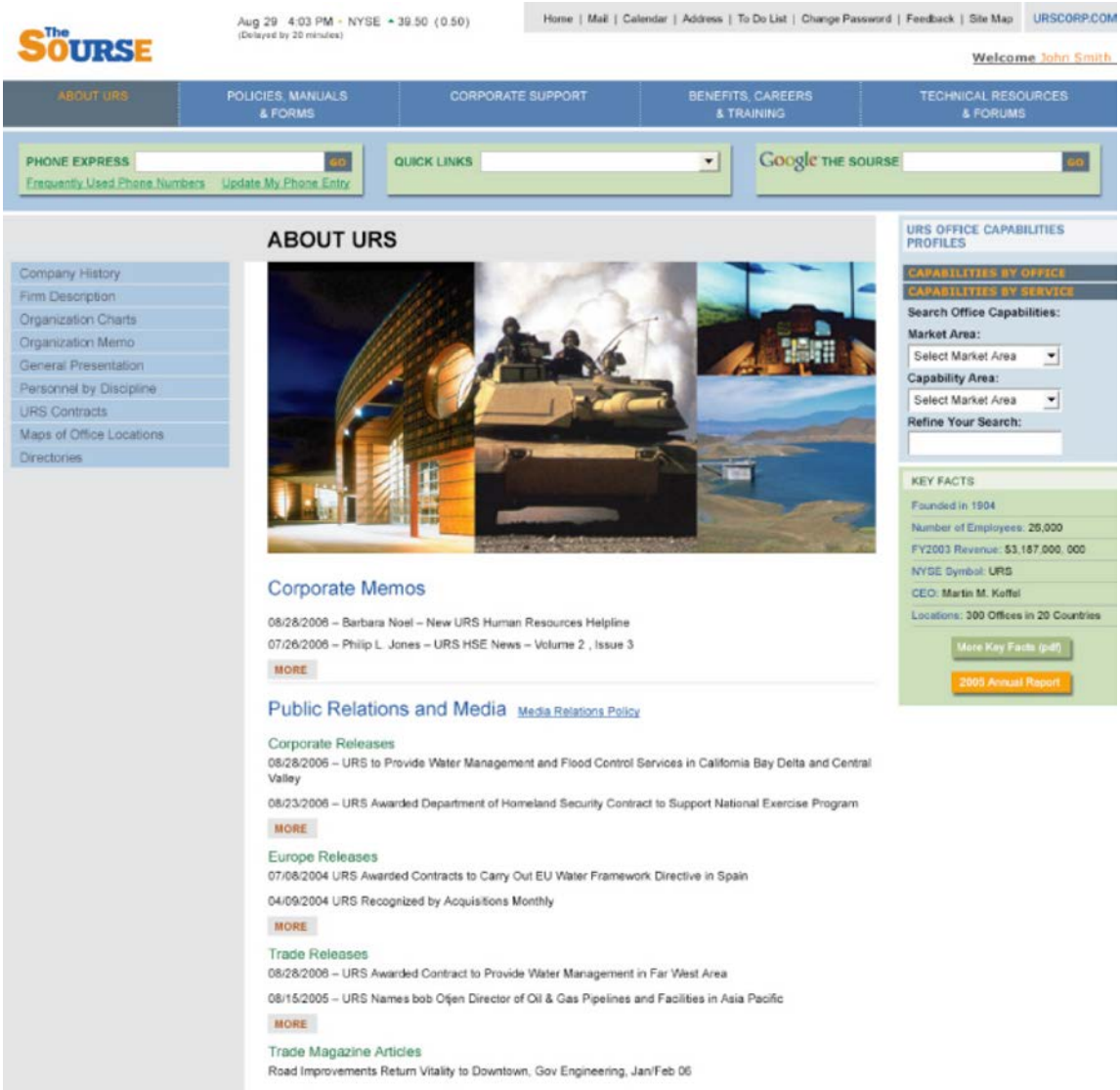
PROJECT INFORMATION
(restricted access)
Project X
Project Y

03.12.07

Pictured: An early version of the office site template shows a different color scheme and navigation from what the team finally settled on for the redesign.

Pictured: This early prototype of the homepage shows a slightly different use of colors than the final design. Note the more "boxy" header, which they later moved above the navigation tabs. *How Do I?* also appears above *My Sourse*, and the *Billboard* treatment is entirely different.

Pictured: The first design of The Sourse v.3 featured rigid tabs at the top of the screen, a different treatment of the header and a much smaller *Billboard* feature located in the right column. The team tabled the proposed *HR Corner* feature, to reconsider it at a later time.



Pictured: This mock-up of the *About URS* page matched the first homepage design, with its box-like tabs and header. The organization of content in the center column was later revised completely.

theSourse

Aug 29 4:03 PM · NYSE ▲39.50 (0.50)
(Delayed by 20 minutes)

Home | Notes Mail | Web Mail | Change Password | Feedback | Site Map

Welcome John Smith

ABOUT URS | FORUMS & TECHNICAL RESOURCES | POLICIES, MANUALS & FORMS | BENEFITS, TRAINING & CAREERS | WORKPLACE SERVICES

PHONE EXPRESS GO
Frequently Used Phone Numbers | Update My Phone Entry

OFFICE SITES
Bookmark My Office

Google THE SOURSE GO
Quick Links

Forums & Technical Resources

- Forums & Technical Resources
- Business Line Forums
- Technical Interest Forums
- Client Account Management
- Subscriptions
- Technical Papers

How Do I?

What International openings are available?

For International Opportunities, visit Careers and then Current Job Openings. There you may search for open positions in Asia-Pacific and Europe. Read More

RELATED LINKS

Health, Safety & Environment
QA/QC

URS provides a comprehensive range of professional planning, design, systems engineering and technical assistance, program and construction management services.

FORUMS

Sourse forums link experts across the company together in a wide variety of techinical communities of interest. You can bookmark your favorite forums, or subscribe for an email update anytime your favorites are updated.

Business Line Forums | Technical Interest Forums

CLIENT ACCOUNT MANAGEMENT

Account Planning | Account Management | Business Development
Client-Specific Searches | Conflict of Interest | Growth Strategies Resources

SUBSCRIPTIONS

SEAOC | SWAAAE

EPA Resources

Table of Contents | Air | General
Impact | Meetings | Pest
SAB Species | TOX | TRI
Waste | Water

TECHNICAL PAPERS

Paper #1 | Paper #2 | Paper #3

All Papers by Topic | Submit a Technical Paper

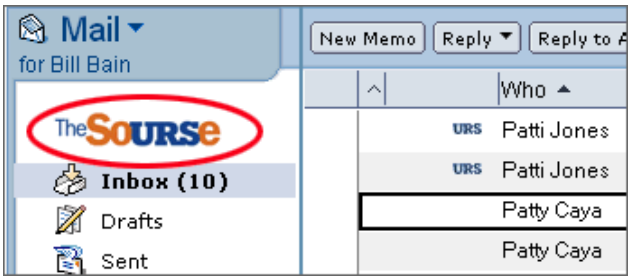
Pictured: This early mock-up of the *Forums & Technical Resources* page features a very simple layout, with little graphic content.

Pictured: An early (and later rejected) color scheme. When honing the look of the various tab pages and the second-layer pages, the team considered a number of different color schemes and treatments.

URL AND ACCESS

Users can access The Sourse at http://thesourse.urscorp.com. A user name (Sourse ID) and password are required to access the site.

The Sourse can be accessed from any Internet-connected computer. Each employee has a specific Sourse ID and password to log in to the site, and while the site isn't automatically bookmarked in users' browsers, it's set to automatically launch when they log in to their email accounts using the Lotus Notes client on their desktop. Users also can launch The Sourse in a new browser window at any time by clicking on an icon in their inbox (see image below). Finally, employees have the option to access their email through a Web browser via the *Web Mail* button in The Sourse's header.



Pictured: When users log in to their email accounts in Lotus Notes, they have quick access to The Sourse via an icon above their inbox link. Clicking this icon will open the intranet in a new browser window.

Some users access The Sourse on shared computers or workstations at client sites. To ensure security for such situations, employees are required to log in with their individual credentials, and an automatic time-out ensures that their accounts don't stay open on these public terminals.

TECHNOLOGY

The Sourse is built on a Lotus Domino platform and hosted on Domino Web servers. The Sourse's user interface was designed using the latest Web technology, including HTML, Ajax, Javascript, XML, Flash, and JSON objects.

"Because The Sourse is based on Lotus Technology, we are able to track who last modified any site document and when," says Linda Davis, Software Development Manager. "This functionality allows us to create sections on The Sourse that are automatically updated based on usage, such as *Recently Updated Forms* and *Recently Updated Policies*."

Several of the site's repositories, such as the *Policies & Procedures*, the *Forms* section, or the component-based sites (business line sites, forums, and office sites) offer revision history functionality. Users also can subscribe to these sections to be alerted via email when any updates are made.

Technology Evolution

Evolving the site technology was a slow process. At first, the team supported the underlying technology for both Lotus Notes and Web access, but over time this redundancy proved time-prohibitive and costly. "With the first two versions of The Sourse, all applications had to be coded twice to be accessed via both the Lotus Notes client and a Web browser," says Davis. "As both the company and The Sourse grew, this process became time-prohibitive."

While planning The Sourse v.3, the team decided to move to a browser-only interface, using current Web technology to make the development process more efficient, and shed the limits of having to design for two clients.

The basic technology behind The Sourse hasn't changed throughout its lifespan; it has always been designed using a Domino platform. "However," says Davis, "the Domino technology has been flexible enough to allow us to incorporate the latest advances in Web programming with each version."

"When we first created The Sourse, we primarily used the Native Domino Formula language, Lotus Script, HTML, and Javascript," she says. "But because the Domino Development Environment allows us to use multiple languages, we have been able to adapt the site over time and incorporate the latest technology. For Sourse version 3, we were able to use many popular Web 2.0 technologies, such as AJAX, right in the same development platform.."

SEARCH

The Sourse employs site search using GSA.

Site-wide search was implemented in 2004, but this early attempt at search was not effective or satisfying for the users. "Users regularly complained about it," says Bain. Improving search was in fact one of the major goals of the 2007 redesign, as users reported that the previous search feature often yielded unusable results.

"Since deploying the Google search, we have monitored our users' experiences and have found the search results and our employees' satisfaction with the search feature to be greatly improved," says Bain. He adds that an additional benefit of using GSA is that it offers many tools to prioritize results according to employee feedback. It also provides a log that reports on search strings that don't yield usable hits; the team uses these reports to proactively address each search issue. As a result, the search function is continually being refined to meet the users' needs.

The GSA was deployed to all users with the v.3 launch. "We continue to update and refine Google Search on an ongoing basis," says Bain.

The site also features section-specific search tools for different parts of The Sourse, such as *Forms*, *Policies & Procedures*, and the *Office Directory*. Each of these search tools yields results only from its respective section.

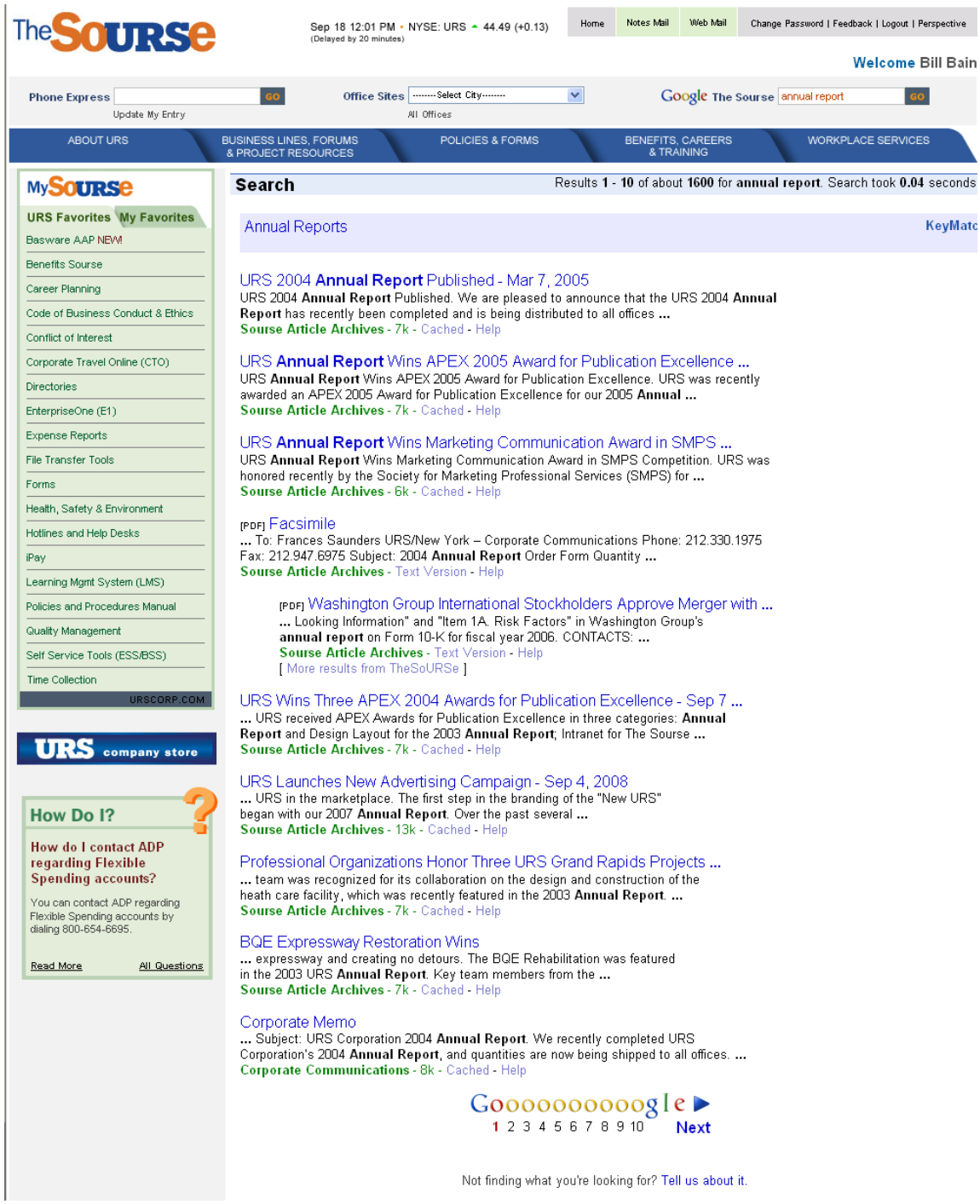
Improving Search through Constant Monitoring

Maintaining a commitment to improving search means that the team must be vigilant about monitoring search results and making adjustments to both the search appliance and the site's content to address any shortcomings as they are discovered.

To this end, team members implemented a button at the bottom of every Google search results page asking users to report whether they found what they were looking for. Bain says that his team reviews this feedback each week and requests changes from the developers. "We also review overall search metrics regularly to identify the most common searches and make adjustments for unsuccessful terms, missing content, etc."

This kind of constant monitoring not only improves the search appliance's performance, it also gives the team information that helps them optimize the site's content so that it's easy to find.

"For instance, when one employee reported that a search for 'maternity leave' did not yield results for our maternity leave policy, we decided to investigate," says Bain. "We found that because the policy used strictly gender non-specific phrasing, the word 'maternity' did not appear anywhere in the policy. We were then able to designate this policy document as a *KeyMatch* for the 'maternity leave' search string."



Pictured: The results of a Google search for the phrase "annual report." Note the *KeyMatch* at the top of the screen.

MOBILE ACCESS

The Sourse can be accessed through the Web browser on some mobile devices, but the site hasn't been designed or optimized for these devices. Bain says there's a growing demand for mobile access among employees, so he and his team are beginning to investigate various methods for implementing mobile applications.

CONTENT MANAGEMENT

Content on The Sourse is administered in several ways. Homepage content is published using a CMS that was designed in-house. "This gives us the flexibility to manage content in all three of our geographic regions: the Americas, Europe, and Asia-Pacific," says Bain. Content can be customized by region or even by country. "Not only does this allow each region to have ownership of its own content, but it also facilitates the sharing of content, and helps to underscore our company's ability to collaborate across continents," he says. Because homepage content occasionally must appear in all three regions, the Sourse Team can override any local content if necessary.

The CMS also lets Bain and his team conduct an automated review process for anything to be published on the homepage. The lifecycle of a homepage article can be completed entirely through the CMS, from draft to final version, and then submitted to the appropriate team members for review. Reviewers can proof, edit, and approve the article with the click of a few buttons. The CMS offers text editing and redlining capabilities similar to those used in Microsoft Word.

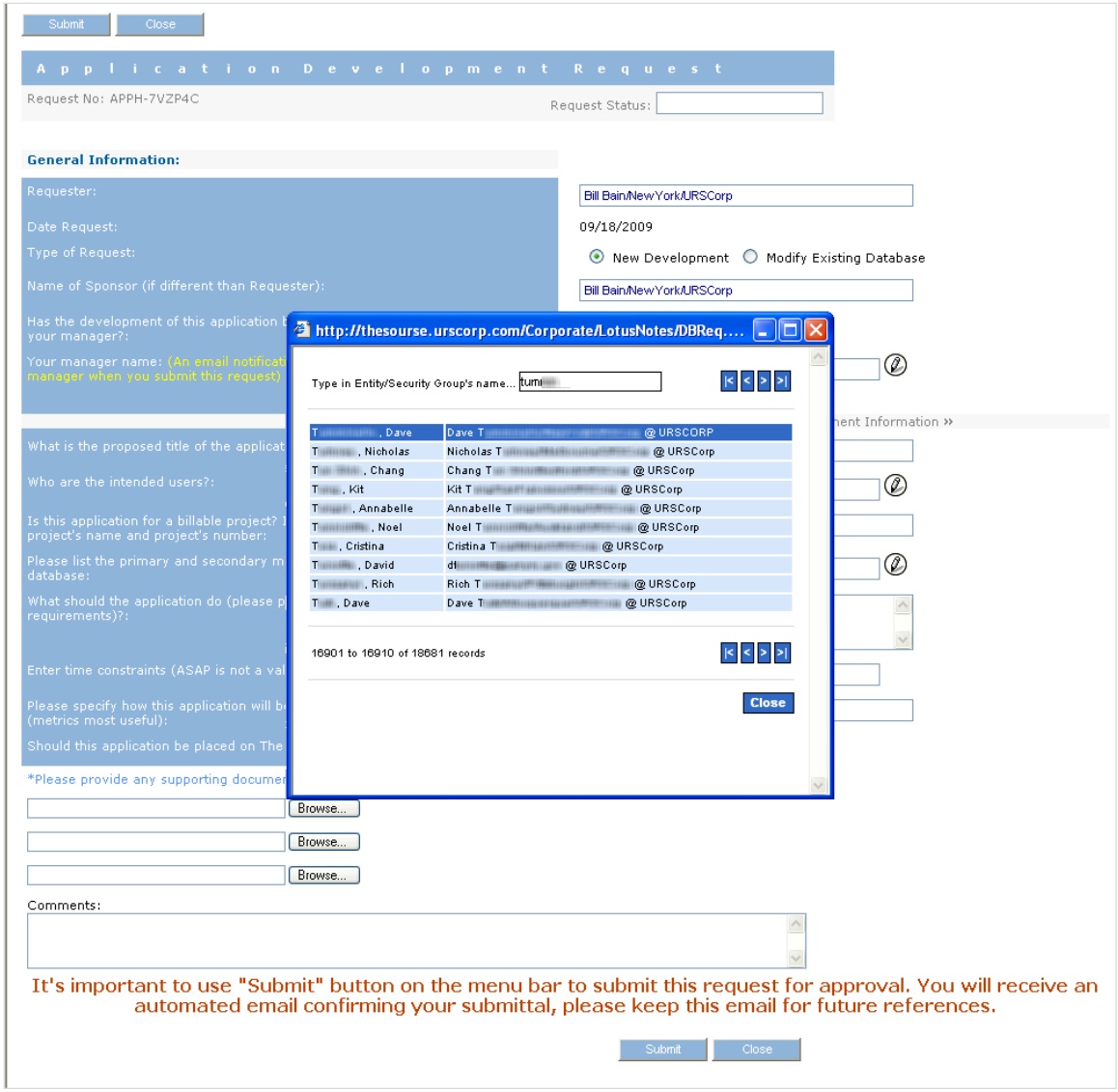
"We also have used The Sourse's *Forum* template to create a *Sourse Team Forum*, which houses a running editorial calendar, a blog used to discuss and develop future homepage articles, and a repository for notes from our weekly calls as well as discussion points for upcoming calls," says Bain.

Content management for other site sections is the responsibility of each section's owners, including those with business lines, office sites, and forums. The team has created administrative tools using Domino-based technology, which allows each content owner to update or make changes to their content. These changes are published immediately.

Using Templates

There are established templates for many portions of The Sourse, such as office sites, forums, and business line sites, as well as for applications such as blogs and document repositories. "These templates allow us to quickly generate new applications that adhere to our user interface guidelines," says Bain. "Templates also ensure that all new applications match the look and feel of The Sourse and follow the same navigational logic." The templates were created using style sheets that provide guidelines for elements such as fonts, graphics, navigation, attachments, and pick lists.

Enforcement isn't an issue; before an application is created, it must go through a specific approval process, which includes a review by the Sourse Team. Using an existing template, new applications can be deployed by the intranet manager and administered by content managers.



Pictured: By clicking on the pencil icon to the right of any field, the user can pull information from the corporate address book to populate that field.

Standards and Guidelines

The Sourse team has developed over 150 standards and guidelines to govern site usage, development, and maintenance. "The goal of these guidelines is to ensure high-quality and consistent content, organization, and presentation of information on The Sourse, as well as compatibility and interoperability between applications and platforms," says Bain. The standards and guidelines include the following topics:

- **The Sourse** and its role and history as the URS intranet
- **Home page and site-wide structure,** including legal standards and guidelines for navigation, content organization, and homepage sections
- **Site management,** including Site Manager and Site Sponsor Agreements, review and approval processes, testing, and usability standards

- **Content,** including the *Corporate Style Guide*, writing for the Web, restricted/prohibited content, and a checklist for good content
- **Design,** including standard look and feel, and guidelines on fonts, graphics, photos, logos, and use of animation
- **Security,** including appropriate use, access for non-employees, and secure hosting standards
- **Technical standards,** including site-wide tools and technical specifications
- **Component-based sites,** including business line sites, office sites, and forums
- **Writing for the Web,** a corporate style guide that provides a set of standards for all copy that appears on The Sourse. This section also includes guidelines for strategically writing for the Web

FEATURES

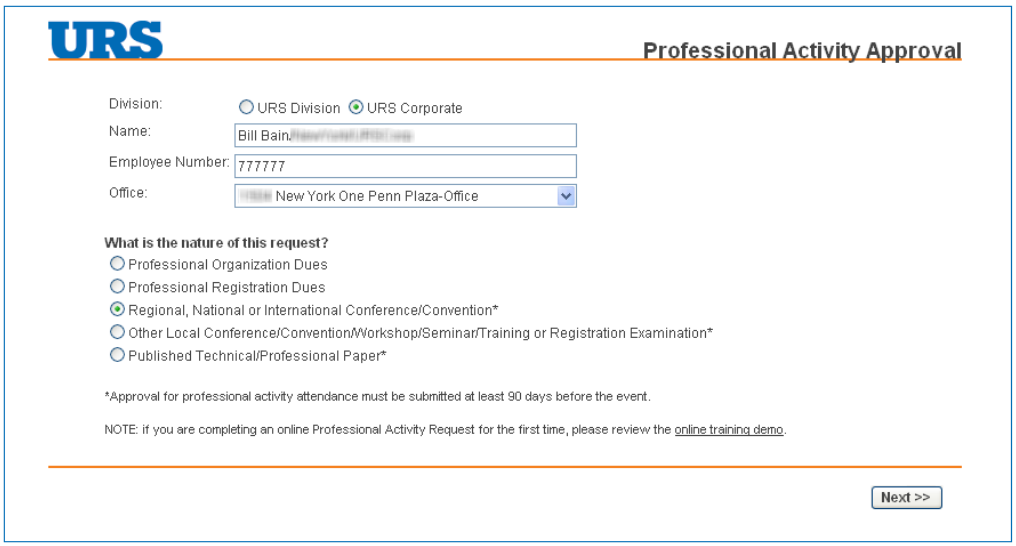
The Sourse includes a number of unique features; following are some of the most used and useful:

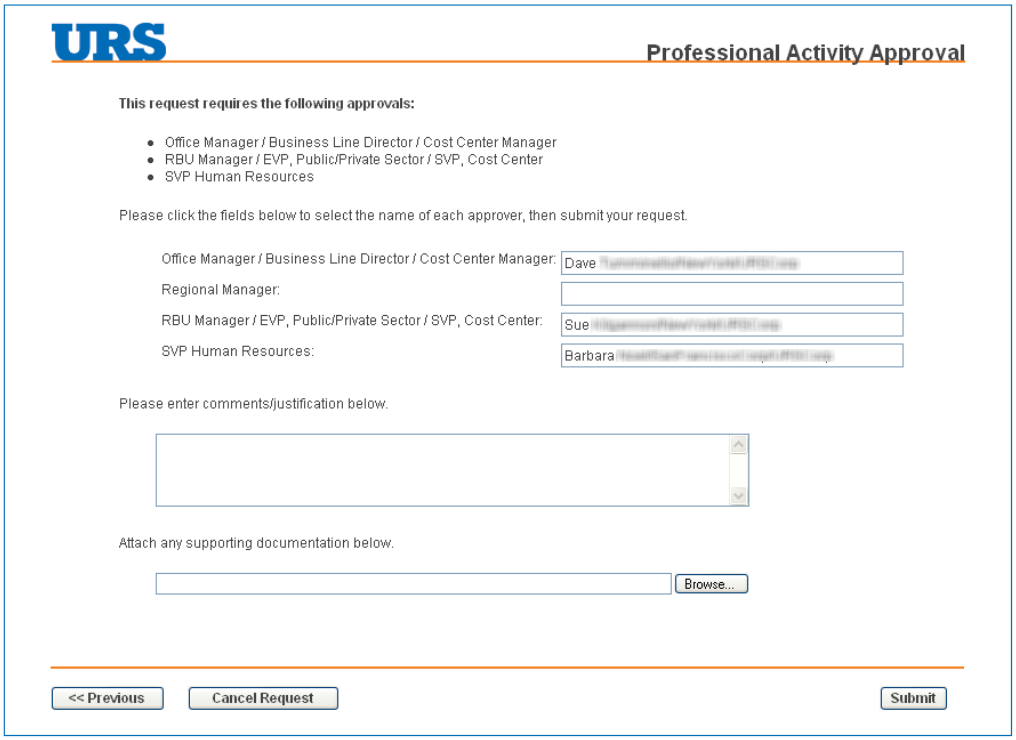
- ***Phone Express*.** One of The Sourse's most highly used features, the *Phone Express* directory provides type-ahead technology and also lets users scroll through first or last names alphabetically. The application pulls from an existing phone directory that is updated nightly. In addition to yielding phone numbers, the *Phone Express* "results" page offers a full range of contact information for each employee, including email and office addresses, alternate contact information, names of office assistants, and even photographs when employees opt to provide them.
- **Subscription function.** Many pages or applications include a subscription function that lets users subscribe to be automatically notified via email if a change or addition is made to the page or application (such as an office site or forum). Subscribers also can regulate the frequency of emails, choosing a weekly or monthly summary of updates, rather than a daily notification.
- ***Most Frequently Used Forms*.** This section is continually updated based on user metrics and has proven to be a very popular feature.
- **Office sites.** These sites facilitate intranet communication at the local operations level. Previously, several locations invested time and labor into developing independent websites to meet this need. With the *Office Site* template, the team can now give office leaders an easy and economical option that ties into The Sourse's role as the primary tool for internal communication at URS.
- **Business line sites.** These sites allow directors of the company's various market areas to build online communities; share industry, company, and department information; and enable their technical personnel to communicate between offices and even across continents.

- ***URS Favorites | My Favorites.*** The *Favorites* feature was designed to balance company priorities with user preferences and limited homepage real estate. Through this feature, the Sourse team can provide links to vital company resources and information, such as the company's *Code of Business Conduct and Ethics* and the *Time Collection* system. It also lets users create links to the content they use most frequently, whether it's on The Sourse or the Internet. Recently, the team expanded the use of *My Favorites* to facilitate the annual performance review process, providing links to each users evaluation form as well as to the forms of their direct reports.
- ***World Clock.*** The synchronized *World Clock* on the homepage shows the current time in seven principal cities where URS conducts business and links to a more comprehensive map displaying other cities with permanent URS operations. When the user hovers over any designated office, the current time and date at that location appears.

Pictured: The world map of URS locations. At the bottom of the homepage, users see the current time and date in six of URS' key cities. By clicking on *More Cities*, users are taken to the world map, which displays 36 cities around the world where URS operates. Hovering over any of the blue dots makes the city's time and date appear.

- ***How Do I?*** This database offers users a robust list of frequently asked questions and answers about how to do or find something related to working at URS. Designed to ameliorate the complexities of a large, multinational corporation, **How Do I?** helps employees who want to carry out various tasks, such as order personalized business cards, make business travel arrangements, update their *Phone Express* entry, or report a workplace injury.



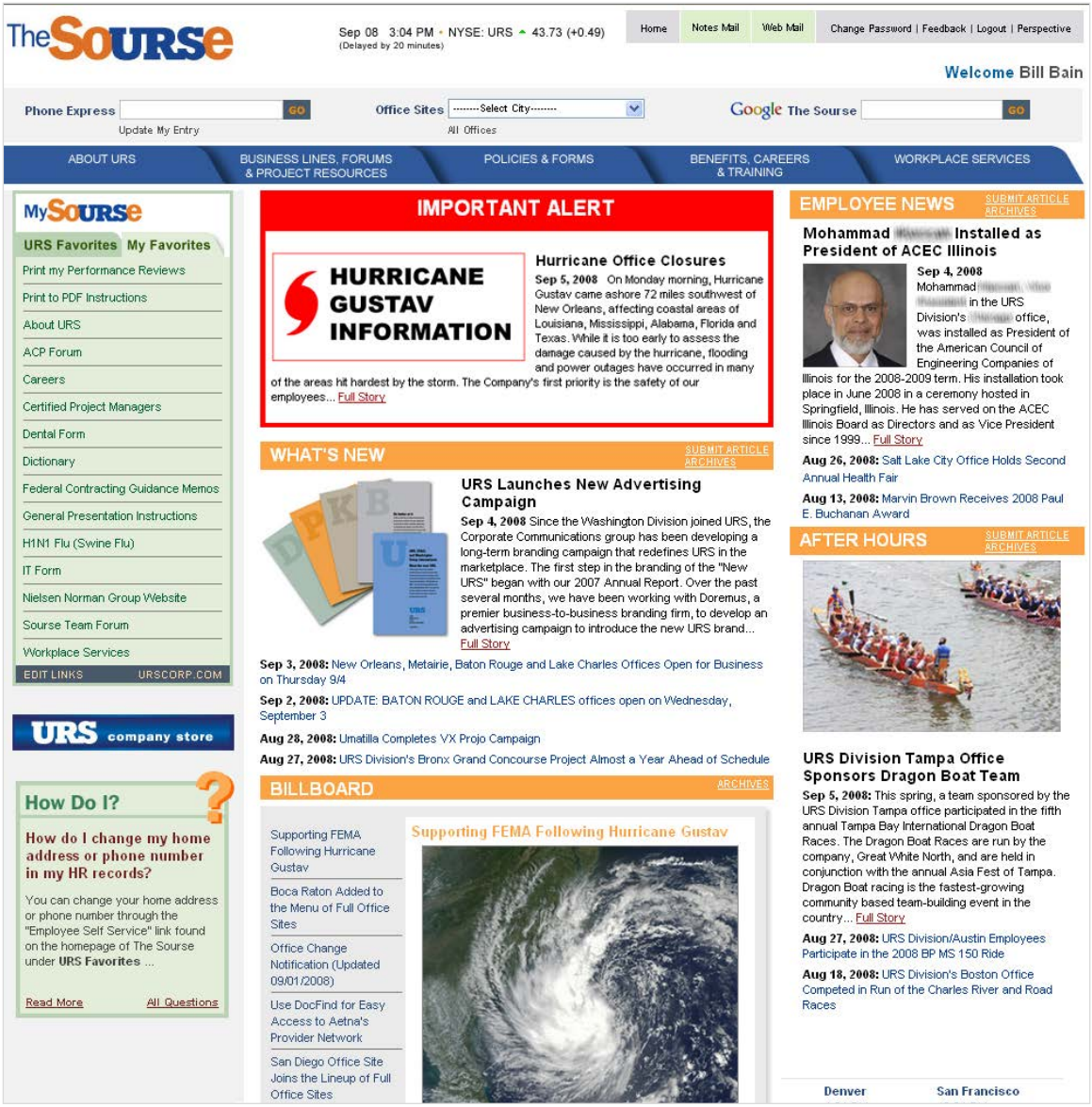


Pictured: Two screens from the automated *Professional Activity Approval* form. The URS team is in the process of automating all forms so that the process of completing, submitting, and approving forms is carried out entirely online. The lengthy *Professional Activity Approval* form was one of the first to be automated; users can now input the required information through a series of screens.

Supporting Mission-Critical Tasks

Nearly all applications on The Sourse are business-related and mission-critical for a particular company role or function. The Sourse provides access to the business tools that employees need to do their jobs, ranging from general tasks, such as finding an address and phone number, or a policy and any related forms; to more specific job tasks, such as locating a contract template or accessing required training modules. The Sourse is also used by all employees for personal tasks, such as locating benefits information, accessing timekeeping software, or finding payroll and accounting information. Following are several mission-critical features of the site:

- **The Sourse homepage.** As the primary tool for internal communication at URS, the Sourse homepage provides instantaneous information to employees about matters such as:
    - Upcoming deadlines for various corporate initiatives (benefits open enrollment, internal awards programs, and performance reviews)
    - Office closures or telephone outages
    - Computer viruses (such as Conficker) or human viruses (such as H1N1)
    - Disaster response actions
- **Emergency management module.** The Sourse was designed to be able to instantly implement new sections on the homepage to provide resources and information following hurricanes or other disasters that might affect employees' safety. This feature is based on a Hurricane Katrina page that was created on The Sourse in response to the disaster in 2005. Immediately following the catastrophic storm, the company's first priority was to locate all employees in the affected region, verify their safety, and ensure that their immediate needs were met.



Pictured: An *Important Alert* section can be implemented on the fly to alert employees to any type of emergency or computer virus threat.

"Within 48 hours, we built a new 'tab' on The Sourse, the *URS Employee Hurricane Resource Center*, which provided an online form for employees to notify us of their location and immediate needs, allowing us to provide assistance," says Kilgannon. "The site also served as a repository for a complete range of information that employees might need, including links for FEMA and insurance assistance, and emergency healthcare information." When URS helped to relocate affected employees to nearby URS offices, the Resource Center provided three employee support bulletin boards, allowing employees from the company's Gulf Coast offices to post requests for anything they needed while transitioning to their temporary residences. These requests included everything from furniture and household items to information on local resources, such as churches, schools, and doctors. Employees from other locations also responded to the posts if they were able to provide the requested item or information.

The Hurricane Katrina module was so successful and well received that the team designed The Sourse v.3 to accommodate similar modules. The team can now customize and implement a module similar to the *Hurricane Resource Center* on the homepage within minutes.

- ***Training* dashboard.** The Sourse's *Training* page features a personalized dashboard that lets users track their progress on the training modules they're required to take each year as a URS employee. Each employee's training status is automatically updated each day.
- ***Policies & Procedures Manual*.** The governing document for employee conduct and business practices at URS is the online *Policies & Procedures Manual*. Employees refer to this document for guidance on subjects ranging from organizational structure, international trade laws, HR, quality assurance, and IT and accounting procedures. Employees can subscribe to the *Policies & Procedures Manual* to be notified of updates.

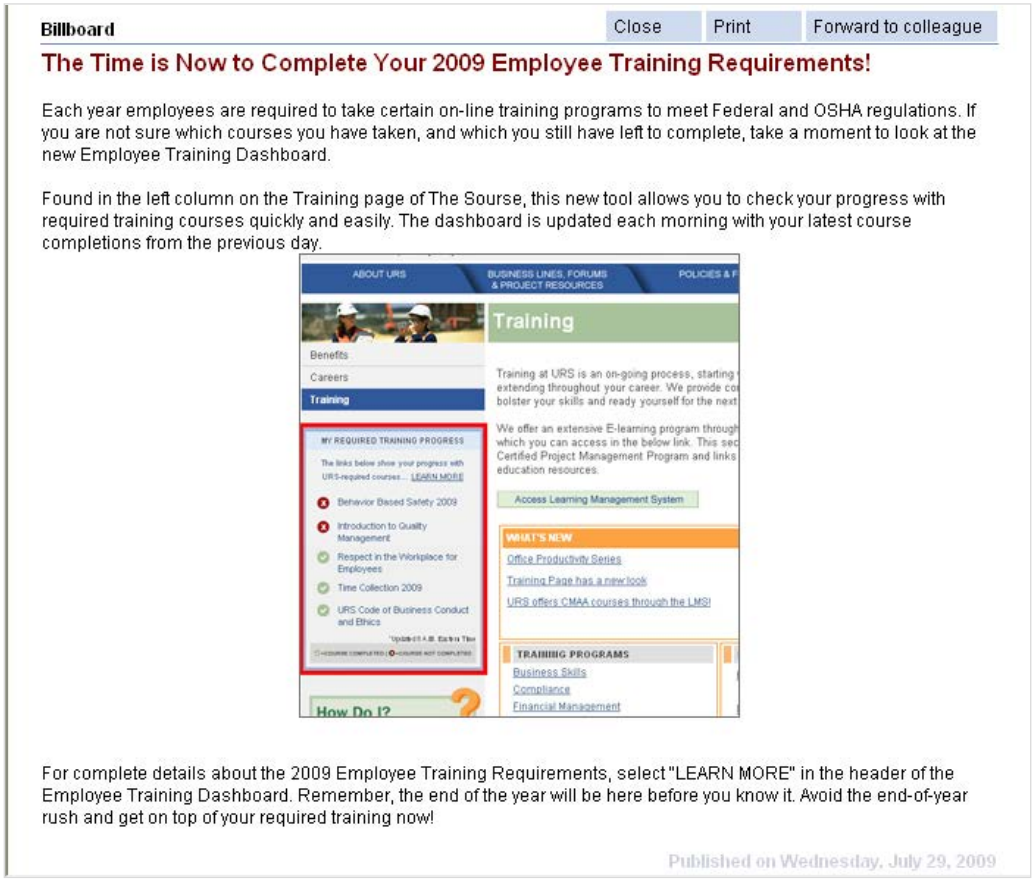
  This section is tied closely to the *Code of Business Conduct and Ethics* that also resides on The Sourse. Employees are periodically required to read and formally acknowledge the *Code*, which describes the principles behind the company's policies and practices.
- ***The Health, Safety, and the Environment & Quality Improvement Incident Database*.** The European and Asia-Pacific versions of The Sourse offer an application that allows employees to report health and safety or nonconformance issues. The application then enables investigation leaders to monitor and document corrective actions to prevent any similar incidents in the future. Plans are underway to launch this application in the Americas.
- **Performance review forms in *My Favorites*.** To facilitate the annual employee performance review process, a link is automatically added to each employee's current and past self-evaluation forms under the *My Favorites* tab, located in *MySourse* on the homepage. Supervisors also have a link to the *Performance Managers Evaluation* form. Using this link, employees can access their own personal information or the information of their direct reports.

Features that Create Buzz

Sometimes a simple feature can really make a splash with users. That was the case when the URS team went live with the new homepage, featuring an employee news section. "We knew employees were interested in news about themselves and their fellow employees and that they wanted photos," says Bain. "However, when we first went live with the new homepage and the employee news section we were very pleasantly surprised at the 'buzz' that these stories created."

One of the first employee news stories featured an Australian employee who had been named a Yale Fellow. According to Bain, over the following days, colleagues around the world flooded his inbox and voice mail with congratulations. "Features like this help to make a company of more than 45,000 employees feel like a closer community," he says.

Team members were also surprised by the interest generated by the site's *Billboard* stories, where they periodically highlight a new promotional item added to the *Company Store*. The manager of the *Company Store* reports a surge in the number of orders—not just of the highlighted item, but of other items as well—when these items appear on the site. "Similarly," says Bain, "our raw metrics data reports spikes in visits to office sites, forums, and other pages that are highlighted on *Billboard*."



Pictured: As with the other article sections on the homepage, users can view a complete story under *Billboard* by clicking on *Full Story*.

Supporting New Hires

Using the intranet as a resource for new hires is often a much-appreciated feature on company intranets. URS uses the *Welcome New Employee* section to support new hires. This section includes an orientation presentation; a checklist of tasks that must be completed within the employee's first few weeks; links to new employee training, helpdesks, and help lines; an introduction to The Sourse; and a link to the *How Do I?* database, which includes a robust compendium of questions and answers specifically for new employees. According to Bain, this information was previously distributed in extensive orientation packets, which consumed staff and budget resources to compile. HR representatives can now direct new hires to this information on The Sourse, eliminating considerable costs.

To further support new hires, the Sourse Team also developed an application called *New Employee Mailbox*, which automatically generates a series of emails to the new employee from key executives providing details about resources available to them and explaining appropriate procedures for their use.

These emails include:

- A welcome message from the CEO
- A message from the Vice President of HR, describing the URS new employee training curriculum
- A message from the Vice President of IT explaining URS policies governing IT and where to find them on The Sourse
- A message from the Vice President of Health, Safety, and the Environment outlining required safety training and various related resources available
- A message from the Vice President of Corporate Communication, providing an overview of The Sourse and how to use it

KNOWLEDGE MANAGEMENT

Knowledge management is handled through two specific features on The Sourse: forums and the *How Do I?* database.

- **Forums.** The Sourse forums serve as topic-specific document and knowledge repositories, including the ability to identify key resources and ask questions. The technical papers section makes available all papers presented by URS employees at professional forums.
- ***How Do I?*** The *How Do I?* feature is a repository of hundreds of the most frequently asked questions about work at URS. Question topics can range from day-to-day tasks, such as how to complete an expense report, to more specific information, such as where to find the company's Dun and Bradstreet number.

  Each page features a *How Do I?* box that displays a randomly selected question and its answer. Questions are tagged so that they'll appear primarily on pages germane to their subject matter. (For example, benefits questions will appear primarily on the *Benefits* page.) Employees also can browse the entire database of questions, sorted by category.

BEST PRACTICES

Sometimes teams learn their lessons the hard way and by doing so they come up with some valuable best practices that other teams can learn from. Here are a few from the URS team:

- **Email and intranet go hand-in-hand.** By tying the intranet closely to the company's email system, the team ensured that The Sourse is a daily presence for every employee.
- **Communicate as a team.** The team attributes at least part of its success to the quality and frequency of its communications. Since the launch of version 1, the Sourse Team has met weekly to discuss any issues, provide updates about ongoing projects, establish future priorities, and review user feedback. During each subsequent redesign and launch, the Sourse Team has met more frequently throughout the week and during regularly scheduled comprehensive all-hands meetings where the entire team meets face-to-face in either New York or Tampa. They also meet biweekly with the content managers in other geographic regions.
- **Use storyboards to focus your concept.** During the initial discussion and brainstorming phases of each of the redesigns, the team found that visualizing proposed ideas helped give direction to the discussion and debate. Their consultant, Tracy Beverly, guided this visualization process by keeping careful track of any ideas discussed and creating storyboards or rough visual representations. These storyboards were intended to be working documents, used to refine the concepts and evolve over time. They were very useful. They gave the team a visual basis for dialogue, allowing them to react to concrete details rather than abstract concepts. They also helped to clearly define new ideas, identify which concepts required additional research, and ensure that there was agreement on the conclusions reached.
- **Don't let resources get lost in transition.** Documenting changes can be critical. Each time the team moved from one version to the next, Beverly created an extensive spreadsheet that listed each and every application, page, or paragraph of information on the current version, and described where it would be found on the new version. This simple practice ensured that all employee resources would be available without interruption.
- **Deploy in phases.** With the first version of The Sourse, the team was especially eager to share the new site with the entire company and made the decision to launch it for all employees on one day. With the large number of users accessing the site at once, the networks in several locations became overwhelmed. That painful experience taught the team that it's better to deploy in phases. Since then, they have not only deployed every successive version of The Sourse in phases, but also used this same phased approach to introduce any new applications that they think will generate heavy user traffic.

- **Stay close to your users.** During the launch of Sourse v.3 and in the months following, the team paid close attention to feedback submitted via the homepage link and had Corporate Communications staff at all levels reading and responding to submissions. This allowed them to make immediate fixes; it also reassured users that they had support for the new technology and weren't just left alone to fend for themselves. The team still reviews feedback each week as part of regular Sourse team calls and they schedule regular meetings with the company's stakeholder groups (Training, Procurement, Accounting, and so on) to address their needs and ensure that The Sourse is evolving to better support their initiatives.
- **Stay close to your leaders.** With The Sourse, the intranet team has been fortunate to have support from the company's CEO and key executives from the very beginning. During his quarterly conference calls with all employees, it's not uncommon for the CEO to underscore the use of The Sourse as an important tool in employees' daily work life or to encourage them to use the site. In return, the team makes it a priority to ensure that The Sourse aligns with leadership's corporate goals and supports its initiatives.
- **Keep your stakeholders involved.** The team made the decision early on to reach out to stakeholders early in the design process and continue to keep them involved throughout each stage of the redesign. They keep stakeholders involved by meeting with them regularly to ensure the new design continues to meet their needs. At each phase of the redesign, the team involved literally hundreds of key executives, operations managers, and members of support departments to assess their requirements and solicit input. This not only provided valuable feedback to the group, but as an added benefit it helped facilitate buy-in because each group had ownership in the site's development.
- **Keep content fresh.** The Sourse team maintains a running editorial schedule to ensure that new articles are posted to the homepage each day. The articles are tagged so that they automatically appear on any related office or business line site, helping to keep their respective *What's New* sections from becoming stale or obsolete. The team also conducts periodic audits of each site section to ensure that all out-of-date information is removed.

RESULTS

Measuring an intranet redesign's success is often a tricky proposition. Relying on anecdotal measures or measures of increased user satisfaction is the route many teams take to judge whether or not a project is successful. If the users are happy, the site is a win. At URS, in addition to those types of measures, team members can also point to several operational improvements made possible by the enhanced functionality that the new site offers.

URS is benefiting from improvements in the following operational initiatives:

- **Automating performance reviews.** New functionality on The Sourse enables a new automated performance review process that can be conducted conveniently and securely online. All resources needed for the review process are populated in each employee's *My Favorites* section on the homepage.
- **Facilitating training.** A new *Training* dashboard gives employees an easy way to monitor their progress in completing training modules that all URS employees are required to take annually. From the dashboard, employees also can access the training system to complete any outstanding requirements.
- **Automating manual processes.** The *Pyramid Awards* site facilitates the management of a new, company-wide awards program entirely online. Employees in all three divisions of URS can access the site, where they can find complete program details, submit a nomination form, and monitor the progress of their submission. The site also facilitates the approval and judging processes.
- **Reducing paper, eliminating costs.** The Sourse is helping to eliminate costs due to paper distribution. As an example, HR has compiled all the information that a new hire needs to get started at URS and placed it on The Sourse. Previously, extensive orientation packets were created to give the new employee guidance on everything from completing timesheets, managing benefits, and using the *Policies & Procedures* manual, to booking travel, conducting an annual performance review, and even using The Sourse itself. Now, HR representatives simply show new hires where this information can be found on The Sourse, eliminating substantial labor and paper-distribution costs.
- **Automating forms.** The company has seen surprising savings resulting from the automation of forms. "When we launched a version of the *Authorization for Capital Expenditure* form that could be completed, submitted, and approved entirely online, one project manager calculated how much money he would save on processing that form alone," says Davis. "By his calculations, the cumulative labor costs associated with printing, completing, scanning, and mailing the form as often as he did could prove to be substantial. Add to that the expenses of overnight courier, the savings became quite significant."
- **Reducing resource expenditures through template reuse.** With the creation of the *Office Sites* template, the team has noticed an increasing number of offices developing a site on The Sourse, rather than using personnel and budgetary resources to develop sites on their own.
- **Improving communication.** Since the beginning of The Sourse, the company's CEO has been a proponent of using the homepage to communicate corporate-mandated or emergency information. With its use of photography and graphic elements, the completely revamped homepage has increased users' attention to such information when it's posted. The new graphical user interface keeps employees engaged and helps to clarify how posted information is relevant to their day-to-day work activities.

- **Reducing time spent "hunting" for information.** The addition of *URS Favorites/My Favorites* to the homepage also has decreased significantly the amount of time employees spend hunting for information or resources on The Sourse.

  Also, the searchable *Office Capabilities* database provides an overview of the services and technical capabilities available in each of the company's division offices. The database can be searched by city, state/territory, employee count, market area, and specific capability. Marketing and business development personnel use it to pursue work based on the capabilities of a specific office or region, or to highlight the expertise that can be shared at URS across borders.

Added Functionality

Another way to gauge a site's success is to take a look at the list of things users can now accomplish thanks to functionality provided by the redesign:

- Access *Most Frequently Used* resources from the homepage with one click
- Easily create a list of their *Favorites*—including external sites
- Forward news articles to their colleagues
- Access the *Health, Safety, and Environment* site without having to re-authenticate
- Change geographic perspective and view other regions' versions of The Sourse (if they have a legitimate business need to do so)
- Create a customized page for their local office
- Change the look and layout of their forums without help from the IT development group
- Subscribe to business line, forum, and office sites
- Use Google search to find usable results

Positive User Feedback

Positive user feedback is nearly guaranteed from an enhanced, well-executed intranet site. And the URS team has received its fair share. "We were pleased with our final product when we launched Sourse version 3," says Bain. "But we were still pleasantly surprised at the positive feedback that came in via the Feedback feature on the homepage. We continue to receive positive comments, both via Feedback and our Sourse surveys."

Here is a sampling of the user responses that typify the positive feedback the team has received since relaunching the site:

> *"I just wanted to note that I think the new Sourse format is significantly better than the previous and that the team responsible has done a fantastic job in making The Sourse more relevant to how we do business, making resources easier to find, and offering interesting business and human-interest articles. Overall just a great job! Thanks!"*

"What I'm looking for is usually so easy to access (especially all the links in the left column). I haven't found the need to set up personal favorites because everything is already there. I do like and use the defaults set up in My Favorites *(manager dashboard, my performance reviews, forms)."*

"Because of the way The Sourse has been designed, it is relatively easy to find what I'm looking for without having to add personalized links."

"The search function has improved dramatically. Thank you—it wasn't very useful before, but I just used it and was pleasantly surprised."

"Three minutes into the new Sourse and all I can say is SWEEEEET! The 'URS Favorites/My Favorites*' menu is awesome and fast!!! Nice work! Looking forward to exploring more, but at first blush you all done good."*

"You've done a terrific job with the new format that befits a worldwide company. After 18 years as an employee I feel that the company is getting younger and getting more sophisticated at the same time. Kudos to every one that had a hand in it."

Responding to Negative Feedback

Of course, not all user responses are positive, but knowing how to handle negative responses can be a very useful exercise in keeping users engaged and reassuring them that they are being heard. "One individual submitted feedback with the subject line, 'Stupid Corporate Idiots Who Screwed Up the Web Access,'" says Bain. "We found that by responding (in many cases via telephone) quickly and personally to all feedback, including negative comments like the one above, we were able to emphasize to our employees that their input is always appreciated, and that we were proactively working to address their concerns."

LESSONS LEARNED

The Sourse team shares some of the lessons learned from it intranet redesign:

- **Always design for the end users.** Because both groups that govern The Sourse are corporate departments, the team first approached the organization of content using a structure that mirrored the company's organizational structure. While this made perfect sense to the team, user research found that employees viewed the content very differently—they viewed it based on their perspective of the company and how the information related to them. This taught the team an important lesson: always remember for whom you are designing—the end users.
- **There is no such thing as too much user research.** Of the many new features of Sourse Version 3, the most popular are those that the team researched, prototyped, and tested exhaustively. As you seek input from a greater number of employees, the direction for development becomes clearer—and you can trust that that direction will result in a highly usable application.

- **Give the users what they want.** The *URS Favorites* section on the homepage proved the axiom, 'Give them what they want!' All the work and discussion that went into defining and designing the user treatment for this feature was worth it. Test results showed the vast majority of users preferred to go straight to their key applications using this list rather than navigating via the tab and other navigational elements.
- **There is no shortcut around evolution.** Many of the new features offered in version 3 build on previous incarnations. While expert review and consulting best practices will help to develop a highly usable intranet, good design is only effective if it takes into consideration 'the way we do things here.' Finding the balance between design and culture is a slow process and must evolve over time.

Bennett Jones LLP

Using the intranet:
Bennett Jones LLP is one of Canada's largest law firms and is recognized internationally, with offices in Calgary, Edmonton, Ottawa, Toronto, Dubai, and Beijing. The offices vary significantly in size (from six to almost 500 people) and are geographically dispersed.

Number of employees the intranet supports:
Approximately 925

Company locations:
Calgary, Edmonton, Ottawa, Toronto, Beijing, and Dubai

Locations where people use the intranet:
Alberta and Ontario, Canada; remotely from the US, UK, Europe, Middle East, China, and India

Design team:
The in-house core project team was selected to represent the interests of lawyers (30 practice groups) and staff (14 administrative departments), directed by a small steering committee of very senior managers who met weekly throughout the project. The team had 12 people in all.

Habañero Consulting Group was responsible for user experience and design (look and feel).

V51 Consulting Inc. was responsible for solution architecture and building the intranet (in SharePoint).

RBRO Solutions Inc. was responsible for integration between Interwoven Worksite (DMS) and the intranet.

Members:

In-house:
Adeniyi Adebayo, National Director, IT; Brian Bawden, National Director, KM; Stephen Bowman, Managing Partner, Toronto; Lorene Cowburn, Office Manager, Edmonton; Karyn Highet, Intranet Coordinator; Andrew Lewis, Team Lead, Systems Development; Kindra McNish, Project Manager/Analyst; Shelagh Mikulak, National Director, Information Resources/Libraries; Aldona Oleinikas, KM Coordinator; Duncan Quarrington, KM Lawyer; Jim Smith, Team Lead, Applications; and Siobhan Walsh, Chief Administrative Officer

Habañero:
Kurtis Beard, Interaction Designer; Jonathon Kay, Interaction Designer; Kathleen Moynahan, Senior UI Designer; Benedict Ng, Interaction Designer; Bryanne Philibert, Project Manager; and Ben Skelton, User Experience Lead and Senior Information Architect

V51:
Akiva Bernstein, Business Analyst and Information Architect; Frank Gasparovic, SharePoint Developer; Nicolas Munson, Trainer; Vincent Pollard, CSS Developer; Debbie Rothstein, Project Manager; Matt Stark, Technical Architect and Lead SharePoint Developer; and Jason Viera, Quality Assurance Lead

RBRO:
Gerrick Denton, Systems Consultant, and Howard Russell, Co-CEO, Professional Services

SUMMARY

When the Bennett Jones team set out to redesign the intranet, their goal was to achieve greater efficiency and a better work product for less money. They faced the daunting challenge of wrangling a law firm's knowledge capital and making it simple to find, use, and update for the firm's 925 employees, including more than 400 legal professionals. They also wanted the tool to help build a cohesive culture across the firm's offices. Finally, they wanted to be ahead of the curve in technology use to help attract and retain the best legal talent available.

The team recognized that the site's main emphasis had to be knowledge sharing and management. In this busy law firm, the people with the most expertise had varying technical skills and little time to learn new tools. The designers thus knew they had to make knowledge sharing a routine activity, rather than an extra and complicated task.

User experience was key to the site's success. To that end, they worked with a user experience design company to identify requirements and discover cultural differences among the offices.

The homepage features *News and Announcements*, including *From the desk of* announcements from key senior executives, such as Hugh L. MacKinnon, the firm's

Chairman and CEO. The homepage provides firm news, as well as press mentions. Local news is followed by events around the firm. Employees are celebrated through the *New Arrivals* and *Anniversaries* sections. *Anniversaries* lists the honored employees, their departments, and how long they've worked at the firm.

The side of the page includes news headlines, filtered for relevance through a news aggregator, and a fact of the day, along with a poll and list of popular links. The page also features recent firm photos, and invites users to share their own photographs.

The straightforward homepage nicely summarizes new information and emphasizes the firm's recognition of its employees as great assets.

The page provides clear navigational choices. Additional links appear at the top of the page, allowing users to access tools including a personalized list of links, forms, and templates, Web links, and firm blogs.

The *KSN* tab, next to *News + Announcements*, displays the latest posting from *The Knowledge Sharing News*, the only firm-wide blog in BenNet, as well as a continuously updated listing of content added to *Knowledge Bank* in the last seven days.

BenNet

Welcome Brian Bawden | Home | My Stuff | Forms + Templates | Web Links | Blogs

MY SOFTWARE | PEOPLE FINDER | Ask Ben | Enter search term | GO | Knowledge Bank Search

Knowledge Bank | Our Teams | How Do I...? | CLE + Training | Policies + Benefits | Our Offices

NEWS + ANNOUNCEMENTS | KSN

From the desk of *Hugh*...

John Weekes

We are delighted to announce that John Weekes has has joined the firm as a Senior Business Advisor in our Ottawa office. Prior to joining Bennett Jones...

Continue Reading...

FIRM NEWS

- Apr 15, 10 — LiveWell WorkWell May/June 2010
- Apr 08, 10 — New Firm Publication - Caveat Counsel: Care and Caution in the Boardroom
- Apr 07, 10 — John Weekes

See All Firm News

BENNETT JONES IN THE NEWS

- Apr 15, 10 — Bennett Jones LLP in the News

See All BJ in the News

TORONTO OFFICE NEWS

- Apr 15, 10 — 4th Annual Sporting Life 10K Law Challenge - Join Team Bennett Jones ...
- Apr 14, 10 — Spring Programs at the Adelaide Club
- Apr 12, 10 — The Unveiling of the new Torontopath.com Website - Prizes Galore!

See All Office News

FIRM EVENTS

The week of April 12 « Previous week | Next week »

- Apr 13, 10 — Partners Expenses Cutoff for April 15th Cheques
- Apr 14, 10 — ELOMA - Annual Support Staff Seminar
- Apr 15, 10 — Telus Open House

See All Firm Events

NEW ARRIVALS IN TORONTO

no new arrivals

See New Arrivals In All Offices

ANNIVERSARIES

Donna	Corporate/Staff (25 years)
Deanne	Corporate Services/Staff (7 years)
Kelly	Litigation/Staff (7 years)
Mona	Corporate/Staff (5 years)
Jennifer	Litigation/Staff (5 years)
Jason	Litigation/Legal Professionals (5 years)
Kim	Accounting/Staff (2 years)
Lorraine	Corporate/Staff (1 years)
Eileen	Accounting/Staff (1 years)
Linda	Staff (1 years)
Knox	Corporate/Legal Professionals (1 years)

Thursday, April 15, 2010 — Toronto — 16°C, Mostly Cloudy

HEADLINES

- GE Capital the key to GE's quarter
- Google profit bounces back
- Credit Suisse Hires Proxy-Fight Expert
- Tulane: S.E.C. Official Urges Caution on Regulation
- Google beats Street with 23% jump in Q1 revenue
- Icahn ups offer for Lions Gate

NEW CANADIAN SMALL CENT COIN IS RELEASED APRIL 15, 1920

THIS WEEK'S POLL

Have you found the Blogs on BenNet useful?

- Not sure how to use them
- I have read some but never submitted anything
- I love blogs
- I will provide my feedback via the FeedBack box on BenNet

You already voted for this poll.

Results and Past Polls

POPULAR LINKS

http://www.bennettjones.com

Research Sites: Select...

News Sources: Select...

Forms: Select...

See More Links

FIRM PHOTOS

See All Photos | Share Your Photos

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Pictured: The homepage emphasizes news and employee information.

The site had to provide immediate access to essential information related to the day-to-day work of the firm. One key to success was empowering lawyers to find precedents as quickly as possible, on their own. To this end, the site's core is the *Knowledge Bank*, a repository for legal documents, research materials, clauses, and resources. Subject matter experts select the information and classify it by type, transaction, area of law, jurisdiction, and other parameters.

The problem with many document repositories is that, as they grow, they become too difficult to use. Users often must navigate folder structures that make finding the right resources difficult. Bennett Jones' team members realized this, and knew they had to build a powerful and simple tool to ensure that employees could quickly find the right precedents.

They started with AJAX-enabled auto-fill to help guide users in the right direction. With impatient users and more than 650 document types — as well as other robust categories — the designers realized that auto-filling suggestions could help expose category names and simplify user selections.

Users start a *Knowledge Bank* search by entering a search query under *Document Type*, *Transaction Type*, or *Area of Law*. As a user types, matches related to the entry appear. In this way, users don't have to think to look under "statutory compulsory acquisition." Instead, the option appears when users type "comp."

Users can also browse by category. All categories are listed on the page, followed by the number of available resources in each.

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WHERE AM I? Home › Knowledge Bank › Precedents

KNOWLEDGE BANK
- PRECEDENTS
- RESEARCH
- CLAUSES
- FIRM PUBLICATIONS
- BenNet Books

Precedents

Browse the Precedent Bank

To find Precedents most relevant to your needs, explore the taxonomies below, or simply begin typing in the box of your choice, under Document Type, Transaction Type or Area of Law, and all of the possibilities that match what you are typing will appear. Select one to produce a set of results that you can quickly narrow down to a handful, by applying filters and/or searching within results for keywords.

Share your work!

Written a great clause lately? Submit your new content to the Knowledge Bank to share!

SHARE

RECENTLY ADDED: 06 Last 7 Days | 41 Last 30 Days | TOTAL: 2351

DOCUMENT TYPE

- Acknowledgement / Receipt (45)
- Affidavit / Declaration (68)
- Agenda / List / Questionnaire (123)
- Agreement / Undertaking (822)
- Application / Petition (30)
- By-Law / Resolution / Articles (108)
- Certificate / Coupon (109)
- Circular / Prospectus / AIF (34)
- Consent / Permit (26)
- Deed / Indenture (21)
- Direction / Authorization (36)
- Letter (293)
- Memorandum (58)
- Minutes (3)
- Note / Bond / Debenture (33)
- Notice / Invitation (140)
- Offer / Term Sheet (27)
- Opinion / Advice (74)
- Order / Ruling (124)
- Plan / Proposal (36)
- Power / Appointment (7)
- Proxy / Ballot / Nomination (2)
- Release / Discharge / Waiver (35)
- Request / Demand / Requisition (20)
- Resignation / Cancellation / Revocation (6)
- Statement / Filing (177)
- Terms / Conditions / Rules (41)
- Will / Codicil (1)

TRANSACTION TYPE

comp

- Business Practices / **Comp**liance Programs (6) *Governance / Management*
- **Comp**ensation / Benefits (54) *Employment / Benefits*
- **Comp**laint / Prosecution (1) *Proceedings / Hearings / Inquiries*
- Environmental **Comp**liance (14) *Environmental / Land Use*
- Statutory **Comp**ulsory Acquisition (10) *Mergers / Acquisitions / Reorganizations*

- Privacy (48)
- Infrastructure / Privatization (1)
- Insolvency / Debt Restructuring (308)
- Manufacturing / Development (125)
- Marketing / Distribution (48)
- Mergers / Acquisitions / Reorganizations (628)
- Organizations / Entities (127)
- Outsourcing / Consulting (20)
- Proceedings / Hearings / Inquiries (97)
- Real Estate / Land Development (159)
- Regulated Products / Regulated Activities (1)
- Trade / Foreign Investment (9)

AREA OF LAW

- ernative Dispute Resolution (2)
- nkruptcy / Insolvency (375)
- adcasting (1)
- mate Change / Emissions (34)
- mmercial Transactions (538)
- mpetition / Antitrust (4)
- nstruction (14)
- rporate Governance (97)
- ectricity Generation / Transmission (20)
- Employment / Labour (124)
- Environmental (60)
- Financial Services / Banking (166)
- First Nations / Aboriginal (0)
- Foreign Ownership / Investment (9)
- Forestry / Forest Products (0)
- Franchising (6)
- Infrastructure / Projects (0)
- Insurance (1)
- Intellectual Property (151)
- International / Cross-Border (60)
- Landlord / Tenant (23)
- Litigation (233)
- Maritime / Law of the Sea (1)
- Media + Entertainment (3)
- Medical Malpractice (0)
- Mergers + Acquisitions (530)
- Mining / Mineral Extraction (15)
- Oil + Gas (314)
- Pensions + Benefits (63)
- Practice Management (4)
- Privacy (4)
- Private Equity / Venture Capital (94)
- Professional Responsibility / Ethics (6)
- Public Policy (1)
- Real Estate (161)
- Regulated Industries / Products (15)
- Renewable / Alternative Energy (2)
- Securities + Public Markets (438)
- Structured Finance (0)
- Taxation (55)
- Technology + eCommerce (7)
- Telecommunications (51)
- Trade Regulation (9)
- Wills / Estates / Trusts (1)

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Pictured: AJAX-enabled auto-fill helps employees quickly find the category they need from the *Precedents* search page.

Once the site returns initial results, a faceted classification does the rest. Like those often-used on e-commerce sites, the system lets users quickly reduce hundreds of results and locate the right documents in two or three clicks. Although team members worried that users might have trouble navigating the accordion facet structure, they've been surprised by its success. The tool has proven quite powerful — and quite popular as well. Users can also full-text search the results if using facets fails to identify the appropriate resource.

Results are returned as information "snapshots" that summarize key information, including the descriptive document name, file type, classification, date, and summary.

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Welcome Sean Pitt | Home | My Stuff | Forms + Templates | Web Links | Blogs | FAQ

MY SOFTWARE | PEOPLE FINDER | Ask Ben | Enter search term | Knowledge Bank Search

Knowledge Bank | Our Teams | How Do I...? | CLE + Training | Policies + Benefits | Our Offices

WHERE AM I? Home › Knowledge Bank › Precedents › Results

NARROW RESULTS BY:

- DOCUMENT TYPE
  - Agreement / Undertaking
- TRANSACTION TYPE
- AREA OF LAW
  - Alternative Dispute Resolution (1)
  - Bankruptcy / Insolvency (74)
  - Climate Change / Emissions (27)
  - Commercial Transactions (229)
  - Competition / Antitrust (1)
  - Construction (4)
  - Corporate Governance (18)
  - Electricity Generation / Transmission (21)
  - Employment / Labour (50)
  - Environmental (19)
  - Financial Services / Banking (82)
  - Franchising (4)
  - Insurance (1)
  - Intellectual Property (21)
  - International / Cross-Border (25)
  - Landlord / Tenant (19)
  - Litigation (7)
  - Marine / Maritime (1)
  - Media + Entertainment (2)
  - Mergers + Acquisitions (185)
  - Mining / Mineral Extraction (6)
  - Oil + Gas (217)
  - Pensions + Benefits (13)
  - Private Equity / Venture Capital (35)
  - Real Estate (67)
  - Regulated Industries / Products (5)
  - Renewable / Alternative Energy (2)
  - Securities + Public Markets (98)
  - Taxation (24)
  - Technology + eCommerce (2)
  - Telecommunications (26)
  - Trade Regulation (2)
- JURISDICTION
- EXAMPLE / MODEL / COLLECTION
- TRIBUNAL TYPE
- SECURITY TYPE

Results « Start Over

846 RESULTS | Search within results | GO | Sort By Rank

1 2 3 4 5 6 7 Next » | Results per page 10

Lease Agreement – Net Office Lease – Annotated
Jurisdictions | Internal | Example | June 10, 2010 | More Info
Describes and explains terms and conditions of net office lease

Lease Agreement – Offer to Lease – Generic
Jurisdictions | Internal | Example | June 09, 2010 | More Info
Governs terms and conditions of offer to lease premises for use as doctor's office

Agreement of Purchase and Sale – Vacant Land – Generic
Jurisdictions | Internal | Example | June 09, 2010 | More Info
Provides purchaser friendly terms and conditions for purchase and sale of vacant parcel of land

Ethanol Sales Contract – Energy –
Jurisdictions | Internal | Example | April 23, 2010 | More Info
Sets out terms and conditions for purchase, delivery and transportation of denatured ethanol

Supplemental Agreement – Retirement Income –
Jurisdictions | Internal | Example | March 31, 2010 | More Info
Provides for supplemental pension benefits for CEO

Services Agreement – Pension Administration –
Jurisdictions | External | Example | March 31, 2010 | More Info
Sets out terms and conditions for provision of third party benefits administration, incorporating Financial Services Authority's Terms of Business (UK)

Administration Agreement – Employee Incentive Plan –
Jurisdictions | Internal | Example | March 31, 2010 | More Info
Details duties and obligations of administrator, remuneration and termination of agreement

Pre-Acquisition Agreement – Take-Over Bid –
Jurisdictions | Internal | Example | March 02, 2010 | More Info
Prospective buyer commits to make formal bid on agreed terms, and target board commits to recommend that its shareholders accept bid, subject to fiduciary out and break fee

Indemnification Agreement – Directors & Officers Liability – Generic
Jurisdictions | Internal | Model | January 13, 2010 | More Info
Provides for corporation to indemnify individual serving as director and/or officer against liabilities arising out of service to, or activities on behalf of, corporation

Share Purchase Agreement – Private Target | Single Vendor/Purchaser – BJ Model
Jurisdictions | Internal | Model | January 08, 2010 | More Info
Provides for sale of shares of private corporation with multiple subsidiaries by a single vendor for cash

1 2 3 4 5 6 7 Next » | Results per page 10

SEARCH TIPS

- **Narrow your search** by selecting options in the left column.
- **Search within results** to narrow your search ever further.
- **Look for helpful icons** that highlight the best resources.

TOOLS

- Email this Page
- Print this Page

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Pictured: Faceted search helps employees quickly find the right documents. An accordion structure on the side of the page lets users filter by information type.

Information pages about each resource provide further detail, including a full description, context, and any warnings associated with use of the document or information. Related documents are shown as well.

Employees can attach a comment to any resource, making it easy to report something as simple as a typographical error or as significant as information about new legislation. The *Add Comment* button attaches the comment to that resource automatically. Knowledge Management (KM) team members review all added comments in case they need to fix a piece of information or respond to a comment.

After some consideration, the team decided to allow anonymous comments. While users are always identified on the back-end, the team lets users publish comments without displaying their names. The team was concerned that more junior employees might be reluctant to comment on an item posted by someone more senior at the firm. Indeed, in practice, the team has seen very good comments by junior people in the firm, which were submitted with the name withheld, so they're happy with their decision.

Another handy piece of information on the page is endorsements. These endorsements arrive via other site tools that let users create personal *My Stuff* pages and let groups create team-specific *Knowledge Bank Favorites* lists.

Anytime a group or individual saves a piece of content to their list, the user or group's name is associated with that piece of information. This acts as a "peer endorsement" of the resource, working under the assumption that anyone bookmarking a resource finds that resource valuable. This information is shown with the resource in the *Knowledge Bank*, letting users quickly assess the document's "pedigree" — who wrote it, who submitted it, and who likes it.

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WHERE AM I? Home › Knowledge Bank › Precedents › Direction to Depositary – Compulsory Acquisition – BJ Model

Direction to Depositary – Compulsory Acquisition – BJ Model

« Back to Results | OPEN DOCUMENT

Description	Target corporation authorizes and directs Depositary to disburse to dissenting offerees, as payment in full for remaining shares not tendered to successful take-over bid, proceeds provided to Depositary by offeror, in accordance with *CBCA* Section 206(8)
Context	Fourth in sequence of five separate documents needed to implement compulsory acquisition of shares from dissenting offerees pursuant to *Canada Business Corporations Act* section 206, following successful take-over bid
Document Length	1 pages
Submitted by	Kathleen
Authors	Jeff
Created	Oct 01, 2008
Last Review Date	N/A
Status	Model
Curators	Kathleen
Source	Internal
Office	Toronto
BenNet #	0014563
DMS-KM #	79863 v 2
Original DMS #	5186796 v 1

Hide additional fields

COMMENTS | ADD COMMENT

You may post comments on this document. Use comments to suggest improvements to the document or to share insights or experience that may help others to use the document more effectively.

WARNING

This document was prepared for use in a cash take-over bid; appropriate modification will be required if take-over bid is not for cash only

SEE ALSO

Related Documents

- Notice of Acquisition – Compulsory Acquisition – BJ Model
- Notice of Adverse Claim – Compulsory Acquisition – BJ Model
- Direction to Offeror – Compulsory Acquisition – BJ Model
- Notice to Dissenting Offerees – Compulsory Acquisition – BJ Model

TOOLS

- Add to My Stuff
- Email this Page
- Print this Page
- Add a Comment

Give your feedback on BenNet

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ENDORSEMENTS

- Firm Precedent
- Group Precedent
  - Capital Markets + M&A

Included In My Stuff 14 people

Darcy, Olu, Colin, Paul, Alison, Brian, Claire, Trevor, Jennifer, Chris, Amanda, Tariq, Charlene, Jordan

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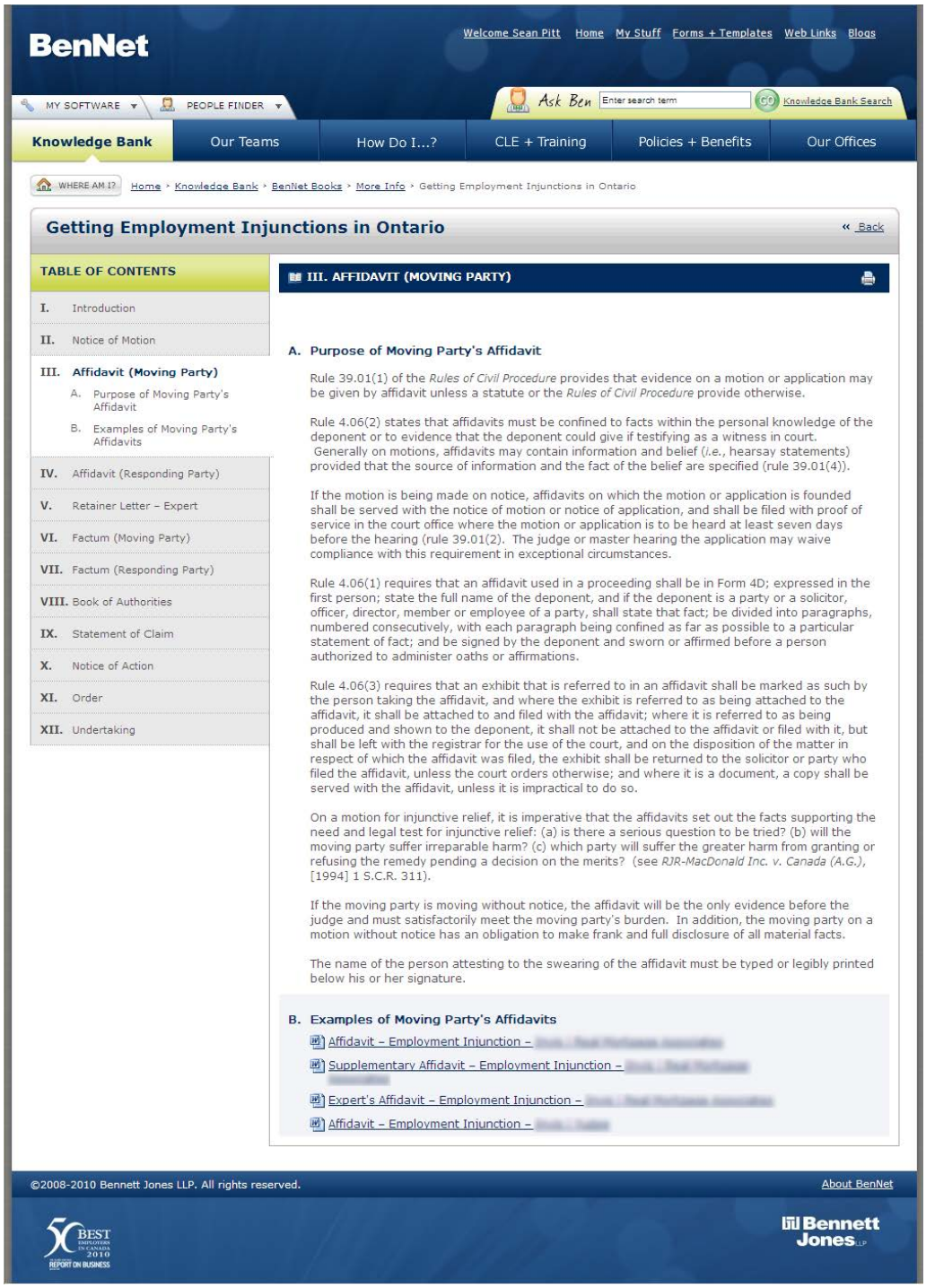
Pictured: Information about each resource in the *Knowledge Bank* is accompanied by comments about the resource, as well as a list of endorsements, indicating which individuals or groups in the firm found that resource useful enough to bookmark.

Team members realized that if it were difficult to share or create knowledge, users wouldn't do it. They therefore created tools to make it as simple as possible to add to the firm's *Knowledge Bank*. *BenNet Books*, for example, lets users assemble *Knowledge Bank* information into guides. To do this, they link resources together, like a book, and thus summarize information about complete topics or processes. Any user can assemble a guide, using a table of contents to link the list of resources.

Books are shared with all offices, and anyone can use or contribute to them, or provide suggestions for improvement.



Pictured: BenNet lets employees group related resources and documents together. This lets employees summarize processes and procedures, linking closely related documents to one another in a simple but powerful way.

The impressive attention to detail on the site doesn't end in the *Knowledge Bank*. The rest of the site is equally well considered. Like a traditional intranet, the rest of the site includes information about policies, procedures, and forms. Team members created three main content categories: *Policies*, *How Do I..?*, and *Forms + Templates*. They developed a 12-category system for organizing this information, using the same organizational structure in the three site areas. They've found that users are successful locating the information they need with little or no training in how to use these areas. The structure enables people to find content without having to know what department is responsible for the content. The common structure makes information easy to locate, but also makes it easy to maintain.

The *How Do I..?* section in particular has drawn praise from new hires and long-time employees for both its function and content. Creating these sections had the added benefit of helping the firm centralize and streamline data and processes, which had an end result of cutting down on paper costs.

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WHERE AM I? Home › How Do I...

How Do I...?

FILE + DOCUMENT MANAGEMENT
- Manage conflicts and secrets
- Open a file
- Deal with documents
- Close a File

See more

ACCOUNTING
- Pay vendors and expenses
- Bill clients
- Collect from clients
- Manage trusts

See more

TECHNOLOGY
- Contact the Help Desk
- Use software
- Request hardware
- Use phones and blackberries

See more

PRACTICE SUPPORT
- Corporate
- Litigation
- Students
- Respond to an audit letter

See more

RESEARCH
- Plan my research strategy
- Ask the Librarians for Help
- Get a QL or Westlaw Canada password
- Bill research costs to a file

See more

AFTER HOURS
- Arrange for access to the office
- Turn on the lights
- Request support from the Help Desk
- Reserve booked time with DocPro

See more

MEETINGS
- Reserve a boardroom
- Arrange for a videoconference
- Order catering
- Run a good meeting

See more

SAFETY, SECURITY + HEALTH
- Ensure the security of Bennett Jones
- Contact Security
- Deal with a medical emergency
- Respond to emergency evacuation

See more

OFFICE SERVICES
- Arrange for a courier
- Find out when mail is picked up
- Report a maintenance problem
- Request repairs to equipment or furniture

See more

MARKETING
- Request promotional gifts & tickets for clients
- Arrange for a client event
- Respond to a Request for Proposal (RFP)
- Use our logo

See more

TRAVEL
- Book a hotel room
- Book a flight
- Rent a car
- Get directions to the office

See more

CAREER + EMPLOYMENT
- Change my personal information
- Request a leave of absence
- Upgrade my knowledge and skills
- Report a sick day

See more

TOOLS
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Pictured: The *How Do I..?* section is set up in 12 easy-to-understand categories that let employees find the information they need without having to know what department is responsible for that information.

The team encourages employees to engage with their personal profiles on the site, and has been impressed with the level of participation. In their profiles, employees

can add their own language skills as well as professional associations. The team initially created a list of 50+ languages to choose from, and was impressed to see employees have added more than 40 different languages to their profiles. The team even received feedback from users who were touched to see their own languages included in the selection list, making the team's initial research in compiling a comprehensive language list worthwhile. In addition, the list of professional organizations has expanded from 66 at the time of the initial release to 116 now.

Further, junior lawyers and staff members can use the *PeopleFinder* to declare their availability by setting their status to green (able to take on more work), yellow (limited availability), or red (no spare capacity). This lets partners see who can take on more work. The system defaults to green (available) every Monday, encouraging junior employees to keep their status up to date; otherwise, they might be overwhelmed if they're already fully occupied, or miss out on an opportunity if they have free time. Availability status can be accessed and changed only by the individual (and his or her assistant).

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WHERE AM I? Home › People Finder › User Profile

Profile « Back

View Website Bio
Request change to website bio
Request change to BenNet profile

Associate, Toronto

PHONE
Office: 23 - 6079
Fax: 416.863.1716

EMAIL
Office: @bennettjones.com
Other:

LOCATION
32N

WORKS WITH
Elizabeth
Assistant
Office: 23 - 4858
@bennettjones.com

WORK AVAILABILITY
Able to Take On More Work

PRACTICE GROUPS
- Commercial Litigation *(Member)*

PROFESSIONAL MEMBERSHIPS
- Advocates Society
- Canadian Bar Association
- Ontario Bar Association

ROLES / RESPONSIBILITIES / SPECIAL SKILLS
- Notary

ADMITTED TO PRACTICE
- Ontario (2007)

EDUCATION
- LLB, Ottawa U , 2006 *(cum laude)*
- MA, Paterson School , 2006 *(cum laude)*
- BComm, McGill , 1998 *(with great distinction & dean's list)*

LANGUAGE SKILLS
- French (Speaks, Reads, Writes)
- German (Reads)
- Portuguese (Reads)
- Punjabi (Speaks)
- Spanish (Speaks, Reads, Writes)

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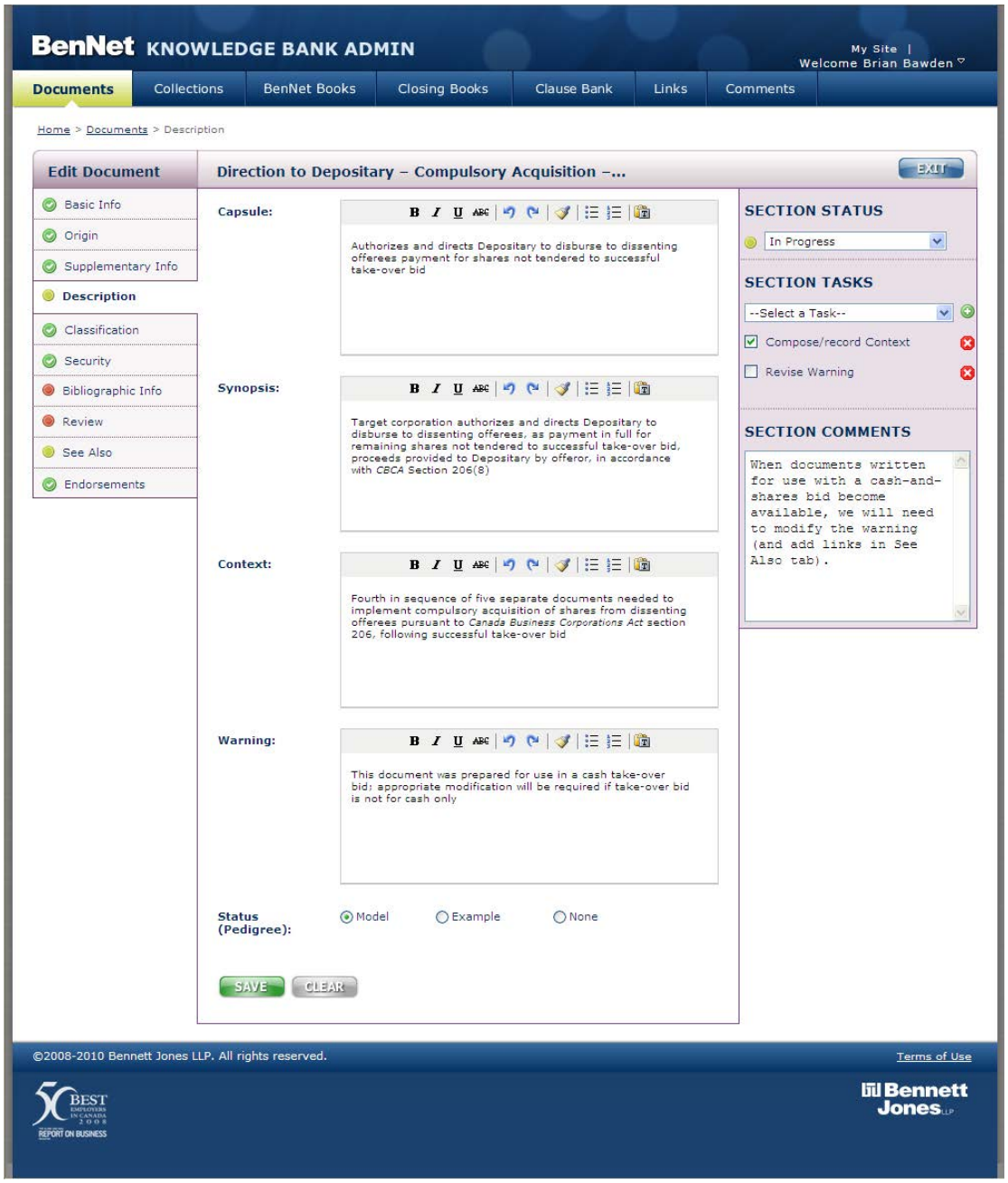
Pictured: *PeopleFinder* is more than an employee directory. Junior lawyers and staff members can set their availability using the tool, and all employees can add language skills and professional memberships to their profile information (and many have).

The team didn't forget the needs of the KM team, which is ultimately responsible for the resources on the site. When the team publishes information from the document management system to the *Knowledge Bank*, a database record is created, which allows the team to add metadata to classify documents according to the established taxonomies. Given the nature of the material, much of the categorization requires someone with a legal background. To this end, the system accommodates records that need multiple administrators.

The administration view's three panels show the *Edit* section on the left, data in the middle, and completion status and a list of tasks and comments on the right. This structure allows administrators to leave comments or tasks for the next administrator directly in the interface.



Pictured: The Knowledge Management team's administration tool allows multiple administrators to work on reviewing or updating information about a single document or resource. Administrators can leave notes or a to-do list of tasks that need to be completed.

The team built — through strong planning, user research, and smart, thoughtful design — not just a new intranet, but also a mission-critical work tool.

BACKGROUND

Bennett Jones built the predecessor to BenNet, the firm's first intranet, in 2000. Although the firm desired robust functionality, it had hit a wall with its current technology platform.

"In the mid-2000s, we found ourselves in a situation where we wanted to add new and more up-to-date functionality to make the intranet more interactive, but were unable to do so because of the limitations of the platform," says Brian Bawden, National Director, KM. In fact, by about 2005, the licensor of the firm's existing software stopped supporting the platform. With this as motivation, the firm began seeking alternative solutions.

"At first we directed our attention primarily at prefabricated platforms ("intranet-in-a-box")," says Bawden. "However, after carefully assessing two such solutions, we decided that we would instead go with a custom solution, designed from the ground up to fit our firm and the way we do things, rather than acquire a prefab platform and try to fit the firm into the software."

Choosing "build' over "buy" was especially important for serving the firm's key revenue producers: attorneys. This approach was much more likely to give them ready access to the resources they need to properly service clients. And perhaps just as important, by designing and coding a custom platform, the firm was assured more control over the platform in the future. By deciding to build their own platform the team would be able to expand and improve the platform incrementally over time with no restrictions on features of functionality.

The platform on which they built the new intranet was based primarily on SharePoint technology, a choice guided by two critical data points.

"Firstly," says Bawden, "SharePoint is not likely to disappear any time soon, and secondly, as a widely-used Microsoft product, there will be a significant developer community for the foreseeable future."

The resulting BenNet platform was a far cry from the 10-year-old predecessor it replaced.

TIMELINE

INTRANET TIMELINE	
Milestone Date	**Milestone Description**
Pre-2000	Pandell, the organization's first intranet implementation
2000–2010	BenNet (1.0)
January 2008	Most recent redesign begins
February 2010	BenNet (2.0) launches simultaneously in all four firm offices

INTRANET TEAM

Pictured: The BenNet team: (top row, left to right) Shelagh Mikulak, Brian Bawden, and Adeniyi Adebayo of Bennett Jones; (row two, left to right) Kathleen Moynahan, Ben Skelton, and Bryanne Philibert of Habañero Consulting; (row three, left to right) Akiva Bernstein and Matt Stark of V51 Consulting; (bottom row, left to right) Gerrick Denton and Howard Russell of RBRO.

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GOVERNANCE

Ownership

Ownership for BenNet lies with the firm's Chief Administrative Officer.

Two regional Intranet Coordinators, each responsible for two of the firm's four offices, manage BenNet's administrative modules on a day-to-day basis.

The KM team manages BenNet's KM modules, including the *Knowledge Bank* and practice group home pages. Each lawyer on the KM Team (currently there are three) has liaison responsibility for specific practice groups.

Bawden says the division of responsibility seems to work well for the firm.

BENNET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Steering Committee	• Provide overall governance and direction • Responsible for future development and enhancement
Change Advisory Team	• Review, assess, and prioritize proposed bug fixes and enhancements • Report to Steering Committee
IT Department	• Provide internal project management • Coordinate with external developers • Oversee deployments of bug fixes and enhancements • In process of assuming greater development role from external developers
Admin Team	• Provide oversight of admin content and admin department pages
Content Owners (Admin)	• Update their sections and ensure consistency • Delegate some updates and changes to other members of the team/department
KM Team	• Provide oversight of KM content and practice group home pages
Practice Group Coordinators	• Work with KM Team to facilitate practice group's use of BenNet functionality
Curators (Practicing lawyers)	• Keep one or more Knowledge Bank resources current

USERS

Everyone in the firm uses BenNet. This includes approximately 925 staff members, of which more than 400 are legal professionals. These users can be divided into the following groups:

- **Legal professionals:** Provide legal services to clients of the firm. Includes lawyers (partners, associates, and counsel), patent and trademark agents, paralegals and law clerks, articling students (graduate lawyers serving what is basically an apprenticeship), and summer students (students who have completed a year or more of their three-year law degree)
- **Managers:** Manage firm's various administrative departments, including Systems, Accounting, HR, and Marketing

- **Assistants:** Provide secretarial and administrative services to legal professionals and managers
- **Support Staff:** Work in the various administrative departments

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
Default Status	BenNet is set as each user's home page. Users can reset their home pages to something else, but the BenNet setting is persistent; when they log in again, the home page reverts to BenNet.
Remote Access	Users can access BenNet remotely using Citrix (secure login). This is an important feature as lawyers and senior managers frequently work from home — especially in the evening and on weekends, and when they travel.

DESIGN PROCESS AND USABILITY WORK

Project Goals

To understand the Bennett Jones intranet's evolution, it's important to understand the overarching goals that guided the project. These included:

- Foster the creation of a cohesive culture across all offices of the firm. This was especially critical because the firm had seen considerable growth, especially in its Toronto office, which had grown from 80 to 350 staff members since 2002.
- Assume a leadership position in technology use in the practice and business of law. This goal was aimed at meeting imperatives that firm leaders felt were most meaningful to its clients: responsiveness in the delivery of truly excellent advice and work product, coupled with greater efficiency and cost-effectiveness.
- Capture and preserve the firm's knowledge capital.
- Attract (and keep) the best and brightest lawyers.
- Compete with other law firms.
- Replace an existing intranet that no longer met the expectations of the firm and its personnel.

A Custom Approach

Prior to the redesign project the firm reviewed at least two off-the-shelf intranets, generically designed for law firms. The team quickly decided to design a custom intranet to fit the organization's specific needs rather than force the firm to fit into a prefabricated intranet product. So, the new BenNet was designed from the ground up to meet the firm's requirements.

It was built in SharePoint 2007 and integrated with several databases (including WorkSite, a third-party document management system). The firm used three outside

developers (described in more detail below) to assist with the effort and split the project into three phases.

"Phase One was ambitious," says Bawden, "in that we insisted upon including a number of interactive features designed to emphasize knowledge sharing and encourage broad participation from the outset."

Unfortunately, in law firms — as in other organizations —considerable activity and effort are often expended to aggregate various knowledge resources into repositories, but once that is done, the repositories often lie fallow.

"Knowledge, however, is a wasting asset," says Bawden. "Without the means to keep those repositories current, they quickly become what one expert has dubbed 'knowledge landfill.' Our mantra was that knowledge sharing and use of BenNet needed to become 'part of the culture, part of the routine' and those interactive features were an essential part of making that happen."

With that in mind, the team spent a fair amount of time in requirements gathering.

"Our greatest challenge was controlling the flow of great ideas," says Bawden, "which can of course lead to 'scope creep' and delay of launch. It's always important to remember, as Voltaire said, 'Perfect is the enemy of good.'"

Partnering with Outside Agencies

The firm partnered with a few outside agencies to augment its internal team's expertise. Each agency was chosen to fulfill a specific project need and worked closely with the internal Bennett Jones team to ensure adherence to the project vision.

"We recognized the complexity of the project from the outset and each agency had its primary role," says Bawden. "We started almost simultaneously with V51 and RBRO, and engaged Habañero within a few months of project inception following a search for a top-tier user experience design firm."

The partner agencies for the project included:

PARTNER AGENCIES / RESPONSIBILITIES	
Agency: Habañero Consulting Group	
Overview	Habañero Consulting provided user experience design (IA, user interface design, usability testing, and related requirements gathering) and intranet governance consulting.
User Experience Consulting	The project followed Habañero's recommended user-centered design process. The internal team liked the fact that there was user involvement throughout the process, and there was close collaboration among the agency, the internal team, and end users throughout the project. "The research was incredibly important as it allowed us to grasp the cultural differences between the different offices, and determine how the intranet could make the lives of people at Bennett Jones easier," says Ben Skelton, Partner and Practice Leader, Websites and eCommerce (Habañero Consulting Group). "I also really enjoyed our four-hour review sessions — we don't often have the opportunity to collaborate with a client so closely on the design, which was a really intense, yet satisfying experience."
Agency: V51 Consulting	
Overview	V51 provided technical consulting and SharePoint development (solution architecture, technical design, development, and quality assurance) and led the requirements gathering, IA, and functional specifications for knowledge management modules (for example, *Knowledge Bank* and practice group home pages).
SharePoint Consulting	V51 Consulting was engaged to define and document the KM module requirements as well as to develop the entire intranet in SharePoint. The internal team spent several months working very closely with V51 to analyze the firm's knowledge management requirements. Following these KM workshops, V51 developed detailed wireframes for all KM modules (more than 300 pages). Habañero Consulting worked closely with V51 by providing heuristic reviews and feedback that went into the final revisions of the KM wireframes. With the exception of one portal section (forms and templates), all of the technical SharePoint development was outsourced to V51.
Agency: RBRO Solutions	
Overview	RBRO Solutions provided integration between the iManage WorkSite Document Management System (DMS) and the portal's *Knowledge Bank* Admin module.
Document	RBRO's role was to work closely with the KM Team and the

Management System (DMS) Integration	Firm's IT group to build a framework that enabled both users and knowledge workers to quickly identify important documents and easily submit them for review and potential publication to BenNet. The RBRO Team worked closely with V51 to develop a Web service synchronization process between the iManage WorkSite DMS and the portal's *Knowledge Bank* Admin module. Key outcomes from this activity included: • **Seamless integrations** into the DMS that let users tag documents for submission. The process enforced the inclusion of the metadata required to make the documents relevant to other consumers. The system also ensured that users submitted only content that they were authorized to submit for inclusion in the portal experience. • **A governing process,** which ensured that ethically controlled documents from the live system were properly secured until vetted and cleaned by KM lawyers. • **A synchronization process** that communicated directly with the BenNet portal. • **Link technology** that let portal users obtain documents directly from the DMS via the portal. This let the firm maintain a usage history for WorkSite-based content via the DMS' core systems.

Usability Activities

With Habañero Consulting's assistance, the internal team conducted several research activities throughout the project. These included:

- **Beta testing of new design.** The intranet was first tested with a group of approximately 90 users in three of the four offices (all of the articling students and selected admin personnel) before it was released to the whole firm.
- **Card sorting.** Card sorts were conducted with various members of the firm to help determine the overall intranet structure. The card-sorting exercise also let the team explore the different content types and functionality that a user might expect to find under each label. Through this process, they were able to test and refine the proposed global navigation labels.

  The intranet team also completed an internal card-sorting exercise to help determine the detailed structure of the *How Do I…?*, *Policies + Benefits*, and *Forms + Templates* modules.
- **Checking server logs or usage stats.** The team conducted a review of available server logs and analyzed usage statistics to inform some of their design decisions.
- **Field studies (visiting and watching people in their workplace).** Team members conducted a series of one-on-one interviews with partners, associates, administrative staff, and articling students across the firm. The

interviews were conducted in Edmonton, Calgary, and Toronto in boardrooms and occasionally in individual offices or workstations.

- **Researching usability or design through books, reports, or other resources.** The team consulted the NN/g *Intranet Design Annual* and other published research to learn about best practices in intranet design. They also relied on the accumulated knowledge of the Habañero team, which specializes in intranet design.
- **Usability testing of design prototypes.** The team conducted usability testing in-person in Toronto; they chose that office because the card-sorting exercises had been done in Calgary.

Features for Work

The result of all of this user involvement and research is an array of features that closely match the work habits of the firm's employees. And, perhaps most importantly, the feature set helps employees enhance their interactions with other team members. The examples below illustrate different aspects of that collaborative work environment in action.

BenNet

Welcome Christina [redacted] Home My Stuff Forms + Templates Web Links Blogs FAQ

MY SOFTWARE PEOPLE FINDER Ask Ben Enter search term GO Knowledge Bank Search

Knowledge Bank | Our Teams | How Do I...? | CLE + Training | Policies + Benefits | Our Offices

WHERE AM I? Home > Our Teams > Practice Groups > International Trade > Blog > Blog Post

Policy Review – Foreign Investment in the Book Industry

« Back

Sep 20, 2010 at 01:15pm Posted By: Brian [redacted] Time EST

Quick recap on where this Policy Review stands:

As you no doubt recall, the Minister of Canadian Heritage and Official Languages issued a discussion paper on July 22, 2010, entitled Investing in the Future of Canadian Books (document **here**) as a kick-off for a review of the current policy (document **here**) that has been in place since 1992.

The initial phase solicited the views of stakeholders, referencing a questionnaire included in the discussion paper. The cut-off date for stakeholder submissions was September 18th.

Stakeholder submissions will be posted on the **web site** (apparently not until October), which will enable the second phase, in which both the general public and stakeholders can comment on submissions. Comments will be accepted until October 31.

According to the web site, "key stakeholders will be invited to take part in roundtables to be held in late 2010, and a ministerial decision on whether, and if so, how, to revise the policy is expected in 2011".

TOOLS

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COMMENTS

Milos [redacted]

Sep 21, 2010 at 11:14am

FYI, we recently assisted a client, [redacted], with regard to its submission in connection with this consultation. It is probably worth discussing briefly at a future Competition Group meeting.

Add Your Comment

Your comments will be displayed along with your name.

SUBMIT

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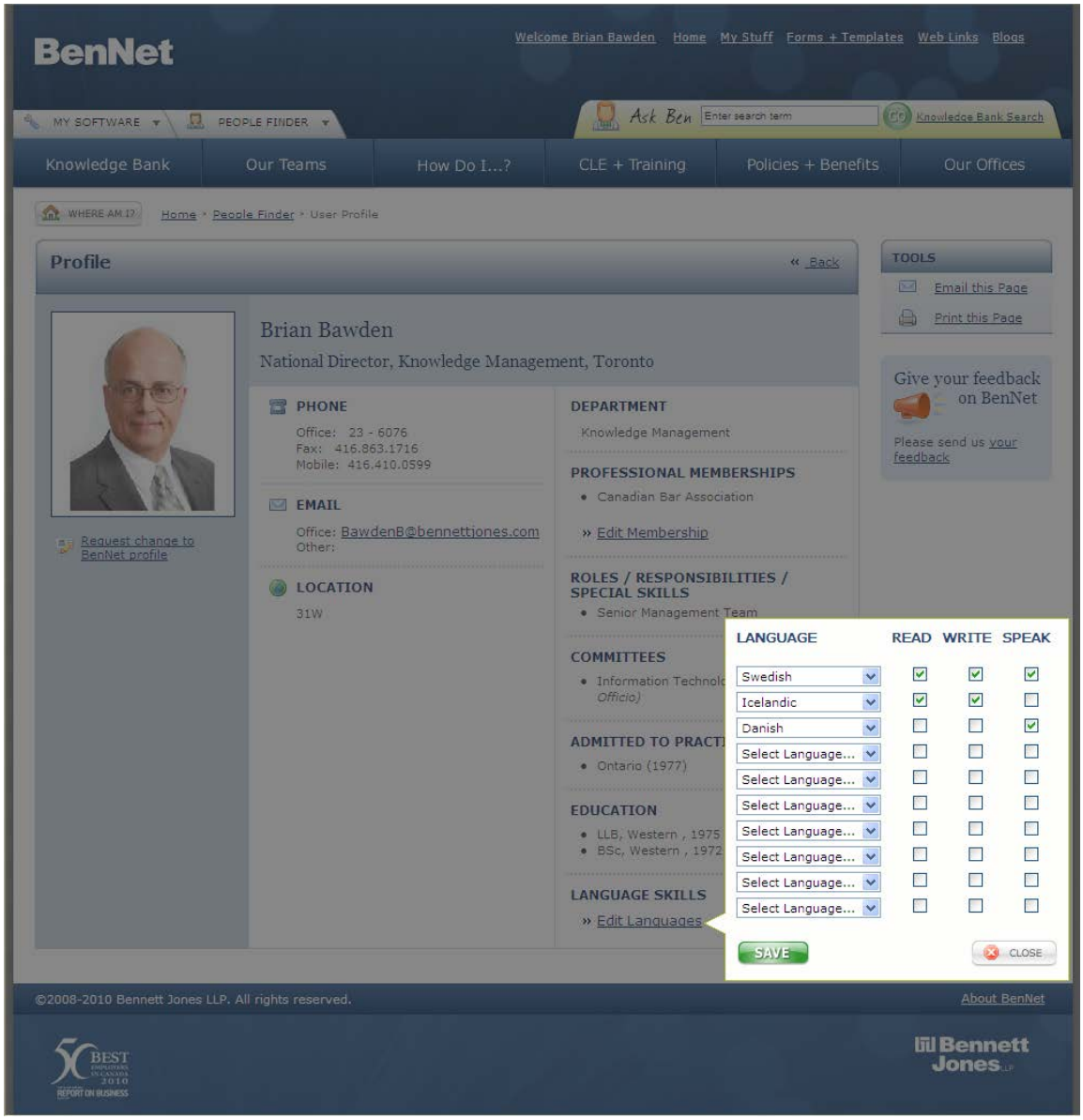
About BenNet

50 BEST EMPLOYERS IN CANADA 2010 REPORT ON BUSINESS

Bennett Jones LLP

Pictured: Blogging is completely open at the firm. Anyone can start a blog or read and comment on any other. With 45 already in play, the tool has become a primary vehicle for communication and knowledge sharing at the firm. The firm so strongly supports blogging that it encourages users to think of the blog as a substitute for email conversations intended for a large audience or community of practice. In a legal environment such as theirs, the Bennett Jones users engage in blog conversations around important cases or new legislation, disseminate best practices, review new precedents, and so on. It makes sense to put these discussions in blog format as blogs are fully searchable and entries never disappear. To accommodate users who are less technologically inclined, the team also provides simple widgets that let users post blog entries, subscribe to notifications, and cross-post to multiple blogs.

Pictured: The landing page for one of BenNet's 44 team workspaces — in this case, a lawyers' practice group. The left-hand navigation links to information relevant to the team workspace and supports collaboration among teams. This provides a simple means to cross-post meetings and events, projects and initiatives, and blog postings.



Pictured: The *PeopleFinder* feature lets employees easily indicate the languages they read, write, and speak. To date, 40 languages have been declared, making the firm more multicultural than the firm realized prior to having this snapshot. Firm members have even been "genuinely touched" to find their languages on the list, making the team glad they did their homework in compiling the master list, which offers more than 50 languages.

New Alberta Rules of Court and Forms 2010

« Back

The new Alberta Rules of Court and related Forms come into effect on November 1, 2010. This project will provide litigation lawyers with a guide to the new Rules and Forms, including forms prescribed by statute and other best-practice precedents.

CONTACT(S):

Sonya [redacted], Blair [redacted], Scott [redacted]

PARTICIPANTS:

Jonathan [redacted], Mary [redacted], Richard [redacted], Valentina [redacted], Dan [redacted], Russell [redacted], Mary [redacted], Michelle [redacted], Alexis [redacted], Coral [redacted], Wanda [redacted], Aldona [redacted], Duncan [redacted], Tariq [redacted], Steve [redacted], Shawna [redacted], Sonya [redacted], Blair [redacted], Scott [redacted]

Action	Date	Details
New Rules Seminar for Assistants – Part 2 of 2	Nov 22, 2010	Part 2 of internal seminar for litigation assistants, also presented on November 19 – see Meetings & Events for details
New Rules Seminar for Assistants – Part 2 of 2	Nov 19, 2010	Part 2 of internal seminar for litigation assistants, also presented on November 22 – see Meetings & Events for details
New Rules Seminar for Lawyers – Part 2 of 2	Nov 12, 2010	Internal CLE on new Rules of Court for Alberta litigators – see Meetings & Events for details
New Rules Take Effect	Nov 01, 2010	New Rules apply, and new Forms must be used, from and after Monday, November 1, 2010
New Rules Seminar for Assistants – Part 1 of 2	Oct 22, 2010	Internal seminar for litigation assistants, also presented on October 18 – see Meetings & Events for details
New Rules Seminar for Assistants – Part 1 of 2	Oct 18, 2010	Internal seminar for litigation assistants, also presented on October 22 – see Meetings & Events for details
New Rules Seminar for Lawyers – Part 1 of 2	Oct 12, 2010	Internal CLE on new Rules of Court for Alberta litigators – see Meetings & Events for details
Rules Published in Alberta Gazette	Aug 14, 2010	Last official step prior to coming into force – publication of Rules, in final form, in Alberta Gazette
Rules of Court issued as Regulation	Jul 19, 2010	By authority of Order in Council O.C. 256/2010, Rules of Court formally issued as Regulation A.R. 124/2010 under Judicature Act
Initial Meeting	Feb 01, 2010	Bennett Jones Rules of Court Project kick-off meeting and planning session

RELATED DOCUMENTS

- Rules of Court Project – ALRI Final Report No. 95 (PDF)
- Recent Amendments to Civil Enforcement Regulation (DOCX)

RELATED LINKS

- Alberta Law Reform Institute > Rules of Court Project
- LESA Rules of Court Blog

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About BenNet

50 BEST EMPLOYERS IN CANADA 2010 REPORT ON BUSINESS

Bennett Jones LLP

Pictured: Project details for a significant and impending change of court rules affecting the Firm's Alberta offices. The project was created in the *Projects & Initiatives* section of the Commercial Litigation practice group's homepage and cross-posted to the corresponding section on the homepages of other affected practice groups. Identifying the initiative in this way, for all to see, reassures those affected that the firm will be ready by the time the changes take effect, and allows interested parties to become involved.

HOW DO I...

File + Document Management

- Manage conflicts and secrets
- Open a file
- Deal with documents
- Close a File
- Use Referral Management
- Manage files sent to Storage

Accounting
Technology
Practice Support
Research
After Hours
Meetings
Safety, Security + Health
Office Services
Marketing
Travel
Career + Employment

Identify a legal or business conflict

« Back

There are different types of conflicts to consider before opening a file and accepting the retainer.

NATIONAL

There are different types of conflicts to consider before opening a file and accepting the retainer.

1. Loyalty

A lawyer and the Firm cannot act against the immediate interests of a current client without consent, even where the retainers are unrelated (*R. v. Neil*, Conflict Policy page 2).

Example: Acting on a collection matter against a company for which we have an open, although insignificant, patent file.

2. Confidential Information

A lawyer and the Firm cannot act against the interests of either a current or a former client where the lawyer or the Firm possesses relevant information obtained from a solicitor/client relationship, which could, in the new retainer, be used to the prejudice of the former client (*Martin v. Gray*, Conflicts Policy, page 3).

Examples: Corporate - Having acted for one party in developing a joint venture agreement many years previously, now acting for another party to that agreement with respect to a dispute arising under that agreement.

Litigation - Taking proceedings against an individual where we had, some years previously, acted on estate planning work for the individual such that we knew his assets and liabilities.

3. Business Conflict

A business conflict is one where, there being no loyalty conflict or confidential information conflict, the Firm, for business reasons, may not wish to accept the new retainer.

Examples: Accepting a small retainer which would preclude the Firm from accepting a larger retainer with respect to the same subject matter. This situation arises when the Firm is asked to act for an Independent Committee or a Financial Advisor where a major corporate sale is in process and where existing clients of the Firm may be candidates to acquire the business. Another example is bringing a lawsuit against the president of a corporate client.

For more information on identifying and resolving a business conflict, see Related Links.

Last updated on Monday, Dec. 07, 2009 at 11:49:19 AM

» Top of the Page

RELATED LINKS

- Conflicts Policy
- How do I...Identify and resolve a business conflict
- Conflicts Committee

TOOLS

Email this Page
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Questions?

Please contact:

Brad [redacted]
25 - 3194
[redacted]

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Pictured: An example of *How Do I…?* content — in this case, how to identify a legal or business conflict. In addition to the explanation in the central panel, a *Related Links* widget in the right-hand panel lets users quickly find related policies and other content. There's also a *Questions* widget that identifies the page's owner, to whom inquiries may be directed.

CONTENT AND CONTENT CONTRIBUTORS

Content management is split into two different processes to accommodate the two types of content housed in BenNet: KM content and administrative content. These content types are not only distinctly different, but are dealt with in distinctly different ways by two different teams.

KM Content and *Knowledge Bank*

"KM content" generally refers to the practice resources that the firm's legal professionals use every day to practice law and service clients. The KM team is responsible for gathering, processing, and publishing this content. Immediate access to the KM is considered mission-critical to the firm.

This content serves the particular needs of the legal professional, whatever those needs might be in the specific instance. And these resources are housed in a system of repositories in BenNet's *Knowledge Bank* module and include:

- **Precedents:** Models or examples of contracts, court documents, and other drafting resources used as starting points to document new transactions or proceedings.
- **Research:** Internal memoranda and other literature that discuss and analyze interesting or difficult points of law.
- **Clauses:** Model language for specific provisions of contracts or other legal documents.
- **Firm Publications**: Updates and alerts sent to clients, as well as articles, papers, and speeches by members of the firm.
- ***BenNet Books*:** Selected *Knowledge Bank* resources, from the *Precedents*, *Research*, *Clauses*, and *Firm Publications* repositories, assembled into a familiar book metaphor with optional added narrative. *Knowledge Bank* also includes direct access to the catalogue for the firm's four library collections of print and electronic resources.

KM Content Management

The primary contributors of *Knowledge Bank* content are the legal professionals themselves. To facilitate the contribution process, a *Share Your Work* widget is prominently displayed in various *Knowledge Bank* locations.

In response to suggestions from users, the team will be adding this widget to the BenNet home page as well. The *Share Your Work* widget creates a workflow that lets users submit content electronically and, at the same time, provides the KM Team with basic but essential information (metadata) about the content being submitted.

Parsing the Contributions

Not every contribution, however, is accepted for publication in *Knowledge Bank*. The *Knowledge Bank* was designed to be a "premium" content collection, meaning that

content is accepted only if a subject matter expert of suitable seniority vouches for it. This helps to ensure quality and consistency of new work product.

"To that end," says Bawden, "we track who submits the content and, before the content is published to the *Knowledge Bank*, a member of the KM team confirms that the submitter is a subject matter expert in regard to the content submitted. If not, the content is routed to a subject matter expert for review prior to publication."

"The process is not as onerous as it sounds," he says. "If a partner in the Employment practice group sends us an employment contract, we publish it to *Knowledge Bank*. If a Tax partner sends us an employment contract, we ask an Employment partner to review it before we publish it."

To acknowledge contributions and provide feedback to content contributors, the KM team advises contributors whether their contribution has been accepted for publication (and if not, why not). For contributions that are accepted, contributors are apprised as to how the document or clause has been described and classified so that they can correct any errors or suggest improvements.

The result is that the KM team must work closely with practice groups and individuals, on an ongoing basis, to generate contributions of premium content and assemble related content into *BenNet Books*.

Contributions that are accepted are copied into a separate WorkSite library that was created for this purpose, and from there are published to *Knowledge Bank* using a specially designed Web service (described below).

According to Bawden, using WorkSite offered many benefits, including that it let them track any circulation restrictions — or *firewalls* — both before and after publication to *Knowledge Bank*. Using WorkSite also let them create the unique *Find the Children* mechanism (described below).

In that separate library, called DMS-KM, default access is read-only. However, because WorkSite is accessible to all personnel, the team was able to institute a "curator" program, granting edit rights to specific documents to individuals who accept responsibility, for a specified period of time, to keep those documents up-to-date.

Due to certain WorkSite limitations, users might not be able to add all of the metadata or use all of the taxonomies selected by the team to classify the documents (type of transaction, jurisdiction, and so on). To address this, they carry out these activities at the SharePoint/*Knowledge Bank* level, using a module that the team developed called *Knowledge Bank Admin.*

DMS-KM and *Knowledge Bank Admin*

One of the firm's partner agencies, RBRO, was tasked with helping the Bennett Jones team develop a framework that would enable the firm's KM lawyers to quickly identify important documents and easily submit them for review and potential publication to BenNet. The RBRO Team worked closely with V51 to develop a Web service synchronization process between the iManage WorkSite DMS and the portal's *Knowledge Bank Admin* module. The key outcomes from this effort included:

- **Seamless integration** with the DMS that lets users tag documents for submission. The process also enforces inclusion of the metadata required to make the documents relevant to other consumers of the information. In

addition, the system ensures users submit only content that they're authorized to submit for inclusion on the portal.

- **A governing process** that ensures that ethically controlled documents are properly secured from the live site until they are vetted and sanitized, if necessary, by the firm's KM lawyers.
- **A synchronization process** that communicates directly with the BenNet portal.
- **Link technology** that lets portal users obtain documents directly from the DMS. With this, the firm can maintain a history of usage of WorkSite-based content via the DMS' core systems.

"The challenge of any great system," says Russell, "is to provide the average user with a simple method of submitting valuable content for the benefit of themselves and others." And this system accomplishes that in spades.

KM lawyers also have a critical function: to identify and label content that others create and augment the mix of valued assets.

"The way in which the DMS was integrated with *Knowledge Bank Admin* met that challenge," says Russell.

Once the DMS was integrated with the *Knowledge Bank Admin*, rolling it out to users was simple. The DMS was already front and center, on each user's desktop. Given their pre-existing comfort level with that aspect of the tool, even less technical users could take part in the knowledge-sharing process right away. This, in turn, led to wider adoption in less time.

"For example," says Bawden, "the success of the Curator program depended on the seamless integration achieved with the DMS."

Outside of the obvious knowledge-sharing benefits of the DMS and *Knowledge Bank* integration, the marriage of the two systems offered the firm other critical, yet ancillary benefits. These included helping the firm identify "children" and facilitating the Curator program. These functions are described below:

- ***Find the Children***

  In the ordinary course of the firm's business, precedents and other *Knowledge Bank* documents are copied and modified to create new documents, and the newly created documents, or *children*, are saved to WorkSite, the Firm's DMS.

  Taking advantage of complete integration between BenNet and the DMS, the *Find the Children* feature can, at any point in time, identify all of the DMS documents that have been created from precedents and other *Knowledge Bank* documents, based on unique codes embedded in each knowledge resource in *Knowledge Bank* resource.

  "This ground-breaking mechanism enables us to not only track actual usage of knowledge resources," says Bawden, "but to learn from it by comparing the children to the parent, and continuously feed improvements back into the system, achieving a critical goal that has long eluded KM practitioners."

- ***See Also***

  Similar to the comment-and-notification mechanism, each *Knowledge Bank* resource has a *See Also* section associated with it. This information is used to record links to related documents, blog postings, CLE programs, and/or other

background material that might be helpful in facilitating the document's proper use.

- **Curators and Periodic Review**

  Significant documents in *Knowledge Bank*, such as model precedents, might be assigned a "curator" who is responsible, for a specified time period, to keep that document up-to-date, taking into account such things as new legislation and court decisions. A curator might be an established expert or a junior lawyer who will develop greater expertise in the particular subject area as a result of being appointed a curator. The curator's identity is displayed with the document so that others know who has that responsibility. The curator will also be notified, along with the KM Team, of any comments posted on that document.

  When the curator or other senior lawyers undertake a review of a *Knowledge Bank* document, the date, reviewer names, and any relevant particulars are then displayed with the document.

Administrative Content

The other content type is referred to as administrative content: useful information about the firm, its offices, policies, programs, procedures (including necessary forms and workflow), benefits, history, news, and so on.

Contribution and management of administrative content is done on the basis of distributed responsibility, and each and every admin page has an owner. On most pages, the owner is identified with contact particulars.

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	**Hardware:** • ESX VSphere 4.0 Enterprise Edition Virtual Server with dedicated Intel Xeon CPU E7440 @ 2.4Ghz (2 processors) • 4 GB of RAM **O/S:** • Windows Server 2008 R2 Standard
Bug Tracking/Quality Assurance	• Bugzilla as the primary system to log both feature requests and bugs
Design Tools	• Adobe Fireworks
Site Building Tools	• MOSS 2007 Enterprise Edition
Content Management Tools	• MOSS 2007 Enterprise Edition • iManage WorkSite DMS (extended by RBRO to push content to SharePoint — see Part I for a description of DMS-KM and its relationship to Knowledge Bank Admin)
Search	• MOSS 2007 Enterprise Search
Other Functions	• At the suggestion of V51, the team used Basecamp, an online project management tool, to foster communication among teams, track issues, and share files

MOBILE

Mobile access is limited for BenNet. And, like many large organizations experimenting with mobile intranet access, Bennett Jones is taking a watch, learn, and implement-in-stages approach.

"For the first phase of BenNet, we made sure that our users could access the blogs and post comments on blog postings from their BlackBerrys," says Bawden. "But we did not create a mobile version of the site for the first phase. Our plan is to observe how our users are using the site and, based on that information, to add mobile capabilities in a later release for some key mobile scenarios."

SEARCH

The portal contains several search interfaces, including:

- A general portal search, known as *Ask Ben*, designed to help users find administrative content
- *Knowledge Bank* search tools that help lawyers locate legal knowledge sets
- A *PeopleFinder* search tool

Ask Ben

Ask Ben is configured using MOSS 2007 Enterprise Search. Currently, this is searching content only in SharePoint site collections. The team configured keywords and best bets to promote content that absolutely must be found. For users who still like to find KM content in *Ask Ben*, they provide one-click links to execute those searches in the *Knowledge Bank* search.

BenNet

Welcome Brian Bawden Home My Stuff Forms + Templates Web Links Blogs Site Actions

Welcome Brian Bawden

MY SOFTWARE PEOPLE FINDER Ask Ben Enter search term GO Knowledge Bank Search

Knowledge Bank | Our Teams | How Do I...? | CLE + Training | Policies + Benefits | Our Offices

WHERE AM I? Home › Ask Ben Search

Ask Ben for "BlackBerry"

Knowledge Bank
- » Search precedents for "BlackBerry"
- » Search research for "BlackBerry"
- » Search clauses for "BlackBerry"

1 2 3 4 5 6 Next » Results per page 10

Use Phones and Blackberries BEST BET
Home › How Do I... › Technology › Use phones and blackberries

Blackberry Usage and Security Policy BEST BET
Home › Policies + Benefits › Policies › Technology › Blackberry Usage and Security Policy

Calling Card Policy BEST BET
Home › Policies + Benefits › Policies › Technology › Calling Card Policy

Blackberry Contact and Plan Information BEST BET
Home › How Do I... › Technology › Use phones and blackberries › Request and use a Blackberry

Workflow Management Systems
Home › Our Teams › Leadership + Committees › Information Technology Committee › Projects

Crossing the Border with Laptops – Some Tips
Sep 07, 2009 at 04:45pm | Brian Bawden
Home › Our Teams › Administrative Departments › KSN - The Knowledge Sharing News › Blog

Travel Info
Home › Our Offices › EDMONTON

Travel Info
Home › Our Offices › TORONTO

Travel Info
Home › Our Offices › CALGARY

Travel Info
Home › Our Offices › OTTAWA

1 2 3 4 5 6 Next » Results per page 10

SEARCH TIPS
- **Ask Ben DOES NOT SEARCH Knowledge Bank, Weblinks or PeopleFinder**
- **Expand your search** by using a **comma** to indicate **OR**
- **Narrow your search** by entering two or more words; **a space = AND**
- **Exact phrases** are searched by using " "
- **Plurals** are NOT assumed

Give your feedback on BenNet

Please send us your feedback

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50 BEST EMPLOYERS IN CANADA 2010 REPORT ON BUSINESS

Bennett Jones LLP

Pictured: A search results page, including best bets, of an employee search for the term "Blackberry" using the *Ask Ben* search feature. *Ask Ben* is another example of the user-centric approach to finding intranet information. Search tips are prominently displayed, as are links to *Knowledge Bank* searches for the same topic.

Knowledge Bank Search

Unlike *Ask Ben*, the *Knowledge Bank* search is more customized to the organization's needs.

"*Knowledge Bank* search is much less out of the box," says Bawden. "The majority of content in *Knowledge Bank* is stored in document libraries with a fair bit of metadata including hierarchical taxonomies not fully supported by MOSS 2007."

When a user executes a keyword search in *Knowledge Bank*, the search is executed across multiple content types, using different search scopes for each content type and targeting different metadata depending on the type. Results are displayed either by date or relevance or some other criteria depending on the content type. Copies of documents from the enterprise DMS are also stored in SharePoint and indexed for search purposes.

"With *Knowledge Bank*, as indicated, we implemented faceted classification in combination with search," says Bawden. "Interestingly, the most efficient means of finding a precedent is to begin with faceted classification (for example, choose a type of agreement), and apply other filters as applicable, using full text search if needed only as a last resort."

Conversely, the most efficient means of finding an article, memo, or other research item or firm publication is to begin with full text search, using faceted classification only as a last resort. However, this approach is not the most obvious path, and team members know they need to work on this.

"We think we will need to adjust the interface to make this more obvious," he says.

BenNet

Welcome Brian Bawden | Home | My Stuff | Forms + Templates | Web Links | Blogs

MY SOFTWARE | PEOPLE FINDER | Ask Ben | Enter search term | GO | Knowledge Bank Search

Knowledge Bank | Our Teams | How Do I...? | CLE + Training | Policies + Benefits | Our Offices

WHERE AM I? Home › Knowledge Bank › Precedents › Results

NARROW RESULTS BY:

- DOCUMENT TYPE
  - Agreement / Undertaking
- TRANSACTION TYPE
  - Emissions Trading
- AREA OF LAW
- JURISDICTION
- EXAMPLE / MODEL / COLLECTION

Results

« Start Over

24 RESULTS

Search within results | GO | Sort By Rank

1 2 3 Next » Results per page 10

Agency ERPA – CERs from CDM – [illegible]

Jurisdictions | Internal | Example | October 03, 2008 | More Info

Agent purchases Certified Emission Reductions generated from Clean Development Mechanism project for prospective buyers, identities to be determined

Escrow Agreement – Closing Escrow – [illegible]

Jurisdictions | Internal | Example | September 10, 2008 | More Info

Bennett Jones to act as escrow agent for client. Sets out responsibilities and conditions that are required to act as agent.

Performance Guarantee – CER Purchase Transaction – [illegible]

Jurisdictions | Internal | Example | September 09, 2008 | More Info

Parent guarantees subsidiary's obligations to New Buyer in transaction in which subsidiary sells Certified Emissions Reductions to New Buyer

Harvesting Contract – Carbon Credits – [illegible]

Jurisdictions | Internal | Example | September 03, 2008 | More Info

Establishes system for creating carbon credits in anticipated compliance markets through use of Nitrogen Tire Injection Program

Emissions Reduction Purchase Agreement – VER Offsets – [illegible]

Jurisdictions | Internal | Example | August 01, 2008 | More Info

Provides for purchase and sale of Voluntary Emission Reduction offsets from 2007 and for offsets from 2009 – 2013

Project ERPA – Canadian Compliance Credits & VERs – [illegible]

Jurisdictions | Internal | Example | July 22, 2008 | More Info

Provides for purchase of emissions reductions, buyer may purchase additional credits produced in year beyond Annual Offset Quantity and has right of first offer and refusal

Master Agreement – New Buyer Arrangements – [illegible]

Jurisdictions | Internal | Example | July 01, 2008 | More Info

Enables new buyer to acquire Contract CERs (certified emission reductions) from current buyers who reduce their proportionate share

Confidentiality Agreement – Purchase of Contract CERs – [illegible]

Jurisdictions | Internal | Example | July 01, 2008 | More Info

Forbids buyer to divulge information concerning its purchase of Certified Emission Reductions from current buyers

Confidentiality Undertaking – New Buyer – [illegible]

Jurisdictions | Internal | Example | July 01, 2008 | More Info

Requires New Buyer to keep confidential all information received about operation of UCF (Umbella Carbon Facility) transaction

New Buyer Purchase Agreement – Certified Emission Reductions – [illegible]

Jurisdictions | Internal | Example | July 01, 2008 | More Info

Provides for new Buyer's purchase of proportionate share of CERs acquired by Seller

1 2 3 Next » Results per page 10

SEARCH TIPS

- **Narrow your search** by selecting options in the left column.
- **Search within results** to narrow your search ever further.
- **Look for helpful icons** that highlight the best resources.

TOOLS

- Email this Page
- Print this Page

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About BenNet

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Bennett Jones LLP

Pictured: Search results in *Knowledge Bank* can be quickly refined to include only the most relevant results using a filtering control that appears in the left-hand panel. This tool has proven to be both effective and popular, as users generally need to apply only two or three filters to reduce a result set of more than 1,000 to a list of fewer than 10. In this example, the user has applied only two filters from different categories — a document type of "agreement/undertaking" and a transaction type of "emissions trading" — to reduce a long list of documents to a more manageable number, and with this narrowing in place, he can now "search within results" or apply additional filters to reduce the list even further.

PeopleFinder is configured in the same way as *Knowledge Bank* search in that it offers an intuitive, browser-refined interface.

"We anticipate we will incorporate into BenNet a more sophisticated search engine, capable of concept searching and able to apply taxonomies (for example, FAST, Recommind, or Autonomy) in the foreseeable future," says Bawden.

RESULTS AND ROI

The golden rule concerning return on investment (ROI) is: benefit is in the eye of the beholder. And nowhere is that more true than with BenNet. Sometimes intranets return quantifiable results (though not often) and sometimes they result in softer impacts such as increased use or user satisfaction. BenNet falls squarely in the latter.

"Ours is not an intranet that readily lends itself to dollars-and-cents calculations of savings or benefits," says Bawden. "Nevertheless, we believe that we have achieved an enormous return on our investment because BenNet creates a sense of community, disseminates information, and breaks down barriers of time and distance between offices — and because it has clearly been embraced by lawyers and staff alike."

"In that vein, perhaps the most immediate success of the new BenNet has been *PeopleFinder*," he says, "closely followed by *BenNet Books*, the *How Do I…?* module, and blogs." He breaks down how each of these modules has returned value for the firm as follows:

- ***PeopleFinder***

  "We can see that *PeopleFinder* receives an enormous amount of use on a daily basis," says Bawden, "but our awareness of the success of *PeopleFinder* is also, in part, anecdotal."

  The team has received considerable praise for *PeopleFinder*'s effectiveness from personnel in all groups and departments, but most notably from busy partners (who, he says, rarely take time for such things). The tool's effectiveness extends beyond such things as staffing new projects and transactions for clients to helping users get to know their colleagues, especially in other offices.

  "We have also received numerous suggestions for expanding the scope of *PeopleFinder* with additional information, which we take as an indicator of its penetration and success," he says.

One measurable way the firm can gauge the tool's success is by tracking the self-declaration of languages and professional memberships contained in the staff profiles. And that activity has yielded great results.

"Our people have declared proficiency in more than 40 different languages (other than English)," says Bawden. "And we expect that number will increase somewhat — perhaps to as many as 45. For professional memberships, we started with a pick list of 66 professional organizations, which has increased to 116 as a result of requests from users who wished to declare their memberships in organizations that were not initially on the list."

- ***BenNet Books***

  BenNet Books is a big hit at the firm.

  "The introduction of *BenNet Books* has caused considerable excitement amongst the lawyers," says Bawden. "We now have 34 books published and many more in preparation. We expect the pace of creation of *BenNet Books* to quicken, as more people see them and realize the possibilities."

  BenNet Books might be described as a successful marriage of traditional KM material with context and process, with the result that the firm can deliver workplace learning while facilitating creation of work products that are consistently of the highest quality.

  "*BenNet Books* moves us measurably closer to the ultimate goal of knowledge sharing — that 'we all know what we each know,'" he says, adding that "one of the interesting observations about *BenNet Books* is that, instead of the traditional approach of submitting one precedent at a time, contributors are teaming up and assembling and submitting 50 to 100 (or more) precedents at once, so as to populate a complete *BenNet Book*."

- ***How Do I…?***

  The *How Do I…?* module has garnered a great deal of praise from both new hires and "old hands" at the firm. Not only for its functionality, but also for the vast amount of information about processes and procedures it contains.

  "The task-oriented presentation makes people feel that the answers they need are literally at their fingertips," says Bawden. "Numerous suggestions received through the BenNet feedback widget indicate that people are delving into it in detail, and administrative personnel have reported a dramatic decrease in the number of questions they receive by phone or email."

  Another side benefit of the module was derived from the process of developing it. The development process prompted the firm to centralize data and streamline administrative processes across the firm.

  "This resulted in making staff more efficient (and using less paper, which of course benefits the environment)," says Bawden.

- ***Blogging***

  And if *BenNet Books* is a good indication of participation, then participation in blogging is the definitive sign of success in participation.

  "The uptake on blogs has been nothing short of remarkable," says Bawden, "especially for a population that previously was largely unfamiliar with blogging."

One of the blog features lets users, through a simple widget, subscribe to any or all blogs and choose to receive email alerts of blog postings on an immediate, daily, or weekly basis. Prior to the BenNet launch, the team made what turned out to be an important decision: to presubscribe everyone to their respective practice group or departmental blogs to receive daily email alerts of blog postings.

"We felt that if we wanted people to go to the effort of blogging, we needed to provide them with an audience," he says. "And presubscription created that audience."

In more than six months since launch, less than one percent of the firm's personnel have unsubscribed to blog alerts.

Other Measures of Success

Bawden cites some other measures that point to the new BenNet's success. These include:

- Extensive use of the *Share Your Work* widget, producing more content for *Knowledge Bank*, which arrives in a steady stream
- Extensive use of the BenNet feedback widget, yielding a wealth of suggestions for improvements and new features
- Employees' ability to simply start using BenNet, with little or no training (especially the lawyers, who rarely attend training), which is evidenced by minimal Help Desk calls
- Practice groups actively seeking assistance from KM lawyers in using BenNet's features and functionality to develop practice group resources
- More robust response to clients (in particular in context of RFPs), who increasingly want the law firms they engage to show evidence of efficiencies created through the use of technology
- More robust response to our recruiters, who have been increasingly queried by law school graduates about our technology. The same applies to potential lateral hires (that is, established lawyers from other firms), who are looking for a high level of practice support from technological tools

LESSONS LEARNED

As with all intranet project teams, the Bennett Jones team can claim some sweet victories and some painful lessons learned.

"Throughout the course of the BenNet project, we did some things right and some things wrong," says Bawden. "Fortunately for us, the things we did right outnumbered the things we would do differently next time."

Team members learned many lessons, including:

- **Solicit support and involvement from senior management.** "To start with, we cannot overemphasize the benefit of having significant management buy-in and involvement throughout the planning and execution phases of your project. Even the most well-run projects will hit a bump or two in the road (we had our share), and when this occurs you want management on your side, instead of having to spend precious time bringing them up to speed and trying to secure their support."

- **Dedicate an internal project manager.** "The second thing we cannot overemphasize (and one thing we initially failed to appreciate) is the importance of having an internal project manager who can spend all of his/her time focusing on the project. The internal project manager must comprehend an enormous amount of detail and must work closely with any external project managers. This is especially critical for projects such as ours, where we engaged different organizations to help with the user experience design and development."
- **Articulate goals and guiding principles. "**Take time at the outset of the project to write down the goals and guiding principles for your intranet, and review them with senior management. This will help make difficult and/or political decisions easier, and can be extremely helpful when the team is tasked with determining which features to include in the current phase and which features to push off to a future phase."
- **Invest in user experience design.** "Fortunately for us, some key members of the Steering Committee understood the importance of user experience design. Putting a significant amount of effort and resources into user experience design will mitigate risks around user adoption. Put more simply, it's the investment that will help you realize the larger investment. Many people in our organization do not have any desire to use technology for the sake of using technology: they simply want to find the information they are looking for and complete the work they need to do. We put considerable effort into making things visually appealing and simple to use and engaged user experience experts who were charged with this key responsibility. It really worked out well for us, and we would recommend that others make the investment in user experience design."
- **Involve users.** "When designing features and functionality, always look for ways that you can get users more involved and engaged, as part of their normal routine, in the key elements that lead to a robust and healthy intranet. In our case, knowledge sharing is critical to the success of BenNet, so we went out of our way to develop functionality that would, without a lot of effort from our users, support knowledge sharing. Enabling users to attach comments to specific resources, providing a place for users to store their 'stuff,' and blogging are good examples.

  "Usability testing is a great way to improve an intranet, but is also a phenomenal way of obtaining buy-in from key stakeholders in the organization."
- **Be inclusive. "**Identify all of your stakeholders, ideally from the outset, and make them feel heard (which is not the same as trying to please everyone). Reach out for input using techniques such as card sorting and usability testing and communicate regularly. To paraphrase Lao Tse: 'The best leader makes the people think it was their idea.' In addition, treat every member of the team as a peer and encourage junior people to speak up. You will be surprised where some of the best ideas come from."
- **Don't take shortcuts.** "In some instances in the design process, we went directly from requirements to mock-ups (i.e., omitting wireframes). We feel that, in most of those instances, the omission of wireframes actually slowed the process by glossing over important questions (e.g., where is a particular set of data coming from?) that ultimately had to be answered. We would not do this again."

- **Improve business processes.** "Building an intranet, as it turns out, is a great opportunity to improve business processes, and you will identify many things in the course of the project that can undoubtedly be improved. Be very selective — if it's broken and you can fix it, then fix it; if it's broken but it would take too much time or effort to fix, acknowledge it and consider addressing it post-launch; if it works but could be better, ask yourself how important it is to fix. Your goals and guiding principles will be helpful in making some of these challenging decisions."
- **Manage the paper.** "Be prepared for a tsunami of documentation: requirements documents, wireframes, mock-ups, minutes of meetings, etc., and multiple versions of each, from multiple organizations and authors. We did a reasonable job of keeping track of the paper, but it took a lot of effort and next time we would provide our internal project manager with a records clerk, whose primary task would be to capture and organize all of the documentation (including successive versions) in our DMS.

  "We didn't have a dedicated Business Analyst assigned to the project to capture detailed requirements. The wireframes we created had notes attached to them, but it would have been useful to capture detailed requirements at the same time. Towards the end of the user interface design phase we did use a wiki, where we uploaded the mockup and/or wireframe and had the team capture requirements — this worked well, but we should have done it sooner!"
- **Don't skimp on the timeline.** "This project was successful because Bennett Jones was willing to spend so much time working on the project. Clients are often not able to dedicate such a large team and so much time to a project."
- **Include the technical architect along the way.** "The Technical Solution Architect (from V51) was at every user experience design meeting, which was incredibly helpful and resulted in a final intranet that really respected the user experience we tried to create."

And one last thing to keep in mind when undertaking this type of project:

- **It's a lot of work.** "We underestimated the amount of work that was required to complete the project! We underestimated the scope that Bennett Jones would want to include in their initial launch (especially with the size and complexity of the *Knowledge Bank* area). They took on an incredible amount of functionality for the first phase of an intranet."

Habitat for Humanity International (HFHI)

Using the intranet/extranet:
Habitat For Humanity International (HFHI) is a non-profit, non-denominational Christian housing ministry. Habitat welcomes all people, regardless of race, religion, ethnicity, or any other difference, to build simple, decent, affordable houses with those who lack adequate shelter.

Habitat employs over 800 people worldwide and serves over 2,000 affiliates in more than 80 countries.

Headquarters: Habitat For Humanity International is headquartered in Americus, Georgia

Number of employees the intranet/extranet supports: More than 800 staff worldwide and currently over 25,000 registered users of affiliated organizations (which include affiliates, national offices, state support organizations, ReStores, Campus Chapters, and more)

Company locations: Habitat operates in nearly 90 countries

Locations where people use the intranet:
Users accessing the intranet and extranet are located throughout the world

Annual Sales: N/A

Design team: My.Habitat 2.0 was developed via collaboration between the Communications, IT, and Organizational Learning Divisions of HFHI and AW Systems, Inc., a technology consultancy based in New York City

Members:

HFHI Staff: Drew Hancock, Senior Webmaster; Bob Norris, Master Librarian; Lisa Reitz, Senior Director Learning and Knowledge Systems; Jane Lee, Interactive Web Designer

AW Systems: Allan Wellenstein, President and Chief Information Architect; Doug Green, Senior Account Manager; Brian Jenkins and Seth Lopez, Technical Leads; Greg Bautier, User Interface Design

SUMMARY

Combining an intranet and extranet into a single, comprehensive knowledge source, the Habitat for Humanity International (HFHI) intranet team faced and overcame many common intranet demons. Goals for the redesign included making content easier to find without having to know who owns the content, establishing content ownership to avoid duplication and inconsistency, ensuring the site addressed needs of groups both in the US and around the world, and making the site the authoritative information resource.

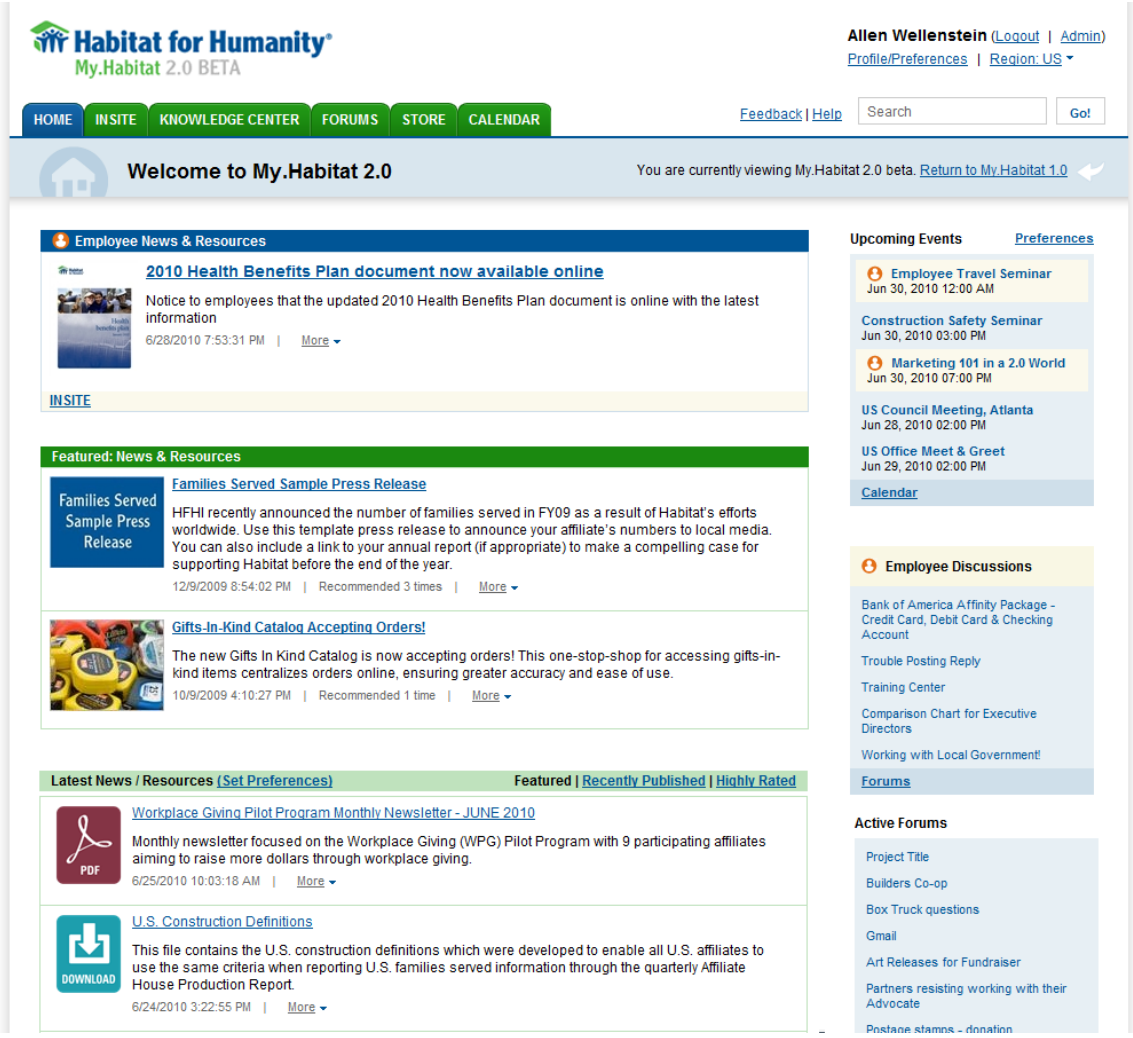
The team overhauled the publishing structure to ensure high-quality content that is easy to locate and displayed according to users' regions and language options. The site has a variety of audiences, from HFHI's 800 employees in five regional offices and field offices around the world, to the staff and volunteers of affiliated organizations, including affiliates, state support organizations, national offices, ReStores, Campus Chapters, and more, accounting for 25,000 registered users.

The newly designed site, My.Habitat (MH) 2.0, is a single location where users can access and share knowledge, resources, and tools. Officially in beta until January 2011, the site includes a link to the previous version to ease users' transition to the new design.

A core improvement to the site is targeted content. The site’s content is now targeted to users based on regional area and language, which users can set for themselves. Users thus see only content that pertains to them, and international audiences are no longer flooded with US-centric information.

The new site combines the old intranet and extranet into one. This solves the problem of duplicate content across the sites. All content that pertains only to employees appears within the *InSite* tab, which is visible only to employees. *Employee News and Resources*, as well as employee-only upcoming events and discussion forum topics, also appear only for employees.

The homepage presents critical content. *News and Resources* are regionally relevant. Events, discussions, and forums keep users up-to-date and aware of what the organization is talking about and working on.

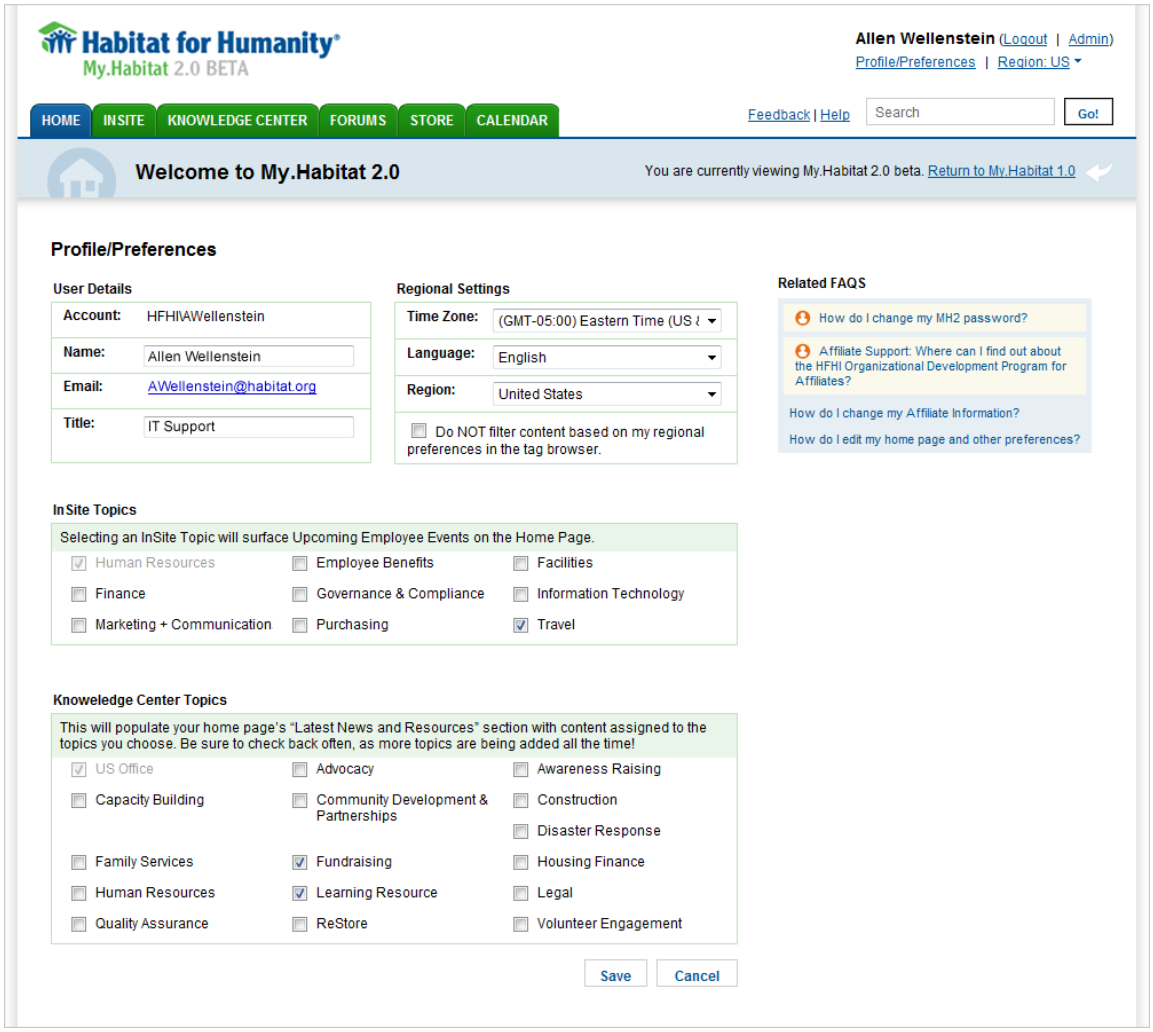


Pictured: The homepage provides news and resources for users, all targeted to the user's region.

Users manage preferences via a link at the top of each page of the site. The site currently supports English and Spanish content, but is configured to allow the addition of more languages as needed in the future.

Users can set their time zone and region, as well as selecting topics of interest. Employees can select *InSite* topics, which affects which employee events the user sees on the homepage and in the master calendar. All users can select *Knowledge Center* topics, which affects the homepage's *Latest News and Resources* section. This

allows users to see only the site updates that are most relevant to their own role and needs. Grayed out categories are those that users are required to keep. However, users will see content in those categories only if it's regionally relevant. All site content is tagged for regional relevance, so the site can direct the right content to the appropriate audience.



Pictured: Users can set their own preferences to see only the content that is most relevant to them.

One of the most significant changes to the site is the way information is organized. Previously, all content was organized based on ownership of information, so users had to know who developed a piece of content in order to locate it. This led to some crucial content being hidden deep in the recesses of unfamiliar departments. This problem stemmed in part from an out-of-the-box SharePoint implementation.

The redesigned site organizes by content, rather than organizational structure. This is possible due to Habitat's agency, AW Systems (AWS), which developed a Content Slammer tool that separates content ownership and management from how that content is browsed by end users.

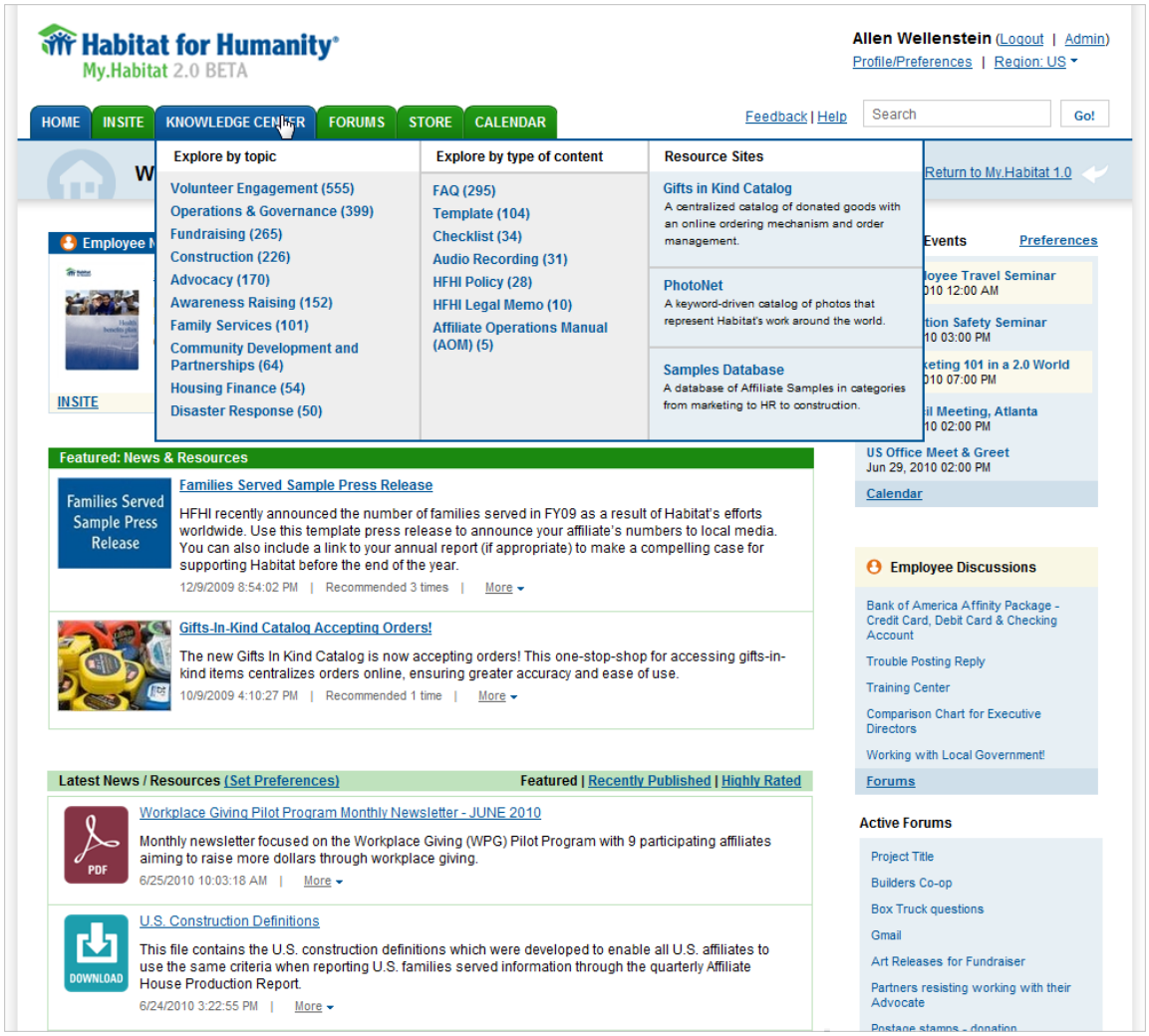
Now, users can browse by topic or content type. Options are displayed in mega-menu navigation. The mega-menu structure lets designers present topic and type options side by side. Each topic or type of content is accompanied by a number indicating the number of resources available to the user. All content on the site is tagged for these categories and types, with topic managers curating each topic.

Resource sites lead users to specialized tools available within the site's framework, such as *PhotoNet*, a photography database, and *Samples Database*, which offers templates and examples from worldwide affiliates.

The shift from an organization-based structure to a content-based structure has stretched beyond the intranet; it has also enabled cross-region collaboration on site content and resources.

HFHI is divided into five global regions, each with an office to support that region's affiliated organizations. In the past, each region maintained its own resources.

With MyHabitat 2.0, the team took the opportunity to consolidate information and combine resources across regions. The team created a *Communities of Practice* structure to bring together global teams of topic managers and site contributors to build global resources. The new site supports this cross-regional work, which has helped bring global consistency in the organization's thinking, a shift in culture, and unification of common program activities and strategies.



Pictured: Shifting to a content-based rather than an organization-based system supports cross-regional teams and shared information across regions.

The site structure is based on the tagging of resources and content. Navigation relies on these tags, helping to narrow users' view of content until they find the information they need. Within the *Knowledge Center*, tag browsing appears on the left. Users can select a topic or type to refine results. The number listed indicates the number of items in that category. If a user hovers the mouse over a subcategory, a tool tip appears offering further explanation and information.

The information displayed is based on the user's regional preference, as it is throughout the site. If they prefer, users can remove those preference filters using a helpful feature on the page. A blue bar at the end of the tag list tells users when a regional filter is applied, and provides a link to *View All*. This area also lists the number of additional resources available if the regional filter is removed.

Resource types include documents, manuals, links, and podcasts, among others. Podcasts are typically recordings of training conference calls. Placing them in the *Knowledge Center* lets users browse by topic and locate them alongside other content.

The body of the page includes introductory text, followed by a list of all resources, starting with featured resources (indicated in green). The topic manager selects these featured resources. The rest of the resources are listed based on user recommendations or popularity. Users can also list resources by date, with the most recent additions shown first.

The right side of the page displays news and events related to the displayed content.

Habitat for Humanity
My.Habitat 2.0 BETA

Allen Wellenstein (Logout | Admin)
Profile/Preferences | Region: US

HOME | INSITE | KNOWLEDGE CENTER | FORUMS | STORE | CALENDAR

Feedback | Help | Search | Go!

Knowledge Center

You are currently viewing My.Habitat 2.0 beta. Return to My.Habitat 1.0

Filtered By

Fundraising (remove)

remove all filters

Refine Further

Topics
Volunteer Engagement (51)
Grants (51)
Operations & Governance (50)
Individual Donor (40)
Corporate Partners (28)
Fundraising Planning (23)
Government Funding & Partnerships (21)
Capital Campaigns (21)
Awareness Raising (19)
Advocacy (17)
More

Resources related to advocating for polictical and legislative support
Includes: Housing Trust Fund, Congress, Federal Agencies

Types
FAQ (110)
Info Sheet (46)
How To (35)
News (24)
PowerPoint (19)
Learning Resource (18)
Brochure (12)
Manual (10)
External Link (9)
HFHI Policy (9)
More

Your Regional Filter is applied | edit
view all (53 additional items)

Fundraising

Welcome to Fundraising on My.Habitat 2.0 beta. Here you will find resources related to developing resources, planning and executing fundraising programs, applying for and managing grants, recognizing donors, and more. Both the Fundraising and My.Habitat teams are grateful for your participation in the beta test.

266 Fundraising Resources

Sort by: Relevance| Date

Gifts-In-Kind Catalog Accepting Orders!
The new Gifts In Kind Catalog is now accepting orders! This one-stop-shop for accessing gifts-in-kind items centralizes orders online, ensuring greater accuracy and ease of use.
5/7/2010 3:03:15 PM | Recommended 1 time | More

Resource Development AOM (2009)
The purpose of this manual is to help your affiliate establish an effective system for raising funds to build more houses and serve more families. This manual will assist you with some of the tools ce needed to plan and implement a successful am
AM | More

Workplace Giving Pilot Program Monthly Newsletter - MAY 2010
Monthly newsletter focused on the Workplace Giving (WPG) Pilot Program with 9 participating affiliates aiming to raise more dollars through workplace giving.
6/25/2010 10:04:45 AM | More

Who in the affiliate is responsible for creating a strategic plan?
The process for setting goals and objectives and the strategies for reaching those goals is a collective effort. The approach to the process is varied, depending on how much time the group can devote to the process, and who is facilitating the process. However, it is recommended that someone from outside the organization facilitate and record. It is very difficult to be part of the process and also wear the...
1/13/2009 8:09:03 PM | More

Related News
Workshop Proposals sought for National Conference
06/28/2010
Free Conference Call Training: Schedule for June, July, August, & September 2010
06/28/2010
Video Clips & Workshop Presentations from the 2009 National Conference: Available for Self-Paced Learning
06/26/2010
Is your affiliate receiving NSP funds? Please complete the HFHI NSP Survey by June 30
06/24/2010
Wells Fargo Makes $8 Million Contribution to Habitat for Humanity's Neighborhood Revitalization Initiative
06/10/2010
More News

Related Events
Jul 22, 2010 12:00 AM
Iowa Sustainable & Affordable Homes Workshop
Calendar

US Support Center
Can't find what you're looking for? Let the US Support Center help!

Pictured: Content appears in a faceted or tag-based structure, letting users make selections to filter results until they find the required resource.

Habitat for Humanity
My.Habitat 2.0 BETA

Allen Wellenstein (Logout | Admin)
Profile/Preferences | Region: US

HOME | INSITE | KNOWLEDGE CENTER | FORUMS | STORE | CALENDAR

Feedback | Help | Search | Go!

Knowledge Center

You are currently viewing My.Habitat 2.0 beta. Return to My.Habitat 1.0

Filtered By

Fundraising (remove)
FAQ (remove)

remove all filters

Refine Further

Topics
Individual Donor (21)
Fundraising Planning (15)
Corporate Partners (14)
Grants (13)
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Learning Resource (1)
How To (1)
Contact Info (1)

Your Regional Filter is applied | edit
view all (18 additional items)

110 Fundraising, FAQ Resources

Sort by: **Relevance**| Date

FAQ

How can planned giving "legacy donors" be recognized?

It takes a special kind of person to make plans for the benefit of unknown persons in the unknowable future, and it is important to recognize these special donors. To do so, Habitat for Humanity International has developed a Legacy Society. Anyone who makes estate plans in favor of any Habitat entity is eligible for membership, which is obtained by telling Habitat International's Planned Giving Department that such plans exist. ...

1/13/2009 5:29:46 PM | Recommended 5 times | More

FAQ

What is a capital campaign?

A capital campaign is an intensive, structured effort to secure pledges and major gifts toward visionary and urgent needs completed within a finite time period, usually one year to eighteen months. The pledges are often received over three to five years. A capital campaign should never be considered as another fundraising technique in an affiliate's annual-giving strategy or to make up for a shortfall in annual giving. Casting a bold...

1/16/2009 5:12:49 AM | Recommended 4 times | More

FAQ

What established theme builds have been used by Habitat for Humanity throughout the country?

Established theme builds include: Women Build: The national Women Build effort was launched in 1998 to promote the involvement of women in the construction of Habitat houses, with training provided in a supportive environment.

1/13/2009 5:38:42 PM | Recommended 2 times | More

FAQ

How do we convert volunteers into donors?

In addition to the need for recording names, it is critically important that everyone in your affiliate treats the volunteer experience as a "donor acquisition" opportunity. To maximize your chances of converting a volunteer into a donor, make sure:* The volunteer recruitment process is professional.* The worksite is always well managed, with needed tools and materials onsite when volunteers arrive.* The onsite experience should be more than just "construction"; volunteers...

Related News

Workshop Proposals sought for National Conference
06/28/2010

Free Conference Call Training: Schedule for June, July, August, & September 2010
06/28/2010

Video Clips & Workshop Presentations from the 2009 National Conference: Available for Self-Paced Learning
06/26/2010

Is your affiliate receiving NSP funds? Please complete the HFHI NSP Survey by June 30
06/24/2010

Wells Fargo Makes $8 Million Contribution to Habitat for Humanity's Neighborhood Revitalization Initiative
06/10/2010

More News

US Support Center

Can't find what you're looking for? Let the US Support Center help!

Pictured: The site's *Knowledge Center* tag browser with a second tag applied, in this case the tag "FAQ." The tag browser lets users drill down further. The numbers in parenthesis show users how many resources exist for each topic so they always know what to expect.

Users can recommend a resource if they find content on the site useful. A simple *Recommend This Resource* link appears at the top of the page, next to the number of times it has already been recommended. This information is used to order the information shown on category pages, helping put the most popular or useful content first.

Each content page also features a *Question/Feedback* link, encouraging active feedback about the site. Beneath the content, metadata is shown with the date the content was created and modified, and who made changes. Tags, including topics, types, and regions, are also listed. Beneath this summary, related content is listed. This list is based on the tags for the content that appears on the page.

Habitat for Humanity
My.Habitat 2.0 BETA

Allen Wellenstein (Logout | Admin)
Profile/Preferences | Region: US

HOME | INSITE | KNOWLEDGE CENTER | FORUMS | STORE | CALENDAR

Feedback | Help Search Go!

Welcome to My.Habitat 2.0

You are currently viewing My.Habitat 2.0 beta. Return to My.Habitat 1.0

How can planned giving "legacy donors" be recognized?

← Back | Recommend this resource (Recommended 1 time) Question/Feedback | Edit item

It takes a special kind of person to make plans for the benefit of unknown persons in the unknowable future, and it is important to recognize these special donors. To do so, Habitat for Humanity International has developed a Legacy Society. Anyone who makes estate plans in favor of any Habitat entity is eligible for membership, which is obtained by telling Habitat International's Planned Giving Department that such plans exist. Benefits of membership include a framed certificate, lapel pins, and publication of names in the quarterly planned giving newsletter if desired by the donor.

Affiliates are encouraged to hold local recognition events. Having an annual banquet for the exclusive benefit of *Legacy Society* members helps stimulate interest and motivate additional members.

The HFHI Planned Giving Department can be reached at (800) 422-4828, ext. 7692 or plannedgiving@habitat.org

DocID: g2e9f4
Publishing Site: FundingSupport/USResourceDevelopment
Created: 01/10/2009 10:47:56 by Elizabeth Brunner
Last Modified: 01/13/2009 17:29:46 by System Account

Topics: Fundraising, Planned Giving, Donor Recognition
Types: FAQ
Regions: United States

Related FAQS

What are memorial gifts?
Memorial Gifts are often made "in lieu of flowers" upon someone's passing or might be made later in memory of a loved one. Such gifts also may take place without your foreknowledge; and you may only learn of it when the gifts are received. These must be handled sensitively with prompt thank-you letters that are sensitive to the occasion – not your standard letter acknowledging a gift. A phone call...
1/13/2009 5:27:50 PM | More

Where can we find sample thank-you letters for donors?
Here are some resources that might be helpful:
1/5/2010 1:15:33 PM | More

What are the tax requirements for acknowledging charitable gift contributions?
If a donor receives goods or services of substantial value in recognition of their donation, they may be required to deduct the value of the benefit from the value of their donation for tax reporting purposes. Consult with a CPA and be certain to observe IRS requirements regarding the disclosure to donors of the

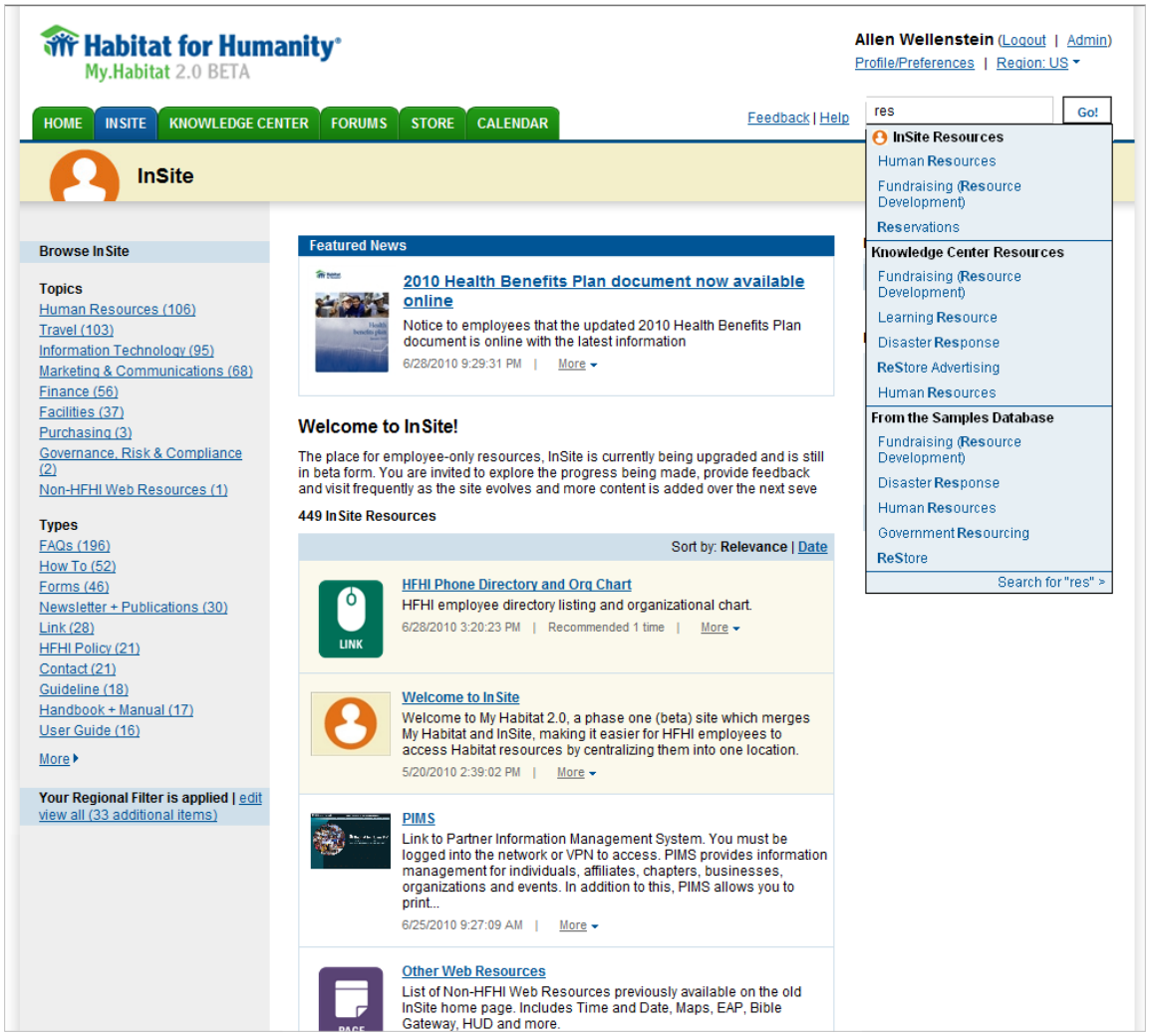
Related Resources

- Workplace Giving Pilot Program May Conference Call
- Campaign case for support-global
- Campaign vision page (photos)
- Campaign vision page
- HFHI Planned Giving Public Information on www.habitat.org
- Wells Fargo Makes $8 Million Contribution to Habitat for Humanity's Neighborhood Revitalization Initiative
- Q&As about the World of Hope campaign
- Workshop Proposals sought for National Conference
- Free Conference Call Training: Schedule for June, July, August, & September 2010

Pictured: Users can recommend a resource by clicking a link at the top of the content area. This lets the site prioritize content based on recommendations.

Curated search helps users locate information. The site uses SharePoint's search tools, but the intranet team has added what they call a *curated search* on top of the tool. When a user starts typing a search query, the site suggests related terms based on the most popular topics across the site. These related terms are set up by the operations team.

The tool recognizes synonyms, helping users locate content under related headings. The team monitors searches, and if they find a search resulted in no good destination, they add one.

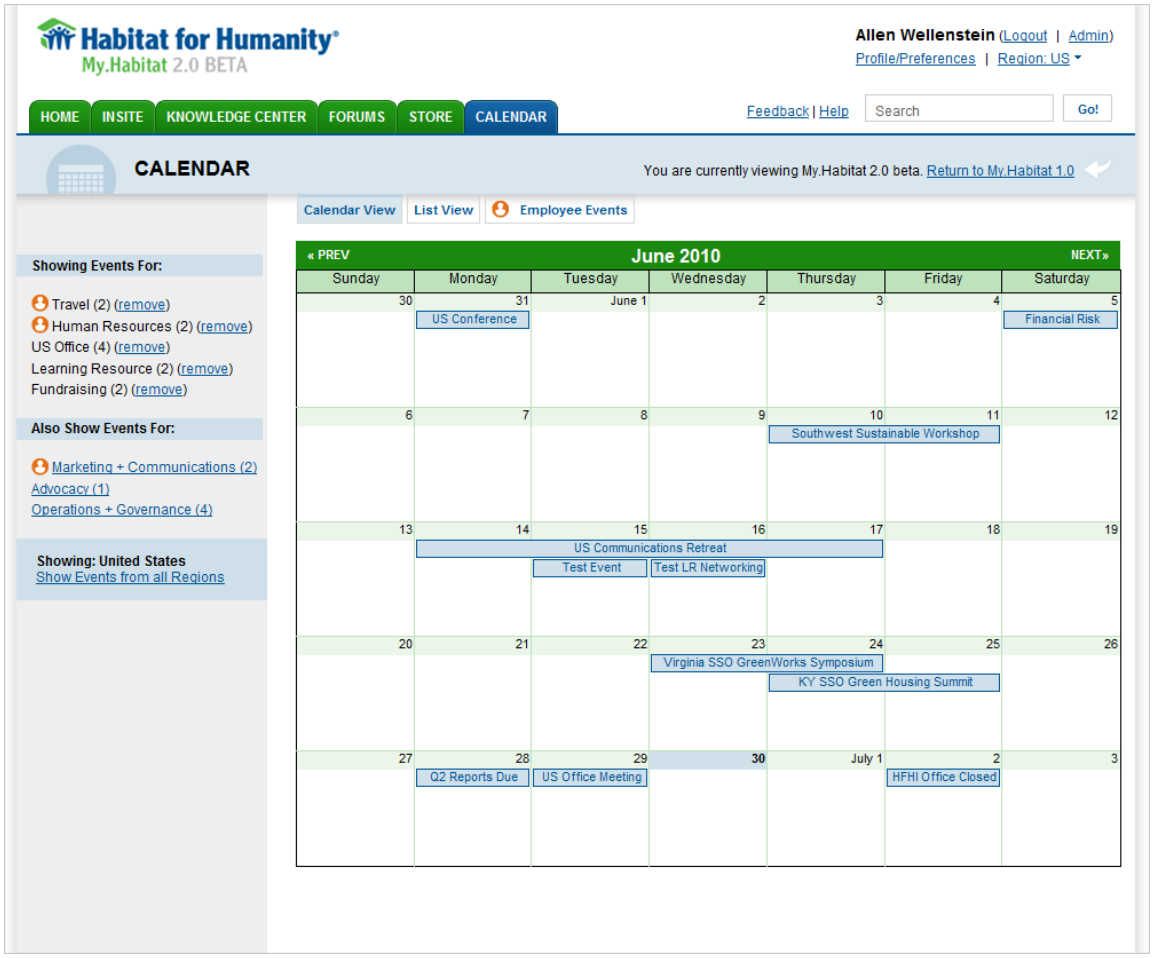


Pictured: A *curated search* suggests terms related to what the user is typing. This lets users select from suggestions, which return relevant results.

A master *Calendar* is a new addition to the site. As with site content, events were also listed based on departments or groups, but there was no central calendar for knowing what was going on around the organization. Now, the master *Calendar* shows all events in a single view, which has proven very helpful for planning.

Events are shown based on the user's region and topic preferences, but users can remove these constraints when viewing the calendar. The left side of the page lists the types of events currently shown. Users can remove any of these types, or show additional event types (listed in a second area on the left). They can also remove the regional filter to see events across all regions.

The *List View* and *Employee Events* tabs allow affiliate and employee-only events to be viewed by topic using the tag browser. Users can view both upcoming and past events in this way.

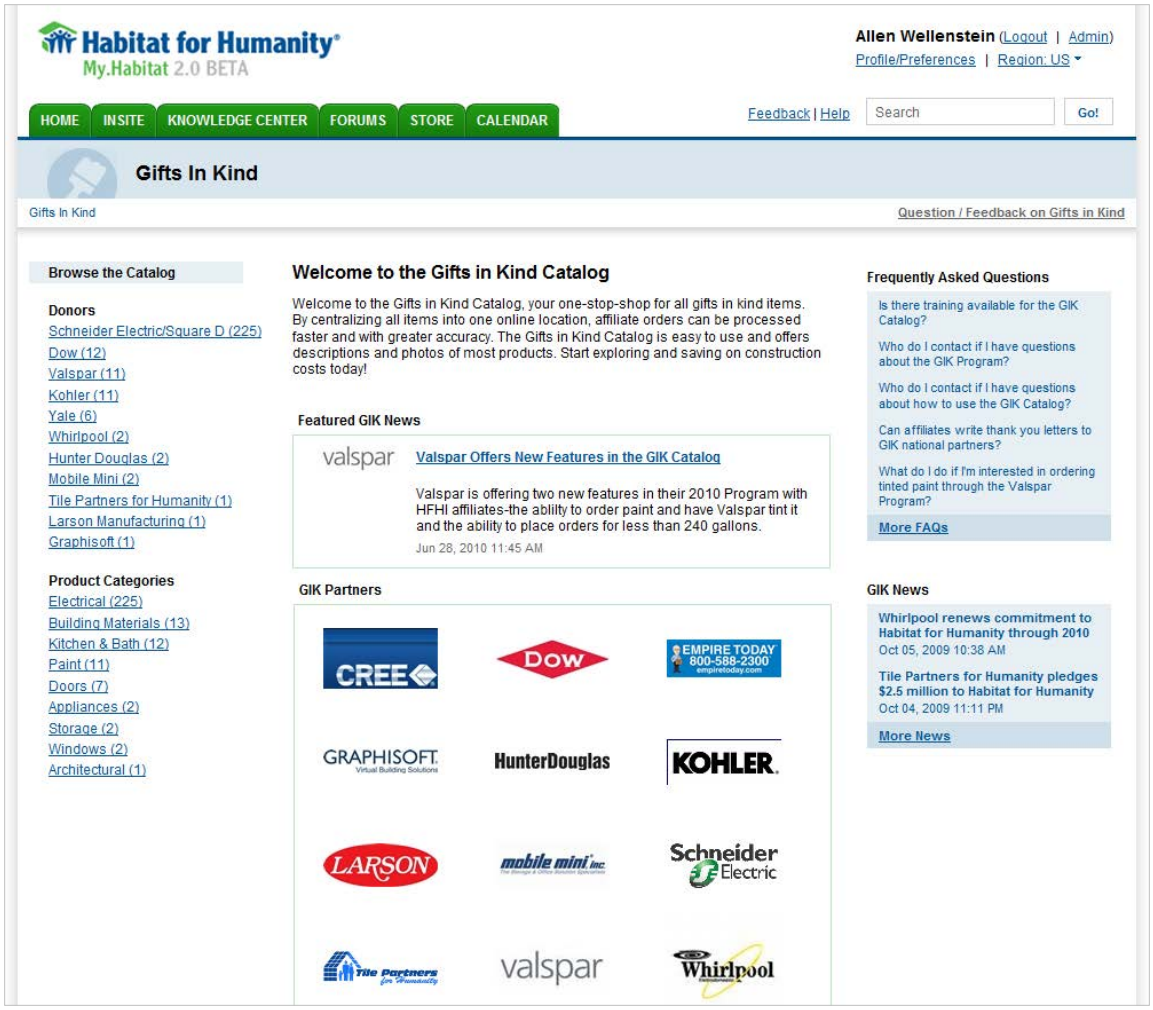


Pictured: The master *Calendar* shows all events, based on user preferences.

The site houses many applications. A main goal of the site was to have a central portal where all resources and tools could live, which required that the site architecture support the integration of applications.

One of these applications is the *Gifts in Kind Catalog*. This area offers a way for affiliates to "shop" for donated materials. Users can browse the catalog for (mostly free) materials and place orders.

The system integrates with donors' back office systems, providing detailed reporting, and financial and donation reconciliation. The site also integrates and presents several other applications as part of the site, including a *Build Brand Store* where affiliates can order business cards and letterhead, and *Project Based Funding*, which is a database of approved international projects in need of funding.



Pictured: The *Gifts In Kind Catalog* lets users shop for building materials donated to HFHI.

Informative, reliable content is key on the site. One area of particular importance is the site's *Affiliate Operations Manuals* (AOMs). These manuals provide operational guidance for affiliates on topics such as construction, family services, and financial policies and procedures. An AOM is intended as an online reference to solve pressing, real-world problems.

Putting an AOM together is a group effort. A team of experts led by a project manager develops the content, which is then reviewed by legal as well as the AOM's sponsor and publishing group owner. Creative Services edits and formats the document, while the MH Librarian makes the PDF version with internal navigation and links to related resources.

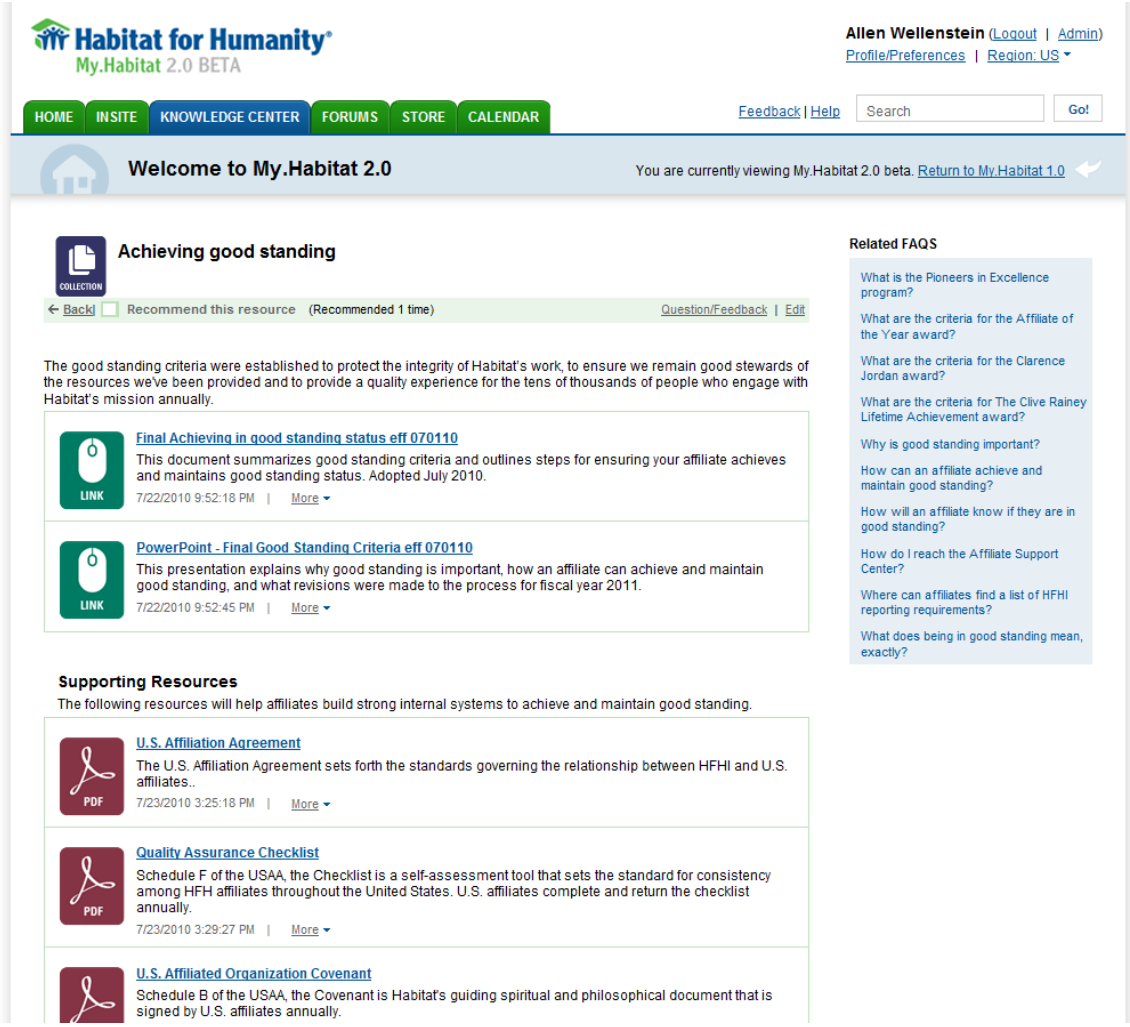
Users can open the entire manual online, download a copy for local use, or navigate directly to a specific section. These documents are among the most commonly used content on the site. Affiliate Support Center employees not only use the information to answer affiliate questions, but also show constituents how to use the materials themselves.

The materials were previously distributed in print, which made them difficult and expensive to revise and redistribute. Although the idea of online manuals was initially met with resistance, the benefit of having immediate access to the most up-to-date information — and the ease of updating information in a digital format — outweighed any concerns.

Pictured: *Affiliate Operations Manuals*, which used to be distributed in print format, are now available online.

Collections are another content type that has excited Habitat's publishers. The collections feature lets publishers create a focused group of resources assembled from throughout the site. For example, a marketing expert can compile a collection to help an affiliate publicize a fundraising event. *Collections* can include content in any form, so they can include templates, graphics, real-world examples, or even be tied to a discussion group.

Publishers are taking this tool beyond what the developers envisioned for it — in a good way. Publishers are creating knowledge bases on topics, which can then be featured in the *Knowledge Center* as a single resource.



Pictured: A collection is a content type that lets publishers group related information together as one resource.

Publishers contribute from all around the organization and all over the globe, which helps the site offer diverse and valuable information. The team offers many resources to help publishers, but found that most publishers add content in bursts, rather than consistently. As a result, people forget how to publish content and how to create strong metadata. They also forget best practices and time-saving techniques. And a lag between bouts of publishing can create issues related to employee turnover.

Realizing this, the team has tried to provide specific training as needed, with reusable training resources. Rather than focusing on lengthy explanations, the team tries to focus on information that is of most immediate use, providing instructions for routine tasks and using tools like annotated screenshots. The team emphasizes best — and worst — practices.

Although the team would ideally like to fully explain the nuances of content and metadata creation, they understand that part-time publishers who aren't constantly uploading content will be unlikely to retain or appreciate such knowledge. So, team

members do their best to help on a case-by-case basis, offering their expertise to aid publishers.

That said, team members appreciate that this problem stems from the fact that their publishers are subject matter experts with many other responsibilities. The publishers' busy schedules and attention to detail are what makes them highly valued contributors to the site, but also what makes continual training necessary.

By fixing the site structure, breaking down site barriers, cleaning up site content, and providing tools and information for users' daily needs, the HFHI intranet team has created a site that truly supports the global organization.

BACKGROUND

MH 2.0's goal is to provide a single location where HFHI employees and the employees/volunteers of affiliates worldwide can access and share the knowledge, resources, and tools they need in their mission of eliminating poverty housing.

