Best Industrial, Product, and Manufacturing Sector Intranets 2001–2019

31 Case Studies of Award-Winning Intranets from Manufacturing Companies, Product Companies, and Industrial Organizations, Reprinted from the *Intranet Design Annuals*

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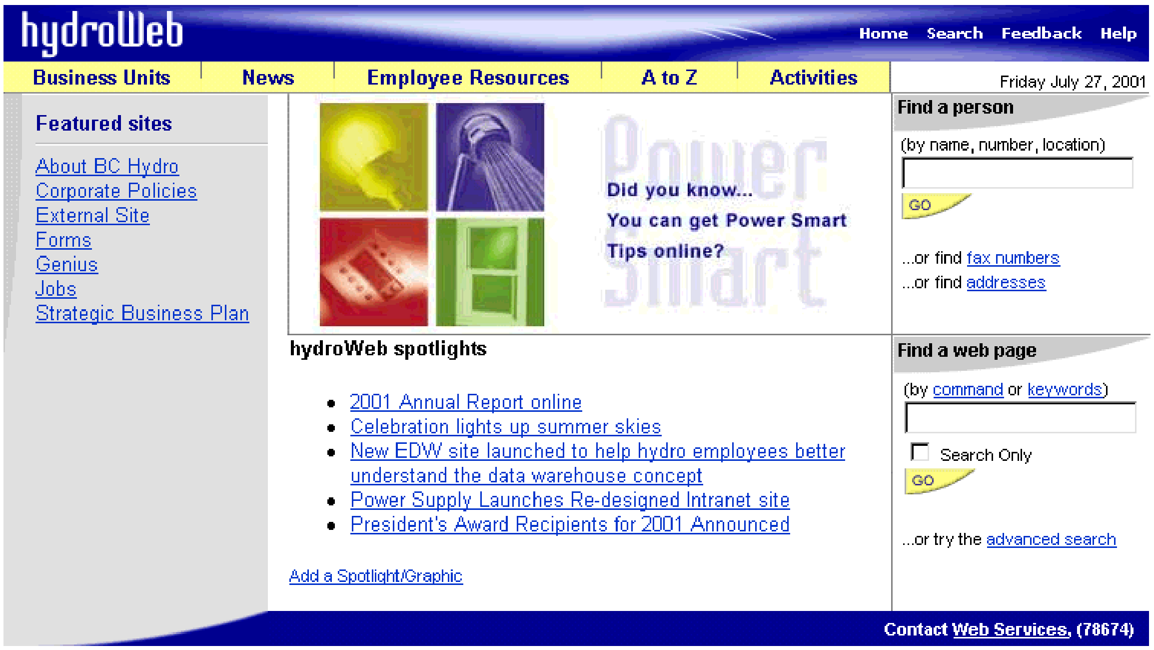
BC Hydro: HydroWeb

BC Hydro is Canada’s third largest electric utility, with approximately 6,500 employees in British Columbia.

DESIGN TEAM:
In-house
(Westech Information Systems, an IT solutions company wholly owned by BC Hydro)

Pictured: homepage



SUMMARY

This site’s designers were resourceful and inspired in their choice of methods for collecting usability feedback. Not only did they abandon the generic lab in favor of going to users’ desks and collecting feedback remotely, but they dreamt up and executed a scavenger hunt to attract people to the study. When testing with internal employees, offering an honorarium doesn’t always do the recruiting trick. Making it easy and fun for people to participate in studies, while still collecting valid data, is the sign of a true and valuable usability professional.

Considering that this site is a massive repository that supports varied information and applications, the basic look is uncomplicated and navigation controls are surprisingly orderly and consistent.

The site encourages constant change, and makes it easy for users to upload their own content, stories, and images. The front-page graphic, which promotes current organizational events, changes to show one of four five main images each time the page loads. Despite this, the site’s overall use of graphics is kept in check, and designers met their goal of rapid page loading (especially important for employees accessing intranet via a 56K dial-up line).

The *Find a Person* feature, which is crucial for medium and large companies, is taken to a new level on this site, enabling users to also find fax numbers, addresses, and telephone numbers.

The site's biggest weaknesses are in menu design; the alpha list menu is a little confusing. And, the site overuses cascading menus, which are difficult to navigate, especially for people with low vision and motor skill disabilities.

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	2	2.5	2.5	2.5	2	2	2

INTRANET

HydroWeb provides employees information that they need to do their jobs. First implemented in 1994, it has been through four revisions. Content now includes forms, policies, and procedures, along with information on advertising, safety, and human and computer resources. The intranet also hosts three applications: *Employee Online*, where employees can look up pay and vacation information and edit their personal details; *Manager Online*, where managers can find employee information; and *Expenses Online*, where employees and managers can review and approve expenses. Other typical tasks include finding phone numbers, looking at job postings, and checking the weather.

The intranet's initial specification was drawn up by a steering group coordinated by Andrew Baker, BC Hydro's corporate webmaster, and consisting of eight BC Hydro employees who represented various departments, including corporate affairs, transmission and distribution, marketing and communications, power supply, human resources, and information systems.

BACKGROUND

HydroWeb has been evolving since 1994, from a relatively simple Web-based phone directory and database of policy statements, to a more complex system using graphic design elements. The intranet was extensively redesigned in 1997, but the company still felt that content was too difficult to find.

Pictured: the site design in 1997

"We were getting complaints that information was buried in the old design," says Andrew Baker. "We wanted a way to bring important sites higher in the structure."

HydroWeb, which contains over 60,000 pages and documents, is a huge repository of corporate information including everything from employee contact details to customer service information. It also delivers a range of human resource features, such as letting employees file expense reports online, and offers general information on things like job openings and the weather.

To capture users' attention, the alternating front-page graphics promote company events such as a blood donor drive in Prince George, a Hydro Hockey Tournament in Vancouver, or a new Corporate Strategic Plan. Staff can submit their own stories and accompanying images, though to keep graphics manageable, they must select them from a repository of 50 stock pictures.

GOALS AND CONSTRAINTS

BC Hydro had three main goals in redesigning the site: make content easier to find, make content faster to find, and lay the groundwork for future content management and portal-type services.

They also wanted the new version to be an obvious improvement over the last version. "People here don't like change unless it is better than before. So we had to make it a lot better or we would have gotten a lot of flak," explains Andrew.

These goals implied several design constraints. All information had to be three clicks at most from the homepage. Another constraint was that the design had to support easy maintenance and make it possible for employees to load their own content.

Because some of BC Hydro's more remote sites have to access the intranet via a 56K dial-up line, pages had to be 30K or less to allow rapid loading.

PROCESS

After the steering group drafted the initial specification, the new site was designed and built by the Web consulting team from Westech Information Systems, an IT solutions company wholly owned by BC Hydro. The Westech team was also represented on the steering committee, which held four formal meetings during the design process. Several informal meetings were also held by Andrew and various individuals, and a steering committee sub-group met with Westech three or four times to review the site's progress.

In drafting the specification, the steering group had to decide the site's main categories and plan the specification. There was plenty of existing material at their disposal. Usability testing on BC Hydro's Internet and intranet sites had already provided good feedback on what employees liked and didn't like in a website; for example, they didn't like pick lists, and they had different ways of searching for information.

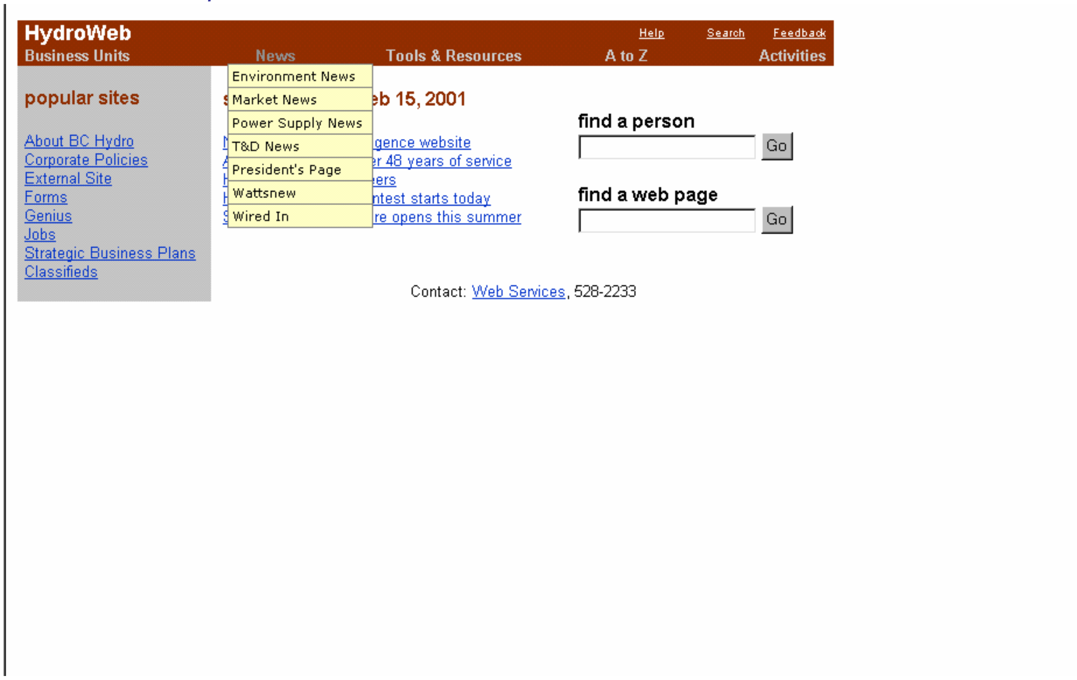
Feedback was also available from the previous version of HydroWeb, indicating that — apart from the general difficulties in finding information — users' biggest complaint was that the search engine didn't work well. "That was so loud that it drowned out all other complaints," Andrew recalls.

Using this information, the committee planned the basic site structure, working through the site's existing list of topics and trying to define five or six categories that they'd all fit under.

They also talked about the design elements they wanted to include. At this point, the concept of drop-down menus was first raised, and they discussed new elements, such as an electronic notice board for announcements.

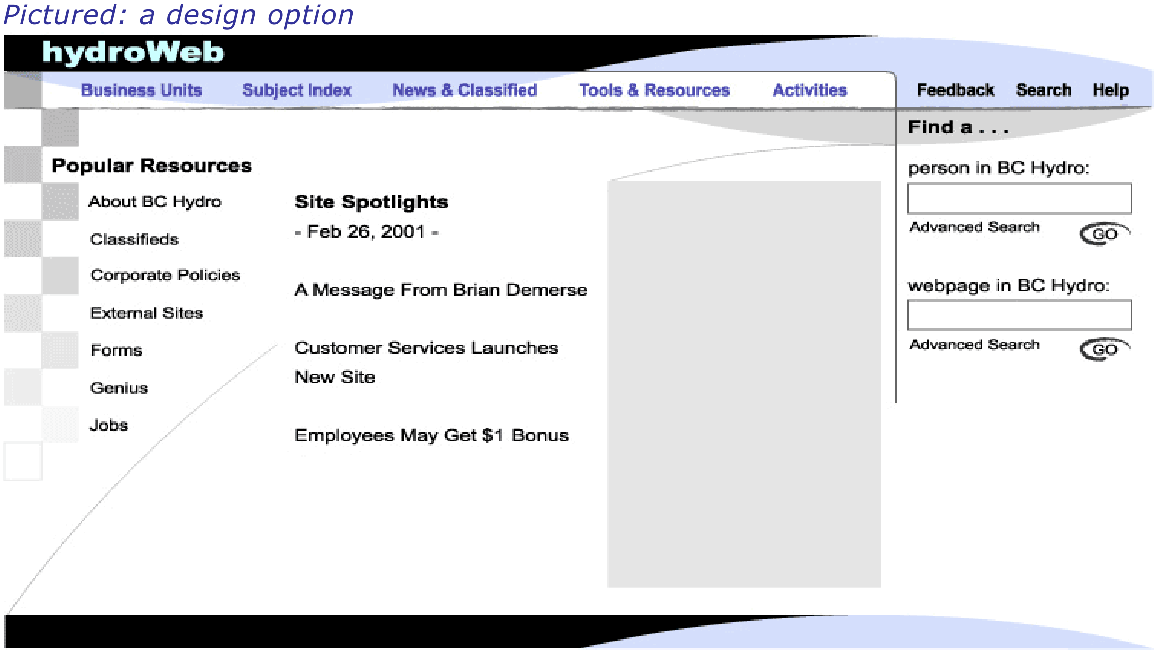
The Web consulting team, led by Westech project manager Stacey Dong, took the steering group's ideas and created a "protosite," a click-through website without graphics to illustrate navigation and labeling. "People found it was a lot easier to find information using the protosite," Stacey recalls. They tested the prototype with seven employees.

Pictured: the "protosite."



Westech presented Andrew with three sketches showing possible directions for the interface design. From these, Andrew selected two design options to present to the committee. These two design options were then redeveloped with feedback from the committee. Each design included the same navigational elements and features, but had unique layouts and colors for the interface.

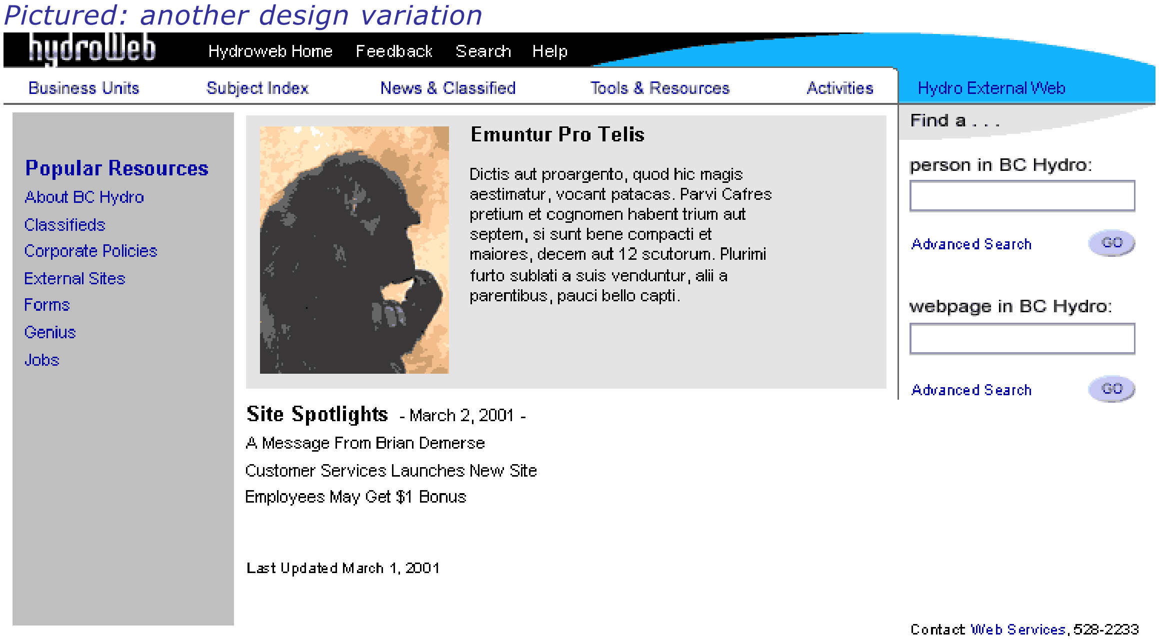
Pictured: a design option



Pictured: a second design option

Westech worked through several design variations to ensure that the graphical elements promoted intuitive navigation and aided rather than detracted from ease of use. The final design was well received by the committee and was tested with eight employees.

Pictured: another design variation



USABILITY

Stacey carried out two rounds of user testing, at the prototype stage and at the final design stage, using small groups representing each business unit. The test users were selected to include a range in age, business unit, years at the company, and levels of Web experience.

Users were given a list of 10 task-oriented questions, such as finding a specific website, and a list of 10 general questions about navigation, labeling, functionality, and suggestions for improvement. Where possible, Stacey went to users' desks and observed them while they worked through the questions. Regional users were interviewed over the phone. A remote access program (Timbuktu) let the tester observe remote users' actions.

The main issue to emerge from both rounds of usability testing was that the wording of the five navigation tabs across the top was not intuitive enough. User feedback suggested that they should change: "Tools & Resources" to "Employee Resources"; "Subject Index" to "A–Z"; and "Social" to "Activities."

Test users indicated that they were able to use the drop-down menus, which helped familiarize them with the menu categories and let them see at a glance the items classified under each category.

A week after the site was first launched, BC Hydro ran an innovative competition to encourage users to offer site feedback. The intranet team developed a scavenger hunt where employees had to look through different sections of the intranet to find the correct answers. For example, one question asked: "Who is the contact for the Customer Services web page?"

The team also asked employees general questions about the new site and provided a text box for feedback. Employee responses were entered into a drawing for prizes.

DESIGN

"In our design, we ensured that there were multiple ways to get the content that was used most often. This meant that employees could efficiently access content via different routes." Stacey says. The top menu bar items were pared down from seven to five high-level categories that let people find content based on organizational structure (*Business Units)*, content areas (*News*, *Employee Resources*, or *Activities*), and a subject index (*A–Z*).

To hold users' attention, the front-page graphic changes to show one of four or five main images that promote company events. Staff can submit their own stories and images, though the latter must be drawn from a stock of 50 generic filler pictures.

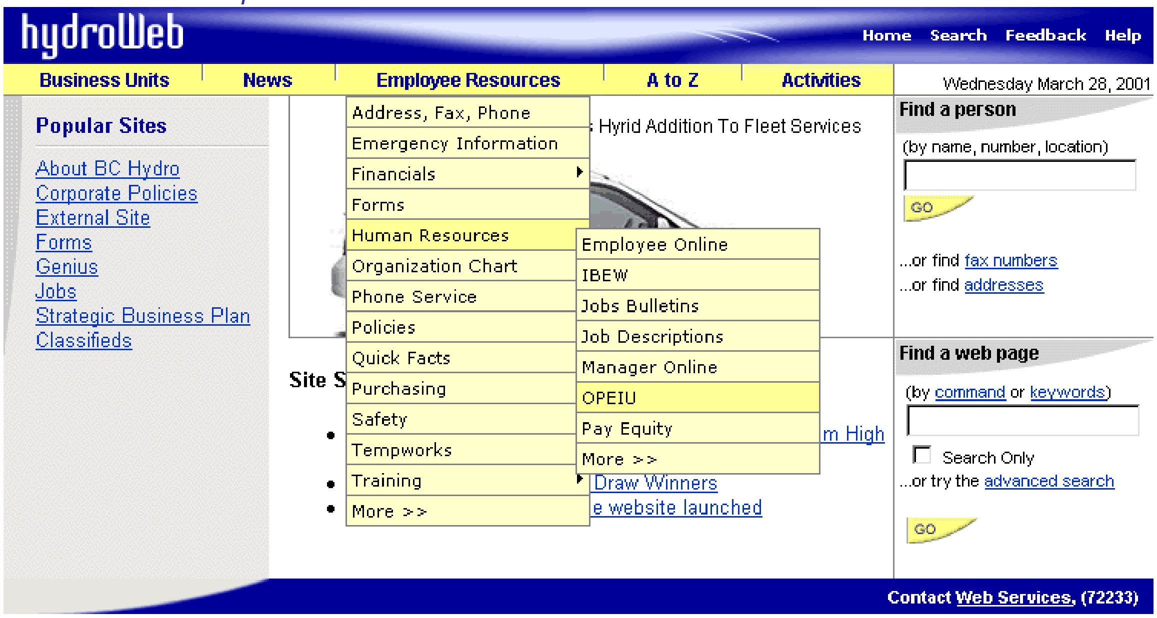
The new design removed the scrolling news headlines from the front page, though this wasn't a universally popular decision. Of the few people who complained about the new design, most said they missed the scrolling headlines!

To address employees' complaints about search facilities, they supplemented the overall site *Search* by using keywords and focused search tools on specific pages. For example, the *Directory* includes a *Find an org chart* search.

All pages have a standard navigation bar that gives quick access to homepage *Search*, *Feedback*, and *Help*.

Drop-down menus on the homepage let users see what information is available in different categories and lower-level pages while retaining a simple, uncluttered design. The drop-down menus work as mouse-overs; no clicks are required. "One of the basic principles of the site is, you click on something, you go somewhere," Andrew explains. The drop-down menu design also has the advantage of accommodating growth, since new items can be added to the drop down without disrupting the basic page design.

Pictured: the drop-down menus



Pictured: A–Z list

The alphabetical list lets users jump to anywhere in the site in three clicks. “We’ve had a lot of anecdotal evidence that people like the *A–Z* list because they can find what they want without having to search by categories when they aren’t sure which category the information they’re looking for is in,” Andrew says.

RESULTS

The number of page views has gone up significantly since the latest version of HydroWeb was launched, from 1 million a month in January to 1.5 million in June. The number of daily users has also increased from 3,000 in June 2000 to 4,000 a day in 2001. Of the employees who replied to a post-implementation survey, 95% liked the new design better than the previous version. The majority of respondents were pleased with the new HydroWeb, commenting that it seemed intuitive and easy to use — though it would take some time to get used to. They, overall, saw the new design as a positive change and a step in the right direction.

A clearer layout appears to have made content easier to find, since the Helpdesk is receiving fewer calls asking how to find information. Of BC Hydro’s survey respondents, 41% said that using the new version helped them find information they hadn’t known existed before.

TIMELINE

- 1994: Basic Web version of old mainframe information system, containing a phone directory company policies and manuals.
- Early 1995: News, a more detailed directory, Web links, and feedback facilities added. Graphic elements start to appear.
- Late 1997: Common navigation across the top of the page and a left-hand menu bar introduced for the first time, along with scrolling news headlines. Human resources, training, and emergency information also added, as are new links.
- April 2001: Latest version goes live.

LESSONS LEARNED

OFFER A CHOICE

“People think in different ways, they have different ways of looking for things, so you need to offer them alternative navigation methods,” says Andrew.

ABB and BEKK Consulting

USING THE INTRANET:

ABB *(Global Web Management)* is a global leader in power and automation technologies. It is one of the world's largest companies with 160,000 employees in more than 100 countries.

DESIGN TEAM:

BEKK Consulting AS, Oslo, Norway, is a leading e-business consulting firm and employs about 100 consultants. The firm delivers consulting services in eBusiness strategy and organizational development, eBusiness platform solutions, and Internet solutions.

MEMBERS: HELENE GUNTHER MERG, GLOBAL WEB MANAGEMENT, ABB; RITA LARSEN, ART DIRECTOR, BEKK; ARNE FOLKESTAD, PROJECT MANAGER, BEKK

Pictured: The ABB home page. Inside.abb.com Group News *is the first page that ABB employees see when they log on to the* Inside.abb.com *intranet. The home page has a stock ticker showing the ABB stock quote on major stock exchanges, a content area featuring ABB news relevant to all ABB employees, and a search field for searching across all* Inside.abb.com *content.*

SUMMARY

Inside.abb.com is ABB's personalized intranet portal. It serves a very large and diverse user group — more than 160,000 people whose work ranges from support functions to highly technical line functions. The users are located around the globe, speak multiple languages, and report to different organizational units. Given the multitude of user types and the equally varied tasks they perform, designing a website that serves them all is no small achievement.

The site navigation is a simple horizontal and vertical bar. The colors and look and feel are elegant and minimalist. The graphic design suits both the Europeans and the other users it serves. Text is well written and easy to read and scan. Pictures are used sparingly and add to the content. The picture quality is high, with crisp images and agreeable colors.

In addition to providing the usual contact and corporate information, ABB also provides discussion forums, which keep users in touch with each other and the site's content. The intranet also takes collaboration to the next level. For example, *Inside.abb* includes the *G5 Net,* a collaborative network for global engineering. This is an online application to support engineering that lets users collect, identify, and distribute comprehensive engineering knowledge to support global reuse. It's one of many ways the intranet supports different types of users and attempts to enhance productivity.

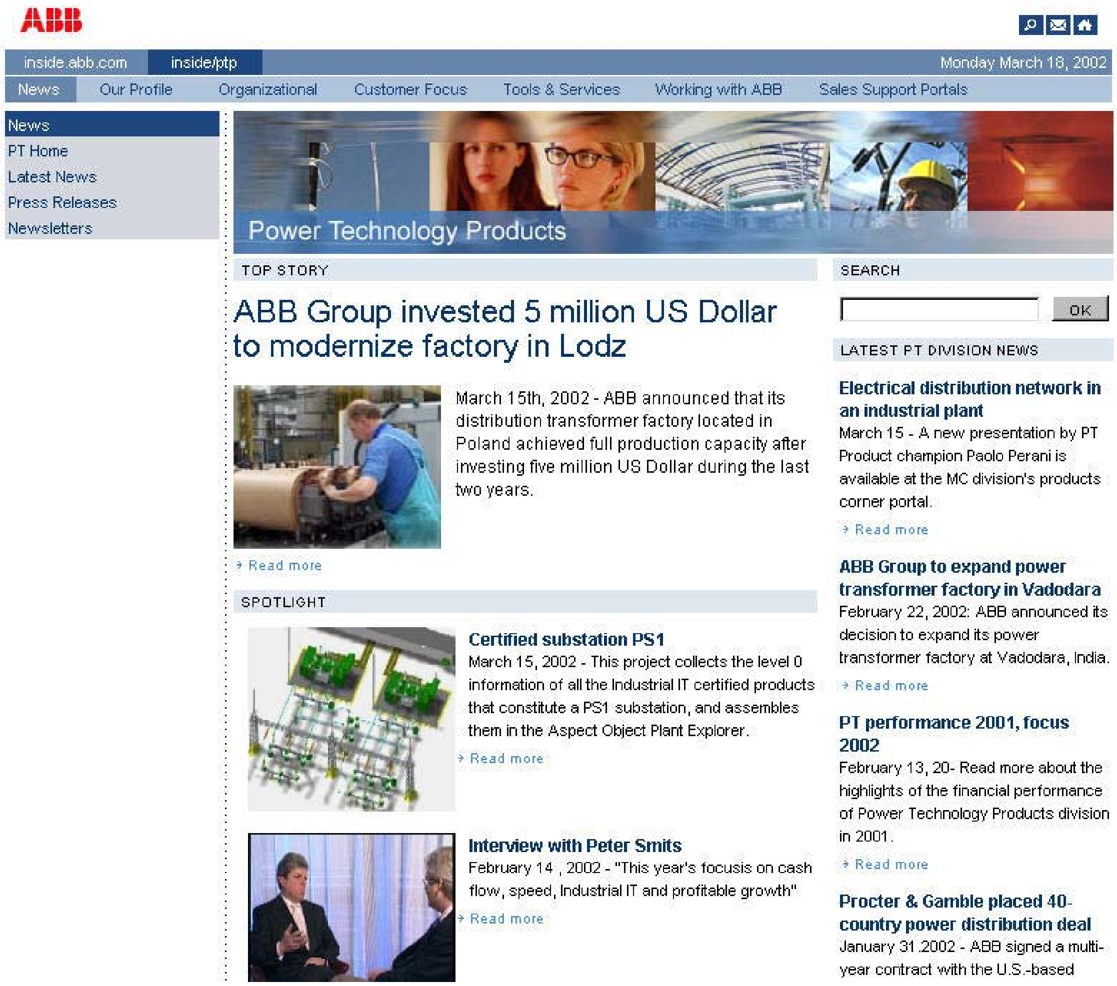
Pictured: An example of a collaborative network for global engineering.