The key to keeping the HFHI intranet fresh and useful is the organization's commitment to continual improvement.

"Even the first version of My.Habitat had a robust feedback mechanism, so we could hear from our users what they liked and what they didn't," says Drew Hancock, HFHI Senior Webmaster. "We also participate in many regional, national, and international Habitat conferences, setting up booths where affiliates and staff can come by and share their thoughts, feedback, and suggestions."

The intranet team regularly surveys users, and a steering committee made up of representatives from the various departments, regions, and user groups across the organization channels feedback from the site's constituents back to the design/operations team.

So, when it was time to design MH 2.0, the team had lots of feedback and suggestions to inform its redesign effort.

Project goals for the redesign project included:

- **Simplify presentation of the organizational structure** to help users find the content they need to perform their job functions, regardless of who owns a particular piece of content.
- **Establish clear ownership** of each site resource to reduce duplication, ensure accuracy, and improve resource timeliness.
- **Make the site as useful** to the organization's international constituents as it is to its US audience.
- **Create a one-stop-shop for sharing HFHI knowledge and tools** so that users (particularly employees) are no longer confused as to where to find authoritative information.

Evolving Over Time

HFHI's original extranet, PartnerNet was built to serve as a single destination for information sharing among the organization's global affiliates. It was essentially just a collection of subsites broken down by program, department, and initiative. But with PartnerNet as a launching point, the organization was propelled to develop its first intranet, called *InSite*.

Although both sites were welcome additions to the organization's knowledge network, it wasn't long before both grew "out of control and difficult to use," according to Hancock. He identifies three main reasons for the sites' eventual demise:

- The navigation schemes couldn't expand to accommodate growth over time
- Just about anyone in the organization could publish content
- The organization lacked an effective governance model to control the content quality

My.Habitat (1.0)

In 2007, a rebranded and redesigned PartnerNet was launched as MH (1.0). This new site, a precursor to the organization's current intranet, was built on SharePoint 2007. And, although the site was very well received, user feedback revealed it had one major shortcoming: the navigation was organized according to content ownership. This paradigm didn't serve the users well.

"This made it confusing to know where to find something," says Allan Wellenstein, President and Chief Information Architect of AWS, the company that partnered with HFHI to build this early version of MH.

MH 1.0 was only HFHI's extranet. HFHI had a separate intranet, InSite, which was the default home page for all employees.

"Content published for affiliates, however, was typically also relevant to employees and was therefore often (but not always) posted to both sites," says Hancock, adding, however, that it was not always updated in both places, "causing confusion as to where employees should go for the latest and greatest."

Solving the Navigation Problem

HFHI's enterprise architecture group had done a study on content management and collaboration platforms and had settled on SharePoint as a platform for MH 1.0. The group's decision was based on its feature set, cost, and integration with tools already in use. For the initial rollout, SharePoint was used pretty much out-of-the-box, which meant that the team encountered a common problem: the site navigation was aligned to content ownership, rather than use.

"One of the common issues you see with SharePoint sites, particularly in intranets, is an organizational structure aligned primarily — sometimes exclusively — with the organization's org chart," says Wellenstein.

SharePoint uses the site/subsite structure both as a way to build navigation and as a mechanism for creating security boundaries.

"As a result, content is often grouped more by who owns it rather than how someone might think to look for it," he says. "This was one of the main reasons we developed Content Slammer: to explicitly separate the ownership and management of content from how it's browsed by end users."

Rather than adhere to the content ownership model, the company looked for a solution that would allow content created and owned by different groups within HFHI to be browsed by topic or content type.

The solution, developed by AWS for another SharePoint client, was to create a SharePoint extension in which SharePoint content could be pushed to a SQL server. This allowed the mapping of complex relationships in SharePoint to SQL and thus enabled more logical browsing for users.

The tool, *SharePoint List Association Manager* (SLAM), let developers grab content published from the various MH sites and organize it in various ways to suit their needs. "In other words," says Wellenstein, "we could continue using SharePoint to allow different groups within the organization to manage their content — something SharePoint does extremely well — but we could grab that data and aggregate and display it in a way that would be more user-centric.

"The big breakthrough here was explicitly separating the tasks of managing content from how that content is browsed."

Separating Content Ownership from Browsing Options

Although SharePoint remains the site's CMS, MH 2.0 separates content ownership from how the content is browsed. Each department or program has a "publishing site" where they publish their FAQs, downloads, events, podcasts, and so on, and tag them by topic and type of content. Users then browse content based on topic or content type rather than needing to find the SharePoint site where that content lives.

Content in MH 2.0 is also tagged with language and regional relevance. Users set their regional and language preferences and see only relevant content as they browse the site. In this way, the organization has helped address an issue brought forth by its international users: that content was too US-centric.

With this, designers have seen much greater adoption of MH outside of the US.

Testing the New Navigation Scheme

The team phased in the new navigation scheme by conducting an initial trial. In January of 2009, in time for a national affiliate conference, the team launched *Knowledge Center*, a new MH tab that let users browse key resources across the organization by topic or content type, regardless of which group published them. And the users loved it.

"My favorite example to illustrate the power of the *Knowledge Center*'s new navigation approach is a resource describing HFHI's official policy regarding having minors volunteer on a Habitat build," says Wellenstein. "In My.Habitat 1.0, users might look to find that under the *US legal* site, the *Volunteer Management* site, the *Youth Programs* site, or the *US Construction* site."

Where they would actually find that document depended on which group had published it.

"In order to have it appear in all of those sites, it would have to be duplicated — which would make management a nightmare," he says.

In the new *Knowledge Center*, users could easily find the policy regardless of which topic tag they used; the result has been enthusiastic support for the new scheme.

"The feedback we got on the *Knowledge Center* was great, so we decided to extend the concept to the entire site," says Hancock. "Thus, the plan for My.Habitat 2.0 was born."

Consolidating Resources

Building on the initial trial, the concept was then applied to other parts of the site to ease the findability of key content across the site.

In addition to applying the Content Slammer approach to the entire site — rather than just to the key resources for each topic (as in the *Knowledge Center*), the team added a profile system. This lets users set their topic preferences, as well as regional and language preferences, so that they see the content they most care about on their home page and, as they browse the site, they see only relevant content based on their region.

In addition to improving information findability, MH 2.0 delivers a true portal architecture that houses, in one place, all the resources and tools available for employees and affiliates. These include a discussion forum, an organization-wide calendar, a system for ordering customized letterhead/marketing materials, a shopping cart for ordering donated building materials, a database of affiliate samples/templates, a searchable photo library, an international volunteer trip scheduling system, and more.

Pictured: The intranet in its 1.0 version. A major usability issue with this version was URLs; because of the native structure of SharePoint URLs, it was very difficult to reliably point someone to a particular resource within the intranet.

TIMELINE

HFHI INTRANET TIMELINE	
Milestone Date	**Milestone Description**
July 2000	Launched PartnerNet, the first version of the organization's extranet using Stellent Content Management System
July 2002	Developed InSite, the organization's first internal staff-only intranet
March 2006	Work begins on PartnerNet redesign
April 2007	Organization launches beta PartnerNet (later renamed My.Habitat 1.0), which was redesign on SharePoint 2007
January 2009	*Knowledge Center* tab launches on top of MH 1.0 to let users browse key resources across the organization by topic or content type, regardless of which group published it
June, 2009	Work begins on MH 2.0 redesign
September, 2009	MH 2.0 launches to the organization (Beta)
Through January 2011	MH 2.0 remains in beta

INTRANET TEAM

Pictured: The HFHI intranet team: (top, left to right) Lisa Reitz, Drew Hancock, and Allan Wellenstein (AW Systems); (bottom, left to right) Doug Green (AW Systems), Connie Steward and Jill Claflin. Not Pictured: Bob Norris.

GOVERNANCE

Ownership

MH 2.0 benefits from sponsorship by several senior stakeholders across the organization, rather than a single department owner.

The shared sponsorship model serves the site well. Sponsors have a strong incentive to ensure that MH investments are tied directly to strategic goals in the organization's five-year plan.

"While a shared approach may sound less ideal than having a clear-cut owner," says Hancock, "this interest-based sponsorship model has been a key determinant in sustaining funding during an extended period of constrained budgets."

"The HFHI Board of Directors maintains vigilant oversight on expenditures and requires that they be explicitly tied to strategic goals; hence sponsors have a strong incentive to ensure that MH 2.0 investments pass that test," says Hancock.

"Another positive aspect of shared ownership is derived from the process of priority-setting and decision-making," he says. "Sponsors have two avenues to advocate for enhancements: A) Persuade the MH Steering Committee to prioritize their

improvement out of existing funds, or B) Use discretionary funding to underwrite a special project."

While this approach works, Hancock admits it is anything but efficient.

"The MH Steering Committee invokes an advocacy approach for priority setting that pits desired enhancements in a competition for scarce resources," he says. "This typically results in a detailed, comparative analysis of feasibility and return on investment (ROI) that informs effective decisions."

This process is challenging when difficult trade-offs must be made, but it fosters a sense of ownership among those who engage in the discussions. In a very real sense, even those whose desired enhancements aren't chosen feel that they've contributed. Moreover, the option always exists for an advocate to locate funding for a special project, so being turned down is not as climatic as it might otherwise be.

"One can count on lively debate from many perspectives, with strong opinions being aired," says Hancock. "Nevertheless, the lack of efficiency is certainly worth the price in that the successful advocate must articulate a compelling argument in the face of ardent critique to prevail."

Personnel from three departments — IT, Communications, and Learning and Organizational Development — provide day-to-day operational support. These departments coordinate both the operational budget and operational activities, including administration, infrastructure, quality control, and training.

INTRANET TEAM RESPONSIBILITIES	
Role / Members	**Responsibilities**
MH sponsors include: • Communications • Learning and Organizational Development • HR • US and Canada • Global Programs • International	• Establish and control top-level topic tags • Establish guiding principles • Assign roles and responsibilities for publishing content • Secure funding
MH Steering Committee members include: • Technology Subcommittee • Content Subcommittee • Users Subcommittee	• Shape strategy • Approve design requirements • Make recommendations for investments (budgets) • Facilitate advisory groups (three groups) • Monitor results (statistics) and suggest changes **Technology subcommittee:** focuses on architecture, functionality, and reliability **Content subcommittee:** reviews feedback and recommendations for content development and usability of the tools for contributors **Users subcommittee** focuses on appropriateness of published content, gaps in content, and ease of use
MH Operations Team includes: • Communications • Learning and Organizational Development • IT • Developers	• Serve as technical and design lead for MH • Serve as technology liaison for MH Operations Team • Serve as primary contact for InSite publishing • Serve as primary contact for Knowledge Center publishing • Establish standards for organizing Knowledge Center content • Resolve conflicts among Publishing Group Owners (PGOs) • Schedule and train Knowledge Center PGOs and topic managers
MH Publishing Team	**MH Publishing Team:**

includes: • Publishing Group Owners • Topic Managers • Forum Moderators • Site Contributors	• **PGOs** have the overall responsibility for maintaining content within their topic area. • **Topic Managers** contribute content; these subject matter experts share their specialized knowledge on selected topics. • **Forum Moderators** create a professional tone for the forum, review new threads and posts, and post comments as warranted. • **Site Contributors** are key-boarders who assist topic managers in publishing content

USERS

MH 2.0, HFHI's combination intranet/extranet, has approximately 25,000 registered users. And its user base is varied. More than 800 employees use the platform from five regional offices and from field offices around the world. Staff and volunteers of associated organizations including affiliates, state support organizations, national offices, ReStores, Campus Chapters, and more, also use the site. The goal is to have the site available to everyone across the organization regardless of role.

"We need to be sure that a volunteer at a small affiliate who needs, say, fundraising 101 content can find that, while the full-time construction manager at a larger affiliate can find the more advanced green building techniques for which she is looking," says Hancock.

Some of the users include:

- **HFHI employee administrative users,** who use the site primarily for basic HR/benefits/directory/community purposes.
- **HFHI subject matter experts,** who help further the Habitat mission and provide support to the staff and volunteers of affiliated organizations around the word.
- **Affiliate / National Office staff and volunteers,** who run the full gamut. Some affiliated organizations are tiny and have no full-time employees, while others are themselves somewhat large organizations with 50 or more employees.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	http://my.habitat.org
Default Status	Each staff member's computer is set with http://my.habitat.org as the homepage when the computer is issued, but they are free to change that if they wish.
Remote Access	MH is accessible both through the LAN and remotely through active directory logins for internal staff and through forms-based authentication for external (non-HFHI staff) users. The intranet-only portion of the content is accessible only with active directory logins.

DESIGN AND USABILITY

The Agency as Collaborative Partner

HFHI partnered with AWS for both the first version of MH and the 2.0 redesign. This partnership was a strong collaboration between the internal HFHI team and AWS. In the discovery/ideation/design phase, AWS partnered with representatives of the Communications and the Learning and Organizational Learning departments and then developed the site under the technical oversight of the Habitat IT department.

While the site's requirements analysis and design were very much team efforts, development was mostly outsourced to AWS.

"Solution Design": Defining Scope Through Consensus

Both projects started with a known budget and timeline and a list of very loosely defined goals the organization wanted to accomplish. AWS led a formal needs assessment/scoping exercise, called the "Solution Design" process, and it was through this process that the two teams agreed on the formal scope of work.

The Solution Design process involved key stakeholders across the organization, both internal and external, in a series of brainstorming sessions, focus groups, and design sessions where the groups prioritized goals and explored various approaches.

According to Hancock, they systematically defined and prioritized the goals and objectives, and "explored different approaches and iteratively and collaboratively defined what we would build. During that process, the design team evolved wireframes, which we shared with a larger group to get feedback."

The wireframes served as paper prototypes so the teams could elicit feedback about what worked and what didn't early on in the design process. This process was very efficient at surfacing issues and finding solutions; by the time the Solution Design document was delivered (AW System's first formal deliverable), there was already broad consensus/agreement within the organization on the approach.

Learning Through User Testing

The team employed formal usability testing prior to launching the *Knowledge Center* upgrade to MH 1.0. Remote usability screen-share test sessions were conducted with users in affiliate offices.

"They [the users] were assigned tasks to complete, and we had them think out loud as they thought about where to click to find the answers," says Wellenstein. "One interesting thing we learned was that users were not looking on the right-most call-out column where we featured related FAQs. Even if the question we asked them to find the answer to was almost verbatim the question shown on the right, users were still exploring the center column of the page, looking for the answer."

As a result of the user testing, they integrated the FAQs directly into the *Knowledge Center* responses area.

A similar study was conducted before the organization launched an online ordering system. "We were able to avoid user confusion by placing simple instructions in a few key areas," he says.

"Every time we do these simple usability studies, even though we aren't doing formal testing in a usability lab, I'm always struck by how much we learn."

Gathering Feedback

Because both the HFHI and AWS teams are committed to maintaining a continual improvement cycle, they've employed ongoing user feedback mechanisms to keep an active user dialogue open even now that the redesign is live. Feedback mechanisms include discussion forums, a site-based feedback management system, and having team members staff conference booths to encourage face-to-face dialogue.

These efforts help team members collect feedback on an ongoing basis. By refining and prioritizing that feedback, they're able to execute on iterative site enhancements.

Habitat for Humanity
My.Habitat 2.0 BETA

Allen Wellenstein (Logout | Admin)
Profile/Preferences | Region: US

HOME | INSITE | KNOWLEDGE CENTER | FORUMS | STORE | CALENDAR

Feedback | Help | Search | Go!

Forums

You are currently viewing My.Habitat 2.0 beta. Return to My.Habitat 1.0

» Discussions

Employee Discussions

Forums	Last Post	Threads	Posts
FYI: For Your Information	Windows XP Zero... by [illegible] Fri, Jun 18 2010 4:50 PM	2	3
Staff Moves	Staff Moves forum... by [illegible] Sun, Oct 4 2009 10:29 PM	1	1
Prayers and Praise	HFHI Weekly Prayer... by [illegible] Tue, Jun 29 2010 9:18 AM	6	6
Classifieds	Free AT&T phone... by [illegible] Tue, Jun 29 2010 3:36 PM	28	37

For Everyone's Information

Forums	Last Post	Threads	Posts
News / Announcements	Re: Postage stamps... by [illegible] Mon, Jun 28 2010 12:05 PM	92	181
Prayers and Praise	Re: Restart with... by [illegible] Tue, Jun 8 2010 3:04 PM	23	70
Help Wanted	Executive Director... by [illegible] Mon, Jun 28 2010 11:48 AM	260	302

HFHI

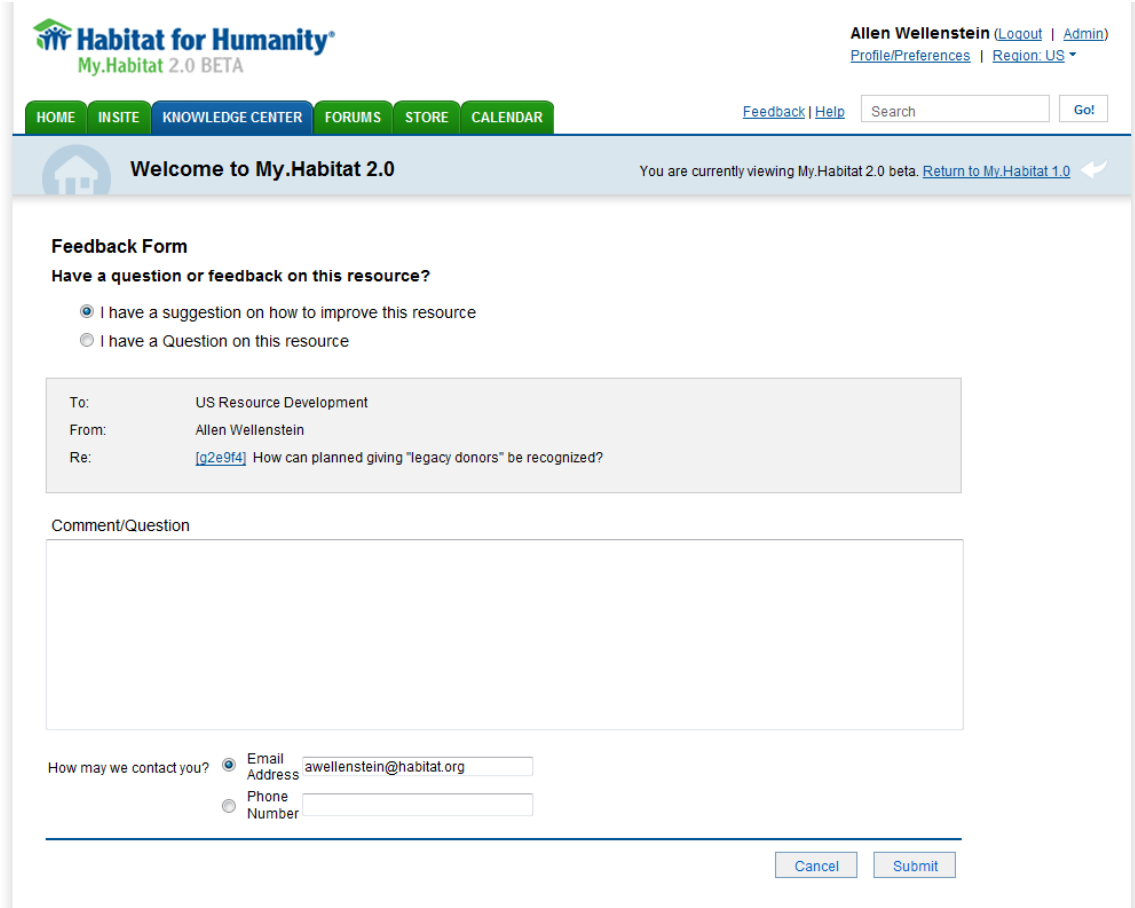
Forums	Last Post	Threads	Posts
[illegible]	Re: Home Depot ... by [illegible]	[illegible]	[illegible]

Shortcuts
- Posts you have not read
- Forum Subscriptions

Popular Tags

"family support" "family support operations manual" advertising americorps cars for homes Construction Construction Tips and Helps family selection Family Services family support fundraising Homeowner education homeowners marketing Mortgages New Board Chairs ReStore ReStores safety Software Sweat Equity training volunteer

Pictured: MH has a fully featured discussion forum to keep the dialogue open with site users. It has open forums, employee-only forums, and specialized forums exclusive to specific audiences, such as affiliate executive directors, national office directors, and so on.



Pictured: HFHI team members employ a strategy of continuous quality improvement, actively solicit feedback, and regularly push updates that address user input. To that end, they've included a feedback link as part of the global navigation. In addition, every single system resource has a question/feedback link. Questions are automatically routed to a centralized support center and feedback is routed to the group that published the particular resource. In the example shown here, the feedback is being routed to the US Resource Development team.

CONTENT AND CONTENT MANAGEMENT

Establishing Responsibility

The sponsors of the MH 2.0 project established guiding principles, roles, and responsibilities for publishing content. These are codified in the MH 2.0 *Publishers' Guide* and conveyed during one-on-one training and support sessions. According to Master Librarian Bob Norris, two key objectives drive the publishing process:

- **Establish ownership** for each resource
- **Manage user expectations** regarding the nature of the resources, such as clearly differentiation between formal policy, recommended best practices, and exemplars contributed from affiliated organizations

Publishers

The first key feature of MH publishing is that it's open to all comers.

"Literally, anyone with the requisite expertise (and necessary permissions) can contribute to content development through our collaborative processes," says Hancock. "There are prescribed resource development processes, editing and review cycles, approval for publishing, and lifecycle maintenance. These processes are differentiated depending on the type of resource — for instance, a legal advisory has a different level of oversight than an informational brief."

There are four formal publishing roles; close to 100 people are assigned to these roles, which entail explicit publishing permissions. Each role/person has both a topical and regional scope. In addition, the site technology segregates content into three distinct knowledge bases:

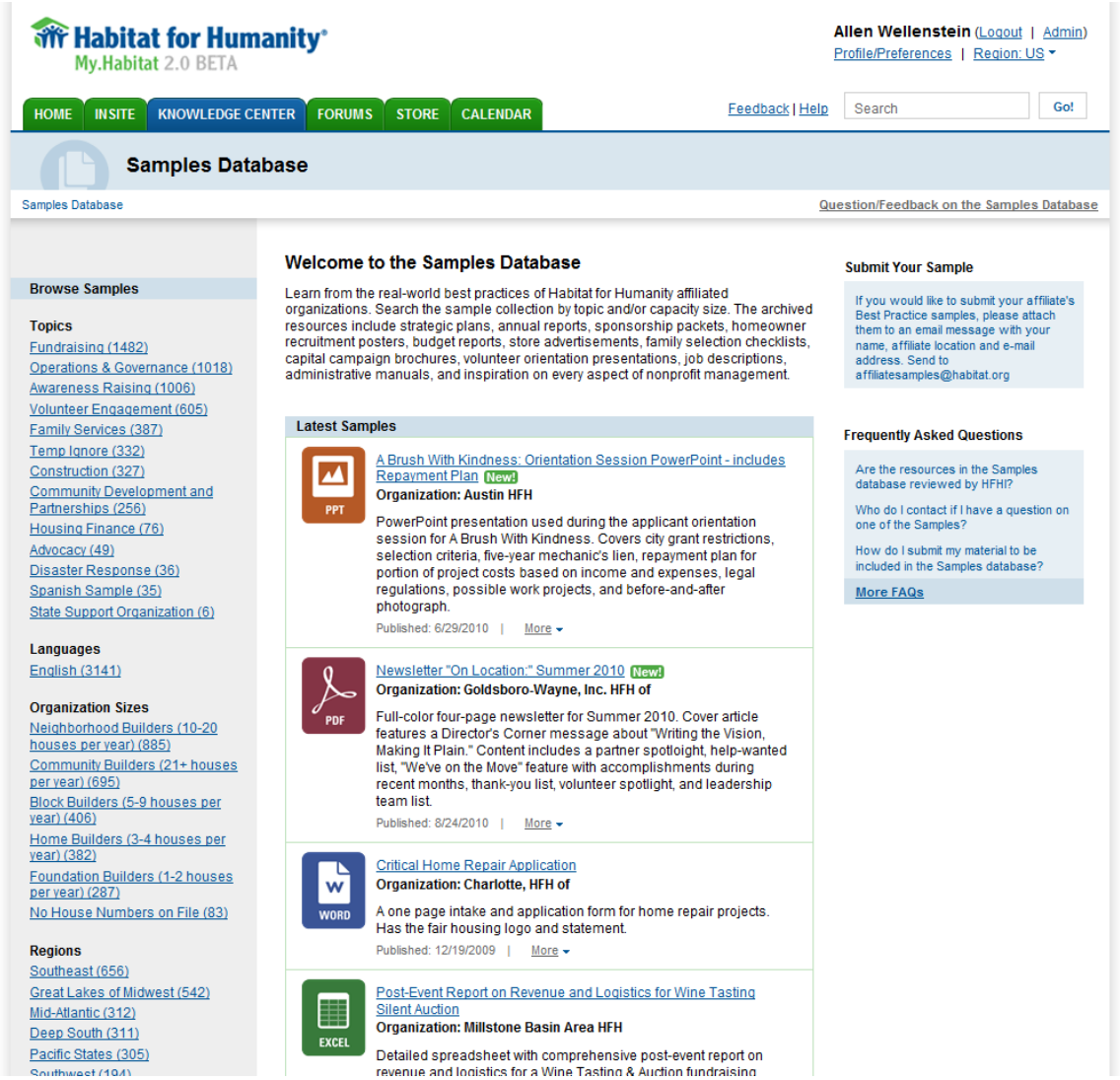
1. **InSite** contains employee content, such as the HFHI travel policy
2. ***Knowledge Center*** contains vetted content, such as the *Affiliate Operations Manual for Construction*

The publishing process for *Knowledge Center* and InSite relies on a human network of publishers, each of whom is formally designated, trained, and supported.

3. ***Samples* knowledge base:** This knowledgebase contains content contributed by affiliated organizations, such as a real-world donor solicitation letter

   The *Samples* knowledge base content-collection process is purposefully inclusive to encourage contributions. "Exemplars are solicited from affiliated organizations and contributions acknowledged with appreciation," says Lisa Reitz, Senior Director Learning and Knowledge Systems. "However, to ensure quality, users cannot self-publish." Topical experts review each contribution, and those that the reviewers feel do not satisfy minimum quality standards are culled.

   "Samples resources are extremely popular," she says. "And user surveys indicate that users are pleased with their availability and usefulness."



Pictured: The front page of the *Samples* knowledge base. This knowledge base contains content contributed by affiliated organizations, such as a real-world donor solicitation letter.

Publishing Roles

Content ownership is established by classifying resources into one of 20 categories, each of which is managed by a Publishing Group Owner (PGO). Each category has multiple topics and a regional scope. Along with ownership comes the responsibility for maintenance.

For formally published resources, such as operations manuals, the editorial workflow is managed by the organization's Communications Department and professional editors edit the content. For less formal resources, editing is coordinated at the department level.

What follows is a breakdown of some of the site's publishing roles:

> **PGOs:** The PGO has significant authority and responsibility to establish publishing policy and provide guidance regarding priorities, vetting, and

approval for the topics under their purview. PGOs are typically senior directors (one level below VP).

Topic Managers: At their discretion, PGOs can designate topic managers to assume authority similar to their own. For example, the Construction PGO has designated a Topic Manager for Sustainable Building (Green) practices. Topic managers are usually company directors.

Site Contributors: Site contributors assist PGOs and topic managers with data entry tasks. Site contributors are usually specialists.

Forum Moderators: Forum moderators monitor and facilitate online discussions. Forum moderators are usually managers.

All four roles — PGO, topic manager, site contributor, and forum moderator — are duties formally designated in each person's job plan and training is required before permissions are granted. Personnel are selected for these roles based on their topical expertise and attention to detail.

Open Feedback

Any user can provide feedback on any resource via MH's form-based feedback system. When this happens, the PGO receives an email notification and takes action on the feedback via the MH *Feedback Manager*. This action might include responding directly to the comment or assigning it to a topic manager. The *Feedback Manager* tracks feedback activities and logs responses.

Although the *Feedback Manager* was created to elicit feedback from users on their experience using MH, a secondary use was discovered that has significantly enhanced publisher collaboration. Publishers who are perusing MH and decide that they'd like something changed about a resource they don't own — such as a change in metadata — simply make the request on the spot using the feedback link, which in turn sends an email notification to the appropriate PGO and the MH Operations Team.

"This convenience has led to publishers spending more time browsing MH in that they can accomplish a great deal without having to log in to the administrative interface," says Norris, "And this, in turn, has resulted in an increase in the quality of the resources and their associated metadata."

Another helpful use of the *Feedback* system occurs when a user complains about not being able to find something.

"It can be very difficult for those of us who work with My.Habitat daily to perceive navigational challenges," he says. "When a user vents frustration, not only can we respond directly and help solve the problem, but we are spurred to analyze what led to the problem and correct it.

"In so doing, we have converted many a user from being frustrated to being an advocate, some of whom go on to enthusiastically contribute their time to help us improve the system."

In addition to gathering feedback through site mechanisms, the organization conducts an annual survey to solicit opinions about MH and key resources. This information is conveyed back to site contributors.

Ensuring Quality

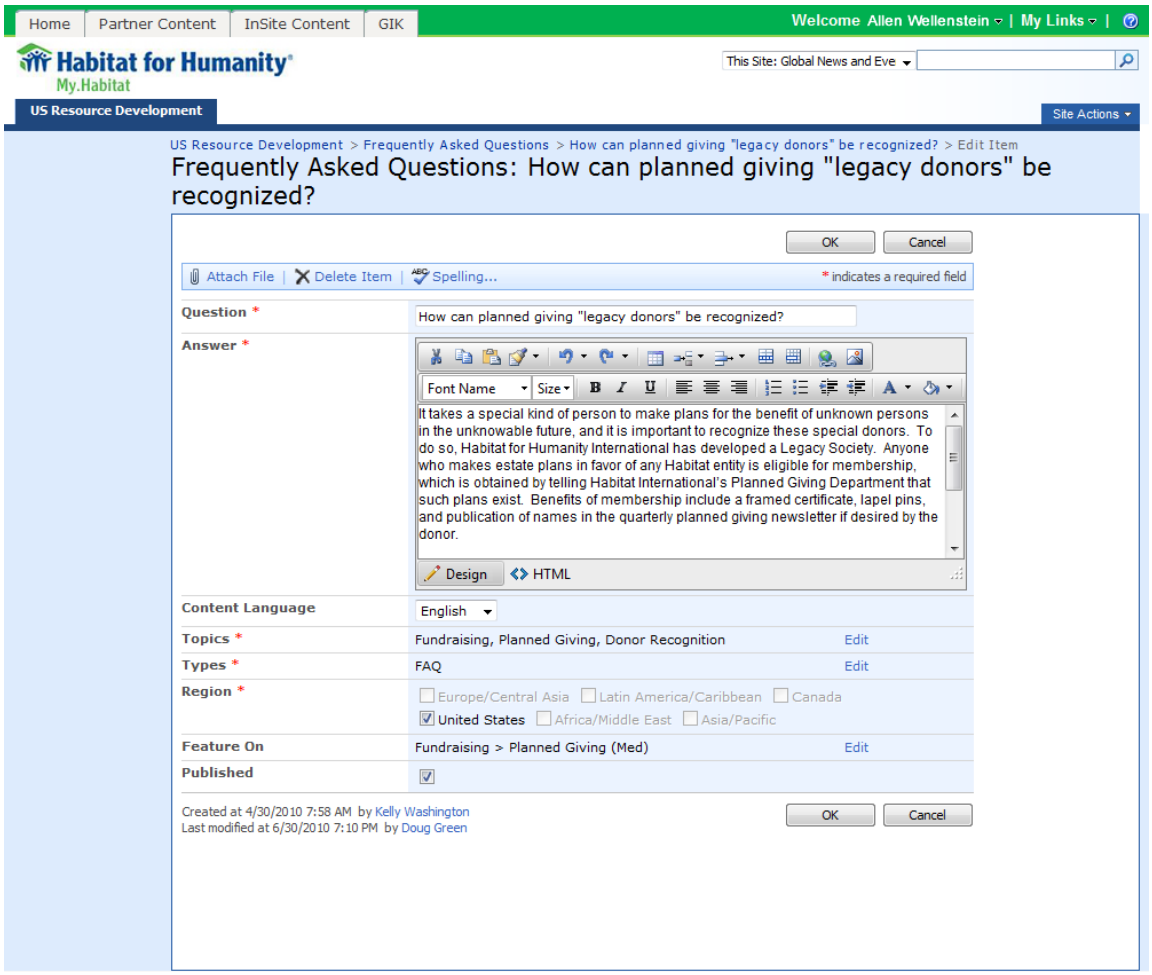
The Communications Department prescribes style guides for various types of site resources, and publishers typically use templates for their content.

The MH 2.0 Operations Team shares best practices via computer-based training (using Microsoft Live Meeting), the *MH Publishers' Guide*, and the MH publishers' SharePoint-based team site. Training is always contextualized to a publisher's own content, and training is a prerequisite for permissioning. Follow-up support sessions are scheduled to help the publisher apply new knowledge to solve real-world problems. On-demand support is also available.

Formal publications are reviewed often. For less formal publications, the PGOs are responsible for assuring that any resource published under their purview meet the guiding principles set by senior leadership and for providing explicit guidance about their criteria to those who have permission to publish.

Post-publication, anyone can surface a potential problem such as a typo, broken link, or out-of-date reference via the MH *Feedback* system.

The Affiliate Support Center collects and conveys US and Canadian user feedback on MH resources. And PGOs monitor resources tagged with their topics for compliance with their guidance. The Communications Department oversees news releases and monitors style-guide-compliance of published resources.



Pictured: An example editing interface for an FAQ. *Content Language* sets the language of this resource. The *Edit* link next to *Topics* and *Types* opens a modal allowing the editor to select all applicable tags (the type tag is often set by default based on content type). The region check boxes are used to set the content's regional scope. Publishing sites are usually regional in nature (for example, "US Construction"), so the regional scope is usually set automatically. In this image, most regions are disabled. Administrators must have specific permission to publish to regions other than their own. The *Feature On* selection allows the content to be featured, if the admin user has the rights, in specific areas around the site (such as the MH homepage) or with specific topics. The FAQ shown here will be shown first when users navigate to the *Planned Giving* tag under *Fundraising*.

Collaborating with Team Sites

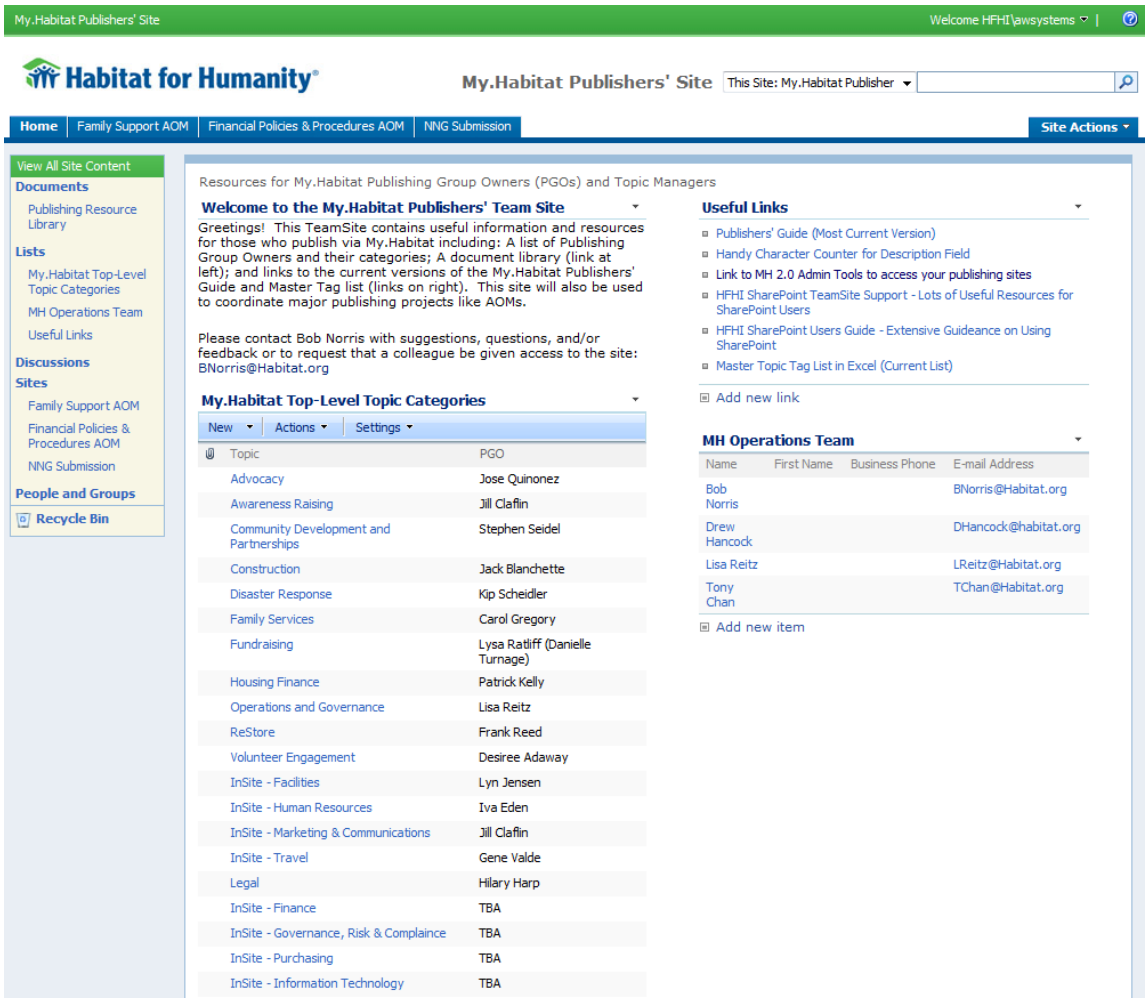
MH uses SharePoint's team sites to facilitate group collaboration. The MH Operations Team, for example, maintains a team site to support users in the four publisher roles: PGO, topic manager, site contributor, and forum moderator. This site is where publishers find the current version of the topic tag list, the MH *Publishers' Guide*, a list of PGOs and their categories, along with other useful resources. An example page is shown below.

The MH Operations Team can communicate with select publishers by group, using the site's notification feature. And per the Digital Publishing Process, project subsites are created on the publishers' team site to foster collaboration in creating, revising, or updating major site resources. Using SharePoint's version control and permissioning, a working copy of the document is maintained and backed-up.

"This mitigates the problems that arise during collaborative writing projects when versioning is left uncontrolled," says Hancock. "It is also quite helpful to collaborators to be able to access their files from a browser."

Once a resource has completed the editing and formatting phases, it's typically engineered for publication with internal navigation links and links to ancillary resources. A proof version is reviewed and tested online by stakeholders before it is approved by the PGO for publishing on MH.

When publishing is imminent, the Communications Department develops a communications plan for notifying constituents and the Affiliate Support Call Center is briefed. Feedback from users is elicited and captured via the Call Center and MH's *Feedback Manager*. Miscellaneous items are tracked via a document maintained on the project subsite. Source files are archived and a review date is calendared.



Pictured: An example of a team site area.

Solving Problems

The HFHI team faced many challenges in taking on this redesign project. But, in every case, they also found a reasonable solution to address the challenges. What follows is a breakdown of the major challenges and how the HFHI team chose to address them:

- **Challenge: Lack of Funding**

  HFHI did not have the discretionary funds to invest in the rapid deployment of a costly enterprise knowledge management solution. Nor did HFHI have the capacity to hire or reassign staff to full-time roles to support a quality control program.

  Solution: *Institute a multi-year, phased approach for technology development*. The MH Steering Committee established priorities, which were funded annually as budget permitted; some especially motivated departments funded special projects out of their discretionary funds. For staffing, existing personnel were nominated as candidates for publishing roles and those selected were assigned the role as a collateral duty. A small operations team was established to support publishers.

- **Challenge: Cross-Department and Regional Topic Stakeholders**

  In many cases, a given topic has stakeholders in more than one department, each of whom has a vital interest in what is published.

  "This is particularly challenging when policy is involved," says Hancock. "For example, a policy related to minors working on a construction site has ramifications that concern the interests of Legal, Construction, and Volunteer Management, as well as the five area offices — each of which may have regionally specific requirements."

  Previous iterations of MH were heavily US-centric, and senior leaders were determined to internationalize MH 2.0.

  Solution: *Establish top-level content categories and the PGO role*. Senior leaders defined the categories with an international perspective and PGOs were given global authority. To ensure inclusiveness, PGOs are encouraged to select topic managers from other departments and regions. Issues of concern are deconflicted by the Operations and Governance PGO who hosts regular meetings.

- **Challenge: Oversight**

Complicating the ownership picture at HFHI is the need for rigorous oversight on certain topics by entities such as Internal Control, Risk Prevention and Response Unit, Legal, and one or more VPs. However, it was recognized that establishing a rigid quality control process that applied to all topics alike would inhibit publication of helpful resources.

Solution: *Establish a formal digital publishing process*. The process applies to key resources, such as manuals and polices, and restricts the use of select tags, such as *HFHI Policy* and *Legal Advisory*. This process defines the guidelines, participants, and steps for assessing requirements, designing the resource, collaborating, reviewing, engineering, publishing, controlling quality, and ensuring maintenance. SharePoint-based team sites and Microsoft LiveMeeting technologies support these efforts. The MH Operations Team coordinates the process.

- **Challenge: Content Maintenance**

  Once published, a resource must be maintained. Although the sites' guiding principles dictate that content must be maintained, actually doing this can be difficult.

  Solution: *Include formal steps for archiving source material, tracking feedback and/or errata, and conducting calendared reviews in the digital publishing process*. These activities are supported by the MH Librarian; for example, source files are archived with SharePoint version control and limited permissions. For resources created and published less formally, the onus is on the PGO to manage the content.

  "Hence, the fundamental concept of our quality control program is that the decision to publish a resource equates to owning that resource, and ownership begets the responsibility to manage it," says Hancock. "Recognition of this burden of ownership is key to effective quality control. It also helps mitigate lengthy disagreements over ownership."

- **Challenge: Supporting Part-Time Publishers**

  While PGOs hold the ultimate responsibility for all content published in their topic area. In practice, the management of that content often falls to a more distributed team of people, some of whom are invested only as part-time content contributors.

  "Conceptually, PGOs are ultimately responsible for anything published on InSite or via the *Knowledge Center* that addresses a topic under their purview," says Norris. "In practice, the PGOs have flexibility in how they choose to manage their categories."

  At one extreme is the PGO who oversees every publishing decision and closely monitors any item labeled with one of his or her topics. At the other extreme is the PGO who delegates almost all decision-making to topic managers. Most PGOs select several topics for self-management and assign others to topic managers. Such disparity poses a challenge for the organization.

"In our experience, publishing activity tends to happen in bursts rather than as a sustained effort," says Reitz. "These bursts are typically associated with departmentally supported events, and publishing markedly subsides as workload spikes. From a support perspective, this results in some inefficiency."

Although the management team conducts a requirements assessment and helps the PGO craft a publishing strategy and train personnel, often this must all be repeated after a publishing resource steps back into the publishing cycle after a workload-induced delay.

So, while the publishers are trained, the gaps between training and execution often mean that they:

1. Forget how to use some of the publishing tools
2. Lose their grasp on nuanced aspects of describing and labeling resources (meta-data)
3. Forget best practices and labor-saving techniques

Personnel turnover is also problematic, especially at the topic-manager-level.

Solution: *A three-pronged approach*. Given HFHI's unique situation, the following three-part approach seems to work best:

1. **Provide specific training.** To some extent, the solution to this problem is the creation of a curriculum supported by reusable training resources. To that end, the team has standardized the orientation and created instructions for routine tasks, such as annotating screen shots. However, the nature of content organization and creating useful meta-data is complex and can be highly resource-specific. Therefore, it's important to account for both the audience and the subject matter; for example, the jargon and utility of construction-related resources is much different than what's useful to an accountant. The organization must also tend to a wide spectrum of user expertise and familiarity with our programs.
2. **Establish best practices.** "Of course, we identify and promote best practices," says Norris. "For example, spelling out acronyms in a meta-data field so that the search index contains both the acronym and the full term. We also tactfully point out practices that are likely to lead to problems."
3. **Meet unique needs individually.** "It strikes me that though there are best (and less than good) practices that can be shared across topics — there are many topic-specific elements that require tailored support and problem solving," says Norris. "As a result, much of our effort is focused on helping publishers meet the unique needs of a select audience, and these solutions are often not broadly applicable."

"If we were dealing with personnel dedicated to these tasks on a full-time basis, this distinction would not be as constrictive," says Hancock. "But when the publisher is working part-time — often less than 20 percent — there is significant pressure to limit the scope of what we teach to that which is most immediately useful to the tasks at hand."

TECHNOLOGY BEHIND MY.HABITAT	
Category	**Technology Used**
Web Server Hardware and O/S	• Dell PowerEdge servers with Windows 2003
Bug Tracking/Quality Assurance	• SharePoint
Design Tools	• Visio for wireframing • Photoshop for design
Site Building Tools	• Microsoft Visual Studio
Content Management Tools	• Microsoft SharePoint 2007 with the AWS Content Slammer
Search	• SharePoint search

SEARCH

Curated Search

MH relies on the standard search provided through SharePoint. On top of that, HFHI added a custom layer to provide "curated search," which lets users jump directly to known, curated topic pages via auto-complete functionality. This was done to accommodate different search behaviors among users.

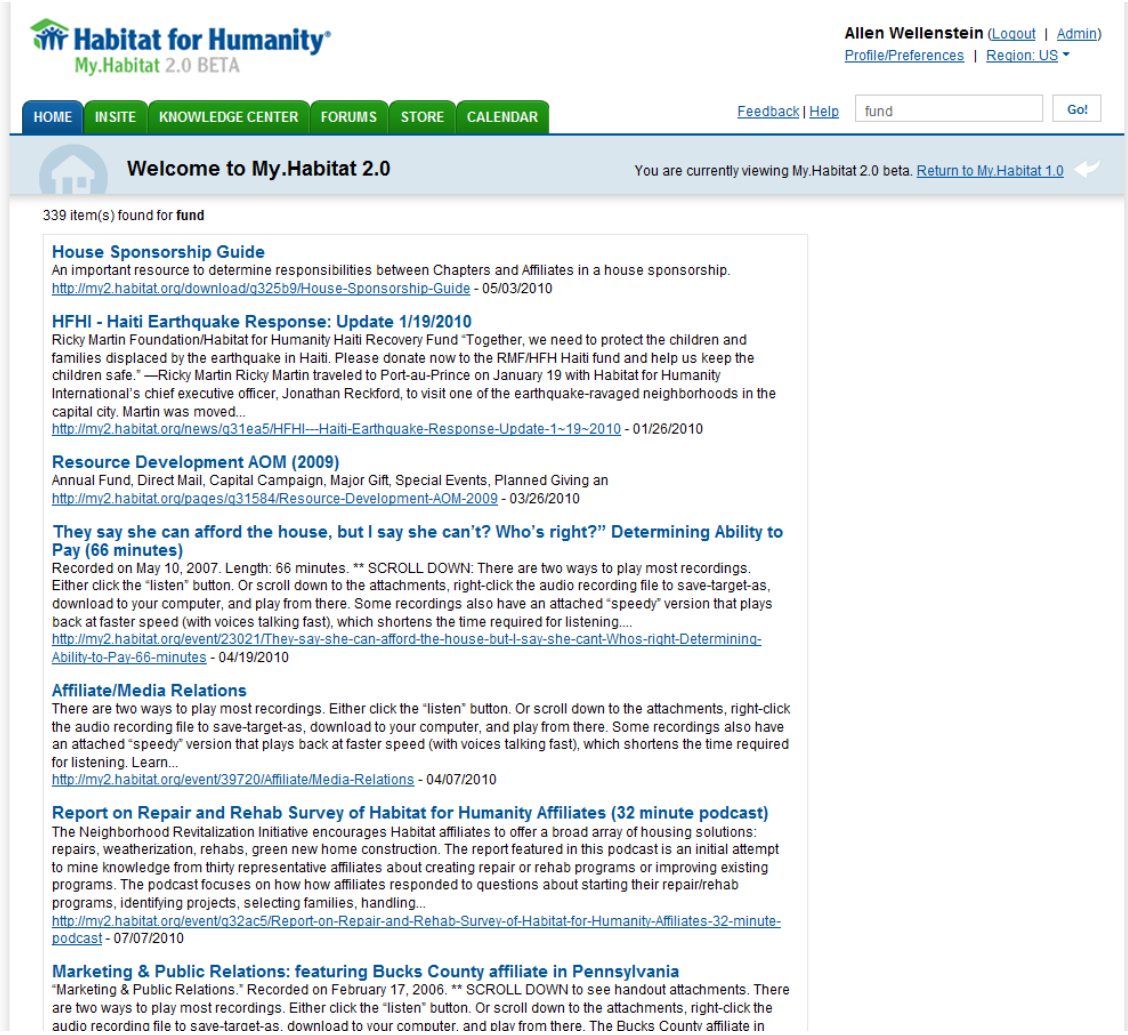
"Users tend to break down into two types," says Wellenstein, "those who use the navigation to find things and those who go right to search."

With curated search, even users who jump right to search get directed to the most relevant, authoritative, and helpful content.

The team maintains the integrity of search results through vigilance.

"We regularly review search logs to make sure that common terms people are searching for are represented in the curated search results with useful, authoritative results," he says. "We can set synonyms, so if someone is typing 'green construction' they get directed to the 'sustainable building' topic in our *Knowledge Center*."

"For terms that are not represented by topic or type tags in our taxonomy — say a particular program name — we can create search pages that return when users enter that name showing the information and links they are most likely looking for."



Pictured: An example of a search results page.

MEASURING SUCCESS

Often, the best way to figure out if you've succeeded is to look at what your goals were when you started. For HFHI's redesign project, the following table provides an at-at-glance view of the project's goals and outcomes:

GOAL VS. OUTCOME	
Goal	**Outcome**
Improve ease of use and access for users	• Approximately 60 percent drop in "where do I find...?" questions. • The updated user profile and preferences has provided much easier user profile management, thus decreasing significantly support requests for things such as email address and password changes.

Highlight the HFHI recommended/vetted approach so that affiliates can quickly find key information	• Improvements to the affiliate Samples Database in the US and increasingly in regions across the globe. • Improvements in integrated learning and knowledge-sharing strategies, such as the Affiliate Support Center accessing information to respond to call center questions, conference calls reinforcing use of affiliate samples, and workshop training sessions. • Regional preference options that make finding locally relevant information easier and faster. • Affiliate Operations Manuals and other resources that provide Habitat's recommended approach and link users to multiple external sites/resources that are essential for their work.
Enhance the ability to report on usage, satisfaction, and other key indicators	• InSite updates are now more timely.
Increase the number of tools and resources available worldwide	• More content is now offered that doesn't depend on one person traveling across the globe. For example, face-to-face training isn't required to increase knowledge sharing. • Engagement of nearly 150 people in HFHI with shared accountability for high-quality content.
Use reliable processes to ensure that information can be updated as fast as conditions, regulations, and other things that impact our work	• Reduction of the "hassle factor" for users in posting and finding information, including better content organization.
Build commitment for achieving and maintaining high-quality solutions through engagement of a cross-functional team of sponsors, publishers, and content contributors	• The ability to use multiple indicators to measure factors such as usage and satisfaction so that the team can easily adapt its approach and continue to meet and exceed user expectations.

Quality vs. Quantity

Reducing the amount of content on a site seems like an unusual measure of success, but for HFHI it was.

"Decreased content, believe it or not, is a significant measure of success for us," says Hancock. "The initial extranet and intranet were described as 'Grandma's Attic.' There was a lot of useful information within, but incredibly difficult to find due to such a large amount of outdated and abstract content surrounding it."

"Once we got a handle on the publishing and created quality control processes, we saw a significant decrease in content, which in our case was a really good thing. The useful information surfaced much quicker for the user and therefore increased the success of the user's visit."

LESSONS LEARNED AND BEST PRACTICES

HFHI team members outline some of the best practices they learned along the way:

- **The management of content and the consumption of content are two completely different concepts.** "Much of the content was organized for viewing in a way that matched the structure of the organizational chart. Although it was easy to identify who owned the content, it wasn't always so simple for the user to find the content without in-depth knowledge of our departmental responsibilities. MH 2.0 separates the ownership of content from how it's browsed. SharePoint is still used as the CMS — each department or program has a 'publishing site' where they publish their news, FAQs, downloads, events, podcasts, etc., and tag them by topic and type of content. Users then browse content based on topic or content type rather than needing to find the SharePoint site where that content lives." (Wellenstein)
- **Separate the content navigation from the ownership.** "Try to resist the temptation to organize the navigation based on the organizational chart. Organize via topics and types of content that the general end user will be familiar with right out of the gate." (Norris)

Genentech

Using the intranet:
Genentech, considered the founder of the biotechnology industry, has been delivering on the promise of biotechnology for more than 35 years, using human genetic information to discover, develop, manufacture, and commercialize medicines to treat patients with serious or life-threatening medical conditions. Today, Genentech is among the world's leading biotech companies. The intranet supports all regular Genentech employees (approximately 11,000) as well as global employees (of Roche, its parent company) who are located on site and have information needs applicable to their roles. Genentech employees are located across the US and also on international assignment with Roche.

Headquarters:
South San Francisco, US

Number of employees the intranet supports:
11,000

Company locations:
Genentech has offices in South San Francisco, Oceanside, and Vacaville, California; and in Hillsboro, Oregon.

Locations where people use the intranet:
Roche and Genentech employees can access the Genentech intranet from Roche offices worldwide. Metrics show that approximately 7 percent of intranet traffic is outside the US, with the bulk coming from Singapore, Switzerland, and Germany.

Annual sales:
Genentech is a member of the Roche group. Financial information for Roche (ROG.VX) can be found at http://www.roche.com/investors.htm

Design team:
The in-house core design team comprised four people, who worked closely with numerous partners, stakeholders, and end users to determine the overall design direction. The contributions of the extended team (below) were notable.

Members:
Core team: James Musick, Director of Social Media & Web Communications; Sharif Ezzat, User Experience and Design Lead; Christian Santiago, Web & Intranet Technical Lead; and Ken Hansen, iPhone Technical Lead

Extended team: Amy Gartner, Director of Internal Communications; Lise Dumont, Sr. Manager, Internal Communications; Emily Anderson, Sr. Manager, Internal Communications; Elizabeth Howell, Sr. Associate, Internal Communications, Pritam Prasad, Application Integration Lead; James Gosnell, Enterprise iOS Team Lead; Jane Pyle, Enterprise iOS Usability Lead; Michelle Tran, System Administrator; and Conor Cassidy, Collaboration Systems Analyst

SUMMARY

Simple and engaging. Those were two of the Genentech intranet team's goals as they approached a site upgrade. Five years had passed since the biotech company's last site upgrade, and team members were looking into new technologies, addressing new business needs, and trying to live up to user expectations. They realized as time passed that users had growing expectations for their internal site, called *gWiz*. Specifically, they expected the ease of use and functionality they were accustomed to on public-facing sites.

As a result, the four-person team set out to improve usability, simplify technology solutions, and introduce new site elements. Team members focused on creating clean pages filled with compelling and current content, but most of all they wanted to create a site that clearly reflected the corporate culture and gave employees opportunities to interact and engage with the site's content and each other. One of the key decisions was to enable social features—such as comments, ratings, and sharing—in all of the new site sections they developed.

The team approached the change as a series of upgrades, rather than a complete overhaul. It took a collaborative approach, which helped team members inform the 11,000 employees of upcoming changes and helped the employees feel involved in the changes. The team started the process with an emphasis on user research. This led to more design iterations than in past intranet efforts, which helped refine and enhance the UI as well as the user experience.

The homepage has a simple, clean design featuring brand colors. The team tried to reduce the complexity of the previous homepage, focusing on content users want and need, presented in a way that makes sense. Images, clean fonts, and a simple grid make it easy to find information. Four news stories are featured at the top of the homepage, together with relevant images, clear headlines, and brief descriptions. Related stories appear next to each headline.

Headlines are accompanied by the story's rating in relation to a five-star scale, followed by the number of users who rated the content. (Users can submit ratings by clicking on the rating scale.) The number of comments is displayed next to a speech bubble, and followed by an icon allowing users to share the content via email. Some stories have sparked hundreds of comments back and forth among employees. Hover states promote interactivity by revealing additional context-relevant content with minimal user action and without leaving the page.

The page includes additional news provided through RSS feeds, providing information about Genentech and parent-company Roche. Announcements appear in the middle of the page with images, headlines, and summaries, followed by upcoming events.

The top of the page includes a lightweight JavaScript time-zone widget. The page always shows users' local time (regardless of location) and the time for one or two other locations that they choose—typically offices they regularly work with—so they can see at a glance what time it is there.

The homepage's *Who Is* section is a very popular area. The company has grown quickly, making it harder to know and meet others in the organization. In an effort to maintain the personal connections that are so important to company culture, the *Who Is* feature showcases employees. Information about individual employees can include a combination of work and personal information, such as their best day at the company, their favorite thing to do when not working, their favorite vacation destination, or the website the frequent the most.

Who's Paul?

Date: August 19, 2011

Name: Paul [illegible]

Department: Rare Disease Cluster, Product Development, Immunology

Time at Genentech/Roche: 9 years this month

What do you do: I am a Principal Medical Director and have focused on the Rituxan in autoimmune program for these past 9 years. The program has spanned rheumatoid arthritis, multiple sclerosis, acute organ transplantation rejection, lupus, vasculitis, type I diabetes mellitus and many other diseases. It's been an extraordinary learning opportunity across multiple autoimmune disorders affecting millions of patients, and has involved some high-risk programs with difficult endpoints and regulatory pathways.

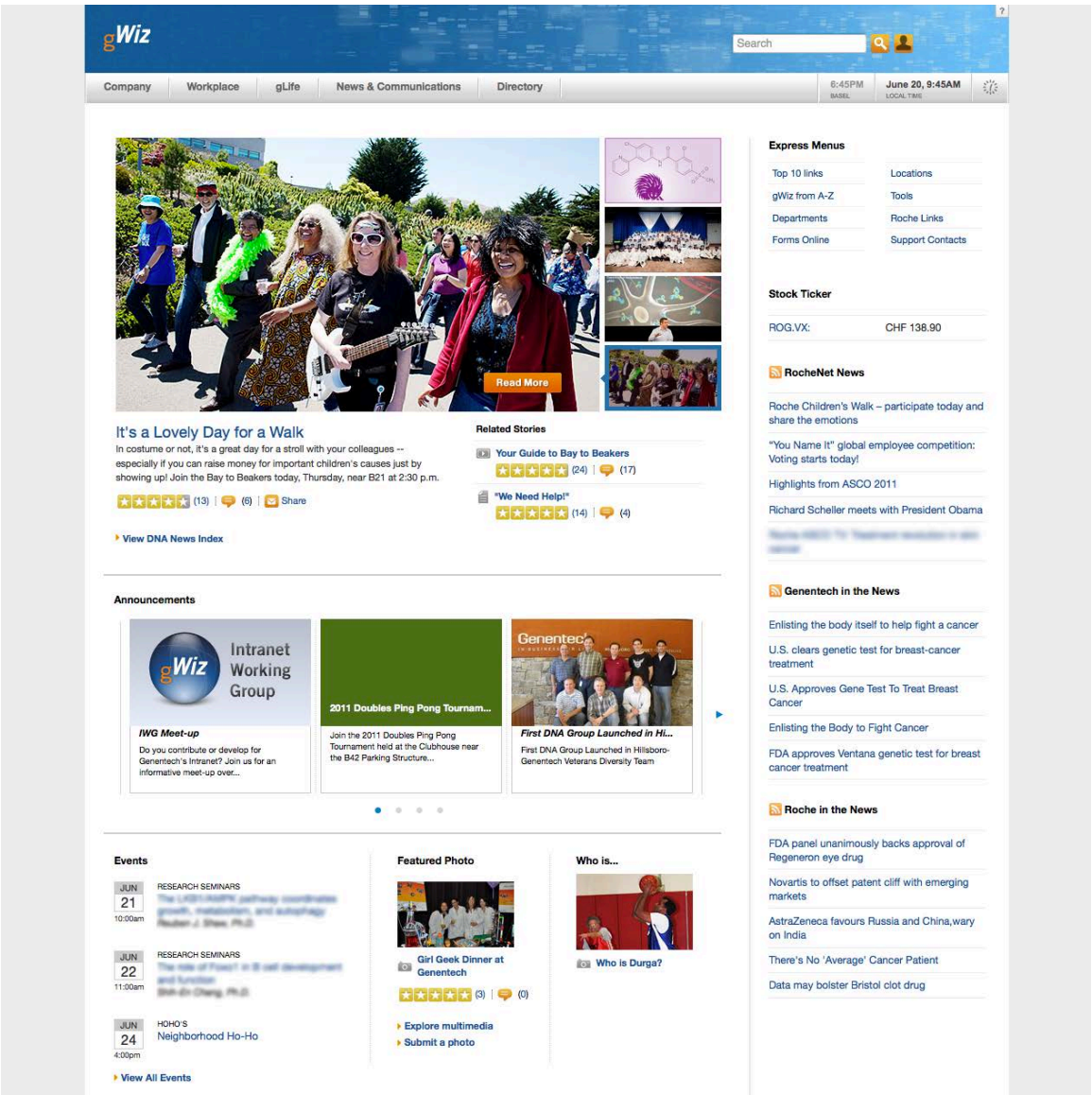
What motivates you: Being on teams that focus on the design and implementation of studies intended to advance science for patients with serious disease. Working to improve patient outcomes across thousands of patients really motivates me every day. I feed off the excitement of discoveries in the REDs [gRED and pRED], the data from our global studies, the development of strategies to better serve patients with less common diseases, and the intellectual drive of other team members.

What was your best day at Genentech and why: The day Rituxan was approved for patients with Wegener's granulomatosis and microscopic polyangiitis! It represented many years of work, a huge team effort, emails and calls from investigators that were part of the process in collaboration with the NIAID and the Immune Tolerance Network. This success was balanced by negative studies with Rituxan in lupus which were disappointing but extremely informative. Drug development is really risky, and it was great to celebrate success.

Favorite Genentech clothing item or memorabilia: Biking jerseys from prior Multiple Sclerosis Waves to Wine fundraising rides! My Genentech friends have helped me and my son raise more than $15,000, and it reminds that we're committed to MS research and approvals.

Favorite thing to do when you're not working: Mike Doherty and I are about to embark on a humanitarian trip to Peru on October 20, 2011. A group of docs and volunteers is going to Cusco, Peru to staff a health care clinic. The clinic is run for about five days and will see about 3,000 patients. We provide basic care and treatment and distribute hygiene products such as toothbrushes, shampoo, and soap, which are not frequently available to these people. We aim to take 1,000 pairs of glasses and will provide these to people who need them. We also visit an orphanage and bring gifts for the children and have a fun day playing with them and teaching them. My teenage daughter and I will go, and it'll be an extraordinary experience for all of us.

Pictured: An example from the *Who Is* section which showcases information about employees, both work and personal information.



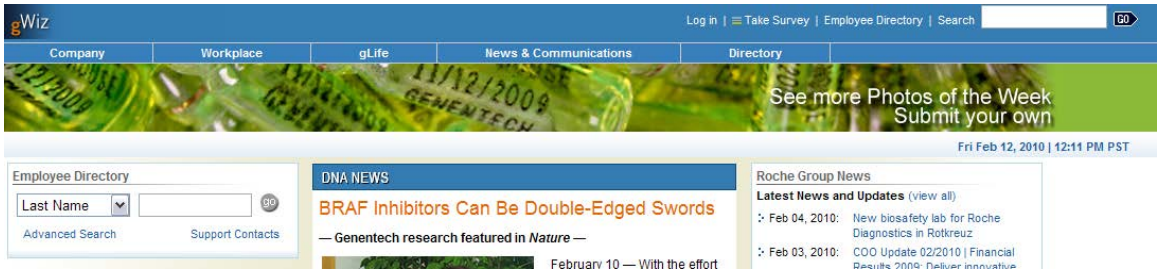
Pictured: The new gWiz intranet homepage is clean and streamlined, focused on news, current events, and interesting content.

Usability testing affected the presentation of search options on the homepage and throughout the site. The team is working on back-end integration to let employees search multiple content collections from a single search field. In the meantime, they had to determine how to present two searches: site search and employee search. Previously, the two searches were located far away from each other on the page and were inconsistently displayed; the team's goal was to simplify this design.

Team members tested a few solutions and decided on one that they considered both flexible and visually simple. However, users quickly complained that the number of clicks to get to employee information had increased. Because searching for employee information was a common task, users were frustrated when it became more time consuming than before, even though the design was streamlined. The team went back to the drawing board and came up with a solution that restored the one-click access to content. Team members realized that employees needed a dedicated

button for employee search by default, rather than having to hunt for the option. The interface now features a single open field, followed by a magnifying glass icon signifying site search and a person outline signifying people search.

Picture: The final design for the search box uses a single text field, followed by two buttons representing site search and people search.



Pictured: The intranet's previous version offered employee search on the left-hand side of the page and site search in the upper right. The searches functioned differently as well.

The team also wanted to simplify content authoring during the upgrade. In the past, a variety of complex content management tools were used to run the site. This resulted in a lot of time and energy spent training content creators, fixing problems, and answering questions rather than focusing on content.

To address this, the team decided to go with a simpler tool, Movable Type, to make authoring easier. Training that used to take several days can now be accomplished—not perfectly, but well—with an email and a short training video. The tool also allows simpler, more frequent upgrades and faster publication cycles.

Regular contributors are trained on the content system, while less frequent contributors can make change requests via a Google form available on the site. Team members were careful to create content guidelines that are brief, clear, and easy to follow. Their approach is that it's better to teach contributors to do it the right way rather than have to address problems later. They also support contributors after content has been added, providing metrics and insights into the site's most successful content and praising good contributions.

gWiz > News & Communications > Press Releases

Press Releases

"Feature" announcements, moderated by Corporate Relations, highlight current information about significant Genentech events, activities, programs and services. The section offers a choice of text-only and graphic promotions.

Appropriate Content
The following content is appropriate for "Feature" announcements:

1. Events including Ho-Hos, patient speakers, Genentech-sponsored community involvement opportunities, Research Revealed speakers, VP Lunches, flu shots/health awareness and blood drives
2. gLife programs and services such as the Concierge, 401(k), Weight Watchers
3. Significant and time-bound computer- or mobile device- related updates

Additional Guidelines
The following guidelines also apply to "Feature" announcements:

1. "Feature" submissions must be applicable to a broad audience (either all SSF-based employees or all Genentech employees). If your submission is not applicable to one of these audiences, please consider a targeted email distribution to appropriate parties.
2. Employees are responsible for creating "Features" submissions.
3. "Feature" submissions can be either text or graphic, but not both.
4. The sponsoring department or group must approve "Feature" submissions before requests are submitted, according to their own department guidelines.

Questions? Contact us at campuslife-d

Pictured: A page from the content contributor guidelines.

gWiz Content Management Training

gWiz Home

These short videos show how content on the gWiz home page can be changed using the Theme Options in Movable Type.

Set News Feeds

How to set your RSS News Feeds. Which allows you to set the news information that appears on the sidebar.

Create an Internal Ad

This will help you to set up your own banner ad. Whether you prefer to make a image advertisement or a text based one. The advertisement will display at the sidebar.

DNA News

Create a News Story

Create your own news story entry page. This page will be displayed as a new web site entry.

Preview and Share a Story

Once you create a story entry you have the option to preview how the story will look and also send the story to a contact.

Multimedia

Add a Photo to a Slideshow

Adding photos that you would like to play one after the other.

Create a Slideshow

How to create a set of images that will play one after the other.

Add a Slideshow Description

Create a slideshow and how to add a description to it.

Create a Video

Learn how to upload a video and publish it to the site.

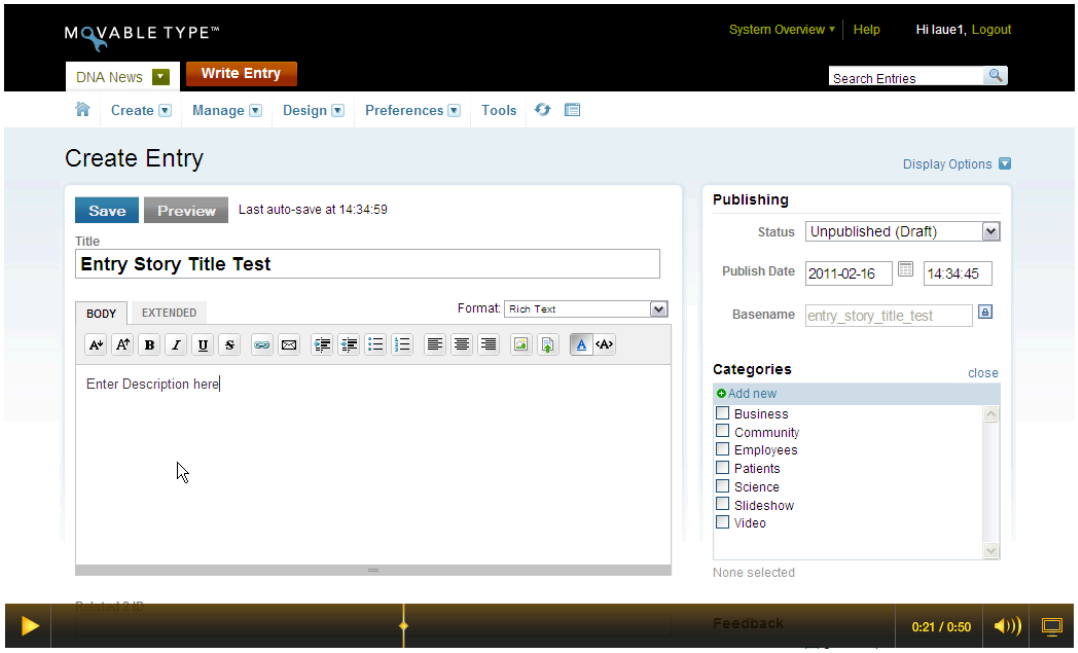
Change the Hero

How to change the hero options to whatever you like.

Tag a Video or Photo "Featured"

You can mark a photo or video as featured to make it one of the featured items.

Pictured: The simple website where the company offers a variety of training materials (mostly in video form, due to its popularity and successful use).



Pictured: A still image from one of the training videos. This example is a step-by-step video that shows users how to create a blog entry.

A key goal for the upgrade was to add social elements that let employees communicate via the site. The team thought of ways to make content more interactive, and employees are responding—posting pictures, tagging content, commenting, and submitting ratings.

Even areas such as executive biographies are designed with interaction and engagement in mind. Executive Committee (EC) Bios highlight members of the executive committee and make those leaders more accessible to employees. The pages provide information about the executive with a clean design and focus on interesting facts rather than more formal information. Informal photographs make the section visually interesting and informative.

Profile pages include a *Think Fast* section showing the executive's preferences for things such as sushi or salad, coffee or tea. This is followed by factoids, including the most interesting or quirky thing in his or her office. A quote on the side of the page highlights the executive's priorities, while the *Pictures & Videos* section pulls relevant content from the *Multimedia Center* featuring the executive or members of his or her organization. This content is automatically pulled in when site photos or videos are tagged with the EC member's name or group, keeping the content up-to-date.

Employees are invited to engage with management via the *Have a Question?* widget on the side of the EC Bio page. The executive's upcoming events are listed as well, so employees know about his or her speaking engagements and meetings. Employees can read updates or see news and articles about or by the executive, and can comment on that content as well. All of these elements drive community engagement around current issues and topics and work to foster the sense of community and culture that the company values.

The landing page for the section includes the latest updates from all EC members and also lets employees ask a question of the group as a whole.

gWiz

Search

Company | Workplace | gLife | News & Communications | Directory

10:46PM BASEL | October 11, 1:46PM LOCAL TIME

gWiz > Our Leadership and Organisation > Executive Committee > Ian Clark

Meet the Executive Committee (EC)

- Executive Committee
  - Ian Clark
  - Hal Barron
  - Rick Kentz
  - Steve Krognes
  - Tim Moore
  - Denise Smith-Hams
  - Richard Scheller
- Management
- Founders

Ian Clark

Chief Executive Officer,
Head of North American
Commerical Operations

About Me | Updates | News & Articles | Pictures & Videos

Think Fast

Blackberry or iPhone
To Go or Cafeteria Seating
Sushi Bar or Salad Bar
Morning or Afternoon Meeting
Walk-by or Email
Coffee or Tea

One thing people might not know about me: [redacted]

To relax, I like to: [redacted]

A favorite project that I've been a part of at Genentech: [redacted]

A favorite tip I give to employees seeking career advice: [redacted]

An interesting/quirky item in my office is: [redacted]

A book I read recently was: [redacted]

A place I want to visit but haven't yet is: [redacted]

My most memorable vacation was to: [redacted]

A favorite aspect of Genentech's culture: I get to work with really smart people who aren't afraid to speak their minds.

The main trait I look for in new employees: People who are smart and who also fit with the culture.

"My goal is to keep Genentech as a science based R&D driven company, to maintain our focus on patients (they are are why we do what we do), and to make Genentech a great place to work for all our employees."

Have a Question?

Ask Ian

Ian's Events

OCT 28 4:00pm — Halloween Ho-Ho, B21

My Biography

Ian Clark is chief executive officer, Genentech and head of North American Commercial Operations for Roche. He was appointed to this role in January of 2010. He also leads the Genentech Executive Committee and is a member of the Genentech Board of Directors.

Clark joined Genentech in 2003 as senior vice president and general manager, BioOncology and, in January 2006, he was named executive vice president, Commercial Operations and became a member of the Executive Committee. In this role, he was responsible for leading all of Genentech's Commercial functions including Sales, Marketing, Managed Care, Customer Operations and Commercial Operations Support. He was named head of Global Product Strategy and chief marketing officer in April 2009.

Prior to joining Genentech, Clark served as president of Novartis Canada, overseeing all of the company's country operations. Before assuming his post in Canada, Clark served as chief operating officer for Novartis United Kingdom. Prior to joining Novartis in 1999, Clark worked in vice presidential roles in sales and marketing for Sanofi (Aventis) and Ivax in the United Kingdom and Eastern Europe. Clark started his career at Searle, where he held management positions in both sales and marketing.

Clark has served on the on the board of the Biotechnology Industry Organization (BIO) since 2009. He previously served on the corporate boards of Vernalis plc and Dendreon Corporation.

Clark received a Bachelor of Science degree in biological sciences from Southampton University in the United Kingdom.

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Genentech
A Member of the Roche Group

Please note: this information is confidential and proprietary. The information is only intended as a reference for internal use at Genentech.
It must not be shared with external audiences.
Website contacts and updates: Corporate Relations

Pictured: The site's *Meet the Executive Committee* section takes a fresh approach to executive information, making management accessible in an informal way.

The *Multimedia* section has been a successful addition to the site. Content from this section is integrated throughout the site, whether on the homepage, on executive profile pages, or associated with news articles. This content is also available on a corporate mobile app. Employees are actively posting to this section as well as commenting on, rating, and tagging content.

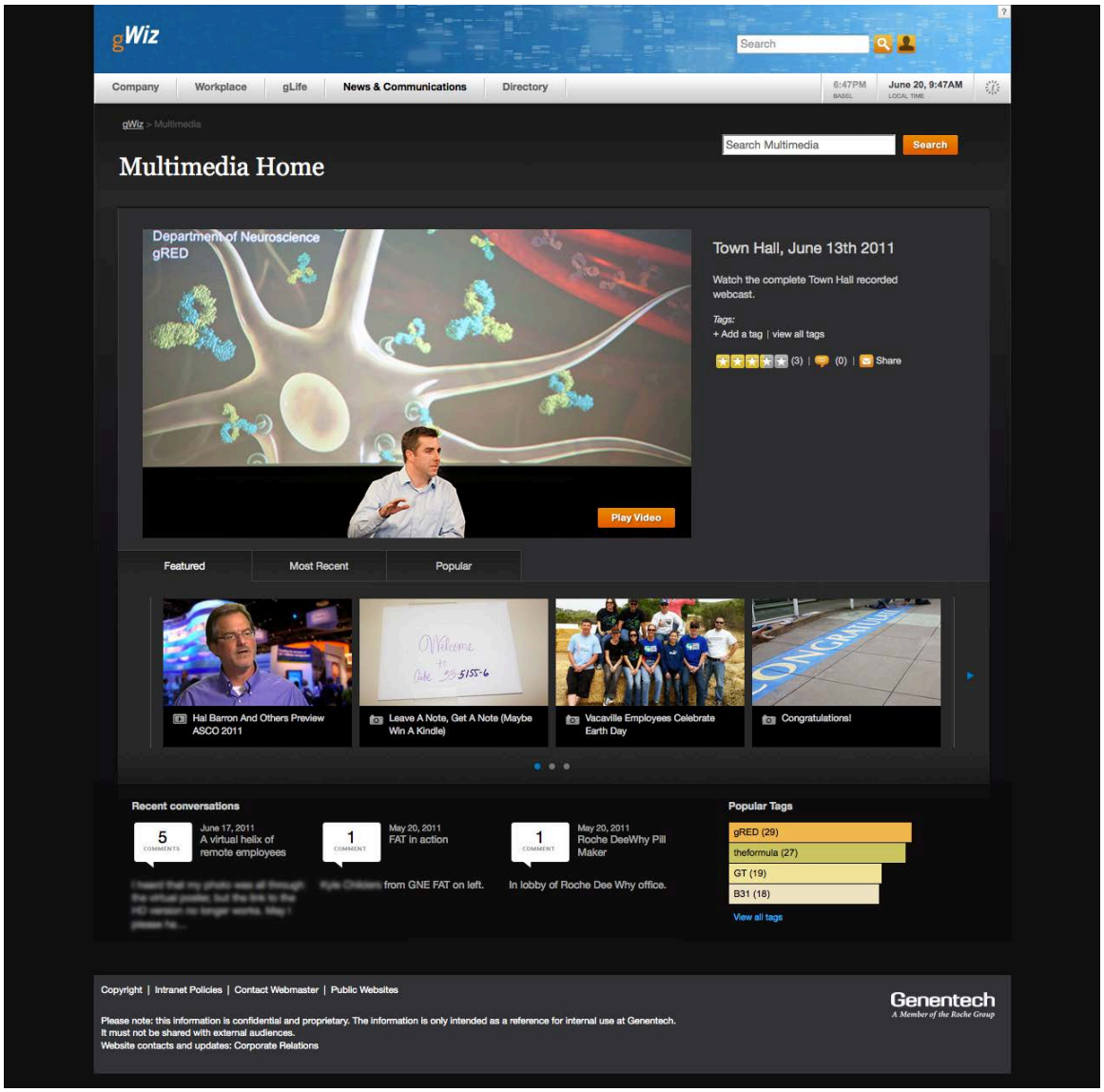
The page's main area highlights a video or photo and changes regularly. Users also can (and do) tag content, resulting in a user-generated tag collection that is thorough and accurate.

In addition to a featured item, the page also promotes recent additions and popular content. Popular tags are highlighted at the bottom of the page, and users can click on any to see the associated content.

Users can browse recent or popular content, as well as search the site. The dual search boxes are a temporary solution due to technology constraints, and the team hopes to implement a single search box soon. Recent comments are shown at the bottom of the page, so users can see not only what's new, but also what's interesting to their colleagues. Conversations are highlighted, showing the number of comments on an item and the latest addition to the conversation.

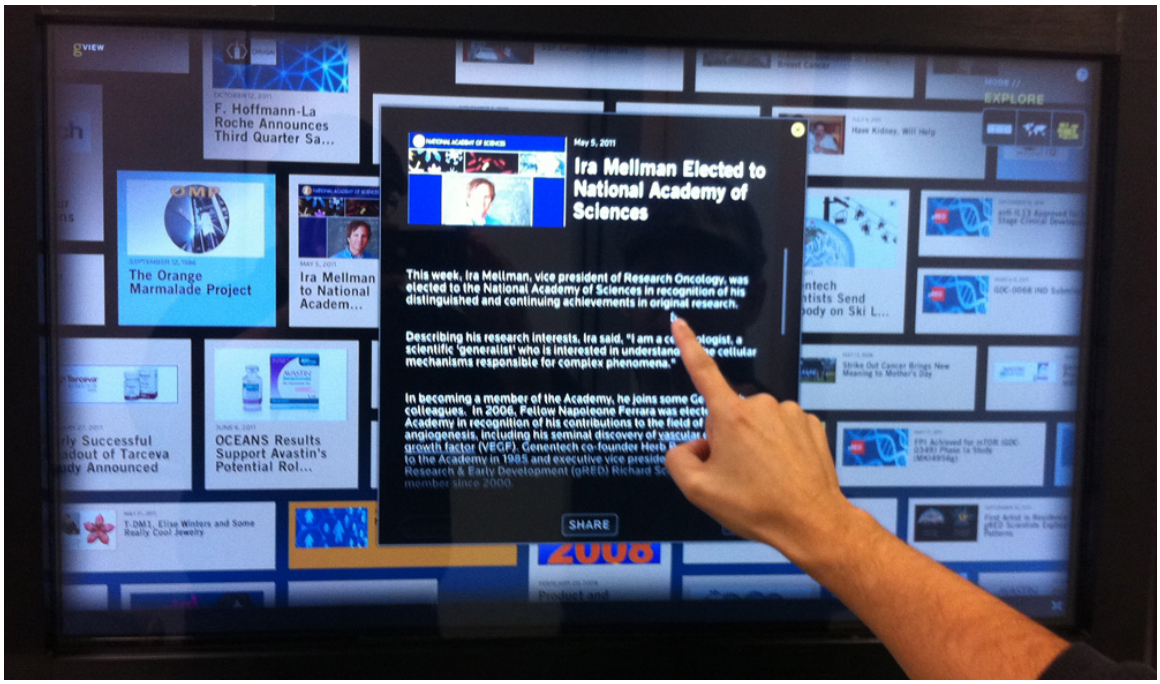
The section has drawn considerable interest. For instance, an employee posted a picture of something that looked like a domino, inspiring comments asking about what it was. The research-oriented employee explained it was a photo of microarray chips used to compare a normal tissue sample to a tumor sample to determine variations of DNA and to help understand the biological mechanisms for cancer. Simply by posting a picture, an employee helped to explain, in lay terms, a complex topic and thereby got nonscientific employees excited, engaged, and informed.

Employees also post images from around the world. Employees who travel in their roles at the company post images of employees in other areas, including the US, Australia, China, and Switzerland. Such images are well received and help connect employees to each other around the globe.



Pictured: The site's multimedia area is a popular section where employees can post, view, discuss, and tag images and videos.

The gView content aggregation and visualization tool offers a different way to browse information, pulling various types of content from the intranet as well as from internal and external RSS feeds from Genentech and parent-company Roche. It runs as a web app, available on the intranet. A tablet app and multitouch kiosk are also in development. The gView tool features news, events, company milestones, and other features such as videos and slideshows.



Pictured: The multitouch kiosk, which will be launched by early 2012.

Users can browse content by time via the timeline or a map, or explore a random mosaic of content. In location view, the size of the dot indicates the relative amount of content about that area. Users can move the slider at the bottom of the screen back and forward in time to see the amount of news for that timeframe. A click on a bubble shows the collection of content.

gView was designed and built to provide a unique and flexible way for employees and visitors to access aggregated content from across the global organization. By collecting news, events, milestones, and multimedia features from multiple sources in one content management system, gView offers the ability to curate and publish content to a variety of platforms and end-user applications tailored to different experiences: web, tablet, lobby installations, and event kiosks.

Pictured: The map view of gView content shows the relative amount of information specific to a location in a particular timeframe (here, July 2010).

When users click on a dot, they see a zoomed view of the timeline showing individual pieces of content, including news, events, milestones, and features. Any piece of content can be clicked to pull up the full story. Users can navigate to the next or previous story in the timeline or share the content.

Pictured: gView offers a different view of content, pulling information from various intranet areas into a highly interactive view.

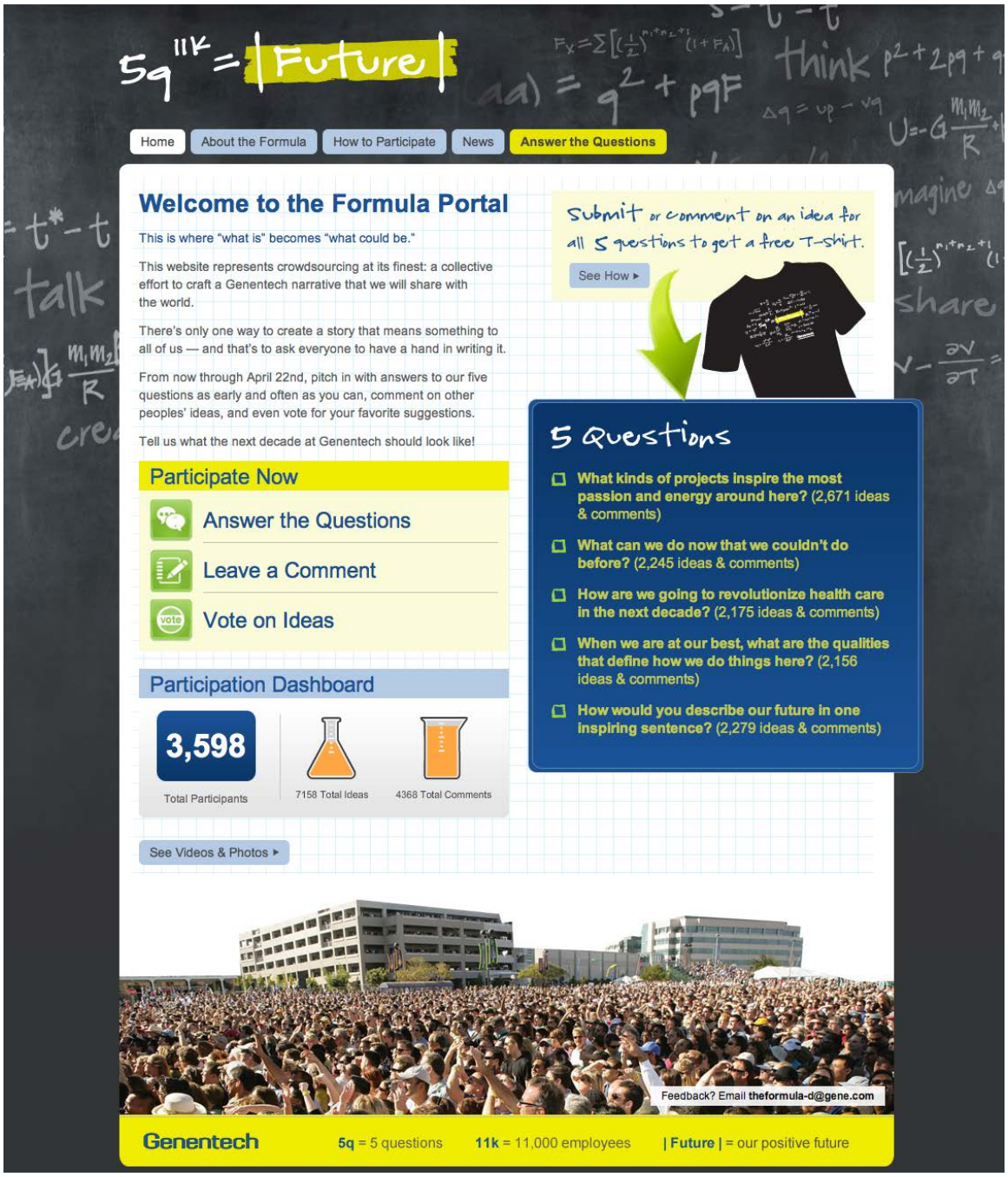
To further engage and connect employees, the team recently added a crowdsourcing element to the site. The site uses crowdsourcing for a variety of topics, including finding answers to a specific problem or question—such as "which iOS app should we build next?"—to discussions of more abstract topics.

One such campaign was *The Formula*, which was intended to engage employees in discussions about the projects that most inspire them.

Such projects are promoted internally from websites or sometimes are part of a larger campaign. For instance, *The Formula* had a full communications and rollout plan that included employee activities and t-shirts for participating. The result? One in three employees participated in the campaign, and it received incredibly positive

response. The project's success inspired several more campaigns on other topics within a few months.

Such projects engage employees and show them that the organization is soliciting ideas and listening to their responses. In instances where employees vote for one another's posts or ideas, there is also an element of interaction, community, and social recognition for participation.



Pictured: Crowdsourcing projects, such as *The Formula*, engage employees and use the collective power of the individuals to answer questions and create ideas.

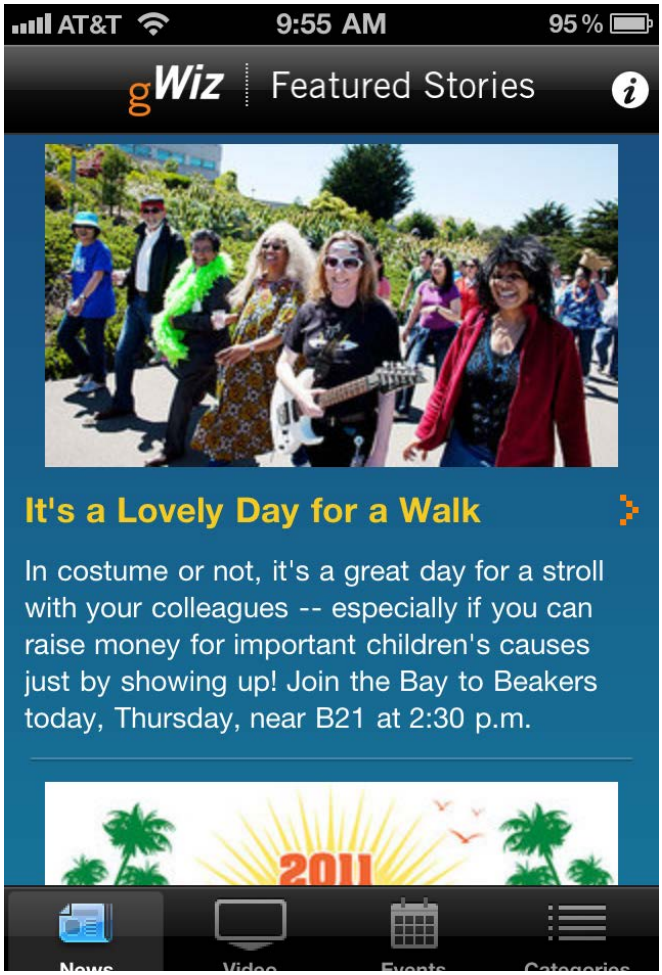
Although the intranet can be accessed on mobile devices if a user is on the Genentech network, the site is not optimized for mobile. To address mobile users' needs, the team decided to build a series of native iPhone apps, supporting the company's dominant platform. The team decided to go with an iOS app versus a mobile-optimized site because they had in-house expertise on the platform and wanted to take advantage of phone features.

The apps include select content from the site, including news stories, events, and video content, which is stored on the device so users can view it when off the network. Employees can also upload photos to the intranet's multimedia section via the app.

The most popular app is the employee directory (*Peeps*), which lets users look for colleagues and find phone numbers, office locations, and other information. The application had earned 6,500 installed users in two and a half years.

The second most popular is the news application, *gWiz*, featuring the latest top stories, multimedia content, and events. All content is available both on and off network. This app has attracted 1,650 users in six months.

As of this writing, Genentech has 47 iOS apps currently in production and another 34 in the QA cycle, for 81 apps in total. Approximately 8,000 employees have iPhones; of these, 7,641 have one or more Genentech applications installed on their devices.



Pictured: Several iPhone apps support mobile users' needs at Genentech. This *gWiz* news application gives users quick access to the latest information, video content, and events.

With crowdsourcing, comments, ratings, simplified content posting, mobile apps, and interesting content, the Genentech team successfully created a site that engages, informs, and connects the organizations' 11,000 employees. The new site meets users' expectations, provides the information they need and want, and lets them communicate with one another as well as with company leaders.

BACKGROUND

It was simply time for an update when Genentech began the most recent intranet redesign project. It had been five years since the site had had a major upgrade; in that time period, the technology landscape had changed dramatically, business needs had evolved, and user expectations had risen.

The company set a number of goals for the project, including:

- **Improve the user experience.** The first goal was to significantly improve the end-user experience on the intranet by increasing the focus on usability and design as well as emphasizing an attention-to-detail that would result in "nuanced improvements discovered and appreciated by users over time."
- **Accommodate shifting communication needs.** Another stated project goal was to put a greater emphasis on accommodating new or changed communication needs within the company so that the intranet could better handle an increased volume and variety of intranet content (for example, shift toward social elements, mobile access, and use of multimedia).
- **Facilitate employee interaction.** The intranet upgrades were also aimed at providing a venue for employees to engage with each other and with the company (for example, providing a place where employees could ask questions of senior management) to support and highlight corporate culture.
- **Upgrade technology.** Since the (most recent) intranet had launched in 2008, the technology landscape had shifted dramatically; one of the project's goals was thus to remove or replace technology that had become outdated, no longer matched business goals, or did not provide the desired level of user experience.
- **Streamline content authoring.** By streamlining content processes, the team aimed to decrease the number of steps needed to publish content and to decrease dependence on IT for simple content updates.

Moving from goals to execution meant the team had to review all relevant data that would point them toward the most effective improvements.

"We used a combination of metrics/analytics, user research (surveys and in-person), and heuristic review," says James Musick, Director, Social Media & Web Communications. "These activities, plus ideas, suggestions, and requirements gathered from users and stakeholders in recent years, fed into a design and prioritization process."

Along the way, the team faced the usual challenges encountered in most large enterprise projects, including:

- **Unexpected technology dependencies**—for example, if you upgrade component A, you must also upgrade B and C.
- **Competing urgent/immediate needs and priorities,** which disrupt the longer term project (and utilize common resources).
- **Trying to balance competing project priorities**—for example, does user-experience trump business goals? If so, does it do so every time, or just some of the time?
- **Socializing and communicating** the increased focus on metrics and design.

INTRANET TEAM

Pictured: The Genentech intranet team (left to right): Christian Santiago, Sharif Ezzat, and James Musick.

GOVERNANCE

Ownership

Corporate Relations, reporting directly to the CEO, manages the overarching "umbrella" intranet and numerous business partners collaborate on content. There are two line-of-business intranet sites (whose users access gWiz for corporate news) as well as small sites, or single pages, for official groups and clubs. The collection of sites follows common web style guidelines (managed by Corporate Relations), but

might have a different content management processes based on the type and frequency of the content.

Intranet ownership within a business unit has benefitted the site through its iterations over the years. "Because it is 'owned' by a business unit, the approach is balanced between technology considerations (decreasing costs, upgrading technology), business needs (communication goals), and user-feedback," says Musick.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Web Communications Team	• Oversees corporate intranet strategy, including mobile, social, and interactive components • Creates guidelines and user working groups to ensure alignment, consistency, and success of the intranet • Serves as business sponsor of projects resulting from strategy and roadmap
Internal Communications Team	• Defines content strategy for the intranet homepage and other key components • Creates compelling, high-quality content
Informatics Team	• Provides operational maintenance and support of the intranet's underlying web applications • Serves as strategic partner on technology decisions that impact and influence (or are influenced by) the overall intranet strategy
Content owners	• Ensures that their particular content area/section/page is up-to-date and accurate • Contributes and creates content as appropriate

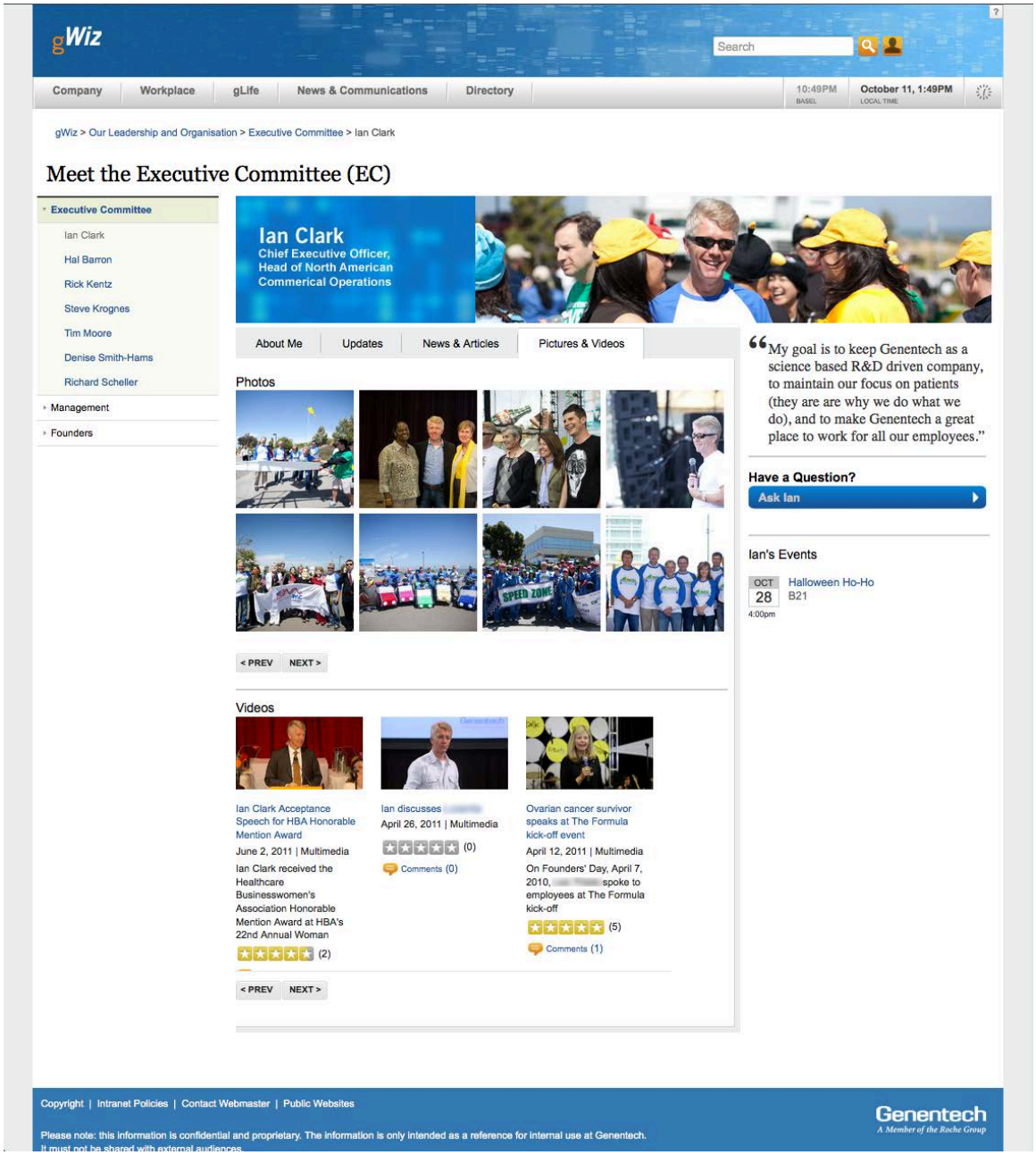
USERS

The intranet supports all Genentech employees by role—such as managers, new hires, and so on—as well as organizationally:

Organizationally:

- **Research and Early Development:** Scientists and support personnel who perform a variety of activities to identify and evaluate molecules and compounds for potential medical use.
- **Development:** Scientists, physicians, and support personnel who shepherd a promising molecule and develop it into a viable candidate for a medicine.
- **Technical Operations:** Employees who manufacture medicines.

- **Commercial:** Home office employees who handle marketing and operations and the field organization.
- **Business Support Functions:** Employees who support legal, finance, IT, HR, and communications activities.



Pictured: The *Pictures & Videos* tab for an EC member. This section automatically pulls in any photo or video on the site that is tagged with the EC member's name. Thus, as content is added to, for example, the *Multimedia* or homepage news sections, the content automatically updates the EC member's *Pictures & Videos* page.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	• gwiz.gene.com
Default Status	• The out-of-the-box configuration on new computers has the intranet as the homepage, but users can change this. Of course, for any browsers that they might install (such as Chrome, Firefox, and so on) they would choose their homepage.
Remote Access	• Without VPN, users cannot access the web version of the intranet, but they can access a select set of content via a native iPhone application.

DESIGN PROCESS AND USABILITY WORK

Design Approach

To deliver on a user-centered approach, Genentech conducted primary research and examined site behavioral data in order to identify those intranet tasks that are most valuable to the largest number of users. Their activities included log file/usage analysis, field studies (watching users in the workplace), surveys, expert design reviews, and usability testing at various stages throughout the project.

"We wanted to utilize all of the standard design/usability processes," says Ezzat, adding that they discarded some of them—such as card sorting—due to practical considerations (such as timeline and cost). "As we continue to evolve the IA, we plan to incorporate those elements that were absent, or on the light side, during the initial refresh."

This research and data drove many of the site improvements, accentuating tasks of the highest value and relocating or eliminating lower-value site areas.

Ezzat and Musick offered several anecdotes on how design research directly affected the outcome of specific site elements:

- **The *Events* section** (towards the bottom of the page in screenshots): "Initially we were going to remove a section that listed a very specific type of event because of the low number of clicks the links were getting—and some preliminary user research. When we really dug in a bit, we determined that by actually broadening the scope (from a narrow/single-use to multiple uses), improving the interface, and adding this element to our mobile application, we'd have something more useful to a broader audience. It has now become an example of the social/mobile/engagement intersection, where we have enabled users to take photos (via their iPhone) at culture events and upload directly to the event (on the iPhone), which results in the photo showing up in our multimedia section. So, research helped us turn something underutilized into a great example of where we are going."
- **The *Top Story* (aka *DNA News*) carousel:** "We were trying to determine where to put the thumbnail images: left side, bottom, or right side? In our initial design, we considered the left side or the bottom, like the *Yahoo!* homepage. First, we found that if the thumbs were on the left side that the cursor movement often traveled over the thumbnails causing the primary image/story to shift and for some reason—we suspect predominance of right-handedness and left-to-right scanning—users were often moving their cursor from left to right. So this was causing issues. Then we tried having the thumbnails on the bottom, with a small bit of headline with them. We then found that, unlike *Yahoo!*, the types of headlines we use or the types of stories we tell required more text than was possible to nicely fit in that area—plus we got better click-throughs with title plus abstract. So then we moved the thumbnails to the right-hand side of the carousel and this has proven to work very well."
- **Content grouping:** "We had numerous conversations and supporting research about how to group content. Both how granular—and thus how many 'content areas' on the page—and, if less granular, how to segment the content. We found out quite earlier that simpler was better (and most intranets, including our previous one, had information-overload as a problem). And then, what was interesting was that we found that some very general groupings fit our user's mental models. Internal news sources versus external news sources was one, and grouping local news—our region/campus—separate from global news was another. By grouping the content in this way. users are able to quickly scan and locate the type of news they are interested in at that moment. And, depending on the user and particular time, they might be looking for one content type or another, and we found that they were not interested in having to read the headline/abstract to determine if they were reading external/internal/local/global news."

- **Autoplay on the video:** "Typically our UX team is not a fan of videos auto-playing when you go to a website. We found, however, that in certain specific cases on our site, users wanted/expected the video to play automatically when they clicked-through to the video detail page. In hindsight, this makes sense (and fits with how YouTube handles it), but initially we were thinking of our video pages less like YouTube and more like standard corporate websites with other (text) content. We learned that for video-centric stories, once a user clicks from the initial page—say the homepage—onto the video page, they would like the video to be automatically playing."

Optimizing Design while Recognizing Ingrained Habits

Metrics, heuristic reviews, and interview/survey data served as the foundation of the team's research efforts; from this work, the team discovered an interesting finding.

Musick explains that, because employees had used the existing site regularly and often, many elements identified through heuristics, interviews, and metrics as poorly designed had become part of users' established work patterns. "They had developed numerous workarounds to get around sub-par usability in some areas, so we determined that a multiphase approach for certain elements would be necessary to move from poor usability (with established workarounds) to good usability."

An example here is the "express menus." These eight "ever growing" pull-down menus each contained literally hundreds of links. These menus were installed during 2004–2005 as a stopgap measure, and were never intended to last.

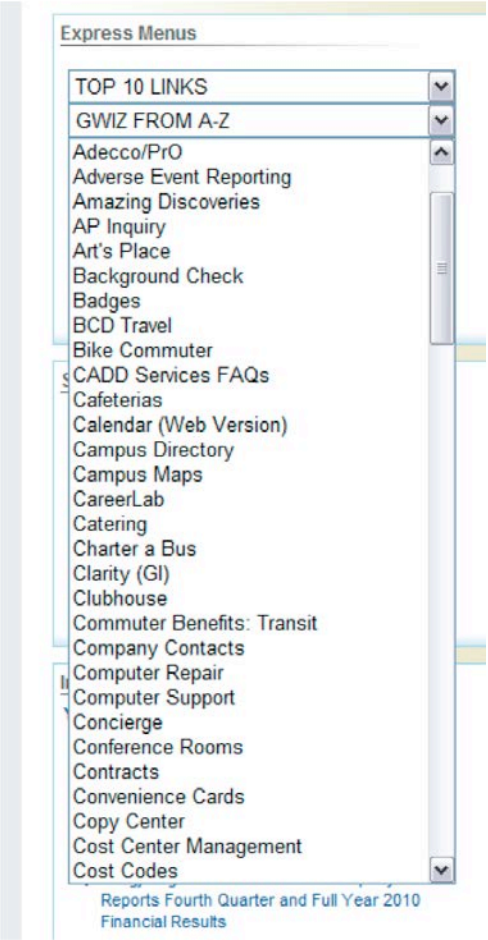
"We remember this clearly because, even at that time, users were 'used to them,' there were many stakeholders, and making a change was expected to be difficult," says Musick. "Fast forward six years, and the collection of drop-down menus were still with us but had grown even more. For almost every new tool, application, product, and department site, the site owner would ask for their link to be placed on the express menu."

This obviously presented an ever-growing list of links crammed into the pull-down format, which is far from optimal for this purpose.

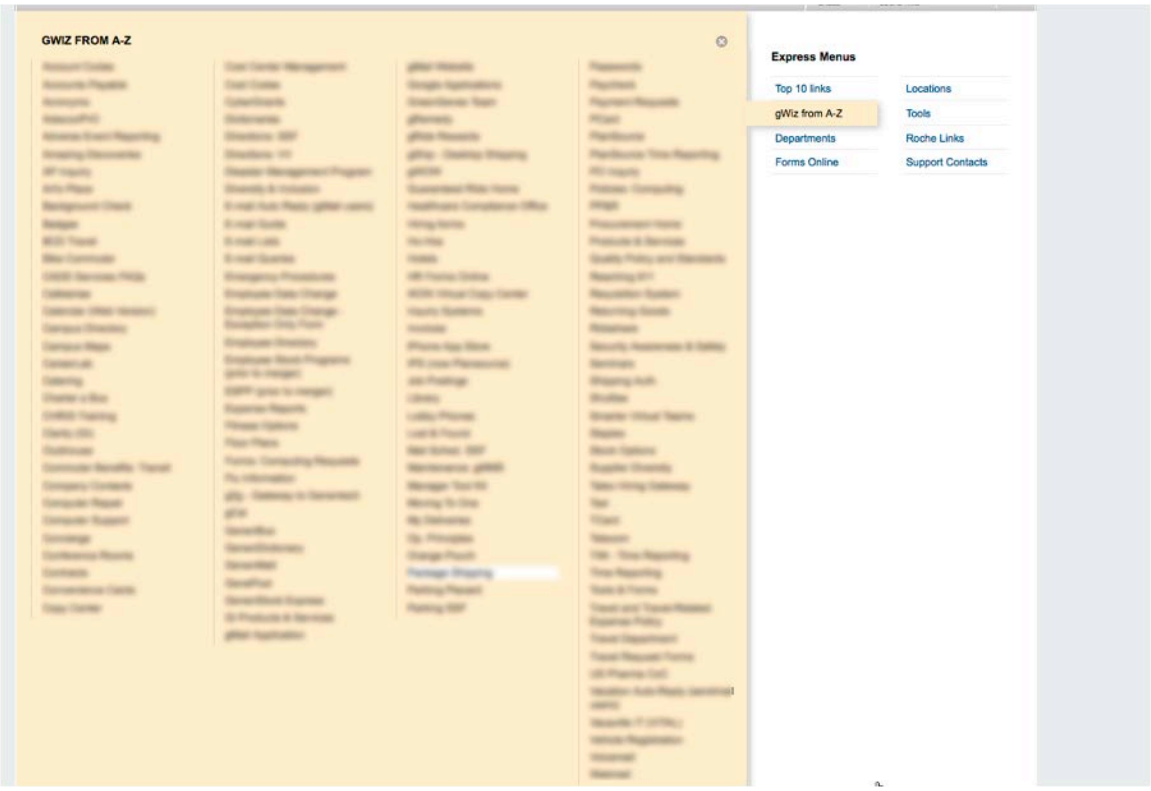
Still, as Musick notes, team members knew that people looked at the express menu, so they made two alterations: they moved it closer to the search area (on the right side of page, rather than the left), and changed the format to a fly-out mega-menu, "which could better accommodate a large number of links."

Even this relatively conservative step—relocation and slight format change—had people asking where the menus had gone. However, they quickly adapted. This interim solution sets the stage for the team to move to a more search-interaction-based way of finding links.

"We anticipate either combining this with the search widget in the future (as a discrete option) and perhaps an intermediate step to that will be having a predictive text/typing box where instead of clicking the fly-out you simply start typing what you're looking for and it pulls from the list of hundreds for you," he says.



Pictured: The *Express Menus* element was poorly designed on the old site, but users were very accustomed to it, so redesigning it completely was not an option. Team members chose an interim solution (shown below), which incorporates the multitude of links into a fly-out mega menu. Eventually, they'll move in a more search-oriented direction.



Pictured: The *Express Menus* design upgrade is an interim solution; although still not optimal, the design is a small step toward a more usable interface for this type of content and will help users transition out of the old paradigm.

This small example clearly illustrates a major challenge of intranet design: how to achieve the right balance between the "right" solution (as a big upgrade) and sending users into interface shock by introducing too many upgraded features all at once. The Genentech team seems to have taken a realistic attitude toward this challenge.

"We definitely have taken an iterative approach to design, development, research, and testing," says Ezzat. "At the same time we have times where we are able to have 'big projects and lots of changes' versus small projects and little changes going on."

So, for example, the team did the bulk of its research/testing prior to the primary refresh/launch and tried out one or two little changes (such as thumbnail position) in advance of the full refresh.

"Then," he says, "after the 'big launch,' we did some more research—feedback and metrics—and did some little tweaking. We're now seven months past the refresh launch and are embarking on another round of research and analysis to determine if a) we hit our mark on some specific big changes, and b) it might be a good time to make a few more specific changes within the context of the new framework/layout/design."

Working with Agencies

Though Genentech had used outside agencies for portions of its previous projects, for this project, the company involved a user-experience-focused agency earlier in the process and asked it to work closely with the in-house design lead. In addition to the user-experience agency, it also engaged an agency specializing in mobile applications and a development agency focused on content platforms.

"We also spent more time and effort in the planning and design phases than we had in the past," says Musick, adding that they also used more types of user research, as well as considering and revising more design options than in the past.

"For each agency we worked very closely together as a team," he says. "We specifically feel this was instrumental in achieving our goals and hitting our target of an extremely high-quality and well-designed intranet."

Genentech worked with three firms during the project:

- **Zaaz** is an interactive agency focusing on strategy, design, development, user experience, and analytics. For this project. Genentech collaborated closely with Zaaz on the user research (for planning the project) and then on the overall site design.
- **Taptera** creates mobile applications for the enterprise. On this project, Taptera was responsible for creating or extending key elements of the interactive mobile iPhone application.
- **Endevver** is a team of web design and development professionals. They provided development expertise on Movable Type (the site's content platform).

gWiz

Genentech Social Media Guidelines

Genentech & Social Media

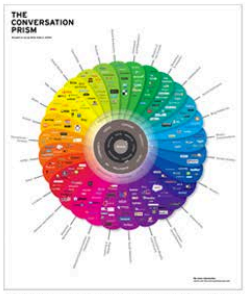
- Genentech & Social Media
- Social Media Sites
- Social Media for Recruiting
- Guidelines
- Learning + Research
- SMUgroup

In recent years, the popularity of social media has increased dramatically, and many Genentech employees are active participants in this phenomenon.

Social media are works of user-created video, audio, text or multimedia that are published and shared in a social environment, such as a blog, wiki or hosted website.

Genentech employees are welcome to engage in social media for personal use, provided they adhere to the social media guidelines on this website. These guidelines are applicable to all Genentech employees, business units, partners, agencies, and any other agents acting on behalf of Genentech.

In addition to providing both specific and general guidelines, this website will serve as a gateway to Genentech's presence on a variety of social media websites.



The Conversation Prism gives you a whole view of the social media universe, categorized and also organized by how people use each network. Source: *TheConversationPrism.com*

SOCIAL MEDIA AND YOU

Whether you're just starting to explore the social media landscape or posting your 35th tweet of the day (!), the resources on this site will help you understand how social media can affect your work.

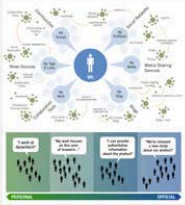
"I want to know what my group or department can do with social media."

"I need to know what I'm allowed to do with social media outside of my role at Genentech."

"I want to learn more about what Genentech is doing in the social media space."

"I've been hearing a lot about social media, and I want to learn how it can benefit me."

Interactive Tour



To explore the wide spectrum of social media usage at Genentech, please visit our Interactive Tour of Social Media at Genentech.

Complete Guidelines

For a detailed breakdown of how social media can be used by Genentech employees, please read the Complete Guidelines for Social Media Use.

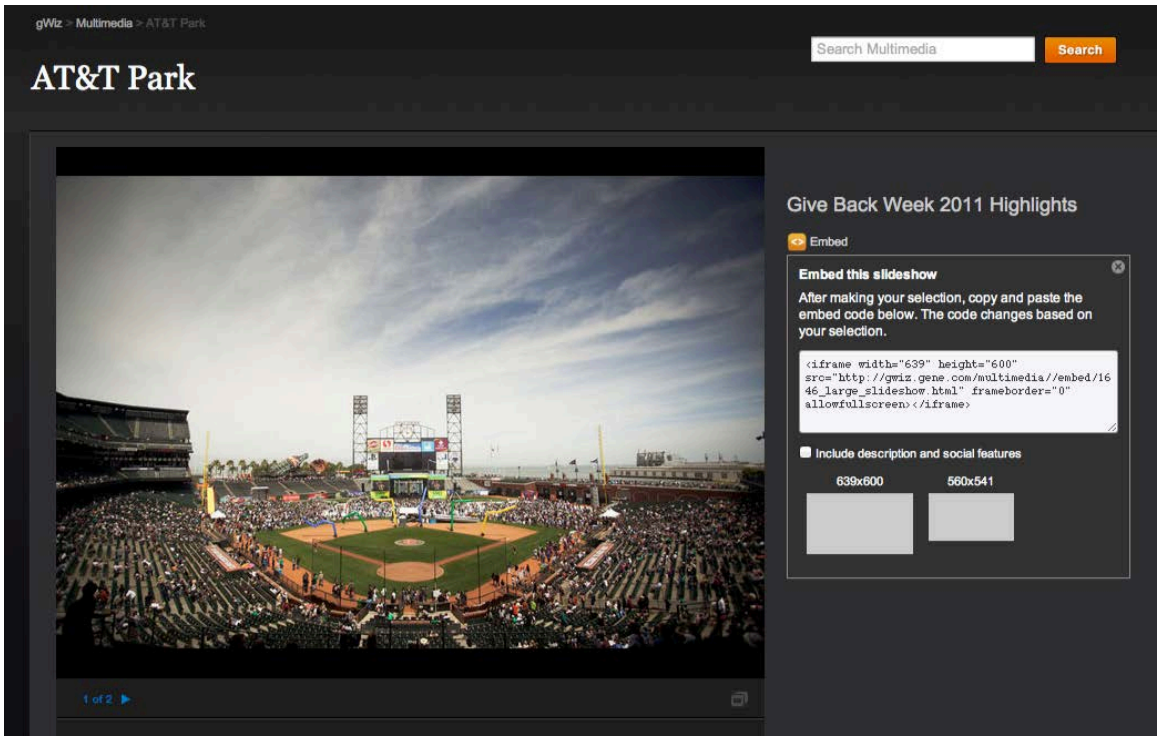
Copyright **Intranet Policies** **Contact Webmaster** **Public Websites**

Please note, this information is confidential and proprietary. The information is only intended as a reference for internal use at Genentech. It must not be shared with external audiences. **Website contacts and updates:** *Corporate Relations*

Last updated: March 21, 2011

Genentech
A Member of the Roche Group

Pictured: gWiz's *Social Media* section, where employees can find social media guidelines as well as information/research to explain the social media landscape. An interactive feature outlining the company's perspective on different social media areas (such as personal versus professional) helps employees act responsibly.



Pictured: Details of the embed functionality (right), which lets users embed video/photo content elsewhere on the intranet.

TIMELINE

This redesign project was the latest in a consistent line of intranet upgrade projects conducted throughout the years. The overall timeframe for this project was 14 months. Following is a brief overview of the organization's intranet project history:

INTRANET TIMELINE	
Milestone Date	**Milestone Description**
1994	• v.1: First company intranet consisting of simple links and content
1997	• v.2: Added graphics and basic IA elements
1999	• v.3: Added dynamic components, such as stock ticker and corporate announcements
2004	• Began design and planning for v.4
2005	• v.4: Introduced common brand/design elements, portal software, and content management system • First major comprehensive, company-wide, intranet effort involving formal design and development process
2010	• Began design and planning for v.5
2011	• v.5: Decreased personalization/customization in favor of increases in usability and social and mobile features; also added the abilities for more frequent upgrades and faster content publication cycles

CONTENT AND CONTENT CONTRIBUTORS

Choosing a Small(er) and More Agile CMS

Nimble was the name of the game as the team evaluated new CMS solutions. While some companies go for big, full-featured tools, the Genentech team saw the wisdom in being able to keep up with technology over time rather than always being behind the eight ball.

"We evaluated numerous choices—enterprise portals, open source portals, open source CMS, blog tools, homemade, etc.—and determined that we wanted a solution that was more lightweight and flexible rather than focusing on top-to-bottom integration with our technology ecosystem," says Musick.

In the past, with more feature-rich CMS solutions, the team often found the tools to have longer development cycles and be more costly, and thus ended up behind the usability curve just a few years after launch.

"Fitting cycles to six to 12 months and getting two to three cycles into one and a half years keeps users seeing that there is change/improvement," he says. "We recently got the nicest complement for fixing/adding a keyboard shortcut sequence to our search area. It's little things like that keep users knowing that there is someone 'at the helm' and working hard to make sure their intranet is top notch!"

With the CMS, the team wanted to find something that let them keep making quick, nimble steps every 12 to 18 months, rather than doing "huge" projects every five to six years.

"By three years, people are typically frustrated and feel a site is old. By five years, it feels like it is ancient history!" he says.

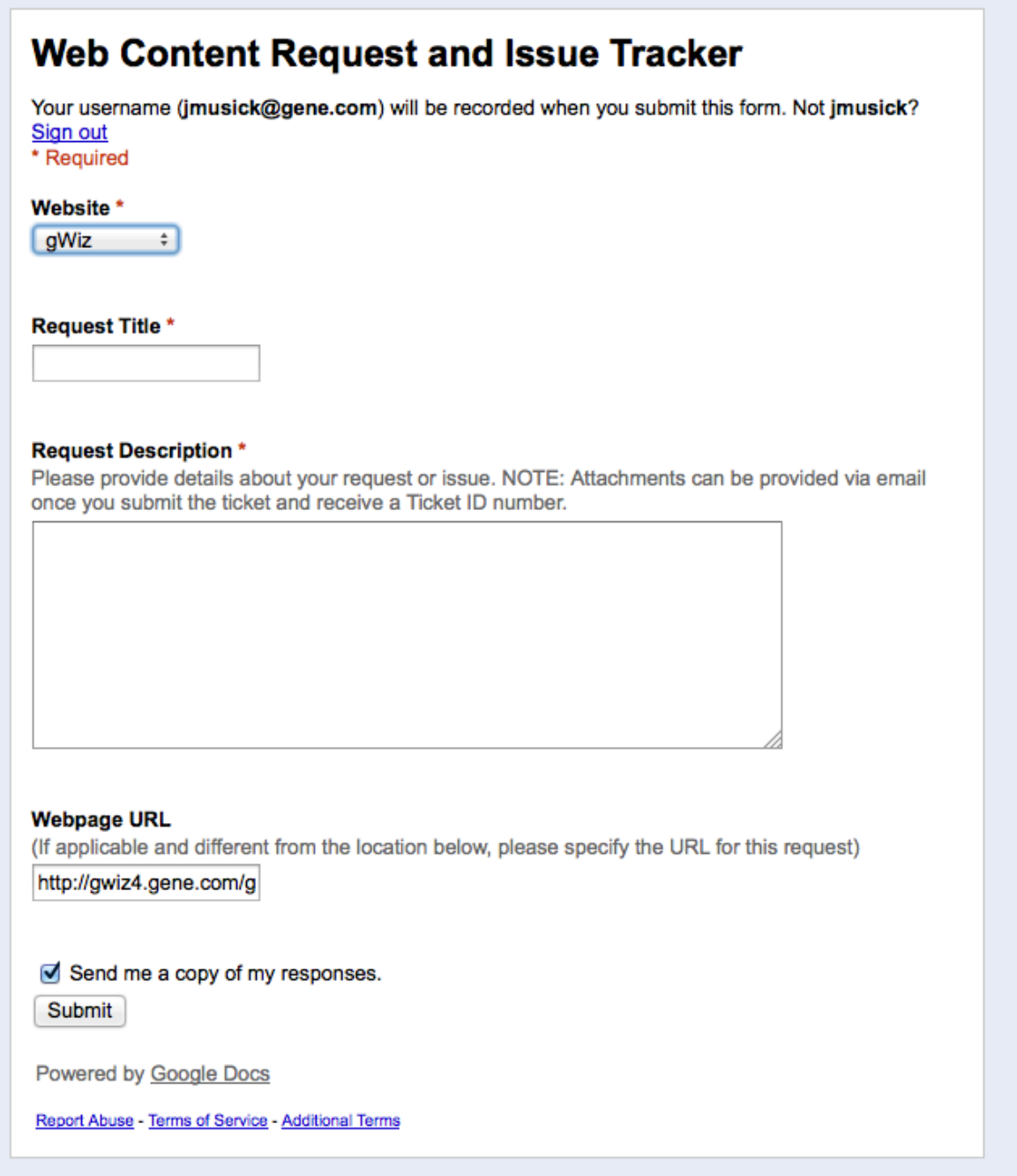
The Contributor Funnel

The intranet's content comes from a variety of sources, but the primary content creators and contributors are in the Internal Communications and HR departments.

"Although we have different content contributor models, there are roughly 50 content contributors routing content through a smaller number of content managers, editors, and developers," says Musick.

The advanced ("power user") contributor groups in Internal Communications or HR have direct access to the content management repository and/or have writers or developers helping with content. The more casual and occasional content needs are serviced through a content-update request mechanism (a modified Google form/spreadsheet).

"This approach allowed us to be more efficient about training versus service," he says.



Web Content Request and Issue Tracker

Your username (**jmusick@gene.com**) will be recorded when you submit this form. Not **jmusick**?
Sign out
* Required

Website *
gWiz

Request Title *

Request Description *
Please provide details about your request or issue. NOTE: Attachments can be provided via email once you submit the ticket and receive a Ticket ID number.

Webpage URL
(If applicable and different from the location below, please specify the URL for this request)
http://gwiz4.gene.com/g

Send me a copy of my responses.
Submit

Powered by Google Docs

Report Abuse - Terms of Service - Additional Terms

Pictured: The team uses a modified Google form/spreadsheet to track casual content updates.

The Review Pyramid

The content review process depends on the page/site location. "We have a pyramid approach," says Musick. High-priority pages (determined by traffic, frequency of update, or internal importance/visibility) have a specific workflow and approval. Other pages have a content process that is managed by the content owners (departments or groups) and varies depending on their business needs, but is guided by regular Intranet Working Group meetings.

"Our approach to consistency is similar to the content review one," says Musick. "We proactively review high-priority pages to ensure alignment with our web guidelines, but rely upon our content owners and stakeholders to help with pages we are not able to monitor as actively."

This approach is not intended to be punitive, however. The focus is on education.

"Our experience has been that an extraordinary amount of time and effort can go into 'enforcement' and at some point the payoff is diminishing," says Musick. "So, we've focused on a triage approach combined with outreach and a philosophy of constant improvement."

Supporting Content Contributors

In an effort to support employees, considerable work went into developing and maintaining the site's style guides. "We spent a significant amount of time and energy completely updating our web style guidelines to make the guidelines more 'consumable and clear' and also a reasonable length," says Ezzat. "We've all seen guidelines that are so long or dense that they are ignored."

"We focused on major items to ensure consistency, style, and tone while still providing enough flexibility for the creativity that our employees have come to expect."

Training on content management systems is often a mix of formal and informal, but the Genentech team has taken what they call a "consumeristic" approach.

"The tools must be reasonably intuitive," says Ezzat. "If countless consumers can learn to blog, use Facebook, etc., why shouldn't a content system be similarly intuitive?"

It's not a flawless approach, but it seems to work well.

"We can't say it's a perfect system, but a recent training of a content contributor took only an email and a short video attachment (as an example) rather than a training session," says Christian Santiago, Web & Intranet Technical Lead. "We consider this wildly successful compared to the 'old days' when we had a vendor in to give us two-day sessions on an enterprise CMS system."

Another, and perhaps more important, support mechanism for content contributors is feedback about how their content fares in the real world—in front of users.

"We provide or discuss metrics as well as general insights," says Musick. "Typically we try to do this as part of our outreach (working group) efforts and highlight success without picking on failure."

"For example, we may show that stories or 'advertisements' on the homepage receive X percent more traffic/eyeballs if they have a picture or a short action-oriented caption compared to no picture and lengthy caption," he says.

TECHNOLOGY

The team's goal for the new technology infrastructure was simplicity.

"Our goal was to reduce complexity and focus on a smaller and more nimble technology footprint," says Santiago. "We determined that news-centric enterprise blogging platforms with easily extensible components were the best fit for our needs."

And so the team chose Moveable Type as its CMS solution. Team members also removed an enterprise portal (Vignette/OpenText), removed some SSO components, and removed several additional technology components.

Below is a snapshot of the intranet's technology landscape:

TECHNOLOGY	
Category	**Technology**
Bug Tracking / Quality Assurance	• The team uses a Google form with a few customizations to store and track bugs in a spreadsheet for easy access for the content team. During development (as opposed to day-to-day content processing), they use Lighthouse for bug tracking.
Design Tools	• The designers choose tools that work best for them, typically using the Adobe suite and some Apple-specific software.
Content Management Tools	• A combination of Movable Type and Subversion (SVN), which is linked with a small content deployment application that was written in-house. Which system the content is in depends on the content authors and update frequency.
Search	• Google Search Appliance (GSA)

gWiz

Search

Company | Workplace | gLife | News & Communications | Directory

10:55PM BASEL | October 12, 1:55PM LOCAL TIME

gWiz > Multimedia

Multimedia: Search Results Page

Search Multimedia | Search

Search results for: Genentech Gives Back 2011

Results 1 - 10 of 80.

Genentech Gives Back 2011 (1) | (0)

20 volunteers from Access Solutions participated in 3 main activities with 50 kids: Mural Painting, Indoor Gardening & Gym Activities.

Genentech Gives Back 2011 (2) | (0)

The kids were attached to our volunteers by the end of the day.

Genentech Gives Back 2011 (0) | (0)

(Thank you poster) The SSF Boys & Girls Club shows us their appreciation for GNE volunteering on "Gives Back Day".

Genentech Gives Back 2011 (1) | (0)

Rows of donated items given by employees bring a sense of pride as we support nonprofit organizations, St. Vincent de Paul and Parca, at the donation drive.

Genentech Gives Back 2011 (3) | (0)

[redacted], senior research associate, gRED, volunteers during the Donation Drive.

Genentech Gives Back 2011 (0) | (0)

A pile of books are kindly donated by an employee to benefit St. Vincent de Paul and Parca, nonprofit organizations providing services to our local communities, at the donation drive.

Genentech Gives Back 2011 (0) | (0)

Volunteers help employees unload their cars during the Donation Drive.

Genentech Gives Back 2011 (0) | (0)

From toys to clothes to electronics, employees donated their gently used items at the donation drive to benefit St. Vincent de Paul and Parca, nonprofit organizations providing services to our local communities.

Genentech Gives Back 2011 (0) | (0)

Throughout Genentech's Gives Back Week employees shared their meal by donating money at campus cafeterias and Grab & Go cashiers to support the San Francisco Food Bank.

Genentech Gives Back 2011 (0) | (0)

[redacted], community liaison for St. Vincent de Paul's Catherine Center, shares how our contributions help people in our local community at the June 13th Town Hall webcast. View online at: http://gwiz.gene.com/dnanews/2011/06/town-hall-recorded-webcast-1.html

1 2 3 4 5 6 7 8 ▸

Featured:

Genentech Float at the SF Pride Parade (23) | (0)

GDS State of Mind (7) | (0)

Thanks, Genentech (0) | (0)

James Sabry, VP of Business Development (6) | (0)

Pictured: The search tool employed on the site is Google Search Appliance (GSA). This screen shows the results of a multimedia-focused search.

MOBILE

What to do about mobile is a challenge nearly every intranet team is thinking about these days. And most companies are in some interim step in what will be a long adoption process filled with many decision points along the way.

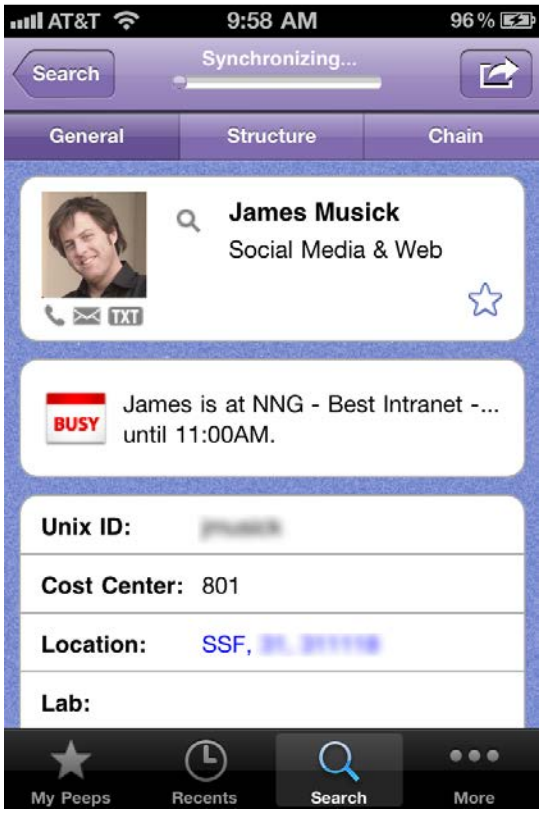
At Genentech, a native iPhone application (iPhone is the company's predominant platform) pulls in select intranet content for mobile consumption. "Though we may broaden mobile-web access eventually, we took this approach to provide off-network access as well as features that are unique to mobile native applications," says Musick.

Deciding on this approach, however, wasn't a slam-dunk. "This was an interesting discussion and decision point," says Musick, "as both native apps and mobile-web have advantages/disadvantages.

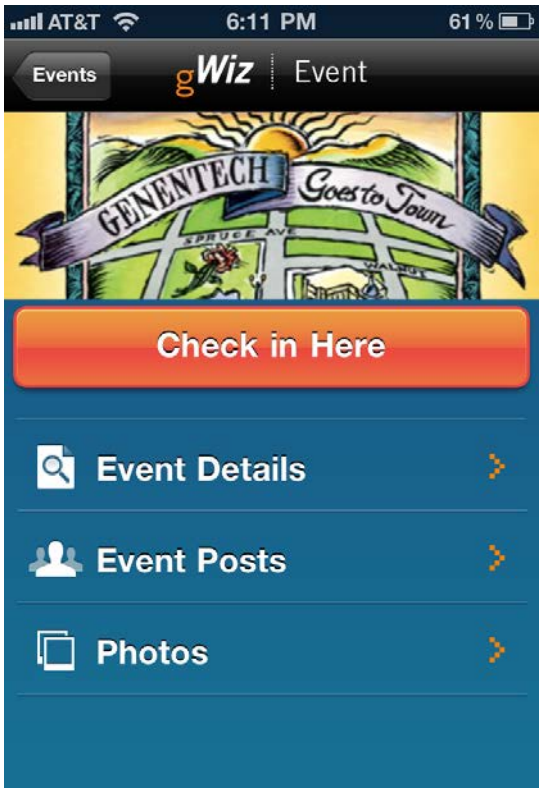
"Ultimately, we decided to go with an application because a) we had extensive in-house expertise with mobile/iOS application development, and b) we anticipated taking advantage of features specific to native applications."

Like most companies, Genentech chose to limit the scope of the mobile application to select intranet areas rather than try to "cram 100 percent of content into the app." The team will proceed in parallel with making the rest of the site mobile-optimized in future releases.

They launched the app with *Top Stories*, which are journalistic-style stories written by their internal communications team. The app includes video stories that are accessible off-network and on the device. Team members then added *Events*, which lets users easily see what's going on within the company, including research seminars, town halls, or fun employee events. Next, they added photo uploads via mobile that go to the site's *Multimedia* section. They also have a "continual rollout" strategy for adding small and enjoyable components—such as check-ins and status updates—bit-by-bit.



Pictured: The iPhone employee-lookup application lets users search for colleagues and find phone numbers, office locations, and other information. It is the most-used iPhone application.



Pictured: A detail view of the *Events* application, which lets users see upcoming events, "check in" at events, and upload event photos (via the iPhone), which then appear in the multimedia section.

RESULTS AND ROI

As Musick notes, "there are numerous areas where we feel that the refresh has hit the mark successfully." And he and his team have been measuring those changes.

"We've quantified portions of the new intranet—for example, the average number of comments per story and utilization of mobile versus web—but for some of the big comparisons (page views, user satisfaction) we are waiting for six months post launch to initiate the survey/research process," he says. "From what we've seen in initial numbers on engagement—which have exceeded our expectations—we're looking forward to the results from this research."

Musick says that one of the more interesting things the intranet team will tackle in the next year is trying to come up with an easy/quick cumulative "health index" for stories and select intranet sections that can balance the value of a page view versus the value of a comment. "We value the engagement (comments and contributions) highly, and want to recognize this so as to optimize our content to encourage employees to be active contributors to our culture," he says.

While they wait for some of those new measures to yield results, team members have seen significant improvements on several important fronts, including:

- **Increased user engagement.** There are several indications that users have begun to enthusiastically engage with the site content:

- The average number of comments per story is approximately 12, and the average number of users who rate each story is much higher (around 100).
- Numerous stories receive more than 100 comments from users, along with hundreds of user ratings.
- Users have also been contributing and commenting on photos, and using the "user tagging" feature.

"So, by every metric we've looked at thus far, users are more engaged on our website now than ever before," he says.

- **Easier content management.** It is now easier for content authors to focus on creating great content. "We've had numerous content management systems in the past from several vendors," says Musick, "and in all cases there was a level of complexity to the use and/or training. And often our content authors would find that it was painful and difficult to post content. Over the years, we developed many workarounds for this (sending content around in Word documents and email, having a content 'writer' and then a more technical 'producer,' etc.). With our current system, it's intuitive enough that we've used a brief email with an attached short video and had nontechnical content authors easily figure out how to create content. The overall production time has decreased, the 'effort or pain' of creating content has decreased, and our web developers can now spend time on making the website better rather than being the second hand, which was needed for content authoring."
- **Improved brand image.** Since the redesign's launch, the feedback from users is that the website "looks and feels" like a quality *external* website. "The public/external web experience on well-designed sites is increasingly becoming the expectation of users," says Musick. "For years, we have targeted this 'consumer-grade' web experience internally, but fallen short of the mark for various reasons. This time, we felt that we hit the target and then had users finding and giving us feedback on delightful 'little things' that we'd added (such as font scaling up/down without killing the page layout, or the lightweight Javascript time zone widget) which confirmed that the design and usability was finally where we wanted it to be."
- **Reduced cost.** Because of the move to lightweight content systems and focusing on and prioritizing what was necessary versus a "nice to have bell/whistle," the team managed to do a full refresh (top to bottom) for a fraction of previous cost.

LESSONS LEARNED

Genentech team members share a few of their lessons learned:

- **Focus on the user experience first.** "Have the branding and aesthetics support that experience. Also, regardless of how well designed a site may be, plan to do some user testing before launch. We changed a key feature in our search tool that made sense to us as a more integrated UI, but users complained about the increased number of clicks; we quickly responded by reducing the number of clicks without compromising the UI design."
- **Focus on functionality.** "The key lesson was from a rollout perspective: rather than publicize the redesign effort as a new intranet launch, we framed the changes as a series of modest upgrades, focusing more on new functionality—what users could do now that they couldn't do before—than on the revised look and feel. Additionally, we engaged our internal web content creators and developers in a discussion about updating the standards instead. This approach resulted in a more collaborative engagement model."
- **Don't make decisions solely on numbers.** "We found it surprising how quickly users responded to the new features we put in place. We were also surprised to get feedback from some users who missed old features we removed that seemed extraneous and irrelevant (based on both user research and metrics). There is a level of sentimental attachment that is worth considering and determining how to make progress without removing too much of what is familiar and loved."

Logica

Using the intranet:
Logica is a business and technology service company, employing 41,000 people. It provides business consulting, systems integration, and outsourcing to clients around the world, including many of Europe's largest businesses. Logica creates value for clients by successfully integrating people, business, and technology. It is committed to long-term collaboration, applying insight to create innovative answers to clients' business needs.

Headquarters:
Reading, UK

Number of employees the intranet supports:
41,000

Company locations:
Logica operates in 41 countries.

Locations where people use the intranet:
Worldwide

Annual revenue:
£3.7 billion (year ended December 31, 2010)

Design team:
In-house, partnering with The Team creative agency.

Members:
Logica core intranet team: Pete Blunsdon and Jenny Perrett, Program Management; Mark Kernot and Chris Green, Technical Management; Ayesha Mian, Migration and Adoption; and Emma Roos, UI Design

Logica offshore development team: Suhas Vengilat, Manikandan Balakrishnan, Praveen Kumar Thalluri, Pradeep Raman, ManojKumar Balan, Bhupendra Rawat, Nilanjan Dutta, and Varun Galur

Logica content management team: Lizzie Lewis, Vivek Thakur, Manoj Balan, Vimpy Choudhary, Harini Subash, Krithika Nagarajan

The Team: Dave Dunlop, Creative Lead; Stuart Eggleston and Mike McIntyre, Experience Architects; Carla Oxlade and Sarah Martin, Project Managers; and Will Bloor, Creative Director

SUMMARY

How do you move 41,000 employees in 41 countries on 25 intranets running on five technology platforms to a new, single, cohesive site experience? That's the challenge the Logica intranet team took on when starting a massive intranet overhaul that not only integrated all the separate sites, but also incorporated a brand refresh and "One Logica" change program that fundamentally changed the way work is done.

The business and technology service company found itself in need of a new intranet in July 2009. The company had quadrupled in size in six years, and multiple systems, many of which were out-of-date or poorly maintained, needed to be improved. Thousands of intranet pages were lost or forgotten, duplicate content abounded, and the sites suffered from low usage as users struggled to find content and then turned to other resources to find what they needed.

A new brand definition was the trigger the organization needed to make the change happen. The company was moving to the idea of "One Logica," which was a change platform standardizing processes and establishing global support functions around the world. The organization wanted employees to say, "I work for Logica," not "I work for Logica UK."

To support this new vision, the intranet needed to change. The existing sites were location-specific, making it next to impossible to know what the company was doing in market sectors across countries. The intranet was a barrier to both knowledge management and knowledge sharing.

The team knew a wholesale replacement was in order. With management support, they started the process with a kick-off workshop, determining the new intranet's core principles. Throughout the redesign process, they kept these principles in mind, returning to them whenever they needed perspective on how to handle a new issue.

Many intranet teams are challenged when trying to combine varied intranet sites into one unified intranet experience across an organization. Site owners are often possessive of their content, designs, and functionalities—and often with good reason; they've invested time in creating and fine-tuning their sites to meet their needs.

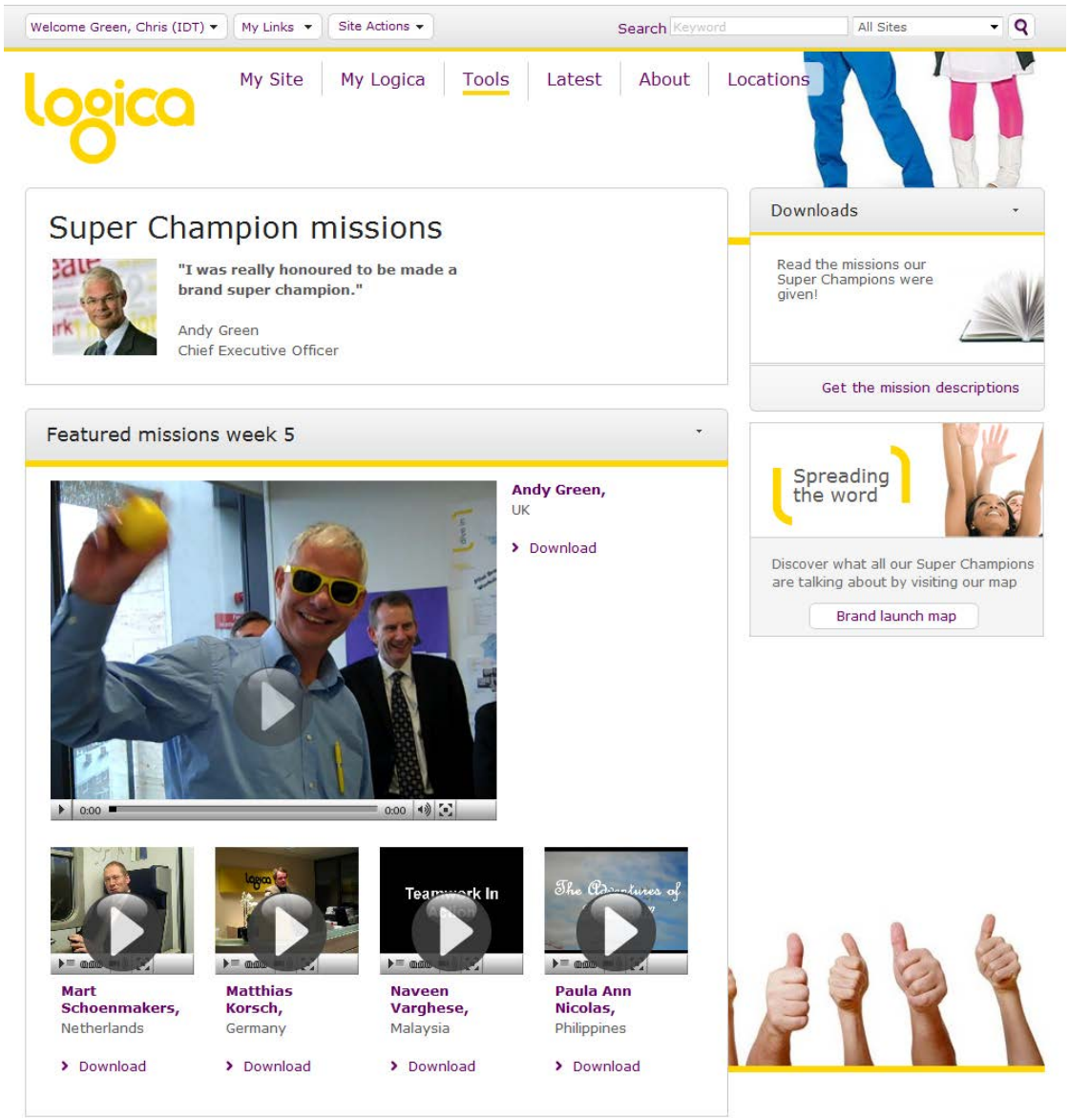
Logica's team members had to take all of these needs into consideration when coming up with a design and structure that would appease and hopefully inspire content creators and employees across the 41 countries where the company operates. Their stakeholders were scattered around the world, with varying cultures and languages adding to the complex mix.

The intranet team had to look for commonalities across locations, languages, and employees. Team members looked at the key tasks the site needed to support based on past usage of the previous sites, as well as what they wanted users to be able to achieve using the new site. From there, they created design iterations of the top-level site structure.

They knew the site had to be global in structure or information would quickly fall into the information silos, which acted as impediments to knowledge sharing. The structure is based on the work the company does, following industry sectors, strategic themes, and services lines. Although the information is global, users can easily drill down to country-specific content as needed.

Team members needed to ensure local needs were met, so they tested in different countries and did country-by-country rollouts, using early adopter countries as beta testers. They also tailored rollout and launch activities to each location, based on focus group feedback in local offices.

The brand launch occurred before most companies were live on the new site. The intranet microsite introduced the new brand—and new site—with campaigns, quizzes, and other ways to engage with the brand. Brand Champions in each country were given yellow mission cases with a Flipcam, mission briefing, and props. These employees blogged as they completed their missions and published the resulting video on the intranet. These campaigns gave early visibility to the new site, got employees reading blogs and engaging with video content, and educated people about the brand change. The event gave the site huge momentum and brought the whole company together.



Pictured: The brand launch introduced the new intranet to many employees and drove enthusiasm about the site. Super Champions in local offices were given "missions" together with props and a Flipcam to record their experiences. Blog posts and videos from these missions drove traffic to the site.

The overall site design is uncluttered and readable. Navigation principles are consistent across the site. Images are used to support content, but the design avoids the use of stock photography, which take up space and add little value.

The grey header bar relates to the current logged-in user. Primary site navigation uses mega menus to display three navigation levels in one step. The left navigation bar reflects the site structure, with links in the right-hand area for related content.

Site search appears at the top of each page. The search defaults to *All Sites* but users can select a different scope as needed.

Welcome Blunsdon, Pete | My Links | Site Actions | Search Keyword | All Sites

logica

My Site | My Logica | Tools | Latest | About | Locations

My Home

My Site home
- View personal home page
- Customise home page
- My links
- Colleagues
- Workspace memberships
- Manage subscriptions

My profile
- Edit profile details
- Add profile photos
- My preferences
- My network
- More info

My blog
- Create post
- Manage posts

My content
- Shared photos
- Shared documents
- Private documents
- View all my content

My Logica

Pay and benefits
- Check my payslips
- Join a ShareSave
- Check my pension
- More about benefits...

Travel
- Book business travel
- Book a hotel
- Find a Logica office
- Get a season ticket loan

Expenses
- Claim expenses
- Apply for a corporate credit card
- Check the UK Expenses policy

Training
- My University
- Book training online
- Coaching and mentoring
- More...

Career development
- Career development resources
- Career pathways
- Performance Mangement System
- Professional subscriptions

Working life and wellbeing
- Employee Council
- Health and safety
- Counselling & support
- Smart Working
- Staff discounts
- Volunteering
- More...

- Innovation
- UK Bid Assist
- UK Value Propositions

Information systems and services
- Raise an IT problem
- Report a problem with a mobile phone
- Use Microsoft software at home
- Access Logica remotely
- More...

Resourcing and assignments
- Check my resourcing details

Procurement
- Buy something from a supplier
- Deal with an invoice from a supplier

Workplace
- My Logica office
- Logica Cafe menus
- Report an accident
- Report a security incident
- More...

Policies
- Security policy
- HR policies
- Workplace
- More...

UK practices +

Central functions +

Hello Yellow

New joiners start here

UK Communities

Get involved with others like you.

> UK communities

> OS communities

My Site	My Logica	Tools	Latest	About	Locations
Home page	My country	Applications	News	Clients	Offices directory
My profile	Diamond Awards	Search	Blogs	Strategic themes	
My blog	UK News	Knowledge		Industry sectors	
My content	LSSC	Collaboration		Technology Practices and Partnerships	
Energise	Staff discounts	Brand		Portfolio offerings	
Help	My location			How we deliver service	
				Global functions	
				Corporate information	

Terms of use | Feedback | Helpdesk | Email this page

Last modified: 12/08/2011 09:15:54 by: Blunsdon, Pete

Pictured: Site navigation is consistent and clear, using mega menus to display three levels of navigational options for users.

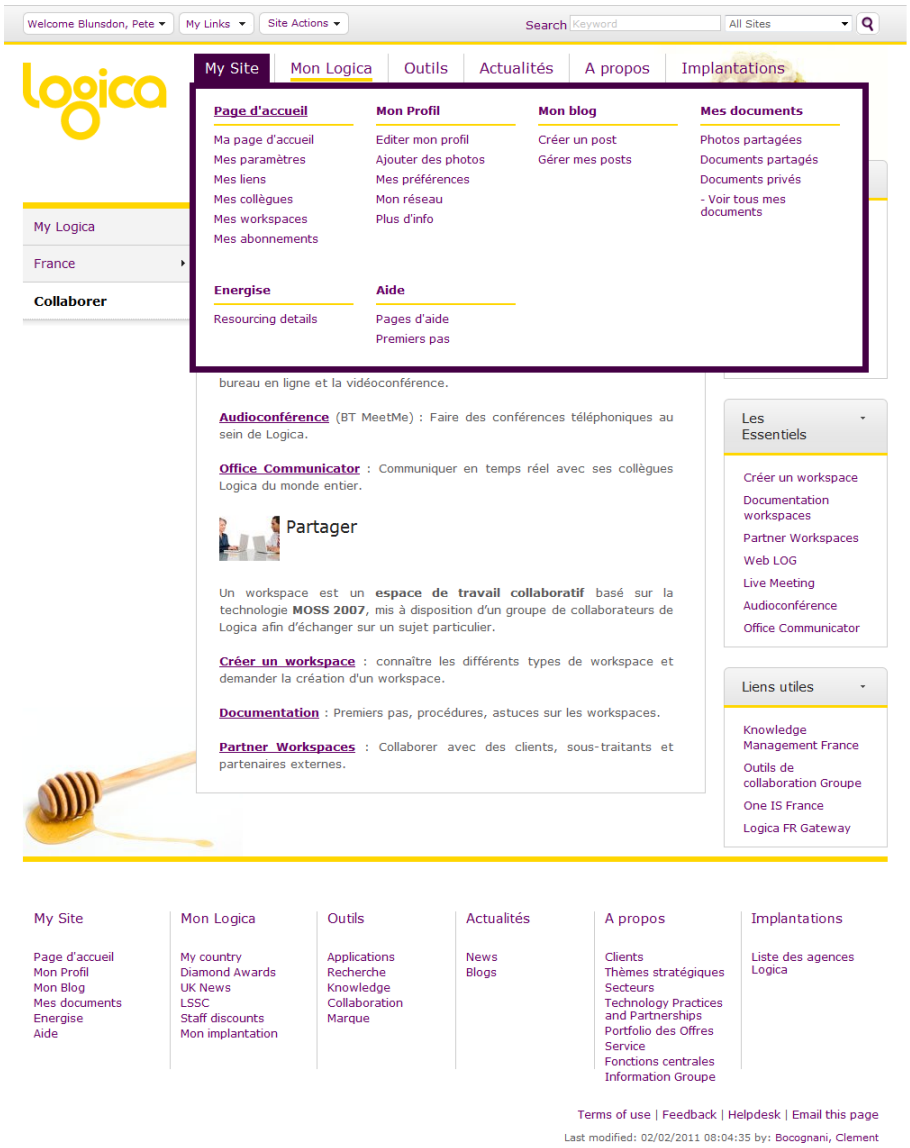
Team members were challenged by an intranet serving global employees who communicated in different languages. Logica's official international business language is English, but many employees are non-English speakers. The team had to determine how to avoid country-based intranets while still accommodating various languages. They also had to visually accommodate different languages. For instance, the design had to accommodate very long names for some offices.

As with most intranets facing this challenge, there was no perfect solution, so the Logica team used several different approaches. Global pages, such as the top three navigation layers, are in English. Pages describing the organization's work are global in scope, so appear in English or at least have an English language summary.

Pages that are specific to staff in one country—such as local HR policies—are in local languages. User-specific pages are in the local language, because they relate to local tasks and activities.

Global navigation menus can display multiple languages and can be tailored to link to local-language pages. The menu language is driven by the user's browser language preferences.

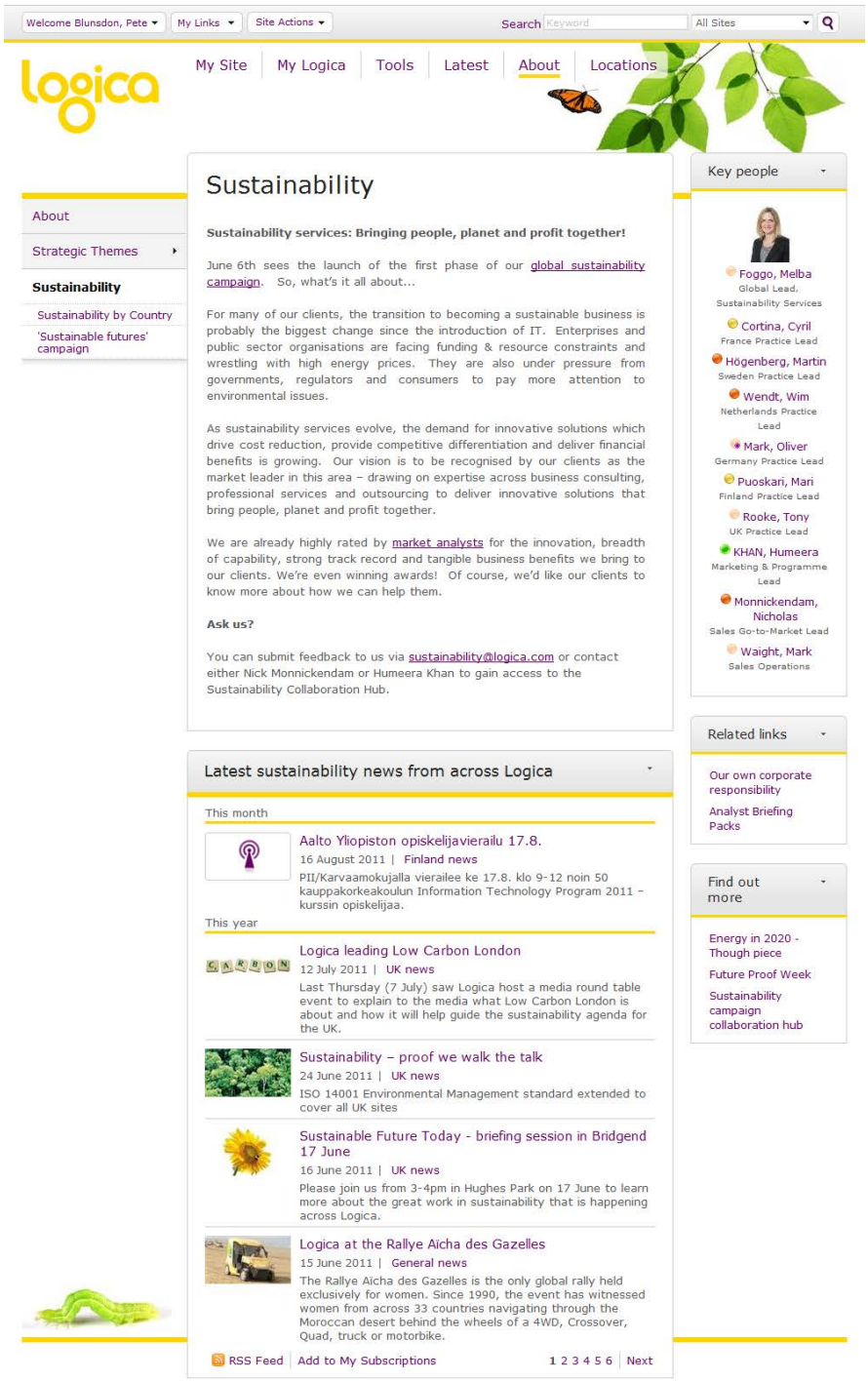
Non-English speakers can use most of the site via local-language menus that link to local-language content. Using English is necessary only when looking at global information. As one team member reports, "This is important—not only for usability, but also to meet local-language laws."



Pictured: Navigation is translated for non-English speakers and links to local-language content.

Local content owners—approximately 500 of them around the world—primarily develop the site's content. The new intranet has introduced a shift in how these content contributors work. Previously, their role was more that of site owner, focused more on their location's specific content silo than on the content itself. Now, all content is global, and contributors can focus on providing content in the context of all other global information about the same topic. Contributors and readers can virtually bump into each other as information about a single topic is brought together. In addition, for the first time, users can see news and updates from across the entire organization and get a top-down perspective on activities.

Each month, an intranet forum is held for local content owners and stakeholders to share best practices and good examples. The new intranet has shifted content creators' audience from local to global. This new, broad audience has inspired content creators and has spurred some healthy competition among contributors.



Pictured: News can now be grouped by topic regardless of geography, giving employees a more holistic view of the company's work.

When the company moved to a global intranet, it was less clear what information departmental pages should contain. Users can access department pages via the *About* section, navigating to *Central Functions*. After the migration, many teams filled their pages with *About Us* information, rather that information that employees could actually use. So, inspired by James Robertson's *Designing Intranets* book, the

team launched the Campaign Against Corporate Blah to change department pages from useless to useful. As a result, department pages are now oriented around the services the department provides, rather than information about the group.

Pictured: The Campaign Against Corporate Blah was created to make content more user-focused and useful.

Welcome Blunsdon, Pete | My Links | Site Actions | Search Keyword | All Sites

logica

My Site | My Logica | Tools | Latest | About | Locations

- About
- Global functions
- One IS
- One IS Countries
- **United Kingdom**
  - Applications and Software
  - Laptops and Desktops
  - Mobile Devices
  - Print and Copy
  - Remote Access
  - Server Hosting
  - Support Services

One IS

We manage all IT services and activities relating to internal use and deployment of technology. Services managed by One IS include the internal support desk, corporate infrastructure, PCs, business applications and all aspects of communications including desk phones and mobile services.

Support services

- Log a support call or escalate an unresolved problem
- Service Level Agreement for the support services

Remote access

- SecurID cards
- UK Gateway

Mobile devices

- Reporting faults
- Reporting lost or stolen items
- New joiners
- Leavers
- Porting to Vodafone

Laptops and desktops

- PC Lifecycle Process Flow Diagram
- Reporting faults & Obtaining Temporary PC
- Reporting lost or stolen items
- Requesting general PC loans (non-break/fix related)
- Refresh Policy & Requesting a refresh
- Instructions for using a new PC
- Providing PCs for new joiners (Including TUPEs)
- Collecting PCS from leavers
- General returns of old PCs/ Office Clear-out etc
- General FAQs

Laptop encryption

We are currently working on a global programme to assure the protection of all our data. It is important to check your Logica laptop is encrypted as soon as possible, please ensure you have either:

- PGP installed for all users handling company material
- BeCrypt installed for staff handling protectively marked material

Applications and software

- UK applications
- Change requests for UK applications
- Software for home use

Server hosting

- About server hosting

Key contact

Hames, Steve
UK One IS Country Manager

Support Desk

UK Support Portal
Tel: 0207 446
(or x)

email support desk

One IS Global

Laurent Allard's Blog
One IS Intranet page
One IS workspace
One IS Security page

One IS News

7 days ago

Extending Internet
25/07/2011 from Laurent Allard's blog
Internet connectivity is something that most of us take for granted nowadays; we feel lost if we are no longer within reach of our e-mails, ...

19 days ago

Improved Business Value and IT Efficiency – For Logica & For Our Clients
13/07/2011 from Laurent Allard's blog
Last month I participated in the annual Innovation Value Institute (IVI) conference at the University of Maynooth in Ireland. This important...

Departmental pages now focus on information that employees can use, such as the services a particular group provides.

Automatic classifications and fixed metadata help put the right content in front of the right users. The site uses a main central taxonomy of common terms and classification rules. So, if there's a change to business focus or language, the team can simply change the taxonomy and apply it to the same content. They use this auto-classification to filter news to employees and to drive content to bloggers. They can essentially create a tag cloud per employee derived from what the employee is doing, and then drive appropriate content to him or her accordingly.

Tags are used to provide the right policy and procedure information to global employees as well. Content in the site's *Operating Model* section, for instance, is tagged with the appropriate country. Users then see only what applies to them, whether it is a global policy or a local one. Employees can select a different view if needed. Document names have a mouse-over function that displays a short summary, which helps those employees unfamiliar with particular documents, while not impeding those who know what they need.

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My Site | Mon Logica | Outils | Actualités | A propos | Implantations

Logica Operating Model

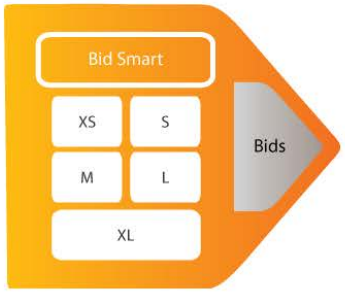
Bids

- Bid Smart
- XS
- S
- M
- L
- XL

Bids

Ce Domaine concerne le pilotage et la réalisation des propositions. Voir les documents en Français plus bas

Read More



Policies, Processes and Roles

Title	Type	Lan	Info
La Qualité Logica	Policy	Fr	
Documents Win / Bidsmart	Process	Fr	
L'implication du Delivery en Avant vente + Gate 5	Process	Fr	

Activities

Activity	Title	Type	Lan	Info
Suivi de la Proposition (Fr)	BIP - Bid information Pack	Template	Fr	
	Contrôle d'un CBR	Template	Fr	
Gate 2 France (Fr)	Gate 2 - Check-Liste DELIVERY	Template	Fr	
	Gate 2 - Check-Liste FINANCE	Template	Fr	
	Gate 2 - Check-Liste TECHNIQUE	Template	Fr	
Gate 5 France (Fr)	CheckList Revue demarrage projet	Template	Fr	
	CR Revue de demarrage projet	Template	Fr	
	Réunion de lancement projet	Template	Fr	

BIP - Bid information Pack | Properties

Utilisation obligatoire. Permet de présenter la proposition et son avancement à chaque étape de Bid SMart. A mettre à jour et à stocker dans chaque Gate du CBR, au fur et à mesure de l'élaboration et des revues de la proposition

Announcements

There are no recent items to display

Settings

Content:	Add
PageId List:	Update
CopyItems	Show
Country:	France

Search

Advanced Search

Tools

- CBR Dashboards
- CBR Search
- Create CBR
- Hermes

Links

- Business France
- CBR Training Resources
- Commercial
- PST Portal
- Strategic Themes

Contacts

Keating, Seamus
Executive Owner

Billany, Phil
Global Process Owner

Pictured: Content in the site's *Operating Model* area is tagged so users see only those policies and procedures relevant to their role or location.

Each user's homepage is their personal page, or *My Site*. The page's main section is for the user's subscriptions. This section lists a blend of content pushed by country or service updates, recommended feeds based on communities, and the user's individual preferences, such as posts from blogs of interest. The information is presented as a Facebook-like newsfeed. This approach focuses users on the latest information, regardless of source. Employees can view content by date or by category.

This approach emphasizes what's new rather than prioritizing based on author or topic. This gives users a lot of control over the information they receive. Some content contributors still want a way to emphasize their news rather than be mixed in with other updates, so the next design iteration will have a tabbed interface. Users will be able to select from among three views of their "homepage"; the intranet team plans to watch closely to see which view is preferred. One view will be a dashboard-type view with separate sections for the latest news, activity updates, campaign advertisements, share price, profile, and blog reminders. A second will be the current view of subscriptions as a time-ordered feed. A third will be a social tab showing the activity feed and microblog posts from people in a user's colleague network.

Other homepage areas can be customized to include sections such as *Share Price*, *Colleague Activity Updates*, *People Search*, *My Links*, and a list of personal and shared documents.

Very little space on the page is devoted to navigational links. Those are instead accessed through the global navigation, which appears across every page on the site. This frees the body of the page to focus on content.

Welcome Blunsdon, Pete | My Links | Site Actions | Search Last name First name People

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My Subscriptions

View by category

Yesterday

De vijf fases voor een natuurlijke planning from Peter van Rossum's blog
In het boek Getting Things Done van David Allen wordt de manier beschreven waarop het menselijk brein op een natuurlijke wijze de planning v...

July in Public Sector from Monique Mulder's blog
July is normally a summer holiday month in Europe, but this year there seems to have been more activity than ever in Public Sector It is gre...

We're switching to Microsoft Office Communicator 2007 from UK News
Over the weekend we upgraded MOC 2007 on pcs.

4 days ago

TIBCO in Digital Infrastructure Protection from Mahesh Nagothi's blog
The term "Digital infrastructure" (DI) describes research environments that support advanced data acquisition, data storage, data ...

Logica sponsors SAP Forums for Travel and Transportation from Corporate News
Forum takes place in Brussels on Tuesday, 27 September.

Planned Outage: WS3 & Archived Workspaces will not be available Tue 30 Aug 2011 from ... from Global Service Announcements
Planned ouatge to upgrade server infrastructure

5 days ago

Label vs Literal vs EncodedLiteral from SharePoint Blog Posts
Label, Literal and EcodedLiteral seems similar enough at first. Just putting Hello world in any of them will be displayed identically in any...

Urging UK businesses to address the innovation opportunity from UK News
Last week Craig Boundy and Danny Wootton hosted a roundtable discussion on the culture of innovation in the UK.

Logica on Azure from Laurent Allard's blog
"Most of you know by now that Logica has won the highly prestigious Microsoft Partner Award as the Windows Azure Platform SI Partner of the ...

6 days ago

Enabling Brilliant Performance - time for dialogue from UK News
Do you receive regular feedback on how you are performing? Do you get the kind of support you need to be successful? Do you understand your ...

Charity Cake Sale 25/08/11 KP from London City news
Don't forget to support Matt as he raises funds for the Kids Company Arctic Biathlon Challenge

Security, ethics and environmental responsibility. from UK News
Have you completed the mandatory eLearning modules yet?

Aspire 2011 – have you applied? from UK News
There's only 7 working days left to apply!

7 days ago

Logica HotNews July/August 2011 from Corporate News
Wins and announcements from across Logica this month.

8 days ago

Kinect Fusion 3D Room Mapping... from Danny Wootton's blog
This is a remarkable video and as per my previous post, I am constantly amazed at how quickly technology evolves and how innovative people c...

Library Made Easy-8: Technical and Delivery from Logica Library Blog
Turning the pages to the last chapter of our Library Book, to Technical and Delivery! The section on Technical and Delivery is home to seven...

9 days ago

Serendipity and Innovation from Wendy Tagg's blog
Here are my notes, thoughts and reactions after reading Krotoski's article in Sunday's Observer. The Oxford Dictionary tells us that the wor...

RSS Feed | Settings | Email preference | Manage Subscriptions

Find a person

Keyword:

Last name:

First name:

Search | Advanced search

My Links

Communities
- Intranet Community
- SharePoint Community of Practice

External
- Pete on Google+
- Pete on LinkedIn
- Pete on Twitter

Intranet
- About the new intranet
- Intranet admin
- Intranet Task Request
- New Intranet Programme

KM and collaboration
- KM intranet page
- Taxonomy Manager

My Site deployment
- Home - RSS News Feeds
- News RSS Recommendations

Add Link
Manage Links

Share price

Latest price (delayed 15m):
83.05p (+1.75) | **€0.94** (+0.02)
Market capitalisation:
1338.22M GBP | **€1514.87M**
Tuesday, August 30, 2011 - 17:45

Show last close | More details

Pictured: *My Site* pages act as the intranet homepage, giving users immediate access to the latest information targeted for them.

Blogging is big in the new design. The trend toward blogging in the organization stepped up a gear when the CEO, Andy Green, started blogging when he joined the company in 2008. He writes the site's most popular blog, with more than 200,000 views. The company had had internal blogs on *My Sites* since around 2005, but Green's adoption made it more widely acceptable, particularly by management.

Green uses the blog to write about his travels and the people he meets, typically using his Blackberry to author the posts. He is sometimes controversial and often uses the blog to discuss topics close to his heart. He uses the blog as a two-way communication vehicle, informing employees of his activities as well as gathering feedback and insights from them. Employees comment and sometimes challenge his ideas—which he encourages and responds to. In his travels, he enjoys meeting those who comment on his blog regularly; such online communication fosters in-person meetings.

Green's blog has had a direct influence on the internal attitude toward blogging. His communication style supports openness and transparency. The uptake of blogging has made for a dramatic change in the past few years, with less formal, more open dialogue occurring, even in countries where more formality is the cultural norm. The prominence of blogging in the new design is helping to continue to break down barriers to good communication.

Team members kept the blogging process. Employees can create blogs with one click and no approval process. Blogs help with knowledge and innovation sharing, and let employees comment on and challenge organizational thinking. Blogging gives employees a voice on the site and in the organization, letting them start and contribute to conversations about what's important to them.

The site includes personal blogs, hosted in *My Site*, and team blogs on team sites. Blogs are available via the *Latest* category in the main site navigation, where posts appear in a single stream from around the company. Users can also select tags from a tag cloud to see posts related to a topic of interest, such as sustainability. The page also leads users to the most-viewed and most-commented blog posts. Users can easily add or remove filters via the *Filter* menu on top of the right-hand column.

Welcome Blunsdon, Pete | My Links | Site Actions | Search Keyword | All Sites

logica

My Site | My Logica | Tools | Latest | About | Locations

Blog posts by tag

Results

17 Days Ago

Organisation 3.0
by: Titulaer, Frank | 05 August 2011
This post is material for my vision paper on Logica as an organisation 3.0. Feel free to spread this material. Your feedback and comments are much appreciated! There is no ONE definition of...
50 views
0 comments
Tags: Leadership, Organisation 3.0, TDP, Sustainability, Transparency

In Space, you can separate the Carbon from the Trees....
by: Rooke, Tony | 05 August 2011
H2 is going to see a couple of new innovations coming to market from the sustainability team in the UK. This blog is about our new proposition that we've been leading on in the UK:...
61 views
0 comments
Tags: Sustainability, Carbon, Land, Space, Carbon Auditors, Financial Services, Utilities, Forestry, Offsetting, Carbon Trading, GIS

33 Days Ago

One Young World - The future is bright!
by: Green, Andy | 20 July 2011
I spent a very rewarding afternoon last week reading through the different articles submitted by our young colleagues for the One Young World summit, and I have to say, I was really pleased with...
2010 views
0 comments
Tags: One Young World, Sustainability

63 Days Ago

Nu lanserar vi Sustainable future today
by: Högenberg, Martin | 20 June 2011
Med frågor om hur vi hjälper våra kunder att utveckla deras verksamhet med nya sustainabilitytjänster, ser vi nu med förväntan fram på att denna sommar skall ta slut.
5 views
0 comments
Tags: Sustainability

70 Days Ago

Sun, Sea and Sustainability...
by: Foggo, Melba | 13 June 2011
Like most people, I'll be taking a holiday this year. Holidays are much needed chances to recharge batteries and spend time with family and friends. But is getting on a plane and flying to...
104 views
1 comments
Tags: Sustainability, International Practice, Sustainability Services, Business Consulting

80 Days Ago

Bringing the Future to Life...
by: Foggo, Melba | 03 June 2011
It's been a busy few weeks. Our new campaign for Sustainability Services launches today. It's great to see our ideas brought to life by the campaign, especially in an area that is becoming top...
27 views
0 comments
Tags: Sustainability Services, Logica Business Consulting, International Practice, Sustainability

88 Days Ago

Future Proof Question Time – live from Logica
by: Tagg, Wendy | 26 May 2011
As part of Future Proof week Logica gave us the opportunity to be able to hear from and question some of our experts. Representing our own propositions and internal position were: Rich...
14 views
0 comments
Tags: Sustainability, Future Proof, Futureproof

Filters

- Remove: [sustainability]
- Remove all tags

Popular tags

Sustainability
Environment Futureproof International Practice Sustainability Services Business Consulting Leadership Organisation 3.0 TDP Transparency Carbon Land Space Carbon Auditors Financial Services Utilities Forestry Offsetting Carbon Trading GIS One Young World Logica Business Consulting Future Proof Future Proof Week

Most viewed

One Young World - The future is bright!	2010
I'll be Switching off!!	1921
Getting ready for Davos	1702
A Plague on all your Houses - why sustainability matters	1527
Green and München	990
The Future Proof Journey	843
A Future Proof Week Confession	443
Sustainability: Doing it to ourselves	441
Which global super power will be the leader of climate change?	277
Sustainability, Security and the Cloud	263

Most commented

A Plague on all your Houses - why sustainability matters	26
Green and München	11
Getting ready for Davos	7
Which global super power will be the leader of climate change?	5
I'll be Switching off!!	3
Sustainability: Doing it to ourselves	3
The Future Proof Journey	2
Sun, Sea and Sustainability...	1
Electric Vehicles in North America - The Outlook	1
Organisation 3.0	0

Within blogs

- Blog portal
- Blog directory
- Blog tags
- Andy Green's blog

Pictured: Blogging is popular at Logica, inspired by the CEO's informal and popular blog.

The blogging tool tracks the number of views and comments on each post and aggregates them across the organization. This results in a "leader board" of authors. Recent posts, views, and comments are shown on user's profile pages, and this has helped drive adoption of the tool. Seeing the popularity of their posts has driven competition among some of the more prolific bloggers; this benefits the company as employees share more information and try to share the "best" information they can. Employees can view a profile page to access a colleague's blog or subscribe to follow a blog.

Because of the company's structure—which includes people working in virtual teams and at client sites, as well as working from home—employee profile pages often act as an employee's first introduction to a colleague.

The profile includes information about the user's online presence and also offers instant messaging. Employees can personalize their profiles, adding *About Me* content, changing the page theme, and adding images to a photo gallery. Employees can enter skills and interests, which allows the employee directory to double as a simple expert location tool. Further, the intranet team can use such content to create groups and target news to those groups, such as sending sustainability information to employees who add that topic to their profile.

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Show security photo

Blunsdon, Pete

Programme Manager
+44 7771 673547

Operation: OLIH: International Holdings
Business: B920: IS Costs & Recoveries
Unit: U920: IS Solutions & Services

Edit my details

About me | My network | More info

Add photo

About Pete

I'm a programme manager, currently managing the global intranet programme. The new intranet is a single, global intranet rather than a collection of country portals - read more about the new intranet. I also head up the *Collaboration and Enterprise Portals* domain within One IS.

My recent background is with enterprise KM and collaboration within Logica. I'm a passionate believer in *One Logica*, and have had global roles since working on the Logica / CMG merger.

Prior to this, I have around 20 years experience managing client programmes, projects and bids in areas such as utilities, healthcare, gas market deregulation and energy trading.

I have a Logica blog covering topics such as intranet, SharePoint, social computing, KM and search.

Edit details

Contact details, skills and interests

Contact information:

Staff number:	[redacted]
Work email:	pete.blunsdon@logica.com
Account name:	[redacted]
International no:	+44 7771 673547
Mobex:	[redacted]
Mobile no:	+44 7771 673547
Location codes:	UK/KP/CF
Address:	Seventh Floor, Kings Place, 90 York Way, London
Location details:	Normally in KP (PLC area) 2 or 3 days a week, working from home for the remainder.
Base office:	Leatherhead

Skills and interests:

Skills:	Programme Management, Company Mergers, Business Change Management, Wiki, Intranets, SharePoint, Knowledge Management, Collaboration, Concept Searching
Interests:	snowboarding, drumming, motor sport, Walking

Organisation information:

Local team manager:	Voudouris, Christos
Project secretary:	
Business secretary:	
Cluster:	UK
Subcluster:	UK Subcluster
Operation:	International Holdings
Business:	IS Costs & Recoveries
Unit:	IS Solutions & Services

Edit details

Pete Blunsdon's blog

6359 views | 162 posts | 139 comments

Subscribe to this blog

Recent Blog Posts

- Mobile intranet designs - 10 Comments
- Concept Searching / SP2010 taxonomy webinar - 0 Comments

Shared links

Communities
- Intranet Community
- SharePoint Community of Practice

External
- Pete on Google+
- Pete on LinkedIn
- Pete on Twitter

Intranet
- About the new intranet

KM and collaboration
- KM intranet page

Add Link
Manage Links

Pictured: Profile pages can be updated to include personal information, skills, interests, and personal photographs. Blog information is listed at the top of the right-hand column.

Another site area that invites participation is *Logipedia*, the organization's version of Wikipedia. The area boasts 5,000 articles, and anyone can create or update an entry. There is no approval or moderation except by other users, who can change information as needed. This site area intentionally has a different look and feel, so users know they aren't on the "official" site.

Many of the entries revolve around the use of business tools, technologies, or methods. There's also information about clients, partners, and communities. One of the more popular areas is *Local Guides*, where employees supply information about travel, parking, and nearby restaurants, bars, and hotels. These guides are then embedded within the intranet's location pages to supplement the site's formal information.

Dashboard > ... > Kings Place

logica

Home View Edit Welcome: Pete Blunsdon Go Search

Navigation
- A-Z Index
- Attachments Index
- Labels
- Recent Updates
- Topics
- Languages

Help
- Getting Started
- What Goes Where
- Help
- Community

About
- About Logipedia
- Statistics
- Acceptable Use

Kings Place

Last edited on Aug 20, 2011

Show Table of Contents

Description

Kings Place (KP) is Logica's main London office. It's been set up as a 'client office' meaning its main role is for hosting client meetings. There are very few project teams based here and most of the accommodation is given over to hot-desking. See the Kings Place location pages on the intranet for more details.

The Kings Place building opened on 1 October 2008. It was designed by celebrated architects Dixon-Jones and brings together, under one roof a creative hub, a dining venue, a conference and events centre, and office complex. Logica has a lease for the entire 7th (top) floor of the building which hosts client meeting rooms, internal meeting rooms, and a large hot desking area.

Travel and Parking

KP is located close (5 minute walk) to Kings Cross and St Pancras mainline and tube stations.

Lunch

- Green & Fortune cafe on the ground floor of the building. This does sandwiches, coffee etc.
- Rotunda Bar and Restaurant on the ground floor. Seating inside or outside by the canal (with a BBQ on Thursday in the summer months].
- Tesco Metro
- There's a Pret on Pentonville Road (turn left at the bottom of York Way and it's a few doors down).
- Starbucks (next to Pret).
- please add more...

Pubs and bars

- Rotunda Bar - the bar on the ground floor of KP.
- The Fellow - mainly give over to food with a few sofas in a lounge area upstairs. Has a small outside area upstairs.
- Camino - sprawling Spanish bar/restaurant. Outside courtyard area that can get fairly mobbed in the Summer. Pitchers of beer and frozen glasses. Bar menu with platter etc or there's a large tapas menu.
- Smithy's - interesting pub / brasserie in converted stables. They do a good lunch deal for £5.
- 06 St Chad's Place - Just rond the corner from Smithy's, this was once a mechanic's workshop, and is now a bar/restaurant with a nice airy feel to it. They do breakfast / lunch / tapas.
- The Big Chill House - large bar with a 'student' feel Good music. Pub food. Large roof terrace.
- The Driver -
- Canal 125 - further up the road from The Driver, this pub is on Caledonian Road right next to the canal side. Small outside area looking over the canal back up towards KP.
- Central Station - Previously aimed at the gay and lesbian community, now trying to broaden its customer base. Cabaret bar. Roof terrace.
- Lincoln Lounge (52 York Way) - small and a bit quirky.
- King Charles I (55-57 Northdown Street) - small, more traditional pub with some interesting decor. No pub food but you can order frome the cafe opposite (kebabs, egg and chips etc) or the Royal Thai and they'll bring it over to the pub when its ready - excellent!
- Bar Pepito - a small sherry bar that is part of Camino. They do a great tasting menu and have knowledgable staff. Small range of tapas. Even if sherry is not your thing, give it a go!
- B@1 - newly opened cocktail bar on Caledonian Road.

Hotels

- Novotel, Euston Road
- Premier Lodge

Labels:
location, kings-place, uk-kp, /uk/kp/, london

Comments:

Add Comment

Pictured: *Logipedia* gives employees the opportunity to post information for the wider community. It has a different look and feel to make it clear to users they are not viewing "official" information.

It was no easy task moving 25 separate intranets across 41 countries into one global site, but the Logica intranet team used research, principles, and planning to ease the transition. Switching from local views to a global view not only reflects the company's priorities, but it also enables a global workforce to communicate in new and powerful ways. This new global view has even inspired some healthy competition, out of which the company is the clear winner. Countries' content contributors compete to create the most successful content and bloggers are inspired to draw in more views and comments. The site's structure supports and encourages the new One Logica approach.

BACKGROUND

The intranet project began July 2009. During the previous six years, Logica had been through three major mergers/acquisitions, which had expanded the company's staff from 10,000 to nearly 40,000. In addition, each of these events brought another intranet platform into the company's ecosystem.

While some of these platforms had been absorbed along the way, by July 2009, Logica had approximately 25 separate intranets running on five different technology platforms. "There was a real mix of useful content and complete junk," says Pete Blunsdon, Intranet Program Manager.

Many of the environments had their own issues, including:

- Thousands of lost and forgotten pages
- Hard to find content
- Pages that were inaccessible to international users
- Massive document duplication
- Low usage
- Anonymous and impersonal content
- One-way, push communications

And, across the board, all platforms were in need of support and maintenance.

In 2009, Logica started work on a new brand definition; this provided the tipping point for the decision to create a new intranet.

The four main parts of Logica (UK, Netherlands, France and Germany, Nordics) that had come together during the merger/acquisition period had all been through branding changes and name changes, but the brand still needed to be refreshed.

"Launching a new brand would have been difficult without a new, fresh environment to engage with staff on a global basis," says Blunsdon. And, while the brand refresh was the impetus for the project, there were much wider reasons, too.

"Our 'One Logica' change program was bringing different parts of the company together, creating new global businesses, standardizing processes, and establishing global support functions," he says. "Having a series of country-based intranet sites meant that staff in a country would tend to get a very inward-looking view of what was going on in the company."

So, for example, if employees wanted to know what Logica was doing in a specific market sector across all countries, they'd have to trawl through multiple intranets, using different navigation and categorization. "Much of the time, this was too difficult and, whilst we'd had global KM systems for some time, we found that using country-based intranets was creating a barrier to knowledge-sharing," says Blunsdon.

The brand program was pivotal to Logica's strategy and future growth. "It was equally important that both clients and staff experienced a single, cohesive organization," he says. "The importance of this program meant that Logica was willing to invest and care passionately about digital design to ensure the brand experience was well received and understood by all employees."

Setting Goals

The main thrust of the intranet project was to support bringing the company together as part of the One Logica change program. Some of the legacy country portals hadn't been well maintained in anticipation of a new replacement intranet; the project was thus aimed at being a wholesale replacement rather than simply a project to upgrade specific features or sites.

In July 2009, a kick-off workshop with senior management identified a series of core principles for a new global intranet. These included:

- "We value openness: everything I contribute is there for everyone."
- "It's all about colleagues."
- "I can't do my job without it. The content and tools I need are there."
- "There is no such thing as a global homepage; I have my own."
- "Content is stored once, but there are many ways to view it."
- "Things are pushed to me because the intranet knows who I am."
- "We add content to our store of knowledge and make access easy through providing views to it."
- "Adding content is as easy as sending an email."
- "Content is enriched with properties from an agreed taxonomy."
- "We have a user forum (globally) to help produce predefined views."
- "Our intranet helps us collaborate with customers, suppliers, and other stakeholders. We make it easy."
- "Our intranet looks attractive. It draws me in. I like it!"
- "We value creating 'One Logica' through our intranet. Remember: we are local for customers, but run a global company!"

This proved to be a very useful list. "It guided the program in the early days, and allowed us to challenge existing thinking and drive through change," says Blunsdon. "We still refer to it today."

The new intranet had to include changes precipitated by advances in knowledge sharing and collaboration. It had to reflect social computing trends, including more personalization. It also had to add a "sense of fun."

Facing Challenges

The biggest project challenge resulted from the very global nature of the company and the company's intranets. This geographic diversity meant that the project team had to accommodate a vast geographical spread of stakeholders and content owners, each with varying cultural and languages differences.

"Something that was straightforward in one country would often need a complete re-think in another," says Blunsdon. The team had to understand and (on some level) accommodate these differences, while also learning to pick its battles.

"We had to be tough and resist trying to accommodate every request," he says. "Just because 'our old intranet had that,' didn't necessarily mean the new one would!"

The team also encountered some technical challenges implementing a rich brand look and feel in SharePoint. "As an example," says Mark Kernot, Technology Manager, "we had to balance the demands of rich JavaScript, imagery, and personalization against performance considerations. Some things we tried, although fabulous in UI experience terms, would not have been compatible with older PCs or remote-access solutions."

The first few migrations were very challenging. "The intranet design was still evolving, and we didn't have all the answers to the 'what goes where' questions," says Ayesha Mian, Migration and Adoption Manager. "By the time we had done four or five countries, we'd seen most variants of content and it became much easier."

Migration started as a joint activity with countries doing a share of the work. When this led to some inconsistencies, the team changed the process, putting migration under a single person and running the process via its offshore team.

"We learned as we went," she says, "refining and enhancing the process and the supporting material with each country. Getting content validated by the business owners was always difficult, and we'd sometimes use gentle persuasion techniques via the steering committee!"

Controlling the Sidebar

Another challenge for the team was finding a way to create a useful navigation sidebar and then locking it down.

The new site's left-hand sidebar is used for in-site navigation. It shows where users are within the overall site hierarchy and where they can go within the current site. "On legacy intranets, there was a tendency for contributors to cram links to just about anything in the sidebar, confusing navigation," says Blunsdon. "On the new intranet, we lock this down so it's used consistently."

Pictured: The side navigation combines the breadcrumb and in-site navigation, while in-page navigation relies on links within the main content areas and related links in components on the right side of the page.

INTRANET TEAM

Pictured: The core Logica intranet team (left to right): Chris Green, Emma Roos, Dave Dunlop, Pete Blunsdon, Mark Kernot, Jenny Perrett, Sarah Martin, Mike McIntyre, and Ayesha Mian.

Pictured: The Logica India development team members (left to right): Varun Galur, ManojKumar Raju, Suhas Vengilat, Pradeep Raman, Bhupendra Rawat, Praveen Kumar Thalluri, Nilanjan Dutta, and Manikandan Balakrishnan.

Pictured: Logica library and intranet content management team (left to right): Manoj Balan, Vivek Thakur, Vimpy Choudhary, Lizzie Lewis, Pete Blunsdon, Krithika Nagarajan, Harini Subash, and Khadar Valli.

GOVERNANCE

As mentioned previously, the intranet project was initiated as part of the wider One Logica change program. It then transitioned into Logica's internal IS/IT organization. This transition has worked out well on several fronts.

"Placing program ownership within the IS function has enabled us to be independent of the content," says Blunsdon, "and this independence has enabled us to bring about a greater level of change. The intranet today is more closely aligned with knowledge management and collaboration, and we have strong governance for associated change projects."

Logica's Chief People Officer (global head of HR) chairs the intranet steering committee, which meets quarterly. Its intranet responsibilities are split across three main departments:

- **IS:** typical intranet services, including content management (site creation, migration, policing, and reporting)
- **Chief Client Office (CCO) organization:** brand, marketing, and communications
- **HR:** employee engagement

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Intranet Steering Committee	• Approves the intranet strategy • Makes key decisions on approach and priorities • Influences and facilitates smooth interactions within countries/operations
CCO	• Reviews strategy • Ensures the intranet embodies the company's client strategy
HR	• Reviews the strategy • Ensures alignment with Employee Value Proposition • Drives cultural adoption
IS	• Develops and owns IS strategy • Provides change program governance
Intranet Program	• Develops and executes the strategy (including securing funding when necessary) • Delivers functionality to meet business needs • Manages the service provision • Owns the intranet architecture • Provides content management, policies, and policing • Carries out intranet usability and benchmarking • Manages information lifecycle • Serves as a conduit to user communities
Intranet Forum	• Helps prioritize medium-term activities (3-9 months) • Manages ideas from conception through adoption • Helps share experiences among businesses • Helps achieve shared ownership
Country/Business Intranet Managers	• Responsible for intranet content management within a business • Serves as main point of contact with the intranet program

	• Responsible for adoption within a business • Responsible for adherence to policies and standards within a business • Contributes to new ideas, identifies improvements, provides feedback • Manages the community of local content editors
Content Owners	• Responsible for maintaining their local business content

USERS

Blunsdon explains the information needs of the three main categories of intranet user at Logica and how the intranet serves those needs:

- **Professional staff:** Professional staff members work for Logica's clients in business consulting, professional services, or service delivery roles. Blended delivery teams with staff working together from multiple locations are commonplace, and there's a drive in the business toward flexible or home-based working. A key objective is to support information sharing across organizational boundaries. Teams often find themselves faced with problems and challenges that have been encountered before. If the intranet can improve networking, knowledge sharing, and discovery, these employees can be more effective in their roles and provide an even better service to clients.
- **Business development staff:** Marketing and business development staff, account teams, and staff working on bid teams work with client requirements and put together proposals. They need to find the answers to questions such as: "Where have we done this before?", "Who can I contact about this?", and "What are our offerings in this space?" This audience needs quick and easy access to information about the company's catalogue of offerings, case studies, references, and clients or partner relationships. And they need to find the relevant contacts fast.
- **Business support staff:** Business support staff work in central function roles such as HR or Finance. Within the company, there's a strong trend toward standardization of processes globally. Many business support roles are supported from offshore location roles. In such cases, the intranet is used as an employee portal, presenting the tools, processes, services, and supporting information that staff need to do their jobs. Business drivers to support this group include the need to reduce service desk calls and time spent searching for information, and ensure that processes are adhered to and correct information is used. In most cases, this means a combination of global and local information, but staff members don't care which is which; they just want to see what's relevant to them.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	• http://mysite.global.logica.com
Default Status	• *My Site* is set as the homepage, but this is not enforced in most countries. It is also bookmarked in users' browsers.
Remote Access	• Most users access the intranet remotely. Many countries have a policy of encouraging flexible working arrangements, and many staff members work from a variety of locations: home, on the road, or at client sites. Most remote access is via VPN connections or SSL gateways.

DESIGN PROCESS AND USABILITY WORK

Design Approach

The One Logica initiative helped reinforce the global message of the intranet and helped the company move away from country-based intranets. The process by which the team arrived at that One Logica intranet consisted of a number of steps that helped them refine the new site's requirements and understand the users' habits and needs based on the old intranets. These primary research methods are described below, but—in addition to the user research—the project was framed from a company perspective through several key inputs:

- Logica Brand definition: guidelines on visual identity and tone of voice
- The One Logica change program
- *The Logica Story*: a description of Logica's strategy
- The company's Employee Value Proposition and definition of Logica values
- *The Organization Blueprint*

"Being part of the One Logica change program helped us reinforce the 'global' message and move away from country-based intranets," says Jenny Perrett, program manager. "The Employee Value Proposition gave stimulus about the kind of ethos Logica is building, especially around the encouragement for cross-working and knowledge sharing." The Employee Value Proposition is also linked to the One Logica strategy to unite the company and bring consistency so employees can be more efficient in their work.

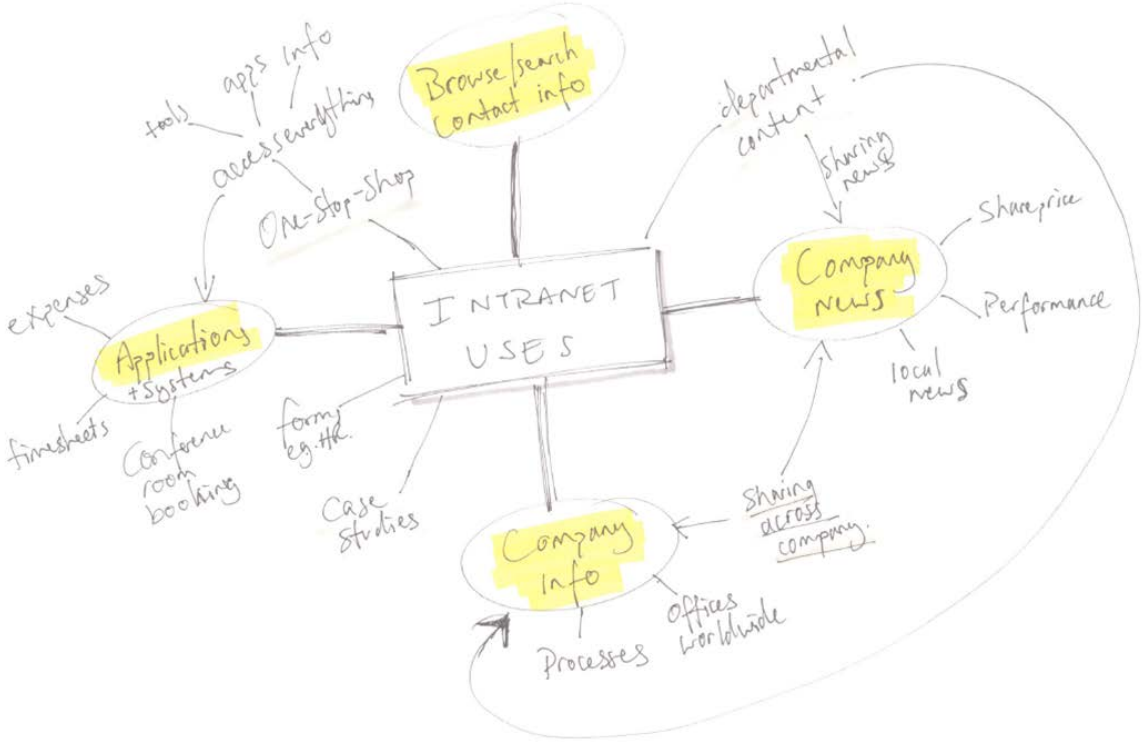
The *Blueprint* provides a model for how Logica businesses should be organized to best achieve the company's goals and produce the highest quality work for its clients. "The *Blueprint* helped shape the *About Logica* section and further influenced the other main intranet areas," she says.

Although these various inputs helped frame the project, user research provided valuable context for the team's design decisions. As the following describes, the team used several tools to collect these insights.

User Survey

A user survey was conducted with people from across various countries and job roles. The results revealed the key tasks the intranet was being used for and what sorts of things the users wanted to see on the new site. Some sample comments from this research include:

- "It is difficult [...] to find information relevant to the actual job you are doing."
- "I would probably be more knowledgeable and therefore efficient if I had more knowledge about different activities in different countries."
- "The intranet should be the doorway to all the things I need on a daily basis."
- "It's a pain to have to search around for things that I had found before!"
- "I'd rather see less, more relevant content, not additional content."
- "Not designed for me and my job."
- "I would like to see a list of frequently visited pages customized for me."
- "We should have *My Intranet*—customizable intranet page (content)."



Picture: A sketch summarizing the main uses of the legacy intranets.

Key User Journeys

The survey helped the team identify the key user journeys that the new intranet had to support. These included:

- Search for details on a person
- Access an application
- Access a workspace
- Find specific information about part of the company (browse and search for organization information, offerings, expertise)
- See news about the company (global updates and contextually "near" news relating to country, local office, discipline, and interests)

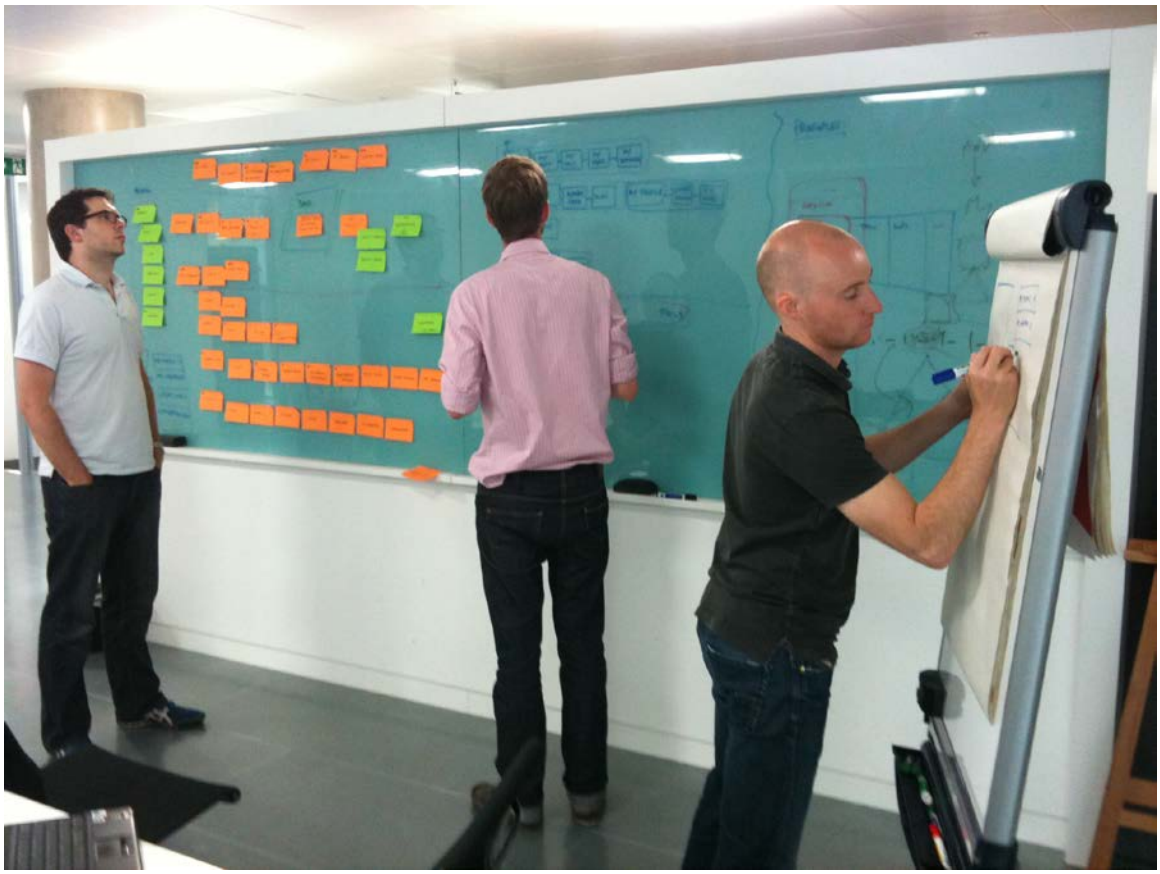
These were then augmented with "evolved user journeys" inspired by user surveys and the EVP:

- Keep up-to-date with Logica successes (such as client wins, patents, innovation, and recommendations)
- Ask a question to the rest of Logica
- Identify opportunities to share my knowledge by contributing to knowledge stores or connecting with people from similar disciplines, skill sets, or business areas

Determining Top-Level Site Structure

The top-level site structure came about through a long series of design iterations, based on the key user journeys. Through this process, the team identified the need for personalization and raised awareness of the critical issue around global versus country site structure.

"We used affinity diagramming techniques to organize intranet content and then presented it back to specific groups within Logica to iterate based on their feedback," says Blunsdon. This process is shown below:

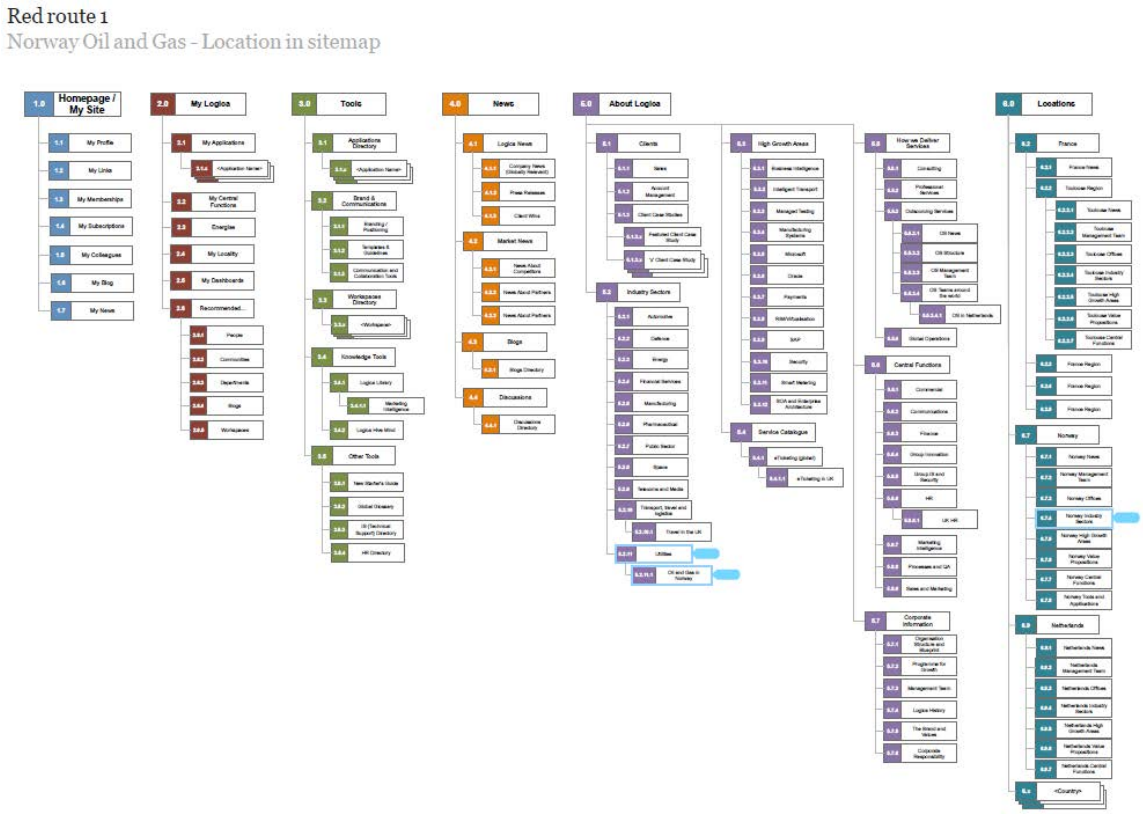


Pictured: A design session in progress.

Given the significance of the decision to do away with country intranets, the navigation and site structure had to be tested with staff stakeholder groups in different countries to make sure the approach to language and navigation worked in practice.

"To do this," says Blunsdon, "we identified a series of navigation 'red routes'—navigation scenarios we could use to test the design. We had to ensure navigation worked from a top-down, global perspective when navigating within a user's own country and when browsing a different country's view of the site."

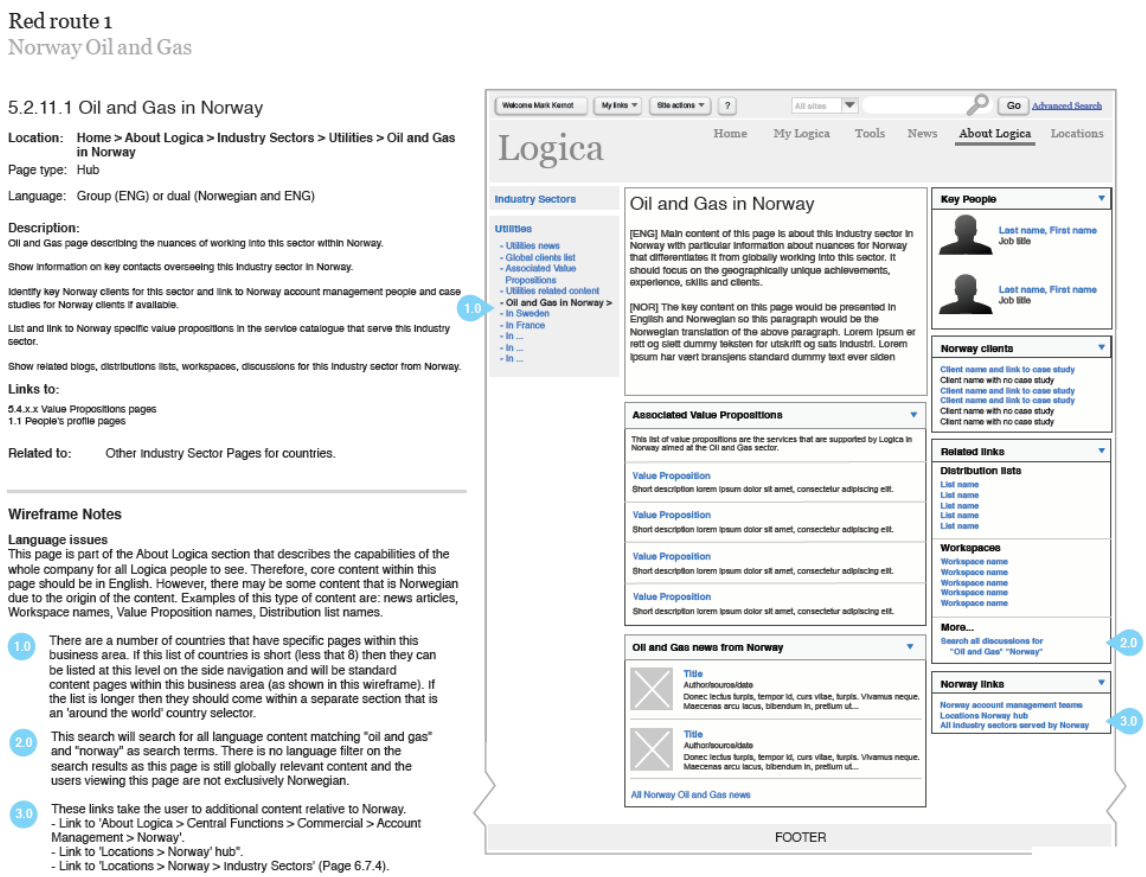
Each red route was plotted within the sitemap, as the following graphic shows:



Pictured: One of the red routes mapped on to the site map.

These navigation routes were then tested on the wireframes as a way to check whether the proposed navigation made sense visually.

"This approach enabled us to walk through examples from a local perspective and get buy-in," he says.



Pictured: Red route navigation mapped on a page wireframe.

Wireframes

Annotated wireframes were produced for all page layouts. The layout below shows an example of a *My Site* page:

Wireframe
My profile - Empty fields (my view)

1.1b My Profile - Empty fields (My view)

Location: Home > My Site > My Profile

Page type: Content

Language: Local (ENG)

Description:

As per new designs with 3 tabs of content.

Links to:

1.1 My Profile - of other people through My Colleagues list

Related to: 1.0 Home (My Site)

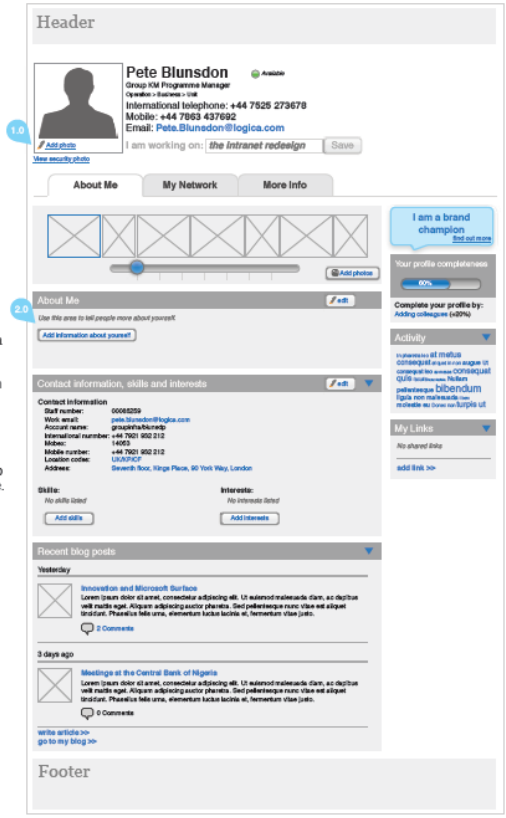
Wireframe Notes

This wireframe shows the behaviour if sections in the user's profile have not yet been populated. There are extra hints, links and buttons to quickly get to populate the content.

1.0 If the user has not yet added a personal photo then the prompt here is to add a photo instead of 'edit'. In addition, this link should take the user straight to the page for uploading a profile photo so they can quickly browse to a photo on their computer and upload it to the profile photos library. The user should not be taken to the screen to edit their general details.

2.0 Even though the user has not yet populated this area it should still be shown with the title and some blank copy explaining the user should add their own details. There is also a button here to get straight to update the details. This button should, ideally, link straight to the relevant section in the edit details page.

This principle should be applied to the other sections as well: even if they are blank they should be displayed with buttons to populate them.



Pictured: A wireframe of a *My Site* page.

Working with an Outside Agency

Because the intranet project was bundled tightly with the company's larger initiative, One Logica, the intranet team needed the support of an agency partner to help translate some of the overarching campaign concepts into intranet design and features.

"The significant level of change within the business around One Logica meant that we needed a digital agency that could help bring this to life through the new intranet," says Perrett. "We needed a partner who could translate ideas and concepts into user interface designs that met brand, engagement, and usability objectives."

Because the in-house team was managing the technical design and development, they needed creative input that was reasonable within SharePoint's constraints.

"It took a few attempts," she says, "before we found The Team [a creative design agency]."

The Team was already working with Logica on employee engagement (as part of the Brand change program), so the intranet team asked Team members to review some of its early designs. They came back with some recommendations on how to best integrate the employee engagement program's principles and improve the intranet's overall user experience.

"Using an external partner brought some fresh, independent ideas to the design process," she says. "It was good to have our ideas and plans challenged! With their support, we were able to be bolder in our thinking and make changes we'd never dared to do previously."

The two worked as an integrated project team. A typical breakdown of responsibilities/project activities was as follows:

- Ideas session/brainstorming (in-house and agency)
- Capture session and create sketches of solution (agency)
- Wireframes and visual designs (agency)
- Implementation (in-house)
- Development (in-house)
- Test (in-house and agency)
- Adoption (in-house)

ROLLOUT AND TRANSITION

A Local Country Perspective

Engaging the staff with the intranet was of vital importance to the project's success, so team members used a variety of methods to communicate as part of each country rollout.

"We knew from previous experience that we had to get real engagement with staff if the new intranet was to be a success," says Christina Tranberg-Mikkelsen, Marketing Director, Logica Denmark. "For us, this meant using a whole variety of communications channels as part of our internal campaign.

She describes a typical country rollout as follows, explaining how they used various key channels:

- **Email campaigns:** All-staff emails were used to start the campaign. "As a first step, we wanted everyone to explore their new *My Site*, visit their profile, and update it!" she says. The key messages were:
    - **The new intranet is a reality!:** and it is a very important tool for knowledge sharing in our local and global teamwork
    - **Getting started is easy ...:** a few steps to take is to activate your *My Site* and update your profile

  "After this e-mail, we did not want to send out e-mails in the organization," she says, adding that instead, they "started using the intranet as our communications platform."
- **Roadshows:** Through an intranet news article, all employees were invited to participate in a road show at their local office. Several one-hour introductions were given in each office, with a short introduction to the intranet, demonstrating the new features and also talking about some of the integration tools with other Microsoft programs such as Outlook, Office, etc.

"The reaction from colleagues was very positive," says Tranberg-Mikkelsen. "Many employees had been looking forward to the new intranet, and most people liked what they saw. A few people were a little skeptical about the new tool, which was structured quite differently compared to the old intranet, so it was an advantage to answer these comments face-to-face and tell about the improvements."

Following the initial road shows, team members plan to invite staff to road shows again. "It is a never-ending story," she says, "but new employees need the same information, and some of our colleagues need a brush up!"

- **News publishing:** To make sure the new intranet felt fresh and vital, the team seeded the site by publishing news articles every day.
- **Local management:** Local managers were briefed on project progress through monthly video meetings. "Managers were asked to be first movers and act as role models," says Tranberg-Mikkelsen. "They appointed a super user in each business unit to help create business relevant content, publish news articles, etc."
- **Super users:** Super users were found in all business units and invited to two workshops, for information and training. The team created a blog for all super users, where they communicated information about changes and new features.
- **Posters:** The team used posters in all of the company offices to promote and sell the new intranet's features and benefits. These posters included slogans such as:
    - "Start your day at *My Site*—a good beginning!"
    - "Get Logica news—quite easy… Choose *My Site* as your homepage" (with an explanation of how to do this in Internet Explorer)
- **Outlook signatures:** For other internal communications, the marketing/communications team also used special Outlook signatures for a few weeks.
- **Specific communications:** After the initial launch, a subsequent communications program focused on giving users tips on how to get the best out of the new intranet's specific features. Topics included blogging, profiles, My Logica, common tools and applications, and information included under *About*.

Rollout

Introducing the intranet to staff was phased in, country-by-country, rather than implemented as a "big bang."

"We had a number of early-adopter countries who were happy to act as beta-testers of new functionality," says Mian. "This helped us drive out issues that we could address before introducing the site to the major countries."

Some of the legacy intranet sites contained a mix of:

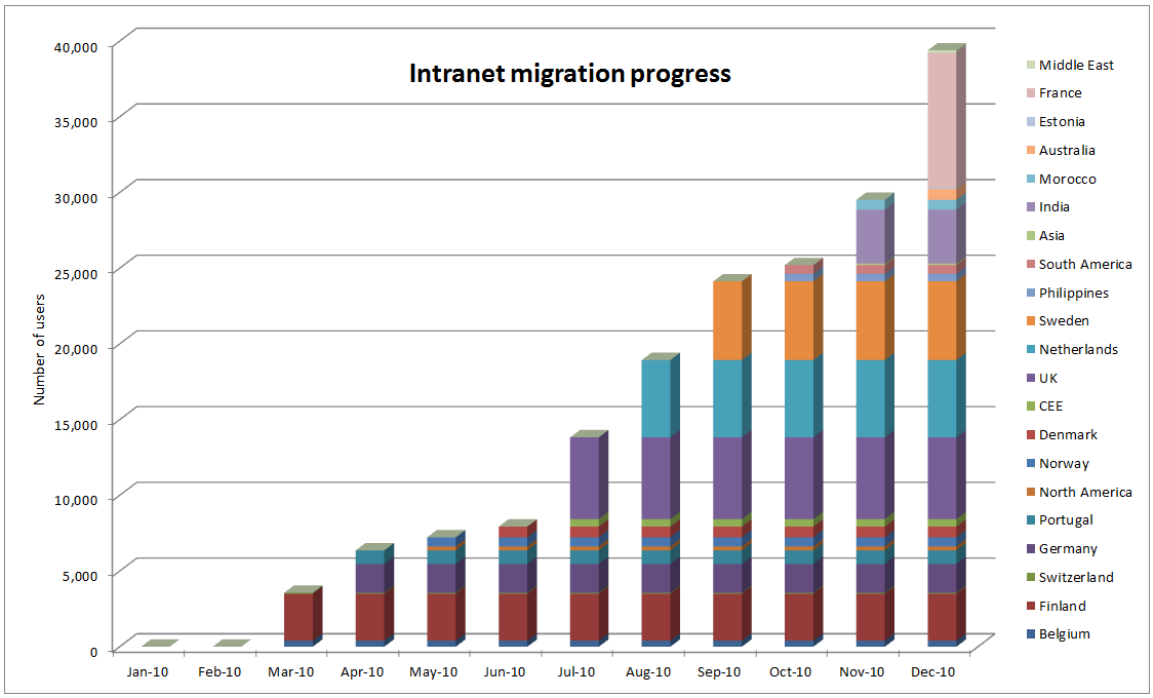
- Current/valid pages
- Obsolete pages
- Current/valid documents
- Drafts of unknown origin
- Out-of-date documents
- Broken links
- Process descriptions
- Whole sites that nobody knew existed
- Embedded applications
- Dependencies and cross-links to other sites

Dealing with this could be daunting, so planning for each country rollout involved mapping out tasks in three phases. There was a long lead-time prior to launching the intranet into a country; during this period, the team engaged in the following activities:

- Obtain senior management sponsors
- Plan
- Audit legacy content
- Identify gaps and assess the need for new content
- Map content to the new intranet and other platforms (such as team sites and Logipedia)
- Migrate and update content (this was performed by the company's offshore team)
- Run verify/review/testing cycles
- Train new contributors
- Engage in communications activities
- Transition and cutover

As part of the transition phase, the team used local focus groups to assess the site's impact and obtain feedback prior to launch. This typically took place on live content, but before the redirects had been put in place. Focus group participants were asked to comment on aspects of the site such as ease of navigation, page layout design, readability, level of detail in content, and effectiveness of communications material. "Reactions to what was, after all, a standard global site varied enormously between countries!" says Mian. "This highlighted the effect of local cultures, how far a particular country was on the One Logica journey, how different the site was from their legacy site, and the effectiveness of local communications.

"This was a really important activity, and we ended up doing a lot more tailoring of the local transition and launch activities than was originally planned," she says.



Pictured: Migration of all country intranets was completed within a year.

A Quick Transition: Pulling off the Band Aid

Moving from the old system to the new one was a quick transition, necessitated by the team's limited resources. Because it didn't have the luxury of easing everyone into the new system over time, the team simply pulled the Band Aid off in one quick move.

"We switched over really quickly from the old to the new system," says Tranberg-Mikkelsen. "We had very limited resources for the project, so this was important. And it was easier to keep the enthusiasm and be proactive."

Tranberg-Mikkelsen cited several key elements that facilitated the quick transition:

- **The intranet as the only source.** "We switched the main all-staff communication channel from e-mail to intranet news articles. Some of the articles were very basic—such as telling about the 'Menu of the week'—but the intranet was the only place you'd find this!"
- **Pre-subscribe users to blog updates.** "Several of the Denmark managers created their own blogs, and we then subscribed relevant groups of staff to receive updates from them."
- **Link campaign.** "As marketing and communications, we had a clear linking strategy in place from the beginning, so we are linking to the different information areas and documents as often as possible."
- **Publicity campaign.** "Visible posters and Outlook banners also created further awareness about the intranet."
- **High-level support.** "[We had] Great support from our central intranet team—always very helpful—and support at a high level from a great team of committed, innovative, and open-minded people!"

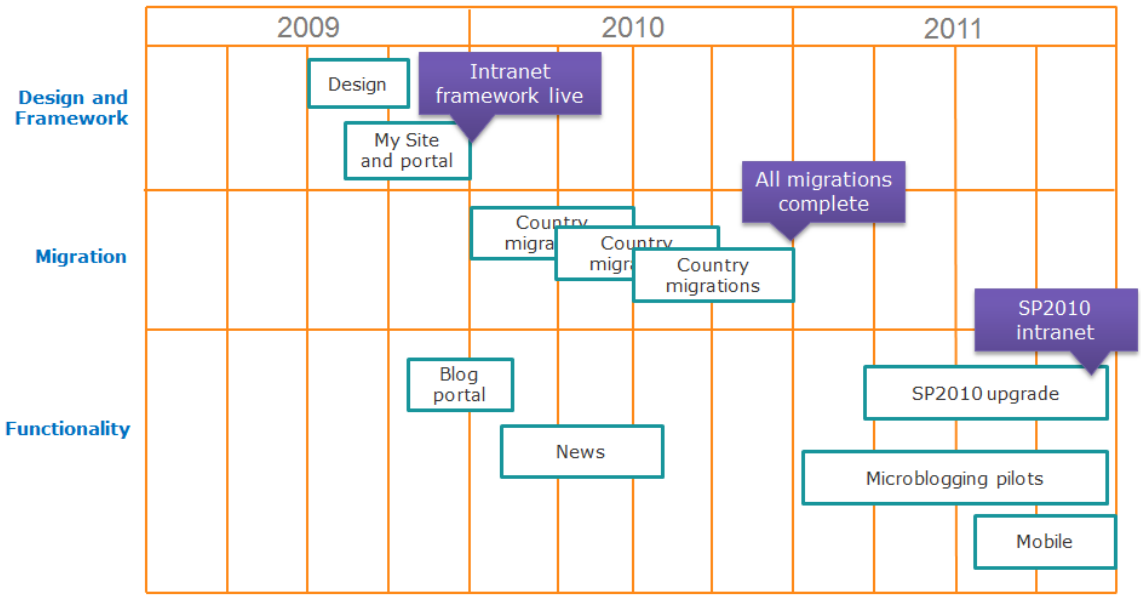
Although the transition strategy was successful, there were some things the team would do a little differently if they did it all again.

"In hindsight, intranet introduction meetings should have been mandatory for all employees," says Tranberg-Mikkelsen, "or at least we should have tracked who had been introduced to the new tool, to be able to target the rest."

"We also found that video introductions and training worked very well; particularly for our consultants who are not in the office every week," she says. "If we went through this process again, we'd make more use of video as a communications tool."

TIMELINE

INTRANET PROJECT TIMELINE	
Milestone Date	**Milestone Description**
2001	• First company intranet
2003	• Combined intranet launched on day one of the Logica/CMG merger • Global intranet community initiated
2003	• Corporate site covering 13 country portals launched
2004	• Global implementation of SharePoint 2003 team sites and *My Sites*
2008	• 30,000 *My Sites* and 20,000 SharePoint team sites upgraded to SharePoint 2007
January 2008	• CEO's *My Site* blog created
July 2009	• New intranet program start date
October 2009	• Intranet Steering Committee agrees to remove country sites
December 2009	• New intranet framework launched in SharePoint 2007
March 2010	• New Logica brand launch
May 2010	• Blog portal live
June 2010	• *Global News* solution live
December 2010	• Migration of all countries completed
December 2011	• Upgrade of intranet to SharePoint 2010



Pictured: The high-level timeline for completing the company's new intranet.

CONTENT AND CONTENT CONTRIBUTORS

Choosing SharePoint

The team chose SharePoint for content management for several practical reasons, among those the tight integration SharePoint provided with the company's existing business systems.

"We wanted the intranet to be the main entry point for user journeys," says Blunsdon. "Effectively, it sits at the top of the tree. Beneath this, we have collaboration team sites, business applications, and repositories such as the Logica Library and the Logica Operating Model. From our guiding principles, we need to 'publish content once but view it in many ways,' so this means aggregating content and rolling it up on multiple pages."

Given that SharePoint is the company's strategic platform for KM, collaboration, and many of its business applications, this need for tight integration meant that SharePoint was a natural choice for the intranet.

"Microsoft is a global alliance partner for Logica, and we have strong technical and business capability for SharePoint in-house, so these were also supporting factors," he says.

Creating Content

Content is developed primarily by the local content owners, who are embedded within the business. These individuals are responsible for a specific part of the business and as such they have the perspective to provide a good overview of the business areas, while also providing relevant content with an eye toward key user journeys.

Approximately 500 people across the organization contribute content to the intranet, but most update only very specific sections. Although this decentralized model allows

the greatest input from employees across the organization, it also presents its challenges.

"This is a bit of a balancing act," says Blunsdon. "We want local content ownership by the right people within the business, but need to maintain consistency and standards.

"In general we don't use fine-grained permissions, as this would create a heavy maintenance workload," he says. "Instead, most general pages can be updated by anyone with intranet contributor rights. There are a few exceptions to this around news and service announcements publishing and when publishing policy or process content. Here, specific permission groups are used for tighter control."

The team makes a big distinction around permission management between people who can edit page content and those who are able to create pages or sites. "Site creation is very restricted as it has fundamental impact on navigation," says Blunsdon. "Only the central intranet team can do this."

Policing Content

Rather than have a complex approval chain, the intranet team takes a policing approach to content. "Regular policing processes help us pick up any content that doesn't follow standards," says Mian.

Daily reports list pages and sites created and are used to keep an eye on new content. "This is where most potential issues are trapped early on," he says. Reports are also produced for checked-out pages, unpublished pages, recently updated pages, draft pages, and so on. These help identify oversights in content management.

"We have an offshore team—three full-time equivalents—that provides content management services, and we encourage the business to make use of this team," he says, "particularly when adding new content." In such cases, content is reviewed by the department owner, and then implemented by the services team. Once it's in place, ongoing maintenance is usually done locally.

Once posted, content is monitored to keep tabs on what content is being accessed and by which groups. "We use intranet statistics to ascertain whether content is being accessed and how staff are navigating to content," says Mian.

This helps drive decisions for placing content in a more intuitive way. "This is an ongoing process, and metrics are reviewed by the individual countries as well as the core team," she says.

Supporting Content Contributors

Content editors are supported on a day-to-day basis via the intranet content services team. But given the geographic spread, most training is carried out via web meetings; when there are specific requirements or larger groups, the team will conduct face-to-face training sessions. The team also offers a range of video-based training modules for self-training or for contributors who need a refresher.

In addition to this training, the team is putting together a training-refresh process that is mandatory if staff members want to keep contributor rights. "This," says Blunsdon, "helps flag up people who have changed roles and no longer need contributor access."

Improving Content over Time

Multiple measures are in place to help improve the quality and ensure content consistency over time. An integral part of the training is to review existing content and identify how to improve it as a measure for understanding best practices to help assure that content contributors' editors will be able to produce consistent content. "When we train content contributors, key principles and guidelines are provided along with the Content Standard document for reference," says Blunsdon. "In addition, we use a number of good example sites—and a few bad examples!—to demonstrate applying standards in practice."

Also, every page includes a feedback link in the footer. Anyone can use this to provide comments on missing or incorrect content. The intranet team responds to these or assigns them to a local owner for review and action.

Contributors are also actively encouraged to share good practices and user benefits and journeys with others to help improve the global experience. The best examples are then showcased via the Intranet Forum meetings.

The intranet content services team follows a schedule of reviews (by country and major business) and regular policing activities. When team members spot problems, they are reviewed with the relevant key contacts; they then develop a plan together to remedy any issues.

"We hold a monthly Intranet Forum meeting with all country and business owners and other key stakeholders participating," says Blunsdon. "We use this to provide updates on the development pipeline, reinforce principles and standards, instigate campaigns such as the 'Campaign Against Corporate Blah.' We also host interactive sessions where ideas are presented and discussed, and invite countries to present on local experiences and successes to provide inspiration to others."

When new content is provided for the intranet, the intranet team provides suggestions for how it can be displayed and why. "We'll either be invited to help, or we'll spot the new content via reporting and volunteer help if we see it's needed!" says Mian, adding that when there are gaps in the content, the team asks contributors to provide the necessary input, "with a strong emphasis on educating the content owners/editors.

"We take this education process very seriously, reverting to our original guiding principles, content standards, brand guidelines, etc., to explain why something isn't right. Without this, feedback risks being taken as just personal preference (and ignored!)," she says. "Page templates also limit the amount of dubious artistic freedom that can be used within pages."

SOCIAL INTRANET

Having social tools on the new intranet is a high priority for the company. The intranet today includes many social features, including commenting, blogs, customizable profiles, forums, and wikis. Migration to SharePoint 2010 is scheduled for Q4 2011 and with this migration will come further social features.

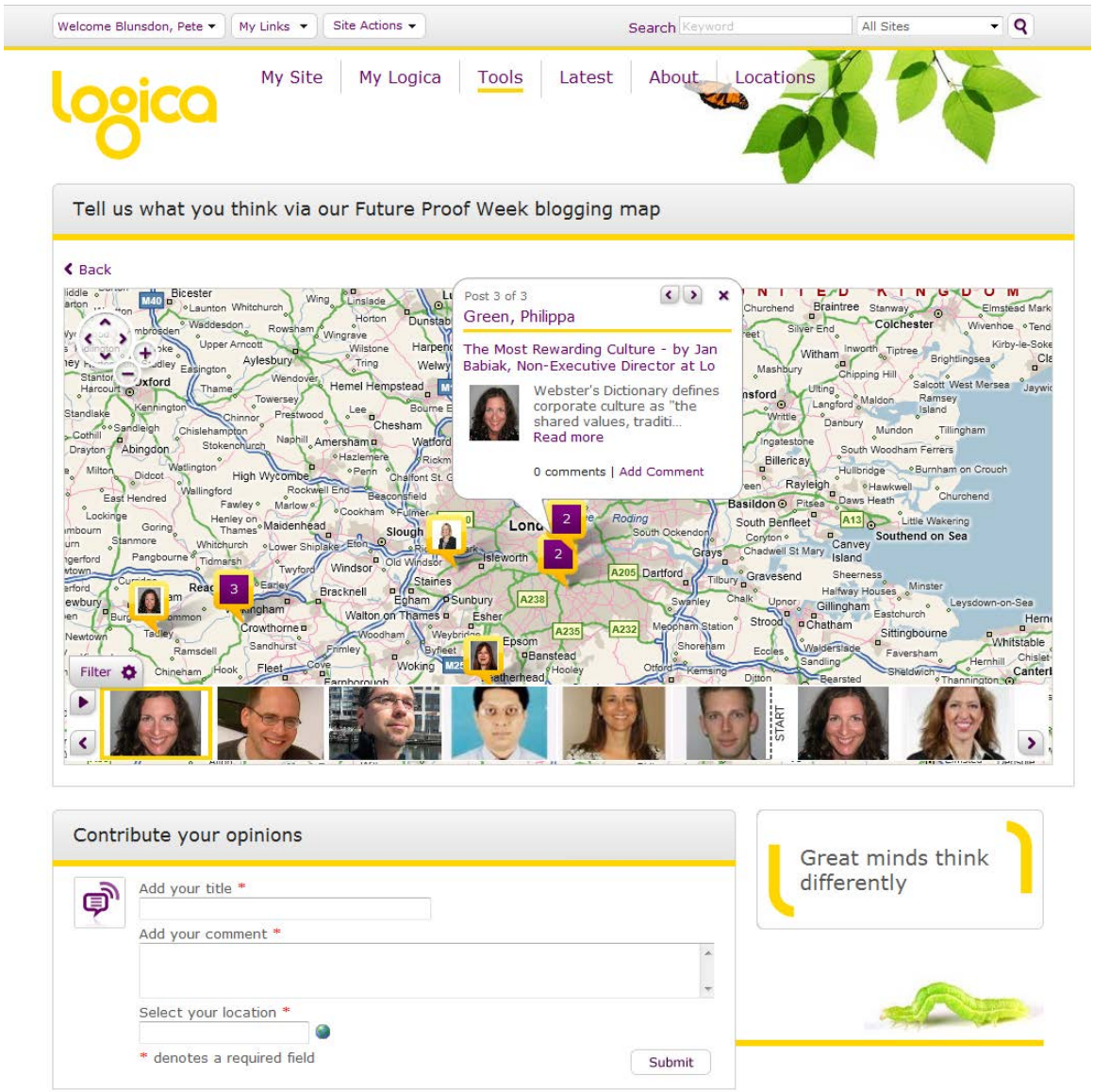
"We've also had several microblogging pilots running for some time," says Blunsdon. "The next step, scheduled around the end of 2011, will involve integrating microblogging into the intranet."

"This is important for us," he says. "Our strategy is to build social features into our global intranet rather than introducing new standalone social solutions. We recognize

that different people take to different forms of social software. By having a single platform, we can avoid fragmenting our user community, and better support networking and knowledge sharing."

Geo-Tagging Blog Posts

A good example of the company's forward thinking about the social intranet is how it uses blogs. Blogs can be tagged with a location, so the user can aggregate posts to those nearby or plot posts on a map. This feature is often used to support campaigns that invite employees to provide input or comment on activities via a form, which writes it as a post on their own personal blog. Campaign-related posts are then aggregated and displayed on a blogging map.



Pictured: An example of how geo-tagging is used to present user-contributed blog posts locally on a map.

FEATURES

The site offers many useful features—many of which have been mentioned—but a few notable ones are worth examining in some detail.

Hello Yellow

Recruits to Logica are helped through their on-boarding journey via *Hello Yellow*. This site presents selected content on a week-by-week basis to help new staff find their way within Logica. The slider at the top of the page allows staff to revisit previous weeks' pages.

The site includes various tools to provide feedback during the on-boarding journey, including:

- Checklists to confirm receipt of information on HR, Health and Safety, security guidelines, and so on
- Surveys after two weeks, eight weeks, and six months
- Tasks that confirm completion of mandatory eLearning, basic familiarization with and business processes completion of HR development plans and objectives

Welcome Blunsdon, Pete | My Links | Search Keyword | All Sites

logica

My Site | My Logica | Tools | Latest | About | Locations

Hello Yellow

Use the bar below to navigate through the weeks of your journey here at Logica

Blunsdon, Pete ( )

OLIH: International Holdings, B920: IS Costs & Recoveries, U920: IS Solutions & Services

Your people manager is: Baracco, Dominique

Your journey

Week 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 +

Welcome to your journey

We should have shown how to do the basics such as filling in time / expenses sheets, hot desk booking etc. Your network should be growing and we should have given you vital knowledge about HR, Resourcing, Security etc. We trust your sense of Logica's brand is growing.

What next? Well we hope the information sign-posted on this page will help you to continue to make sense how the organisation works and the journey it is on.

A. Green Future

Hear from our CEO on how we can bring the Logica brand to life

Learn more...

Be brilliant together...

Learn more about our brand. Our ambition, what makes Logica different and how we want to spark the possibilities for the future.

Learn more...

Talent and Development

Investigate the learning tools available to you - including browsing and booking elearning/training

Learn more...

Resourcing

A list of documents supplying useful resourcing information - including CV templates and how to use LARA (apply for roles)

Learn more...

From Green to Red Hot

See how much you'll learn in your first six months.

Learn more...

Everything you need to do to keep moving at Logica

Welcome to Logica
You have been invited to attend, find out more about what it's about.
Learn more

HR Policy
Get to know your key HR Policies.
Learn more

Employee Benefits
All you need to know about Core Logica Benefits, Flexible Benefits and Pension.
Learn more

Logica Working Practices
Useful information on the Smart Working Policy.
Learn more

HR and Payroll Queries
Got a question for the HR or Payroll? Your answer might be a few clicks away...
Learn more

Employee Assistance Programme
Whether you have a simple question or a complex concern, Unum LifeWorks is available to help you.
Learn more

Staff Communications Council
An effective channel for communication between staff and management.
Learn more

No grey areas

What is Hello Yellow?
Onboarding - Roles and responsibilities
Getting started
HR welcome calls
Your key contacts
Health & safety
How Logica works - FAQs
Security
PTS handbook
Book a desk (DILBERT)
Book annual leave (ALBERT)
One IS support desk
Timesheets

Mellow Yellow

What's on this week
Logica's Sports & Social Club 'LSSC'

Pictured: The *Hello Yellow* site helps new employees through their on-boarding process.

Tools Page and Global Navigation Menu

One of the intranet's primary roles is to provide easy access to the applications and tools that users need to do their jobs. The most frequently used applications are brought together on the *Tools* menu. The menus are the same on every page, avoiding a need to return to the homepage.

Tools listed on the menu are a mix of global tools and tools specific to the user's role within Logica.

"They don't care which is which," says Blunsdon, "they just see what is relevant to them."

The *Tools* section contains a full directory of tools and applications, along with pages that provide information about applications. The following example from *Tools* > *Communications*, describes apps related to brand and communications.

Welcome Blunsdon, Pete | My Links | Site Actions | Search Keyword | All Sites

logica

My Site | My Logica | Tools | Latest | About | Locations

Admin
- Annual leave booking
- Desk Booking
- Expenses
- O2 Bill Analyser
- Timesheets

People
- Everyone benefits
- Payview
- Diamond Awards
- ePMS
- LARA

Process
- OMT
- CBR resources
- Bid Smart
- Logica Operating Model
- Cortex
- Procurement

Other
- One IS Service Desk
- Spark
- All Group tools...

Search
- People search
- Library search
- Logipedia search
- Image search
- Workspace profiles
- Search Centre

Knowledge
- eLearning
- Intranet portal
- Logipedia
- Logica Library
- Global Glossary

Collaboration
- Live Meeting
- Office Communicator
- Workspaces
- Audio conferencing

Communications
- Image Library
- CommsBuilder
- eCommsBuilder
- WizKit
- Brand tools

Tools

Communications
- Brand sites by Country
- Brand Tools Training
- Business Cards
- Comms Builder and eComms Builder
- Corporate gifts
- Email Signature
- Guidelines
- Image library
- Logica Brand Film
- Logica Logo
- Logica Quotes
- PowerPoint WizKit
- Templates

Quote

Read the brand story

Brand guidelines
Visual identity guidelines and new tone of voice

Logica quotes
Database of Logica quotes to use in your branded communications

CommsBuilder and eCommsBuilder
Web based tools to create branded literature, posters and other collateral, branded email marketing and advertising

Image Library
Repository of approved images and Logica logos to bring your communications to life

PowerPoint WizKit
Branded slide template in tool and approved Logica presentations synchronised to your PowerPoint.

Templates
List of branded office templates for documents like CVs, Bid Proposals, Letters, Faxes and Memos.

Corporate gifts
Branded pens, mouse mats, writing pads, umbrellas, polo shirts, sweets and more...

Applications examples
Collection of brand application examples. E.g. magazines, charts, graphs, exhibition stands, literature, advertising.

Do you have a question?

FAQs
Find answers to some of the questions that may occur to you.

Related Links
- Logica Boilerplate
- Logica Story
- Mission Vision Value

Pictured: This page from the *Tools* section lists tools related to brand and communications. It also shows the *Tools* menu, listing the most commonly used local and global tools.

The Logica Library and Auto-Classification

The *Logica Library* is the company's global reuse repository. It's organized into different sections for different types of content (such as Sales and Marketing or Reference Stories). The homepage allows users to search for content or browse in each of the *Library* sections.

Within each *Library* section, browse filters allow users to drill down and select sections of interest, and then further slice and dice their selections and refine the results by filtering on properties like language or content type.

Welcome Blunsdon, Pete | My Links | Site Actions | Search Keyword | All Sites

logica

My Site | My Logica | Tools | Latest | About | Locations

Reach the information you need with the Logica Library

About the Logica library

Find
Search or browse the library to get the files you need
Search

Share
Share and reuse content globally with your peers
Contact a Logica Library administrator

Browse the Library sections

Bid Knowledge
Fragments of common bid responses, company information, diagrams... [more]

Business Support
Publications from global functions such as HR, Finance, Commercial, One IS... [more]

Global Insight
Marketing intelligence, competitor analyses, campaign-specific research and insight... [more]

Project Summaries
Short, factual summaries of projects carried out by Logica teams worldwide... [more]

Reference Stories
Reference documents and PowerPoint 'reference cards' for use by bid teams... [more]

Sales and Marketing
Case studies, capability statements, factsheets, sales guides... [more]

Technical and Delivery
Project documents - articles, papers, standards, procedures, templates, tools... [more]

The Library blog

7 days ago
Library Made Easy-4 : Supporting our businesses
25/07/2011 from Logica Library Blog
Moving into the next corridor of our library aisle: Business Support!Business Support houses documents related to some of the central and ap...

14 days ago
Library Made Easy-3 : The book of Bids!
18/07/2011 from Logica Library Blog
It's all like a big book!! This is what the content stores appeared to me this morning as I sat flipping through the various documents dur...

21 days ago
Library made easy- 2: What's in store?
11/07/2011 from Logica Library Blog
Browsing through the Logica library makes you wonder what the content stores are all about! Shall we take a look? Simply put, a content s...

Questions?

About the Logica Libary
Logica Library (in Logipedia)
Contact a Library administrator
How to search the Library
Watch a 2 minute screencast

Contact

Lewis, Lizzie
KM Content Services Manager

Admin links

Navigate the Library publishing sites

Pictured: The *Logica Library* homepage has a distinct identity and lets users easily find specific content.

Welcome Blunsdon, Pete | My Links | Site Actions | Search Keyword | All Sites

logica

My Site | My Logica | Tools | Latest | About | Locations

Logica Library

Library search results

Results from **1** - **10** of **170** for **sustainable mobility** (selections within **Theme**) in **Sales and Marketing** (0.156 seconds)

Sector	Theme	Content Type	Business
All	Items selected	All	All

☑ All	☐ Capability Statement	☐ Presentation	☐ Video
☐ Advertisement	☐ Case Study	☐ Press Coverage	☐ White Paper
☐ Brochure	☐ Factsheet	☐ Sales Guide	

within results sustainable mobility 170 documents Refresh results

Next

Name	Type	Published
Sustainable Mobility external v1.0 (pptx, 1041KB, properties, no external use) **Sustainable Mobility**	Presentation	27/05/2011
1a Shaping a Sustainable Future v2 (pptx, 1462KB, properties, no external use) We don't just talk about it, we have delivered sustainability-related services across the globe. From **sustainable mobility** for Finnish travellers, to greenhouse gas reduction schemes in Australia -	Case Study	16/06/2010
Logica Sustainability Strategic update June 2011 MASTER VERSION final (pptx, 7568KB, properties, no external use) **Sustainable Mobility**	Presentation	07/06/2011
UK Factsheet_sustainable-mobility LR (pdf, 112KB, properties) **SUSTAINABLE** MOBILITY Bringing intelligence to transport THE CHALLENGE To be **sustainable** means to be fair - to this generation and the next. It's being **sustainably** profitable, with environmental protection meeting economic growth and our quality of life. For transport, it means improving network efficiency, reducing congestion, cutting pollution and making people aware of the benefits of change. It's a big cultural shift. Your challenge is to handle the transformation that is **sustainable mobility**, from road charging and	Factsheet	19/04/2010
analyst briefings sustainability_June 2011_MF (docx, 1534KB, properties, no external use) **Sustainable Mobility**	Sales Guide	07/06/2011
Logica Sustainability Services Sales Guide V1-4 (pdf, 762KB, properties, no external use)	Sales Guide	06/06/2011
Sustainability summary of propositions and offerings (docx, 35KB, properties, no external use) **Sustainable Mobility**	Sales Guide	16/06/2011
1b Empowering Sustainable Mobility (pptx, 1429KB, properties, no external use) Electric vehicles are part of our Empowering **Sustainable Mobility** proposition, and leverages our strengths in Energy and Transport	Case Study	16/06/2010
UK Case Study Daimler Green IT LR (pdf, 473KB, properties) and to shape the future of safe and **sustainable mobility** with groundbreaking technologies and high quality products. Until	Case Study	21/09/2010
SBT_Daimler_GreenIT_CS_EN_2011_lowres (pdf, 365KB, properties) and to shape the future of safe and **sustainable mobility** with groundbreaking technologies and high-quality products. Until	Case Study	02/08/2011

Refine search by:

Language

EN – English (167)
DE – German (2)
SV – Swedish (1)

Content Type

Presentation (60)
Sales Guide (18)
Capability Statement (7)
Advertisement (11)
Brochure (13)
Factsheet (24)
Case Study (17)
White Paper (19)
Press Coverage (1)

Refine by age

Last Month
Last 3 Month
Last 6 Month
Last year
All

Pictured: The *Logica Library* homepage has a distinct identity.

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	• Production environment: four web servers, two application servers, SQL cluster over two geographic locations • Separate environments for Acceptance/Failover, Test, and Development • Windows Server 2008, SQL Server 2008, Microsoft SharePoint 2007/2010 • In-house hosting via Logica Private Cloud solution in UK and Sweden
Bug Tracking/Quality Assurance	• SharePoint team sites and custom lists
Design Tools	• Wireframes: OmniGraffle 5.2 and Adobe Illustrator CS3 • Page designs: Adobe Photoshop CS3
Site Building Tools	• Visual Studio 2010 • SharePoint designer 2007 and 2010 • jQuery plug-ins • IE developer toolbar • Firefox and Firebug • HttpWatch • Yahoo Yslow
Content Management Tools	• Standard SharePoint content management
Search	• SharePoint 2007, SharePoint 2010, and Concept Searching
Other Functions	• Attini Blogs: blog aggregation, view count tracking, tag clouds • Concept searching: taxonomy management and auto-classification • Statistics and analysis: in-house solution based on IIS logs and SQL reporting services • Atlassian Confluence: *Logipedia* • Aptimize: page optimization and caching

	• Axceler ControlPoint: team site management • FoxIT PDF iFilters • AvePoint DocAve Archiver: team site content archiving • Bing maps

MOBILE

Users can access the intranet from a browser on any mobile device with connectivity to the Logica network. Currently, users get the full web experience, but the team is building a lightweight mobile interface.

"We are designing an optimized mobile experience for our growing population of smartphone users (iPhone, Android, Windows, and Blackberry)," says Kernot. "We are also ensuring that basic page rendering is supported on older devices, predominantly Blackberry 5 and older."

"As part of the mobile intranet project, we're using in-built SharePoint device identification to detect specific browsers and redirect users to a page variant optimized for mobile presentation," he says.

Key audiences for this project include:

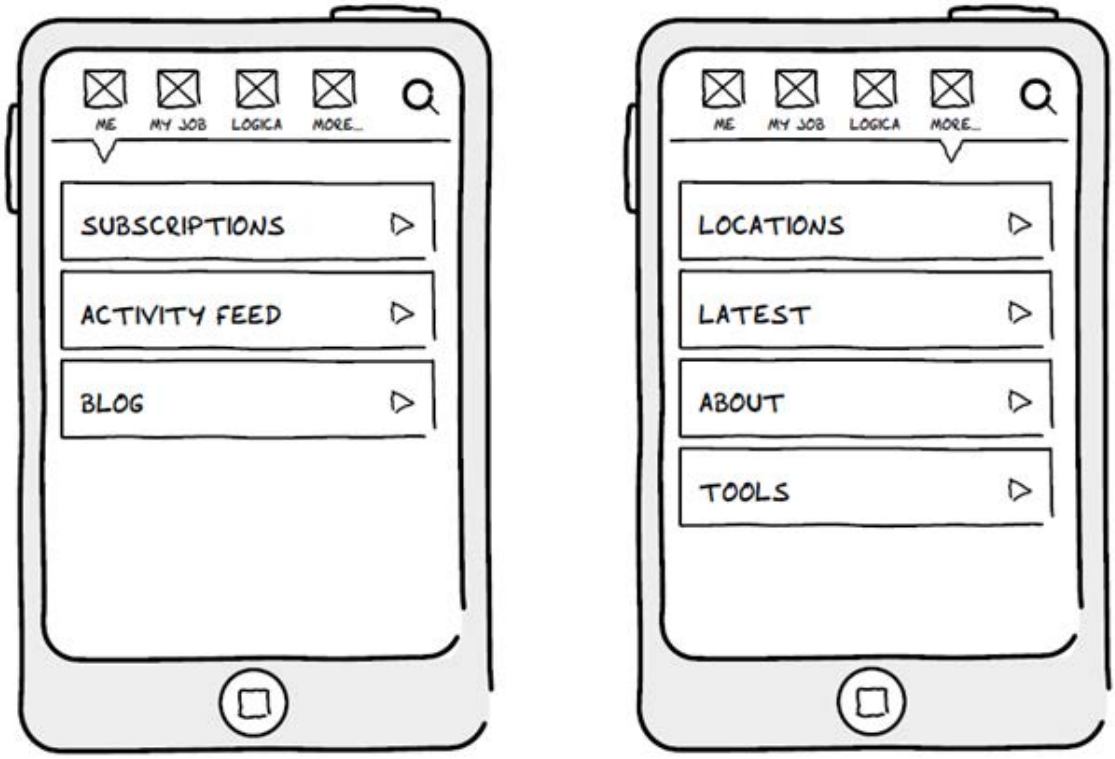
- Staff working on client sites
- Business development teams putting together client proposals
- General staff who need to keep up-to-date and feel part of Logica when they are on the move
- General staff who are building their networks within Logica
- Mobile staff members who need to quickly look up "company directory" information (such as proposal or sector contacts, account teams, and support functions)

"We identified key user journeys for mobile employees by working through the existing site map," says Kernot. The resulting mobile-optimized interface is being built around the following five journeys:

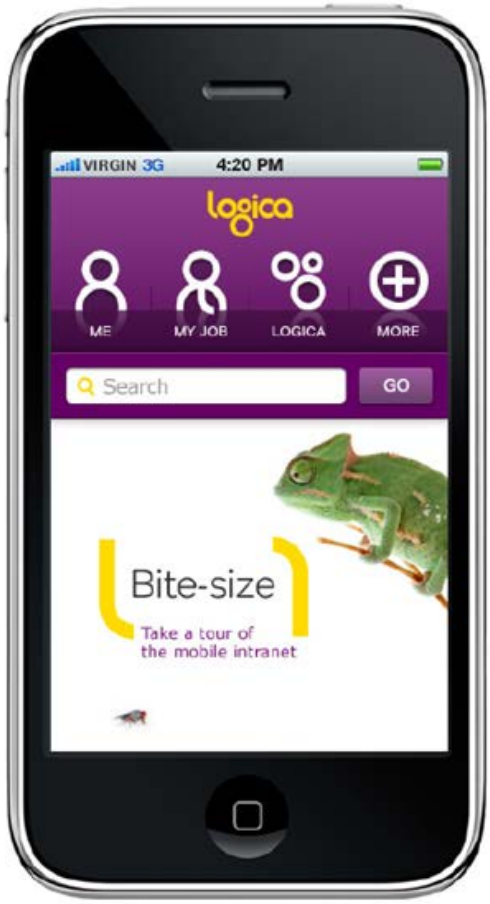
- **Me:** subscriptions, activities, contact information, blogs
- **My job:** *My Tasks*, *Tools*, *My Workspaces*, business directory, location
- **Logica:** *Library*, strategic themes, technology practices, offerings catalogue, industry sectors
- **More:** locations, *Latest*, *About*, *Tools* directory
- **Search:** intranet search and people search

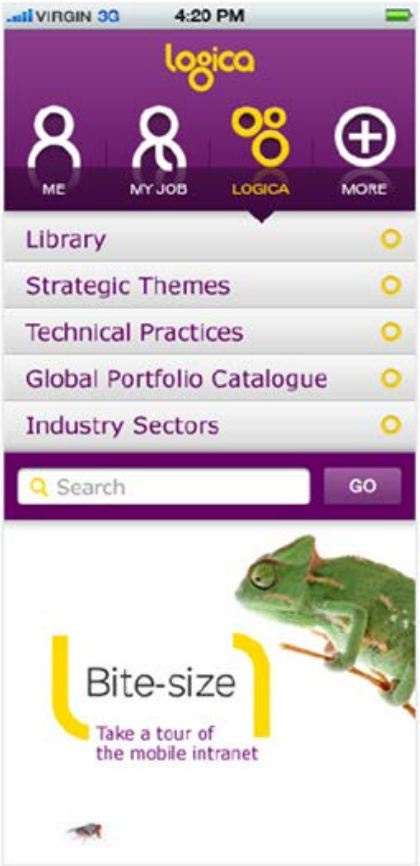
These journeys are being tested by the team, testing various realistic scenarios, called "red routes."

"We're building a proof of concept for the optimized mobile interface using a selection of 'red routes' to provide realistic scenarios. We're then testing this with various user groups following a similar process to the main site design," he says.



Pictured: Early design mock-ups for the mobile intranet proof of concept.





Pictured: Early design concepts for the mobile intranet proof of concept.

SEARCH

The Logica intranet uses two products to support its search requirements:

- **SharePoint search:** provides the main search engine, indexing content within the intranet, *My Sites*, team sites, and a selection of specific sites and external content (around 16 million items).
- **Concept searching:** indexes the intranet, *My Sites*, and the *Logica Library* and provides the auto-classification service.

The decision to use Microsoft's search platform is based on the company's use of SharePoint as its main collaboration and portal platform. "Our IT strategy, our experience in use of the product, and Microsoft's evolution of the search platform all were contributing factors," says Kernot. "That's not to say that we haven't looked at competing products. Through the course of search evolution in Logica, we have looked at most and where we feel Microsoft doesn't go far enough, instead of switching tracks to another provider, we have taken the approach of supplementing functionality building on the core products. An example of this is our use of concept searching for taxonomy and metadata management and auto-classification."

Customizations to the SharePoint search platform have all been done in-house. The search UI has been changed to match the intranet design. The *Search Center*'s tabbed interface supports different "slices" of search, search result layouts, refine-by

options, federated searches, and advanced search options are all tailored according to specific content sources.

Search behavior is tracked through the analytics/statistics system so the team can track trends in the most commonly searched for terms. Within this set, search terms that don't lead to obvious results can be updated with a "best bet" to give users quick access to the information they are seeking.

"Priority is given to specific sites to boost the relevance of search results," says Kernot. "As an example, the pages on the intranet have a higher level of authoritativeness than content on a team site. Some of the search tuning is actually achieved through the design and management of the content environments themselves."

Some examples include:

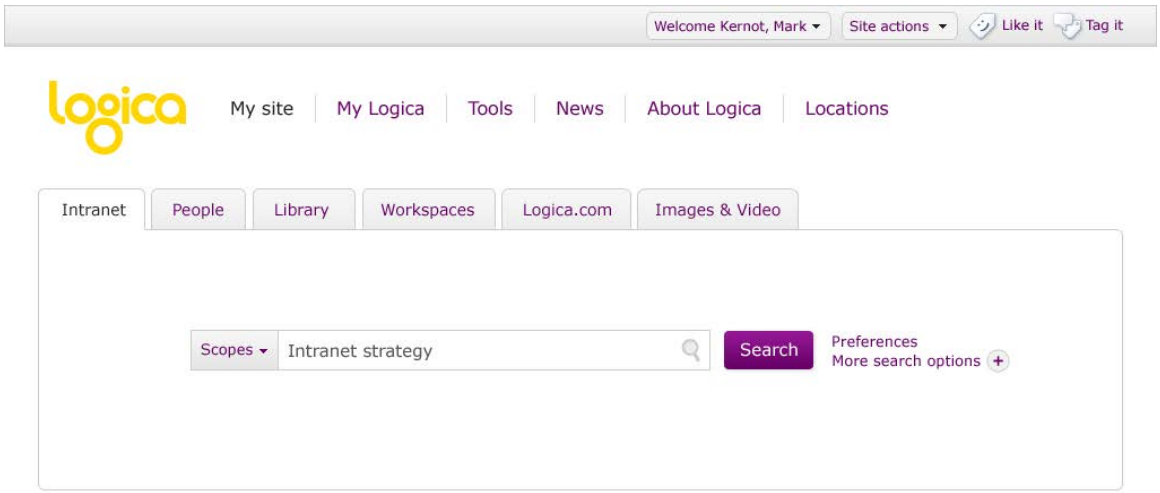
- **News articles:** "News articles are stored within a hierarchy, by country and then by year. This is for ease of content management, rather than presentation purposes. Using separate sites per year means it's easy to archive articles once they become aged and give greater relevance to more recent content."
- **Team sites:** "Once team sites are finished with, they're archived by a clean-up process that takes place once a quarter. Content on these sites is still indexed but in a separate scope and only after each new batch is added. This way, we remove a lot of search result 'noise' relating to obsolete content."

"We are using auto-classification to improve search relevancy," he says. "By auto-tagging intranet pages with business metadata, we're able to improve search filtering to the area you work in. This is especially handy if you are looking for local HR policies/local administrative support."

Search Interface

A search box is included in the global navigation bar in the header of every page. The default is an *All Sites* search, but users can choose specific search scopes via a dropdown. Searches take users to a results page in the *Search Center*. The *Search Center* tabs are also listed in the *Tools* menu.

The *Search Center* has a very simple UI —just a search box, some tabs to show specific content types, and a dropdown to refine the scopes.



Pictured: The *Search Center* is very simple - just a search box and some tabs to filter specific types of results.

In the site's SharePoint 2010 *Search Center*, the team reserved the main page area for key content but used federated search boxes in the right-hand panel to show related searches such as people or content from the *Logica Library* or workspaces. The left-hand zone contains options to refine the search. According to Blunsdon, people take to this much more readily than a page full of advanced search options.

Welcome Kernot, Mark | Site actions | Like it | Tag it

logica

My site | My Logica | Tools | News | About Logica | Locations

Intranet | People | Library | Workspaces | Logica.com | Images & Video

Author:
Any author
Blunsdon, Pete
Harrison, Sharon
Roupie, Marie-Claude
Simpson, Stephen
Show more >

Modified date:
Any modified date
Past month
Past six months
Past year

Content type:
Any content type
Document
Web page
Wiki page

Site:
Any site
info.global.log...
mysite.global.lo...
wiki.global.log...

Scopes | Intranet strategy | Search

Preferences
More search options

Results **1-6** of **327** for **intranet strategy**

Sort by: Relevance

Best bet

Strategy
The **intranet** strategy sets out the three year strategy for Logica's **intranet**. ... The **Intranet** Strategy is currently work-in-progress (as of June 2011) ... View the current draft **Intranet** Strategy (PDF, 600Kb)
59kb | Blunsdon, Pete | 07/06/2011

Mobile **intranet** designs
... is part of the **intranet** strategy - it's an essential way of engaging staff and there are increasing ... **Intranet** ... **Intranet**
Blunsdon, Pete | 21/01/2011

Apresentação **Intranet** Logica
... wider **intranet** programme. ... about the Logica **intranet** and this return visit was for us to present more about our own experience ... here, such as strategies around multiple country / language support, brand realisation, and migrati ...
Blunsdon, Pete | 21/01/2011

Wootton, Danny | 23/05/2011

Developing applications for SharePoint
Basic::**Intranets**, Collaboration sites, **Intranets** ... Is an application + **intranet** platform ... Want SharePoint to play big role in content management strategy
Simpson, Stephen | 20/10/2009

One IS Solutions
... on future strategy, requirements and solutions. ... Most staff are currently working on the programme to introduce the new global **intranet** portal. ... client intimacy strategy.
Roupie, Marie-Claude | 15/02/2011

People results (9 results)

Mark Kernot
Technology & Deployment Manager
mark.kernot@logica.com
+44 7786 277136

Pete Blunsdon
Programme Manager
pete.blunsdon@logica.com
+44 7771 673547

Ayesha Mian
Business Transformation
ayesha.mian@logica.com
+44 7889 094056

More People results

Workspace content results
(29,440 results)

Intranet Strategy
Intranet community blog ... **Intranet** Strategy
Harrison, Sharon | 21/04/11

Strategy Slides
Intranet strategy slides ... Ensure **intranet** embodies our client intimate strategy
1MB | Blunsdon, Pete | 21/01/11

Intranet Strategy
Intranet Strategy.docx ... New **Intranet** Programme
19MB | Blunsdon, Pete | 24/05/11

More Workspace results

Previous | **1** 2 3 4 5 | Next

Pictured: Content search results showing refine-by options and federated searches.

People Search is one of the intranet's most-used features. The site features two forms of output: a simple (and fast) directory listing that's useful if users want just a phone number, and a more detailed presentation that includes photos, colleague information, and other business details. All "people" links, whether in search results or included on intranet pages, link to the user's *My Site* profile.

Welcome Kernot, Mark | Site actions | Like it | Tag it

logica

My site | My Logica | Tools | News | About Logica | Locations

Intranet | People | Library | Workspaces | Logica.com | Images & Video

View:
All matches
Name matches
Profile matches

Role:
Any role
Programme Manager
Technology & Deployment Manager
Business Transformation
IT Senior SharePoint Technical Architect
Show more >

Location:
Any location
SE/GGV
SE/MOV
UK/GRPK/1
UK/KP/CF
Show more >

Show: Directory | Advanced

Intranet strategy | Search | More search options

Results 1-7 of about 7 for Intranet programme | Sort by: Alphabetical | View as:

Blunsdon, Pete
Programme Manager
Colleague
Browse in org chart
By Blunsdon, Pete
920: IS Solutions & Services
UK/KP/CF
United Kingdom
pete.blunsdon@logica.com
+44 7771 673547
Blog

Ekström, Fredrik
Senior Business Consultant
Add as colleague
Browse in org chart
By Ekström, Fredrik
47100: CI & BIM/ECM/ECM Portal&Collab.
SE/MOV/
Sweden
fredrik.ekstrom@logica.com
+46 40 251258
Blog

Green, Chris (IDT)
IT Senior SharePoint Technical Architect
Colleague
Browse in org chart
By Green, Chris (IDT)
1004: Information Management
UK/13QR/1
United Kingdom
chris.x.green@logica.com
+44 7921 932212
Blog

Kernot, Mark
Technology & Deployment Manager
Browse in org chart
By Kernot, Mark
920: IS Solutions & Services
UK/KP/CF
United Kingdom
mark.kernot@logica.com
+44 7786 277136
Blog

Mian, Ayesha
Business Transformation
Colleague
Browse in org chart
By Mian, Ayesha
611: OS UK Client Service Mngmnt
UK/KP/CF
United Kindom
ayesha.mian@logica.com
+44 7889 094056
Blog

Roos, Emma
GUI Developer
Add as colleague
Browse in org chart
By Roos, Emma
U4700: CI & BIM/ECM/ECM Portal&Collab.
SE/GGV/
Sweden
emma.roos@logica.com
+46 31 7331251 Ext: 31251
Blog

Voudouris, Christos
Global IT Director, Client and Employee Value
Add as colleague
Browse in org chart
By Voudouris, Christos
910: Technical
UK/GRPK/1
United Kingdom
christos.voudouris@logica.com
+44 7774 336516
Blog

Pictured: An example of a people search results page.

RESULTS AND ROI

Sometimes, an intranet's most important successes are the things that are simply easier or more efficient because the intranet exists. Blunsdon shares some of those benefits from the Logica intranet:

- **A more global network.** "Getting the right people for the job (or getting the right assignment yourself) is now easier because we no longer rely on just the people we know. Project teams can be mobilized using a global pool of knowledge and resources. People who share their knowledge and expertise are rewarded via extensive networks, which in turn lead to opportunities."
- **Better content and better access to content.** "Significant usability improvements have resulted from the consistency of content and navigation provided by the global platform. Contributors now produce content for a global audience and have much wider exposure than with country silos. We see evidence of healthy competition between businesses to attract users with clear, well-written content. Mining the intranet is quicker and easier as a result."
- **Increased collaboration.** "Information on our offerings and propositions [proposals] is collected together in our *Global Portfolio Catalogue* and supporting collateral (case studies, references, etc.) is managed in the *Logica Library* so users know where to find them. As a result, we see a greater level of awareness of, and collaboration between, our solution teams across the organization."
- **Improved stakeholder buy-in from all countries and businesses.** "As the benefits of a single, global platform become more apparent, usage increases as content owners want to improve their information and provide benefit to their staff through this channel via blogs, news, and links to relevant and useful information."
- **A shift in contributor focus.** "As adoption increased, we saw a shift in the nature of our engagement with contributors—support issues reduced, and there was an increase in staff wanting to use new channels, content targeting, or seeking assistance with content presentation."
- **Increased competition.** "As all parts of the organization are now on a common platform, it's easy to make comparisons between countries. We generate statistics deliberately comparing usage (in percentage terms) within countries. This visibility, backed with objective measures, creates an element of competition between businesses. No one wants to be left behind."
- **News targeting.** "The number of news channels (ranging from formal corporate to operational and business sectors to informal updates and chats) has quadrupled since the intranet was first introduced. As countries get into steady-state, they're getting value from more accurate targeting of news feeds."
- **The blog directory:** The team tracks the number of views and comments within the blog directory. The company's CEO is well in the lead with over 200,000 views, 198 posts, and 814 comments.

- **News commenting:** Adding the ability to comment on formal news challenges the perception about what is considered a top article. For example, a simple article on changes to a travel policy generated around 70 unexpected comments.

LESSONS LEARNED

An important lesson learned, and something many teams struggle with, is how to successfully use *My Sites* in SharePoint. Logica has been using *My Sites* since 2004 or so (originally under SharePoint 2003). "They never really had broad acceptance," says Blunsdon. "Most of the time, they were just used as a personal drive." And when the company upgraded to MOSS 2007, despite some improved functionality, the story was pretty much the same.

"The breakthrough came," he says, "when we included *My Site* as part of the intranet. Although it's still a separate application, it's visually 'integrated' via the global navigation menus. This means it doesn't have to compete with the intranet—instead, it's very much part of it."

The custom *My Subscriptions* component helped establish *My Site* as the primary content-delivery channel for staff. As a result, the company has achieved a very high *My Site* adoption—in excess of 95 percent of users each month in most countries.

"Using the SharePoint *My Site* as the homepage is something that we've seen a number of organizations trying recently," he says.

The *My Site* experience taught the team several lessons:

- Putting the user in control is a very positive step
- Include *My Site* within the primary navigation
- By default, within SharePoint, users are the Site Collection Admins of their own personal sites. This might give more control than is desirable (for example, users can delete their own personal sites!)
- Despite a range of customization options, the overwhelming majority of users will stick with the default, so make sure you choose the default set of components carefully.
- The out-the-box SharePoint *My Site* navigation can be confusing for users, so it's a good idea to try and simplify it.

Logica team members also shared some of their other experiences from the intranet project:

- **Balance local versus global needs when tackling multi-language support.** "Coping with multiple languages is hard! There are so many ways of tackling this and compromise is inevitable. We had to be sensitive to local needs whilst still staying true to the global One Logica design principles."
- **Start with seeded sites.** "In the early stages of migrations, country teams were encouraged to participate in setting up their new sites. This created some difficulties. Teams lacked the global view, and once they had invested effort in creating content they were reluctant to change it. We changed the approach and delivered populated sites back to them which was much more successful."

- **Test wireframes before translating to designs.** "We often found that pages that looked good as wireframes or design mockups didn't work in practice when populated with real data. We have a lot of staff with very long names!"
- **Establish guiding principles and refer to them to settle competing demands.** "We sometimes found ourselves trying to be too accommodating to demands from the business, which would have taken us down the wrong path. Another member of the team would then remind us of our own guiding principles we set out on day one. This helped bring us back on track, but it happened more often than you'd think!"
- **Balance freedom and artistic freedom. "**You need a 'toolbox' of components to allow the business enough artistic freedom when creating content pages. Too much freedom and you end up with a mess; too little and they'll go off and do something else."
- **Less is more when it comes to content.** "It takes time to get the page layouts and components right and there's always a pressure to start content population. We went through a few iterations and each time it was a painful process to roll out the changes. There's often a tendency to put too much on a page. Less is more! Mobile support also has a big impact here. If you can identify the bare minimum set of content across all pages up front, it makes mobile rendering a much easier task."
- **Pare down SharePoint's features before releasing it into the wild.** "There's a lot in the box with SharePoint. And we added a lot more. If you allow web parts on publishing pages, make sure the web part gallery is kept lean and mean, otherwise it becomes a 'candy store' for contributors building pages."
- **Get support from above—high above.** "If you are undertaking a major redesign, try and get the most senior steering committee possible. You'll need it to help drive through the level of business change needed. Change needs to be wanted at the top of the company if it is going to be taken seriously in the businesses."
- **Define navigation carefully, and then lock it down.** "Define your navigation rules, test them with different scenarios, refine them, and then stick to them!"
- **Establish your technology environment with care.** "SharePoint development needs to be agile, but it's essential that the release processes are very strictly controlled. Make sure you have separate development, test, acceptance, and production platforms, and use them!"
- **Look outside your own team for perspective.** "An external perspective on your intranet design can be very valuable. It can encourage boldness in design, and views are not clouded by previous designs or experiences."

- **Manage the release of social tools.** "If you're introducing social technologies, make sure you have an adoption plan or be prepared for low usage."
- **Keep the user perspective in mind.** "If you're part of the intranet team, your world revolves around the intranet. For users, it's a tool that they expect to just work. Don't assume they have the same vision!"
- **Communicate early and often.** "Do a lot of internal marketing and communication. When you think you've done as much as users can bear, do a bit more!"
- **When rolling out a global intranet, there will be vast differences from one country to another—so plan for it.** "We found smaller countries were often the most receptive and excited to join the new intranet as it gave them an opportunity for global exposure. Larger countries varied in their attitude. Some were eager to participate and share in the direction of a global platform whilst others clutched to their legacy sites to resist what they felt was relinquishing control. Each country was managed individually according to their culture and approach, allowing them to buy-in to the One Logica story, reassuring them that they wouldn't lose their cultural identity in the process!"

Acorda Therapeutics, Inc.

Using the intranet: Acorda Therapeutics, Inc., is a biotechnology company whose mission is to develop and market therapies that restore neurological function and improve the lives of people with multiple sclerosis, spinal cord injury, and other nervous system disorders.

Headquarters: Ardsley, NY, U.S.

Number of employees the intranet supports: 350

Company locations: U.S., with a presence in other countries through external partnerships

Locations where people use the intranet: U.S.

Annual sales: Forecast of $280+ million annual sales in 2012

Design team:
Klick, a third-party digital agency, designed, developed, and implemented the intranet in collaboration with project management and departmental representatives at Acorda.

Members:
Klick: Michael Melnick, Director, User Experience; Neville Thomas, Program Director; Barry McKelvey, Director, Project Management; Cynthia Dahl, Senior Technical Architect; Peter Cheung, Associate Director, Analytics; Yamini Ramamoorthy, Associate Creative Director; Mark Hadfield, SVP, Program Delivery; Mark Donaldson, Senior Web Developer; Armando Narvaez, Manager, Quality Assurance

Acorda Therapeutics: Mike Russo, Senior Director, Corporate Digital Strategy & Innovation; Kyle Kuhn, Associate Director, Business Development; Pasqual Zottola, Senior Director, IT

SUMMARY

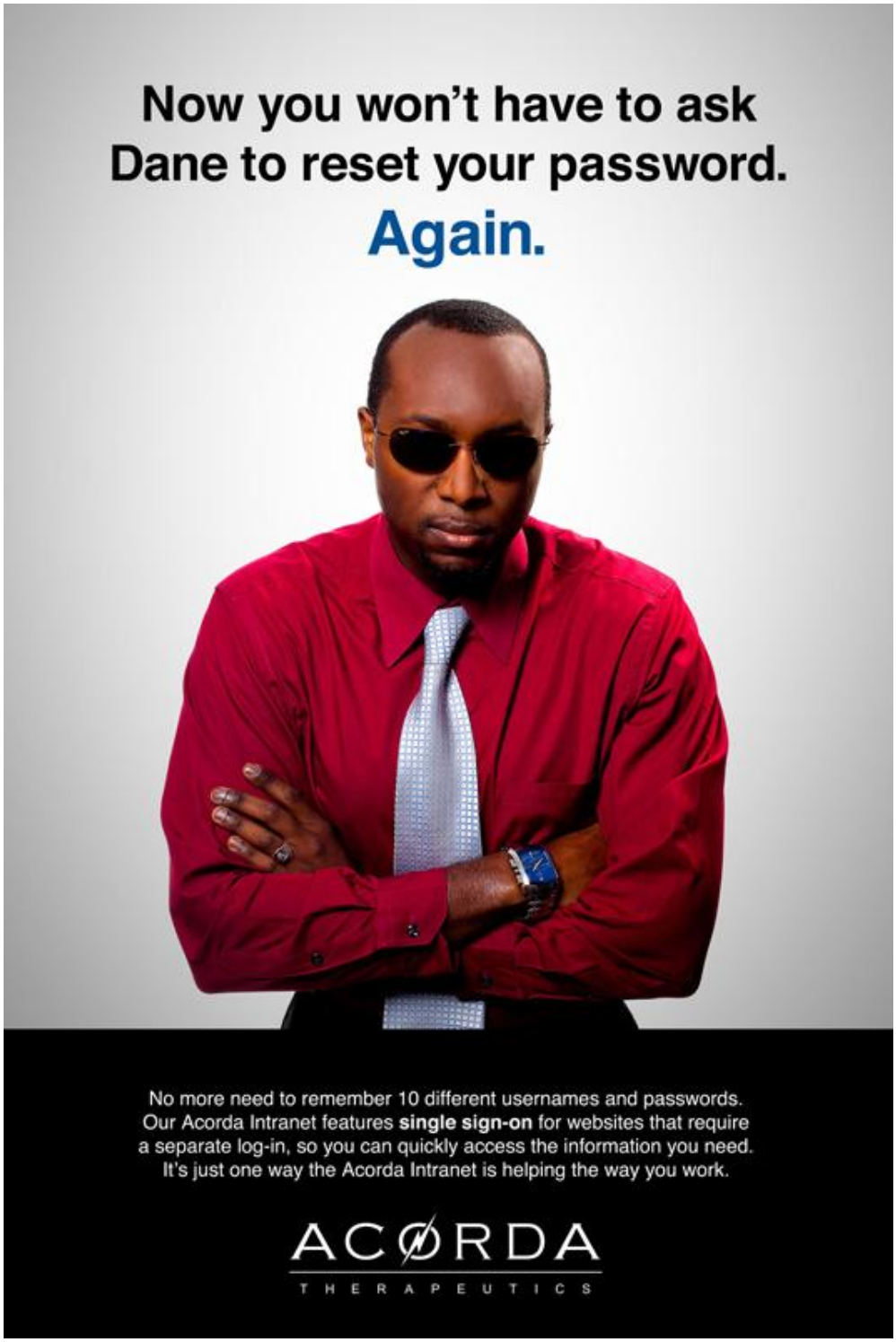
Improving communication, preserving culture, and ensuring intranet adoption were the goals that digital agency Klick set out to accomplish when creating Synapse, the intranet for Acorda Therapeutics. Having outgrown its previous site, the biotechnology company saw the need for an internal technology change to support its growing needs.

Acorda brought Klick in on the basis of previous collaborations and their similarities in company size, growth rate, and culture. Klick also has its own intranet, Genome, which helps the company increase operational efficiencies and enables the use of analytics for decision-making.

Klick knew that any intranet must meet the needs of its users. Acorda's employees are busy developing and marketing therapies that restore neurological function for multiple sclerosis, spinal cord injury, and other nervous system disorders. Its approximately 350 employees are already pressed for time, and the Acorda/Klick team concluded that to successfully implement a new intranet system, it would need to be fairly intuitive and require a minimal investment of employees' time. In addition, given other priorities, the intranet could not introduce major organizational changes. This was a challenge, as one of the main objectives was to more fully integrate the intranet into employees' day-to-day lives at work—which was a big change from the existing intranet's somewhat marginalized role.

The Klick team started the project with interviews and contextual inquiries, trying to understand the company, culture, employees, and business needs. An interview guide, used for consistency, asked not only about areas of improvement and how a better intranet could make employees' work easier, but also about what motivates and inspires employees and why they love working at Acorda. The Klick team wanted to make the intranet a place that employees wanted to go, and knew a strong awareness of the company's culture could help them create a site to meet employees' needs as well as provide the content they were most interested in.

The company intranet had to serve as a useful tool both for getting work done and for connecting with the company. Klick recognized that it needed to get employees excited about the new site before its launch to help its reception. Because the existing intranet was not widely used, Klick planned a campaign featuring posters placed around the office to draw employees' attention and highlight the benefits of using the new site. They also had a "name the intranet" contest, with the tempting prize of an iPad for the winner (resulting in the site name: "Synapse"). They used a humorous "People You Know" campaign, creating posters with actual employees (including the CEO) highlighting some of Synapse's functionality and reflecting the fun Acorda culture.



Pictured: The "People You Know" campaign posters garnered laughs but also educated users as to the benefits of key intranet features.

The homepage is built to communicate messages as well as enable daily work. A three-column design focuses on productivity-based tools on the left, news in the center, and culture and events on the right. A mega menu drop-down offers quick

access to internal pages, and a pervasive footer includes links to the latest winners of a company award, an acronym decoder, and tertiary navigation.

The top of the page conveys timely messages, alerts, or reminders, drawing the users' attention. The left productivity column includes shortcut links to apps, documents, and how-to information that users have flagged as useful and added to their customizable lists. Users can manage their lists or add more content to them via links at the bottom of the section. A customizable list of websites appears below the productivity column; a key icon indicates when single sign-on is available for the website.

One of the biggest successes on the site is the change to single sign-on. A key finding of Klick's initial research was that many employees used several web-based applications and tools in their daily work, and having to log in to each one individually was a huge annoyance. This problem was brought to the team's attention most notably when visiting an employee's desk, which was covered with Post It notes with usernames and passwords crossed out and rewritten, which was the only way she could keep track of all her separate logins.

The Synapse site now offers single sign-on to many of the websites that employees use daily. These tools are indicated with a key icon in the list of websites on users' homepages, providing quick access to tools without them having to remember passwords. Users who access these tools or sites via Synapse can bypass login.

The middle of the page is focused on news items, which are updated frequently. All news items are dated and the content owner is listed as well. A Twitter feed from @AcordaNews also populates the site's main news area. Users can discuss or like news items; the number of likes is indicated next to each item.

The right column focuses on news from the CEO, important information for adverse-effects reporting and complaints, and event information. Photos accompany events information; this was a popular feature on the previous site, so the Klick team carried it through and put it on the new site's homepage.

SYNAPSE

Welcome, **System Admin** in IT
My News | My Profile | My HR and Benefits

IT Helpdesk | Onboarding Center | Sitemap | Admin | Sign Out

Find People, Websites, How-To's, Documents and Apps

PEOPLE | DEPARTMENTS | EVENTS | ABOUT ACORDA | WEBSITES | DOCUMENTS | HOW-TO'S | APPS

Eligible Wellness Program expenses MUST be submitted to Wellness@Acorda.com or faxed to 914-606-9523 by July 1, 2012 to be considered for reimbursement. For the program details and reimbursement form Click here

My Apps | Documents | How-To's

- Contract Request Forms
- Exfactory Sales
- HRIS
- IT Helpdesk
- IT Helpdesk Admin
- IT Orientation & Activation
- Media Monitoring DB
- MyHR
- P&V Award Committee
- Partnership Time Tracker
- RFS
- RFS Admin
- SoftDriv
- spARC
- Time Tracker Admin
- Topaz

Manage My Apps | Get More Apps

MY WEBSITES

Auto Log-in

- Accreditation Council for Conti...
- AcordaMeetings.com
- American Academy of Neurology
- American Society of Health Econo...
- Ampyra Web Site
- BioSpace
- Broad Reach
- Cardinal Health
- Concur
- DocCompliance

Manage My Websites | Get More Websites

WE'RE MOVING

Read More about Acorda's new location

FEATURED NEWS

AMPYRA - MAKING A DIFFERENCE...

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Fusce iaculis, purus at accumsan cursus, diam lorem mollis libero. Read more

MORE NEWS

- New BioCentury Issue Available: June 11, 2012
  Jun 12, 2012 by Laura French in Executive | Discuss | 1 like
- New BioCentury Issue Available: June 4, 2012
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- CEO Ron Cohen filming interview w @News12WC - watch for it Sat&Sun @ 7am, 930am, 1130am, 130pm & 330pm http://t.co/CA1XQ2Nn
  Jun-1-2012 via @AcordaNews on twitter
- Congrats to **Sharon Jones**, Sr Dir, Med Affairs, on rec'ing the @IOMSN_finch Thumbs Up award for her dedication to the fight against #MS !
  Jun-1-2012 via @AcordaNews on twitter
- New research at CMSC/ACTRIMS examines impact of walking impairment, use of AMPYRA http://t.co/DwBys31g
  May-31-2012 via @AcordaNews on twitter
- RT @techreview: Pill Could Reverse Effects of a Stroke Long After It Hits http://t.co/thJQ909r
  May-30-2012 via @AcordaNews on twitter
- RT @Burke_Rehab: Thank You to our Diamond Sponsor @AcordaNews for sponsoring the 2012 Burke Award! http://t.co/8wDASTUT
  May-30-2012 via @AcordaNews on twitter
- To mark #WMSD2012 we've launched Ampyra Dialogues, 1st online talk show focusing on walking and #MS http://t.co/esCKMIJY
  May-30-2012 via @AcordaNews on twitter

See All My News (4 Unread) | Manage My News | See All Tweets

RON'S CORNER

Ron's Interview on News 12 Westchester - June 2, 2012

Listen to Ron discuss why Acorda is important to Westchester becoming a biotech hub.

Posted: Jun 12, 2012 New

See All

ACORDA FACEGAME

Who is this?

- Lisa Ramos
- Francine Borris
- Bonnie Lark

Am I right?

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Adverse Event and Product Complaint Reporting:
Phone: 1-800-367-5109
Fax: 510-595-8183
Email: druginfo@medcomsol.com

Corporate Governance Hotline:
Phone: 1-888-774-8808 (Toll Free)
Available 24 hours a day, 7 days a week
Or, send an email anonymously

EVENTS

June 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
1	2	3	4	5	6	7

See Complete Calendar

EVENT PHOTOS

Westchester Walk MS 2012
Apr 29, 2012
Photos

See All Photo Albums

ACORDA PRINCIPLES & VALUES AWARD WINNERS

Next P&V

Montana Abruzzio
Sr. Vice President - Communications, Communications

We tell it like it is

Learn more about this P&V | See more award winners

Acorda Acronym Lookup: ABC Look Up e.g. ARC, IIS

For Adverse Event and Product Complaint Reporting
Phone: 1-800-367-5109 Fax: 510-595-8183 Email: druginfo@medcomsol.com

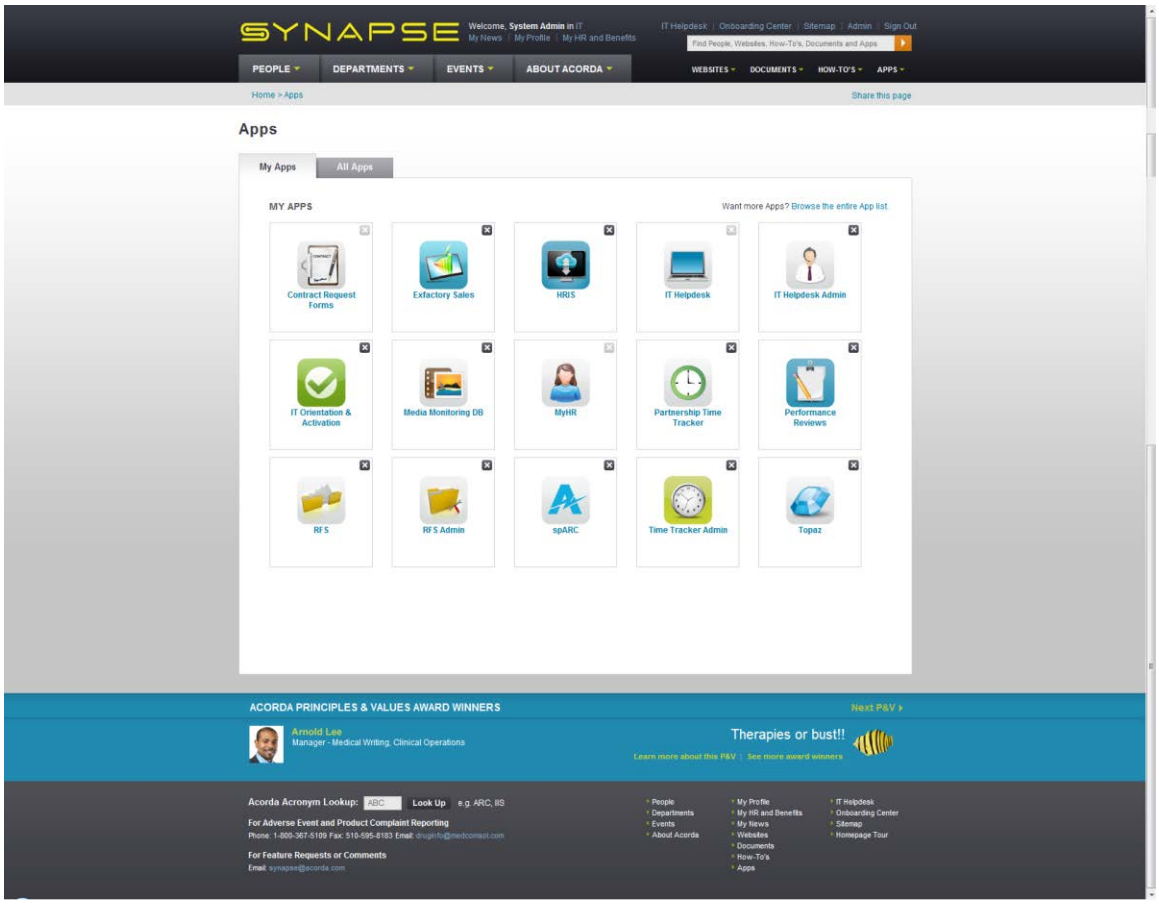
For Feature Requests or Comments
Email: synapse@acorda.com

- People
- Departments
- Events
- About Acorda
- My Profile
- My HR and Benefits
- My News
- Websites
- Documents
- How-To's
- Apps
- IT Helpdesk
- Onboarding Center
- Sitemap
- Homepage Tour

Pictured: The Synapse homepage features efficiency tools on the left, news in the middle, and cultural information on the right, fulfilling the site's goals of communicating, reflecting culture, and adding productivity.

The site lets employees see all web-based apps in one place. Users can "install" an app on their homepage using the *My Apps* functionality. These links open the tool in a new window or tab, with a thin strip across the top that quickly links users back to Synapse—as well as encourages them to add the app to *My Apps* if they haven't already done so. Apps can be accessed via the customizable list on the user's homepage (via the navigation bar's *Apps* link) or on the *My Apps* page. The *My Apps* page shows all the apps the user has selected. The *All Apps* tab shows all available apps, based on permissions, with filters and sorting similar to the Apple App Store.

Users can remove most apps via an "X" on the screen. However, some apps, such as IT HelpDesk and HR information, can't be removed.

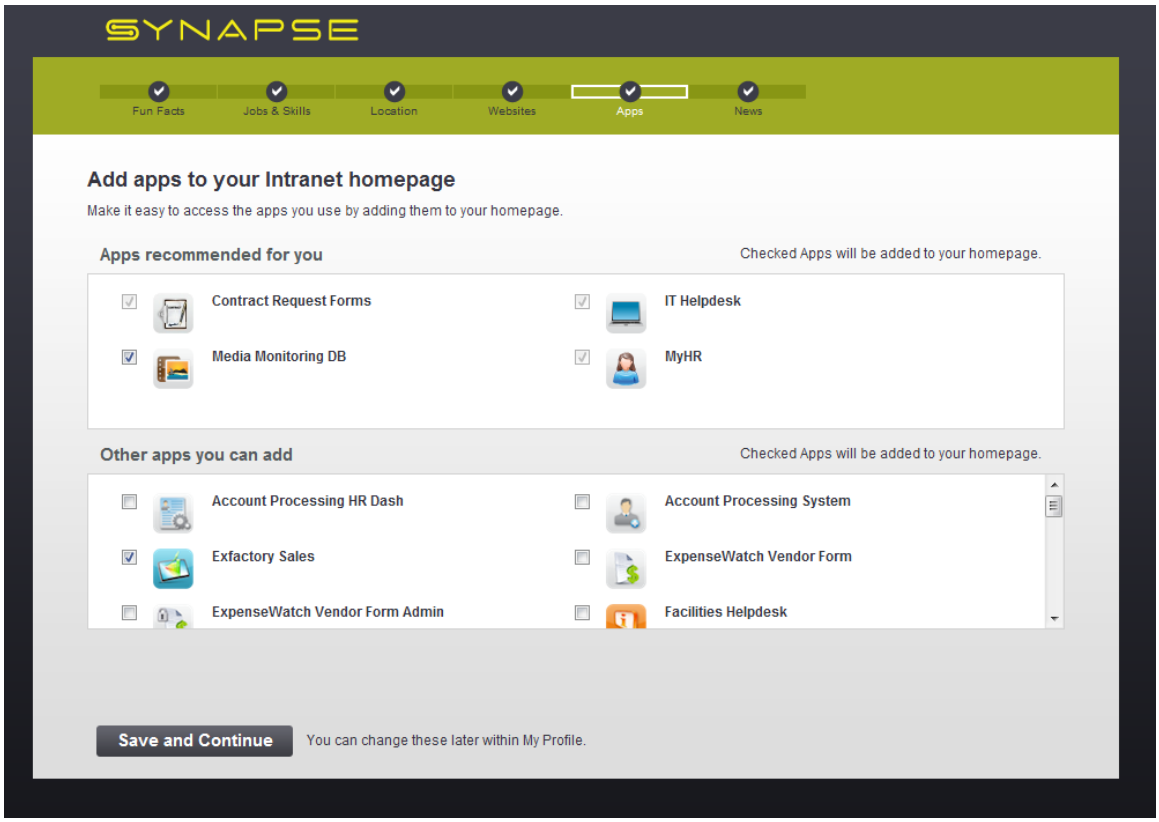


Pictured: Users can customize a list of apps to gain quick access to tools they commonly use.

Apps are added at first launch, through the initial set-up process. Some apps are recommended based on the user's department affiliation, while others are used throughout the organization and are pre-populated. Additional available apps are listed as well. Users simply have to select an app to add it to their customized list.

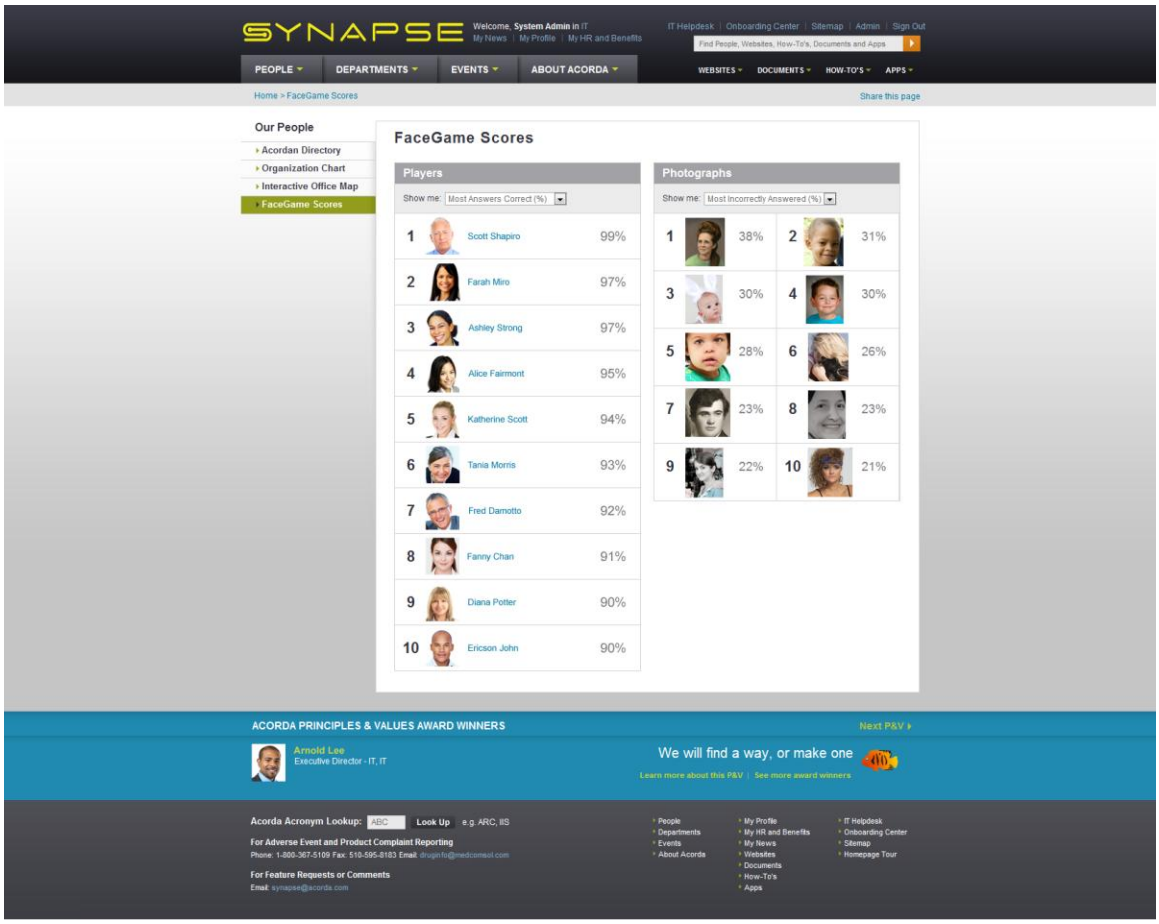
Customization on intranets is generally most successful when its availability is obvious to the user and the customization is easy to do and has a clear benefit.

Having users make these selections at first launch shows users that the process is simple, introduces them to the customization concept, and helps them through the process. Customization often fails because users either don't realize it is possible or don't take the time to do it, even if the time commitment is minimal. Including app selection in the initial set up helps mitigate those problems.



Pictured: The *My Apps* section, which appears on the homepage or is accessible via the site navigation, can be populated during the user's initial login to the site.

One successful site feature—which is intended to both support the company's culture and drive traffic to the site—is the *FaceGame*, which appears in the right column on the homepage. To create it, the team asked all employees to provide up to three pictures of themselves as kids or teens prior to the site's launch. These photographs are shown on the homepage, and employees can guess which colleague's picture is shown. Once they submit a guess, employees see the correct answer and a link to the employee's profile so they can learn more about that individual. This game has been very popular on the site, garnering more than 10,000 plays over three months—an average of 3.5 plays per user per day! A leader board shows the current *FaceGame* champion and also shows which photos fool the most people.



Pictured: The *FaceGame* engages employees, supports the company culture, and facilitates relationships as employees learn more about each other through this entertaining interface.

As with any intranet, search was a key component in this design. When doing initial research, the Klick team realized that the most common type of search was for people: locating someone to call or email right away. The team used Apache Solr, an open source solution, and implemented an auto-complete that streamlines this common task. Now, as users search for colleagues, search results appear in less than two seconds, giving employees quick access to the contact information they need. Results update almost instantaneously while users type their queries. Employees can then simply click on the phone number to dial that number on their desk phone via the company's voice over IP system or click the email address to send an email directly.

The click-to-dial feature is a big hit internally—for those that know it's there. Before launch, this feature was a showstopper in executive planning meetings. And those employees who have discovered or been shown the feature love it. However, because it's an unexpected feature, it has low discoverability—a problem that Klick realized only after launch. They plan to release new features with more fanfare in the future to try to increase employee awareness of them.

Because looking up colleagues is the primary use of search, people results are the first facet of results listed in the auto-complete window. The window shows the top

three results in each facet, with a link to see more results; this emphasizes the number of results found and indicates that more results are available.

Results are grouped by type (people, websites, documents, how to's, and apps), and a thick gray bar helps emphasize the different types of results. Users can click directly on a result or click to view the full lists of results.

Pictured: The auto-complete function in the site's search offers quick access to information. Employees can see colleagues' contact information without having to click through to a full employee profile.

Users can click through to full employee profiles, which also include the click-to-dial feature. Profiles are integrated with Microsoft Outlook, so employees' real-time appointment status (available, booked, tentatively booked, or away) can be shown in their profiles.

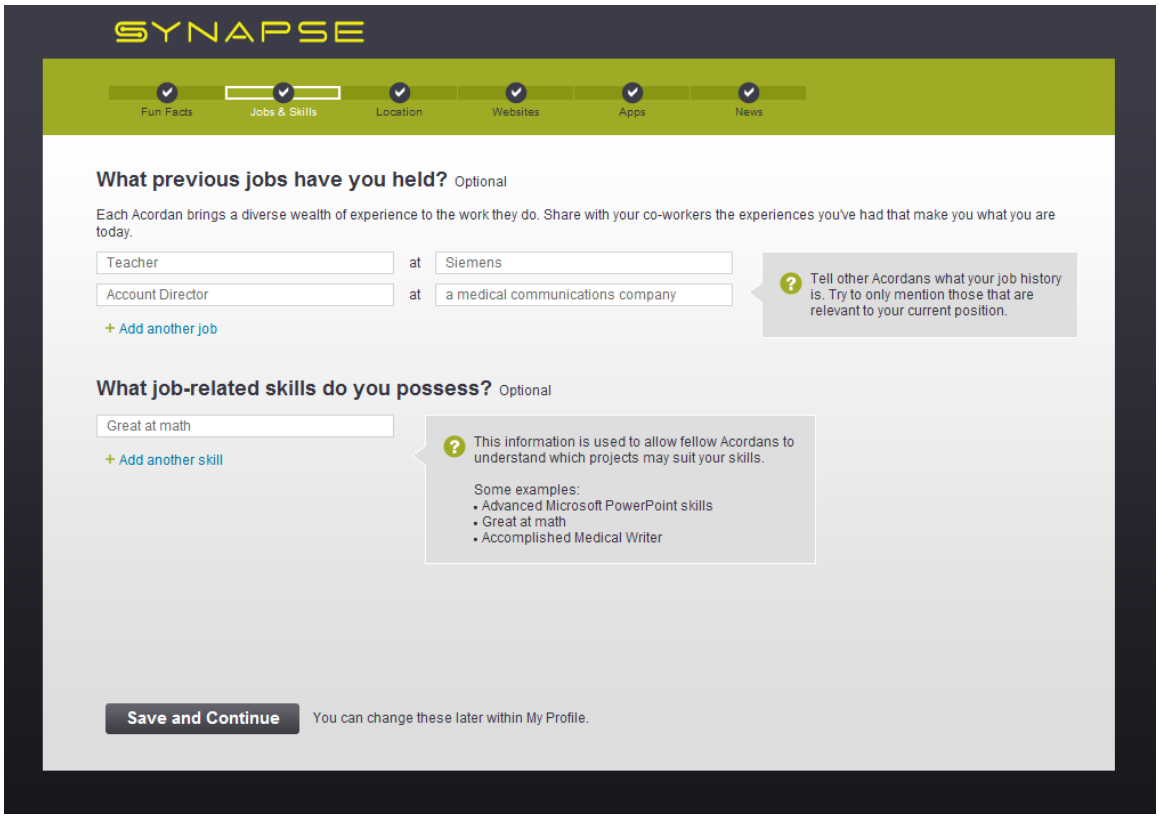
Profiles include information collected from users on their first use of the site. Tenure is also automatically calculated based on an HR database.

At first launch, employees are asked to provide profile information, including preferences for subscriptions and lists of websites and apps that help customize the homepage. The profiles also show location information. If they work in the office, employees are prompted to click on a map to indicate where they sit; if they work outside the office, they are asked to indicate the city and state in which they work.

Based on the employee's department, the site automatically recommends news, websites, and apps.

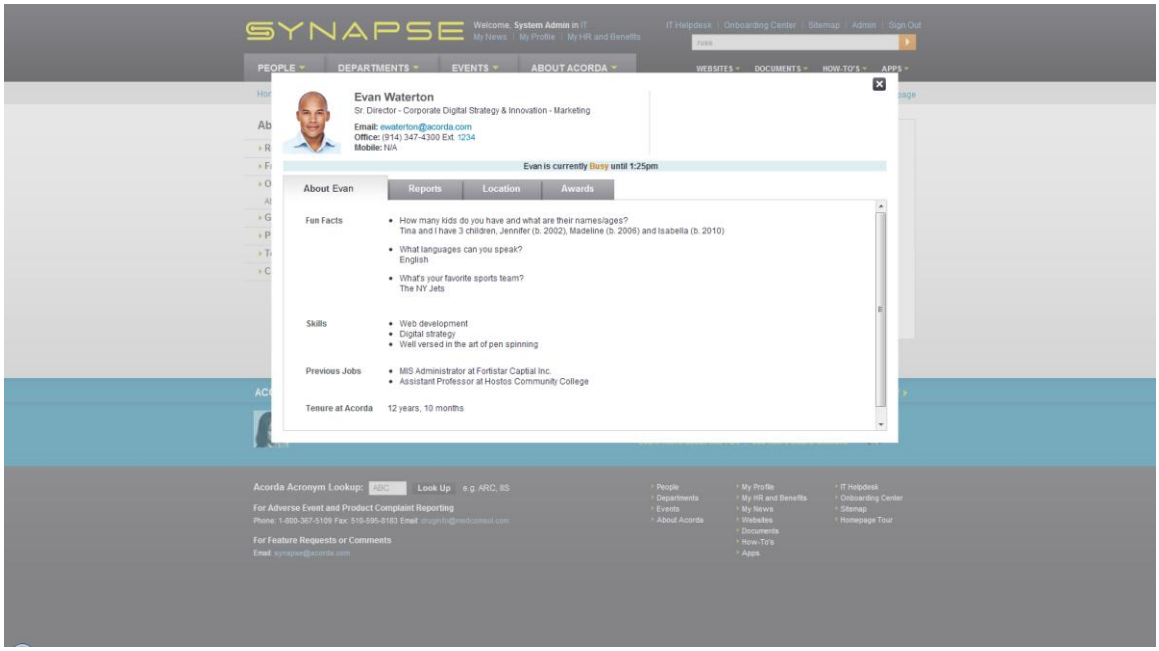
Questions are clearly marked as optional, and each has descriptive text to help the employee understand why it's relevant. For instance, a question about previous jobs is accompanied by the text, "Each Acordan brings a diverse wealth of experience to

the work they do. Share with your co-workers the experiences you've had that make you what you are today." Job-related skills are described as a way to "allow fellow Acordans to understand which projects may suit your needs," followed by a few examples. Employees are also reassured that they can "change these later within *My Profile*."



Pictured: At first launch, employees are prompted to answer a few questions about themselves to help populate their user profiles.

Because much of the user profile information is self-reported, it's important that employees keep the information up-to-date. Acorda and Klick are working together on ideas that will make profiles more robust without relying on busy employees to take the initiative, including to let employees: nominate each other for performance awards; tag and display photos on profile pages; and show employee stats on profile pages, such as how many comments they received or what content they liked.



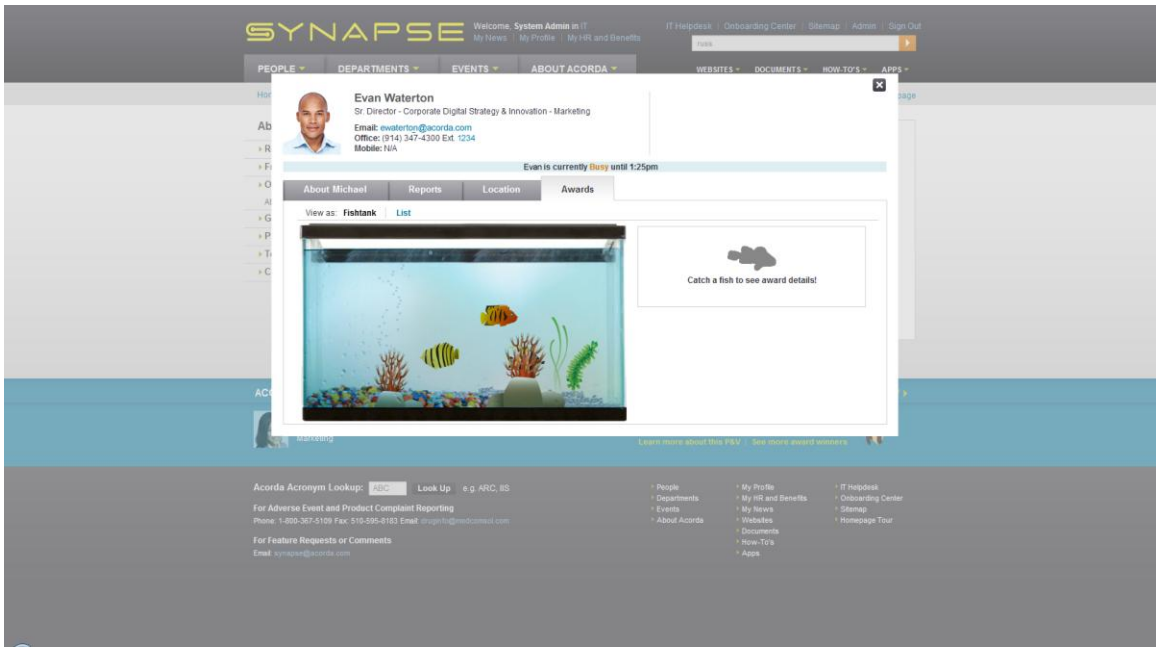
Pictured: User profiles include information employees submit upon first use of the site, as well as some auto-populated information.

The other key user profile feature is the user's fish tank. The fish tank shows which Principles & Values (P&V) awards the employee has earned. P&V awards are given approximately biannually; receiving one is a rare, honored accomplishment. The fish tank lets employees display such awards, and is part of the corporate culture.

At each new employee orientation, CEO Ron Cohen tells the "Fresh Fish Told Here" story, which he had read and remembered from a childhood book of Jewish folklore. The moral of the story is: "People don't care what you say or write about yourself. They only know what you do and who you are. At the bottom of the list of principles and values we will write 'Fresh Fish Sold Here'—so that we will always remember that this list is only words, unless our actions give them life."

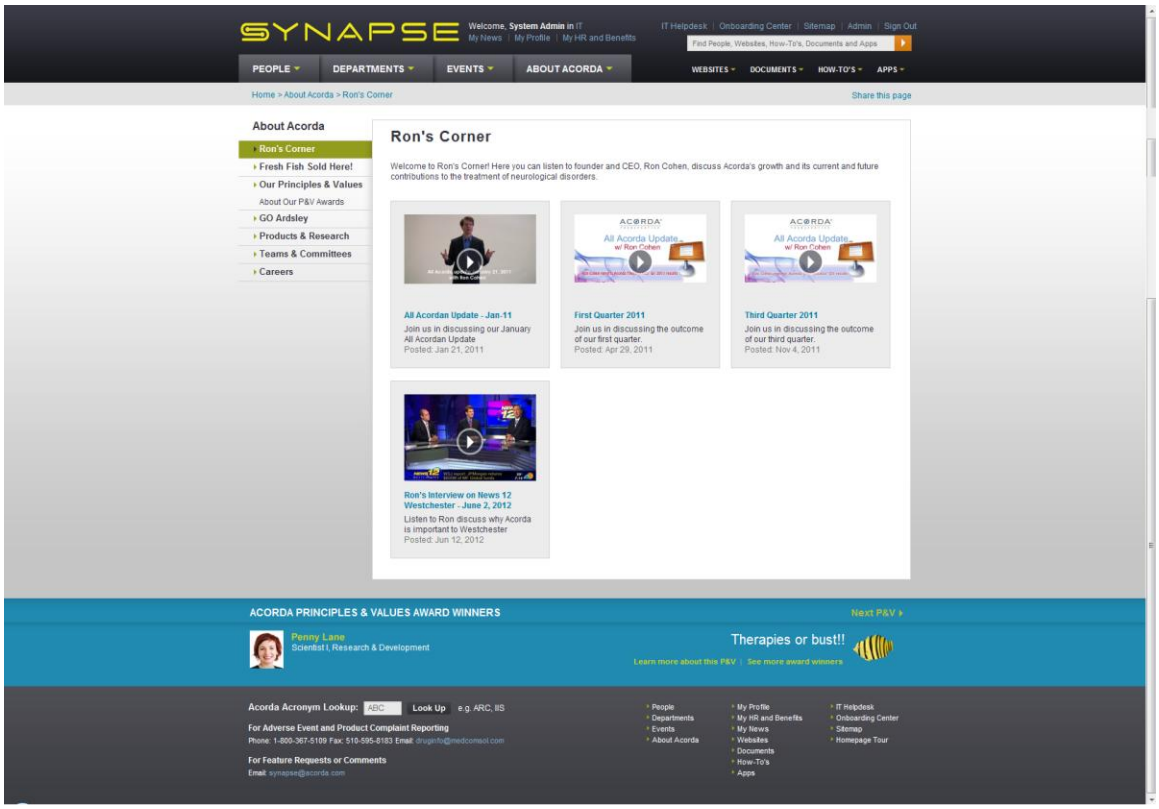
This story is now part of Acorda's legend, making fish a meaningful symbol at the company. At orientation, every new employee receives a glass fish, along with the nine P&Vs to live by. The P&V awards also have fish associated with them, with each principle or value mapping to a fish species. So, when employees receive a reward, it is rendered as a fish in their fish tank. Clicking on a fish displays the award details and the related principle or value.

Pictured: New employees receive a glass fish at orientation.



Pictured: User profile fish tanks feature fish representing any P&V awards they have won. "Catching" or clicking on a fish displays information about the awards.

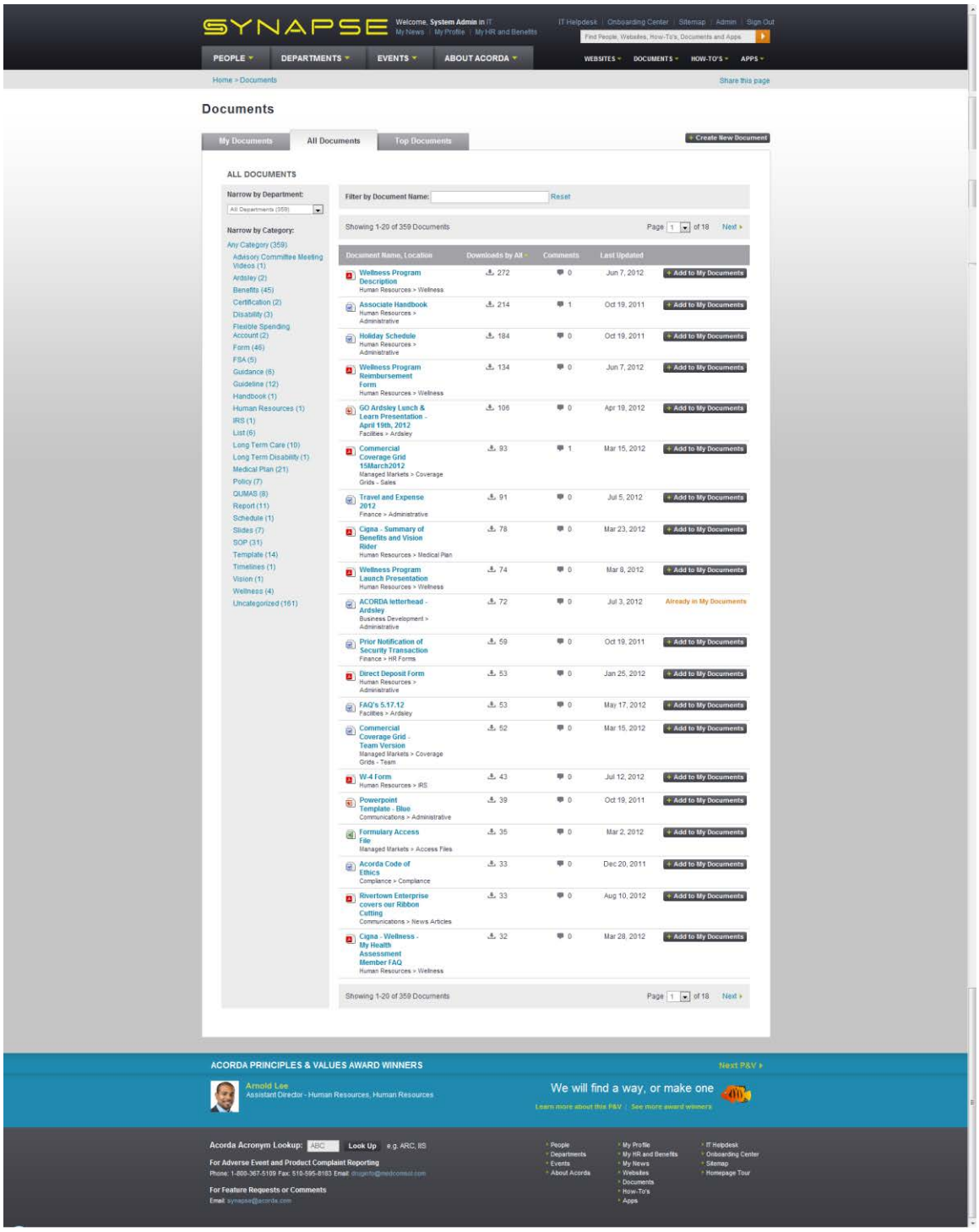
Clearly, Cohen is a huge presence at Acorda, and Klick's research showed that he is indeed a big motivator within the company. However, as the company succeeds and therefore grows, employees have less exposure to him than in the past. To continue to make his inspiration felt within the growing company, Synapse offers *Ron's Corner*, an intranet section that features quarterly videos of the CEO addressing employees and talking about company performance and expressing his gratitude for employees. The latest video is always featured on the homepage. The site also features a video of Cohen telling the fresh fish story.



Pictured: Video messages in *Ron's Corner* help employees feel more connected to the CEO, who is a strong motivator within the company.

Acorda also moved some critical work assets to the intranet. These documents previously lived on a shared network drive, and employees had complained that finding documents they needed there was difficult. Now, such files are organized under *Documents* and *How-to's* based on department. Documents now have permissions-based management and display their owner. Users can search to easily find and view documents by department, or to see all documents, regardless of department.

Employees can also comment on documents, but this feature is rarely used. The team realized that social features, such as "liking" or commenting on an item, didn't work particularly well for work-related documents. They therefore removed the "like" button but kept the commenting function. So far, however, comments are not automatically forwarded to document owners; as a result, comments that raise questions aren't necessarily addressed by the document owner. This is an area the team plans to revise in the next iteration.



Pictured: Users can view documents by department or see all available documents. Facets on the side of the page help narrow options. The date of the document's last update is always listed.

Half of the Acorda workforce is in the field, and future plans include mobile apps. Sales reps currently rely on third-party apps to do their scheduling, promotional material orders, and expense reports. Although the current intranet can be accessed

via mobile devices, it's not optimized for mobile. For instance, some site content uses Flash, which doesn't work on iOS. However, because sales reps use company-issued iPads, apps built specifically for them might be included in the future.

The Klick team has done an admirable job moving from an outdated intranet site to a gracefully integrated tool, built with the end user in mind.

BACKGROUND

Following FDA approval for its first Multiple Sclerosis (MS) therapy—Ampyra—in 2010, Acorda found itself overwhelmed by the growing needs of an ever-expanding audience: patients, healthcare professionals, corporate partners, and external stakeholders including the FDA and the SEC. Given their similarities in size, growth rate, and culture, Acorda asked Klick for guidance on how to manage its explosive growth. In response, Klick demonstrated the capabilities of its own intranet—Genome—to Acorda executives. After seeing the potential benefits of a custom-built intranet, Acorda and Klick initiated an in-depth discovery process to uncover the specific business needs required to ensure success in both the short- and long-term.

To guarantee that the intranet's design met those business needs, the Klick User Experience team conducted onsite visits and contextual inquires, culminating in 10 in-person executive-level interviews and 35 in-person departmental interviews, including two ride-alongs with Acorda sales representatives in the field. The research gathered during the interview process provided critical insight into the day-to-day issues that intranet technology could address.

Interview findings were compiled, analyzed, prioritized, and augmented with intranet best practices. The team then proposed functionality to meet the business objectives and address the most common interview findings.

The phase I launch of Synapse was intended to accomplish three key goals:

- **Improve communication** flow across the organization
- **Preserve** the unique Acorda **culture**
- **Ensure adoption** of Synapse

The long-term objectives for Synapse are more far-reaching and have greater business impact. The ultimate vision for Synapse is to improve Acordans' productivity by offering increased automation and interactive tools to promote positive behavior (and process) changes across the organization. Accomplishing these goals means developing a customized intranet that can both surface project-based data and reports to Acordans and provide Acorda's management team with rich analytics to drive decision-making.

Adoption Challenges

To ensure a successful launch, Klick had to overcome a few significant hurdles. For instance, during the interview process, one of the key findings that emerged was that Acordans are extremely busy and set in their established workflows. The team was concerned that the intranet's success would be compromised unless there was an awareness or marketing campaign that clearly spelled out the intranet's benefits. Klick thus planned a significant pre-launch hype campaign that included posters to support two key pre-launch efforts: the "What's In a Name?" campaign promoted the Name-the-Intranet contest, awarding an Apple iPad to the Acordan with the winning

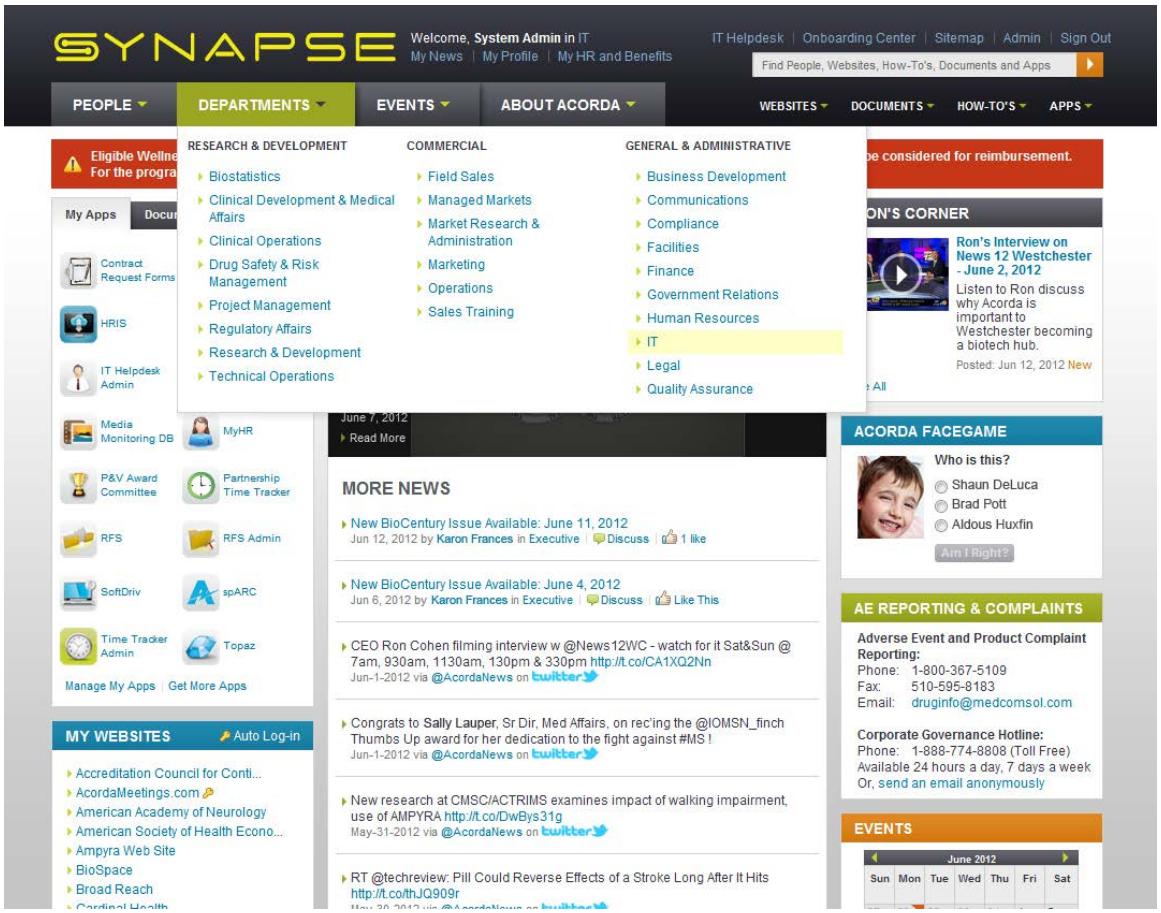
submission; and the "The People You Know" campaign teased the benefits of Synapse features prior to launch.

"The creative approach for 'What's In a Name?' was to draw immediate attention from every single person walking the halls at Acorda," says Yamini Ramamoorthy, Creative Director. "We wanted people to stop in their tracks, take a look, and start talking to their colleagues about the game, and inspire and excite them. The 'Name Game' posters perfectly tied into Acorda's culture."

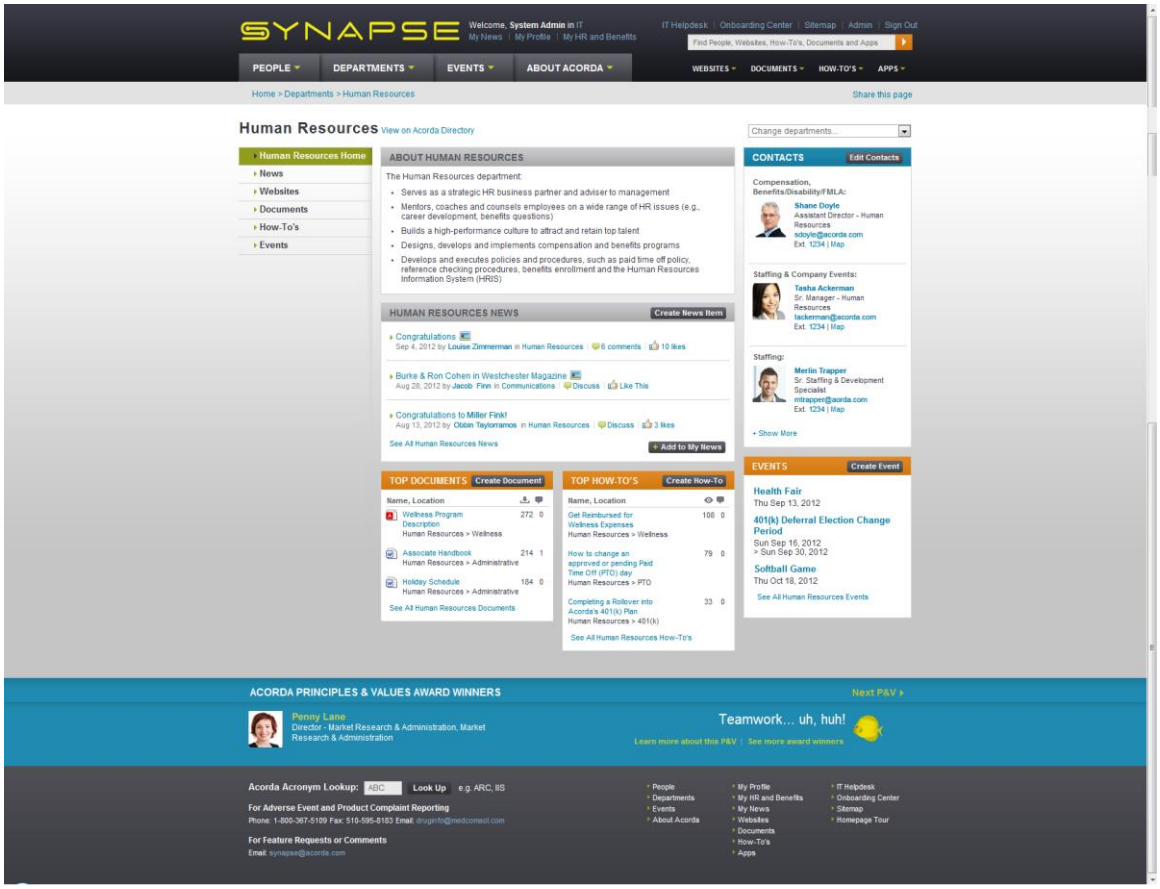
"The 'People You Know' posters employed professional photography of actual Acordans in exaggerated poses to illustrate the benefits of specific features being built into the initial Synapse launch," he says. "The shock value of seeing recognizable Acordans—including CEO Dr. Ron Cohen—in such humorous poses generated a lot of buzz about Synapse and generated a significant amount of excitement."

Pictured: The "What's In a Name?" posters leverage established brands to lend visual stopping power.

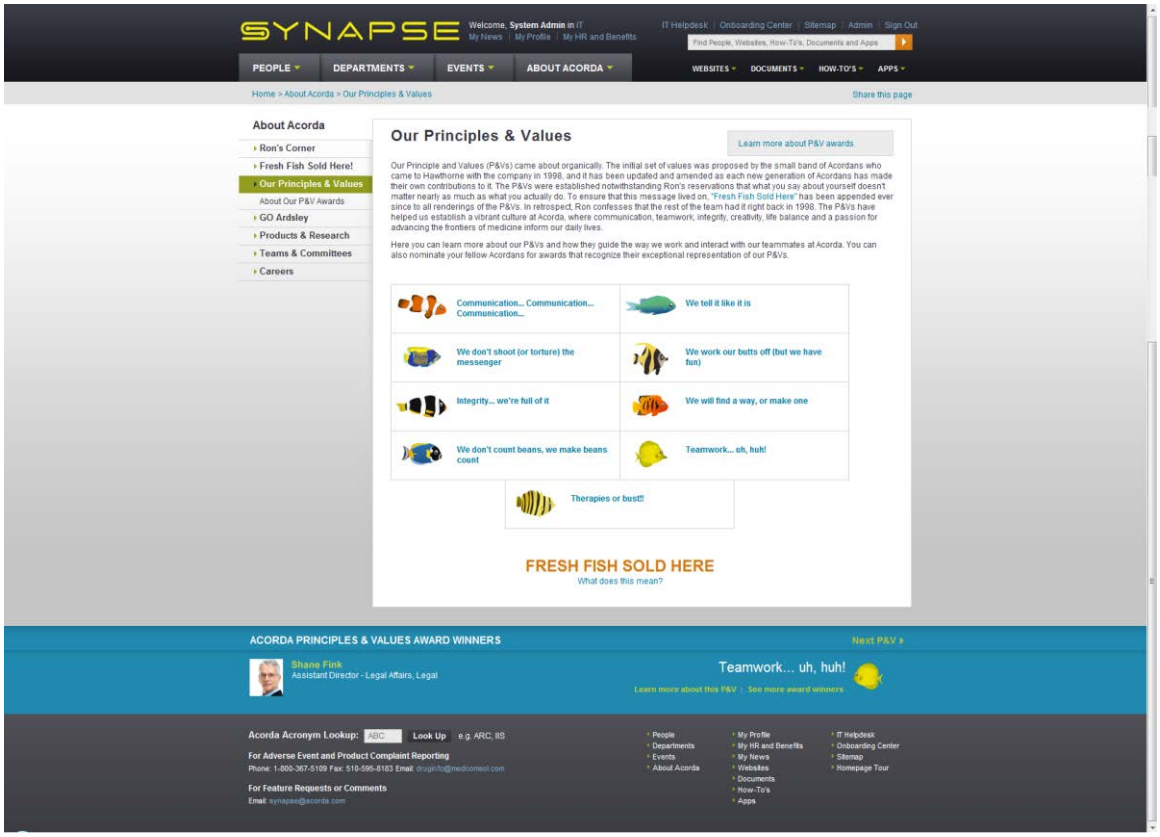
The pre-launch tactics ensured that momentum peaked as Synapse launched. A company-wide lunch-and-learn event celebrated launch day and included a complete intranet walkthrough, a takeaway pamphlet with tips and tricks, a Synapse-branded "bobble" water bottle, and the announcement of the Name Game winner. The winning name, Synapse, had a neurological reference that resonated strongly with this biotech company's employees, and the posters were seen as instrumental in engaging employees and driving intense excitement about the intranet's launch.



Pictured: All main nav nodes utilize mega menus. The *Department* drop-down uses Acorda-defined department groupings. Here, the user's department is highlighted.



Pictured: Each department is represented by a departmental homepage. It contains a description, a targeted news feed, a list of contacts broken down by topic area, and widgets representing the department's top *Documents*, *How-to's*, and *Events*.



Pictured: This page lists the Acorda Principles and Values (P&V), with links to details of each. P&V Awards are granted when employees exemplify a particular principle or value in an outstanding way, and the fish representing that principle or value then appears in the person's fish tank.

INTRANET TEAM

Pictured: The Klick Health Synapse team (from left to right): Peter Cheung, Heeyol Lee, Rob Brander, Michael Hambor, Cynthia Dahl, Sivasankaran Uthayasankaran, Mark Hadfield, Michael Melnick, Leerom Segal, Birgit Cole, Glen Webster, Neville Thomas, Armando Narvaez, Ari Schaefer, Mark Donaldson, and Andrew Middlemas.

GOVERNANCE

Ownership

A Synapse Governance Committee recommends and approves functional changes or enhancements to Synapse and manages the site. The committee is a group of seven Acordans with representation from across a range of departments and organizational levels. The Director of Business Development handles day-to-day project-related communications and site management. Content updates are handled by each department, which has a nominated representative who is responsible for administering Synapse content.

The Synapse Governance Committee was assembled only recently, so its impact on the site is yet to be determined. Prior to this model, Kyle Kuhn, the Associate Director of Business Development, filtered and prioritized all Synapse-related requests that arrived in his inbox from the various departments.

SYNAPSE TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Departmental Administrator (Acorda)	• Manage day-to-day updates of departmental content on Synapse, including news, documents, how-tos, events, and contacts • Surface high-priority Synapse functionality enhancement requests to the Synapse Governance Committee • Review solutions proposed by Klick to meet the above requests
Synapse Governance Committee (Acorda)	• Review and prioritize Synapse functionality enhancement requests from departments and committees/teams • Review and approve proposed Klick-provided solutions to the above requests • Review and approve short- and long-term budgets and timelines
Account Director and Project Manager (Klick)	• Work with the Synapse Governance Committee to track performance and consolidate feedback and lessons learned • Work with Klick's internal teams to develop solutions to enhance Synapse's on-going performance
User Experience Lead (Klick)	• Evaluate feasibility and understand business problem being solved by Synapse enhancement requests submitted by the Synapse Governance Committee • Ideate and design (wireframe) appropriate solutions to meet the enhancement requestor's needs • Review and ensure appropriate implementation of enhancements
Design, Development and QA Teams (Klick)	• Help establish feasibility and scope of solutions proposed by User Experience Lead • Implement solutions on time and budget, in collaboration with Acorda IT

USERS

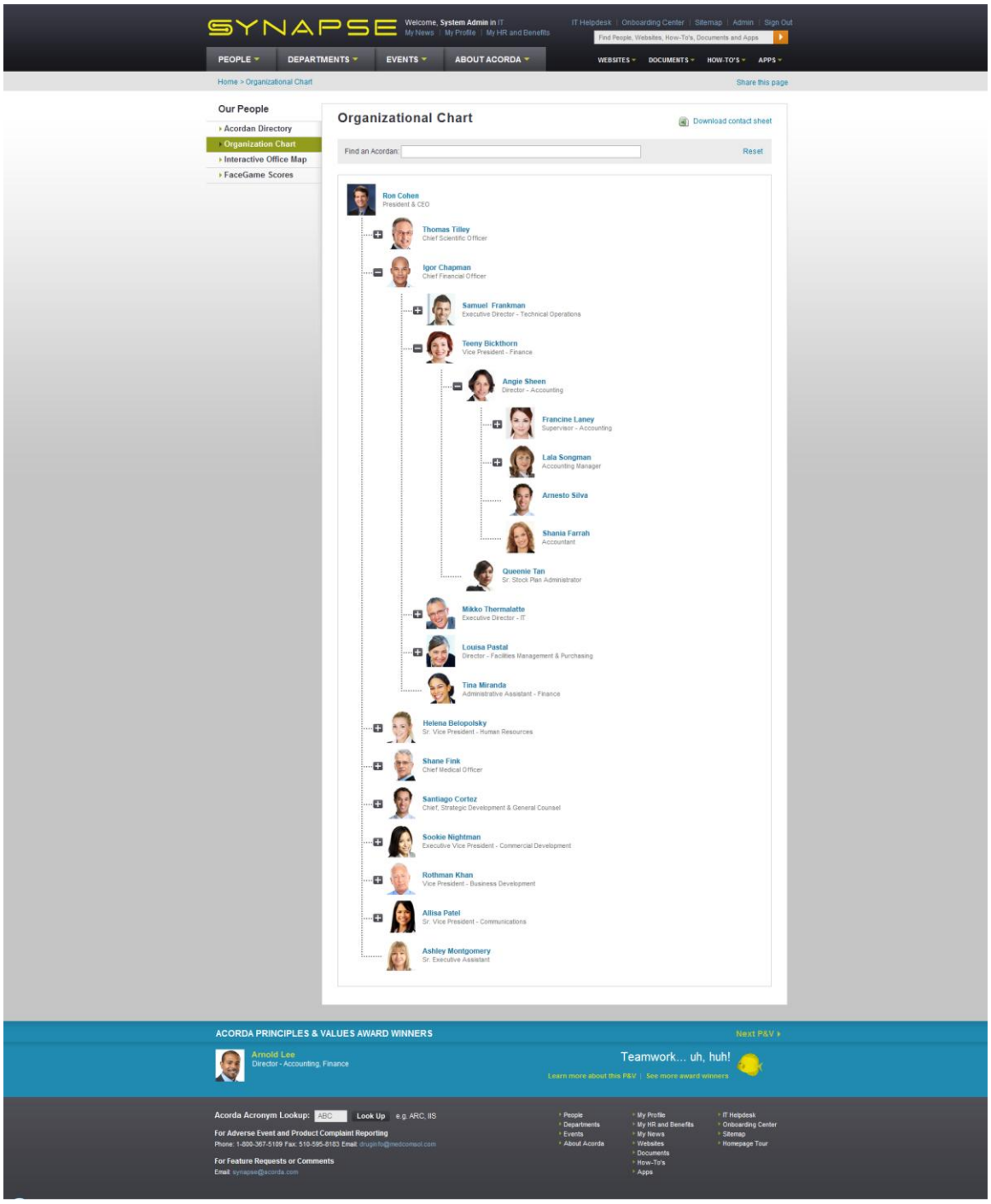
Synapse services all Acorda employees, although only half the company is physically located at the head office in Ardsley, New York.

Because Acorda deals with the complexities of developing, distributing, and marketing an FDA-approved drug, the list of departments that use Synapse is long and varied and grouped according to three categories:

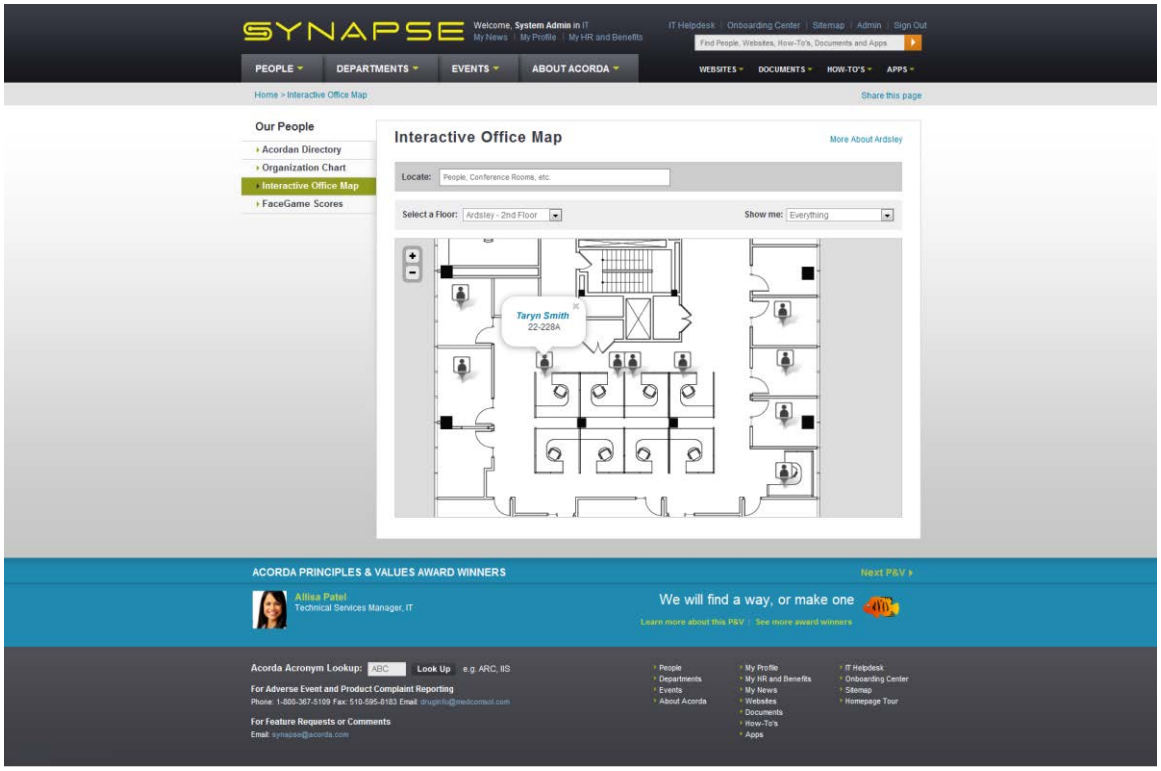
- **Research and Development** (e.g., Clinical Affairs, Regulatory, and Technical Operations)
- **Commercial** (e.g., Field Sales, Managed Markets, and Marketing)
- **General and Administrative** (e.g., Finance, HR, IT, and Legal)

Although Synapse offers departmental landing pages, the site IA and search functionality were purposely designed to be department-agnostic—that is, users can find documents and other assets on Synapse without knowing which department "owns" that asset.

At phase I launch, all department pages were identical in their functionality and layout. However, as enhancements are continually rolled out, there will be an opportunity to customize each department landing page to meet Acorda's growing needs.



Pictured: The site's organization chart uses a collapsible/expandable tree view. Clicking on a name displays that user's profile in a dialog box. The search box's look-ahead functionality lets users easily find the person they are looking for. Once a user chooses a person, the org chart auto-expands the tree and the located Acordan node is brought into focus.



Pictured: This interactive office map was made available to coincide with Acorda's relocation to a new facility. Using it lets users find other Acordans, meeting rooms, and shared spaces with ease.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	• http://synapse.acorda.com
Default Status	• Synapse is set as each user's homepage, but users can change this setting if they wish. Also, the site is set as the homepage in each user's browser. Users click the home button to reach Synapse.
Remote Access	• Users can access Synapse outside of their VPN. Doing so brings up a login screen that is bypassed if the user is already logged into the VPN.

DESIGN PROCESS AND USABILITY WORK

Design Approach

As mentioned earlier, the Klick team initiated the design project with a series of stakeholder interviews, field visits, and user research. Klick had previously delivered

successful digital project work on other Acorda brand initiatives and had established a reputation for high-quality work. Acorda brought Klick in to work on various aspects of the intranet project, including all of the discovery, design, implementation, and testing services, in collaboration with Acorda Business Development and IT.

The selection of usability methods for the Synapse project was largely based on two criteria—time and usefulness—and included the following:

- **Attending new employee orientation:** To immerse itself in the Acorda environment and understand what makes Acorda so unique, Klick sent three representatives to attend new employee orientation onsite at Acorda. This intensive two-day session (which was attended by 15 new Acordans) included:
    - A brief history of Acorda
    - An overview of Acorda's structure and systems
    - A presentation by CEO Cohen, including an entertaining explanation of the Acorda P&Vs
    - A presentation by each department head introducing his or her respective department, what they do, and how to work with them
    - An overview of employee logistics and benefits (insurance, stock options, etc.)

  New employee orientation not only gave Klick team members a wealth of information about how Acorda operates, but also let them mingle among the (soon-to-be) Synapse user base. This gave them a unique opportunity to understand the challenges that arise when on-boarding new hires and the questions that are commonly asked during the process.

- **In person interviews:** As a follow-up to the executive-level interviews conducted early in the project, Klick interviewed more than 35 Acordans across multiple departments and from different organizational levels. Common themes that emerged from the interviews were later addressed, wherever possible, by specific intranet functionality.

  The team used an interview guide to maintain consistency from one interview to the next. "The interview guide was critical in order to establish interview consistency, ensure a simple analysis process, and prevent the interviews from getting too off-track," says Michael Melnick, Director, User Experience. "What I found tremendously useful was asking Acordans not only about their pain points or how we could make their jobs easier, but also the positive aspects of their work: what motivates and inspires them, and why they love working at Acorda." These findings greatly impacted the intranet design and were leveraged to help the team create features on the site, such as the *Awards Fish Tank* and Acorda *FaceGame*.

These interviews, together with field research (explained below) yielded the richest findings and had the greatest impact on the Synapse design.

- **Field research/contextual inquiries:** More than half of Acorda's workforce works in the field, so gaining an understanding of the needs of those users outside the home office was crucial for building an effective intranet. To better understand that world, Klick conducted ride-alongs with Acorda sales representatives. The UX team members acted as silent observers as Acorda sales reps traveled to neurologists' offices to "detail" the product. This experience gave the Klick UX team valuable insight into how the intranet could be designed to meet the unique needs of these workers.

  For example, to perform many tasks associated with their jobs, sales reps rely on third-party websites—far more so than folks working at headquarters. They use various partner websites to schedule seminars with neurologists, order promotional material, and submit expenses. "During a field ride along, one of the Acorda representatives griped about how many passwords she had to remember because all the Acorda partner websites required individual logins," says Melnick.

  "I recall getting a tour of one of the reps' workspaces," says Mark Hadfield, Senior Vice President, Program Delivery. "Her desk and computer monitor were littered with dozens of Post-It notes that contained scribbled or crossed out usernames and passwords. She complained how each website she was required to work with had different password requirements and reset schedules. This kind of observation wouldn't have been possible unless we were physically present in the rep's home office to prompt about the Post-It notes."

  This particular finding gave rise to the site's single sign-on feature. Klick identified the most commonly accessed Acorda partner websites and worked with them to allow single sign-on directly through Synapse. This means that users accessing partner websites are seamlessly authenticated (behind the scenes) if they're already signed in to Synapse; no need to login separately. This convenience feature remains one of the Synapse platform's most useful benefits.

- **Checking SharePoint usage stats:** Prior to the availability of Synapse, Acorda used a SharePoint-based intranet to share files and post news alerts. Reviewing the usage stats of the Portal proved helpful for the design team, and this data helped corroborate findings that were uncovered during the interview process. Klick team members looked for usage trends to avoiding leaving popular, well-used features on the cutting room floor when they created Synapse. For example, during the user interviews, several Acordans said that one of the reasons they visited the old intranet was to look at the event photo albums. The site statistics backed up this claim and revealed that other areas, such as news and announcements, were also getting a lot of traffic. Personal news items, such as birth and wedding announcements, were especially popular. Given their popularity, photo albums and news items were enhanced in the redesign and included in the Phase I feature set for the new site.

- **Guerilla-style usability testing:** Throughout the wireframing phase, Klick UX team members found great value in conducting ad hoc, five-minute "guerilla" usability tests to validate various aspects of the interface and IA on the fly. With limited time to devote to these sessions, they were, as Melnick describes, "a lesson in crude simplicity." A typical session was conducted as follows:
    - Print a wireframe or series of wireframes.
    - Ambush a colleague (not involved in the Synapse project) who agrees to participate in a five-minute test.
    - A UX designer (acting as facilitator) explains the testing scenario to the participant (e.g., "Let's pretend you wanted to find a document on the intranet….")
    - The facilitator lets the subject explore the page and asks the subject to explain what they would do in context of the scenario, prompting them to think aloud.
    - In the cases where major design or architecture decisions needed to be made, some tests were conducted with three or four subjects.

  These tiny tests yielded big results. Despite the informal approach, the tests provided key usability-based findings and allowed the UX team to proceed with key design decisions with confidence of knowing how they would play out in the real world. "The costs of conducting these simplistic tests were far outweighed by the benefits provided," says Melnick.

- **Research and visioning:** Throughout the design process, Klick scoured countless articles and research publications from both online and offline sources for design inspiration (including the 2011 Nielsen Norman Group Intranet Design Annual) to both augment the team's extensive knowledge and experience and to gain exposure to current best practices.

  Also, prior to doing any discovery work, Klick assembled a mock-up of what an Acorda intranet homepage might look like so that Acorda executives could visualize the potential.

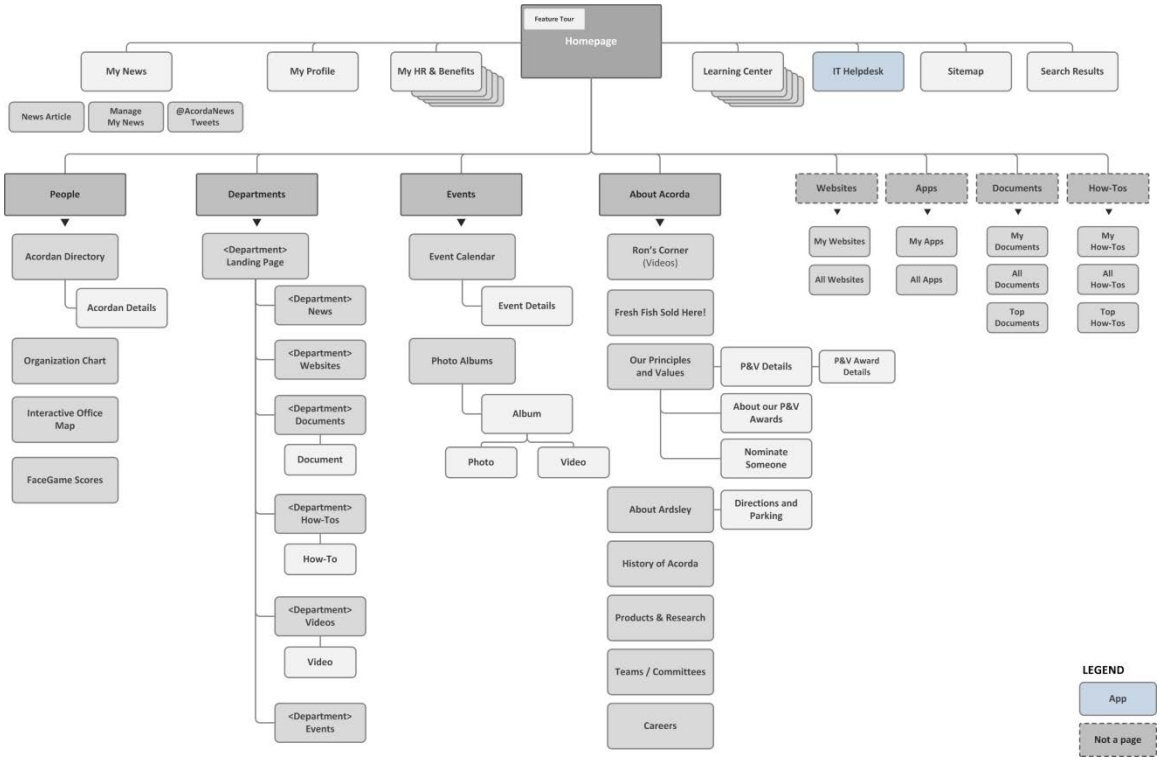
Pictured: The homepage as envisioned before any usability or research methods were carried out. Note: on this screen, the site is called "Acordinator," which was the working title before Name Game was completed.

Pictured: A department landing page as envisioned before any usability or research methods were carried out.

This mix of research methods was a good investment for the Klick team. "User research played a huge role in the shape of the final product," says Dave Lougheed, Vice President, User Experience.

"We initially proposed concepts that were grounded in best practices but weren't specifically tailored for Acorda. As we gathered real user insight, it became clear to us that we needed to rethink some of our base assumptions," he says. "The final product now clearly reflects the daily reality of a growing company with an important mission in healthcare. I couldn't be more pleased with the results."

Klick is still actively involved in a consultative role when Acorda proposes new features. Klick also provides ongoing strategic direction and counsel on how best to leverage the Synapse platform to meet the company's growing and ever-changing needs.



Pictured: The Synapse information architecture.

TIMELINE

INTRANET TIMELINE	
Milestone Date	**Milestone Description**
2003 (approximate)	• First Acorda intranet launched (SharePoint-based Portal)
August 2010	• Klick and Acorda meet to discuss ideas for managing growth and culture
September 2010	• Acorda agrees to intranet redesign • Klick conducts executive interviews
October 2010	• Klick conducts departmental interviews and field ride-alongs
November 2010	• Interview findings are analyzed and presented • Prioritized features and functionality list is created and approved
December 2010–January 2011	• Initial IA, wireframes, and creative concepts are completed
February 2011	• IA, wireframes, and creative concepts are presented and approved by the Acorda executive team
February–May 2011	• Wireframes and page-level creative designs completed with periodic check-ins and approvals • Web and application development initiated • Content creation initiated with department representatives
June–August 2011	• Web and application development completed • Content creation completed
September 2011	• Quality assurance testing is initiated and completed
October 2011	• User acceptance testing conducted at Acorda • Pre-launch adoption plan begins
November 2011	• Final tweaks, fixes, and updates
December 2011	• Synapse launch

CONTENT AND CONTENT CONTRIBUTORS

Klick's proprietary content management system, SmartSite, is both a development platform and a traditional CMS. As a result, Klick was able to leverage an established codebase to begin Synapse's development and to deliver it on schedule, even with tight timelines. Although customized administration tools were built for Synapse content owners, SmartSite lets Klick quickly update content throughout Synapse, including areas that don't have an administration tool.

The form-based administration tools use several methods to ensure high-quality content:

- **Contextual help** is provided inline, right beside fields that are ambiguous or esoteric.
- **Smart defaults** are offered (wherever possible) to permit quick content creation in each administration tool.
- **Shortcuts** help populate input fields whenever possible (shortcuts include a "copy poll" function, check all/uncheck all controls, and a quick link to populate the Acorda Head Office address when defining event location).

Content on Synapse is mainly created and managed by department administrators. A customized permission engine allows master administrators to define who can be a department administrator. For areas that are new and require initial content creation, Klick works with designated Acordans to provide in-house copywriters to produce the new content.

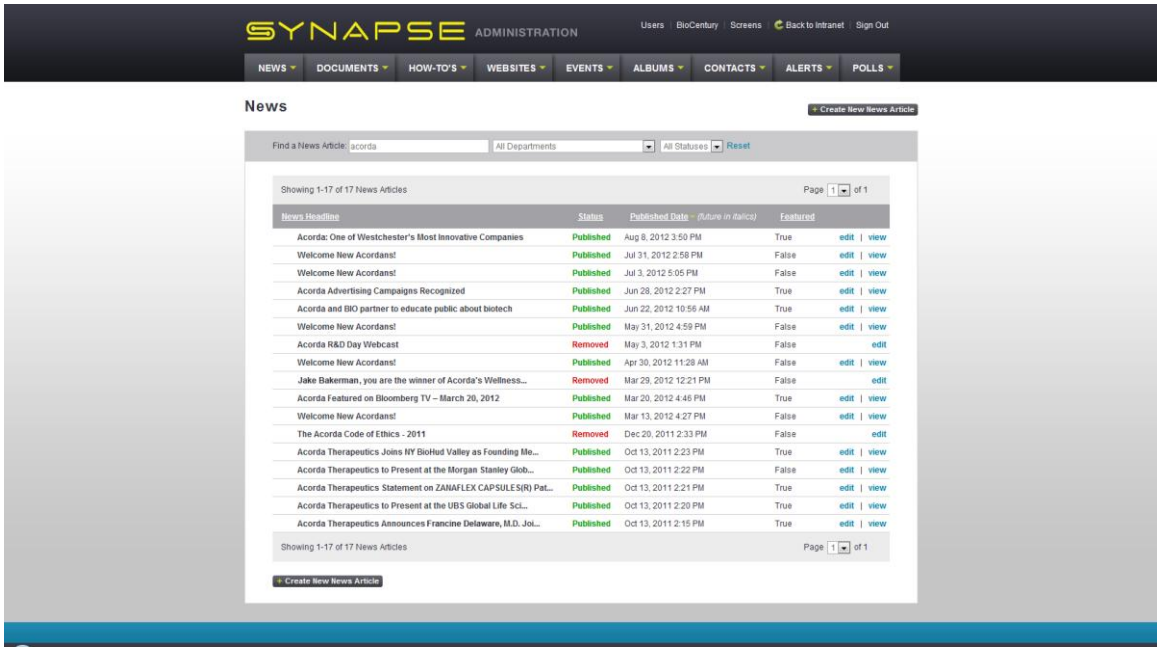
Each department has one or two content contributors, with approximately 75 in total. Content contributors use the customized administration tools to quickly add documents or how-tos to their department page. There are also customized administration tools for the following sections:

- News
- Documents
- How-tos
- Websites
- Events
- Contacts (departmental contacts)
- Photo albums
- Alerts
- Polls
- Users (permissions, user profiles)
- Ardsley TV (TVs that display intranet content throughout the facility)
- *BioCentury Issues* (newsletter)

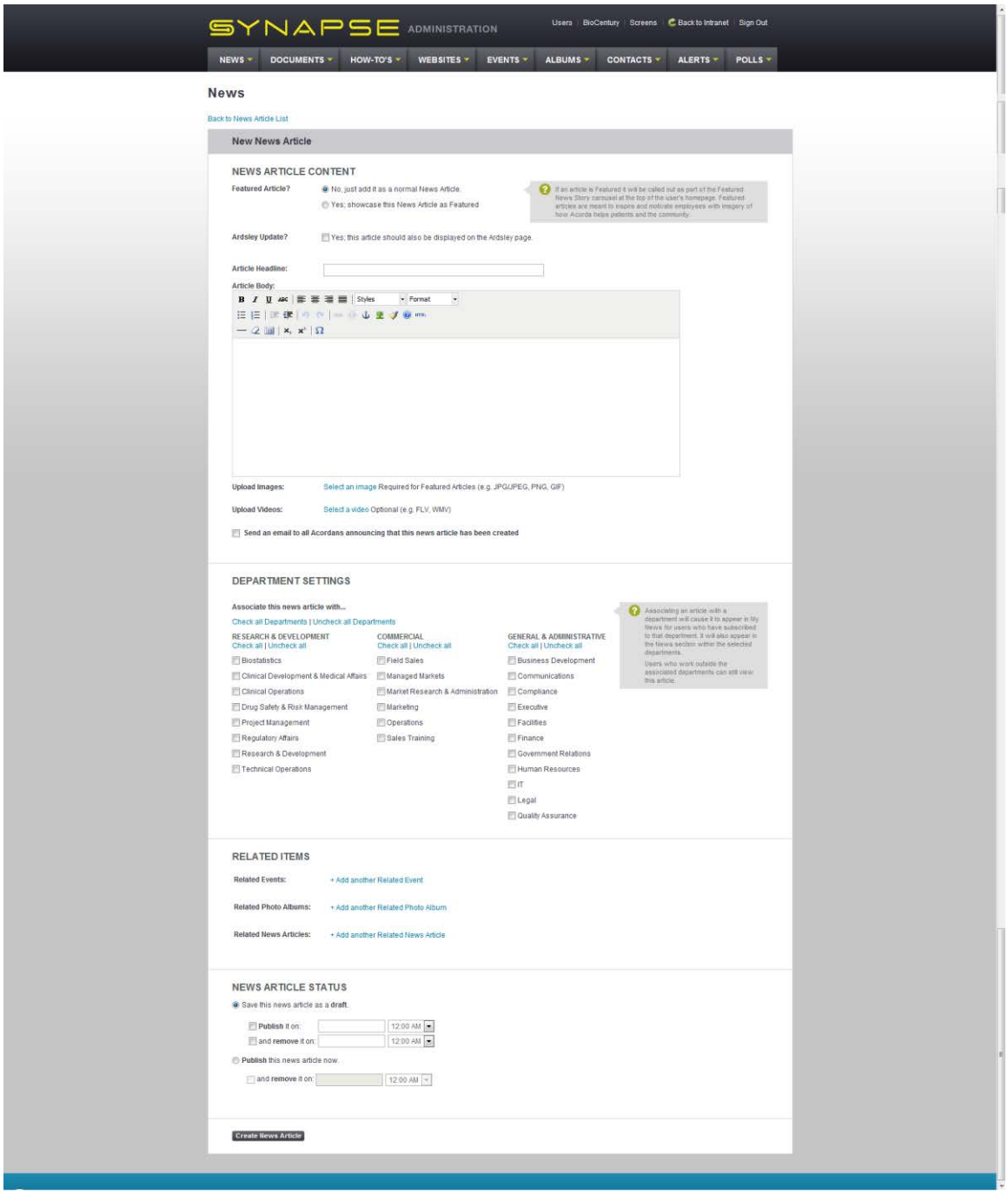
Pictured: An example of what appears on the television screens at Acorda's new facility. A Synapse administrator controls the top area, while the bottom strip is automatically generated by integration with Synapse news items. Each TV is connected to an iPad and the TVs are controlled by an iPad app.

All content updates are accomplished through customized administration tools developed specifically for each Synapse asset (such as news, documents, and how-tos). Each department administrator provides metadata about the asset being provided, and Synapse takes care of the rest.

Currently, there is no formal editorial workflow, although the Synapse Administration tool lets authors preview new content before publication. Content creators can create and share a preview link to the staging environment by applying a "draft" status to new content. When appropriate, the content creator can then move the content to "published" status. The Administration tool also lets users schedule future content publication or removal. This puts the onus on the tool rather than the person to "flip the switch" on schedule.



Pictured: The *News* Administration tool index screen. Dynamic text searching and sorting options let admin users find news postings quickly and easily. Users' admin permissions dictate which news items they can administer.



Pictured: The *News* Administration tool's *New News Item* screen. Contextual help and clear chunking of sections let users create news postings quickly.

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	• Windows Server 2008 • SQL Server 2008
Bug Tracking/Quality Assurance	• Genome (Klick's intranet) ticketing system • Email error-stream reporting
Design Tools	• Photoshop • Illustrator • Flash
Site Building Tools	• Microsoft .NET 3.5 • SmartSite (Klick's proprietary CMS)
Content Management Tools	• SmartSite
Search	• Apache Solr
Other Functions	• Microsoft Exchange integration

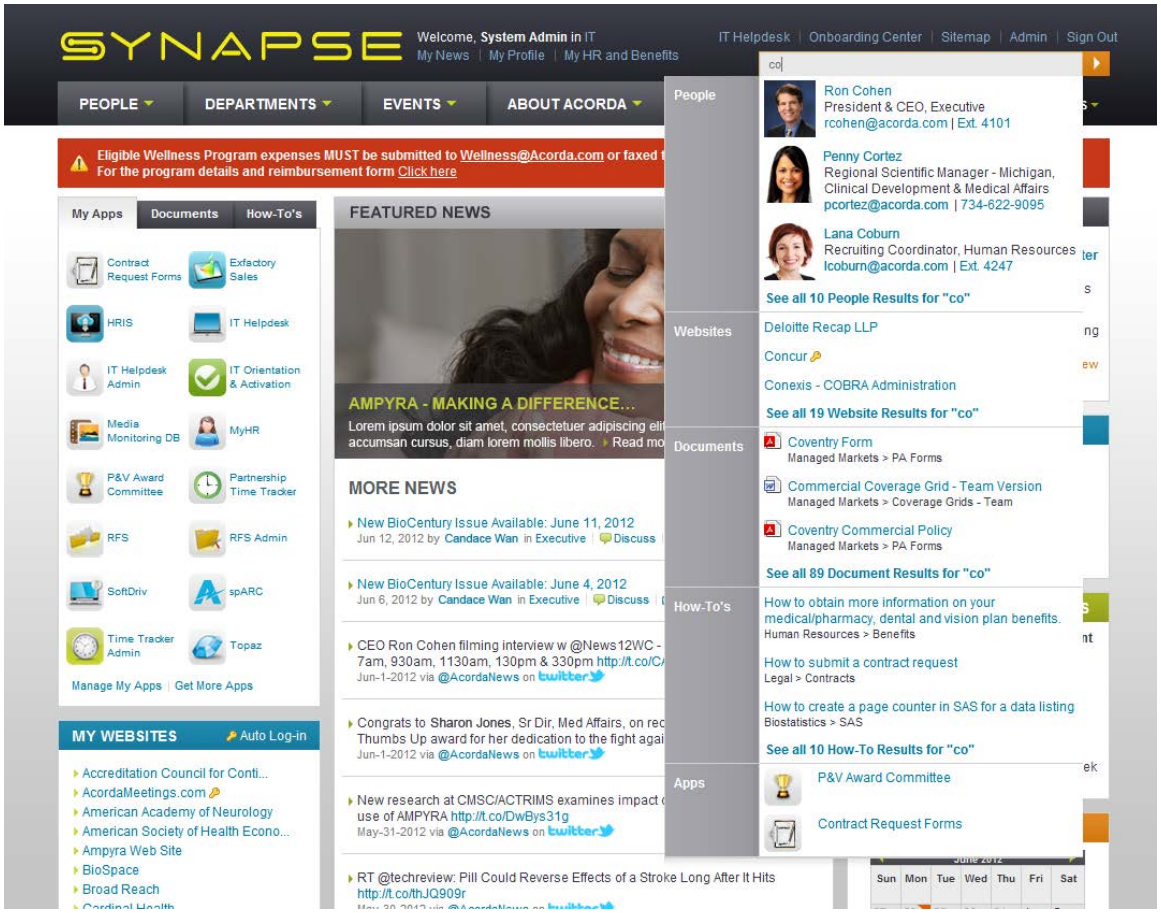
MOBILE

Users can access Synapse on mobile devices. However, the Flash components won't work on iOS devices and there is no mobile-optimized layout. Because all field personnel use Acorda-issued iPads, future Synapse enhancements might include dedicated Synapse-powered iPad Apps.

SEARCH

Apache Soir powers search on Synapse. Several factors influenced the choice of this platform, including:

- **Performance:** Ultra-fast search is one of the key factors that makes Synapse successful. Because Solr allows the search auto-completer to return results quickly, users can refine their search with nearly instantaneous results rather than waiting for a traditional search results page to load repeatedly.
- **Out-of-the-box features:** Solr made sense because it provided key features that didn't require customization. The tool's full-text capabilities, results highlighting, dynamic clustering, and configurability met the needs of Synapse almost immediately.
- **Open source:** Because Solr was open source, it was easy on the Synapse budget.



Pictured: This screen shows search on the homepage. Search is powered by a powerful faceted search that is grouped by people, websites, documents, how-tos, and apps. Users can make phone calls to other people in the head office by simply clicking on the phone number beside the person's name (in the auto-completer). Clicking the arrow or the *enter* key takes users to a comprehensive search results page.

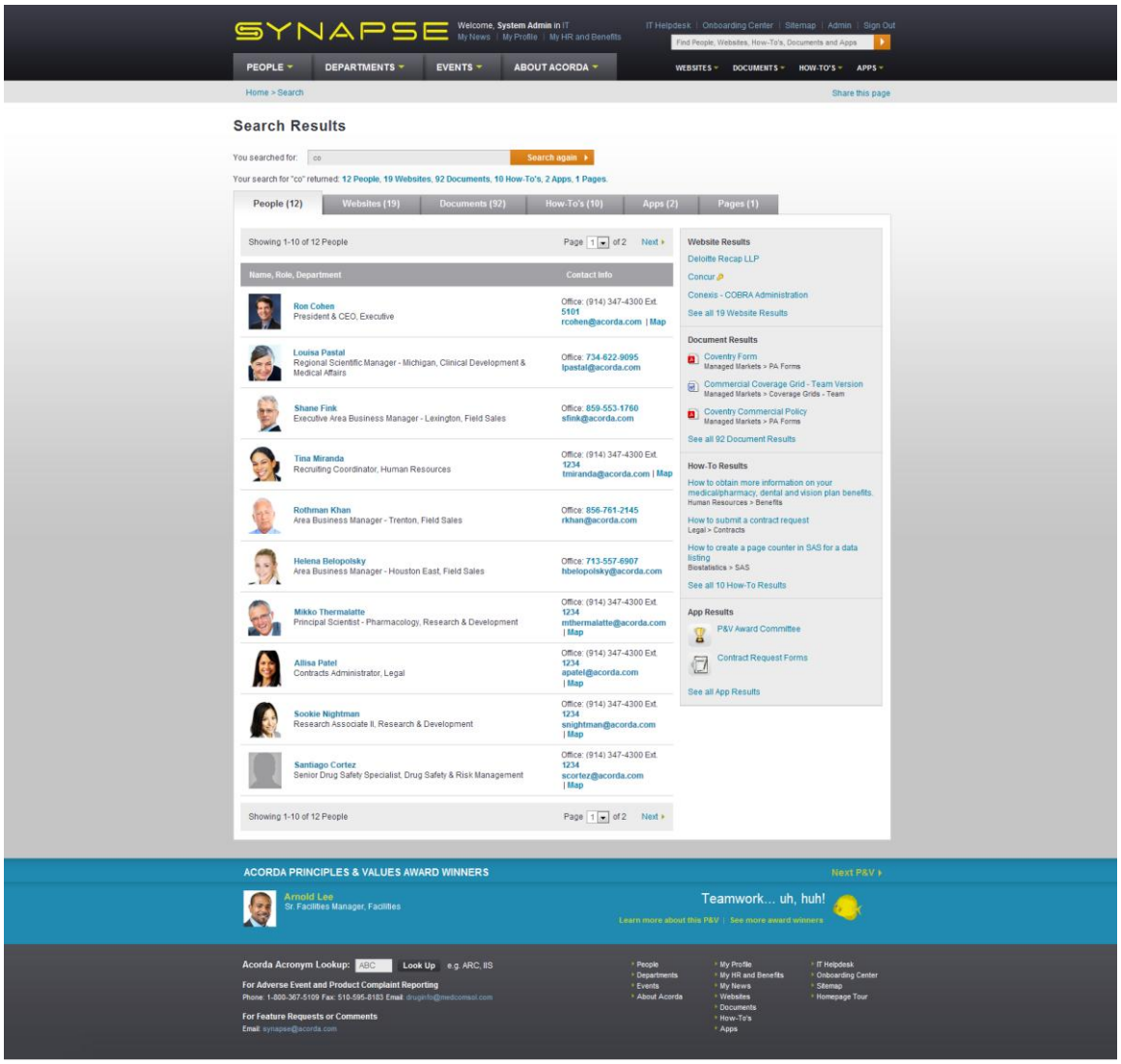
Refining Search Results

After observing user behavior on the Klick intranet and studying user stats from the original Acorda intranet, the design team had a better understanding of when and why people use intranet search. "Far and away, the most frequent usage of search was to find people with the intention of getting in touch with them right away," says Melnick. "As a result, people results are displayed as Synapse's first search result facet with click-to-call and *email to* links displayed directly in the auto-completer box, meaning that Acordans can dial others without even leaving the Synapse page being viewed."

Other facets are also shown in the search auto-completer, including websites, documents, how-tos, and apps. To prevent the auto-completer from scrolling too far down the page, each result facet is rolled up to the top three results, with a link to explore all results. The hyperlink also shows the number of results—such as, *view all 4 people results for Smith*—so users will know when not all results are displayed in the auto-completer.

The full search results screen is broken down by each facet using tabs, with an added *Pages* tab that surfaces content pages throughout Synapse that match the searched term.

"The search look-ahead is a feature that is heavily relied upon to ensure scalability as Synapse grows," says Melnick. "As Acorda adds employees, websites, documents, how-tos, and apps, the search facility indexes that content automatically."



Pictured: The complete search results screen, with tabs to allow for navigation across facets.

RESULTS AND ROI

The Synapse team doesn't stray far from its original goals when figuring out ways to measure the site's success. "The original business goals of Synapse should always be the yardstick against which success should be measured," says Melnick. "Does Synapse improve communication and preserve culture, and are Acordans adopting the system? In all three cases, yes."

"The analytics approach can be summarized in this way," says Peter Cheung, Associate Director, Analytics. "We tied the measurement strategy to the initial business goals of Synapse. It wasn't so much about dollars and cents as it was about promoting culture, improving communication throughout the organization, and ensuring adoption. Our key performance indicators were carefully selected from key actions that could be taken on Synapse that indicate the initial goals are being met, including participation in *FaceGame*, clicking on apps and assets within the customizable panels, and reading news items.