International design is a difficult challenge for many global corporations. ABB provides a nice solution by offering both country portals and multi-language support, including multiple character sets with news, information, and services pertaining to the specified country.

Pictured: The country portal for Norway. Users link to country pages from the Inside.abb.com *main page. The local home pages all have a structure similar to the* Group News *main page, but the information is written in the local language and is relevant to the individual country.*

Additionally, most intranet designs must meet the needs of different divisions with different skill sets, responsibilities, competencies, forms, and jargon. The ABB design provides division pages containing information relevant to the specific divisions. Users access the division pages from the *Inside.abb.com* main page.

Pictured: An example of a global division page, which has a structure similar to the Group News *main page, but offers information relevant to the individual division.*



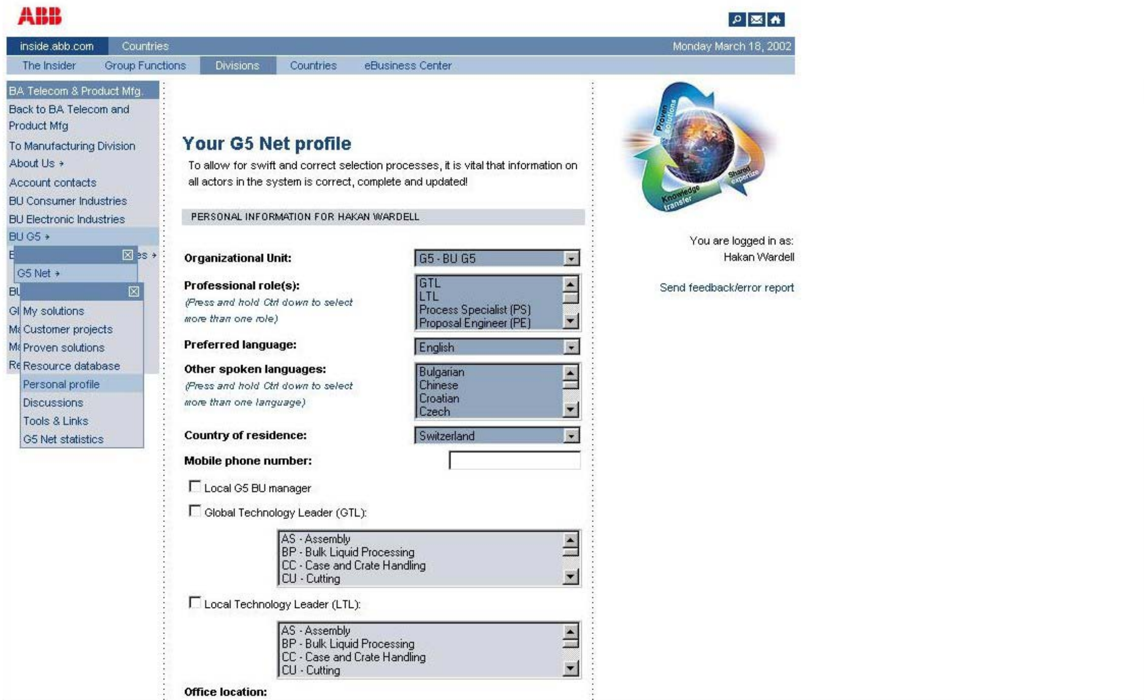
Across these sites and company divisions, the intranet navigation is standard and consistent. This is a very important usability factor, as many companies have intranets for each division and country, but fail to standardize the navigation across those subsites. To ensure consistency across all intranet portals, the company created and makes available detailed Web design guidelines, which support content providers throughout the organization. Further, mandatory sections ensure that each site has a minimum amount of relevant information and services. With more than 200,000 pages on the intranet, adhering to these guidelines is imperative. This not only creates a positive experience for the users, but it also saves time for content providers, as they will know where and how to publish their information.

Pictured: An example from the ABB Web Guidelines. *This page shows detailed guidelines for content area use in the Web templates.*

Because of these guidelines, employees' experience using the design will be more positive, and productivity will be enhanced. The designers also considered methods to improve efficiency on the backend, building the intranet application on the same platform as the existing Internet sites. So, ABB achieves significant synergies through one common ABB Web platform, with unified content management and publishing for the intranet, Internet, and extranet.

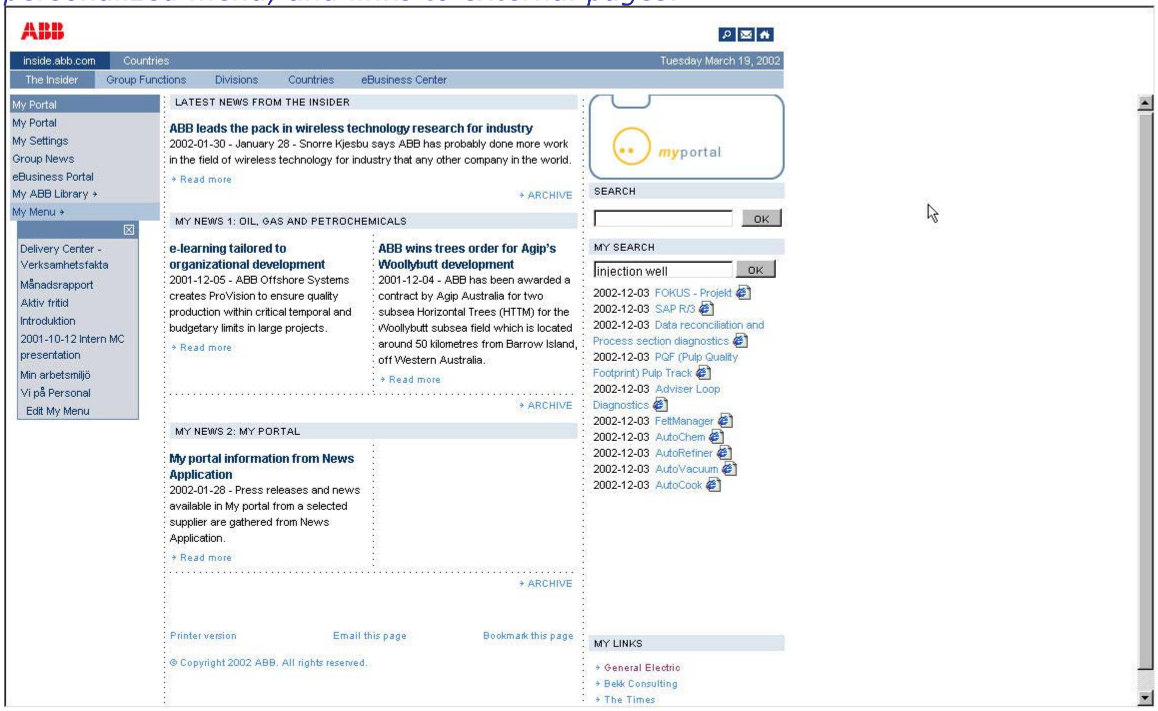
Most of the site's design is minimalist, and the form for editing user profiles follows suit. It doesn't ask for too much information, and its fields and labels are clear and simple.

Pictured: The process of creating an engineer's personal profile on the G5 Net*, a collaborative network for global engineering.*



Users can also customize the site to suit their needs. The *MyPortal* feature is a personalized portal page with a selection of pages of interest to the user.

Pictured: MyPortal*, a personalized portal page on the ABB intranet. The example shows the front page, where the user includes the news feeds of his or her choice, updated pages within a specified category, a personalized menu, and links to external pages.*



Even with an extremely short development schedule, these designers were able to achieve an award-winning intranet. Key to this success was constructive communication between the designers and the host company, and a strict five-stage development process.

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

DESCRIPTION OF THE INTRANET

The intranet is based on a flexible framework that lets ABB integrate country-specific and division-specific intranets in one common portal accessible to all employees worldwide.

Inside.abb.com was recently upgraded, dramatically improving the usability of content management. Significant development effort was invested in making publishing easy for content providers. The result is a content management system (CMS) that is easy to use and supported by flexible templates that enable decentralized content production.

ABB's intranet serves multiple purposes. First, it is the primary source of information for ABB employees in all countries and across all organizational units. Second, interactive technologies invite key target groups to share ideas and information.

Third, it facilitates ABB's goal of moving internal processes to the Web to increase efficiency.

BASIC FEATURES

Inside.abb.com offers a global intranet portal containing news, information, and functionality relevant for all nationalities. Furthermore, it lets users personalize their own portal. To address cultural issues and differences in needs, ABB also encourages countries and divisions to create their own intranets using the global platform.

Basic features on *Inside.abb.com* include:

- ABB group corporate information and services
- Country portals with country-specific information and services
- Division portals with division-specific information and services
- Multi-language portals/sites
- Support for multiple character sets (this feature is also in the menu system)
- An advanced search engine, searching across all ABB intranet sites and document libraries
- Standardized navigation on all sites
- Seamless integration of division and country sites into the corporate site
- Access to document libraries
- Personalization
- Discussion forums
- An idea bank (*New Ventures*)
- Contact information

ADVANCED FUNCTIONALITY

ABB is Web-enabling and is integrating more and more employee work functions on the intranet. Some of these functions are open on the intranet, others are password protected. Single sign-on prevents users from having to log-in to each and every function. Examples of advanced functionality include:

- The *Response Form* module lets content providers set up a tailored Web-based form where users can respond to a survey, order printed information, and so on. User responses/inputs are aggregated and exported to Excel for further processing by the content provider.
- *News Application* is an efficient tool for ABB's global editorial staff to share and publish news messages and press releases. The messages are published in a news feed; a news editor can also suggest that his or her article be published in a colleague's news feed. Portals or other Web pages using a given news feed are automatically updated when new messages are published.
- *G5 Net* is a business-critical application for a unit that produces automation equipment. From business locations around the world, *G5 Net* enables reuse

of RFQ documents and solution specifications, and — based on updated competency maps — puts together a good solution-specification team.

- *eSMART* is a procurement system. It's also an example of a standard application that was equipped with a front-end, in keeping with ABB's design and navigation guidelines.
- The *Traffic Center* contains weekly statistics on global Web platform usage. It also lets portal owners and content providers order specific statistics related to one or more of their Web pages.

URL AND ACCESS

ABB's *Inside.abb.com* intranet cannot be accessed via URL from outside the corporate network firewall. Inside the firewall, *Inside.abb.com* is not password protected and there is no user identification or log-in. Hence, anyone who has access to a computer connected to ABB's corporate network can access the intranet.

It is, however, possible to explicitly password-protect selected intranet pages. This option is only used for sensitive content or applications with restricted distribution. In this case, the username and password is managed by the Lotus Notes groupware client (mail, calendar, etc.) used by most ABB employees.

Users access the corporate part of the ABB intranet by typing "Inside.abb.com" into their browser's address field. When configuring new computers, this address is set up as the browser's home page. Hence, the intranet is launched every time the user starts the browser.

Users can reach other parts of the intranet through the menu system. However, a number of shortcuts are defined to enable direct access to certain sections. For example:

- All country intranet sites can be access using URLs of the type: inside.abb.com/fr. The two-letter code following the slash is the Internet country codes; the example specifies France. Other examples include "no" for Norway and "us" for the U.S.
- The *Traffic Center*, which provides intranet usage statistics, is available at inside.abb.com/traffic and at inside.abb.com/statistics.
- The Common ABB Web Platform (CAWP) CMS, along with user guides, hints, and tips for publishing on the intranet, is available at inside.abb.com/cawp.

BACKGROUND

Currently, ABB's intranet serves multiple purposes. First, ABB uses it as the primary source of information for ABB employees in all countries and across all organizational units. Second, its interactive technologies invite key target groups to share ideas and information. Third, it facilitates ABB moving internal processes to the Web to increase efficiency.

When ABB originally decided to enhance its IT systems further by developing and launching the global intranet, developers built the application on the same platform as existing Internet sites. In other words, ABB achieves significant synergies through CAWP, which unifies intranet content management and publishing; the Internet; and the extranet. In addition, ABB's intranet has a common and standardized structure for the global, country, and division sites, providing timesavings for

- intranet users, who only have to learn "how to navigate" and "where to find what I'm looking for" once;
- site owners, who have a standard procedure for building new sites; and
- content providers, who know where and how to publish their information.

Furthermore, the common document structure enables extensive filtering and personalization possibilities, and the sites' mandatory sections ensure that each site has a minimum of relevant information and services.

GOALS AND CONSTRAINTS

The intranet's goal is to improve information usage and workflow within ABB by centralizing all information; providing a consistent, easy to use interface that is open to everyone in the organization; and applying global standards for publishing information. ABB sees itself moving toward these goals in a continuous improvement process, rather than a one-off project.

DESIGN PROCESS AND USABILITY ACTIVITIES

ABB uses Lotus Notes as its groupware (including mail) platform. In 1999, the ABB intranet was basically a large collection of Lotus Notes databases. There was no common portal to the databases; each user had to locate and open relevant databases on his or her Notes workspace. The databases were hard to find, hard to search, and contained overlapping information.

In addition to the Notes databases, several small and simple websites had been set up to serve small groups of users. "The sites had nothing in common apart from the ABB logo," says Helene Gunther Merg, global Web management. "Anyone who wanted to start a website could do so, and everyone wanted to keep their own information to themselves."

The lack of information sharing between divisions was a problem for ABB; divisions often sell to each other, and solutions sold to external customers always involve input from more than one division. "We lose a lot of contracts and money by not being well coordinated," Merg explains. "There have been cases where people in the company have brought in items from outside companies to sell to customers, because they weren't aware we made those items."

In 1999, the Global Web Management department was formed at ABB's Zurich head office, and was given responsibility for building a common platform for company-wide intranet and Internet development.

During the fall of 1999, the department worked on a white paper outlining a strategy for unifying ABB's Web-based communications and introducing a common CMS. Published in December that year, one of its recommendations was that work should start on creating an integrated, browser-based intranet in early 2000. Then, in April 2000, the executive committee suddenly decided it needed the intranet up and running for ABB's annual forum for high-level managers, which gave the team only eight weeks for development and deployment.

Although the old ABB intranet was organized on a divisional basis, Global Web Management's white paper proposed a navigational structure based on working tools rather than organizational structure. Also, as with information architecture, many elements of the intranet's visual design had already been laid down by the group's design guidelines for ABB's public Internet site.

The task of getting the new *Inside.abb.com* live on the new publishing platform in eight weeks was not quite as impossible as it seems, because the Global Web Management group had already laid a lot of the groundwork. In addition to the business case for a new intranet, its white paper contained a new proposed information architecture, and ideas about how the intranet should develop and how language versions should be treated. The company also already had a usable CMS based on Lotus Notes in place for ABB's global Internet site.

To help meet its deadline, the group called in Norwegian e-business consulting firm BEKK, the developer of the ABB's Internet's CMS. ABB and BEKK have continued to work closely on the intranet's development ever since.

BEKK has applied its five-stage process of iterative development to the later stages of the intranet's development. Those five stages are: 1) decide (establishing business goals), 2) define, 3) design, 4) develop, and 5) deploy. User input is crucial at all but the first stage of this process.

However, in the rush to get the initial intranet version out, all types of formal methods had to be abandoned. "We didn't have time to sit down with groups in ABB," says Arne Folkestad, BEKK's project manager. "We already had some feedback from the existing Internet site and the structure there, and we had good ideas about how the new intranet should be."

Key groups from areas such as management, HR, and corporate communications were informed that a corporate intranet was about to be launched. The information was distributed by email, because — prior to the first version of the browser-based intranet — there was no channel to reach all of the targeted ABB employees. The intranet has since been actively used to inform individuals and groups about changes, and to provide user guides and other relevant material for content providers and regular Web users.

Pictured: The first version of Inside.abb.com, *January 2001.*

Once the new *Inside.abb.com* was live, team members went back and carried out in-depth usability studies, and made a series of improvements. They used both questionnaires sent out to key user groups and direct observation of user groups. For example, the team did extensive usability work with groups of content providers in August 2001, just before a major upgrade to the CMS.

"We sent out questionnaires to the content providers and sat down with them and watched them work. The user friendliness of the CMS's templates increased incredibly as a result of their feedback," Folkestad says.

In June 2001, team members made minor changes to the design as a result of user feedback. Then, after they upgraded the CMS in November, they began looking more closely at how they could improve the intranet navigation. Important input to this work was a system usability evaluation that BEKK carried out, based on user feedback and an expert walkthrough. They concluded that although the basic design and navigation principles were good, the front page wasn't effective at drawing users into the site; navigation was too time-consuming; the site structure was hard to understand and users could easily get lost; and menu items were not intuitive enough.

In April 2002, the new navigational and menu structure went live, and is now being migrated to all countries and divisions.

"It might not be the fanciest Web design in the world, but we think it's a nice, clean structure," says Merg. "ABB is a bit like this: serious, strict, clean. Most of our business is in Europe, and our design reflects that we're a European company, though we have to consider that we do have employees and customers all over the world."

ABB continues to canvass user feedback in several ways. It has an intranet user group of twenty-eight people, representing the major divisions and countries in which it operates. The group was established in the summer of 2000, and has evolved with the intranet, with the emphasis on keeping the group relatively small and action-oriented.

The intranet user group meets for a two-day workshop four times a year, and also sends out quarterly email surveys both to existing intranet users and to a random sample of ABB employees who don't use the intranet to find out why. On its first attempt, the group sent 3,000 random surveys and got a 20% response.

The group's email surveys contain introductory text and a link to a questionnaire prepared using the publishing platform's *Response Form* module. Using this module, the user group and all ABB content providers can easily define flexible questionnaires, along with feedback and registration forms. The Global Web Management group and BEKK use the platform in their work in the same way as regular content providers.

Another source of improvement information is *Inside.abb.com*'s *Traffic Center*, which provides statistics on Web usage and information about how content providers and webmasters can use these statistics to improve their pages. This process of continuous improvement has led to many minor and major design changes since the new *Inside.abb.com* was launched.

BEKK developed and deployed a new, easier to use version of the CMS in autumn 2001. At that point, all existing content had to be moved into the new Notes content templates, and team members took the opportunity to clean up much of the structure and design. Before developing the new CMS, they completed thorough usability studies of the previous version to pinpoint where users had problems, experienced the system as inefficient, or wanted to see improved and added functionality.

During the development phase, the BEKK team ran several sessions with the ABB helpdesk, which serves global content providers, to assess the system's usability and get feedback on the proposed functionality. This proved very useful; in addition to being advanced content providers, the helpdesk knows quite well where the different user groups were likely to face problems. Since deploying the new CMS, user feedback on it has been consistently very positive.

ABB has about 4,000 content providers around the world, and their technical skills and ability to write vary. Global Web Management's focus is now on improving the quality of the intranet content by providing Web guidelines, writing guidelines, and online training, as well as hands-on courses.

Several other changes were made in response to user feedback. In June 2001, a more flexible menu system was introduced, giving content providers more control over the sequence in which published pages at a given menu level appear in the left menu. Previously, the sequence was strictly alphabetical, but users indicated that they needed more flexibility. At the same time, the icons for help, home, and contact us were moved from the footer to a more visible place at the top of the page.

Pictured: In June 2001, a more flexible menu system was introduced and the icons for help, home, and contact us were moved from the footer to a more prominent place at the top of the page.

On the Internet site, the icons appeared in the top right-hand position. Users indicated their preference for this placement, so ABB decided to use it on the intranet site as well.

Further design modifications were introduced in November 2001, including making search available on all pages and moving the intranet's front page stock ticker to just below the page title.

In May 2002, more far-reaching changes occurred, with navigation reorganized around a site structure based on business tools and functions rather than departments. The new structure is heavily influenced by this "radical" proposal, which implies profound changes in the usability evaluation. The same structure is being applied to the country and divisional subsites.

Pictured: A new menu structure based on business tools and functions, rather than departments.

In September 2002, the design team plans to launch a new front page that, in addition to news, will feature more functionality and interactivity, including a calendar of events, a poll function featuring issues relevant to ABB, a tips and links of interest feature that includes user submissions, and a better shortcut navigation to important intranet sections. In addition, work is progressing on making tailored portals to encourage more intranet participation by less active user groups. In the first stage, this includes managers and sales people.

LANGUAGE ISSUES

Employees in all divisions and all countries use the intranet. About thirty countries have already set up their own intranet, seamlessly integrated into the global solution; more countries are in the process of doing so. Currently, content is generated in twenty-seven different languages, all from a single CMS.

The CMS automatically translates most of the menu system, and has special coding to handle Chinese and other non-Latin character sets. The top navigation remains in English, however, to emphasize that it is the entrance to the global intranet.

TIMELINE

- December 1, 1999: ABB's Global Web Management department formed, initially as an interim working group.
- December 1999: *Web White Paper* published, recommending that work on an integrated intranet begin.
- April 2000: Executive committee decides it wants an intranet ready in eight weeks.
- May 2000: Prototype intranet is launched.
- June 2000: Global site goes live.
- Fall 2000: Several country-specific intranets are established and integrated into the global solution.
- June 2001: More flexible menu system introduced, along with some changes to the design.
- November 2001: Major upgrade to CMS.
- November 2001: Further design modifications.
- April 2002: New navigational and menu structure goes live and is rolled out worldwide.
- September 2002: Planned release of a new version of the front page.

RESULTS

The team is in the process of migrating information from various global sites to the intranet, and the company is confident that centralizing the technical infrastructure and intranet design will save a lot of money. "Before, there was a lot of duplication, and that was obviously very costly," Merg says. "Now, content providers can concentrate on content rather than design."

LESSONS LEARNED

Insights from Helene Gunther Merg:
Start small, grow fast. "You could sit around forever deciding what the intranet should look like. It's best to get started and try it out, then change it later. Iterative development is the Internet way."

Have figures at your fingertips. "People always ask about costs and benefits. It's important to be able to give them an answer."

Get your priorities right. "People will put everything on their wish list, whether they will use it or not. You have to focus on what's really needed."

Go for quality, not quantity. "To start with, people will create a lot of content that can be good or bad. You need to be selective."

A user-friendly CMS is key to success. "Invest in making life easy for your content providers. A user-friendly interface is a key to having a live intranet with frequently published and updated content. A good user interface will also save money on user support."

ChevronTexaco and Dimension Data Holdings

Using the Intranet:

ChevronTexaco Corporation (NYSE: CVX), one of the world's largest integrated energy companies, is involved in every aspect of the energy industry, including oil and gas exploration and production; transportation; refining; retail marketing; chemicals manufacturing and sales; and power production. Active in more than 180 countries, ChevronTexaco employs about 53,000 people worldwide (excluding service station personnel and contractors). The merger between Chevron and Texaco on October 9, 2001, created ChevronTexaco Corporation, now headquartered in San Ramon, California.

Members:

Lori Coupard, Web team lead; Lyn Garrison, lead producer; Karen Young, managing editor; Renee Silveira, assistant editor; Jennifer Salem, developer; Antoinette Bishop, production coordinator.

Design Team:

Dimension Data Holdings plc (LSE: DDT) is a leading global technology company. The group delivers solutions using its proprietary Application Network architectural framework and its expertise in networking, application integration, and managed services. Founded in 1983, the company had revenues of $2.1 billion in 2002 and operates in thirty-plus countries with over 8,000 employees.

Dimension Data's Brand & User Experience Group not only defines and leverages brand and market strategies, but also executes appropriate online techniques to achieve an optimal user experience. Key services include: brand identity, information architecture, usability research and testing, UI and graphic design, and front-end code development (D/HTML, ASP/JSP, and other "scripting" technologies).

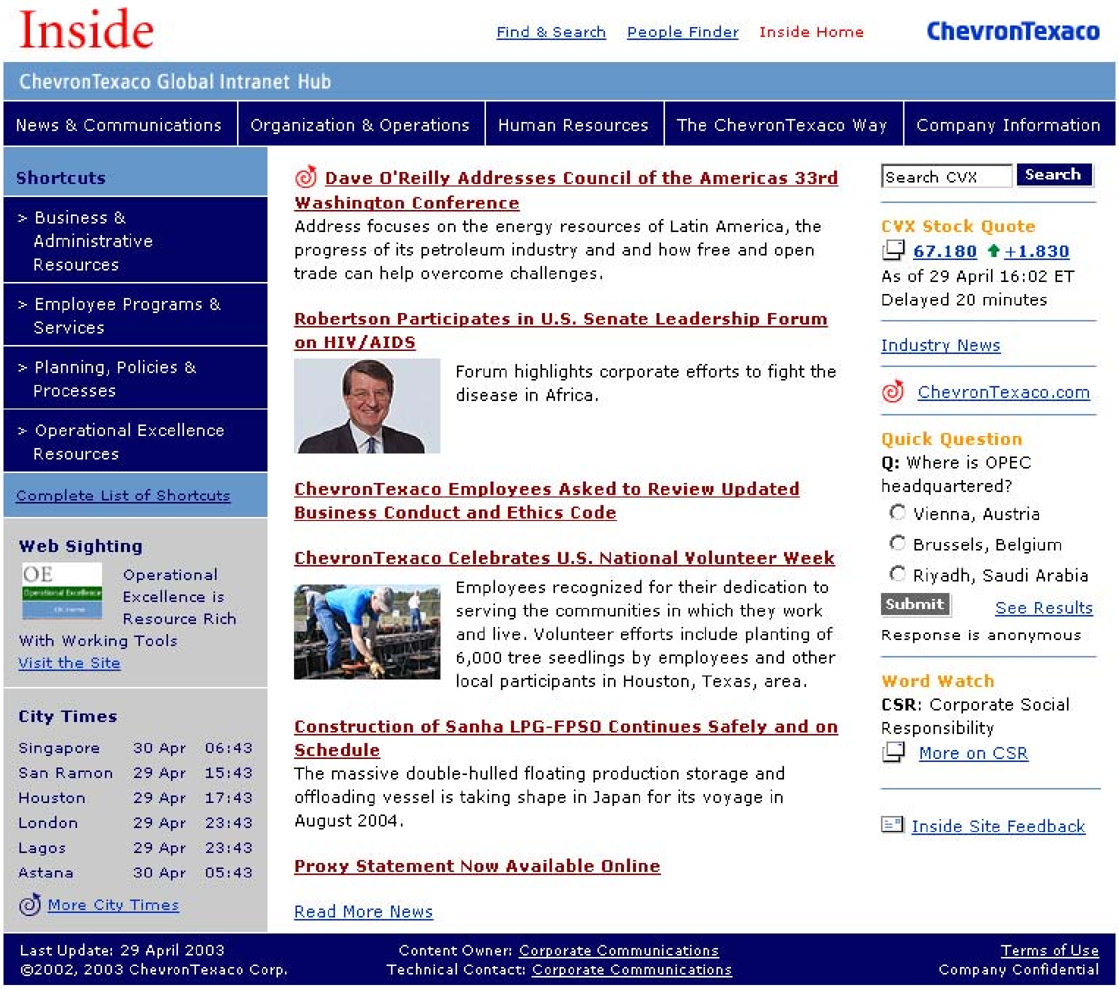
Members:

Olivia Harting, creative producer; Glenn Snyder, lead information architect; Alex Costello, art director; Jenny Kolcun, art director.

SUMMARY

Chevron and Texaco merged in 2001. *Inside*, the new global Intranet hub, was initially launched as *Day One*, aiming to promote the new company culture and identity and serve as the initial online gathering place for the integrated ChevronTexaco workforce worldwide.

Mergers often bring great synergies and benefits to a new corporation, but they also raise many questions about the new organizational structure and where employees fit into it. Mergers can often fail due to cultural integration issues. To support this type of integration, effective employee communications — with a focus on consistent, clear messaging — are critical. By providing a consistently branded, easy-to-use resource to deploy strategic messages and links to critical content across hundreds of intranet sites, the Inside site aims to align the workforce and thereby contribute to cultural integration goals.



Pictured: The homepage of Inside, ChevronTexaco's global intranet hub. The page is clean and engaging, and features pertinent global news and clear navigation, opening the door to the rest of the company's intranet.

The center column of the Inside homepage features the most recent news stories, press releases, and other important corporate communications.

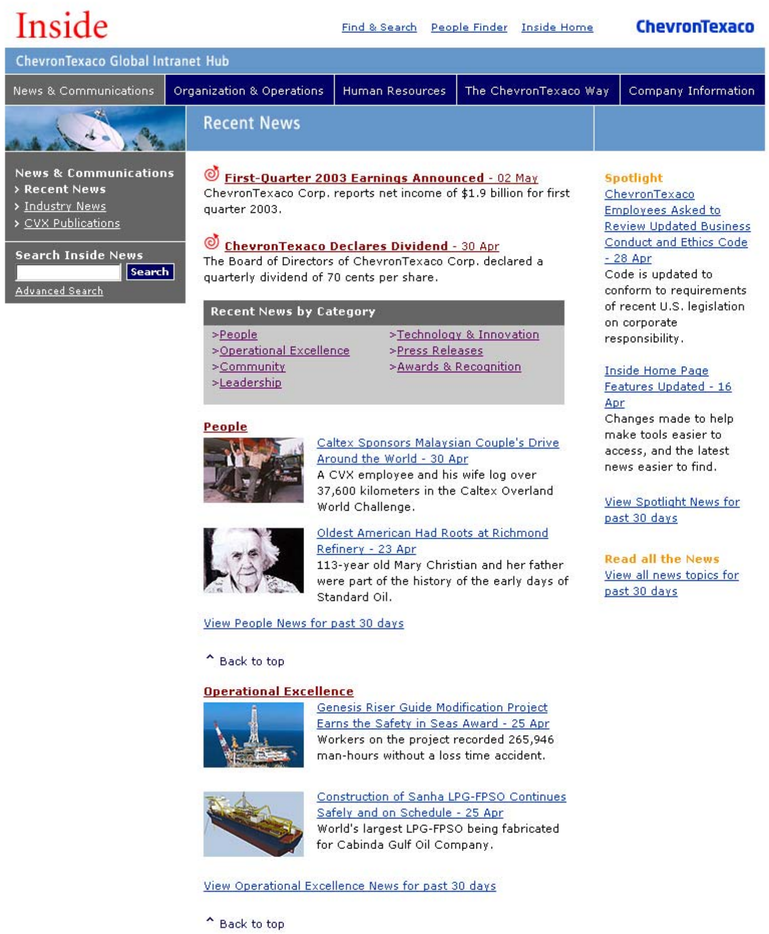
The left column includes shortcut navigation to important and frequently used intranet-based tools and resources. It also features the weekly *Web Sighting*, spotlighting internal sites whose content is relevant and timely for the global audience and, whenever possible, uses the company's intranet page layout standards. The *City Times* feature offers the time and date information for a few key headquarters locations around the world, emphasizing the company's global nature.

The right column features the "CVX" stock quote, which is updated every 20 minutes. There is also a link to a pop-up window with up-to-date market indices and competitor stock quotes. In addition to corporate news, Inside offers a link to relevant industry news, updated every hour.

Quick Question, a popular interactive homepage feature, quizzes employees about company and industry-related facts and can serve as a quick polling device. Users can submit answers to this weekly quiz, and check the results page for the correct answer and up-to-the-minute results of how other users responded. The results page also provides more information about the question's topic, including related links that steer interested users to other Internet or intranet areas to learn more — an engaging way to educate employees.

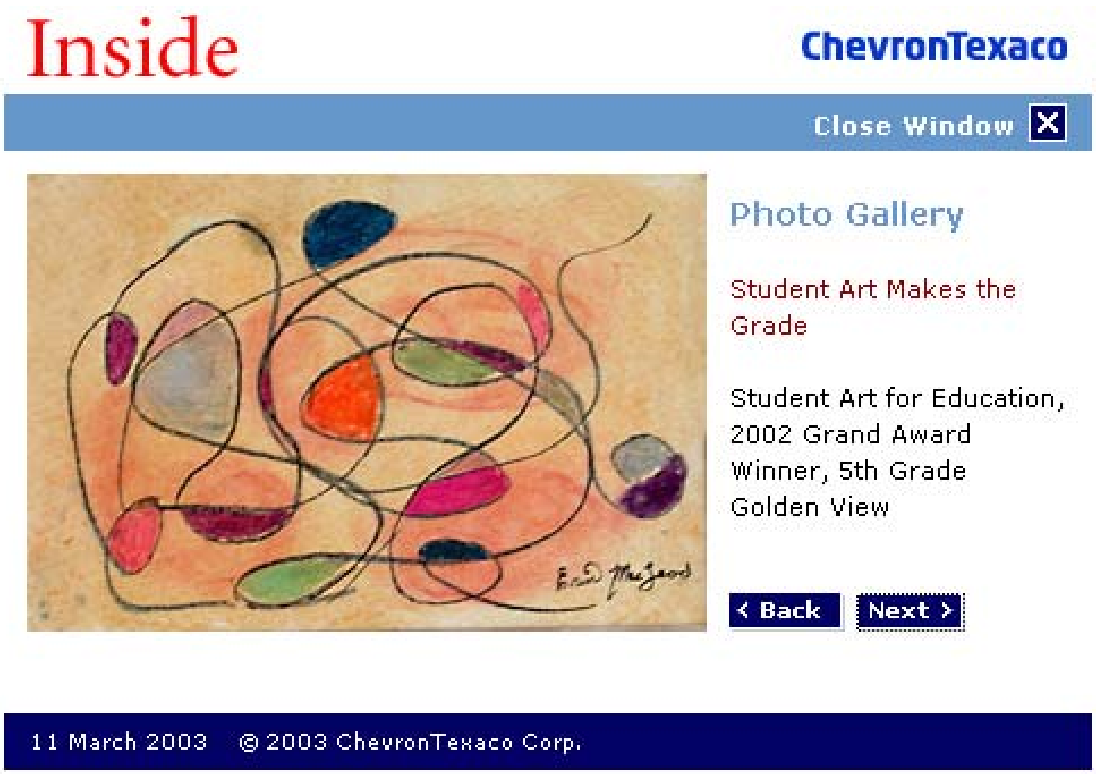
Pictured: The *Quick Question* results page displays answers to the weekly quiz or poll, and provides additional information and related company or industry links.

The primary navigation bar's *News & Communications* link takes users to a comprehensive news page. There, users can browse the most recent company headlines by category, view a specific category's news for the past thirty days, or search news stories with a simple or advanced search.



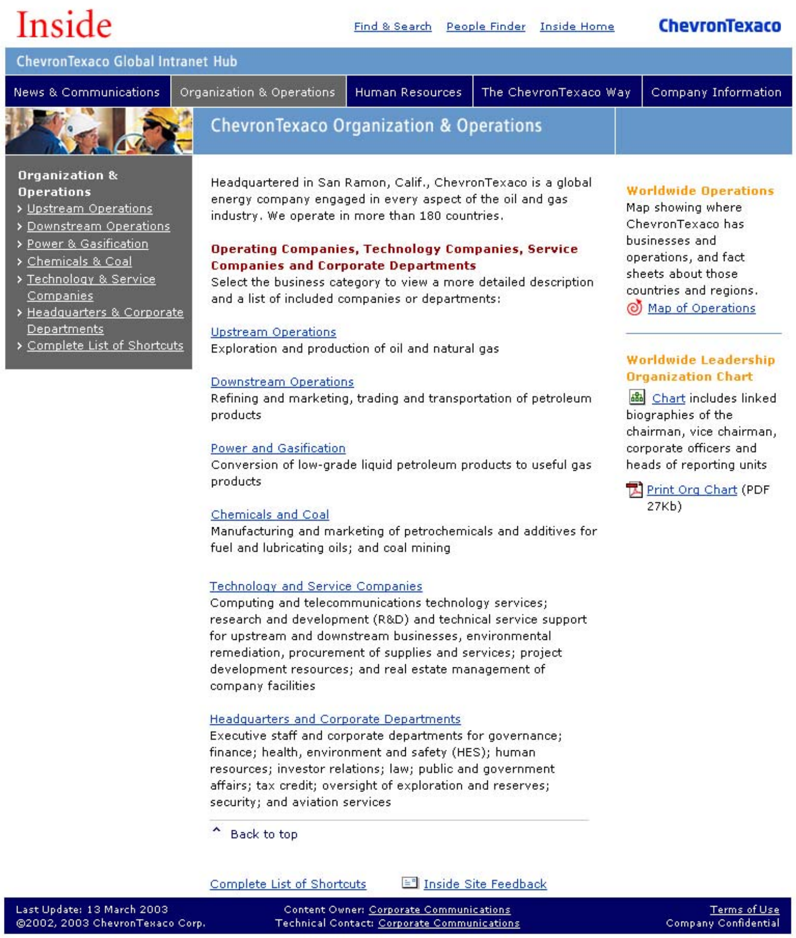
Pictured: The main page of the *News & Communication* section on ChevronTexaco’s intranet.

Using content management gives Inside’s editors innovative control over their news stories. Among other things, they can easily create a photo gallery for news stories with more than one associated image. This one-photo-at-a-time gallery presentation is particularly convenient for users with slower Internet connections. Rather than waiting for an image-rich article to load, users can instead open the gallery, where they can page though a slideshow at their leisure. The editors use templates to choose images and assign titles and captions.



Pictured: Authors and editors can associate photo galleries with news stories, using content management templates to add photos, titles, and captions. Users can scroll though the slideshow using the *Back* and *Next* buttons.

Inside's *Organization & Operations* section lets employees find information and site links for all ChevronTexaco's primary business units, as well information about the company's overall structure. Business units and corporate departments' links are annotated with succinct descriptions and, when available, include quick links to an organization chart.



Pictured: The *Organization & Operations* page includes contextual links to the company's different business units. Descriptions of each group help employees better understand the organization.

One of Inside's main goals is to bring the tenets of *The ChevronTexaco Way* to the forefront of employees' minds, and thus this section — which outlines the company's values — is a top-level category of the site. Through engaging real-life success stories and interviews with key leaders, *Living the ChevronTexaco Way* encompasses important topics such as vision, values, people, partnership, and performance. Also, employees can submit suggestions for stories, as well as download a PDF version of *The ChevronTexaco Way* brochure, available in eleven different languages.

Pictured: The *Living the ChevronTexaco Way* section illustrates the company's business philosophy with real examples and interviews with leaders.

The intranet's navigation and layout are intuitive and easy to use. Inside's design and navigation adhere to ChevronTexaco's *Intranet Page Layout Standards & Guidelines*. Sponsored by the corporation's Web Council, these standards were developed iteratively over several months of gathering requirements and soliciting feedback from numerous company-wide website owners. The resulting page layout standards were also usability tested. The guidelines specify that intranet pages use a two- or three-column grid layout. The layouts have a consistent format, including a standard header, footer, primary navigation, link treatment, and color palette.

URL AND ACCESS

Inside appears as most employees' default browser homepage. Some business units override this setting and let employees go to the unit's homepage first, but the company's IT department estimates that approximately 72% of users go directly to Inside. On the company network, the URL is "inside.chevrontexaco.com." To access the intranet remotely, users log on to the ChevronTexaco network first. As part of the standard header, all intranet sites include an *Inside Home* link at the top of each page.

CONTENT MANAGEMENT

Because Inside is ChevronTexaco's official corporate communications vehicle, a central editorial team produces most of the content and decides whether it is global and in keeping with the company's key strategic messages and values. ChevronTexaco employees are encouraged to submit content for Inside, but the editorial team considers all material before it appears on the site. The news section was built and is currently maintained using Microsoft Content Management Server 2001.

TECHNOLOGY

Designers built the Inside pages using Microsoft Site Builder, Microsoft Visual Studio 6, and Macromedia HomeSite; they used Macromedia Dreamweaver and Adobe Photoshop for prototyping and Rational Rose for modeling.

The site uses Microsoft IIS as its Web server, Microsoft Content Management Server 2001 as its content management solution, Microsoft Visual SourceSafe for version control, and TeamTrack and Watchfire WebXM for bug tracking and quality assurance.

The site-wide and company news search engines are based on Inktomi.

GOALS AND CONSTRAINTS

1) Promote a single-company culture. 2) Be the daily gathering place for all employees and contractors worldwide. 3) Provide easy access to business-specific (business unit or operating company) sites. 4) Let employees and contractors access the information they want and need to conduct daily business, while sharing key strategic information to increase alignment.

BASIC INTRANET FEATURES

Above all, Inside offers excellent news capabilities, plus simple navigation and good process support. Basic features include: corporate communications (news stories, press releases, and letters from the chairman); stock quote and market analysis information; industry news provided by Factiva; shortcuts to the most frequently accessed business tools and resources; information about the organization's structure, history, and finances; links to all primary business unit and operating company sites; HR information; a section about living the company's values, including case studies and interviews with leaders; a news-specific search and homepage access to a global intranet search; and feedback mechanisms on every page.

USERS

The ChevronTexaco global intranet supports 53,000 employees and tens of thousands of contractors in over 180 countries worldwide. Areas it supports include:

1) Upstream operations: exploration and production of oil and natural gas.
2) Downstream operations: refining, marketing, trading, and transporting petroleum products.
3) Power and gasification: converting low-grade liquid petroleum products into useful gas products.

4) Chemicals and coal: coal mining, and manufacturing and marketing petrochemicals and additives for fuel and lubricating oils.
5) Technology and service companies: including computing and telecommunications technology services.
6) Headquarters and corporate departments: the executive staff and departments for HR, governance, finance, health, environment and safety, investor relations, law, public and government affairs, tax credit, oversight of exploration and reserves, security, and aviation services.

USER TASKS

- Browse or search across (~500) ChevronTexaco intranet sites
- Search company news
- Access printable news articles
- Search staff directory
- Access printable organization charts
- Locate a company office or facility
- Access shortcuts (tools and resources)
- Access relevant city times around the globe
- Take interactive quizzes
- Provide feedback, suggestions, and comments
- Access HR information (both global and regional)
- Search for jobs

BACKGROUND

The Chevron–Texaco merger integrated three brands — Chevron, Texaco, and Caltex, Chevron and Texaco's joint venture company. This posed a unique challenge for the merger Web development team. The company called in Dimension Data, a technology services company, to help create Day One, an interim intranet site that would be available as of the first day of the new company's existence.

The merger required that certain tools and resources, such as HR information, be immediately available to all 53,000 employees in 180 countries. The interim site was primarily aimed at giving managers access to policies, forms, and online tools to perform key job responsibilities. But it was also intended to help employees understand company goals, priorities, and values, as well as where they fit into the new organizational structure. Finally, the site was to provide contextual paths into the legacy sites for Chevron, Texaco, and Caltex.

Pictured: The original homepage for the Day One site.

However, Day One was never intended to be much more than a brochure site about the new company. Understandably consumed with merger logistics, Chevron and Texaco had little time to engage in extensive usability work or to contemplate "day two" and beyond. And, while much effort was put into the site's information flow, it didn't provide what was needed to continue to support the new organization. "It was a pretty shallow site; it was developed primarily as a tool to deploy key messages from management rather than reflecting the day-to-day needs and interests of users," says Lori Coupard, Web team lead for ChevronTexaco's Public & Government Affairs (P&GA) department, which manages Inside.

Furthermore, the new company identity was created with print rather than Web design in mind. As a result, Dimension Data's design team had some challenges in giving Day One a look and feel that was consistent with the new identity and accessible and easy to read online, with layouts that Web authors could easily maintain. "It was important that the intranet reflected the new aesthetic of the company — and the Day One site did that almost to the detriment of usability," says Coupard.

Shortly after the merger, ChevronTexaco went back to Dimension Data to discuss a full-fledged intranet redesign that would provide a better user experience and offer content that better balanced user and management needs.

DESIGN PROCESS AND USABILITY ACTIVITIES

One of the first tasks that Coupard faced when she was brought on to lead the new Web team was to help create a corporate intranet hub for ChevronTexaco with a flexible framework — something that would allow for more dynamic and timely content.

Coupard interviewed those team members who provided support or content for internal or external corporate websites. Her goal was to discover which of the existing processes and roles they perceived as working well, and which offered opportunities for improvement.

"It was very clear from those discussions that there were some frustrations with both the back-end processes and the site's user experience. I didn't feel we had enough information to alter the site yet," she recalls. "Corporate Communications was mainly composed of former Chevron employees, and the Day One site was a departure from what they were used to. It's not unusual for people to be uncomfortable with change, and we needed to tease out how many of the complaints were resistance to a new Intranet site and how many were based on real usability issues."

In February 2002, work began on what the Web team called the "Improve Inside's User Experience" project. The effort involved many types of research, including heuristic analysis, employee surveys, one-on-one user testing, and best practices benchmarking. Lyn Garrison was appointed ChevronTexaco's intranet lead producer and Olivia Harting from Dimension Data was named creative producer.

As a first step, three Dimension Data specialists in user interface and visual design carried out a three-day heuristic analysis of the Day One site. ChevronTexaco then conducted a user survey about the site with 3,000 randomly selected employees and contractors. The team sent the survey invitation to participants worldwide via email, to ensure that they also reached staff members who were not regular intranet visitors.

The survey itself was Web-based and consisted of thirty questions, both multiple choice and open-ended. "In hindsight, it was a longer survey than I would have liked, but the findings were certainly comprehensive," Garrison says. And, despite the length, the response rate was a gratifying 30% compared with the 6 to 9% ChevronTexaco typically expected for surveys conducted on their external corporate sites.

During March and April, the team carefully analyzed the heuristic and survey findings to unearth Day One's main usability concerns. They then used these as a basis for one-on-one usability testing, intending to probe known issues, identify new ones, and tease out employee suggestions for improvements. During May, they carried out usability testing with ten employee participants representing various business functions across worldwide locations. Interviews lasted 45-60 minutes, during which the team asked participants to carry out two types of exercises: exploratory (walk through the site as they would on a typical day) and directive (carry out specific site tasks, verbalizing their thoughts, likes, and dislikes along the way). They carried out nine of the tests remotely, via Microsoft NetMeeting, and one test in-person at ChevronTexaco's office in San Ramon, California, which gave them the opportunity to directly observe the user.

Several key findings emerged from the usability testing. One clear message was that users were finding the site, and especially the homepage, too news-focused, cluttered, and confusing. Overall, the homepage had too much text, and users had trouble deciding which news items were most important and most recent. As one user put it, "The one thing that I would change right now would be to have fewer news articles, or at least just headlines, and clean up the homepage." The homepage also lacked navigational aids to quickly get users to the items they wanted — that is, it lacked tools to help them do their job.

Some test participants said that some homepage fonts were too small and found the varying font sizes of news headlines confusing. The background colors also failed to help users determine information priority, and the white text headlines in the colored boxes often hindered legibility. Similarly, the primary navigation bar at the top of every page was a graphic, rather than HTML text, which created accessibility issues.

Clearly, the team needed to simplify the design, add more user-focused content, and clarify the information hierarchy.

Pictured: Day One's colored boxes didn't tell employees which information was most recent and most important. A month after the merger, the intranet team added images to the top news stories as an interim solution prior to the full redesign.

Two other major issues were naming and taxonomy. Clearly, not everyone in the company understood Day One's global navigation terms; this was especially true for international locations. For example, one test user wondered what the term *Business Tools* meant: "I haven't got a clue [what to expect in *Business Tools*] but I would expect to find HR forms."

Some terms that worked well with US employees failed to resonate with international users. For example, the employee directory had originally been called *White Pages.* While this name was familiar to US users, it was meaningless to many of ChevronTexaco's overseas employees. Nor was *Business & Operations Gateway* intuitive; users were not sure what "gateway" implied and found the name "distracting."

The site's hierarchy of news information was problematic as well. For example, participants didn't really see the difference between the content of the homepage, the *News & Communications* landing page, *News & Features*, *Press Releases*, and, in some cases, *External News*. Typical comments were "[*News & Communications*] looks so much like the homepage; I'm not sure why it has its own separate area. I'm guessing a lot of this is on the homepage" and "I would have thought that I was already at *News & Features*, being on the homepage!"

Pictured: The old *News & Communications* landing page. Users didn't understand how it differed from the homepage and were confused by the section's many content categories.

Based on the usability testing results, the team made several sweeping recommendations. They proposed to redesign the homepage with less content (including fewer news articles), a more intuitive information hierarchy, a consistent font and color scheme, quick links, and descriptions of links and tools. They also recommended renaming and reorganizing several sub-pages.

The findings also justified restructuring the *News & Communications* section's news by category. "Previously, we'd been thinking as a publisher rather than a user," says Coupard. "It was salient to our intranet team whether a news item was a press release or an internal speech, but our readers were more interested in what the content was about, how recent it was, and what was most important. As such, we decided to move toward organizing the news archive by category first, then by date, and add photos to the top stories. Between the requests from users and best practice benchmarking findings, we were able to justify a move in that direction."

Drawing on the heuristic analysis and usability test results, the team started designing a new taxonomy and nomenclature for the site. From the usability tests, it was clear that they needed to make the content of various categories much more obvious. This included deciding on new, more descriptive top-level naming conventions.

In addition to reacting to the research findings, the team had its own agenda. One of the goals for Inside was to promote a single-company culture for the new organization, and the team wanted to re-architect Inside so that the corporate values were more prominent. "Research shows that 80% of mergers fail due to cultural integration issues, so company culture needed prominent real estate on the site," Coupard explains.

In the Day One site, *The ChevronTexaco Way* (the company's mission, vision, and values statement) was buried two or three levels down, and was simply an online version of the printed brochure. The team felt it did not do a good enough job of projecting the corporate culture. "We wanted to make people feel more engaged and proud to work for the company," says Glenn Snyder, lead information architect from Dimension Data.

On the redesigned site, *Living The ChevronTexaco Way* was elevated to one of the top navigation's five sections, and the section itself was given more human interest by focusing not on the brochure's verbiage, but rather on real examples of the company's values in action. The new section is nineteen pages, and each sub-section has *Leaders Speak*, a question-and-answer session with one of the company's top managers. An article on cost reduction, for instance, might give examples of how actual people are achieving cost reductions and how this is helping the company. Employees are encouraged to submit article suggestions.

While the Inside redesign was taking shape and content development was underway, another team — including some members of the Inside team — was finalizing its work on the new corporate intranet page layout standards. The Inside team would use these standards, and the accompanying guidelines, to apply the site's new look and feel.

Before the visual designs were ready, the Inside team conducted usability testing of the proposed structure. The team created functional prototypes in the form of clickable wireframes, and, as before, carried out testing in-person and via NetMeeting. The eight test participants were once again selected based on a test participant screener, offering a good sampling of the intended audience.

As a result of the testing, the team made some changes to the site's terminology. "For example, we had several possible names for the *Word Watch* in the homepage's lower right corner, including *Acronym of the Day*, *Jargon Watch*, and so on," Harting recalls. "We wanted to find the one that made the most sense to the most people."

The team also added several new features they wanted to test, such as *Quick Question*, *News by Email*, and *Recent News by Topic*. The features were well received in testing and were added to the site with minor modifications to increase usability: "Sometimes we found we needed to make the instructions a bit more clear, but otherwise, they were pretty straightforward to users," Harting says.

The team also modified site feedback forms based on usability testing results. Depending on where the user is in the site, they can opt into various feedback mechanisms. "We now pre-populate the drop-down field for the type of feedback users are sending, based on where they opted into the feedback," Harting explains. "So, if they come from the *Suggest a Quick Question* page or a news story, the email received will indicate that in the title."

During this time, the team also made decisions on issues that came up in past usability tests, such as those related to the primary navigation bar's DHTML drop-down menus. "Some people loved them and some people hated them," Coupard says. "The initial feedback from former Chevron employees in our department had been that they weren't comfortable using them, but when we spoke to test participants, the results were more positive; they liked having quick access to deeper levels of the site, but requested a few changes to make them more usable. The answer wasn't to get rid of them, but instead to tweak the functionality."

To gain wider acceptance for the drop-downs, the team had to work on the menu's reaction time. They changed the timing so that menus dropped down and collapsed up more quickly; the menus thus stayed around long enough for users to see them, but not so long as to obstruct access to other page content. The team also made sure to provide an alternate route to drop-down menu content for users accessing the site with screen reader software.

By early August, the Inside team had a draft of the corporate intranet standards and could finally begin work on the page designs. Because they'd laid so much groundwork, the design phase was comparatively quick and easy.

One of the *Intranet Page Layout Standards & Guidelines* project's goals was to create what Coupard calls a "family resemblance" between all internal ChevronTexaco sites, while giving designers the freedom to customize their site within a range of standard design options. Senior management's goal of having all company intranet sites conform to the guidelines by December of the following year proved a daunting challenge.

"One of the compelling elements of the business case for introducing a common look and feel was to save money by increasing user productivity and shortening site development time," says Coupard, who also served as a project manager for the *Intranet Page Layout Standards* project. "All that would be thrown out the window if we started forcing people to redesign their site to adopt a new interface overnight. So we compromised and said, if you're doing a new site or substantially reworking an existing one, it should conform. If not, we ask you to adopt the standards when you can. We focused on improvement rather than perfection."