"The vast majority of people using Synapse—a whopping 98 percent of Acordans—performed at least one key action," he says. "In other words, people weren't just visiting Synapse, they were using it to help improve the way they work, communicate, and get informed."

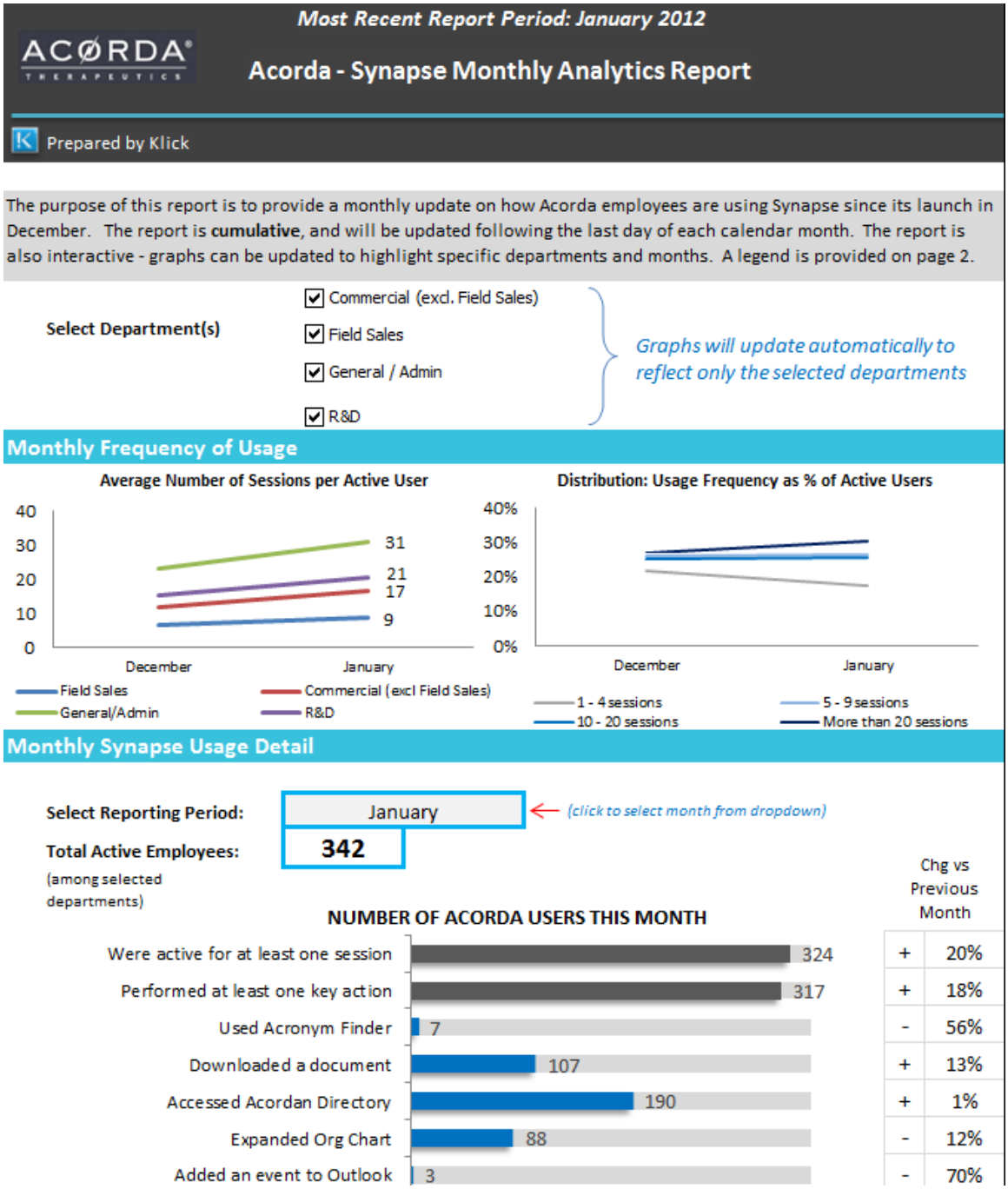
Acorda is still adapting to Synapse, and over time it's becoming more entrenched in the company's day-to-day processes. Each day, more content creators and department administrators lean on it more heavily to disseminate information—and, increasingly, to improve productivity and collaboration. This gradual adoption is part of the design. "The design affords the scalability necessary to grow the system along with the organization," says Cheung.

Klick and Acorda agreed on several user actions to serve as benchmark measurements for the site. These include:

- Number and percent of employees who access Synapse, and how often
- Percent of employees who did more than just visit the Synapse homepage
- Percent of employees who customized Synapse (using *My Apps*, *My Websites*, *My Documents*, or *My How-Tos*)
- Percent of employees who read at least one news item
- Percent of employees who have used the *Acordan Directory*
- Uptake of social features (such as liking and commenting)
- Quantity of P&V award nominations (37 nominations as of this writing!)

For a time after launch, Klick sent Acorda monthly reports tracking these numbers in an interactive spreadsheet. One of the key insights from a report produced shortly after launch was that engagement was particularly strong in work-related functions (the app section with forms and tools), but not yet as strong among culture-building actions (photos, *FaceGame*, and so on). The takeaway from this is that it might take some time for users to become accustomed to having both types of content available in one portal.

The team continues to track the numbers through a custom Google Analytics implementation.



Pictured: A sample analytics report. Klick produced these reports for Acorda after launch to track Synapse usage and trends.

LESSONS LEARNED

The Synapse teams shares some lessons learned:

- **Maintain momentum after launch. "**Synapse launched to great fanfare at Acorda, but after the initial buzz died down there was a slight 'hangover effect.' Despite Klick's best effort to seed useful content and allow users to hit the ground running with smart personalization recommendations, Synapse's momentum eased and some Acordans became somewhat indifferent to the platform. Part of the issue was that, despite the detailed walkthrough at launch, some Acordans elected to not fully explore or utilize the features of the site."
- ***Selling* the feature is sometimes just as important as the feature itself.** "A handful of power users grew largely dependent on Synapse's click-to-dial feature—clicking 'dial' anywhere near a user's name in Synapse would dial their phone to that person's extension—while others had no awareness that feature even existed. Users who have the feature demonstrated to them are surprised and use it moving forward! This issue emphasizes the importance of ensuring 'feature awareness,' going beyond fundamental control affordance."
- **Recruit confederates.** "During the interview process, several Acordans voiced sensitivity to the release of any new application that would add to their already significant workload. As a result, Synapse's user sentiment was somewhat low and the probability of a successful launch was at risk even before the design took shape.

  "While the negative stigma associated with Synapse was overcome to a great extent after launch, the feeling is that the system would have benefited from having recruited Acordans as intranet advocates in place *before* launch. Even a few Acordans actively demonstrating excitement about Synapse would have influenced others to adopt the same attitude."
- **Context is king.** "Individual documents and how-tos are each represented with a page on Synapse that displays metadata about the asset (publish date, contact, description, etc.). Originally, this included the ability to 'like' and comment on the asset. After reflecting on this design and gathering feedback from the Acorda Synapse team prior to launch, it was decided that 'liking' work-related assets wasn't appropriate, as the social context is awkward—what does it actually mean to 'like' a document? This feature was subsequently removed from asset-related pages.

  "The commenting function has remained but has floundered since assets aren't naturally conducive to conversation. Additionally, there is a risk that a comment is added to a document page that requires a response, yet a response is never provided since asset creators are not notified when a comment is added. News postings that announce social milestones (weddings, baby announcements, etc.) do garner good quantities of comments and 'likes,' underscoring the learning that (social) context is everything!"

Abt Associates, Inc.

Using the intranet: Abt Associates is a mission-driven, global leader in research and program implementation in the fields of health, social and environmental policy, and international development. Known for its rigorous approach to solving complex challenges, Abt Associates is regularly ranked as one of the top 20 global research firms and one of the top 40 international development innovators. The company has multiple offices in the US and program offices in more than 40 countries.

Headquarters: Cambridge, MA

Number of employees the intranet supports: 2,700

Company locations: Abt Associates has US offices in Atlanta, GA; Bethesda, MD; Cambridge, MA; and Durham, NC. International offices are located in Africa, Asia, Europe, Latin America, the Caribbean, and the Middle East.

Annual sales: $553 million in 2013

Design team: The core team is comprised of diverse leaders across Abt globally. BrightStarr was contracted to design and build the site.

In-house team: Albina Shekhtman, Director, Application Services & Programs; Allison Jung, HRIS Associate Analyst; Beth Williams, Manager, Communications; Cara Capizzi, Senior Graphics Designer; Cheryl Fries, Senior Knowledge Management Specialist; Danielle Hunt, Senior Associate/Scientist, Public Health and Epidemiology; Deborah Dangay, Lead Technical Writer, International Economic Growth; Frank Divita, Division Director of Operations, Environment & Resources; Jay Knott, Executive Vice President & Chief Business Officer; Jessica Erbacher, Finance and Contract Analyst, International Operations; Mark Spranca, Vice President, Reputational Capital & Technical Leadership; Mary Harper, Chief Information Officer; Mary Maguire, Chief Communications Officer; Mauricio Poodts, Deputy Chief Information Officer; Ricky Merino, Senior Knowledge Management Specialist, International Health; Rob Grimmett, Associate Director, Digital Communications; Sandra Nolden, Vice President and Division Director of Operations, Social & Economic Policy; Vanessa Martin, Web Technologist

BrightStarr: Emma Pinkerton, Lead UX Consultant; Kunaal Kapoor, Delivery & Development Lead; Kip Wagner, SVP Sales & Accounts; Kanwal Khipple, Lead SharePoint Consultant; Glen Chambers, SVP Operations; Juan Larios, Lead SharePoint Architect; Camille Mitchell, Project Manager

SUMMARY

The Abt Associates Global Intranet (AGI) was designed so that employees can be efficient regardless of which device they use to access it. This effort was completed not just for the sake of saying that "the intranet is mobile-ready"; previously, the intranet was inaccessible for 60% of the company's workforce, who were stationed in developing countries without reliable internet access. The organization resolved to redesign the intranet to enable global collaboration on projects and proposals, so staff everywhere could access the latest company thinking on breakthrough methods and innovation.

For Abt Associates, the best approach was responsive web design. AGI's particular responsive design makes it possible for the company's 2,700 employees—some of whom are in Africa, Central and Southeast Asia, Asia-Pacific, Latin America and the Caribbean, and the Middle East and North Africa—to access the intranet's complete functionality wherever and whenever mobile services are available.

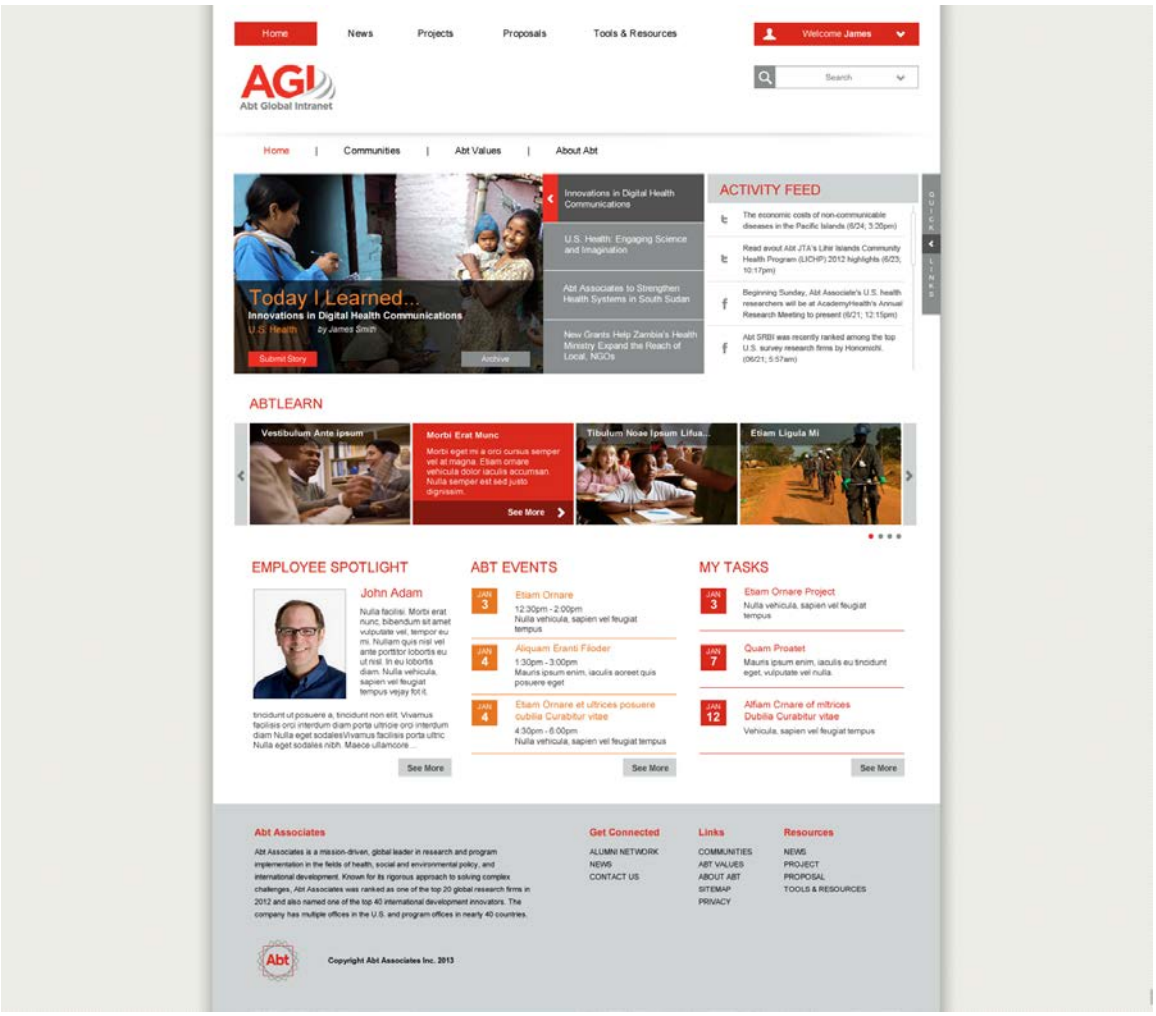
In some cases, the design team employed the "Tiny Tweaks" responsive design pattern[1] on AGI pages. In this pattern, the layout stays roughly the same when accessed via large or small viewports, but the type and images are larger on desktop devices than on tablets or phones. This pattern lets the designers choose just once which individual page elements have the highest priority and thus appear toward the top of pages, with larger print or greater visual appeal than lower-priority content.

In other responsive design patterns, designers can drop page parts below the fold or change the look or layout of parts when they're viewed on smaller screens. To do this, designers must assign a priority for each piece of content for each size of device, and also indicate how the content should move or change when accessed via different viewport sizes. With the Tiny Tweaks pattern, designers don't need to do these steps for each device; they simply change the size of elements).

The Abt Associates global intranet is a responsive design that allows access to all features on mobile devices, which is especially helpful for employees who work in countries with spotty or infrequent internet access.

In some cases, pages on the site use different responsive patterns, such as dropping a column as the viewport gets smaller. This lets designers make the most of the desktop's large screen area while also effectively presenting the highest-priority information for employees using smaller viewports.

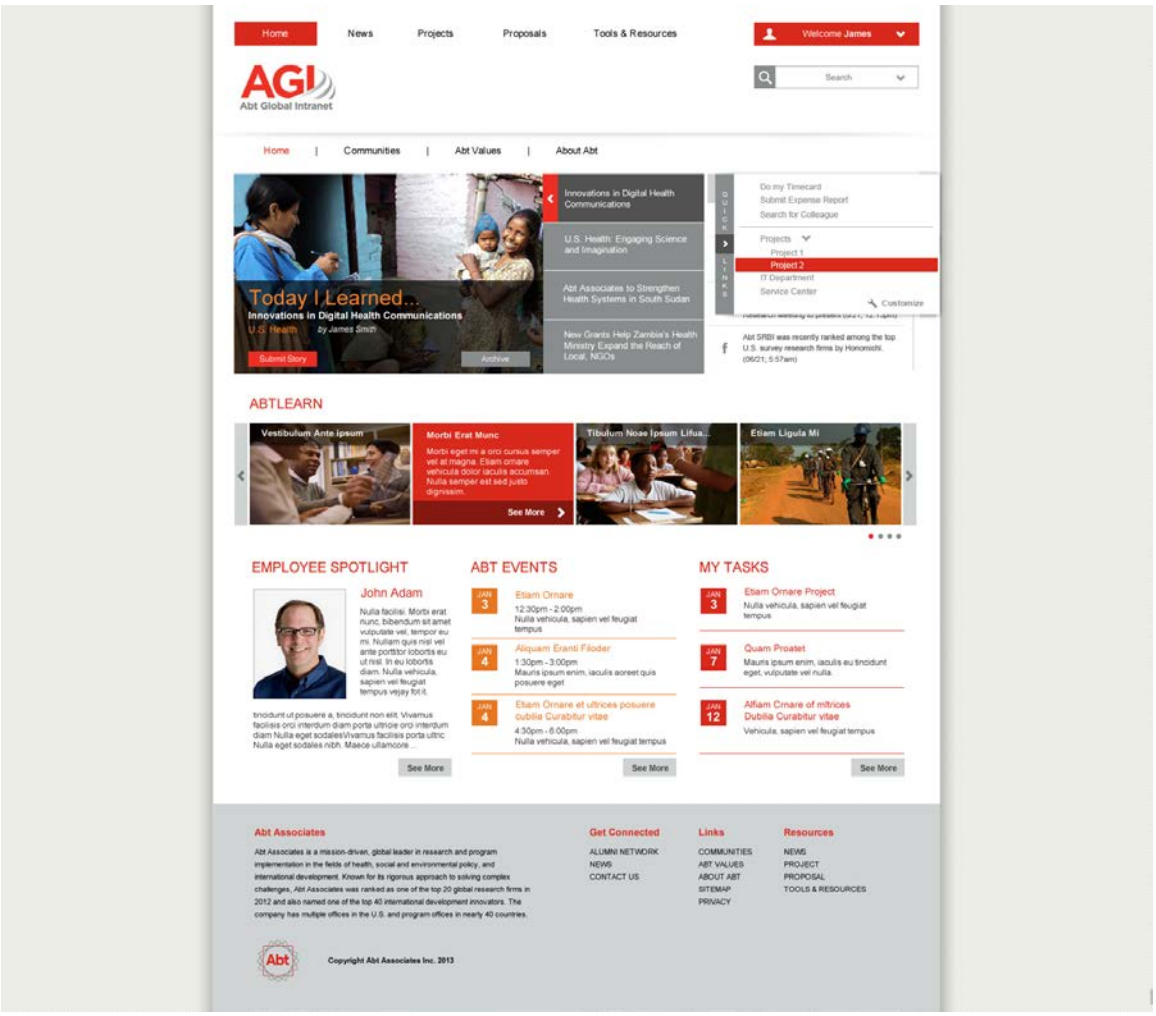
1 Luke Wroblewski, "Multi-Device Layout Patterns," 14 March 2012, http://www.lukew.com/ff/entry.asp?1514.



The Abt Associates intranet makes good use of space when employees view AGI on large screens.

On a mobile phone, the top horizontal menu collapses into a visible, large-enough-to-tap *Menu* button. This button helps reserve valuable screen real estate for content instead of navigation. Also, the *Quick Links* are promoted to a *Quick Links* button in the top left and lead to items people use frequently, such as timesheets, employee directory, expense reports, and current projects. This tool also saves time and money: employees can now submit timesheets from a remote village, rather than having to drive hundreds of miles back to an office.

On the desktop version, employees access these links via the *Quick Links* vertical button on the far right, which invokes a fly-in menu list of the links.

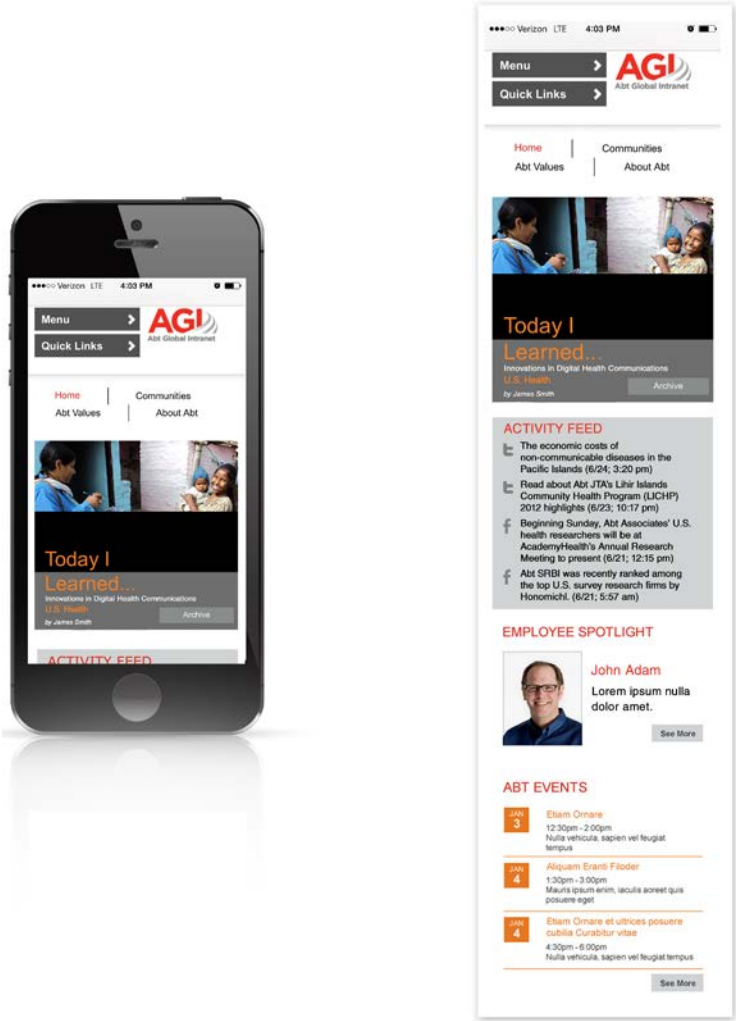


The Abt Associates intranet opens *Quick Links* as a fly-in menu (on the right) when viewed on a desktop.

Accessing Quick Links with an appropriate touchscreen element (in this case, a button) and with just one tap on mobile devices saves time and effort. These buttons are large and have space between them, making them easy to tap. Also, the text is clear and large, and there is good contrast between the white text and dark grey button background. All of these elements make the button readable on small screens.

The global navigation wraps to two lines, still leaving enough space between the four commands to make them easy to tap.

The content is repositioned so that the highest priority information appears first; less important information appears second, and so on as the user scrolls down.



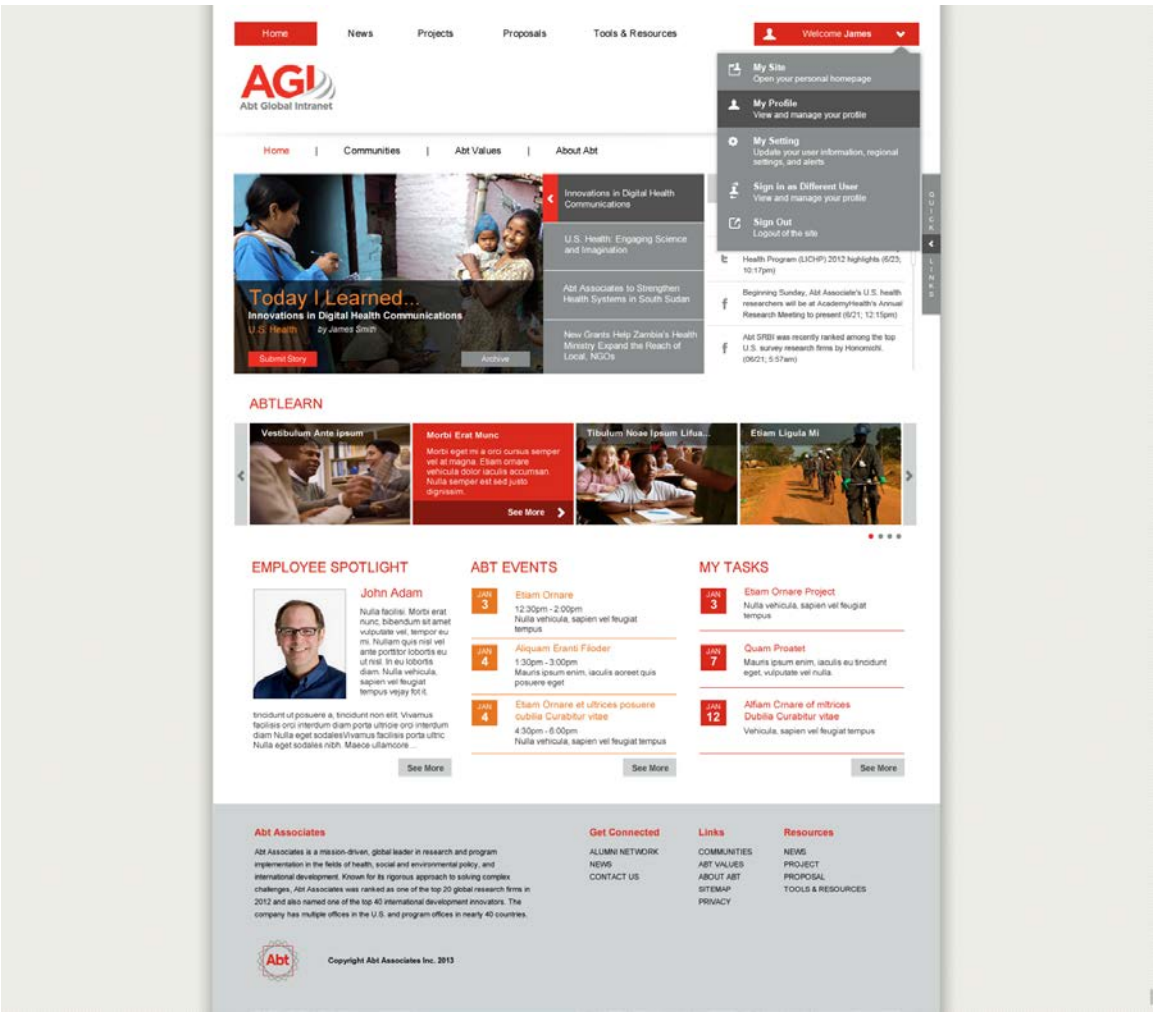
The Abt Associates intranet tailors content for small screens, such as phones or other mobile devices.

No matter how large the viewport, the homepage layout looks fresh and uncluttered. Even the larger amount of content visible on the desktop homepage is arranged within both horizontal and vertical grid patterns, which make the content seem orderly. Further, the white space between items gives employees a visual breather as they scan the page. The color palette is cohesive yet limited to just a few shades of red, orange, grey and white; disciplined designers can convey a brand and tone using these few colors.

Sections have visible headings—such as *Activity Feed*, *Abt Learn*, and *Abt Events*—so users can quickly scan to the type of content they're interested in. And, when scrolling on mobile devices, these headings give employees an immediate cue about the section they're about to scroll to.

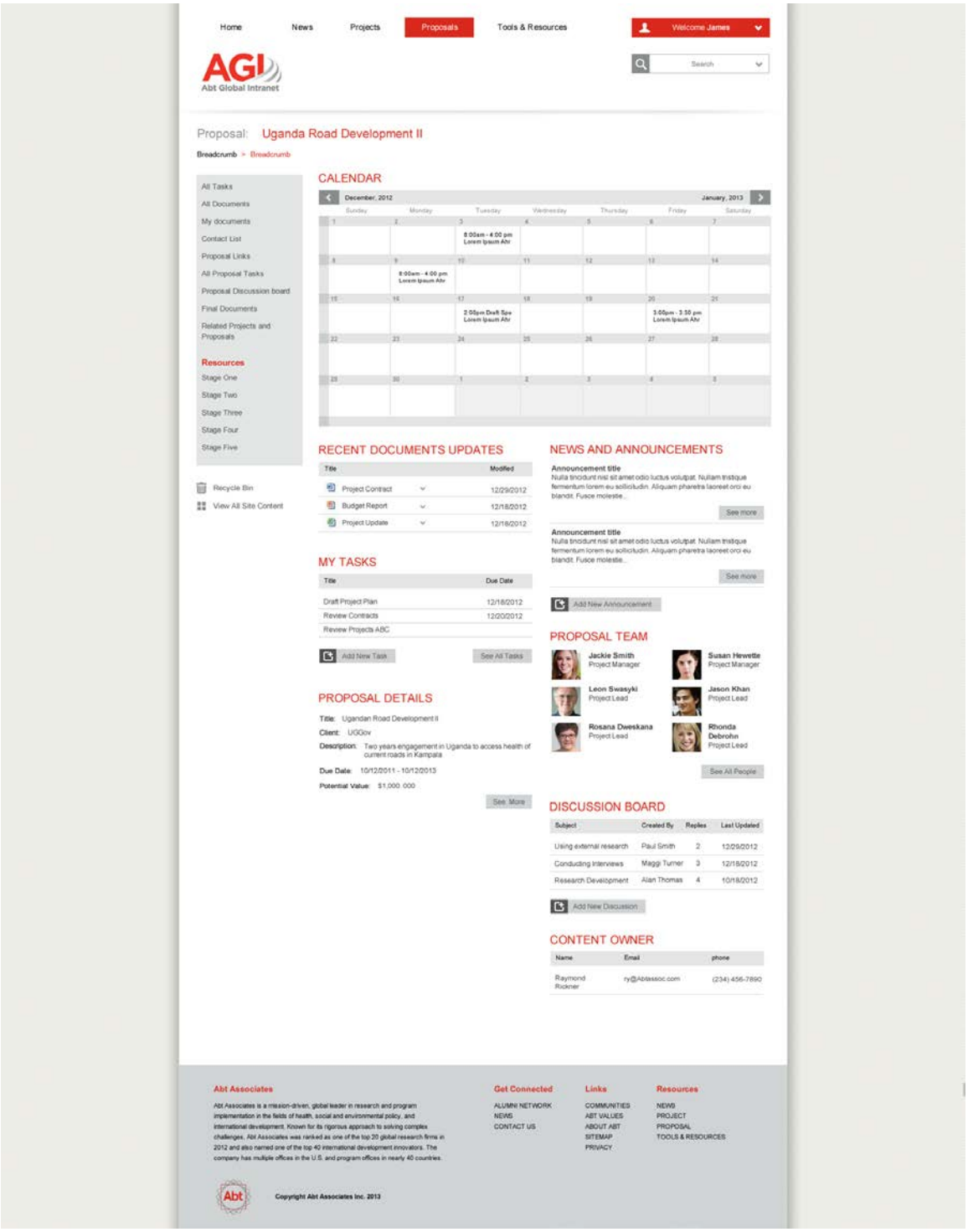
The role-based system serves information and tasks applicable to the logged in employee, which eliminates clutter—a positive trait for mobile and desktop viewing alike. Employees can easily access user-relevant information for projects they're working on, training they've undergone, and documents they use on a regular basis. *My Tasks*, a list of document and site updates, and other custom web parts help

employees quickly access their content with little interaction cost or effort. This is especially helpful when using mobile devices. On a desktop, users access their personal features via the top-right button, which is labeled with their user name. This button features a menu with links for *My Site*, *My Profile*, *My Setting*, *Sign in as Different User*, and *Sign Out*.



Employees at Abt Associates can easily access relevant information for projects they're working on, training they've undergone, and documents they use on a regular basis.

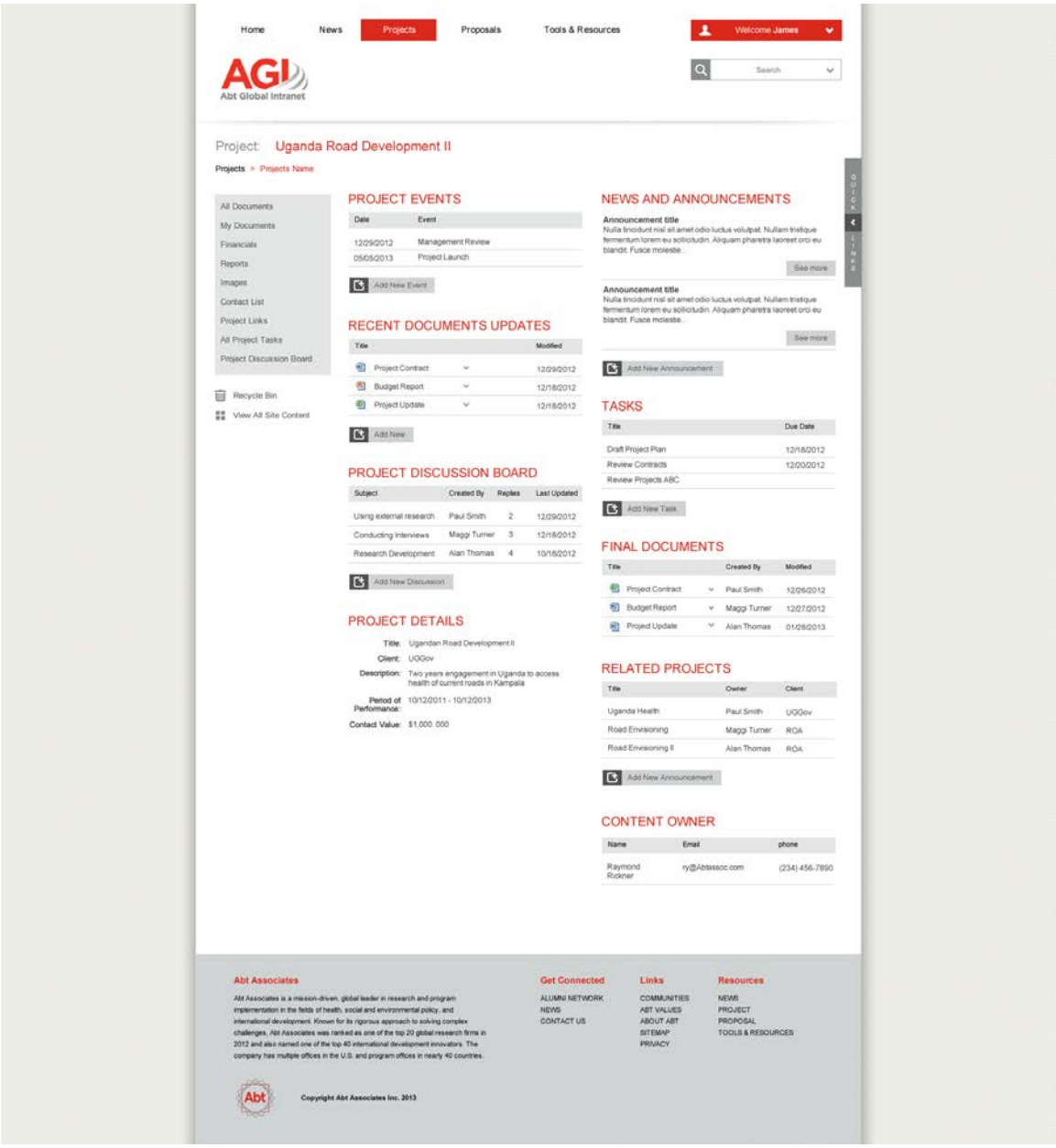
When working together on a proposal, involved employees can easily find consolidated information such as tasks, documents, discussions, and a calendar of events. Designers took advantage of built-in SharePoint features, including the capability that lets multiple people collaborate on the same document simultaneously, with secure access to the documents and multiple permission levels available to an administrator. Also, a strong metadata-based search system indexes these documents (as well as people and specific search results).



A proposal page on the Abt Associates intranet consolidates information such as tasks, documents, discussions, and an events calendar.

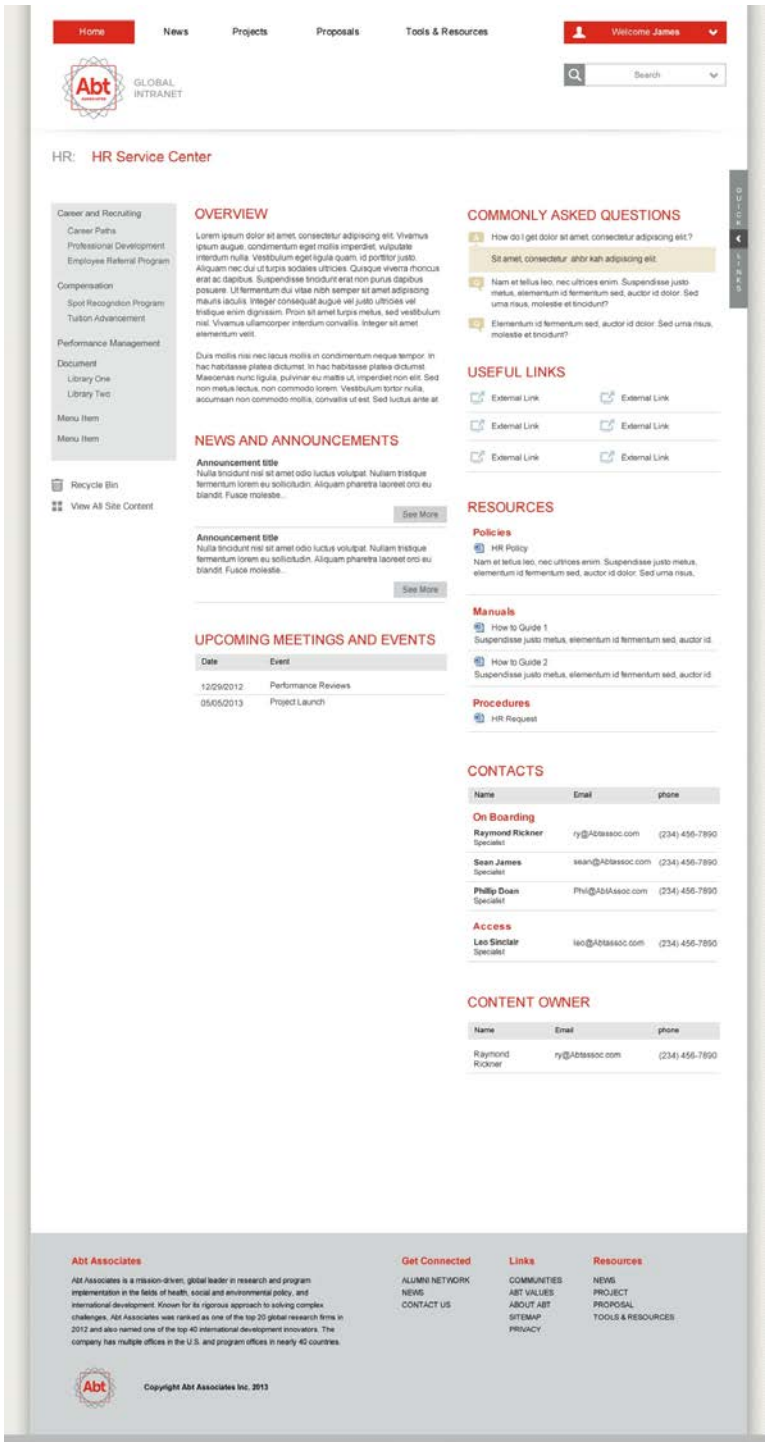
Similarly, project pages house everything you might want to know about a particular project. *Events*, *Recent Document Updates*, *Discussion Board*, *Details*, *News*, *Tasks*,

Final Documents, *Related Projects*, and *Content Owner* are all sections on the main page that contain helpful information. More project-related topics are available in the left-side navigation.



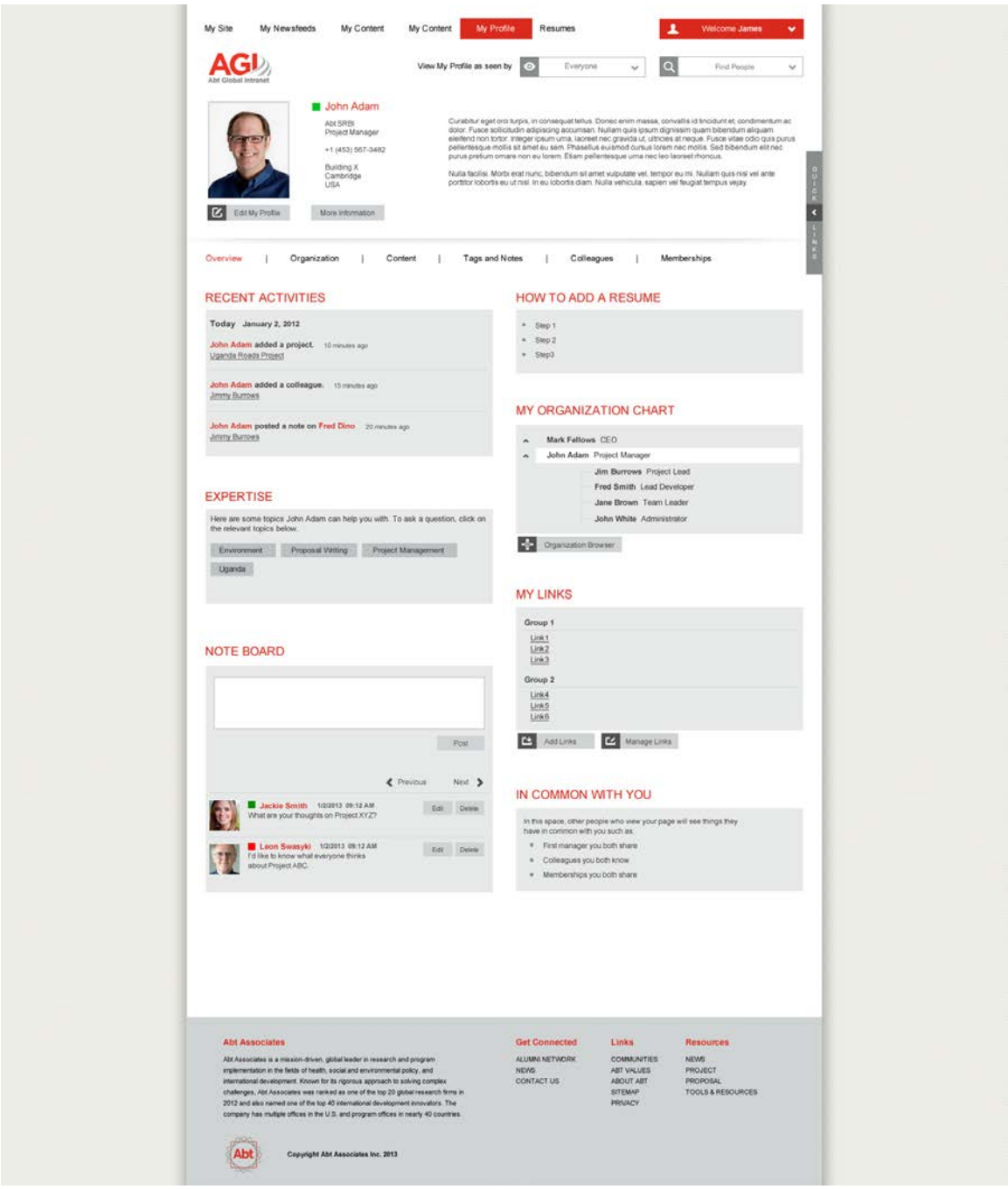
The Abt Associates intranet includes project-specific sections on the main page, including *Events*, *Recent Document Updates*, *Discussion Board*, *Details*, *News*, *Tasks*, *Final Documents*, *Related Projects*, and *Content Owner*.

The HR Service Center page is similar to a project page in that it presents most pertinent information on the main page or in the left-side navigation. The page also includes links to department-specific meetings and events, resources, contacts, an FAQ, and news/announcements.



The *HR Service Center* page on the Abt Associates intranet includes links to department-specific meetings and events, resources, contacts, an FAQ, and news/announcements.

Like project pages, person pages are also thorough, have social elements, and make it easy to tell which skills each employee possesses.

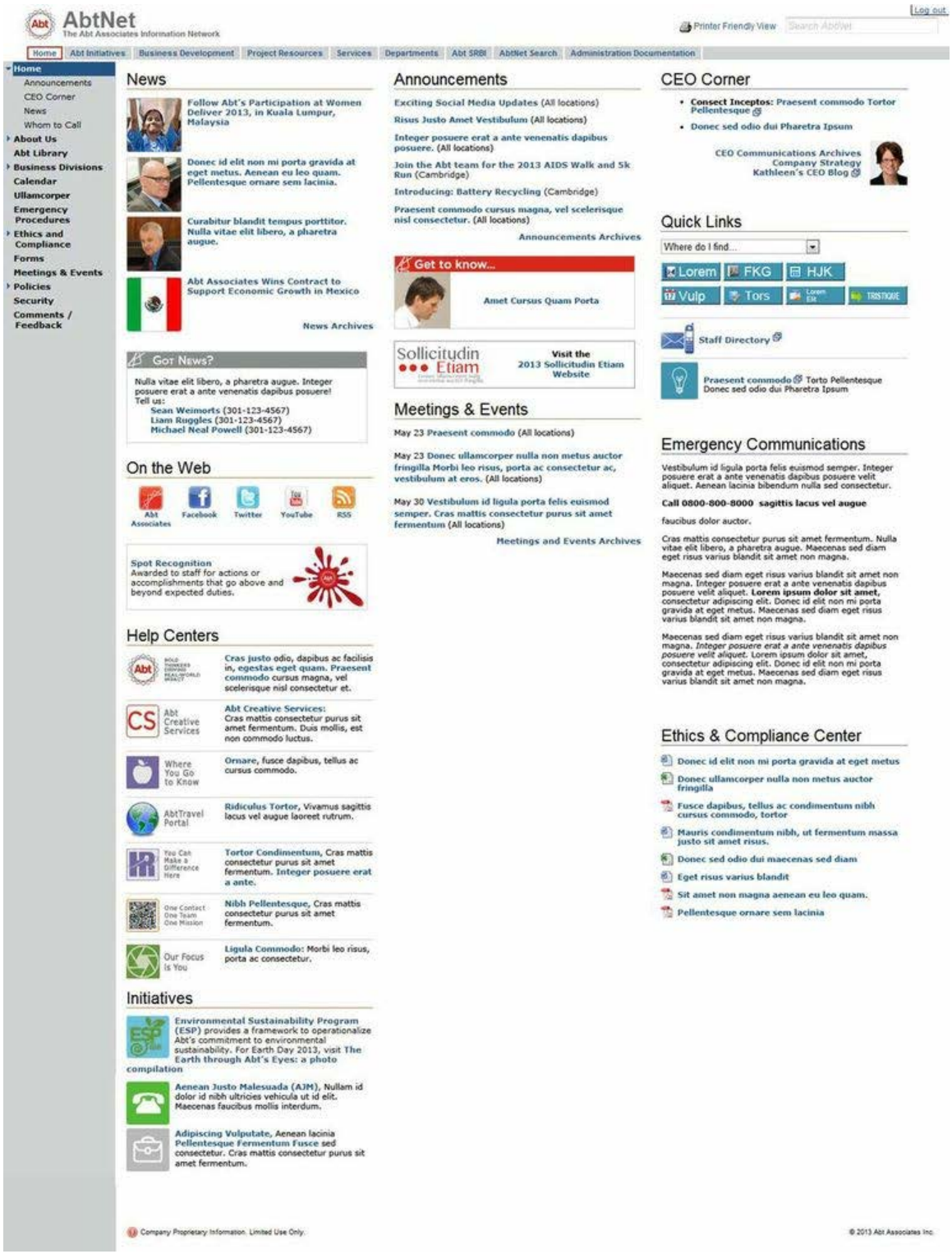


Person pages on the Abt Associates intranet are thorough, have social elements, and make it easy to tell which skills each employee possesses.

The Abt Associates' intranet team set the goal to "create a smooth, seamless, and personalized experience that makes users feel welcome; encourages them to contribute insights to foster continuous learning; and, with mobile technology, enables them to access everything, no matter their location." The team's giant "virtual hallway" endeavor works tirelessly to connect employees around the world—effectively, thoroughly, and equally.

BACKGROUND

AGI is an inter-department partnership that brought about by the leaders of Knowledge Management, IT, and Corporate Communications, who decided to pursue a total revamp of the company's intranet in 2011. At the time, the intranet was inaccessible to 60% of Abt's workforce—that is, approximately 1,600 people. These users are stationed in developing countries, implementing international health and economic growth programs that range from Malaria and HIV/AIDS prevention efforts to helping farmers increase crop yields. The Abt team recognized the lack of reliable internet and intranet access in these areas as a major hindrance to Abt's mission to improve the quality of life and economic well-being of people worldwide. The increasing expansion of cell networks in those locations gave Abt a unique opportunity to address the situation with an intranet refresh.



A sample page from Abt's previous intranet

Goals

The project's overall goal was to create a user experience for employees that would be personalized and make them feel welcome; encourage them to contribute insights to foster continuous learning; and, with mobile technology, enable them to access everything, regardless of their location. Abt developed the concept of a "virtual hallway" that would serve to connect and educate Abt employees worldwide.

The redesign project had three simple, specific goals:

- Create the virtual hallway, which would let staff easily connect and share ideas and knowledge.
- Make it easy for staff members to do their work in any location.
- Give staff members access to resources so they could continue to develop and grow.

Home | News | Projects | Proposals | Tools & Resources | Welcome James

AGI
Abt Global Intranet

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INNOVATIVE SOLUTIONS FOR COMPLEX ENVIRONMENTAL MANAGEMENT, REGULATORY, AND POLICY CHALLENGES

Author: James Paul
Date: 12/19/2012

Environment, Resources & Climate Change
Country: Nigeria

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POST A COMMENT

Post

Showing Comments 1-2 of 2 **Page: 1**

Jackie Smith 10/31/2012 4:45 PM

What are your thoughts on Project XYZ?

Reply | Recommend | Report Abuse

Leon Swasyki 1/2/2013 09:12 AM

I'd like to know what everyone thinks about Project ABC. rum enim consequat ut. Phasellus aliquam neque vel turpis tempus non tristique felis ullamcorper. Duis in pulvinar ante. Fusce non arcu ac orci lacinia congue a congue nibh. Pellentesque ligula ligula, feugiat commodo tempus in, viverra sed orci. Mauris dic.

Reply | Recommend | Report Abuse

RELATED

- Air Quality
- Climate Change
- Toxic Chemical Management
- Water Resources
- Materials Management
- Environmental Modeling
- Decision-Support Tools & IT Solutions
- Facilitation, Mediation and Meeting Management

QUICK LINKS

Abt Associates

Abt Associates is a mission-driven, global leader in research and program implementation in the fields of health, social and environmental policy, and international development. Known for its rigorous approach to solving complex challenges, Abt Associates was ranked as one of the top 20 global research firms in 2012 and also named one of the top 40 international development innovators. The company has multiple offices in the U.S. and program offices in nearly 40 countries.

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Links
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ABOUT ABT
SITEMAP
PRIVACY

Resources
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TOOLS & RESOURCES

Abt

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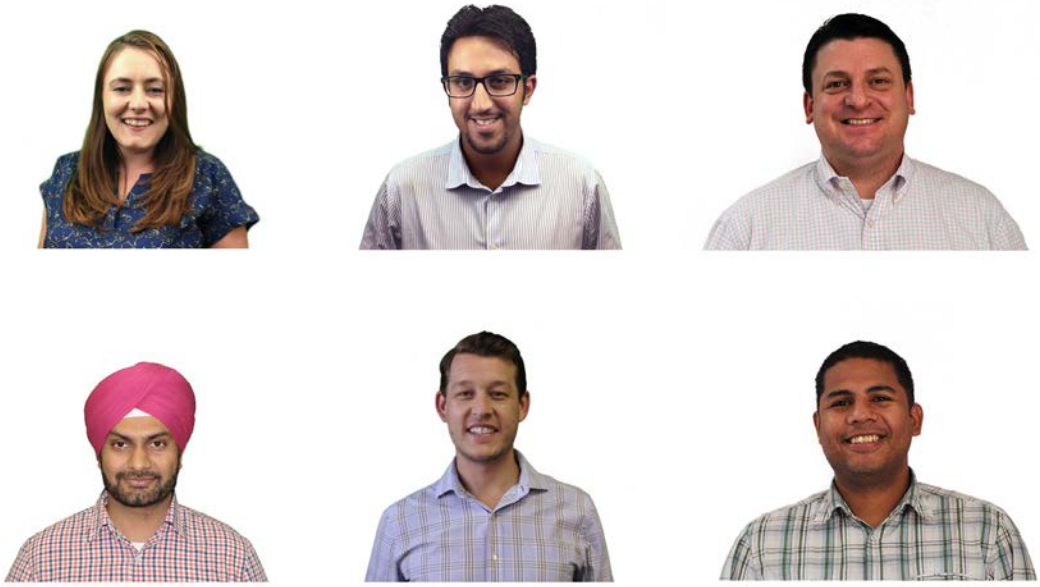
This page shows how the new intranet allows users to comment on articles and connect with the writers, engaging them on particularly interesting or germane topics and contributing to a general discussion.

INTRANET TEAM

The Abt Associates AGI team (top row, left to right): Mary Harper, Mary Maguire, Mark Spranca, Albina Shekhtman, Cheryl Fries, and Cara Capizzi; (middle row, left to right): Frank Divita, Jessica Erbacher, Deborah Dangay, Danielle Hunt, Mauricio Poodts, and Beth Williams; (bottom row, left to right): Vanessa Martin, Allison Jung, and Rob Grimmett.



brightstarr

Brightstarr team members (top row, left to right): Emma Pinkerton, Kunaal Kapoor, and Kip Wagner; (bottom row, left to right); Kanwal Khipple, Glen Chambers, and Juan Larios.

GOVERNANCE

Ownership

The Corporate Communications, Reputational Capital, and Information Technology departments sponsor AGI.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Executive Sponsors	• Ultimately accountable for AGI and for defining and achieving the strategy
AGI Project Implementation Team	• Execute the AGI strategy
Governance Committee	• Make day-to-day decisions regarding changes and additions to AGI
Technical Support Team	• Site administrators, technology support staff, and others ensure that performance and availability goals are met
AGI Guides	• These AGI experts educate and empower staff members in how to use AGI to meet their unique goals

USERS

The site supports all internal users—from entry to C levels—in more than 40 countries worldwide and across the US. AGI enables global collaboration on projects and proposals, as well as collaboration with clients and partners. Staff everywhere can also access the latest company thinking on breakthrough methods and innovation.

DESIGN PROCESS AND USABILITY WORK

Design Approach

There were three initial activities that helped shape the AGI design:

1. An initial pilot (2011) of some aspects of the SharePoint collaboration components yielded the team's first set of use cases and personas.
2. In 2012, the team conducted a focused feedback-gathering exercise globally, helping to refine the use cases and personas.
3. In the fall of 2012, the internal team engaged BrightStarr to do the intranet design and build. BrightStarr also finalized the use cases and personas.

Engaging Users

Before starting the Abt project, the BrightStarr team decided on a rough selection of workshops and activities that would yield sufficient data points to inform the project. As Emma Pinkerton, Lead Business Analyst, BrightStarr, explains, "These included 'gamestorming' activities like Speedboat (which determines pain points), Post the Path (mapping user activities), User Personas (to create empathy and process understanding, as well as uncover additional pain points), and functionality

workshops, where we dig into the hardware and practical requirements of each department."

These activities provided crucial information about the participants' goals, frustrations, and expectations regarding intranet use.

BrightStarr team members also arranged for an on-site series of week-long workshops and additional follow-ups with Abt employees as necessary for clarification and design/wireframe feedback.

Once they had attained a solid base of information to help them understand the user problems and goals, they sorted attendees into user groups, each representing a particular department and function.

"This [was] our way to get everybody in the room to air their laundry," says Pinkerton. "We get all the complaints and frustrations out of the way to create that future in a positive way, and get a clear sense of their goals and expectations."

"In addition," she says, "we were able to benefit from having regular users from different parts of the company give their perspectives of what the other departments do or need to do, based on their own interactions with that department."

Once the researchers had established a research base, they used additional exercises to identify potential obstacles and use cases to determine the top tasks and relative importance of these tasks for the users.

What they found was that Abt users wanted to interact with their intranet and use it to work on projects or proposals, submit expenses and timesheets, and contribute to internal knowledge sites.

Research Drives Vision

The investment in user research paid off for the BrightStarr team, especially when it came to decisions about how best to implement a mobile strategy.

"Our research drastically changed how we approached the site," says Pinkerton. "For example, we were aware that the client wanted to put an emphasis on making it mobile friendly going in. While conducting research, we discovered that 60% of all Abt Global Intranet users—approximately 1,600 people, spread across 60 countries worldwide—who needed to access the site were doing so from mobile phones and tablets, in developing countries with limited hard-wired internet access, to do basic functions of their jobs."

These users help local states and governments with international health and economic growth problems, such as Malaria and HIV/AIDS prevention efforts and efforts to help farmers increase their crop yields.

"That meant that we had to approach design and architecture in a completely different fashion than any normal intranet project," Pinkerton says.

These users had to be able to access and interact with every facet of the normal site, and to do so in limited data areas. They also needed the new site to be future-proofed: it couldn't be a device-targeted site specific to iPhones, iPads, or Android phones with a specific screen size.

"We had to ensure that it had true responsive design," says Pinkerton.

The team wanted the user groups to determine the best, most logical steps involved in performing a task.

"We didn't want our architect to go in and organize content in ways that made sense to us," says Pinkerton, "we wanted it to be intuitive and logical to the everyday users.

"We talked to the Abt users about what each project meant to them, and how they organized their content," she says. "We gauged their mental model to figure out how they expected things to come together and mapped that experience for each user persona. Once we'd done that, we started to construct low-fidelity wireframes to demonstrate usability, tangibly map key tasks to content, and have a more concrete way of interpreting the system."

In addition, team members used Notable (a program that allows multiple users to provide targeted, image-based feedback) to solicit additional input on the proposed design concepts. After confirming the provisional layout and IA, they made a high-fidelity interactive prototype using Axure.

Abt used this prototype to get a strong idea of how the site functioned in a practical setting. The BrightStarr team then conducted performance tests, using an application that tracks user behaviors and reactions as they attempt to find/access parts of the website.

The overall result of this research-based approach is a highly functional site that most of Abt's field employees can access in a way that allows them to educate and communicate with their co-workers.

TIMELINE

PROJECT TIMELINE	
Milestone Date	**Milestone Description**
2005	• First company intranet (AbtNet)
2011–2012	• AGI pilots
October 2012–April 2013	• Phase 1: design, build, and launch of AGI
May 2013–March 2014	• Phase 2: optimization and enhancement

CONTENT AND CONTENT CONTRIBUTORS

Content for AGI is created, implemented, and maintained by Content Directors — subject-matter experts who have been nominated to be responsible for a specific group or category of content on AGI. Content Directors are trained in SharePoint and collaborate regularly with the Corporate Communications and Reputational Capital departments about Abt standards for content management. Currently, there are more than 20 Content Directors across the company who review page content and documents with their immediate supervisors or with key subject-matter stakeholders. The Corporate COM sponsors regular meetings with the Content Directors to discuss AGI project progress and related editorial processes and standards. The Corporate IT team provides in-person content management training workshops on how to update AGI content effectively.

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Design Tools	• Visual Studio 2012, SharePoint Designer 2013
Site Building Tools	• Metalogix (for management and migration)
Content Management Tools	• Metalogix, SharePoint Designer
Search	• SharePoint 2013 Enterprise Search for Office 365
Other Functions	• Responsive intranet for internal consumption, and collaborate workspaces for projects and team members

MOBILE

The intranet's fully responsive, user-centric design was created with the Office 365 SharePoint 2013 and lets any mobile or tablet user access full site functionality wherever they can get mobile access, saving time and money for the organization's clients. The site is most frequently accessed through iPads and iPhones.

BrightStarr integrated the responsive web design using style sheets and responsive queries. The solution is device-targeted, meaning that the site adjusts itself based on whether it's being accessed by a desktop or an iPhone, but it does not use device channels[2]; the version users see on mobile devices contains all of the intranet's features and information.

To achieve this, the solution resizes the page based on the accessing device, ensuring that it isn't device-specific and thus can be considered "futureproof." The site offers full mobile functionality to any mobile or tablet device currently on the market, as well as devices yet to be released.

The mobile responsive design is optimized for use by Abt's approximately 1,600 field agents. These users can access the site via mobile intranet connections in developing countries on their tablets and phones, rather than having to use hard-wired Ethernet.

Cellular coverage in many countries in which Abt does business is more reliable than wireline. In many instances, it's the only conduit of communication. "With our years of doing business in these countries, we are proficient at leveraging multiple technologies to deliver a reliable user experience," says Mary Harper, Chief Information Officer, Abt. "Technologies like caching, network optimization and alternative power sources for when power supplies go down have enabled us to succeed with AGI."

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2 A *device channel* is part of the SharePoint 2013 publishing infrastructure and lets designers render certain site content, style the content, and even change images — all while maintaining the same URL across a pool of different devices.

The lessons learned from operating in remote locations informed the mobile approach to the new site.

As a result, the solution is lightweight and designed with a minimum of unique images and templates to accommodate users' specific data usage requirements and provide maximum functionality. Mobile users must be able to work on projects, access documents, submit time sheets, edit pages, add items to calendars and task lists, and contribute to conversations on the site. The *Quick Launch* feature gives mobile users immediate and easy access to common tasks without forcing them to search the site, while user profiles offer one convenient log-on, so they don't have to worry about logging in repeatedly throughout the site.

SEARCH

Search was implemented using SharePoint Enterprise Search for Office 365.

The AGI team wanted to define scopes of data, such as documents, reports, and projects; SharePoint Search let them achieve most of their search requirements, within budget and on time.

RESULTS AND ROI

Seeing Results

The new intranet is a place where the company's 2,700 employees in 60 countries can learn and collaborate, do their work, and leverage resources like never before. Because AGI is designed for mobile, it allows staff members to access information they need from any location. They can complete a timesheet standing in an agricultural field in Mozambique or do it at home at the end of a day. Also, the homepage's real-time activity feed makes it easy for staff members to stay informed about what's happening in the company.

"AGI is like getting a brain boost for our global company," says Jay L. Knott, Executive Vice President & Chief Business Officer. "It brings us much closer to having a seamless web of knowledge, communication, and collaboration across Abt Associates. AGI allows us to put the full force of the breadth and depth of our staff worldwide toward solving the biggest challenges to improving people's lives."

For example, the new *Today I Learned* feature lets the company's global staff members share, in their own words, best practices, lessons learned, and insights that can benefit colleagues worldwide.

This feature was created in response to employees' expressed desire to connect with each other and learn more about each other's work. And it's making a difference.

"It's a way to bump into each other in a virtual hallway for a conversation across divisions, countries, and continents," says Cheryl Fries, Senior Knowledge Management Specialist, Abt. "It's our own social network. It's prominently featured on the AGI homepage."

Also, the site fully supports the company's learning culture, offering easy access to knowledge resources and communities where experts can share methods and create instant discussions with dynamic workspaces.

LESSONS LEARNED

Abt team members share lessons learned:

- **Think about mobile first, not as an afterthought.** "Adopting a 'mobile first' philosophy was critical for our success with AGI. Thinking mobile first means designing and building technologies first for mobile formats instead of mobile as an afterthought. We found that, in order to achieve mobile first, it meant changing the mindset of our teams and developing capabilities in other areas critical to our success with mobile. For example, establishing a clear mobile device policy, readying other third-party software tools to be accessed via AGI, and building a support ecosystem required in a mobile enterprise." (Harper)
- **Plan for success.** "Upon rollout, the demand for workspaces on AGI grew much faster than expected. In response, we have augmented staff to better meet demand, and at the same time increased communication and transparency as to the logic behind how we are prioritizing the load." (Spranca)
- **User engagement will yield results.** "Employee engagement was important for a successful launch of AGI. We hosted 'AGI Cafes,' which were a friendly, informal environment where staff could learn about using AGI. Over 20 well-attended cafes featured excellent coffee and staff who functioned as 'AGI Guides,' who demonstrated key functionality and features informed by the use cases. Mobile devices and other formats were available at stations to give staff a hands-on opportunity to learn. One of the most popular stations was the AGI photo booth, where staff could have a photo taken and uploaded to their profile, on-the-spot." (Grimmett)

Mayo Clinic

Using the intranet: As the first and largest integrated, not-for-profit group practice in the world, Mayo Clinic has physicians, scientists, and researchers from every medical specialty. Working together in teams, knowledgeable professionals diagnose and treat more than a million patients each year from all walks of life, from every US state and nations worldwide.

Headquarters: Rochester, Minnesota

Number of employees the intranet supports: 4,100 physicians and scientists; 3,450 medical residents, fellows, and students; and approximately 53,600 administrative and allied health staff, for a total of 61,150.

Locations where users use the intranet: Minnesota, Arizona, Florida

Annual sales: $8,843 million in total revenue, gains, and other support, with 1,165,000 clinic patients served (year ending 2012).

Design team: The Intranet Shared Services Unit comprised the core in-house team of 16 people.

Intranet Shared Services Unit: Donna Blade, Production Coordinator; Josh Brule, Analyst/Programmer; Nik Coates, Lead Analyst/Programmer; Dawn Daehn, Analyst/Programmer; Monty Flinsch, Systems Analyst II; Deborah Grover, Systems Analyst II; Craig Hobson, Associate UX Designer; Richard Hurt Jr., Systems Analyst II; Sumathi Jayakumar, UX Manager; Jane Jacobs, Unit Head; Gianna LaPin, Senior UI/UX Designer; EleAnn Mulholland, Project Manager; Jonathan Schelander-Pugh, Production II; John Schultz, UX Designer; Terry Smoley, Senior Analyst/Programmer; Mary Uhlir, Media Systems Analyst

Video streaming team: Jodie Bartz, Digital Media Producer; Ryan Hegge, Digital Media Producer; Mark McGlinch, Senior Digital Media Producer

SUMMARY

If you can't find information on an intranet, it may as well not be there. Designers at the Mayo Clinic used constraints to their advantage to create a system that exceeds the expectations and makes it possible for physicians, scientists, students, and staff alike to find all the information they need.

Because many staff computers are located in patient-care environments, privacy is a great concern. So, these computers are reimaged every two weeks to comply with data security policies. This means that intranet designers couldn't rely on bookmarks, cookies, or search history to make it easier for people to find information. Team members, however, used their creativity to come up with a few specific ways to still make content easy to find. Examples include

- Offering powerful site search and strategically selected and positioned local search capabilities
- Placing the most popular tools in visible areas, such as the homepage, and on specific departmental pages
- Providing a simple, persistent IA

Knowing that the intranet's homepage was set to be the browser default on every new computer, designers created a left-side navigation that includes high-level clinical and administrative tools that many employees frequently use. Although this placement uses a piece of prime homepage real estate, it was a smart, strategic move. The homepage offers these high-level tools, plus a wide variety of information and other tools—from an events calendar to news, status, weather, and suggested websites—without being cluttered.

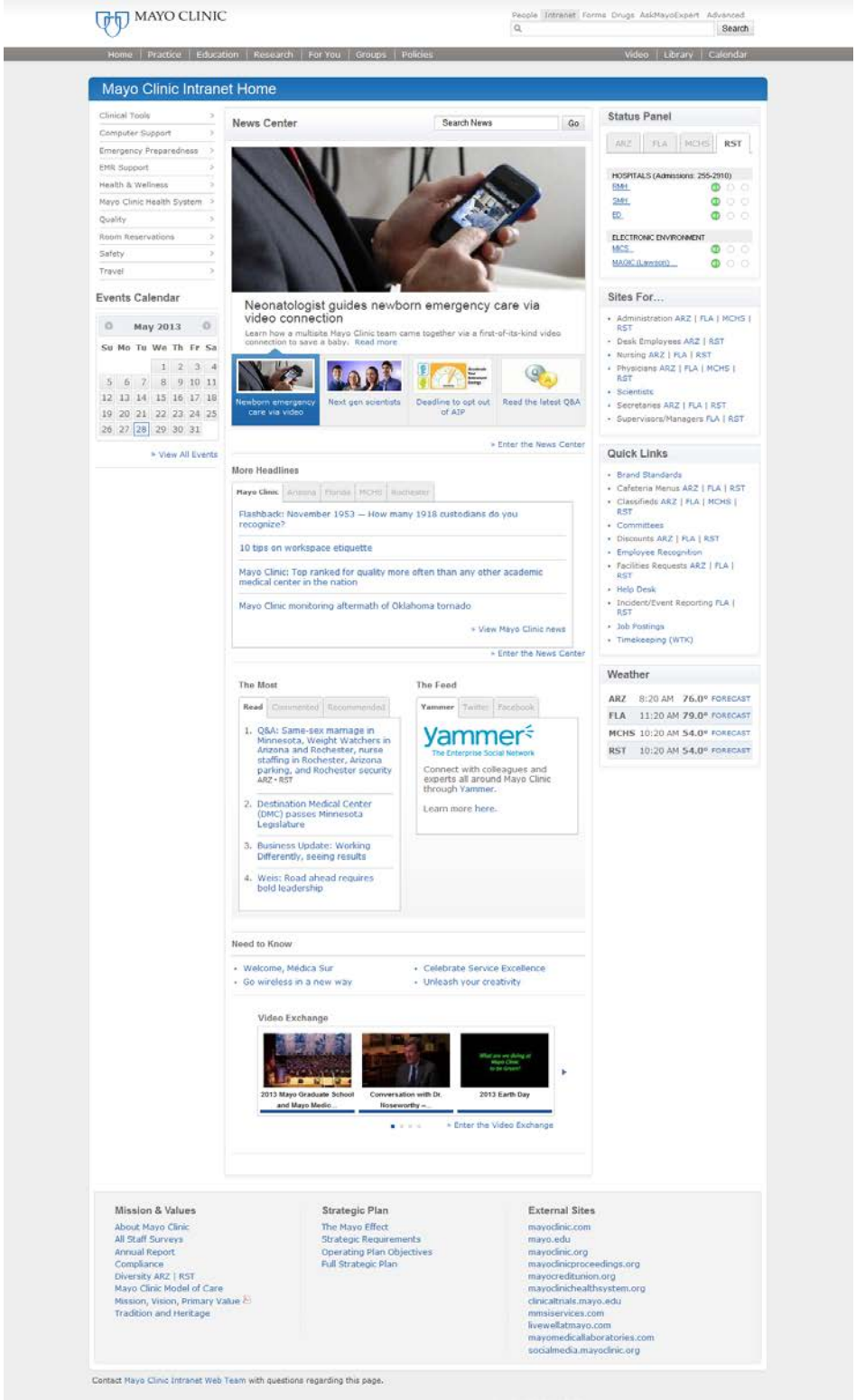
The *Status Panel* on the right offers real-time status information, such as whether the hospital is at capacity or the electronic medical record system is experiencing delays; this information is critical to various job roles. Further, if there is an outage

or impairment, the *Status Panel* provides links to back-up information and instructions for accomplishing critical tasks.

Employee Communication specialists who serve on the editorial team parse the news on the homepage in various ways to help employees find what they want. The carousel at the top displays four important news items. Each is easily decipherable in the carousel's navigation, with clear, good-sized images and accompanying headline text.

In the middle of the homepage, news headlines are sorted by physical location, using static tabs for Mayo Clinic locations. *The Most* section offers tabs for *Read*, *Commented*, and *Recommended.* To the right, *The Feed* brings social networks into the fold with tabs for Yammer, Twitter, and Facebook. *Need to Know* displays a few announcements, and the *Video Exchange* section displays the most recent videos posted.

The search function at the top of pages allows users to scope the search by common areas. *Intranet* is the default selection, as it is the most commonly needed search function. Next come choices for *People*, *Forms*, *Drugs*, and *Advanced.*



The Mayo Clinic's intranet homepage links to necessary applications and offers news that's easy to process.

The Mayo Clinic intranet also lets employees effectively use video to communicate with, teach, and motivate one another. Although this capability was available on the intranet in 2011, videos were not easy to find. After thorough research and the intranet redesign, the *Video Exchange* was born. Sometimes referred to as *Mayo's YouTube*, this area offers live streaming capabilities and houses videos of events such as award ceremonies, lecture series, guest speaker presentations, and purchased training material. The Video Streaming team works to maintain this system, which hosts more than 20,000 videos and offers a simple interface so people can find what they're looking for.

The navigation at the top suggests *Featured* videos that are current and important to the organization. Other links—*Programs, Live,* and *Library*—allow people to find particular shows, events streaming live, and a set of categorized videos. The search field within the *Video Exchange* enables people to find current videos and events, as well as an archive of past programs and events. This local search is clearly separated from the site search because it is positioned within the content area and below the heading *Video Exchange.* Additionally, the main site search appears just pixels above it; this proximity makes the two searches easy to differentiate.

A featured video consumes a large portion of the *Video Exchange*'s main page and is accompanied by its title and date. The controls beneath the video display its length, which is always helpful for users to set expectations and help them decided if and when they want to watch longer pieces.

Below the hero video are additional videos from the news area and featured videos. Each is accompanied by a title and duration. The filmstrip UI elements display arrows before and after a set of visible videos. These arrows indicate to users that there are more videos available in the set. Additionally, each shaded rectangle represents a full set of videos in the carousel.

MAYO CLINIC

People | Intranet | Forms | Drugs | AskMayoExpert | Advanced

Search

Home | Practice | Education | Research | For You | Groups | Policies | Video | Library | Calendar

Video Exchange

FEATURED | PROGRAMS | LIVE | LIBRARY | Search

00:00:00 / 00:25:03

2013 Mayo Graduate School and Mayo Medical School Commencement Speech – Tom Brokaw

May 18, 2013

From the News Center (45)

2013 Mayo Graduate School and Mayo Medical School Commencement Speech – Tom Brokaw
May 18, 2013
Duration: 00:25:03.1

Conversation with Dr. Noseworthy – May 2013
Duration: 00:09:24.8

2013 Earth Day
What are we doing at Mayo Clinic to be green?
Duration: 99:59:59

Florida All-Employee Meeting - April 15, 2013
John Noseworthy, MD
Duration: 00:54:08.6

Featured Videos (38)

2013 Mayo Graduate School and Mayo Medical School Commencement Speech – Tom Brokaw
May 18, 2013
Duration: 00:25:03.1

All Supervisors Meeting - May 15, 2013
Duration: 01:02:00.5

Quarterly Administrative Update - May 14, 2013
Shirley Weis
Duration: 01:04:05.6

Conversation with Dr. Noseworthy – May 2013
Duration: 00:09:24.8

Contact Digital Media at 8-7203.

The Mayo Clinic's intranet has more than 20,000 videos; individual titles are easy to find through the video categories or the *Video Exchange* search feature.

Finding people is easy via the site search capabilities at the top of each page and through the *Mayo Clinic Directory.* Users can search for people by name, institutional committees, and advanced capabilities. Once on an employee profile page, users can find lots of information about co-workers, including contact information and their committees and appointments. This wealth of data is maintained by the dedicated Directory & Reference Publications team.

MAYO CLINIC

People | Intranet | Forms | Drugs | Advanced

Search

Home | Practice | Education | Research | For You | Groups | Policies | Video | Library | Calendar

Mayo Clinic Directory - Person Detail

Find a Person or Institutional Committee | Favorites | Request a Change | View Reference Pages

People | Institutional Committees | Advanced >>

jaya | first | phone or pager | All | Search | Clear | Phone Format: Internal

Portrait: Jul 2010

View Access Card

Kenneth J. Trent, M.D.

Professor of Neurology,
College of Medicine

Title: Physician
Unit: Physician Enterprise
Appointment Category: Consultant (Cons)

Appointment: Neurology (N)

Identifiers [hide]
LAN ID: nhj837
RACF ID: jndk3993h
Person ID: 4777532
Employee ID: 47754211

Contact Information
ken.t@mayoclinic.edu
Administrator: Darcy Skone
Campus: Rochester, Minnesota
Mail: MAYO_3_NEURO

Location Information [hide]

Mail Location
Kenneth J. Trent, M.D.
RST — Physician Enterprise - C
Mayo Building

Tip: try exploring the Title, Unit and Supervisor links.

Work Area	Phone/Pager
Administration RST — Mayo	127 or (77)3-4790
Administrative Assistant	(77) 4-8616
Neurology RST — Mayo	127 or (77)7-9034
Medical Secretary	(77) 6-4148
Clinical Assistant	(77) 1-5104
Appointments	(77) 1-0398

Tip: move mouse over phone or pager icon for more information.

Institutional Committee Appointments [hide]

Board of Trustees	President and CEO	MC
Diversity and Inclusion Oversight Committee	Chair	MC
Executive Operations Team	Chair	RO
Finance Committee	Ex-officio	RO
Management Team	Chair	MC
Mayo Clinic Board of Governors	Chair	MC
Mayo Clinic Corporate Officers	President and CEO	MC
Mayo Clinic Government Relations Committee		MC

FAQ • To request a change, contact the Directory office. Last updated: 22-Apr-2013.

Feedback. How are we doing?

The employee profile pages on the Mayo Clinic intranet offer a lot of information, including contact information and committees and appointments.

Departments have their own sections on the intranet, so employees working in those areas can easily find pertinent information. Each clinical department follows the same template, making it easy for developers to create and users to move between areas.

The intranet's clinical departments provide horizontal content navigation below the horizontal site navigation, with contextual navigation on the left. This gives users access to the main site pages, as well as to the navigation within their own departments. The news that's covered on the department's main section page includes messages from leaders, department-specific news, the *Spotlight* on various initiatives, and a top-stories feed from the institutional *News Center*.

For getting work done, the page offers links to strategy information, a role-based gateway of links, links to clinical tools, frequently used links and bookmarks, and a local search function specifically for the department area.

MAYO CLINIC

People | Intranet | Forms | Drugs | AskMayoExpert | Advanced

Search

Home | Practice | Education | Research | For You | Groups | Policies | Video | Library | Calendar

Thoracic Surgery

Search this site

Our Division Home | Schedules | Policies, Procedures and Protocols | Clinical Practice | Education | Research | Administration

Thoracic Surgery

- Home
- Committees
- Staff Directory
- Quality
- Practice Management
- Forms
- Quick Links

News Center
TOP HEADLINES

- Quick response and teamwork
- Expanded access to patient education
- A holiday from hunger in Rochester

VIEW MORE HEADLINES

Home

Safety

Patient safety initiatives

- Hand Hygiene
- Medication reconciliation
- Sentinal event management
- Teamwork
- Universal protocol

SBAR

Spotlight

Coverage Changes

Francis 5C Updates

Gateway

All | Consultants | NP/PAs, Residents, Fellows | Nursing | Clinical Support

- Accreditation Readiness Pocket Resource
- CME Link
- Department of Surgery on the Intranet

News and Announcements

Welcome Kelly Hangge PA-C. She will be Dr. Wigle's primary PA.

Lisa Barnes PA-C has transitioned to the role of the hospitalist.

Congratulations Sarah Wilhelmson CNP on the birth of her son, Owen Henry on September 24, 2012

New home oxygen requirements (June 2012)

Ordering PFTs late in the day for next day surgery (June 2012)

Upcoming practice changes in Thoracic Radiology

Resident duty hour requirements

Clinical Tools

- Esophageal Cancer Staging
- Lung Cancer Staging
- Esophagectomy pathway
- Lobectomy/Wedge pathway
- VATS lobectomy pathway (Drs. Cassivi, Deschamps and Wigle)

Help Feedback

Leadership Message

- Strategic Plan
- Mission / Vision

- DOS Emergency Preparedness
- Formulary
- Patient Education
- On-call Directory

AskMayoExpert

Search

2013

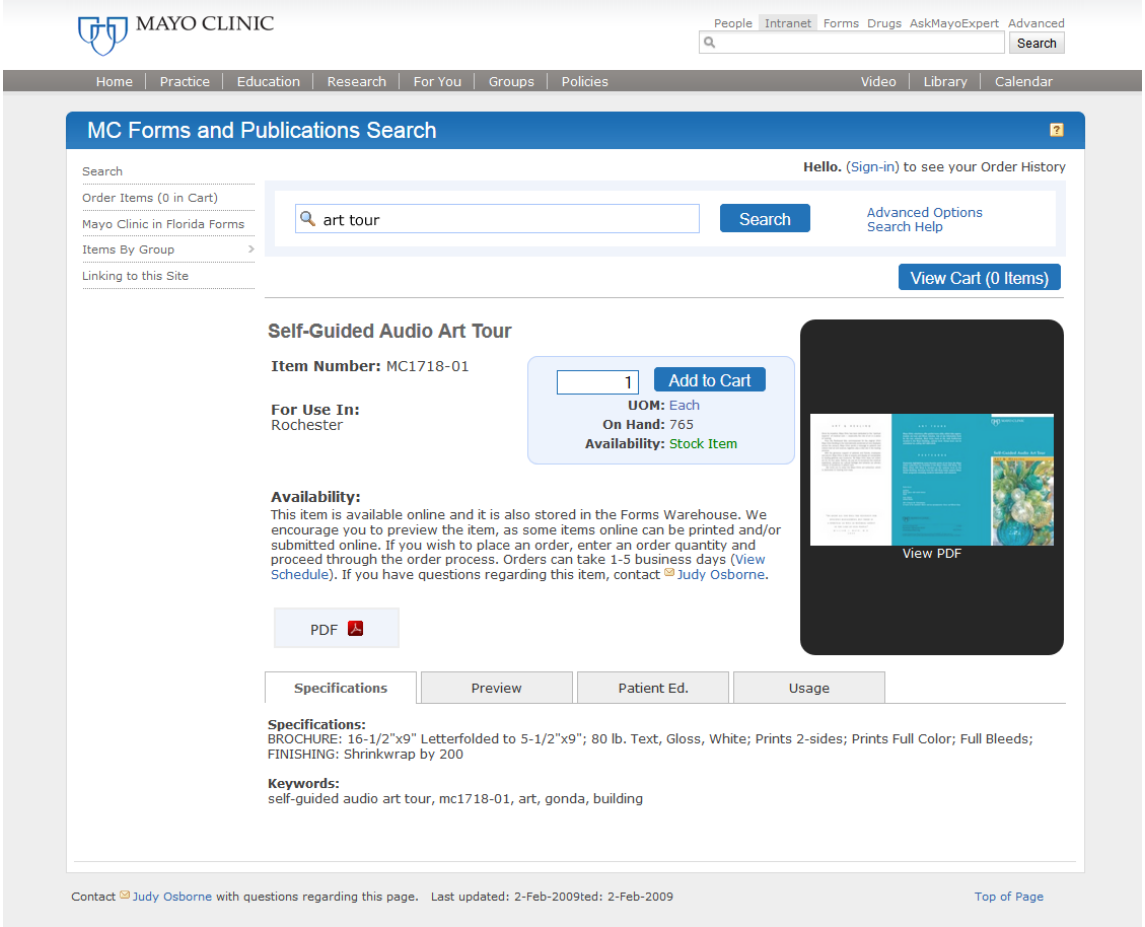
June

View Thoracic Surgery calendar

Contact Cathy Wemhoff, (77)4-2644, with questions regarding this page. Last updated: 21-Mar-2013

Departments have their own intranet section, so people working in those areas can easily find pertinent information.

In addition to making it easy to find people, news, and departmental information, the Mayo Clinic intranet helps people find forms and documents using the *Forms and Publications Search.* This local search includes digital as well as paper-based documents. Any employee can search and access the metadata, preview a PDF, or order a print piece. The left navigation includes links for search, ordering, and browsing by group.



Employees can search for forms and documents—printed or electronic—on the Mayo Clinic intranet.

When planning the intranet redesign, team members truly researched the organization's employees. To make the information they learned understandable, memorable, and accessible, they decided to create personas. These personas helped increase awareness about the different people, tasks, tools, bottlenecks, and challenges employees were facing. Team members used these personas to remind themselves about the users and—more important—to share an understanding and focus about the people they were designing the intranet for. Personas enabled them to make sound, confident design decisions.

Each persona is thorough and includes details about the persona's job, goals, workflows, schedule, workspace, and computer.

Anyone in the institution can use and access the library of personas. Indeed, they have been used effectively in situations beyond the intranet design, including helping to mitigate a conflict between management and front-line desk staff over new regulations for attire.

MAYO CLINIC

People | Intranet | Forms | Drugs | AskMayoExpert | Advanced

Search

Home | Practice | Education | Research | For You | Groups | Policies | Video | Library | Calendar

Employee Personas

search this site

- Home
- Value of Personas
- Persona Library
  - Find a Persona
- Persona Creation
- For More Information

News Center
TOP HEADLINES

- Honoring great gifts
- Population Health Management
- Cannaday Family Medicine in Florida

VIEW MORE HEADLINES

Tonya - Physical/Occupational therapist

At a glance

Age	42	**Gender**	Female
Years at Mayo Clinic	11	**Patient facing**	75%
Years in current role	11	**Hard to keep up with information**	Moderately
Interest in institutional information	Medium to High		

"I help patients gain function to live their lives."

Job overview

Tonya helps patients with chronic and acute physical injuries or conditions. She collaborates with other healthcare providers to develop a treatment plan that will help the patient gain strength and relearn how to do daily activities, such as brushing his/her teeth and getting dressed. Physical and occupational therapists often work together to make sure they are working toward the same goals with a patient and will sometimes share sessions.

Not only does Tonya do consults, develop therapy plans and teach patients how to do exercises, but she's also a motivator and tries to convince patients that although it may be painful, there is an advantage to doing the recommended exercises.

Tonya loves her job and finds a lot of satisfaction in helping others get better.

Typical job titles

- Physical therapist
- Occupational therapist

Additional duties

Tonya helps train students, works on patient education materials, participates in research activities and is involved with committees and projects associated with occupational and physical therapy.

Tonya's main goals

- Tonya wants to be the best therapist she can be
- She wants to continue to learn so she can remain up to date on the latest therapy techniques
- Tonya wants a job with good work-life balance so she can also be a great mother

Daily Life | Psycho/Emotional | Use of Information | Use of Technology | Relationships

Major workflow

Tonya gathers her list of patients to see in the morning. Some patients will have scheduled therapy time (typically patients in the outpatient area) while others will just need to be seen by the end of the day (typically patients in the hospital) and she fits them in between her scheduled patients. She occasionally does rounds with other members of patient care teams in the morning, and works with patients the rest of the day. Because she works in multiple areas, she is constantly on the go, running between various hospital floors and the clinic.

She typically tries to do documentation and therapy planning throughout the day and during lunch but often finds herself doing the bulk of it at the end of the day. Therapy services are billed to patients, so throughout the day, Tonya also has to keep track of her productive time.

Schedule

Her day is fully scheduled. She primarily works 8 a.m. to 5 p.m., Monday through Friday. She also works one weekend every four to five weeks.

Workspace

She has a cubicle and shares a workspace with her colleagues.

Computer

She uses a shared computer for most of the day, but she does have her own computer in a work space shared with other therapists.

How Tonya stays organized

- The list she receives each morning with her patient appointments for the day
- Printed referrals from the medical record
- Uses a paper list to make notes about patients and checklists

Main forms of communication

- Face to face
- Phone
- Email
- Pager

Contact Gianna LaPin with questions regarding this page. Last updated: 19-Jan-2012

When planning any new project, the Mayo Clinic intranet design team uses personas to increase awareness about the different people, tasks, tools, bottlenecks, and challenges employees were facing.

Persona-driven UX development helped the Mayo Clinic's intranet team members understand and focus on the various types of people they were designing for and thereby derive a great intranet, which makes everything searchable and findable.

BACKGROUND

Mayo Clinic's intranet is the primary tool for employee communication, as well as the gateway to multiple areas of the clinical practice. However, it wasn't always a tidy model of order and discipline. The intranet has evolved from an academic "Wild West" model to a loosely coordinated system that features centralized management of the publishing platform(s), templates/themes, user research and design, and best practices alongside a decentralized authorship model.

Being flexible while maintaining structure is not always an easy charge. "The overall goal for the intranet," says Jane Jacobs, Unit Head, "is for it to realize its potential as a critical business and communication tool that allows for needed variance within a multidisciplinary clinical, education, and research environment, while it provides a level of consistency that allows employees from many disciplines to interact effectively with each other."

The organization's intranet team is a small, multidisciplinary group that does its best to strike this balance. It provides best practices and consistency through influence rather than control.

Goals

The driving force behind the new site is the ever-increasing need for it to be a flexible, reliable, and easy-to-use web publishing tool to support its primary audience in direct patient care. Additional intranet goals are to:

- Provide a universal framework for presenting web-based content on the intranet
- Decrease the time required to build and maintain intranet sites
- Decrease the amount of outdated content on the intranet
- Increase the ability to find content
- Increase overall user, author, and editor satisfaction

Challenges

As with all large organizations, competition for resources can be intense. As a team of 16 supporting more than 6,000 individual authors, prioritization is an ongoing challenge, as is maintaining a standardized set of functionality. Another challenge is in training and technical support: approximately 98% of the 6,000 authors have no experience in web authoring or production.

The current integrated intranet homepage has many features. Those features include (from left to right): the left nav stack's high-level clinical/administrative tools; *Events Calendar*; featured *News Center* articles; more headlines sorted by physical location; *The Most* (read/commented/recommended) and *The Feed* (social network feeds); selected operational headlines; the most recent additions to the *Video Exchange* portal; enterprise status panel (for hospital admissions and electronic systems); links for role-based sites; operational links that cut across all roles; and current time and weather information.

MAYO CLINIC

Mayo | People | Forms | Drugs | more advanced

search

Mayo Clinic | Arizona | Florida | Rochester | Mayo Health System

Library Calendar

Practice Education Research Groups Policies

creating the FUTURE

Now on Let's Talk
Stephen Swensen, M.D., and James Dilling talk about their vision for Quality in Mayo's future

Creating the Future
Mayo Clinic's strategic plan

- Quality
- Science of Health Care Delivery
- Individualized Medicine
- Integration
- Administration

Let's Talk

Quality Metrics

Mission & Values
- About Mayo Clinic
- Mayo Clinic Model of Care
- Rochester Strategic Plan
- Mayo Clinic Health Policy Center
- Compliance
- Diversity
- Tradition and Heritage
- 2006 Annual Report
- 2006 All Staff Survey

Quality
- Quality Metrics (Transparency)
- Accreditation
- Patient Satisfaction Data
- Practice Guidelines
- Genomics
- Quality Management Services

Safety
- Formulary
- Emergency Preparedness
- HIPAA
- Patient and Health Care
- Safety and Security

Service
- Service Essentials
- Service Excellence
- Patient Education
- Transcultural Resources

June 21, 2013

News from: Arizona Florida

Top News Stories

- Have questions about how to Fund Your Future?
- New vendor to operate city-provided bus service beginning July 2; no changes for Mayo in interim
- Next Arizona Town Hall Meeting to take place April 13
- What has Mayo Clinic learned at the Mall of America?
- Why I Volunteer for the Katie Ride and Walk for Life: Margie Wright

Spotlight

Roving Report
An informative and perhaps entertaining look inside the new Center for Innovation

Creating the Future in a Diverse World
Video from Mayo Clinic's second annual Diversity Conference now available on Let's Talk

It's not too late to get your flu shot
Flu season is almost here. Protect yourself, your family and those you care for by getting your flu shot, and earn 50 LiveWell points while you're at it.

New Travel Card coming in January
Don't throw it away! Sign, activate and begin using Feb. 1. Redeem GE rewards points ASAP.

Mayo Clinic Model of Care
Learn how you contribute to the Mayo experience

Get a look at this!
New campaign on Integrity and Compliance

Find out what Quality and Safety mean to you

Mayo Clinic Center for Innovation
Inspired by the past. Innovating for the future

Mayo Today Magazine
Your connection to people and happenings throughout the Mayo system

Blood Donor Center Online Appointment Scheduling
View the new online scheduling tool

The Campaign for Mayo Clinic
Comprehensive campaign will help Mayo Clinic create the future of medicine

Surgical Day = orange

Leadership Corner

Weis: Road ahead requires bold leadership May 22, 2013

Business Update: Working Differently, seeing results May 17, 2013

Conversation with Dr. Noseworthy – progress and focus May 8, 2013

Shirley Weis announces plans to retire at end of 2013 April 17, 2013

ARZ	8:04am	86°	forecast
FLA	10:04am	83°	forecast
RST	9:04am	64°	forecast

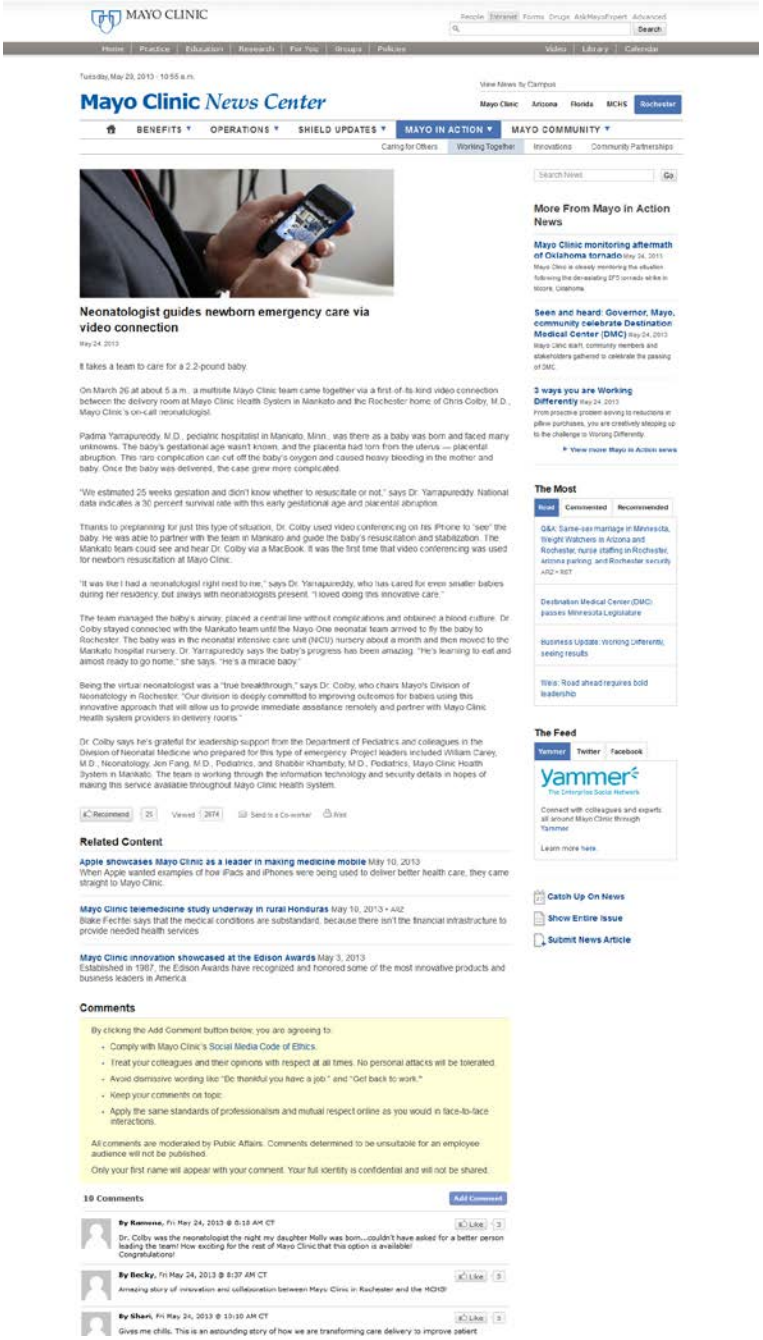
Home pages for...
- Desk Employees
- New Employees
- Nurses
- Nurse Practitioners & Physician Assistants
- Physicians
- Secretaries
- Supervisors

Bookmarks
- Brand Standards and Tools
- Cafeteria Menus
- Classifieds
- Committees
- Conference Board
- Dan Abraham Healthy Living Center
- LiveWell
- e-cards
- Help Desk
- Information Security
- Job Postings
- MICS
- Mayo Internet
- Micromedex
- Parking
- RE-AIMS
- Room Reservations
- Surgeon's Schedule
- Timecards
- Travel Management Services

Contact **Web Support** with questions regarding this page. Last updated: 10-Oct-2009

Top of Page

The old homepage (circa 2009). This homepage also had many features, including (from left to right): a leadership message; links to the strategic plan; links to a series transcripts for "fireside chats" produced by the then-current CEO; a link to *Quality Metrics*; more links to static "administrivia" (gray box); top five news stories; *Spotlight* news stories (rarely changed); more leadership messages; time and weather; links to role-based sites; and operational links of interest to some (but not all) roles in the organization.



The *News Center* is the central enterprise-wide employee communication vehicle. Readers have the opportunity to read further via dynamically generated links or engage in discussions via semi-anonymous comments.

INTRANET TEAM

The Mayo Clinic intranet team (back row, left to right): Josh Brule, Mary Uhlir, Ryan Hegge, Jane Jacobs, Richard Hurt Jr., Sumathi Jayakumar, Donna Blade, Jodie Bartz, and Nik Coates; (front row, left to right): Jonathan Schelander-Pugh, EleAnn Mulholland, Dawn Daehn, Monty Flinsch, Craig Hobson, Terry Smoley, Gianna LaPin, John Schultz, and Mark McGlinch; (inset): Deborah Grover.

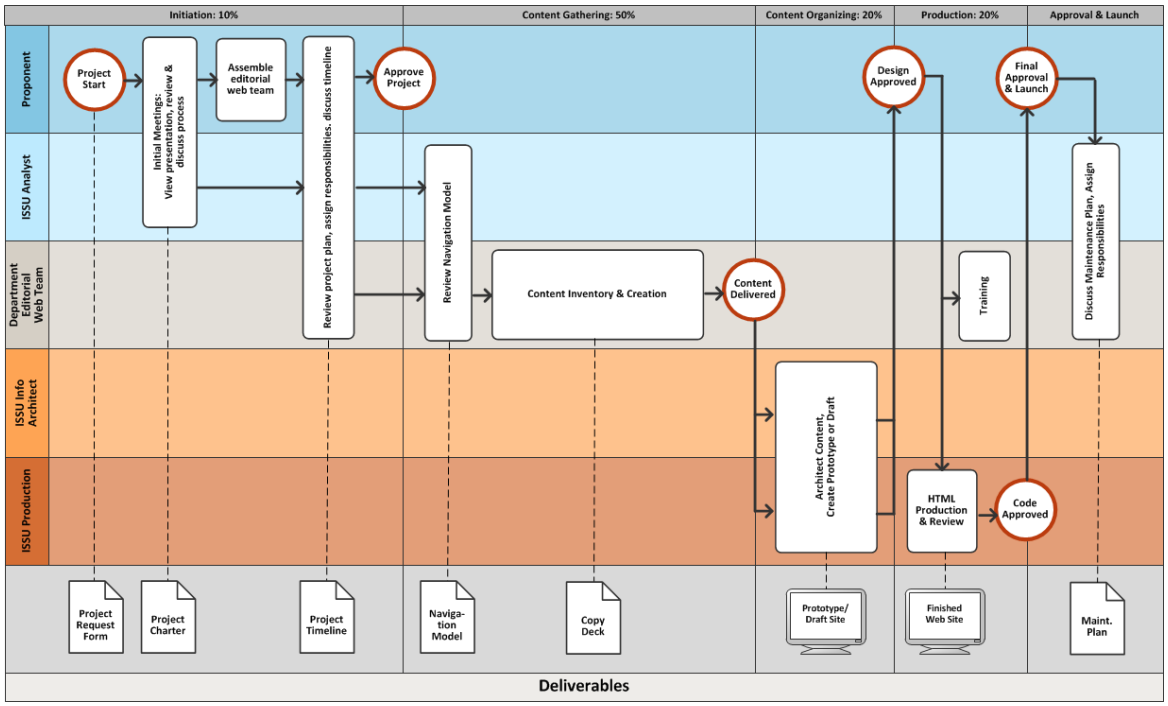
GOVERNANCE

Ownership

Like its practice, the Mayo Clinic's intranet is governed in a consensus model and influenced through persuasion rather than enforcement. There is not a single "owner" for the intranet; it is a shared, community property.

Although there is no formal oversight body, the Intranet Shared Services Unit (ISSU), which is part of the Division of Media Support Services, provides support for the institutional publishing platform (WordPress and Adobe Contribute), as well as best practices and user research/design. Broad support for the hardware and infrastructure is provided by the Information Technology Department. Publishing platform support, user research and design, business analysis, and template/theme management is provided by the intranet team in Media Support Services. Content is created, managed, and owned by each individual author and/or group that requests and maintains an intranet site.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Intranet Shared Services Unit	• Maintain institutional publishing toolset (WordPress) • Provide project management, analysis, and UX services for intranet-related projects • Serve as product manager for WordPress, Contribute, and Google Search Appliance
Information Technology	• Provide infrastructure support
Learning Technologies and Training Solutions (LTTS)	• This internal employee education group works with ISSU to develop curriculum and provide instructors for classroom training courses and workshops
Individual Site Owners/Editors	• Provide content specific to their area(s) of expertise
Public Affairs	• Provide broad oversight for institutional and leadership communications



A key component of the Clinical Intranet Standards program was the development of an easy-to-understand workflow that communicated the nature of the relationship between the proponent and ISSU. It was important to show the customer exactly how much of the project was his/her responsibility. This chart shows role-based swimlanes, key deliverables, and dependencies. Managing expectations—especially with regards to who did what during the redesign process—was important to ensure deadlines were met and that a useful product was ultimately constructed.

USERS

Five different persona groups currently use the Mayo Clinic intranet:

- **Clinical:** physicians, surgeons, nurses, residents/fellows, dietitians, and clinical assistants
- **Educational:** education directors, education coordinators, faculty, and medical students
- **Research:** research scientists, research technologists, research study coordinators, and research fellows
- **Lab:** lab technicians, assistants, and technologists
- **Administrative Support Services:** administrators, business analysts, IT analysts, housekeepers/janitors, and administrative assistants

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	• http://mayoweb.mayo.edu
Default Status	• The site is set as default Internet Explorer homepage on all new PCs; users may change this setting if they choose.
Remote Access	• Users can access all firewalled URLs when using VPN access. Remote access must be requested from Mayo IT and approved by the employee's supervisor; hourly employees are generally not allowed remote access due to timekeeping issues.
Shared Workstations	• PCs configured for patient care activities are set up as a shared Electronic Environment Device (EED) and are primarily deployed in clinical settings. EEDs are pre-configured with all necessary medical record programs and have limited configuration abilities. EEDs are automatically re-imaged every two weeks, which prevents users from saving personal bookmarks or files on the computers.

DESIGN PROCESS AND USABILITY WORK

A Scrappy Design Approach

The best way to describe the Mayo Clinic's design approach might be to call it "scrappy." The team doesn't let being small get in the way of producing useful, actionable results. Making the most of what it has to work with has become sort of an art form for this team.

"We've had to get creative with our research activities," says Gianna LaPin, Senior UX/UI Designer, "learning how to get more done with less and making the whole process move much more quickly, yet still produce profound insights that result in highly successful outcomes."

The team's go-to research activities aren't all complicated or expensive; instead they tend to be grassroots and use simple tools.

"The methods we've used typically are things that are very low cost and can be accomplished with basic office supplies, a good vector drawing package (like Adobe Illustrator or OmniGraffle), and a skilled facilitator," says LaPin. "We tend to have more person-time than money to spend on a project, so if things take a little bit longer, or we have to work overtime to set it up, it's easier for us to accomplish it than to ask for money for a technological solution."

One recent example is when the team redesigned the Department of Nursing intranet site, where it was creating a new navigation model. "We created a paper prototype and took it around to various nursing work areas to try it out with potential users," she says. "The feedback we got from this exercise was extremely valuable and gave the team confidence to proceed with a complex new navigation strategy, which we'd never used before because we hadn't done such a large site. We were worried that users wouldn't understand it or like using it, but it was extremely gratifying to watch the nurses intuitively moving from one area to another without hesitation."

Many nursing employees are paid hourly, and getting them into the lab often requires them to come in on their day off to participate. By walking around in their work areas with paper, the team was able to catch users during those few minutes between tasks, which replicated the mindset that nurses are likely to be in while using the real website.

Another strategy is what LaPin calls "usability lite" exercises, in which the design team enlists the help of users to assist with the research. "I might ask customers to help tote AV equipment to presentations or take photos of artifacts found at a user's desk," says LaPin. "We really try to make them an equal member of the user research team. We also try to involve everyone in the design phase of a project. We do a lot of charts and drawings on whiteboards and flip charts, and hang them on the wall so everyone can see them and make comments and suggestions.

"This helps make them feel like they are valued members of the design team," she says. "Mayo Clinic is a big place, and our proponent colleagues hold a lot knowledge that I don't have. Plus, by including them, it shares both responsibility and ownership for the project's outcome. This team-based philosophy is one of Mayo Clinic's core values."

The team also makes good use of its "relationship network" to help achieve results beyond its means. LaPin says that the team has successfully formed relationships with key allies across the institution, including the Human Resources department, which helps tremendously with recruiting and employee demographic data, and Information Technology, which has provided a dedicated lab space and two full-time human factors researchers who assist in running in-person usability studies.

A key finding from the team's use of a variety of usability methods is that there is no magic bullet methodology. In fact, employing multiple research methods ensures better results.

"Each methodology has strengths and weaknesses," says LaPin. "I think the key thing we learned is that it's more important to do a few different studies for each project, instead of relying on one activity and assuming you've gained all the knowledge you can.

"Any amount of user research is better than none at all," she says, "but more is almost always better. I tell my customers to see it as an investment for both future projects and as a way of developing true empathy for our users, who we tend to forget are our fellow employees."

Until the last few years, insight into the organization's users has been limited by the fact that user research, if done at all, was frequently treated as a too-late-to-be-useful line item in a project plan. "This has started to change fairly recently," says LaPin, "thanks to the evangelizing of a small number of individuals, both in our unit and scattered throughout the institution. We've also had a change in leadership in a

few key departments and some mergers, which have better aligned skills and products with changing institutional needs; this has also helped turn the tide in favor of creating a user-centered-design culture.

"In the best case scenario," she says, "where we are part of the project team from the ground up, we try to spend a long time in the beginning doing as much investigation as possible. We try to identify and interview stakeholders as part of the project analysis phase, as well as do a business and technical requirements investigation before a project manager drafts up the project plan."

The ISSU UX team relies on low-cost user research methods to perform studies that are fast, yet carry high value. This photo is from a test done with a paper prototype for the Department of Nursing website.

The team's various research methods have yielded some valuable insights. LaPin shares some of the highlights:

> **The "target audience" and the actual users are often different.** "Many of our proponents think they want to target physicians with their website content, but the reality is physicians are often not the people who actually use the sites. They usually direct someone else (an administrative assistant or a secretary) to find information or complete a task, so those people are frequently the real audience. We determined this through stakeholder interviews, direct in-person observation of employees in their work areas, and study of web analytics.

"Similar to the example above is another common misperception: that an intranet site is targeting 'everyone at the organization.' I think site owners confuse 'target audience' with 'who has access to your content.' Defining the audience is one of the most important analysis tasks that has to take place at the beginning of the project, and frequently requires a tactful conversation with administrators and other stakeholders. Having real data to back up our audience recommendation is especially useful, and having the personas is a real help, too."

- **Gauge demand through data, not buzz.** "The demand for mobile-specific content is not as great as the vocal minority thinks it is. Not many employees use mobile devices to access intranet content. For example, surgeons aren't allowed to have mobile devices in the operating theater, and nurses can't carry them between patient rooms due to infection control concerns. Clinicians do use their email constantly, but they already have access to that on their iPhones.

  "Clinicians do really want to interact with the electronic medical record system and other patient-care applications, but development of those products is driven by IT, not us. We are considering expanding our UX services from just website-specific to all digital interfaces, but getting IT to consistently include design from the beginning of the project requires a tremendous culture shift."

- **Dividing users strictly by role is not always a clean way to cut the data.** "Mayo Clinic's unique organizational structure of dual appointments—physicians perform educational and research duties, as well as see patients—meant that there was no real org chart for the institution. There were pieces of them, but they never connected together all the way to the top."

  It thus fell to the team to figure out how to organize the organization.

  "When we were starting the persona project, we were faced with the infinite number of ways we could divide up the employee population. Our first instinct was to use the institution's org chart to help segment the entire organization, which is when we discovered that a true org chart didn't exist. I'm glad we didn't find an org chart, because we ended up pulling records from HR and chose the job classes with the largest number of employees, which I think ended up being the better solution. I guess the lack of an org chart is really more of an incidental finding rather than a major discovery—although it floored me, personally."

- **Users want to be involved in the research.** "Employees, on the whole, are very willing and excited to participate in user research projects. We rarely had problems finding volunteers to interview or attend focus group sessions, and some even came in on their days off to contribute. They enjoy having the opportunity to express their opinions and be heard."

- **Don't forget users whose jobs are not deskbound.** "Email and the intranet are generally the preferred way for our Internal Communications group to share information with employees, but there are large segments of the workforce who rarely check their email or look at the intranet. Generally, these individuals don't have the opportunity to use a computer, such as a cafeteria cashier or a warehouse worker. This awareness has helped Communications to modify how they share information; in this case, they may target the supervisors through their quarterly meetings, instead of trying to reach employees directly."

Using Iterative Cycles

In addition to using discount research methods, the team also relies on frequent iterative cycles to help them discover and solve problems as they are discovered. These cycles are not highly controlled cycles, but rather quick bursts adapted as needed to solve specific problems.

"We tend to look at a project very holistically and organically," says LaPin, "instead of as a regimented process that must be followed in the correct order. I suspect this working style developed because often we are not called in or included in a project until many of the decisions have already been made, and the project is well on its way to production."

This means they frequently have to figure out the situation very quickly and do a lot of cross-communication in order to understand the true business and user needs.

"Unfortunately, we almost always find that those needs are not well defined—or rather, they are the perceived needs of the proponent instead of the actual end users," she says. "Once we all agree that we have a good handle on our users and their needs, a formal presentation is made or a report gets written, depending on the circumstances. By this point, we've already started coming up with some great solutions to explore, so we might start coding up a prototype or laying out page-level wireframes. If the project has significant interactive features, especially if it's something that we've never tried before or we are unsure if it will fly with the users, we'll design another usability test (usually in the lab or with a mobile laptop)."

In the past, the team would perform a whole week's worth of tests in the lab and then simply get a report of the findings, but in the past year or so they've moved toward more of an iterative design approach.

"We simply fix problems between lab tests as our users find them instead of waiting until the end of the week to do anything," says LaPin.

"We started doing this with the nursing redesign project about two years ago," she says. "It worked because we had the project's programmer in the lab with us, watching the users struggle and participating in the debrief discussion that occurred after each lab session where the observers collectively recorded their impressions, facilitated by the lab's moderator. We identified where the user had problems or made mistakes, and I would suggest a solution (as the project's UX lead). The team would agree to make a change, and the programmer would do it right away. The changes were not huge, just cosmetic.

"In one situation, we were all getting frustrated because nothing seemed to be working," says LaPin. "The users weren't seeing the *Emergency Plans* link in the main navigation. We tried everything we could think of: making it all caps, turning it

bright red, etc. Time and again we saw the users look right at the link but they didn't click it. But by the end of the week, we finally hit on the right solution and had users getting through the task without making a mistake."

For iterative design to occur, people have to be watching the users, physically gathered in one space (or connected by video/phone). "Not everyone has access to a dedicated physical space, but if they do, the more people from the project that they can get behind the mirror, the better," says LaPin. "A member of the programming team needs to be present, with whatever technical setup he or she needs to make real-time changes to the testing environment. A knowledgeable UX/UI expert also needs to be observing, and everyone participating needs to be empowered by the project's stakeholders to make changes they think are appropriate."

Conducting rapid design/test sprints like this means the team can often emerge from the lab with a production-ready product instead of having to spend time afterwards debugging. This sounds like a win-win for everyone involved, but, as it turns out, it was difficult to change the prevailing mindset. "I was surprised at how hard it was to change the belief that we had to be very über-scientific about the whole process," says LaPin. "They worried that changing the prototype mid-week would somehow invalidate the results that came afterwards."

Using Data to Drive Decisions

Data is only as important as its importance to the people who are on the receiving end; because Mayo Clinic is a very data-driven organization, the design team knows that data matters.

"Mayo is very data-driven," says LaPin, "so being able to produce data—even if your customer doesn't really understand it—brings a higher level of credibility. The data that our lab studies generate is very qualitative, especially when we use them to iteratively design and develop. One task I frequently have to perform is making the project team (who are usually not trained scientists or statisticians) understand the difference between qualitative and quantitative data, and the role of heuristic evaluation."

As a leading medical and research center, data drives the organization's core business of providing best-practice-based care to patients, so it's natural for intranet authors to expect that same level of research and evidence-based practice applied to the intranet. "It's important that we are able to support our recommendations with the same rigor that our medical staff applies to direct patient care," says Lapin, "so we spend a lot of time researching, benchmarking and doing user observation. Our customers love graphs and charts and numbers, but it's challenging to visualize complex data in a way that people unfamiliar with the project can appreciate it.

"We have been working on our first true quantitative experiments this last year," says LaPin, "which requires some training and skill building. Most of us don't have experience with experimental design, so this has been a learning process—but one we all believe will repay by advancing the field and improving our credibility in the institution."

Working with Outside Agencies

It is always preferred to find resources internally rather than go outside the organization for help, but the reality is that most organizations augment their internal team with contractors or agencies. The Mayo Clinic team has a great

relationship with these hired guns. "We work so closely with some of our agencies, that we've hired a few employees as permanent additions to the Mayo family," says LaPin. Some of the agencies the organization has engaged in recent years include:

- **Human Factors International (HFI):** Provided specialists to help the Persona Project develop a research methodology for creating personas.
- **Corporate Web Services Inc. (CWS):** This local web development company has helped on several intranet projects, generally with IA and front-end development.
- **Aquent** and **Xylo Technologies:** Provided contract help for small-to-midsized web redesign projects, as well as IA/UX expertise for the redesign of the Department of Nursing intranet site (the organization's largest project to date).

TIMELINE

INTRANET TIMELINE	
Milestone Date	**Milestone Description**
1996–1999	• First intranet implementation (first homepage, first common intranet navigation banner) • Pages are all static HTML authored by a few individuals • Intranet at this point is perceived as an "experiment"
2000	• Version 1 (V1): Department websites established using Adobe Pagemill and FrontPage web authoring software • First general-purpose publishing system
2001	• First committee—the Rochester Intranet Technology Subcommittee —is established to formally handle intranet governance
2003	• Began use of Contribute (owned by Macromedia) to author intranet websites (V2 template)
2005	• First pilot of a true CMS—Stellent and WebSphere. Stellent was fully implemented to store the institutional *Policy & Procedure* library, but WebSphere was abandoned as it was deemed too complex and costly for general publishing
2006	• The Intranet User Interface Guidelines Workgroup is established to publish user research and develop navigation best practices; the committee is still running, though membership has changed over time
2007	• Installed Google Search Appliance to replace Verity search
2009	• V3 interface system released as a Contribute template • Formation of Intranet Shared Services Unit

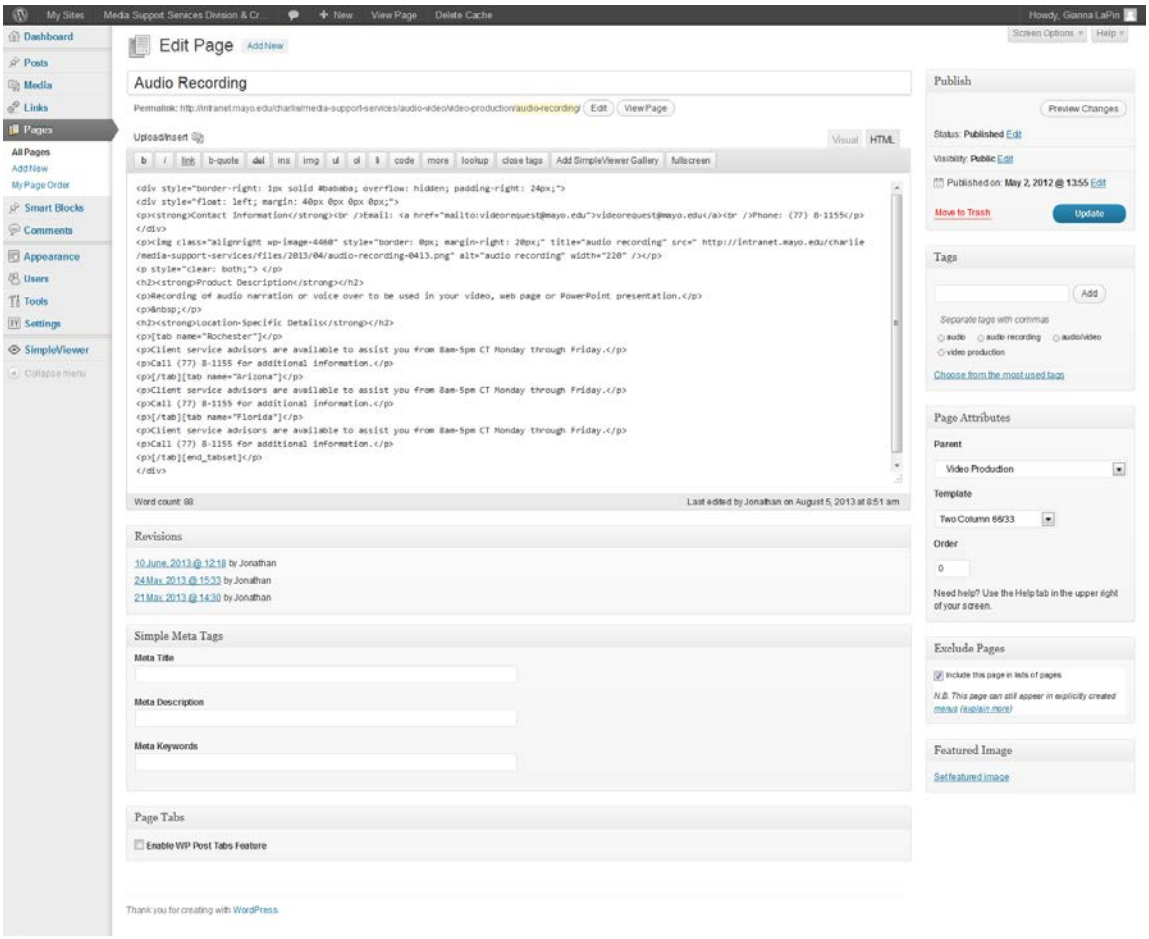
	• "One Mayo" intranet merger • WordPress pilot started
2010	• Redesign of top-level pages to use V3-derived HTML & CSS (versions 1 and 2 were HTML templates written for specific publishing tools, but V3 was expanded beyond the Contribute technology and integrated into WordPress, so it's become more of an "interface standard" rather than a "template") • Other intranet groups apply V3 visual style to their own publishing tools (usually home-grown .NET or ASP systems); V3 is no longer tied to a specific technology • WordPress introduced as new operational publishing platform
2011	• Clinical Intranet Standards developed and sanctioned by the enterprise Clinical Practice Committee • UX team established within ISSU; developed streamlined workflow and role definition • Redesign of the Department of Nursing intranet site completed (approx. 10,000 pages)
2012	• Persona Project concluded • FrontPage phased out in Arizona due to aging technology; replaced entirely with WordPress
2013	• Redesign of Department of Radiology intranet site completed (approx. 1,200 pages) • Redesign of Division of Media Support Services intranet site completed (approx. 350 pages) • Formal Contribute sunset plan initiated; will require conversion of more than 500 websites by 2015

CONTENT AND CONTENT CONTRIBUTORS

Using a standardized publishing platform and collection of interface standards developed and maintained by ISSU, website content is authored and maintained by local SMEs for departments and work units to support a diverse array of daily tasks, including work shift scheduling, clinical procedural and process information, committee activities, departmental news, and practice management information. Besides general published content, several other web-based applications serve important employee needs such as searching for people; communicating hospital status (such as bed availability, emergency room traffic, and electronic environment uptime); finding event information; learning about patient care practice changes; determining benefit eligibility; and performing annual training to meet regulatory requirements.

Content on the Mayo Clinic intranet is developed by a diverse group of authors ranging from individual employees with domain/subject matter expertise to highly skilled communications professionals producing content directly in support of the organization's internal communications strategies. "It is a blended 'top-down/bottom-up' content management philosophy that allows individual authors to contribute content with little or no oversight burden while also providing a high level of brand and message control for official institutional messages and campaigns," says Monty Flinsch, Systems Analyst II. "We have just over 6,800 registered users with contribution privileges on over 1,000 individual sites."

An additional 1,500 users managing approximately 700 sites will join the WordPress program when the organization's migration from Adobe's Contribute is complete in 2015.



The WordPress authoring environment. ISSU has made several modifications to the authoring experience of the intranet's operational WordPress environment, including a customizable theme and several plugins that change how the visual editing tab functions.

Maintaining Oversight

The organization employs a multi-tiered content review process that is geared to the authors' needs. "The majority of the authoring community is self-policing," says Flinsch, "with individual intranet site authors charged with adherence to our internal communications and intranet use policies that are based on trust, mutual respect, and openness." Different types of information is supported by different processes:

- **Official news.** Content published on the official internal news area, such as the weekly news site and leadership blogs, is closely managed by communications professionals who employ a structured content strategy and editorial calendar. This helps ensure that the content is produced quickly and stays on-brand.
- **Regulatory information.** Content related to regulatory information, policies, procedures, and clinical protocols is closely managed through a multi-step workflow employing a standard document-management chain of custody and audit trail processes.

- **Newly published sites and those undergoing major revision.** Most content on the Mayo Clinic intranet is locally managed and reviewed. However, the intranet team vets each site prior to it being published for the first time and after any major site revisions to check for completeness and functional compliance with the Intranet Publishing Standards prior to release. Local SMEs perform content reviews with little or no oversight from the intranet team. Content, IA, and usability feedback is provided to the site manager and must be addressed prior to release.

  "We employ a distributed review process once a site is live based on end-user feedback," says Flinsch. Every intranet page displays a link to the content owner's email, allowing any content or usability concerns to be quickly reported directly to the site manager or author. This system provides just enough oversight to maintain the team's quality standards, while preventing the flow of fresh content from being held back by cumbersome pre-publishing review processes.

  "This strategy allows our authors to publish their content quickly with a minimum of process or red tape," says Flinsch.

Supporting Authors and Ensuring Consistency

Mayo Clinic authors benefit from access to a suite of site themes and page templates, taking the guesswork out of adhering to the organization's content strategy and user interface guidelines. "User interface standards are baked into our themes and templates, making compliance for the most part a background concern," says Flinsch. "All content published within the system is presented in a framework that has been developed, tested, and reviewed by our Intranet, UX, and HCI teams."

Page-level presentation issues are dealt with on a case-by-case basis through consults with the Intranet and UX teams.

Templates and themes are overseen by the Intranet User Interface Guidelines Workgroup, which is comprised of professionals from the UX, Communications, and Human Computer Interaction teams. Training and support materials provide extensive guidance on writing for the web, IA, and a variety of other topics relevant to the author's needs.

The organization also provides extensive online, face-to-face, and peer-based training and support solutions to its authors. All users are encouraged to enroll in an internally developed eight-hour Introduction to WordPress class taught by professional instructors from Mayo Clinic's Learning Technology Group. This extensive online training program employs nearly 100 hours of short video lessons on everything from basic authoring skills to advanced WordPress topics.

In an effort to address the most common training and support concerns as they arise, the team is developing a growing library of step-by-step lessons is driven by the topics coming into the team's support queue. Finally, a peer-based support system on the company's internal Yammer network allows skilled users in the authoring community to assist and motivate users new to the system or unsure of their skills.

TECHNOLOGY

Nik Coates, Lead Analyst/Programmer explains the intranet's technology backbone tools:

- **Content Management:** The principal technologies used to publish content on the intranet are Contribute and WordPress. The team is currently in the process of converting its approximately 900 Contribute sites to the WordPress environment (which currently hosts around 1,000 other sites). Contribute is being retired, so WordPress will become the sole intranet publishing platform. "The WordPress environment allows us to centrally administer users, sites, standards, templates, and functionality, which is necessary given the large number of internal sites that we support," Coates says.
- **Web Analytics:** For web analytics, the team is currently migrating from Webtrends to the open source Piwik toolset. The change was made primarily to increase the functionality of the web analytics toolkit. Because Piwik is open source, the team can integrate it with the company's employee demographic data to produce data analysis functionality that is unavailable in any existing off-the-shelf product.
- **Search:** Google Search Appliance is used for general intranet search and custom search collections used by various projects throughout the enterprise, including *AskMayoExpert*, an online health knowledge management system used both in Mayo Clinic patient care and Mayo Clinic Medical School education.

Other intranet technologies include:

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	• **Servers (hardware):** HP Proliant BL460c/G6 • **Servers (virtualization software):** VMWare ESX • **Virtual server OS:** Red Hat 5.9
Bug Tracking/Quality Assurance	• **Bug/issue tracking:** BMC Remedy 7.1
Design Tools	• **User research:** OptimalWorkshop suite, TechSmith Morae • **Wireframes:** OmniGraffle, Adobe Illustrator, Visio • **Prototyping:** Axure RP, Adobe Dreamweaver • **Mockups:** Adobe Photoshop
Site Building Tools	• **WYSIWYG editing:** Adobe Contribute (sunsetting) • **HTML/JS:** Adobe Dreamweaver
Content Management Tools	• WordPress 3.5.2
Search	• Google Search Appliance (GSA7)
Other Functions	• **Analytics:** WebTrends (sunsetting), Piwik

MOBILE

Mobile access is provided if a user's device is connected to a secure WiFi network on campus, or logs in with a VPN. Mobile users see all the same content as desktop users.

Contrary to many organizations' experience, the Mayo Clinic team has found that there is little to no demand for mobile services by the organization's employee population. "Individual groups within the institution have created strategic mobile applications that are in use by small sections of the population or to service a niche demand, but as a whole, mobile traffic accounts for less than 0.3% of our total intranet traffic," says Coates. "Our standard sites are accessible through several devices and display very well on tablets and iPads. However, we do not use any mobile-specific CSS or other mobile-specific optimizations. In our institution, the ROI is not enough to introduce mobile-specific optimization to our sites."

SEARCH

Back in 2006, Mayo Clinic was using several search solutions (Verity, Mondo Soft, and so on) across both internet and intranet departments. Leaders from both departments met to discuss a more unified search solution. After extensive requirements gathering and analysis, the Google Search Appliance platform emerged as the winner. "Factors influencing the decision included hardware/software cost, accuracy of results, ability to customize results (both appearance and functionality), reliability, and scalability," says Terry Smoley, Sr. Analyst/Programmer.

Because the intranet supports many publishers with various requirements, there are several methods for updating and refining search results. "For new sites or existing sites that are migrating," Smoley says, "updates (for example, adding/removing URLs to be indexed) and search enhancements (such as Key matches) are included as a step in the project's workflow. Additionally, when search users notice inaccurate or missing search results, we have a system, which allows them to submit a request to update search results. Finally, our more sophisticated publishers are constantly refining their search results by pushing incremental XML feeds to the search appliance, managing dynamic synonym and keyword suggestion lists, and using result biasing measures (such as metadata, URL, date)."

MAYO CLINIC

People | Intranet | Forms | Drugs | AskMayoExpert | Advanced

blood Search

Home | Practice | Education | Research | For You | Groups | Policies | Video | Library | Calendar

Mayo Clinic Intranet Search Results

blood Search

Mayo Intranet | AskMayoExpert | Documents | Drugs | Forms & Publications | News | Policies & Procedures

People	Phone	Pager	Work Area
Blood, Kimberly J.	(77)6-1973		General Surgery (Austin Medical Center Clinic 1 South)
Blood, Peter N. C.N.M.T.	507-434-1189	127 (13745)	Hospice (Skemp Clinic 1)
Blood, Stephen S. (Steve)	(78)3-2940	127 or (78)3-7823	RST - Neurology Appointment Center (Mayo Support Center South 1)
Blood, Tiffany J. RHIT	(77)4-1937		FLA - Nursing, Cardiovascular (Mayo Building & Hospital 2-TCN)
Blood, Victor M.	(78)6-3334		Respiratory Care (La Crosse Medical Center 1)

Showing results 1-5. See all 6 results in People

Search results from: All locations Arizona Jacksonville Rochester Mayo Health System

Sort by date / Sort by relevance

Search Results 1 - 10 of 7530 for "blood" in All Locations

Blood Tests

... Home. **Blood** Tests. **Blood** Transfusions. ... Utilization Review. **Blood** Tests. **Blood** Test Ordering. Clinic, Emergency Department, Hospital. ...
mayoweb.mayo.edu/man-procblood/ - 25k

Blood Transfusions

... Policies/Guidelines; Utilization Review. **Blood** Transfusions. General Information, Transfusion Reactions. ... Ordering, **Blood** Products. ...
mayoweb.mayo.edu/man-procguide/btindex.html - 5k

Department of Radiology

Vascular/Interventional. ... RIMS/PACS/Workbench (status & support); **Blood** & Body Fluid Exposure: (9) 252-4226. Safety. click here to open form. ...
mayoweb.mayo.edu/rad-vir/ - 10k

Division of **Vascular** Surgery

... vass. Division of **Vascular** & Endovascular Surgery Duty Hour Policy. ... **Vascular** Surgery Meeting Dates & Deadlines. **VASCULAR** ...
mayoweb.mayo.edu/vascular-surgery/ - 5k

Blood & Body Fluid Exposure

... **Blood** & Body Fluid Exposure. Report all **blood** and body substance exposures to the Employee Occupational Health Service immediately! ...
mayoweb.mayo.edu/dpom-ehs/bbfcontact.html - 5k

Gonda **Vascular** Center Mission

... **Vascular** Surgery. Gonda **Vascular** Center. Home. Gonda **Vascular** Center Mission. ... 1992 Gonda **Vascular** Center Dedication (video). Quick Links. ...
mayoweb.mayo.edu/gonda-vasc/ - 5k

Vascular Surgery Fellowship | Department of Surgery – ARZ

... **Vascular** Surgery Fellowship. Home » Education » **Vascular** Surgery Fellowship. Dr. Richard Fowl Dr. Samuel Money Dr. William Stone. ...
intranet.mayo.edu/charlie/general-surgery-arz/education/vascular-surgery-fellowship/ - 8k - 2013-01-04

Vascular Access | Department of Emergency Medicine – RST

... **Vascular** Access. Home » Sections and Divisions » Emergency Ultrasound » Image Library » **Vascular** Access. NORMALS, ABNORMALS,
intranet.mayo.edu/.../home/sections-and-divisions/ultrasound/image-library/vascular-access/ - 9k - 2013-01-05

Laboratory Collection Services: **Blood** Collection

Search This Site. Home. **Blood** Collection +. Arterial Puncture. ... Studies/Kits. Transfusion Medicine. Venipuncture. Body Fluid/Non **Blood** +. Clerical. ...
mayoweb.mayo.edu/ccls-docs/labservices-bloodcol.html - 4k

Cerner update – CBC and peripheral **blood** smear reporting ...

... Cerner update – CBC and peripheral **blood** smear reporting changes. ... The remainder of the **Blood** Cell Count tab will be unchanged. ...
intranet.mayo.edu/.../2013/08/14/cerner-update-cbc-and-peripheral-blood-smear-reporting-changes/ - 7k - 2013-08-14

Result Page 1 2 3 4 5 6 7 8 9 10 **Next**

For help with Intranet search, visit our Google resource page. Last updated: 08-02-2010

A search results page for the query "blood." When using the top global input field to run a search, the search appliance will query seven different search collections and present results in a tabbed format. If the query has matches in the company directory as well as general intranet content (as in this example), the SERP will return the top five *People* results, including a primary phone number and a link to the web-based pager gateway (if available). If users need more information, they can click a person's name for the full directory profile.

RESULTS AND ROI

Simply put, success for the Mayo Clinic intranet means solving a problem.

"Sometimes, success comes by simply satisfying the need of a customer to promote his or her individual project," says LaPin. "If that is the case, then we are successful in minimizing the resource drain to meet that need. Other times, we hear success in the grateful emails we receive from users who are thrilled to have an attractive, well-organized tool to help them with their daily work. Success might be word-of-mouth praise from customers that generates a new project request. Another form of success might be external recognition of expertise at industry conferences."

As with many other organizations, measuring the ROI value of Mayo Clinic's corporate intranet is an imperfect science at best. "In fact," says Sumathi Jayakumar, UX Manager, "business analysts contend that precise ROI measurement is not possible due to the expansive and far reaching nature of intranets. However, while measuring the precise return on investment may not be possible for most of our sites, there are means by which our organization does qualify both potential and existing ROI."

For example, at Mayo Clinic, application- and project-based ROI can be measured far better than the ROI of the entire intranet. Application or widget examples include the employee directory, the policies and procedure management tool (UCM), employee HR self-service tools, clinical standards templates, Synthesis (EMR), and the committee application. "Most of the savings [from these tools] result from the cost avoidance of printing or distributing documents, and enhanced communication, collaboration, and decision-making, among other things," Jayakumar says.

LESSONS LEARNED

Jayakumar outlines some of the team's best practices developed from its experiences building the new intranet:

- **Form a multidisciplinary project team with well-defined roles and responsibilities.** "Intranet projects are a product of many dedicated minds that see things from different viewpoints. Use project managers and supervisors to protect employees' schedules, so they can stay as focused as possible on one project at a time with a minimum of distraction."
- **Maintain consistency of centralized project intake and management.** "Find or build a project intake tool and capture information about requests and projects. Track your time. Use the data gathered to justify requests for additional resources and staff when necessary."
- **Develop a well-defined intranet redesign process and implementation.** "Whether it is a waterfall process, an Agile/Lean process, or a hybrid, define each step and its dependencies well. Be clear about expectations and deliverables upfront, especially when communicating with customers. Draft SLAs [service-level agreements] if necessary."

- **Invest in user experience resources and processes.** "Become comfortable with a variety of user research gathering methodologies. Design experiments that generate data for future projects. Cross-train members so they can serve many roles, but allow specialists to develop and give them the training, the experiences, etc. they need to stay committed. Have more experienced employees directly mentor the less experienced and pay attention to their professional development."
- **Utilize project management and business analysis resources.** "Establish the business value of intranet projects. Use a dedicated project manager to oversee meetings, deadlines, resources, and budgets."
- **Create editorial teams for on-going maintenance of content.** "Encourage these teams to develop a content strategy and formal workflow. Expect them to assign dedicated, skilled resources to content authoring and maintenance."
- **Form an enterprise governance structure.** "Find or grow an intranet champion, preferably someone at the C-level. Figure out how to ride the flow of the organizational culture. Figure out who the influencers are, and turn them into intranet evangelizers."
- **Be active in the knowledge management industry.** "Contribute to the development of best practices, tools, and templates. Publish your knowledge, your processes, and your discoveries. Benchmark and share with other organizations. Stay informed."

National Geographic Society

Using the intranet: National Geographic Society is one of the largest non-profit scientific institutions in the world. It reaches 450 million people worldwide each month through its media, exhibitions, live events, school publishing programs, research grants, and merchandise.

Headquarters: Washington, D.C.

Number of employees the intranet supports: Approximately 1,500 full-time employees, along with numerous contractors, interns, and international partners.

Locations where people use the intranet: Washington, D.C., New York, Los Angeles, Detroit, Colorado, Chicago, London, Sweden and China

Design team: A three-person Internal Communications team led National Geographic's intranet redesign, working with Celerity's web and mobile team and the Baker Hill design agency. The team engaged stakeholders from every department across National Geographic for the initial launch and to establish a regular group of contributors.

In-house team: Keelin Vaccaro, Director of Internal Communications; Megan Seldon, Manager of Internal Communications; Christy Solberg, Visual Communications Coordinator; Russ Little, Director, Technology; Dan Backer, Director, Infrastructure

Celerity: Elisabeth Beller, Project Advisor; Drew Engelson, Technical Advisor; Susana Esparza, Scrum Master and Project Manager; John Dymond, Architect and Lead Developer; Jason Kolaitis, Lead User Experience Designer; Beshoy Louka, Front-End Developer; Ilya Lemberg, Developer; Kenneth Yu, Developer

Baker Hill: Mark Hill, Principal and Creative Director

SUMMARY

Faced with an outdated intranet and armed with data from an engagement survey of employees, the National Geographic intranet team knew employees wanted more communication and collaboration. Based on the existing survey results and more than 100 face-to-face interviews with employees, the vision for the new site, *ngconnect*, became clear: connect employees to the organization, each other, and the tools they need to do their jobs.

The team wanted to achieve these goals while reflecting a sense of the organization and its history. It was essential to the Internal Communications team that the new site reflects the DNA of the nonprofit scientific institution, with a focus on exploration and adventure, visually stunning photography, and unique storytelling.

The team, together with business acceleration consultancy Celerity and design agency Baker Hill, approached the redesign using an Agile methodology. User research played a big role in the project, with focus groups, card sorting, and user testing of prototypes, as well as continued user feedback through the review process, which occurred every two weeks.

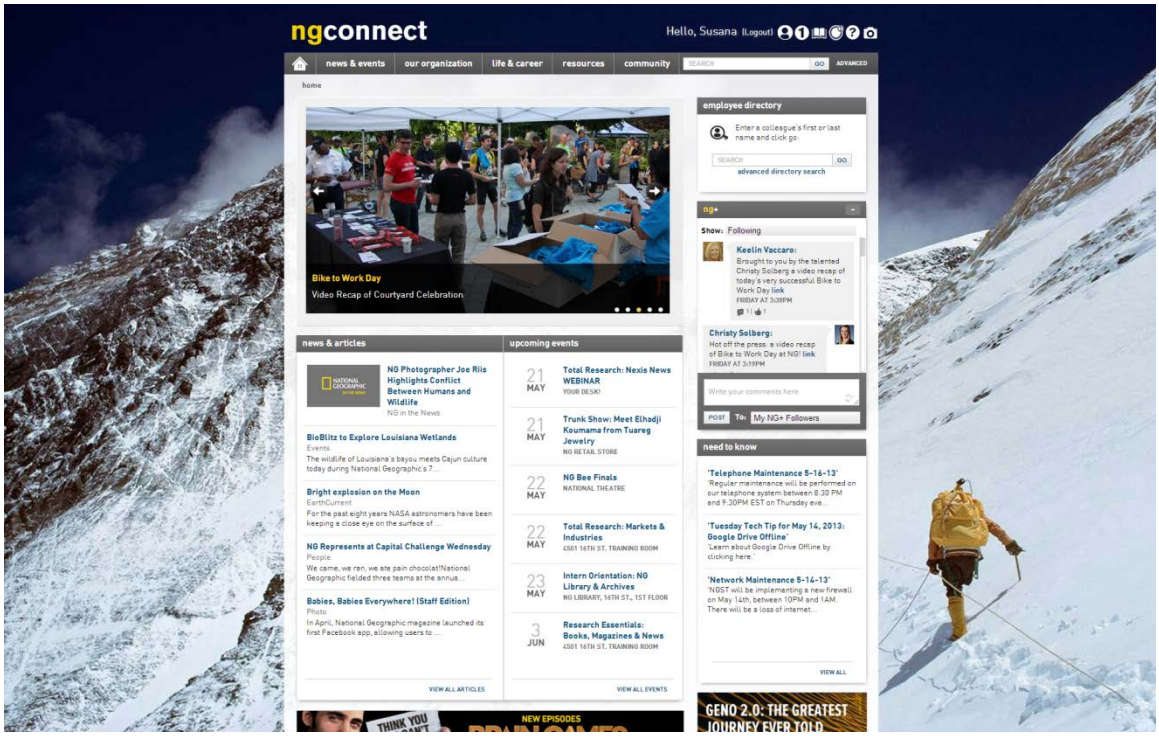
The homepage uses a carousel to highlight five news items daily. Users can page through items using arrows on the side of the carousel. News and articles are also listed beneath the carousel. Each headline is accompanied by a category (such as *Events*) or source (such as *EarthCurrent*) and part of the story's first line. Upcoming events are listed with the event name and location. Each piece of content allows users to comment on or "like" it, creating an opportunity for dialogue.

The *Employee Directory* appears in the top corner of the page. Users can enter an employee's first or last name or do an *Advanced Directory Search*. A feed from the site's custom-built social tool, ng+, is listed beneath, showing employee information from those they are following. Employees can comment on items directly from the

feed and select which groups should see the comment (such as posting to all followers or only certain groups).

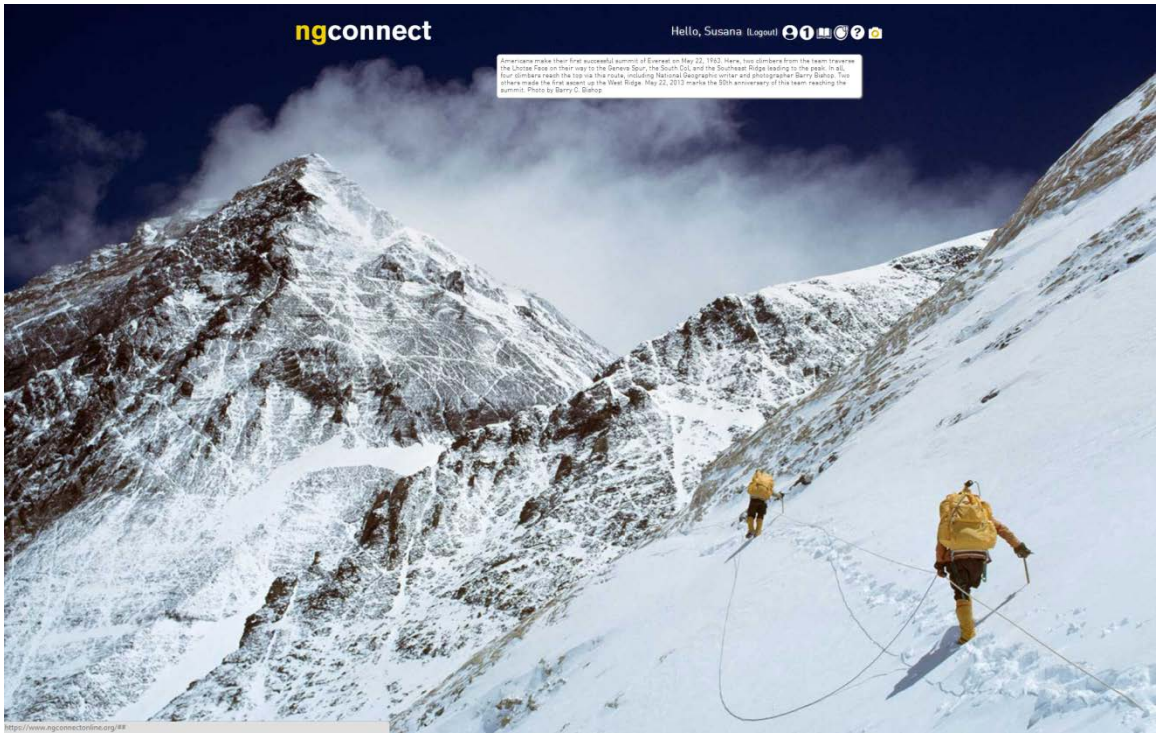
The homepage also includes several other features: the *Need to Know* section has important operational content, such as maintenance work and technology tips; promotional banners advertise upcoming National Geographic programming or employee events; and the *Most Popular* content menu displays how many users have either viewed or "liked" a piece of content.

Icons at the top of the screen give users quick access to notifications, their employee profile, Portal 1, the library, Okta, SSO, help, and also background image information. These links are available throughout the site.



The homepage highlights news, events, and updates. Users also have quick access to the *Employee Directory* and ng+, the site's social tool.

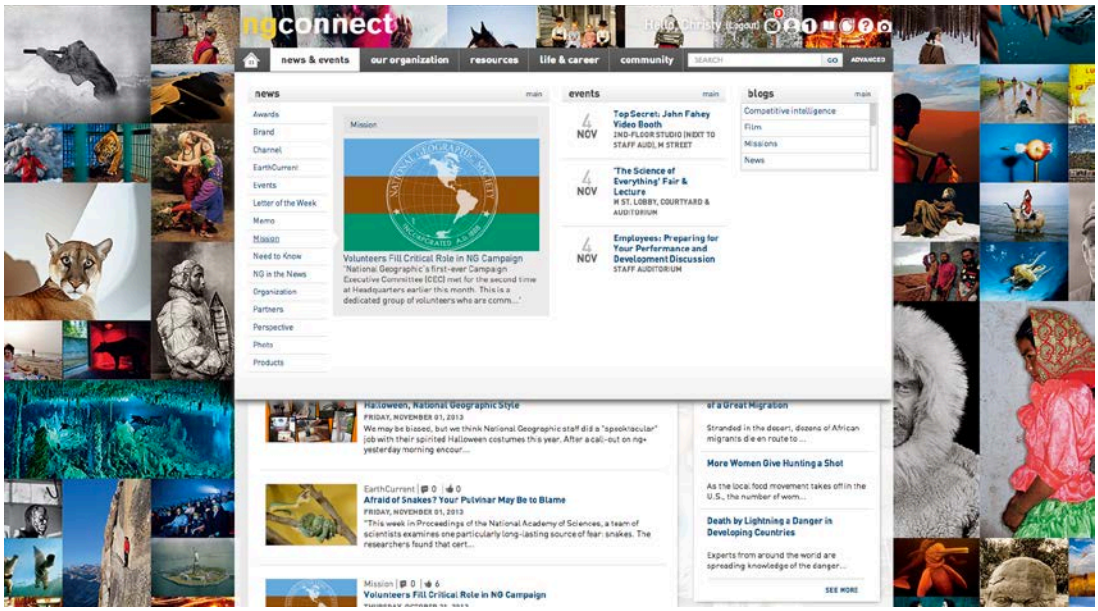
The site uses a big image background, drawing on its rich history as a scientific institution with incredible photography. The images, which change monthly, are chosen to reflect current events or significant milestones in the organization's 125-year history. Users can "close" the content of the site to reveal the full screen image, complete with a caption, by clicking on the camera icon in page's the upper right-hand corner.



National Geographic's expansive and impressive photo library is put to good use on the site. Images act as a backdrop to the site, and users can click the camera icon in the upper right-hand corner to see the full photograph and its caption. The image above shows the first successful summit of Mount Everest by Americans in 1963.

To help users navigate the site, megamenus provide quick access to information. The previous site structure had grown unmanageable over the years. The team used card-sorting exercises to create navigational categories, but user testing was essential to creating the final design. In testing on prototypes, the team found that users had a hard time using the large menus, becoming overwhelmed by the number of choices. The users also had issues with the timing of the hover states on the menus: users were accidentally triggering them, and then finding them hard to close. The team used these testing results to streamline the options presented to users and to change the timing to improve performance.

The menus list subsections within categories as well as highlighting pieces of content. For instance, the *News and Events* menu highlights key content from each section area, upcoming events, and links to key blogs available on the site.

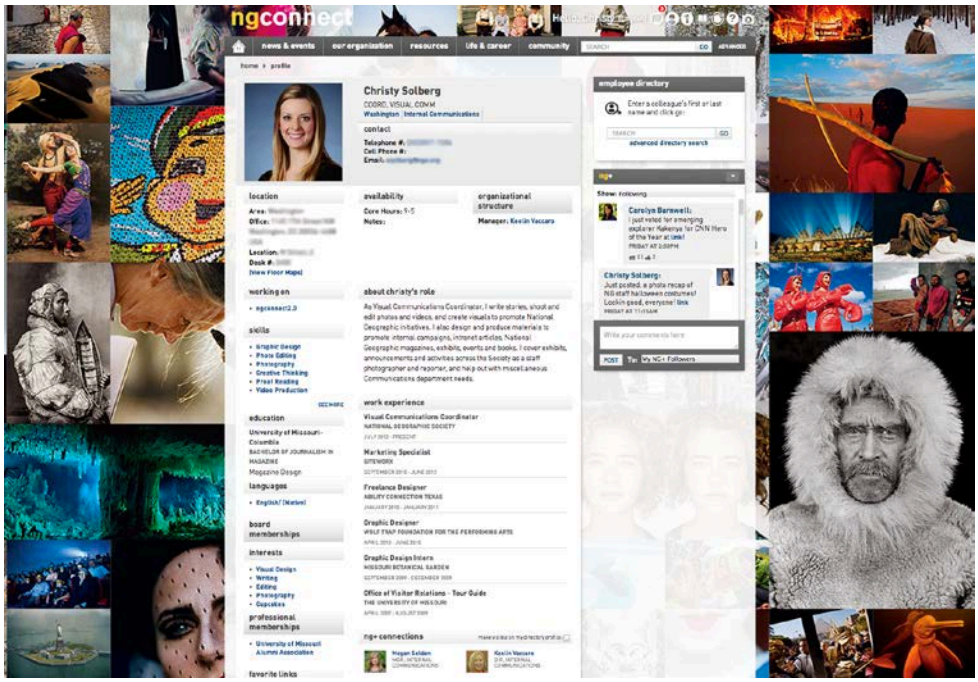


The site's megamenus list subcategories of content, but also surface important information in each site section. Events and a list of blogs round out the content in the menu. The main image changes depending on the selected news category.

The *Employee Directory* underwent a transformation, with the goals of providing standard contact information as well as helping employees get to know their colleagues by searching shared skill sets or current projects. Profile information includes current projects and connections to other employees. The *Employee Directory* pulls data from two internal systems, but also allows employees to pull in data from their LinkedIn profiles (via an API).

One of the main reasons employee directories often suffer on sites is a lack of employee participation in filling in or maintaining their own data. The team realized this, so use LinkedIn as a shortcut for providing that data. Users can simply log in to their LinkedIn profile and import information into the intranet *Employee Directory*. The team also encouraged employees to upload photos to their profiles by hosting special staff photo days aimed specifically at taking profile photos.

The employee search is highlighted on the site's homepage and is always available via the site search on every page. Users can search for colleagues by name or by keyword, to help people find one another when they have a topic—rather than an individual—in mind.



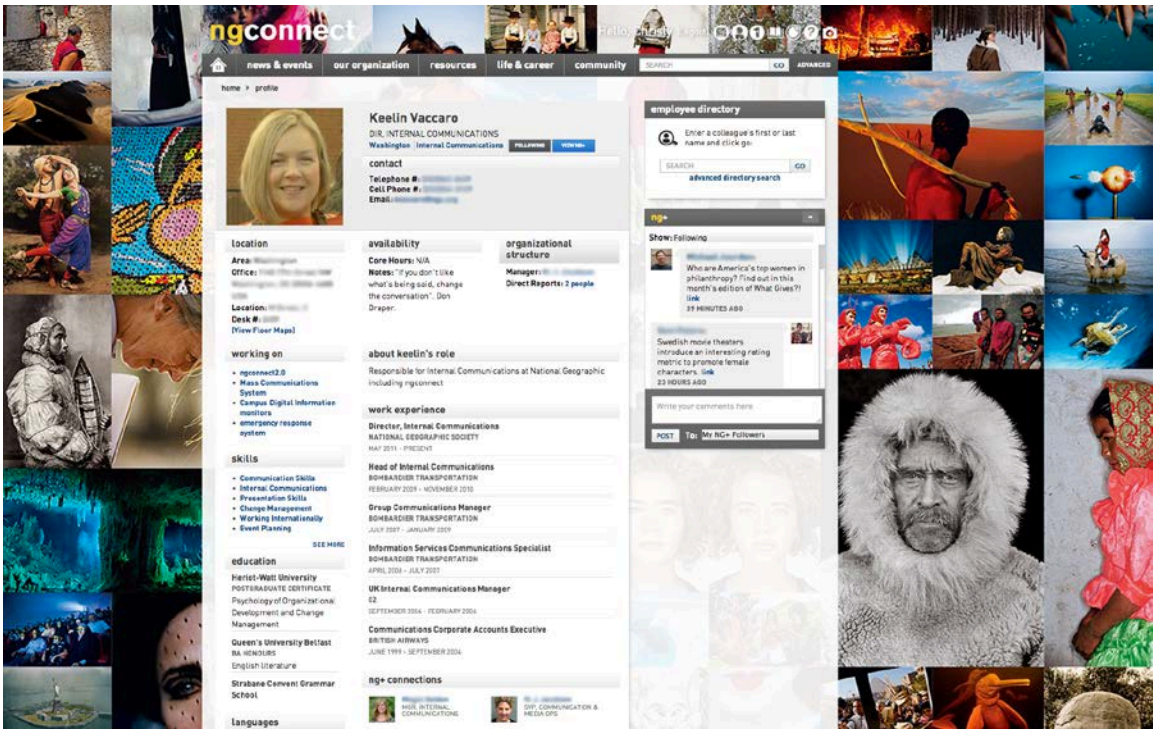
Employee profiles list essential contact information at the top, along with key details such as availability and place in the organizational structure. The side of the page lists current projects, skills, education, languages, board memberships, interests, professional memberships, and favorite links. The center of the page allows for a personal statement about the employee's role, a list of past work experience, and, finally, a list of the employee's connections on the site's social network tool.

The greatest stride toward connecting employees was the addition of ng+, a custom-built internal social tool. The ng+ tool combines what the team considered the most useful and relevant elements of four popular social tools: LinkedIn, Twitter, Facebook, and Google+.

With ng+, users can microblog, posting short updates about their day or work; ask questions; and share useful or interesting info with their network. The tool uses a connection approach similar to Twitter, where "following" doesn't have to be mutual. Further, the team recognized the need for some groups—such as Human Resources, The Green Team (sustainability), Technology, and Internal Communications—to be able to broadcast messages; these messages appear in everyone's feed.

One of the ways the team encouraged employee interactions on the new site was to ask senior management to microblog about important meetings, travel, and organizational developments, as well as to use their microblogs to recognize good work and achievements. Employees are often more willing to participate in social areas of intranets when they see senior leaders posting or commenting; such posts indicate that the organization sanctions this new way to communicate.

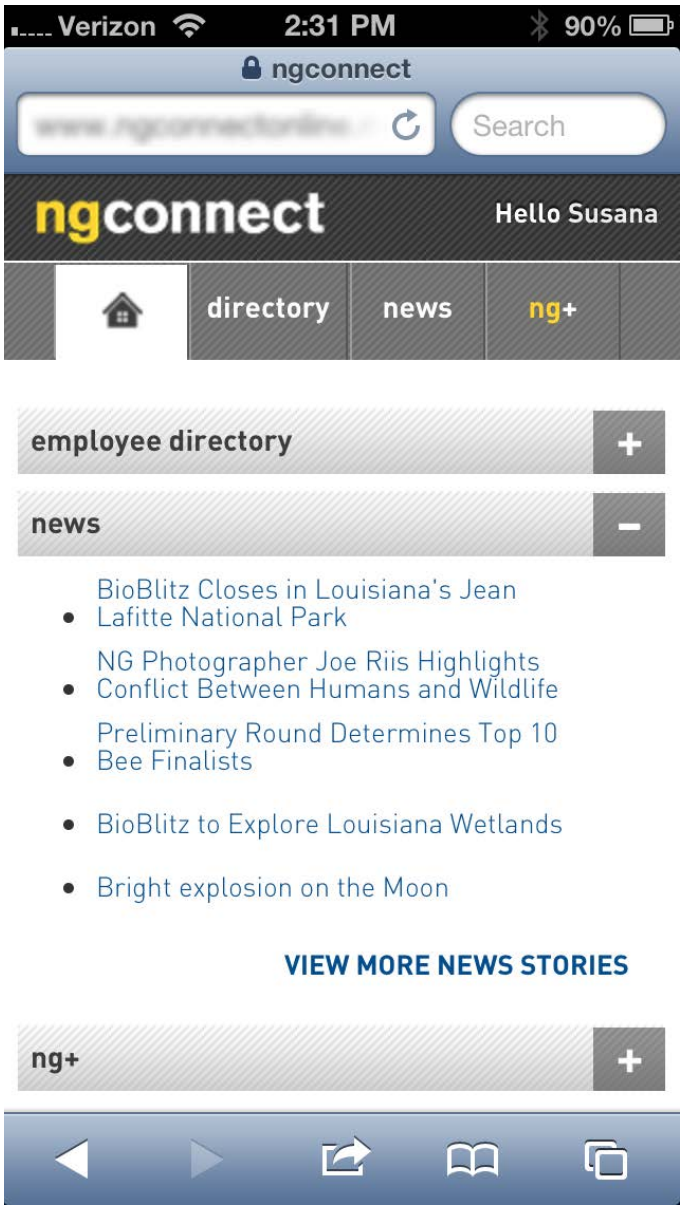
Currently, about a quarter of employees are actively using ng+ for sharing information or asking questions. More than half of employees have commented or liked a post.



The notifications feature has increased the overall ng+ tool adoption. The team introduced the notifications feature after launch, following feedback from employees who wanted some sort of prompt when co-workers in their network had commented on or liked their posts. The feature also notifies employees when transactions such as travel expenses require approval.

A version of ngconnect is available for mobile users, focused on delivering only the key information needed by users on-the-go. The team realized that mobile use might mean use in a remote location, or use when traveling between buildings on the organization's main campus (in Washington, D.C.). The mobile site offers the *Employee Directory* news, and access to ng+. Staffers have used the social aspect of the mobile version to post remotely while at off-site conferences or traveling on business. Although web-based, the site is optimized for iOS and Android use, incorporating swipe gestures and page transitions.

For the mobile intranet, the team focused on key content and quick page loads; news stories, for instance, do not include photos.



The mobile version of the site focuses on three key areas for mobile users: news, the *Employee Directory*, and ng+, the site's social tool. The mobile experience is focused on keeping employees informed (through the news), connected (through ng+) and in touch (via the *Employee Directory*).

With the robust ng+, which is integrated throughout the site and its mobile version, the National Geographic intranet team went beyond a site update to create a tool that supports new methods of communication throughout the organization.

BACKGROUND

The redesign of National Geographic's intranet began with an employee engagement survey conducted in 2009. This survey revealed an overall theme: Staff wanted communication and collaboration across the organization to improve. And, as one of

the main channels for employee communication, the intranet redesign was one of the specific suggestions put forward by staff to help meet this need.

A working group of employee volunteers from across National Geographic then took a deeper look at three issues: what employees wanted to see in a new intranet, best practices across the intranet world, and what resources would be required to develop such an intranet. The working group presented their findings to National Geographic's senior management team, which gave the go-ahead for the redesign and allocated a budget and the necessary resources, including hiring an Internal Communications director to lead the project.

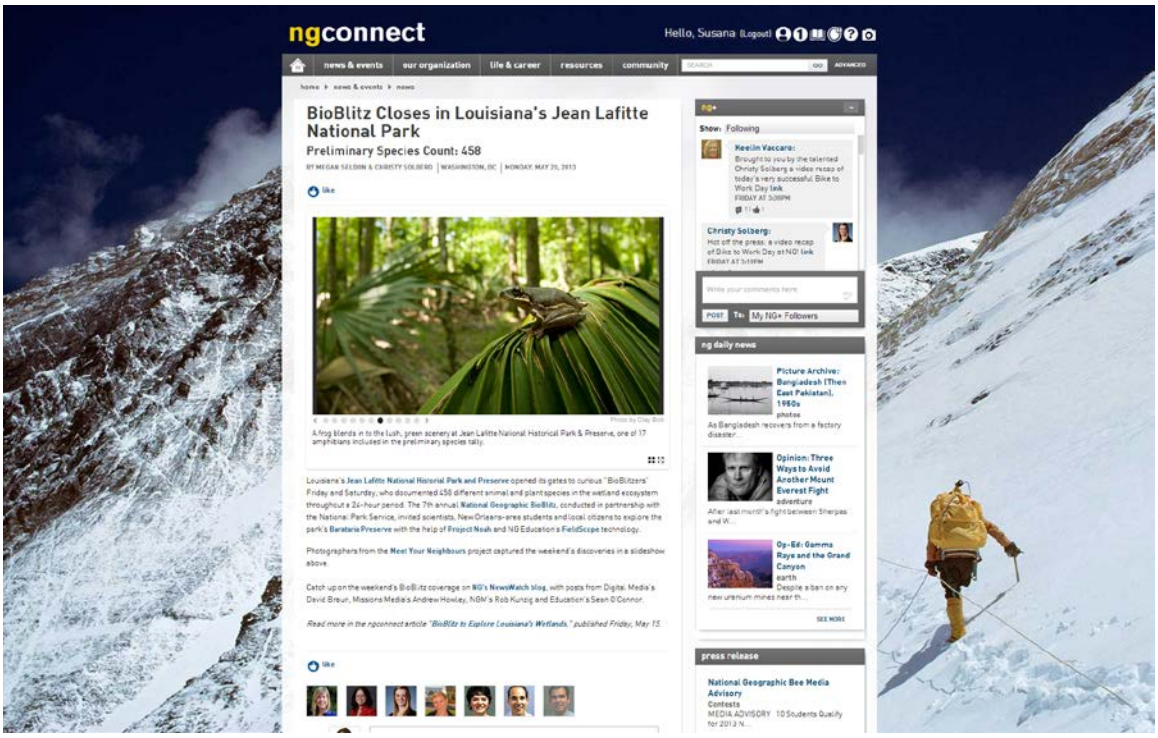
"One of our first steps was to define a core vision for the new intranet," says Keelin Vaccaro, Director, Internal Communications, National Geographic, "which came after reviewing all existing employee research, as well as conducting face-to-face interviews with over 100 employees who represented all areas and levels of the organization.

"This was also a great help in beginning to define site requirements," she says.

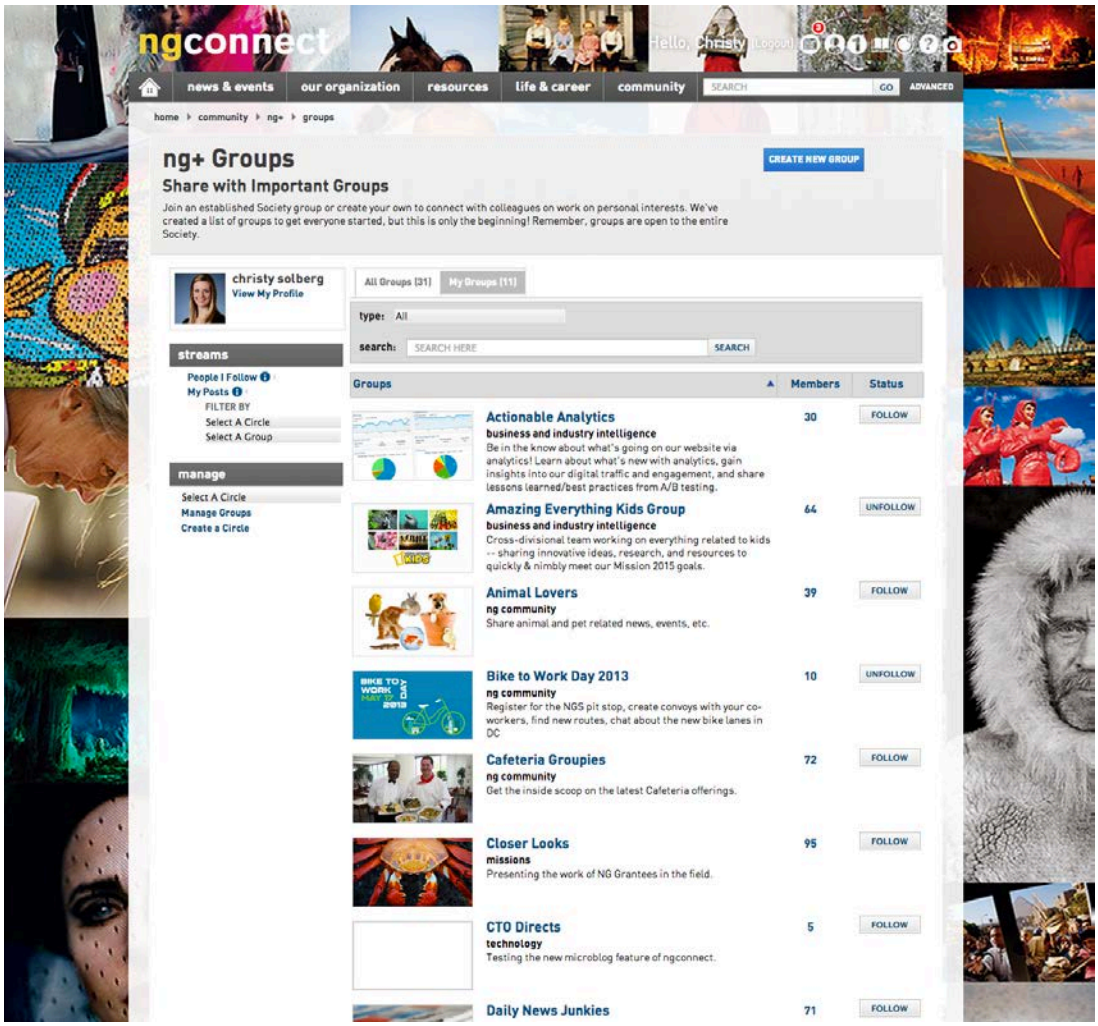
The vision for the project was clearly defined: "Connect employees to the organization, each other, and the tools they need to do their jobs."

Of equal importance was designing the site so that it conveyed the organization's brand attributes of exploration and adventure through stunning photography and unique storytelling, while also making it intuitive and functional.

The old National Geographic intranet design, which was a winner of the NN/g 2007 Annual Intranet Design Award.



A sample news story on the redesigned site has an optional image carousel at the top of the page, followed by the article body and opportunities for users to "like" or comment on the article at the bottom of the page.



One of the intranet's social and community-building features is the *Groups* page, where employees are encouraged to create and self-manage various group pages related to their work and outside interests.

INTRANET TEAM

The ngconnect team (front row, left to right): Drew Engelson (Celerity), Megan Seldon (National Geographic), Keelin Vaccaro (National Geographic), Christy Solberg (National Geographic), Susana Esparza (Celerity), and Kenneth Yu (Celerity); (back row, left to right): Elisabeth Beller (Celerity), Russ Little (National Geographic), Beshoy Louka (Celerity), Mark Hill (Baker Hill), John Dymond (Celerity), Dan Baker (National Geographic), and Jason Kolaitis (Celerity).

GOVERNANCE

Ownership

National Geographic's Internal Communications team oversees ngconnect's strategy, day-to-day operation, and content. Members of National Geographic's Technology team are also involved in supporting Help Desk inquiries from staff and the infrastructure that ngconnect is built on. Although Internal Communications might be the "owner" of ngconnect, content contribution is encouraged from across the organization, and the team believes that this will be key to sustaining the intranet in the years to come.

"Internal Communications' overall stake in the intranet has been a positive opportunity," says Vaccaro. "As communicators, it has allowed us to make the site more engaging through visual and dynamic design and content.

"As owners of the intranet, it has also helped establish the relatively new Internal Communications team and its work across the Society," she says. "The scope of ownership is much greater than in years past, since we now maintain all content across the site."

One challenge has been that, at certain points, the Communications team found itself tasked with making decisions related to data or technology, which Vaccaro says doesn't naturally fall within the team's core area of expertise. "The solution for this has been to partner with an external vendor who has that expertise, and pull support from other areas within the organization—such as the internal technology team—when we can," she says.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Internal Communications Team	• Intranet strategy • Budget management • Coordination of internal and external technology resources • Maintaining content quality across site • Publishing daily homepage content • Training and support for content contributors • Post-launch enhancements • Setting and maintaining style and editorial guidelines
Content Contributors	• Creation and maintenance of department/division/universal content • Creation of timely news and event posts
Technology Team	• Maintenance and monitoring of Ektron CMS and servers • Tier 1 support/Help Desk inquiries from staff
Celerity	• Post-launch development • Site maintenance • Troubleshooting CMS or front-end issues

USERS

The site is designed for all of National Geographic's employees, international partners, channel partners, and contractors. The type of work performed at National Geographic varies widely, with hundreds of different roles supported by the intranet within this diverse organization. Example roles include producers, graphic designers, editors, researchers, managers, interns, and writers.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	• ngconnectonline.org (web and mobile)
Default Status	• The Technology team sets each new employee's homepage as ngconnectonline.org, but employees have the ability to change it.
Remote Access	• Users can access ngconnect remotely through ngconnectonline.org, which prompts them to enter their username and password to authenticate themselves through the Okta single sign-on service. National Geographic encourages teleworking, and users regularly access ngconnect off-site, whether in D.C. or at one of the organization's satellite offices.

DESIGN PROCESS AND USABILITY WORK

Design Approach

The key to getting an intranet project done on time and within budget is to not let the perfect be the enemy of the good. Although every team strives to do its best work, perfection is rarely within reach. "We tried to follow the typical User-Centered Design (UCD) process as best we could," says Jason Kolaitis, Lead User Experience Designer, Celerity, "but in reality, due to timelines and budget constraints, following the process to a 'tee' is pretty difficult. Luckily, we were able to accomplish the majority of UCD tasks in order to create a highly successful intranet design."

Kolaitis says they built the intranet around the core needs of the end users. "We didn't try to build something we *thought* users might need," he says, "we built something we *knew* users needed." Using one-on-one interviews, focus groups, card sorting, content inventories, and a lot of web research, the team was able to create an intranet that filled a void for many National Geographic employees.

The design process kicked off with the team interviewing stakeholders and employees and completing a baseline review of the existing intranet to get an understanding of what already existed, and where the site needed to go for the future. Overall, the team found that users were mostly happy with the information on the site, although it was clear that it needed a visual refresh and that the site's IA—which had grown organically for several years—was no longer manageable.

Minimal analytics data was available to analyze traffic patterns and frequently used content, so the team decided to perform focus groups with end users; this would let the team dive deeper into key business issues, desired intranet use, and important integration points. The result of these efforts was a set of prioritized features that would help employees accomplish their jobs, including:

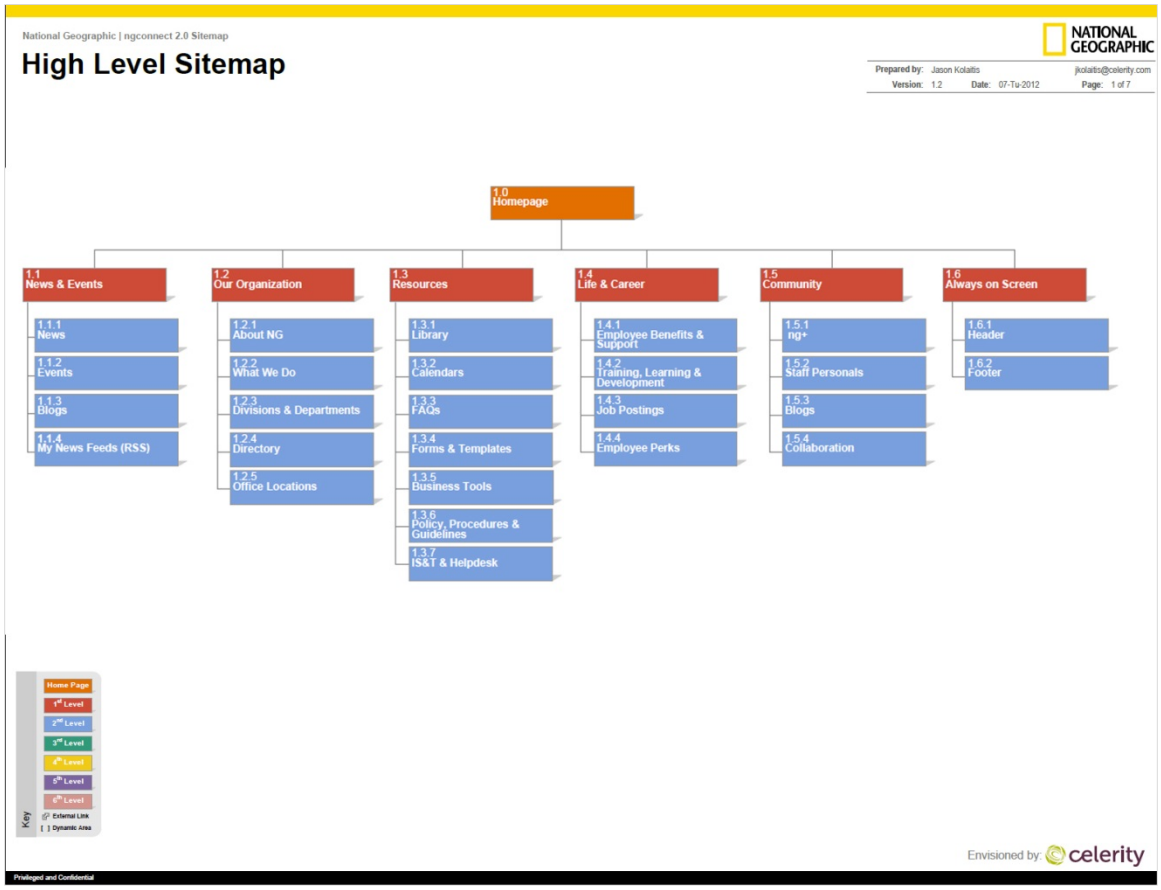
- *Employee Directory* with enhanced profiles (with self-service capability)
- Organization chart

- Generic and customizable quick links
- Basic enterprise calendar capability
- Social capabilities (blogs, micro blogging, and classifieds)
- Robust search
- Single sign-on
- Online form submission capability
- Mobile access (with highest priority on the *Employee Directory)*

This parallax scrolling microsite on the *History and Heritage* page showcases the history of National Geographic in a fun and engaging way.

Developing the Information Architecture

The new IA was achieved through a series of online card-sorting tasks (to iron out and finalize the new site map) and by developing and testing a series of clickable prototypes (using Axure RP).

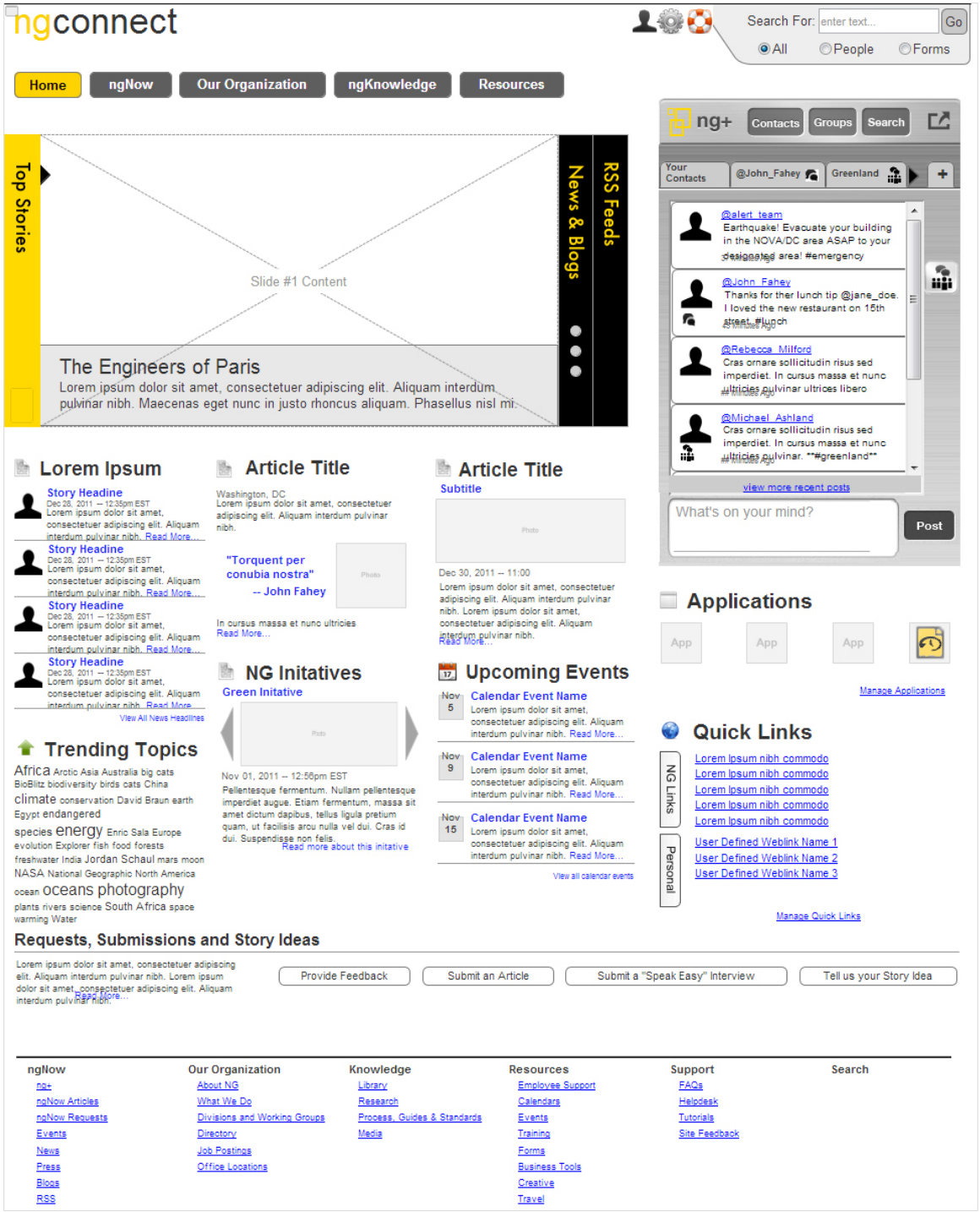


The proposed high-level site structure.

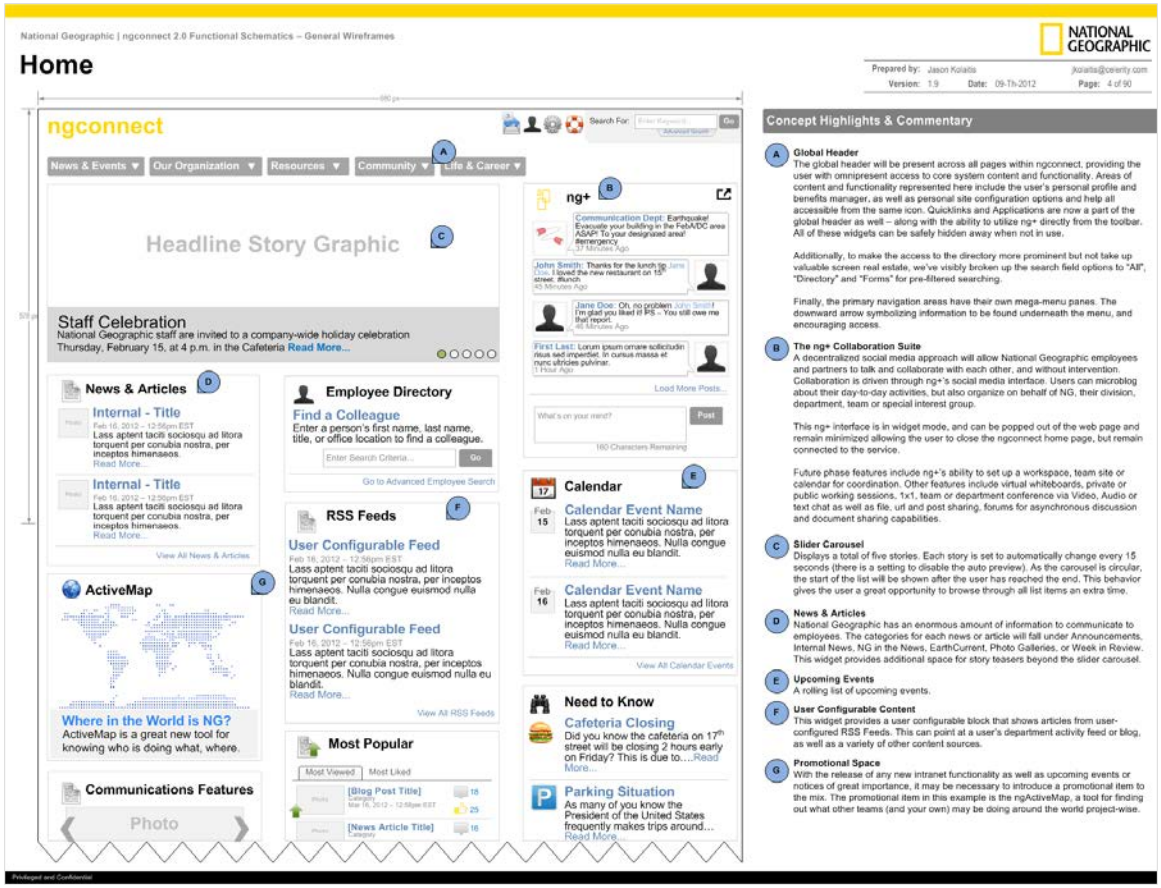
"Overall, the tests went well, but we were surprised to find out that users had extreme difficulty using the megamenus we originally designed," says Kolaitis. "The 'on-hover' states for the megamenus caused significant problems during the tests, as users weren't able to easily close them, and anytime the user's cursor crossed through the navigation bar the menus accidently appeared. We clearly needed to fine-tune the delay for these interactions."

This was one of the team's primary takeaways from the usability testing.

Also, says Kolaitis, users experienced information overload and were overwhelmed by the amount of content in the menus. "So, in the final design, we also reduced the amount of content in the menus and only surfaced the most popular content," says Kolaitis.



The initial Axure clickable prototype.



Homepage wireframes for ngconnect.

After the initial discovery and conceptual design phase, the team began designing the remaining templates and the site's core functionality. This process and the rest of the project followed an Agile methodology, which let the development team review and demo its progress every two weeks to both the core user team and stakeholders. It also gave the team an opportunity to get regular, direct feedback from users.

Working with Outside Agencies

National Geographic partnered with an outside consulting firm, Celerity, to provide a full end-to-end solution including discovery, strategy, platform selection, user experience design, and development.

One of the core reasons for engaging an outside technology vendor was that the organization wanted to bring a platform-agnostic viewpoint to the table during these early project stages. Ultimately, the new intranet's chosen platform had to fit with National Geographic's technology strategy; however, at that stage, the team didn't want to limit itself to considering only platforms supported by internal expertise.

The organization also worked with D.C.-based design firm Baker & Hill to develop the intranet's visual design concept.

These outside agencies were tightly integrated into the design process, working side-by-side with National Geographic's internal resources.

"Our relationship with each agency was to work with them as a team," says Vaccaro. "It was clear that National Geographic owned the product decisions, but at times relied on Celerity's expertise in website design and development. During the initial stages of the project, the Celerity team worked onsite for several weeks at a time at National Geographic's HQ, which created a positive and productive team environment."

Once the development sprints began, Celerity's development team worked offsite and interacted with the National Geographic team through daily Scrum calls and periodic onsite demos and meetings. Celerity's project manager was onsite regularly, while the rest of the team worked onsite as needed.

TIMELINE

The overall redesign time frame was 16 months from discovery to launch.

INTRANET TIMELINE	
Milestone Date	**Milestone Description**
December 1999	• Original company intranet, Inside NGS, launched
March 2006	• Redesigned NG Insider launched (winner of NN/g Intranet Design Annual 2007)
September 2011	• Homepage facelift (v. 1.0) to support a more visually appealing experience pending upcoming redesign
September–December 2011	• Discovery and design phase, including usability testing with prototype and platform selection in preparation for 2.0 redesign
Late January–February 2012	• Environment and tools/systems setup, Agile education, and ngconnect 2.0 project kick-off
March–mid December 2012	• Development, testing, training, and content upload for new intranet site
December 14, 2012	• Launch of ngconnect 2.0
January 2013 to date	• Continuous improvements through small and iterative enhancements based on user feedback; changes so far include improved search, enhanced social tools, and an image gallery
July 2013	• A survey and usability testing conducted to assess ngconnect 2.0 success and room for improvements

CONTENT AND CONTENT CONTRIBUTORS

Choosing a Platform

To identify the best platform for National Geographic's content management needs, the intranet team had to understand, at a high level, the different types of functionality the organization required. So, team members looked to the findings from their discovery efforts, including stakeholder interviews and focus groups, and also reviewed the technology landscape.