By the end of September 2002, the Inside designs had been finalized, coinciding with the development of the CMS that Corporate Communications would use to publish news. The team populated the site with content, and added metadata to every page. On November 11, 2002, the redesigned Inside site was officially launched.

Pictured: The new homepage, launched in November 2002, was an improvement, but there were more enhancements to come. Management was concerned that the design gave more prominence to content that changed weekly (in the center) as opposed to daily (news stories, to the left). When asked, users weren't sure what the difference was between the content; as far as they were concerned, it was all just news. As more information was added over time, the popular shortcuts menus in the center of the page often slipped below the page fold.

Since the November re-launch, the site has undergone two iterations. In April 2003, major changes were made to the homepage: the team moved the shortcuts into the left navigation and above the fold, making them more noticeable, easier to access, and more consistent with the rest of the site, which has navigation at the top or left of each screen. The most important and recent news is added to the top of the page, with older stories cascading down the center and, as new information becomes available, "falling off" (becoming available via search in the *News & Communications* section).

The team also introduced the *Web Sighting* feature in response to requests from intranet site owners who wanted to promote their Web offerings. Previously, new site launches were highlighted in the center area and were often confused with news content. *Web Sighting* now lives in the left column and is changed weekly. This feature offers greater visibility — and some incentive — to site owners who adopt the new corporate look and feel.

Pictured: The new *Corporate Public & Government Affairs* site shows how designers applied the intranet standards to a departmental intranet site. The corporation's standard intranet header includes the site name, global intranet links, and the ChevronTexaco "signature." Site footers must include standard content as well. Site designers can choose from an "approved" palette of primary and secondary colors, and also have a few options for primary and secondary navigation treatments. Fonts and link behaviors are consistent across the sites.

TIMELINE

- Mar. 2001: Work begins on the interim Day One merger intranet.
- Oct. 2001: Chevron and Texaco merge, Day One intranet site launched.
- Feb. 2002: The "Improve Inside's User Experience" project begins.
- Feb.-Mar. 2002: Heuristic evaluation of Day One site, including user survey and usability testing.
- Mar. 2002: Interim enhancement of Day One homepage; images are added and DHTML drop-down functionality is fixed.
- Apr. 2002: Research findings and recommendations presented to management. Approval to continue granted.
- May 2002: Revised IA for new Inside site begins.
- July 2002: Usability testing for new Inside site's proposed IA.

- Aug. 2002: Corporate intranet standards released; Inside's design phase begins.
- Sept. 2002: Content management solution completed for news section.
- Oct. 2002: Content entry, testing, QA, management review.
- Nov. 2002: Full redesign (Inside 2.0) officially launched.
- Apr. 2003: Next iteration of the homepage launched; site enhancements continue on an iterative basis.

RESULTS

With the Day One site redesign, average weekly visits to the Inside site have increased by about 47%. The ChevronTexaco team feels it has achieved several less tangible benefits as well.

First, easier access to information will save employees and contractors time, thus increasing productivity. In the old site, it took three clicks from the homepage to get to timesheets, job postings, and business card ordering, or two clicks to get to travel and four to get to training opportunities. Now, each of these routine tasks requires only a single click. The team can safely assume that, in the old scenario, each click increased attrition before people reached their goal. In the redesign, they wanted to increase the likelihood that users would find the basic information that they routinely sought by making it accessible in one click.

By increasing overall traffic and usability, the team believes that Inside is better able to accomplish management's communication goal: increase exposure to information that supports key strategic messages to help improve decision-making quality. "For example, operational excellence is one of ChevronTexaco's key strategic top-down messages and was also cited in the survey as something people wanted to learn more about via the Inside site," Harting explains. "We added operational excellence resource links in the left navigation shortcuts — and access to this content has substantially increased."

Overall, the team feels that the company is still realizing the intranet's value as a medium for communicating to employees worldwide. The team is monitoring progress as best as it can, by mining data from search logs and usage statistics, and reviewing survey findings to identify and improve users' access to key content by making it accessible from the homepage. The intranet team has attached catch codes to many of the homepage links so that it can track both content popularity and which paths people prefer to follow — even when those paths lead to other intranet sites. The team plans to conduct a follow-up user survey to provide before-and-after data and surface additional opportunities.

LESSONS LEARNED

Insights from Lori Coupard:

Don't just grease the squeaky wheels. "It's imperative to go beyond the people speaking loudest and make sure you gather input that represents the whole user base."

Content publishers are users, too. "Ensure that whatever you build easily supports their communication goals and streamlines their publishing process. Your content providers are the critical link to the site's success."

Become an expert on how employees are using your site. "If management wants something pushed out at 3 p.m. Pacific Time, we can do that, but first we'll point out that people won't necessarily recheck the site for new information at that time; we've found that a once a day refresh is more than enough for most users."

Advocate for the users by balancing management messages with what users want. "It doesn't matter how important your key messages are if no one looks at them. Engaging, 'sticky' features and easy access to useful information will encourage people to regularly visit the site. It's important to remind management of the importance of this delicate balance."

The Electrolux Group

Using the intranet:

The Electrolux Group, based in Stockholm, is the world's largest producer of powered appliances for kitchen, cleaning, and outdoor use, such as refrigerators, washing machines, cookers, vacuum cleaners, chain saws, lawn mowers, and garden tractors. In 2003, the Electrolux Group had sales of around $17 billion and approximately 77,000 employees. Every year, customers in more than 150 countries buy more than 55 million Electrolux Group products for both consumer and professional use under famous brands such as Electrolux, AEG, Zanussi, Frigidiare, Eureka, Flymo, and Husqvarna.

Design Team:

Electrolux, Lowe Brindfors, Grow

Members:

Lowe Brindfors

Grow: Jari Ullakko, creative director

Electrolux: Ralf Larsson, E-gate manager; Claes Nordén, E-gate manager (from November 2003 to May 2004)

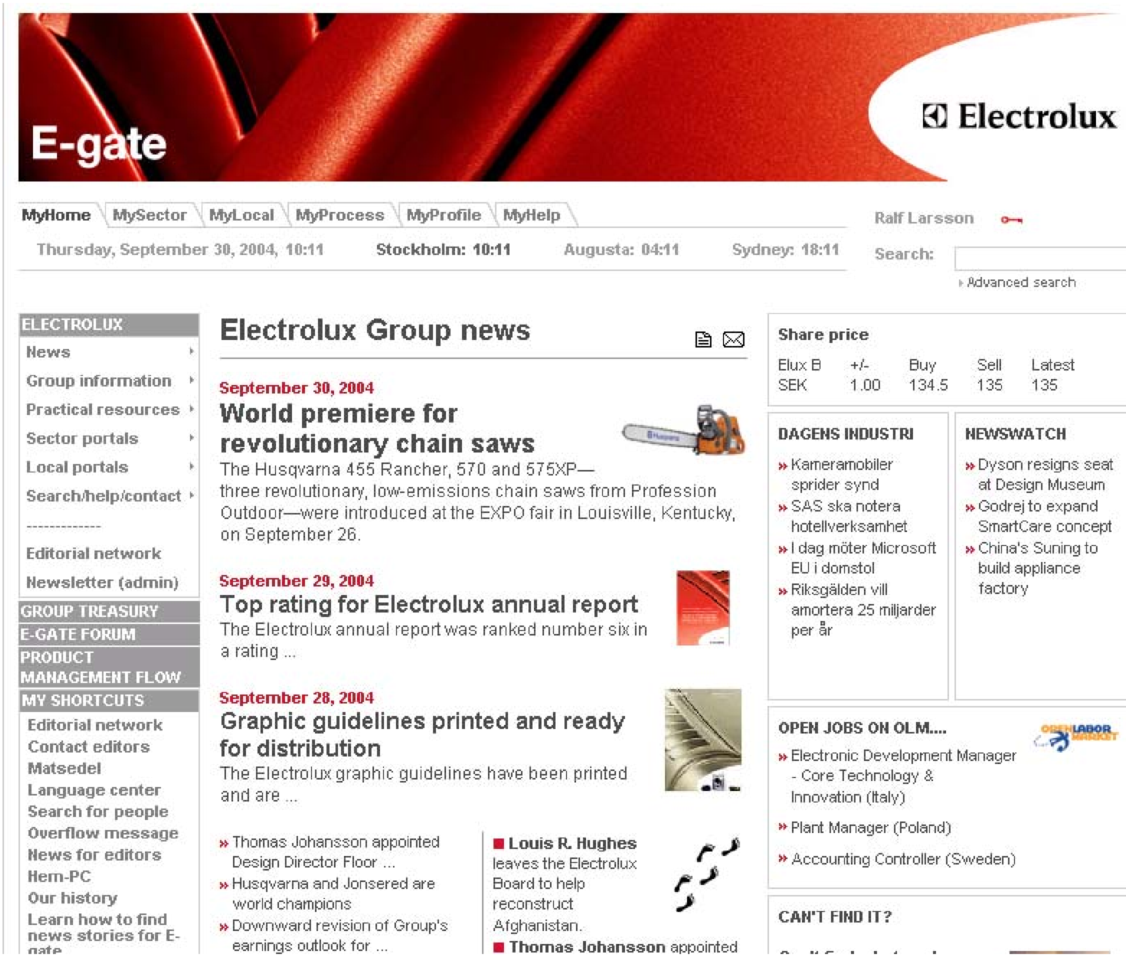
SUMMARY

The Electrolux Group's intranet designers know their users, and strategically target them with segmented portals to give users the information they need, when they need it.

On the homepage, pleasing aesthetics and good content quickly draw in users. The site's subpages are displayed in the left menu. The homepage also offers simple headlines about internal news, overall company news, and industry news — for example, one headline announced a competitor's release of a groundbreaking new saw with higher torque, lower fuel consumption, and reduced emissions. Articles like this keep employees apprised of new inventions and inspire them to conceive of their own, better innovations.

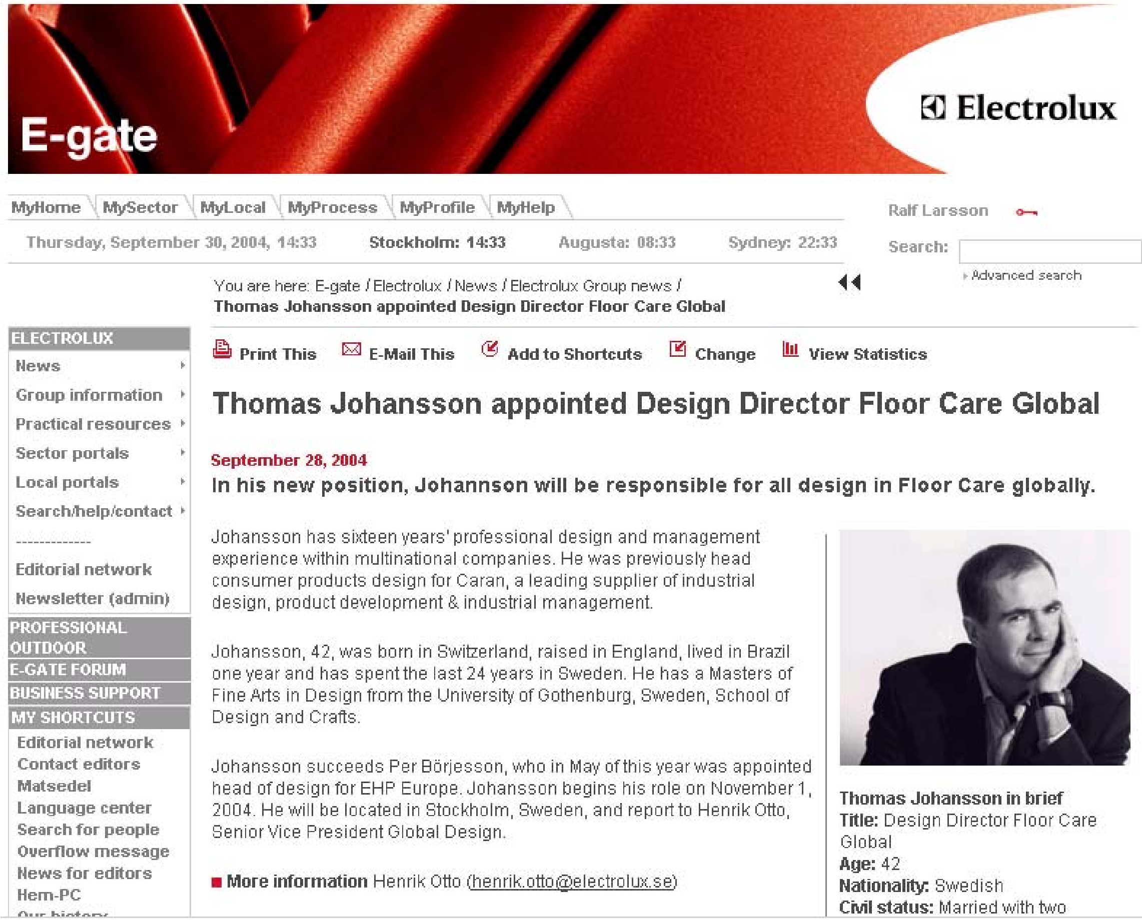
Times of day are shown across the top of the screen for the three biggest Electrolux locations: Stockholm; Augusta, Georgia; and Sydney. This reinforces the fact that Electrolux — and, by extension, E-gate — is a global entity. (While users can't currently change the default time locations, they will be able to in a future version.)

On the homepage's right-hand side, *Newswatch* tracks industry-related news. CNN is the default here, though users can also select from media in their language, such as the French business magazine *La Tribune* or the German *Frankfurther Allgemeine*.



Pictured: The homepage on the Electrolux Group's E-gate intranet looks good and gives users a diverse choice of news topics.

As for the actual news pages, the content is well written, leading — as it should — with the story's most important points. The writing style is light, personal, and engaging. The designers also strive to use good, clear photographs to help illustrate points or add color to a story. When appropriate, photographs are labeled so users can easily get pertinent details, such as who's in the picture. Using the links above every article, users can also create a printer-friendly text layout of the article, e-mail it to another employee, or add the article to their shortcuts, located in the left-hand bar.



Pictured: An example of a news page with good photographs and an engaging writing style. Using the links above the article, users can create a printer-friendly text layout, e-mail the page to another employee, or add the page to their shortcuts, which are located in the left-hand bar.

No wonder designers refer to E-gate as their "internal news portal." Furthermore, to sate users who want news as it breaks, Electrolux offers the ability to subscribe to news feeds. On the content-generation side of this scenario, news editors have a mass-mailing system for notifying such users of important, breaking news.

Giving employees the information they need can be challenging, especially at large, global organizations such as Electrolux. While the 16,800 intranet users are mainly white-collar workers, they all have different roles and do very different jobs, including sales, marketing, product development, production, communication, quality control, financial control, and administration. To further complicate matters, users access the intranet from six different continents and a total of fifty-four countries.

To satisfy these diverse groups, the intranet provides a series of portals — from country-based to department-level — that users access via the top horizontal tabs. The intranet lets editors change the look of their portals, giving them new "skins" — Electrolux shorthand for a collection of design elements and templates. To differentiate the portals, each must have a different skin than the main group's portal.

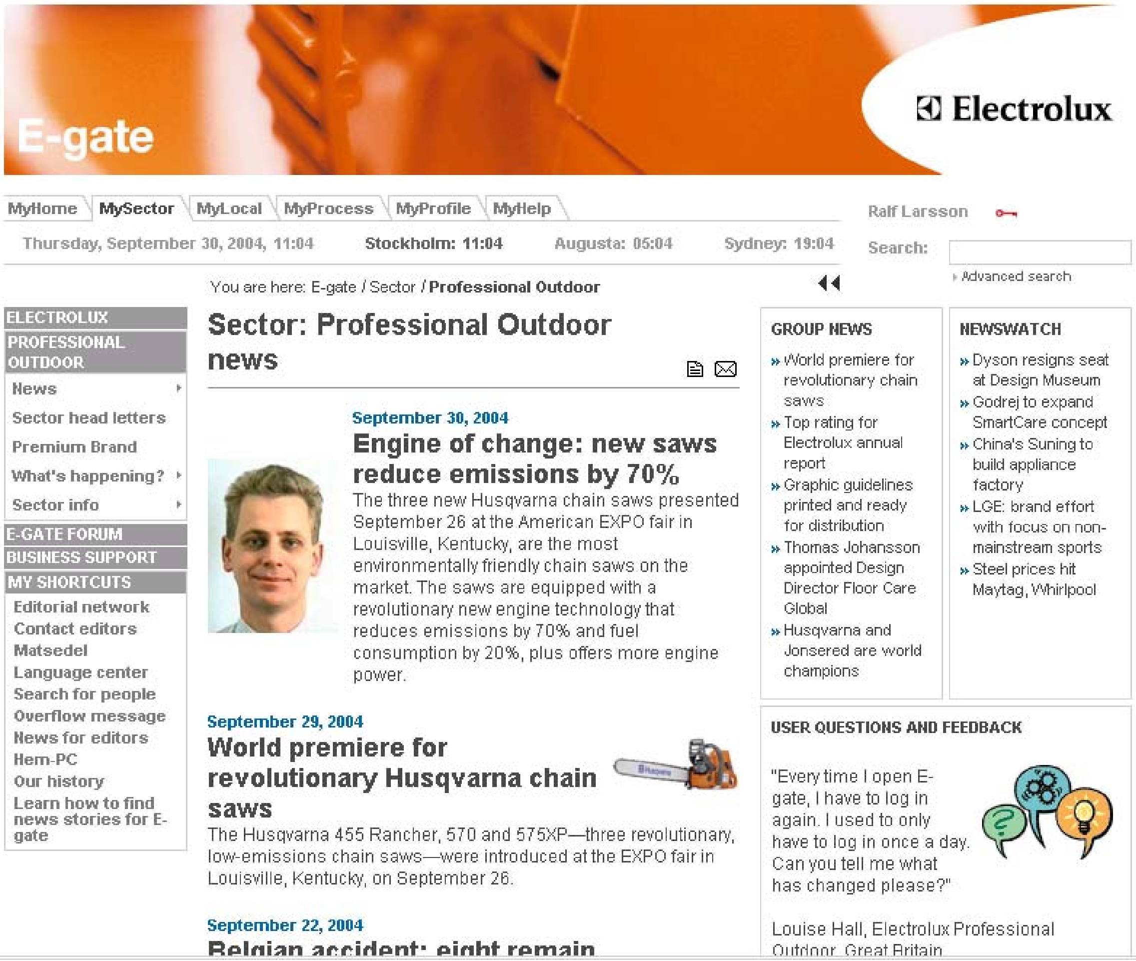
E-gate has national portals for all major countries where the user base might not be fluent in English, including Brazil, France, Germany, Hungary, Italy, Spain, and Sweden. The major design elements on these pages are identical, as is most of the content, yet these translated, localized pages help all employees feel represented, no matter where they are.

Pictured: An example of the local portal for Spain. E-gate has national portals for all major countries where the user base might not be fluent in English, including Hungary, Italy (image follows), France, Spain, Brazil, Germany, and Sweden (image follows).

Pictured: The local portal for Italy.

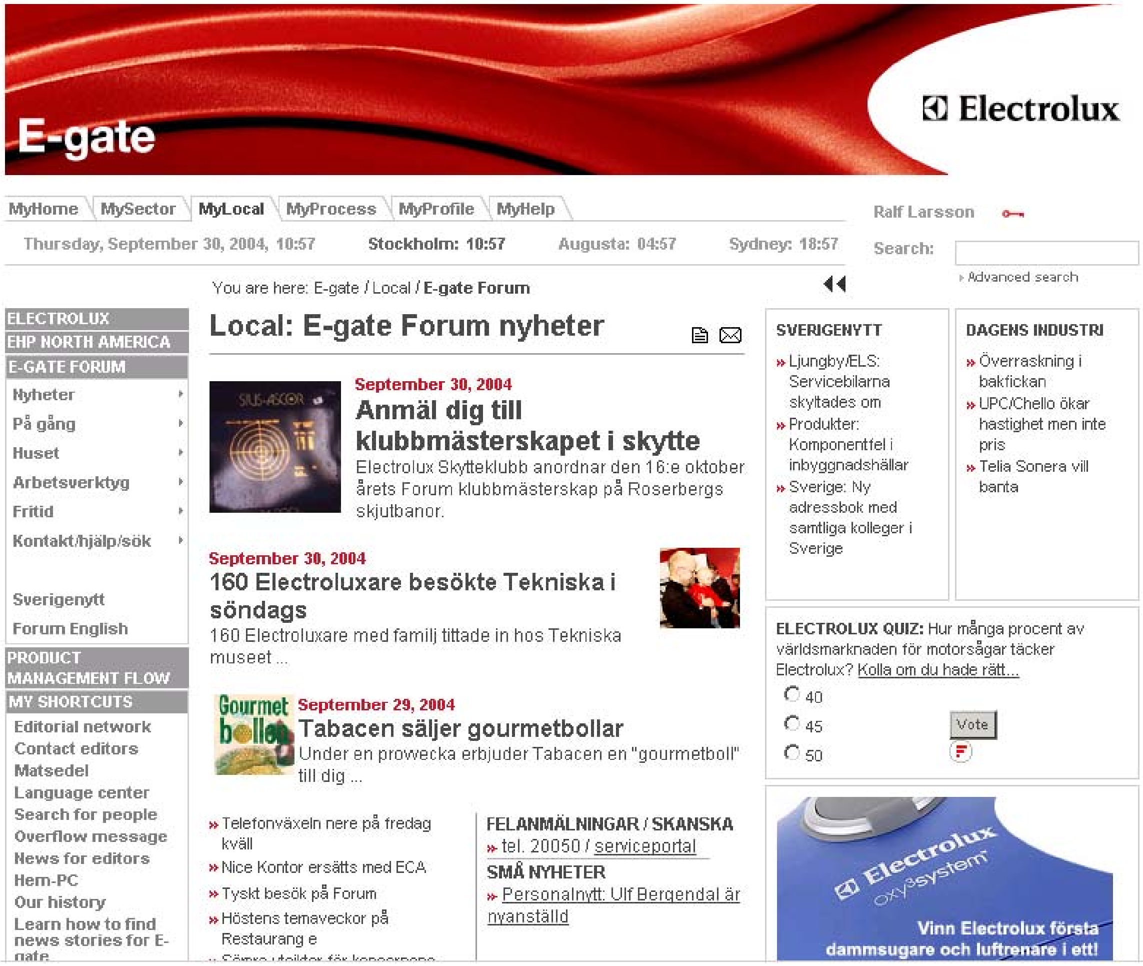
Pictured: The local portal for Sweden.

Each business area also has its own portal. Users access business portals by clicking the *MySector* tab. The start-page features news items related to that sector, with relevant subpages in the left-hand menu.



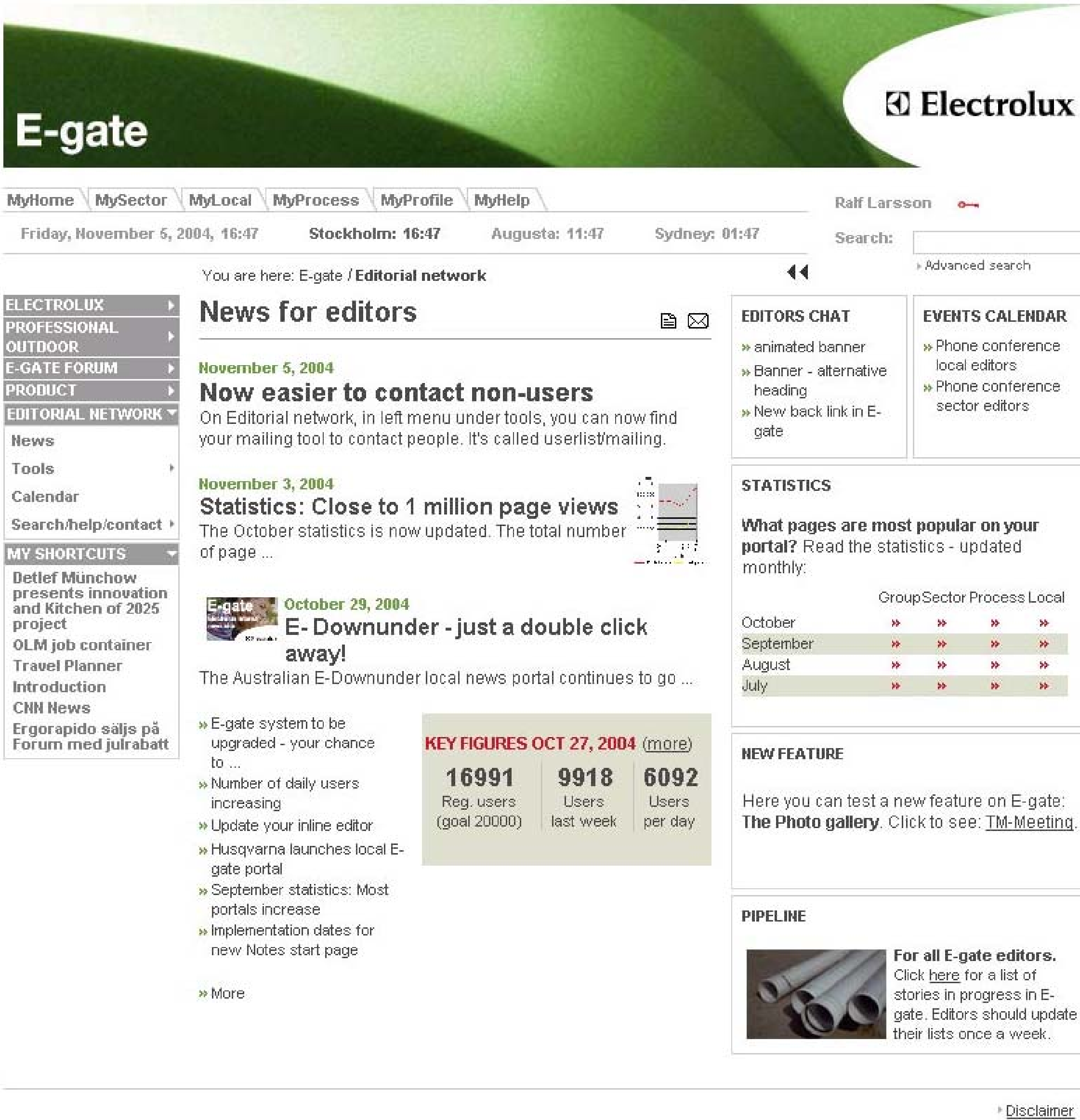
Pictured: Each business area has its own portal with its own skin. This screenshot shows the start page for *Professional Outdoor products*. The relevant subpages are displayed in the left menu.

Users access their department-level start pages by clicking the *MyLocal* tab. The head office has about twenty local portals in E-gate. The left menu shows subpages for this department.



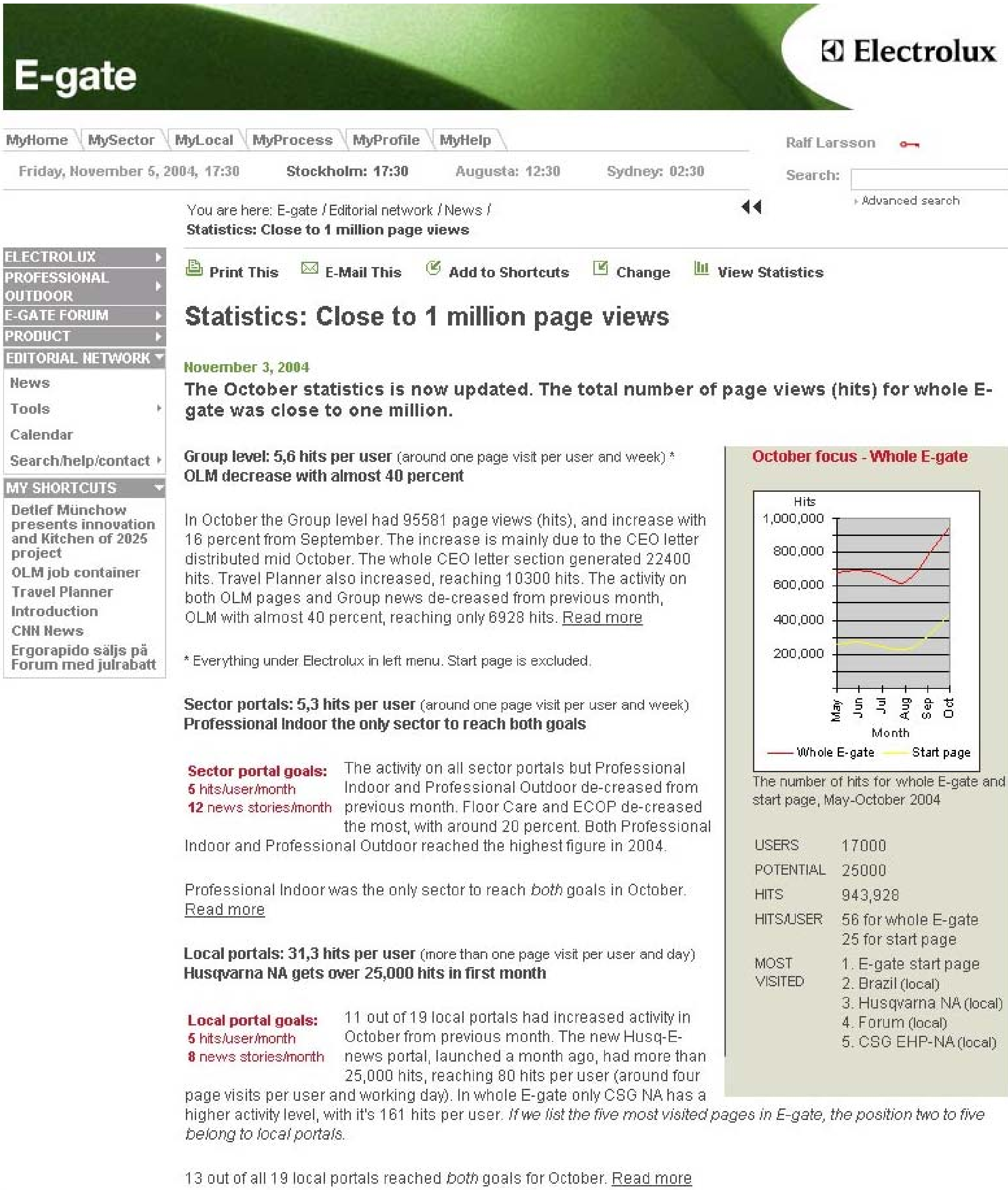
Pictured: The start page for the Stockholm head office's portal, which is a department-level portal. The left menu shows subpages for this department.

E-gates editors have their own portal, which makes it easy for them to monitor their intranet section's usage. The *Statistics* section makes usage patterns easily readable, and the *Pipeline* area encourages editors to change their content weekly, and makes doing so easy.



Pictured: The editorial portal contains information for E-gate editors. One interesting feature: dynamic statistics of the most-popular pages within each editor's portal.

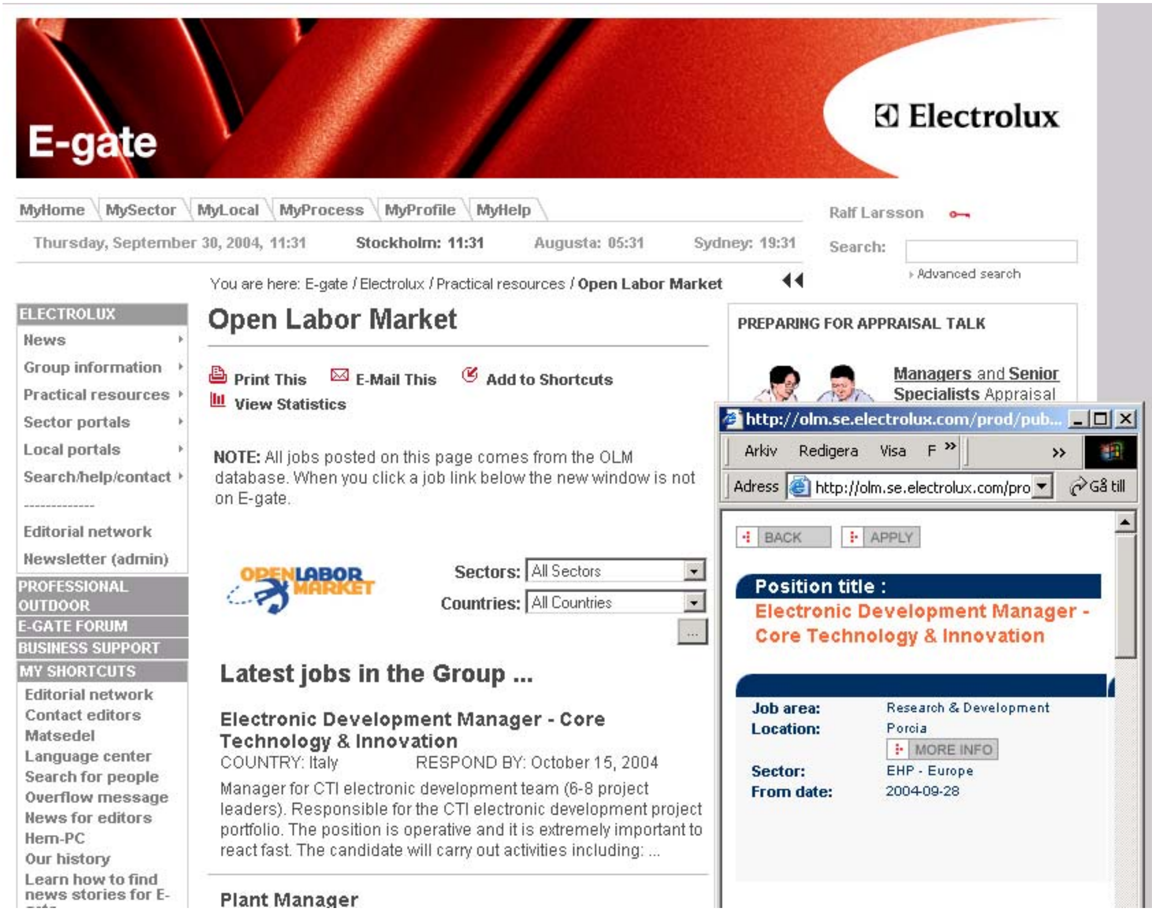
The editorial portal also targets users with news. Articles are aimed at helping editors; story headlines highlight things such as contacting users, page-view statistics, and system upgrades.



Pictured: An example of a news story in the editorial portal.

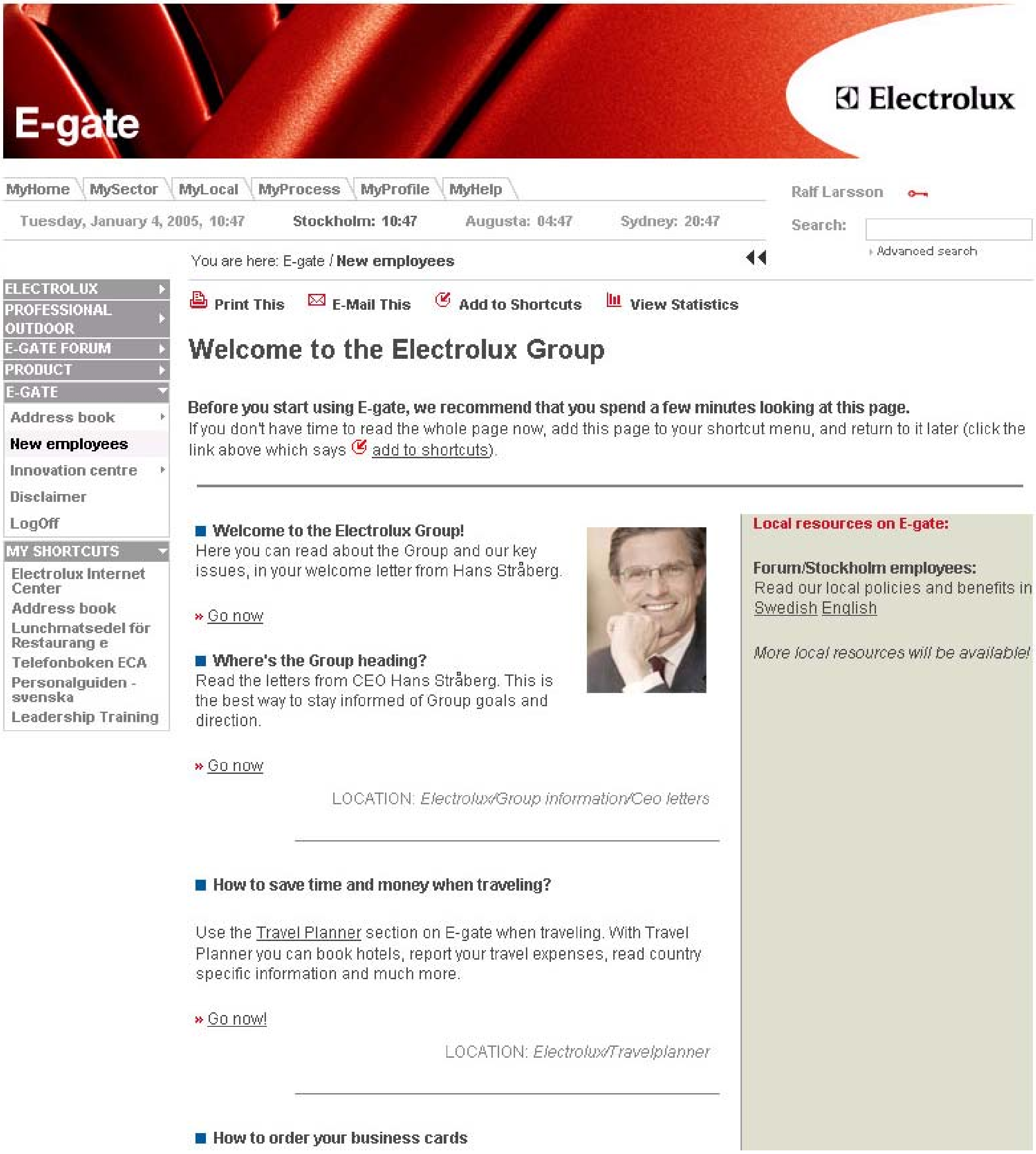
Electrolux intranets have always provided internal job listings, but previous versions forced users to access them via a Lotus Notes database. To make jobs easier to find, designers created the *Open Labor Market* to help employees locate all available jobs at the organization. The *Latest jobs in the Group…* area showcases some of the most recent job openings. Users can also search for jobs by country or sector. Search results clearly display the job title, location, and a summary job description; the *Respond by* date motivates interested parties to act quickly. Note that job titles are links to the Lotus Notes job-openings database, which offers more information about specific positions.

“Now all new jobs are sourced from Notes and published on our start page, which has been a huge success, attracting many employees,” says Ralf Larsson, the E-gate manager.



Pictured: The *Open Labor Market* shows all internal job openings. This interface aggregates information from other systems — in this case, importing from Lotus Notes — to help users easily find and apply for jobs.

E-gate incorporates various other features and applications, including a built-in business-support process tool; a slideshow manager that lets users select slides and create their own presentations; and a travel manager for booking flights and hotels, and reporting expenses. Electrolux also uses the intranet to welcome and assist new employees. Each new hire receives a personalized welcome e-mail and a link to E-gate’s *Welcome* page, which includes the CEO’s comments and links to important tools.



Pictured: New Electrolux employees receive a personalized welcome e-mail, which links them to E-gate's new-employee page. The page includes links to important tools and a message from the CEO.

Tabbed sections at the top of each page and obvious left-hand navigation make the intranet easy to navigate. The *You are here* breadcrumbs at the top of each page help employees swiftly determine where they are. Users can also add pages to their personal shortcut menu for faster access.

With numerous simple applications, and multiple targeted portals, users find exactly what they need on E-gate.

URL AND ACCESS

E-gate is bookmarked in all employees' browsers. The intranet is the homepage for most people who view the intranet via Lotus Notes, and for some employees who use Internet Explorer.

Users who are away from the corporate LAN can access the intranet by connecting to the network via VPN. Electrolux also has kiosks for blue-collar workers at some of its European sites.

CONTENT MANAGEMENT

For content management, Electrolux uses off-the-shelf software, EPiServer 3.2, which they've customized to meet their needs. EPiServer works with Microsoft Active Server Pages and logs ASP changes (including user and time); Electrolux uses this to handle version control.

Content owners within the company vary. For the group section, the owner is Paul Palmstedt, vice president of internal communications. Each local section also requires a content owner; content teams are typically led by the local HR, marketing, or public relations departments.

All intranet sections — as well as external Electrolux Web sites — must follow the brand guidelines developed by Lowe Brindfors, a brand-design agency. (The public-facing electrolux.com website is set to be updated, per the new guidelines, during the spring of 2005.) Prior to launching the intranet redesign, the team created and distributed the new guidelines to content editors.

EPiServer enforces all major templates and all design elements. "Only administrators can change those," says Larsson. Also, all new skins must be approved by the company's brand manager.

To help maintain a cohesive look and feel, the intranet team frequently communicates with editors via a dedicated editor portal. This portal, says Larsson, is "where they find guidelines, read news, and chat online about various issues." Maintaining this outreach is important so that "everyone understands the logic behind all of the guidelines," he says.

TECHNOLOGY

The E-gate intranet team uses Microsoft Visual Studio for building intranet applications. It runs the intranet with EPiServer for content management and a Microsoft SQL database running on Dell servers with Windows 2000.

Users access the intranet through the Lotus Notes browser or Internet Explorer.

GOALS AND CONSTRAINTS

Goals:

1. Have every user visit the site at least once daily.
2. Follow new brand guidelines.
3. Personalize different intranet sections with different skins.

Constraints:

1. Accomplishing site redesign in three months.

BASIC INTRANET FEATURES

All E-gate intranet pages feature: a "print page" for printer-friendly page rendering, the ability to send a page to another employee, and related links for more information about a topic. For fast access to frequently used pages, users can add pages to a personalized shortcut menu. Users can also subscribe to any E-gate information source and get e-mail notifications of content updates.

To find people, users can search the corporate address book.

E-gate integrates various business tools, including a travel center, with relevant news, hotel and airline booking, and an expense-report tool. Another tool offers business process support. Users can also browse a directory of new internal jobs.

Newly hired employees receive a special e-mail directing them to a "getting started" section of the intranet, along with links to essential intranet tools.

USERS

The intranet has 18,800 users divided among six continents and fifty-four countries; most are in the United States, Sweden, Italy, Germany, Australia, Brazil, and Great Britain. Users typically have their own PCs. The target audience works mainly in sales, marketing, product development, production, communication, quality control, finance, or administration.

USER TASKS

- Get news and updates
- Search the staff directory
- Book airline and hotel reservations
- Report expenses
- Search and apply for internal jobs

BACKGROUND

E-gate began as a Lotus Notes database in 2001. The IT department managed all aspects of the intranet, and content was segmented into a few so-called "news channels." There were few readers, however, as the database "was very difficult to find," says Larsson.

Since then, corporate communications took over intranet management from IT. Technologically, the intranet team transitioned the intranet from Notes to EPiServer and Microsoft ASP in September 2002.

The management change brought a different approach to the intranet. "We prefer to call E-gate, our intranet, 'our internal news portal,' as we believe the Web-based news format is a good way to inform our colleagues," says Larsson. "Our goal is to have better-informed colleagues, as better-informed people make better decisions," says Larsson.

Previously, Notes administrators edited the content; there are now 50 to 100 dedicated editors, including "everyone from secretaries to professional editors," says Larsson. As a result of all this involvement, "the cost for editing is reduced, and editing is much more effective." The number of news channels has also dramatically increased, as have the number of registered users.

In 2003, the corporate communications group unveiled a new Electrolux brand identity. Suddenly, the intranet looked out of date. "With the identity in place, it was obvious that our intranet needed to align with the new brand," says Larsson.

DESIGN PROCESS AND USABILITY ACTIVITIES

The E-gate team needed to redesign the intranet to meet the new Electrolux brand identity, which applies to all of the company's intranet and Web sites. Thus, "meetings with design, brand, and Internet people started the whole process. This, coordinated with editorial teams, inspired us a lot," says Larsson.

To guide the redesign, the intranet team conducted a Web-based user survey and heuristic evaluations, studied server logs to note user behavior, and ran usability field tests of the old intranet with twelve users. According to E-gate's former manager, Claes Nordén, the field test tasks were centered on finding specific information, such as "Can you find the news story *X* in the portal *Y*?" and "Can you find the latest letter from our CEO called *XYX*?" The team also referred to a usability study from the Electrolux USA website (http://www.electroluxusa.com), and to that site's look and development, as it was adopting the identical branding guidelines.

While most users liked the intranet, the team's research indicated that "the general opinion was that the design, information structure, and search functionality needed to be improved," says Nordén.

The project's first phase focused solely on redesign, without considering the fundamental intranet technology. "We chose to exclude major changes in functionality," says Larsson, because of the limited time available.

The team also gathered redesign input from numerous sources. "Since the design needed to align to the new brand identity, a number of designers were invited to give suggestions. The best suggestions were chosen and a project team was put together," says Nordén.

TIMELINE

- 2001: Launched first intranet (based on Lotus Notes)
- September 2002: Launched redesigned intranet (based on EPiServer and Microsoft ASP)
- December 2003: Began latest redesign project, incorporating new Electrolux branding guidelines
- March 2004: Launched redesigned E-gate

RESULTS

This redesign meets Electrolux's primary goal: altering the intranet to match the company's new brand identity. Yet, along the way, the redesign team also improved site usability and laid the foundation for making changes that user testing diagnosed, and that users had requested.

For example, users had difficulty finding two popular intranet sections: the internal job market, and the internal travel agency. "Our internal job market is integrated with E-gate, to help colleagues find other available jobs in the company," says Larsson.

The internal travel agency includes travel-related news, and integrates other Web sites to facilitate hotel and flight booking, and to report travel-related expenses.

"Before, both these applications were hard to find and difficult to access," says Larsson. The redesign emphasized their locations and reduced the number of clicks needed to access them. In addition, background technology changes eliminated some application log-in requirements once the user is authenticated in E-gate. Future versions of the intranet will extend single sign-on.

Also, different portals can now customize their look. "Editors can have their own layout, or skin, to make their own portal more individual," says Larsson. As long as content heads follow the E-gate branding team's graphic guidelines, they can add their own graphical elements, such as top images and arrows. However, some standard elements must appear, and the skin must then be approved by an Electrolux brand manager. Afterwards, the skin is set. "Local editors can't change these elements — only the text and images on the pages they edit," says Larsson, referring to elements designed to be changed, for example on a news page. "We don't want to allow too much freedom, as we all work for the same group, and E-gate supports our CEO's effort to build one strong, global Electrolux brand."

Now, with the redesign in place, "it feels like people are more positive about our intranet," says Larsson. "As the corporate communications group is focusing heavily on our new brand identity, we also have 'new ambassadors' like brand managers and marketing managers who like the redesigned intranet even more" because it mirrors the new branding.

Overall, when it came to redesigning the site, Larsson was surprised by how easily the redesign went. "To my knowledge, this was the first time we did a redesign following a professional graphic guideline that was for the whole group," he says. "As one or two external websites based on the guideline had already launched, we already had very good reference tools and templates available. We also excluded functional changes from the redesign, to only focus on layout and graphical elements. In short, we were very structured, and patient, and didn't rush into it."

With design changes implemented, search engine improvements are now underway. As for the information structure, "that has now been improved, and is about to be implemented in all portals throughout the site," says Nordén.

The intranet team is also planning a migration from ASP to ASP.NET for several reasons. First, it integrates more easily with more tools, including the Lotus Notes environment, and Lightweight Directory Access Protocol (LDAP) and Active Directory servers, which they'll eventually use to meet the single sign-on goal across the intranet. Second, the new software will enhance usability, because it includes a language module, hot keys, zooming, and low- and high-resolution versions of pages. Those features are especially useful because about 75% of Electrolux employees' mother tongue isn't English, and many travel and use modems on the road. Finally, ASP.NET includes: a better editing tool that allows direct publishing from Microsoft Office, improved image and document handling, and more-flexible templates.

LESSONS LEARNED

Insights from Ralf Larsson:

Get branding help. "Involve your brand people. Having a brand guideline before you start the project makes life easier."

Think big. "Always try to incorporate feedback from users and editors into any redesign. Always think big."

Insights from Claes Nordén:

Manage end-user expectations. "Involve others in the project and respect their opinions. Be careful, however, about trying to satisfy everybody's suggestions, and make it clear beforehand who has the final say, and why."

Make life easy for editors. After reading the brand guidelines, translate those into intranet design guidelines for editors. Be sure to communicate these guidelines to editors before — or at least at the same time as — launching the redesigned site; it makes life easier for the editors.

NedTrain

Using the Intranet:

NedTrain, based in Utrecht, the Netherlands, is a subsidiary of the Dutch National Railway Company (Nederlandse Spoorwegen). NedTrain is an expert in train- and railway-maintenance and overhauling. Before any new parts or equipment are allowed on the Dutch Railway, NedTrain first assays them. Other domestic and foreign transport operators also rely upon NedTrain's services. NedTrain has thirty-nine locations throughout the Netherlands.

Design Team:

Macaw B.V.

Members:

NedTrain: Arienne de Vries, communications department manager; Belle Prinssen, webmaster

Macaw B.V.: Arie Duindam, project manager, architect and lead programmer; Marco Roling, System analyst, project manager; Jelger Groeneveld, developer; Antoni Dol, lead designer and art director; Elise van Looij, developer; Berry Vorstenbosch, senior developer for application services

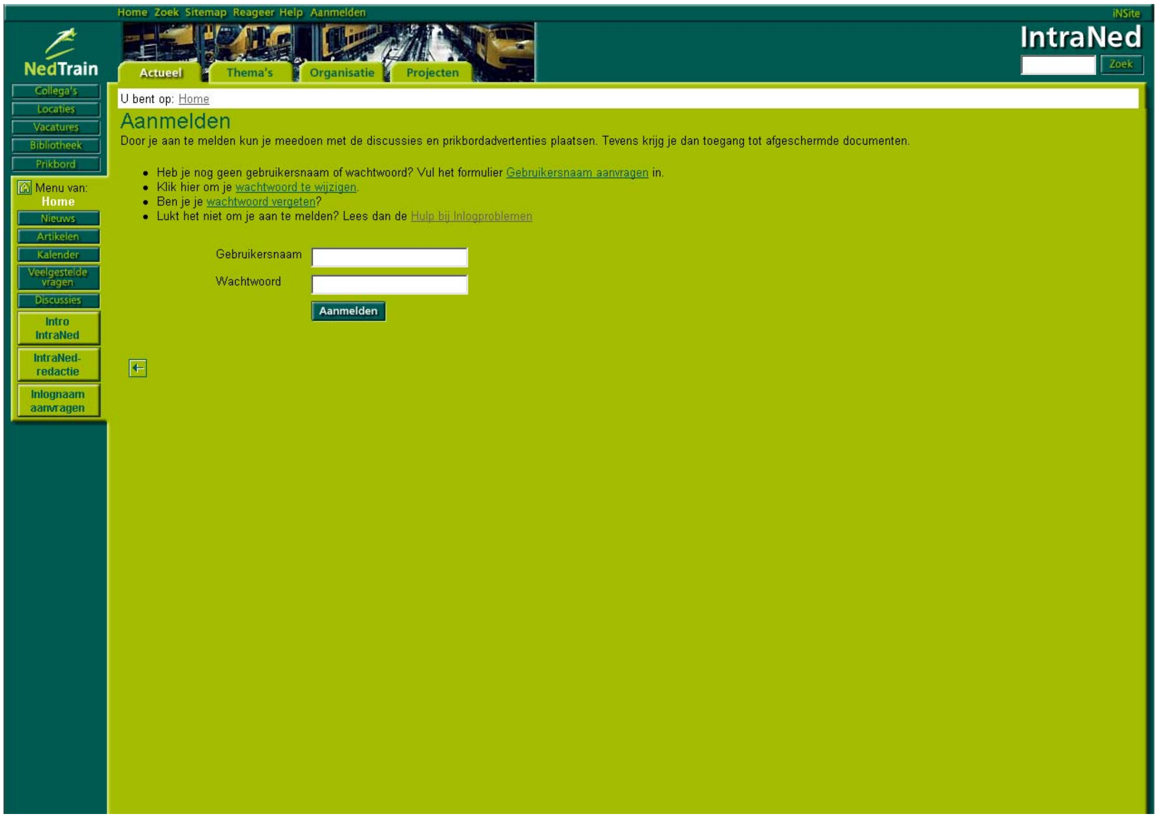
SUMMARY

One of NedTrain's main objectives for their IntraNed intranet is to make information available for all employees and improve communication between departments and locations. The intranet achieves this goal, beginning with the homepage, which features current news relevant to all NedTrain employees. Users also have access to articles, events, FAQs, and discussions. Employees use these areas extensively, along with more thematic pages, personal organizational pages, and project pages.

IntraNed's look and feel is business-like but not stuffy, and follows NedTrain's corporate guidelines: be efficient, and avoid excessive dynamic design and content elements.