According to Susana Esparza, Scrum Master and Project Manager, Celerity, this process resulted in the identification of three types of tools:

- Web content management tools

- Portal technology (providing a single point of access for applications, information, data, and processes)
- Enterprise social and collaboration platforms

To reduce the number of platforms to review and demo to a manageable quantity, the team focused on 10 criteria:

- Core functionality/built-in applications
- Content management (authoring, publishing)
- Search
- Light document-management capabilities
- Portal/personalization capability (such as the ability to customize dashboard with widgets and display data from other systems)
- Social media (such as wikis, blogs, community features)
- Flexibility/customization (in terms of the platform)
- Scalability/performance
- Ease of implementation and ongoing maintenance
- Intuitiveness/ease of use (for both end users and content contributors)
- Interoperability with other systems
- Price
- Strategic fit (in terms of product direction and/or National Geographic's vision)
- Vendor stability and/or open source community support

With these criteria in mind, Ektron emerged the winner. Overall, Ektron performed best against the criteria listed above and met most of the high-level requirements gathered during the design phase via a fit-gap analysis. "Ektron also did a very good job by demonstrating how their product was able to complete task-based scenarios provided to them by the ngconnect team," says Esparza.

Content Authoring

National Geographic's Internal Communications team maintains most of the general communications content. However, the site was designed to support distributed content ownership so that authors throughout the organization can easily update and maintain their content. Across the site, divisional and functional content is owned and developed by the respective teams, while more global/shared content—such as events, news, and resources—are managed by a select group of individuals assigned to represent their division/function within the organization.

ngconnect has various groups for content ownership, depending on the site section. Following is a list of the groups and the number of content owners in each:

- Alert authors: 3
- Blog authors: 20
- Department authors: 83

- Events authors: 27
- Life/career authors: 16
- News authors: 23
- Resources authors: 27
- Sustainability authors: 4

Approximately five contributors work actively on content on a day-to-day basis, updating dynamic elements such as news and events. For other content, such as departmental pages and resources, content is updated weekly, monthly, or as needed.

Through the ng+ social tool, intranet users can also contribute to the site regularly via comments, posts, "likes," and shares. This opens information sharing and content ownership to the entire user population.

Templates and Guidelines

The organization has a light editorial approval chain in place. All homepage headline news is approved through the ngconnect team. Contributors who have received training in ngconnect's editorial guidelines create content for other sections.

Templates help order and structure the content. Several templates were created to allow content contributors to create their own site sections and subsections. Some templates address specific needs (for example, the *Bio* page template) and some simply offer authors different layout options. In addition, editorial guidelines and a content checklist (see the excerpt below) were created to help authors with tone, voice, style, and images as they create their pages. The main content contributors for each department have also received an in-depth classroom training session on editorial guidelines.

ngconnect

Editorial Guidelines: Checklist

Tone & Voice

- ❑ Conversational and engaging; relevant; energetic and exciting

Organizing Content

- ❑ The most important points are presented in the first two paragraphs
- ❑ A short one-paragraph summary is presented to sign-post content
- ❑ Paragraphs are short (40 to 100 words)
- ❑ Key page elements are visible through Q&As, bulleted lists, bolding etc.
- ❑ Descriptive hyperlinks tell readers WHERE they are going

Writing Content

- ❑ Sentences are short and written in active language
- ❑ Content is written in second-person
- ❑ Explanations are provided where needed
- ❑ Hype, buzzwords, jargon, business "talk", idioms, ambiguity etc. are avoided

An excerpt from ngconnect's editorial guidelines checklist.

In addition to the editorial guidelines, content contributors are always welcome to review their content with the Internal Communications team. "Within the CMS, we provide a few tips on the content entry form as reminders to ensure standards and consistency. We are also planning an annual audit of content," says Megan Seldon, manager of Internal Communications.

Training

In preparation for the new intranet's release, the ngconnect team conducted train-the-trainer sessions with key contributors across the organization. These sessions were focused on the different types of content owners (such as news authors, departmental page authors, and document owners) so that the training would be effective and in context with what authors would own and be responsible for creating and maintaining.

"Through this method, we established a mechanism in which contributors are able to teach others as changes in the organization happen, and allow for this training to grow organically," says Esparza. "The intranet implementation team also created training material for the various sessions for future reference."

TECHNOLOGY

"ngconnect was built as a gateway platform that can easily integrate new systems and feeds" says John Dymond, Lead Architect and Developer, Celerity. "This will allow for flexibility should the organization decide to change the systems it interacts with. It also allows for new systems to be plugged in without changing the programming of existing systems."

In an effort to save users time, the site uses single sign-on, which gives users fewer passwords to remember, helps reduce phishing, and improves the overall user experience. Users no longer need to first sign into a VPN, then sign into the intranet, and then sign into their department's Google Site.

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	• **Web Server:** 16GB RAM/50GB hard drive • **Database Server:** 8GB RAM/500GB hard drive storage • **Search Server:** 16GB RAM/250GB hard drive storage • **Dev / Staging Servers:** 2GB RAM/60GB hard drive • All Servers run under Windows Server 2008 R2 Standard (64-bit) SP1 and have Intel Xeon CPU X5650 at 2.67GHz/2.66 GHz (2 processors)
Bug Tracking/Quality Assurance	• BugHerd (http://www.bugherd.com)
Design Tools	• Adobe Photoshop • Microsoft Visio 2010
Site Building Tools	• Visual Studio 2010 • Team Foundation Service
Content Management Tools	• Ektron CMS Version 8.60 SP1
Search	• Microsoft Search Server 2010
Other Functions	• Integrates with Okta SSO • Integrates with Oracle PeopleSoft • Uses Gigya to import employee information from LinkedIn

MOBILE

The ngconnect mobile site leverages mobile-specific templates that focus on key sections of the full desktop site. "We wanted to make sure we invested the correct amount of time and effort on the 'portable' part of the intranet," says Elisabeth Beller, Project Advisor, Celerity. "We identified three key main areas that people always need access to whether on travel, walking from one meeting to another, or simply checking in from home: directory, news, and ng+."

Making the *Employee Directory* mobile-friendly was a priority, as many users search the *Employee Directory* on their mobile devices. "The National Geographic headquarters in Washington, D.C., houses staff across three neighboring buildings," says Beller. "People often walk from one building to another to go to meetings, visit the cafeteria, or chat with one of their colleagues. Although the campus has maps displayed in key places close to elevators, these don't have the level of details needed to find a person or meeting room. By accessing the *Employee Directory* through their mobile device, one is able to find the desk number, floor, building, phone number, and email address for the person they need to reach."

Because making the entire site available on the phone wasn't a top priority, and because the Ektron CMS provides an easy mechanism to use mobile templates to produce a mobile site, the team opted for a mobile-optimized version of the site, rather than a custom mobile solution or application. The mobile version of the site is optimized to provide the key content useful to most employees. The mobile templates for the *Employee Directory*, news, and ng+ are powered by the same content on the full version site.

"We leveraged the same user research completed at the beginning of the project to guide decisions regarding the content to be available on mobile and the approach for developing the mobile site," says Esparza. "Budget and resource constraints were also a factor, which led us to the most straightforward solution within the CMS."

The mobile site is targeted for iPhone and Android devices. It is not a native application, but uses jQuery Mobile to take advantage of swipe actions and page transitions. Using HTML5 meant the site would be compatible with National Geographic's core campus technology infrastructure and supported browsers.

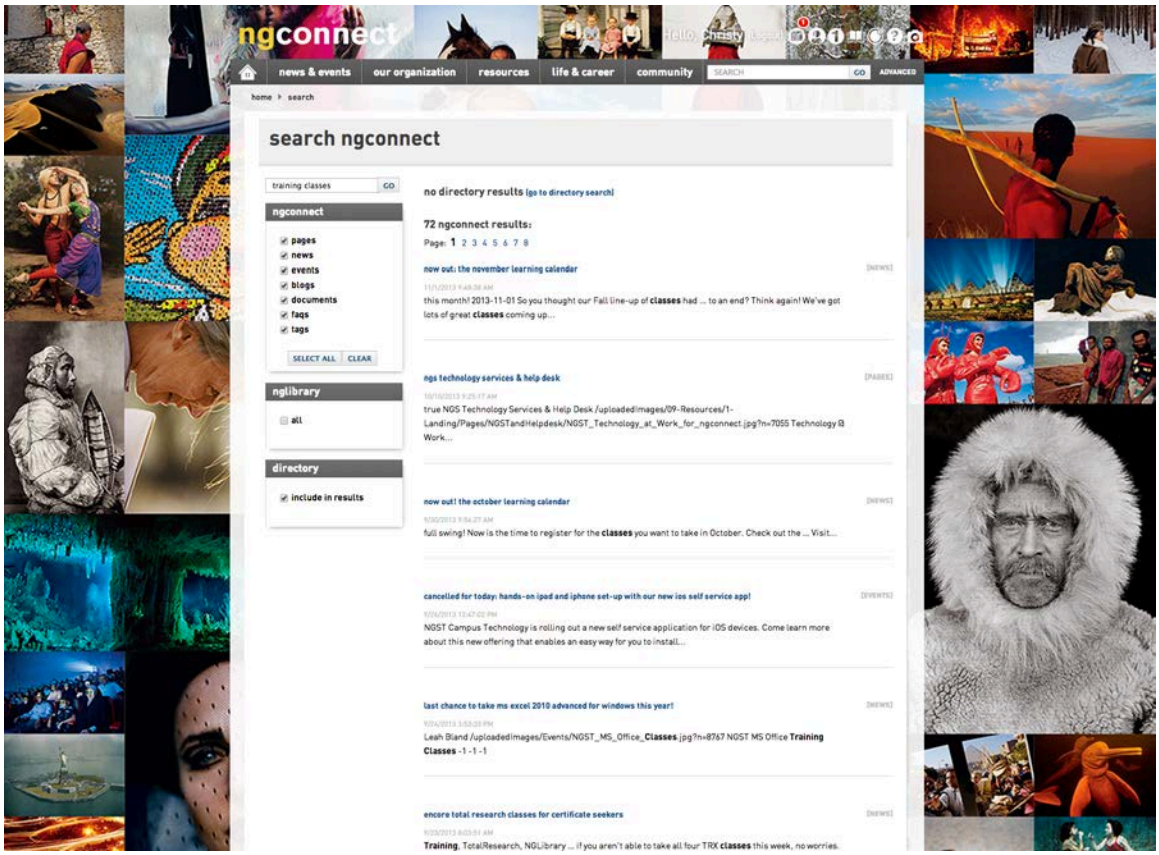
SEARCH

As with most intranets, the National Geographic team found that users had problems finding information on the previous intranet; team members did their best to fix that by creating a federated search with easy-to-use search facets. The federated search indexes all of the remaining department Google sites, the HR PeopleSoft/Oracle Database, Ektron CMS SQL Database, and RSS feeds from multiple sites.

Search is handled by Microsoft Search Server, which is built into the site's CMS, Ektron (as of version 8.6). "The product team has spent considerable effort developing Microsoft's search connector to work with the product, and we wanted to leverage these capabilities," says Dymond.

"We have configured Search Server to federate a number of different data sources," he says. "We created a BDC source so that Search Server can index PeopleSoft data such as directory, department, and location information. In addition, a number of National Geographic sites and microsites are indexed so that they can be included or filtered from global search."

Searches are context-sensitive, and users can search within several subsets. This permits global or very specific searches, depending on the user's needs.



An example search results page.

RESULTS AND ROI

Employees have responded well to the new site. Various measurements show that the site is becoming a valuable asset for the organization's employees in their daily work life.

"In a survey conducted seven months after launch, we asked employees whether they found the new site an improvement from its predecessor—almost 70% agreed it was," says Vaccaro. Sixty-five percent of survey respondents also said they use ngconnect at least once a day.

News and Events content, which is designed to ensure employees know "what's going on" at National Geographic, rated highly in the survey, with 88% of employees rating it a four or a five on a five-point usefulness scale.

Another measure of success is exemplified by the success of the *Employee Directory* (and employee profiles): 80% of employees rated it as one of the new site's most useful features. In usability testing, one employee said:

> *"I'm absolutely in love with the Directory, I'd buy it dinner. It's helped me do my job better. I didn't think it would make that much of a difference, but it has made a world of difference."*

The organization has also seen promising levels of adoption for the site's social features:

- Two thirds of employees have updated their profiles and around 25% are actively using ng+ for asking questions or sharing information with their networks.
- More than half of employees have either commented on or "liked" articles or content posted by their colleagues or Internal Communications.
- Employees feel comfortable weighing in on organizational decisions and contentious issues via the comments section on internal news articles.

And, as employees use the site, they're exploiting opportunities to find new ways to use it. "Since the overall site is much more attractive and engaging, we've also had more employees requesting to have their departmental content featured, or coming to us with suggestions of how we could leverage some of the core functionality even further," says Vaccaro. "The site is also at the center of all major company announcements."

LESSONS LEARNED

Vaccaro shares some of the team's lessons learned:

- **A phased approach is useful.** "One of our main takeaways was that we should have considered a phased site launch. This would have eased the workload on project team members—the last few weeks prior to go-live were intense ones—but most importantly, it would have eased users into the new content, functionality, and design.
- **Prioritize the build based on the complexity of the components.** "Another lesson learned was around the development of ng+, the social component of ngconnect, which occurred toward the end of the project. This was one of the more complex aspects of the site. We may have benefited from developing this component earlier in the process, giving us more time for testing and employee feedback prior to launch."
- **Communication efforts increase adoption.** "Continual employee communication of the benefits and features of the new site, especially around the social tools, has helped increased adoption. Activities have included special staff photo days, where employees get a smart, new profile photo taken for their profile; demo videos; a special Valentine's Day promotion and giveaways; plus senior managers microblogging around important meetings, travel, and organizational developments."
- **An Agile approach can bring clarity to the project.** "We found that the Agile project methodology introduced by Celerity brought us the right level of focus, flexibility, and stakeholder engagement required for the project.
- **Plan for post-launch communication needs.** "While it sounds obvious, the work doesn't end when you go live. In the weeks after launch, we dealt with a high volume of user questions and requests, department demos, and continued employee outreach and communication. Be prepared for that."

- **Managing an intranet is a journey, not a destination.** "After coming full circle as a Nielsen Norman award-winning intranet in 2007, to one in dire need of a complete redesign some six years later, perhaps the biggest overall lesson is placing real importance on continuous improvement. The organization has invested in redesigning the intranet, and the best way to protect that investment and continually engage employees, is by constantly looking for ways to improve, and actively engaging employees in that process."

triptic

Using the intranet: triptic is a tech-savvy agency for online communications from Eindhoven, The Netherlands. Since the agency started in 1997, its expertise in online strategy, design, and development has gradually culminated in a specialization in the intranet field. It has developed intranets for large organizations such as Dorel Europe, Jessa Ziekenhuis, and Sacha Shoes.

Headquarters: Eindhoven, The Netherlands

Number of employees the intranet supports: 20

Locations where people use the intranet: Eindhoven, The Netherlands

Design team: Iris, the company's intranet, was designed and built by an in-house team.

In-house team: Arthur Turksma, Strategist; Rick Cuijpers, Consultant and Project Manager; Roel Knapen, Coordinator; Lieke Huenges Wajer, Test Coordinator; Willem van Berlo, UX Designer; Onno Marsman, Senior Software Architect; Frank Kemps, Developer; Martijn Wernaert, Developer; Teun Beijers, Developer; Tim Didderiëns, Support; Jos Rouw, Copywriter/Editor; Anne Blommaert, Usability Tester; Tatiana Morokko, Controller

SUMMARY

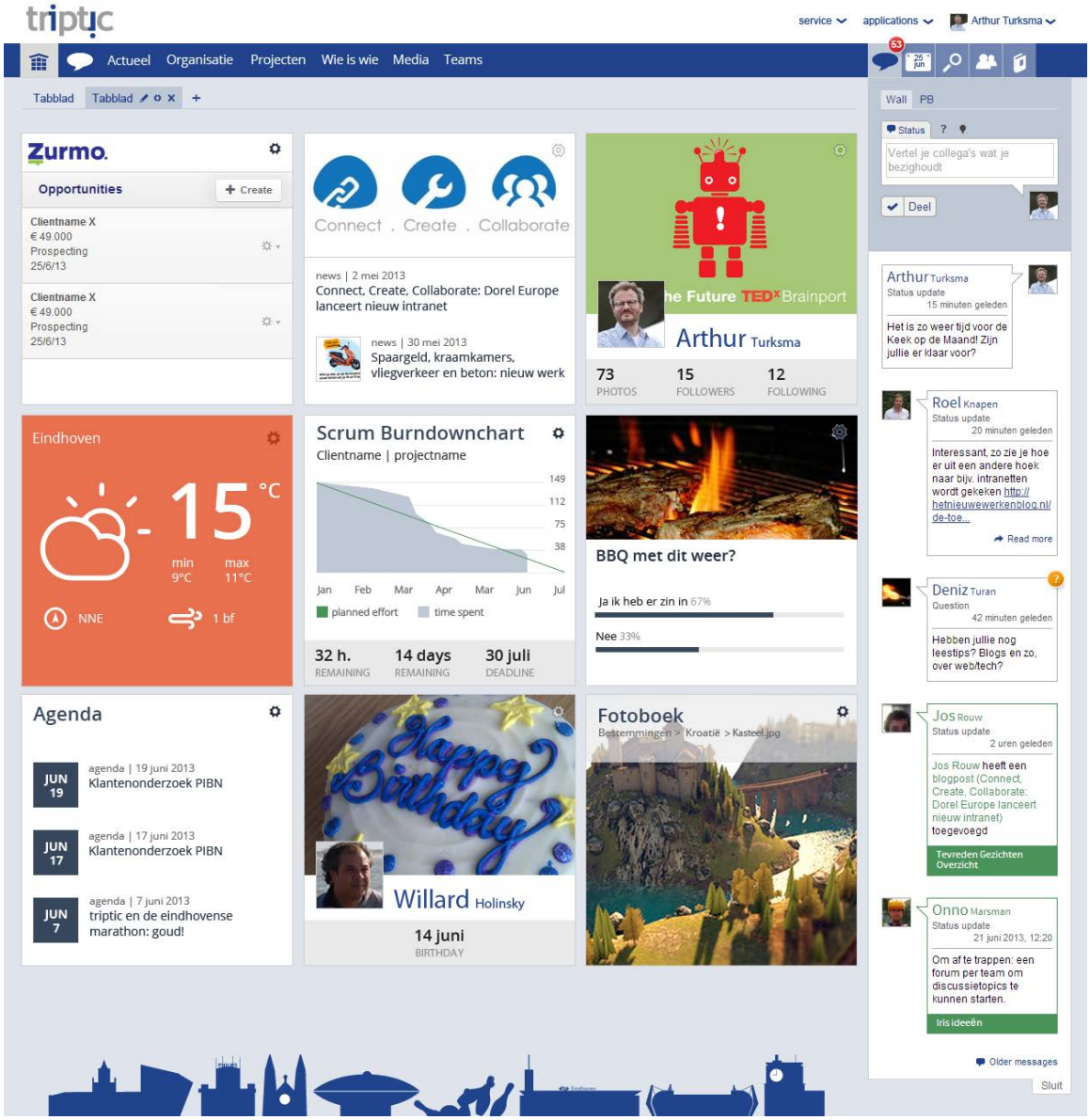
One of several traits that differentiates Iris, the triptic intranet, from many intranets is that it actually looks fun to use. What makes the homepage seem like a good time? Offbeat images, whimsical icons, bright colors, and simple text all draw users in—without crossing the line into being annoying, which is a very tricky balance to achieve.

The Iris homepage recognizes logged in employees and serves up their desired information, such as a personal calendar and social following activity. The news and a poll occupy two other default sections (known as *widgets*) on the page, keeping the employee's finger on the pulse of the organization.

Potential new projects appear in the upper left. This list is connected to the organization's CRM system (Zurmo). Employees can click these links for details or choose the *Create* button to add a new one. The very inviting "anyone can do this" attitude at triptic is apparent in the Iris design, highlighting another trait of great intranets: they convey the organization's goals and culture.

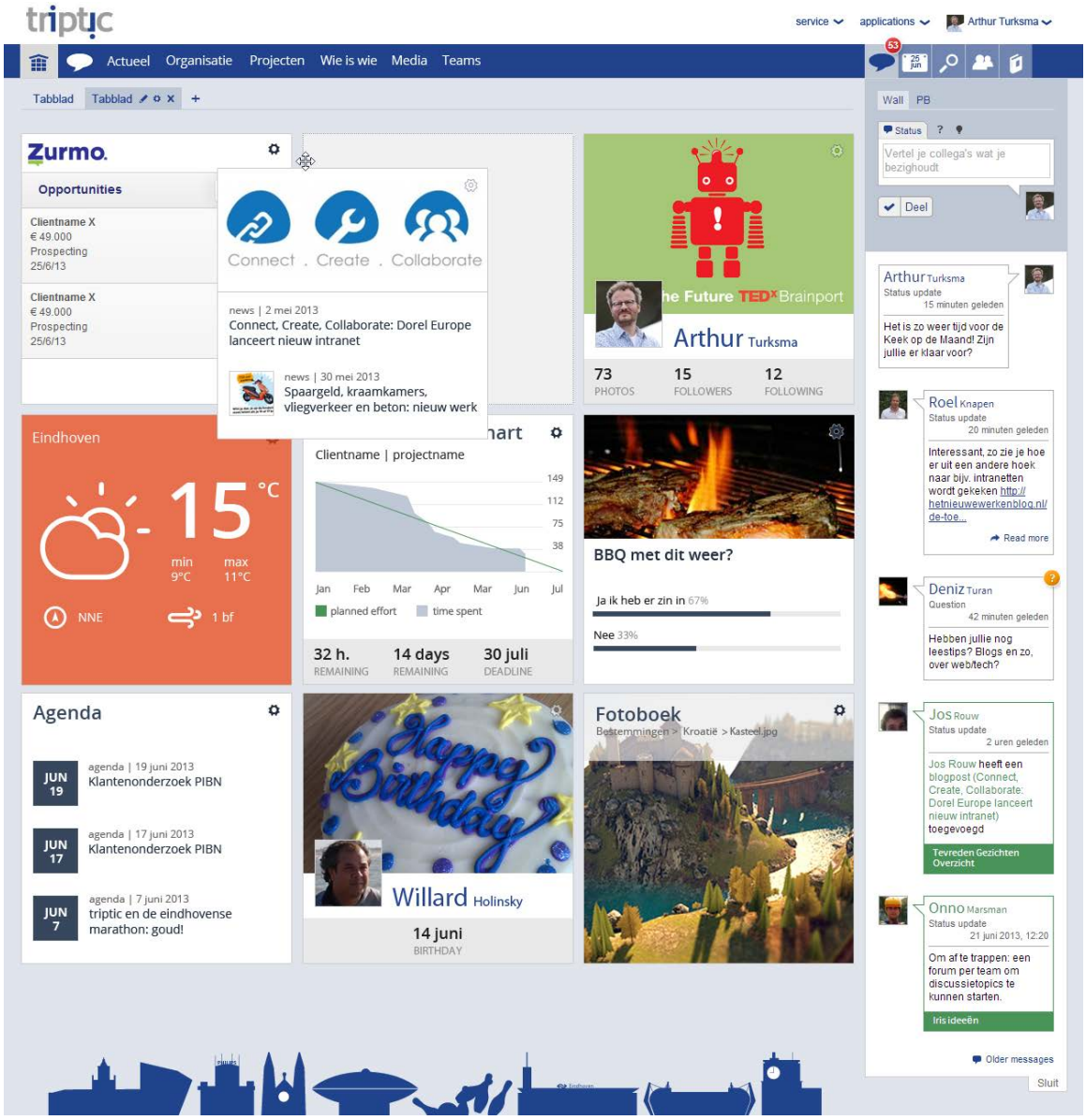
Iris also shows project progress, such as in the *Scrum Burndownchart*, which communicates time spent compared to planned effort for a client working in an Agile development process.

The homepage's right rail houses a toolbox with five tabs that is persistent across Iris. This toolbox makes it possible to search, find people, access documents, and post messages. These tools help people complete key tasks from any page of the site.



The triptic intranet homepage offers news, project information, calendar, project status, and social features in a whimsical way.

The default homepage makes smart selections for widgets for employees. But Iris also lets people customize the homepage by dragging and dropping to move items, or adding and removing widgets through the settings icon.

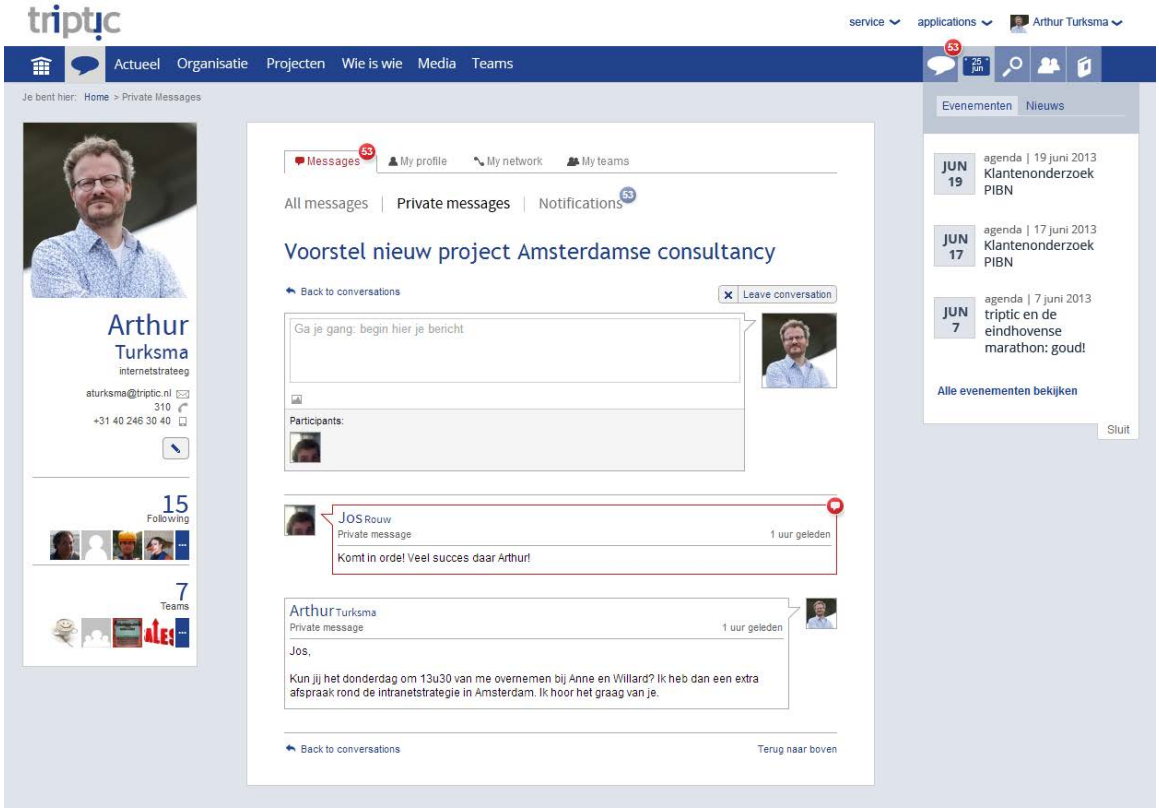


Employees can drag and drop to move widgets (sections) on the triptic intranet.

Beyond being communicative and flexible, Iris is unquestionably a social intranet that offers several lovingly used social features. Employees each have their own wall, which they can access easily by clicking the horizontal navigation menu's speech bubble icon (one of only two icons in the upper left; the other is for the homepage). The logged-in user's image and contact information appear on the left. In the center of the page, employees can write their status, ask a question, or share an idea. Iris also has the capabilities for shared messages, private messages, and notifications—all accessible via the three links above the wall feeds. When employees are posting on their own walls, their photo appears on the right, while their colleagues' posts have photos on the left, making it easy to distinguish each author.

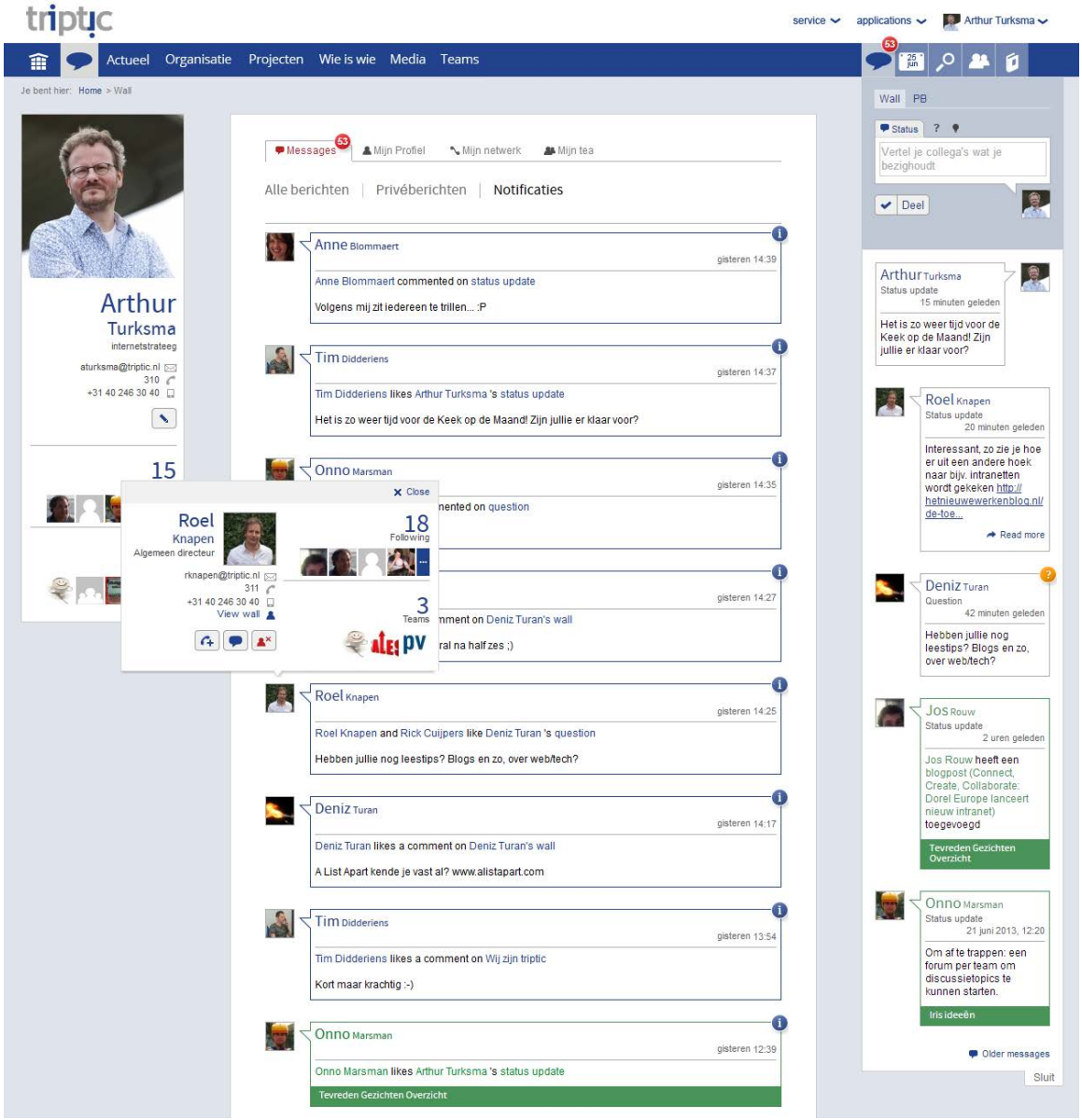
All employees using the triptic intranet have their own wall where they can post information such as status and questions. The toolbox is in the right rail; here, it has the third tab selected, which is an alpha search for people with an open search field. The results for the letter "R" show corresponding employees' name, phone number, photo, and schedule.

In the *Private Messages* section, accessible through a link at the top of the page, employees can write private messages to one other colleague, and later add more people to the discussion. The prompt within the text field says, "Go ahead: start your message here," encouraging people to communicate.



Employees can send messages to one or more selected colleagues through the intranet's *Private messages* section.

The *Notifications* section provides an overview of the activity of the colleagues the employee is following. Each rectangle displays the name, picture, and latest post. When users hover on a profile picture, it opens a summary, including the person's name and picture, the number of people the person is following (along with a sample of those people), and a button to send the person a message.

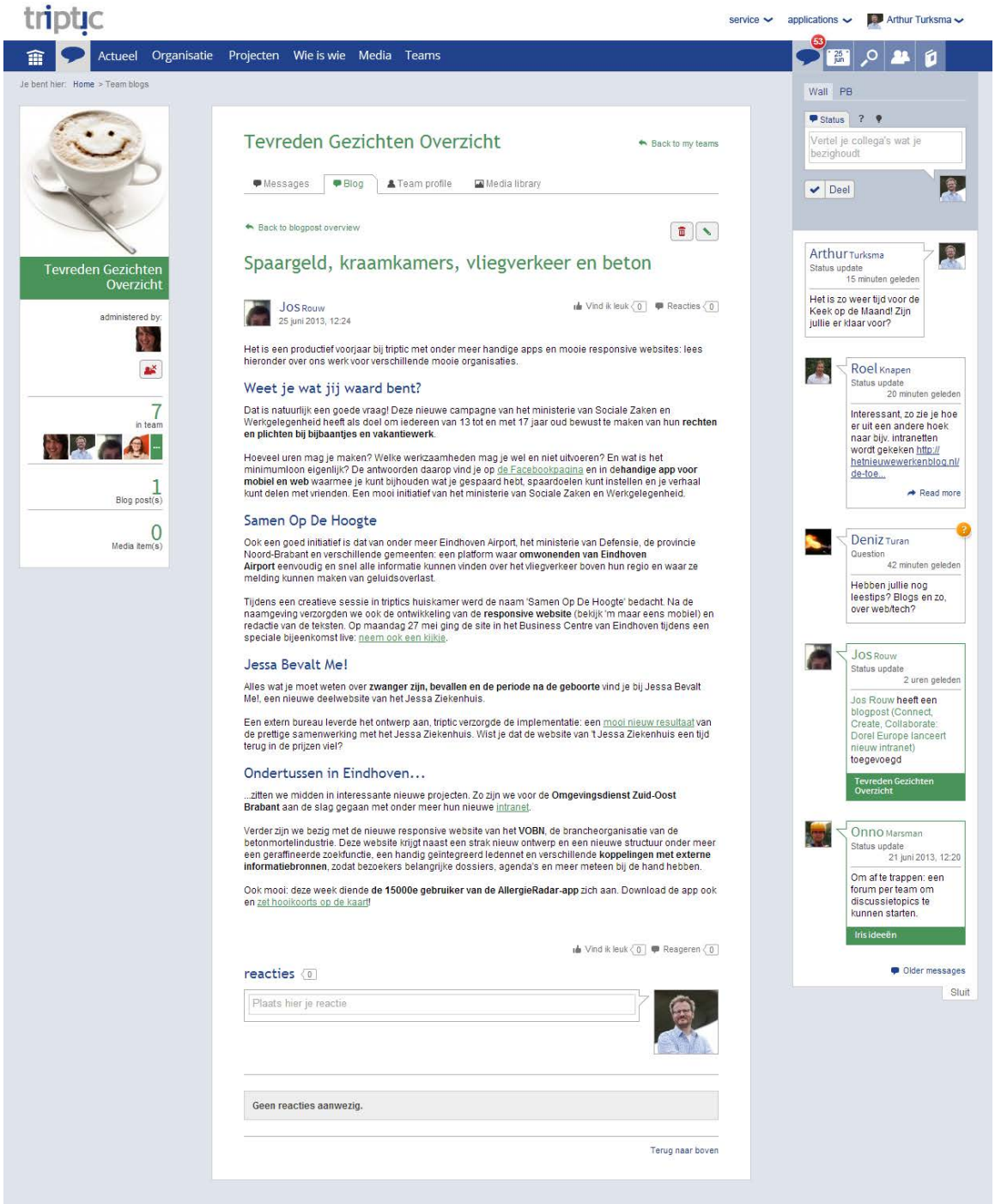


The *Notifications* area on the triptic intranet displays the latest activity of people the logged-in user is following.

Social features are also accessible and helpful from a group level. For example, team walls encourage members of a particular team to congregate online and share information such as success stories and examples of work they've done to help clients.

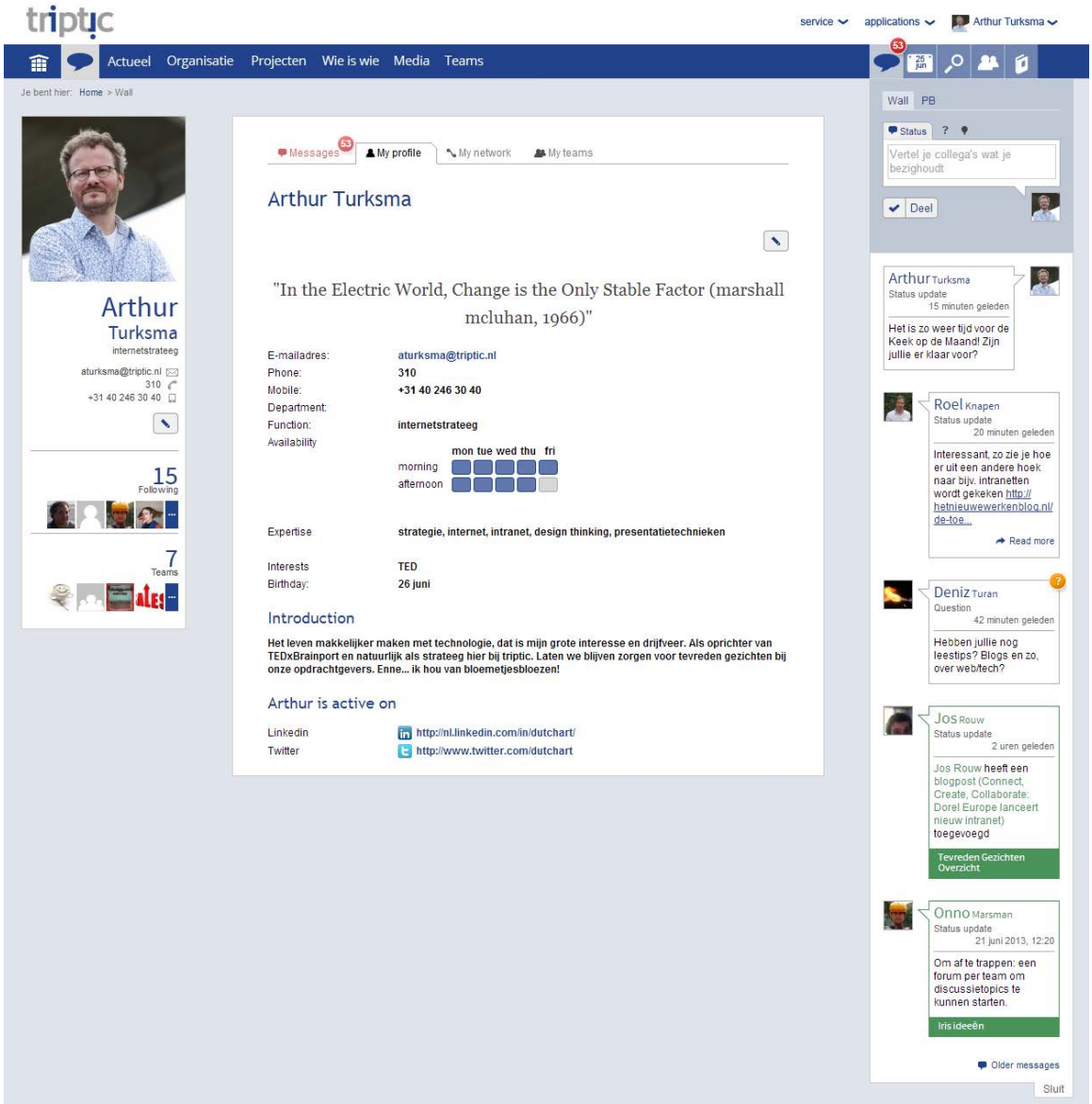
Team walls on the triptic intranet encourage team members to share knowledge and experiences.

If employees have more than a few short comments to communicate to their team members, they have the option on Iris to write a team blog; these passages appear immediately after the employee posts them.



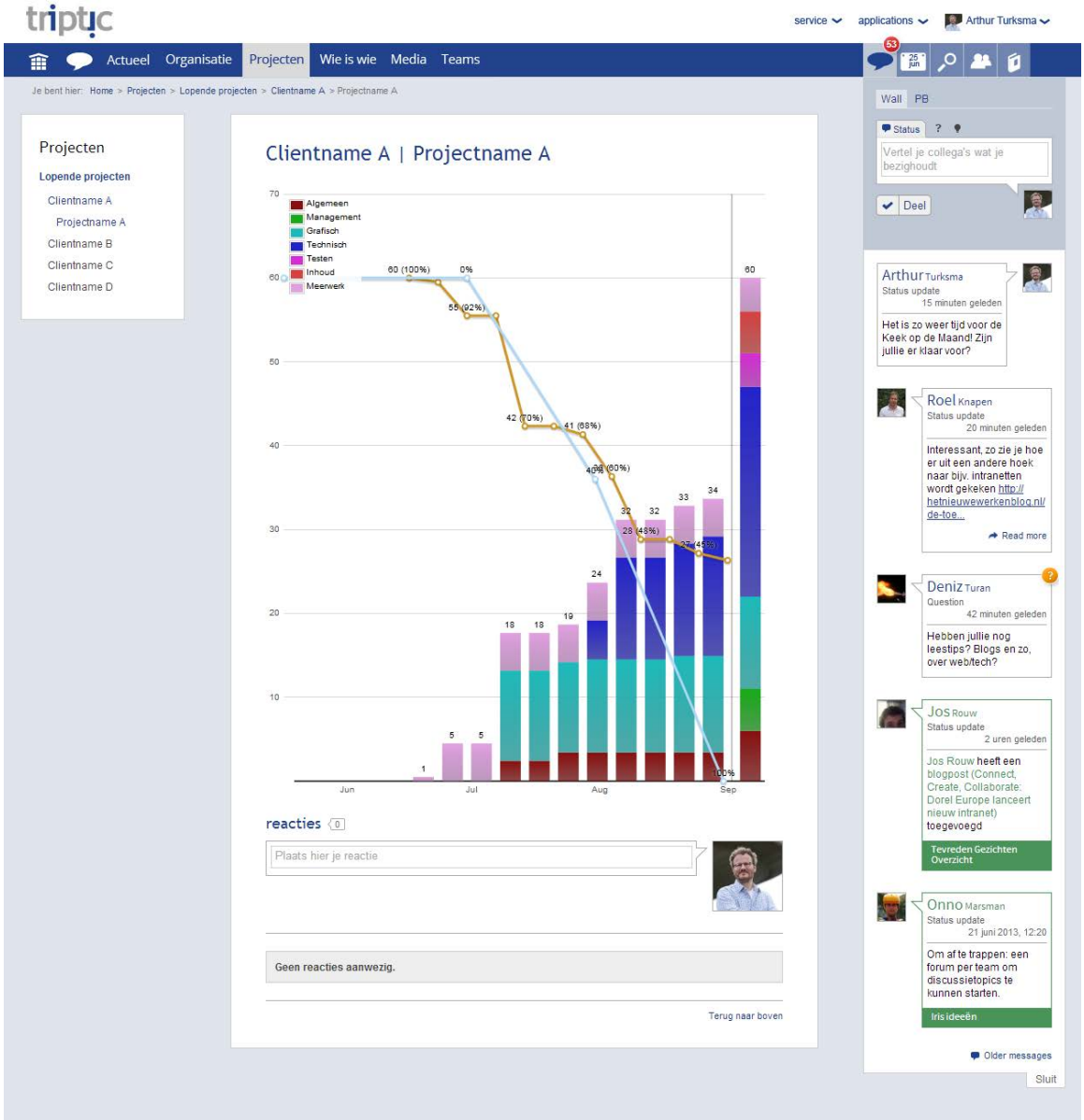
The triptic intranet offers team blogs for longer messages to team members.

For more information about individuals, employee profile pages include germane information such as name, a photo, a favorite quotation, email, phone number, job, expertise, schedule, and social information.



Employee profile pages on the triptic intranet include thorough summaries.

Information about particular projects is housed under the *Projects* menu. triptic keeps copious records about project activities and schedules, and benchmarks what was planned against what is actually happening (or has happened). Bar-line charts are one type of graphic employees use as a basis for communicating, discussing, learning, and planning.



Project pages on the triptic intranet help team members communicate, track, and plan their work.

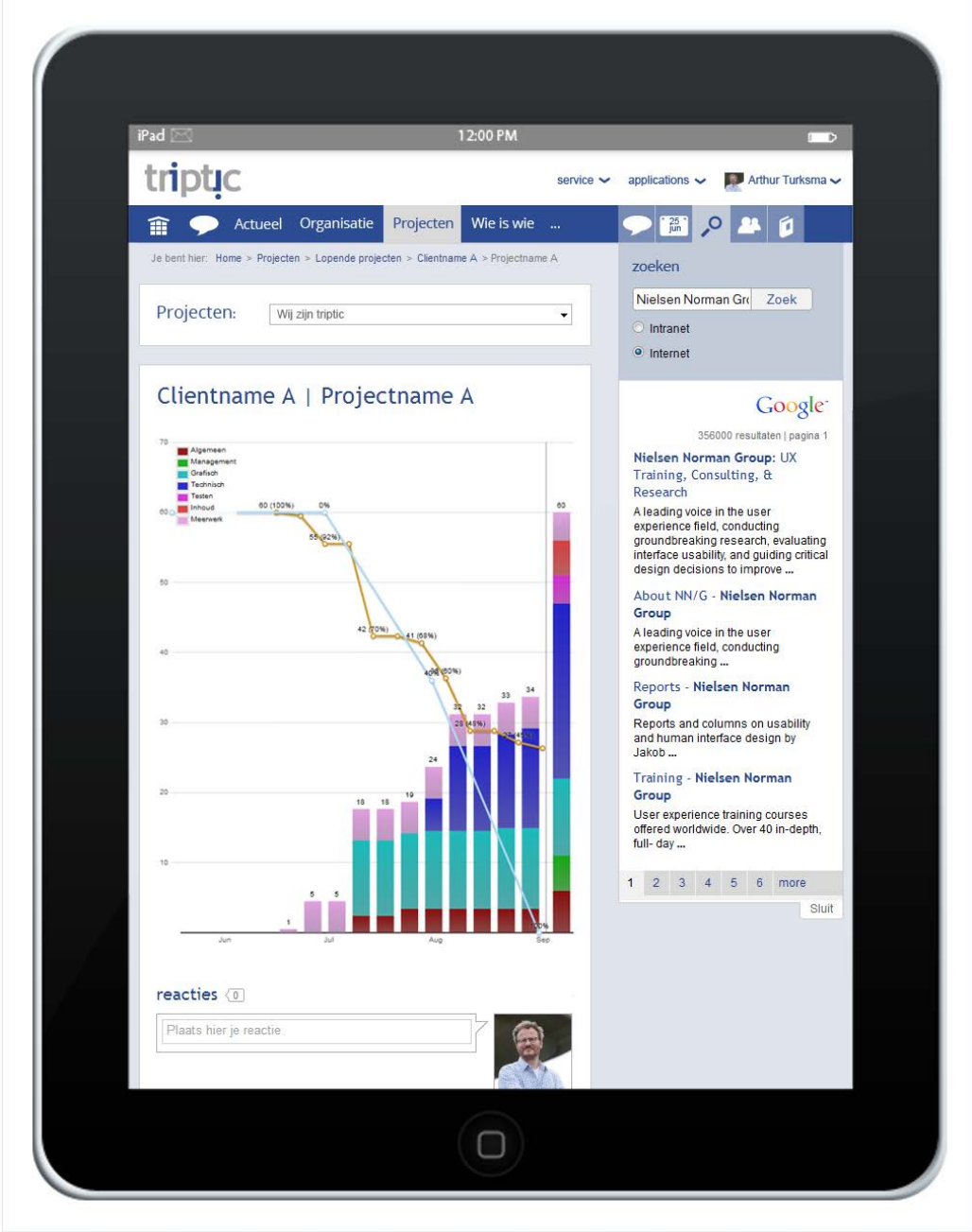
As if all of these smart features on Iris were not enough, the entire intranet is accessible on mobile devices and desktops alike, as it's a responsive intranet design. The intranet designers wanted to ensure that people could communicate and retrieve information on Iris from anywhere, anytime, and chose this method to meet this goal.

The triptic intranet is a responsive design, easy to use on large and small viewports alike.

On a smartphone, the social icon, two menu links, and a menu icon at the top of the screen allow employees to navigate to the toolbar (which appears in the right rail when viewed on a large screen). In this view, designers chose to make the project chart a high priority and display its content first, and the employee's social activity next; however, any employee can rearrange their dashboard to suit their liking.

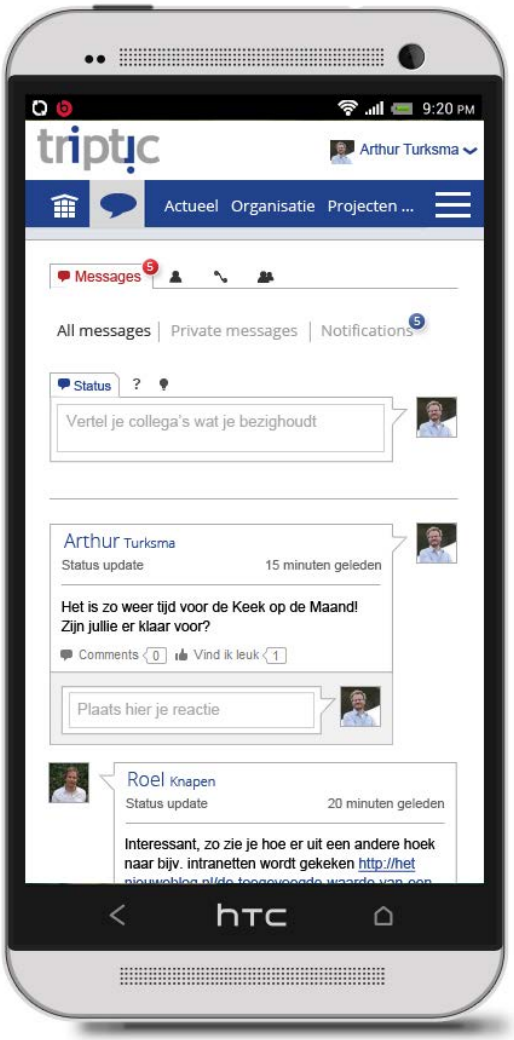
The triptic intranet homepage, as viewed on a smartphone, displays the social and menu icons at the top, followed by the highest-priority content.

Unlike a phone interface, a tablet has enough screen real estate to show the toolbox in the right rail.



The right-rail toolbox remains persistent in the triptic intranet's tablet view.

When viewed on a phone, the social tab shows fewer comments by default than the desktop version, but the comments are still easily legible. Although the photos of colleagues who comment are a little harder to see on a small screen, the names are very legible. In this view, it helps even more to have the colleagues' photos appear on the left side of their posts.



The social tab on the phone view looks similar to the desktop view, but shows fewer comments by default.

Overall, Iris is a breath of fresh air. She is disarming, funny, smart, modern, and available when you need her. And we would really delight in spending time with her.

BACKGROUND

The triptic intranet was designed, above all, to enhance collaboration. Although it was inspired by well-known public social media platforms, it was designed to be something different: an employee's central starting point.

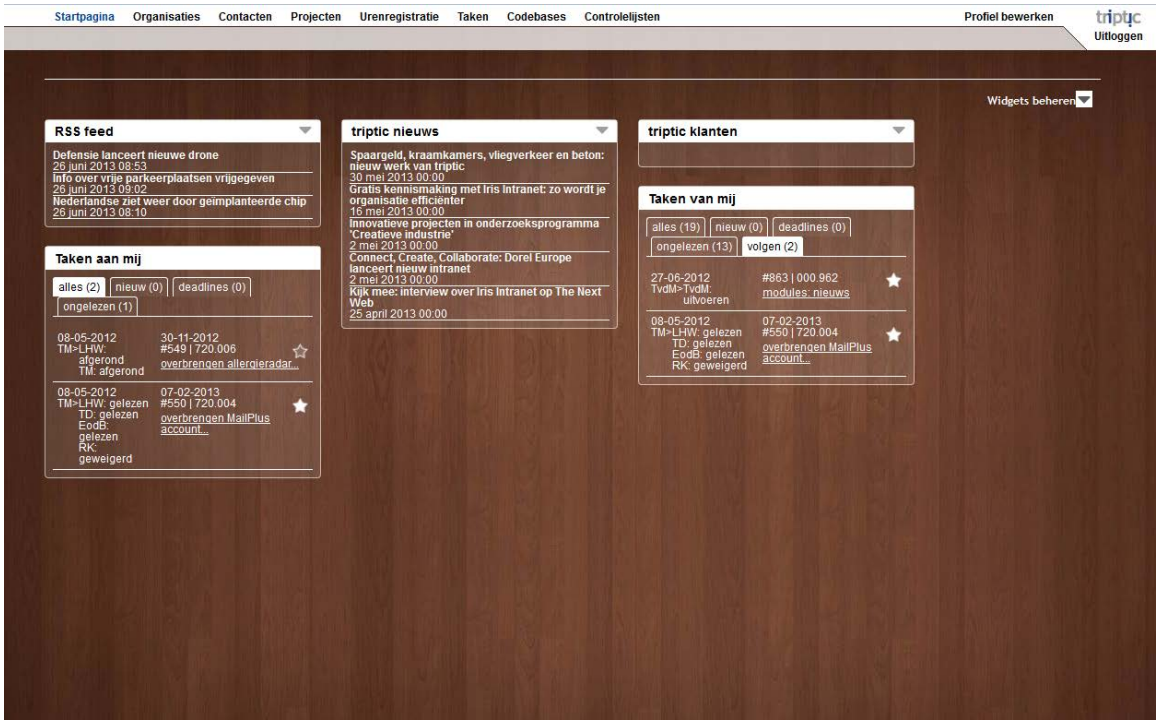
"Our clients were looking for ways to work more efficiently," says strategist Arthur Turksma. "So, we came up with platforms that enabled them to do so. And, when we saw the positive impact these platforms brought along, we decided to start using an intranet ourselves. By that time, Iris showed up."

What the team strived for was to ensure that Iris was not "just another" business tool.

"I have some experience with different enterprise social media platforms," says Rick Cuijpers, Consultant and Project Manager. "But what I dislike is that they're often like another system next to the other software you use, 'YASP'—yet another software platform—another place you have to go to. I prefer the intranet to be an employee's central starting point."

The main challenge for triptic was to find the time to create their own intranet while also serving client projects; despite their great work for others, the firm found themselves in a scenario where the cobbler's children had no shoes.

"The main obstacle was: how do you organize this?" says Cuijpers. "We want to keep developing, keep innovating, but we also have our clients to produce for. Put simply, time was an issue."



The older version of triptic's intranet was quite static and mainly focused on project and task information.

INTRANET TEAM

The triptic team (left to right, standing): Tim Didderiëns, Frank Kemps, Anne Blommaert, Martijn Wernaert, Onno Marsman, Lieke Huenges Wajer, Willem van Berlo, Tatiana Morokko, and Jos Rouw; (left to right, sitting): Roel Knapen, Rick Cuijpers, and Arthur Turksma.

GOVERNANCE

triptic was fortunate in that its experience advising clients on governance structure helped it see the uniqueness of its own governance needs. "Though we are experienced with governance for our clients and see it as indispensable for intranet success, it is not an issue within our own agency because of its relatively small size," says Turksma, adding that, at triptic, "employees' formal tasks are also their intranet roles. Everyone's responsible for input related to their own expertise.

"That way," he says, "governance takes care of itself. The intranet reflects the agile way we manage our day-to-day work: taking responsibility instead of getting it."

Also, colleagues' roles within the company are the same on the intranet. "So, for instance," says Turksma, "our colleague Tim provides support to our clients, and is also the go-to guy for such matters on our own Iris."

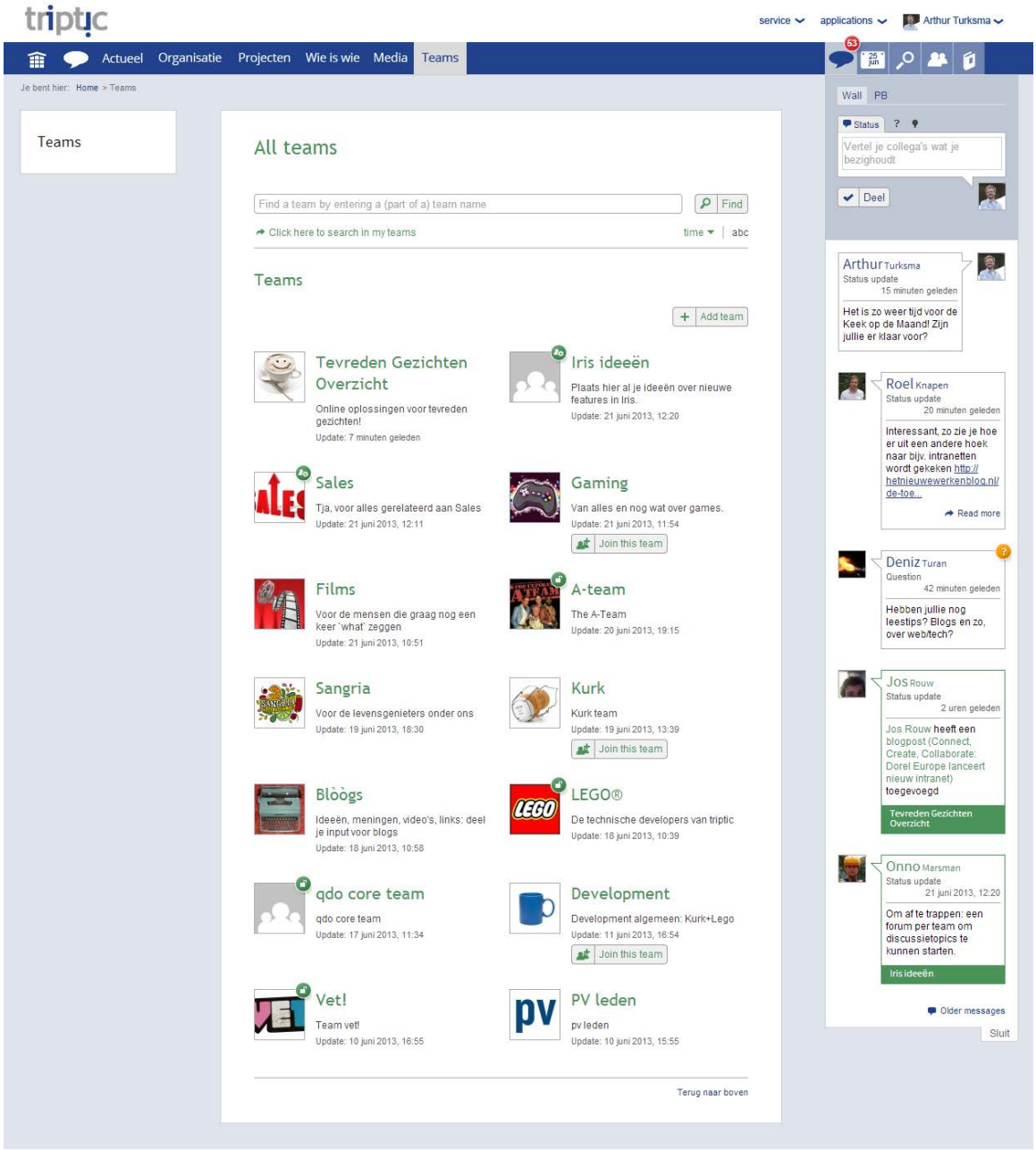
Ownership

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Intranet Strategist	• Overall strategy and concept design
Software Developer	• Programming
Software Architect	• Technical design
Design + UX	• Usability and look and feel
Intranet Coordinator	• Content and structure
Test Coordinator	• Testing
Support	• Support
Controller	• Budget control and time management
Editor	• Content

USERS

The entire 20-person staff at triptic uses Iris. With this tool, the various teams can now share insights much more easily than before. The company's designers and developers, sales and communications officers, managers and strategists can work on ideas together in interactive team pages. This type of online collaboration has changed the company culture, moving it from face-to-face meetings to more online discussions.

"At our agency, we work in multidisciplinary groups of developers and designers, but on the intranet, we have specific teams per specialization—where, for instance, graphic designers and interaction designers discuss recent developments in their field together," says Turksma. "Also, our sales team recently saw a drop in the number of meetings by preparing for pitches on the intranet together."



This team's overview page shows how users can arrange all team pages alphabetically or by the most recently updated, and also use the search engine to find a particular team. Team pages can be open, semi-open, or closed, depending on each team's preference.

URL AND ACCESS

The URL of the homepage is: https://iris.triptic.nl.

DESIGN PROCESS AND USABILITY WORK

Design Approach

The company used a design approach that Turksma calls "Intranet Design Thinking." "We went and defined the key worker types," he says. "In our case, a programmer, designer, sales manager, controller, etc., and asked 'What's their 'journey' on a typical work day?'"

From this, team members developed and tested prototypes. The intranet and the specific modules are based on the company's design methodology and its phases: *empathize*, *define*, *idealize*, *prototype*, and *test*.

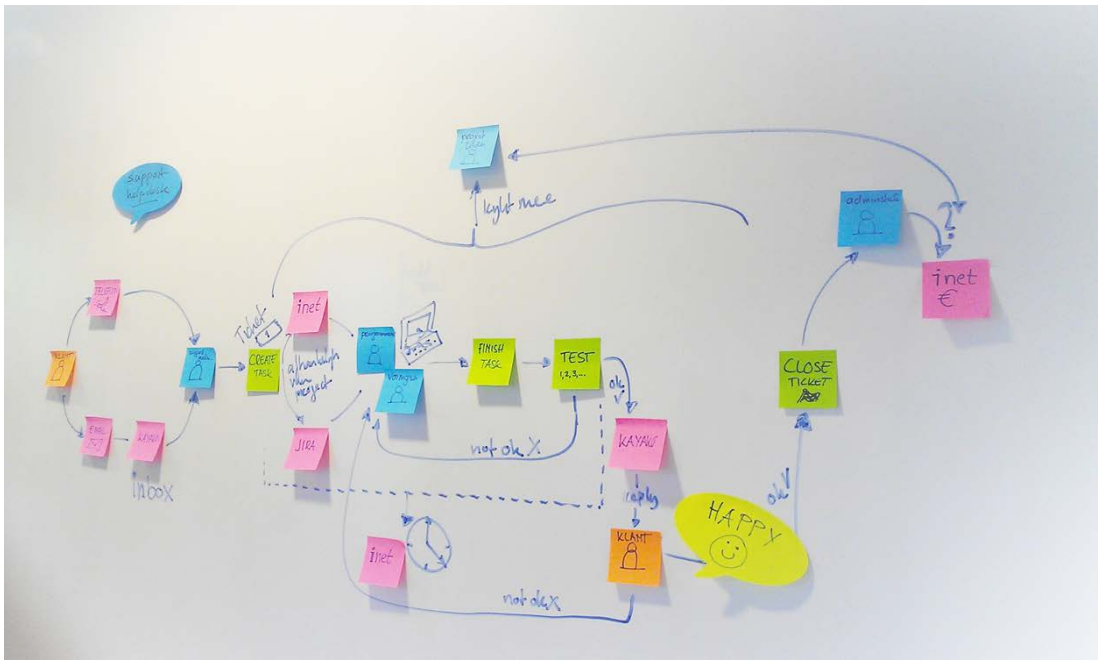
The team was careful to plan not just for launch of a successful site, but also for its growth.

"Looking at social intranets, we saw that after they were launched, knowledge sharing would work for a while, but then the activity would decrease," says Turksma. "Why? Because it just feels like there's even more work to do. We felt like there had to be a way to make it more dynamic, more efficient, and, well, easier."

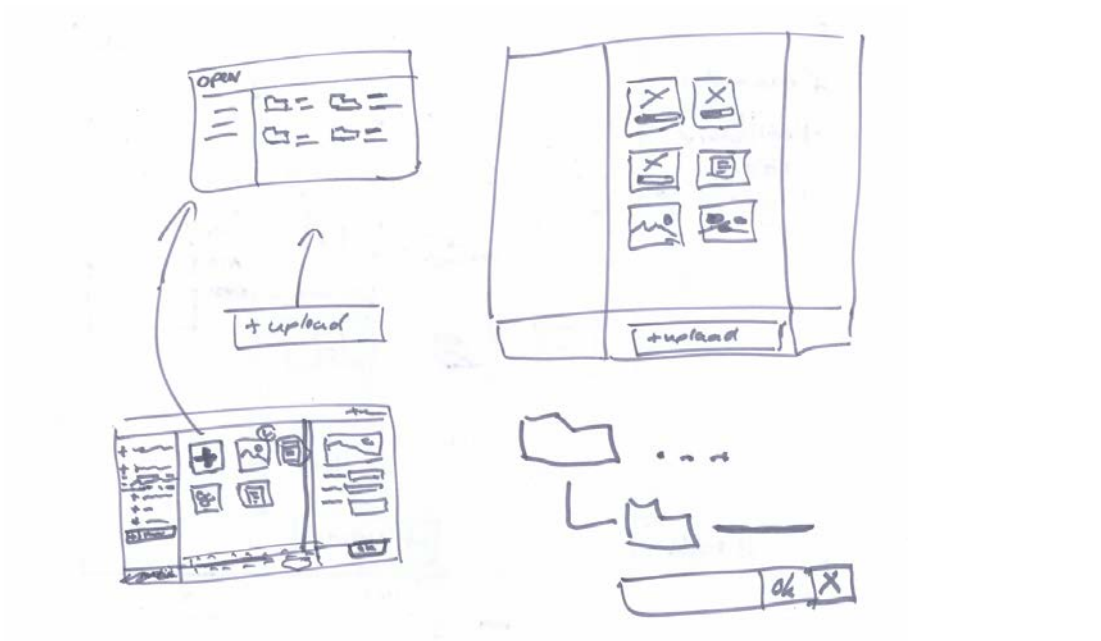
With that as their goal, team members set out to answer several pertinent questions—including "What do people need to complete their tasks?" and "How do you facilitate that, or better yet, how do you improve their activities?"—and made answering those questions a fundamental part of their intranet design approach.

The team analyzed user behavior on several intranets and looked into recent studies on digital interaction and collaboration. "That was the starting point for our designing process," says Turksma. "We did some usability tests for early versions of our intranets, both with an outside agency that specialized in usability testing, and with smaller tests we conducted ourselves, inspired by Steve Krug's down-to-earth approach."

Cuijpers adds that, "over the last few years, I got inspired by the well-known social media as well. We learned quite a bit from their best practices."



The design team mapped out the customer journey using sticky notes and a white board to identify how it could make things less complicated and easier to use.



An early sketch used to figure out how and where to insert media in the intranet. Hundreds of sketches were created to optimize the "design language" and the platform's usability. To maintain consistency in the designs, the team made a template of all interactions and behavior, and made guidelines in a design pattern, so that the experience of each of these is consistent throughout the intranet.

TIMELINE

triptic's evolution from creator of intranets for client use to creator of an intranet for its own use was a gradual unfolding. Ideas that were developed to meet client needs were eventually applied to the company's own requirements.

"At triptic, we've generally seen a development from a 1.0 intranet, which served to inform, to a primary process-based intranet with everything from invoicing to hourly registration and overviews of contacts and projects, to the social stuff based on connecting with each other and sharing knowledge," says Roel Knapen, Coordinator. "Around that time, when customers asked us to implement enterprise social media, we saw all our developments fuse into the idea of Iris: a platform of integrations and connections, with all the information and intelligence to help you."

Forces outside the company's universe also played a part in shaping the outcome of the Iris platform.

"The worldwide crisis played its part as well," says Knapen, "as it really forced organizations to think about efficiency. We were looking for ways to get a better idea of the hours we spend on projects and incorporate this into our invoicing and registration systems. Now, this also integrates seamlessly with our Scrum Agile approach: we can use all this information to inform our people on the progress of projects, thus aiding their decision-making, stimulating autonomy. Basically, we use technology to serve both the primary process and the people."

INTRANET TIMELINE	
Milestone Date	**Milestone Description**
1999	• First version of internal billable hours registration system
2001	• First version of internal wiki
2005	• First integrations of billable hours registration, project management, support, and CRM into the Supportweb internal environment (known as *Sweb*)
2005–2009	• Further development of Sweb (now called *inet*) • Improved UX
2009	• After developing several extranets/protected sections of websites, first client requests for social intranets were received • Developed Swiss Army Knife and dashboard concepts
2009–present	• Developing intranets for clients built on triptic's proprietary CMS, qdo
2011–2012	• Development of inet functionality continues, including creating financial overview functionality, reports visualization, and checklists for work evaluations
2012-2013	• All internal (Sweb, inet) and external (client intranets) development merged into what is now known as *Iris*, the company's internal intranet platform

CONTENT AND CONTENT CONTRIBUTORS

A Homemade CMS

Although triptic team members are no strangers to various industry-leading CMSs, all this knowledge has led them to develop their own.

"In the past we have worked with several Content Management Systems, some well-known, but eventually we built our own and chose to use it for our intranets," says Onno Marsman, Senior Software Architect. "We found that the open source alternatives are not reliable enough when it comes to usability, accessibility, security, and how fast users may feel confused or break something."

The team believes that its internal CMS is more robust, flexible, and safer than existing systems.

Everyone Contributes

At triptic, everyone contributes content to the intranet. "We like trust and openness in our agency," says Turksma, "and since we're a fairly small company anyway, there is no need for an editorial workflow. The fact that we built it ourselves stimulates our people to actively participate on the intranet. And, of course, our colleagues know it like the backs of their hands because they developed it and they provide support to our clients, so they can help each other out when it's necessary."

Content contributors are quickly provided with feedback through comments and "likes." The company's communications officer and copywriter shares his tips for effective online writing with the staff, and the company has created two specific teams on Iris dedicated to feedback: one for bugs and improvements, and another for "'Happy Faces' from our customers," says Turksma.

The team also pays close attention to site stats to provide insights into what's working and what isn't. "We just love statistics," says Knapen. "They provide us with insights on what's popular and what isn't. With those in mind, we do make appropriate adjustments, instead of just looking at them."

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	• Linux: CentOS (Windows is also possible) • PHP • MySQL (or Microsoft SQL) • Virtual machine with four cores, 8GB RAM, 160GB hard disk space
Bug Tracking/Quality Assurance	• Bazaar version control system • Selenium automated testing/continuous integration/PHP Unit • JIRA
Design Tools	• Photoshop • Illustrator • Gliffy • Post-its!
Site Building Tools	• PHP Storm • Various browsers with specialized plugins (including Firebug and several web developer tools)
Content Management Tools	• qdo CMS
Search	• Apache Lucene (SOLR)
Other Functions	• Active Directory

triptyc

service applications Arthur Turksma

Actueel Organisatie Projecten Wie is wie Media Teams

Je bent hier: Home > Organisatie > Wij zijn triptic

Zoeken

Responsive design

Pages (1)

Wall (2)

Teams (6)

Wie is wie (2)

Documents (1)

Filter

All dates

This month

Last 3 months

This year

Older

Zoeken

Responsive design | zoek

12 results

Result found in "pages"

1 result

Wij zijn triptic

Sinds 1997 zijn we thuis in strategisch denkwerk, technische ontwikkeling en aantrekkelijke vormgeving. In dienst van de mensen, gewiekst met ...

Organisatie > Wij zijn triptic

Results found in "wall"

2 results

Jos Rouw

Haddden jullie deze blogpost over responsive design al gelezen? 'Responsive design: belangrijke vragen voor je organisatie'. Lees hem, deel hem...

Wall > Jos Rouw

Arthur Turksma

mooie nieuwe term: Responsible Responsive Design... kunnen we ook meenemen in het verkoop-praatje van Iris :) You're designing responsively..

Wall > Arthur Turksma

Results found in "Teams"

6 results

Iris release 1.2 testresultaten

Ik ben in elk geval erg tevreden met ons responsive design, als je ook kijkt op mobiel hoe lekker dat gaat, we moeten nog wel even testen op iPad mini maar...

Teams > Iris release 1.2 testresultaten

Iris ideeën, verbeterpunten en fouten

@Willem van Berlo, hoe wil je het qua responsive design aanpakken met afbeeldingen op mobiel? Het aanpassen gaat niet altijd even lekker!

Teams > Iris ideeën, verbeterpunten en fouten

Besteld: het boek 'Responsible responsive design' waar Arthur het laatst op zijn wall over had, we zijn natuurlijk al goed bezig maar qua contextgericht responsive...

Teams > Iris ideeën, verbeterpunten en fouten

Ontmoet Iris Demo's

Bij de volgende Iris demo moeten we wel meer aandacht besteden aan responsive design. De vorige keer merkte ik dat er veel interesse is voor responsive design omdat het idee van 'je hoeft geen aparte mobiele...

Teams > Ontmoet Iris Demo's

Sales

Vraag tussendoor: als prospects vragen naar responsive, hoe omschrijven jullie dan de voordelen van responsive design?

Teams > Sales

Blogs

Na de vorige blogpost 'Responsive design: belangrijke vragen voor je organisatie' kunnen we wel een vervolg gebruiken. Kunnen de responsive design-experts...

Teams > Blogs

Results found in "Wie is wie"

2 results

Willem van Berlo

Job: Designer
Email adress: w.vberlo@triptic.nl
Phone number: 040 2660321

Wie is Wie > Willem van Berlo

Rick Cuijpers

Job: sr. Technisch adviseur / a.i. Projectmanager
Email adress: r.cuijpers@triptic.nl
Phone number: 040 2660319

Wie is Wie > Rick Cuijpers

Result found in "Document

1 result

Guidelines responsive design

PDF | 10x gedownload

Teams > Blogs

Terug naar boven

Wall PB

Status ?

Vertel je collega's wat je bezighoudt

Deel

Arthur Turksma
Status update
15 minuten geleden
Het is zo weer tijd voor de Keek op de Maand! Zijn jullie er klaar voor?

Roel Knapen
Status update
20 minuten geleden
Interessant, zo zie je hoe er uit een andere hoek naar bijv. intranetten wordt gekeken http://hetnieuwewerkenblog.nl/de-toe...
Read more

Deniz Turan
Question
42 minuten geleden
Hebben jullie nog leestips? Blogs en zo, over web/tech?

Jos Rouw
Status update
2 uren geleden
Jos Rouw heeft een blogpost (Connect, Create, Collaborate: Dorel Europe lanceert nieuw intranet) toegevoegd
Tevreden Gezichten Overzicht

Onno Marsman
Status update
21 juni 2013, 12:20
Om af te trappen: een forum per team om discussietopics te kunnen starten.
Iris ideeën

Older messages

Sluit

An example of a search results page.

MOBILE

Iris is fully accessible and available on smartphones and tablets. Using responsive web design, it adjusts to accommodate portrait and landscape orientations in both content and layout.

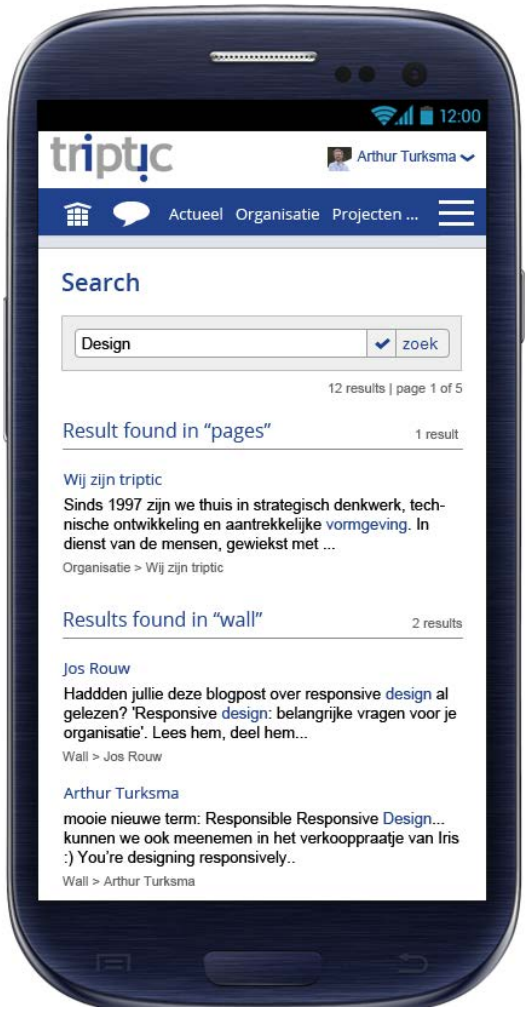
The content is fully available through tablet and mobile as well, but the design adjusts its widgets accordingly. Depending on the device and the context, some content becomes more or less prominent. For example, on mobile, the *Scrum Burndownchart* displays as only the big picture, with no detailed view. The team decided that the drill-down capability is needed only on desktops.

"The idea for presenting content differently was task-related," says Turksma. "On the road, you have different priorities. For instance, and, in the case of our agency, most importantly, when our accounts people are on their way to clients or pitches and want to look up information. All this stems from design thinking: what is needed and where?"

"It's difficult to prioritize, to decide which content is most important on smartphones especially," says Willem van Berlo, UX designer. "To give you a simple example, people on the road will most like be looking for contact information rather than other personal information. I find the biggest challenge is this prioritizing and leaving other stuff behind.

"We deliberately chose to go responsive instead of building an app, to create more or less the same environment on each device, so Iris really gets familiar," he says. "Another challenge is to keep the intranet as 'light' as possible when it comes to the data you hit a mobile phone with. You have to take bandwidth into consideration."

An example of a mobile content page



A search results page adapted for mobile display.

RESULTS AND ROI

Early Successes

Although Iris is still young, the triptic team has experienced some early successes with the site. "We've only been running it for a couple of months, but we already recognize the benefits we've also seen with our customers' intranets," says Cuijpers, adding that triptic employees "work more efficiently and more easily, which is very rewarding."

The social aspects of Iris are helping staff spend less time pushing paper and more time collaborating with co-workers. "Our biggest success is that, on a day-to-day basis, we notice that we spend less time on paperwork and more time on actually working together," says Turksma. "For example, during the sprint of a project, all the people involved are more informed and always know what to do next. We notice that the amount of calculated hours is closer to the number of actually executed hours than before. That sure makes me happy."

Another good example of how Iris has transformed work practices is how things work when the agency prepares a pitch for a prospect. "Normally, you'll typically see a huge load of emails in a short period of time," says Turksma, "but now everything is very clearly organized on Iris. That saves us a lot of time, no longer having to dig into piles of mails when you're out and about…. Iris helps us save minutes each day, which makes us more productive. It's a pleasure to have her around."

"We haven't yet calculated an exact amount of time we save, but everybody is experiencing the benefits," says Knapen.

LESSONS LEARNED

Iris team members share their lessons learned:

- **Leave time to address cross-browser peculiarities.** "When it comes to cross-browser, we were surprised a few times. For instance: when we discovered some things did not work in an older version of Internet Explorer that was still widely used. We had to implement older techniques so it would be supported by this browser. That provided us with some design challenges." (Marsman)
- **The cobbler's children need fancy stilettoes, too.** "[Making] time is an issue. We want to keep developing, keep innovating [for ourselves], but we also have our clients to produce for. Put simply, time is an issue." (Cuijpers)
- **You are never done.** "When it comes to developing, one of my most important lessons is the fact that you're never done. Never done developing, but also, when working with clients, you are never done with system integrations, governance, stimulating user adoption, and streamlining processes." (Cuijpers)
- **Test early and often.** "Interesting advice for other intranet designers would be to start using automated tests right away. We should have done that earlier on, for example, [with] the messaging matrix, in which it is determined which user sees which information. It became too complex for manual testing, which cost us a lot of hours." (Cuijpers)

WellPoint Medicaid Business

Using the intranet: WellPoint is the nation's leader in serving low-income families and people with disabilities through state-sponsored health care programs. With more than two decades of experience managing health care for the nation's most vulnerable people, WellPoint is well positioned to address the challenges and growth opportunities of health reform, Medicaid expansion, and the dual eligible population.

Headquarters: Indianapolis, Indiana

Number of employees the intranet supports: 7,700 associates in the WellPoint Medicaid business unit

Locations where people use the intranet: Currently, the primary users are WellPoint Medicaid business unit associates in 19 US states; Heartbeat will support collaboration needs for additional corporate WellPoint sites used by more than 43,000 associates.

Annual Sales: $61.71 billion

Design team: The intranet design was done completely in-house; the core team was comprised of 17 associates from both Communications and Information Technology (IT). These associates included specialists in web- and print-based communications, design, usability, best practices, and technology. Associates throughout all levels of the organization contributed an array of subject matter expertise.

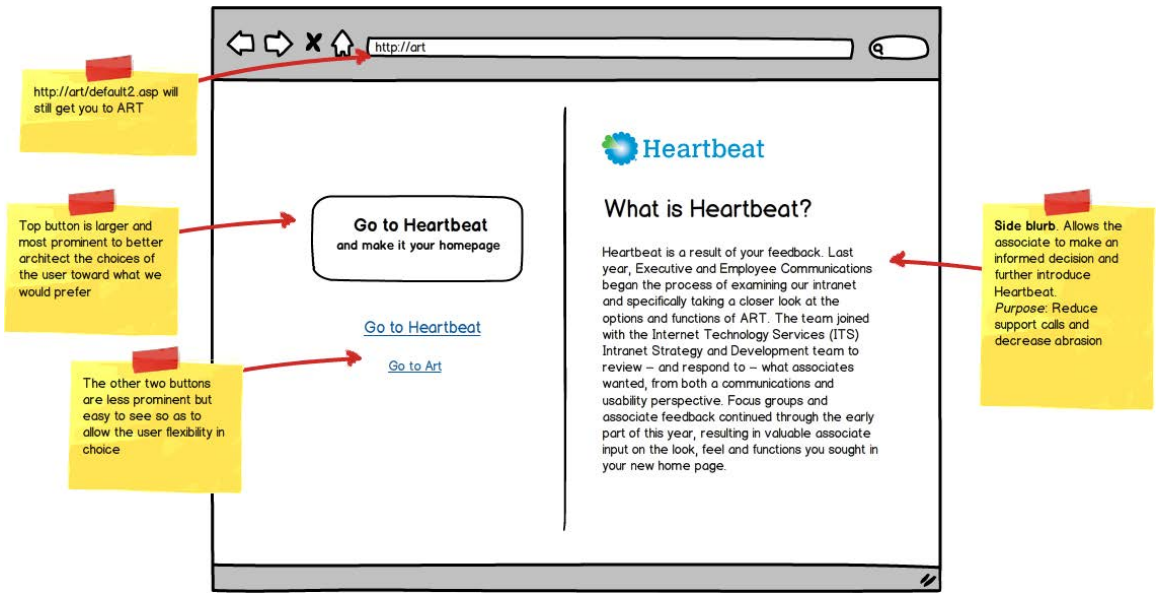
In-house team: Peter Lobred, VP of Executive and Employee Communications; Jamisson Fowler, VP of Information Technology Services; Tom Caudron, Associate Vice President of IT Integration Services; Jason Marlowitz, Director of Intranet Strategy and Development; Chelsea Caplan, former Senior Coordinator Communications for Executive and Employee Communications; Leila Roche, Senior Coordinator Communications for External Communications; Dan Whitehead, ITS Programmer Analyst I; Arlen Vargas, ITS Programmer Analyst III; Brendan Mcgarrett, ITS Programmer Analyst III; Katie Landry, Manager of ITS Application Management and Support; Rebecca Lambert Systems Business Analyst II; Peggy Callaway, Art Director for Executive and Employee Communications; Anthony Francisco, ITS Programmer Analyst Principal I; Jaclyn Payne, Systems Business Analyst III; Brian King, ITS Programmer Analyst Principal I; Melissa Carter, Project Coordinator II; Nealy Gihan, Manager of Writing for Executive and Employee Communications; Trey Runkle, Former Project Manager I; Andrew Flowe, Project Manager; Kaitlin Kelly, Corporate Communications Specialist; and Susanna Cagle, ITS Business Analyst

SUMMARY

With associates spread across 19 states, WellPoint's Medicaid business unit needed a new intranet to improve communication and collaboration across its geographically dispersed group. The previous intranet was out of date—it was nearly 10 years old and largely unchanged in that time—and offered users no ability to collaborate or personalize the content.

The new intranet is the result of two WellPoint teams working together: Executive and Employee Communications, and Intranet Strategy and Development. This partnership has served the site well; the Communications team brings its expertise in conveying information to the company, and the intranet team brings its technological and user experience expertise to making the site work well and be easy to use.

This teamwork was a key part of the new site's rollout. The joint team recognized the need for change management. As such, the communications team crafted messages about the changes on the site, building excitement, interest, and momentum for the new site and its content and features.



An example of the messaging the Communications team worked on to ease the transition to the new intranet. The previous site and new site ran side by side for two months to ease the transition. The interstitial included an explanation of the new site, starting with: "Heartbeat is a result of your feedback."

Meanwhile, the intranet team created iterative revisions of wireframes and designs. The team took control of the site design, presenting wireframes and ideas for review, rather than designing by committee. The team collected feedback on wireframes and showed changes based on that feedback in iterative reviews. This helped the team get buy-in and also made sure the changes were moving in the right direction. Early on, the team found that discussions surrounding new ideas and features of the intranet went more smoothly if they provided even very rough wireframes of ideas.

The team named the new site *Heartbeat*, which both relates to the group's work and indicates that the new site is the "pulse" of the company. As such, the homepage focuses on information that changes regularly, including announcements and rotating news stories. A news carousel is embedded in the top hero space on the page. Seven stories are featured in the carousel at a time, each with a headline, brief summary, and link to read more. The images change randomly on page load to convey a sense of site freshness to users.

The team wanted to limit the amount of information on the homepage, knowing that cluttered pages force users to work harder to see information (and that users often skip cluttered pages, rather than plow through them). The rest of the page incorporates white space and a clean design to help users focus on the content available.

Beneath the carousel, users can view their own weather forecast as well as the forecast for another WellPoint location. The team incorporated this rotating weather feature—which highlights a random sample of weather details for various WellPoint locations—as a simple way to connect employees to one another. The goal was to give associates a glimpse into their widely scattered colleagues' days.

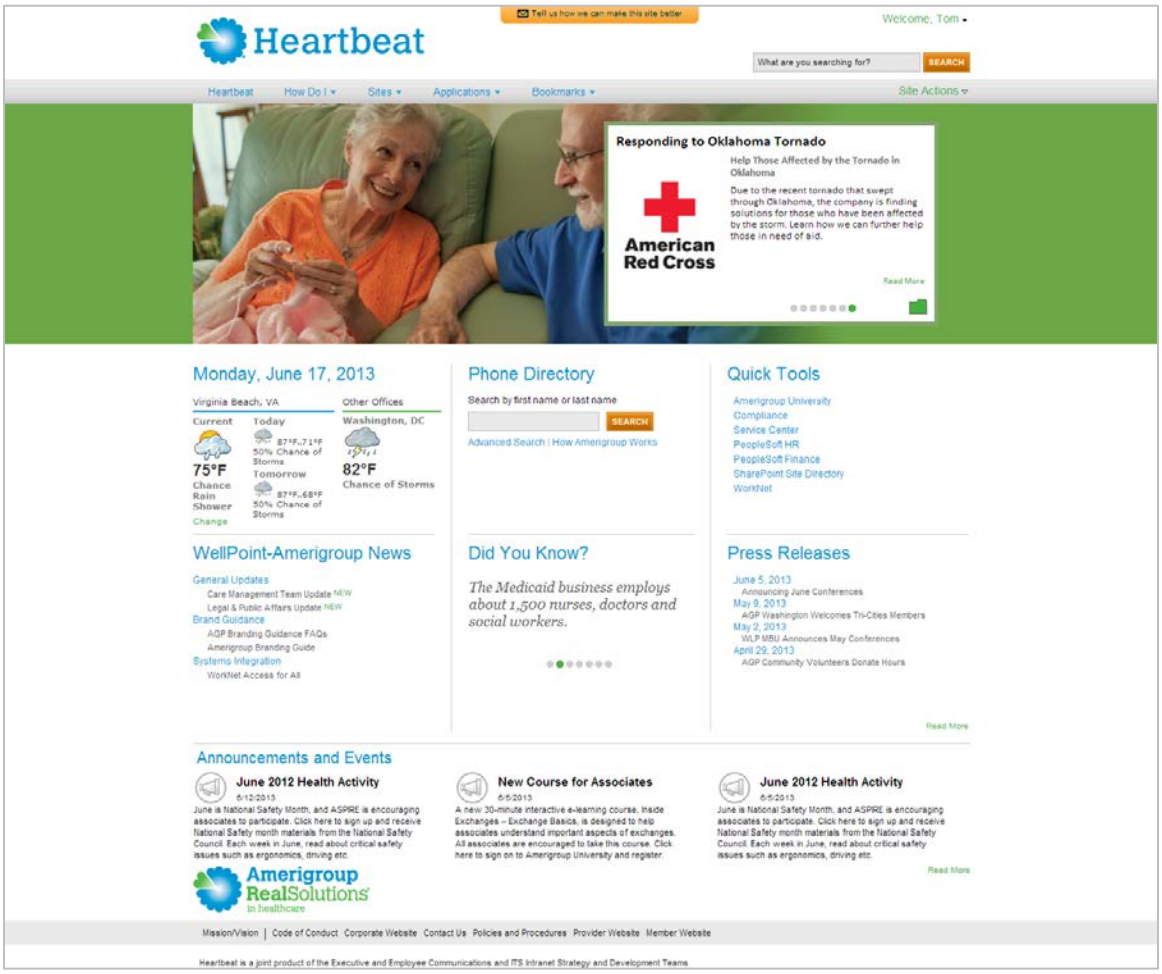
This section is followed by WellPoint-Amerigroup corporate news, with updates, brand information, and systems-integration headlines. Additional announcements

and events round out the homepage news, with each item including the date it was posted and a brief content summary.

Employees can quickly access the employee directory via a search box on the homepage that lets them search for colleagues via a first or last name, link to an advanced search, or find out more about the Amerigroup corporate structure. Additionally, this resource provides a tutorial on how the Medicaid business works, information about the industry, along with a glossary for acronyms.

The center of the page is focused on interesting tidbits of information relevant to both employees' workdays and WellPoint's work. New content is typically rotated in on a monthly basis, but sometimes appears weekly, depending on the frequency of key company events.

The right side of the page includes a list of links to tools commonly used throughout the organization. This is followed by recent press releases, with each headline accompanied by the date it was posted.



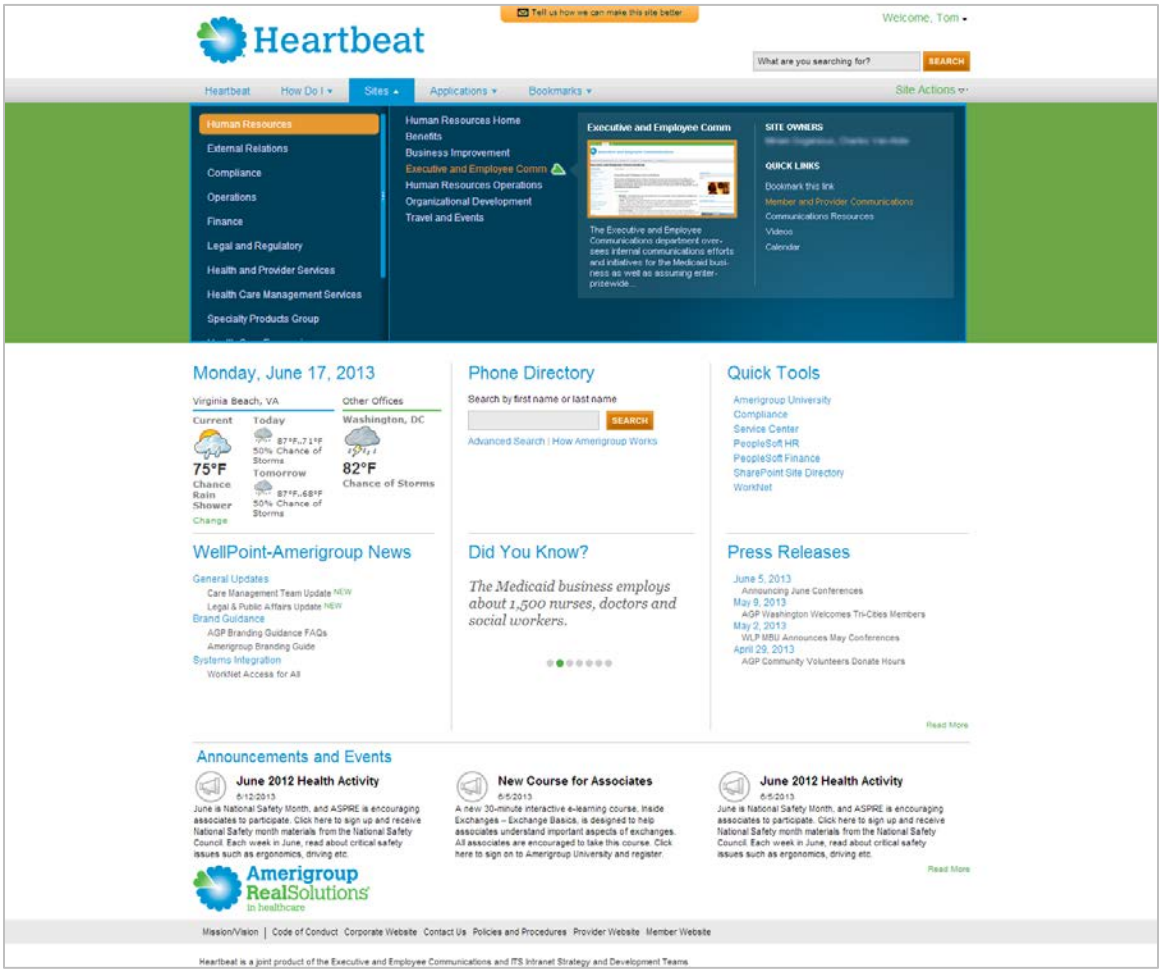
The new intranet's clean homepage focuses on news and announcements and provides quick access to tools.

The team incorporated user research and user interface design expertise throughout the project. In early conversations about the new site, users had a few common

requests. They wanted a directory of the site's more than 10,000 SharePoint team and project sites. They wanted ways to collaboration across different domains, crossing over the previous site's information silos. They also wanted a central location for business-critical applications.

The site's navigational structure makes these items front and center. Users can chose from *How Do I?*, *Sites*, and *Applications*. They can also create and access a customizable list of personal *Bookmarks*.

The team decided to limit the number of choices in the megamenu navigation so that users could more easily access important information. For instance, the *Sites* section lists broader categories of sites, which are then further broken down. Users can select a category on the left, see related subcategories, and mouse over the subcategories to see a brief summary and the site's owners.



The *Sites* navigational category lets employees navigate to the many team and project SharePoint sites.

One component of the new site is customization. Employees can create their own custom bookmarks through the site, giving them quick access to the resources they use regularly. For instance, the team found that a group of nurses used this tool to great effect. The nurses often relied on a wide variety of outside and inside tools to do their daily work, and keeping track of them was a challenge. Some of the lead

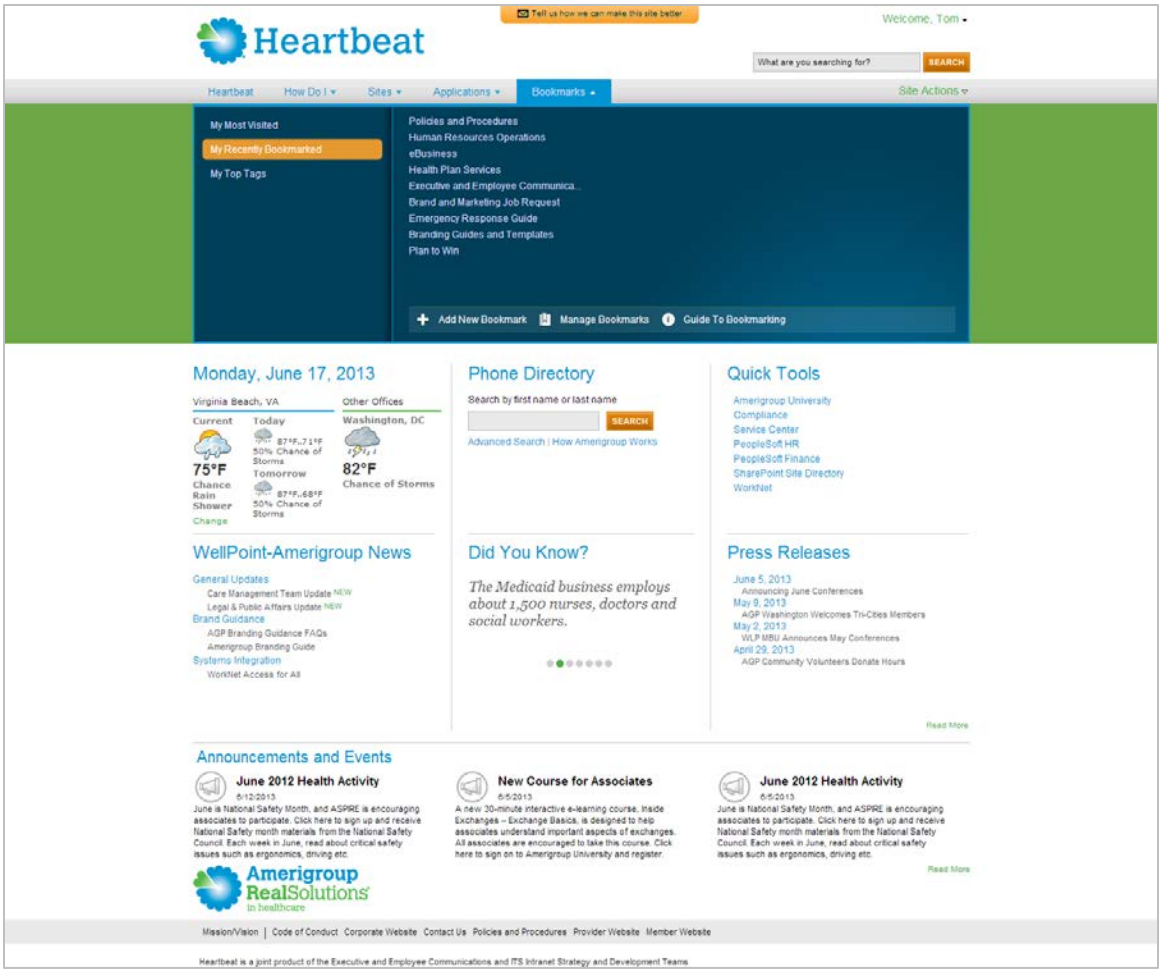
nurses started using the site to gather lists of resources, and they encouraged others to do the same. In this way, they utilized the site to make their daily work a little simpler.

Users can add and tag bookmarks as an additional way to manage larger lists of links. Users can go to *Manage Bookmarks*, and from there they can view an alphabetical list of all links or use tags to navigate to subsets of links.

Once users bookmark content, they can view their links in three ways: by the most commonly visited, by recent bookmarks, or by top tags. *My Top Tags* is a list of the top 20 terms people use when tagging (bookmarking) a resource. For example, an associate might have several documents, pages, or whole sites where "Medicaid" is a keyword selected to describe those resources. If "Medicaid" is a commonly used keyword, it will be listed in the menu on hover of *My Top Tags*. These tags are arranged by frequency specific to the individual associate, but the logic behind it is using an aggregate of all associates' to derive metrics around the most commonly bookmarked resources and the categories in which they belong.

Once users click on one of the terms in *My Top Tags*, they are presented a view containing all sites and documents organized by that term.

Users can add new bookmarks via a link in the menu or manage existing bookmarks; they can also view a guide to bookmarking, if needed. When employees have not yet created any bookmarks, a brief explanation of the tool appears with a link to add a new bookmark and a link to the guide as well.



Users can create customized lists of links that lead to internal or external resources. These links are available through the *Bookmarks* item in the main site navigation.

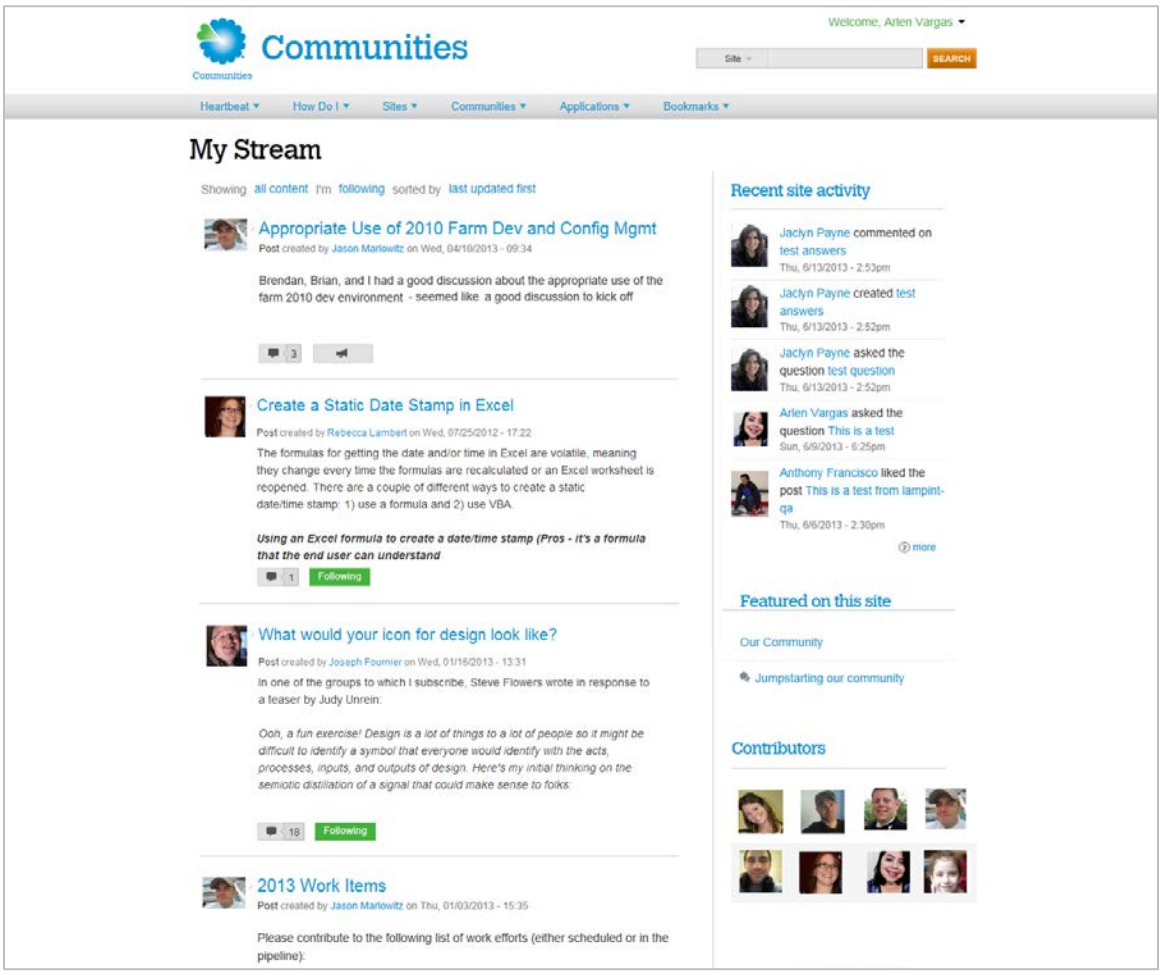
Another key site area is *Communities*. A main goal of the redesign was to facilitate communication and collaboration, and this section was built to do just that.

The *Communities* Heartbeat menu option is secured by role, so that only associates in the Medicaid division have access to this resource (Heartbeat is accessible across all divisions). The designers did this to address regulatory concerns for all divisions before opening up more collaborative capabilities. Company-wide rollout is slated for 2014, at which time the *Communities* menu option will be enabled for all WellPoint associates.

In *Communities*, employees can follow other community members, topics, groups, or individual pieces of content. Users can keep up-to-date via an activity stream that showcases the latest information posted. The stream includes a picture of the person who posted the content, the date and time posted, and a few lines of text and the number of comments. Users can determine at the top of the page what content they want to view. They can select which type of content they want to see, as well as change how that content is listed, by showing:

- *Answers:* correct answers to questions posted to various communities/groups
- *Posts:* general knowledgebase or discussions
- *Questions:* posts that allow associates to suggest answers and receive credit for correctly solving problems
- *Wikis:* more in-depth content stores on specific elements of the business

Further, the *most active* option uses a capability called "radioactivity" to determine whether older posts have enough activity to delay their decay or will be shuffled to bottom of the list.



The site's *Communities* section lets employees communicate across the organization.

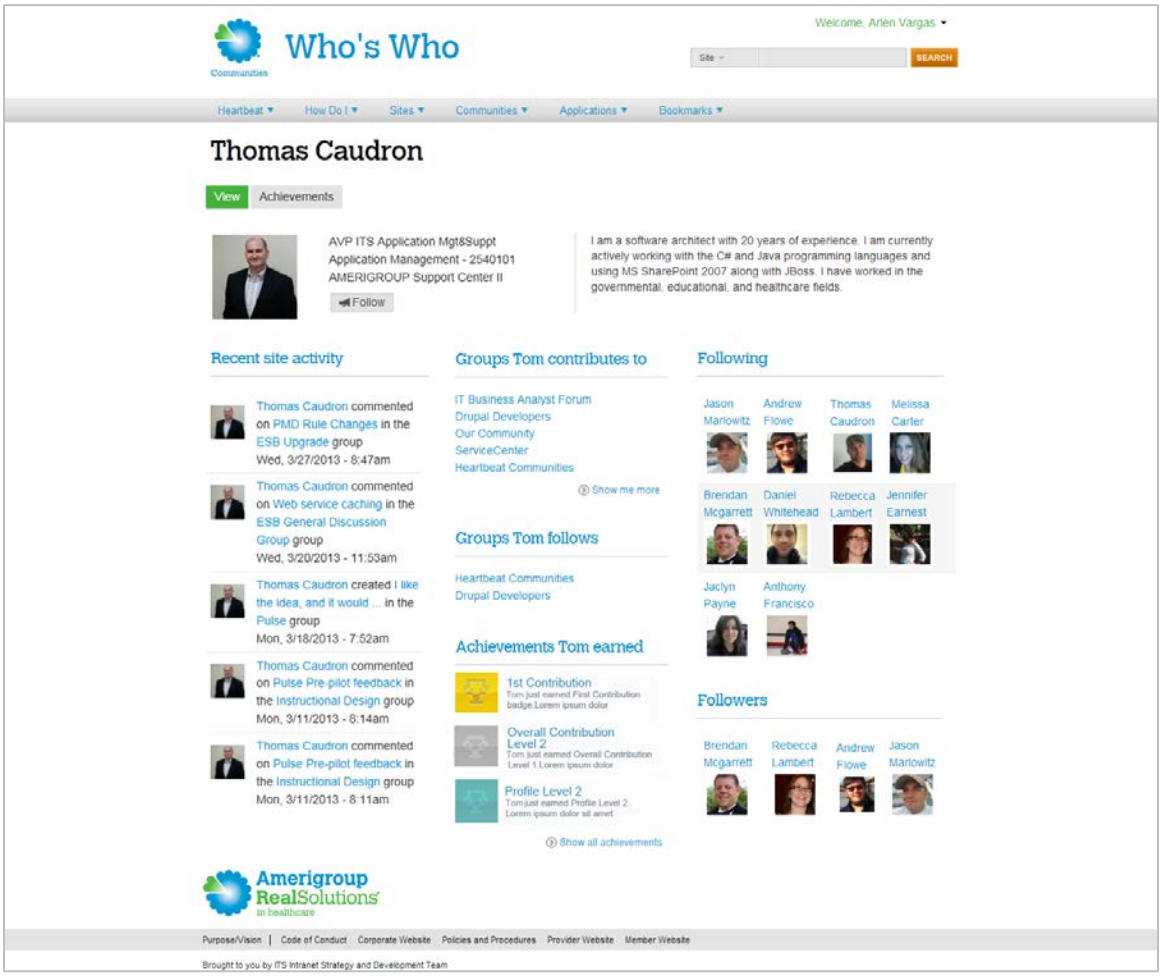
Profile pages in the *Communities* section pull highlight information about that employee's participation around the site, providing a more robust user profile. Associates can see community members' activities, the people they follow, people following them, and the groups to which they contribute.

Employees can also see the person's *Achievements* in the site's social areas. To encourage the use of collaboration tools, the team gamified participation.

The team knew from past experience that it could be difficult to get busy associates to share information with one another. People are often reluctant to share information on intranets, particularly when information hasn't been shared through the site previously.

For instance, the team previously tried to encourage employees to share information on profile pages to help people find SMEs within the company. However, even with leadership support, associates didn't engage with this type of content. The team found that the information that was shared either wasn't specific enough or it simply became outdated quickly as people entered their skills and project information once and never updated it. The payoff just wasn't there for users.

Armed with this experience, the team decided to try a point-driven system to encourage sharing and participation. They're working on a system of point-based badges to identify and reward SMEs that would also factor into employees' yearly assessments. This is an attempt to increase the quality and frequency of posts, while filling the intranet with timely and accurate information.



Profiles list users' recent activity on the site and also highlight their earned *Achievements*. The team is using elements of gaming to try to encourage employees to share more information and participate in *Communities*.

Iterative design and a focus on change management helped the joint team creating WellPoint's new intranet build a tool that helps employees connect and do their day-to-day work more efficiently.

BACKGROUND

A dated intranet wasn't serving the organization well in terms of design or information management. When the redesign project kicked off, the old intranet was nearly 10 years old and was showing its age in more ways than one.

"A multi-year, company-wide rebranding effort had just been completed and the intranet was still representative of the previous corporate colors, design elements, and theme," says Jason Marlowitz, director, Intranet Strategy and Development. "Information management had not kept pace with changes in the company's growth and critical functions. Largely a static site, the intranet lacked the technical capability needed to power collaboration and personalization."

The solution to the challenges with the old site was to build a new intranet from the ground up, with input from users across the organization.

To develop a collaborative intranet that associates would visit on a daily basis, various departments came together to take a holistic approach to the ground-up rebuild. The result was the development and design of the new Heartbeat intranet site. Several focus groups were conducted as the site rolled out, with associates giving continual feedback on how to further enhance features, usability, and more.

Goals

Heartbeat was designed to better align with current branding; to provide a vehicle to facilitate better communication among associates across 19 states, as well as between associates and corporate-level employees; and to encourage collaboration and knowledge sharing.

The organization wanted to provide associates a resource that offered relevant and current information with an element of personalization and the ability to customize. "We made it our goal to guarantee that the content and functionality of the intranet was never outdated," says Peter Lobred, vice president, Executive and Employee Communications. "Heartbeat was developed to be the 'pulse of the company' where all associates and plans could engage with each other and share information in one forum—hence the name Heartbeat."

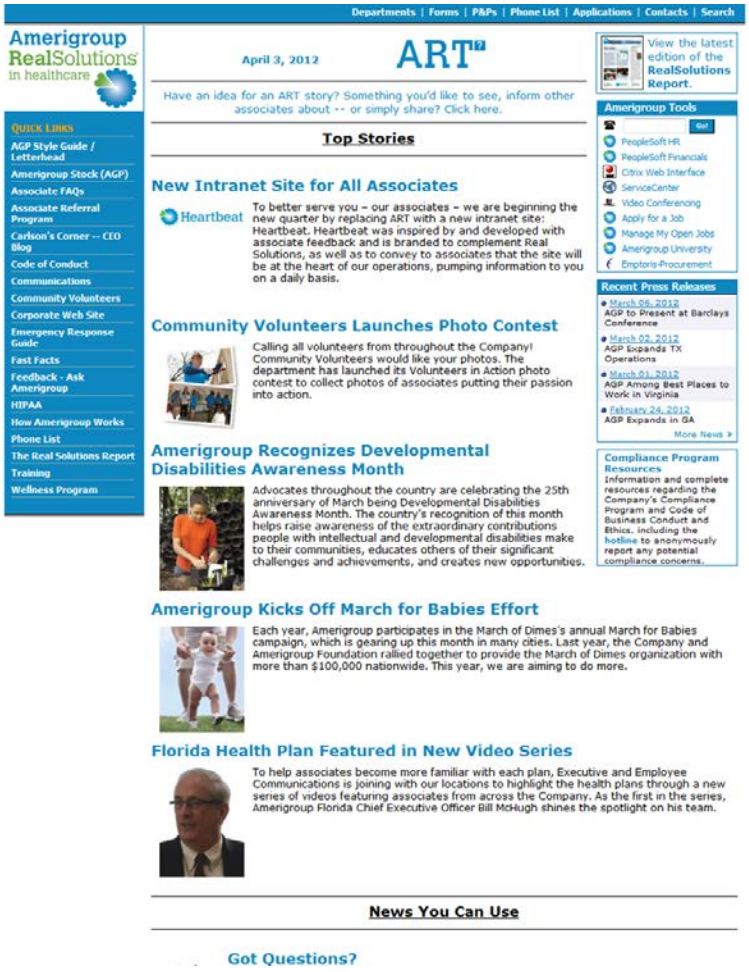
Another goal was to ensure Heartbeat stays relevant for every associate, across all of the company's health plans. To ensure this outcome, the team was proactive in engaging with users far and wide to identify their needs across roles, departments, and even states.

"We wanted Heartbeat to offer an effective user experience, be pleasing to the eye, provide needed information, and be easy to access and use," says Lobred. "The goal was for associates to create an emotional attachment to the site, so they would use it regularly."

Challenges

The team faced several challenges in creating Heartbeat. Team members explain two of the most vexing challenges:

- **How to tailor the work to the available budget.** "The product backlog for Heartbeat was much larger in scale than the initial budget would allow." (Marlowitz)
- **How to keep it alive.** "After the initial launch, the success of Heartbeat and the need to treat it as a living, breathing product was clear. The team was designed to partner with Executive and Employee Communications on future iterations, help define the roadmap, and develop the products." (Jamisson Fowler, VP, Information Technology)



This is the homepage for ART, the previous intranet. ART was in use for almost 10 years and, aside from basic weekly content changes, remained relatively static during that time. The site suffered from a lack of cohesion and connectivity to the growing SharePoint team site content, as well as a confusing navigation structure (which changed from page to page). It was also difficult to extend the outdated technology.

INTRANET TEAM

The WellPoint team (top to bottom, left to right): Peter Lobred, Jamisson Fowler, Thomas Caudron, Jason Marlowitz, Peggy Callaway, Nealy Gihan, Katie Landry, Leila Roche, Daniel Whitehead, Rebecca Lambert, Arlen Vargas, Brendan Mcgarrett, Melissa Carter, Anthony Francisco, Jaclyn Payne, Brian King, Andrew Flowe, Susanna Cagle, and Kaitlin Kelly.

GOVERNANCE

Good Governance Means Support and Leadership

Heartbeat is a partnership of the Communications and the Intranet/Information Technology teams. Heartbeat is a success due to this partnership. "We found a cross-domain partnership to be imperative for success," says Jamisson Fowler, Vice President of Information Technology Services. "Each team brings a diverse set of skills and experience that benefits the other.

"For example," he says, "rollouts are typically flawless because the Executive and Employee Communications team leads the charge. Skillful change communication means the difference between a solid product being seen as a benefit or seen as a hindrance to line-level associates."

The intranet team works extensively with the Executive and Employee Communications team to develop features, usable content, and greater accessibility that will drive associates to the intranet. Chelsea Caplan, former Senior Communications Coordinator for the Executive and Employee Communications team, had weekly calls with the intranet team to discuss the latest developments and brainstorm different ways to make the intranet more usable. After these calls, the Intranet Strategy and Development team developed the features, while the Communications team created materials to roll out the new tools to the company. "Without both teams working together, the intranet would not be what it is today," she says. "This collaboration is critical to its success, popularity, and usability."

Another key to the site's success is the organization's willingness to treat Heartbeat as a "living and breathing" site. After the first release, project sponsors agreed that the intranet is a product and must be managed as such. As a result, a team was formed to partner with key intranet stakeholders, such as Executive and Employee Communications, and work collaboratively with these groups to define a product strategy, continue to iterate design, and conduct in-house development. This team was comprised of the initial designers, developers, and analysts who played an integral role in the initial release of Heartbeat. These associates focus solely on intranet's advancement and support.

"Establishing a team of associates experienced in UX and employee-facing development, and focusing that team on the corporate intranet, ensured that Heartbeat would continue to grow with the company," says Tom Caudron, AVP of IT Integration Services.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Communications Team	• Define communication plans for new feature releases • Define governance around communication within Heartbeat • Manage Heartbeat's content • Act as a central point of contact to collect high-level requirements, establish goals, and provide steering for Heartbeat's communication and branding elements • Manage the top-level company/division-wide navigation
Intranet Strategy and Development Team (ISD)	• Serve as main technical contact point for Heartbeat and other intranet products • Coordinate with stakeholders internally to define technical and product roadmaps • Promote conceptual capabilities to gain approval and encourage use of existing features • Perform detailed business and technical analysis • Define UX guidelines and provide UX consulting to ensure Heartbeat and all intranet sites are easy to use and brand compliant • Produce conceptual UI and software designs, iterate designs, gain stakeholder and sponsor acceptance • Define system architecture and develop software • Perform testing • Support platform • Provide direct user engagement support and act as a facilitator in power user communities
Team Site Owners	• Manage domain/team-specific sites that roll up to Heartbeat • Provide first-tier support for users of respective sites • Work with Intranet Strategy and Development to create team site-specific enhancements
Group Owners	• Manage group-specific collaboration streams, such as news feeds, discussions, Q&A posts, and

	knowledge bases within Heartbeat's *Communities* features • Feature the most qualified content based on correct answer or beneficial discussion
Community Managers	• Establish and maintain governance within *Communities* • Provide top-level support to group owners • Identify features and act as the lead facilitator of the *Communities* product backlog, sprints, and releases • Monitor content to ensure relevance and adherence to terms of use • Promote the varying business uses of *Communities* collaboration features, such as proposal writing

USERS

Heartbeat supports more than 90 departments across the organization's 19 affiliated health plans. It also supports corporate collaboration needs and provides an application platform for various teams to quickly implement critical business-process automation, such as managing the diverse regulatory requirements set by government partners.

Currently, the primary users are WellPoint's 7,700 Medicaid business associates in 19 states. Heartbeat will also support collaboration needs for additional corporate WellPoint sites, which are used by more than 43,000 associates. WellPoint's Medicaid business unit employs primarily medical, technology, finance, support, and management personnel.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	• http://heartbeat.wellpoint.com
Default Status	• By default, all WellPoint Medicaid business unit associates have Heartbeat set as their homepage. Associates can change this setting. Associates are encouraged to utilize Heartbeat's *Bookmarks* (social bookmarking) feature to create a personalized list of commonly used sites and access these sites through Heartbeat. • By default, a shortcut to Heartbeat is placed on each associate's desktop.
Remote Access	• Some corporate offices provide shared computer facilities to be used during breaks. Although not widely used, Heartbeat is accessible via these workstations.

DESIGN PROCESS AND USABILITY WORK

Design Approach

In 2011, a series of focus groups revealed that associates unanimously wanted an intranet redesign. The design direction the team took was to look at successful websites for inspiration and direction, and to augment that vision by conducting feedback sessions with users at several key points along the way. In those sessions, team members asked users to weigh in on prototypes and respond to beta releases.

"In addition to helping with design and steering, this also helped solve the most common problem with new intranet rollouts: change resistance," says Caudron. "The regular engagement of stakeholders from all levels in the company, as well as showing one-to-one relationships between provided feedback and changes made, created a cultural shift in the company. Even the most change-resistant associates no longer saw the outdated intranet as acceptable. This greased the wheels to introduce regular, iterative improvements with little user abrasion."

Designing Navigation

The team used interactive wireframing sessions to help drive the initial feature roadmap for the site. From an initial rough sketch of a conceptual layout, several mockups were created to depict placement of zones for communication, navigation, and interactivity. A review of the current site's navigation and analytics, pulled from usage of more than 10,000 SharePoint team and project sites, helped identify common themes for top-level navigation and search. "For example," says Marlowitz, "we quickly identified that a flat navigation structure would not scale well with the proliferation of self-managed SharePoint sites. We wanted these sites to share the same navigation, branding, layout, and some common communication elements as

Heartbeat. This in turn would smooth out the experience of navigating from Heartbeat to a team site and back."

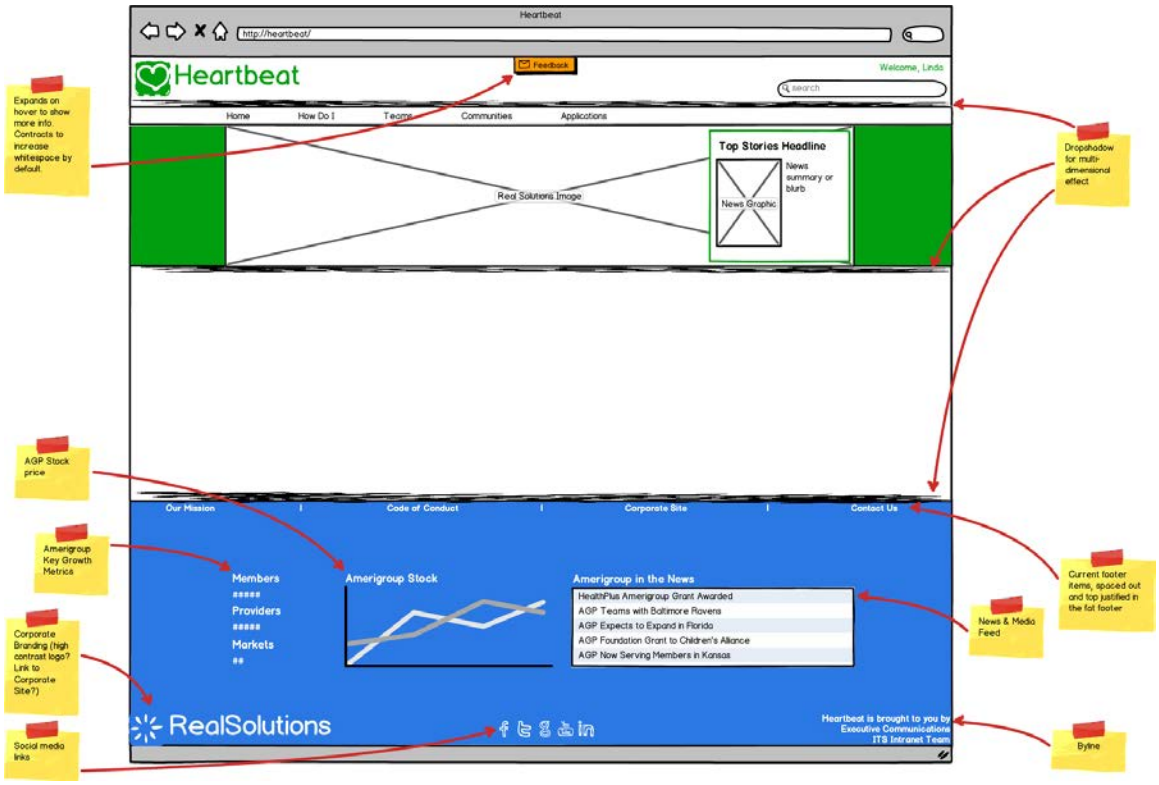
To achieve that goal, the team had to define navigation that included the most important segments of the intranet's IA. Through an analysis of the numerous SharePoint sites, they identified high-level navigation elements, and from this analysis, they were able to agree on a megamenu approach. Marlowitz explains:

- **Sites:** "Given the large number of SharePoint sites, a directory of SharePoint sites was our most-requested feature. This segment included team sites (intra-team communication and document sharing) and project sites (multi-domain communication for the purposes of supporting an effort with a defined start and end)."
- **Communities:** "Communities are a set of features and content centered on cross-domain collaboration. One of the more common findings from analyzing reports on existing content was that there were a disproportionately large number of team sites with broken security inheritance. This was largely due to evolving needs. Communication that was once team-specific became interwoven with cross-functional collaboration. This organic growth and evolution of the 'team site' created a hard-to-manage and hard-to-use scenario of parent sites with hundreds of nested subsites and varying authorization. We found that the existing technology created silos of communication."
- **Applications:** "Applications are resources most commonly used by associates. Analysis of the existing intranet logs found almost a one-to-one ratio of page views and distinct visits. From this, we concluded that the homepage of the intranet was being used as a jumping off point for accessing custom-developed, business-critical web applications—largely replacing what would otherwise be desktop shortcuts."

Another facet of the navigation research included reviews of prior Nielsen Norman Group Intranet Design Annuals. "Primarily, we focused on how large company intranets coalesced around a single top-level navigation," he says. "Our summation was that typical navigation link lists alone would not be as successful. We found that encouraging use of a well-maintained search resource, allowing associates to create their own navigation, and defining navigation based on the individual's most commonly used resources, were also necessary for a company-wide navigation approach. Essentially, we found a blend between one-size-fits-all and mass customization."

Targeted Interviews

Another method that was useful in revamping the intranet was one-on-one discussions with executive vice presidents and regional CEOs. During these discussions, they discussed the positives and negatives of ART and what should change. A key criticism was that ART's search function did not work. Now, Heartbeat has a search refinement—which allows associates to easily identify the top-level department sites and navigate to the sub team sites within—and a phone directory for associates to look up names, departments, titles, and locations.



In addition to feedback from the roundtable feedback sessions, the initial feature roadmap for the Heartbeat site was driven by iterative wireframing. From an initial rough sketch of a conceptual layout, several mockups were created to depict placement of zones for communication, navigation, and interactivity.

TIMELINE

PROJECT MILESTONES	
Milestone Date	**Milestone Description**
January 2001	• First implementation of an intranet for the WellPoint Medicaid business unit (previously Amerigroup)
September 2006	• Beta implementation of team-managed intranet subsites
September–November 2010	• Branding overhaul: minor modifications to colors, fonts, and logos to more closely match the new corporate brand
June 2011	• Recent redesign project start date (idea for redesign or planning began)
April 2012	• Launch of new design
September 2012	• Social bookmarking/tagging feature implemented
March 2013	• After WellPoint acquires Amerigroup, Heartbeat becomes the intranet resource for the WellPoint Medicaid business unit, which has expanded to approximately 7,700 associates. To facilitate collaboration among all WellPoint associates, Heartbeat is introduced beyond the Medicaid business to the entire WellPoint workforce—a total of approximately 43,000 associates
April 2013	• Brand compliance feature (consistent theme/ navigation) implementation begins across all intranet sites • *Communities* (social intranet) beta roll out to associates begins

CONTENT AND CONTENT CONTRIBUTORS

Managing Content

The Executive and Employee Communications team develops Heartbeat content. Stakeholders within the respective teams manage content within department-specific sites. Content within *Communities* is created by associates and managed by group and community managers.

Content to be posted on Heartbeat goes through a review process. Typically, someone from the Communications team writes content or develops ideas, which are then reviewed by Peter Lobred, VP of Executive and Employee Communications. If

the content is copy, photos, or video, it is posted on Heartbeat once it is approved. If content involves new features for Heartbeat, it requires an additional review by the Director of Intranet Strategy and Development. From there, the teams work together to develop a project timeline and materials.

Users are given specific guidelines on how to write content and share information with associates. This standard is applied to all written materials.

The content contributors might be involved in the editing process, but final decisions on content to be posted in the intranet's public areas are made by the Executive and Employee Communications team members responsible for Heartbeat. To keep the lines of communication open, the team occasionally conducts surveys asking associates about their experiences with Heartbeat, which allows contributors to know if Heartbeat content/features are resonating with associates. A "Heartbeat inbox," managed by the Heartbeat content manager, gives associates an opportunity to express any complaints, concerns, or requests. This inbox is reviewed on a daily basis, and both the Executive and Employee Communications team and the ITS team have access.

TECHNOLOGY

The intranet is built on two main platforms, each representing the best tool for the job. SharePoint 2007 served as the incumbent technology and was already widely adopted by every division in the company. The choice to build the new intranet main site, Heartbeat, on SharePoint was driven by ease of content syndication between the main site and the thousands of sites managed across all departments.

Customizing Design

Because the team took a custom approach to the design, the site is not recognizable as a "typical" SharePoint site. "By implementing a completely custom design, most stakeholders are not aware that Heartbeat is effectively a SharePoint site," says Marlowitz. "This separation from the more common SharePoint design elements and SharePoint's advanced API/web services allows us to time the migration of Heartbeat in line with technical resource availability instead of the SharePoint product release and upgrade schedule. That said, we want to be constantly progressing Heartbeat functionality. Though the underlying technology is sound and well-supported, there are attractive enhancements in the latest version of the platform."

At the time of initial build, the planned upgrade to SharePoint 2010 was not far enough along to incorporate Heartbeat. The decision was made to build in SharePoint 2007 initially and then upgrade when appropriate. After Heartbeat's launch, Microsoft announced the SharePoint 2013 product.

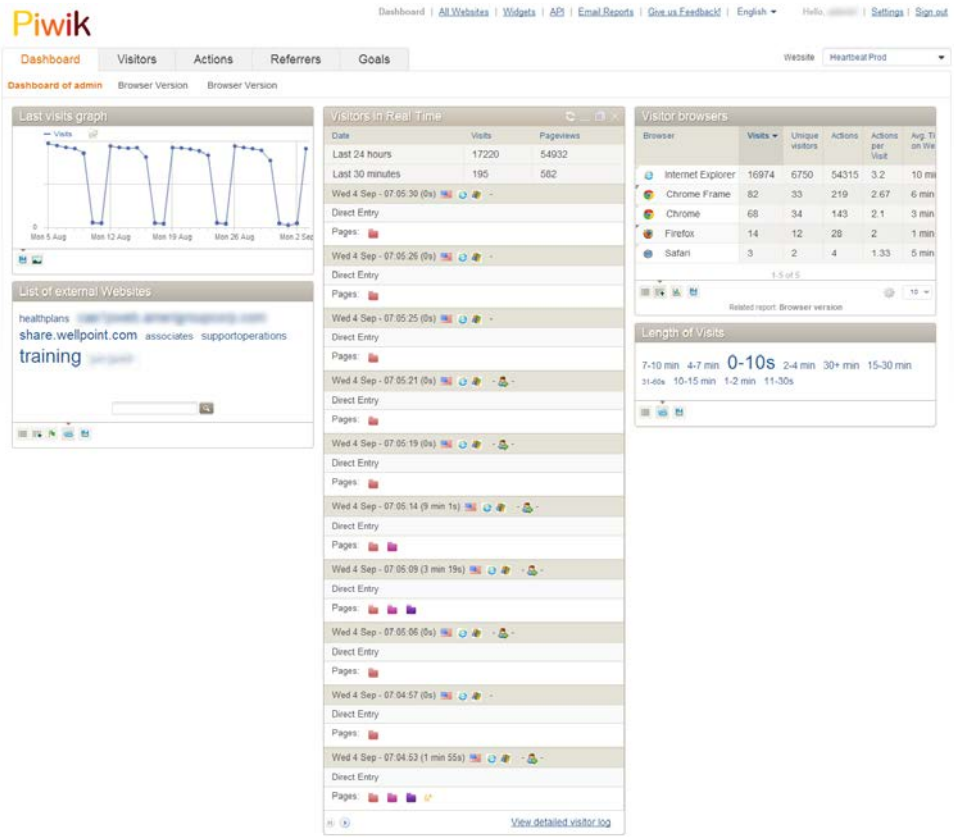
Page-Tagging Analytics

In addition to the design, the team also customized the platform's analytics. "After launch, we discovered that the out-of-the-box analytics found from monitoring server logs would not give us enough data to identify and prioritize enhancement opportunities," says Marlowitz. To address this problem, the team leveraged page-tagging analytics. Page tagging utilizes client-side technologies—typically JavaScript—to collect data around user events. With page tagging, site designers can capture and analyze activity that occurs before, during, and after a page is requested. Typically, analytics software such as Piwik and Google Analytics will provide this functionality, so site and content administrators can spend more time

analyzing the resulting reports. This type of tagging lets them make decisions based on data that is available only by monitoring client-browser interaction with the site. "For example," says Marlowitz, "we were able to determine the most common exit points of the *Applications* list of links and modify navigation order based on frequency."

After the initial implementation, the team used Piwik to analyze usage. As a result, they modified the scope of subsequent releases to enhance commonly used resources and tweak navigation. For example, analytics showing a diverse sample of the most commonly accessed resources gave a clear justification for adding social bookmarking.

The large set of commonly accessed sites showed the team that associates needed to be able to personalize navigation, and that Heartbeat should provide a blend of static menus that remain largely consistent, as well as a menu option that changes with the associate's activity.



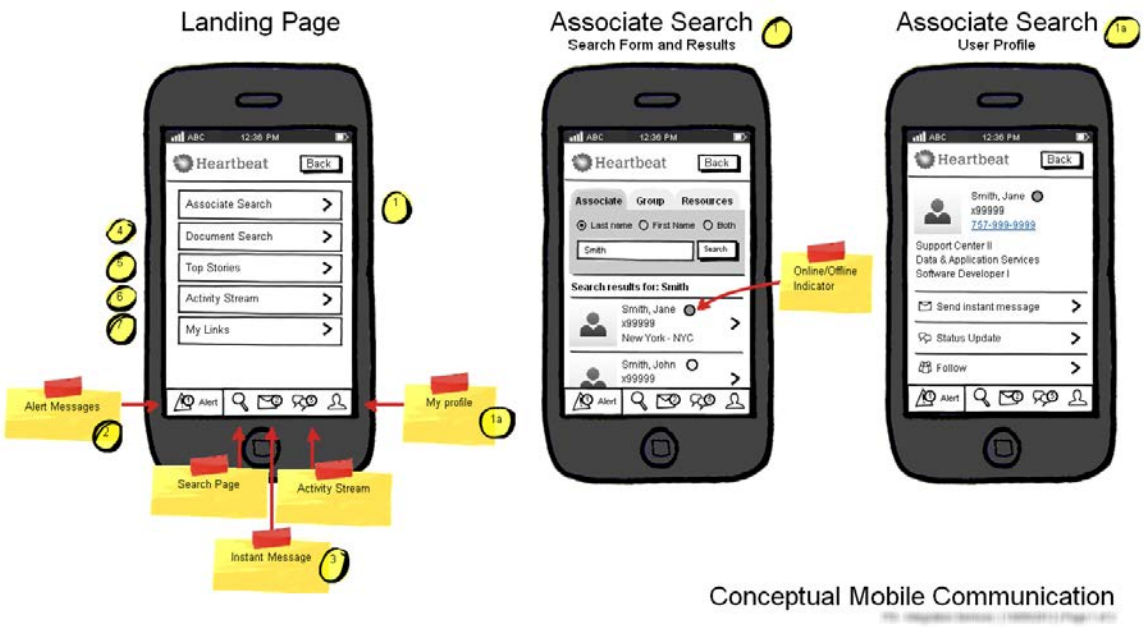
This is the site's web analytics tool. Through page tagging with Piwik, the team was able to make decisions based on data available only by monitoring client-browser interaction with the site. For example, they were able to determine the most common exit points of the *Applications* list of links and modify navigation order based on how frequently applications were accessed.

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	• SharePoint 2007, 2010, 2013 • Windows Server 2008 and 2012 • VMWare • Drupal Commons • Apache 3 • PHP • MySQL • Ubuntu 12
Bug Tracking/Quality Assurance	• JIRA, Selenium, Jenkins (for continuous integration)
Design Tools	• Balsamiq, PhotoShop
Site Building Tools	• SharePoint Designer, Visual Studio, Eclipse
Content Management Tools	• 100% browser-based for web content; also serving standard office documents
Search	• SharePoint and Apache SOLR
Other Functions	• Piwik (open source "page tagging" web analytics software)

MOBILE

Users can access the site using iPads and other devices (connected to the corporate Wi-Fi) using a web proxy feature in the Good software for Android.

The mobile experience is powered by CSS cross-browser/cross-OS testing to ensure that functionality is as close as possible to that of the corporate standard workstation. The site is tested and functional in Android and iOS, but a mobile-specific version is not scoped until 2014.



Balsamiq mockups show key functionality for mobile device audiences.

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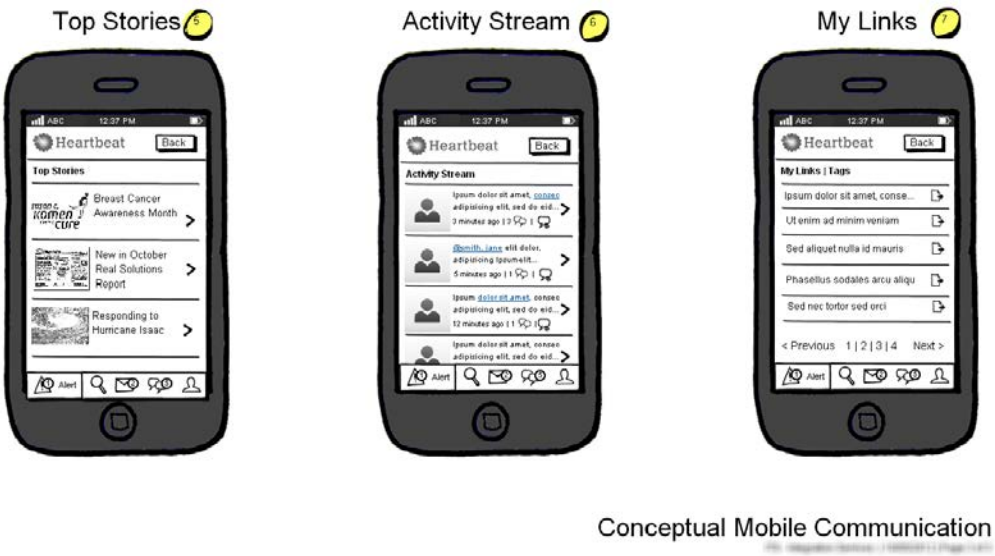


Balsamiq mockups show key functionality for mobile device audiences.

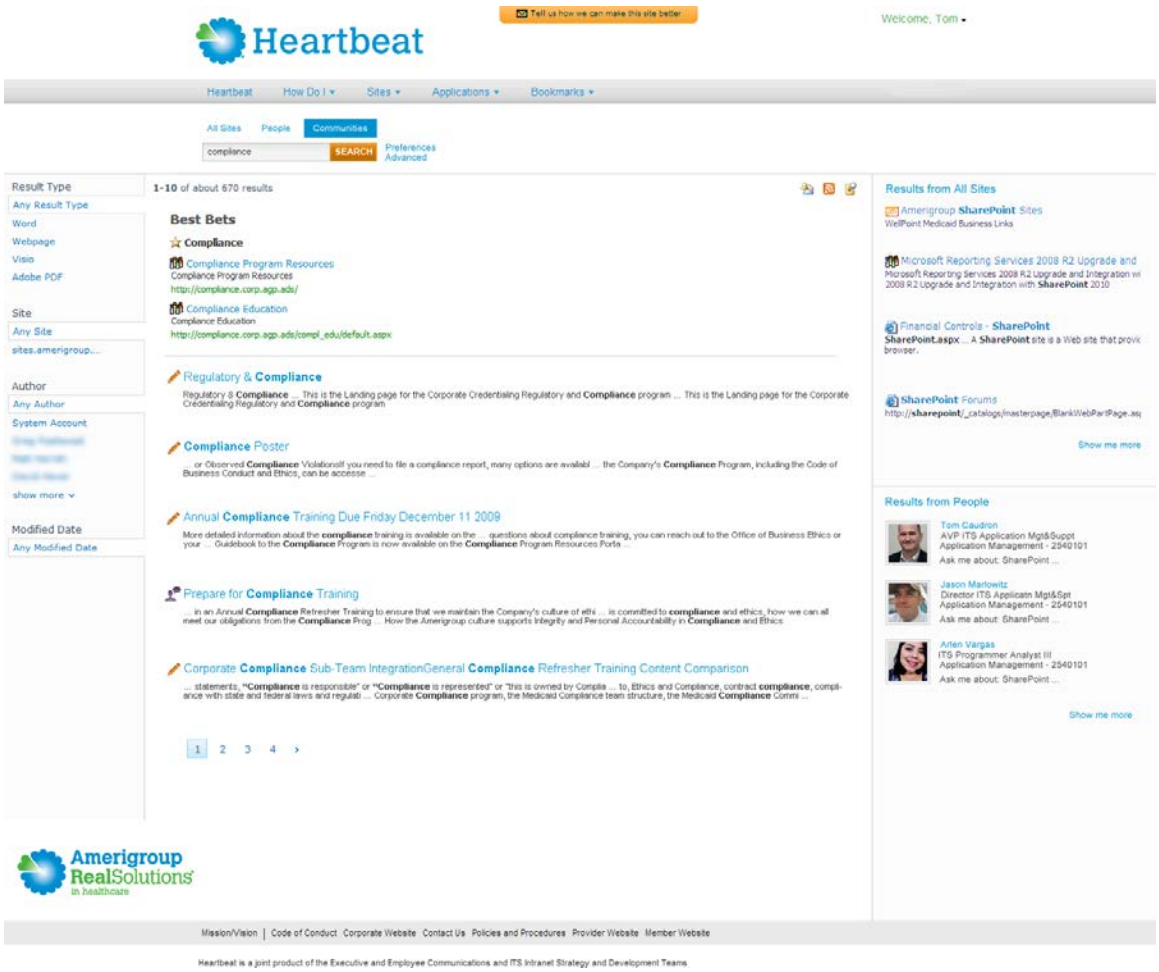
SEARCH

The team chose to use SharePoint Search, but only after evaluating it against Google Search Appliance. Although Google offered a more user-friendly and familiar experience out of the box, the team found that SharePoint Search was more tightly integrated into the thousands of individual sites already created, so it seemed like a better choice. Additionally, team members chose to completely redesign the search UI to more closely match the Heartbeat look and feel, thus improving on SharePoint's out-of-the box search UI.

Searching social content in the site's *Communities* is accomplished using Apache SOLR, as it was already integrated with Drupal Commons. The idea of having two different search engines in play was a concern, but it surprisingly made sense in this context.

"Initially, [we were] concerned that having two search platforms would create a disconnected experience, [but] through customization of the SharePoint Search UI, we made the multi-source search experience more seamless," says Marlowitz. "The resulting product is a search page that presents results from both platforms in one view."

Realizing that findability would be critical to the success of the site, the team chose to augment results with features such as "best bets" so users can quickly find sites that might not be accessed often enough to warrant placement in intranet-wide navigation. Additionally, several departments utilize search to quickly identify content for transactional job-related purposes. For example, the Regulatory team handles content reviews for thousands of documents per month. Search allows them to quickly retrieve a publication review job. "Continuous incremental crawls are key to ensuring that these recently uploaded documents are indexed in a timely manner," says Marlowitz. "Additionally, we monitor search analytics, such as 'top failed searches' and 'most common search terms,' to identify and feature top content.



The search center integrates results from *Communities*, sites, and people in one place. *Best Bets* results help associates quickly identify prominent content.

Groups

Communities

Welcome, Arlen Vargas

Site SEARCH

Heartbeat | How Do I | Sites | Communities | Applications | Bookmarks

Groups

Type keywords and click apply to find groups.

APPLY

VIEW FULL CATALOG

REQUEST A GROUP

Software Developers

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3 contributors discussing the topic Development.

This group is dedicated to sharing best practices for software development and requesting/providing general guidance in this field.

Recent content

- Subversion Branching Strategy
- PHP The Right Way
- Code Review Practices

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4 contributors discussing the topics Theming, Development, Branding, Drupal Commons.

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- Code Review Practices
- The Open/Closed Principle -> Protected Variation
- Moq and catching expected exceptions

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11 contributors discussing the topics ID, Instructional Design, Learning, Articulate, Adobe, Captivate, Storyline.

This group discusses a wide variety of topics related to any kind of learning design or development, including the creation of instructor-led training, job aids, e-learning, blended learning, webinars, and more.

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- Reflection Question Technique
- What I do not enjoy
- What would your icon for design look like?
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Recent contributors

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Leadership Development Program (LDP)
Intranet Strategy and Development
Drupal Developers

Featured Groups

Heartbeat Communities

Recently Added Groups

Leadership Development Program (LDP)
Enterprise Integration .NET

Purpose/Vision | Code of Conduct | Corporate Website | Policies and Procedures | Provider Website | Member Website

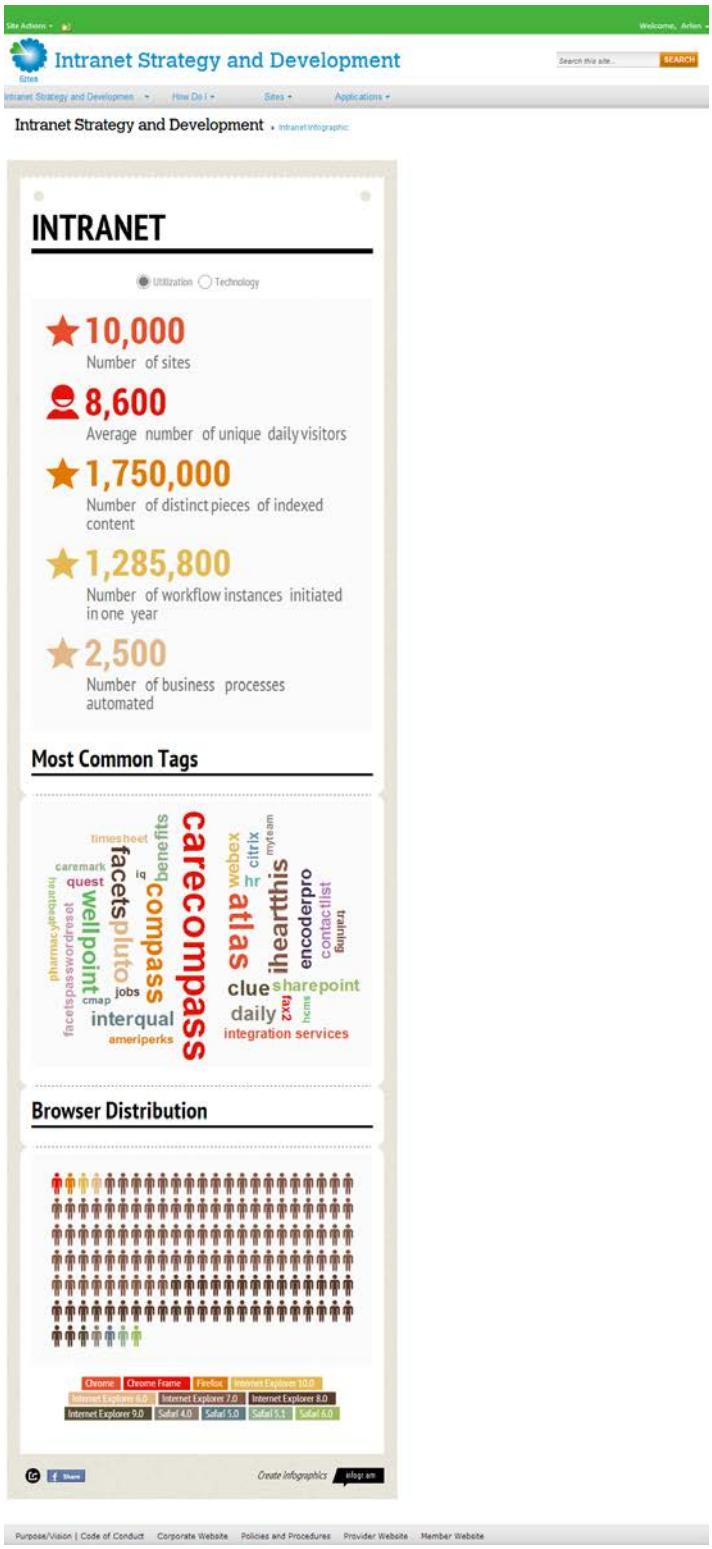
Brought to you by ITS Intranet Strategy and Development Team

The *Groups* search allows associates to easily locate groups.

RESULTS AND ROI

Heartbeat works, in part, because people use it. It adds a touch of personalization and humanization that many other intranets lack. "We knew that Heartbeat needed to contain features that would draw people in and encourage them to visit the site more often," says Lobred. Features such as company announcements, rotating news stories, and social bookmarking draw users in.

In addition to being a useful tool for information and collaboration, the intranet has become an essential tool used by company executives to distribute important messages. "Associates know that when an organizational announcement appears on Heartbeat, or a top story showcases an executive, this information is vital to read and access," says Lobred. "Heartbeat gives leadership the ability to connect with associates, ensuring enterprise-wide distribution of important communications. While Heartbeat is a vital tool to unite the various health plans, it also allows executives to collaborate with the rest of the company."



The *Intranet Strategy and Development* (ISD) team site's *Intranet Infographic* highlights data about intranet usage, number of sites, browsers, and general web metrics.

LESSONS LEARNED

The WellPoint team shares its lessons learned and advice:

- **Include users early and often.** "Including users at various stages of the research and design was critical to the site's success."
- **Build a blended team.** "Drawing from Communications, Human Resources, and IT, the WellPoint project was able to build a team with experience in and passion for building internally and externally facing web products."
- **Formally identify ownership for segments of the site.** "Provide a Responsible Assignment Matrix chart and get agreement from all team members. In the case of Heartbeat, we identified that the area below the masthead and above the footer on the main site was owned exclusively by our Executive and Employee Communications team, and that the Intranet Strategy team was responsible for providing a consulting role on UI/UX and technical ability/potential features. Other decisions, such as decisions around the main navigation had implications across the organization. This required both Communications and Technology steering."
- **Communication and user experience can make or break a rollout.** "We were fortunate to have experts in both areas—which goes to the next point."
- **Recruit/include internal SMEs.** "It's best to recruit subject matter experts in development, UX, and communications (preferably with company-wide visibility in their respective roles), but keep the core team small enough to make nimble decisions."
- **Start small.** "Start with just the homepage or a subsection of the intranet to build good will around the design and direction."
- **Keep everyone on the same page with visuals.** "Never have a meeting on functionality without accompanying visuals, whether they are wireframes, mockups, or existing sites. There were several events in the initial "norming" stage of the project where feature concepts were not well understood prior to development. Occasionally, this required rework.
- **Build in transition time between the old site and the new.** "Keep the prior site online for a period of time after the replacement goes live. Expect one to two months of content "shakeout" while users identify elements missing on the new version. We kept the old intranet site available for two months while Heartbeat ran in production. At about the two-month mark, we replaced the prior site's default page with an interstitial that allowed the associate to access either site. Eventually, we redirected the prior web address to http://heartbeat once we felt that change acceptance had propagated through much of the organization."
- **Commit to a living, breathing site approach.** "Keep current not only content, but feature sets. Upon initial release, define a release schedule and product strategy, and communicate that with sponsors and other leadership during conversations about the initial rollout."
- **Focus on the UI/UX aspects of the site design first.** "We emphasized attention to look and experience even when content, systems, and infrastructure appeared to be more pressing concerns. This paid many dividends in the end. Had we shorted the UI/UX, we would not have had such an overwhelming response to the site. Capitalizing on that response allowed us to more easily affect change."

- **Find a great name.** "It's hard to imagine 'Heartbeat' being called 'the intranet' for example. The team made a compelling case that the site must have a name that would easily integrate into everyday conversation. To gain approval from those responsible for branding, we created a brief presentation of 10 or so names with accompanying visuals of intranets from companies known to be branding leaders. The presentation demonstrated a standard of naming an intranet site in a way that closely ties with brand, even if not directly pulling from the company name or other approved verbiage. In short, the name needs to be special to internal stakeholders—something unique that they can call their own."

Accolade

Using the intranet: Accolade is a social housing organization that rents about 16,000 affordable homes around Drachten, Heerenveen, Franeker, Sneek, and Joure (in the northern province of Friesland). It has 40,000 customers, and mainly focuses on households having annual incomes under 35,000 euros.

The company motto, "Helemaal je eigen plek" (literally, "entirely your own place") stands for the idea that finding a place to call home is everyone's right, whether an individual, a young family, or someone disabled and in need of some extra care. Everyone can be admitted and rent a home from Accolade.

For that reason, the organization does more than just deliver affordable, comfortable homes. Stimulating a good quality of life in the districts and neighborhoods it serves is just as important. The objective is to find a suitable home in a pleasant area to live in, especially suited to the customer's needs.

Headquarters: Heerenveen, The Netherlands

Number of employees the intranet supports: 200

Company locations: Heerenveen, Sneek, Franeker and Drachten, The Netherlands

Annual sales: $58.2 billion in 2013

Design team: Four in-house people formed the core team. The team was supported by the agencies Embrace SBS and Umbrella, both part of the Malengo Group.

In-house: Irene Willems-Sloot, Communication-specialist; Hiltsje Rinsma, Manager Customer Contact; Michiel Booij, IT-specialist; Bianca Bijlstra, Information-specialist

In-house ambassadors: (These ambassadors were part of the test group. They delivered input in the early stages of design and right now they provide other colleagues with tips and tricks how to use the intranet): Fred Hesselink; Klaas de Groot; Andre Jongsma; Rinette van der Wal; Hennie de Ruiter; Fennie Haanstra; Gretha van Veen; Marjan Maat; Jolanda Buursma; Wietske Atsma; Simone Rozenboom; Ryna Marra; Jelly van der Werk; Annelies Veenstra

In-house knowledge moderators (responsible for keeping the information in the knowledge base complete and correct): Teunis van der Veen (Sales); Ineke Moraal (daily maintenance); Wilbert Rienstra (real estate); Dominicus Nota (IT); Renata Mentjox (Information services); Ellen Dikland (Communication); Marjan de Blauw (Finance); Gretha Waterlander (Rent homes / Customer contact); Hennie de Ruiter (Districts and areas); Gerda de Lange (Finance); Luuk van der Wal (Districts and areas); Fred Hesselink; Klaas de Groot; Andre Jongsma; Rinette van der Wal; Hennie de Ruiter; Fennie Haanstra; Gretha van Veen; Marjan Maat; Jolanda Buursma; Wietske Atsma; Simone Rozenboom; Ryna Marra; Jelly van der Werk; Annelies Veenstra.

Malengo Group: Hilda Boerma, Manager Marketing; Eli van der Horn, Project Manager

Embrace SBS: Martijn Weesjes, Consultant; Douwe-Jan Hibma, Interface designer; Jan-Willem Geertsma, Front-end developer; Koen Wemmenhove, Consultant; Cor Eikelenboom, SharePoint developer; Jeroen Scholtens, .NET developer

Umbrella: Jonas Hansel, Front-end developer; Dajo Hein, .NET developer; Wouter Duteweerd, .NET developer; Jolle Lont, .NET developer; Ynte de Jager, Lead developer.

SUMMARY

Faced with the challenge of trying to deliver better services to its customers (and also serve more channels) while working with a smaller budget, the Accolade team turned to creating a new intranet as the solution. The social housing office, based in The Netherlands, was receiving less money from the Dutch government, but needed a way to continue their goal of putting the customer first. The organization rents 16,000 affordable homes, helping customers find a suitable home in a pleasant area, suited to the customers' needs. The team decided a new intranet, focused on helping the organization's 200 employees do their jobs more efficiently, would help reduce costs and improve performance.

One of the benefits of working on an intranet is that your users are all around you. The Accolade team took full advantage of that fact, doing early research with

colleagues and including them at every step along the way. They invited their colleagues to have a voice in the site even before the team had a fully formed vision of what the intranet should be. They looked to their colleagues to form that vision with them.

Employees were asked what their expectations for the intranet were, and how or what they expected to contribute to it. This put the emphasis on social sharing from the get-go. The team asked questions such as:

- What are your frustrations in your work?
- What does a perfect day at work look like?

Employee feedback was translated into specifications. A panel of 15 employees was key to the development process, providing early input and testing on the new site. These employees turned into site ambassadors who helped introduce the new site and functions to colleagues, while encouraging and supporting intranet adoption.

The design team also followed Customer Contact Center employees in their normal workdays, following up with interviews to fully understand work processes, what worked well, and what did not. Further, all employees were invited to participate in the design process, whether through suggesting names for the site or providing input or feedback.

The organization's front office is the frontline of communication with customers, receiving about 35,000 customer inquiries via phone annually. Previously, employees had to search different systems to find answers to customer inquiries, and sometimes that information, when found, was old and incorrect. As a result, customers had to wait longer for replies that were not entirely helpful due to the state of information.

The intranet needed to consolidate information and do better to connect front-office employees with the people having the right expertise for various customer inquiries.

Armed with data and input, the team decided to "think big, but act small," taking an Agile approach to start with a "light" version of the intranet and introducing functionality and complexity over time. Accolade's in-house team of four worked closely with employees from Embrace SBS, who delivered the site's social component, and Umbrella, who provided the task management aspect of the tool and connected it to the Customer Contact Center software. The team had first looked for a customer relationship management solution, but found the systems were too traditional to fully support the organization's needs. Instead, they integrated social tools with task management and customer support and created a social-powered solution that supports the company's internal processes.

Organizational processes and social tools are integrated together, encouraging communication and collaboration. This solution was potentially risky, as many of the organization's 200 employees were not familiar with social tools and their conventions. For instance, the concept of "liking" a story was foreign to some users.

Social tools are integrated with the core functionality of the site, so as employees visited the new site to complete tasks, they saw the utility of the social aspects as well. The site launched without providing any formal training, and yet with only the use of a quick guide and an online tutorial, employees have picked up the social tools quickly.

With many employees being new to the social tools, there have been a few hiccups. Rather than creating formal guidelines for usage, the team has taken a more casual

approach, posting public tips for employees who may not quite understand the best use for a tool. For instance, some employees posted entire documents in places intended for microblog copy. When this type of thing happens the team replies to the post with a tip about where to post documents in the future, which helps the contributor as well as other employees who see the tip.

The homepage of the intranet reflects Accolade's emphasis on the customer. The middle of the page offers a carousel with three rotating news items, and employees can customize the homepage, rearranging page elements like the customizable widget that provides a snapshot of company performance called *How do we perform*? Performance statistics give employees a sense of how the organization is doing on a daily basis. Further, employees can hover over any of the statistics to see more information as well as discuss or suggest areas for improvement.

For instance, one of the most important organizational measures of success is the number of homes occupied. To make the best use of the properties and serve customers quickly, Accolade strives to move a new tenant in as soon as an old tenant vacates. Showing this information on a daily basis keeps employees up to date with the larger performance indicators, as well as gives them the opportunity to say or do something about those numbers.

The middle of the homepage is a stream showing activity from the various teams or groups that employees belong to. Employees can like or comment on what their co-members share.

Site navigation appears at the top right, offering links to *Home*, *All Teams*, *News* and a section offering information from the Human Resources, Communications, Facility and Information Technology groups, and also the knowledge bank.

The left sidebar gives quick access to the employee's profile, notifications, colleagues, teams, tasks and access to customer information. The right side of the page includes a personalized list of applications (which can all be opened without repeatedly signing in to each one), updates about changed or posted information on the site, the CEO's blog, and information about Accolade in outside media. Other available widgets include the *birthday calendar*, *Twitter feed*, *My Favorites*, *RSS feed*, *notes*, *weather forecast*, and so forth.

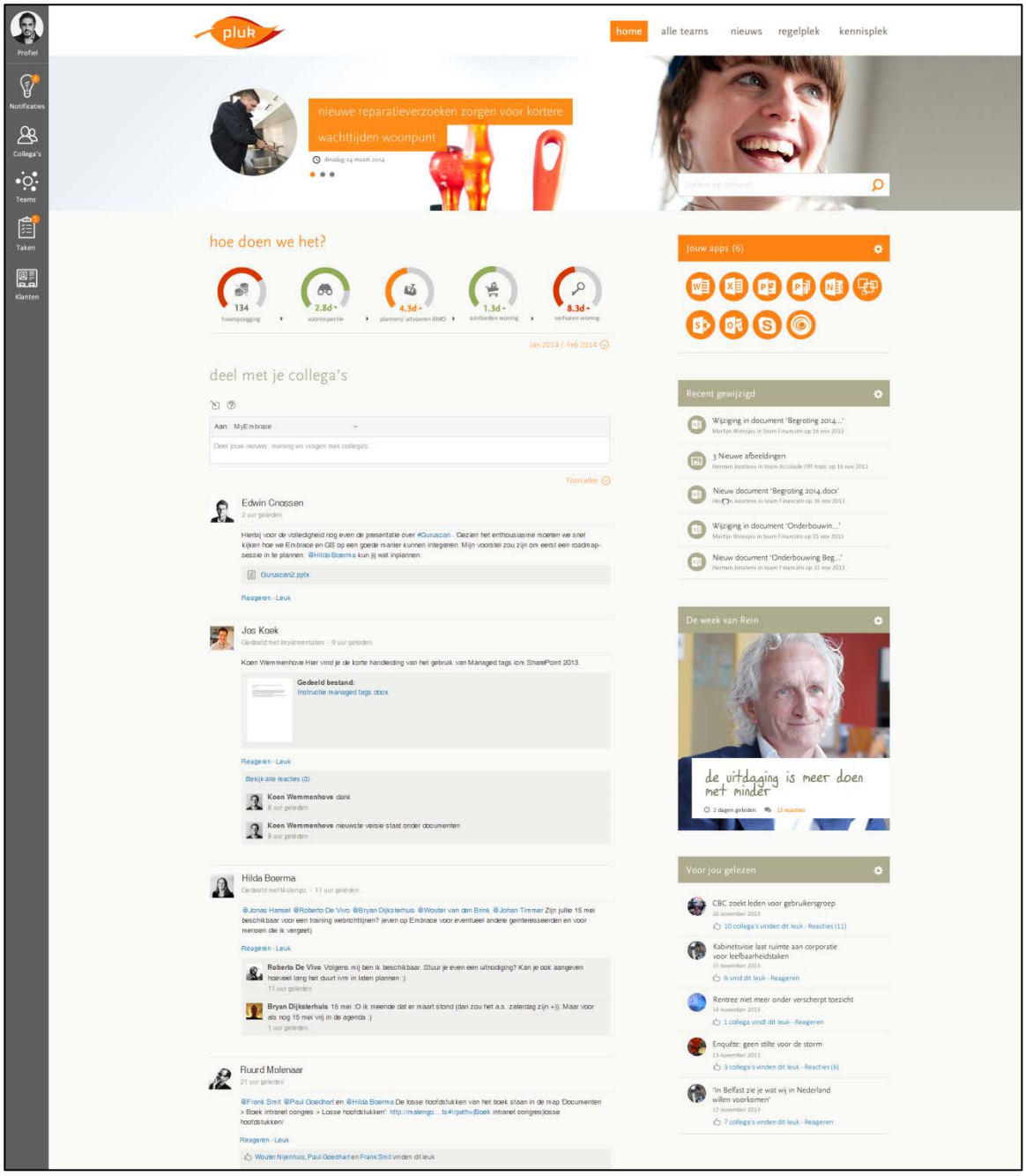


Image 1. Accolade Intranet: Homepage. The Accolade intranet homepage gives employees quick access to updates and information from colleagues, a snapshot view of performance, a one-click way to access key tools and applications, and corporate information via news stories, the CEO blog, and articles about Accolade from outside sources. *01_Accolade_01_home_live.png*

Employee profiles allow users to share information, which helps colleagues find one another and make connections. The team realized there had to be a low barrier for

employees to enter information if employees were going to take the time to do it. As such, they allow employees to quickly fill in profile information by associating their LinkedIn profile.

The profile page is split into several tabbed views. The default view shows general kinds of profile information together with the latest updates, availability information, extended profile information like expertise and experience, pages the employee has created, and documents the employee has added. The orange link at the top of the page allows employees to "follow" one another, or be updated when a colleague posts content on the site.

The left column of the page shows the employee's colleagues, who are listed based on their most recent activity on the intranet. The employees' status is listed as well, so users can easily chat with, call, or email co-workers. People shown in black are online while those shown in gray are offline. If they appear in color, an integration of sorts with Outlook and Lync is made. Green means available and orange/red means they are in a meeting (busy). The right side of the page shows a list of colleagues who associated with the particular user (colleagues from the same department). In the image shown above, it is translated as "Colleagues of Hilda."

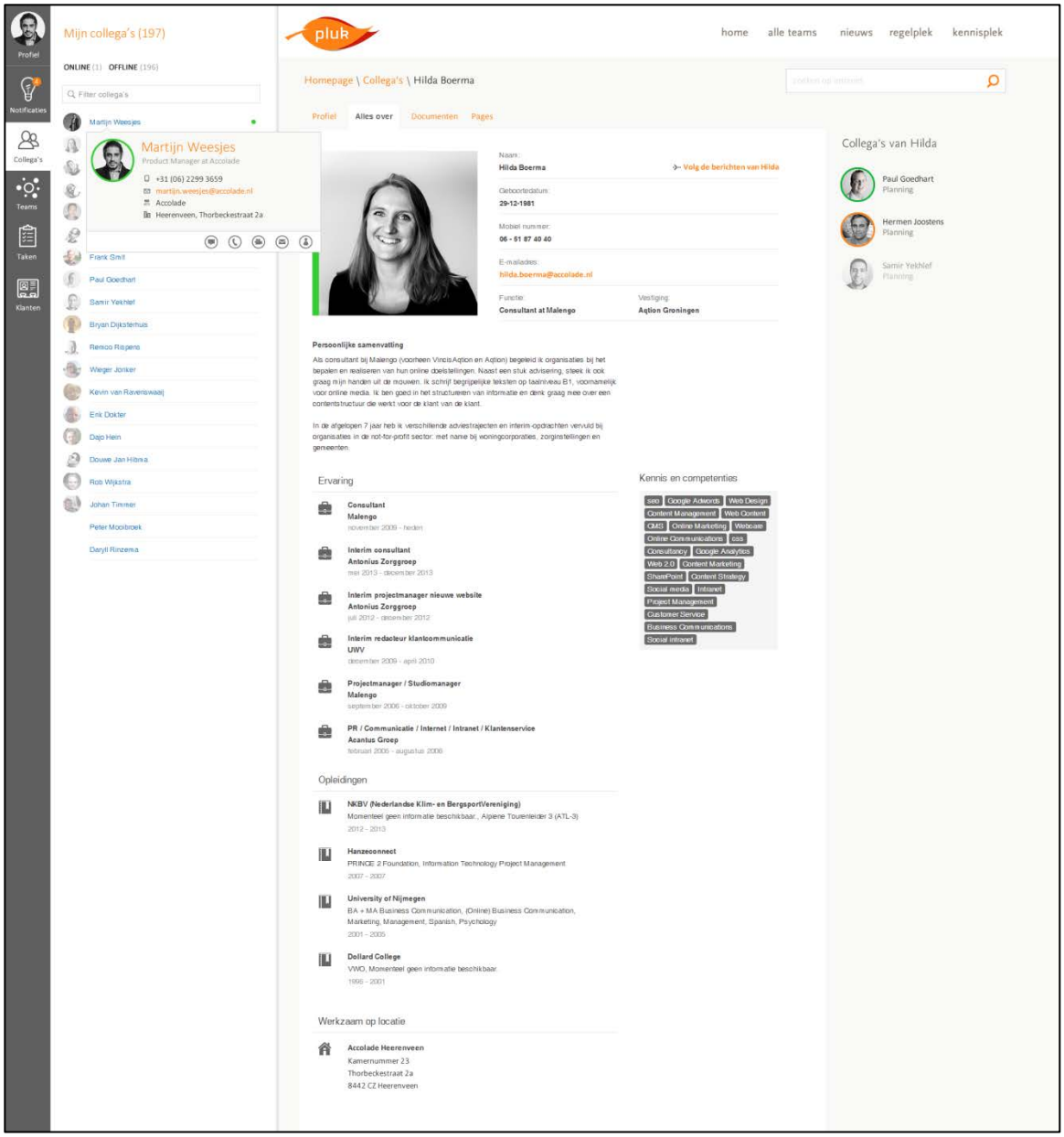


Image 2. Accolade Intranet: Employee Profiles. Accolade employees can fill in additional details, like expertise, in their intranet profiles, and easily communicate with colleagues via a list of connections on the left side of the page. *02_Accolade_02_profile_live.png*

The team added some offline encouragement for users to complete their profiles as well. Signs on office restroom mirrors remind users what they can add to their profiles. The text reads, "Fill in your profile on Pluk. Everything about me: Name, job, phone number, email. Important information: Knowledge, Projects, Experience, Competencies." And, of course, nicely provides a cutout so employees can still use the mirror, as well!

The Accolade intranet team used signs on office bathroom mirrors to remind and encourage employees to fill in more details in their employee profiles.

The main goal of the site is to streamline communications with customers. Now employees can access any system they need by simply turning on their computer, which automatically signs them into the intranet each day. This has streamlined work and made it easier for employees to track communications with customers as well as to easily contact colleagues when needing help.

With a goal of answering 80% of customer questions via the front office, the organization is seeing fewer errors in customer phone calls as well as providing quicker responses, saving time for the front office workers as well as customers.

Employees are now able to find the information they need in the knowledge base. The knowledge base is supported and continually updated by employees throughout the organization, who can contribute and update information. Any question the front office employees can't answer is now posted on the intranet and directed to the appropriate department or person, who then receives a notification of an outstanding inquiry.

Task management is integrated with social components. The task management page shows tasks assigned to the employee or his team. Color is used to indicate status, such as "completed," "in progress," or "due." Numbers in orange indicate new messages from colleagues. The body of the page shows the details of each task, such as the deadline, a description, customer information, related frequently asked questions (fed from the knowledge base) and related experts.

For example, the front office will add a task because they are unable to answer a question or need clarification from a colleague. Employees responding to the task can make a short response about any contact, such as "I called and left a message." The front office is then notified when the task is completed.

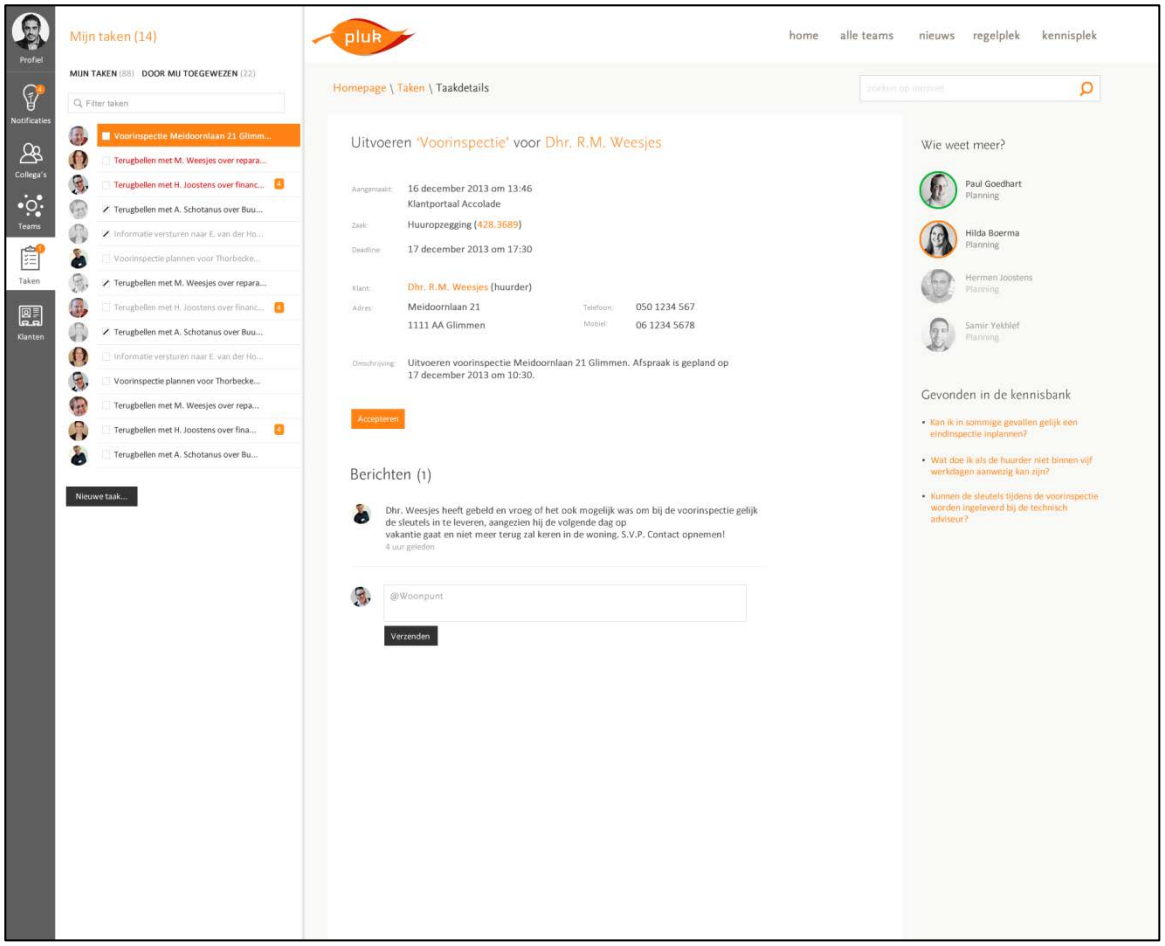


Image 3. Accolade Intranet: *Tasks*. The *Tasks* area of the Accolade intranet site consolidates information about activities that need to be completed. *03_Accolade_03_STM_live.png*

Customer data is integrated into the site, so employees with the right permissions can look up any customer in a quick and easy way, by name, address, postal code, birthday, or phone number. The customer page includes customer details pulled from Umbrella, the customer contact application. If users need to add or update information, they can do so easily via links that lead directly into the customer record in Umbrella and no additional login is needed.

All information is stored at a customer level; employees don't need to search different databases to see the full story about a customer. This allows easy tracking of customer communications. Anyone who may have contact with the customer can see what prior contact occurred and the status of outstanding questions. As a result, customers are complaining less, and when they do, employees have a full record of what happened, who talked to the customer, and what was said.

The system even includes information posted to social media. The Customer Contact Center monitors social media channels, replies to posts, and translates those to tasks for the organization as needed.

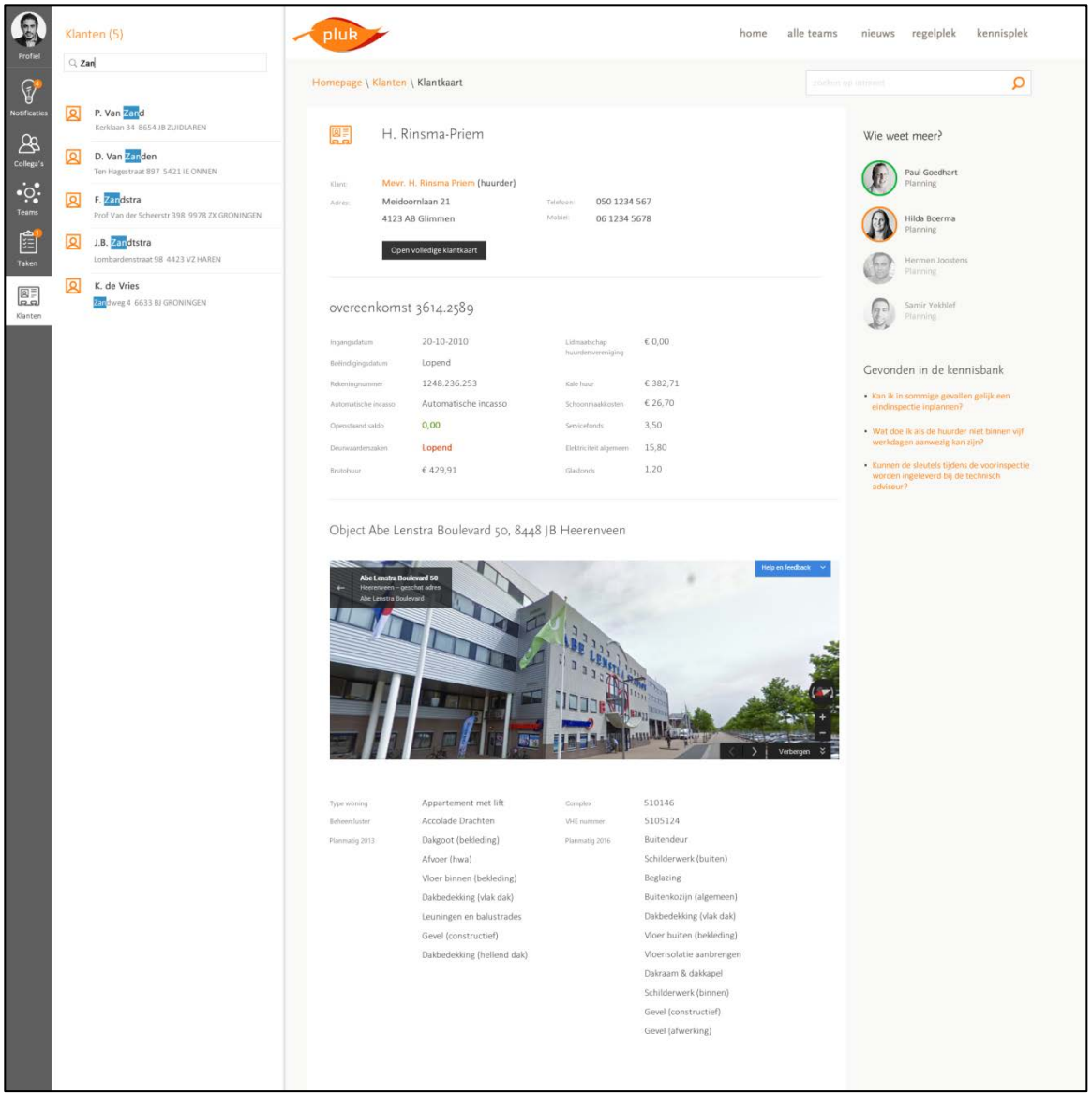


Image 4. Accolade Intranet: Customer Information. On the Accolade intranet customer information is easily searched through the site, which provides an easy entry point into the customer contact application as needed, for easy updates. *04_Accolade_04_CRM_live.png*

The site's success is perhaps best exemplified by the number of satisfied customers who get the information they need in a timely manner. Employee uptake on the site has been impressive, with 191 of the site's 205 users uploading a photo to their profile, and 184 of 205 employees participating on the site weekly.

BACKGROUND

The driving force behind Accolade's adoption of a social intranet was the desire to connect the front office with the rest of the organization to help it achieve better results with its service offerings. In order to accomplish this, the organization had to reorganize how it conducted its customer service activities. The social intranet was at

the center of that change, allowing the organization to put the customer first. Irene Willems-Sloot, Communication Specialist, said they had two main objectives:

- "**Launch software.** The software would enable us to collaborate and work together on cases and processes, as well help us manage tasks for the back office (both work-focused and case-focused)."
- "**Avoid bureaucracy.** We didn't want any bureaucracy in connecting the front office with the organization, but we did want to act in line with business values like entrepreneurship, collaboration, transparency, and approachability."

Now the social intranet is an integral part of the organization's work practices. Every employee needs the social intranet to do his work. Creating that kind of synergy was by design. "That is why we built a social intranet with our primary processes completely integrated into it, with 'social task management' included," says Willems-Sloot.

"If you don't use the intranet, you cannot do your work properly," she says. "When you start your computer, you are automatically logged in (with single sign-on) to the social intranet. You can open other applications (without logging in) through the intranet and you can personalize the homepage of the intranet with the widgets and applications you want (like iGoogle)."

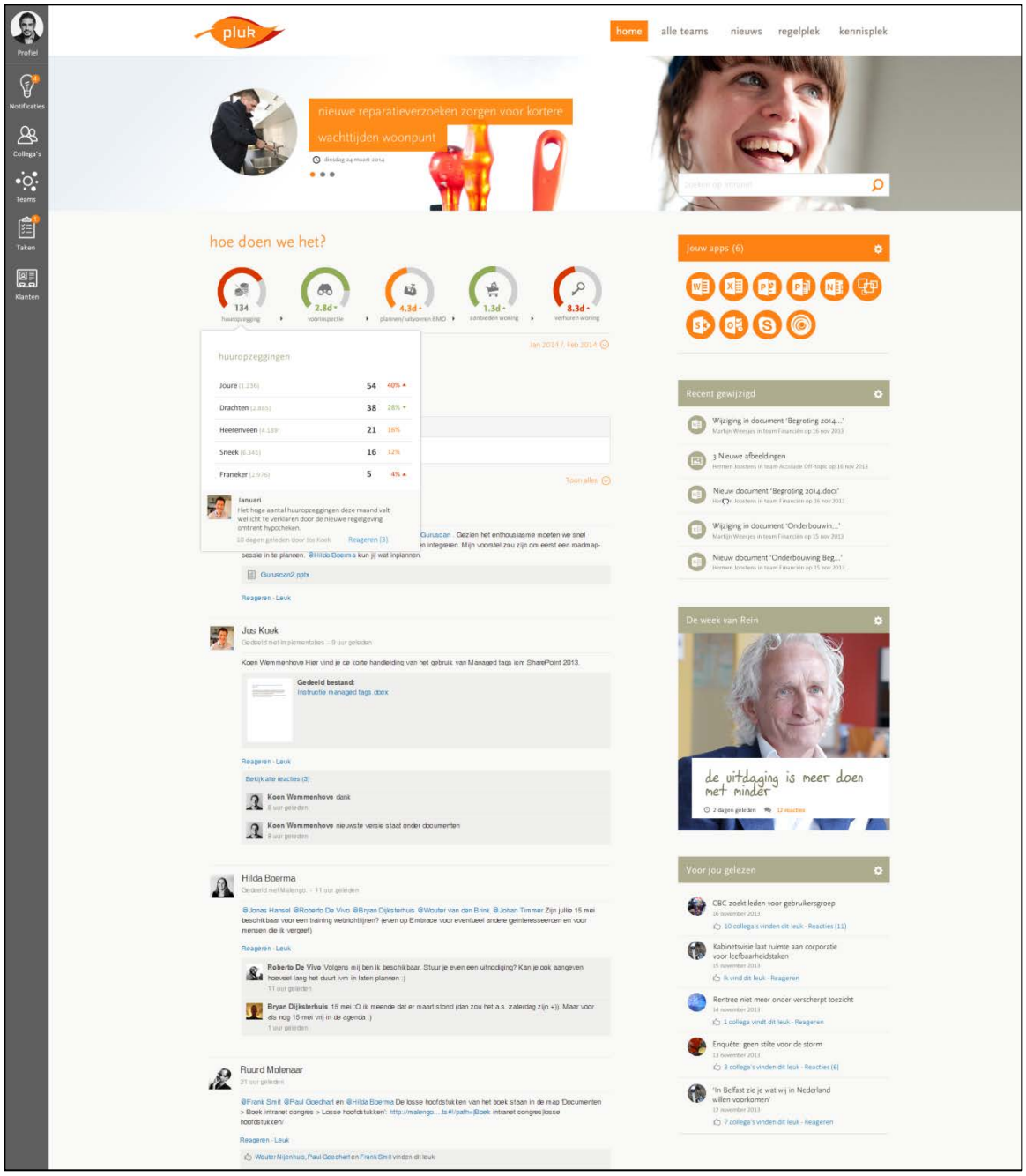


Image 5. Accolade Intranet: Reports Widget. On the Accolade intranet, a reports widget is available that shows how the organization is performing on certain business metrics. Employees can see that information, but they can also comment on the report to help improve the performance of the company in certain areas. *05_Accolade_05_kpi_live.png*

INTRANET TEAM

Accolade (in-house) team members (left to right): Hilda Boerma, Frank Smit, Hiltsje Rinsma, Michiel Booij, Bianca Bijlstra, Berend Hut, Martijn Weesjes, Koen Wemmenhove, Hermen Joostens, Irene Willems-Sloot, and Erik Dokter.

GOVERNANCE

The Communications & Marketing department is the owner of the intranet and has overall responsibility for the site.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Irene Willems-Sloot, Communication Specialist	• Oversee the intranet and responsible for community management
Michiel Booij IT Specialist	• Maintain the connections between the intranet and the business systems
Hiltsje Rinsma Manager Customer Contact	• Maintain connection with front office • Responsible for social task management
Bianca Bijlstra Information-specialist	• Coordinate the activities of the moderators who manage the managed content (keeping the knowledge base up-to-date)

Figure 1. Accolade Intranet Team Responsibilities

USERS

The Accolade intranet supports all of the organization's employees, from the front office and back office department to the maintenance engineers. It also supports all departments — administration, Human Resources, IT, Facility Management and Communication — as well real estate agents.

URL AND ACCESS

URL AND ACCESS INFORMATION	
Category	**Technology Used**
URL	• pluk.accolade.nl
Default status	• The intranet is published as an application within the organization's Terminal Service (TS) environment. The intranet application launches when users sign in. Changing the browser's default homepage does not affect this.
Remote access	• When users are not on the corporate LAN they can access the intranet by using Citrix. Employees can use their personal browser and navigate to the corporate Citrix landing page. After logging in (with their personal user, password and token set) they can use the intranet the same way as if they were on the corporate LAN itself. This method is regularly used by a large group of users. • Also, the organization's TS environment is currently published via Citrix and can be accessed externally by certain users using a security token. At a later point they plan to publish the intranet in a way all users can access it without needing a security token.

Figure 2. Accolade URL and Access Information

DESIGN PROCESS AND USABILITY WORK

Design Approach

In October 2013, the Accolade design team asked the company's employees to help it build a new intranet and instead of making a functional design and asking them for their opinion and feedback, the team decided to involve them much earlier in the process. "We asked them what they would expect from a new intranet and what they expected to contribute to it," says Willems-Sloot. "And we tried to take as many aspects as possible and turn them into specifications."

In addition to the core intranet team, the following groups were involved in this research:

- **A panel of 15 employees**, from several departments, was asked to contribute input and these employees were used as early stage testers.
- **Every other employee who wanted to be involved.** For example, people were asked to help think of a name for the intranet and people were asked to bring ideas to the table for functionality and features.

The team continued with this type of personal approach throughout the project so they could delve deeper into user motivations through face-to-face interactions. "We choose to emphasize personal interaction in our methods," says Hiltsje Rinsma, Manager Customer Contact, Accolade. "We wanted to talk to people directly, so that we could immediately ask follow-up questions. This way people would think along with us, and their replies weren't anonymous as with surveys. We picked the people we talked to carefully. If we hadn't spoken to anyone from a certain department after the first round, we simply went there and asked people until we had."

Research Methods

In addition to reaching out to employees, the team employed other user-focused activities. Koen Wemmenhove, a consultant from Embrace SBS, explains:

- "**Card sorting:** We held a brainstorm session with a group of colleagues to determine the navigational structure and used statistical analysis to analyze the content from the previous intranet. Also, we spoke to representatives from various departments about what content they thought was essential for the new intranet.

  "To conclude the session we gathered all the information and labeled it either static or dynamic content. Static content — content that only changes a few times per year, at most — will earn a spot in the main navigation. Dynamic content — which changes frequently — will be put into team sections, microblog and dynamic pages.

- "**Focus groups:** We've conducted several focus group sessions with a group of 12 people who in addition to participating in focus groups, later became intranet ambassadors. In the first meeting, we asked them: what did they want to do on the intranet, what did they want to find, and what would they like to arrange.

  "We collected the answers on sticky notes and based our functional design on this research. With this information, we could also process some quick wins. For example, a lot of people told us that they were looking for the company's logo.

- "**Field studies** (visiting and watching people in their workplace): We followed employees during their work at the Customer Contact Center and interviewed them afterwards. They were able to tell us what information about their colleagues was crucial for them to do their work. The extent to which colleagues were available for us to do this research and have them questions was essential, as was our ability to see their agendas."

- **Meeting with other teams:** In this case, members of the Accolade team visited with the intranet team of another social housing office (Mijande Wonen) that has worked with the software from Embrace SBS since 2010. This step proved helpful to Accolade's own project because it learned that integration with a primary system is essential for the adoption of the intranet. The Accolade team also learned from the other team's experiences and lessons learned.

Social, by Accident, Not by Design

The new intranet project was part of a bigger project called "Focus on the Customer," which had been in progress for two years. The team started to work with Umbrella when they needed software to support the company's Customer Contact Center. That was in the summer of 2012 and this is how the early steps played out:

- **Step 1** (June 2012–December 2012): Set up a centralized Customer Contact Center (front office), in order to organize customer contacts across all of the company's communication channels.
- **Step 2** (late 2012–March 2013): Connected the Customer Contact Center with the rest of the organization. As it happened, the team was not originally looking for a social intranet. First they searched for a suitable CRM system, but discovered those systems too traditional for their needs. They ultimately found what they were looking for by integrating the primary processes into a social intranet.

  The team had a good experience from that, so they asked their agency partner, Embrace SBS (also part of the same company), to integrate task management and told them they wanted a "light" version of Umbrella. The new social intranet now connects the front office with the rest of the organization.
- **Step 3** (March 2014–end 2014): The team is currently working on a customer portal within the intranet, to help connect the customers with the rest of the organization.

TIMELINE

PROJECT TIMELINE	
Milestone Date	**Milestone Description**
2003–2006	• **Accolade Group Intranet** created and managed with Microsoft FrontPage (HTML pages)
2006–2009	• **Accolade Group Intranet** developed using PHP, with some parts manageable via CMS
2003–2009	• **Arqin Office Intranet** developed using .ASP and content from file share systems, no CMS (see image below)
2009–2014	• **AccoladeNet** based on SharePoint 2007 (see image below)
October–December 2013	• Begin research for new intranet
January 2014	• Begin implementation on new intranet
April 2014	• New intranet online
July 2014	• New release online
September 2014	• New release online

Figure 3. Accolade Project Timeline

Image 6. Accolade Arqin Office Intranet: 2003-2009. This shows how the Arqin Office (Heerenveen office) intranet looked before it and the other offices were merged under the umbrella of the Accolade intranet. The Arqin intranet was developed with .ASP, featured files from file share systems, and had no CMS. *06_Accolade_06_Arquin_office_old_intranet.png*

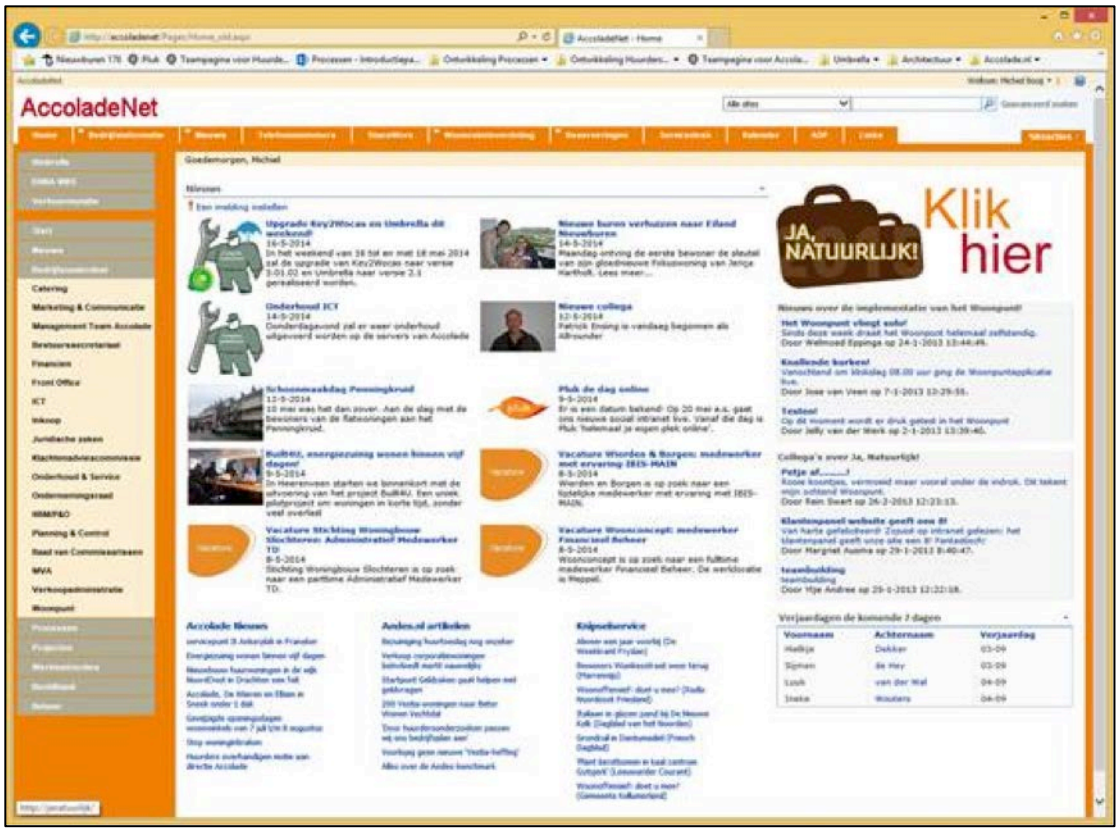


Image 7. Accolade AccoladeNet: An Early Intranet Design. The AccoladeNet was an early intranet based on SharePoint 2007. *07_Accolade_07_old_SharePoint_intranet.png*

CONTENT AND CONTENT CONTRIBUTORS

The Accolade intranet uses SharePoint 2013 Server. SharePoint was chosen as backend and CMS for the following reasons:

- High availability
- Built-in document management system functions such as version control and advance authorization
- Native compatibility with other Microsoft products such as Microsoft Office Web Apps, Lync, and Exchange
- Automation of processes via SharePoint workflow
- Flexibility

All employees at Accolade are able to develop content for the intranet. Employees can personalize their respective homepages, decide for themselves what information they want to share, and what information they want to read. They can also decide which widgets they will use, identify which teams they are a member of, and choose which colleagues they want to follow. Rather than provide any specific guidelines or rules for employees to operate by, the team has simply chosen to triage any mistakes that occur; for example, placing content in the wrong team or placing extremely long documents in a microblog post). When triage is needed, the team will

leave a tip so the individual user (and others) know what went wrong and how to do it better next time.

The team has also appointed a group of moderators who keep the information housed in the knowledgebase correct and up to date. Each of them is responsible for the content of their respective department.

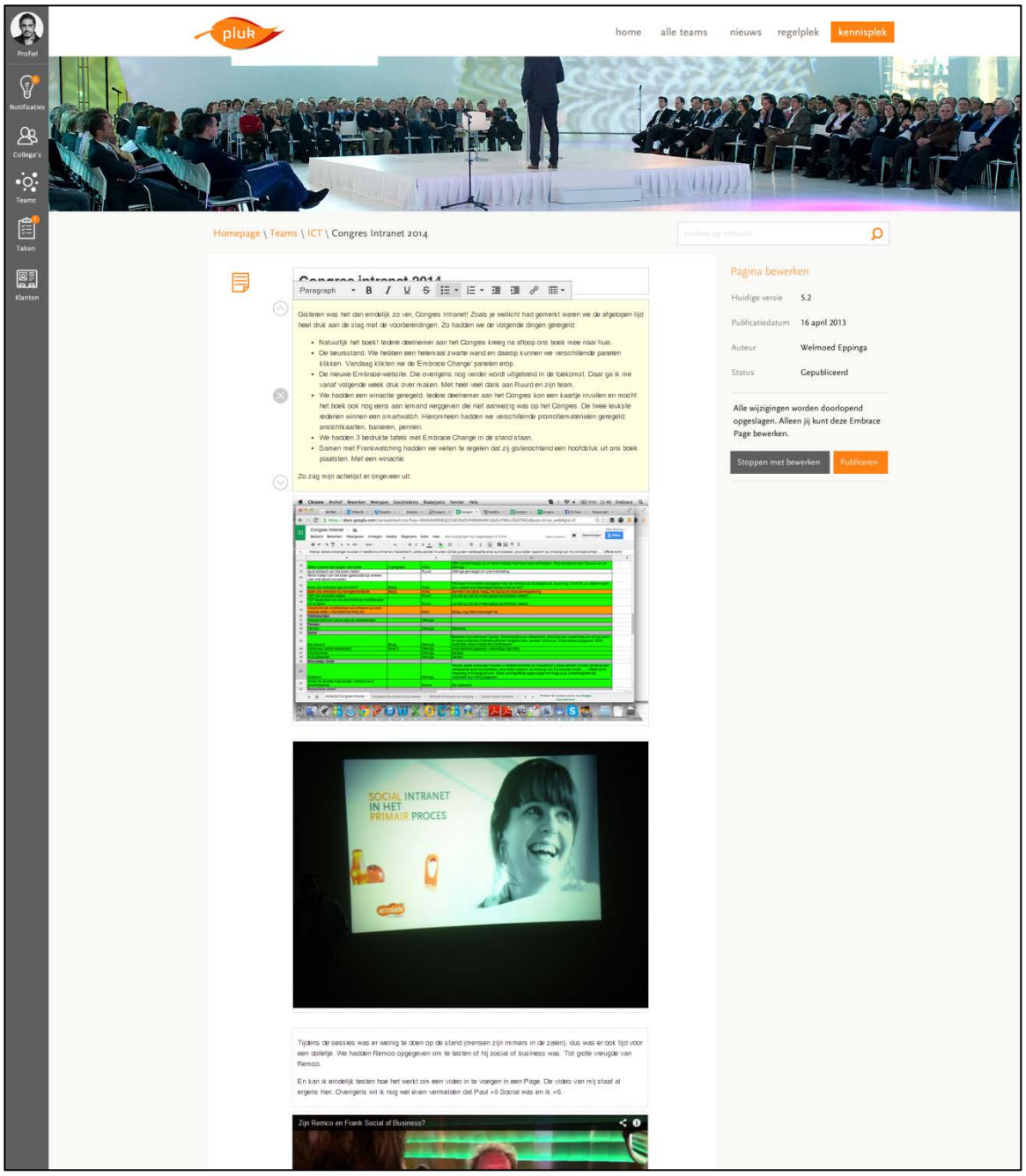


Image 8. Accolade Intranet: Support for Team Collaboration. Accolade employees can work together in teams on different pages on the Accolade intranet where they are able to perform certain tasks, such as basic text editing, add photos and documents, and embedding YouTube videos and SlideShare files. They can collaborate on pages, comment on pages, and lock pages if they don't want other colleagues to edit the content. The Corporate Communications department can use the pages for corporate news by tagging content with the #corporatenews hashtag. *08_Accolade_08_page_live.png*

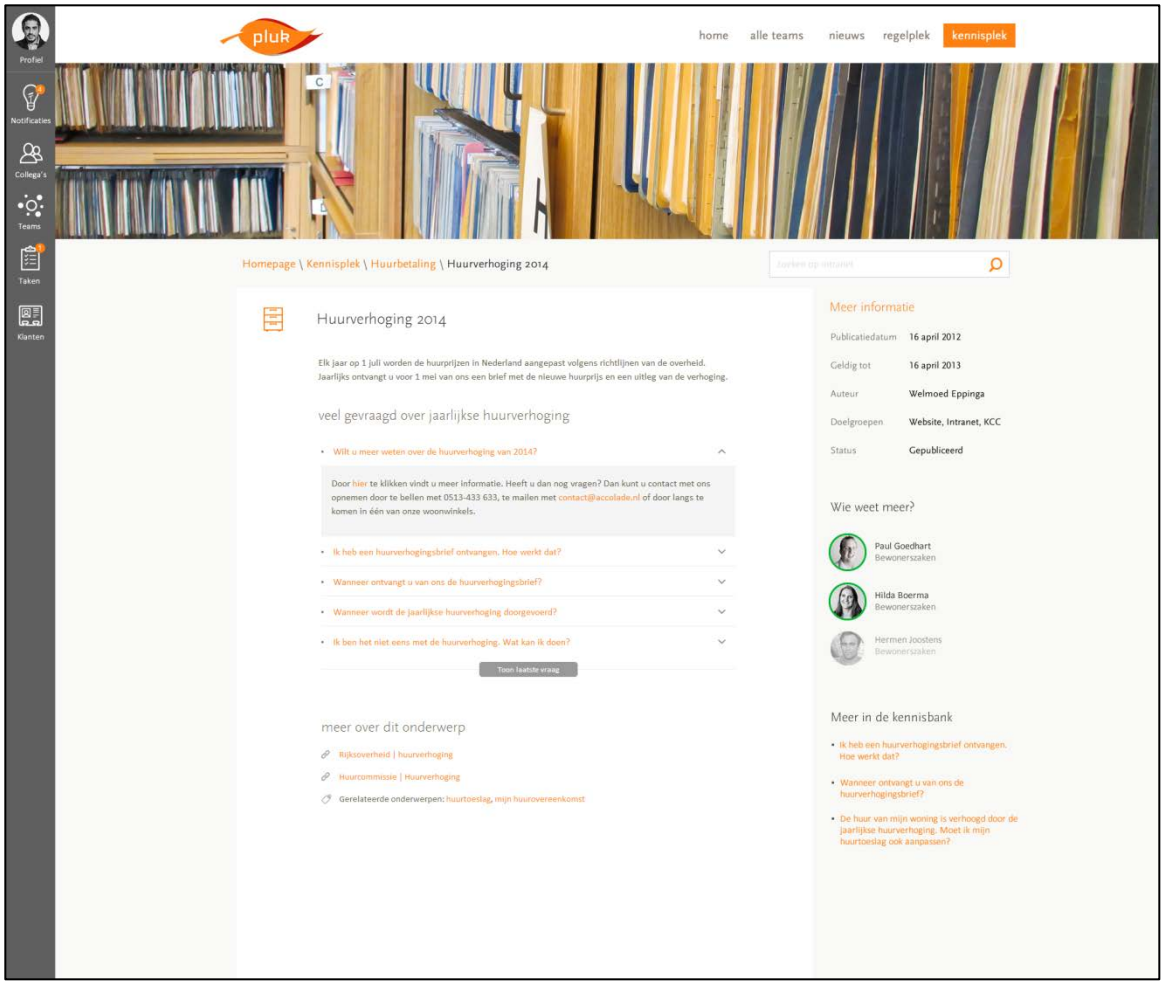


Image 9. Accolade Intranet: Knowledge Base Integration. The Accolade team integrated the intranet with the knowledge base from its front office application, Umbrella. Now when users search or browse categories, the intranet displays related information and topics (e.g., frequently asked questions) by publication date, author, location of content (intranet or website), status, and even names and contacts of people may know more about the subject. If users see content isn't correct, they can easily report it. *09_Accolade_09_knowledgebase_live.png*

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and OS	• A virtualized environment with Windows Server 2008, 8GB of dedicated RAM and shared CPU, and a separate MS SQL instance.
Bug Tracking / Quality Assurance	• Team Foundation Server (TFS) is used for source control, issue tracking, and unit tests.
Design Tools	• Fireworks and Axure are used for prototyping and testing with users.
Site Building Tools	• The intranet is developed in Visual Studio 2013 with TFS.
Content Management Tools	• The intranet is also dependent on a SharePoint 2013 farm for storing documents and content management.
Search	• Lucene is used for searching inside the intranet. SharePoint search results are delivered through a plugin architecture.

Figure 4. Accolade Intranet Technology

MOBILE

Mobile intranet access is supported for all intranet content, but it's currently limited due to network constraints involving Citrix. Neither has the user interface been optimized for mobile yet.

SEARCH

The Accolade team chose Lucene because the search technology behind the intranet needed to be feature-rich and easy to implement, as well flexible and fast.

"Because of our plugin architecture, it's easy to include search results from an external source, or even replace the default search engine," says Jeroen Scholtens, .NET developer, Embrace SBS. "In this case extra results from SharePoint Search are included with a plugin."

Users can refine search results to only those from their team, or from an external source. They may also search by a given interval of time (weeks, months, years) backward from the current date, as well by content types like documents, microblog posts, pages, teams, and profiles. All of these options can be enriched with plugins. The reason for this rich set of refinement options is to give users the tools they need to filter instead of search. The filtering capabilities are illustrated in the image below.

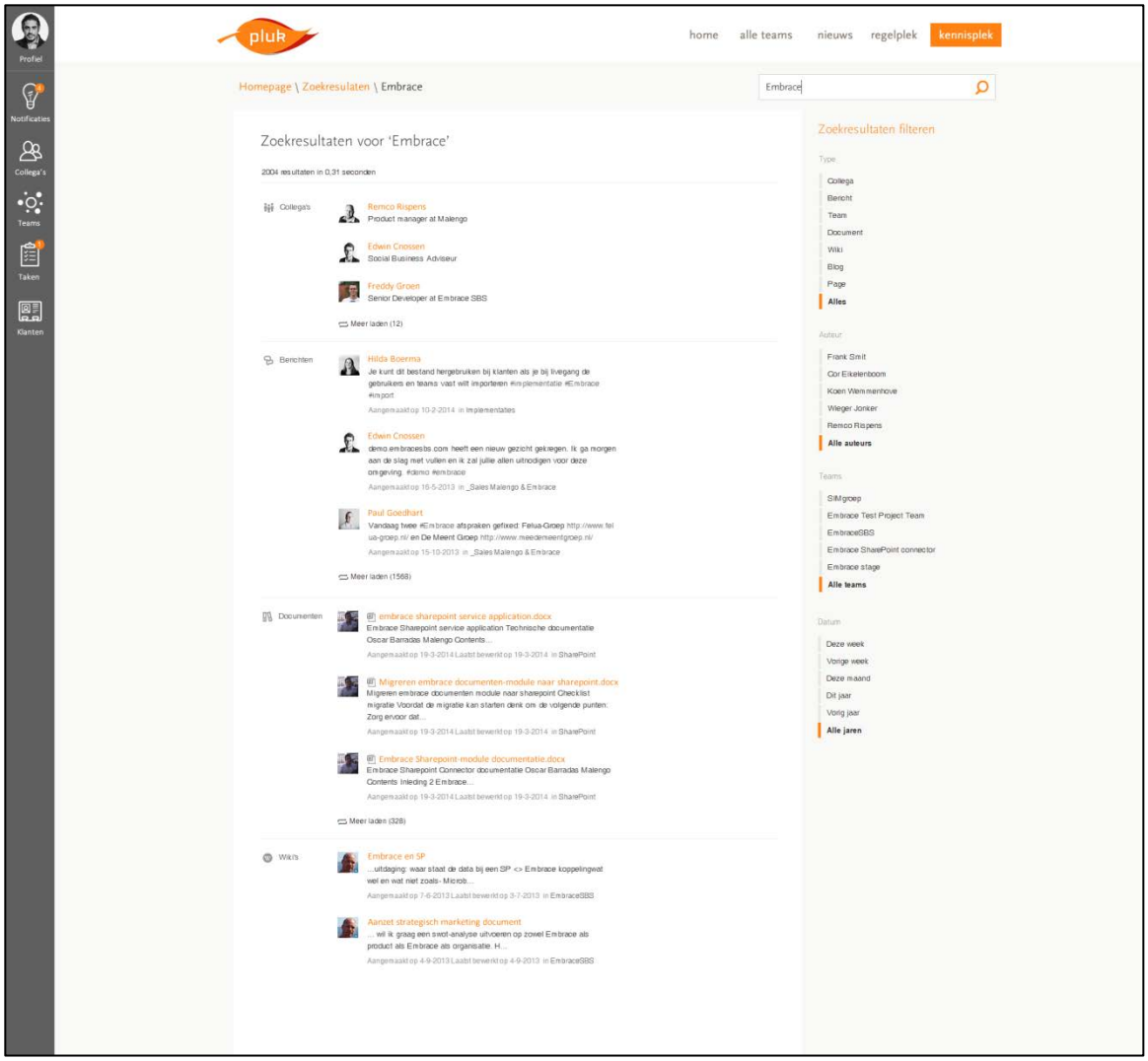


Image 10. Accolade Intranet: Search Results. Search results are presented in real time. Employees can filter by different categories (documents, colleagues, authors, and so forth) or can choose to search only within a specific team. *10_Accolade_10_searchresults_live.png*

RESULTS AND ROI

Like many companies, Accolade doesn't quantify the results of its intranet in hard numbers. "We think our intranet is successful because we deliver better services to our customers thanks to our intranet," says Rinsma. "With the help of the intranet, knowledge is easily accessible, complete, and correct. Thanks to social task management we have connected the front office with the rest of the organization and we can now share responsibility. This stimulates entrepreneurship and a drive to work together, which is one of our main values."

Rinsma points to several other gains from the social intranet:

> "**Time saved.** Since the implementation of the intranet, we have saved a lot of time. Thanks to the information in the client directory in

the knowledge base and the integration with Lync, information is now completely open and transparent to our staff."

"**Fewer errors.** With better information at our fingertips we make less errors in the phone calls with our customers. It saves time for our front office department, and it also saves a lot of time for our customers. We are more in control of the situation. We have about 35,000 maintenance requests (phone calls) a year, so making this process easier saves a lot of time. For example, an employee from the front office shared this:

'We store every contact we have with our customers, and it's visible on the intranet. It seems logical now, but we didn't do it two years ago. When a customer called in the morning and talked with colleague X, and he called back in the afternoon and got colleague Y, colleague Y didn't know the customer had called earlier. Now we can see when a customer called, what colleague X said to them, and give the same answer.'"

"**Contribution to performance goals.** The intranet helps with achieving our goal of answering 80% of the customer questions directly at the front office level. The staff from the front office is now able to answer 80% of the questions they receive daily, because:

- **Information is correct:** They find all the correct information (documents, processes, forms) in the knowledgebase on the intranet.
- **Departments are now connected:** The intranet has connected the different departments with each other. The intranet stimulates colleagues from other departments to improve the quality of the information in the knowledgebase on the intranet in a user-friendly and easily accessible way.
- **Employees know what's going on:** Employees know what's is going on in the organization because of the corporate news, microblogs from colleagues, and social media integration on the intranet. And the 20% of the questions that the front office cannot answer directly are also visible on the intranet. Accolade continuously tries to improve their processes, to make sure the front office can answer more questions directly (and can help the customer better and more quickly).
- **Information is customer-centric:** All the information is stored at customer level. An employee doesn't have to search in separate document management systems to find letters that are sent to customers in a specific area. The company stores all the letters at customer level, so the front office department can easily find this information.
- **Single sign-on provides ease of use:** Users open all their applications through the intranet without having to sign in again. This example from a front office employee illustrates this point: 'In the beginning, we had to search for information in different systems and the customer had to wait for us to find all the pieces of information. Right now, there is just one source of information: the intranet.'"

"**Control.** The front office is more in control of the (20%) of customer questions they cannot answer directly, because they now have:

- **More complete information:** They have full insight in the expertise of colleagues now because the organization encouraged colleagues to add their expertise in an effort to enrich their personal profiles.
- **Visibility into task status:** Task status is completely visible. It is clear which colleague will complete the task and what the status is (and the business value is transparent). They also have full insight in availability of colleagues and departments.
- **Better access to expertise:** It is easier and more transparent to ask a 'who knows something about …' question. You don't have to call different departments anymore to find out who has the expertise. Within a couple of minutes, you have the names or department of colleagues who know more, and due to the Lync integration you have insight in their availability."

"**Customer satisfaction.** Customers are more aware of the actions our front office staff have to take if they can't address customer questions directly. Status and expectations are clearer. And because of clearer expectations, our customers complain less, and when they do complain, we are more in control because we reported all the contact we had with the customer, including contact we had on social media. It is all transparent in our systems and easily findable on the intranet. The knowledge base on the social intranet is the absolute truth. Before, our front office staff had to search local storage or in mailboxes for the right forms or documents, and old versions of forms were often sent to customers. That doesn't happen anymore; the right information is stored on the intranet."

"**Linking employees with organizational objectives.** The new intranet has provided employees a better understanding of organization's objectives. For example, for our organization it is really important (because it saves a lot of money) to prevent our homes from being empty. When a customer gives notice that they will end the rental agreement, we try to rent the house immediately at the end date to another customer. On our intranet we present this information in a graph that is updated daily. It's greate for our employees to have complete access to this information, but because of the social component of our intranet our colleagues can comment on it also. So we connect the social with the business, and our colleagues can contribute to our organizational goals by helping to decrease the amount of time our homes remain empty."

The old intranet was mostly an information-based tool, with some corporate news, some HR forms and procedures, and the employee birthday calender. Only select employees could add information. "With the new intranet we have a social intranet," says Rinsma. "Every employee can now add information and update the intranet. It stimulates entrepreneurship and initiative, and that's the empowerment we want our employees to feel. Entrepreneurship is one of our main values."

Positive User Feedback

In addition to tracking the ways the intranet has returned value for the organization, the team is also tracking positive user feedback. Willems-Sloot shared a few examples of these positive responses:

> **Jelly van der Werk, communications employee:** "I am taking a course for communications employees and the teacher presented a list of attributes for the 'ideal social intranet.' The teacher told us that hardly any organization had an intranet that looked liked this, but Pluk has almost everything on the list! Thanks to Pluk, I can:
>
> - email less,
> - see what my colleagues are working on,
> - navigate more easily to the systems I need,
> - scan our corporate news,
> - find the information I need, and
> - connect with colleagues who are in my project team, or wherever."
>
> **Fred Hesselink, advisor to the board of Accolade:** "Pluk is:
>
> - **Easy and accessible:** I can share information in a very simple way.
> - **Unified:** I don't have to send documents anymore or save them on local storage, rather, thanks to Pluk, information is saved and accessible in one place.
> - **Flexible:** It is possible to target information to your specific audience."
>
> **Lutske Banga, information advisor, Accolade:** "Pluk is a central place to share knowledge and experience with colleagues, and allows me to respond to questions and activities immediately. I have access to a lot of information about my colleagues, ongoing projects, tasks and information about our renters, and what have you. It gives me access to all the applications and knowledge.
>
> - **My morning starts on Pluk:** I check the news and microblog messages. Since we've had the social intranet, I notice we're able to share information with each other easily, and because we can, we share more.
> - **Pluk has improved how I work with colleagues:** On the social intranet I can work together with colleagues in project teams. We share documents and edit them together and can respond to each other immediately.
> - **Pluk helps me parse information:** I can judge for myself which information I need or find interesting, and join teams that can tell me more about that information."

Usage

Willems-Sloot provided a few usage statistics (as of August 1, 2014):

- 205 user accounts
- 191 have a profile photo
- 184 were active in last seven days from when data was shared
- All users are a member of five teams, on average

The most popular teams are:

1. Team Accolade: 190 members
2. Team Customer and House: 110 members
3. Team Daily Maintenance: 66 members
4. Team New Ways of Working: 43 members
5. Team Finance and Information: 40 members
6. Team HeerlijkHelderSchrijven ("How to Write Letters/Emails/etc." to customers): 35 members
7. Team Front Office: 35 members

LESSONS LEARNED

"Think big, act small" is a big piece of advice Accolade team members say they would give other teams about to embark on an intranet redesign project. "Don't put the perfect situation into one big project, rather make sure the project is divided into smaller steps that are based on a clear vision, and build it slowly," says Rinsma.

Rinsma and Willems-Sloot share some of the team's other lessons learned:

- **Social tools should serve a business purpose.** "Make sure the (social) intranet is integrated into your processes. Some separate social tools sound like fun but you have to work hard to achieve a certain adoption rate. Some people will simply not use them so make sure employees need the intranet to do their work. When they work with it they will soon see the advantages of the social components."
- **Involve employees early.** "Make sure employees are involved in an early stage of the project. Don't wait to involve them until you already have a functional design and let them tell you what they think of it. Rather, involve them early. Ask them what frustrates them in their work. Ask what a perfect (work) day looks like. Ask them which processes can be improved. You should involve users as early as possible during the design process but in order to allow them to really contribute they should first have some basic understanding of what a social intranet is. You may want to start with a beta or a very simple first version to help users to fully understand concepts like microblogging and working in teams."

- **Find creative ways to involve people and generate feedback.** "Staff can be involved on different levels. For example, you can ask staff to help think of a new name for the intranet. Our staff came up with the name of our intranet, Pluk. As another simple example, we interviewed colleagues and found that a lot of them are looking for the company logo. So we put that on the intranet as well."
- **Pay attention to the customer.** "You have to continuously pay attention to the internal customer (your colleagues). Don't think the intranet will work if you don't put in effort."
- **Determine the governance structure up front.** "Make sure to arrange the governance well. Who is the 'owner' of the social intranet? Who is responsible for keeping information up to date?"
- **Work closely with IT.** "In the beginning (of the bigger project) we didn't work close enough with the IT-department. Now we work together as a team with the IT-department and can handle the dependencies better. For example, because the intranet is integrated in our primary systems, an update of one of our primary systems also affects our intranet."

Klick Health

Using the intranet: Klick Health is the world's largest independent digital health agency. It is laser-focused on creating solutions that engage and educate about life-saving treatments. The company helps inform and empower patients to manage their health and play a central role in their own care. Every solution the company crafts hinges on in-house expertise across the digital universe: strategy, creative, analytics, instructional design, user experience, relationship marketing, social, and mobile.

Headquarters: Toronto, Canada

Number of employees the intranet supports: Over 400

Company locations: Headquartered in Toronto, with teams in Chicago, New Jersey, New York, North Carolina, Philadelphia, and San Francisco

Annual sales: $100 million

Design team: The core team is comprised of eight dedicated full-time employees, however anyone at Klick has the ability to contribute to Genome.

In-House: Aaron Goldstein, COO; Benjamin Nadler, Senior Director, Internal Operations; Andrew Woronowicz, Director of Business Process & Systems; D'Arcy Rittich, Chief Technical Strategist; Rey Crisóstomo, Technical Architect; Rob Brander, Senior Application Developer; Alex Chesser, Genome Developer; Alexey Davydov, Senior Application Developer

SUMMARY

Genome, the intranet for Klick Health, is far more than a way to read news. The intranet is integral to each employee's everyday activities, providing a wealth of tracking and management tools that help employees get their work done, while allowing the company to collect and use work data to drive decisions and track successes.

The intranet is a custom-built, in-house system supporting the organization's business goals. It started as a task management system for tracking progress and communication around tasks and grew into a suite of tools that support Klick Health's business functions. This is a natural fit for an organization that prides itself on data-driven solutions.

The homepage gives a brief introduction to the site, highlights news items and recent social activity, and provides quick access to project and ticket information. Clicking on a plus sign in any item reveals more information. The items become greyed out after the user has clicked on the corresponding news item. (Nothing happens when users hover over them.) The color change is used as a means of highlighting new, unseen items. The most recent items are displayed on the homepage. Each news item has an expiry date, after which it is automatically removed from the homepage. If users click *close news* their *Ticket Homepage* appears instead.

The homepage has a clean and minimal design. Interior pages focus on content and functionality with minimal visual distraction. The site maintains a clean and unified appearance with plenty of white space balanced with a bright palette of colors to highlight key areas, draw attention, or indicate status.

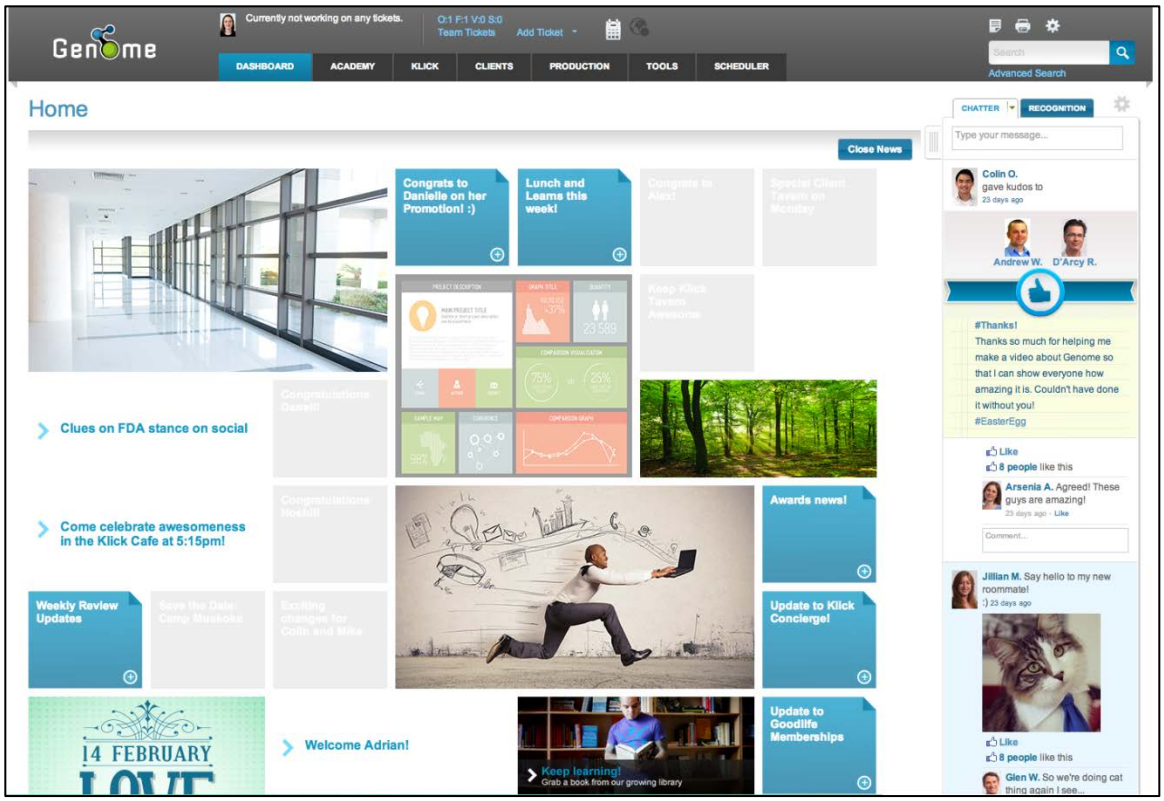


Image 11. Klick Health Intranet: Homepage. The homepage of the Klick intranet, Genome, highlights a few news items, the latest social activity, and gives users access to project information (center of page) and tickets (top of page). *34_Klick_Health_01_Genome_Homepage_and_Chatter_live.png*

The core of the intranet, the ticket page, remains the most used page. Tasks that need to be completed are summarized in a ticket and assigned to an employee. Each ticket appears on its own page, where employees can add sub-tasks as needed and assign tasks to members of the project team.

A list of employees associated with the project or task appears on the left side of the page, together with images of each employee. In the center of the page, beneath the task summary and any sub-tasks that may exist, is a chat or comment window that allows team members to add notes or have discussions around the task.

This alone would be helpful, but the site goes one step further. Anyone else currently viewing the ticket is shown as *Currently in Chat* to the right of the chat window. This allows colleagues to contact each other instantly to ask a question, clarify an issue, or discuss a solution. Any chat or comment associated with a task is summarized and stored with it. Employees can also track their time by clicking the *Start tracking time to this ticket* button.

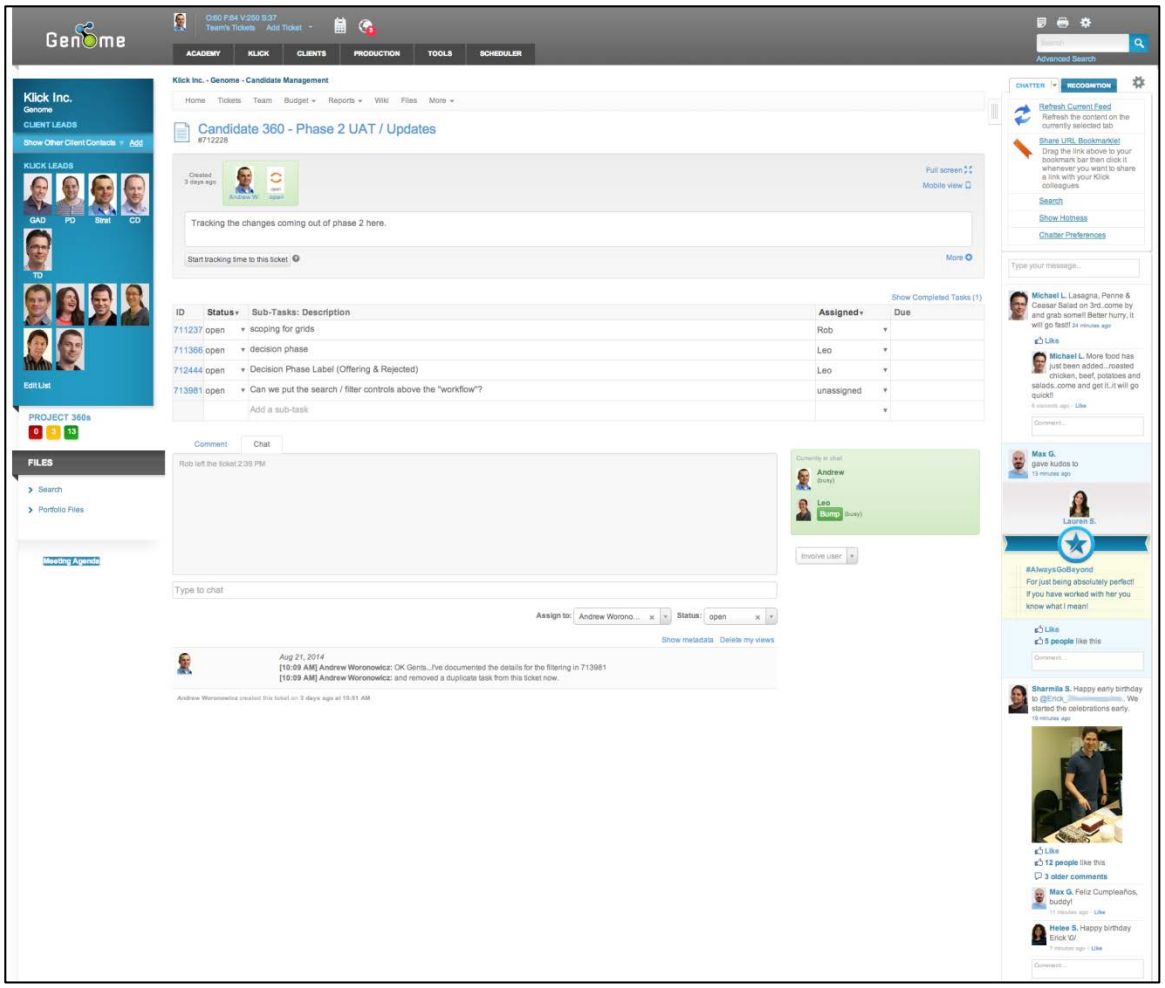


Image 12. Klick Health Intranet: Ticket Tracking. Ticket tracking is at the core of Klick's intranet. *Tickets* allow employees to track their activities and progress. Chat and commenting functionality keeps all conversation surrounding an activity in a single location.
35_Klick_Health_02_GenomeTicket5_live.png

A unique feature of the site is a weekly review system called *Project 360*. This system asks team members to provide a "gut feel" about how a project is going. This allows employees to voice concerns early, before they grow into larger issues. Other team members can then weigh in to determine if the issue is surmountable or if it has the potential for larger ramifications, such as derailing a project, blowing a budget, or extending a deadline. This tool acts as an early warning system if things are starting to go wrong.

Rather than being a tool where employees may be hesitant to voice a concern, the tool brings what may be minor concerns to the foreground, ensuring the team is aware of the issue and moving toward a solution. This helps eliminate smaller, avoidable issues that could grow into insurmountable obstacles if left untended. The organization has a sense of shared accountability for projects, and as such, employees are comfortable voicing concerns early.

Team members can easily provide feedback about a project. They can indicate if they think the project is going as planned, has problems, is exceptional, and so forth. Feedback is given via an easy two-step process: first the user selects the *gut feel* and then provides a brief comment or concern regarding it. When the user clicks *Save and go to next step*, notifications are automatically sent to team members (for every status except *green*). At the same time, project homepages are automatically updated so everyone can see the most recent status and comments. For the user giving feedback, "*next step*" refers to any other projects the user may have to review. The system leads them through all projects until they are done for the week.

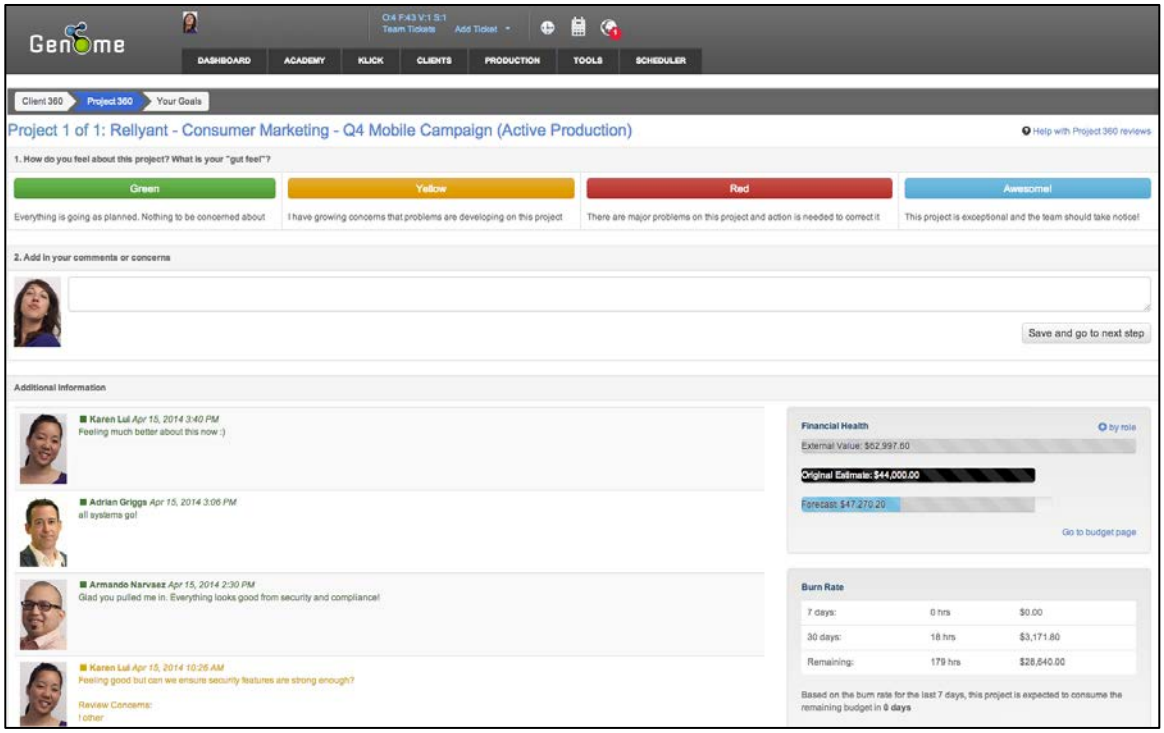


Image 13. Klick Health Intranet: *Project 360*. *Project 360* is a tool on the Klick intranet that allows employees to give "gut feel" feedback about a project's progress. This weekly check allows team members to flag potential issues early, and gives colleagues a chance to address, acknowledge, or discuss any concerns. *36_Klick_Health_03_Project360_live.png*

Encouraged by the success of their other tools to track progress and flag issues, the team moved into building a tool to assist with hiring. *Candidate 360* strives to turn hiring into a predictable, repeatable, data-driven process. The team started by creating an ideal persona to fill every role at the company. The persona was based on the skills and personality types of employees who excel at the company and those who typically do not. This resulted in two lists: one of success characteristics and one of potential issues.

The tool helps the company manage the hiring workflow, collecting and applying data at each step along the way. Candidates are tagged with the positions for which they are being considered. Genome detects calendar entries for interviews and sends an information pack to interviewers in advance. The information includes details about the given candidate and a list of criteria to use in their evaluation. Interviewers also

receive a summary of the candidate's evaluation, including comments from all interviewers.

Post-interview, each person adds comments, reviewing the candidate based on the list of criteria. This can be done via desktop or mobile. Genome automatically sends a reminder to interviewers to complete the survey.

Automating the system allows the company to learn more about what makes a successful hire, as well as fine-tune the hiring system. Hiring can be more systematic, collecting feedback about candidates and helping determine what makes someone a good fit for Klick. The system even helps identify which employees are good at interviewing and assessing candidates.

Candidate information is summarized at the top of the page and includes a cover letter, URL, or resume, as appropriate. The system can include test results and interview responses, a "scorecard" for applicants, and a list of potential issues (called "Watch Outs"). Discussion and comments can be added just as they can in the task management tool.

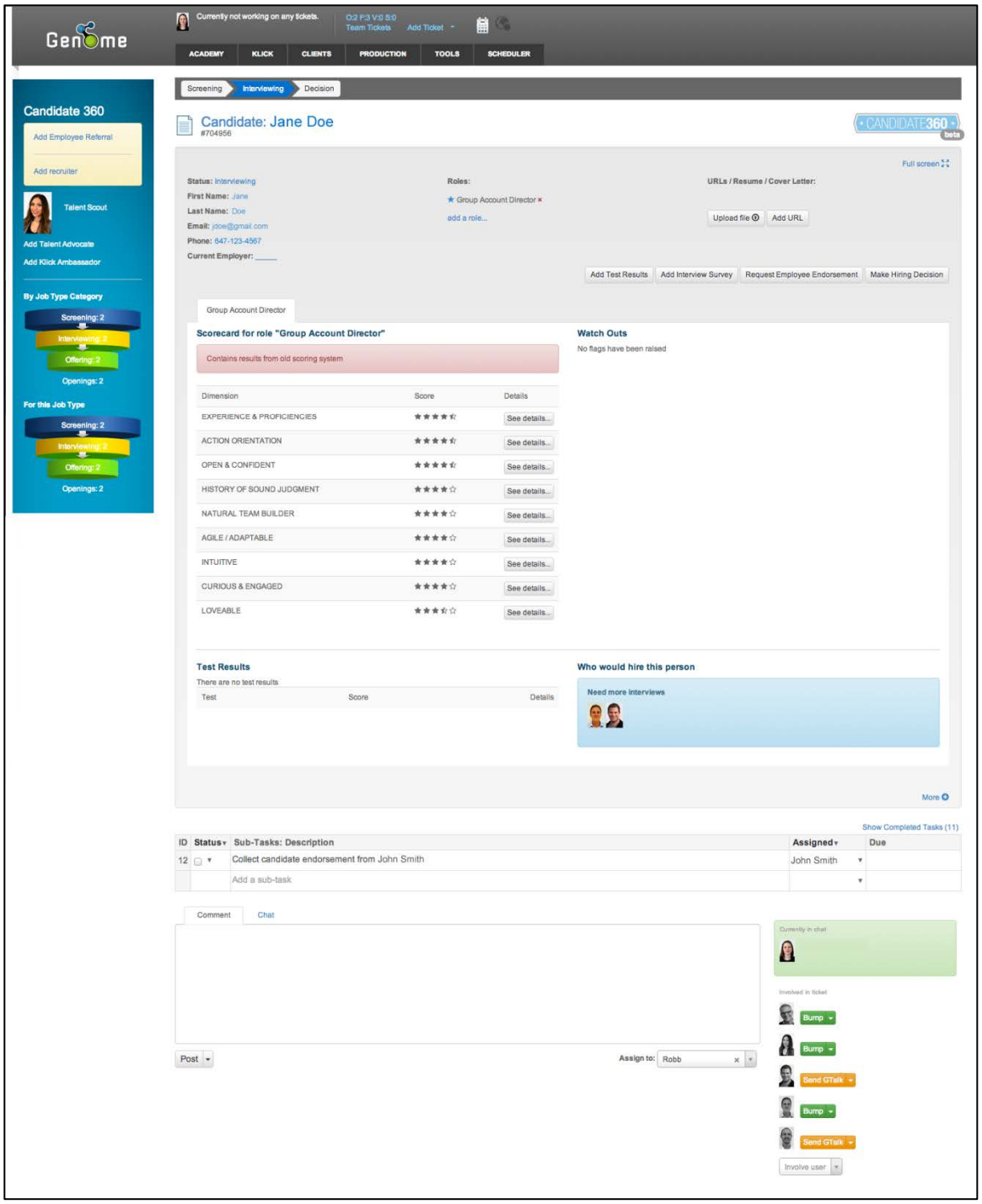


Image 14. Klick Health Intranet: *Candidate 360*. The *Candidate 360* tool combines all information about hiring a candidate into one place. The system aids and guides the hiring process and tracks all feedback about candidates. *37_Klick_Health_04_Candidate 360_Anonyn_live.png*

Klick Academy is the company's knowledge management platform that resides in Genome and serves as an important training tool with more than 1,000 video

courses. Within *Klick Academy*, *Klick Talks* allow an employee to ask any question and get a video response within days. It may seem daunting to provide this type of turnaround for a video response, but the fact that the response is on video is actually a factor in how quickly the question can be answered.

First, an employee asks a question within *Klick Academy*. Then someone on the content team finds a subject matter expert in the company to answer the question, walks to the subject matter expert's desk with an iPhone in hand, and records the expert's response. The video is quickly uploaded from phone to intranet for all to view. That's it.

The process makes sharing knowledge simple and easy for those asking and answering questions and is minimally labor-intensive on the content team's side. Rather than compose an email or write an official site tutorial, experts simply answer the question in a casual way. Expert knowledge is quickly recorded and made available in an easy-to-consume format. The success is seen in the number of talks, which has rapidly grown to 740 videos and counting. This simple approach lowers the barrier for experts to share their knowledge, as well as for employees to seek it out.

Users can browse the *Klick Talks* videos with the newest and most popular highlighted. The featured expert is shown, along with the topic and length of the video response. Employees can also submit a question via a simple form that guides users along by saying, "Do you have a question? Can't find the answer you're looking for? Submit your question here to have it answered within days!"

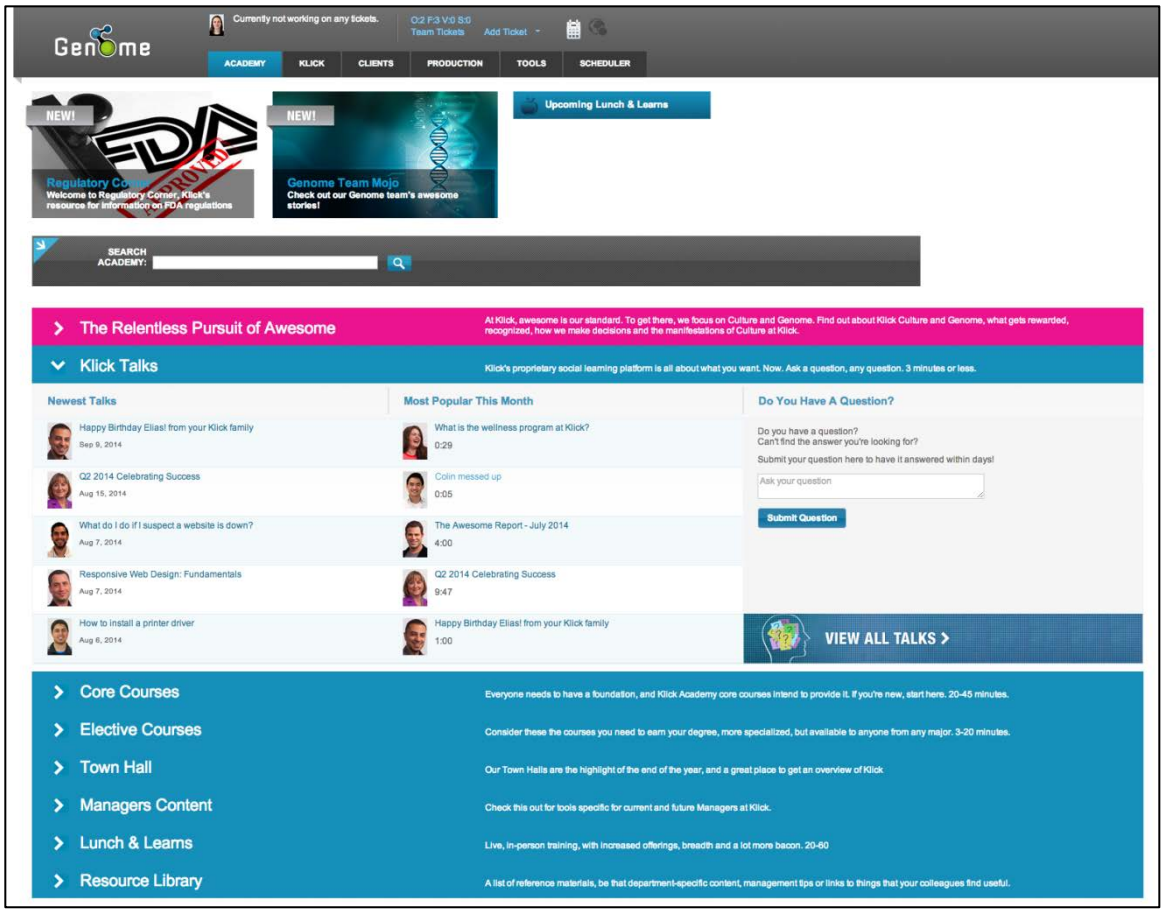


Image 15. Klick Health Intranet: *Klick Talks*. The *Klick Talks* feature on the Klick intranet is a knowledge base of in-house, topic-expert video responses to employee questions. Any employee can ask a question, then a content team member will find an in-house topic expert, record the expert responding to the question, and upload the video to *Klick Talks* for all to view (and comment on or discuss). *38_Klick_Health_05_Klick Talks_live.png*

The most successful tools are often the simplest. Genome allows employees to easily send "kudos" — recognition for work well done — to peers via their social networking tool, *Chatter*. Employees need only enter a name, message, and select a badge to represent their gratitude. Between sending kudos and liking (or commenting on) a sent message, *Chatter* has an average of 513 acts of employee recognition every day, a sure testament to how popular and easy to use this tool is.

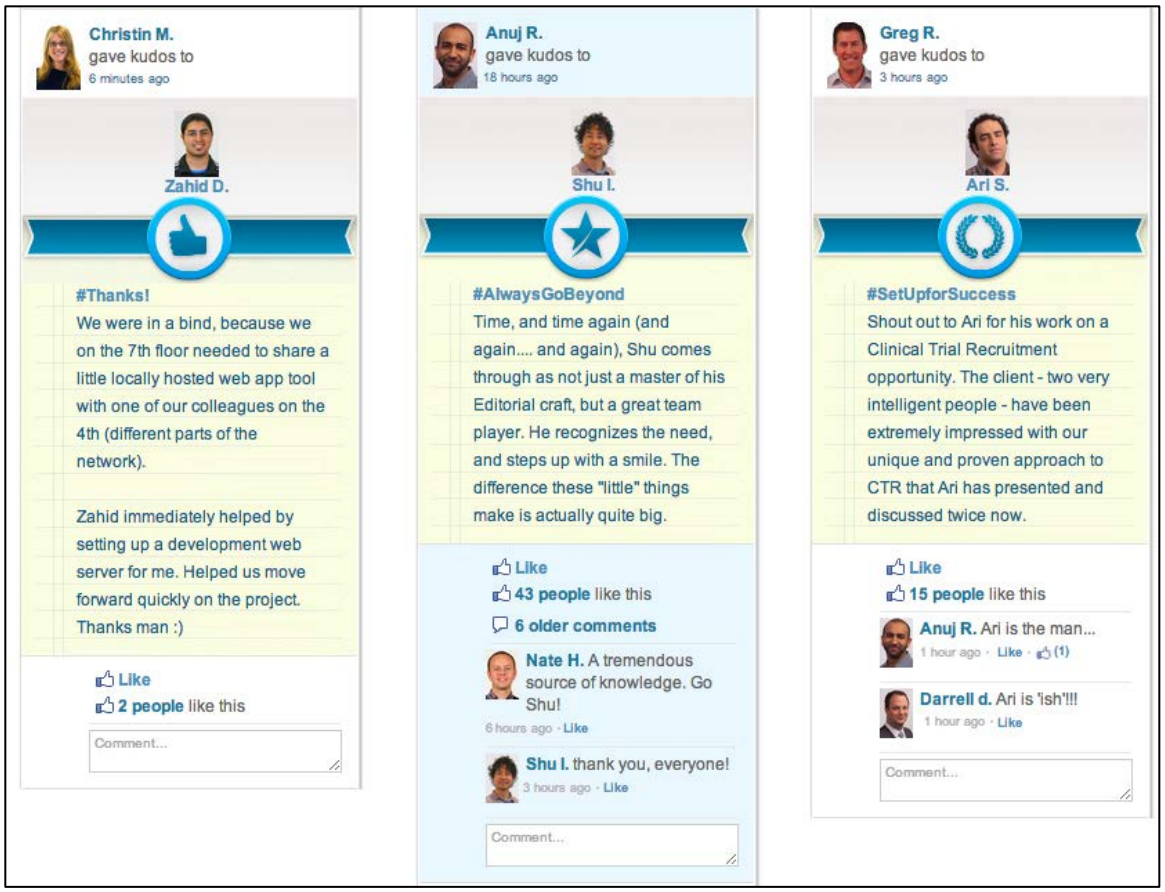


Image 16. Klick Health Intranet: *Chatter*. The *Chatter* tool makes it easy for employees to recognize one another for work well done. Employees can send public thanks to colleagues for reliability, dependability, or going above and beyond. The tool encourages use by its simplicity, thus helping to spread positive thoughts around the organization. Kudos that employees receive are displayed on their profile pages. *39_Klick Health_06_Kudos_live.png*

Klick uses the information it gathers to encourage philanthropy within the organization. The company rewards its employees with credits to donate (or "Klick it Forward") to the charity of their choice. For example, many employees buy malaria nets in Africa, fund microfinance loans around the world, donate livestock to Sub-Saharan Africa, or provide toys and art supplies to patients in a local children's hospital.

The *Klick it Forward* tool summarizes available options for employees by using a picture to illustrate the donation, listing the dollar amount associated with each type of contribution, briefly describing the donation and why it is important, and indicating if the company will match the donation. For example, a donation of $75 to provide a goat to a family is matched six times over, for a total contribution of $525.

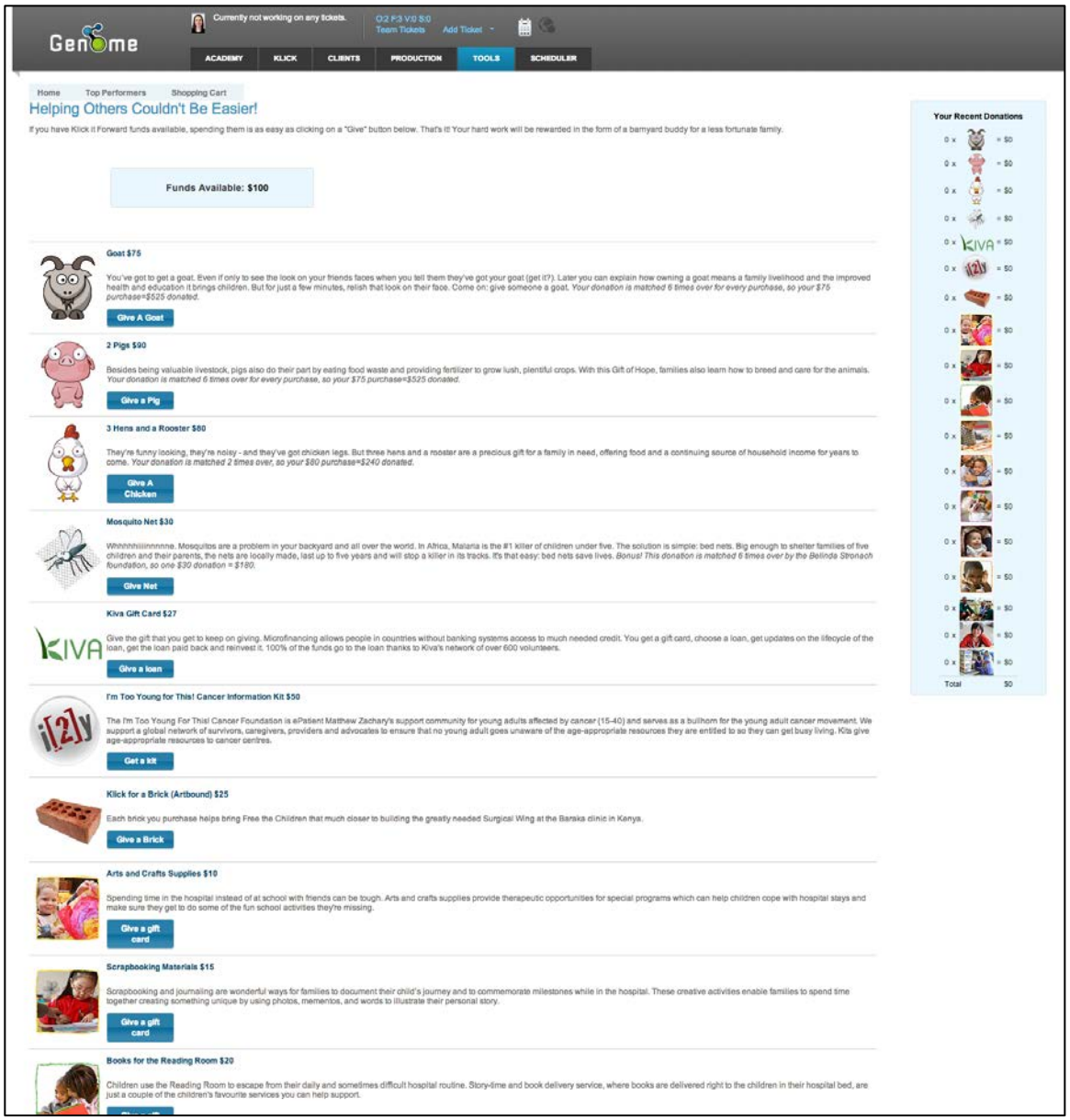


Image 17. Klick Health Intranet: *Klick it Forward*. The *Klick it Forward* page summarizes available charity options that employees can donate to, including any funds the company will match. *40_Klick Health_07a_Klick it Forward.png* and *40_Klick Health_07b_Klick it Forward_CROPPED.png*

The team never stops thinking about how the site and company can improve. Genome offers a wealth of tools to employees, which results in a treasure trove of data. The team is constantly thinking about the data in new and meaningful ways. For instance, by combining data about employees from the business travel database with what's known about them from project management tools, the team created *In-Flight Reading*. This tool is a "data by-product" that recognizes when employees are traveling to a client and emails them an updated project dossier summarizing all major items, change comments, and other useful information.

Iterative designs lead to continual improvements in the Genome user experience. The team has created a solid work system that continues to evolve, making the most of the wealth of data collected in order to streamline and enhance employee workflows and experiences.

BACKGROUND

Killing Email

The impetus for creating Genome stemmed from a deep hatred of email. "Not only is email a marginal improvement to the traditional office memo, but it is also the ultimate tool to let other people re-prioritize your day for you," says Leerom Segal, Klick Health's co-founder and CEO. "That said, we didn't just want to get rid of email and replace it with another product, or suite of products. We wanted to create a centralized set of task-tailored tools, to allow for big picture oversight of all the moving parts across the organization."

So the only solution was to build a custom, in-house intranet system that would address *all* of the company's business requirements in one place.

Genome began as a task management system, aimed at capturing the entire communication stream around each task, providing clear accountability for each and every task and delivering high-level reporting on all of the moving parts. It then evolved into a full-featured project management system when the team added the company's suite of custom-built financial tools. The addition of these tools created a direct link between a client contract, work orders defining the number of estimated labor hours, up-to-the-minute spending against every one of those hours, and invoices based on specific project milestones. With these additions, Genome was a huge leap forward in terms of project management capabilities for the company.

"These tools opened new doors with respect to measuring and monitoring the financial success of projects and allowed us to easily and expediently detect if and when projects were at risk — even early in their lifecycle," says Andrew Woronowicz, Director of Business Process & Systems. "So we could investigate and resolve any issues before they became major obstacles."

The next phase of Genome's lifecycle focused on a weekly review system that asked all team members involved on a project to provide a simple "gut feel" about how a project was going. These weekly reviews, ultimately named "Project 360s," ensure that all team members have a platform to voice their concerns, where the entire conversation surrounding a project is woven into a single, cohesive story that's understood by everyone on the team. Capturing these conversations in plain sight of project team members means that potential problems can be intercepted before they became critical.

"This simple social engineering has enabled us to build lightweight feedback loops that provide an excellent early-warning system," says Woronowicz.

The next additions to Genome also made a huge splash. Adding the social tool, *Chatter*, to the site in 2014 bridged the gap between company growth and its ability to maintain close connections among co-workers.

"As an organization, we had been growing at such an incredible pace that we were faced with the challenge of how to maintain our close-knit community. With *Chatter*, we became small and intimate again," says Woronowicz. "We essentially felt like a start-up all over again."

The most recent addition to the Genome arsenal of tools is *Candidate 360* (rolled out in July 2014), which gives the organization a data-driven approach for managing the end-to-end lifecycle of the hiring process.

All these individual features of the Genome platform add up to a holistic system that not only kills email (the original mission), but returns value far above the sum of its parts.

"Without a doubt, Genome has become part of Klick's DNA, providing our people with a personalized, simplified, and enhanced work experience — every step of the way," says Segal.

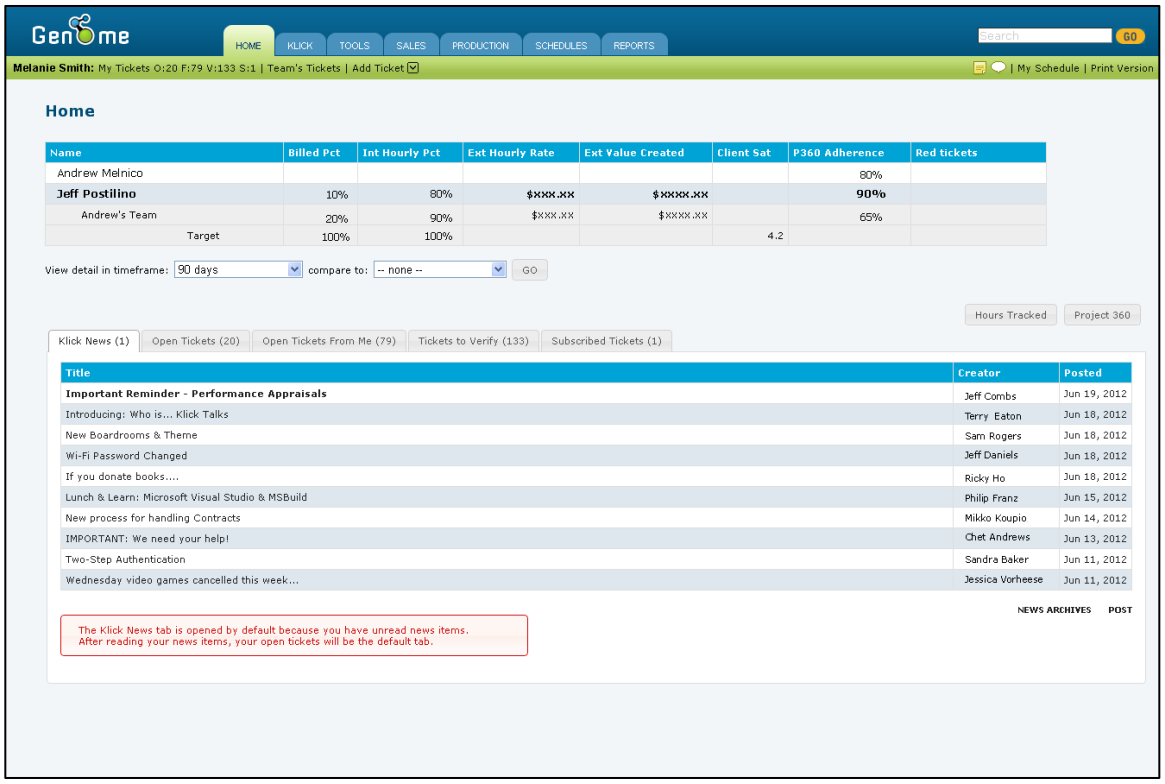


Image 18. Klick Health Intranet: 2012 Homepage. The Genome homepage from 2012. *41_Klick_Health_08_OldSiteHome_2012Genome.png*

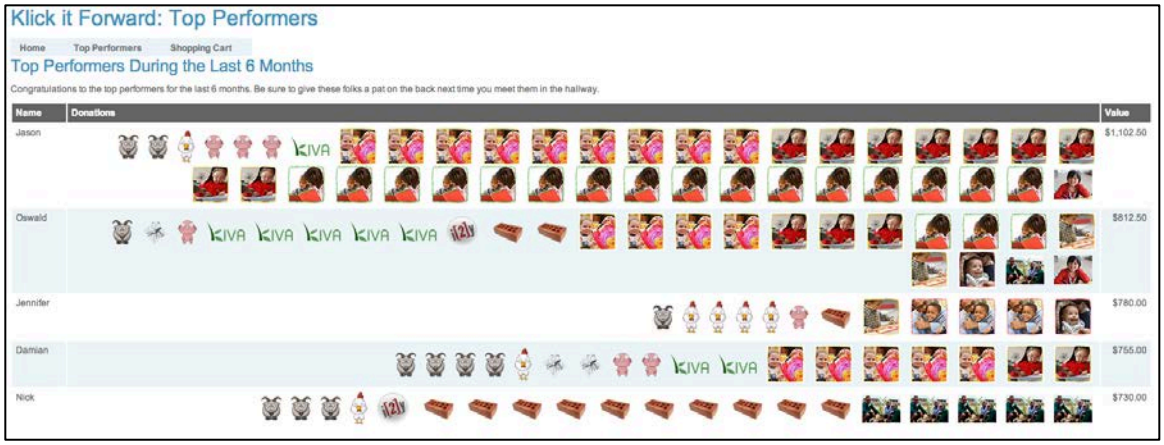


Image 19. Klick Health Intranet: *Klick it Forward* Top Performers. The Genome's leaderboard tracking of leading employee contributions to *Klick it Forward* over a six-month period. *42_Klick_Health_09_KiF_Leaderboard.png*

INTRANET TEAM

Klick team members (left to right): Aaron Goldstein, D'Arcy Rittich, Benjamin Nadler, Leo Horie, Alexey Davydov, Rey Crisóstomo, Alex Chesser, Andrew Woronowicz, and Rob Brander.

GOVERNANCE

Ownership

Klick's COO Aaron Goldstein is the person who originally conceived of the idea for Genome. Over the years, his Genome team has grown into an eight-person, in-house department, responsible for the ongoing development and execution of the platform. In addition to this core Genome team, many other Klick employees, including members of other technical and creative teams, contribute to evolving the system in their downtime. The tools and access to Genome have been built in a way that allows

people beyond the core team to quickly build applications, while the core team maintains control over privacy, security, and data integrity.

"Having the ultimate ownership rest with the COO is critical to our success," says Woronowicz. **"**It ensures that Genome is being directed with the entire organization in mind and not focused on the objectives of one particular division."

The fact that Genome now serves the objectives of the entire organization is easily illustrated by asking employees from different parts of the organization how Genome affects their daily tasks. Production teams say that tickets clearly identify tasks and accountability, while project management people cite estimation, time-tracking, and reconciliation tools. Likewise, client services will point to their client management toolset, complete with project, portfolio, client-level metrics and forecasts, and so on. Genome makes everyone feel like they have a piece of the pie.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Senior Director, Internal Operations	• Oversee Genome team • Serve as liaison between internal teams and Genome requirements • Drive the vision, specifications, and ultimate delivery of Genome updates
Director, Business Process & Systems	• Coordinate internal team needs and Genome requirements • Drive the vision, specifications and ultimate delivery of Genome updates
Chief Technical Strategist	• Oversee technical team and manage vision for overall Genome architecture and direction
Technical Architect	• Maintain site architecture • Oversee both front-end and back-end development
Application Developer	• Develops back-end, including C+, SQL, and web service development
Web Developer	• Develops front-end, including HTML, CSS, Angular JS, and C+

Figure 5. Klick Health Intranet Team Responsibilities

USERS

All of Klick's 400+ employees use Genome every day, and not because it is a corporate directive, but because the tool is tailored to match the way employees do their work. Employees in all areas of the business use Genome to manage production at a macro level, monitor activity and trends, and evaluate performance against metrics. For example, employees on the production side of the business will keep

Genome running to track their daily tasks and receive alerts about critical information.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	• genome.klick.com
Default Status	• Genome is the first and last tool that all employees use each day. Employees often make Genome their default homepage, but that is by choice, not a corporate mandate.
Remote Access	• Users can access Genome from any internet connection, not just from within Klick's corporate network. • Two-factor authentication ensures access is secure. • Users regularly access Genome from home, client offices, and even during daily train commutes to and from work.

Figure 6. Klick Health URL and Access Information

DESIGN PROCESS AND USABILITY WORK

An Iterative Design Approach

Although the Genome Team follows traditional design practices — from contextual inquiries and requirements documentation to wireframes and usability testing — iterative development is the special sauce behind Genome's success as a user-centered platform. "The biggest secret [to success] is simply involving users in an iterative (phased) development process," says Woronowicz.

Iterative rollouts result in well-refined tools that are not only used, but also loved by the user base. Each round of development at Klick is ushered through the iterative process of wireframing, building, releasing the beta, and testing with a group of select users who provide feedback for the next release. The frequent feedback loops, combined with contextual inquiries focused on how employees truly use the system, ensures the expressed and observed needs of employees are part of the solution. This dramatically reduces any resistance to adoption and change. "These sessions also provide a logical opportunity to re-visit the roadmap and make subtle course corrections based on new inputs or changing landscapes," says Woronowicz.

By the time the tools are released company-wide they have been highly refined from feedback, yet the team still keeps the feedback channels open. For example, when the team released the company's internal social tool, *Chatter*, they asked users to make suggestions using the hashtag, #dogfood, because as Woronowicz explains, "we were truly eating our own dog food by using the very tool itself to provide a mechanism for feedback."

The #dogfood posts with the most likes were an indication of updates that were most pressing, and they were moved to the front of the development queue.

Years later, the team is still seeing new posts with the #dogfood tag, and the ideas generated through this tag have far surpassed what the initial development team could have ever dreamed up when they were planning the tool.

A Virtuous Cycle of Transparency

Klick not only allows ongoing user feedback, but welcomes the challenges that inevitably arise from it too. The manner in which company leaders handled feedback on the initial time-tracking process is a good example.

Not long after *Chatter* was launched, the company's COO posted a message about the importance of accurately tracking billable time. The post, which intended to serve as a reminder to be diligent and accurate, created a heated discussion that produced 44 responses, comments, and rebuttals within the first day of being posted, and many more after that. In these responses, employees cited specific reasons why that level of accuracy could not be met. According to Segal, Genome's leaders welcomed this feedback rather than viewing it as a threat to their power. "A traditional organization might have frowned upon a direct challenge to the COO," he says, "and those publicly criticizing a policy would be flagged as troublemakers who weren't willing to tow the party line." At another organization the conversation might have been hushed into the background, however, Klick's leaders were able to engage with those most adamant about the issue and work out a solution within three days of the original post being made.

Segal and the Genome team refer to this willingness to engage with employees in an open forum as a "virtuous circle of transparency." "It helps to encourage our super-bright and creative employees to share the innovations and approaches they devise with the rest of the company — using the tools," he says. "This rapid and free dispersal of new ideas and ways of working is what sets Klick apart and allows us to iterate and innovate faster and with greater efficiency than our competitors."

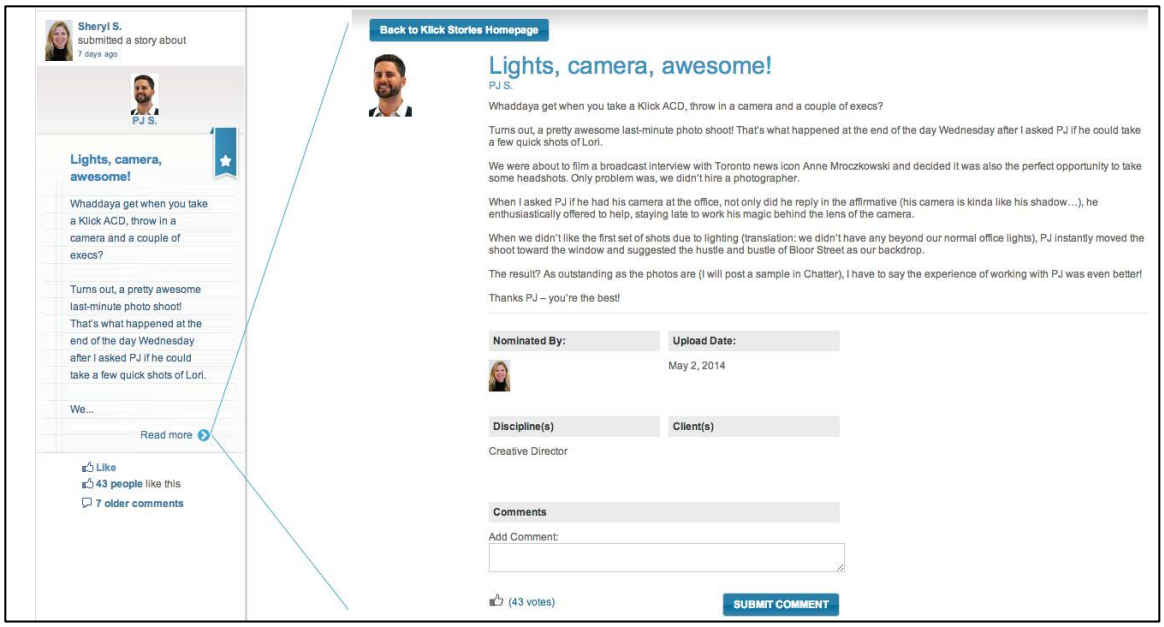


Image 20. Klick Health Intranet: *Chatter* Story. In this composite image, the left panel shows a story as seen in the *Chatter* feed, while the right panel shows the same story in full as would be seen when a user clicks on *read more*. *43_Klick_Health_10_Story+Chatter Integration_live.png*

TIMELINE

PROJECT TIMELINE	
Milestone Date	**Milestone Description**
June 2004	• The very first Genome ticket was created, in a beta version of Genome developed by COO Aaron Goldstein and CTO Steve Willer.
November 2006	• Full-featured **financial platform** released
March 2008	• The first version of ***Project 360*** is released, a weekly review system that allows team members to provide a "gut feel" about how a project is going.
December 2010	• Release of a **full-featured travel system** (within Genome) that allows employees to book all of their travel arrangements (flights, hotels, etc.), and associate costs, when applicable, with specific clients and projects in the Genome financial system.
December 2010	• ***Klick it Forward*** program released, rewarding employees for positive performance by providing them with donation credits that can be directed to their choice of charities. Contributions are made directly within Genome and result in monthly donations to a wide range of charities.
October 2011	• **Vacation management tool** added to Genome, allowing employees to book vacations and monitor their vacation balance at any time. This system allows vacation time to be automatically booked into employees' schedules and shows the person as "on vacation" via Genome's Employee Locator function.
November 2011	• **Full redesign** featuring an entirely new look and feel, new information architecture, megamenu for easier navigation, and many other system updates.
November 2011	• ***Chatter* and *Kudos*** beta release to the first group of users. During November and December, 2011 the beta group was expanded little by little until it encompassed the full Genome user base.
March 2012	• ***Klick Academy***, the company's full-featured knowledge management platform released. It features core video courses designed for different labor roles, elective courses, and *Klick Talks*, which are short videos from subject matter experts in response to employee questions.
August 2012	• **Expense claim system** released, allowing

	employees to submit expenses directly in Genome. This tool handles exchange rate conversion, applies the appropriate taxes to each line item, applies the expense to the appropriate project, and orchestrates the entire submission, approval, and payment workflow.

May 2013	• ***Customer 360*** is released, a tool allowing employees to share customer feedback with the rest of the internal teams. It enables team members to identify and communicate any hot-button issues for each client, and ensures team members are sensitive to a client's individual needs in every interaction with them.
May 2013	• ***Scheduler 2.0***, the company's time tracking platform, was fully redesigned, making the process simpler and easier by including support tools. Integration points are built in to employee calendars, allowing users to drag and drop an entry into the schedule to track time automatically.
November 2013	• ***Tickets 2.0*** is launched, a complete redesign of the *Tickets* system with a suite of new features. The concept of *Tickets* was pivotal to the birth of Genome, but as *Tickets* grew and evolved over the years, some of the original concepts required updates. The highlight of this release was and in-ticket chat feature that allows any user to be "bumped" into a ticket to engage in a real-time chat. Web sockets enable full-duplex, real-time communication between each client and the server, allowing for content to be delivered as needed, without being requested by the client. This means users don't have to refresh their page to see changes when viewing a ticket page. All changes are visible to all clients and are seen in real-time regardless of whether those changes are chat posts from other users, checklist items being added, the ticket description changing, or ticket comments added. The impact was noticed immediately, particularly when users were seeking a quick answer to a question that was potentially holding up work. Having the conversation in the context of the ticket allows for it to be captured within the ticket history and avoids having the ticket re-assigned back and forth.
February 2014	• ***Weekly Review 2.0*** is released. The redesign of *Weekly Review* incorporated the original aspects of *Project 360* and *Customer 360* under a common umbrella, and unveiled a wealth of targeted insights delivered to users while performing each review.
July 2014	• ***Candidate 360*** platform released. The initial release focused on the interview and hiring process and was immediately followed with the full release. It now manages the candidate funnel from screening to decision-making all the way through to

	hiring.
August 2014	• ***Work Orders 2.0*** redesigned. The core component of the company's financial platform, *Work Orders*, was fully redesigned to deliver advanced features and targeted insights that assist in the creation of a work order.

Figure 7. Klick Health Project Timeline

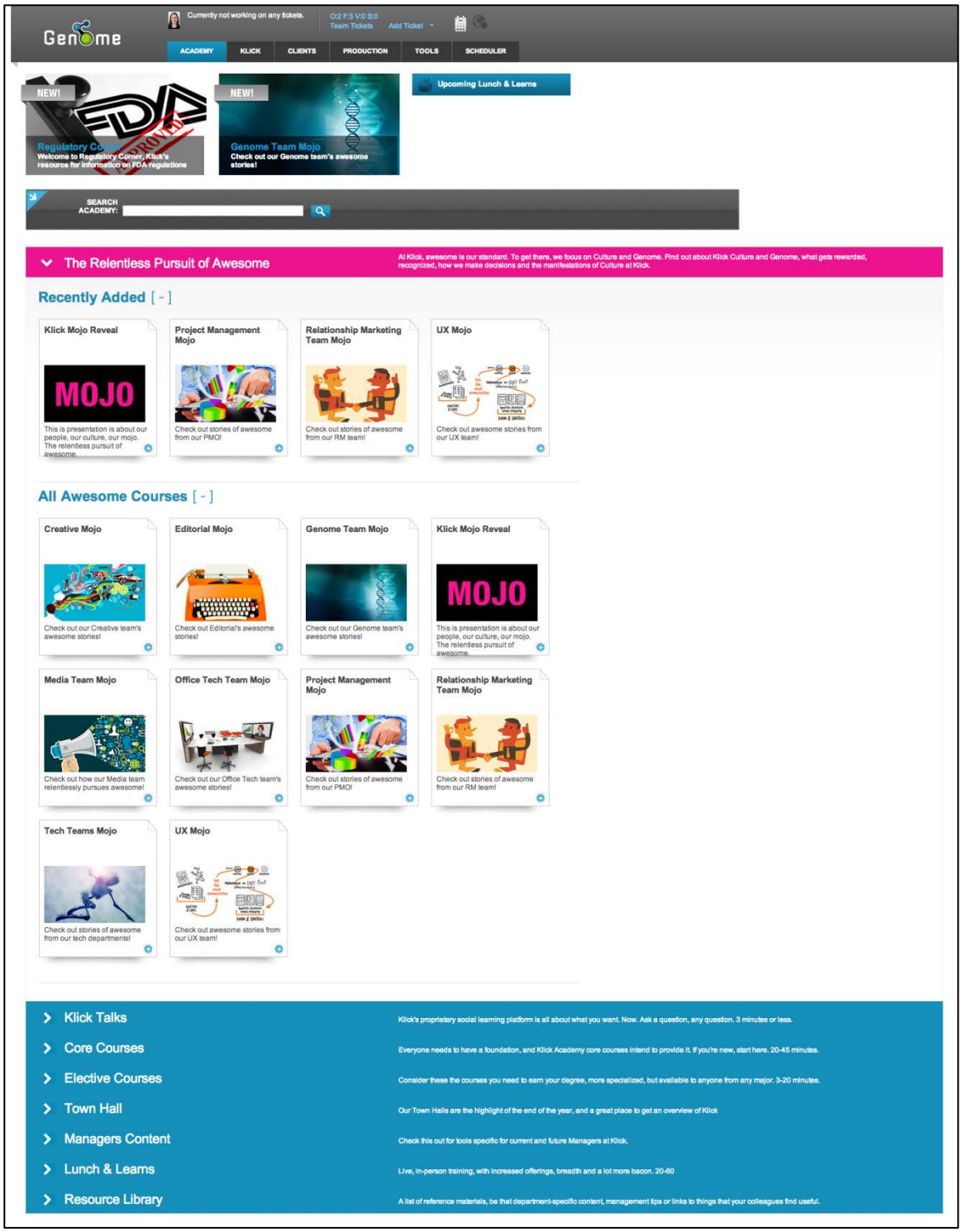


Image 21. Klick Health Intranet: *Klick Academy*. *Klick Academy* on the Klick intranet offers video-based training on industry and company knowledge topics. *44_Klick_Health_11_Klick Academy_live.png*

CONTENT AND CONTENT CONTRIBUTORS

Traditional forms of top-down or corporate-lead content are rare in Genome. And groups that regularly update this type of content can edit and publish it any time without need for approval. Although the built-in CMS fully supports an approval workflow, it is rarely needed. Within other areas of Genome, nearly everyone is able to manage content freely. Departments have wiki pages that document and define best practices specific to them. Every project has at least one wiki page that outlines the key project information, ranging from the client objective to the IP address of the staging website.

Unlike at other companies, where corporate news feeds may be locked down and controlled by corporate communications departments, any Klick employee with news to share is invited to submit news on Genome, resulting in what Woronowicz refers to as "a pleasant mix" of information, from corporate-level news and events to posts about Euchre Night or the company's softball game. The intranet's design encourages social interaction. The interaction itself is cleverly enticed from users by the fact their contributed posts are fed to large LCD screens throughout the office hallways.

News items surface in both the news tool for archival and continued reading purposes and on *Chatter* for conversation, where users can comment on and/or like news items.

Each employee also has a custom profile page, which they are encouraged to populate with answers to such questions as: *What team are you on? What do you do for fun? What countries have you visited? What's the strangest thing you ever ate? If you could be a superhero, which would you be? If you had to pick, would you prefer to be on American Idol or Dancing with the Stars?* And similar questions, you get the idea. Profile pages may also display a collection of images, like from a corporate event, for example, and employees would be recognized and tagged in them using facial recognition.

Users can contribute intranet content in many ways: posting to *Chatter*, creating *kudos* to recognize and thank colleagues, or by writing a story about accomplishments or general awesomeness among "Klicksters" (Klick Health employees).

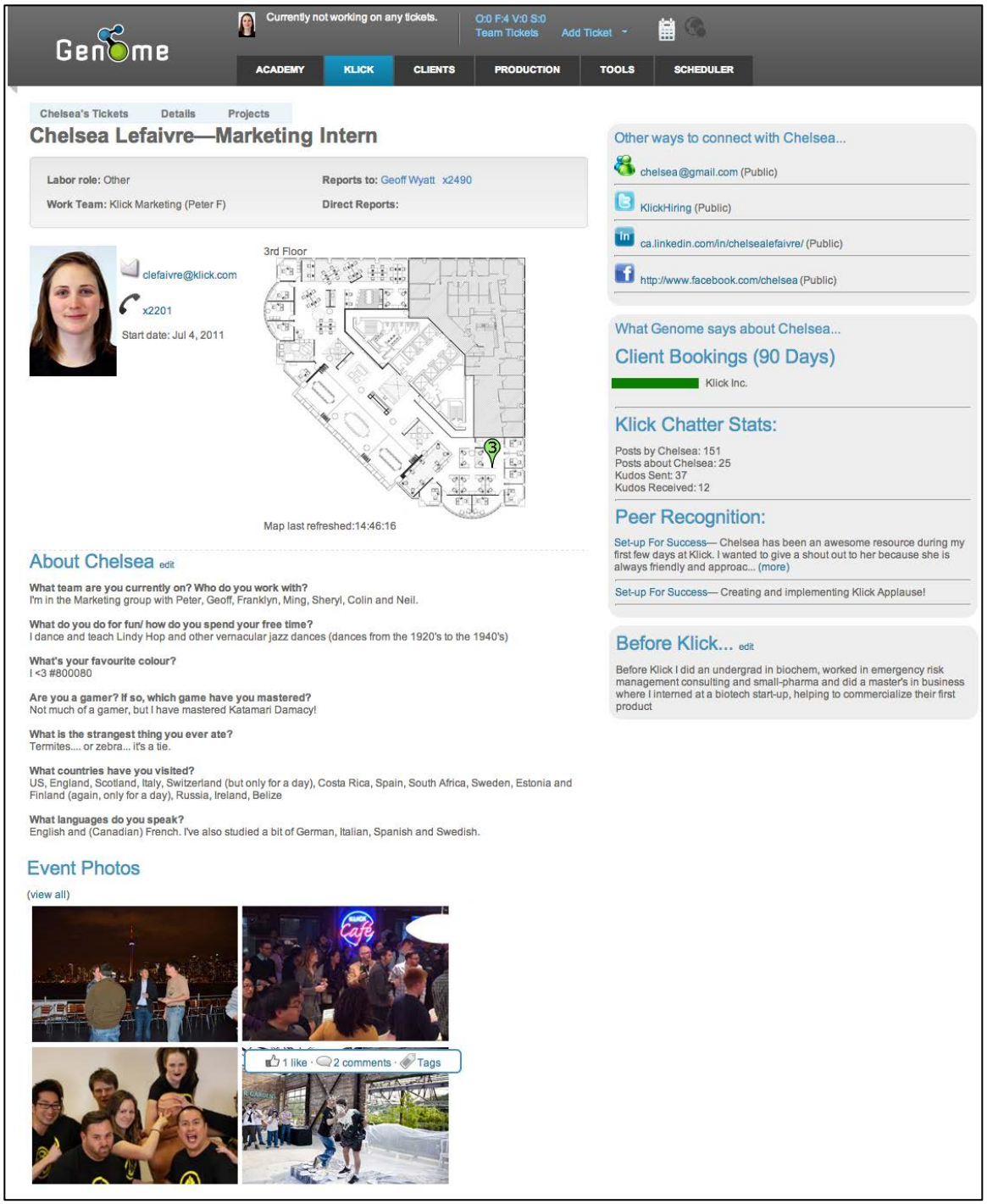


Image 22. Klick Health Intranet: Employee Profile. An employee profile shows where the employee is located on the seating map, information about the employee, photos of them from events, social links, Genome stats, and a bit about their history before they joined Klick. The contact info has a link to a direct-dial feature. *45_Klick Health_12_Profile Page_live.png*

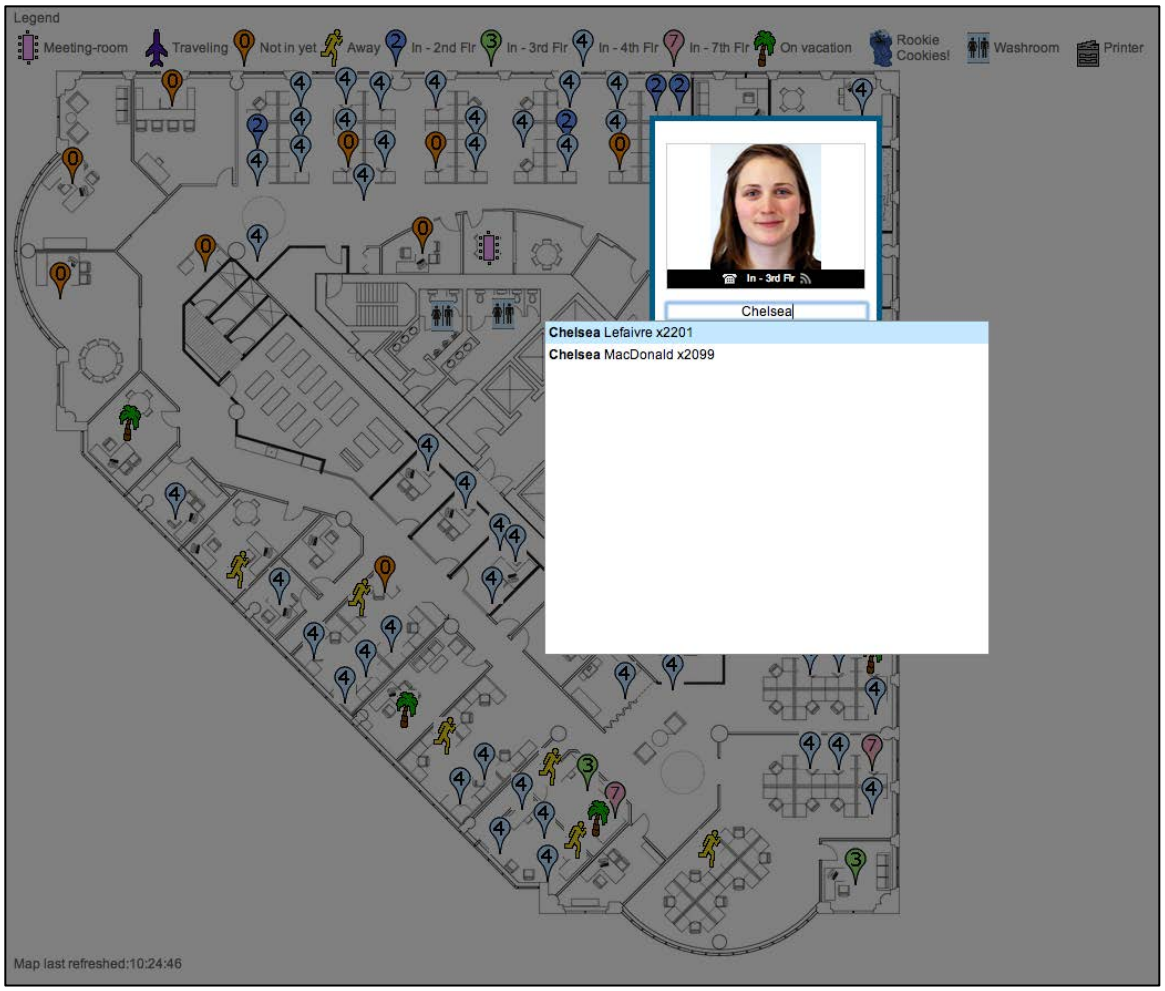


Image 23. Klick Health Intranet: Employee Seating Map. When users press *Option+Spacebar* to search a particular location on the seating map locator, a light box pop-up shows additional information about the given employee. *46_Klick_Health_13_Locator+SeatingMap_live.png*

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and OS	• Dell servers, Windows Server 2008
Bug Tracking / Quality Assurance	• Genome (custom)
Design Tools	• Photoshop
Site Building Tools	• Miscellaneous text editors and Visual Studio
Content Management Tools	• Genome (custom)
Search	• Lucene, SQL Server Full-Text Indexing
Web Sockets	• ASP.NET SignalR library
Web Services	• ServiceStack
Cron Management	• Custom engine
Notifications	• Custom engine
Data Warehouse	• Custom Cube Browser

Figure 8. Klick Health Intranet Technology

MOBILE

The team built the mobile version of Genome from the ground up, and started by asking a cross-section of company employees which tasks should be achievable through mobile use and, conversely, which tasks they would rather do while in the office. "While we awaited for those answers," says Segal, "the Genome team was debating the pros and cons of a native app versus a set of simple, mobile-specific web pages versus a fully-responsive design."

The responses they received matched where their intuition was pointing them, confirming that the greatest bang for their development dollars would be to support a limited set of task scenarios that would get the heaviest usage. So the Genome team opted for a small set of very targeted, mobile-specific web pages.

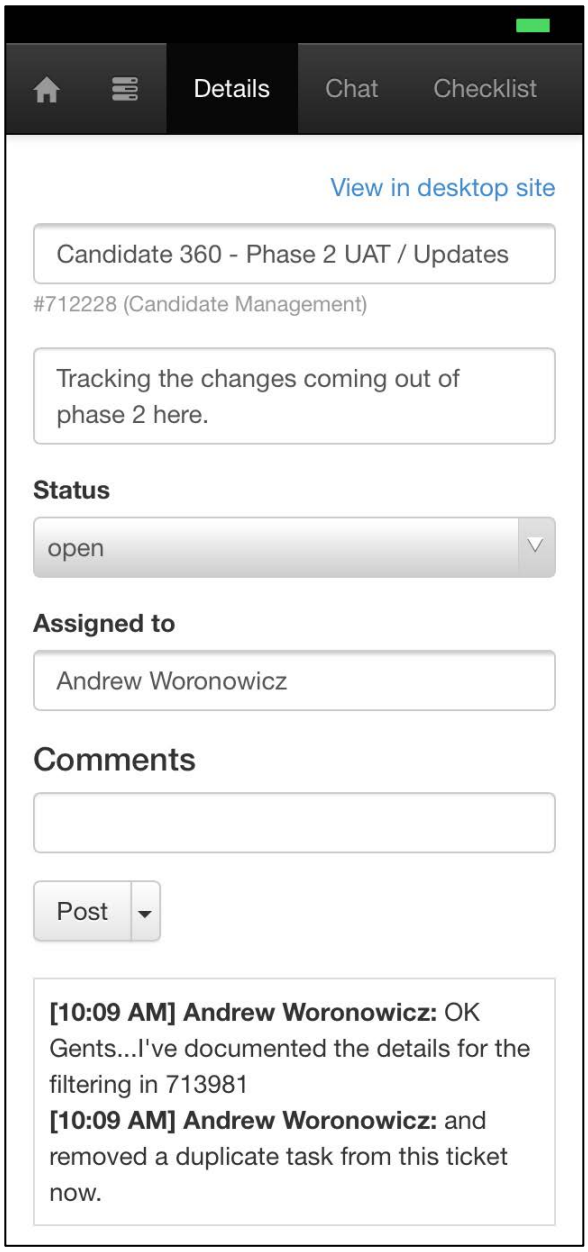


Image 24. Klick Health Intranet: Mobile Ticket Details Tab. The *Details* tab of a ticket, as seen on the mobile Genome app for the Klick intranet. *47_Klick_Health_14_MobileTicket_Details_live.png*

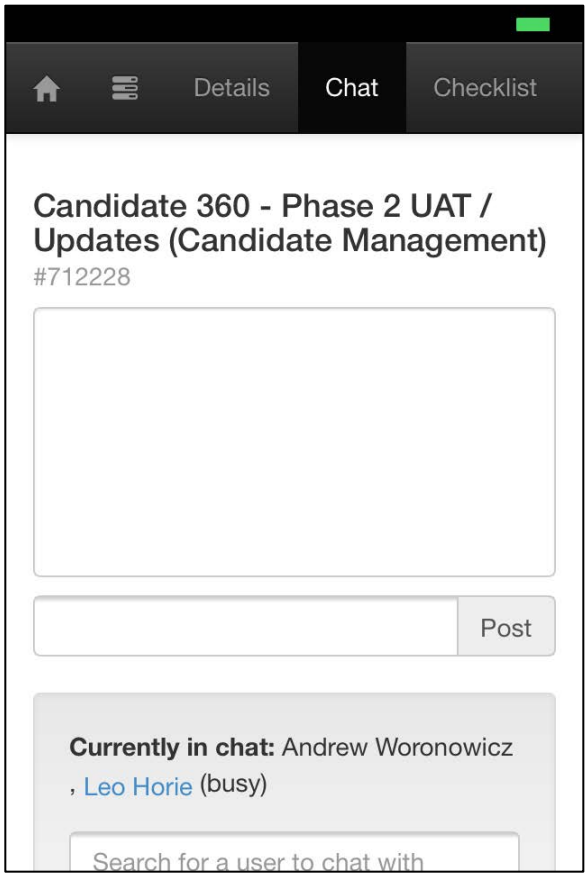


Image 25. Klick Health Intranet: Mobile Ticket Chat Tab. The *Chat* tab of a ticket, as seen on the mobile Genome app for the Klick intranet. *48_Klick_Health_15_MobileTicket_Chat_live.png*

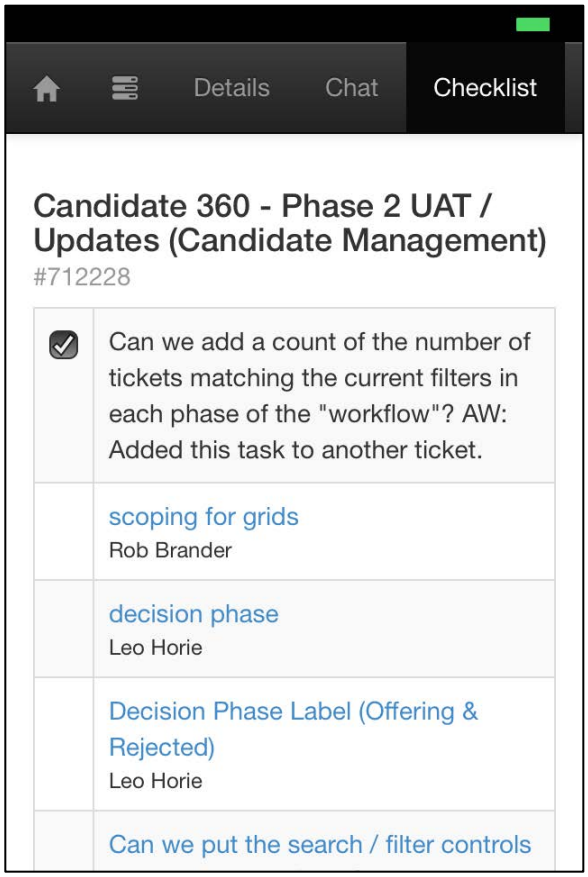


Image 26. Klick Health Intranet: Mobile Ticket Checklist Tab. The *Checklist* tab of a ticket, as seen on the mobile Genome app for the Klick intranet.
49_Klick_Health_16_MobileTicket_Checklist_live.png

Prioritizing Tasks for Mobile Users

The design team had two objectives for the first round of mobile Genome development: the mobile version should only cater to a specific sub-set of intranet tasks, and those tasks should allow mobile users to move work forward and connect with team members while away from their desks.

The first mobile tool the team created was a quick-and-easy ticket interface. The tool allowed users to browse their own tickets (ordered by priority) browse the tickets of other users or projects, and open a ticket to perform basic actions, such as comment, re-assign, and change ticket status.

The team also included a company directory tool allowing Klicksters the ability to look up any fellow employee, see their picture, job title, contact information, and even their last-known work location. The app shows a list of selected employees and their status. For example, "on the 7th floor" or "not in yet." Clicking on a person brings up a baseball-card-like info sheet with the person's picture, contact info, and the location they were last known to be at work. This search-on-the-go app saves Klicksters time when they're trying to find their colleagues in the office.

The design team also created a mobile version of *Chatter* in an effort to inspire a broader feeling of connectedness, even while out of the office. The mobile tool allows employees who are traveling to stay connected with the internal stream of consciousness of the organization, but it also allows them to inject their experiences back into the office.

The connection the tool provides contributes to an important sense of belonging and support for travelling staff members. "It's hard to quantify the feeling of camaraderie that is felt when a picture is posted — via mobile *Chatter* — of our team members who are traveling and about to pitch to a new client, and the entire office chimes in with their support," says Woronowicz.

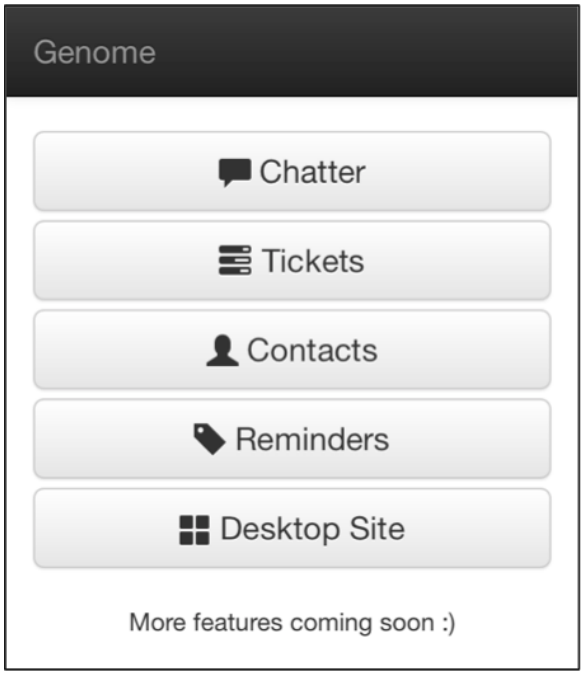


Image 27. Klick Health Intranet: Mobile App Home Screen. The mobile Genome app home screen, as seen on an iPhone, is a simple list of tool and link options for the targeted types of tasks. *50_Klick Health_17_Mobile Genome_live.png*

SEARCH

Genome differs from a typical corporate intranet in that it has very few pure content pages. The vast majority of the site is focused on data that is grouped and organized in various ways. The intranet does have a traditional search tool, but the primary search tool is a faceted, exploratory one called *Finder*. Any user can simply hit *ctrl+space* or *cmd+space* from any page in Genome to open a modal window. From that modal window, employees can search for just about anything, including a fellow employee's name, a project name, a client, a Genome tool, a content page or whatever else he might think of. Then, the user can either navigate to that page or tool, or press *tab* to continue to search through different attributes of that item. The way this tool works is best illustrated through an example. The team shared this scenario as an illustration:

> "A technical architect wants to check on what one of his team members is working on right now. Rather than disturb that person, he can simply type: *ctrl+space* → "smi" (which automatically finds the only matching pattern, John Smith) → *tab* → "*schedule*" → *enter*. The technical architect is immediately taken to John's schedule to see what John is actively booking his time to right now. The exact same scenario applies if a user wants to see John's ticket list, project list, location on the company seating map, and so much more. The technical architect can also search for "John" → *tab* → "*call*" and have his phone automatically call John's phone, and, if John doesn't answer, leave a message that will automatically pop up the next time he calls John to remind him of what he wanted to ask him."

The same faceted search applies to other components of Genome, such as projects (project budgets, project work orders, *Project 360* reviews, project tickets, etc.). It can even be used for searches like "who," "what," "where," "when" and "why," along with a search phrase. This triggers the return of relevant *Klick Academy* items. "You can imagine how pleasant the experience can be when an employee wants to create a ticket or fill out her schedule for the first time," says Woronowicz, "and all they have to do is type "how" → *tab* → "schedule" to get instant access to a 90-second video outlining the process."

Image 28. Klick Health Intranet: Faceted Search. The search feature in Genome allows users to search using terms like "who," "what," "where," "when" and "why" along with a search phrase. A sample search such as: "how" → *tab* → "schedule" will access a 90-second video outlining how to schedule time through Genome. *51_Klick Health_18_Schedule Time.png*

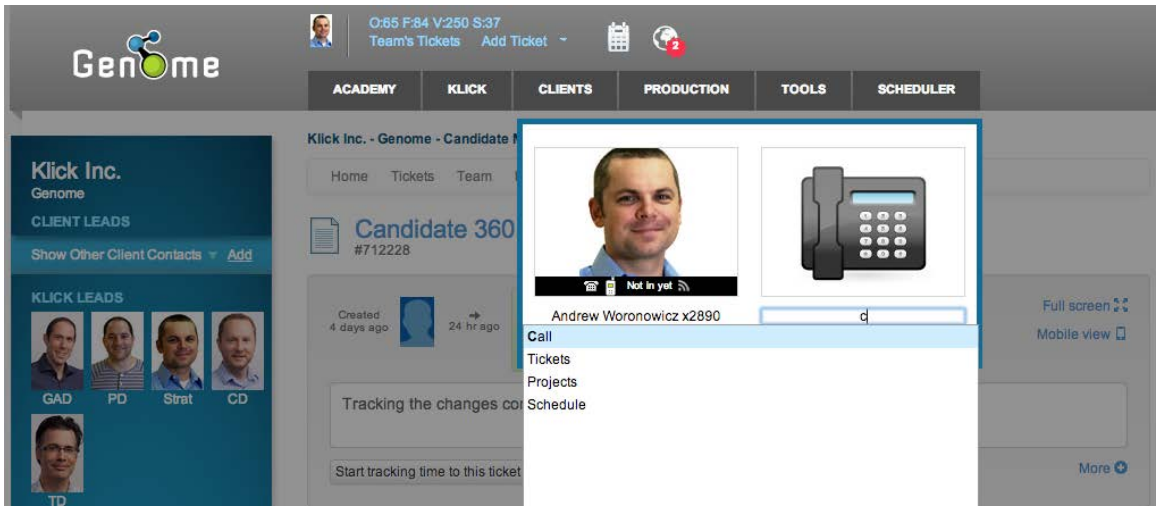


Image 29. Klick Health Intranet: Intra-Office Calling. A productive feature of the Klick intranet is intra-office calling. After searching for a colleague, a person can type "call" (or simply "C" then hit *Enter*) to initiate a call. This feature also allows access to that co-worker's tickets, projects, and schedule. *52_Klick_Health_19_Calling_Andrew.png*

RESULTS AND ROI

Even a data-driven organization, such as Klick, can struggle to define and measure the success of an intranet. "We use many different metrics, including specific ROI calculations comparing the time invested on a new feature against the time saved within the first quarter or year after release," says Woronowicz. **"**For example, *Project 360* experienced an 83% weekly usage rate three months after we launched

the weekly review feature, reaffirming that employees were finding utility and value in it. However, one of our favorite measures of success is basic usage, specifically as it relates to new features that our employees are by no means required to use to be successful."

In November of 2011, for example, when the company launched its internal social network, *Chatter*, it maintained both high expectations and also a willingness to accept the tool might be a complete and total failure. "Our employees are extremely busy," says Segal, "and without a tangible benefit, they would have no reason to engage with it. But they did — and how!"

The results speak for themselves in terms of engagement. In the first year, *Chatter* posts, news stories, kudos, comments and so on surpassed all aggregate social interaction expectations, averaging one new interaction every 76 seconds of the work day. But that would prove to be just the start of great things to come. In the 12 months prior to this writing, the platform generated 151,109 social interactions, including *Chatter* posts, employee kudos posted, and comments or likes on those posts.

"If that number doesn't sound incredible to you, keep in mind that our organization only averaged about 400 employees during this timeframe," says Segal.

Another good example of user engagement exceeding expectations happened in November 2013, when the company launched its updated ticketing system with a new in-ticket chat feature. The idea behind the feature was to allow employees to quickly collaborate in real time to resolve issues quickly, answer questions, and move forward with their day — as opposed to assigning the ticket back and forth to have the same discussion, or worse yet, to schedule a face-to-face meeting to resolve the issue. This time-consuming, asynchronous communication (inherent in many ticket-tracking systems) is inefficient as participants post comments and then re-assign the ticket — lather, rinse, and repeat. Being the data-centric organization Klick is, the Genome team analyzed the time saved if they short-circuited the back-and-forth of re-assigning tickets and emphasized synchronous collaboration instead. Woronowicz gave us the numbers:

> "Assuming the bare minimum of two ticket assignments (one to ask a set of questions and one to post the full and complete answers) and assuming that a busy employee would only look up from their current task to check their ticket list once per hour, each of those 1,845 conversations each month would have required 3,690 hours of calendar time before the resolution was achieved. This amounts to 462.25 business days, or 1.8 calendar years (based on 250 business days per year) in delays. That's 1.8 calendar years of elapsed time saved per month."

Given this calculation, even if only a small fraction of those conversations had followed this enhanced path, the savings would still amount to a resounding success. And it has been a resounding success.

Despite the fact that there was no external incentive for using the tool, aside from the benefits that the tool itself provides, it has already exceeded expectations and continues to grow. In the nine months since that tool launched, 337 of the company's approximately 400 users have engaged in ticket chats. Woronowicz, again:

> "More astoundingly, there have been a total of 16,609 conversations consisting of 58,723 individual comments. That represents approximately 1,845 conversations per month, assuming at least two people, each of whom would have had to otherwise conduct conversations via other means."

In addition to these amazing examples of user engagement, the team also shared some key stats the Genome platform has racked up since launch. They include:

- Over 4 million unique pages
- Over 716,963 tickets (tasks)
- Over 17,633 projects
- Over 6,500 Kudos (peer recognition posts)
- Over 50 unique tools

LESSONS LEARNED

The Genome team has a long history evolving its platform over many years. From minor enhancements to full-scale redesigns and major feature releases, the team has gained a lot of wisdom through experience. Several key lessons have etched their place in the collective memory of the organization because they prove true, time and time again. Woronowicz explains these lessons:

- **Involve the end users.** "This runs much deeper than just including them in requirements sessions and contextual inquiries at their workstations, although those steps are critical as well. We have found that the more we involve users in the full lifecycle of a phase of development, the higher our success rate is. The reasons are very intuitive. Having end users involved in the up-front requirements ensures the end result matches the original need. Having end users participate in wireframe reviews and beta testing ensures that we continue to work off of a consistent vision and openly discuss where changes are needed with the entire group. Having end users participate in the rollout process and actually train their peers on the new tools builds a community of advocates who are proud of the finished product and well-versed in the intricacies of the solution, allowing them to become subject matter experts for their peers."
- **Iterative development cycles result in better products.** "Where possible, we modularize updates into smaller components that can be built and deployed independently. Even when the full functional benefit cannot be achieved without subsequent releases, we still strive to share partially functional builds and begin getting feedback early in the process. This gives us a much longer runway to course-correct and inevitably, at each release point, users are inspired with new ideas and entirely new directions we would not have thought of at the outset of the project. The end results are more thorough, feature-rich modules that match what our end users really want."

- **Fail fast.** "We call this process 'digital Darwinism' and it applies to any ongoing initiative, as well as any existing feature of Genome. If a feature is not getting used, we scrap it. If we are partway through a build and realize the cost/benefit doesn't make sense, we abandon it. This, admittedly, is harder than it sounds, particularly as teams become invested in their work. However, once you follow that cycle a few times and the team can clearly see that the next initiative we worked on was a clear success, abandoning a project at risk of underperforming becomes the obvious choice."

- **Actively seek out and trust data.** "Collecting and analyzing data is completely second nature to us. Every new tool is designed and built to not only serve the current business need, but also to collect data so that in the future we can easily measure the effectiveness of the tool and many others. A perfect example of this is our new hiring platform *Candidate 360*. *Candidate 360* creates a structured and guided applicant-management process and connects end-to-end from the first time we know about a potential candidate right up until they are hired. The data we are collecting about the specific attributes we expect candidates to have, how they score against those attributes, and the success our employees have interviewing them will tell an incredible story in the future when we can couple the data with employees who have been hired through this process. It will give us the intelligence to recognize which of our employees conducting interviews are great judges of talent, and which of our decision criteria turned out to be more or less important when identifying the ideal candidate versus a hire who didn't work out in the long run. Anticipating what data will be needed to make more informed decisions in the future, and ensuring the data is available to everyone at the right time, has been one of our most critical success factors to date."

Intermountain Healthcare

OVERVIEW

COMPANY

Intermountain Healthcare is a not-for-profit health system based in Salt Lake City, Utah, with 22 hospitals, approximately ,400 multi-specialty doctors and caregivers employed at more than 185 clinics, a broad range of clinics and services, and health insurance plans from SelectHealth. Intermountain Healthcare is the largest healthcare provider in the Intermountain West, with more than 35,000 employees, serving the needs of Utah and southeastern Idaho residents.

Headquarters: Salt Lake City, Utah

Company locations: Intermountain Healthcare has 22 hospitals and 185 clinics across Utah and Southeastern Idaho.

Locations where the intranet is used: Employees at all locations use the intranet.

Annual sales: N/A

THE INTRANET

The intranet audience is dispersed throughout the state of Utah and Idaho. The intranet serves more than 35,000 employees, as well as affiliated physicians and contractors.

There are two core audiences:

Clinical: The clinical audience includes physicians, nurses, pharmacists, and other professionals who provide patient care. The tools and information available through the intranet are important because the clinical audience relies on the content to understand best practices, guidelines, policies, education, and so on.

Knowledge workers: Knowledge workers are heavy users of the intranet's document management, collaboration, and workflow tools. These users complete tasks such as inputting and collecting information from forms, sharing and collaborating on documents, and submitting information through approval workflows.

Mobile approach: Responsive website and mobile app

Technology platform: SharePoint 2013

TEAM

Design team: The eBusiness team is responsible for the strategy and management of the employee intranet. The eBusiness team works closely with key stakeholders including Communications, HR, Education, Compliance, and Operations to develop content, designs, and strategy.

Leadership: Camille Wellard, eBusiness Director

Design: Jeff Eschler, UX Designer; Gordon Peterson, UX Designer

Product management & analysis: Tyson Henrie, Product Manager; Josh Horton, Business Analyst; Jordan Edwards, Business Analyst; John Hess, Business Analyst

Development: Nate Green, Software Engineering Lead; Sunil Kongara, Software Engineer; Dmitriy Samus, Software Engineer; Mike Gilmore, Software Engineer

Server admins: Jed Obray, Middle Tier Admin; James Hillaker, Middle Tier Admin

INTRANET TEAM

Intranet team members shown here (left to right, top to bottom): Tyson Henrie, Josh Horton, John Hess, Gordon Peterson, Jed Obray, Jeff Eschler, Jordan Edwards, Nate Green, Camille Wellard, Sunil Kongara, James Hillaker, Mike Gilmore, and Dmitriy Samus.

HIGHLIGHTS ABOUT THIS WINNER

- **Responsive:** Everything available on employees' work computers is also available on their (work-issued or personal) mobile phones. The liquid design bends and adapts gracefully to promote visibility on any screen, making targets effortlessly clickable or tappable with a mouse or finger.

- **Gamification:** Creative gamification features in employee profiles and the health portal generate enthusiasm and a bit of fun competition.
- **Health Portal:** The portal focuses on preventative health and fitness. This preventative approach includes a variety of appealing health campaigns for all employees. In addition to helping employees feel good both mentally and physically, extrinsic rewards include community building and gamification principles that award employees with badges than can ultimately be exchanged for cash rewards.
- **Communication:** News, initiatives, office and workgroup information, and a social feed — all on the homepage — keep employees easily up-to-date on pertinent happenings.
- **Targeted Sections:** Physicians, nurses, pharmacists, and knowledge workers all need the intranet to collaborate and consult as they provide quality care to patients. To furnish detailed information to people in particular roles — without inundating the entire audience — the site offers helpful, targeted sections based on particular jobs and tasks.

BACKGROUND

The company's main motivation for the intranet redesign was to address emerging mobile needs. It considered creating a mobile version of the intranet, but ultimately decided that creating a mobile responsive site would result in a more scalable and sustainable product. The redesign project thus had several goals:

- Create a mobile responsive site that optimizes content for any device.
- Reengage site owners by providing easy-to-use tools for content management.
- Create a more cohesive site design that uses design elements consistently throughout the site.
- Improve search and overall site satisfaction by eliminating unnecessary content.

Every project has its own set of challenges. The Intermountain team was working with two pressing constraints:

- **Resource bottlenecks:** While the team was implementing the updated intranet, it had to simultaneously manage implementation of a new CMS and new designs on the public website. This created a resource bottleneck, as many of the site owners played roles in maintaining both the intranet and the public website.
- **New team:** Due to changes in roles and growth in the department, nine new people joined the Intermountain team within an eight-month period. Most of these new team members had very little experience with intranets, and several had only minimal experience with websites and usability in general. Although these fresh eyes contributed unique perspectives to the project, educating them about intranet strategies required a fair amount of effort.

Image 1. Intermountain Healthcare Intranet: Previous Version of the Intranet Homepage. *73_Intermountain_01_home_version1.png*

DESIGN REVIEW

Homepage, Desktop UI

Image 2. Intermountain Healthcare Intranet: The Current Homepage.
74_Intermountain_02_home_live.png

Homepage and Desktop UI Highlights

With a clean layout and various types of news and current information, clinical staff and administrators alike can easily get up-to-date on the organization and its events by simply scanning the Intermaountain.net homepage.

1. **Icons for Important Links:** Many of the most needed and most commonly used tools are offered as icons with text, in a priority position on the homepage: in the upper left. Thus, when employees launch Intermountain.net, they can immediately access key intranet areas and integrated third-party applications such as email, the employee directory, team spaces, the document repository, and training. Initially, users can rely on the text labels if needed; over time, icon recognition will offer even faster access to these common tools.
2. **Hero:** Designers chose to use a hero image in the homepage's main center section to showcase a single piece of important information. For example, the *LiVe Well* campaign urges employees to stay fit and healthy through specific activities. Doing this with colleagues you know — and ones you haven't yet met — creates a sense of community and, in some cases, a bit of healthy competition. The campaign name and information, *LiVe* Well and *10,000 Steps*, appears in large, clear lettering. The subheading *To Better Health* is a benefit-driven phrase, communicating why it might behoove people to participate. A date assigned to the campaign — here, June to November 30 — clarifies the participation window and introduces the *scarcity principle*, which can encourage people to take part in something because it won't be possible forever. A large, simple image shows a person engaged in a target activity, so people can imagine themselves participating. The image areas with text overlay are blurred to make the foreground text better stand out.
3. **News:** Three of the top news stories are showcased in the center section below the hero, and the *View All News* button below them makes all news easily accessible.
4. **Feed:** The most recent posts from the user's communities are listed in the right rail. Users can gauge their colleagues' interest in the topic, indicated by the number of likes and comments; they can also "like" comments or add a comment. Below the feed, employees can link to their full feed or join a new community of interest.
5. **Visual Sections:** The various homepage areas are easy to scan because they are visually chunked. Traits that help compartmentalize areas include: a large, clear title above the section; active white space between sections; and background colors behind or borders around each section. These traits help employees quickly scan the homepage for topics of interest.
6. ***Workplace Links*:** The *Workplace Links* section on the left links to information about the user's specific location and business unit.
7. **Calendar:** The main organization calendar includes events and holidays and displays the next five upcoming items.
8. **Menu and Search:** As is expected, the global navigation and site search appear at the top of all pages. At the top level, the global navigation is narrow and offers three distinct options: *Clinical, Pay & Personal,* and *Workplace Tools.*

Homepage, Phone UI Highlights

Understanding the emerging mobile needs of Intermountain's clinical and administrative staff alike, intranet team members were highly motivated to create a design optimized for mobile and any other screen using responsive web design. By studying user needs, devices, and content security needs, the team masterfully achieved its goals to represent the entire site and have a single base and method for adding and editing content.

Everything on the intranet homepage when accessed on a desktop computer is also available on smaller screens — even the smallest of smart phones.

1. **Hero:** The hero image is the same; it is still legible and takes the top content position in the phone UI.
2. **Tools:** Visible before scrolling on the phone, the tools are only a tap away.
3. ***Workplace Links* and Calendar:** Appearing after the tools, these features have almost the exact same UI as the desktop ones. The text is easy to read, and large targets make the links easy to tap.
4. **News:** For better mobile viewing, two news items are displayed by default, and all can be accessed via swiping and the *View All News* button.
5. **Initiatives and Feed:** These features also follow the same UI as on the desktop.
6. **Menu:** The menu and search are collapsed into an icon in the upper left hamburger menu to conserve screen real estate and dedicate more room to content.

Image 3. Intermountain Healthcare Intranet: Responsive Design.
*75_Intermountain*_03_homeresponsive_live.png

Employee Health Portal

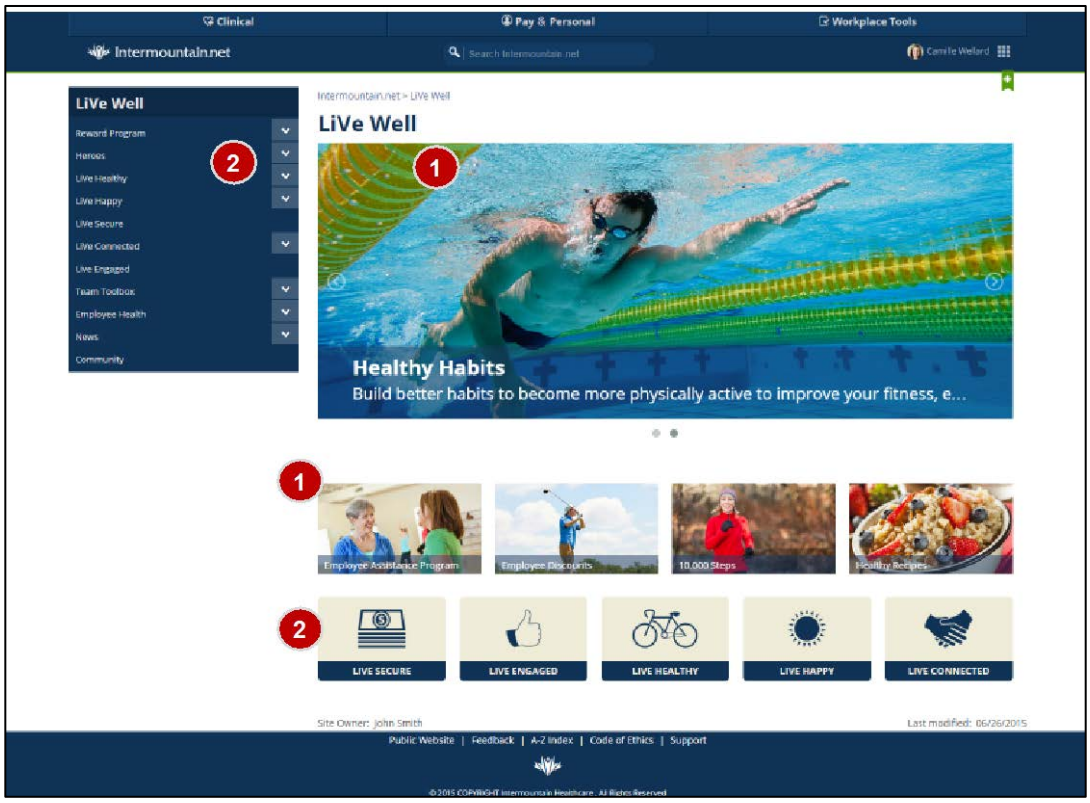


Image 4. Intermountain Healthcare Intranet: Employee Health Portal.
76_Intermountain_04_employeehalthportal_live.png

Employee Health Portal Highlights

The intranet takes advantage of Intermountain Healthcare's goal to increase employee health and wellness. Although the organization offers many different health-related services for employees, the intranet summarizes and advertises them, and the Employee Health Portal consolidates them into a single point of access.

1. **Campaigns:** Multiple health campaigns and activities appear in and below the main carousel to appeal to diverse employee tastes about health and fitness. Making these visible advertises the activities and increases the likelihood that people will know the initiatives exist, learn about them, participate in them, and ultimately be happier and healthier employees.
2. **Initiatives:** Overreaching initiatives — *Live Secure, Live Engaged, Live Healthy, Live Happy,* and *Live Connected* — appear as labeled icons below the campaigns. They are also listed in the left navigation, along with *Rewards Program, News, Community,* and other elements to draw employees in and encourage participation.

Rewards Tracker

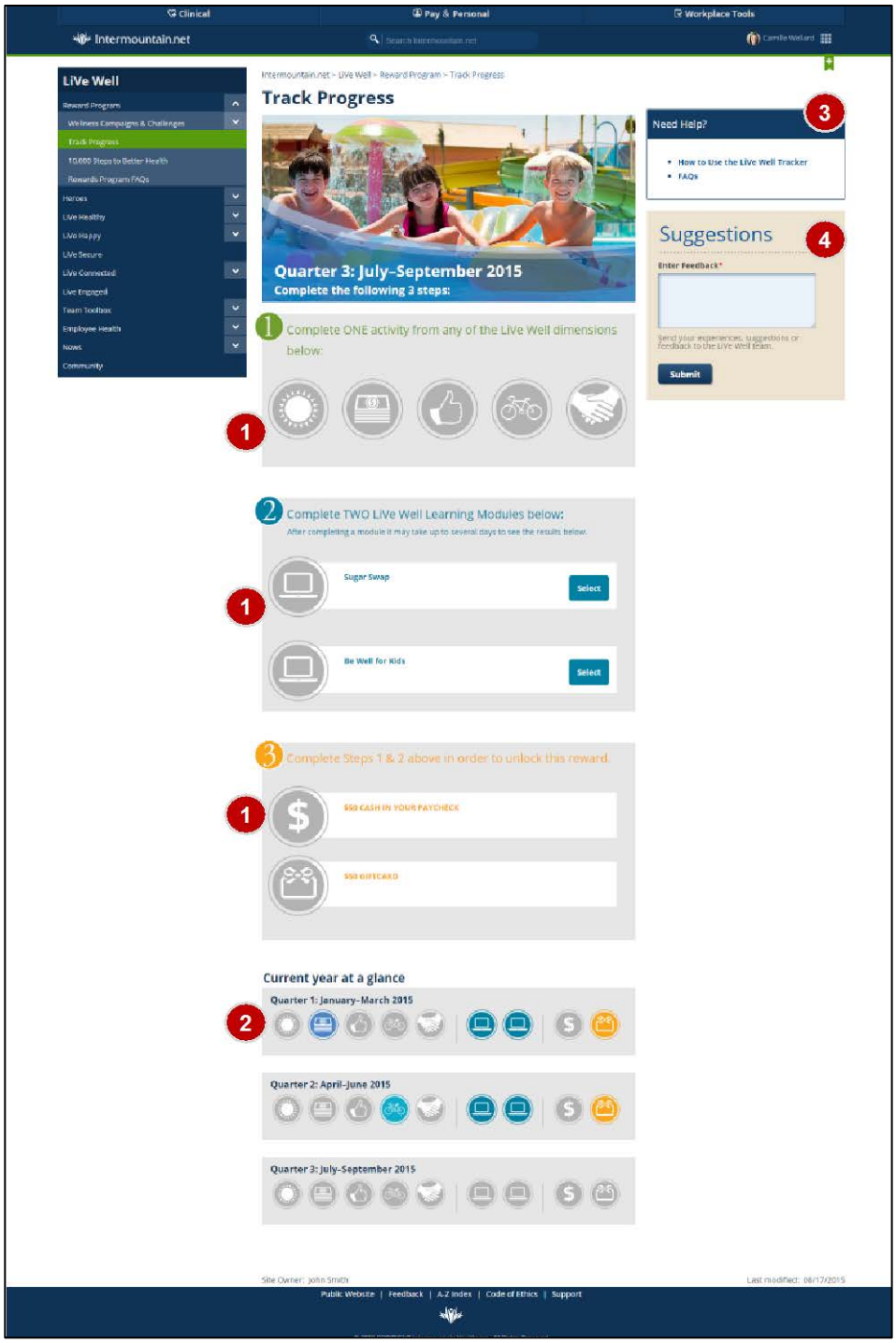
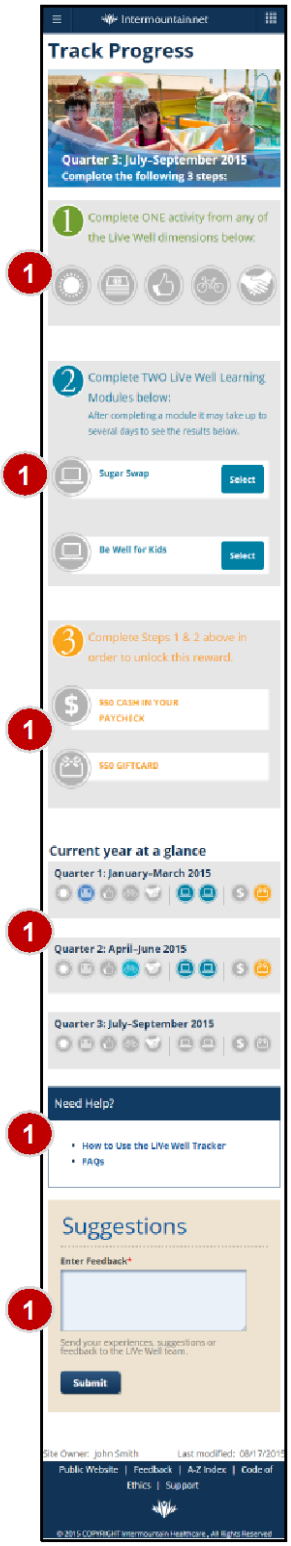


Image 5. Intermountain Healthcare Intranet: Employee Health Rewards Tracker. *77_Intermountain_05_rewardstracker_live.png*

Rewards Tracker Highlights

1. **Steps and rewards:** The steps needed to participate are numbered in chronological order, described, and accompanied by badges when appropriate.
2. **Status:** The *Current year at a glance* section summarizes the employees' achievements, showing potential badge achievements in grey and achieved badges in color. This gamification can help employees recall what they have done, feel good about it, and feel inspired to do more.
3. **Help:** For employees who need a little assistance, the help section in the right rail includes links to *How to use the LiVe Well Tracker* and *FAQs.*
4. **Suggestions:** Employees can share their ideas about the programs via the simple and visible *Suggestions* box.



Rewards Tracker, Mobile UI Highlights

1. **Visible and Simple:** As in the desktop UI, the mobile UI makes each step visible, legible, and easy to follow. Rewards, help, and the *Suggestions* box are also readily available. This is one more example of how the Intermountain team's intranet conquered the small-screen challenge.

Image 6. Intermountain Healthcare Intranet: Employee Health Rewards Tracker Mobile View.
78_Intermountain_06_rewardstrackermobile_live.png

Employee Profile

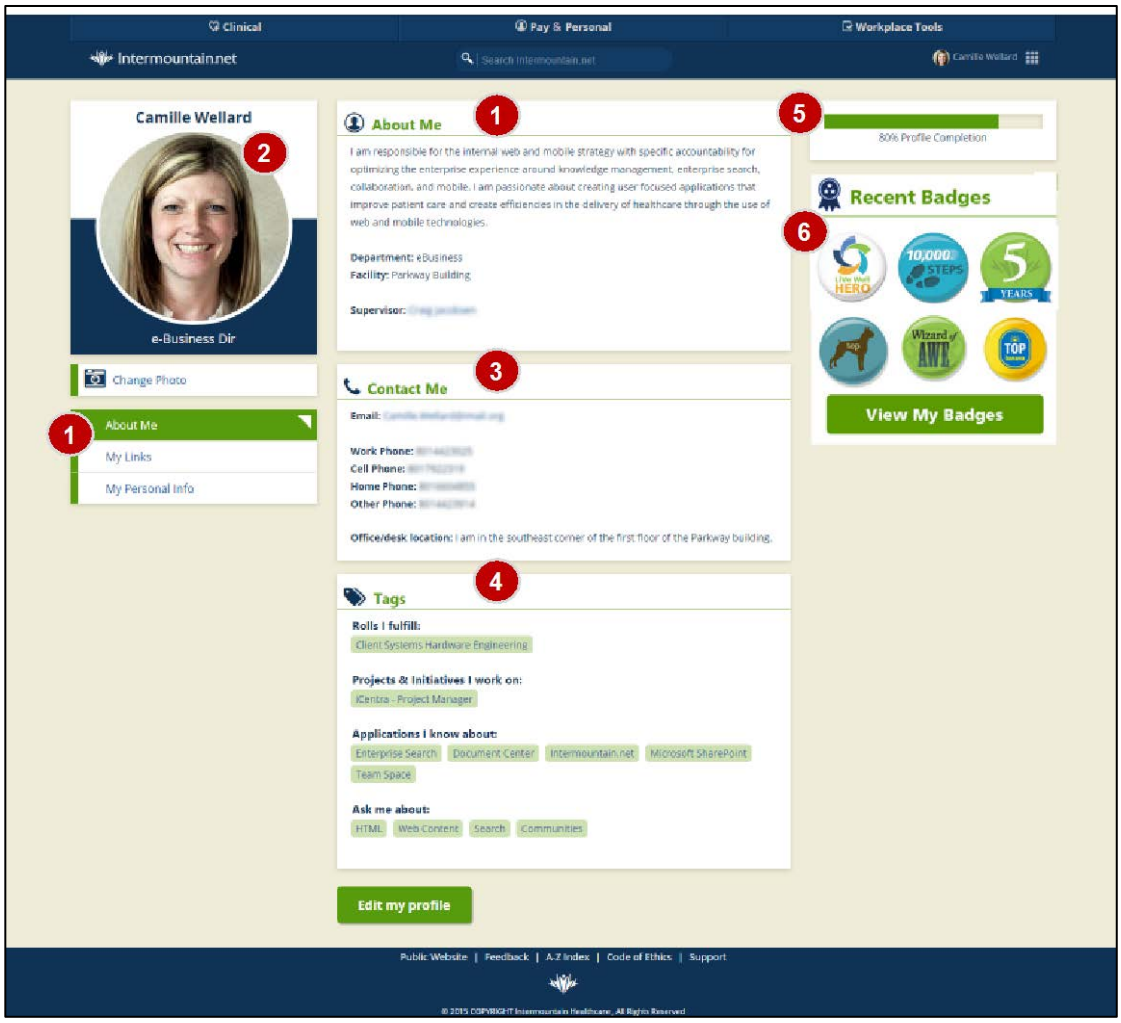


Image 7. Intermountain Healthcare Intranet: Employee Profile.
79_Intermountain_07_profile_live.png

Employee Profile Highlights

The employee profile includes basic information and much more, helping employees find the right people and get to know each other.

1. ***About Me*:** Here, employees write what they think is most pertinent for their colleagues to know. They can also add links and personal information.
2. **A Clear Photo:** This helps employees get to know one another. Users can also change their photo easily.
3. **Contact:** The *Contact Me* box offers multiple ways for colleagues to connect.
4. ***Tags*:** In the employee search, people can find one another based on topics and affinities, rather than just name or job title. Categories for tags — such as *Roles I fulfill, Applications I know about,* and *Ask me about* — jog

employees' memories about what they know and are good at. This encourages them to add more topics, and ultimately creates better communication among employees.

5. **Completion:** Another gamification feature displays the degree to which users have completed their employee profile. The progress bar and percentage status help people realize how far they have come and how far they need to go in building their intranet profile.
6. **Badges:** These are a classic gamification technique, in this case applied to people's work at the organization. Employees can earn badges for a) years of service with the company; b) participation in internal programs, such as the employee health program; and c) participation in communities. Posting and responding to questions in online forums grants points that translate into a badge.

Organizational Chart

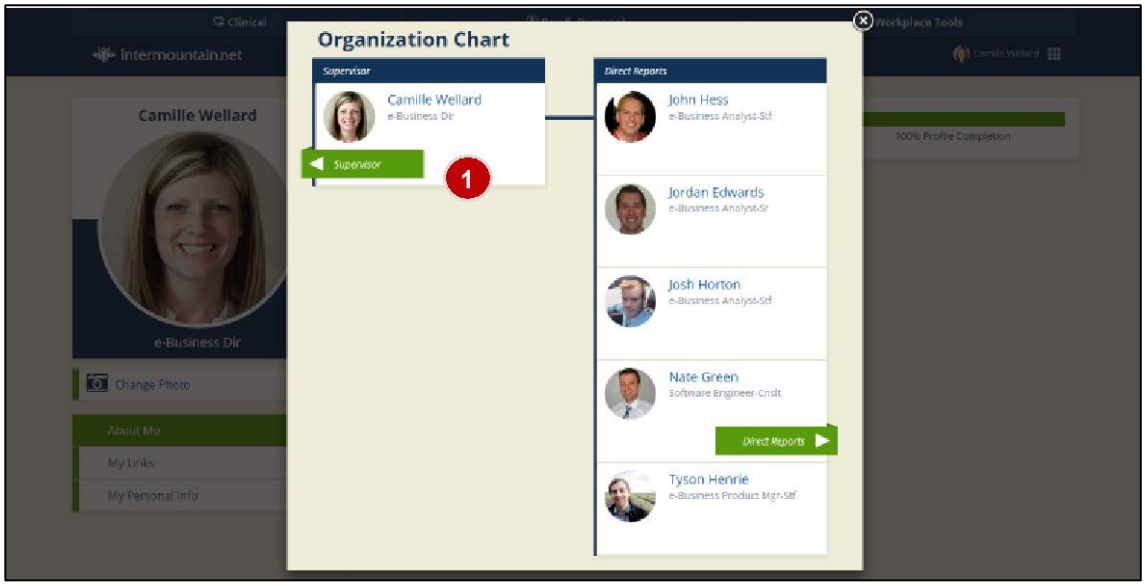


Image 8. Intermountain Healthcare Intranet: Organizational Chart.
80_Intermountain_08_orgchart_live.png

Organizational Chart Highlights

The organizational chart can be linked to from an employee's profile and offers a key benefit to employees.

1. **Context:** It displays where users fit in the formal organization. Photos, names, and job titles help further clarify a person's organizational context.

Megamenu Navigation

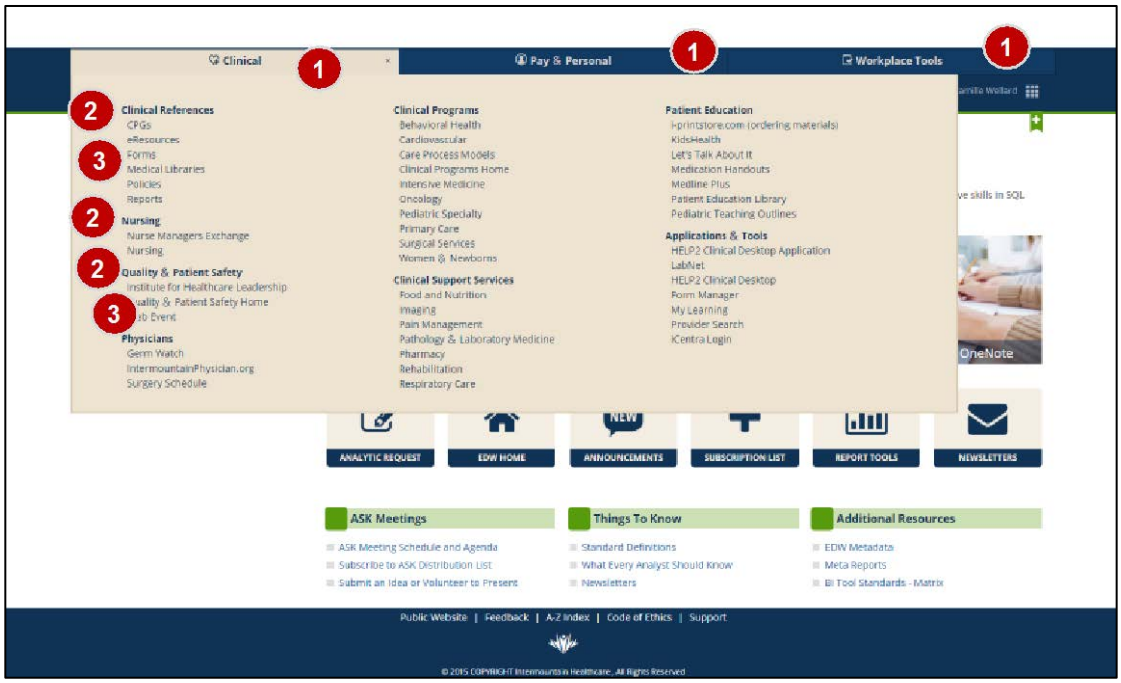


Image 9. Intermountain Healthcare Intranet: Megamenu.
81_Intermountain_09_topnav_live.png

Megamenu Navigation Highlights

The megamenu opens on hover when users access the intranet on a desktop computer. The menu makes it easy for users to scan the available sections and links.

- **Selection:** The selected global navigation command appears selected and matches the color of the open menu, while the menus that are not selected continue to display as white text on a blue background. This section indicator helps people understand where they are in the design.
- **Headings:** These words are bolded and appear above and slightly to the left of the links. Headings that are visually stronger and distinct from the links are easy for users to scan to, and help them choose topics they are interested in before needing to read more links.
- **Links:** The commands below the headings appear as regular, indented text. Clear, unique wording makes it easy for people to understand where the links lead.

Left and Right Navigation Menus

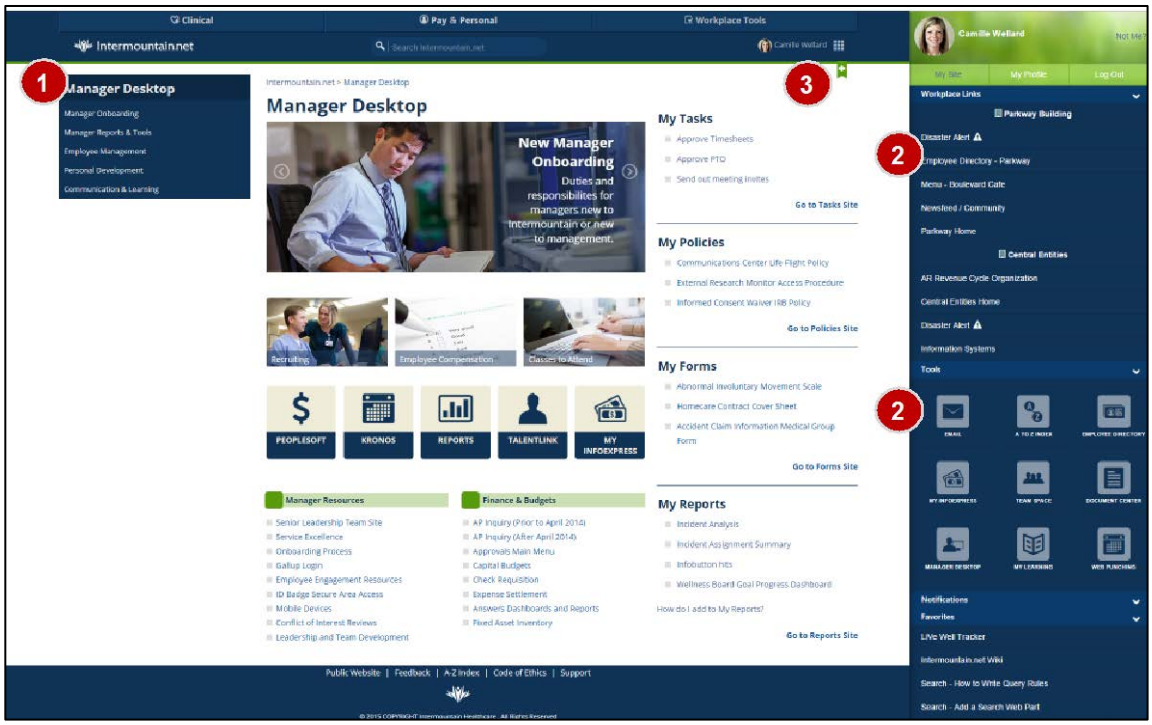


Image 10. Intermountain Healthcare Intranet: Navigation.
82_Intermountain_10_rightnav_live.png

Left and Right Navigation Menus Highlights

Beyond the megamenu, the site offers other imaginative ways to traverse the content.

1. **Left Navigation:** The contextual navigation — that is, the links related to the user's current intranet section — appears on the left, which is an expected location. The site section's title is listed both at the top of the page and in the left navigation, while the section links appear in the colored box.
2. **Personalized Links:** The right-side navigation menu includes links that are personal to the logged-in user. Although these same items appear on the person's homepage, offering them in the ride-side menu lets employees quickly access their personal links from anywhere on the intranet.
3. **Icon to Open / Hide:** The right-side navigation menu is collapsed by default to save screen space, but users can easily open it by clicking or tapping the waffle/grid icon next to the profile name. Clicking or tapping this same icon closes the menu when it's open.

Navigation on Mobile

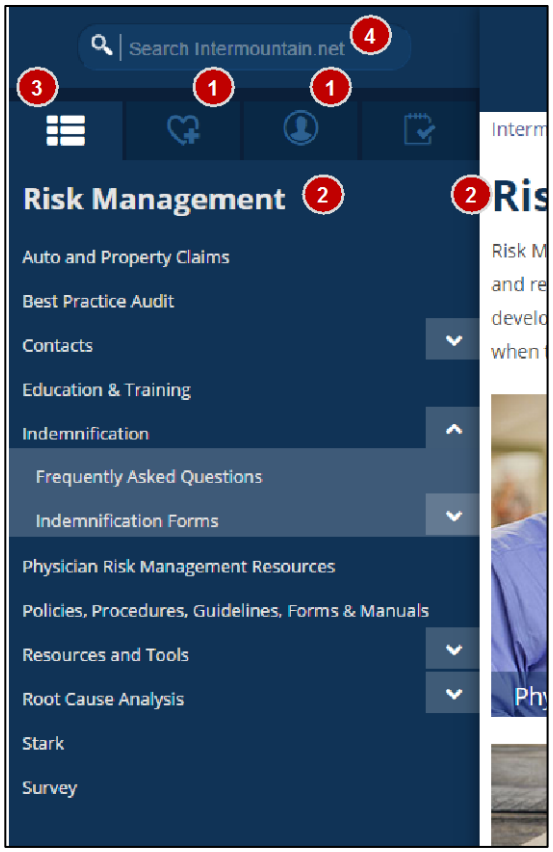


Image 11. Intermountain Healthcare Intranet: Mobile Navigation.
83_Intermountain_11_leftnavmobile_live.png

Mobile Navigation Highlights

1. **Icons:** Users select from icons at the top to get to the local and global navigation. The first tab is the local navigation for the current site. The other three tabs are for the global navigation: *Clinical, Pay & Personal,* and *Workplace Tools.*
2. **Left Navigation Title:** In the phone UI, the left-side context navigation continues to list the section name at the top of the menu and as the section page title.
3. **Collapses:** The menu collapses in an icon when not in use, to show more content on a small screen.
4. **Search:** The search field appears at the top of pages, making it readily accessible when typing or speaking a search term is easier than tapping away.

Role-Specific Sections

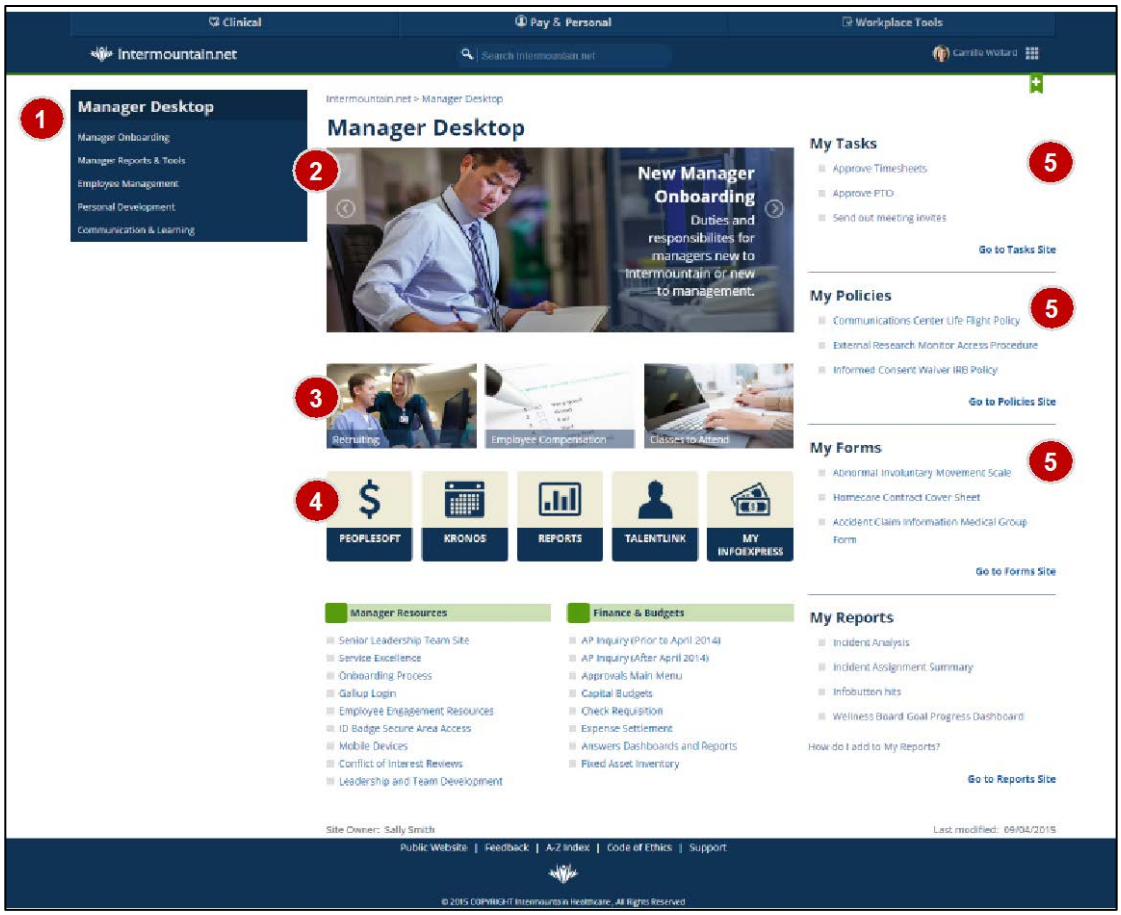


Image 12. Intermountain Healthcare Intranet: Role-Specific Sections.
84_Intermountain_12_rolespecific_live.png

Role-Specific Sections Highlights

Physicians, nurses, pharmacists, managers, and knowledge workers have overlapping needs, but mostly they use different types information and complete a wide variety of tasks using the intranet. Targeted sections of Intermountain.net help serve the best content and tools to specific audiences without cluttering pages for the rest of the employees. For example, the *Manager Desktop* is a portal-like page that aggregates content from many different sources around the organization to make it easy for managers to locate and access tools and resources they need to do their work effectively.

1. **Left Menu:** As users expect, a list of navigation links appears on the left. The links are simple and lead to topics that managers need to know about. Listing these links in the navigation actually advertises and promotes the content to managers, and may call attention to topics they did not originally have in mind. The links here include *Manager Onboarding, Manager Reports & Tools, Employee Management, Personal Development,* and *Communication & Learning.*

2. **Carousel:** Important topics display in the carrousel in the top center section of the page. Clearly labeled text is accompanied by an image, and arrows let users scroll forward and backward to see the topic possibilities.
3. **Topics:** Overarching topics that managers need, such as *Recruiting, Employee Compensation,* and *Classes to Attend,* appear below the carousel in the page's center section.
4. **Third-Party Tools:** A key goal of the intranet redesign was to integrate helpful third-party tools that employees use. For managers, large icons that link to popular tools such as *PeopleSoft* and *Kronos* were added in the page's center section.
5. **Customizable Links:** In the right rail, managers can view and edit the lists of tasks, policies, forms, and reports to display by default those that are most pertinent to their work. The *Go to … site* links below each respective list of links lead to the full list of link possibilities.

Previous Version of a Role-Specific Section

Image 13. Intermountain Healthcare Intranet: Previous Version of a Role-Specific Page. *85_Intermountain_13_rolespecific_version1.png*

News Section

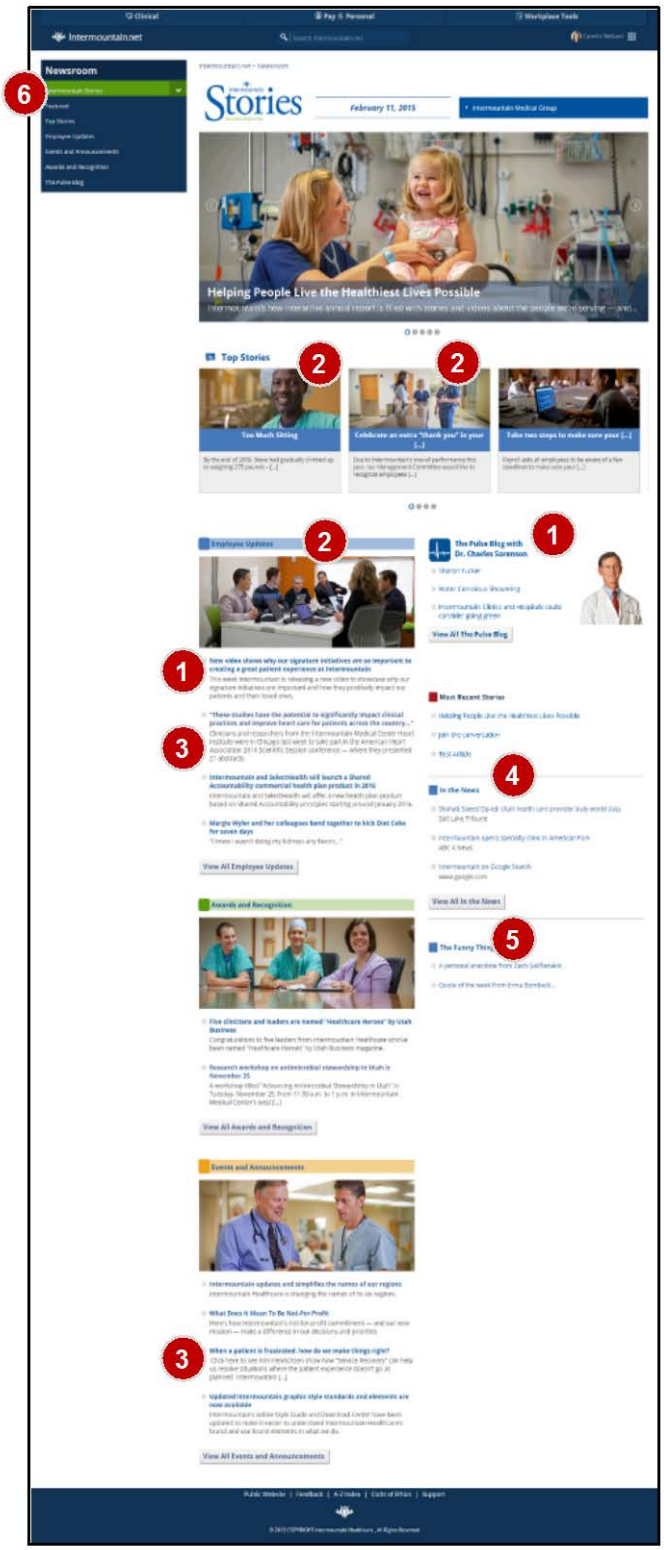


Image 14. Intermountain Healthcare Intranet: News Section.
86_Intermountain_14_news home_live.png

News Section Highlights

A richly populated *Newsroom* displays top stories, updates for employees, awards, and more.

1. **Clear Titles:** Visible titles help employees easily scan the news.
2. **Related Images:** Images add flavor, color, and information to stories.
3. **Summaries:** Brief summaries give employees a sense of the article before they commit to clicking and reading it.
4. **Media:** The *In the News* section links to articles the press has written about the organization.
5. **Humor:** Handpicked quotes and stories from humorists and comics lighten the mood.
6. **Topics:** Employees may look for news items by author name, top stories, and awards and events, making it easy to find specific items of interest.

News Article

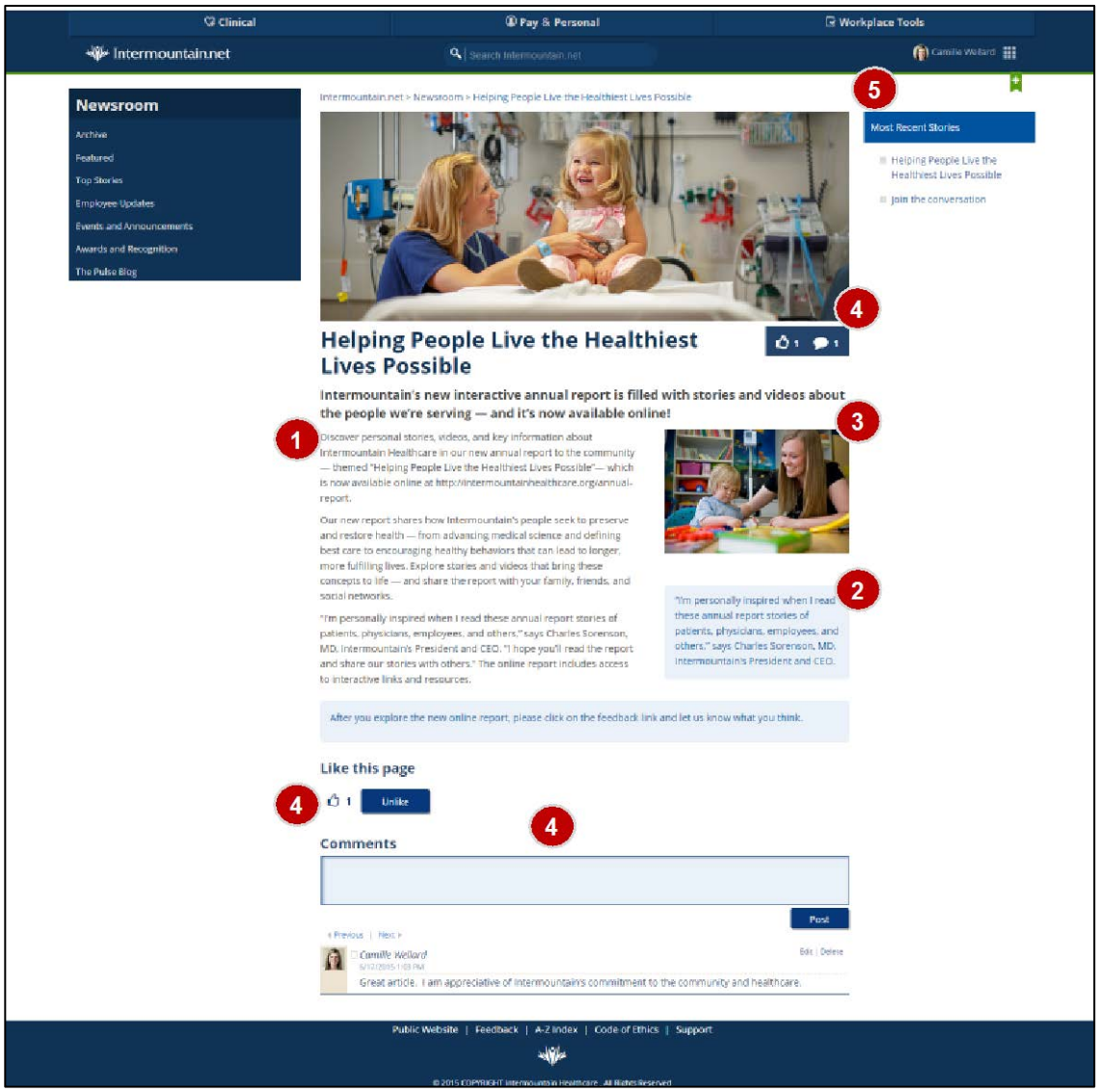


Image 15. Intermountain Healthcare Intranet: News Article Example.
87_Intermountain_15_newsarticle_live.png

News Article Highlights

1. **Narrow Text Column:** This makes text easier to read online, and translates easier to the mobile version.
2. **Callouts:** People can get a sense of the story's content from a few key words.
3. **Related Images:** The images have the right size and content granularity for the allocated space.
4. **"Like" and Comment:** Social features make it possible for all employees to participate and be heard. They also let users see what other employees have to say. Finally, the organization's leaders can read comments to get a pulse on what employees think is interesting and important.
5. **Most Recent Stories:** People looking for other stories can scan to the right and see the newest items to read.

Café, Desktop UI

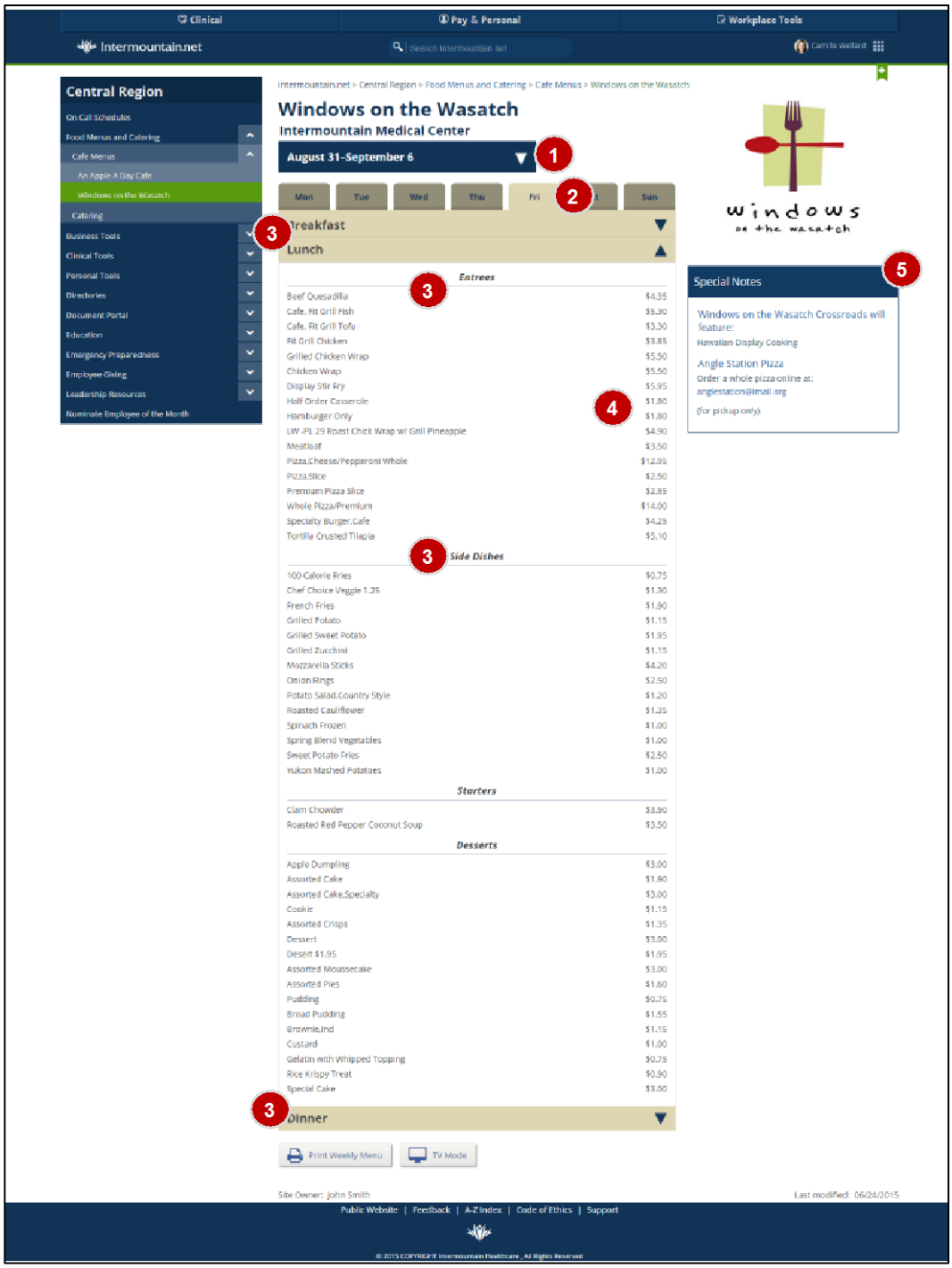
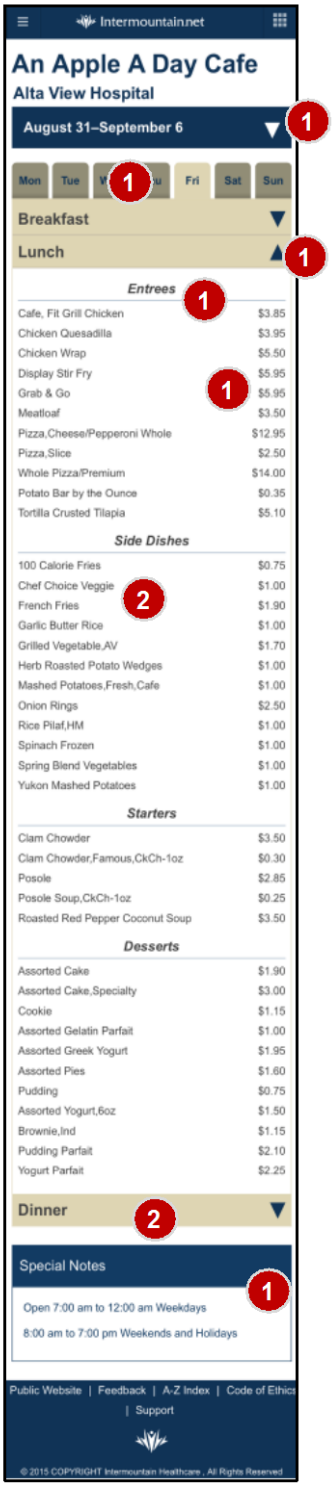


Image 16. Intermountain Healthcare Intranet: Café Menu.
88_Intermountain_16_cafemenu_live.png

Café Menus: Desktop UI Highlights

In any organization with a good cafeteria chef, posting the daily menu on the intranet is almost a necessity. At Intermountain Healthcare, each facility's café menus are popular pages on the intranet. The data is sourced from a core nutrition system, which automatically updates the pages.

1. **Week Navigation:** Employees can choose the current or a future week. This lets them plan what to eat and whether they will have lunch at the café or elsewhere.
2. **Day Navigation:** Clicking a tab displays the menu for specific days of the week.
3. **Meals:** *Breakfast, Lunch,* and *Dinner* sections can be expanded or collapsed. The sections are separated into *Entrees, Side Dishes, Starters,* and *Desserts.* The café menu also includes nutrition info for each item, as the organization wants to encourage employees to plan healthy meals and be aware of nutritional content.
4. **Price:** Each item is listed and priced.
5. **Specials:** Special food items are called out in the right rail.



Café Menus: Mobile UI Highlights

1. **Same Features as Desktop:** Mobile screens offer the same features as the desktop: choose week, expand and collapse meals, item and price, and specials.
2. **Legible Text and Large Targets:** These make tapping and reading very easy, even on a small screen.

Image 17. Intermountain Healthcare Intranet: Café Menu Mobile View.
89_Intermountain_17_cafemenumobile_live.png

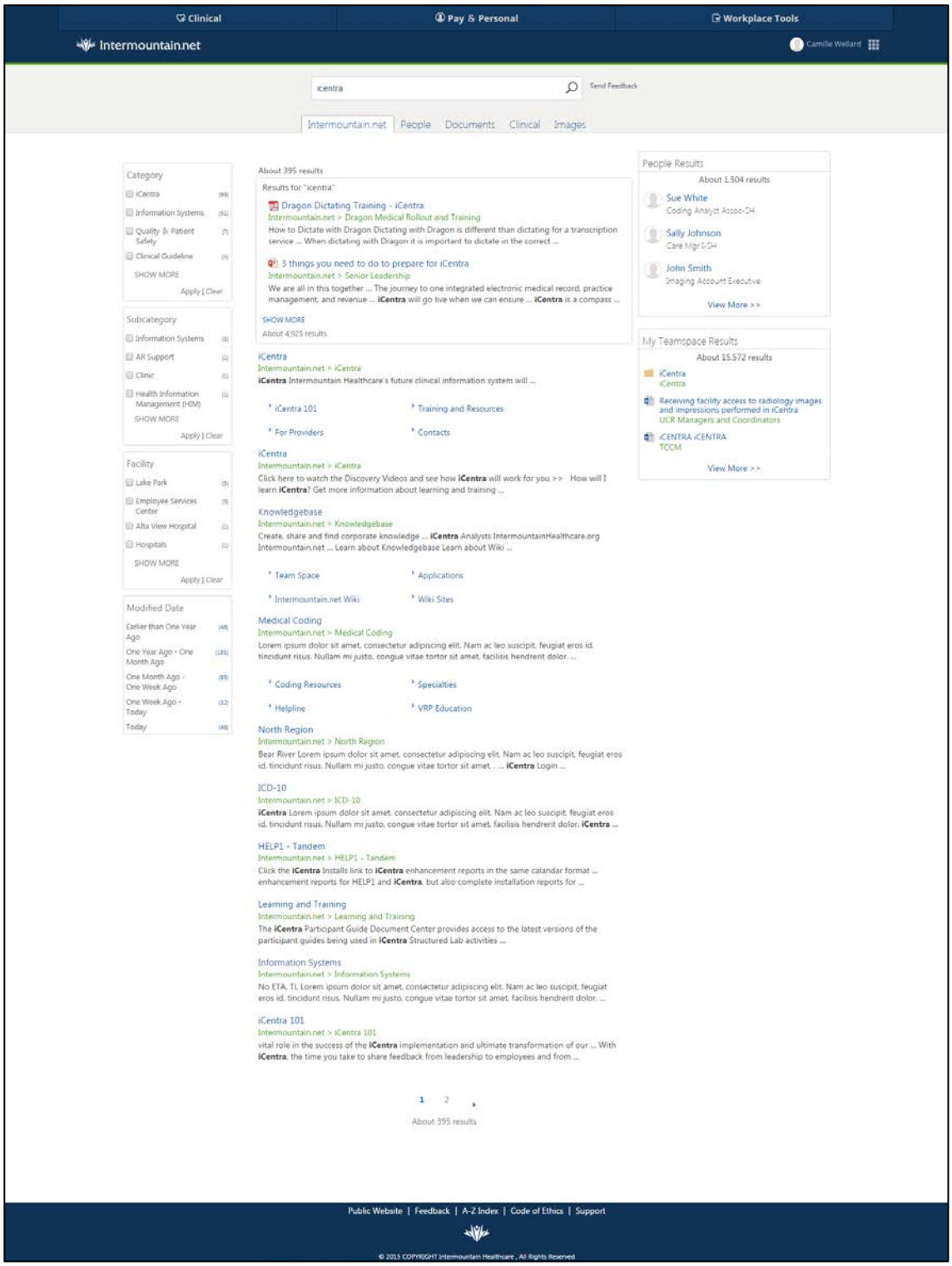


Image 18. Intermountain Healthcare Intranet: Search Results Page.
90_Intermountain_18_searchresults_live.png

DESIGN PROCESS AND USABILITY WORK

Approach and Methods

The team's design approach was defined by the users via surveys, field-testing, and web analytics. The goal to create a responsive intranet also considerably influenced the design.

When creating the new intranet designs, the team utilized several research and validation methods:

- **Analytics:** Team members felt that analytics were an important research approach because analytics gave them a view into what people were already using and finding valuable on the site. Analytics also helped answer questions that emerged early on, such as which tools should be most easily accessible and how disruptive it would be to remove or significantly change various components.

  The team analyzed the usage stats and found search analytics to be most helpful in determining which keyword queries people were searching for most. For example, one of the most searched for keywords was an application that employees use to clock-in and clock-out, view their schedules, and submit PTO requests. Because this was such a popular tool, the team decided to make it one of the key tools on the homepage. Immediately after the new site was launched, searches for this application dropped dramatically.

  Analytics are good at showing what is working or not working with an existing design; they are not as valuable for gauging the potential success of a new design. The team thus included other forms of research and testing to optimize its designs.

- **Researching usability trends and reading published reports:** Because the intranets of other organizations are difficult to access, the team relied on previous editions of the Nielsen Norman Intranet Design Annual to find ideas about which design elements and unique features other companies were incorporating into their intranet designs. This was really helpful for the team; seeing what others were doing gave them ideas on how to design the new site's page templates.

  Another thing the team discovered while researching usability best practices is that a homepage should offer basic but essential content: news, navigation, key tools, key information, community and culture, internal marketing, and collaboration. So they took a cue from that research and incorporated many of these content areas into their new homepage design.

- **Usability testing design prototypes:** After the team vetted some initial designs with key stakeholders, they conducted usability tests. Usability testing was conducted on both the site's desktop and responsive, mobile views.

  These usability tests were helpful for several reasons. Camille Wellard, eBusiness Director explains:

- **"They validated we were on the right path:** One thing we were worried about people understanding was the right fly-out menu. It was a newer concept we hadn't seen on many sites. When we did our usability tests, people were able to understand the purpose of the menu and find it without any trouble."
- **"They helped us catch some improvements we needed to make:** We learned that the font size on our tools was too small and was difficult for some to read, so we increased the font size."
- **"They helped us address some of the anxiety and concerns that come with change.** When we had concerns from stakeholders — such as, 'I don't know that people will understand where to find the top fly-out menus' — we were able to use the usability tests and validate that people were able to find the fly-outs."

Information Architecture

IA is very important to the Intermountain intranet team and always has been. "A strong IA has been a core strategy since the beginning days of the intranet," says Wellard. "Over the years, we have worked closely with key stakeholders, conducted focus groups, and attentively addressed challenges people experience when trying to find information."

IA has been key to the team's success with its intranet. Following is the team's advice for other teams struggling to establish an IA that works.

Recommendations for creating an IA that works:

- **Governance:** Have a strong governance model for what will go in the main menus to keep them focused and purposeful. Establish clear ownership over the site structure and stick to the model.
- **Use analytics:** The Intermountain team tracks analytics on menu items that users click on; they then use that data to assess usage and remove little-used navigation items to help keep the menus focused.
- **Work together to develop sitemaps:** When a new site is requested or a site owner is overhauling an existing site, Intermountain's eBusiness team works closely with the site owner to develop a sustainable, user-focused sitemap. Many site owners think about navigation without viewing the site through the eyes of end users. Typically, site owners have no training in usability or IA, so partnering with eBusiness is very valuable. Site owners bring their domain knowledge and understanding of content needs, and eBusiness brings experience and training in web design, IA, and usability. Together, they create a strong partnership and strong sites.

Adoption and Buy-In

To help the intranet realize its potential and achieve its true value, it is important to include key stakeholders and end users in the process. Intermountain team members have been successful in getting users to adopt intranet tools because they proactively seek to understand their needs and address their concerns. For teams

trying to drive adoption to a revamped intranet site, Intermountain's team members offer the following advice:

- **Define goals and objectives upfront.** "When we start a new site, we always begin by identifying goals and objectives. By understanding what we're working toward upfront, projects typically turnaround quicker and result in good experiences and internal relationships."
- **Help solve a problem:** "While working with site owners on a new site, we look for opportunities to solve a problem. If we can identify an area that they are struggling with that could be solved technically, we brainstorm possible solutions and work to implement a technical fix. For example, if a site owner is having a difficult time gathering and managing information, we look at forms and workflows to facilitate their process. These types of solutions are typically easy to implement and create high satisfaction. This helps drive adoption and build meaningful relationships."
- **Create easy-to-use tools:** "Some of the tools built in the previous version of the system were difficult to use and made you think twice as you were using them. In our new SharePoint 2013 implementation of the authoring tools, we took extra time to evaluate and optimize the site owner and content contributor experience. Our goal is to make contributing content to the site so easy that those that are assigned to do it aren't intimidated, and hopefully even enjoy working on their sites."
- **Provide training and support:** "One key to getting adoption is to have great training for those using the system. We provide instructor-led training twice a month. We also have thorough documentation of the steps required to author content and provide best practices for maintaining a site. Finally, we will do one-on-one training for those that need additional help. Having a strong training and support system is key to maintaining users of the system and driving adoption."
- **Find good example sites:** "Having a strong example site helps people know what options are available and what they are working toward. It also helps showcase best practices and proper implementation of the templates. These example sites can also help generate excitement as people are able to see the improvements from the old designs to the new designs, and it encourages people to move quickly to update their own sites."
- **Engage early adopters:** "Early adopters help drive adoption by generating positive word of mouth about the new designs and authoring tools. They can be used as example sites and can help lay the foundation for future successes with other departments."
- **Plan for change management.** "Change can always be difficult to deal with. We got some pushback from users, but we have communicated the positive changes that the redesign provides. Training, support, and knowledge management have been huge."