Pictured: IntraNed's homepage features events, FAQs, discussions, job opportunities, a map of locations, a *who is who* listing, and search. The design follows NedTrain's corporate guidelines on intranet design efficiency.

Users enter the intranet through a very simple login page with open fields. This straightforward page also offers assistance for users who have password issues. Users who are not yet registered can request a login. The page also lets users change their passwords, and will e-mail current passwords to users who've forgotten them. If they have login problems, the help screens offer users questions with yes/no answers that ultimately lead to solutions.



Pictured: The login page makes it easy for users to log in quickly and offers help for people who need it, including the option to change or request passwords.

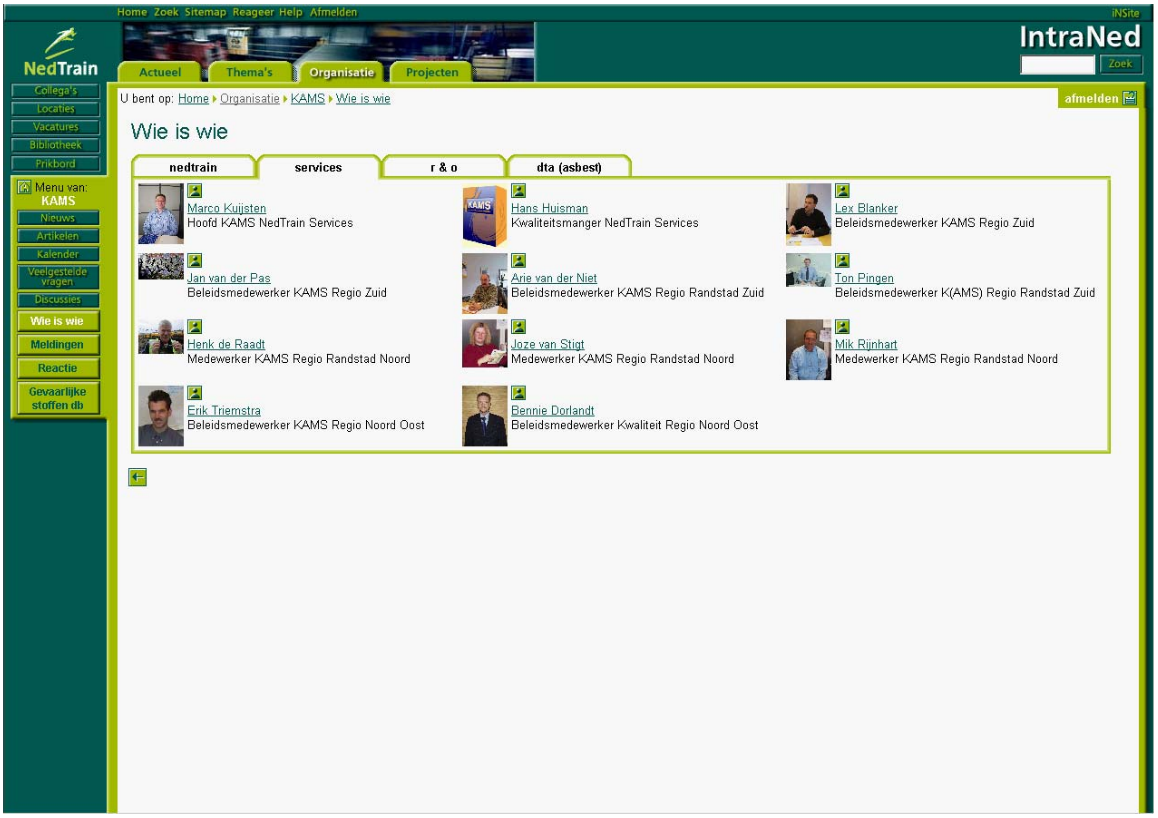
Once logged in, users are given permission to view specific content, such as particular projects or department information. When creating a document, the user can choose whether it can be viewed by all users, or only by those with proper permissions.

IntraNed has many different types of user groups. Employees in corporate departments hold jobs such as personnel officer, communications manager, payroll clerk, and administrative assistant. NedTrain's maintenance employees include assemblers, co-operating front-rank men, warehouse employees, mechanical/electrical servicemen, and shunters. Traditionally, people doing these jobs do not have access to desktop PCs at work. But at NedTrain, most of the workshops have kiosks with touch screens, keyboards, and trackballs. Employees use these kiosks to access IntraNed, as well as technical manuals.

Pictured: NedTrain offers workshop-based kiosks in easily accessible locations.

Pictured: Two NedTrain employees use IntraNed at a kiosk in their workshop.

With 4,000 intranet users in more than thirty-nine locations in the Netherlands, the employee directory at NedTrain is an important feature. The colorful address book shows the employee's name, job title, and picture. By offering pictures with the list of employees, the application lets people easily find the names of employees they know only by face, or see the faces of people they know only by name. Because the pictures are not all taken in a studio, the shots also help show people's personalities. Clicking the person's name link leads to a document that includes the person's name, address, phone numbers, tasks, and holiday schedule.



Pictured: The colorful address book helps the 4,000 intranet users in more than thirty-nine locations find each other. A picture of each employee adds a personal touch, and helps colleagues learn each other's faces.

A simple open field for searching is available on the homepage and on every page of the intranet. Extensive search functions let users search the entire intranet, all public documents, or specific subcontexts or document types.

For users who prefer browsing to searching, a straightforward navigation scheme leads them to their content. Tabs across the top include *Theme*, *Organization*, and *Project* and are always available. This tabbed interface makes it easy for users to acclimate. The left-side navigation menu choices (in the lighter green area) change depending on which of the roughly 90 subsites is selected via one of the top-horizontal tabs. In some cases — such as on the *Organization* tab — there is no need for related navigation, so it doesn't appear.

At the top of the left side navigation area, blue-green buttons offer global level choices that are always available. The global choices include *Colleagues*, *Locations*, *Employment Opportunities*, *Library*, and *Bulletin Board.*

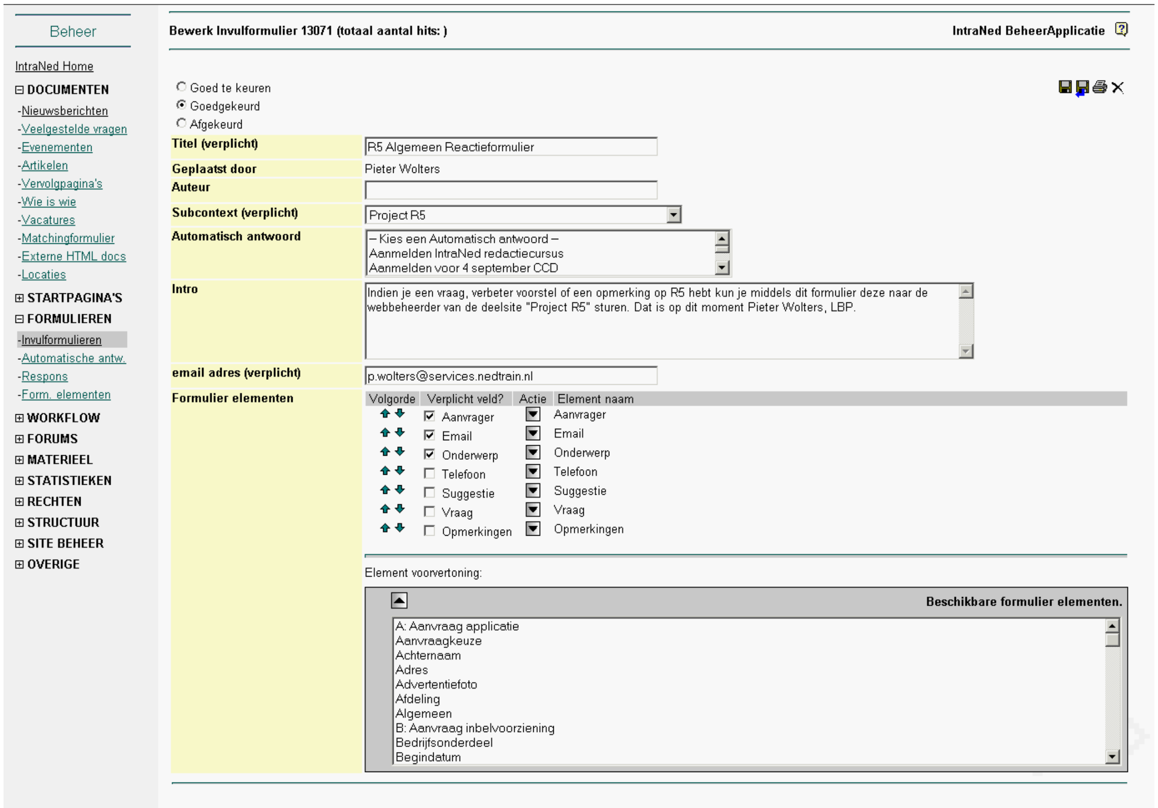
Pictured: The *Organization* tab shows the high-level company organization chart. The screenshot also shows the left-side global navigation, which is always available.

An interesting IntraNed feature is its locations map, which automatically regenerates, using latitude and longitude, whenever the page is changed. "Locations on the map do not change very much," says Antoni Dol, lead designer and art director, "but to allow NedTrain to not be dependent on a graphic designer in any way, we decided to build it this way." (He also concedes "it was an easy and fun thing to do" for Arie Duindam, Macaw's project manager, architect, and lead programmer, who has a passion for global-positioning systems and maps.)

Pictured: The map of locations is automatically regenerated, using latitude and longitude. Thus, NedTrain is not dependent on a graphic designer to make the changes.

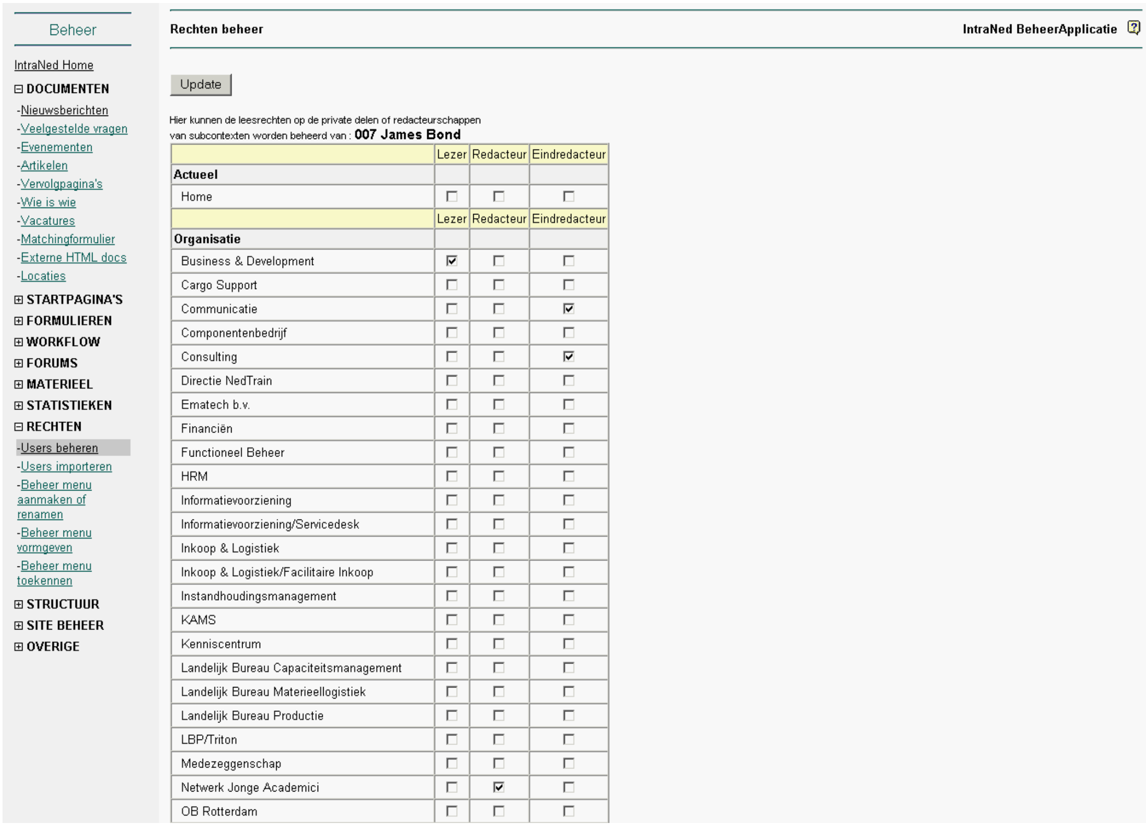
NedTrain's corporate departments read and actively contribute content to IntraNed. Users need not be very technical to add content: they can submit information via a simple form. The text is legible and field labels are left-aligned for easy scanning. Users can tick off radio buttons and checkboxes, and type their content in fields.

Editors can set up a form to be sent to any e-mail address, and can compose and create the auto-reply text sent to users after they've submitted the form. Editors can then deal with form submissions in the content management application.



Pictured: Users can easily add content to IntraNed via a very simple form.

Systems support personnel allocate rights — such as read, edit, and administrator — depending on a user's role within the company. For highest flexibility, user rights are allocated per subsite. So, a user can have admin rights in one IntraNed area and read-only rights in another. Systems support personnel can quickly assign rights using simple checkboxes in the form.



Pictured: Systems support personnel can quickly and easily allocate rights to users via a simple list of checkboxes.

Letting employees access the intranet, no matter where they work, and letting many of them add and edit content, make IntraNed a supportive, collaborative tool for NedTrain employees.

URL AND ACCESS

NedTrain's intranet URL is intra.nedtrain.nl; IntraNed is the start-up page for employees' Microsoft Internet Explorer 6 browsers.

For security reasons, when NedTrain employees are away from the LAN they can only access IntraNed by calling a special server, which then dials users back, and logs them onto the LAN.

All of NedTrain's larger workshops now have one or two IntraNed kiosks with touch screens, keyboards, and trackballs. IntraNed access from PDAs running Microsoft's Pocket-PC operating system is under development.

CONTENT MANAGEMENT

IntraNed's CMS is a customized version of Code-Rack, a CMS developed by Macaw. Both Code-Rack and IntraNed were built using Microsoft's ASPs technology; Code-Rack's development predates the introduction of Microsoft's .NET framework (although a version of Code-Rack now exists for .NET, it's not used for IntraNed).

Code-Rack is “actually more a framework for a CMS, to be customized and added to for each project,” says Dol. For the NedTrain project, the CMS was enhanced to include passive, or *theme*, pages. Here’s how they work: when uploading content, IntraNed editors can assign themes to it — designating it to be a certain type of company or industry news, for example. The CMS then automatically generates and maintains a number of pages filled with the most recent publications by theme. Theme pages also support project development. “People who have no idea they are working on the same subject will see each other’s work appear” on relevant theme pages, notes Dol.

Macaw also added division-level permissions to Code-Rack, so each division can maintain its own information and its own templates.

In NedTrain’s intranet, a user is assigned one of four roles: user (default), editor, chief editor, or webmaster. Editors can create and modify several types of documents using either HTML or a DHTML editor that resembles the Microsoft Word interface. They can then set public or private (restricted) permission for each document. As noted above, editors assign themes to pages and can also create forms, which are often used to let employees sign up for events and training. Editors can set the forms to automatically reply, via e-mail, to employees. Chief editors can create and edit all forms and documents they have access to, approve or reject documents, and publish approved documents online. The webmaster controls additional website functionality, via a Web-based interface.

Templates handle all content, ensuring NedTrain has a uniform look.

Content creators can also use pagelets (pre-made sections). Different pagelets — which are often used on division and project team homepages — contain such things as files, links to current news items, upcoming employee birthdays, and a list of recent events.

NedTrain’s communications department oversees IntraNed’s webmaster and the dedicated editors assigned to different business areas.

The webmaster functions as editor-in-chief, and various communication staff members are executive editors. NedTrain’s 200 editors are organized regionally. “This democratic set-up mirrors our organizational structure,” says Belle Prinssen, IntraNed’s webmaster. While editors typically answer end-user queries, the webmaster is the editors’ and users’ first point of contact.

TECHNOLOGY

IntraNed was developed using Microsoft Visual Studio, Microsoft Visio, Macromedia HomeSite, and Adobe Photoshop. While Macaw typically uses Visual Studio’s SourceSafe for source code management, “as a test we were using Rational’s ClearCase as an alternative, plus Rational’s ClearQuest as a bug-tracking tool,” says Dol. “Although my personal experience with the tools was not bad, Macaw discontinued using ClearCase, but we continued to use ClearQuest,” as well as Microsoft’s SourceSafe, and now the open source version control system Subversion.

The intranet runs on Microsoft’s Internet Information Server 5, Windows 2000 Advanced Server, and SQL Server 2000. A SQL database handles all content, and Citrix MetaFrame maintains authentication and access control.

The intranet infrastructure resides at NedTrain's headquarters in Utrecht. For supporting IntraNed's users, NedTrain's information and communications technology (ICT) department provides technical support. Two employees in Macaw's Application Services department maintain the back-office technology and live site. The Macaw employees access the NedTrain systems remotely by "connecting to an internal server that has a Microsoft Remote Access Server connection to the NedTrain server," says Dol. Macaw also runs its own development version of NedTrain locally.

GOALS AND CONSTRAINTS

Goals:

1. Enhance internal information distribution and communication between NedTrain's independently operated departments and locations, while reducing document-distribution costs.
2. Make information more quickly available and accessible to more employees.
3. Standardize on department-level intranet templates.
4. Maintain hassle-free navigation and an intranet consistent with NedTrain's corporate style.
5. Decrease overall operational costs and increase operating efficiency.

Constraints:

1. Having no dedicated project manager available for the redesign.

BASIC INTRANET FEATURES

Beyond search and regularly refreshed content (news, articles, event listings, and FAQs), NedTrain's has several other basic features:

- Extensive information about ongoing projects and subdivisions
- "Theme pages" that automatically centralize articles on the basis of attributes set by content creators; example pages include *Safety and quality* and *Materieelbeschikbaarheid* (indicating train wagon and locomotive part availability)
- The ability to create forms, such as a form that lets employees subscribe to a course
- A corporate library containing the company handbook and HR information
- A map of locations that is dynamically generated using site latitude and longitude, which eliminates the need for a graphic designer when location changes occur
- Ongoing discussions
- A poll (linked to discussions)
- A dynamically built site map with drop-down lists of navigational choices
- A job listing board for open NedTrain positions
- The ability to add pagelets — such as a birthday calendar or links to the latest news — to any page

- In addition to basic contact information, the corporate *who is who* directory lets employees display their current list of tasks where and when they're working, and their replacements for holidays or sick days
- A general-interest bulletin board, including an ongoing NedTrain garage sale

USERS

NedTrain has 4,000 employees, located in its Utrecht headquarters and thirty-eight maintenance and service locations throughout the Netherlands. Users range from corporate employees, with titles such as personnel officer, communications manager, payroll clerk, and administrative assistant; to maintenance staff, including assemblers, co-operating front-rank men, warehouse employees, mechanical and electrical servicemen, and shunters.

USER TASKS

- Read news at the organization, division, or project level
- Share documents
- Search the company directory, or find telephone numbers and e-mail addresses through the *who is who* feature
- Update personal information
- Locate an office or facility and find its address and contact information
- Access HR information
- Read manuals
- Browse internal job openings
- Enroll in activities
- Consult the calendar listings for such things as company meetings, corporate events, and trade shows
- Review site-usage statistics
- Post to discussion boards and the bulletin board
- Fill in forms

BACKGROUND

IntraNed started in 2001 "as an information source for every employee with a PC inside the company," says Dol.

"IntraNed was initiated by the communications department and developed in collaboration with our ICT department," says Prinssen. Before rollout, NedTrain appointed editors to manage different pieces of the intranet.

The initial intranet included basic information, such as departmental news, and a list of employees and locations. Later, Macaw developed the *who is who* application and the *Materieelbeschikbaarheid* indicator, a "real-time train part availability indicator, and the most important piece of information in the company," says Prinssen. "It allows all staff to check if they've achieved their targets for maintaining train wagons and locomotives." Both features noticeably increased IntraNed use.

While early intranet iterations were separate projects, Macaw now maintains a more continuous IntraNed presence, both in running and developing the intranet. For example, "Macaw's Application Support department is now responsible for the stability, maintenance, and implementation of intranet additions," says Dol.

NedTrain's annual budget for intranet development is €60,000.

Planning for intranet redesigns and application changes starts with the webmaster, who collects all user feedback. "Small changes or additions can be performed by Macaw's application services department, on the basis of a maintenance contract," says Berry Vorstenbosch, senior developer for application services.

Any proposed change, however, must fit IntraNed's look and logic. Thanks to that consistency, Prinssen says that, "everything now looks as though it was part of the very first delivery of the IntraNed."

For this redesign, NedTrain wanted to improve information delivery to all employees — not just those with PCs — and improve inter-departmental communications and collaboration between employees. By improving the intranet, NedTrain also wanted to continue decreasing operating costs and increasing operating efficiency.

DESIGN PROCESS AND USABILITY ACTIVITIES

With no project manager available for the redesign, the project's architect/lead programmer covered the project-management tasks, and the system analyst identified the requirements and features needed for the design. Later, the analyst assumed more of the project management duties, including defect and change tracking, planning releases, and coordinating with the lead programmer. Shifting tasks between these two team members "worked because both were experienced professionals and saw the work that had to be done," says Dol. While he advocates this approach if there's no project manager and a near-term deadline, in general Dol recommends using a dedicated project manager.

For the original design, Macaw first conducted usability tests, testing working intranet versions with users. Tests took about 90 minutes. Tasks included finding specific information on the intranet, responding to site-feature questions, and evaluating the intranet's speed, aesthetics, and usefulness.

For finding specific information, sample questions included: "How many hours per week is the operational contract manager job advertised on the NedTrain intranet?" "What is the zip code of the Rotterdam Central Station?"

For evaluating site features, the browsers were turned off and users responded from memory to true or false statements. Examples include: "*Materieelbeschikbaarheid* can be reached via the project tab." "A project team's news item can appear on the homepage."

On a scale of 1 to 10, users were asked to rank the site's look and feel, speed, usability, and usefulness. Specific queries about intranet features included general questions about the site's appearance, missing features, and whether or not users would visit IntraNed on a daily basis.

The tests produced many findings, some related to design and others to technology problems. For example, users frequently searched, but occasionally documents that they knew should appear in the results didn't, creating "user irritation," says Dol. Macaw dealt with that problem via a code fix. Following the usability testing, the team also replaced one of the tab labels, "communities," with "organization," since Dutch users didn't understand the former word.

Macaw also found that few people used the site map. "The term 'site map' is still gibberish to a lot of Dutch users," Dol says, though he notes that "the people that did use the site map had no problems." Because the site map added needed insight into the information architecture, Macaw left the feature, but rewrote the names of some primary levels to better suggest the site map's purpose to users. "This site map is a nice piece of work, because it is dynamic," says Prinssen. "If we create a new project site, it is added to the site map automatically."

TIMELINE

- May 2001: Kicked off project with requirements workshop, followed by a final "vision for the design" document elaborating on the project's important requirements and the desired end result
- June 2001: Began construction on the intranet
- September 2001: Launched headquarters intranet
- 2002: Began subsite creation and related department editing (this is ongoing; each new project typically creates a subsite)
- October 2002: IntraNed on all PCs in all locations
- February 2003: IntraNed accessible via kiosks in the five largest workshops
- February 2003: Design team began incorporating more "fun" elements to draw people to the intranet, including a bulletin board and a pagelet for birthdays
- November 2003: Added another eight kiosks
- July 2004: NedTrain's board of directors decided the intranet should be the conduit for all future company information, and launched plan to discontinue use of network drives for information storage
- December 2004: Added another ten kiosks
- For 2005: Enable IntraNed access via handhelds and increase personalization

RESULTS

Since IntraNed first launched in 2001, the redesign team has been instituting modular changes — sometimes weekly.

Thanks to those ongoing improvements, and with the contribution of 200 editors, "IntraNed has grown to be the first and fastest medium employees turn to for news about the company," says Prinssen. "NedTrain has thirty-nine locations throughout the Netherlands. IntraNed makes it easier for everyone in these locations to find information or colleagues, and has also improved collaboration between employees."

Now the intranet has an array of must-read material, including manuals, procedures, mechanical instructions, a hazardous-materials database, and more. For example, “the defect codes of our trains are listed on IntraNed,” says Prinssen. “This means that if a train shows a defect code on its display, a mechanic can look up both the meaning of the code and how to fix the problem on IntraNed, saving time and effort.”

New pagelets also improve information delivery. The company-wide “materieelbeschikbaarheid” indicator, for example, is especially popular.

The improvements have helped drive increased intranet use, with fourth-quarter visits growing from over 860,000 in 2002, to 2 million in 2003, to 2.5 million by the end of 2004.

Based upon anecdotal feedback, “users are very happy” with the redesign, says Prinssen. For example, when users were queried about whether additional project information should be highlighted in its own, separate digital newsletter, “the overall response was that they preferred to read this information on IntraNed.”

Employees looking for a new job can submit their profiles to the IntraNed Matching System, which helps HR find the right person to fill job openings. “If a candidate matches a job profile, this is displayed on screen” to HR whenever a new job listing is created, says Prinssen.

Editors often use forms to let employees sign-up for events. The redesign added the ability for editors to view all results from a form online. “Editors already received the form data in an e-mail, but now they can also view this data online,” says Prinssen. This online view aggregates all of the information in one interface. Before, each response to the form generated a separate e-mail.

LESSONS LEARNED

Insights from Antoni Dol:

Manage expectations. “Expectation management is an important part of any project for a client, especially for retaining their full cooperation. With those two things, good project management, and the Rational Unified Process Methodology, we can build software on time, and on budget.”

Work without a project manager only in a pinch. “With no project manager available for our project, the architect and lead programmer ran such project management tasks as planning, budgeting, and organizing, while the system analyst researched redesign requirements and features. Later on, the analyst took on more project-manager responsibilities. This approach worked because both members of the team had extensive experience with such projects, and is something to consider if you lack project managers but must start immediately. Otherwise, however, I recommend a dedicated project manager.”

Insights from Belle Prinssen:

Keep it fresh. “Always have new, but useful, information on your intranet.”

Foster intranet champions. "It is very important to have one, or several, intranet champions to promote and campaign for the intranet. At NedTrain, that's my role; my nickname is 'Mrs. IntraNed' — the one person any employee can ask any intranet-related question. Also, I personally trained all the editors, which means they know how to find me for any follow-up questions. Especially for our large company, with 4,500 employees at thirty-nine locations, it's crucial to have a central person anyone can approach."