OUTSIDE AGENCIES	
Agency	**Project Role**
Solution Stream Web design consultant	• Helped with the initial designs for the header, footer, and intranet homepage

GOVERNANCE

The intranet is owned by the Information Systems department's eBusiness team. It fits into a broader knowledge management, collaboration, enterprise search, and mobile strategy.

Originally, Intermountain's Strategy department owned the intranet. This helped set a strong foundation for a successful intranet approach. As corporate needs evolved, however, the intranet began to report to the Information Systems department and has continued to operate as a strategic information service.

One of the challenges of managing an intranet is governance. "We view the owners of the intranet as all employees," says Wellard. "When we need support for new initiatives, it can be challenging to find a business sponsor as the initiatives transcend any one particular group."

The way the team overcomes this challenge is through strong leadership and by building relationships with its key stakeholders.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
eBusiness Team	• Governs the intranet • Drives the vision and development of web and mobile strategy and overall look and feel • Manages the CMS, education and training, and promotion • Works with site owners to develop IA, sitemaps, and new page templates, and to determine content needs
Site Owners	• Build, manage, and maintain their own site and its roles, access, and content • Train site contributors/content owners and serve as a resource to help them maintain and manage the site
Site Contributors/Content Owners	• Work with site owners to create and manage sites • Provide content and continued maintenance of the site
User Group	• Provides feedback and best practices, and helps drive roadmap for new features • Made up of site owners, contributors, and key stakeholders

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	• http://intermountain.net
Default Status	• The intranet is set as each user's homepage; users cannot change this setting.
Remote Access	• The intranet is available outside of the firewall, and employees regularly access it while off the network to obtain information and key tools.
Shared Workstations or Kiosks	• Many users — especially nurses and other clinicians — access the site via shared workstations. Many shared computers are located in patient care areas and are used by multiple people throughout the day.

TIMELINE

PROJECT MILESTONES	
Milestone Date	**Milestone Description**
2003	Launch of first intranet
2007	**Team Space:** Launch of this enterprise collaboration tool, which lets employees share documents, calendars, tasks, and more with their teams
2010	**Document Center:** Launch of enterprise document management tool integrated with other intranet functionality such as search
2011	**Internal collaboration tools:** Launch of social communities
October 2013–January 2014	Planning for new responsive designs for header, footer, and homepage
March 2014	Usability testing of new header and homepage
April 2014	**Launch of new design:** Header, footer, and homepage launched on SharePoint 2010
July 2014–December 2014	Planning and development of new responsive page templates on SharePoint 2013
January 2015	Launch of first redesigned SharePoint 2013 intranet subsite
October 2015	Final intranet site moved to SharePoint 2013; intranet redesign complete
Overall redesign time frame: October 2013–October 2015 **Note:** In addition to being a site redesign, the organization used this project as an opportunity to upgrade sites from SharePoint 2010 to SharePoint 2013, which added to the project's development time and complexity and made it last much longer than if they had stayed on the same SharePoint version.	

CONTENT AND CONTENT CONTRIBUTORS

CONTENT MANAGEMENT	
Contributors	The intranet has more than 250 content contributors and site owners; the business unit that owns each site chooses the latter. For site owners, the site might constitute all or only part of their job function. For example, the Communications departments typically have a full-time employee assigned to manage the internal and external websites. For most site owners and contributors, however, working on the site is only a part of their job function.
Contribution	The team has worked to encourage content contribution in several ways: • **Analytics:** The team sends site owners reports that show them which site sections and pages are most popular and which type of content people are trying to locate. This helps the site owners understand the site's valued content and helps guide the creation of new content. • **User groups:** The user groups are a great way to encourage dialogue among site owners, letting them express the success they've had with certain types of content or tools and brainstorm ways that others could use them on their sites. • **Visible ownership:** The bottom of each page lists the content owner and the last-modified date. This helps encourage content owners to keep their content current for two reasons: first, it's their name and reputation associated with the page's content; second, users can reach out to them directly if there is a problem with the content or the page is missing content they need. • **Social features:** Certain types of content have features that let users "like" or comment on the content. This helps engage content owners and gives users a voice.

Training	• **Instructor-led training** is offered twice a month. The introductory class focuses on the basics of site management. Another class is more advanced and is intended for power users. Users can view the training schedule and register for classes from the intranet. • The team also provides an online **knowledge base with wiki articles** that users can review anytime. These articles walk users through a step-by-step process on how to manage intranet sites.
Management	• Site owners are primarily accountable for a site's content. eBusiness will periodically complete site audits to determine if content needs to be updated or reviewed. Many of the site owners are from the company's Communications department and have formal training in writing. • The name of the content owner is listed on each page, along with the date that the content was last modified. Explicitly listing content owners helps encourage them to maintain the content because users can reach out to them directly if there is a mistake or a needed update.
Maintaining Quality	To maintain quality content, the Intermountain team offers the following advice: • **Have the right people managing the sites:** The Communications team is heavily involved in managing and reviewing site content and helps ensure that it meets standards. • **Work closely with site owners:** The Intermountain team works closely with site owners and, in some cases, works directly with content contributors. The team created a sitemap that outlines the content needed for the site. Also, because team members have a good understanding of what already exists on the site, they can help direct site owners to other content to minimize duplication. • **Encourage brevity:** The move toward responsive design has given the team an opportunity to persuade content writers to keep things simple and direct to accommodate space limitations.

Culling Content	While working on the site redesign, the team was able to successfully eliminate some of the outdated content on the site by reviewing each site individually. Team members used analytics to create a heat map to show which content was being viewed regularly and which wasn't being viewed at all; they typically deleted the latter. They stored outdated but needed content on the site in an archive folder that was hidden from search engines and permissioned only to content owners.

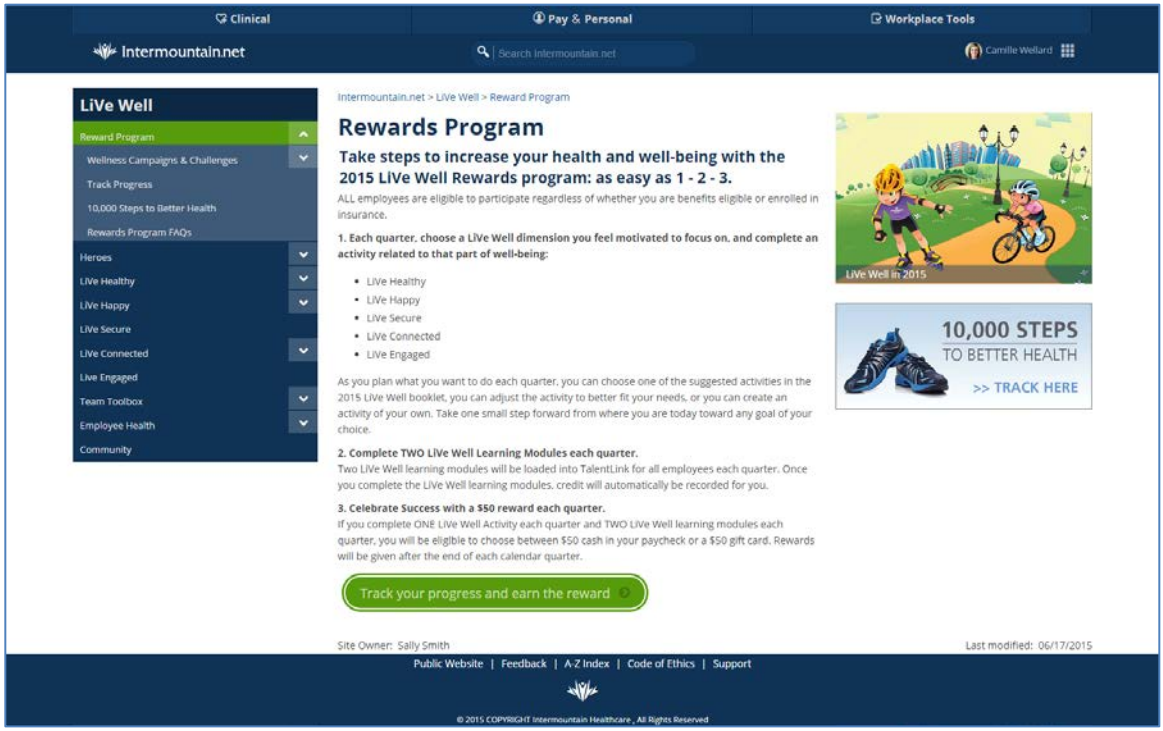


Image 19. Intermountain Healthcare Intranet: Content Page. Content pages were developed to make it easy for site contributors to author content. The templates are optimized to give content authors creativity within the site's design and branding parameters. With the old site, many content owners created their own graphics and pseudo-templates. In contrast, the new site has a cohesive design and user experience due to the easy-to-use templates that accommodate diverse content needs.
91_Intermountain_19_contentpage_live.png

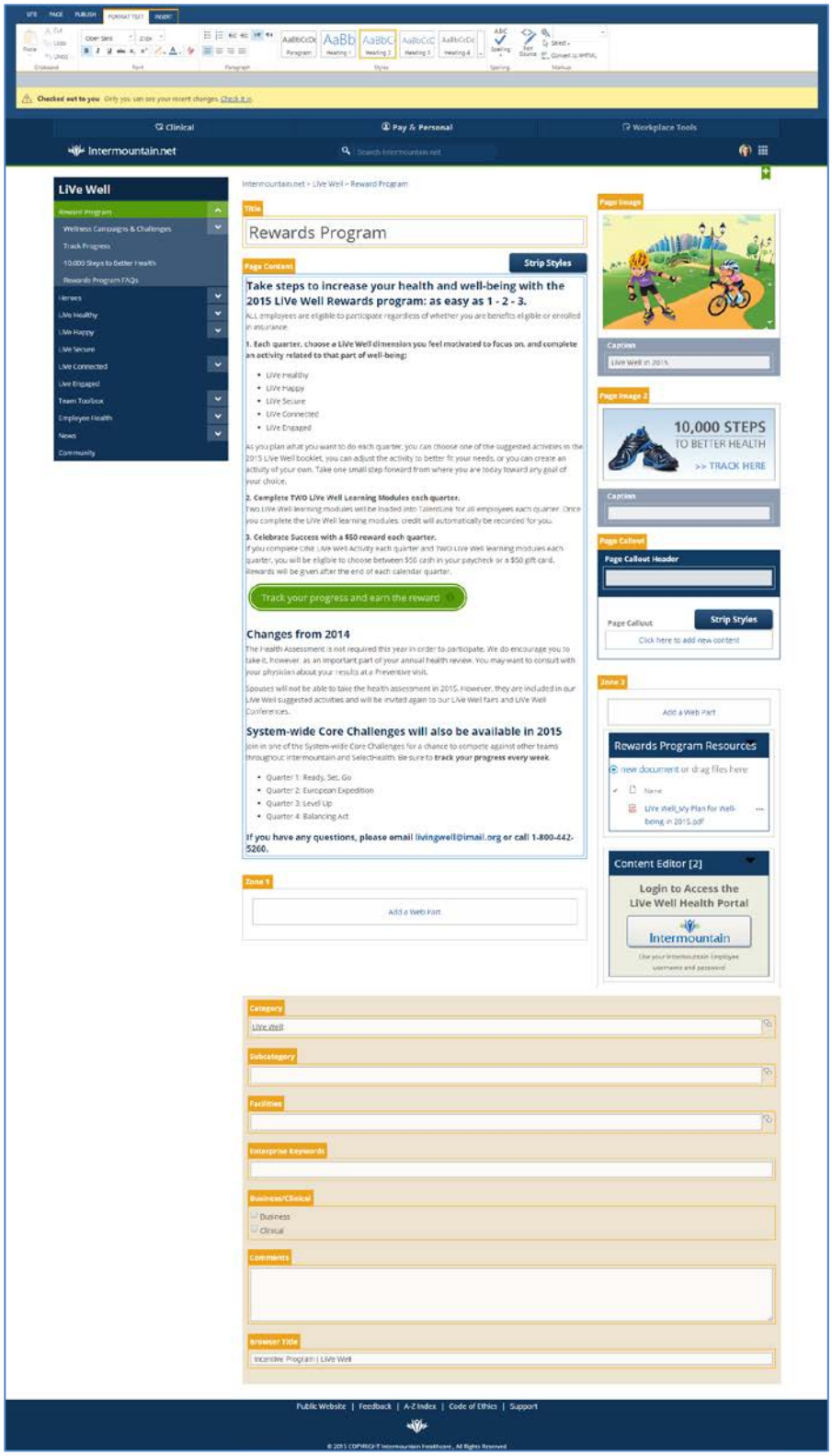

Clinical
Pay & Personal
Workplace Tools
Intermountain.net
LiVe Well
Intermountain.net > LiVe Well > Reward Program
Title
Rewards Program
Page Content
Strip Styles
Take steps to increase your health and well-being with the 2015 LiVe Well Rewards program: as easy as 1 - 2 - 3.
Changes from 2014
System-wide Core Challenges will also be available in 2015
Page Image
10,000 STEPS
TO BETTER HEALTH
>> TRACK HERE
Page Callout
Page Callout Header
Zone 2
Add a Web Part
Rewards Program Resources
Content Editor [2]
Login to Access the
LiVe Well Health Portal
Intermountain
Zone 1
Add a Web Part
Category
Subcategory
Facilities
Enterprise Keywords
Business/Clinical
Comments
Browser Title
Public Website | Feedback | A-Z Index | Code of Ethics | Support

Image 20. Intermountain Healthcare Intranet: Content Edit Page. Team members paid careful attention to providing a good user experience for content authors. They wanted to encourage people to continue to contribute content and generate enthusiasm for working on their sites; the team thus ensured that the content input tools and templates were straightforward and easy to use. *92_Intermountain_20_contentpagedit_live.png*

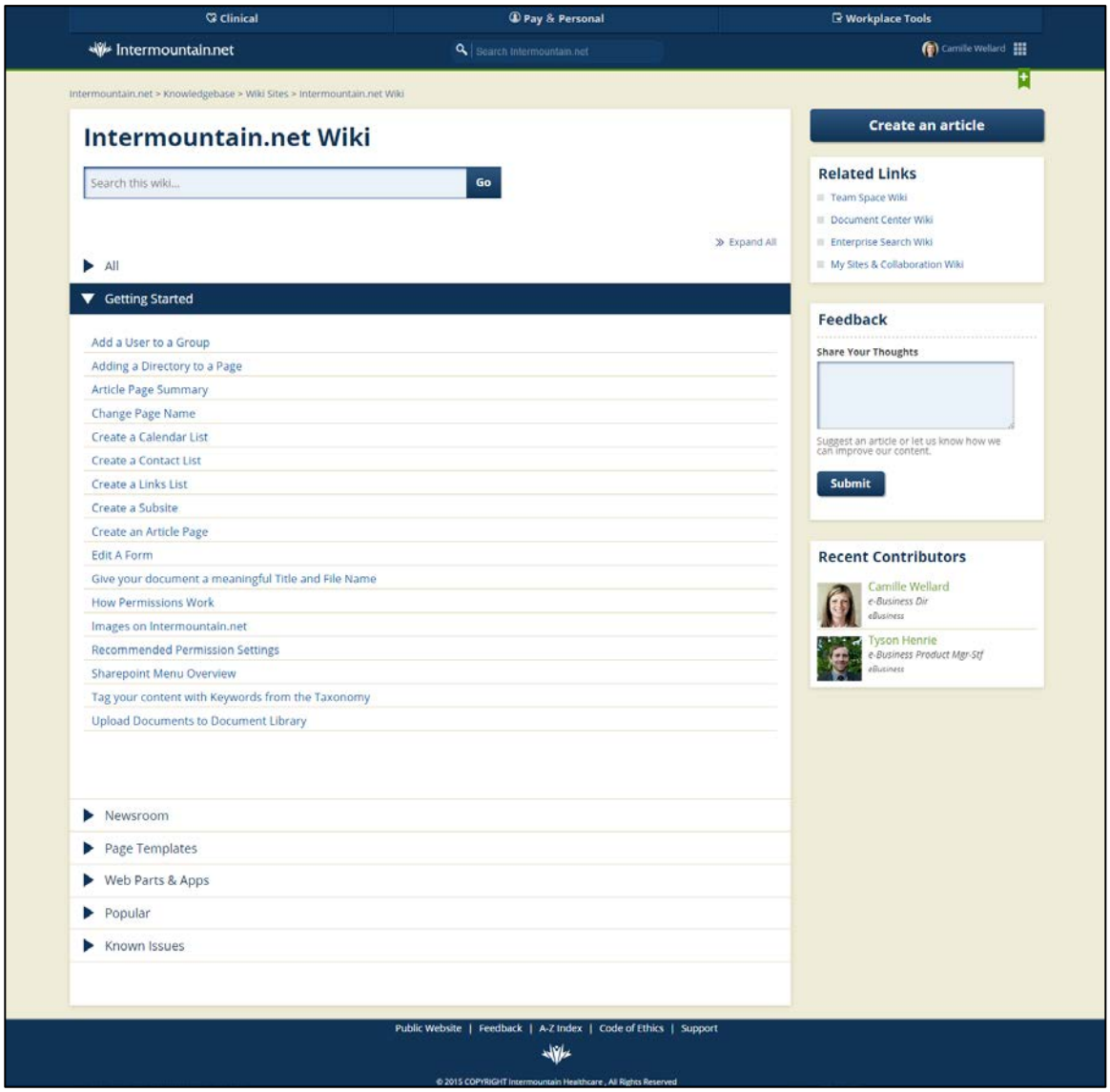


Image 21. Intermountain Healthcare Intranet: Training Wiki Homepage. *93_Intermountain_21_trainingwikihome_live.png*

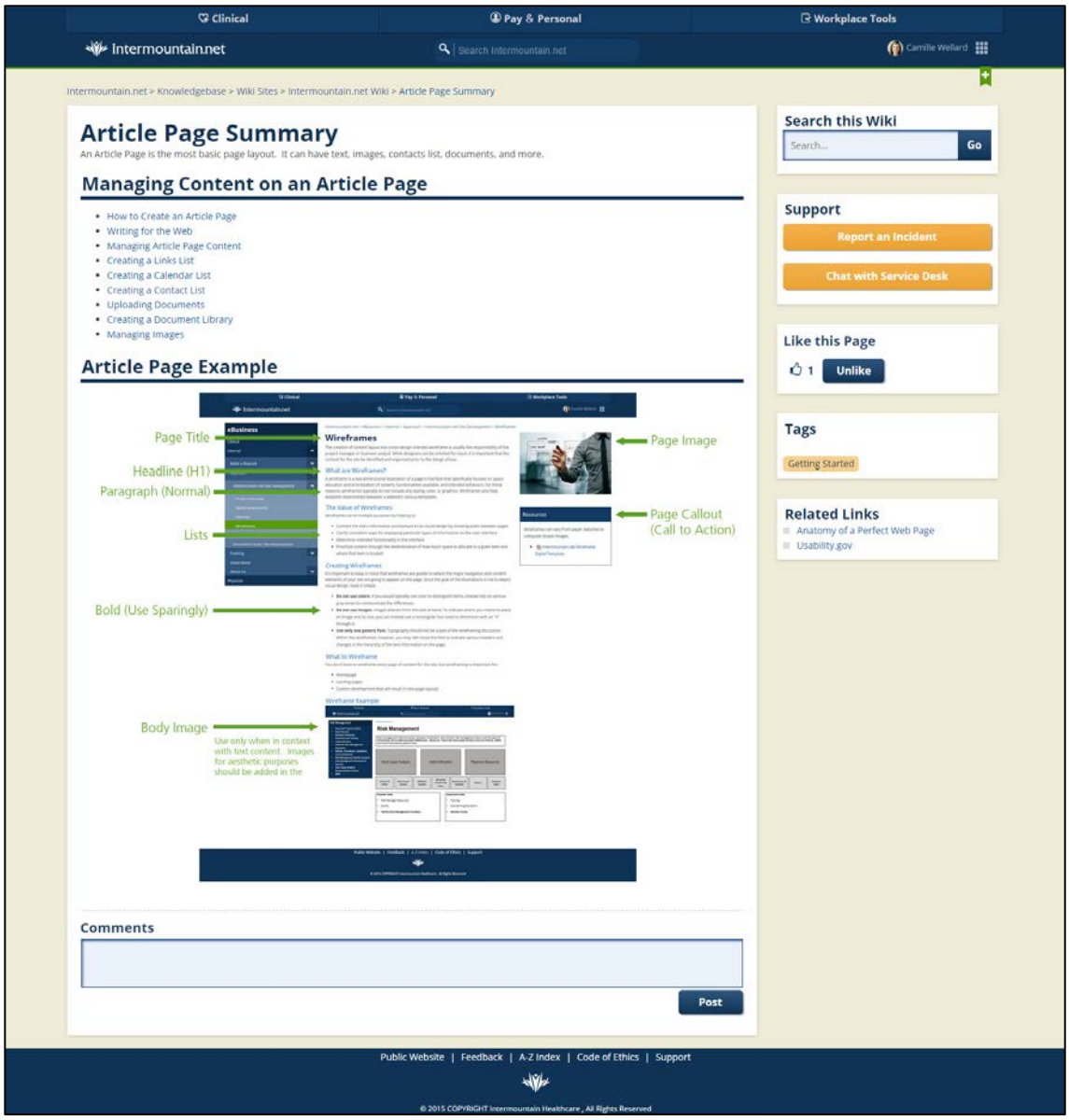


Image 22. Intermountain Healthcare Intranet: Training Wiki Example Article. *94_Intermountain_22_trainingwikiarticle_live.png*

Clinical | Pay & Personal | Workplace Tools

Intermountain.net | Search Intermountain.net | Carrille Wellard

Intermountain.net > Knowledgebase > Wiki Sites > Intermountain.net Wiki > Writing for the Web

Writing for the Web

On the web, people are in a hurry. They skim and scan, looking for quick answers to their questions. Help your readers quickly find what they need with these web writing tips: When writing for the web, using plain language allows users to find what they need, understand what they have found, and then use it to meet their needs. It should also be actionable, findable, and shareable.

Why it Matters

People read differently online than they do when they read print materials - web users typically scan for information.

Identify Your Users' Top Tasks

People come to your site with a specific task in mind. When developing your site's content, keep your users' tasks in mind and write to ensure you are helping them accomplish those tasks. If your website doesn't help them complete that task, they'll leave. Conduct market research, perform a task analysis and other types of user research, and analyze metrics to better understand what users are looking to accomplish.

Knowing your users' top tasks can help you identify:

- Content to feature on your homepage or landing pages
- Page headers and sub headers.
- A logical structure to each page's content

How to Write User-Friendly Content

It's important to target your audience when writing for the web. By knowing who you are writing for, you can write at a level that will be meaningful for them. Use the personas you created while designing the site to help you visualize who you are writing for.

- **Use the words your users use.** By using keywords that your users use, you will help them understand the copy and will help optimize it for search.
- **Chunk your content.** Chunking makes your content more scannable by breaking it into manageable sections.
- **Front-load the important information**. Use the journalism model of the "inverted pyramid." Start with the content that is most important to your audience, and then provide additional details.
- **Use active voice**. "The board proposed the legislation" not "The regulation was proposed by the board."
- **Use short sentences and paragraphs**. The ideal standard is no more than 20 words per sentence, five sentences per paragraph.
- **Use bullets and numbered lists**. Don't limit yourself to using this for long lists—one sentence and two bullets is easier to read than three sentences.
- **Use clear headlines and subheads**. Questions, especially those with pronouns, are particularly effective.
- **Use images, diagrams, or multimedia** to visually represent ideas in the content. Videos and images should reinforce the text on your page.
- **Use white space.** Using white space allows you to reduce noise by visually separate information.

It's also important to create an editorial calendar. You can encourage visitors to return to your site by keeping your content fresh and up-to-date.

Web Writing Checklist

- Less is more! Be concise.
- Break documents into separate topics.
- Use even shorter paragraphs than on paper.
- Use short lists and bullets to organize information.
- Use even more lists than on paper.
- Use even more headings with less under each heading.
- Questions often make great headings.
- Present each topic or point separately, and use descriptive section headings.
- Keep the information on each page to no more than two levels.
- Make liberal use of white space so pages are easy to scan.
- Write (especially page titles) using the same words your readers would use when doing a web search for the info.
- Don't assume your readers have knowledge of the subject or have read related pages on your site. Clearly explain things so each page can stand on its own.
- Never use "click here" as a link - link language should describe what your reader will get if they click the link.
- Eliminate unnecessary words.

Comments

Post

Search this Wiki

Search... Go

Support

Report an Incident

Chat with Service Desk

Like this Page

1 Unlike

Tags

No tags have been added.

Public Website | Feedback | A-Z Index | Code of Ethics | Support

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Image 23. Intermountain Healthcare Intranet: Writing Guidelines.
95_Intermountain_23_trainingwritingguidelines_live.png

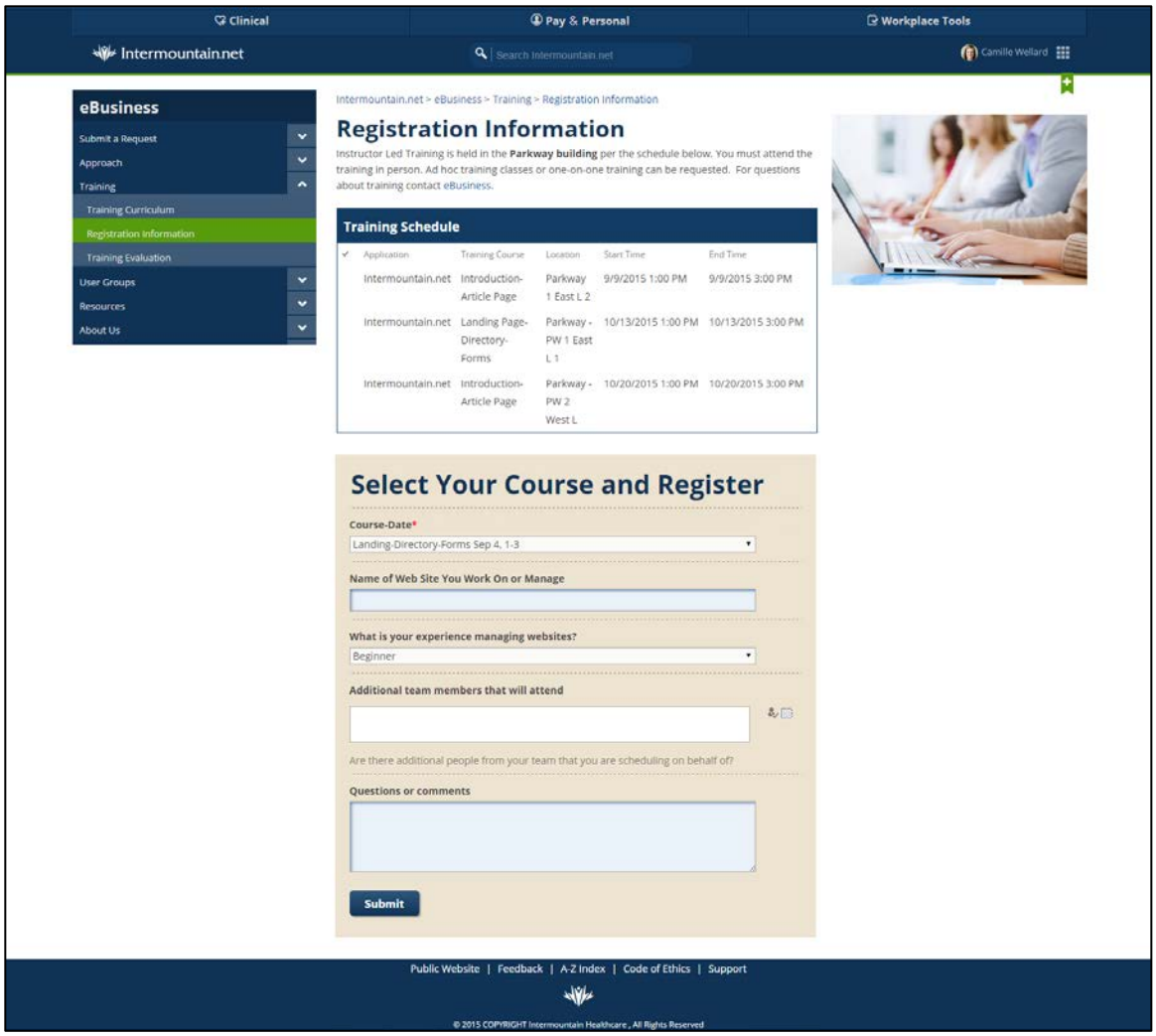


Image 24. Intermountain Healthcare Intranet: Training Course Registration. *96_Intermountain_24_trainingregistration_live.png*

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Bug Tracking / Quality Assurance	• SharePoint List
Design Tools	• Adobe Creative Suite, InVision
Content Management Tools	• SharePoint 2013
Search	• SharePoint 2013

RESULTS AND ROI

The Intermountain team has seen a 100% increase in mobile site visits since it launched the new designs. The vast majority of the traffic still comes from desktop users, but the increase in mobile traffic is promising.

To gauge the success of the new designs, the Intranet team members used several key indicators:

- **Increased engagement:** "We have seen an increase in engagement from our site owners and content contributors. Site owners are creating more content and looking to the intranet more and more as a way to promote initiatives and achieve business goals. There is also an active user group that is interested in improving their sites and extending their offerings." (Wellard)
- **Better quality content:** "Site owners and contributors are building higher quality sites. They are utilizing the writing standards and templates that have been provided for them. They are also transitioning old paper processes into online processes. Finally, they are turning their documents into web pages, which helps increase the quality of content on the site." (Wellard)
- **Inclusion in projects:** "Internal stakeholders are seeking the consulting and involvement from eBusiness in their projects. They are looking to integrate their third-party applications into the intranet to create a better, seamless experience. The reason they are reaching out to us is that they like the strategy and approach with the new designs and can see the value in working closely with the eBusiness team to achieve their objectives." (Wellard)
- **Increased user participation.** "Increased usage and participation is one way we track success. For instance, in employee profiles, we can track how many people have uploaded a photo or populated a specific field. At the very least, increased participation indicates interest in or perceived usefulness of any given feature by our employees." (Tyson Henrie, Product Manager)

- **Changes in user feedback.** "Receiving positive user feedback has been helpful in gauging the success of the new designs. We are also able to correlate positive results when we *don't* get feedback. For example, when we make a change to the homepage and employees start using it without problems, we know that it is working." (Henrie)
- **User reliance on intranet features.** "Search is one of the most important tools we provide to employees. When search functionality is broken, we hear about it immediately. On the other hand, sometimes there are features we don't hear are broken until several days or even weeks after they are broken. This can be a good indication that the feature has not been highly adopted. Although this metric is more informal, it is a helpful way for us to measure the value of the tools we build." (Henrie)

LESSONS LEARNED

The Intermountain project team members share some lessons learned:

- **Know where you're going.** "Intranets are tough. There are many different systems and people you need to work with to create a valuable, end-user focused portal for employees. One thing I've learned is that you need to plant seeds early and often in order to achieve long-term strategies and objectives. For example, if you want to integrate with another internal system to increase usability and overall employee satisfaction, it can take a lot of time to 1) convince the other teams that it is a meaningful project; and 2) complete the work to make the integration. If you know where you're going, you can plant seeds with key stakeholders when appropriate. When the time is right, people will think to include you in their project." (Wellard)
- **Nothing encourages a team or demonstrates value more than a win.** "Start with the easy things. When you can show value and show it with a quick turnaround, it has a snowball effect. Not only will the team that you helped provide the quick-win recognize the value and want to continue to work with you on future projects, but other teams will as well." (Wellard)
- **A strong governance model is key.** "As internal ecosystems become more and more diverse and the application landscape looks to become more integrated, it is important to have support and policies in place to ensure that it doesn't become the Wild West." (Wellard)
- **Building strong relationships helps you identify where you'll get the biggest bang for your buck.** "By building strong relationships with key sponsors and stakeholders, they will look to the intranet as a key component to their strategies. Relationships will help connect the dots between complementary objectives." (Wellard)

- **Build the case for usability.** "I was in a meeting recently and someone used the term 'usability' without me mentioning it first! We are ruthless promoters of usability and regularly start our discussions with a 'Call for Usability in the Enterprise.' Usability needs to be part of corporate culture, and by providing a good model for usability through the intranet, you can demonstrate the value and role usability can have with other applications." (Wellard)
- **Collaborate with end users.** "I learned it's extremely important to collaborate with end users to effectively understand their viewpoint. Yet, once all the user data has been gathered, it's imperative that you stay focused on your unique perspective. Be flexible, but make the right decisions to benefit your organization as a whole." (Josh Horton, Business Analyst)

Nate Green, the Engineering team lead, shares some of his team's SharePoint lessons learned:

- **UX engineers with SharePoint experience are very valuable.** "SharePoint is a beast. If your UX staff is willing to learn it, your SharePoint customizations will be better."
- **Apply customizations to multiple cases.** "When creating customizations, it's best if you can find ways for them to be applied to multiple use cases rather than individual use cases."
- **Reusability is important in large intranets.** "Build your customizations around your platform's strengths. SharePoint does certain things very well. Leverage those strengths rather than reinventing the wheel where possible."
- **Talented and available system administrators are important.** "Most of our 'blocker' issues were due to platform issues. Make sure you have enough support staff to help as your Intranet grows."

NAV CANADA

OVERVIEW

COMPANY

NAV CANADA is Canada's Air Navigation Service Provider (ANSP), managing 12 million aircraft movements a year for 40,000 customers over more than 18 million square kilometres. It is the world's second-largest ANSP by traffic volume.

Headquarters: Ottawa, Canada

Company locations: NAV CANADA operates in 130 facilities located across Canada.

Locations where the intranet is used: In all Canadian provinces and territories, and remotely from Asia, Europe, the Middle East, the US, and the UK.

Annual sales: $1.27 billion CAD (reported revenue for 2014)

THE INTRANET

Users: The company's intranet, Central, supports all of NAV CANADA's 4,650 employees, whether they connect via one of the company's 130 facilities located across Canada or remotely while travelling to the many countries where NAV CANADA sells its air traffic management systems technology. Central is used as a hub for communicating information available to all employees, such as corporate policies, benefit and compensation content, company news, service desk FAQs, and the employee directory. Central is used as the reference point for people managers seeking information on key managerial activities, such as personal development and recognition. Central is also the organization's standard collaboration platform, hosting departmental, working group, and project repositories for storing and collaborating on content using a single platform.

Mobile approach: HTML5 mobile web app designed for smartphone form factor

Technology platform: SharePoint 2013

TEAM

Design team: Approximately 200 people were involved in the intranet project.

The project was sponsored by senior leaders from every function, including the CEO. Each leader appointed a functional senior manager to the project's steering committee, which met on a monthly basis to oversee the project.

The 15-person core project team included resources from both NAV CANADA and its external partners, who were co-located and actively contributed to the project's success.

The core team was supported by an extended business team of 150 people located across the country, many of whom would become content managers and/or site owners for their respective departments; and an extended IT team of 20 people who played pivotal roles in helping to implement and manage the underlying infrastructure.

Leadership: Simon Robert, Program Director

Core Team: Frances Ashe, Project Coordinator; Kim Boulet, Change Management Lead; Can Ciplak, SharePoint Administrator; Jean-Pierre Frigon, SharePoint Developer; Brad Garner, SharePoint Developer; Dan Heron, Business Analyst; Raymond Ho, Technical Delivery Manager; Jorden Johnson, User Experience Coordinator; Bethany Johnston, Project Manager; Nick Kellett, Engagement Partner; Julie Kent, Business Analyst; Erik Mercier, Functional Lead; Goran Mraovic, User Experience Designer; Daniel Sanscartier, SharePoint Architect; Milos Stojanovic, SharePoint Developer; Hoking Xu, SharePoint Developer

EXTERNAL PARTNERS

StoneShare (Ottawa): IT consulting firm that provides solutions and services focused exclusively on Microsoft's SharePoint platform. StoneShare was the prime partner and key contributor in planning the intranet replacement project and was responsible for architecting and implementing the new intranet.

Atomic Motion (Ottawa): Design and web development company specializing in design, digital marketing, and app/software development. Atomic Motion was responsible for the new intranet's user experience design.

INTRANET TEAM

Team members shown here (left to right): Kim Boulet, Milos Stojanovic, Daniel Sanscartier, Dan Heron, Raymond Ho, Jean-Pierre Frigon, Bethany Johnston, Erik Mercier, Simon Robert, Nick Kellett, Hoking Xu, Brad Garner, Can Ciplak, Goran Mraovic, and Frances Ashe.

HIGHLIGHTS ABOUT THIS WINNER

- **Simplicity in Look and Feel:** Calm colors and lots of white space make the site feel simple and soothing.
- **Business Communication:** Several features help employees truly understand the business NAV CANADA is in and recognize the various projects and undertakings happening at the organization. For example, the *Project Highlight* and *Employee Highlight* features on the homepage call out current activities, processes, and information that are core to the business.
- **Project and Department Information:** Thorough and consistent information about departments and projects are communicative and helpful, and transform many groups and individuals from strangers to understood and very approachable colleagues.
- **Help and Wikis:** Many intranets leave users to their own devices, but Central helps users through processes such as creating a collaboration site. Guidance and suggestions help employees to be more productive and confident as they do tasks that are new to them.

- **Targeted Mobile:** A few very important features, such as employee search, are offered with a well-thought-out mobile experience.

BACKGROUND

The impetus for the intranet redesign was multi-pronged and was a response to both content management and technology challenges the organization was facing.

NAV CANADA's content management requirements had grown substantively as the company was transitioning to a digital workplace where reliance on the exchange of electronic information and the tools that facilitate these transactions were becoming increasingly important to its business.

The company's employee-facing legacy portal was more than 10 years old, no longer met business requirements, and carried a large infrastructure footprint that was expensive to maintain. The underlying software platform was also severely limited in its capabilities compared to modern intranet technologies; it also suffered from a dated user experience and ineffective search engine, making it very difficult for employees to find information and collaborate. Managing the site's content required IT resources spending unnecessary time and effort to make even the simplest of changes.

Without a modern enterprise content management (ECM) platform, content management needs were met outside the legacy portal using a mix of custom-developed and commercial point solutions. Some of these systems were more than 10 years old as well, and many were no longer meeting basic business requirements such as offering reliable search and self-service tools. Not only were these systems obsolete, but they addressed only a portion of the company's overall content management requirements.

These deficiencies were driving employees to spend excessive amounts of time navigating these legacy information silos to manage and find the information they needed on a daily basis. This meant that the rising opportunity costs of the effort spent using these legacy systems were significant, costing the company time and productivity that could otherwise be spent on higher-value work. Employees were demanding a more effective and modern solution capable of meeting business requirements.

Before they could develop an action plan, team members needed to do research and conduct planning activities. With the assistance of the company's lead systems integrator, StoneShare, the team completed a comprehensive planning phase over a period of four months, known internally as "phase 0." This was a chance for the team to gather requirements, conduct business process reviews, develop the SharePoint architecture, and produce an implementation roadmap and risk assessment plan for deploying SharePoint to the enterprise.

"The work conducted with StoneShare was instrumental in putting forward a clear and convincing business case to replace the legacy intranet, which was supported by a very strong fact base," says Simon Robert, ECM Program Director. "However, it's important to note that phase 0 also provided a tremendous opportunity for the project team to engage all the key stakeholder groups — 11 departments in our case — secure their buy-in early, and begin managing the change required for the new intranet."

Goals

NAV CANADA created its new intranet to address the following goals:

- **Provide a modern and effective online experience** that would
  - Improve search
  - Improve user experience and enhance design
  - Streamline content layout and navigation
  - Reduce legacy portal content by 70%
- **Offer a wider range of online services to help employees**
  - Access corporate content
  - Receive content on personal and corporate mobile devices
  - Engage with each other and with the organization through the use of collaborative technologies
- **Reduce costs associated with web technologies to**
  - Eliminate obsolete systems and infrastructure
  - Provide self-serve content management capabilities

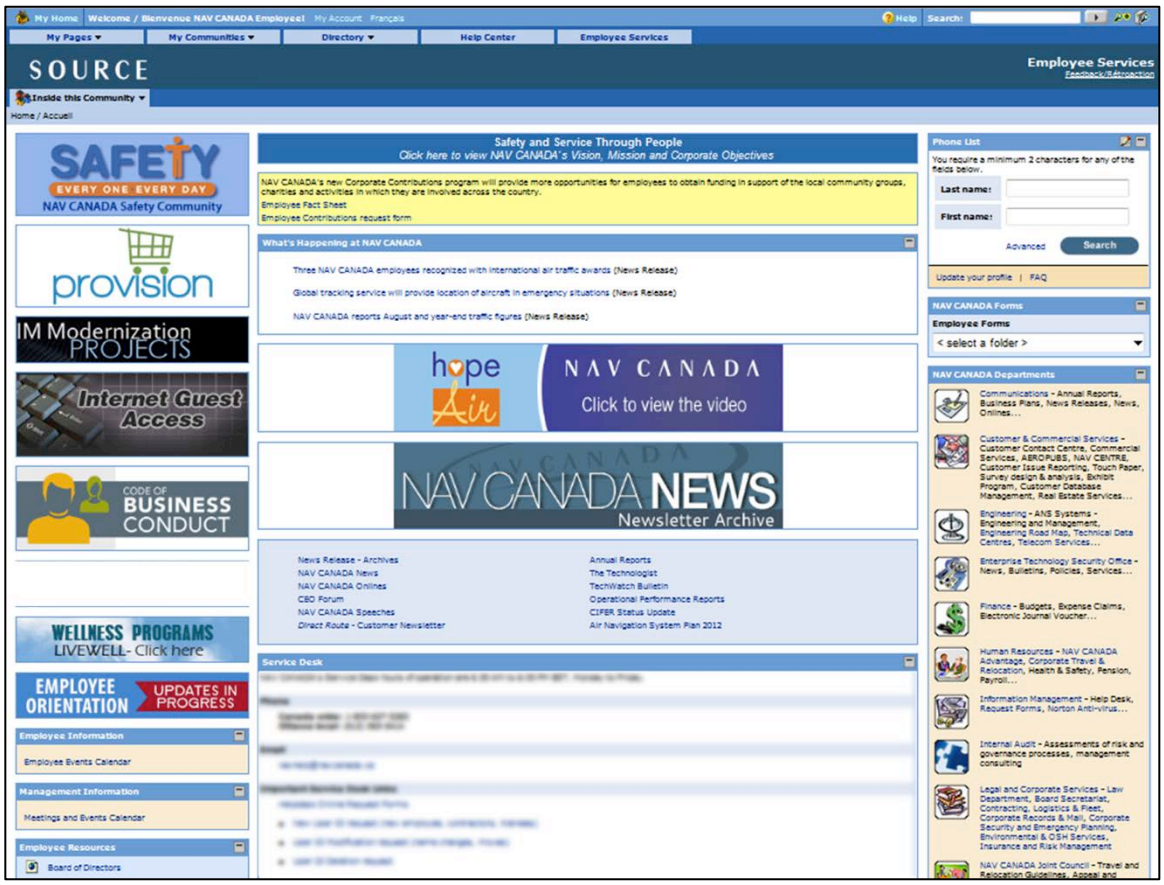


Image 25. NAV CANADA Intranet: Legacy Portal Homepage. On the old intranet, departments would compete for real estate on the homepage, which resulted in an excessive amount of links and banners to promote various initiatives. The content clutter overwhelmed users, and the site was no longer meeting business requirements. *97_NAVCANADA_01_HomePage_version1.png*

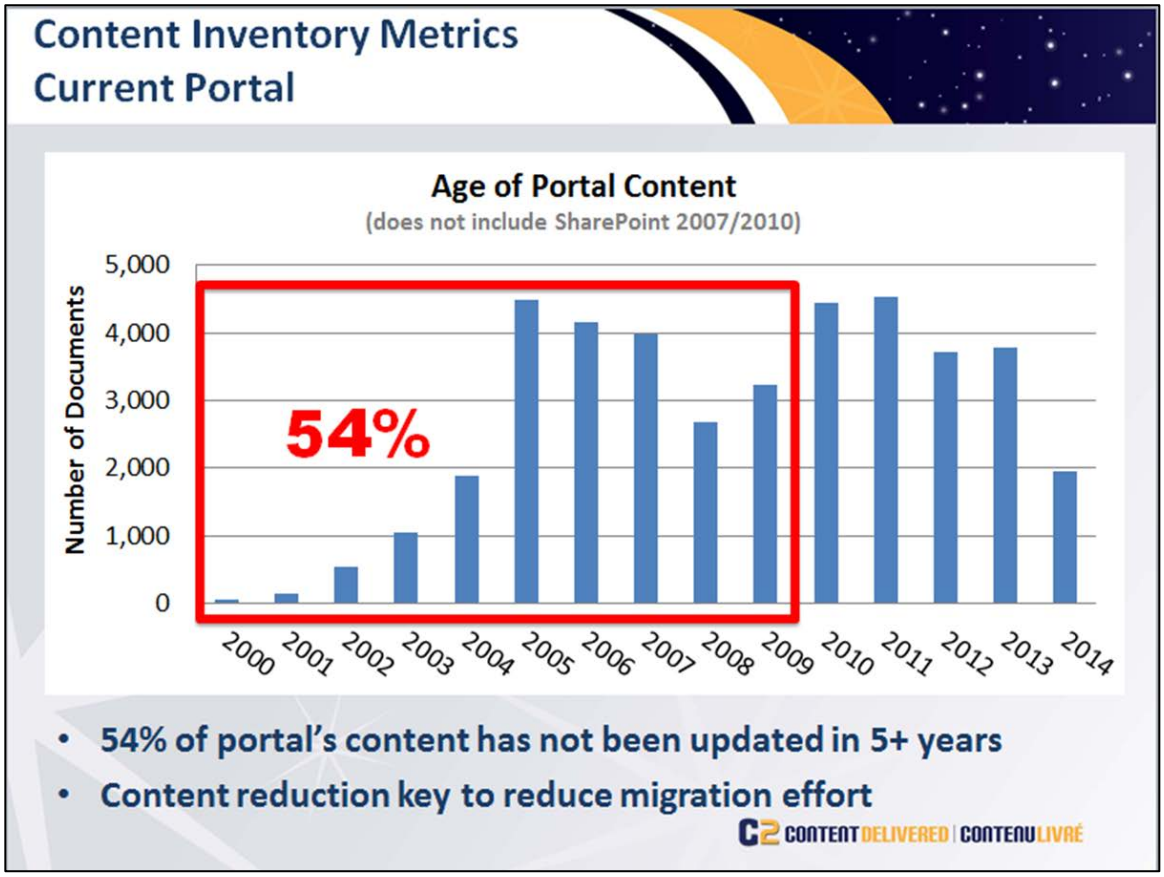
CHALLENGES

The challenges inherent in this type of undertaking are significant. The NAV CANADA team overcame many obstacles with this project, including the following:

Content Challenges

- **Content retention:** When the NAV CANADA's team found out that 54% of documents hadn't been modified in five years they knew that users were over-retaining content and the team had to take a no-nonsense approach to content migration.
- **The importance of content reduction:** The team realized early on that it needed to reduce the amount of content that would be migrated from the legacy systems because — among other reasons — the less content migrated, the less time the migration would require.

- **Challenges with the content inventory and migration (CIMM) tool:** The project team decided to develop a custom content inventory and migration tool (CIMM) for the legacy portal's content as there were no third-party tools that could handle the migration. The CIMM tool evolved from a simple SharePoint list to a complex process requiring much more effort than anticipated to complete. The development of CIMM in the early stages of the project disrupted the technical team's work until the solution was completed.
- **Migrating critical content:** Planning and executing such a large migration (more than 200,000 documents) while trying to preserve the content integrity — such as location and metadata — was by far the greatest challenge faced during the project.



Following a detailed content inventory of the NAV CANADA legacy intranet, the design team produced this slide to inform stakeholders of the state of the legacy portal's content and to reinforce the message that content needed to be cleansed prior to migrating to Central. The slide clearly shows that 54% of the content had not been updated in five years. This data was key to get stakeholder buy-in for the team's plan to cut content on the legacy portal by 70%.

Other Challenges

- **Managing enterprise search permissions:** Central's powerful search function identified a small number of documents that did not have sufficient permissions in their original SharePoint 2007/2010 environments. Due to a poor search experience in these legacy environments, these permission gaps were not detected until after the content was migrated and live in Central. As a result, the project team had to work closely with the business after go-live to address the permission gaps on affected documents.
- **Business resource availability:** The intranet replacement project required substantial business involvement from every department of the company. Securing these resources was relatively straightforward; however, ensuring that this large group of nondedicated project resources received appropriate support for the duration of the project required a tremendous amount of effort on the part of the project team to keep these individuals informed and engaged.
- **Governance:** The SharePoint governance strategy included the decentralization of select administrative responsibilities to the business to allow it to self-administer its SharePoint sites. This change required a tremendous amount of planning, communication, and education on a large scale.

DESIGN REVIEW

Homepage

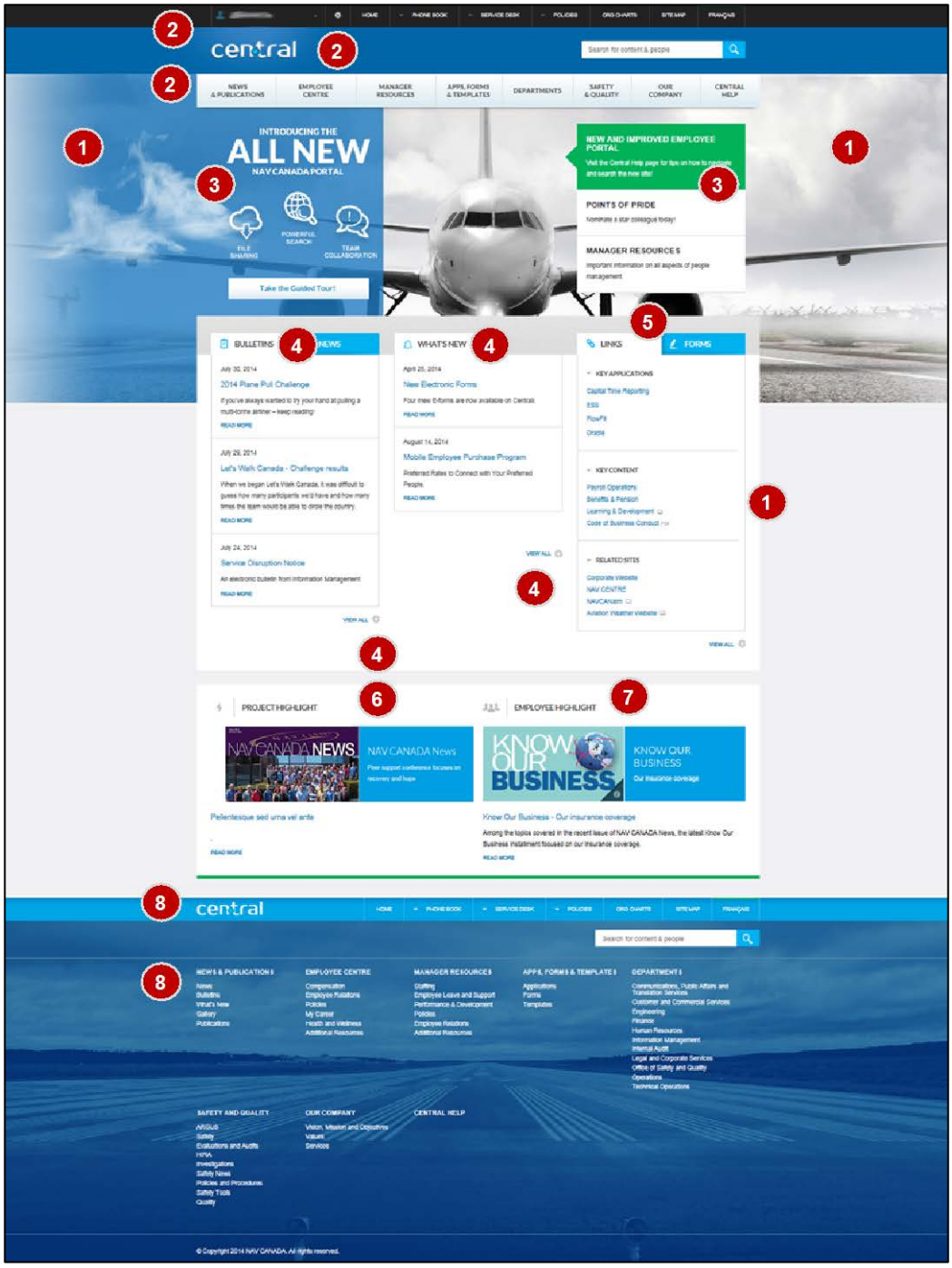


Image 26. NAV CANADA Intranet: Homepage.
98_NAVCANADA_02_Homepage_Live.png

Homepage Highlights

1. **Calm, On-Brand Design:** The simple-looking design of the Central homepage is a welcome greeting for some 4,650 employees at NAV CANADA. Soothing blues, greys, and whites are accompanied by a rotating background image (carousel) of three current and national campaigns and/or events.
2. **Navigation:** The three top, horizontal layers of navigation are easy to identify due to their location and different background colors: black for utility navigation, blue for search, and light grey for global navigation. There is good contrast between the color of the link text and the menu background color.
3. **Carousel:** Promotions for features of the new intranet design are given prime real estate on the homepage, in the carousel at the top. The promotion shown in the screenshot above was used on go-live, with text that appears on the left making employees aware of the new intranet and its key improvements, including: file sharing, powerful search, and team collaboration. The *Take the Guided Tour!* button opens a rich PDF slideshow taking the user through the intranet's key features. The head-on image of an airplane provides a strong visual related to the core business. The white boxes to the right can be selected or just watched as they rotate through. In addition to promotions, the carousel houses announcements and other special interest stories, such as *A Moment in Aviation History.*
4. **News and Announcements:** Various types of news, including bulletins and announcements about processes and new programs, are readily available on the homepage. Obvious blue links, an international date, and short descriptions make the content thorough and understandable. *View All* links lead to the full set of news-related items.
5. **Links and Forms:** Commonly used applications, pages, and other websites are consolidated on the front page for employees.
6. **Project Highlight:** One way to empower all employees is to make them aware of core projects and goals. This section is allocated to this goal. For example, the *Flight Planning* piece explains how this integral planning process works.
7. **Employee Highlight:** This section is dedicated to promoting initiatives or events that are directly related to employee life at NAV CANADA. For example, a piece about *Our insurance coverage* discusses the business insurance and how it works.

8. **Fat Footer and Repeated Utility Navigation:** The wide footer navigation at the bottom repeats the global navigation topics and lists the same links that appear in the megamenu. The utility navigation that appears at the very top of the site — *Home*, *Phone Book*, *Service Desk*, and so on — is also repeated just above the fat footer. These end-of-page navigation offerings give employees one more chance to find the information they are looking for when they have scrolled to the end of a page. Making their background a different color than the page content also makes them easy to identify and scan to, or ignore if not needed.

Tabs on Homepage

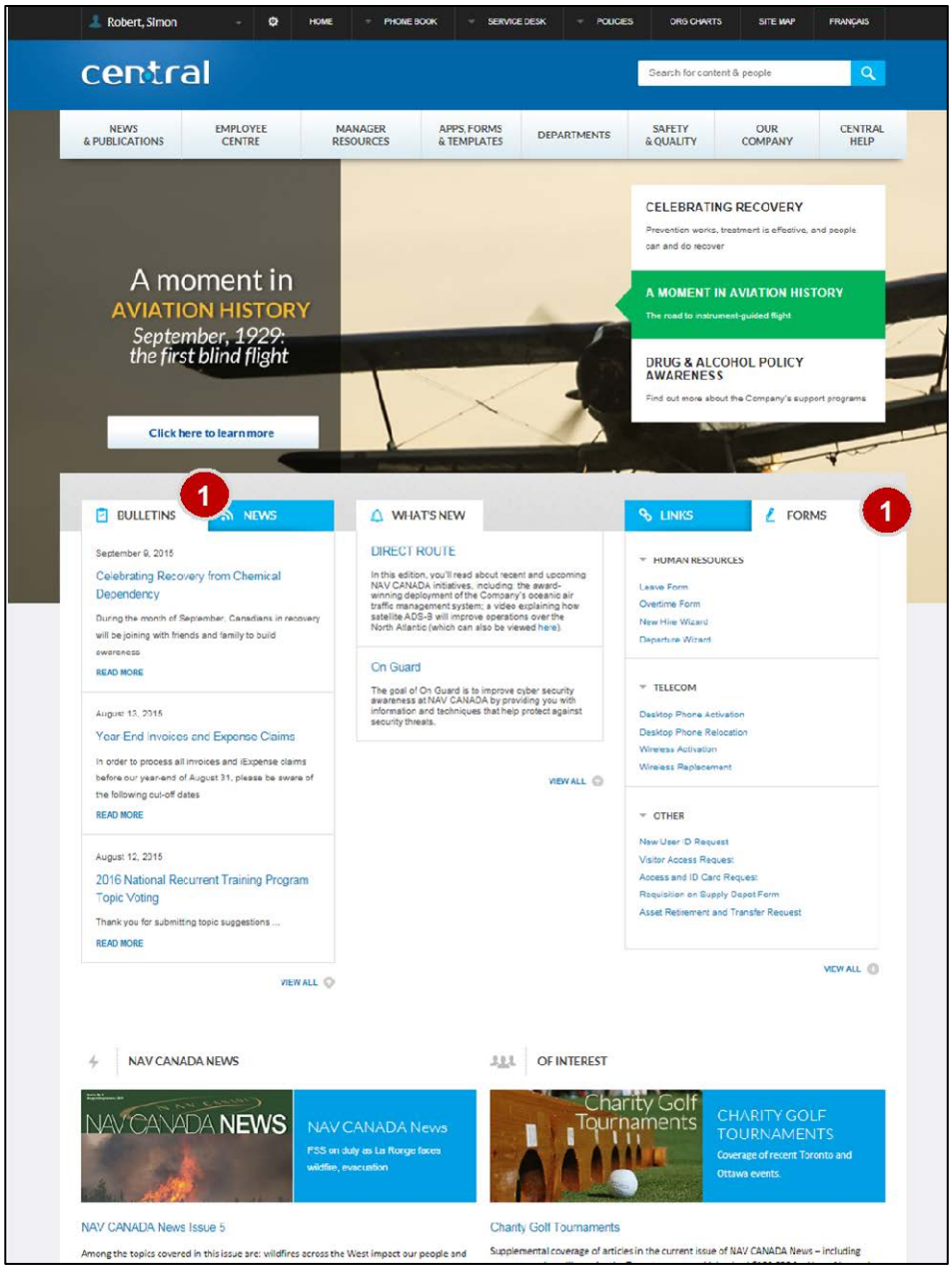


Image 27. NAV CANADA Intranet: Homepage with Forms Tab.
99_NAVCANADA_03_Homepage_Forms_Live.png

Tabs on Homepage Highlights

1. **Small Tabs:** These allow more information to be quickly accessed on the homepage without cluttering the page with too many links. It's important that these are visible and clickable, as they are on Central.

Navigation and Search

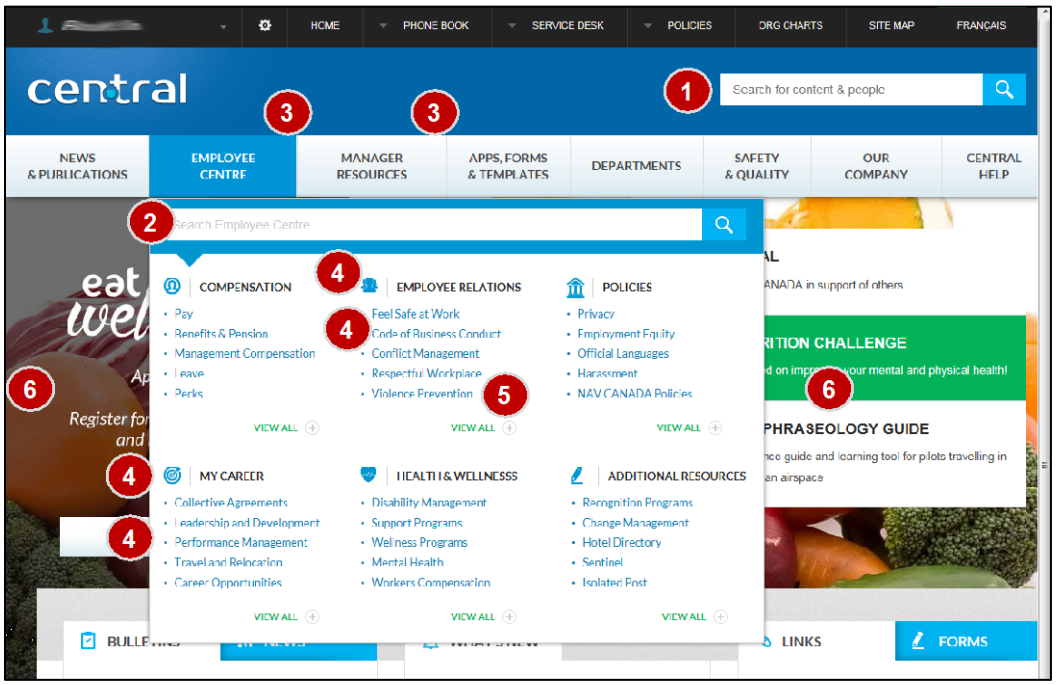


Image 28. NAV CANADA Intranet: Navigation and Search.
100_NAVCANADA_04_TopLevelNavigation_Live.png

Navigation and Search Highlights

1. **Search Field:** The site search field appears in an expected location: the upper right of all pages. The white field is offset by the darker blue background, and the search magnifying glass button on a lighter blue background stands out.
2. **Scoped Search:** When the global navigation megamenu opens, the first item that appears is a scoped search field. The grey prompt text reads *Search Employee Centre* or *Search*, depending on the menu item selected. This informs users who read the prompt that a search here would be querying only in that section of the intranet.
3. **Selected Menu:** The global menu item that is selected is differentiated with a blue background while the rest of the menu backgrounds remain white. This small effect is a wayfinding cue to help employees.
4. **Text:** The topic headings are black text, indented, all capital letters, and demarked with an icon; the links are blue text, outdented, title case, and bulleted.
5. **List:** Each menu item offers the five most commonly needed links; the rest of the links are available through the *VIEW ALL* link.
6. **Width:** The megamenu leaves plenty of vertical space to its right and left, making it clear to users that this is, indeed, a menu and not a separate web page.

Search Results

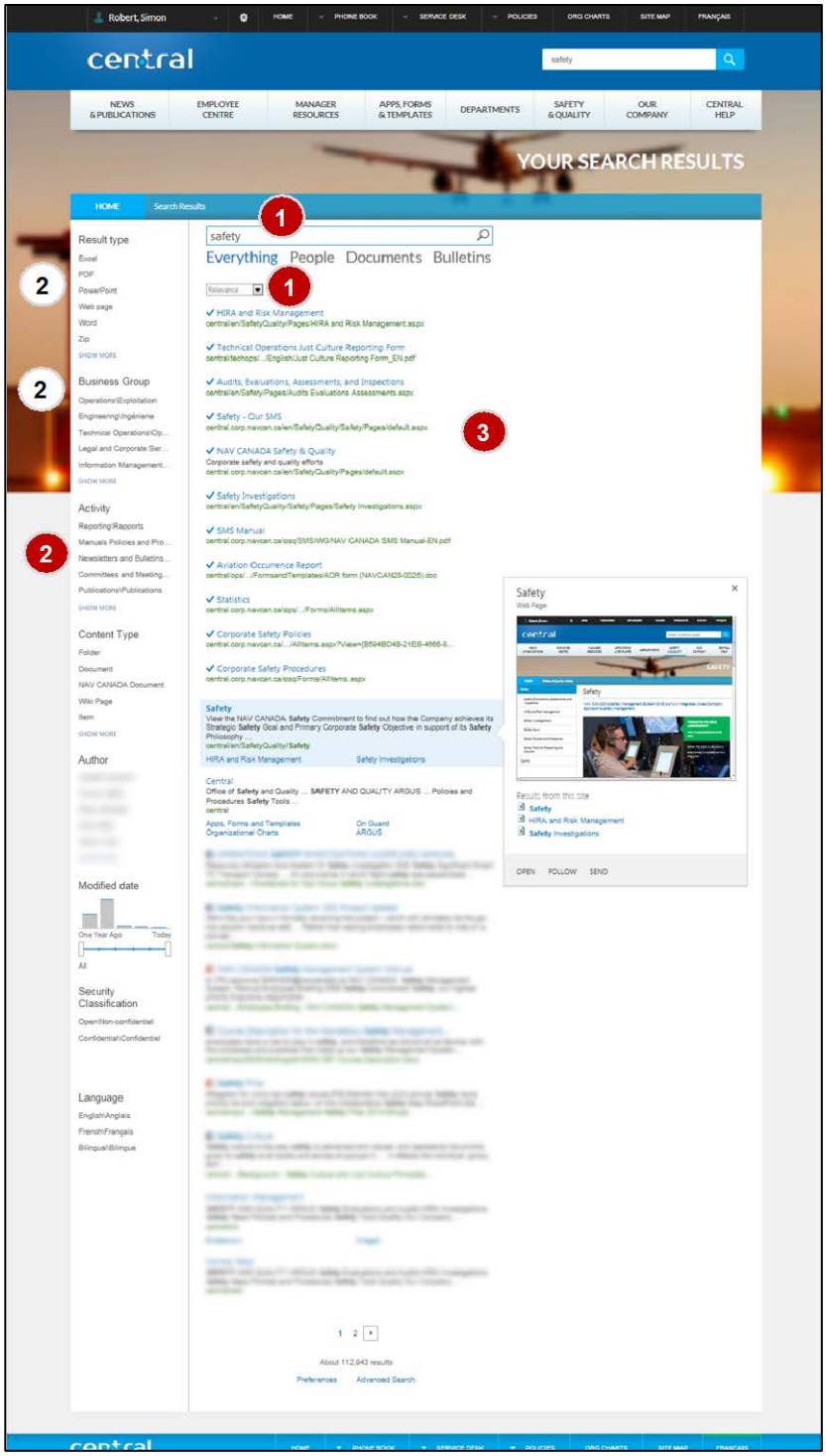


Image 29. NAV CANADA Intranet: Search Results.
101_NAVCANADA_05_SearchResults_Live.png

Search Results Highlights

1. **Categories:** Search results can be categorized by *Everything, People, Documents,* or *Bulletins,* making it easy for employees to find what they want. Designers chose the smartest default: *Everything.* Another smart default was sorting by *relevance,* rather than by date or another option.
2. **Filters:** Several filters appear on the left, sorted in categories. These facets help employees to quickly and easily sift through results to leave only what's desired. Using these facets does not cause the page to refresh; the search results are instantly reduced, with each selected facet allowing users to quickly refine a large amount of documents to a few highly relevant results.
3. **Keywords:** More than 300 keywords have been configured to return specific search results to help promote key content, such as applications, policies, and employee requests. For example, "benefits" takes employees to the *Benefits* page. In the example above, the "safety" keyword returns several promoted results that appear at the very top of the search results. Although this example illustrates a large number of promoted content, on average, only one or two promoted results appear.

Central Help Wiki for Collaboration Sites

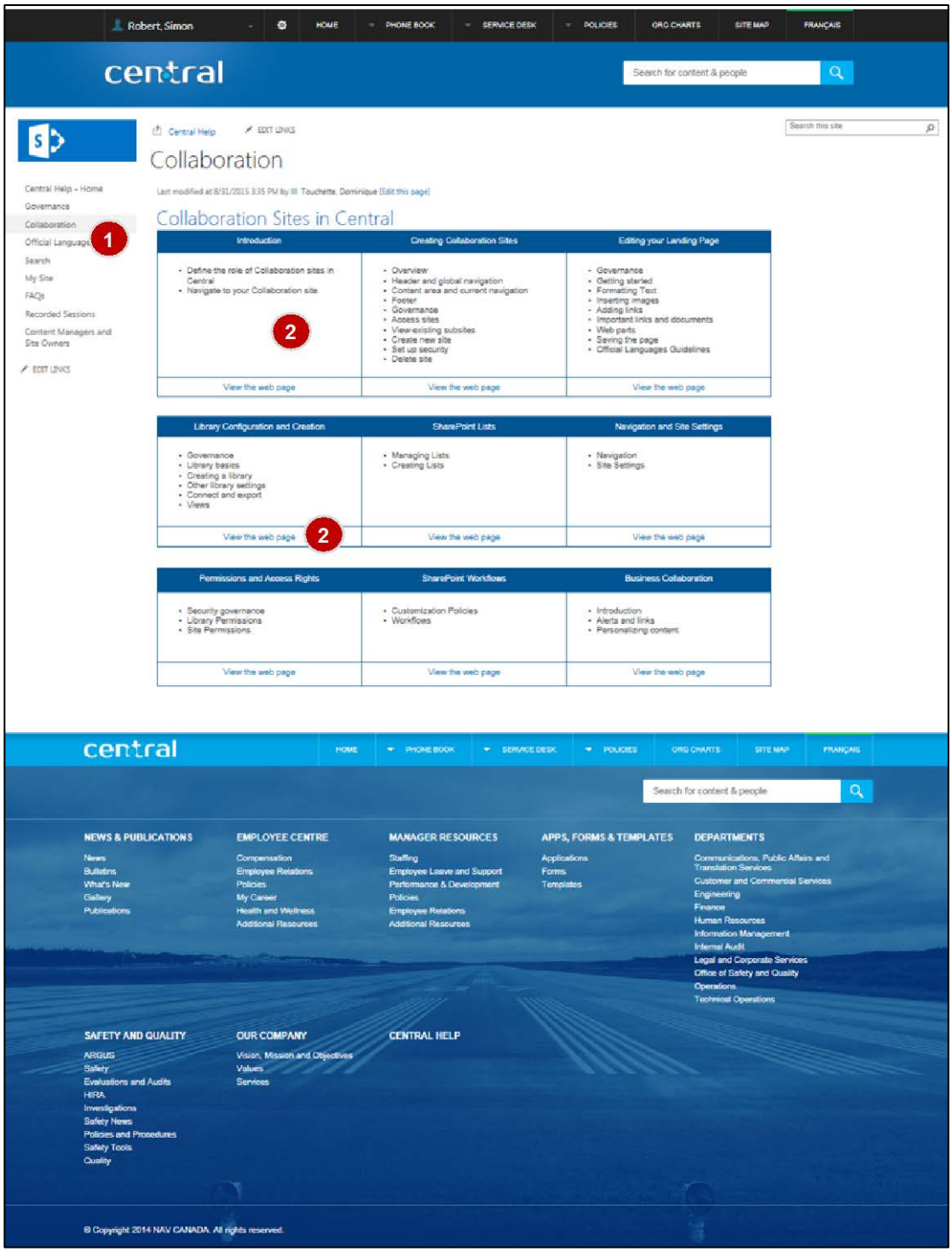


Image 30. NAV CANADA Intranet: *Central Help* Wiki Detail Page.
102_NAVCANADA_06_CentralHelpWiki_Live.png

Central Help Wiki for Collaboration Sites Highlights

Central offers users a large library of online help content. One wiki helps employees through working with collaboration sites. Collaboration sites are a wonderful way to enable teams and individuals to share information about a project without needing a personal developer at every step of the process. Without some guidance, however, the number of collaboration sites and the information in these sites can be hidden in a silo, outdated, or redundant, among other negative things. But not at NAV CANADA, as its help wiki helps to prevent this.

1. **Collaboration Sites Guidance:** Central offers help for anyone interested in creating a collaboration site. Rather than leaving employees to their own devices to figure out collaboration spaces, the Central team went the extra mile to help them create a useful collaboration space from the start.
2. **Steps and Links to More:** A simple table offers guidance for the more common areas people need help with, such as creating the site, editing the main page, and permissions. *View the Web Page* links below each set of steps lead to more guidance.

Central Help

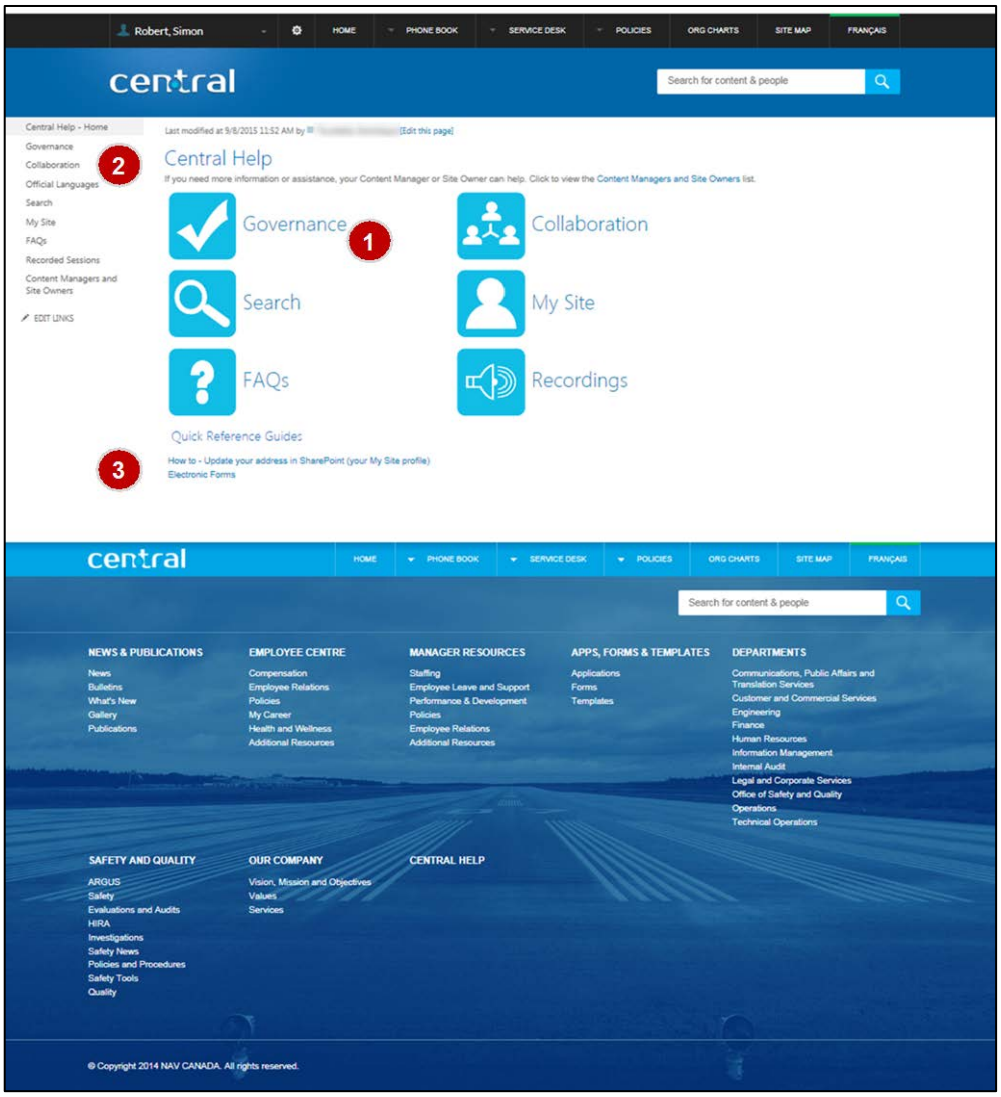


Image 31. NAV CANADA Intranet: *Central Help* Wiki.
103_NAVCANADA_07_CentralHelpWiki_Live.png

Central Help Highlights

1. **Comprehensive Help Resource:** The help main page offers assistance for not only creating collaboration sites, but also for other topics such as *Search* and *Governance*.
2. **Menu:** More topics, such as *Official Languages*, appear in the left-side menu.
3. **Quick Reference:** The *Quick Reference Guides* offer additional help for infrequent tasks, such as updating addresses.

People Search, Smartphone UI

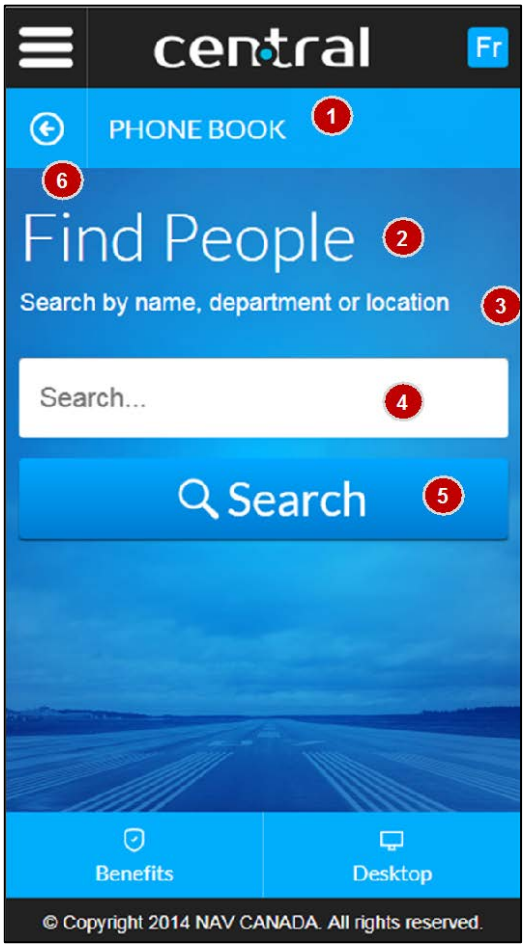


Image 32. NAV CANADA Intranet: People Search in Mobile App.
104_NAVCANADA_08_MobilePeopleSearch1_Live.png

People Search, Smartphone UI Highlights

Central offers a mobile experience for all tasks on a tablet and for some tasks on a smartphone. One such task that works superbly on a phone is searching for people. Accessing the *Phone Book* on Central via a phone opens a very light, simple screen.

1. **Signpost:** *Phone Book* is clearly stated at the top of the page, so people know where they are.
2. **Command:** *Find People* clearly communicates to employees what they can do here.
3. **Prompt:** Options to search by name, department, or location describe specifically which types of things to search for.
4. **Field:** The large text field makes it easy to tap and type terms.
5. **Button:** A large button makes it effortless to tap to invoke the query. The *Search* label and magnifying glass icon make the button highly recognizable.
6. **Back:** An arrow in the upper left takes the employee back a screen.

People Search Results, Smartphone UI

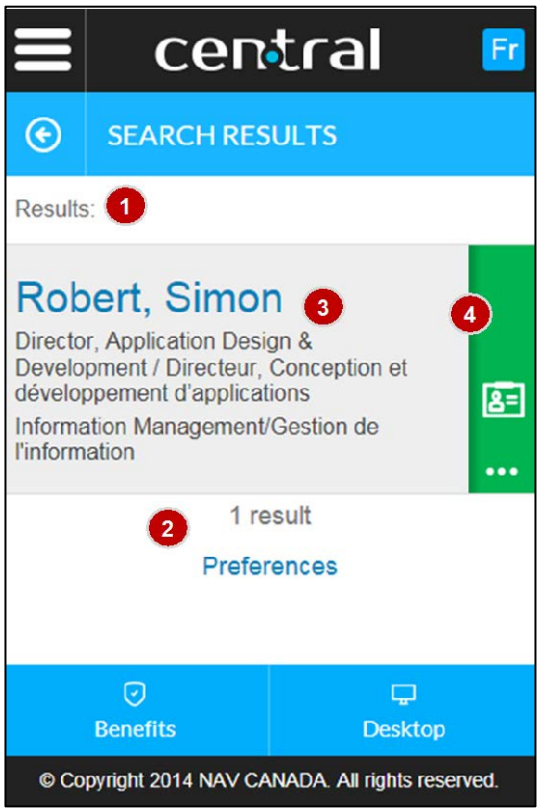


Image 33. NAV CANADA Intranet: People Search Results on Mobile App.
105_NAVCANADA_09_MobilePeopleSearch2_Live.png

People Search Results, Smartphone UI Highlights

1. **Label:** *Results* displays at the top of the page.
2. **Status:** The number of results appears at the bottom of the page.
3. **Name:** The person's name appears in large, legible text, as does his job title below.
4. **Contact and More Information:** Swiping or tapping leads to more information about the person, including a photo.

Employee Profile, Smartphone UI

Image 34. NAV CANADA Intranet: Mobile UI Employee Profile.
106_NAVCANADA_10_MobilePeopleSearch3_Live.png

Employee Profile, Smartphone UI Highlights

1. **Photo:** A large, clear photo helps people recognize each other.
2. **Name and Title:** The person's name and title are easy to find and read.
3. **Telephone Numbers:** The landline and mobile numbers are differentiated with icons.
4. **Email:** Email can be read, copied, or clicked to address a message.

Employee Profile, Desktop UI

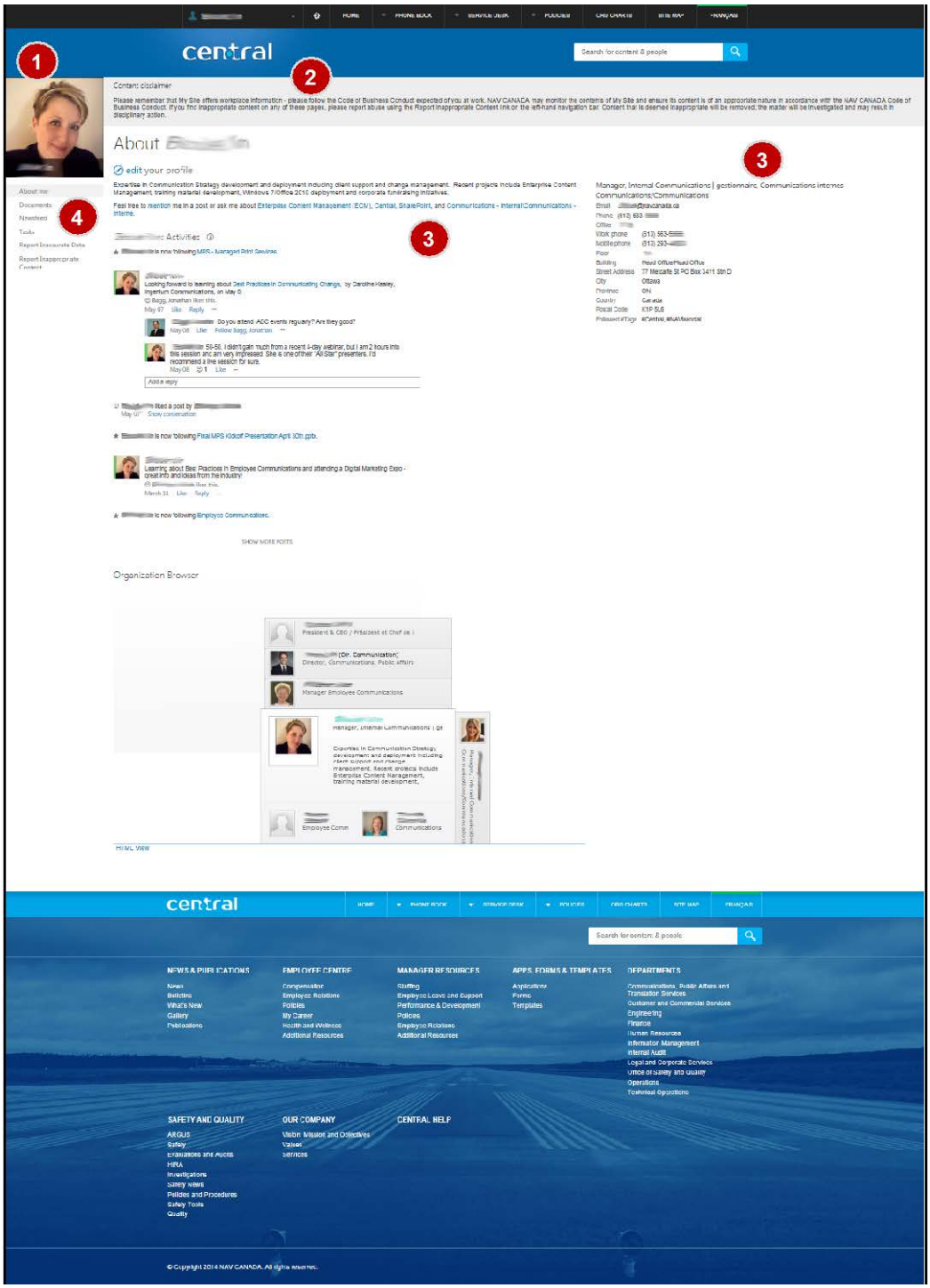


Image 35. NAV CANADA Intranet: Employee Profile Page (Desktop View). *107_NAVCANADA_11_EmployeeProfilePage_Live.png*

Employee Profile, Desktop UI Highlights

A simple page offers rounded information about the individual.

1. **Photo:** The picture helps employees get to know one another.
2. **Comment:** A philosophy, mantra, or interesting thought starts the profile page. This gives employees a sense of each other and allows individuals to express themselves.
3. **Social:** Shares and who the person is following and followed by promote social activity.
4. **Tasks, Report, Documents:** Other items people are associated with can also be accessed. This is another way to help employees find expertise around NAV CANADA. Air traffic controllers, shift supervisors, human resource specialists, real estate managers, and people doing many other jobs can find a wealth of knowledge by locating people and collaborating.

Department Page

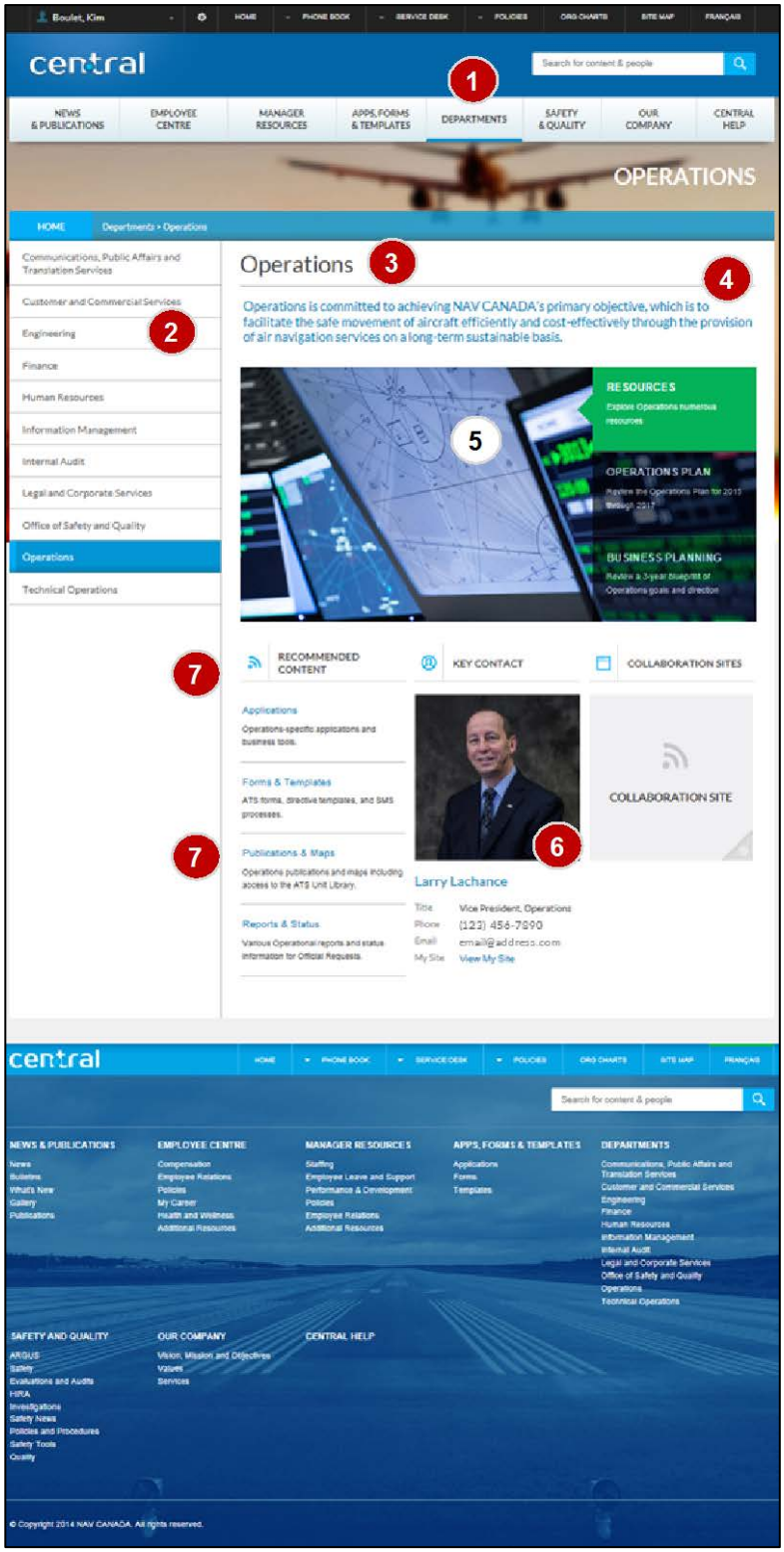


Image 36. NAV CANADA Intranet: Department Page. *108_NAVCANADA_12_DepartmentPage_Livev2.png*

Department Page Highlights

Each department is described on Central, making the organization transparent and the departments understandable and approachable. The resources help employees understand what each group does and why it's important, and can provide ideas for working together.

1. **Global Navigation:** The *Departments* link is visible and understandable.
2. **Left Navigation:** Department names are listed and easy to scan in the left-side navigation.
3. **Name:** The page title names the department.
4. **Statement:** Each department states how it works to achieve NAV CANADA goals. This helps people to understand the departments' purpose, and unifies departments under one large team striving for the same things.
5. **Carousel:** Some of the department's offerings and plans are promoted here.
6. **Leader:** The vice president of the group is named, with a photo and contact information.
7. **Resources:** Applications, forms, collaboration sites, and other resources are linked here and sometimes briefly described.

Project Repository (Collaboration Site Example)

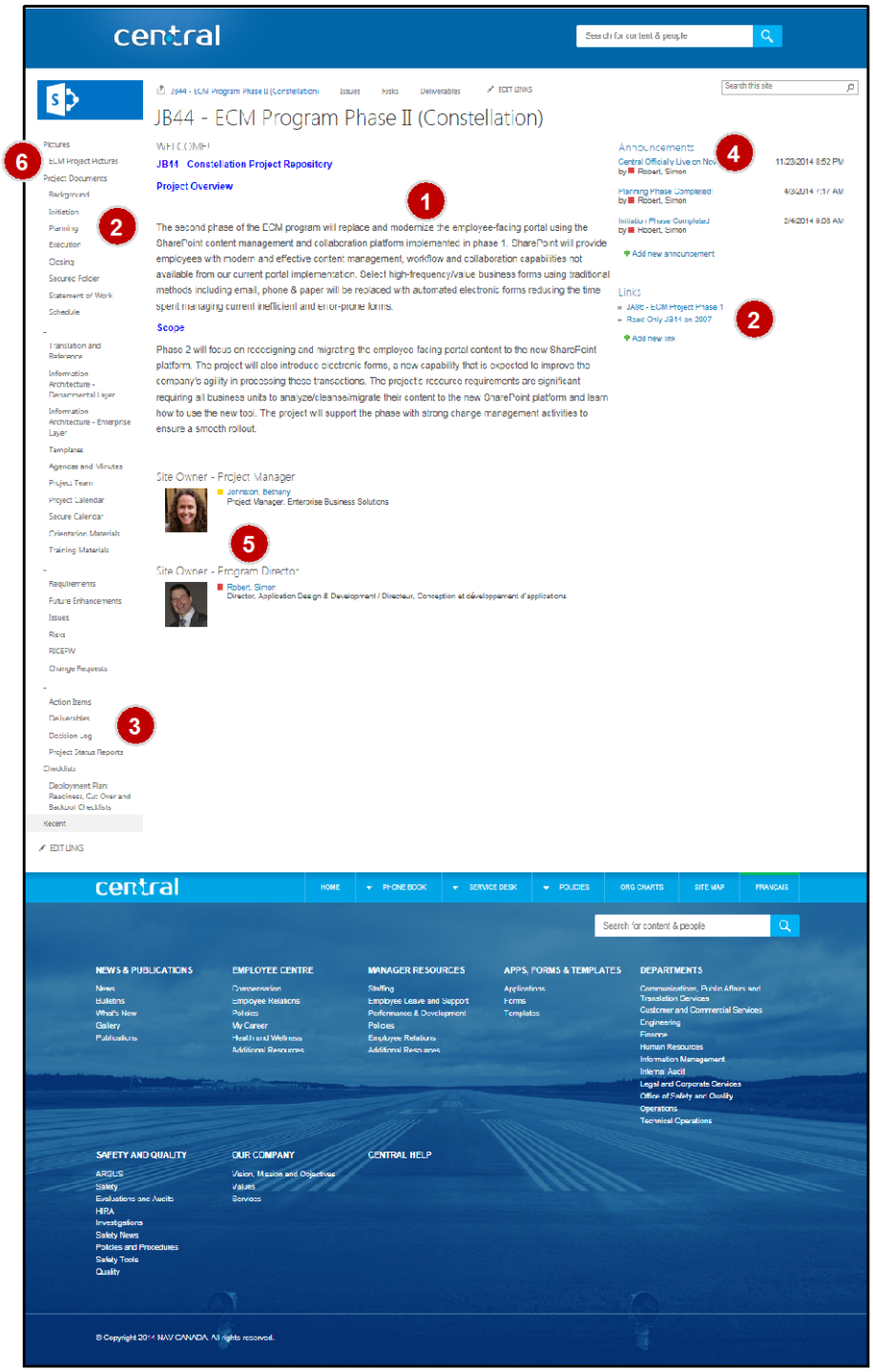


Image 37. NAV CANADA Intranet: Project Repository Page.
109_NAVCANADA_13_ProjectRepository_Live.png

Project Repository Highlights

Tracking projects and all of the activities and accompanying material is a snap at NAV CANADA, using project repositories on Central. Everything is consolidated and easy to find in one place.

1. **Summary:** The project is described in clear terms. This is especially helpful to newcomers on the project, and people learning about the project.
2. **Related Materials:** Everything from deliverables, issues, and risks to templates and photos are available via the left-side menu. Links are available on the right.
3. **Plans:** Requirements, action items, tasks, and more are also tracked.
4. **Status:** As phases are completed, the status is posted in the right rail.
5. **Site Contacts:** NAV CANADA's governance policies require that each collaboration site clearly indicates the site owners in case someone requires support. These contacts are posted under the scope of the project.
6. **Role-Based:** This page is also personalized, allowing only project members to see it, and only managers on the project to see certain content.

Hotel Directory

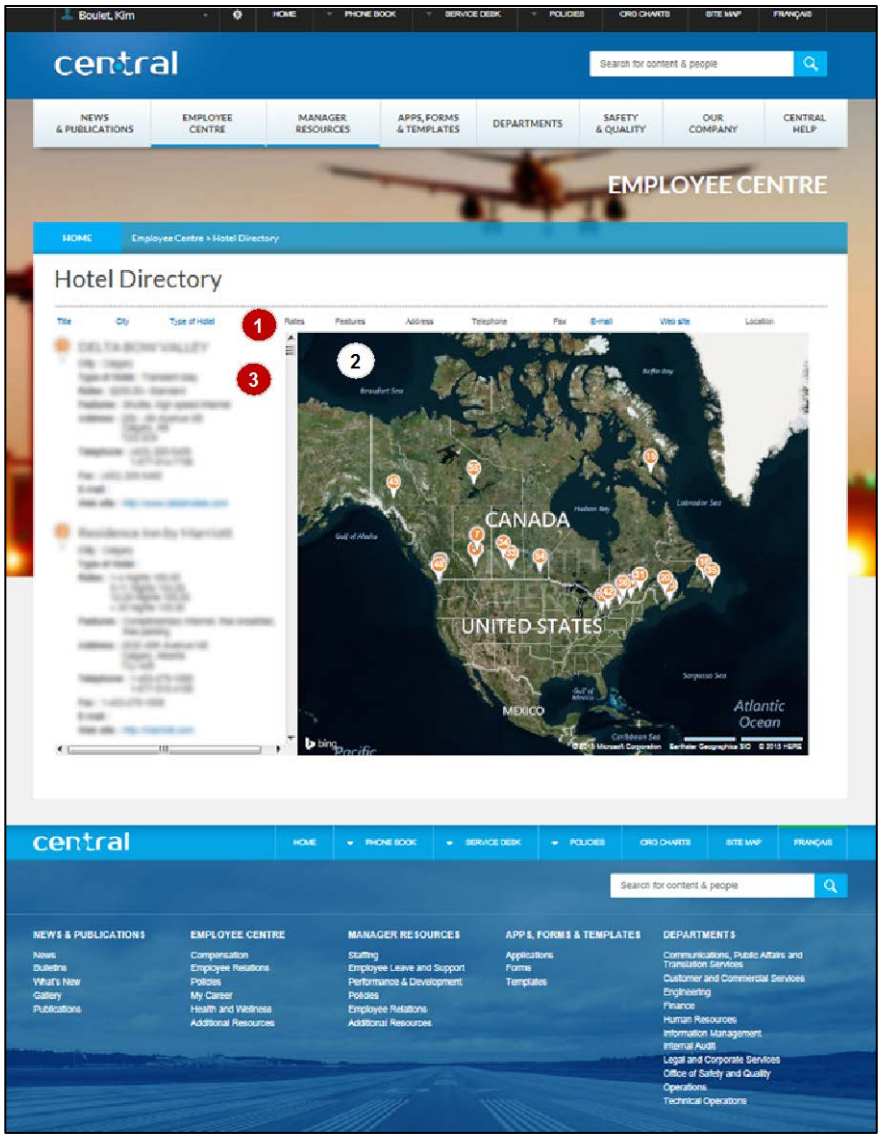


Image 38. NAV CANADA Intranet: Hotel Directory.
110_NAVCANADA_14_InterestingPage_Live.png

Hotel Directory Highlights

Employees can easily search for approved hotels for NAV CANADA employees when traveling in Canada. This is an expected, modern interface that employees can quickly acclimate with.

1. **Filters:** Selecting filters refines the results displaying on the map.
2. **Map:** Users can zoom and pan across the map.
3. **List:** The results are listed in text on the left.

DESIGN PROCESS AND USABILITY WORK

Approach

The design process was comprehensive and fact-based. It started with a deep analysis of the current state so that the team could understand the pain points and the functionality required to address those points.

"We surveyed employees asking them how they used the legacy intranet, what they liked, what they didn't like, and what their expectations were for the new intranet," says Simon. "What we found was that employees used the employee portal on a very frequent basis, but were looking for a much better search experience and a more modern look-and-feel."

Basic portal features such as search, navigation, and content freshness were the focus of the users' wish list as opposed to bells and whistles such as classified ads. In other words, NAV CANADA's employees were asking for a modern portal that would be really good at the basics, as opposed to a flashy intranet with little substance.

The survey data was crucial to give the design process direction and credibility. Team members were able to prioritize the new intranet's requirements and help contain the scope of the project; they did this using fact-based arguments and data to defend the scope rather than being forced to engage in circular emotional discussions when users were demanding changes after the scope was set.

The team was also able to use web analytics to analyze usage patterns on the legacy portal to better understand which pages were most and least popular.

Prior to the intranet project starting (and even before the team selected its ECM platform), team members conducted a lot of research on user experience design best practices for intranets, including Nielsen Norman's Intranet Design Annual reports. "The research revealed several key findings that influenced our approach," says Simon. Here are a few of those key findings:

- **Importance of a solid user experience:** No matter how many features your ECM platform has, if it's not easy to use, users will not use it and your benefits will quickly erode.
- **UX methodology:** Designing a new website or intranet is a unique process that requires distinct steps to do it well. Ensure that you use a proven user experience design process tailored for employee-facing intranets.
- **Understand your audience:** Before producing a design, take the time to understand the types of users that will be accessing the intranet and what their needs are.
- **Hire the best user experience firm:** Unless you have deep intranet user experience expertise in-house, hire a firm with a proven methodology and track record *in intranet design* to do the work.

User Experience Design

Although many things had to be addressed during the redesign, the user experience took top billing. The user experience design approach was broken down into four steps:

1. **Technology selection:** The first step was to set the user experience as the highest weighted criteria when selecting the ECM platform. Contrary to traditional product evaluation criteria, which emphasize the importance of features and functions or architectural cohesiveness over usability, the team felt strongly that user experience needed to be the most important evaluation criteria to achieve its goals. With that in mind, the team invited representatives from each department to attend product demonstrations and evaluate the solution's user experience, features, and functions to ensure that the selected solution would be easy to use.
2. **Information architecture:** Once the technology platform was selected, the team designed the new IA by conducting workshops and card sorting sessions with the business, analyzing web analytics data from the previous intranet, and surveying users to determine what content and features were most/least important to them.
3. **Wireframes:** With an IA defined, the team proceeded to engage the user experience firm, Atomic Motion, to begin the design process. Navigation plans and wireframes were developed to provide the NAV CANADA team with a visual orientation of the new look-and-feel without spending too much time debating colors, fonts, and so on. The focus of this process was the structure and position of the various intranet elements that needed to support the IA, rather than the look and feel.
4. **Design concepts:** Once the wireframes were approved, the team focused on applying visual styling treatments to the wireframes including color, imagery, and iconography. Atomic Motion produced two different design approaches to help spark discussion and give the NAV CANADA team members something to compare against.

JOHN SMITH

HOME | PHONE BOOK | SERVICE DESK | POLICIES | ORG CHART | SITEMAP | FRANÇAIS

NAV CANADA PORTAL

Search for content and people

NEWS & PUBLICATIONS | EMPLOYEE CENTRE | MANAGER CENTRE | APPS & RESOURCES | DEPARTMENTS | SAFETY | OUR COMPANY | PORTAL HELP

Feature Caption

Lorem ipsum dolo, consectetur adipiscing elit. Etiam ligula dui, feugiat eu purus n congue nisl. Nam malesuada arcu augue, in mollis erat interdum in.

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FEATURE 3
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12/02/14
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EVENTS

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Group Meeting
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27/01/14
Group Meeting
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View all

LINKS | FORMS

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Possim quis nunc eodem videntur
Clari accumsan consequat
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Project Highlight

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View project

Employee Highlight

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Image 39. NAV CANADA Intranet: Sample Wireframe. This is a wireframe of the homepage developed during the design process. This wireframe was used to conceptualize the design of the new intranet without investing too much effort in styling and branding. A wireframe was created for each page layout of the new intranet, which was then submitted for review by stakeholders. These were highly effective tools for refining the requirements and design elements prior to the styling and branding process.
111_NAVCANADA_15_WireframeHomepage.png

Information Architecture

The first step in the design process was to create the new intranet's IA. Central was designed as four applications running seamlessly on a single technology platform, presented under a consistent banner and user experience that included the following:

- **An enterprise layer:** Home to Central's main landing page and designed as a modern website, the enterprise layer contains content that is accessible by all employees, such as company news, campaigns, benefits, policies, links to apps, forms, and templates.
- **Collaboration sites:** All business units now have the ability to create and manage their own collaboration sites, provided they are justified and comply with governance policies, secured to any number of internal users to collaborate efficiently on information that would otherwise be managed in inefficient network file shares or spreadsheets.
- ***My Sites*:** This feature provides employee business contact information, social newsfeeds, and a dynamic organizational chart illustrating each person's position in the corporate structure.
- **Mobile access:** Central also provides a mobile experience, accessible from all company-issued smartphones and personal devices that are equipped with NAV CANADA's enterprise mobility management capability. This allows users to access Central anytime, anywhere, and on any device.

The company's legacy intranet content was structured primarily by business group, which meant that users needed to know which department was responsible for a piece of content to find it, as the search engine was very difficult to use and unable to mitigate this issue.

Research conducted prior to the project indicated that task-based navigation was much more intuitive and effective compared to traditional organization-based navigation. So, the team endeavored to produce an IA and navigation plan that was task-oriented.

Another key IA problem the team was trying to solve was to declutter the intranet's homepage. The legacy intranet homepage was cluttered with too many banners from content owners competing for real estate because there was no space for them to advertise their initiatives elsewhere.

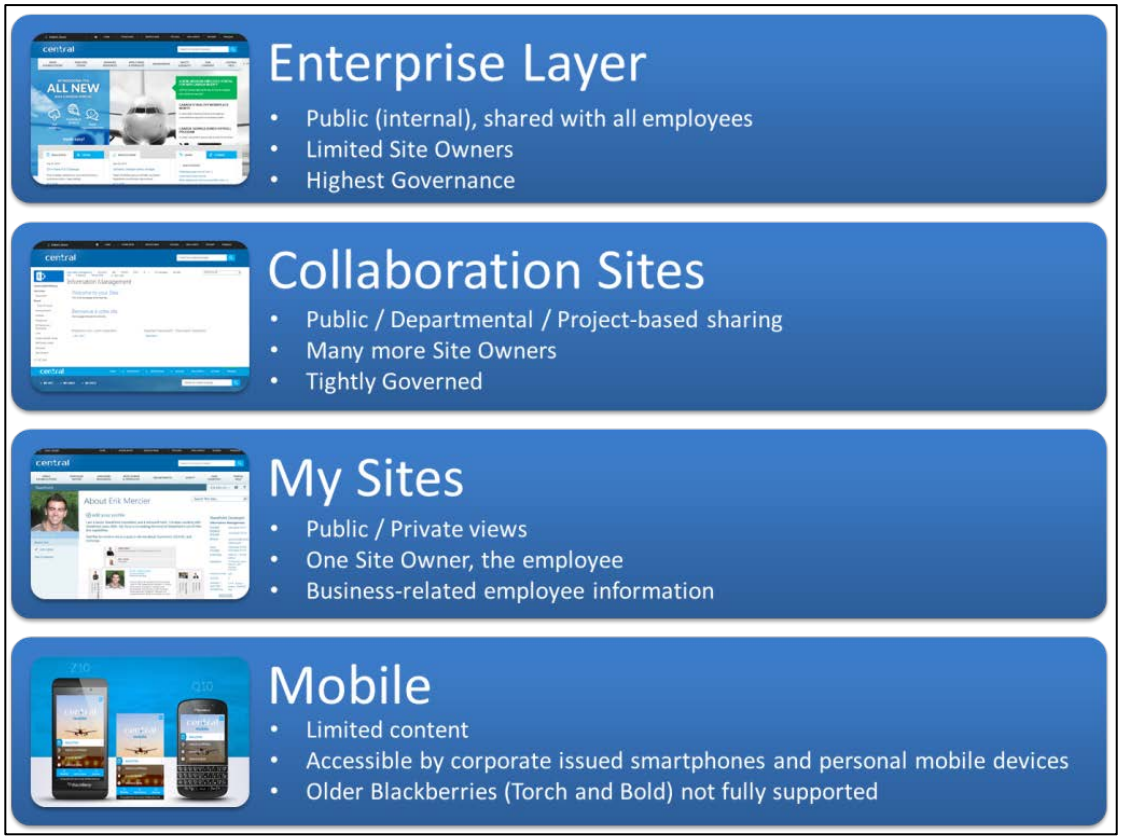
The new IA allows users to access content using several different paths, such as through the top navigation, megamenus, search, and so on, which is much more intuitive and effective to use compared to the previous approach.

The team also created a design that limits the homepage banners to national campaigns only. Department-specific initiatives can be advertised on each business group's department page. This eliminates the issue of a cluttered homepage while allowing business groups to promote their initiatives.

Simon offers some advice for other teams struggling to develop a new IA approach: "The best advice we can provide is to take the time to understand what content the intranet will provide and how users expect to navigate that content."

"Create task-oriented buckets of content," he says, "using your company's vernacular, to form your main navigation elements and surface the most popular content using megamenus to reduce clicks and streamline navigation. Continue to analyze user behavior post implementation to determine if the original design needs to be enhanced to address gaps or new requirements."

The most important thing he and his team found effective with this project is the one teams often overlook: get as much feedback as possible from the user community to validate designs upfront, using mock-ups to avoid expensive rework during development.



High-level view of the new IA for the new intranet.

Hiring the Right Partners

Another thing the NAV CANADA team did right was hiring the right experts to do the parts of the project they couldn't do in-house. Knowing that user experience was a top priority for the new intranet meant that outside experts hired to assist in the effort had to be of the same mindset.

"We identified early on that user experience was a top priority for the new intranet and that it needed to be easy to use or else employees wouldn't adopt it," says Simon. "We used this criteria when selecting our partners. We hired StoneShare as our lead SharePoint systems integrator and a local web design firm, Atomic Motion, to facilitate the intranet user experience process."

It was critical that the systems integrator (StoneShare) had experience branding SharePoint because doing so is much more involved than a standard SharePoint installation. The task requires the integration of visual assets into SharePoint's presentation layer, which requires specialized skills.

"StoneShare provided this expertise and, combined with Atomic Motion's proven design methodology, both firms' outstanding consultants guided us through the research, wireframing, visual composition, and SharePoint branding process," says Simon.

Other components in the project played out as follows, with a healthy give and take between the agencies and the internal project team:

- **Mobile design:** Once the main intranet design was complete, Atomic Motion, working closely with StoneShare to understand SharePoint's mobile capabilities and limitations, produced a design for the mobile app that was optimized for the smartphone form factor; adhered to mobile app best practices; and used the same colors, styles, and theme as the main intranet.
- **SharePoint integration:** Atomic Motion delivered all visual assets to StoneShare so they could implement the design in SharePoint. These assets included all the images, styles, cascading style sheets (CSS), and JavaScript needed to brand SharePoint accordingly. Having the design firm provide these assets saved a tremendous amount of time by avoiding having the SharePoint developers spend time slicing up images and building CSS/JavaScript content from scratch.
- **Third-party add-ons:** StoneShare took the lead and used these assets to apply the Central brand and integrate key third-party add-ons such as the megamenu and rotating banner to SharePoint's user interface. "StoneShare, with their deep experience in branding SharePoint, did a fantastic job integrating the user experience assets and components into SharePoint's complex presentation layer, to the point where the end result was tightly aligned to the visual concepts," says Simon.

This kind of smooth interplay between the two agencies and an easy back and forth between the agencies and the internal team was a critical success factor that helped lead to the useful and usable intranet NAV CANADA employees use today.

"Atomic Motion and StoneShare delivered a modern and impactful design which met all of our requirements and was orders of magnitude cleaner and easier to use compared to our legacy intranet," says Simon.

OUTSIDE AGENCIES	
Agency	**Project Role**
StoneShare IT consulting firm that provides solutions and services focused exclusively on Microsoft's SharePoint platform	• Assisted in the planning work of the company's ECM Program, including requirements gathering, business process reviews, IA, enterprise taxonomy, technology validation, implementation roadmap, and risk assessment to support the program's business case. • As the prime systems integrator and part of an integrated team with NAV CANADA, led the implementation of the SharePoint solution to replace the legacy intranet, including solution configuration, testing, and deployment (new intranet, mobile web app, electronic forms): o Facilitated content migration to new intranet o Offered solution support during stabilization period o Provided training materials and training sessions o Provided knowledge transfer back to NAV CANADA
Atomic Motion Design and web development company specializing in design, digital marketing, and app/software development	• Led the user experience design process to deliver the new intranet and mobile web app designs including: o User profiles o Wireframes o Design concepts o Design assets • Developed all presentation-layer application code and markup required to convert approved desktop/tablet and mobile designs into intranet page layouts and master pages capable of seamlessly integrating with SharePoint 2013.

Adoption and Buy-In

The NAV CANADA team didn't have to spend a lot of energy to convince its core group of users to adopt the new intranet because the legacy portal was a significant

source of pain for those users. Most NAV CANADA intranet users were, in fact, anxiously awaiting the site launch so they could take advantage of the new features.

As with most companies, NAV CANADA also had pockets of users who did not use the legacy portal because they preferred to use file or network shares to manage their content. The intranet team nudged those users along, touting the advantages of the content management features and hoping these users would also come around to using the new intranet.

To help with adoption, the team launched a national campaign that featured articles in the company newsletter, posters, digital ads, and national email bulletins to inform users of the new intranet and its key features. The campaign was highly successful. The team also created a digital guided tour that was accessible in an interactive PDF format from the homepage. It walked users through high-level features, IA, and navigation tips to help users transition to a site that looked and functioned quite differently than the legacy intranet.

GOVERNANCE

The project was sponsored equally by each major function within the company. During the project, an Enterprise Content Governance Board (ECGB) was established to govern and oversee the strategic direction and overall health of the system, post-implementation. The ECGB is chaired by the Information Management department, where the core intranet team members are located.

This distributed model was ideal to support the project toward a successful outcome.

“The distributed ownership model was a critical success factor for the new intranet,” says Simon. “Having all business groups sharing in the ownership and success of the intranet ensured that the project had the necessary resources and support to complete the project and maximize user adoption.”

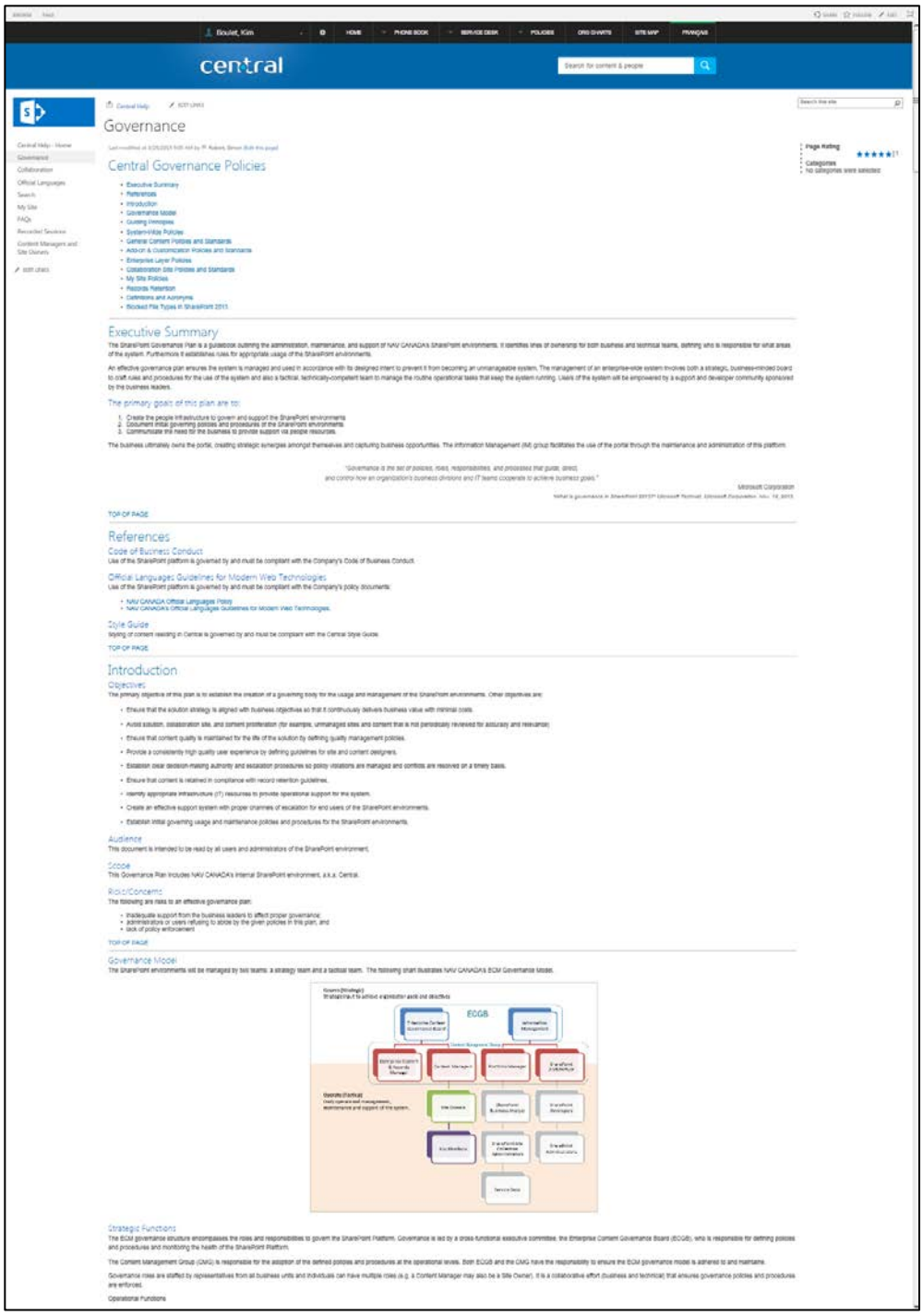


Image 40. NAV CANADA Intranet: Governance Policies Page. The governance policies page is a reference for all employees and contains information on the new intranet's governance model, roles, and responsibilities, as well as the policies and procedures that are in place to maintain the health and integrity of the new intranet. *112_NAVCANADA_16_Governance_Live.png*

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Enterprise Content Governance Board Representatives	• Serves as a governance body with ultimate responsibility for meeting the goals of the solution • Ensures that the strategic direction of the ECM platform remains aligned with NAV CANADA objectives • Defines governance policies and standards
Enterprise Content Records Manager	• Maintains the enterprise metadata dictionary over the life of the solution • Defines and manages the enterprise taxonomy, including content types, managed metadata (term store), and metadata in both external and internal environments
Content Management Group	• Supports the successful deployment of the solution in the organization by sharing best practices and lessons learned in a Community of Practice • Members serve as SharePoint advocates and change agents
Content Managers	• Assigned for each business group • Responsible for overall ownership of the business group's content • Implement and enforce content management policies as defined by the ECGB • Manage site collections and approve site and subsite creation • Guide and mentor site owners to adhere to governance policies • Support site owners in providing second-level support to their business community

Site Owners	• Assigned for each site • Responsible for ownership of content for the site • Ensure that site members use the site appropriately and comply with governance policies and standards • Ensure that the sites are active and delivering value to the business • Provide first-level support to their business community • Validate the accuracy and relevance of site content
IM Portfolio Manager	• Manages the overall direction, design, and functionality integrity of the solution from a business perspective • Works with the SharePoint architecture and ECRM to recommend changes and manage updates to IA and governance
IM SharePoint Architect	• Ensures integrity and alignment with the enterprise architecture • Architect and design SharePoint solutions and farm topology
IM SharePoint Business Analyst	• Captures new requirements for the ECM platform • Recognizes any constraints that the governance policies impose (what features are available, how content can be changed, and so on) • Builds use cases and designs that do not conflict with established governance • Gathers technical metrics and key performance indicators for ECGB

IM SharePoint Developer	• Modifies SharePoint branding and look and feel • Implements changes to images, CSS, master pages, and layouts • Performs search engine optimization (SEO), including best bets (query rules) • Modifies SharePoint templates • Creates and deploys web parts • Creates and tests deployment scripts as required • Participates in design tasks as needed • Participates in development and testing
IM SharePoint Administrator	• Develops best practices and operation guidelines for infrastructure setup • Implements solution upgrades, service packs and security updates, and maintenance work

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	• **Desktop:** http://central • **Mobile:** http://central/mobile
Default Status	• The intranet is set as each user's homepage by default, but it can be changed.
Remote Access	• Remote users can access the site using VPN, and many do.
Shared Workstations or Kiosks	• Air traffic controllers are not assigned a corporate computer so they access Central via kiosks located in a communal area in their respective facilities or via the Central Mobile app on their personal mobile devices.

TIMELINE

PROJECT MILESTONES	
Milestone Date	**Milestone Description**
2003	• First company intranet
December 2013	• Intranet modernization project started
January 2014	**Initiation phase completed:** • Onboarding team members • Project repository setup • Project team orientation • SharePoint 101 education sessions
March 2014	**Planning phase completed:** • Requirements validation • Governance strategy and plan • Content migration strategy and plan • Change management strategy and plan • Enterprise taxonomy model • Information architecture • User experience design • Technical architecture • Project plan
November 2014	**Launch of new design:** • SharePoint 2013 infrastructure • Enterprise layer • Collaboration sites • *My Sites* • Electronic forms • End-user training
November 2014–February 2015	**Stabilization:** • High-severity defects • Critical enhancements • Reinforce end-user training

	• Knowledge transfer to operational staff
January 2015	• Intranet achieves one million hits
February 2015	• Project closure
Overall redesign time frame: 14 months	

CONTENT AND CONTENT CONTRIBUTORS

Prioritizing Governance

When NAV CANADA embarked on its ECM program to modernize the company's CMSs, governance was quickly identified as a critical goal and key success factor to the program. Many of the issues experienced with the company's legacy systems such as obsolescence, stale content, and inconsistent practices were largely due to a lack of adequate governance policies and accountability for individuals to oversee the adherence to those policies.

Therefore, the team spent a significant amount of time researching SharePoint governance best practices to create its current governance framework. When creating this framework, a key objective was to decentralize low-risk administrative capabilities to the business; this allows the business to be more agile in managing its content and reduced the reliance on and workload for the IT department to manage each business unit's content.

The governance model roles are divided into two key functions: strategic and operational. Representatives from all business units staff governance roles, and individuals can have multiple roles (for example, a content manager may also be a site owner). It is a collaborative effort (business and technical) that ensures governance policies and procedures are enforced.

Strategic Functions

Governance is led by a cross-functional executive committee, the ECGB, which is responsible for defining the overall strategy, policies, and procedures, and for monitoring the health of the SharePoint platform. The ECGB meets on a quarterly basis to review a series of health metrics (provided by the IT department) to ensure that the system is being used appropriately, is adhering to established governance policies, and is performing at an acceptable level.

Reporting to the ECGB is a cross-functional group of content managers called the *Content Management Group* (CMG) who are responsible for the adoption of the defined policies and procedures at the operational levels. Both ECGB and the CMG have the responsibility to ensure the ECM governance model is adhered to and maintained.

Operational Functions

The tactical team consists of three subteams charged with supporting the directives of the strategy team: operations, support, and development.

Information Management resources provide operational support for the system, as they help to ensure the enforcement of the governance plan and manage the more routine maintenance of the system. To do this, they perform nightly backups, usage monitoring and analysis, and scheduled task validation. They also keep the system current with security releases and system upgrades.

SharePoint Site owners, system administrators, service desk personnel, and other various support resources create an effective support system with proper channels of escalation for end users of the SharePoint environments. This team handles application questions, defects, and other problems requiring issue resolution.

Technical resources, such as developers, are tasked with implementing change requests and new features, in a manner that fulfills the business opportunities as identified by the strategy team, while also ensuring adherence to standards.

Contributors

The number of content contributors/owners varies by area of the intranet. In many cases, managing content on the intranet was already part of their core job function; examples include the following areas:

- **Enterprise layer:** This layer hosts content viewable by everyone in the company and there are approximately 25 content contributors. The company's Communications department controls the homepage, *News & Publications*, and *Central Help* sections. HR controls the *Employee Center* and *Manager Resources* sections. The Office of Safety & Quality controls the *Safety & Quality* section. The IT department controls the apps, forms, and templates section, and each department has the ability to manage their own department's landing page located under the *Departments* section.
- **Collaboration sites:** Each business group has its own collection of collaboration sites to manage content at the department level. Most of these sites limit access to a small number of individuals and are rarely open to everyone in the company. More than 200 site owners currently control these collaboration sites, and that number is growing as adoption of the new intranet increases.

Contribution

With the new intranet firmly established as a preferred communication and collaboration platform within NAV CANADA, content contribution occurs regularly as part of day-to-day business operations. There is a consistently high demand for national campaigns to be promoted on the intranet's homepage, and the company is creating new collaboration sites on a regular basis as departments launch new initiatives and/or projects that require an effective method of collaborating. To further encourage contribution, the intranet team is working with each business group to migrate select, high-value file shares to the new intranet to increase adoption and gain further returns due to more efficient and effective content management capabilities.

Training

Training prior to launch was extensive. The training plan was led primarily by StoneShare, which was tasked with producing training materials and delivering training to end users and IT resources that would eventually support the solution. This required a tremendous amount of work on the part of StoneShare and NAV CANADA to achieve. StoneShare's experience conducting training programs was leveraged to deliver rich and comprehensive training sessions, combining both theoretical and practical hands-on learning techniques with printed and electronic training materials that were very well received. Having a bilingual trainer that knows SharePoint at a deep level was critical to delivering a solid presentation, answering questions quickly, and ultimately increasing the confidence in the solution.

Individuals received training based on their role. For example, end users who consume and post basic content (such as on collaboration sites) received a basic training offering via interactive PDF and other online material. Users who have administrative roles in the system or control higher risk/visibility content — such as content on the homepage — received more in-depth training.

When the project was launched, StoneShare conducted more than 90 training sessions across the country, training more than 200 content managers and site owners and more than 500 end users. Many more received on-demand self-serve training, including a guided tour of the new intranet's key features and more in-depth prerecorded training available via the *Central Help* wiki.

Going forward, it is the responsibility of content managers to train new site owners and the site owners' responsibility to train new users of their respective collaboration sites on how to use the new intranet. The Information Management department will provide more in-depth training, as needed, to groups requiring it.

Content Guidelines

Here are some example content guidelines from the company's governance model:

- All content will adhere to the one file, one version, and one location best practice. Uploads will be made by the owners of the content. Users can request that any information not available be uploaded or posted.
- Users will create links to content but will not make copies for convenience on their personal hard drives or *My Sites*.
- Edit in place, do not delete documents to create new versions. With version control enabled, documents can be revised and reviewed by appropriate staff then published when changes are completed. This preserves links created by users.
- Site owners are ultimately accountable, but every contributor is responsible for content management. All posted content should be accurate, relevant, and current. Users also can assist in notifying site owners when content needs to be updated or archived.
- Whenever possible, send links to content rather than consuming more resources by attaching files that already exist in SharePoint including in *My Sites*.

- Copyrighted material will not be added to the site without proper licensing or written approval.

Ensuring Quality Over Time

Site owners are responsible for working with their content contributors to manage the quality and freshness of content on each of their respective sites. The intranet team is also working on implementing an automated electronic records management and archiving solution which will ensure that corporate records are retained and disposed of according to a corporate retention schedule and that all non-records are removed from the system after a set period of time to keep the content repository as lean as possible.

Everyone using the new intranet has the ability to report stale or inaccurate content to site owners, who are ultimately responsible for maintaining content quality on their respective sites.

CULLING CONTENT

One of the key accomplishments of the new intranet project was the amount of content that was left behind when the team migrated content to the new intranet. This is a critical step of nearly every redesign and not one that is always successfully accomplished. NAV CANADA's process was arduously thorough and therefore amazingly effective.

The legacy intranet did not have archiving capabilities, which meant that the repository grew uncontrollably over its 10-plus year lifespan. This created several issues. End users complained about the significant amount of stale content on the legacy intranet, as it was cluttering the environment, reducing the efficacy of search results, and having a significant negative effect on the end-user experience. Very early on, team members knew that this problem needed to be solved if they were going to deliver a first-class intranet experience that would meet user expectations.

The most effective way to describe the team's approach is: fact-based. "We took the emotion out of the discussion and solved the problem using a highly organized and fact-based approach," says Simon.

Process

Here is an overview of the key steps the team took to solve the challenging problem of culling content:

- **Content migration methodology:** StoneShare was instrumental in leading the content migration process, which was a highly complex and laborious task. Using a mixture of manual and automated tactics, StoneShare successfully migrated more than 210,000 documents to the new intranet. Most companies leave this content behind to avoid the painful process of triaging, tagging, migrating, and testing content that goes along with such a large project. StoneShare's experience in migrating content to SharePoint gave the intranet team the confidence to commit to its sponsors that it could consolidate the legacy intranet and SharePoint 2007/2010 content successfully. With StoneShare's proven methodology, the team was able to achieve its goal.

- **Content inventory:** During the planning work before the project started, team members conducted a detailed inventory of the existing content on the legacy intranet so that they could understand the nature, sensitivity, and freshness of the content. The inventory would also serve to establish a baseline that would be used to accurately measure the impact of the project on the legacy content. The legacy intranet did not have any built-in capabilities to produce this inventory; therefore, one of the project team members conducted a manual review of the site, capturing each and every page and document on the site. The process was long and arduous, taking approximately two months to complete, with the team member working full-time on this activity alone. The inventory data was collected using a spreadsheet and included key attributes such as: name, size, owner, department of origin, creation date, and last updated date.
- **Inventory analysis:** Once the content inventory was completed, the team proceeded to produce a series of high-level key metrics using the inventory data to help articulate and visualize the data in a simpler format. The data was instrumental in establishing the content migration strategy and plan, which included the content reduction target. For example, the data indicated the fact that more than 54% of the legacy intranet content had not been updated in more than five years. Data points such as these enabled team members to quickly calibrate content reduction targets that they knew could be achieved. They set their goal at reducing the legacy intranet content by 70%.
- **Executive buy-in:** Once the content migration strategy and plan was defined, the team presented the proposal to its executive management committee (CEO and senior VPs) to solicit buy-in and gain support for the reduction plan. Using a well-orchestrated presentation with clear and easy to understand metrics from the content inventory, the team successfully secured a commitment to reduce the legacy portal's content by 70%. Another selling point for the target number was to reduce risk to the overall project. Less content to migrate translates to less effort, time, and complexity, which helps reduce the overall risk to the project. It's a win–win that just makes sense.
- **Communicating the plan:** With executive buy-in on the reduction plan, the team communicated the target to everyone involved in the project, including the extended business team: the users responsible for making the decisions on what to keep and what to leave behind. Using a similar approach, with a well-orchestrated presentation that featured clear and easy to understand metrics from the content inventory, buy-in was quickly secured for the plan.

- **Keep/delete decisions:** The project used a high-touch approach for facilitating the content reduction process. Team members created a content migration work stream with dedicated resources so they could work closely with their business groups and guide them through the keep/delete exercise. Using the content inventory data, they created a SharePoint list that included one row for each piece of content on the legacy intranet. Then, they instructed the extended business team members who were appointed as content decision makers to analyze content owned by their department and make a keep or delete decision for each piece of content.

  Other than the overall reduction target, there were no set criteria given to decision makers. The intranet team left it up to them to determine what to keep or delete. Content marked as *keep* would require a destination that mapped it to the new intranet's IA and also the appropriate metadata required by the new enterprise taxonomy metadata model. Content marked *delete* would be left behind. Every two weeks, the extended business team met for a standard project status update, which the team used to track its progress against the plan. Team members produced a metrics package that tracked the keep/delete/undecided ratios by department. These metrics were also presented to the steering committee to help maintain the focus and priority of the exercise. In the end, the team exceeded the reduction target of 70%, reducing the legacy intranet's content by 75% (approximately 30,000 documents).
- **Content migration:** With the keep/delete decisions made, the content to be kept (approximately 10,000 documents) was staged and migrated to the new intranet using a custom-developed migration script provided by StoneShare, which copied the content from the staging location to its final destination. StoneShare also led the process of migrating more than 200,000 documents from the legacy SharePoint 2007/2010 sites to the new intranet. This content was much newer and more relevant compared to the legacy intranet and required little culling. Once the content was migrated, the team asked the content owners to review the migrated content and validate that it was migrated to the proper location with correct metadata attributes. Given the number of documents that were migrated, it was not feasible to conduct a document-by-document test, so the team opted to conduct thorough tests on sample content, which proved to be efficient and effective at finding pervasive issues, which were quickly corrected by the project team.
- **Running in parallel:** Once the new intranet was launched, the team set the legacy portal to read-only and kept it online and accessible for a period of two months to give users an opportunity to retrieve content from the legacy intranet that may have been missed during the migration. Having the legacy intranet running in parallel with the new intranet also gave employees an opportunity to redirect any links pointing to content on the legacy intranet to the content's new location on Central.

- **Archiving legacy content:** After running the legacy portal in parallel with the new intranet for two months, the team took the legacy portal offline and proceeded to decommission the application and underlying infrastructure. Part of this process included making of a copy of the legacy portal's content database that would be archived to tape for a period of seven years.

What Worked and What Didn't

Overall, most aspects of the above plan worked very well. In particular, the following tactics were highly effective. Simon explains:

- "Having a detailed content inventory was probably the most important step to take, since just about every decision made to create the content migration plan relied heavily on data sourced from the inventory."
- "Having a complete fact base and clear metrics took the emotion out of the process and kept everyone focused on the task at hand. It also gave the project team a lot of credibility as, in many cases, we knew more about the content than the business groups themselves."
- "Measuring the team's progress using metrics and communicating our progress to senior management helped us to keep a healthy pressure to reach the reduction target."
- "Running the legacy portal in parallel was a low-risk and low-effort tactic which provided the project team with an answer to many questions from content owners should a key piece of content get missed in the migration. Having the legacy portal run in parallel for two months after the go-live was a powerful insurance policy which helped our business users be more aggressive in their content reduction decisions."

The one area in which the team struggled was related to the SharePoint list that it created as a proxy for a spreadsheet; the list's purpose was to communicate the content inventory to content owners and collect the keep/delete, content mapping, and metadata decisions. The reason the team used a SharePoint list was that it was easier for the custom-developed migration script to interact with it. However, the SharePoint list did not have certain capabilities, such as the ability to bulk-update many rows at once, which frustrated decision makers and significantly increased the effort required to complete the task.

"Although this technique ultimately worked for us, it was complicated and required a tremendous amount of effort to manage the process and create the custom migration script to conduct the migration," says Simon.

Advice for Other Teams

What's the magic bullet for accomplishing this type of complex, but successful content culling project? "Plan, plan, and then plan some more before approaching content migration," says Simon. "Partner with a firm who has proven experience migrating content to the destination technology to help you plan and execute the migration."

The NAV CANADA team partnered with StoneShare due to its proven experience migrating content to SharePoint, and the team readily admits it is unlikely that it would have achieved its goal of migrating 210,000 documents without StoneShare's methodology, experience, and leadership.

The other key factor to success is to treat content migration as a high risk on the project and mitigate accordingly. "Conduct as much research [as possible] on the content before the project starts to fully understand the size of the content migration challenge and how much scope, schedule, and cost will need to be dedicated to the activity as part of the project's business case," says Simon.

"Perform a detailed content inventory of the legacy intranet's content and produce clear metrics to analyze and articulate the data," he says. "Set a realistic target on the amount of content to reduce, secure senior management buy-in on the target, and take a top-down approach for mobilizing resources to achieve it. Track your progress using consistent metrics and regular updates, and choose your migration process carefully."

Consider third-party tools to assist in the content migration to automate the process where possible, and consider running your legacy intranet in read-only mode in parallel for a period of time after the new intranet goes live to allow time for content owners to retrieve content that may not have been migrated.

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
ECM Platform Software / Hardware	• SharePoint 2013 Standard • VMWare (virtualized)
Database Software / Hardware	• SQL Server 2012 • VMWare (virtualized)
Web Server Hardware and Operating System	• VMWare (virtualized) • Windows Server 2008 R2
Bug Tracking / Quality Assurance	• Team Foundation Server
Design Tools	• Adobe Fireworks • Adobe Illustrator • Adobe Photoshop
Site Building Tools	• Visual Studio
Content Management Tools	• Content Matrix
Search	• SharePoint out-of-the-box
Other Functions	**Add-ons:** o Nintex Workflow o Nintex Forms o Royal Slider (rotating banner) o Archetonomy (megamenu)

Technology Evaluation

During the ECM strategy engagement, a technology assessment was conducted to identify a technology that would be appropriate for NAV CANADA's business environment and reflect the needs of the consumers and contributors of information.

Both platform and best-of-breed vendors were evaluated. Platform vendors offer broad ECM capabilities in a single software package. Platform solutions cover many different workloads, but often cannot compete with a best-of-breed tool built specifically to address a particular workload. And platforms sacrifice depth for breadth.

NAV CANADA's ECM requirements were such that most ECM platforms could address a sufficient number of the requirements; however, the company conducted a

significant amount of research into these types of solutions and decided to seek a platform to meet its needs. This decision was driven in large part due to the company's IT strategy of seeking platforms to provide scalable technology foundations capable of growing with its needs and reducing the number of vendors that the company must interface with and the skills its support teams need to learn.

Eight vendors were evaluated based on predefined criteria. Significant weight was applied to the "Modern and Effective Experience" criteria to emphasize the importance of an effective user experience as a critical success factor. The team invited representatives from each business group to attend product evaluation demos and rank each solution's user experience based on a variety of usability questions. This step was key for the success of the evaluation.

"This was an important aspect of our solution evaluation," says Simon, "to get the business or end-user perspective on ease of use."

One of the reasons the organization selected SharePoint was that it was the most intuitive solution of all and offered a very strong user experience that was familiar in some ways to the end user, since the company had recently upgraded Microsoft Office, which also offered the ribbon interface.

To validate the platform's capabilities, the team partnered with StoneShare at the beginning of the program to conduct a comprehensive gap-analysis comparing its requirements to SharePoint's capabilities. Team members also wanted to know which version of SharePoint (standard or enterprise) was best suited to meet their requirements. StoneShare assessed each requirement, informing NAV CANADA if it could be met using out-of-the-box features or a third-party add-on, or it required a customization. This process gave the team assurance that SharePoint was capable of meeting its requirements. StoneShare also produced a highly detailed technical architecture for implementing SharePoint at NAV CANADA, which was another great opportunity to assess the product's capabilities and implementation requirements before the project started. StoneShare's deep knowledge of SharePoint architecture and implementation provided the NAV CANADA team with invaluable information to plan the project and mitigate risks accordingly.

RESULTS AND ROI

The project achieved its main purpose: to retire the legacy intranet, which was no longer meeting business requirements, carried a very large infrastructure footprint, and was incurring escalating licensing costs. By replacing the legacy intranet, the company addressed the obsolescence and licensing risks and now has a modern and fully supported content management and collaboration platform that can scale with the growing demand for enterprise content management services.

Along with that success, the team points to some measurable outcomes worthy of note. The team also achieved the following with the launch of the new intranet:

- Reduced legacy portal content by 75%, resulting in 30,000 documents being deleted
- Migrated more than 880 SharePoint (2007/2010) sites, representing more than 200,000 documents, to Central
- Conducted 90 training sessions with more than 500 users across Canada

- Trained 200-plus content managers and site owners on how to govern Central
- Achieved tremendous usage since going live — twice that of the legacy site — with more than two million hits in five months

Some softer measures have also been achieved by the organization with the introduction of the new intranet. These include:

Financial Benefits

- Standardization of content management tools and processes, which has led to a more efficient use of technology and reduced costs related to content management
- Reduced time required to make content changes by providing self-serve content management capabilities

Employee Benefits

The project played a key role to enable a digital workplace at the organization, which improved productivity and engagement by allowing employees to**:**

- Find the information and people they need to do their jobs quicker and easier
- Collaborate, search, and complete tasks, as well as read the latest news
- Much more easily find, submit, and track frequently used business process transactions using eForms

The project also allowed the organization to measure the behaviors and benefits of the ECM platform and make incremental improvements to encourage people to use it.

Ultimately, the digital workplace improves productivity and strengthens the workplace technology environment to help people work smarter and also help attract and retain the best employees.

Technology Benefits

Decommissioning the legacy portal technology by leveraging investments made in the SharePoint ECM platform and electronic form technologies has addressed significant gaps in the company's technology environment; these accomplishments are aligned with IT's platform strategy, and include the following:

- Retired obsolete employee portal (Plumtree), which had reached end-of-life
- Used SharePoint ECM platform — first introduced in phase one of the program to modernize the company's corporate website and introduce a new secured extranet — to replace the employee portal, taking advantage of employees' existing skillset in SharePoint
- Introduced new eForms capabilities, leveraging SharePoint ECM platform

- Reduced user errors with fixed form validations through eForms, and improved form processing time through automation

LESSONS LEARNED

NAV CANADA team members share some of the lessons they learned in creating the new intranet:

- **Hire experts.** "Partnering with external firms such as StoneShare and Atomic Motion was a key success factor to bring expertise, proven methodologies, and lessons learned by their experience, not ours, to help de-risk the project and deliver better results. Partnering with these firms using a co-located model also provided tremendous opportunities to transfer knowledge from the external firms to in-house team members that is invaluable in becoming self-sufficient, which was our goal. Once the project was over, all external firms left, yet we retained sufficient knowledge to manage and maintain the platform going forward." (Simon Robert)
- **Strong leadership is key.** "You need strong leadership and execution from start to finish. These projects are difficult and require strong leadership at all levels of the project to succeed. We were fortunate to have that leadership, which ensured that decisions were made quickly, issues were dealt with in short order, and that the team was held accountable to perform at a high level." (Simon Robert)
- **Strategically manage stakeholder input.** "When building an intranet, you can't allow a free-for-all in terms of ideas and opinions. You need to do your research up front, vet with a few key stakeholders (in our case, HR and Communications), and approach the remaining stakeholders with firm recommendations. This saved us a ton of time, but still allowed us to manage the stakeholders in a way that they felt part of the process." (Bethany Johnson, Project Manager)
- **Sometimes low tech is more effective than fancy tools.** "We ran into some technical issues early on that caused an impact to schedule. In conducting a recalibration exercise, we decided to start with a (very large) whiteboard rather than traditional project scheduling tools. We realized that the whiteboard provided clear visibility to the dependencies and potential conflicts that we would miss with the traditional tools. We knew there were a lot of moving parts to delivering the new intranet, and to bring visibly and understanding to all of it was difficult. Using the whiteboard forced the light bulbs to turn on, as we would move things around to adjust for dependencies, conflicts, or time constraints. The end result was a tight but achievable schedule that we were able to hold to. We used this white board exclusively for the remainder of the project." (Johnson)
- **Focus on your content migration strategy — and stick to it.** "Don't say 'We'll get to that later' because you won't. Once people see how much work it is to tag and classify content, they'll think twice about migrating stale, dated files that they're too scared to archive. The time it takes up front to thin out and tag/classify your content is well worth the effort." (Kim Boulet, Change Management Lead)

- **Communicate early and often.** “Repeat your message over and over again until your employees finally say, ‘Okay, I get it.’ We had a particularly engaged team of representatives from across the organization and they did a great job in cascading information throughout their teams. But there are always pockets of users that, for whatever reason, don’t hear the message. By consistently stating our messages with clear purpose and direct calls to action, our team members were less likely to say ‘You didn’t tell me’ or ‘I didn’t hear you.’” (Boulet)
- **Create governance and adhere to what you create.** “We were completely transparent about our governance guidelines from day one. We were firm on new guidelines, such as adopting out-of-the-box features (zero customizations) and avoiding site sprawl.” (Boulet)
- **Create a style guide and circulate it widely.** “We developed a new style guide and helped our clients to adapt to a new way of thinking: that when it comes to navigating an internal intranet, less is more. Web content shouldn’t look different from one page to the next; there should be a clean, cohesive look and feel to the content with a focus on the user experience.” (Boulet)
- **Buy-in will be as strong as the emphasis you place on user participation.** “The best practices for NAV CANADA’s ECM program were stakeholder management and change management for the organization. The NAV CANADA ECM program ensured end users support and buy-in by enlisting key individuals from each business unit to be part of its extended project team. All major decisions of the project are consulted and approved by the extended project team members. The Steering Committee of the ECM program is also represented by executives from each of the business units. This ensured top down awareness and support for the extended project team members. By using this inclusive model, change management effectively begins at the very start of the project and creates a sense of ownership for every business unit during the entire journey of the project.” (Raymond Ho, Technical Delivery Manager)
- **Staff according to need, not according to availability.** “One of the project team’s key technical lead resources from our partner was assigned to the project on a part-time basis. This resource was assigned to two projects at the same time at two different client locations each week. Unfortunately, this arrangement did not work well in practice, as the rest of the team working full-time was constantly expecting support and direction from this resource, who was only on-site two out of five days each week. Consequently, the demand of this resource while they were in the office was overwhelming, and it became counterproductive and unsustainable. It ended up causing the individual and his team to perform many overtime hours to catch up on a weekly basis to meet commitments. This is not a sustainable model.” (Ho)

- **Stakeholder involvement is key to ensuring success.** “This was a large-scale enterprise project, and we needed to ensure buy-in and support in order to be successful. Resources from 11 business units were needed to migrate and develop new content. One of the keys to our success was strong project sponsorship coupled with early and regular executive engagement. We secured their commitment at the onset and they were there throughout to honor that commitment and provide the support we needed.” (Johnson)

Kerry Group plc

OVERVIEW

COMPANY

Kerry Group provides the largest, most innovative portfolio of Taste & Nutrition technologies and systems, and functional ingredients & actives for the global food, beverage, and pharmaceutical industries. The consumer foods division, Kerry Foods, is also a leading consumer foods processor and supplier in select EU markets.

Headquarters: Tralee, County Kerry, Ireland

Company locations: Worldwide

Locations where people use the intranet: Employees at all Kerry Group sites, offices, factories, and locations use mykerry,

Annual revenue: 2015 Group revenue was €6.1 billion (euros)

THE INTRANET

Users: Approximately 13,000 users at 163 sites in nearly 50 different countries across five continents

Mobile approach: Responsive web design

Technology platform: SharePoint 2013

TEAM

Executive sponsorship: Gerry Behan, President & CEO Kerry; Flor Healy, CEO Kerry Foods; Michael O'Neill, President & CEO North America; Brian Mehigan, CFO; Frank Hayes, Director of Corporate Affairs, Kerry Group; Iain Witherington, Senior Vice-President Group HR

Executive leadership: Noelle Watts, VP of ICT & Digital Lead; Jim Egan, Director, Employee Communications & Engagement Kerry; Tony Bergin, Group Internal Communications Manager; Sue Lamon Diver, Marketing Communications Director–EMEA; Sharon Whitehead, VP of Global HR; Noranne Courtney, Regional Business Engagement Manager; Dillan Shikotra, Internal Communications, Kerry Foods

Functional Leadership: Andy Royston, Chief Marketing Officer Kerry; Khaled Zitoun, Global CTO; Tom Murphy, Chief Procurement Officer; Pat Casey, CIO–Retired; Brenda L'Estrange, Chief Information and Process Officer

CORE TEAM

Design/Analyst Team: Gillian O'Halloran, mykerry Team Lead; Paul MacDonald, Analyst; Robert McWhinney, Analyst

External: Randall Snare, Head of Content Strategy; Owen Derby, Creative Director; Sheena Bouchier, UX Designer; Lynsey Duncan, UX Designer; Tom Cunningham, Graphic Designer; Charles Fenoughty, Digital Strategist; Emily Atkins, UX Designer

Technical Team: Adnan Ahmed, SharePoint Architect; Liam McCambridge, Senior Developer; Nicole Hesser, SharePoint Administrator

External: Sridhar Bommana, Technical Lead; Krishna Vungarala, Technical Lead; Saurabh Tripati, Technical Lead; Akash Rawat, SharePoint Developer; Adrian Heaney, UX Developer; Conor Luddy, UX Developer; Rod Farry, UX Developer; Ingars Paeglitis, Senior SharePoint Developer; Joao Lopez, Senior SharePoint Developer

Communications: Gemma Lougheed, Communications Assistant; Michele Caldwell, Communications and Community Relations Representative

Training: Noel McDermott, Global Learning Manager; Romeo Damian, Global Learning Specialist

INTRANET TEAM

Team members shown here (top row, left to right): Gillian O'Halloran, Paul MacDonald, Robert McWhinney, Adnan Ahmed, Liam McCambridge, and Nicole Hesser; (bottom row, left to right): Noelle Watts, Tony Bergin, Jim Egan, Michele Caldwell, Noel McDermott, and Gemma Lougheed.

HIGHLIGHTS ABOUT THIS WINNER

The Kerry Group intranet, mykerry, supports 13,000 of Kerry Group's employees, across five continents and 163 locations in 50 countries. The new site was designed with collaboration and knowledge sharing in mind, to help employees find information and connect with one another. The team integrated social tools for the first time, added video, and created personalized experiences for employees around the world.

- **Regional content.** The new site includes personalized content based on the employee's region. News is now targeted to specific geographic areas, helping to ensure content is useful and relevant to local audiences. When the communications team adds a news story to the site, they can send it to the global organization or tag it by specific region or functional department to target it to specific people.
- **Introducing social tools.** To help meet the goal of fostering a global culture of knowledge sharing and collaboration, the team introduced social tools, enabling two-way communication on the intranet for the first time. The team encourages participation with the new tools by using an informal tone and getting leadership involved in creating and reacting to content. The team also launched a "Let's Get Social" campaign with posters and signage, and started a leaderboard competition. The campaign aimed to increase awareness and use. It included information about how to use social elements, such as hashtags (#), how to label content, and how to use the @ symbol to refer to other employees or groups in posts.

- **Single platform.** The site provides a single entry point for information and productivity applications across the entire worldwide organization. One goal of the site is to help employees find the information and people they need to help bring the most value to customers. The intranet also acts to unite an organization that is constantly growing. As Kerry Group acquires businesses around the world, the new site helps integrate these new businesses and employees, enabling them to easily connect with their new colleagues.
- **Quick delivery.** The team had a nine-month timeline, including design, sign off, testing, and implementation. This was a very tight schedule, so it was vital that the project was scoped appropriately. Decisions had to be made to identify the functionality that would bring the most benefit, and these elements were prioritized over less critical functionality, which was scheduled for future releases. This process gave the organization a pipeline for future development and ongoing improvement, while the appropriately scoped project was delivered on time and within budget.

BACKGROUND

Kerry Group's intranet, mykerry, is a collaboration and knowledge space developed to significantly enhance information availability and UX for Kerry Group employees. It includes information on people, strategies, policies, locations, technologies, products, brands, and customers and is built to connect the company's employees across the globe and help them do their jobs more easily.

The main reason for the most recent intranet redesign was to replace an existing legacy intranet solution, which was outdated and no longer met the organization's needs. Kerry Group had grown significantly since the original solution was deployed and has become a truly global organization, with employees dispersed across the world and often on the move.

To support this growth and the information needs of its employees, the company needed an up-to-date intranet solution with a whole host of new functionality, including regionally customized news, video, social, content management, access security, mobile availability, and integration with a variety of other systems.

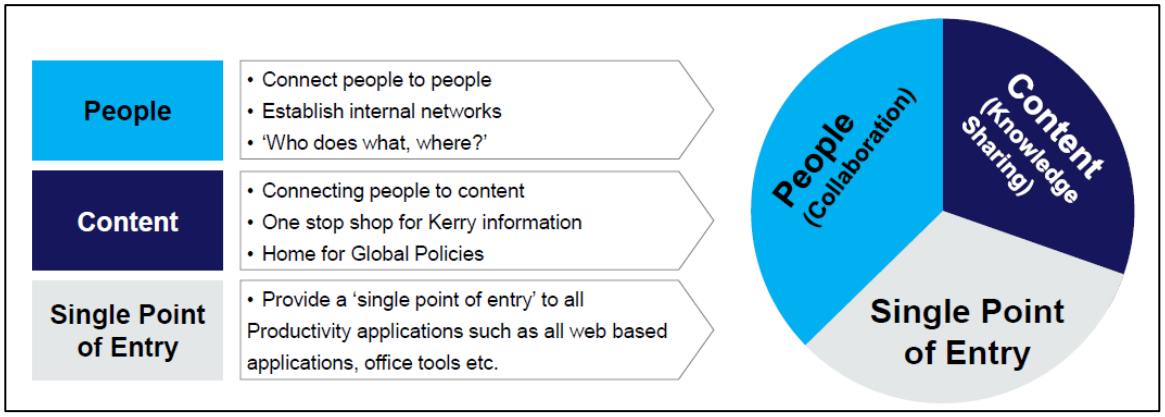
In addition, the organization needed a new, scalable technical solution that could meet its needs as the business evolved. It chose SharePoint to meet this requirement.

Goals

The project's overall goal was to foster a global culture of knowledge sharing, knowledge transfer, and collaboration. The redesign's high-level goals were to better connect

- **People to people:** Support collaboration by establishing a comprehensive employee profile database and various internal networks across subject matter and locations.
- **People to content:** Provide easy access to and rules for content and information storage, supported by integrated search.

- **Single point of entry:** Provide one access point to all productivity applications.



This chart illustrates the company's high level goals as they embarked on an intranet redesign project.

Specific goals included the following:

- Support global business growth strategies
- Drive business efficiency for all future acquisitions
- Accelerate the on-boarding process for employees taking on new roles and responsibilities
- Encourage employee growth by facilitating strong working relationships
- Promote continuous improvement and consistent ways of working across all global functions, technologies, and end-use markets
- Value, recognize, and reward employee expertise, knowledge, and engagement
- Provide a single, user-friendly, and intuitive virtual global platform that would
    - Enable and sustain knowledge management success through global governance
    - Provide a continuous stream of meaningful, interesting, and fresh content
    - Provide a single point of entry for all knowledge, applications, and contacts employees require to maximize their performance
    - Integrate with communication technologies including mobile devices, applications, videos, and social media

In addition to these broad goals, the organization wanted the new intranet to accomplish some tactical wins by adding new functionality to support news, video, and social components. It also wanted to spruce up the homepage's look and feel to better reflect the branding and modernity of the organization.

Challenges

- **Timeline.** The timeline was the most significant project challenge. The team had only nine months to get the new intranet designed, approved, signed-off, tested, and implemented. Some elements of the original design had to be pushed into a future release because they required more time for technical work (the presence indicators on social, for example) or because the content was not ready.
- **User feedback.** Getting comprehensive user feedback from a global organization was also a challenge in the short timeframe. To accomplish this, the team formed super user and focus groups so it could gather as much input as possible. After go-live, the team continued to conduct focus groups, with the resulting feedback leading to some rework. Keeping the focus groups going has proven very valuable; the team has gained excellent insights from people using the new intranet in their day-to-day jobs.

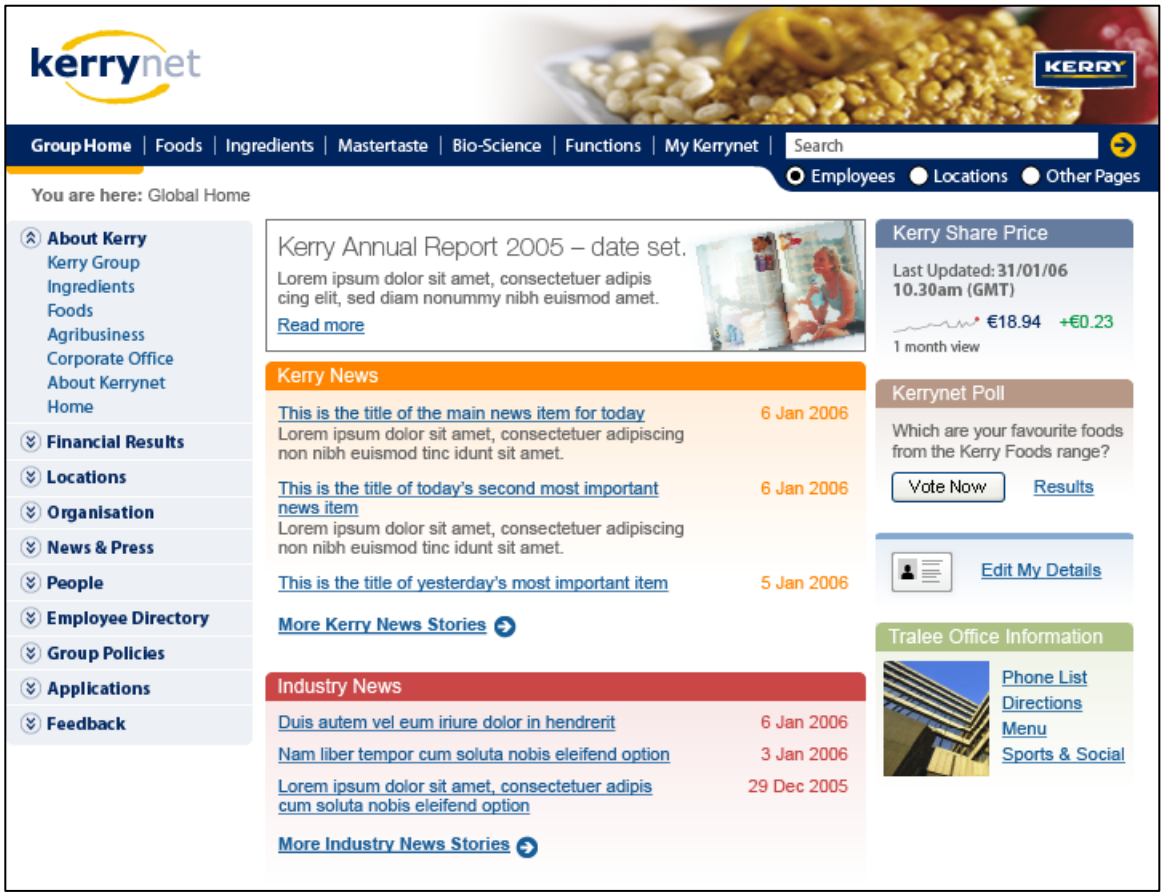


Image 1. Kerry Group Intranet Old Homepage. The old homepage, as it looked prior to the redesign. *Kerry Group_01_home_version1.png*

DESIGN REVIEW

Homepage

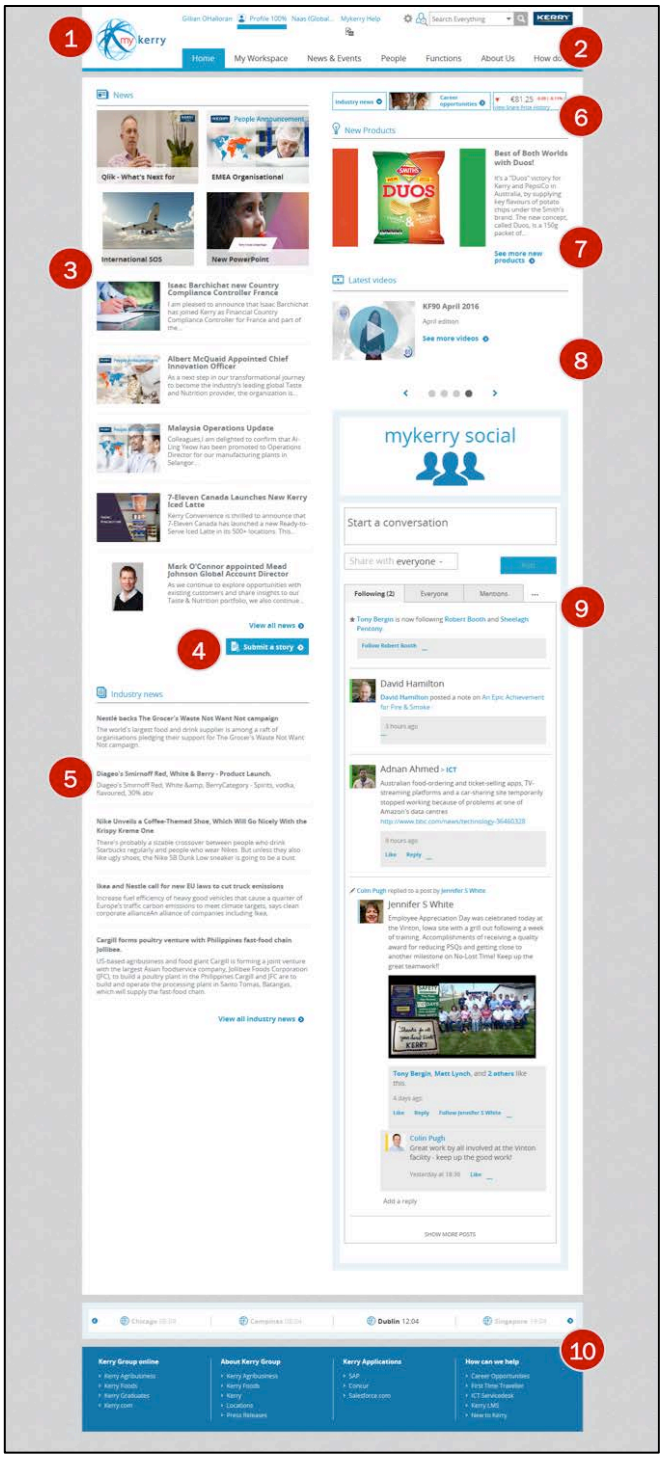


Image 2. Kerry Group Intranet New Homepage. *Kerry Group_02_home_live.png*

Homepage Highlights

1. **Modern design.** The new design reflects the organization's branding, using the corporate color of blue balanced with sufficient white space.
2. **Navigation.** The currently selected navigational section is indicated in a blue tab; the other section tabs appear as gray text on a white background.
3. **News.** The homepage prominently features news: the top four items are images with brief headlines. If users move the mouse over a news item, more information is revealed. Additional news items are listed below, with an image accompanied by a headline and the first few lines of text from the story. News is personalized based on the employee's division, location and department.
4. **Submit news.** Employees can submit ideas for news stories. A large, clear call to action — the blue button with a page icon and a link to *Submit a story* — appears directly beneath the list of news items. Any employee can submit a news story. The story goes through an approval process and can be published for a specific group or "upgraded" to the entire organization.
5. **Industry news.** At the bottom left side of the page, the *Industry news* section gives users access to information about taste, nutrition, and international consumer foods that is relevant to the organization's day-to-day work. The information is pulled into the site via an RSS feed.
6. **Quick links and information.** The homepage's upper right section includes a link to *Industry news*, which helps visitors navigate to the headlines further down the page; a link to *Career Opportunities*; and the company's share price, together with a link to the share price history. The *Career Opportunities* link was added to the homepage in response to user feedback and requests after the initial launch. Eighteen months after go-live, the team revamped and improved the homepage based on this and other user feedback.
7. ***New Products*.** Information about products from around the world appears in the upper right area, with a picture of the product and a brief description. Visitors can click through to see more new products as well. This informs and educates employees on products and also encourages new product concepts and ideas in other regions. In addition, it helps keep employees connected with both their end products and their customers.
8. **Video.** The homepage also features a carousel of the company's *Latest videos*. People can play a video from the page, navigate through the video carousel via the forward or back icons, or click a link to see more videos.
9. **Social.** *mykerry social* is featured prominently on the lower half of the homepage. Here, visitors are encouraged to *Start a conversation* via a large text field, select who will see the posted information, and then push a button to post the content. The prominence of the prompt in the design shows the importance of social sharing to the organization. The posting section is followed by three tabs that let people quickly see: posts from people they are following, posts from everyone at Kerry Group, and posts that mention them. Employees can like or reply to any post in mykerry social.
10. **Footer.** Each page's footer includes world clocks from key geographic locations: Chicago, Campinas (Brazil), Tralee (Ireland), Singapore, and Shanghai. It also provides links to external sites and Kerry Group corporate

information, key applications, and support information (such as travel support and the ICT Servicedesk).

Employee Directory

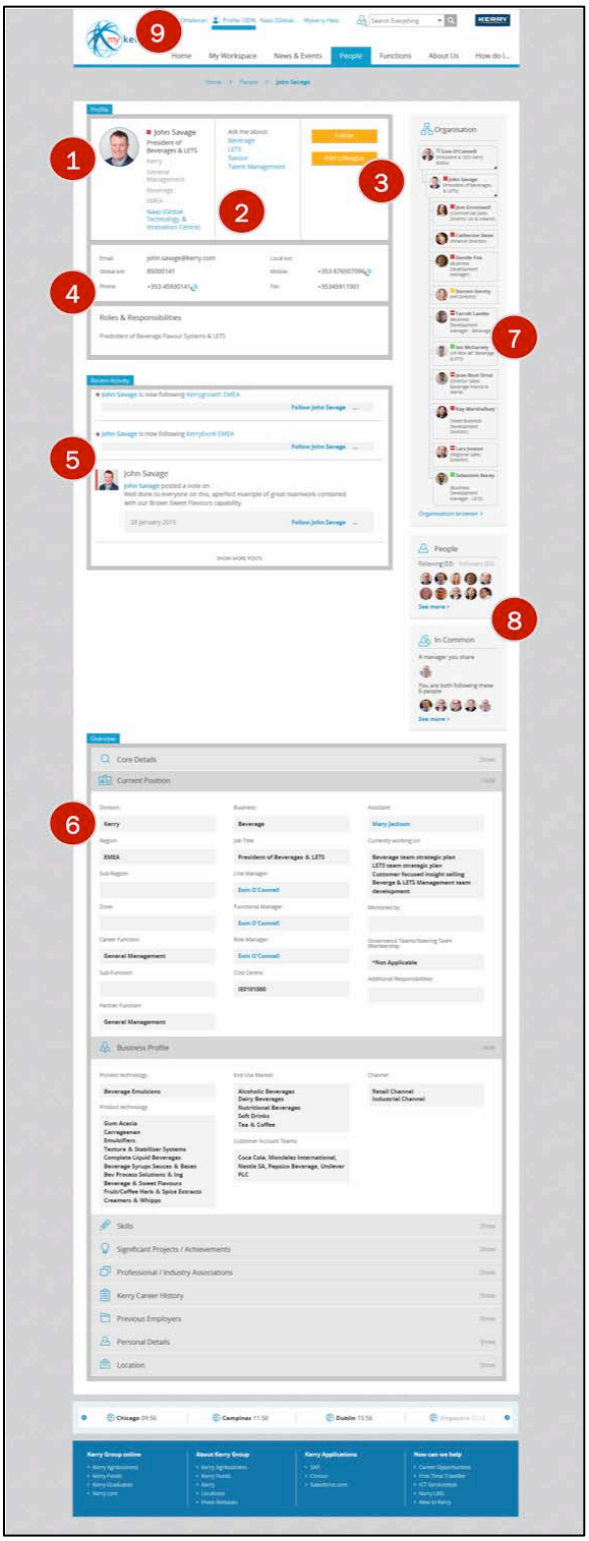


Image 3. Kerry Group Intranet Employee Profiles Page. *Kerry Group_03_Profiles_live.png*

Employee Directory Highlights

1. **Robust profiles.** The company aims to provide comprehensive employee profiles to enable connections between employees and across SMEs and locations. With more information in each profile, people can learn more about each other; the site can also use the information to help connect people via search. The additional information makes the site's search capabilities stronger, as the site has more information about each individual's expertise.

1. **Expertise.** The profile starts with information about expertise, rather than contact information. A hierarchical listing of the employee's department, starting at Kerry and going down to the user's specific group, follows the employee's picture. The next column includes areas of expertise, which employees add to their own profiles. For example, an employee working on a new ice cream coating can add "coating" as something they know about.

2. **Follow.** Employees can follow one another, and track each other's activity on mykerry.

3. **Contact information.** Key contact information includes the employee's email, global extension, phone number, and mobile number.

4. **Recent activity.** The profile includes a snapshot of the user's most recent social activity on the site.

5. **Overview.** The bottom of the page contains a more detailed view of information about the employee. This includes a statement about what the employee is currently working on in the *Current Position* area, and detailed information about expertise and markets in the *Business Profile* section. People can expand and collapse the profile section as needed. Sections include *Core Details*, *Current Position*, *Skills*, *Significant Projects/Achievements*, *Professional/Industry Associations*, *Kerry Career History*, *Previous Employers*, *Personal Details*, and *Location*.

6. **Organizational chart.** The right side of the page includes a view of where the user falls within the organizational structure, showing who the employee reports to as well as who reports to the employee.

7. **Relationships.** The *People* and *In-Common* areas work to foster relationships across the organization. The *People* area shows who the employee is following as well as who is following that employee. The *In Common* area shows employees their shared connections in the organization. In this case, the employees share a common manager and six colleagues that they are both following.

8. **Updated information.** People are encouraged to complete all sections of the employee profile. A person's profile status is shown at the top of each intranet page as a reminder to people who may not have completed their full profile. If the profile is not 100% complete, both the employee and the employee's manager receive periodic and personalized email reminders about what needs to be added and why the person should fill in the information.

   The site provides a quick reference sheet for employees so they understand what needs to be completed to achieve the 100% profile rating. To help with profile completion, the team opened the profile pages to employees about a

month before the new site's launch so people could add information early. It also ran a campaign around filling in profiles to further encourage their completion. To get employees' profiles started, the site pulled existing information from a variety of sources.

Video

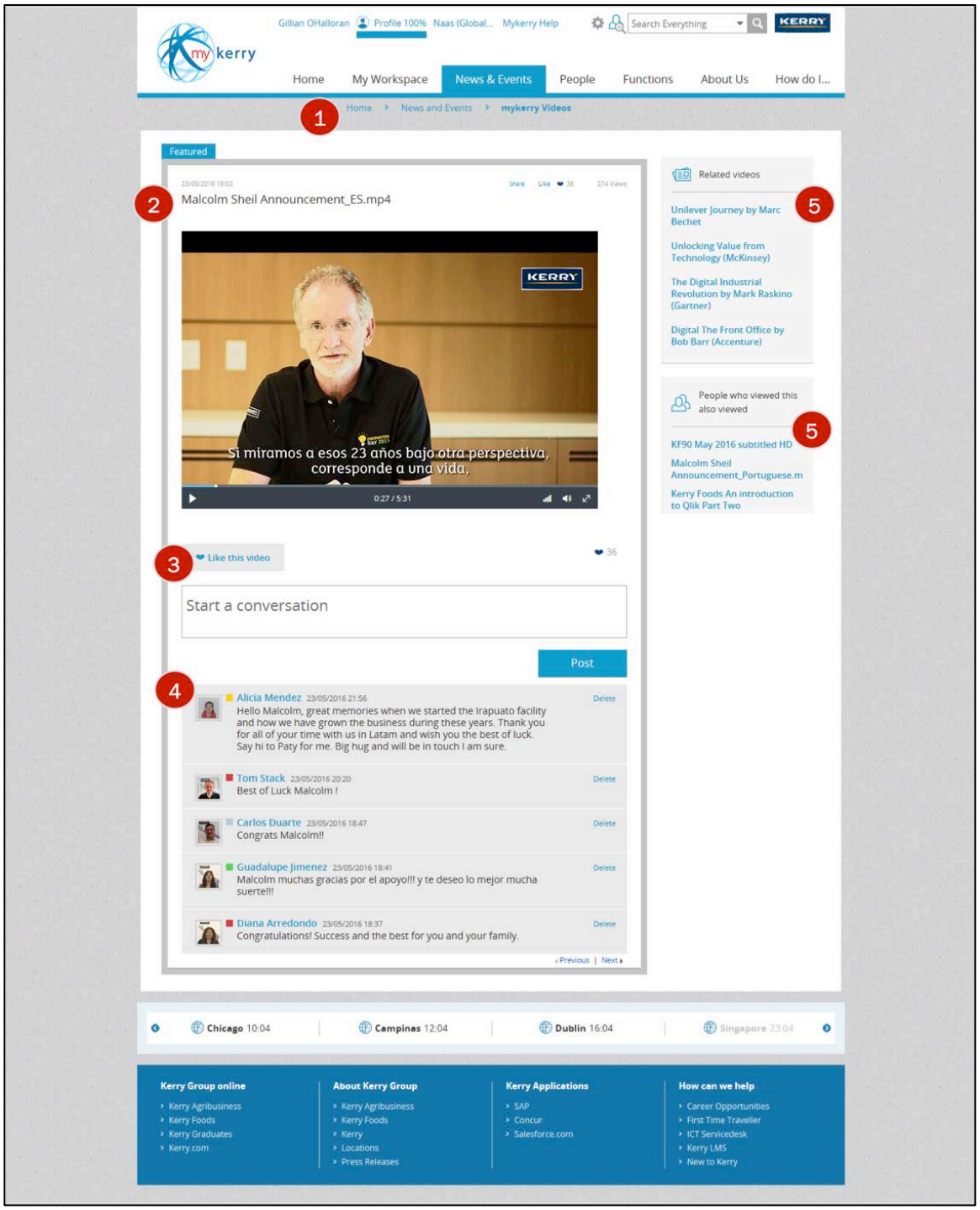


Image 4. Kerry Group Intranet Video Page. *Kerry Group_04_Video Functionality_live.png*

Video Highlights

1. **Video.** Video is a new addition to the site. Videos are featured in the site's *mykerry Videos* section, which appears within *News & Events*. Videos are also featured throughout the site and on the homepage, where a carousel of recent content appears.
2. **Details.** Each video page includes the date the content was posted along with the file name. The video's length is displayed below the image, where the time completed and time remaining are also shown. Videos play within the body of the page, rather than in a separate window.
3. **Likes and comments.** A clear and prominent *Like* button appears with each video, along with a heart icon and a number indicating how many likes the video has received. A large text field with the prompt text *Start a conversation* appears below, with a button to post a comment. This phrase is used throughout the site to invite people to add comments or post information.
4. **Latest comments.** Next, the latest comments about the video are shown. The contributor's picture and name are included, together with the date and time the comment was posted. Visitors can page through comments via the *Previous* and *Next* buttons at the bottom of the last comment.
5. **Recommended content.** The site's right column includes a list of related videos. This content is presented based on metadata and pulls content similar to the video being viewed. Following this is a section called *People who viewed this also viewed*. This list of recommended viewing is based on other visitors' behavior on the site. This is a good use of data about user activities to help people find information of interest.

Functions Hub

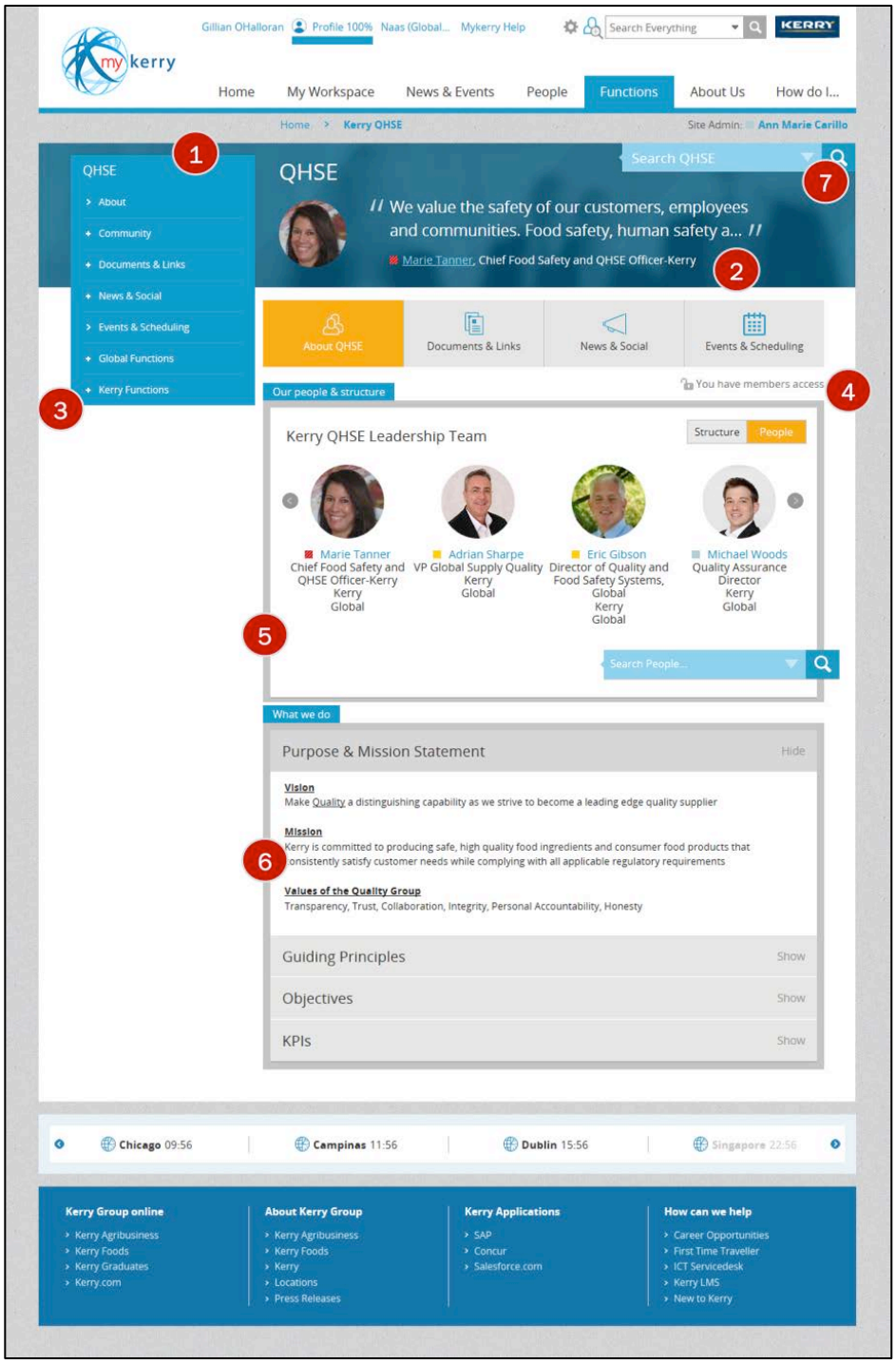


Image 5. Kerry Group Intranet Department Homepage. *Kerry Group_05_Function Hubs_live.png*

Functions Hub Highlights

1. ***Functions* hub.** In this portal area, different functions explain their role in the organization and share specific functional content and news with colleagues or the whole company. The portal lets members of various hubs communicate with each other and share information.
2. **Quote.** Each function page includes the function's name, a picture of a leader, and a quote, together with a link to that leader's profile.
3. **Secondary navigation.** The pages include navigation along the left side that lets visitors explore the hub. Key areas are also highlighted in boxes across the top of the page.
4. **Members.** Function members have extended access to the site. A lock in the corner indicates whether a user has member access or not. Members can access private areas that are open only to people within the function; these areas include discussion forums for sharing knowledge and posting to fellow employees.
5. **People and structure.** This section highlights the function's leadership team in a carousel that users can rotate via arrows on either side of the employee images. A toggle in the upper right lets users change the view from *People* to *Structure*. Under the images of the leaders is a blue search box that offers a quick way to search people within the team.
6. **Basic information.** This area contains information about the function's *Purpose & Mission Statement*, *Guiding Principles*, *Objectives*, and *KPIs* in an accordion structure, which is opened and closed via *Show* and *Hide* links.
7. **Local search.** A search specific to the group is included at the top of the page's content area to distinguish it from the site-wide search available at the top of each page. Filler text helps distinguish this search as well; here, it specifies the functional area — *Search QHSE* — in contrast to the *Search Everything* or *Search People* text in the page's other available search boxes.

DESIGN PROCESS AND USABILITY WORK

Design Approach

Various activities informed the design choices for the new intranet, including the following:

- **Selecting a design partner.** The first step on the design journey was to identify an external design partner with relevant expertise. The project steering team assessed several organizations, choosing a partner that had appropriate experience and skills, and was a good fit for Kerry Group.
- **Assembling a design team.** A multifunctional team was assembled to work with the design partner. This team included representation from senior executives; key functions such as HR, ICT, and Marketing; internal designers; and internal communications.
- **Conducting peer-company analysis.** The team began its research by looking at other companies' intranet designs and took cues from designs that seemed to work particularly well.
- **Determining critical requirements.** The team mapped out the new intranet's critical objectives and identified its required functionality; this was a key driver in the design process.
- **Holding persona workshops.** The team conducted workshops to identify the personas of potential users. To create a design that would reflect various user viewpoints, the team sought to determine what various users wanted to see and would find engaging, as well as to identify their needs, and so on.
- **Prioritizing content.** The team prioritized page content through activities such as card sorting. They enlisted employees from different functions and regions to help them define the IA.
- **Holding sketch sessions.** The design team took an iterative approach to page design and wireframing, holding sketch sessions where team members sketched out different approaches, then reviewed them with representative users.
- **Ensuring company branding.** Color schemes, logos, and the overall look and feel were critically assessed to ensure that they aligned with Kerry branding, both internally and externally.
- **Using interactive HTML.** As the design advanced, the team prepared a clickable prototype to show how a typical user could journey across the website. This was a particularly valuable demonstration tool.
- **Courting user acceptance and input.** Wireframes and prototypes were shown to user focus groups across the company's regions, to help the team hone, improve, and finalize the design.

IA Approach

The team focused strongly on getting the IA right. Because the company had large divisions and subdivisions, it was important to have a cohesive intranet that also incorporated the requirements of its many entities. The final design used several navigation mechanisms:

- **Meta navigation.** A small menu on the top, in blue text, that is secondary to the primary navigation. This meta navigation provides quick links to the employee's profile, location page, and help material. It also shows the percentage of the profile that is completed.
- **Megamenu.** On the previous intranet, this menu showed all the main navigation at once. However, the design team's research found that user reactions were very mixed toward the megamenu, so the team removed the megamenu when it did the redesign.
- **Side navigation.** This shows two layers of subnavigation beneath the main navigation.
- **Breadcrumbs.** This lets people easily navigate back up, as well as quickly understand the context of their location in the intranet.
- **Footer.** The footer provides quick links to frequently used applications and information.

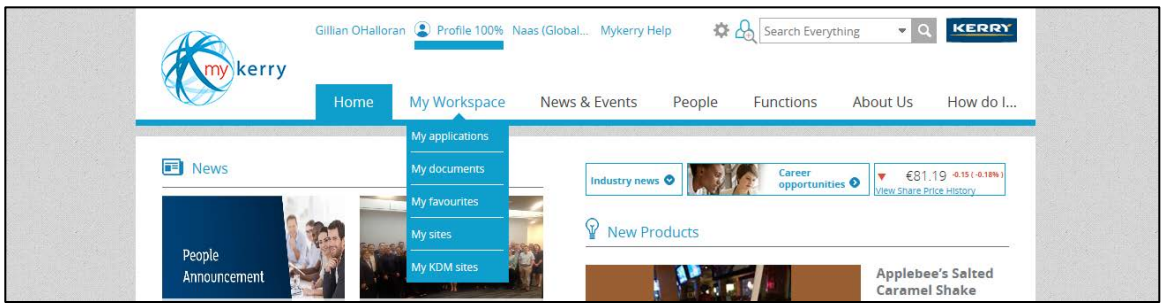


Image 6. Kerry Group Intranet Meta Navigation. At the top, in blue, the secondary navigation provides quick links to an employee's profile, location page, and help materials. It also shows the percentage of the profile that is completed. *Kerry Group_06_Navigation Header_live.png*

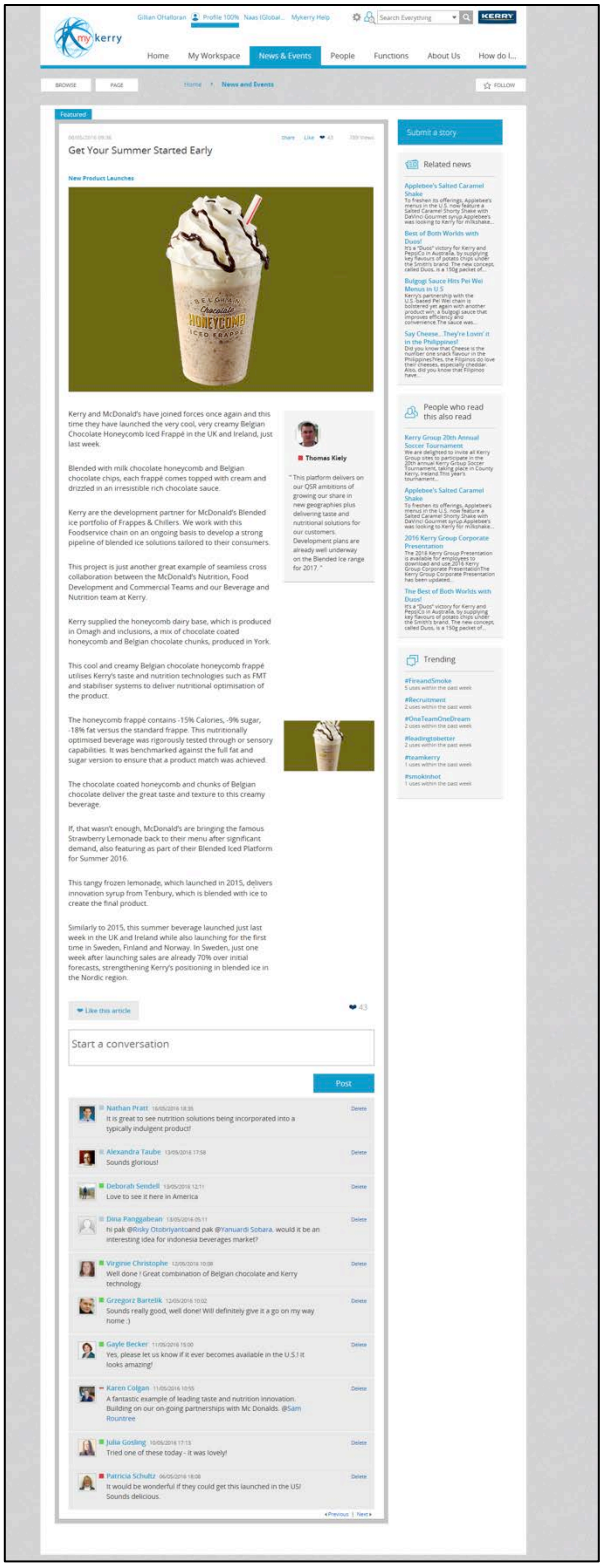


Image 7. Kerry Group Intranet News Story. This shows a typical news story, which employees can like, share, or comment on. *Kerry Group_07_News Story Social Feature_live.png*

Adoption and Buy-in

The Kerry Group team treated adoption as a serious issue to be planned for and accommodated throughout the rollout. Following are some of the approaches the team used to ensure the intranet was ultimately used and appreciated:

- **Get leaders on board.** The team had full buy-in from the company's senior leadership team and from the heads of key functions such as HR and ICT. One of the company's senior business leaders took an active role in the project's implementation, which was a major factor in its success. Further, most senior executives completed their employee profiles before the system went live to encourage others to do the same.
- **Try different approaches to entice people.** Moving from a custom Lotus Notes-based system to an up-to-date SharePoint solution was a big change for all of Kerry Group's users. Some embraced it quickly, while others took a little longer to acclimate.

  The intranet team tried many things to get people on board; the following approaches were most effective:

  - Create an animation introducing mykerry
  - Explain what the new intranet could do through roadshow presentations and town hall meetings across regions
  - Nominate mykerry super users and champions on key sites, giving mykerry an all-important local face to answer questions, resolve problems, and promote the new platform
  - Provide branded merchandise to help build mykerry's brand recognition
  - Make the intranet the default homepage for all employees — a small but crucial step toward adoption.
- **Train people.** Recorded training sessions were set up after go-live to help people get the most out of the new intranet. The training program also included a suite of training materials, including user guides, quick reference guides, and tips and tricks. Despite the availability of all these tools, many people tried to figure out the intranet on their own by simply exploring it. These explorations led to queries and helped identify additional training needs. This, in turn, helped the team realize that the training program and materials needed to evolve over time.
- **Customize when needed.** Out-of-the-box is not always the best solution to encourage technology use; the Kerry Group team learned that sometimes you need to spend a little more and customize the UI design of critical functionality to make it more usable. For example, completing people profiles was an initial key requirement of employees, yet the interface to do it was clunky and unfamiliar to many people. This led to some initial frustrations. To address them, the team had to make the software easier to use.

- **The adoption program never ends.** The adoption program must continue indefinitely, as people's intranet needs evolve and new people join the organization. This is important to bear in mind: don't plan for a one-off training program at launch. Rather, plan for continuous training and awareness-raising year in and year out.

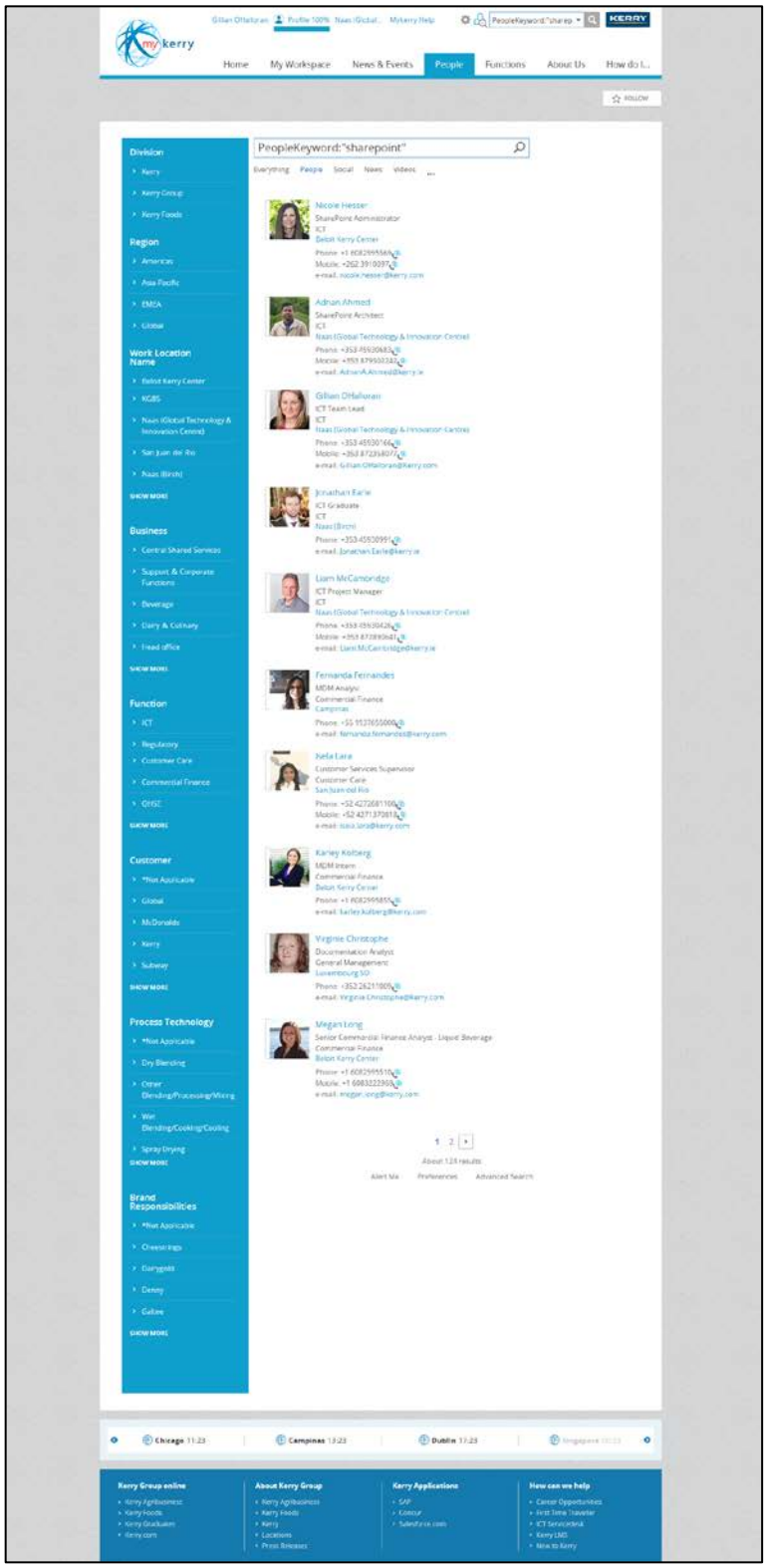


Image 8. Kerry Group Intranet Search Results. This shows the main results screen that users see after searching for a particular person in the company directory. This page lets users IM the person directly from the listing. It also offers an email link, along with personal and professional information.

Kerry_Group_08_Search_Results_live.png

WORKING WITH OUTSIDE AGENCIES	
Agency	**Project Role**
iQ Content (now: Each & Other) A UX design and research consultancy	**Initial Launch of mykerry:** • Designed the IA, conducted card sorts with relevant user groups, and so on • Designed wireframes and graphics • Implemented HTML page design
Storm	• Developed SharePoint solutions
Sequel	**Homepage resign phase:** • Designed wireframes and graphics • Implemented HTML page design
Avanade (Accenture)	• Developed SharePoint solutions

GOVERNANCE

The ultimate owners of the mykerry intranet are the Kerry Group businesses. This is demonstrated by the fact that the intranet sponsors are the organization's most senior executives. Communications, HR, and ICT jointly own the intranet's ongoing development and administration.

Having business representatives and multiple functions involved in intranet ownership has been very positive. With so many opinions and ideas, the team feels that the end result is a very well-rounded intranet. This model has also forced the organization to have a clear governance structure so that all requests and requirements are reviewed appropriately and scheduled for delivery depending on priority assigned by the group, resulting (hopefully) in no angry customers around delivery time. The involvement of such high-level stakeholders also means that the intranet team has support from people on the ground in every region who are advocating for mykerry and driving it forward all the time.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Executive Sponsorship	Account for the success of mykerry Actively advocate for and visibly sponsor mykerry Nominate executive leads Oversee nomination of function leadership Represent senior executive and business and functional leads
Executive Leadership	Advocate for and sponsor mykerry at meetings Ensure appropriate support structures are in place for the success of mykerry Determine governance priorities: affirm the message, time, resources, and support, and engage with the strategy
Function Leadership	Advocate for and promote mykerry Ensure the implementation and success of mykerry in their business area Remove obstacles to mykerry adoption Provide regular updates on adoption progress and encourage feedback Apply standards, promote best practice, and escalate issues to executive leads Work with the core team to deliver implementation and enhancements
Core Team	Provide governance, program management, coaching, support, and evaluation of mykerry Ensure that content and features are available on the group intranet level

Super Users	Work with the intranet core team to prioritize changes and enhancements and test new functionality Promote and drive adoption in their region Encourage employees in their region to complete their profiles Support the Site Champions, who provide the first line of support to employees Act as a go-to person for Champions: answer any questions about the intranet in their region Train and support content owners
Site Champions	Ensure that location pages are up-to-date and consistent Act as the first port of call for all employee queries at their location Educate and train employees on how to navigate and use the intranet; communicate new changes and updates Collate feedback and suggestions from their location back into the core team
Content Owners	Update their sections and ensure consistency Delegate some updates and changes to other members of their team or department

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	http://mykerry/Pages/default.aspx **Mobile URL:** https://mykerry.kerry.com/Pages/default.aspx
Default Status	mykerry is set as each employee's homepage; this is a global policy, and the homepage cannot be changed. The mobile URL is pushed down as a bookmarked icon to employee's home screens on all company phones and tablets. People can also bookmark the URL on their personal phones.
Remote Access	• People can use the mobile URL to access the intranet remotely, without being connected to the Kerry network. This is especially useful for sales and marketing teams, who are often out visiting customers and exhibiting at trade shows. This easy intranet access lets them stay connected with what's going on internally and also easily collaborate and access documentation while on the move.
Shared Workstations or Kiosks	Factory-based employees access mykerry via shared workstations (where available). All of the manufacturing locations' processes and procedures are stored on the intranet, and this documentation is regularly accessed and referenced throughout the day. (Access to this documentation is particularly important when auditors visit.) The intranet also stores key regulatory documentation, such as product specifications and safety data sheets. Factory employees also use the intranet to find people through the site's extensive search functionality and to stay up-to-date on all company news and events.

TIMELINE

PROJECT MILESTONES	
Milestone Date	**Milestone Description**
2000	First company intranet built on Lotus Notes technology
2004	SharePoint 2007 was leveraged across Kerry Group for project teams document and information repositories
2007	Lotus Notes intranet design and functionality upgraded
2012	Collaboration and team sites launched in SharePoint 2010 as a first pilot of collaboration functionality
February 2013–October 2013	Launch of new intranet on SharePoint 2013 platform complete with enterprise collaboration suite
September–October 2015	Launch of new homepage redesign

CONTENT AND CONTENT CONTRIBUTORS

Contributors

Kerry Group has a team dedicated to communications in every business region — Europe, the Middle East and Africa (EMEA); LATAM; Asia Pacific (APAC); North America; and Foods & Global. Members of this team play a big part in sourcing content for their region, especially news content. In addition to these contributors, any employee, function, project, or team can submit news stories to the intranet. The relevant regional Communications Team member has publishing rights and must approve all content. Should a regional news story be deemed interesting for the whole of Kerry Group, the Group Communications Team can upgrade it accordingly.

The Group Communications Team meets regularly to discuss intranet issues and mykerry content specifically. Promoting mykerry and mykerry content is a significant part of team members' job function, so they have the final say on if, and when, content is published. This workflow ensures a certain level of control and oversight over all news content published on mykerry. A Group-wide editorial calendar helps the team manage content planning and avoid duplication; news is targeted to employees, depending on their job roles and where they are based.

For other, non-news content, various people own pages. For example, the Group Sustainability Manager owns mykerry's *Sustainability* section and is the only person who has editing rights for those pages; any changes must go through that manager.

Contribution

The intranet team seeks out contributors, but it also tries to encourage employees to submit content themselves. This effort is aimed at creating a culture of ownership. Team members want various contributors to feel that they own and are responsible for content, and that they can have influence as a result. Contributors who feel this sense of ownership are far more likely to take their accountability seriously.

The team also engages with SMEs on various topics, checking in with them regularly and encouraging them to submit content. Whenever possible, the intranet team calls on contributors to provide regular updates to the site. For example, the company's Learning Academy sends information on upcoming trainings to post as mykerry content. The Marketing Team also contributes stories. Each week, a member of that team submits a story about a new product, and this regular contribution is factored into the site's editorial calendar. Such a relationship not only serves the intranet — by having a regular schedule of predefined content — it has also helped intranet team members forge strong relationships with Marketing staff members, who now approach them with new, unsolicited content.

The team also runs regular mini-campaigns — on mykerry and through newsletters, emails, and word of mouth — that encourage employees to submit content.

Training

Training for mykerry is something the team takes very seriously. The training methods and tools for mykerry are owned and administered by the Kerry Group Learning Academy, in close conjunction with the mykerry Steering Committee and the Communications Team. Because different employees have different proficiency with mykerry, team members have committed to constantly finding ways to help company employees use different functionalities on the site. They also reach out to people in other ways, including the following:

- **New hires.** The intranet team has prepared training materials for new hires so that they can get the most out of the intranet from their very first day.
- **News items.** The team makes an effort to ensure that the process for submitting a news item is as simple as possible; it also created a one-page quick guide on how to do it.
- **Help.** At the top of the homepage is a quick link to *mykerry help*, where visitors can find information on how to use all the elements of the intranet. Available training materials include how-to videos, slides, recordings, and Quick Reference Guides. People can also filter results based on whether they consider themselves a beginning, intermediate, or advanced user.

Management

The Communications Team ultimately manages all content, but content in each region is owned by the Communications Team in that region. As communication professionals, team members work alongside contributors to make sure all content is accurate, appropriate, well edited, and up-to-date.

For Kerry Group-wide content, page owners are responsible for doing the same, and can enlist the help of the Group Communications Team as needed. For example, mykerry's section on the Bike to Work program is owned by the HR Team, but that team works with the Communications Team to decide what content is most appropriate and how to best present it; the HR Team also got help initially to learn how to upload content.

Quality

Ensuring high-level usability and efficiency is something team members think about a lot, because they want users to keep coming back every day and for mykerry to be the go-to place for information.

"It has taken a lot of effort and enthusiasm from the mykerry Communications Team to make sure that quality is maintained," says Communications Executive Gemma Lougheed. "One effective way we have found is to safeguard strong sponsorship and participation from senior leadership. If content is regularly read and endorsed by senior leadership, then content owners are far more likely to instinctively want their content to be of a high quality."

The way team members engage with SMEs is related to how they deal with other groups of content contributors. The SMEs have expert knowledge of their subject area, and they sometimes have a particularly technical angle or way of approaching the topic. In such cases, Communications Team members can work with them to distill the information and translate it into nontechnical language. "Where possible," Lougheed says, "we give authors plenty of time and resources to meet their obligations."

The Communications Team promotes the use of plain, easily understood and digestible English. It wants web writing to be high quality, so it endorses short, snappy article headlines, clear paragraphs, and interesting quotes from people.

Another simple quality control measure is to always ask simple questions about proposed content, such as: *Is this interesting for our users? Why do they need to know this? What is the benefit for the business?*

"Answering questions like these helps us to focus on improving content," says Lougheed, "rather than producing content for the sake of it."

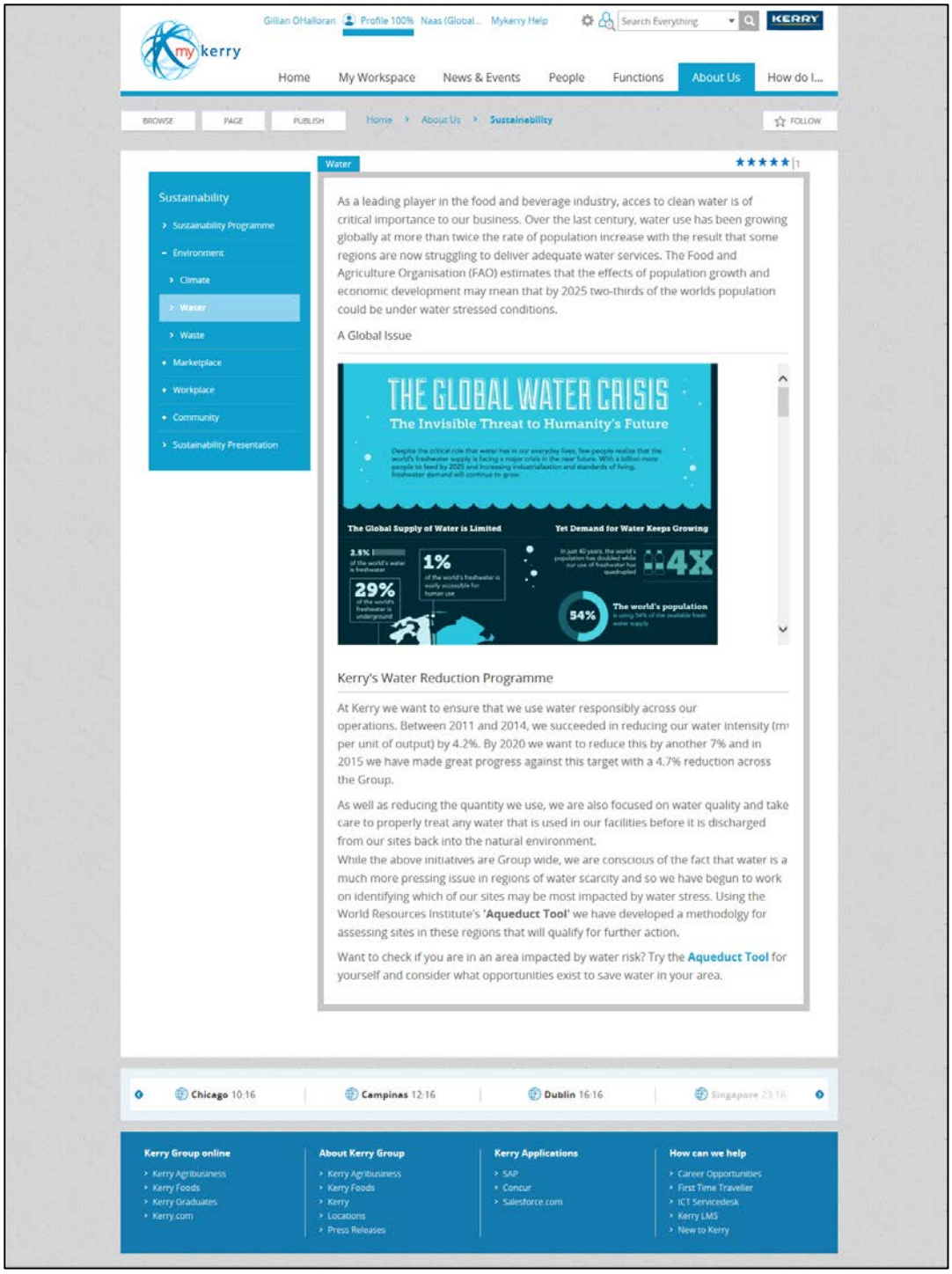


Image 9. Kerry Group Intranet Content Page. *Kerry Group_09_Content Page_live.png*

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and Operating System	Four web and four application servers, and two SQL database servers (both SQL clustered) Intel Xeon CPU E5-2620 v2 @ 2.10GHz, 8 cores, 64 GB RAM Windows Server 2008 R2 Enterprise
Bug Tracking/Quality Assurance	Visual Studio Online, IE Developer Toolbar, Fiddler, SharePoint Code Analysis Framework, Avanade Code Analysis Tool, SPDispose Check
Design Tools	Visual Studio IDE, Photoshop, SharePoint Designer
Site Building Tools	SharePoint 2013, Visual Studio, SharePoint Designer, HTML Editor, Gulp, Sprite, Node.js, JavaScript minifier, FxCop, Content Delivery Network (CDN)
Content Management Tools	AvePoint Migrator, PowerShell, SharePoint CMS
Search	SharePoint 2013 Search
Other Functions	Azure Application Insights for site tracking, Azure CDN for static content, Azure Media Services for global video hosting solution, Factiva Integration to integrate industry news with the intranet, share price Integration, ICIMS Integration to show career opportunities, and so on

ROI

Tracking Metrics

The Kerry Group team tracks many aspects of its intranet usage to keep an eye on trends. These measurements include the following:

- **Total population:** The number of unique users per month as a percentage of the total employee population and, out of this, the number of social users (providing likes, comments, posts, etc.) and mobile users.
- **Users by country:** The number of unique users by country.

- **Social:** Total contributions, broken down by comments, likes, shares, and the number of mobile users.
- **News:** The number of likes, comments, views, and shares, both as a total number and segmented by news category type.
- **Video:** Total number of likes, comments, views, and shares.
- **Device usage:** Tracks intranet users by access device (desktop, tablet, or smartphone).
- **Terms acceptance:** The number of people who have accepted the site's *Terms & Conditions*.
- **Search:** Total number of searches, broken down by categories (people, news, etc.); top-searched terms; and search results that return no matches. The team also runs system reports that cover search activities in detail, using the following qualifiers:
    - Number of queries performed
    - Top queries by day
    - Abandoned queries by day
    - Abandoned queries by month
    - No-result queries by day
    - No-result queries by month
    - Query rule usage by day
    - Query rule usage by month
- **Additional metrics:** Homepage hits, top five pages visited, average time spent on site per user, average pages per user per visit.

Softer Measures

The intranet team also tracks softer measures to keep a pulse on how the site is being received. These measures include the following:

- **User satisfaction.** The team puts a premium on user satisfaction as tracked by word of mouth. Also, because leaders at the highest level are tightly involved in the intranet, team members can simply ask them what they think of mykerry and various enhancements the team has carried out.
- **Pulse gauging.** From time to time, team members engage in "pulse gauging" activities. These are typically surveys (conducted via Survey Monkey) that the team uses to get feedback on specific enhancements. Another softer measure they track is the star-ratings earned on intranet pages. Here, users can rate their overall approval of pages; this gives the team an informal way to gauge employees' approval of page content and design throughout the site.

- **Annual survey.** A more formal measure of intranet satisfaction is the annual ICT survey, which asks all computer users in the organization for feedback on their ICT experience. The survey allocates an entire section solely to questions about mykerry. This means that, each year, the company asks all PC users 6–10 questions specifically about the intranet, which gives the intranet team key feedback data it can track year over year. The questions cover topics such as satisfaction with performance, functionality, and design; identification of user issues; and suggestions for improvements. This annual ICT survey is a well-established and respected tool, so team members feel they can strongly rely on the responses they receive from it.

LESSONS LEARNED

Lessons Learned

Tony Bergin, Group Internal Communications Manager, describes some of the key lessons the team learned through their redesign efforts:

- **Study other company's intranets.** "Carrying out a good due diligence of other organization's intranets was a key learning point in the whole process, as was seeking advice from design teams who had experience of what works well and what doesn't."
- **Choose a designer who is willing to listen.** "Having a designer who listens to user requirements and really understands the organization's needs was essential."
- **Take time to involve people prior to launch.** "In order to hit your go-live deadline, you are likely to be limited in the amount of user feedback and input you can solicit before an intranet goes live. Take as much time to garner feedback as possible. It irons out the kinks that can really annoy users."
- **It's never too late to involve people.** "We viewed our new intranet design as an interactive approach that potentially would require tweaking even after go-live. We therefore engaged independent focus groups from across the business to give feedback. We took this feedback and applied updates to some elements of the homepage design that proved universally positive to the intranet audience."

Best Practices

The team also has some best practice advice that other teams can apply to their own intranet projects:

- **Communicate early and often.** "The main piece of advice we would give to others starting out on a redesign project is to continuously talk to others who have experience. Ask them what works well and what doesn't. Think about what the needs of your organization are and liaise regularly other key departments."

- **Continue to develop and improve.** “Something to always bear in mind is that a good intranet will constantly need to be tweaked and updated in order to improve. Therefore, think about what is most important for your go-live and, consequently, what could wait to be improved on at a later date. With this in mind, have your plan in place, but also schedule time for unforeseen mishaps.”
- **Involve leaders from day one.** “Our intranet redesign project would not have worked if we had not kept senior leaders briefed, so that they knew what to expect and were on board from day one.”
- **Get buy-in from above.** “Having the buy-in and proactive involvement and support of senior executives, both from the business and key functions such as HR and ICT, was a huge benefit to the project. This enabled critical decisions to be made more easily, ensured adequate resources were available, and meant we had some high-level champions when mykerry went live.”
- **Appoint a project manager.** “Having a designated, independent project manager helped keep everything on track and kept everyone on the team honest on their deliverables. Aligned to that is the importance of a dedicated, internal multidisciplinary project team: vital so that everyone works towards the same goals.”
- **Engage with people.** “Constantly engaging with users was also imperative, to have them at the forefront of what we were doing all the time in order to keep mykerry as user friendly as possible.”

Archer Malmo

OVERVIEW

COMPANY

Archer Malmo is one of the largest independently owned, full-service advertising agencies in the US.

Headquarters: Memphis, Tennessee

Company locations: Memphis, Tennessee, and Austin, Texas

Locations where people use the intranet: Memphis and Austin

Annual revenue: $26M

THE INTRANET

Users: The intranet is used by and built for every department across the agency to help staff members be more efficient, consistent, and knowledgeable.

Mobile approach: Responsive web design

Technology platform: WordPress

TEAM

Design team

Project Leadership: David Sparks, UX Architect; Justin Dobbs, VP, Group Creative Director; Robby Grant, VP, Digital Development & Technology; Tyler Watkins, Digital Project Manager

Design: Brian Dixon, Senior Art Director; Gabe Martin, Associate Creative Director/Digital; Ben Colar, Associate Creative Director/Art Director; Ben Hampton, Senior Art Director; David Sparks, UX Architect

Content: Brian Dixon, Senior Art Director; Trish Swope, Director of HR; David Sparks, UX Architect; Gary Backus, Principal, Chief Creative & Strategy Officer; Amy Beth, Director of Communication; Tyler Watkins, Digital Project Manager; Addie McGowan, Senior Digital Marketing Strategist; Mary Lynn Gratzer, SVP, Director of Client Services

Development: David Taylor, Senior Digital Developer; David Sparks, UX Architect; Gabe Martin, Associate Creative Director/Digital; Brian Dixon, Senior Art Director; Joel Gulledge, Digital QA/Email Deployment Manager; Patrick Tamburrino, IT Director; Wil Gatlin, Senior Digital Developer; Cameron Roe, Digital Developer

Human Resources: Trish Swope, Director of HR

INTRANET TEAM

Team members shown here (front row, left to right): Gabe Martin, Trish Swope, Brian Dixon, Ben Hampton, and Tyler Watkins; (back row, left to right): Cameron Roe, Robby Grant, David Sparks, Joel Gulledge, Ben Colar, and Wil Gatlin; (not shown): David Taylor, Justin Dobbs, Gary Backus, Amy Beth, and Mary Lynn Gratzer.

HIGHLIGHTS ABOUT THIS WINNER

Having tools to share knowledge, presentations, and client information inside an advertising agency is not just a nicety — it's a necessity. The Archer Malmo intranet, *Inside Archer Malmo*, is chock full of these valuable assets, including information that makes it easy to find the right people and find answers to common questions.

The goal of Inside Archer Malmo is thoughtful and well defined; it aims to "democratize and centralize our combined knowledge, as well as to provide a single resource for information our employees need." The team behind this project met and exceeded this goal, providing an intranet with a fun voice, tools that encourage information sharing, and many ways to collect feedback from employees. The intranet has many other standout features, including:

- **Simplified pages.** Most pages have one main topic (or a few main topics) and showcase those alone. For example, the simplified homepage focuses on top tasks, and isn't cluttered with much else.

- **Consistent branded colors used effectively.** Designers use typeface and color successfully to indicate information hierarchy. The large, bold orange headings combined with black text somehow manage to look fun and elegant, and nothing like a Halloween skin. White page backgrounds for content sections are easily distinguished from the dark gray backgrounds used at the top of pages and in the fat footer. These obvious background changes help users quickly scan and ignore sections they are not interested in at that moment. Demoted text, such as status, are displayed in a light gray — still visible, but understated.
- **Cheeky tone of voice.** Like the colors, the words used are often fun and gently sarcastic.
- **Navigation and search.** Even with simplified pages, the global navigation and fat footer are always available to advertise features and act as a safety net for users who are unsure of what to do next. On each page, the search field means employees can find anything from anywhere on the intranet.
- ***Employee Asked Questions* and topics pages.** These wikis help employees share knowledge and search for and find information without having to hunt for the right person to ask or the right database to gain access to.
- **Lunch orders.** This tool does more than just get food to employees; it's a killer app that brings many people to the intranet daily or weekly. Getting people to open the intranet for something they want — like lunch — can also encourage them to use it for other things they need for work.
- **Good forms.** So many forms in the world are missing descriptions or have descriptions spread across intermittent pages (in too many steps). But not on Inside Archer Malmo. When collecting information, forms include a quick description of what is desired, examples, and a call to action. The form fields themselves are on the same page as the description page, so no need to click again and again to get to the place to type.

BACKGROUND

Archer Malmo employees need a variety of files, tools, information, and answers to questions on a daily basis. The company had become overly reliant on emails, which over time became repetitive and cluttered workflows. The company also needed a knowledgebase that could provide the answers and information employees need and routinely ask for, including wiki functionality that would empower internal experts to contribute content that benefits everyone. This information ranges from the most up-to-date PowerPoint or Word templates to historical information about the agency's relationship with a particular client.

When hatching plans for a new intranet, the company knew that providing HR information and technical support was a given, but it also wanted to go further and create something more scalable and flexible that would accommodate its needs going forward. In 2015, the company opened a new office in Austin, Texas, and its

creative department began building new brand guidelines to update the look and feel and refine various brand assets. The company thus saw a window of opportunity to finally create a useful intranet that would serve the organization now and into the future.

At that time, the company's existing intranet was being used only to place lunch orders for the Memphis office; previous attempts to create a wiki/knowledgebase type site had stalled.

In Q4 of 2016, company leaders began discussing a redesign for the public-facing website and it quickly became clear that many of the needed tools would be best served from an intranet platform. For example, they discovered that team members had a very hard time accessing information about specific clients. To do this, they had to identify the correct people to contact for the information, and then figure out how best to consolidate all the client's information from sources across the agency.

The solution to this and other information needs was to create an intranet that had client pages with wiki functionality so that subject matter experts could easily add information over time. This approach would not only serve the internal audience of knowledge seekers, but also provide a way to funnel these assets out to the agency's new public website. These ideas coalesced around a knowledgebase wiki site, which formed the foundation of what would become the new intranet. It had a clear mission and roadmap:

- **Goal:** Create a purposeful and helpful intranet, full of resources, information, and tools that all employees need on a daily basis.
- **Challenge:** momentum. David Sparks, the agency's UX Architect, had wanted to tackle this type of project for a few years, but the internal motivation hadn't reached the tipping point to get it going. Once the spark was ignited, however, the team was able to get it up and running in short order. Choosing WordPress as the platform contributed to that momentum. WordPress, for all of its plusses and minuses, was found to be the best option because it's reliable, scalable, documented, widely understood, and easy to work with. What the team couldn't get done with plugins, they were able to custom build.
- **Approach:** The overall goal was to make time-to-launch as short as possible. Getting the intranet replaced quickly was a primary driver because the intranet serves as a content generator for the agency's public site (currently in development), and that project couldn't wait. Also driving the decision to move quickly was the knowledge that any aspects of design or features that weren't perfect could be refined later. As long as the content was ported over, and specific functionality was duplicated, the company would have an improved system on day one. With that foundation in place, it would be easy to add bells and whistles later and get old content updated quickly.

The hope is that over time, the information contained in and on the intranet will continue to grow organically and that the value derived from that will follow.

DESIGN REVIEW

Homepage

Pictured: Archer Malmo Intranet Homepage. The homepage is uncluttered and makes the employees' top tasks easy to find. *11_ArcherMalmo_01_home_live.png*

Homepage Highlights

The Inside Archer Malmo intranet designers took a risk. They chose to offer only a few elements above the homepage fold, including the search feature, main global navigation, and the main content area, which includes only six large boxes with icons and a small amount of text. Their bravery paid off. The reason this design works so well at Archer Malmo is because the included items happen to be among the most important things to the employees and to the business. Making these items the only content on the homepage focuses employees on what matters most. Also, offering prominent search allows people to find anything else they have come to the intranet to find. Finally, showing the main navigation advertises what else is possible.

1. **Global navigation.** The global navigation links appear horizontally across the top of the page, advertising what the site offers.
2. **Search field.** The site's search appears below the links, and the large white box pops visually on the dark background.
3. **Task icons.** The icons for the six top tasks are given prime real estate just below the navigation links and search. Each area includes a call to action in large, bold orange text on a white background. Below each call is a simple explanation of the section and a link whose clickability is communicated by its blue text.
    - ***Get IT Help*.** Employees can quickly request help for their computer, phone, and other systems.
    - ***Order Lunch*.** Employees in the Memphis office can take advantage of a convenience: ordering lunch for delivery that day.
    - ***Give a Hi-5*.** Employees can commend coworkers on a job well done. Including this call to action on the homepage encourages participation. As a reward, people mentioned in Hi-5s are entered into a drawing to win small gifts during large agency meetings.
    - ***AM Brand Guidelines*.** Brand guidelines are important for consistent communication with clients. This section helps employees produce and manage their digital assets using the recommended media and best practices.
    - ***AM PowerPoint*.** All employees can locate and download PowerPoint templates. This eliminates the need for employees to request and share templates via email, and lets template creators quickly and easily update the templates.
    - **Social content.** To encourage a rich pool of suggested content for Twitter and other social channels, this icon links to the social form that lets employees share their ideas and suggestions for Tweets and more.
4. ***Announcements*.** The main section below the fold houses company announcements and is clearly labeled as such. Each announcement title is in large, bold orange text, in keeping with the site and homepage style. Below the title are the author, date of publication,

number of comments, and an edit icon, followed by the first part of the announcement, which offers a good taste of the topic.

5. **Right rail.** To the right of the announcements are short lists of recent posts and comments. This section also includes links to archived announcements and a *Categories* section listing popular topics that users can select to sort announcements.
6. **Footer.** The footer is delineated with a gray background and white text. The orange touches help the section match the rest of the page's style, while the dark background distinguishes it as a separate section. The leftmost footer column repeats the global navigation links, giving users another chance to find their topic. Below these lists are a site map, links to applications that employees use (such as expense reporting, time sheets, Basecamp, and Paystubs), and a link to the public-facing website. The other three columns in the footer include the latest company-related posts on Facebook, Twitter, and Instagram. These allow employees to see what's happening in Archer Malmo social channels without having to leave the intranet.

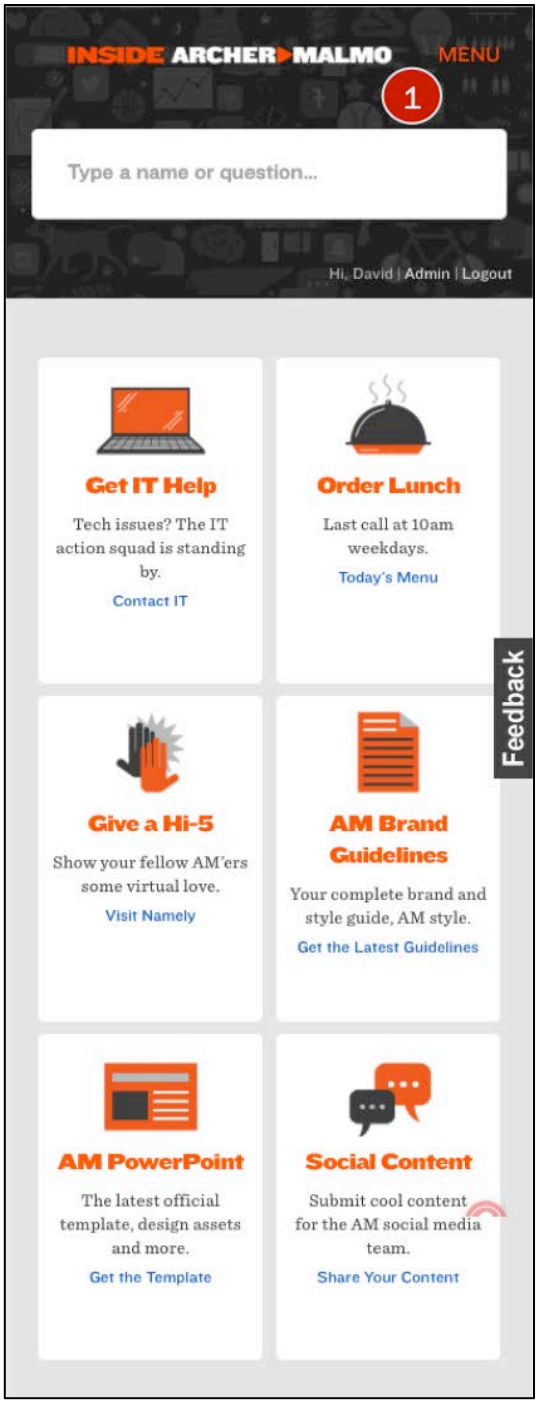
Mobile Homepage

Pictured: Archer Malmo Intranet Mobile Homepage. The Archer Malmo intranet homepage on mobile devices includes the same content as the desktop, but arranges it so it is easy to deal with on a small screen.
12_ArcherMalmo_02_MobileHomeWithMenu_live.png

Mobile Homepage Highlights

The homepage presents the same items on mobile as it does on desktop, but they flow differently (and appropriately) on the smaller screen.

1. **Heading.** The *Inside Archer Malmo* heading remains at the top, as on the desktop.
2. **Global navigation.** The global navigation appears in a vertical list of links that's easier to read than the desktop's horizontal list across the top of the page.
3. **Search field.** The site's search appears below the links, and the large white box pops visually on the dark background.
4. **Task icons.** The top-task icons are given prime real estate below the navigation links and search, but are sized to flow a little differently than on desktop so they fit on the small screen.
5. ***Announcements*.** These have the title, information, and beginning of the announcement, but wrap differently than on desktop.
6. **Footer.** The same elements appear as those on desktop, but the columns drop elegantly and elongate the page.



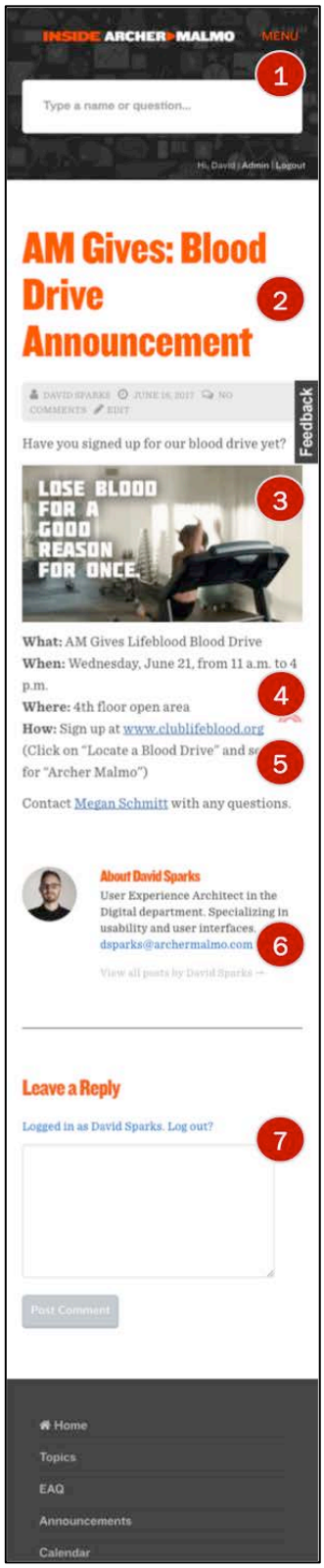
13_ArcherMalmo_03_MobileHomePageNoMenu_live_cropped.png

Mobile Homepage, Closed Menu

Pictured: Archer Malmo Intranet Mobile Homepage Menu. The menu link in the upper right (shown here zoomed in) opens and closes the list of navigation links.

Mobile Homepage, Closed Menu Highlights

1. **Menu Link.** The orange *MENU* link in the upper right corner opens and closes the vertical links list. The ability to close the menu lets people use the screen real estate for content without having to scroll the links off the screen.



Announcement Page, Mobile

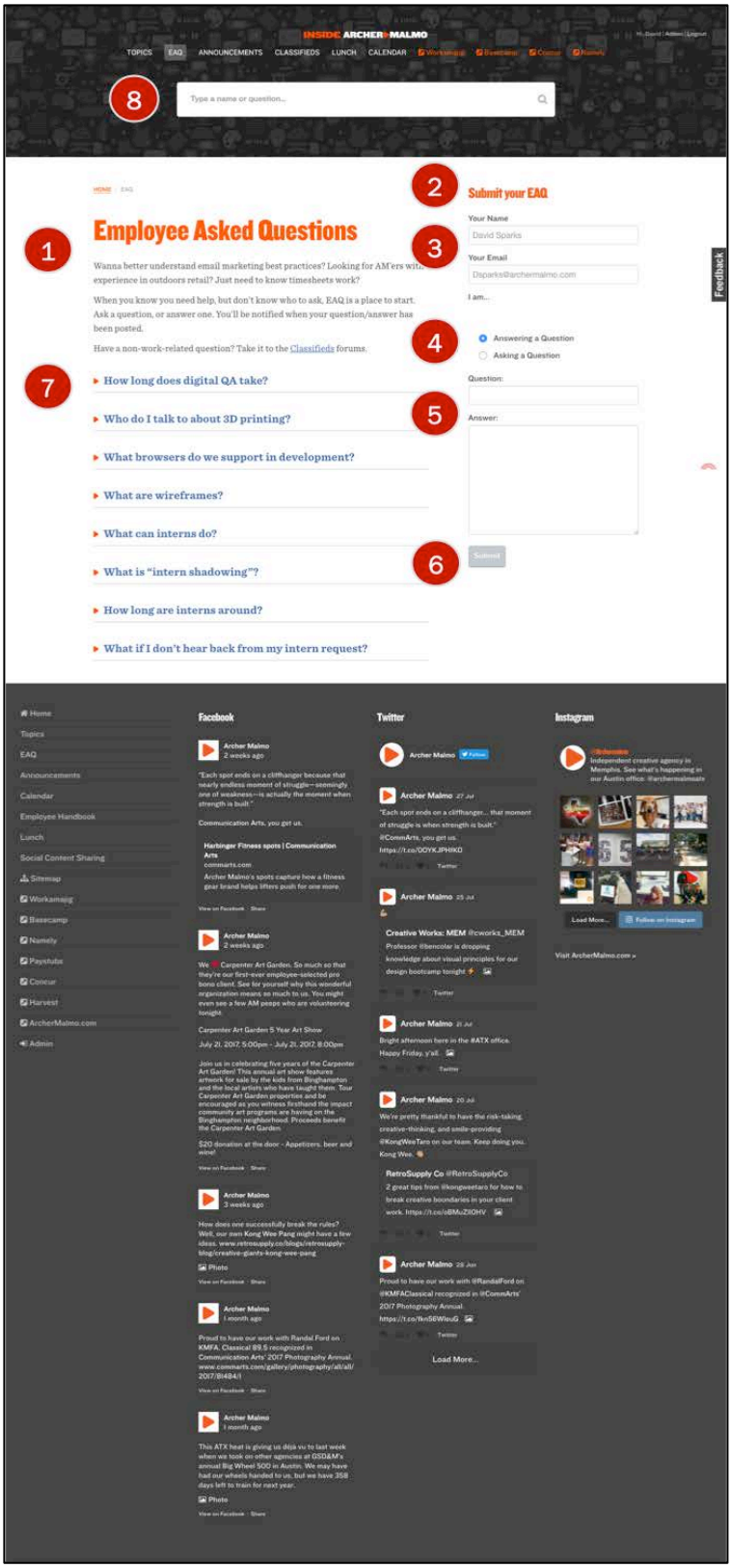
Pictured: Archer Malmo Intranet Announcement Page — Mobile View. Each announcement (shown here zoomed in) is easy to scan, appearing on its own screen on mobile.

14_ArcherMalmo_04_MobileAnnouncementPost_live_cropped.png

Announcement Page, Mobile Highlights

Tapping an announcement in the list on either the homepage or the main *Announcements* page opens that announcement's page.

1. **Navigation.** Search, the *MENU* link (which reveals the global navigation) and the fat footer remain constant.
2. **Title.** The announcement title appears in large orange letters at the top and is easy to see and read.
3. **Related information.** The author, date of the announcement, number of comments, and editing capabilities appear below the title in a gray banner with gray text; they are visible, but visually demoted.
4. **Image.** A meme related to the blood drive announcement carries a funny message, "Lose blood for a good reason for once."
5. **Information.** The announcement itself includes the basic information and links to related resources, including whom to contact.
6. **Author.** A short author bio and photo appears after the announcement, followed by a link to more of that author's announcements.
7. **Comment.** The large *Leave a Reply* field lets people submit responses to the announcement; these responses typically add information, offer reviews, or ask questions.



15_ArcherMalmo_05_FormEAQ_live.png

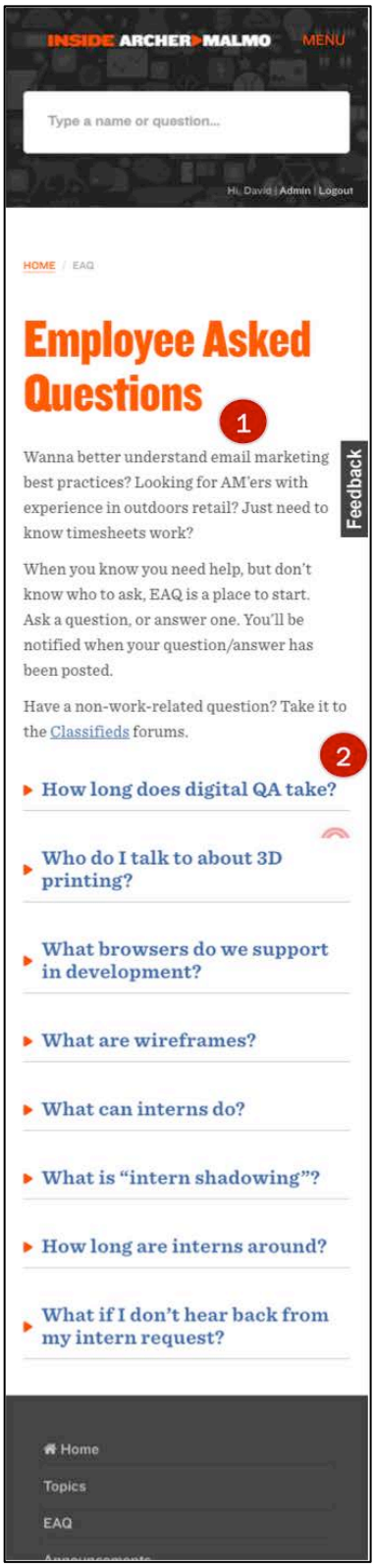
Employee Asked Questions

Pictured: Archer Malmo Intranet Employee Asked Questions. The EAQ page lets employees ask questions of one another, answer questions, and read questions and answers.

Employee Asked Questions Highlights

The *Employee Asked Questions*, or *EAQ* page provides a common place for coworkers to ask, answer, and find answers to questions. This wiki helps solve the problem of employees trying to find the right people to answer their questions. The wiki offers an expected and accessible place — other than email — to consolidate shared knowledge between colleagues.

1. **Explanation.** The first section of the page explains what the feature is by presenting the types of questions a person might ask, then encouraging people to ask questions. It also directs people to the *Classifieds* forums for questions not related to work. Doing this reminds employees that the *EAQ* area is for work-related questions, but that there is also a place they can go for other questions.
2. **Ask questions.** The form for submitting a question appears in the page's right column. *Submit your EAQ* identifies this as the place to write, not just read.
3. **Identifying fields.** The first fields ask for the user's name and email address.
4. **Ask or answer.** The next set of fields asks users to identify whether they are asking or answering a question. Spacing before the two radio buttons makes them easy to see.
5. **Q&A.** The last fields let users type their question or answer.
6. **Submit.** The *Submit* button is easy to see and click.
7. **Questions.** The most recently asked questions appear in an expandable list on the page.
8. **Search.** Users can also search for questions via the site search.



Employee Asked Questions, Mobile

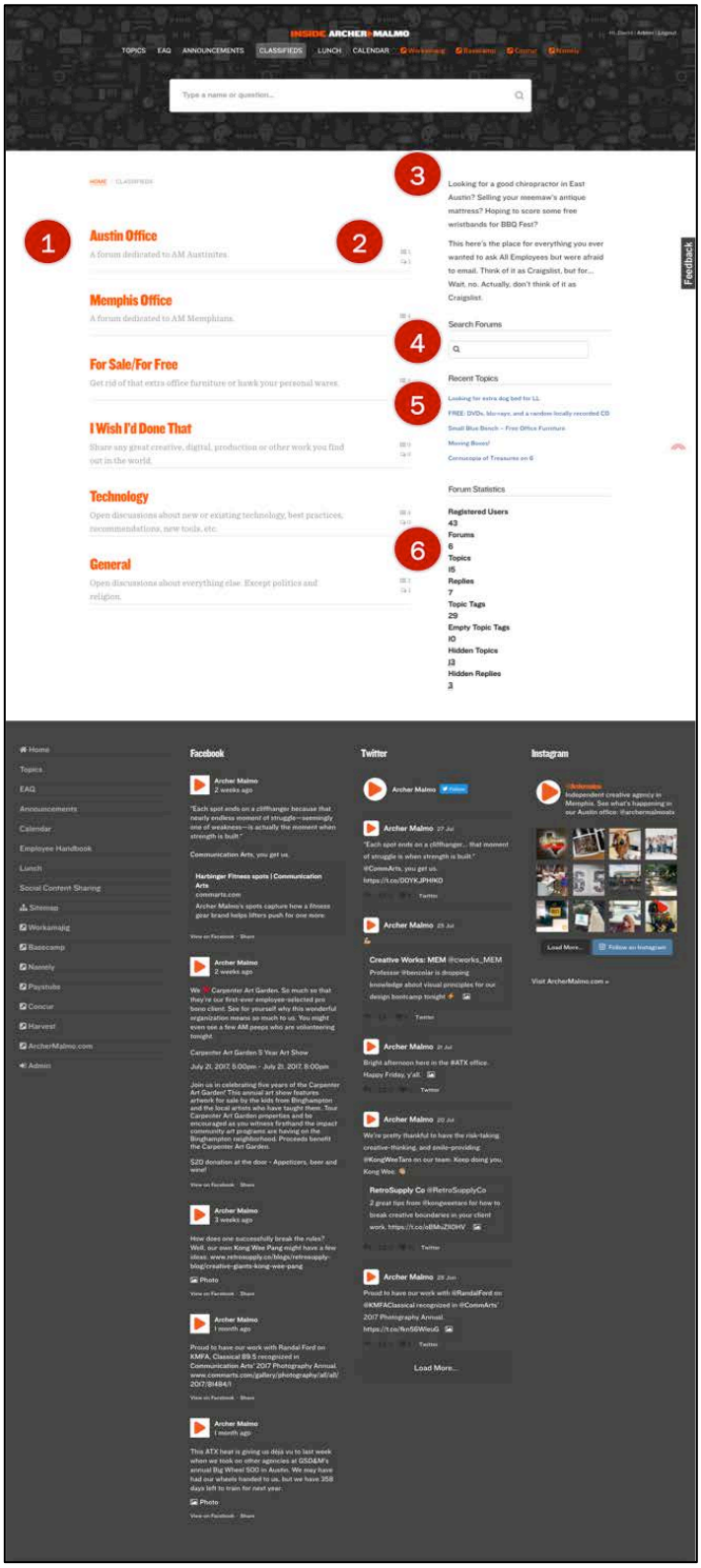
Pictured: Archer Malmo Intranet Employee Asked Questions — Mobile View. The *EAQ* page on mobile (shown here zoomed in) displays the most recent questions.
16_ArcherMalmo_06_MobileEAQ_live_cropped.png

Employee Asked Questions, Mobile Highlights

The mobile layout of the *EAQ* flows differently from the desktop version, and displays less.

1. **Explanation.** The first section includes question examples and a request for people to ask questions.

2. **Questions.** The question list displays next on the screen. The list is tall and the text is legible, making the questions easy to read and to tap to view answers.



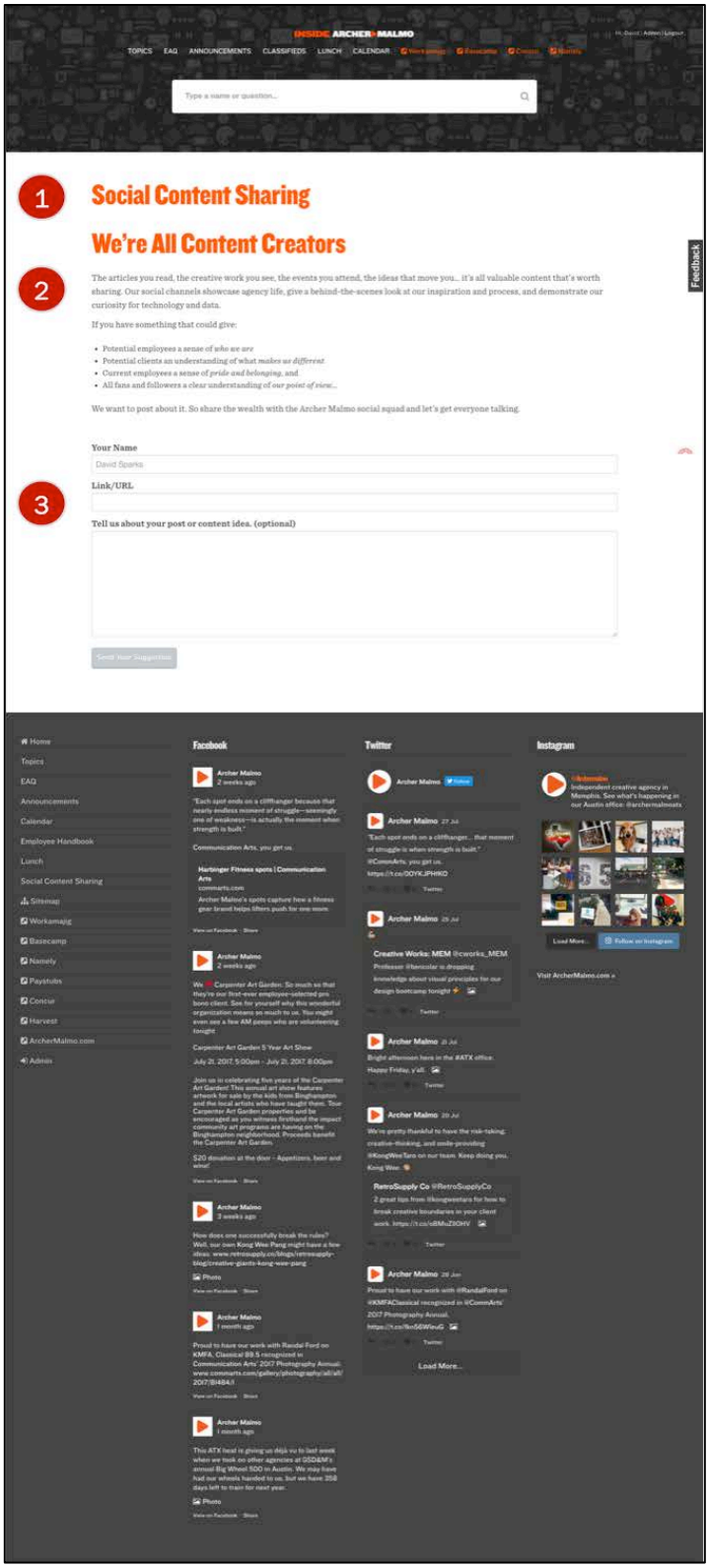
Classifieds

Pictured: Archer Malmo Intranet Classifieds. Employees can talk about non-work topics and buy and sell items in the intranet's *Classifieds* section.

17_ArcherMalmo_07_ClassifiedsEmployeeCommunication_live.png

Classifieds Highlights

1. **Global topics list.** Each topic is listed and briefly described below its title. The overarching topics are broad and include: *Austin Office*, *Memphis Office*, *For Sale/For Free*, *I Wish I'd Done That* (where people share creative ideas), *Technology*, and *General*. The *General* section notes that discussions about politics and religion are not welcome, helping to keep emotionally charged disagreements out of the workplace.
2. **Activity numbers.** The number of items under each topic and the number of comments are in small gray text on the right, indicating the activity under each topic.
3. **Description.** A slightly mischievous description in the upper right of the page explains that employees can do anything from sell a mattress to browse for tickets to an event.
4. **Search.** An open field lets employees search the classifieds for anything their heart desires.
5. **Recent topics.** Recent posts (here, including someone needing an "extra dog bed for LL") appear as links in the middle of the right column.
6. **Statistics.** The *Forum Statistics* section at the bottom of the right column displays basic statistics, such as the number of users, topics, and tags.



18_ArcherMalmo_08_SocialFeatures_live.png

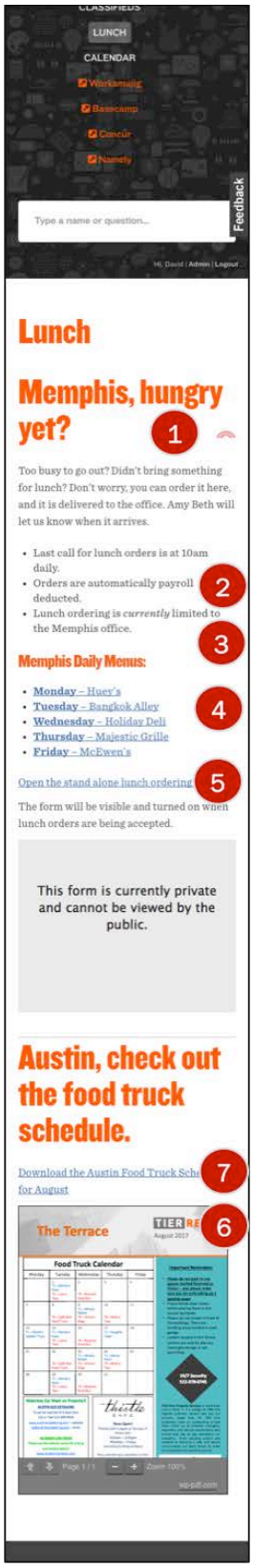
Social Sharing Ideas

Pictured: Archer Malmo Intranet Social Sharing. Employees can use a simple form to suggest ideas for posts on Archer Malmo's public social channels.

Social Sharing Ideas Highlights

Employees are encouraged to come up with ideas for items to be shared on Twitter, Facebook, and Instagram. This not only helps all employees feel included, it ensures a diversity of rich topic options for publishing to the social channels. It also helps the people who post for the organization stay abreast of items that could be interesting to their clients and potential clients.

1. **Title.** The page title communicates the idea: *We're All Content Creators* in the social channels. Saying this right up front lets employees know that deriving social content is encouraged and is everyone's responsibility.
2. **Description.** The description of what employees might suggest includes articles they read, creative work they see, events they attend, and ideas that move them. Below this, the company's target audience for social channels appears in a bulleted list, which further directs employees to consider what readers might want to know.
3. **Form.** The submission form asks for the user's name, a link to the information they propose for sharing, and a larger field with the label: *Tell us about your post or content idea. (optional)* It's helpful to get the employees' ideas about the content they are referring and to allow enough space for them to say as much as they want — but the word *optional* takes the pressure off. If the person simply thinks something *might* be interesting, but they are not sure how to describe why, the *optional* makes it okay for them to post just the link and be done with it. This one word probably helps generate many leads.



Lunch Ordering, Mobile

Pictured: Archer Malmo Intranet Lunch Ordering — Mobile View. The intranet facilitates lunch ordering for the Memphis office employees and to serve employees in the Austin office, the food truck calendar is posted until a lunch ordering system can be put in place there. This is the mobile view zoomed in.
19_ArcherMalmo_09_LunchWithMenuMobile_live_cropped.png

Lunch Ordering, Mobile Highlights

Never underestimate the importance of a full belly, or its impact on employee concentration. With so many helpful features that support the business, perhaps the most cherished one of the Archer Malmo intranet, and certainly the more trafficked area, is the lunch ordering feature.

The *Order Lunch* section owns a prominent spot above the homepage fold. When clicked, it leads to the lunch page.

1. **Description.** For the Memphis office, which has no cafeteria, the description tells users about the service.
2. **Payroll payment.** To make it easy on employees, costs are automatically deducted from their payroll so they don't have to deal with paying each day. This is stated in the second bullet on the page.
3. **Future lunch features.** In the lunch ordering area, it states that "Lunch ordering is *currently* limited to the Memphis office," indicating (through the use of italics) that the service will likely be expanded to the other office.
4. **Restaurants.** The weekdays list offers a link to the menu of each day's restaurant.
5. **Form.** Employees can fill in a form with their lunch order by 10:00 am, when the hunger pangs are just brewing. Browser notifications inform people who ordered food when it has arrived. Similar notifications are also used for "last call" for lunch orders, and other non-lunch urgent announcements.
6. **Food truck schedule.** To serve employees in the Austin office, the food truck calendar is posted.
7. **Download.** Austin employees can download the food truck calendar for the month.

PowerPoint Templates and Assets, Mobile

Pictured: Archer Malmo Intranet PowerPoint Templates and Assets — Mobile View. A mobile view (zoomed in) of how employees find and share the most updated templates and client pitches on the intranet.

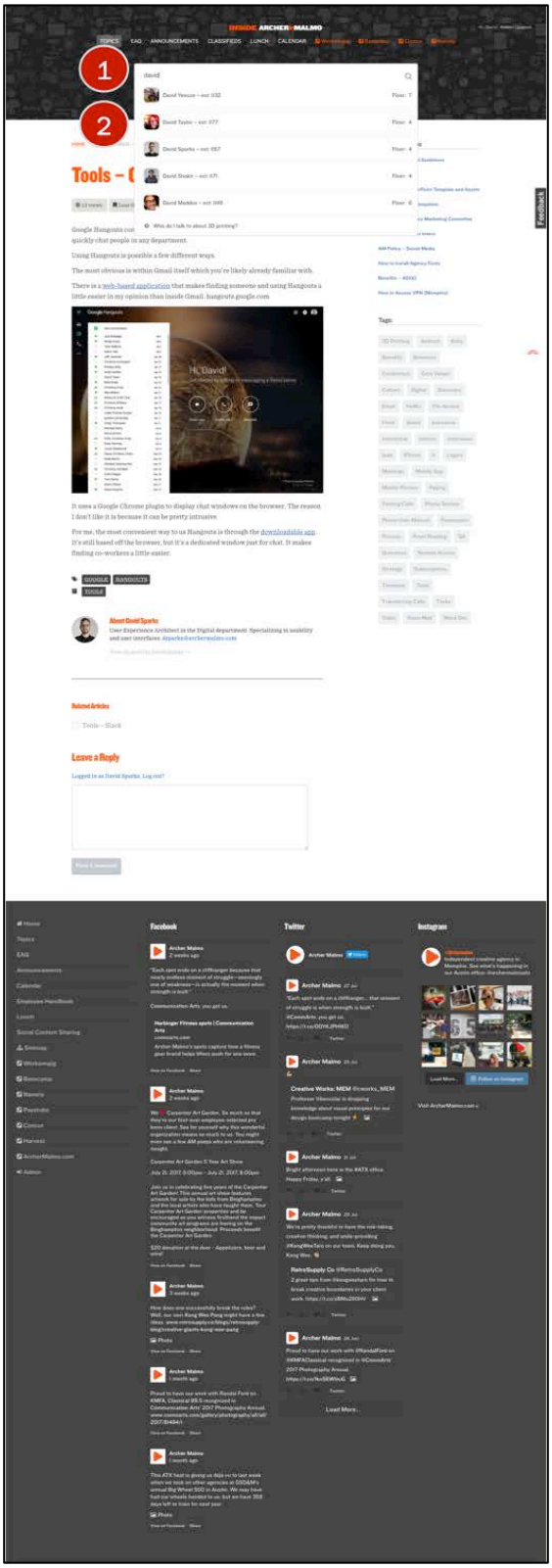
20_ArcherMalmo_10_MobileSingleTopicContent_live_cropped.png

PowerPoint Templates and Assets, Mobile Highlights

Because it's an agency, Archer Malmo employees deliver many presentations and documents to clients and partners. Employees learn from one another, and improve decks and documents, so it's important that work and knowledge is shared and carried forward between teams and individuals. However, as at many organizations, locating the most current and approved presentations and documents was a struggle.

To address this, the intranet designers created one place where all employees could find and get PowerPoint templates, eliminating the need to request and share templates via email.

1. **Headings.** Each section with a link to assets is separated by a large, clear heading that users can easily scan.
2. **Links.** Links are consistently presented as blue underlined, making them easy to spot.
3. **Description.** The page's first section explains why it's important to be consistent with branded collateral and pitches.
4. **PowerPoint template.** The first link leads to the sanctioned PowerPoint template.
5. **Assets.** The next section describes and links to additional design assets.
6. **Training.** If the templates alone are not enough, people can get training on using them effectively.
7. **Brand templates.** The other Archer Malmo brand templates are accessible via the final link.
8. **Comment.** People can also comment on the post and make suggestions for updates.



21_ArcherMalmo_11_EmployeeProfiles_live.png

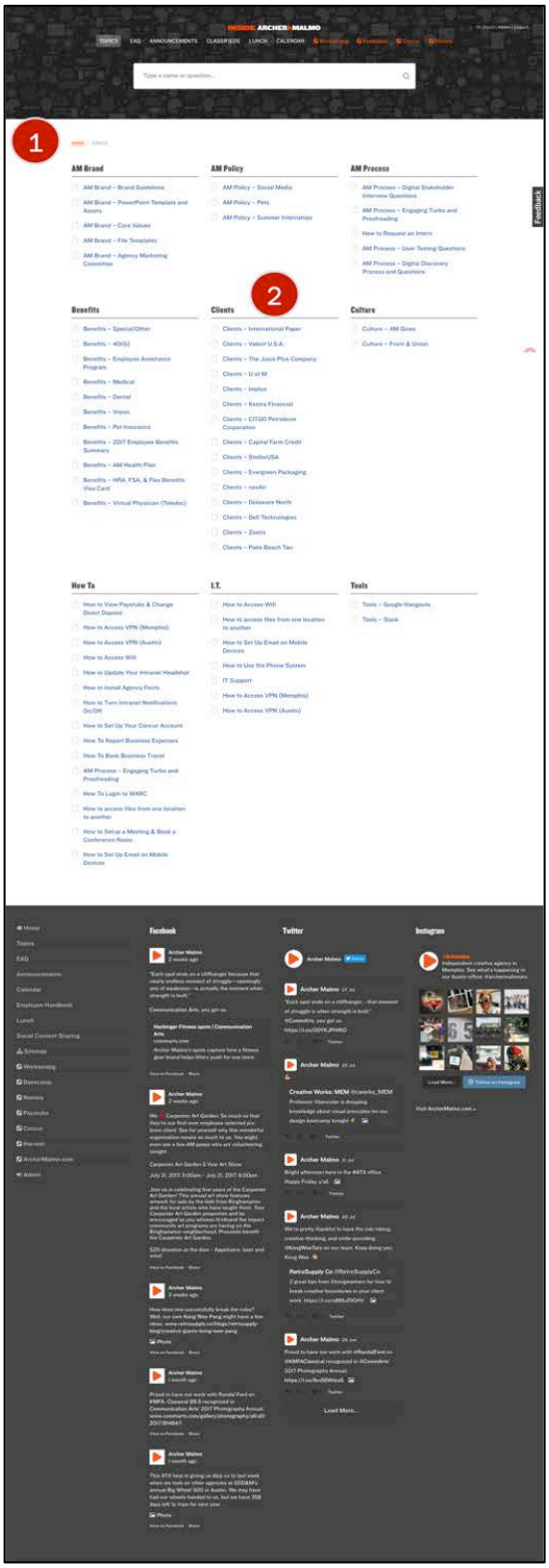
Employee Search

Pictured: Archer Malmo Intranet Employee Search. As the user types a name, live search pops up a list of people with that name.

Employee Search Highlights

At an agency, being able to reach the right colleagues can ensure that a good client stays happy. Employee search at Archer Malmo makes it lightning-fast to find a colleague's phone number.

1. **Live search.** The drop-down list begins to populate with names corresponding with the letters typed into the site search field.
2. **Information.** For each result, a photo of the person displays for easy recognition. Next is the person's full name and phone extension; clicking the name opens a new browser tab and loads the individual's profile, which is hosted through Namely.



Topics

Pictured: Archer Malmo Intranet Topics. Pages in the *Topics* section cover a variety of subjects and have wiki functionality so all employees can share their knowledge. *22_ArcherMalmo_12_Topics_live.png*

Topics Highlights

1. ***Topics* section.** This section includes various types of information about documents, file templates, client biographies, process outlines, IT information, HR information, company policies, internal processes, how to do certain things, tools, and more. The pages within these topics are wikis and are maintained by the employees, so everyone at the organization — not just delegated content owners — can share their knowledge without needing to access a CMS or to acquire approval. This *Topics* area is fast emerging as the place where employees can find answers to any questions they may have.
2. **Client pages.** Because client pages have wiki functionality, people who work with clients can easily add information on them. Others can then access the information to get a jumpstart when working with a client that is new to them. The information on client pages also helps ensure that clients receive a consistent, approved message from all agency staff.

Topics, Mobile

Pictured: Archer Malmo Intranet Topics — Mobile View. *Topics* and their wiki functionality (here, zoomed in) are also available on mobile devices.
23_ArcherMalmo_13_MobileTopics_live_cropped.png

Topics, Mobile Highlights

1. **Drop Columns.** The same topics appear on mobile as on desktop, but the columns are stacked vertically to best accommodate the lists on the small screen.

DESIGN PROCESS AND USABILITY WORK

An Accidental Intranet Project

Employees were spending a lot of time emailing each other to get answers to questions that ideally would be common knowledge to any agency employee. From that challenge emerged the idea to create a unified knowledgebase and make it part of a new intranet. One of the primary benefits of creating a new information-based system was that it would offer tools to assign content ownership to people who are authorities on the information. With that in mind, the team developed a WordPress install to help determine what information to include.

In these early stages, the agency was not yet planning to replace the existing intranet, so the early experiments were more exploratory than aimed at intranet planning. Given this, the initial vision for the knowledgebase was that it would likely be separate from or complimentary to an intranet.

Much of the research that was eventually folded into the intranet initiative was conducted to redesign the agency's public facing website. This research included:

- Content model exercises
- A content audit of the existing site
- A domain subject model exercise to describe the site in more detail
- An exercise to document existing taxonomies and categories
- Group content strategy sessions
- A survey to help determine how employees were using the intranet and solicit their ideas for a future version

Through these efforts, the team decided to take a content-first approach for the .com site, which helped highlight the types of information that would be needed from internal stakeholders to make it happen. This, in turn, created the momentum that spurred the intranet redesign.

Information Architecture

Getting the IA right was a priority from the start. IA wasn't overly difficult for this project, because the site is mostly organized around tasks and functionality, such as ordering lunch, communicating with coworkers, and looking up specific information. The *Topics* section, which is the site's wiki/knowledgebase area, is where the IA is most noticeable because it is a collection of categories. The initial categories were determined by analyzing existing content found on the old intranet, which consisted mainly of HR or IT information.

After sorting through existing content, the team began to identify other types of information that had to be included, such as brand- and culture-related content, process information, a client section, and how-to content. Because it had a good starting point with content and knew the type of information needed for the .com redesign, in some ways the IA almost created itself. Also, given the platform's built-in flexibility, the team can add new categories as needed in the future.

Menu Approach and Navigation

The menu design was driven primarily by common tasks that users need. For example, ordering lunch through the site is the most common task, so it had to be part of the navigation. Given this, it was clear that the menu should be task-oriented overall, which made it much easier to determine the other menu items.

The search function also plays a huge role in site navigation because the goal is for content to grow and encompass more and more information over time. When the intranet reaches this tipping point, navigating the wiki area may become more difficult so having great search functionality and a great search results layout was key from the get-go.

Adoption and Buy-In

The lunch ordering tool proved pivotal on many counts. Since its inclusion was guaranteed, it ensured that some subset of employees would visit the site daily or weekly and would be the first to sign on to the new system. Through this exposure, they would learn about other helpful site content and tools over time.

To aid adoption now that the site has been launched, the team is currently focusing on an educational email campaign and training sessions to help people get more involved with and contribute to the site. The email campaign will consist of multiple emails, each addressing a specific intranet value or function. This will hopefully keep the new intranet top of mind. The other strategy to help drive adoption is to ensure that the site is always updated with fresh content and to help users think about the intranet as a place where content should go. For example, the team is making efforts to ensure that any all-agency emails are posted on the site. That's also helping people understand that they can use the intranet as a communication tool.

GOVERNANCE

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
User Experience Team	• Content governance, user assistance and guidance, troubleshooting, maintenance, new features and functionality, and IA
Digital Development Team	• Development, server maintenance, and functionality
Human Resources Team	• Content, announcements, and document governance
Creative Team	• Design, brand guidance, and document and content governance

Ownership

The goal for the intranet has always been that it be owned by all employees. Staff members come and go, but the information is always needed. The digital, HR, and creative teams own the intranet most directly; the agency's UX Architect David

Sparks is the site's "keeper" until the email campaign and training sessions are complete. These sessions will help aid in buy-in and will disperse ownership to subject matter experts.

Maintenance and bigger changes will remain with the UX and development teams.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	inside.archermalmo.com
Default Status	No browser homepage or bookmarks are required, but most employees likely have it bookmarked.
Remote Access	The site requires authentication with employee G Suite email; once authenticated, employees can access the intranet from anywhere.

TIMELINE

PROJECT MILESTONES	
Milestone Date	**Milestone Description**
2000–2008	• First company intranet, built with Google sites
Early 2015–late 2016	• Knowledgebase research and testing options. Although the recent redesign started in approximately November 2016, planning for it essentially started in early 2015, when a few team members began looking into knowledgebase options.
2016	• VSO 2.0 Collaboration launch: the first pilot of intranet collaboration functionality
June 5, 2017	• New intranet launched on Archer Malmo's 65th anniversary, celebrated on June 5, 2017.
June 2017–present	• Gradual and continual updates to content, resources, and functionality, including: o Adding an existing form that lets employees request help from any available interns o Revamping intern help system and rebuilding the lunch ordering system from the ground up (upcoming) o Integrating Slack o Adding content tags to search results o Creating a company history page
Overall redesign timeframe: Approximately 8 months total	

Pictured: Archer Malmo Intranet Old Homepage. The homepage of the agency's old intranet, which was powered by Google Sites.
24_ArcherMalmo_14_InsideArcherMalmo_version1.png

CONTENT AND CONTENT CONTRIBUTORS

Governance

The team's approach to content governance was very direct. First, three team members took the lead. Because they started with a decent amount of content, they recruited subject matter experts to review it and provide any needed content or document updates.

Now, the UX architect typically creates any new pages or helps someone else create a page; new pages are then shared and reviewed to ensure they have a consistent tone and are on brand.

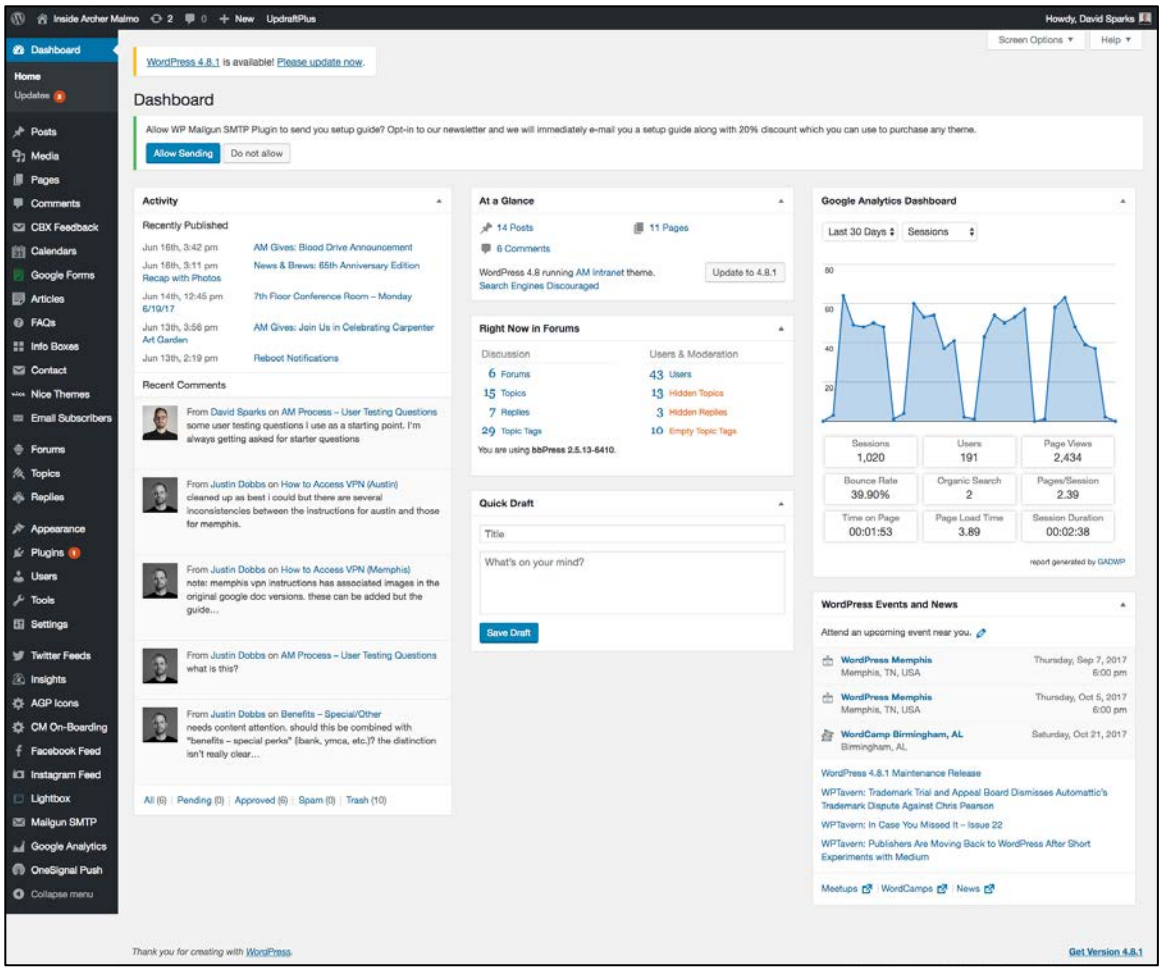
Contribution

To date, approximately 10–15 contributors have created pages on their own or with assistance. Contribution is encouraged by flagging all staff emails that should actually be intranet content. When these group emails go out, a team member will ask the senders if they would like the information posted on the intranet; sometimes it's even possible to short-circuit that chain by catching a topic before it's announced via email and encouraging the author to post it on the intranet first.

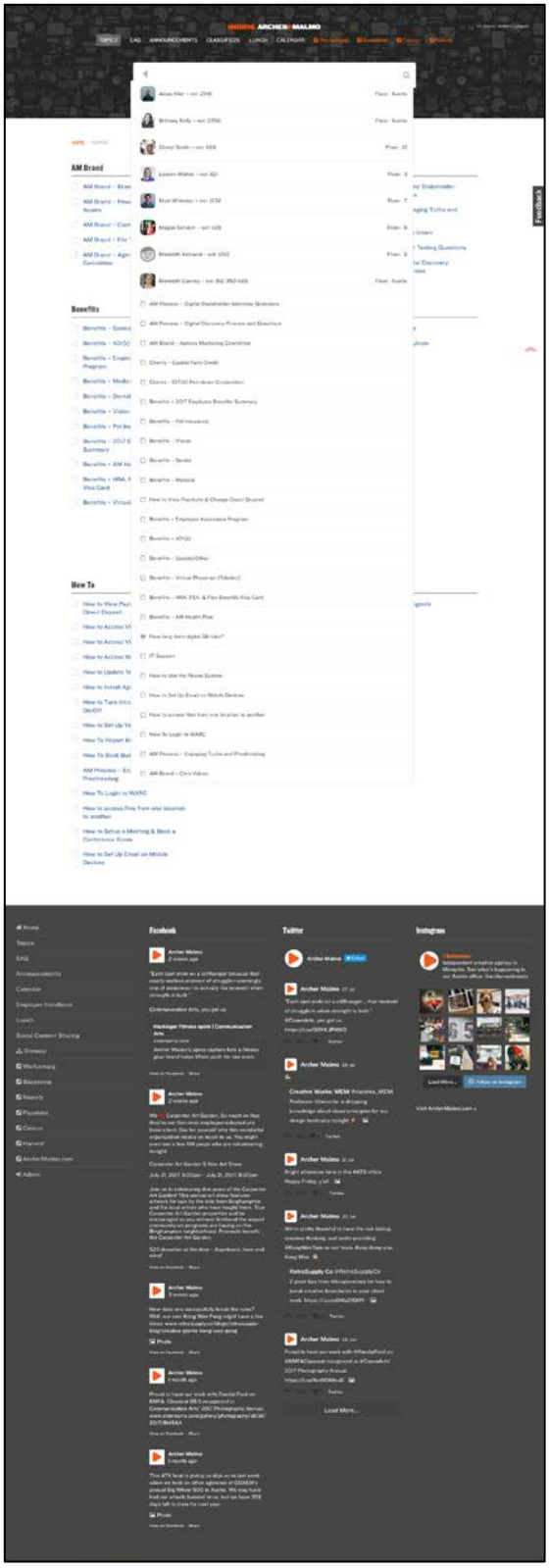
Ironically, an email campaign is currently underway to encourage intranet contribution and continued use.

Other content-related activities include:

- **Training.** Training has been addressed on a one-on-one basis. This was one of the main reasons for choosing WordPress. The team assumed that if some staff members have knowledge of a CMS, they would likely have used WordPress before or at least know about it. WordPress also has a wealth of learning resources available online because it is so widely used.
- **Flagging stale content.** The longer-term intranet plan is to develop a system that will automatically flag and send reminder emails about potentially stale content. Because the site is still so new, this hasn't been a challenge yet; to keep content fresh, each team owns its own section, such as HR and the like.
- **Maintaining quality.** So far, responsibility for content quality control lies with Justin Dobbs, a member of the creative department. Dobbs is leading the charge to ensure that everything is concise, helpful, on brand, and worded in a way that is easy to understand.
- **Content guidelines.** Content guidelines will be an essential part of future growth as people become increasingly educated and start creating new content. Currently, guidelines are managed on a case-by-case basis.



Pictured: Archer Malmo Intranet CMS. The intranet is powered by the latest version of WordPress, chosen in part because it is well known and easy for non-tech savvy employees to use. *25_ArcherMalmo_15_CMS_live.png*



Pictured: Archer Malmo Intranet Search. A powerful search function was necessary to ensure the new intranet's success and adoption. Search is augmented through the use of Namely.

26_ArcherMalmo_16_EngagementFeatureSearch_live.png

Pictured: Archer Malmo Intranet Search Results. A search results page with Namely integration. These results appear above the other search results on the page.
27_ArcherMalmo_17_SearchResults_live.png

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and Operating System	• Ubuntu. 1GB RAM/5GB disk space
Bug Tracking/Quality Assurance	• The QA team reviewed the site before launch; because the development team was closely involved with the creation, they were able to address bugs along the way and no tech was needed.
Design Tools	• Assets were designed with Photoshop and the site was designed in the browser.
Site Building Tools	• WordPress
Content Management Tools	• WordPress
Search	• WordPress
Other Functions	• Various WordPress plugins

ROI

Positive Reviews

Since launch, the overarching feedback has been that the site is user friendly, so the design has been very well received. Users have noted that the content is more helpful, robust, and informative than on the previous site. The navigation is also much simpler because it is task-based. Users also found improvements in the search functionality, particularly because Namely was integrated into the results.

The team installed Google analytics and a user insights plugin for WordPress that shows popular pages and user activity. Currently, the site averages approximately 60 users a day, which is about one-third of the agency's total employees.

LESSONS LEARNED

UX Architect David Sparks shares some of the things the Archer Malmo team has learned on its journey to a new intranet:

- **Don't let the perfect be the enemy of the good.** "I think for me the biggest lesson learned is the reality that getting a product out the door and making adjustments later can be very valuable. Get the product out the door and tweak as things evolve and as you learn. Going in depth with research and testing can produce amazing results, but sometimes things are actually pretty simple and it would be more productive to just get it done. If something doesn't work, change it. You can formulate ideas about how things will go or what will work best, but seeing it in the real world adds a lot of value and insight."

- **Learn from mistakes**. “One thing that hasn’t gone as planned is the *Classifieds* (forum) section. There were some initial issues with users creating accounts, adding photos to the posts etc. Things like that slowed the adoption of the classifieds. We still need to add the functionality where users will be notified about posts and replies via email. That will help, but we’ve also talked about dropping the forums altogether and using that section to encourage Slack usage, but the problem with that approach is that content in Slack isn’t searchable with the intranet search tool. Part of the value from a forum is if an employee asks for a local roofer recommendation on Slack, no record of that will show up on the intranet. One of the intranet’s goals is to be a place where our employees can go to get answers they need, so the *Classifieds* section was meant to cut down on all-employee emails, such as somebody trying to get rid of a couch or something like that. The *Classifieds* section is going to require a little more work so that it makes sense to keep it — and for now, we’re working out the kinks.”
- **Content is king so think big.** “The first place to start with an intranet redesign in my opinion is the content. What content exists? What needs to exist? How will it get created? Next would be to understand the different user needs. Why are they going, or not going, on the current intranet? What can be done to improve that? What are they doing when they do visit? Are there any features that would be valuable to the end user? So think big. You may not be able to do everything, but knowing what the ideal looks like will help you get as close as possible.”
- **Focus on UX, not on being pretty.** “Be more focused and concerned with usability and functionality over look and feel. Not to say the design is unimportant, but an intranet should be a utilitarian sort of tool.”

GSK

OVERVIEW

COMPANY

GSK has three world-leading businesses that research, develop, and manufacture innovative pharmaceutical medicines, vaccines, and consumer healthcare products.

It is committed to widening access to its products, so more people can benefit, no matter where they live in the world or what they can afford to pay.

Headquarters: Brentford, United Kingdom

Locations where the intranet is used: The company has a significant global presence, with commercial operations in more than 150 countries, a network of 87 manufacturing sites, and large R&D centers in the UK, US, Belgium, and China.

Company locations: Employees and contractors/contingent workers at all locations use the intranet.

Annual sales: $37.8B USD in 2016

THE INTRANET

Users: 140,000 employees and contingent workers have access to the intranet.

Mobile approach: Users can access general content from mobile devices via the company's secure browsing environment, AirWatch. Additionally, many core applications (such as WorkDay, Outlook, and help documentation) and key services (such as news) have external mobile versions available. Long term, the team is looking to develop a mobile-first approach for the intranet, where it will design, test, and build the mobile version, then scale it up to the desktop version.

Technology Platform: SharePoint 2013

TEAM

Leadership: Alex Saunders, Head, Global Digital Communications; Richard Gera, Director, Digital Channels; Aileen Norris, IT Business Partner; Darren Moore, Director, Hosted Collaboration Services; Mark Barfield, VP, Global Collaboration Services

Internal Digital Communications: Karen Weingarten, Manager, Internal Digital Channels; Joe Lees, Manager, Internal Digital Channels

Information Technology: Rich Wojnar, Manager, Web & Design; John Cavanagh, IT Business Process Partner; Mark Hogan, Manager, Service Development; Greg Williams, Senior SharePoint Engineer; John Kotes, Product Owner; Marguerite Hayes, Intranet Service Manager; Anne Maye, Team Sites Product Owner

The Moment (Primary External Vendor): Anwar Mustapha, Digital Manager; James Monteith, Project Manager

Search and Service Gateway: Phil Pischke, Director, Self Service Solutions; Srini Raghavan, Manager, Search Innovation; Marcin Wasko, Technical Analyst; Malgorzata Szabelska, IT Lead, Search and Technical Architecture; Jakub Kontek, IT Specialist, Service Gateway; Fiona Saunders, Service Manager

Analytics and Strategy: Miles Tomlinson, Director, Global Digital Insights and UX; Jaclyn Kirkman, Digital Insights Manager; Tom Kludge, Digital Insights Manager

Global Content: Rachel Cooper, Director, Global Content Strategy & Editorial; Annie Newman, Senior Content Manager

INTRANET TEAM

Team members shown here (upper left): Joe Lees; (upper right): Karen Weingarten and Rich Wojnar; (bottom, left to right): Richard Gera, Phil Pischke, John Cavanagh, Srini Raghavan, and Chip Umsted.

HIGHLIGHTS ABOUT THIS WINNER

Calling the GSK intranet "large" is like calling the sun "bright." As huge intranets often do, the GSK intranet had become unwieldy and inconsistent. This negatively impacted end users and content creators, who wasted effort acclimating on pages, searching for content, and reinventing the wheel each time they designed a new page or section.

While less-bold teams would have become discouraged or frightened when endeavoring to simplify content and create a consistent look and feel, the connect GSK team members did not retreat. Instead, they dug in and studied the design and content, and analyzed common page layouts and preferred styles. They learned about their users — including end users and content creators — and their common interactions.

Armed with this research knowledge, they held fast to the theme that "less is more" and focused on providing personalized, quick access to the most important and most used systems and services.

The team also focused on creating invaluable tools for publishers to ensure their success and design consistency. Templates, design patterns, "getting started" videos, a detailed manual, and a dedicated Yammer group are just some of the tools publishers have at the disposal. These boost content providers' confidence and skills, while at the same time creating advocates for the tool and saving the company money on agency fees.

The "one GSK" mandate became the team's battle cry, lifting it to create and implement proper branding across the entire intranet and helping everyone involved to do the same.

- **Brand template tool.** Surveying thousands of pages on the site, GSK intranet team members found commonalities and patterns in page elements. They then designed an easy-to-use, centrally controlled tool called the *brand template*. This streamlines the way pages are designed and lets users with no design or technical experience create a brand-compliant, consistent page. For flexibility, content publishers use a catalogue of commonly used page components, which lets them focus their efforts less on UI and more on delivering great content to their colleagues. The team was successful; there are now 2,000+ sites using the new brand template, which is estimated to have saved GSK millions of dollars that would have been spent on design agency work.
- **Assistance for publishers.** The 1,000–2,000 content publishers are not just sent off to fend for themselves with the brand template tool. Rather, they have video tutorials, detailed documentation, support staff, and a collaboration social feed where they can ask questions and get quick answers from experts. This toolbox of help boosts the confidence and productivity of publishers, and ensures efficient and consistent site design.

- **Simplified pages.** In several targeted areas, the designers made a concerted effort to display only the necessary or most important content on pages, rather than fitting in every piece of available related content. Examples of the site's many simplified pages include the *Services Gateway* page on mobile and the selection of only a few news items for the homepage.
- ***Services Gateway*.** Trying to find the right process or person can quickly steal minutes, hours, or days from employees; it can also negatively impact their satisfaction and focus. The GSK intranet supports 140,000 employees and contingent workers, with a wide variety of job functions all around the world. If each employee wastes even 10 minutes a year looking for the right process to follow, 23,333 hours are wasted each year on that alone. Instead, the GSK intranet saves users' time on basic administrative functions. The *Services Gateway* consolidates everything admin-related that employees need and personalizes the links to them, so no hunting is needed.
- **Consistency.** With an organization and site this large, creating a consistent design, while still allowing teams and individuals flexibility, is an enormous undertaking. Still, many pages feature the same search, global navigation, context navigation, right rail, and content area. These common elements make it easy for employees all over the world to navigate the site, regardless of which section they are sampling.

BACKGROUND

Simplify First

The GSK intranet is very large. It has 400 site collections, 5,000 subsites, and thousands of content publishers and contributors across the world. Until recently, most of these sites had a disparate look and feel, so the goal with this most recent redesign was to simplify and reduce the system's content and create a consistent look and feel while providing tailored access to the most-used systems and services.

Under a company mandate to create "one GSK" and implement proper branding across the system, the GSK team analyzed common interactions, page layouts, display types, preferred styles, and brand elements. It also created the easy-to-use, centrally controlled brand template tool, which lets hundreds of content publishers create vivid, consistent, brand-compliant pages without having to rely on an agency for development.

Get to Know Your Audience

The key to the brand template feature's success was to develop an understanding of the audience the team was designing for so it could also create appropriate support materials. This support includes live training, short getting-started videos, a detailed and picturesque PDF manual, a dedicated Yammer group, and a PowerPoint file designed to help users plan page layouts before building pages. The tool gives intranet publishers confidence in their own skills and turns them into advocates for the tool.

Initially, the tool's design was complicated. Through several rounds of user studies and testing materials with content publishers, the team overcame its initial learning curves to create the self-service tool.

The brand template has not only delivered brand consistency on thousands of pages, it has also improved the overall UX as it limits customizations and is centrally controlled. Further, it has driven significant cost savings.

Because the elements of the brand template are centrally controlled, the team can significantly change the look and feel across every page using the template without requiring content publishers to make a single edit. That functionality is possible only because of the way GSK created the tool.

In 2018, the intranet will undergo a system upgrade and redesign. The plan is to focus on the UX, with the goal of making the vast intranet appear smaller to the individual by providing tailored and targeted content, and enabling opportunities for a more personalized and social overall experience. The team will also review and improve governance and add further self-service guidance.

Challenges

The GSK team faced a very specific challenge: supporting a large population of publishers with a tiny intranet team. Because the GSK intranet is so large, the company can have anywhere from 1,000–2,000 people publish content at any given time, creating a support challenge. The intranet team needed not only to create a tool that would simplify the number of page elements and streamline the look and feel, but it also had to ensure the tool was easy to use and had the right kind of support materials to sustain the change and lead to significant cost savings.

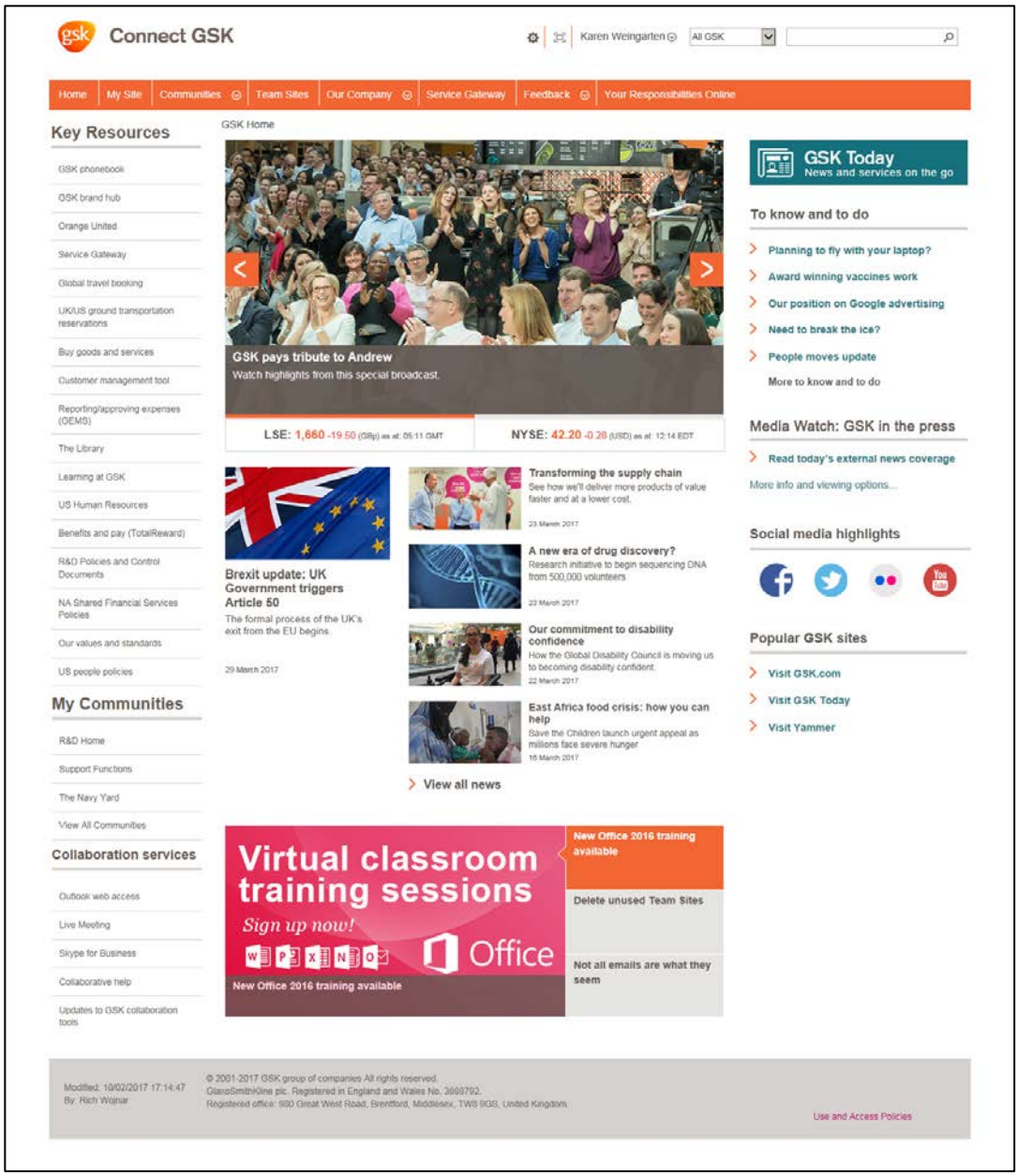
The designers also needed this army of publishers to become advocates for the tool and process. They knew that creating a core team of initial advocates would help spread brand compliance and consistency across the organization.

All of this had to be accomplished with a tiny intranet team, so it had to ensure that the support materials could take the place of initial hands-on live training.

Building Adoption Momentum

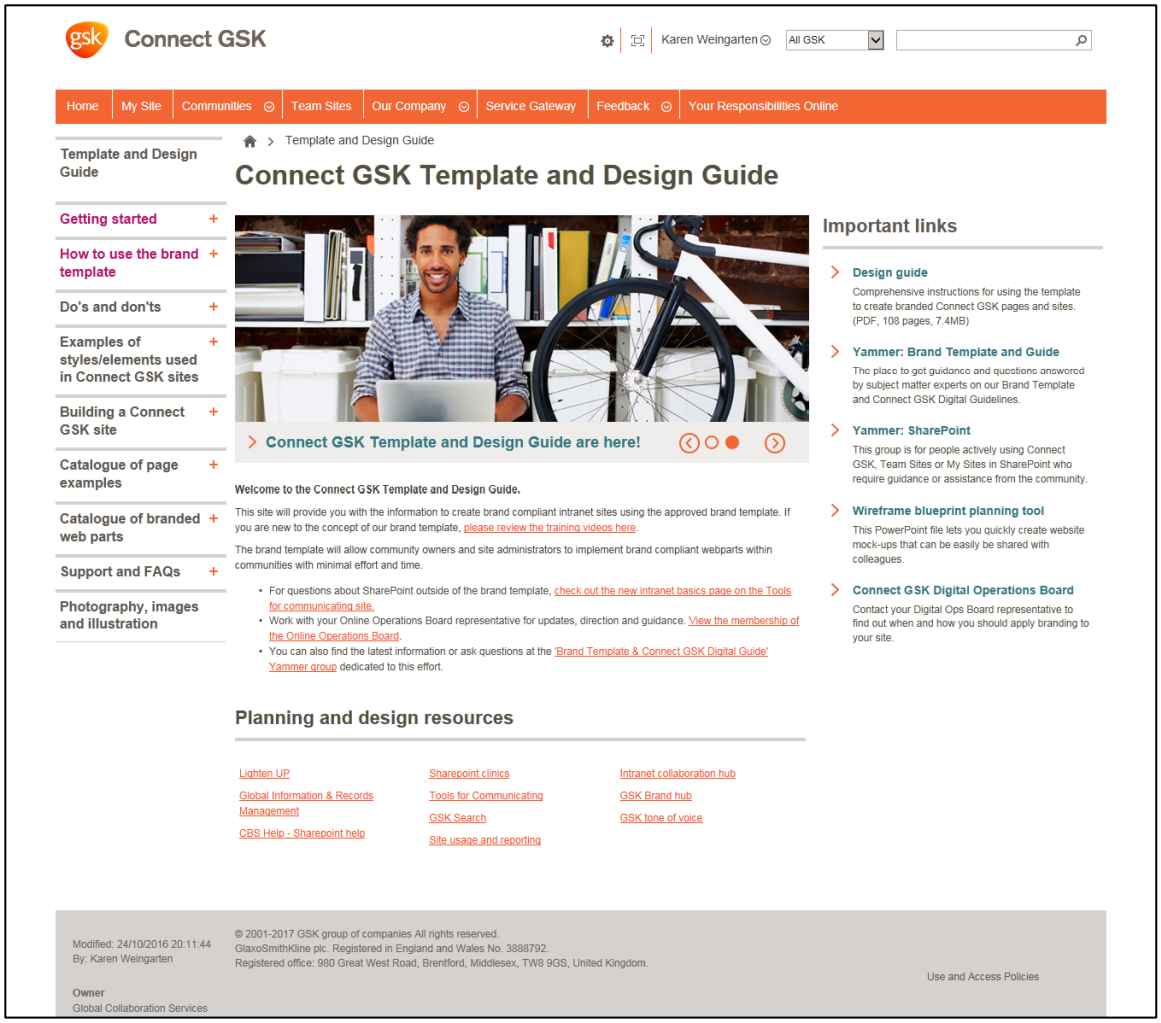
Uptake of the tool was deliberately slow and steady. Designers carefully communicated with site owners, letting them know that the tool would be available and building up interest over time. They also recruited key top-level business sites to become early adopters. They strategized that, if they got early adopters on board, it would help ensure that interest would build quickly as others would want a piece of the pie.

They did not, however, mandate that everyone adopt the tool at once because doing so could potentially cause an uproar — and also because they frankly couldn't support a flood of new users all at once with such a tiny team. Their mantras were: If you are creating a new site, you should use the tool. If you are planning on updating existing content, you should use the tool. Aside from that, they did not force the tool on sites without specific activity plans.



Pictured: GSK Intranet Old Homepage. The previous homepage design had an overwhelming amount of news, with 15 news articles and two carousels on the page. Users told the intranet team they couldn't see past the clutter; metrics validated that feedback. The need to simplify drove the redesign effort. *71_GSK_01_home_before.png*

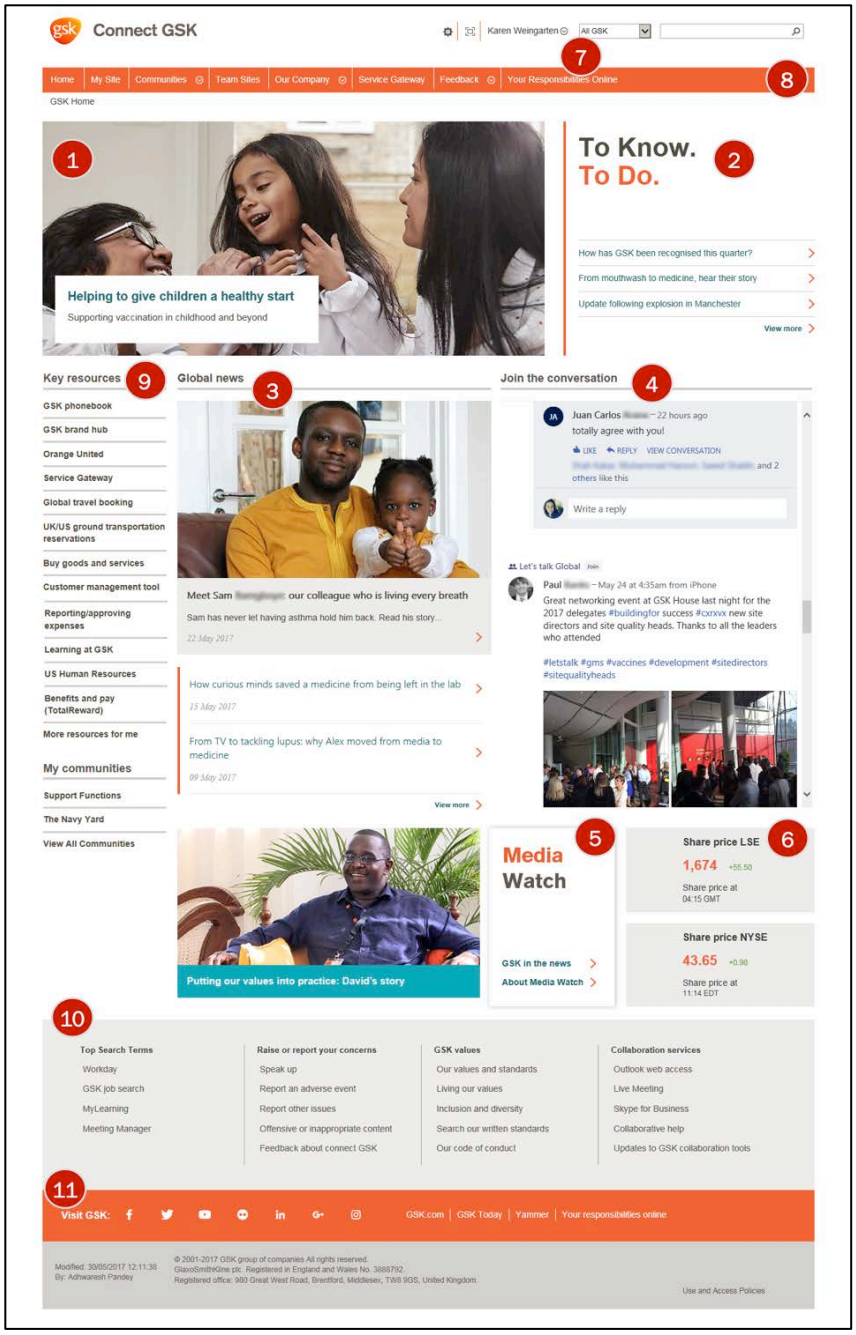
Pictured: GSK Intranet Old Brand Template Site. An example of the original brand template site featuring previous brand-compliant visuals. The look and feel was modified centrally. No work had to be done by the site owners to revise the page design elements, as every site in the system that used the brand template would instantly see the design change. *72_GSK_02_brand-template_before.png*



Pictured: GSK Intranet New Brand Template Site. The new brand template site provides site owners and publishers with information they need to create brand-compliant intranet sites using the approved tool. The brand template lets community owners and site administrators implement brand-compliant elements within communities with minimal effort and time. *73_GSK_03_brand-template_live.png*

DESIGN REVIEW

Homepage



Pictured: GSK Intranet Homepage. The connect GSK intranet homepage selects a few news items to showcase, and it supports users with global navigation, context navigation, and a large page footer.
74_GSK_04_home_live.png

Homepage Highlights

Designers worked industriously to simplify the homepage, since it is the default browser page for most employees. While several sections are offered, the page is not inundating. Each section targets only a few pieces of content at most, and the page curates what's important for employees. Knowing that their users are usually "on a mission" when they go to the intranet, designers wanted to make it easy for them to quickly sample anything compelling, then return to their original task. The optional top banner spans horizontally across and is used for special announcements or reminders. It also sometimes serves as a countdown feature: one more day until… and it can be turned on/off as needed.

1. **Feature article.** A big chunk of the upper left of the page is dedicated to one featured news item, which includes a large image, a title, and a subtitle. To make the text on an image legible, designers added simple aesthetics: a white background rectangle behind the text, which makes it much clearer than if it had appeared directly on the image. Designers consulted their research and site goals when deciding to go with only one main news item and very little text, rather than multiple news items and more text, in homepage's top section.
2. ***To Know. To Do.*** The right top section of the homepage is mostly white space, so the text that is there is very noticeable. The few words, *To Know. To Do.,* are written in large bold black and orange letters on the white background. The message these words deliver to employees is that they should pay attention to this section. The section's three announcement or news items include minimal green links. The *View More* link below the three items advertises that additional items exist.
3. **Global news.** Below the spotlighted news item is a set of internal news items. These are created by the company's Global Communications team and are relevant to everyone in the company. These items help keep employees abreast of outside influences and occurrences they should be mindful of in their work.
4. **Join the conversation.** This section includes an embedded Yammer feed, which usually features a discussion around a specified group, hashtag, event, or spotlighted story. This section had to be revised after the initial launch, as pulling the live Yammer feed into the page put a strain on the page load. To resolve this, the team used the space to highlight a targeted Yammer conversation that can be accessed with one click.
5. **Media watch.** This section ensures that employees can quickly access information and what is being said about GSK in the press.
6. **Share price.** User feedback showed that GSK employees liked having the stock price on the homepage. In the new design, it stayed on the page but was moved below the fold. Posting this information on the homepage is a good idea on many intranets; positioning it below the fold lets interested employees access it with only a bit of scrolling.

Also, inevitably, any stock price will drop, so putting it below the fold avoids immediate demotivation of employees when drops occur.

7. **Search.** A drop-down list defaults to *All GSK* so people can search the entire intranet, or choose a subset to search within. Defaulting to the all choice means that people who don't notice or remember the drop-down list will not be confused by a scoped search.

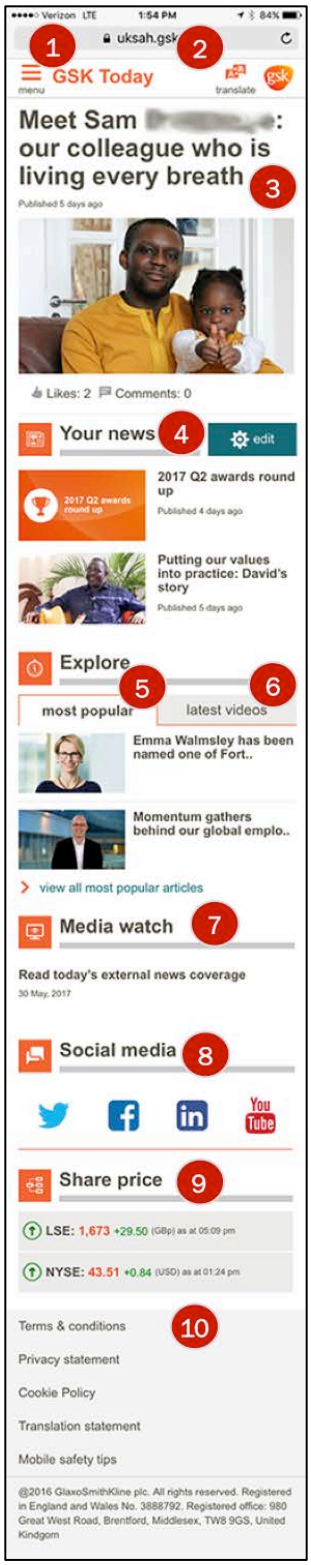
8. **Global navigation.** The orange background makes the horizontal navigation intelligible on the white page. The links lead to important intranet sections such as a personalized page, communities, team sites, information about GSK, services such as IT help, a method for giving feedback, and GSK's standards. The navigation is available in 13 languages and is determined by the user's browser preferences. GSK has a significant global, including commercial operations in more than 150 countries; a network of 87 manufacturing sites; R&D centers in the UK, US, Belgium, and China; and employees and contractors in all of these locations using the intranet. Multi-language support therefore ensures that all employees can access necessary and helpful information via the navigation.

9. **Left navigation.** The left navigation links are targeted to the logged in user based on his or her business area, location, role, and language. The top section of links falls under the *Key resources* heading, and includes topics such as brand guidelines, travel booking, purchasing, and HR. Services are identified specific to a country or business area. For example, an employee in the US is served the US HR links and the US-specific travel booking tool. The *More resources for me* link at the end of the *key resources* list gives users a place to go if the homepage doesn't display what they are looking for. It also suggests that these are not just generic links, but rather are targeted toward the individual. The navigation's lower section, *My communities,* shows key communities relevant to the user, such as his or her business unit and location page The *View All Communities* link at the end of the list helps employees find more communities of interest.

10. **Bottom section.** The gray background of the large footer at the bottom of the homepage helps it stand out from the rest of the white page. The footer is sectioned into four parts: each has a heading and is demarked by vertical lines and clear columns of links. Four of the *Top Search Terms* appear in the left-most column. This helps users see what their colleagues are interested in. Next is the *Raise or report your concerns* section, with options for discussing issues; these activities can help improve the workplace. These links are also found via the global navigation, but displaying them on the page, rather than collapsed in the menu, makes them more visible. And, while it would not make sense for global navigation to remain open and take up most of the top of the page, this "doormat" style design is helpful as a footer. The fourth column, *GSK values,* offers links to what the company views as important, including *standards, code of conduct,* and *diversity.* Finally, the fourth column, *Collaboration services,* consolidates online tools and methods that employees can use to

collaborate, such as Live Meeting and Skype for Business. This list makes it fast and easy for employees to locate these needed tools.

11. **Social.** Icons for GSK's social sites — such as Facebook, Twitter, and LinkedIn — make it easy for employees to read and participate in discussions on customers' views of their company.



Mobile Homepage

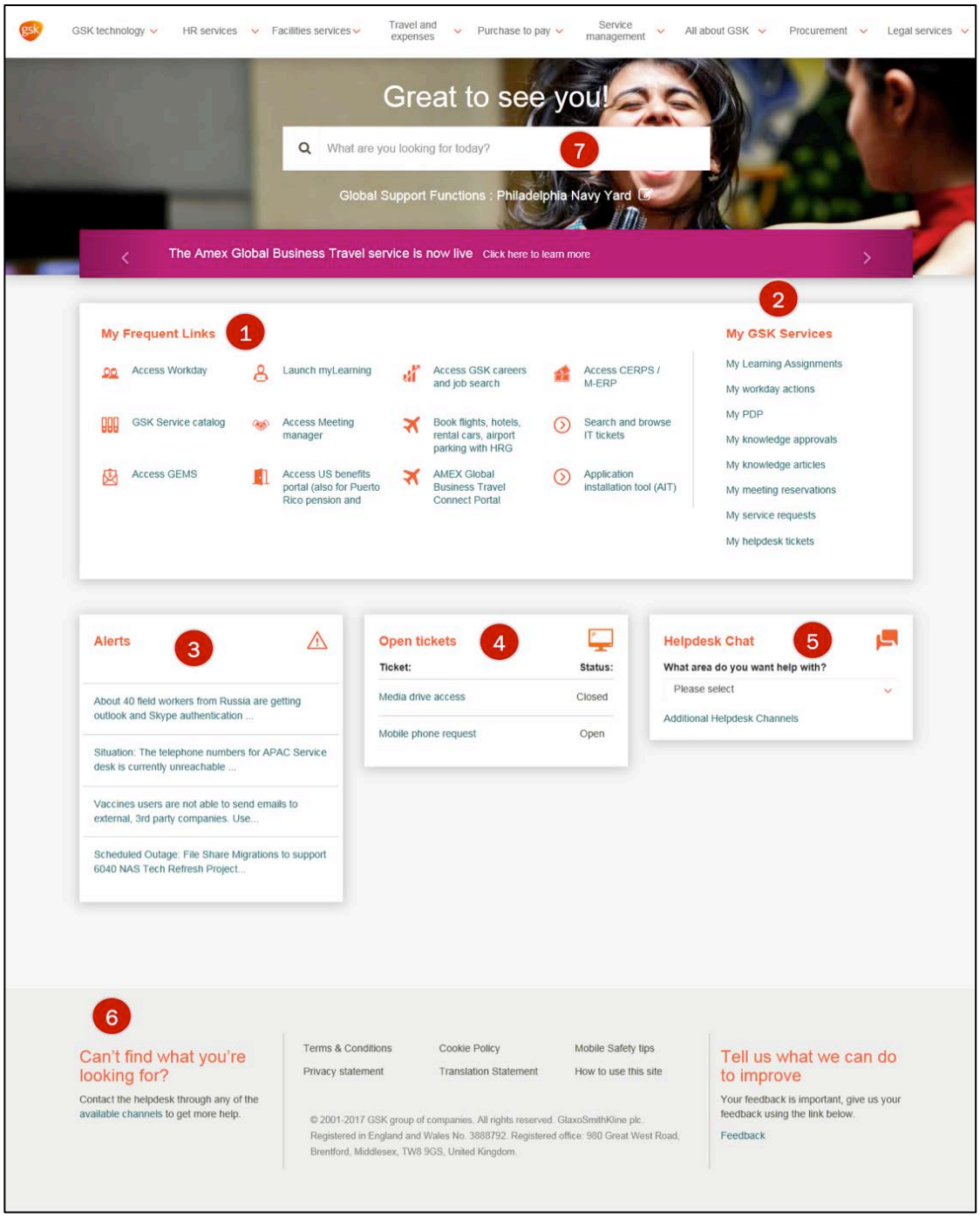
Pictured: GSK Intranet Mobile Homepage. The connect GSK intranet homepage on mobile phones collapses the global navigation into a hamburger with the word *menu* in the upper left, and promotes the top global news item. *75_GSK_05_mobile_live.png*

Mobile Homepage Highlights

Key resources related to news, the *Service Gateway*, and several other core applications are available on mobile via a separate, mobile-accessible website called *GSK Today.* Because the intranet supports 140,000 employees and contingent workers — many of whom are in the field, factories, or laboratories — mobile access is imperative.

1. **Navigation.** On mobile, the global navigation collapses down from the desktop version's horizontal menu links to a hamburger icon accompanied by the word *menu* in the upper left. The *menu* label takes up very little space but helps clarify what the hamburger icon is for unfamiliar users.
2. **Translate.** In the upper right is an icon with the label *translate*. This lets users translate the content into any of 25 different languages. Because employees work in more than 100 countries and speak 13 primary languages, translation is an essential feature.
3. **Top news item.** News stories displayed on the mobile site are selected from those suitable for internal release, but that do not contain sensitive information. An important news item displays at the top of the mobile homepage, with a mobile-friendly image and large, sans serif black text on a white page background. These traits make the content easy to scan on a small screen.
4. **Your news.** This section displays a few news headlines and thumbnail images related to topics users have indicated an interest in. The label *Your news* makes it obvious that the section is customized, while a teal button with the cogwheel icon and *edit* label communicates the ability to customize it further.
5. **Popular articles.** The most popular articles appear halfway down the page under the *Explore* heading in the *most popular* tab. The *view all most popular articles* link lets interested employees easily access more news.
6. **Videos.** The *latest videos* tab shares the horizontal space with the *most popular* tab and displays a few of the internal videos.
7. **Media watch.** Press clippings keep mobile users apprised of what is being said in the press about GSK.
8. **Social media.** Employees can be reminded of and quickly access GSK's social channels on Twitter, Facebook, LinkedIn, and YouTube. This helps them join the discussion with their customers from anywhere in the world.
9. **Share price.** As on desktop, employees can scroll to see the current GSK stock price on both exchanges on which it is listed.
10. **Footer.** Administrative information, such as the cookie policy and privacy statement, is visible in the footer at the end of each page.

GSK Service Gateway



Pictured: GSK Intranet Service Gateway. The *Service Gateway* section of the GSK intranet offers key tools based on each employee's location, facility, and business area. *76_GSK_06_service-gateway_live.png*

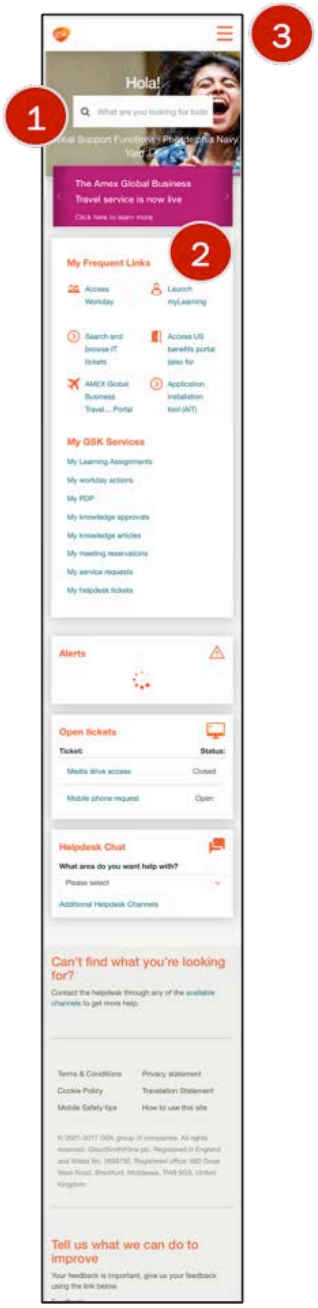
GSK Service Gateway Highlights

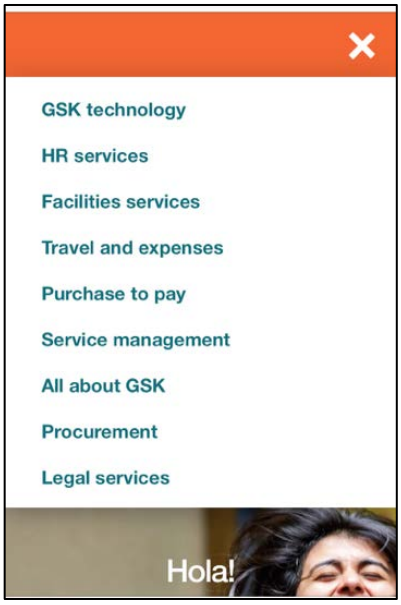
The *Service Gateway* section provides links to key tools, including services, live chat, and alerts. This is the go-to section for employees looking for information and help to get things done at GSK. The links are based on the employee's location, facility, and business area. Available in 50 countries and 21 languages, this section is popular among employees, with 5,000 user interactions each day.

1. ***My Frequent Links*.** The page's top section displays a dozen links organized in three columns. The space between the links makes them easy to scan and thus helps employees easily find particular tools. Within the settings, the users can set their country, business unit, location, language, and type of content, which will then filter the content that they see, displayed in the selected language.
2. ***My GSK Services*.** Tools that most employees typically need appear in a column under the *My GSK Services* heading. Items ranging from pay stubs to meeting reservations to expense reports and informative articles are just a click away. Each link leads with *My,* signifying that the upcoming page will be personalized to the user. Consolidating these tools in one place and naming the links with typical (rather than branded) terms means employees don't have to know which group or individual to go to or the brand name of particular tools. Rather, employees can navigate to this intranet section and scan for natural-language words, confident that they will find what they need.
3. ***Alerts*.** The first column informs people of the status of tools, such as when the intranet will be down for maintenance. Housing this information on this page means users can learn where it is, and find it when they need it.
4. ***Open tickets*.** Lower in the right rail is a list of help resources, technical information, and the service requests list related to the user. Users can see a ticket's topic — such as *Service Request* or *MyLearning* — and the date the request was made.
5. **Chat online.** If employees can't find an answer on their own, never fear, they can use the chat feature to request assistance. To direct the question more accurately, employees first answer two quick questions via the drop-down lists, choosing a topic and the language they prefer to communicate in.
6. **Help desk contacts.** The Help desk contacts at the end of the page offer another safety net. Employees may call a main number or search for an individual in the department they need.
7. **Search.** Finally, employees can use the search function at the top of the page to help them find information they need. This scoped search is different from the main site search, as it focuses specifically on the tools, services, and documents in the intranet's *Service Gateway* area. For example, if an employee moves to a new home and searches here for "change address," the search would return the results "How do I update my personal information at GSK," with links to various systems that require the employee's home address (such

as the HR Workday tool, American Express billing, and expense report systems).

GSK Service Gateway, Mobile





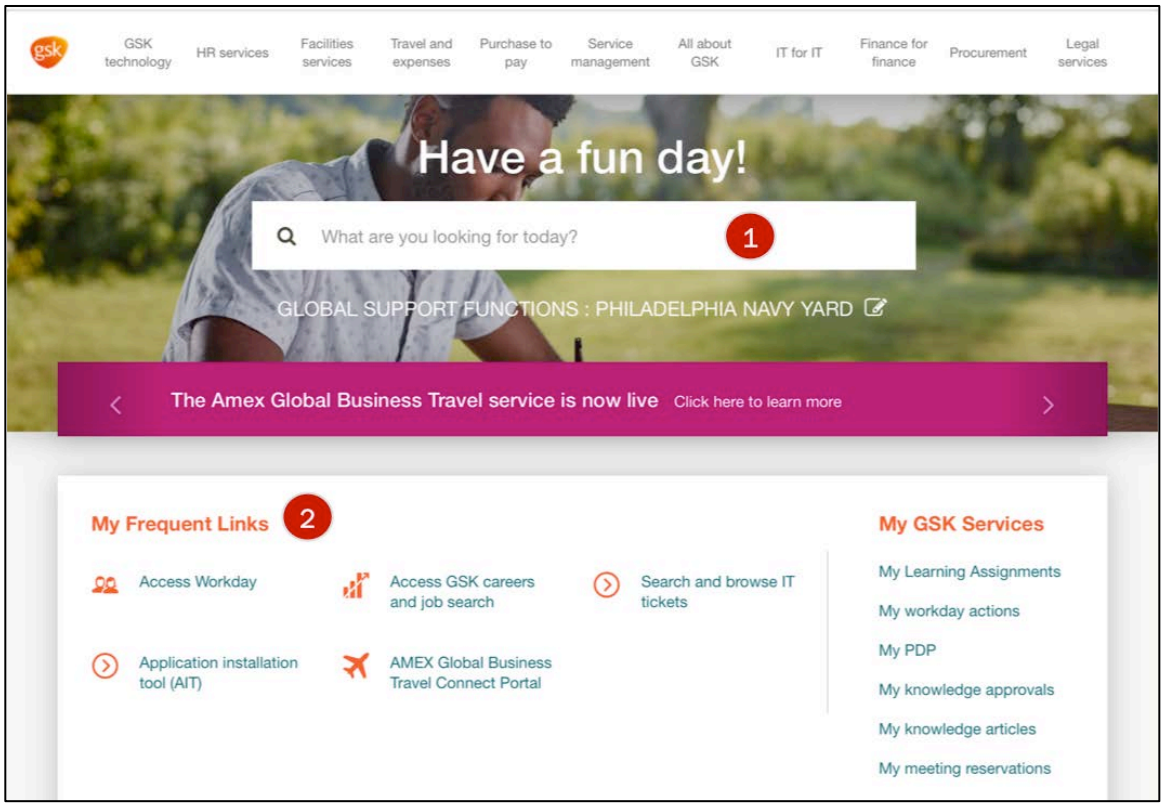
Pictured: GSK Intranet Service Gateway — Mobile View. The mobile phone version of the site's *Services Gateway* section adapts the desktop view to a more consolidated layout (left screen) and the hamburger menu expands to show a set of global navigation options (right screen). *77a_GSK_07a_service-gateway_phone_live.png* and *77b_GSK_07b_service-gateway_phone_menu_live.png*

GSK Service Gateway, Mobile Highlights

The simplicity of this screen makes it easy for users to scan to services they need.

1. **Search.** Employees can search for help services on mobile, as on the desktop. The field appears at the top of the page.
2. **List of links.** The person's most-used links related to tools and services appear in this list.
3. **Hamburger menu.** The menu in the upper right opens to reveal global menu choices (see right screen above).

GSK Service Gateway, Tablet

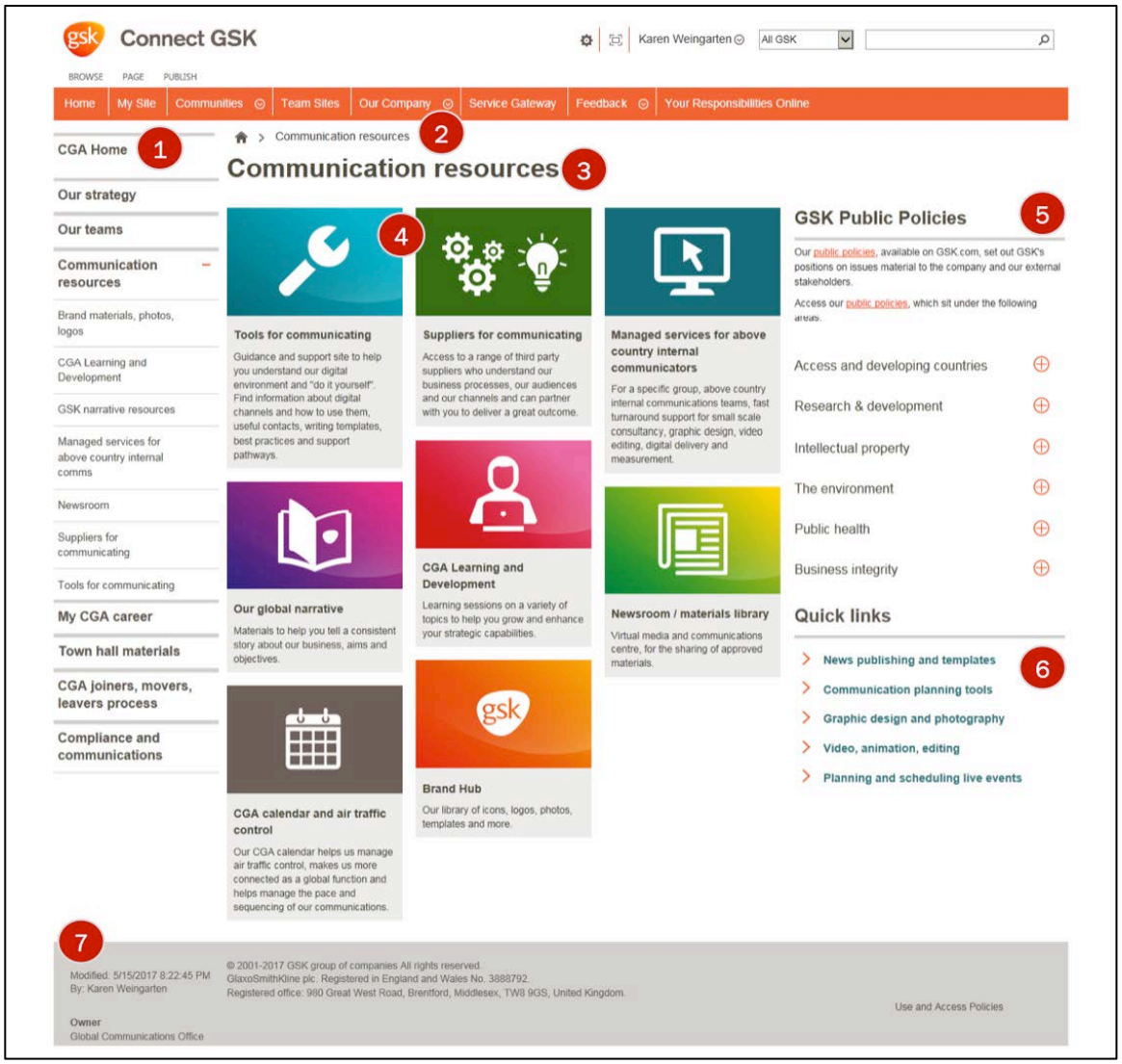


Pictured: GSK Intranet Service Gateway — Tablet View. The tablet version of the *Services Gateway* page makes elegant use of the screen size. *78_GSK_08_service-gateway_tablet_live.png*

GSK Service Gateway, Tablet Highlights

1. **Search.** Employees can search for help services, as on the desktop. The field appears within the hero image toward the top.
2. **Links.** Each section of links is organized to be easy to scan on the tablet screen. Here, three columns — versus one column on phones and five on desktop — make the page seem helpful but not cluttered.

Communications Team Resources



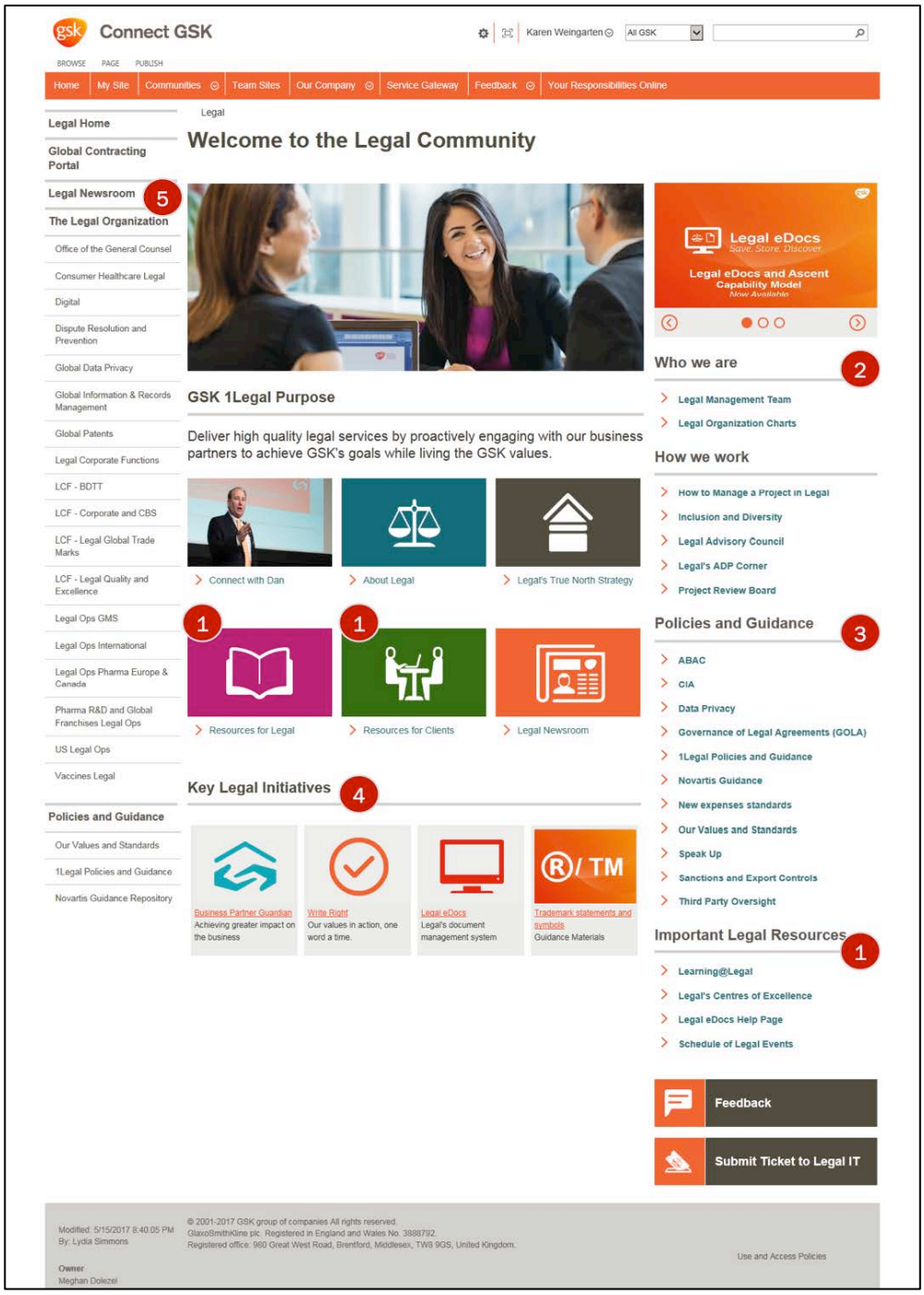
Pictured: GSK Intranet Communications Team Resources. The Communications and Government Affairs team members use this page to access the key tools and services they need to do their work.
79_GSK_09_resources_live.png

Communications Team Resources Highlights

The GSK intranet offers pages for teams that require common resources. These pages have similar layouts, which helps employees who work with more than one resources page. This page lists key tools, services, and sites for GSK's Communications and Government Affairs team.

1. **Left navigation.** The left-side context navigation is related to the selected section — in this case, *Communications resources.*
2. **Breadcrumb.** The breadcrumb clearly displays the site section the page is housed in.
3. **Page title.** The page title is in large, bold text, making it easy for users to confirm that they are in the right place.
4. **Content section.** Large white brand-compliant icons in different colored rectangles signify the page's different sections. Titles and summaries below them describe each section's purpose.
5. ***GSK Public Policies*.** The top section in the right rail houses links to the organization's public policies on topics such as research and development and public health.
6. **Useful links.** Links to additional helpful and relevant content are listed toward the bottom of the right rail for easy access.
7. **Page information.** Connect GSK has 450 site collections, 5,000 subsites, thousands of content publishers, and contributors across the world. Thus, the knowledgeable intranet design team uses not only content communities, templates, training, and much more for their contributors, but also clever UI components to keep page content updated. Pages list the individual page author, the team that owns the page, and the date and time it was last updated. This information makes it easy to track and find old content, as well as the people to contact about updating or removing it.

Community



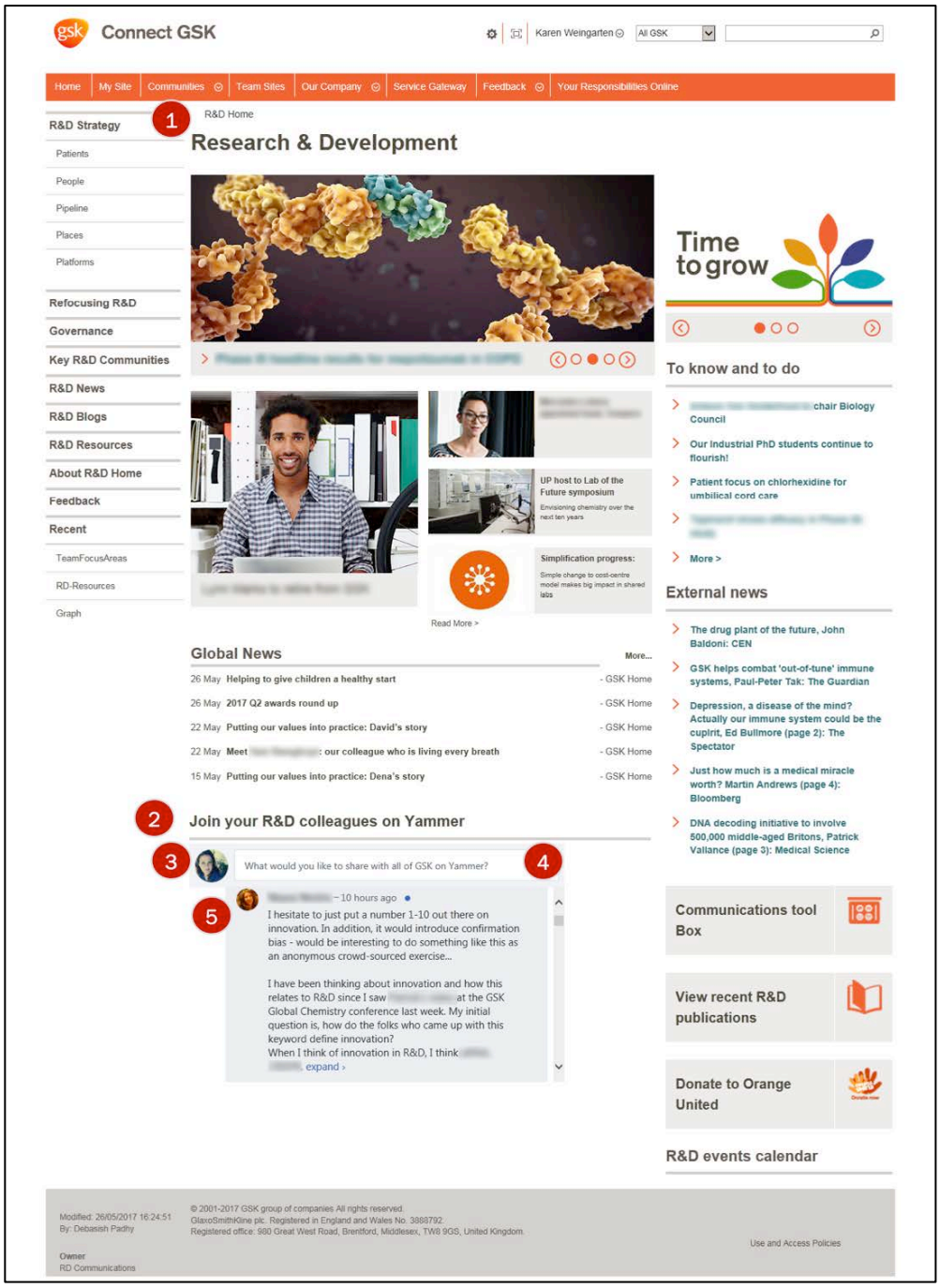
Pictured: GSK Intranet Community. The Legal department, like many others at GSK, created a community to help its own team members as well as employees who need its services. *80_GSK_10_dept_live.png*

Community Highlights

Many GSK teams and departments have communities with pages on the intranet. Some pages provide information for consumers of that team's services, such as information about the department, contact information, and related resources and services. The legal team's community consolidated the content of what were eight separate sites into one helpful community on connect GSK.

1. **Resources.** The legal community's main page offers links to resources for the Legal department and its clients in the page's main section and the bottom of the right rail.
2. **About.** The top section of the right rail includes information about the management team, the rest of the organization's team members, and how the team functions.
3. **Policies.** Links to specific legal and corporate policies appear in the lower section of the right rail. The heading *Policies and Guidance* makes this section easy to scan to.
4. **Initiatives.** Curious employees can easily get a sense of the department's current priority areas via the *Key Legal Initiatives* near the bottom of the content area.
5. **Left navigation.** Several topic links — many related to the Legal department — appear in the left context navigation. Other topics include the latest legal news and contracting.

Community with Yammer Feed



Pictured: GSK Intranet Community with Yammer Feed. The Research & Development community on the GSK intranet embeds a Yammer feed on its main page to encourage conversations. *81_GSK_11_social_live.png*

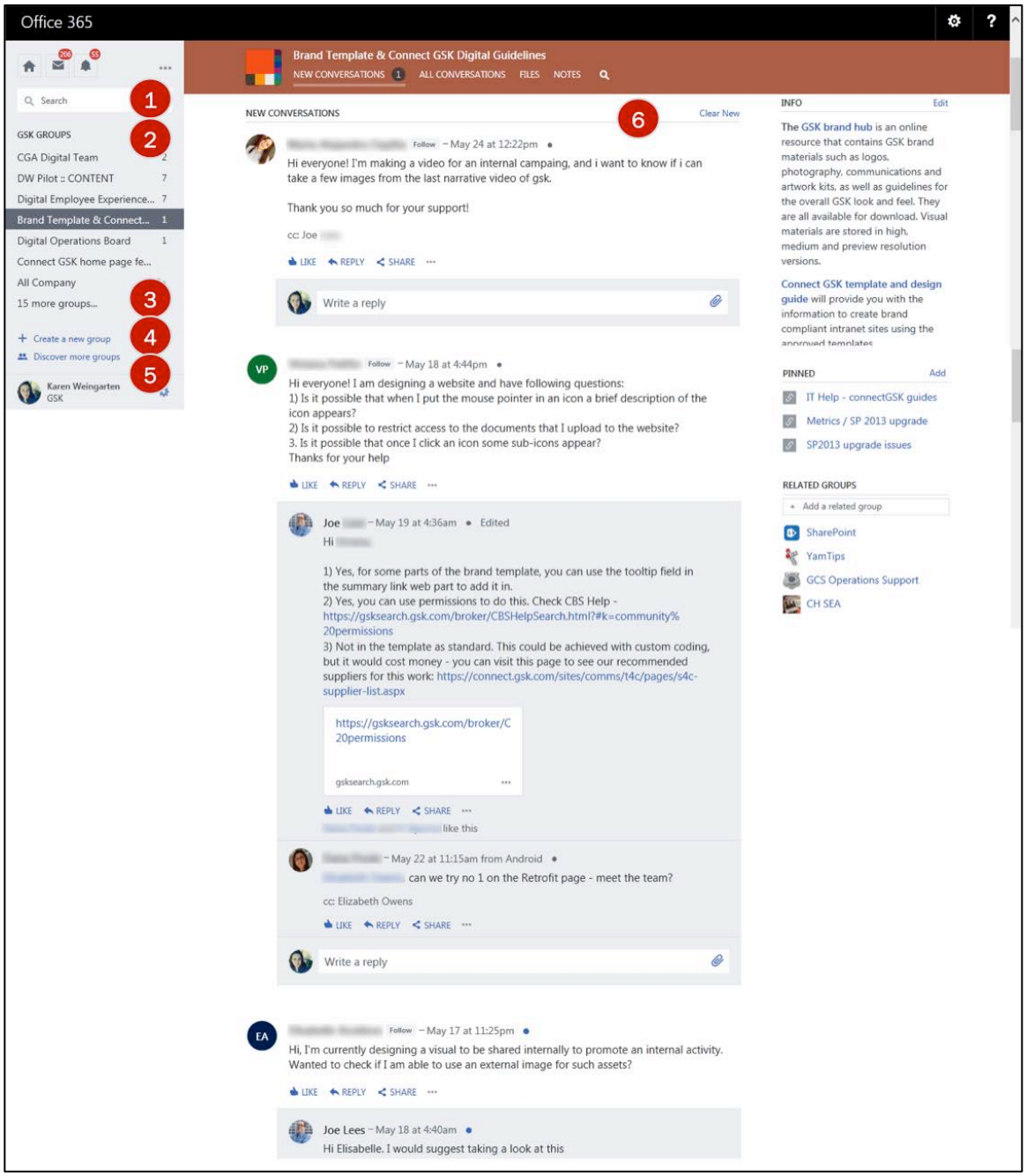
Community with Yammer Feed Highlights

Conversations have earned a special place within the GSK intranet's various community sites. In fact, many communities embed a Yammer feed to support and encourage discussions. People carry on conversations about various topics, hashtags, and audience groups, some of which are enormously popular. For example, one hot topic — GSK's CEO transition — generated 1,600 comments. During the CEO transition, GSK's offices around the world shared photos and comments via Yammer as they watched the simultaneous global broadcast. It was a fantastic way to see everyone, feel like one company, and sense the energy during the event to welcome the new CEO.

Placing feeds on communities implies that the topics discussed will be related to that community, which boosts user's confidence to write and respond. Also, having the common interest of the community itself means employees who go there actually have shared goals and challenges, so they will naturally write to one another. Having common needs helps to make the community a valuable place to interact.

1. **Position.** The collaboration feed is strategically located: on the main page of the R&D community, just below *Global News.* Placing it on the main section page demonstrates that what the employees say and think is important enough to highlight rather than bury. Further, placing it under the news items gives employees an opportunity to scan the news and be inspired.
2. **Yammer section title.** The section title, *Join your R&D colleagues on Yammer,* not only describes what the section is, it calls members to write something.
3. **User's image.** The small user photo might inspire users to see themselves as authors.
4. **Prompting to share.** The field to write in is located at the top of the section. The label, *What would you like to share…*, could help users think about what they have been wanting to talk about.
5. **Latest conversations.** The most recent posts appear at the top of the feed, showing the author's picture and name, and the amount of time since the post was made.

Yammer Feed



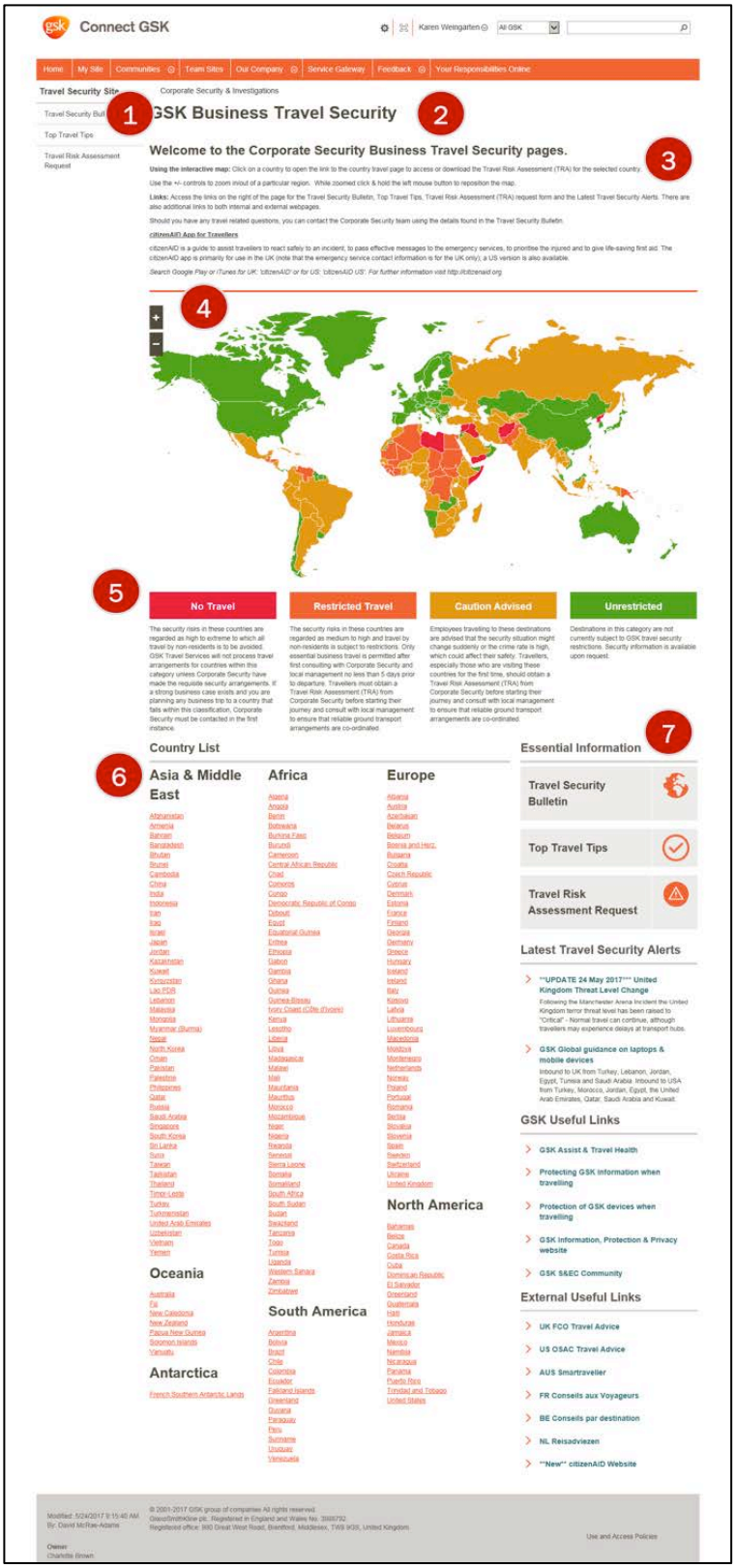
Pictured: GSK Intranet Yammer Feed. In this Yammer feed example, a group collaborates on the GSK intranet's template tool.
82_GSK_12_collaborate_live.png

Yammer Feed Highlights

The GSK intranet enables discussions with Yammer feeds, which are all located in one intranet section. Users in a community can often find Yammer feeds embedded on pages within that community, and people typically link to the group feeds via those embedded feeds. However, storing all the group feeds in one area ensures that employees can find specific discussion topics they are interested in.

In this Yammer group, novice users of the brand template tool and subject matter experts alike participate in helpful, lively discussions. This ensures that the intranet's brand template tool is being used most effectively and efficiently.

1. **Search.** Users can search for Yammer groups via a field that searches only Yammer groups.
2. **List of groups.** The groups are listed alphabetically on the left side of the page. Selecting a group displays the group's current conversation in the page's content area.
3. **More.** The groups that are not visible in the list can be accessed via the *15 more groups…* link at the end of the list. It's helpful that that number of groups is noted, rather than just a vague *more groups* link.
4. **Create.** The plus-sign icon accompanied by the label *Create a new group* provides an obvious way to start a new discussion group.
5. **Discover.** The *Discover more groups* link is a great way for employees to find topics they are interested in. Located near the link to create a new group, it's also a reminder to scan for groups to ensure the one you are planning to create doesn't already exist.
6. **Conversations.** The layout for the selected group's current conversation employs an expected wall feed interface and displays the most current comment, the author's photo, the date and time it was posted, and options to like, reply, share, and comment.



83_GSK_13_travel_live.png

GSK Business Travel Security

Pictured: GSK Intranet Business Travel Security Section. The GSK intranet's *Business Travel Security* section helps the many employees who travel for business determine the safety of possible destinations.

GSK Business Travel Security Highlights

With ever-changing travel restrictions and security circumstances in the world, GSK needs a mechanism to communicate its travel security vision to its many staff members navigating the globe.

The map provides an at-a-glance view of the world, and offers immediate insight into the locations where travel is sanctioned or should be avoided.

1. **Navigation.** In the left-most column are links to the travel bulletin, travel tips, and making a request to help assess the risk for particular trips.
2. **Title.** The page title is large and legible. The text is understandable, and it confirms that employees can find accurate information about travel security on this page.
3. **Summary.** The text at the top of the page houses a wealth of information, including how to interact with the map and the list of links. It also links to and describes a valuable resource — the *citizenAID* app for travelers — which offers assistance in emergency travel situations, such as reacting to a safety incident.
4. **Map.** The world map is displayed with a simple iconic view, with each country outlined in thin white borders. Each country's color indicates a level of travel restriction that corresponds with the country's status. Clicking the country in the map (or in the list of links below it) displays travel restrictions, policies, and other considerations about traveling to that country. For a quick overview, users can match the color of the country in the map to the color of the travel state below it.
5. **Legend.** Below the map are the names of four states of travel restriction: *No Travel, Restricted Travel, Caution Advised,* and *Unrestricted.* Each name is written in a box in the color that represents that state. Below each is a general description of what each rating means, and how employees should proceed accordingly.
6. **List of country links.** Many countries that GSK employees travel to are also listed as links on the page. The links are organized first by continent — with all seven written in large, bold black text — and then sorted alphabetically under the corresponding continent's name. Clicking a country name link (or on a country in the map above) displays travel restrictions, policies, and other considerations about traveling to that country. This list also provides a good way for employees who are color blind or blind, or who are less familiar with world geography, to learn about travel restrictions.
7. **More information and alerts.** Alerts communicate the most recent important changes in travel security. The *External Useful Links* area shows five resources that GSK has deemed helpful for its employees. Also, the same tools in the left navigation appear as buttons below the *Essential Information* subheading.

DESIGN PROCESS AND USABILITY WORK

Approach

Given the disparate designs that existed across the company's previous huge intranet, team members started the redesign project by simply analyzing the types of page layouts and content. This exercise helped them reduce the pages down to four general page types: landing page, two column, one column, and library. They also broke the content down into a few basic types: titles, news carousels, call-out quotes, buttons, features, bulleted lists. They then worked with the brand team to design a few visual styles for each content type.

After looking at thousands of pages, the team quickly realized that while each site looked different, they had many things in common. For example, every site had bulleted lists in many colors and styles. The team thus decided to design a small catalog of lists and turn hundreds of bulleted list styles into six brand-compliant styles:

- **Standard link list:** bullet icon, title link
- **Link list with detail:** bullet icon, title link, short description under title
- **Thumbnail and link:** small image with title link
- **Profile image and link:** slightly larger image, text description, link below
- **Square bulleted list:** square icon, title link, short description under title
- **Expanding list:** links separated by expandable category name

The developers worked within the constraints of SharePoint to figure out an easy way populate a template with content and use brand-compliant elements without making users write code or create special graphics.

Early on, team members spoke to both relatively new users and users of the company's high-impact sites. Through these discussions they learned the following:

- Content publishers were not developers and would not write code
- Publishing content was only a small part of each publisher's job
- Few had Photoshop or any image editing tools other than Paint
- Few understood how to save or upload images
- Traditional SharePoint training was often too technical, and the organization lacked a great path to train true beginners (though it did offer live drop-in sessions that were quite helpful)

These users told team members that if they wanted this tool to work, it would have to be very easy to use and not require other sophisticated tools or much time to implement.

As a result, today, with no development or design experience needed, publishers can create a brand-compliant list in about five minutes. This saves money on design and development and does not require an agency to build the page. Team members quickly realized that 80% of content was feature graphics (pictures with text), news

carousels, fancy call-out quotes, special header designs, or basic text blocks, so they decided to streamline the design of these features into the company's brand template tool. Now, if publishers can insert a web part into a page and crop an image, they can build brand-compliant pages with little effort and zero technical experience.

Understanding Training Needs Through Usability Studies

The brand template tool does require some training, so the team conducted one-on-one usability studies to analyze how people reacted to the tool as they used it. Team members chose a group of users including very experienced content publishers as well as some with little SharePoint experience. Their feedback helped the team decide what kind of support materials would be necessary.

In addition to the template approach, they also added "free zones" where publishers can add custom tables, dashboards, maps, animations, videos, visuals, or other items that couldn't be designed for in advance. Leaving some flexibility helped users embrace the not-so-flexible brand template elements.

More than 2,000 sites now use the brand template, and the company estimates that it has saved millions of dollars in agency resources it no longer needs.

Developing Support Materials

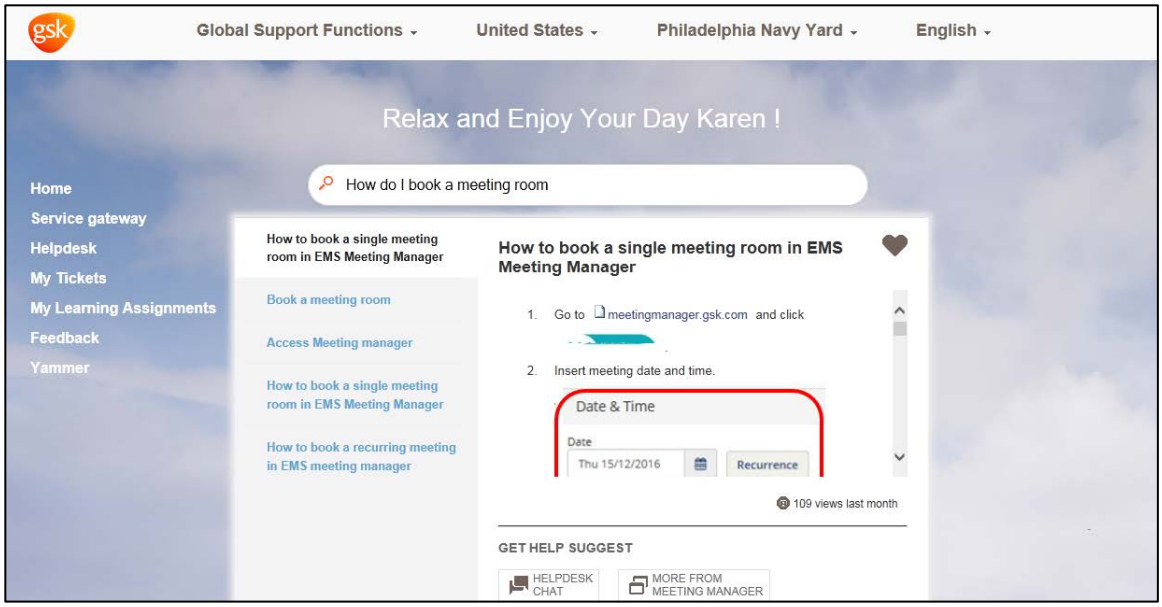
The design team knew that support materials would have to go the extra mile to ensure that users would succeed the first time they used the tool. To achieve this, team members took a two-pronged approach. First, they developed tools inside the tools to help users with common processes. Next, they provided a suite of support materials in place of live training — which would have been ideal, but the team was too small to provide it. The team delayed the launch for two months to develop these tools and support materials so that they would be in place at launch.

Because many of the feature or carousel web parts work only when users add a link to an image, team members knew that users would get lost the minute they had to look for an image. This would be a huge distraction when learning the new system, so the team developed an FPO image library and taught the platform to use it. Users can now borrow FPO images and set up a beautiful page within 30 minutes. Once they were confident editing and saving images to the right library, they could go back and edit the page with new, personal images.

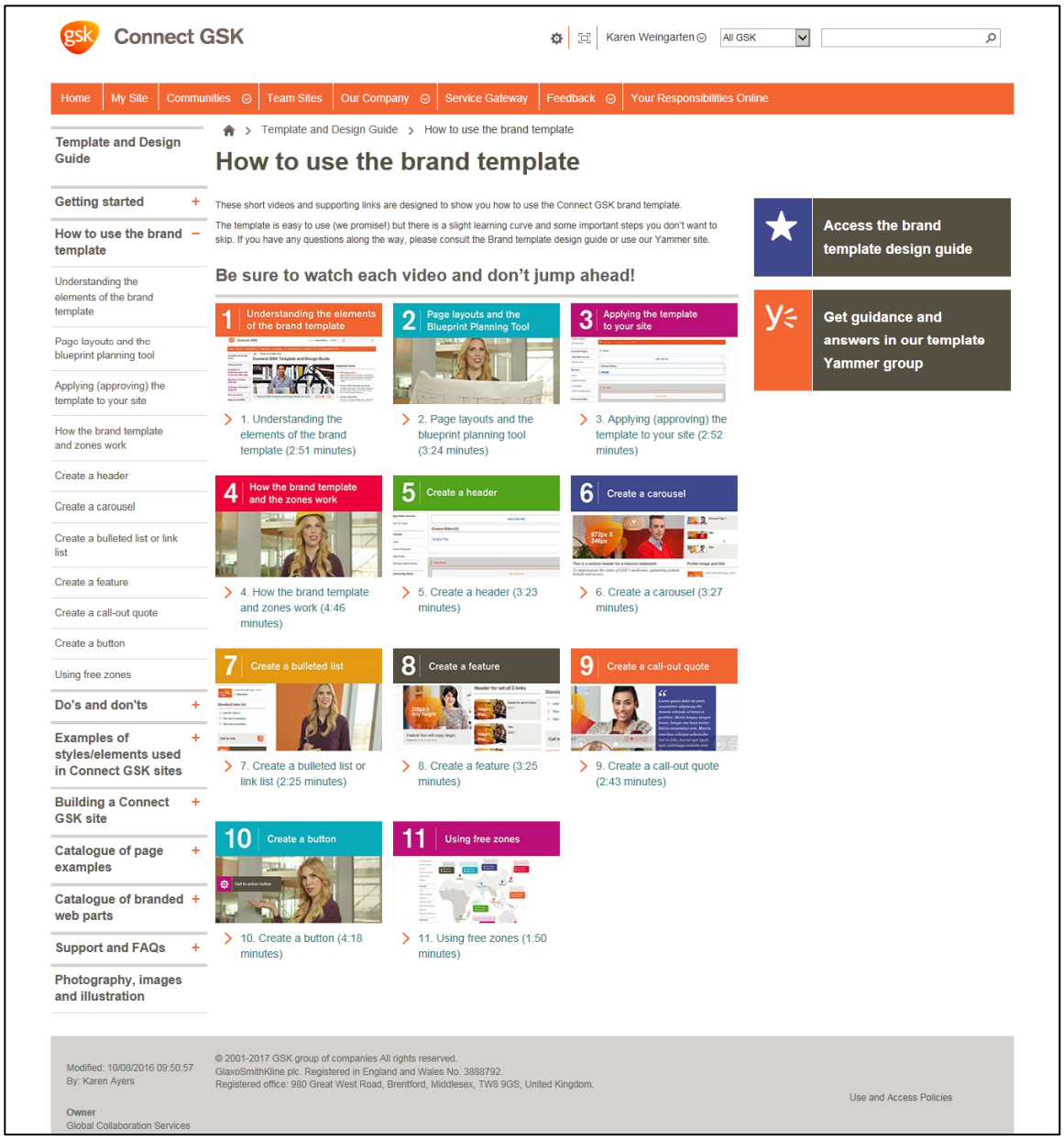
When team members tested the FPO library with a few users, it worked like a charm, so they added a button library. The button styles are based on brand-compliant icons. The intranet team wanted to make sure users didn't get lost in a cumbersome process that required them to go to the corporate brand image hub, find the right approved icon, download it, edit it (with the right tool), save it, and upload. This seemed like a long detour, and the team didn't want users to get lost on this path. With that in mind, it created hundreds of icons in a few colors that were already sized properly for the button styles. It then tested the feature, and users were thrilled.

Support materials include:

- **PDF.** A PDF file that outlines the process to add every available feature with photos. This document is 100 pages, but because it is thorough, visual, and explains all possible problems along the way, it's a lifesaver for publishers.
- **Website.** A website that provides the same information as the PDF, along with key links, image libraries, FAQs, and every available resource for using the tool.
- **Instruction videos.** These videos take the place of live training. They are short, fun, and list all of the corresponding resources mentioned in them.
- **PowerPoint.** The team knew that everyone had access to PowerPoint and most knew how to use it, so it created a PowerPoint file called *Blueprint Planning Tool*. This tool has an example of every element available in the template. Users can drag and drop each element into a blank page to plan the page design. This planning ahead was crucial; the template is easy to use when users have an idea of what they want the page to look like. Using PowerPoint let the team give users a tool they were very comfortable with and, within a few clicks, a user can proclaim, "I want my page to look like this!" The Blueprint file includes brief notes that tell users where each element should go and what each element requires, making the page easier to build.
- **Page examples with notes.** The team also provides a library of page examples, with notes on each one.
- **Yammer group.** A Yammer group lets experts and users help each other out. The team also used the Yammer tool to help track any initial issues after launch.



Pictured: GSK Intranet Help Feature. The *Get Help* search component focuses specifically on the tools, services, and documents in the *Service Gateway*. It thus streamlines access to any help or support documentation for those tools. *84_GSK_14_help_desk_search_live.png*



Pictured: GSK Intranet Brand Template Videos Landing Page. This page showcases the video catalogue used to teach publishers how to implement the brand template on their own sites. Each supporting video page links to the tools, assets, and resources needed to accomplish each step.
85_GSK_15_brand-template_videos_live.png

Connect GSK

Karen Weingarten | All GSK

Home | My Site | Communities | Team Sites | Our Company | Service Gateway | Feedback | Your Responsibilities Online

Template and Design Guide

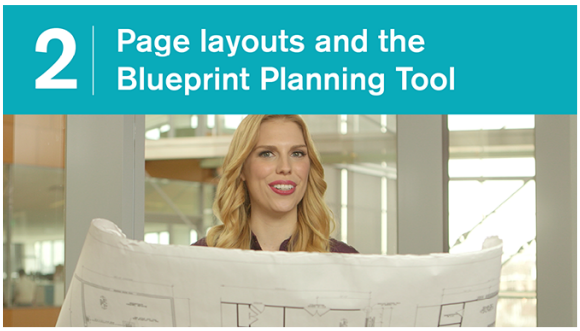
- Getting started +
- How to use the brand template −
  - Understanding the elements of the brand template
  - Page layouts and the blueprint planning tool
  - Applying (approving) the template to your site
  - How the brand template and zones work
  - Create a header
  - Create a carousel
  - Create a bulleted list or link list
  - Create a feature
  - Create a call-out quote
  - Create a button
  - Using free zones
- Do's and don'ts +
- Examples of styles/elements used in Connect GSK sites +
- Building a Connect GSK site +
- Catalogue of page examples +
- Catalogue of branded web parts +
- Support and FAQs +
- Photography, images and illustration

Template and Design Guide > Page layouts and the blueprint planning tool

Page layouts and the blueprint planning tool

Our blueprint planning tool lets you quickly create website mock-ups. These mock-ups are useful in planning your pages and preparing the elements necessary to use the template. An added benefit is that you can use the blueprint tool to share ideas with colleagues and gain feedback before developing your pages.

Once you have an idea of the content you want on each of the pages of your website, you can drag and drop branded web parts into the "mock template". This tool will remind you which zones to place a web part in and the proper image sizes.The more design decisions you make in the mock-up stage, the fewer design decisions you'll need to make later on.



Previous video | Next video

Remember:

- If you can use PowerPoint, you can quickly mock-up pages in the style of the brand template.
- PowerPoint isn't "smart" enough to know which zones a web part should live in, so you will have to reference the guide or the page examples to get an idea of the correct placement.
- **The template will be easy to use if you plan!** You've got to know which web parts you want to use, where they go and the content or images needed before you build. This PowerPoint file lets you quickly mock up pages and reminds you what is needed for each web part.
- View the template's catalogue of page examples to get an idea of how you want your page layout to look and view our catalogue of branded web parts for which elements would suit your content.

Download the blueprint (.PPT)

Access the brand template design guide

Design resources

- GSK style guide
- Familiarise yourself with the Brand Hub
- Find icons in the Brand Hub's icon library

Are we there yet?

Almost. You've got 9 more to go!

1. ~~Understanding the elements of the brand template~~
2. ~~Page layouts and the blueprint planning tool~~
3. Applying (approving) the template to your site
4. How the brand template and zones work
5. Create a header
6. Create a carousel
7. Create a bulleted list or link list
8. Create a feature
9. Create a call-out quote
10. Create a button
11. Using free zones

Modified: 19/08/2016 11:38:06
By: Karen Ayers

Owner
Global Collaboration Services

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Use and Access Policies

Pictured: GSK Intranet Video Detail Page. Each short, punchy video has all the useful corresponding material listed on the page; the videos make it very easy for users to get started. *86_GSK_16_brand-template_videos_live.png*

OUTSIDE AGENCIES	
Agency	**Project Role**
The Moment	• Design, develop, and consult on key projects including the new homepage design, brand template concept, and Yammer integration • Define, design, test, and develop the brand template and its support materials • Manage day-to-day updates and address platform issues related to content publishing and the brand template • Work with top-level community owners to define, design, and build site content as needed

GOVERNANCE

The company's Digital Operations Board (DOB) makes decisions on operational matters related to the digital channels and associated processes. It does this through discussion and connected decision-making at the DOB meetings; members then bring the resulting insights back into their business areas.

The Board's 2017 focus areas included:

- Establish clear rules and guidance around site and content owner responsibilities
- Support site and content owners in simplifying, aligning, and reducing content
- Improve digital channel projects around email, analytics, mobility, and news delivery
- Lay the groundwork for the next version of our "Digital Employee Experience," which includes the company's intranet, channels, and key systems

Each DOB representative is empowered and well placed to:

- Understand and influence the overall GSK strategy, digital strategy, and broader strategy within business areas
- Understand the current digital channel landscape
- Understand the needs of their own business area audiences
- Influence site and content owners in their business area
- Understand trends in internal and external digital technologies and use that understanding to aid decision making
- Make decisions related to operational matters that impact a specific business area

- Confidently respond to requests for new communities (site collections) in a specific business area and understand the larger impact of adding those sites to the architecture
- Own and refine the architecture (structure) of that business area.

Similarly, the search, *Service Gateway*, and employee support teams host a Global Enabling Services customer board. This board comprises representatives across business functions that own many of the company's services, including HR, IT, Facilities, Finance, and Procurement. The representatives make decisions around how these systems work, develop recommendations around governance, and provide feedback on proposed changes.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Stakeholders	• Make top-level decisions • Serve as primary sponsors from the IT and Communications areas of the business
Global Enabling Services customer board	• Focus on how the *Service Gateway*, search, and employee support teams and systems work • Develop recommendations around governance and provide feedback on proposed changes
Digital Operations Board (DOB)	This group includes representatives from each key business area; typically, they are the key communicators/site owners from the company's top 22 business areas. They include subject matter experts for specific functionality areas such as search, services, digital support, IT, risk, compliance, and records management. Their responsibilities include: • Manage the site structure in each business area, communicating changes and expectations to the site owners and creating site-specific governance rules for each business area. • Manage top-level permissions and access • Relay information to community owners in each business area • Represent the best interests of the people in each business area
Site Owners, Site Administrators	• Align to each business area • Create and maintain distinct sites • Remain current with any technical training or changes to brand guides • Follow records management rules for deleting and updating content • Work with aligned DOB member to provision new sites and manage top-level navigation
Content publishers	• Adhere to records-retention rules, brand guidelines, and GSK narrative • Work directly with site owners

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	https://connect.gsk.com/
Default Status	• The global homepage is the default homepage for most employees. Specific business units, such as Vaccines, R&D, and Consumer, have an exception; their own intranet homepages can be set as a default.
Remote Access	• Most users can connect into the system via remote connection using the company's secure access tools.
Shared Workstations	• Many of the company's factory-based employees do not need a computer for their daily work and have workstations available to check email, participate in training, and access resources, including the intranet.

TIMELINE

PROJECT MILESTONES	
Item	**Status**
~1998	• SmithKlineBeecham WorldLink Intranet
2005–2008	• myGSK intranet in PlumTree
2008	• Migration to SharePoint 2007
~2013	• Upgrade to SharePoint 2010
October 2015	• Upgrade to SharePoint 2013
2017	• Evaluate the entire digital employee engagement experience and plan for the next connected, evolved experience

LESSONS LEARNED

GSK team members share some of their lessons learned:

- **Prepare support tools and create advocates in advance.** “Getting your audience on board before something launches and listening to their concerns and desires is key. Making sure they are confident and have self-service tools can make or break a project.”
- **Don’t over-complicate things.** “A lesson learned from Apple — ask yourself: ‘What else can I take away?’”
- **The intranet may be enormous, but to the user, it should be very small.** “Most users want to accomplish one task at a time, and access only the content relevant to *me*. Don’t cloud it with a map of the universe, just give me access to the three or four things necessary.”

About the Authors

In addition to those listed below, we thank co-authors Candice Goodwin, a journalist and usability consultant (2001-2003 Intranet Design Annuals), and Mathew Schwartz (penandcamera.com) (2004-2007 Intranet Design Annuals) for their essential work.

Kara Pernice is Senior Vice President at Nielsen Norman Group and works with clients to derive UX strategy and designs that meet business goals. With more than 20 years of experience in management and user experience (UX) research and design, she has led many major intercontinental research studies, authored a variety of research reports and hundreds of guidelines, and coauthored the book *Eyetracking Web Usability*. *The Wall Street Journal* called Pernice an "intranet guru." She has lectured around the world on a wide range of topics, and her client work spans many businesses and industries. Before joining NN/g, Pernice gained invaluable experience pioneering UX and building and managing UX teams in an assortment of development environments and established several successful user experience programs. A champion for usability, Pernice chaired the Usability Professionals' Association 2000 and 2001 conferences, and served as 2002 conference advisor. She holds an MBA from Northeastern University and a BA from Simmons College.

Amy Schade is a Director at Nielsen Norman Group with more than 20 years of experience in usability, user research, and website design and development. She has led research, authored reports, and taught courses on the usability of intranets, mobile websites and applications, responsive design, emerging design patterns, email newsletters, and ecommerce. She co-authored the Intranet Information Architecture report and has co-authored the Intranet Design Annual since 2010.

Schade works with clients large and small in industries including telecommunications, ecommerce, nonprofits, government, education, and publishing, including extensive work on corporate intranets. She has conducted worldwide user research, including longitudinal studies, remote studies, accessibility studies, and eyetracking research, running studies in the US, Canada, Europe, Asia, and Australia.

Before joining NN/g, Schade worked as an information architect. She previously held a variety of positions in advertising and web production. She holds a master's degree from the Interactive Telecommunications Program at New York University and a BA in communications from the University of Pennsylvania.

Patty Caya (www.pattycaya.com) is a freelance journalist (writer and editor) and an award-winning digital media producer. In her business writing, she specializes in topics relating to usability (including social media and mobile design) and the business and technology of the web. She has co-authored the Intranet Design Annuals for NN/g since 2008. She wrote and edited the report, *Mobile Intranets and Enterprise Apps*, and the 1st and 2nd editions of *Social Features on Intranets: Case Studies of Enterprise 2.0.* She authored the 3rd, 4th, and 5th editions of the report on intranet portals and contributed to the *Application Design Showcase (2nd Edition)*.

For more than a decade, Caya has split her time between journalism projects and web consulting. She is an experienced content strategist and interaction designer. She has consulted for many of Boston's top interactive agencies, leading web and intranet development projects as well as usability testing, research, and design initiatives. Her client roster spans a wide range of industries and includes leading

national brands alongside mission-driven nonprofits. She has a BFA from New York University's Tisch School of the Arts and has completed coursework in the User Experience Program at Bentley University.

Dr. Jakob Nielsen is a principal of Nielsen Norman Group. He is the founder of the "discount usability engineering" movement, which emphasizes fast and efficient methods for improving the quality of user interfaces. Nielsen, noted as "the world's leading expert on Web usability" by *U.S. News and World Report* and "the next best thing to a true time machine" by *USA Today*, is the author of the bestselling book *Designing Web Usability: The Practice of Simplicity* (2000), which has sold more than a quarter of a million copies in 22 languages. His other books include *Hypertext and Hypermedia* (1990), *Usability Engineering* (1993), *Usability Inspection Methods* (1994), *International User Interfaces* (1996), *Homepage Usability: 50 Websites Deconstructed* (2001), *Prioritizing Web Usability* (2006), *Eyetracking Web Usability* (2009), and *Mobile Usability* (2012). In 2013, Nielsen received the SIGCHI Lifetime Achievement Award for Human–Computer Interaction Practice. Nielsen's Alertbox column on web usability has been published on the internet since 1995 and currently has about 200,000 readers. From 1994 to 1998, Nielsen was a Sun Microsystems Distinguished Engineer. His previous affiliations include Bell Communications Research, the Technical University of Denmark, and the IBM User Interface Institute. He holds 79 US patents, mainly on ways of making the internet easier to use.

NN/g

Evidence-Based User Experience Research, Training, and Consulting

Since 1998 Nielsen Norman Group has been a leading voice in the user experience field.

- Conducting groundbreaking research
- Evaluating interfaces of all shapes and sizes
- Guiding critical design decisions to improve the bottom line

We practice what we preach

We don't just talk about the importance of testing with real users, on real tasks, in real life business situations: we do it. Every week, somewhere around the globe, NN/g team members are conducting research that informs the three pillars of our business: training, consulting and research. In that work we have:

- Tested more than 2,000 different interfaces
- Observed more than 4,000 users—in person—in 18 countries and on 5 continents
- Analyzed thousands of hours of recorded user observations sessions
- Conducted countless diary studies, focus groups and remote user tests

Our collective experience will save you time… and money

Making technology easier to use is no longer a nice-to-have. Useful, usable products make money. And our expertise can help your team achieve their design goals quicker and easier than going it alone. Choosing NN/g means you benefit directly from our:

- Finely tuned methodology: We have an arsenal of proven tools at our disposal and know how and where to apply each one, taking the guesswork out of how to achieve the optimal design solution to meet your business goals.
- Comprehensive body of knowledge: We've taken the results of our decades of research and testing and distilled it down into actionable guidelines, best practices and proven methodologies. Our research library, containing more than 60 published reports, books, and an email newsletter archive dating back to 1995 is unrivaled.
- Practical approach: Our approach is 100% practical, useful and actionable. Whether you attend one of our Usability Week events or invite us to consult at your place of business, the training you will receive can be put into action immediately so that you can see the results.

Our people are the best in the business

At NN/g there is no "B Team." When we dispatch consultants to work with you and your team, or when you attend a Usability Week course, you are learning directly from some of the best-educated and most experienced minds in the business.

- Our principals are considered pioneers in the fields of user research and interface design.
- Our researchers and consultants tackle the most recent and relevant topics in usability, from evergreen challenges such as information architecture and intranet usability to emerging trends in social media and mobile usability.

Stay Informed

Jakob Nielsen's Alertbox Newsletter

Summaries of our latest research and insights published twice per month.

To subscribe: https://www.nngroup.com/articles/subscribe

NN/g
Evidence-Based User Experience Research, Training, and Consulting

TRAINING

Usability Week Events

Usability Week training events are offered in the U.S., Canada, the U.K., Europe, Asia and Australia.

Each week-long event features full-day, immersive training courses where attendees learn practical skills directly from experienced practitioners so they can solve complex UI problems and create better interface designs.

More than 40 courses offered in these categories:

- Agile
- Applications
- Content Strategy
- Credibility & Persuasion
- Email
- Information Architecture
- Interaction Design
- Intranets
- Mobile & Tablet
- Non-Profit Websites
- Prototyping
- Social UX
- User Testing
- Visual Design
- Web Usability
- Writing for the Web

Available courses and upcoming locations: https://www.nngroup.com/training/

In-house Training

Many of our courses can be taught at your location and customized to fit your unique offerings, methods and resources.

In-house training is ideal for:

- Large teams that want to spread user experience perspective throughout the group
- Teams working on large projects that need to kick start the creative process and head in the right direction

In-house training information: https://www.nngroup.com/consulting/

REPORTS

NN/g has published more than 60 reports that detail thousands of evidence-based design guidelines derived from our independent research studies of websites, intranets, application, and mobile interfaces.

More than 60 reports addressing these topics:

- Agile
- Applications
- Audience Types (e.g., children, college students, seniors, people with disabilities)
- B2B Websites
- Corporate Websites
- Ecommerce
- Email
- Information Architecture
- Intranets
- Mobile & Tablet
- Non-Profit Websites
- User Testing
- Social UX
- Strategy
- Web Usability

Shop for reports here: https://www.nngroup.com/reports

CONSULTING

The same experts who conduct our research and teach Usability Week training courses are available for custom consulting including:

- **Evaluating your website, application, intranet or mobile interface** (average cost $38,000 USD)
- **Usability testing** (average cost $25,000 - $35,000 USD)
- **On-site training with your team** (average cost $10,000 USD, plus travel per day)

Consulting details: https://www.nngroup.com/consulting