Make the intranet personal. "Make sure all departments are represented on the intranet. For NedTrain, this means having subsites for the communications, ICT, and HR departments. In fact, those subsites are the most-visited parts of the intranet."

Make the intranet a guide to the organization. "We put our organizational structure — with quite a lot of detail — onto the intranet, which has worked very well. Now employees can determine which department can best field a particular type of question. Conversely, because IntraNed follows the organizational structure, and because employees know their company, they also know their way on IntraNed. For example, if you have a question about your computer, you surf to the ICT department on IntraNed."

Procter & Gamble

Using the intranet:

The Cincinnati-based Procter & Gamble Company (P&G) began in 1837 as a small, family-operated soap and candle company. Today it's the largest manufacturer of household products in the United States, with $51.4 billion in 2004 revenue. P&G markets its products to consumers in 140 countries, under such brand names as Actonel, Always, Ariel, Bounty, Charmin, Crest, Downy, Folgers, Head & Shoulders, Iams, Olay, Pampers, Pantene, Pringles, and Tide.

Design Team:

Procter & Gamble' s Global Business Services (GBS) group and the employee-communications department; Hewlett-Packard; Bridge Worldwide

Members:

Procter & Gamble: Michelle Gosselin, GBS brand manager and initiative leader; Barb Nieman and Scott Bennett, employee communications; Linda Weaver, technical liaison with HP; Gail Macke, employee resources page leader; Mark McCabe, people management page leader; Gretchen Terhar, business management page leader; Steve Schmidt, P&G deployment and launch leader; Kim Rechtin, employee research leader

Hewlett-Packard: Donna Quinn, project manager; Vincent Jacobs, Jim Kruckeberg, Mandy Huth, Cuong Vu, Mark Owen, Phil Stam, Jeff Sen, and Cary Harlow, technical development

Bridge Worldwide: Jeff Haun and Steve Kirschner, account team; Dave Maly, Kerry Broderick, Nicole Wehrle, and Kristine Shuey, creative team

SUMMARY

Procter & Gamble brands include some of the world's most recognizable product names — Pampers, Tide, Bounty, Pringles, Folgers, Charmin, Downy, Crest, and Clairol are a few of its creations. To keep an incredible machine like this well oiled takes a large staff, superior communication, and the right tools. The P&G intranet, my.PG.com, is at the center of this effort.

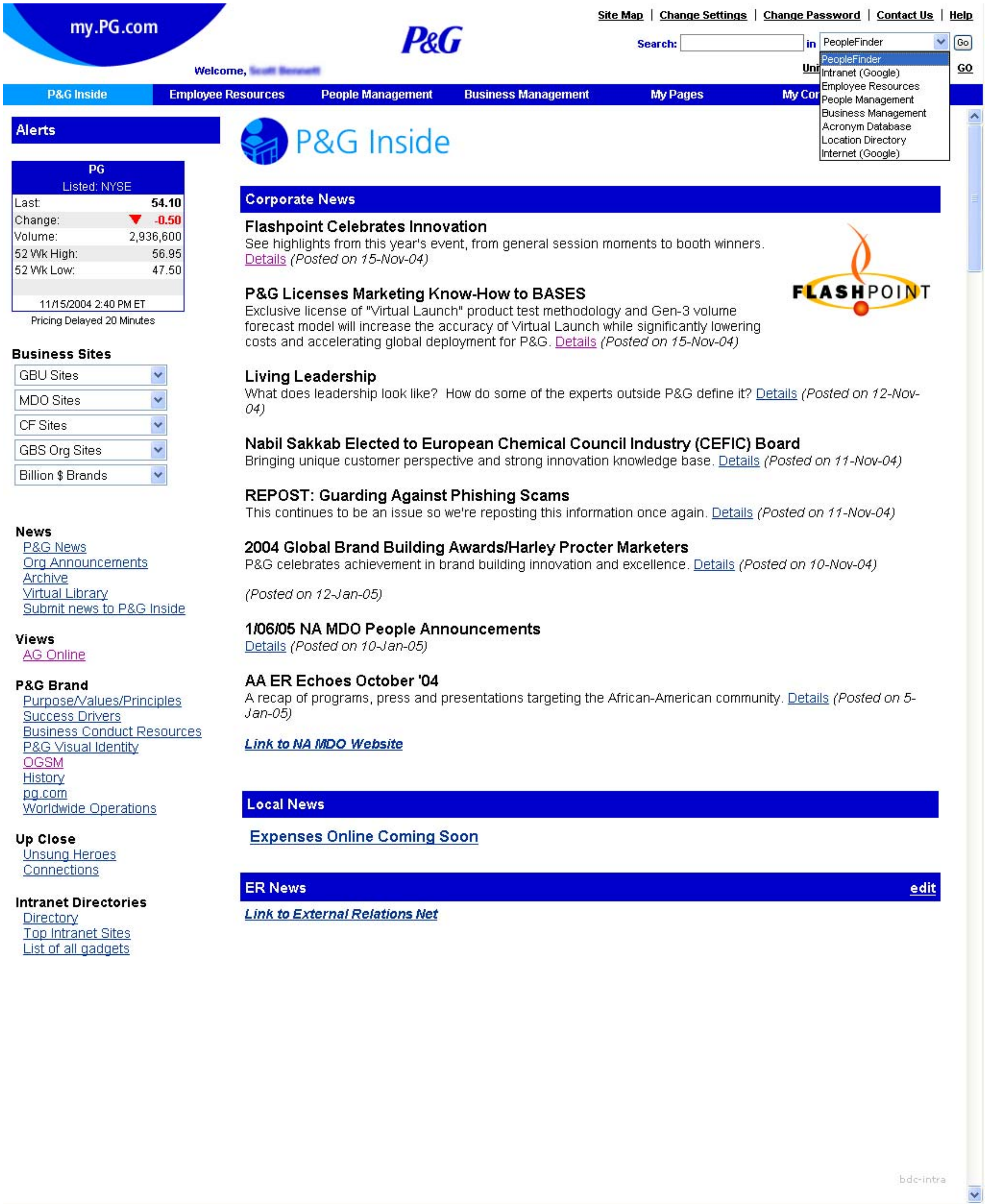
All P&G employees have access to the intranet for news, HR services, business support services, and business data. My.PG.com makes it fast and easy for employees to get the information, tools, and resources they need.

On the homepage, all employees see the *Corporate News* area, which contains global news about the organization, including important awards and references — such as making Fortune's "best companies to work for" list. The area also displays high-level announcements, such as major product launches, acquisitions or divestitures, and corporate sales milestones.

Following corporate news is business-unit news, local news, and news related to various company functions. Here, the intranet's personalization features serve relevant news based on an employee's selections. For example, local news is keyed to the employee's worksite, city, or country. Also, because employees often belong to more than one business unit, they can receive news from up to three organizations or units, as well as select news from up to three functions (including research and development, marketing, finance, HR, and sales). By clicking on *P&G News*, users can see all recent references to P&G in external media.

Users can change their business unit and function news settings by clicking on the *Edit* button for each section. To change their location setting, users click on *Change settings* in the banner in the page's upper-right-hand corner. They can also click on their current country or city (each a separate link in the upper-right part of the page) to change it. The location setting is prominent because it determines the content users see in other sections of the portal.

Users can easily search the entire intranet (using the Google appliance), employee directory, or other areas of the intranet via the search function in the upper-right corner of all pages. To select the search area, employees use the drop-down menu, which gives them many search choices, including a people finder; the intranet (Google); the *Employee resources*, *People management*, or *Business management* sections; an acronym database; the location directory; and the Internet. The nicest thing is that the most-used functions — searching the entire intranet and the employee directory — are the first two choices.



Pictured: Users can search the entire intranet, employee directory, or other specific intranet areas by selecting from a drop-down list next to the open search field.

Users also see the stock quote on the homepage, and can link or navigate to various business sites via the left-side drop-down menus.

P&G's corporate visual identity, denoted by the moon-phase-type graphics and royal blue color, also comes to life on the intranet homepage (other colors from P&G's corporate color palette are often used to denote other intranet sections). The corporate logo, referred to internally at P&G as a "phase graphic," plays off P&G's historic moon-and-stars logo.

Pictured: The Procter & Gamble homepage displays global corporate news to all employees. More news is personalized by the user's location and any corporate-group news to which they subscribe.

When employees click on a news item, they see the full story, complete with a title, short summary, and date of the posting — in an international format that spells out the month. In addition, pertinent photographs enhance the story, cropped to reinforce P&G's brand identity.

Pictured: News stories on the P&G intranet demonstrate good writing, appropriate and relevant photographs to enhance the story, and include full information, such as a story title, description, and date. Recalling P&G's corporate logo, pictures are cropped to reinforce the corporate brand identity.

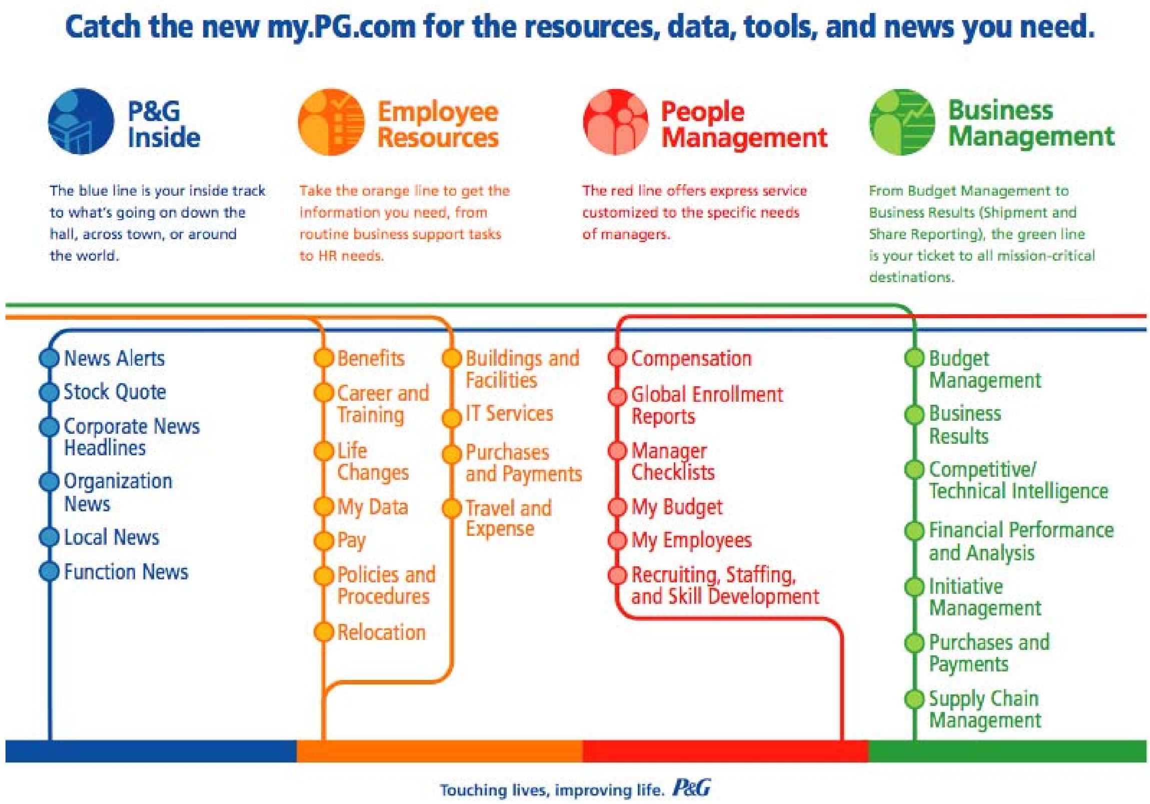
In addition to horizontal controls at the top of the page and the left-side navigation, the intranet provides a site map, reinforcing the main sections:

1.) *Employee resources*: pay, benefits, relocation, career and training information, IT, buildings, purchasing, and travel.

2.) *People management*: everything managers need, including the compensation system and organizational charts.

3.) *Business management*: role-based applications and content for employees' job-related needs, whether their jobs are commercial (sales, marketing) or technical (logistics, research and development).

The page clearly lists and provides thorough descriptions for each of these areas. The color-coded page also resembles a subway map — and that's no accident. "Our offline communications to employees used the site map theme and further capitalized on the idea by using a subway theme as the launch campaign," says Michelle Gosselin, brand manager for P&G's Global Business Services division and head of the redesign.



Pictured: For the new intranet's marketing launch campaign, P&G picked up on the site map's subway design theme to introduce users to the intranet's information architecture.

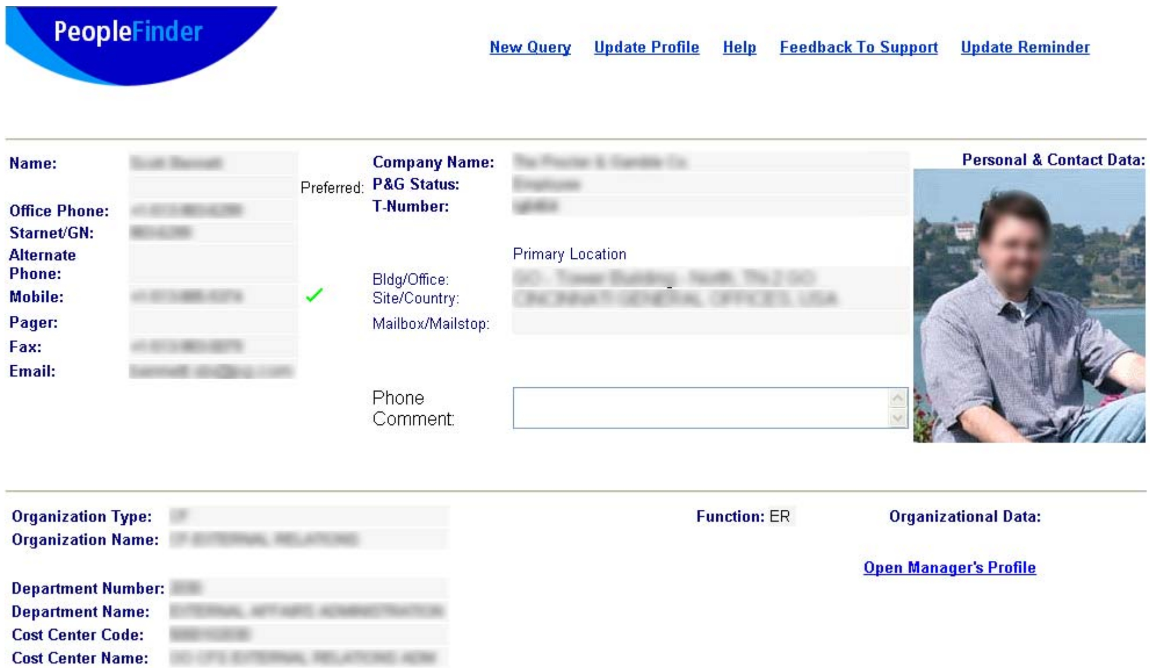
In terms of Web design, a site map might seem rather old-school, but in this case, it's a useful element: after the redesign, it was the first page every user saw. P&G took this approach because "we found that it sent a much stronger signal that this was something new and different, and that my.PG.com was going to deliver much more than just news," says Gosselin. "In our user research, we found that about half of our users preferred to land on the news page, while the other half preferred a site map-type page, describing our top-level navigation." Based on that research, the designers gave users the option to eliminate the navigation page at startup and instead start on the news page.

Users who set the news page as their intranet home can easily access the site map via the *Site map* link at the top of every page.

Pictured: The site map page clearly distinguishes and describes the intranet's four main sections. Users can either use this page or the news page as their homepage.

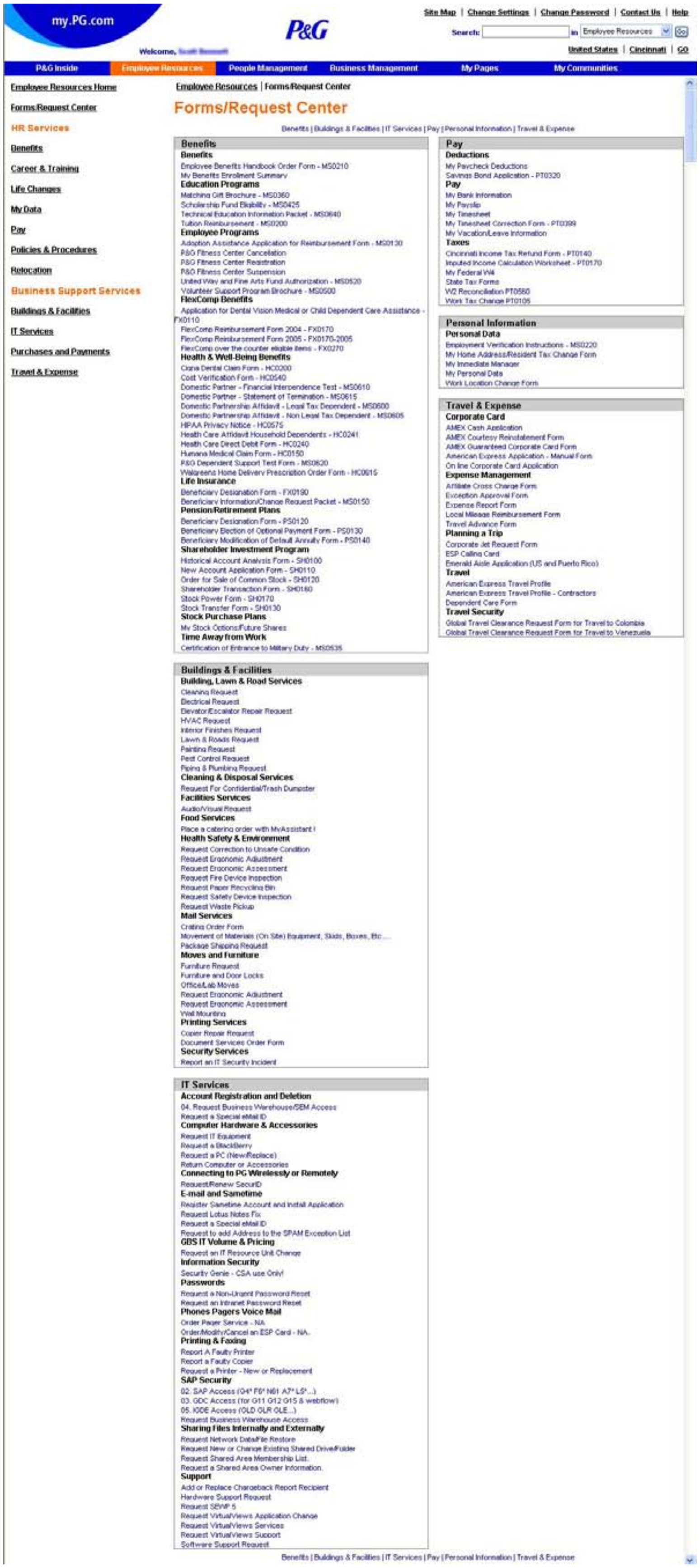
The main-category colors on the site map carry through to the top-level global-site navigation. The navigation bar is royal blue, and once a button is selected, it briefly turns a different color to indicate it's a link. This attention to colors makes it very easy for users to determine which intranet area they're in, and it creates a consistent look and feel across the entire intranet, using colors from P&G's corporate brand palette.

Beyond the site map, employees need other ways of locating crucial information, and with almost 110,000 employees in more than eighty countries, the employee directory is a work staple. To be useful, however, user profiles must be thorough and helpful, and indeed they are in P&G's *PeopleFinder* application. The profile shows the employee's name, phone numbers, e-mail, and any other communication information they provide. The employee's P&G organization, cost center, role, and location are also visible, as is a picture.



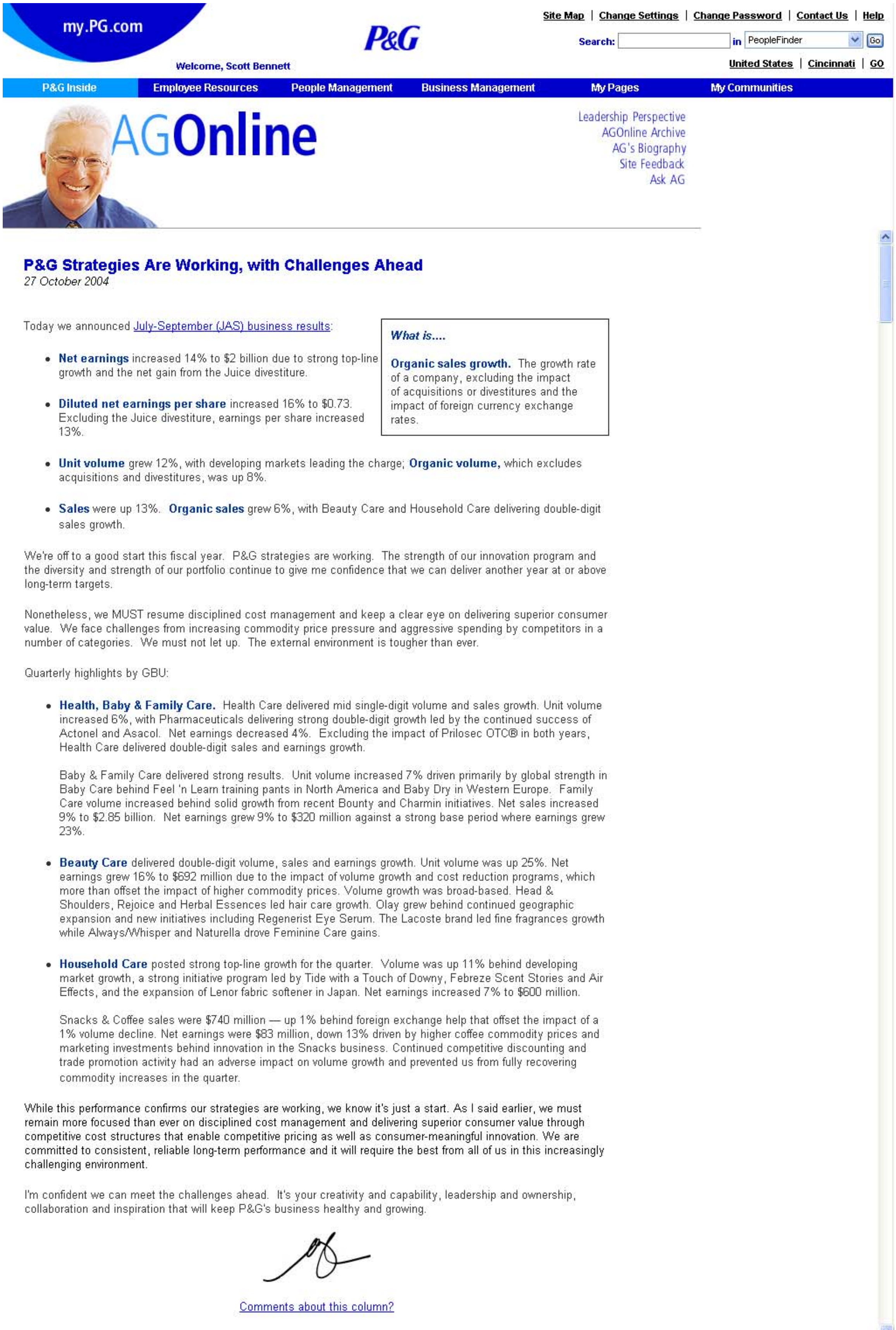
Pictured: The employee profiles in the corporate directory provide all the information you could need to contact someone. A picture of the person also helps people to get to know each other.

At large organizations such as P&G, every little bit of time wasted on a bad interface can prove costly. Even time wasted trying to find forms, when multiplied by many users, can really add up. A great way to save users' collective time is to consolidate forms from across the organization. P&G does this by consolidating forms from its three main content areas — *Employee resources*, *People management*, and *Business management* — into a single interface. The *Forms/Request Center* lists the forms and divides them into specific, easy-to-decipher categories. Links open either HTML forms, Word documents, or, for paper-based submissions, PDF documents.


my.PG.com
P&G
Site Map | Change Settings | Change Password | Contact Us | Help
Search: in Employee Resources Go
Welcome,
United States | Cincinnati | GO
P&G Inside
Employee Resources
People Management
Business Management
My Pages
My Communities
Employee Resources Home
Forms/Request Center
HR Services
Benefits
Career & Training
Life Changes
My Data
Pay
Policies & Procedures
Relocation
Business Support Services
Buildings & Facilities
IT Services
Purchases and Payments
Travel & Expense
Employee Resources | Forms/Request Center
Forms/Request Center
Benefits | Buildings & Facilities | IT Services | Pay | Personal Information | Travel & Expense
Benefits
Benefits
Employee Benefits Handbook Order Form - MS0210
My Benefits Enrollment Summary
Education Programs
Matching Gift Brochure - MS0360
Scholarship Fund Eligibility - MS0425
Technical Education Information Packet - MS0640
Tuition Reimbursement - MS0200
Employee Programs
Adoption Assistance Application for Reimbursement Form - MS0130
P&G Fitness Center Cancellation
P&G Fitness Center Registration
P&G Fitness Center Suspension
United Way and Fine Arts Fund Authorization - MS0520
Volunteer Support Program Brochure - MS0500
FlexComp Benefits
Application for Dental Vision Medical or Child Dependent Care Assistance - FX0110
FlexComp Reimbursement Form 2004 - FX0170
FlexComp Reimbursement Form 2005 - FX0170-2005
FlexComp over the counter eligible items - FX0270
Health & Well-Being Benefits
Cigna Dental Claim Form - HC0200
Cost Verification Form - HC0540
Domestic Partner - Financial Interdependence Test - MS0610
Domestic Partner - Statement of Termination - MS0615
Domestic Partnership Affidavit - Legal Tax Dependent - MS0600
Domestic Partnership Affidavit - Non Legal Tax Dependent - MS0605
HIPAA Privacy Notice - HC0575
Health Care Affidavit Household Dependents - HC0241
Health Care Direct Debit Form - HC0240
Humana Medical Claim Form - HC0150
P&G Dependent Support Test Form - MS0620
Walgreens Home Delivery Prescription Order Form - HC0615
Life Insurance
Beneficiary Designation Form - FX0190
Beneficiary Information/Change Request Packet - MS0150
Pension/Retirement Plans
Beneficiary Designation Form - PS0120
Beneficiary Election of Optional Payment Form - PS0130
Beneficiary Modification of Default Annuity Form - PS0140
Shareholder Investment Program
Historical Account Analysis Form - SH0100
New Account Application Form - SH0110
Order for Sale of Common Stock - SH0120
Shareholder Transaction Form - SH0160
Stock Power Form - SH0170
Stock Transfer Form - SH0130
Stock Purchase Plans
My Stock Options/Future Shares
Time Away from Work
Certification of Entrance to Military Duty - MS0535
Pay
Deductions
My Paycheck Deductions
Savings Bond Application - PT0320
Pay
My Bank Information
My Payslip
My Timesheet
My Timesheet Correction Form - PT0399
My Vacation/Leave Information
Taxes
Cincinnati Income Tax Refund Form - PT0140
Imputed Income Calculation Worksheet - PT0170
My Federal W4
State Tax Forms
W2 Reconciliation PT0580
Work Tax Change PT0105
Personal Information
Personal Data
Employment Verification Instructions - MS0220
My Home Address/Resident Tax Change Form
My Immediate Manager
My Personal Data
Work Location Change Form
Travel & Expense
Corporate Card
AMEX Cash Application
AMEX Courtesy Reinstatement Form
AMEX Guaranteed Corporate Card Form
American Express Application - Manual Form
On line Corporate Card Application
Expense Management
Affiliate Cross Charge Form
Exception Approval Form
Expense Report Form
Local Mileage Reimbursement Form
Travel Advance Form
Planning a Trip
Corporate Jet Request Form
ESP Calling Card
Emerald Aisle Application (US and Puerto Rico)
Travel
American Express Travel Profile
American Express Travel Profile - Contractors
Dependent Care Form
Travel Security
Global Travel Clearance Request Form for Travel to Colombia
Global Travel Clearance Request Form for Travel to Venezuela
Buildings & Facilities
Building, Lawn & Road Services
Cleaning Request
Electrical Request
Elevator/Escalator Repair Request
HVAC Request
Interior Finishes Request
Lawn & Roads Request
Painting Request
Pest Control Request
Piping & Plumbing Request
Cleaning & Disposal Services
Request For Confidential/Trash Dumpster
Facilities Services
Audio/Visual Request
Food Services
Place a catering order with MyAssistant I
Health Safety & Environment
Request Correction to Unsafe Condition
Request Ergonomic Adjustment
Request Ergonomic Assessment
Request Fire Device Inspection
Request Paper Recycling Bin
Request Safety Device Inspection
Request Waste Pickup
Mail Services
Crating Order Form
Movement of Materials (On Site) Equipment, Skids, Boxes, Etc....
Package Shipping Request
Moves and Furniture
Furniture Request
Furniture and Door Locks
Office/Lab Moves
Request Ergonomic Adjustment
Request Ergonomic Assessment
Wall Mounting
Printing Services
Copier Repair Request
Document Services Order Form
Security Services
Report an IT Security Incident
IT Services
Account Registration and Deletion
04. Request Business Warehouse/SEM Access
Request a Special eMail ID
Computer Hardware & Accessories
Request IT Equipment
Request a BlackBerry
Request a PC (New/Replace)
Return Computer or Accessories
Connecting to PG Wirelessly or Remotely
Request/Renew SecurID
E-mail and Sametime
Register Sametime Account and Install Application
Request Lotus Notes Fix
Request a Special eMail ID
Request to add Address to the SPAM Exception List
GBS IT Volume & Pricing
Request an IT Resource Unit Change
Information Security
Security Genie - CSA use Only!
Passwords
Request a Non-Urgent Password Reset
Request an Intranet Password Reset
Phones Pagers Voice Mail
Order Pager Service - NA
Order/Modify/Cancel an ESP Card - NA.
Printing & Faxing
Report A Faulty Printer
Report a Faulty Copier
Request a Printer - New or Replacement
SAP Security
02. SAP Access (O4* F6* N61 A7* L5*...)
03. GDC Access (for G11 G12 G15 & webflow)
05. IODE Access (OLD OLR OLE...)
Request Business Warehouse Access
Sharing Files Internally and Externally
Request Network Data/File Restore
Request New or Change Existing Shared Drive/Folder
Request Shared Area Membership List.
Request a Shared Area Owner Information.
Support
Add or Replace Chargeback Report Recipient
Hardware Support Request
Request SEWP 5
Request VirtualViews Application Change
Request VirtualViews Services
Request VirtualViews Support
Software Support Request
Benefits | Buildings & Facilities | IT Services | Pay | Personal Information | Travel & Expense

Pictured: The *Forms/Request Center* houses the organizations' forms and presents them in categories that users can easily navigate.

Communication with an organization's leaders helps keep employees in touch and aware of important directives and accomplishments. On this front, P&G's intranet contains an engaging section hosted by A.G. Lafley, P&G's chairman of the board, president, and chief executive. The smiling picture of Lafley makes him seem friendly and approachable, and the page's information is concise and presented in a simple, bulleted list. Terms an employee might not understand, such as "organic sales growth," are defined in a call-out box. This helps employees actually understand the information and learn from it, and helps them feel like part of the organization's future.



Site Map | Change Settings | Change Password | Contact Us | Help

my.PG.com

P&G

Search: in PeopleFinder Go

Welcome, Scott Bennett

United States | Cincinnati | GO

P&G Inside | Employee Resources | People Management | Business Management | My Pages | My Communities

AGOnline

Leadership Perspective
AGOnline Archive
AG's Biography
Site Feedback
Ask AG

P&G Strategies Are Working, with Challenges Ahead

27 October 2004

Today we announced July-September (JAS) business results:

> ***What is....***
>
> **Organic sales growth.** The growth rate of a company, excluding the impact of acquisitions or divestitures and the impact of foreign currency exchange rates.

- **Net earnings** increased 14% to $2 billion due to strong top-line growth and the net gain from the Juice divestiture.
- **Diluted net earnings per share** increased 16% to $0.73. Excluding the Juice divestiture, earnings per share increased 13%.
- **Unit volume** grew 12%, with developing markets leading the charge; **Organic volume,** which excludes acquisitions and divestitures, was up 8%.
- **Sales** were up 13%. **Organic sales** grew 6%, with Beauty Care and Household Care delivering double-digit sales growth.

We're off to a good start this fiscal year. P&G strategies are working. The strength of our innovation program and the diversity and strength of our portfolio continue to give me confidence that we can deliver another year at or above long-term targets.

Nonetheless, we MUST resume disciplined cost management and keep a clear eye on delivering superior consumer value. We face challenges from increasing commodity price pressure and aggressive spending by competitors in a number of categories. We must not let up. The external environment is tougher than ever.

Quarterly highlights by GBU:

- **Health, Baby & Family Care.** Health Care delivered mid single-digit volume and sales growth. Unit volume increased 6%, with Pharmaceuticals delivering strong double-digit growth led by the continued success of Actonel and Asacol. Net earnings decreased 4%. Excluding the impact of Prilosec OTC® in both years, Health Care delivered double-digit sales and earnings growth.

  Baby & Family Care delivered strong results. Unit volume increased 7% driven primarily by global strength in Baby Care behind Feel 'n Learn training pants in North America and Baby Dry in Western Europe. Family Care volume increased behind solid growth from recent Bounty and Charmin initiatives. Net sales increased 9% to $2.85 billion. Net earnings grew 9% to $320 million against a strong base period where earnings grew 23%.

- **Beauty Care** delivered double-digit volume, sales and earnings growth. Unit volume was up 25%. Net earnings grew 16% to $692 million due to the impact of volume growth and cost reduction programs, which more than offset the impact of higher commodity prices. Volume growth was broad-based. Head & Shoulders, Rejoice and Herbal Essences led hair care growth. Olay grew behind continued geographic expansion and new initiatives including Regenerist Eye Serum. The Lacoste brand led fine fragrances growth while Always/Whisper and Naturella drove Feminine Care gains.

- **Household Care** posted strong top-line growth for the quarter. Volume was up 11% behind developing market growth, a strong initiative program led by Tide with a Touch of Downy, Febreze Scent Stories and Air Effects, and the expansion of Lenor fabric softener in Japan. Net earnings increased 7% to $600 million.

  Snacks & Coffee sales were $740 million — up 1% behind foreign exchange help that offset the impact of a 1% volume decline. Net earnings were $83 million, down 13% driven by higher coffee commodity prices and marketing investments behind innovation in the Snacks business. Continued competitive discounting and trade promotion activity had an adverse impact on volume growth and prevented us from fully recovering commodity increases in the quarter.

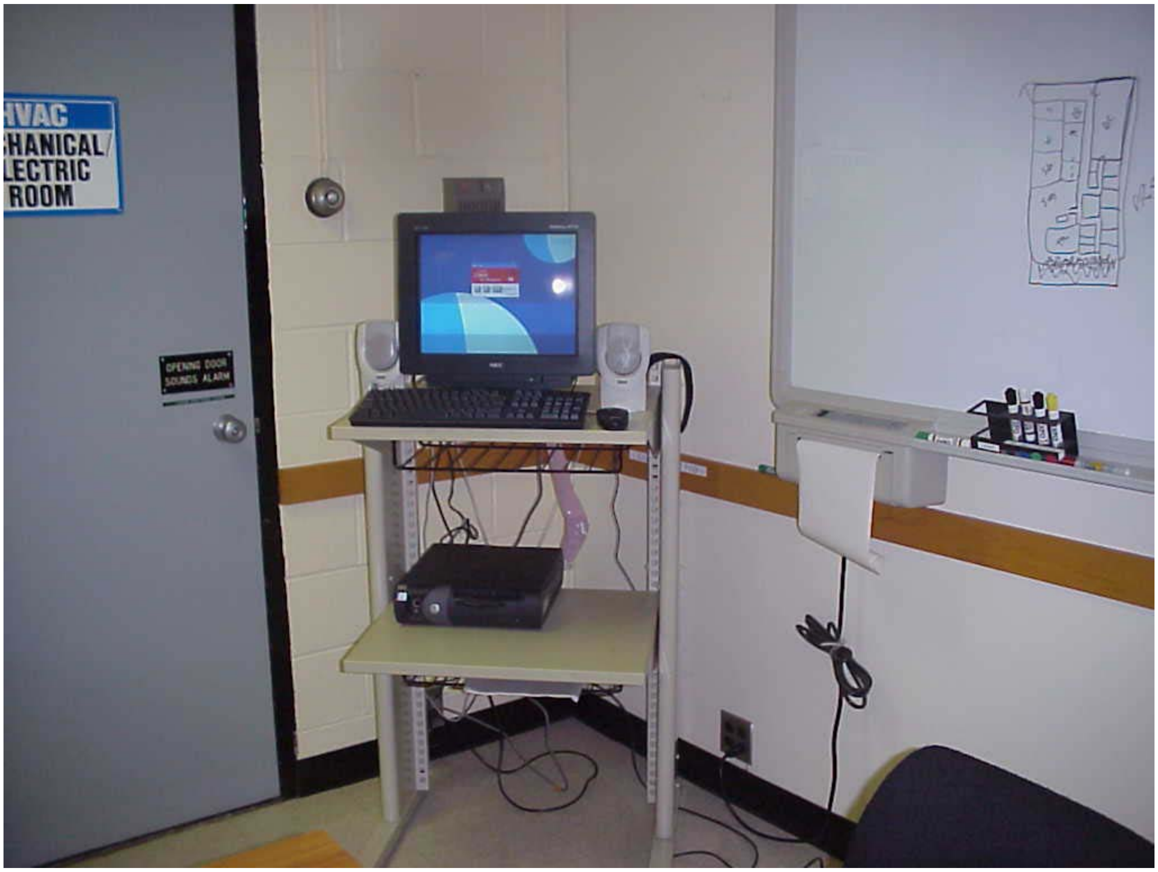
While this performance confirms our strategies are working, we know it's just a start. As I said earlier, we must remain more focused than ever on disciplined cost management and delivering superior consumer value through competitive cost structures that enable competitive pricing as well as consumer-meaningful innovation. We are committed to consistent, reliable long-term performance and it will require the best from all of us in this increasingly challenging environment.

I'm confident we can meet the challenges ahead. It's your creativity and capability, leadership and ownership, collaboration and inspiration that will keep P&G's business healthy and growing.

Comments about this column?

Pictured: The P&G president and CEO offers an announcement page to keep employees informed.

With so much information on the intranet, it's important that all employees get access to it. Of course, some employees work in plants and warehouses rather than at a desk in an office. For these employees, the organization provides workstations for e-mail and intranet access.



Pictured: A shared workstation in a meeting room in Mehoopany, Pennsylvania, gives plant technicians access to their e-mail and P&G's intranet.

Through consistent navigation and branding, and good search capabilities, the intranet unifies different P&G groups' intranet sites and gives employees access to both the intranet and the P&G organization as a whole. News, personalization, and employee-oriented communications materials also keep employees engaged and informed.

URL AND ACCESS

The intranet's URL is http://my.pg.com. The intranet is the default homepage for all employees, though they can change it. "Most employees choose to keep their homepage set to the default," says Barb Nieman, who works in P&G's employee communications department.

When not connected to the corporate LAN, employees can access the intranet on a company-provided computer via a VPN connection. In some plants, technicians also access the intranet via kiosks connected to the corporate LAN.

CONTENT MANAGEMENT

"The content management system is a custom-developed, Web-based system that uses a combination of portal server and document management systems to generate the HTML and JavaScript files used to render the site," says Mark McCabe, leader of the people-management page.

Based on the intended audience, portal content beyond news is arranged into one of three sections: content relevant to all employees, to staff managers, and to business managers. "There is a global portal owner, an owner for each section, regional owners for each piece of content, and in some cases, country-specific owners," says McCabe. This approach to content ownership arises from P&G's highly distributed operations, including multiple locations and languages. Much of the content relevant to all employees, including HR, pay, benefits, travel, and building information, is actually location- or country-specific.

Country-specific content owners add or change all content via templates, making it easy to enforce design and presentation. P&G tracks all changes with the content management tool.

TECHNOLOGY

The software running the intranet, Plumtree Corporate Portal, runs on Microsoft Internet Information Server and Windows NT servers. Plumtree also handles the intranet navigation and site localization, including serving relevant translations.

P&G uses custom-built portlets that integrate with Plumtree to create some dynamic features. The site also uses static HTML, and JavaScript, both of which the Plumtree software serves.

A Google appliance handles general intranet searches, while the custom-developed document management engine searches for content, and various other engines locate people, company locations, acronyms, and so on.

HP handles the bulk of P&G's IT needs through an outsourcing arrangement that includes most of the intranet technology. "Some of our Web applications are sourced to other strategic suppliers as well," says Gosselin, "such as IBM for our online travel booking and online expense reporting systems." P&G also uses real estate services company Jones Lang LaSalle for its conference-room booking system.

GOALS AND CONSTRAINTS

Goals:

- Implement a role-based architecture to make the intranet more intuitive so employees find the news, data, tools, and resources they need more quickly.
- Update the intranet's graphic design to reflect P&G's new visual identity, and standardize the whole intranet's look and feel.
- Better exploit portal-software capabilities to improve corporate content delivery, and localization and personalization features.

Constraints:

- Timing: Senior management wanted the intranet to sport P&G's new visual identity as quickly as possible, while the redesign team wanted to ensure the role-based framework and navigation improvements were ready.
- Dealing with technical limitations related to the time constraints, since "waiting for the ideal technology to be qualified and ready would have added considerable time to the project," says Gosselin.

BASIC INTRANET FEATURES

The intranet offers a range of information for P&G employees, much of it localized and in relevant languages so employees don't have to wade through irrelevant information. For example, a range of content — including vacation policies, benefits, travel, and building services — is country-specific, and is only revealed when users select their location via a drop-down menu.

Other intranet features include links from the homepage to corporate news and organizational announcements. Employees also have access to a variety of job-specific tools, including sales, marketing, logistics, and research and development functions. For example: managers can access relevant compensation system calculators and organizational charts; marketing personnel can access work in process, including advertising clips and artwork packaging; salespeople can see customer-shipment reports; and scientists in research and development can search a global library of research that has already been performed on various technologies.

USERS

P&G has over 100,000 employees working in almost eighty countries worldwide.

USER TASKS

Typical user tasks include:

- Read corporate, business unit, or site and facility news
- Access company-specific reference or policy information
- Search for content, employee information, and common P&G acronym definitions
- Book travel
- Obtain computer support or applications to install
- Order supplies
- Report building problems
- Obtain HR-related information and download related forms
- Access job- and business-related data, systems, and applications

BACKGROUND

Intranet development at P&G began in 1996, when the IT department created prototype sites for two of the company's most important competencies: research and development, and sales. "A site for public-affairs employees was also slipped in, since work was already well underway on that," says Nieman.

Those three sites went live in 1997, with an HTML-based homepage. From there, the intranet grew organically — "there was no central organization structure," says Nieman — as different departments and teams added their own stand-alone sites.

In 1998, IT still managed the intranet, but the employee-communications department began managing the communications-related parts of the homepage. At this point, the homepage "began to evolve from a launch page to more of a communication tool, as well as providing some high-level navigation to key intranet sites," says Nieman.

In 2000, the introduction of new page-creation tools (that required no HTML knowledge or programming), plus pre-built "easy start" sites for such things as team collaborations, led to a rapid increase in the number of internal intranet sites.

Later that year, P&G began implementing portal technology from Plumtree, moving beyond its Lotus Notes infrastructure. In October 2001, the Plumtree-driven intranet went live, supporting 60,000 employees worldwide. One notable new feature was a dynamically generated directory page, providing better insight into the intranet's content.

In 2002, the intranet's functionality and appearance was updated.

DESIGN PROCESS AND USABILITY ACTIVITIES

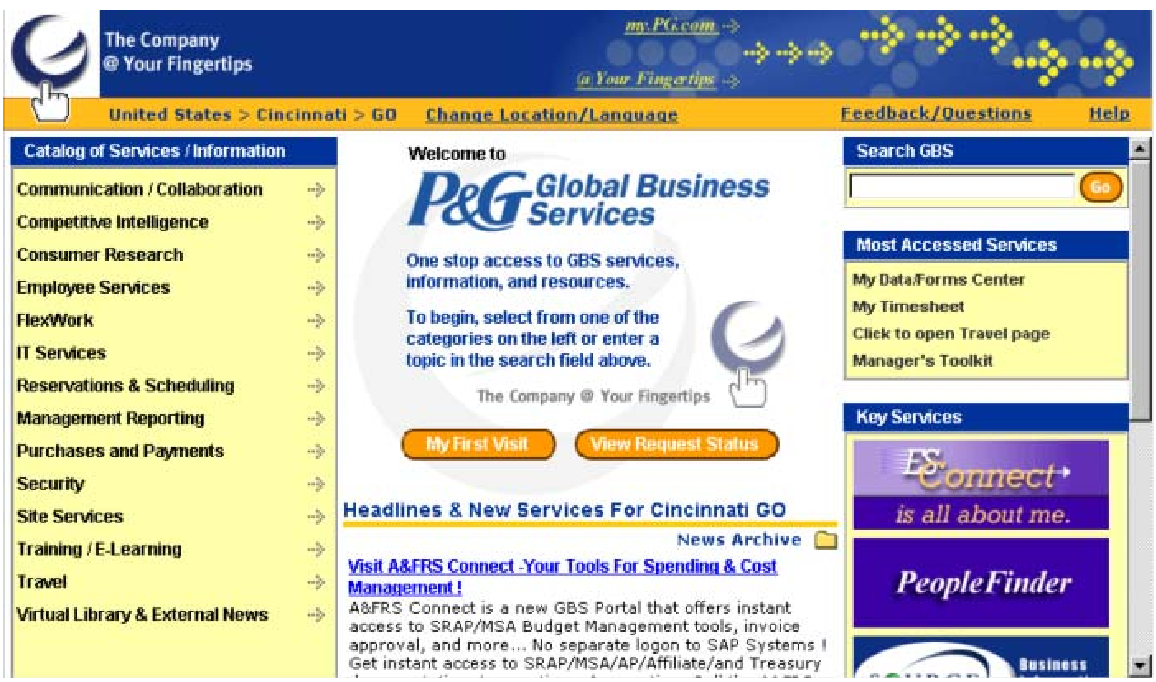
Assembling a team

One catalyst for redesigning the P&G intranet was that "employees told us they didn't know where to go for various services," says Gail Macke, leader of the employee-resources page. "Frankly, we'd gone a little 'brand crazy,'" with application titles such as "SourceOne," "A&FRSConnect," "BBP," "ESConnect," "Company at your Fingertips," "my.PG.com," and "eSupport."

For an analogy to the challenge users faced, "imagine a grocery store organized by manufacturer rather than by product category," says Gosselin. The naming was a legacy of an intranet architecture driven by internal P&G departments rather than employee needs.

Another redesign catalyst was the desire to update the intranet to reflect P&G's new visual-identity standard.

Pictured: The old P&G intranet was organized by department, and its design didn't match the new corporate-branding guidelines.



Pictured: Subsections in the old P&G intranet lacked navigation or design consistency with other subsections.

To start the redesign, P&G first needed to assemble a redesign team. At P&G, there's no one intranet team per se, says Gosselin, because "historically, the intranet has been a loose confederation of sites linked together across the enterprise." The employee-communications department, for example, maintains content for *P&G Inside*, the de facto intranet homepage, while HP, in conjunction with a P&G governance organization, makes technology-related intranet decisions.

For this redesign, the project team was composed of employees from a variety of P&G's groups. Gosselin, as brand manager for Global Business Services (GBS), which owns most corporate-wide content, led the project. The employee-communications department also participated, especially advising on news and visual-identity issues. Meanwhile, HP provided systems development and integration expertise, and the design firm Bridge Worldwide delivered the graphic design, based on the design it created for P&G's public-facing website (http://www.pg.com).

Because P&G's shared-services group maintains much of the intranet content, several of its managers also joined the redesign team to handle the *Employee resources*, *People management*, and *Business management* sections.

Setting the scope

With the team in place, members outlined a plan of attack. "We knew we wouldn't be able to redesign the thousands of pages of an organically grown corporate intranet all at once," says Gosselin. Instead, the first phase of the project — the winning redesign — would target about twenty of the largest corporate intranet sites. Others would be redesigned later.

The first step of the redesign plan was to learn from the existing site, so the team commissioned an expert review of the existing intranet, analyzed previous employee-satisfaction surveys, and benchmarked the functionality of popular Internet portals. At the same time, Bridge Worldwide began developing a new graphic design for the intranet.

The redesign team also began user research. "We needed to understand how employees approached the intranet," says Gosselin. Research began with card-sorting exercises, to discern a better information architecture.

All of that research "showed us employees visit the intranet for one of three key reasons," says Gosselin. Employees' primary activities were to look for news, HR information, or perform administrative tasks; to perform tasks associated with managing other employees; and to use business tools, data, and information relevant to their role in the company.

Based on the results, says Macke, "we decided we needed to move to a more role-based design, to make it easier for employees to find what they were looking for."

Through research, the team honed a new, role-based navigation structure, with six primary pages: news, employee resources, resources for managers, key business tools and data, personalized pages, and communities (individual sites for P&G departments and organizations).

To speed the project, "the team got agreement to do visual design and content organization through the use of an HTML- and Java-Server-Pages-based mockup design, which we used to demonstrate and 'sell' the new portal design to functional leaders and content owners," says McCabe. This step was necessary "to get them to agree to such a dramatic change, and to move their content to the new portal." This HTML and Java server pages (JSP) mockup, which was done only in English, sped up the process since it "let us test 90% of the design and functionality of the new site with users before making a significant investment in technology," says McCabe.

Launching a prototype

In January 2004, the redesign team created the HTML and JSP intranet prototype, then conducted usability testing on it in February and March. "The testing focused on the thirty tasks most commonly completed by an employee or manager, and our goal was to have users successfully complete 80% of the tasks," says Macke. However, with the first version of the prototype, "we didn't meet our goal."

To improve employees' success rate, the redesign team studied results from the prototype test to understand the current design's pitfalls and why users couldn't find the information. This research sent the information architecture design team back to the drawing board to make content easier to find. With a new prototype in hand, the team ran a second round of usability tests on both the prototype and the existing intranet to benchmark improvements. This time, task-completion rates for the new site met the needed 80% success rate and were significantly better than the current intranet.

Meanwhile, the team discussed technology needs with HP, which returned with an implementation proposal in April 2004. The timing here was a challenge for P&G. Management wanted the intranet updated with the new P&G branding quickly. Yet, the intranet redesign required significant changes to the content stores and to the technology, which the team would need to rigorously test and qualify before launching it to over 100,000 users. Technologically, there was no way to stage a phased rollout — it had to be done all at once.

Balancing the need for speed and new functionality "led us to use an older version of Plumtree that didn't allow as much design flexibility as we would have liked," says Gosselin. A newer version of Plumtree would bring many of the enhancements the team wanted, but would have taken much longer to implement. So, the team chose the older technology, knowing that "we could implement the next version, and get the improvements, without changing the role-based framework we were creating with the current redesign."

After the sign-off on the proposal, the HP team implemented the technological changes in Plumtree on the development server and in the Web-based CMS in less than two months. The team launched a pilot of the redesigned intranet in June. "We recruited 500 users, representative of our global user base, and tested it for about a month," says Gosselin. In July, the redesign team took those test results and made enhancements to the system on the development server.

Heralding the new intranet

With the new intranet release upcoming, P&G implemented an internal-marketing plan. “We wanted to give employees enough information and notification that the intranet was changing,” says Gosselin. The expectation was that the intranet would be intuitive enough to use without much training. Accordingly, “we struck a balance between informing and training.”

First, the team began describing the impending switchover through e-mail messages and articles posted on the old intranet.

The redesign team also released three marketing pieces: a poster with high-level information, which they hung in offices and plants; a quick-reference guide to the new intranet, in the form of a subway map; and a detailed brochure for heavy users, including administrative assistants. The team also sent the brochure to users who voiced concerns about navigation and e-mailed or called with content-finding problems. P&G was also mindful of “diffusion marketing”: early adopters (who tend to be technology-savvy) adopt a new offering quickly, and can champion it into widespread use and help educate later adopters.

Pictured: The redesign team released a poster for all P&G offices and plants, heralding the new intranet. The poster further reinforced the team's subway design theme.

The subway idea came from Bridge Worldwide, the agency responsible for the new intranet's graphic design. "The map communicated the benefits of the change perfectly — a faster, more organized, and more efficient route to the information you need," says Gosselin. The approach was also elegant, since "the concept was globally relevant" to the entire P&G user base.

The new site went live, over two weekends in August, to the more than 100,000 P&G employees.

TIMELINE

- 1996: Began development of prototype intranets for three groups: research and development, sales, and public-affairs employees
- 1997: Moved three initial sites into production; new sites were added organically
- 1998: Evolved the intranet from a launch page to a full-fledged communication tool, including high-level navigation to key intranet sites
- 2000: Introduced easier-to-use intranet authoring tools (no HTML or programming knowledge needed), which rapidly increased the number of intranet sites
- December 2000: Began rollout of Plumtree portal technology
- October 2001: Implemented Plumtree, which supports 60,000 employees worldwide
- May 2002: Upgraded to Plumtree Portal version 5.5 and made some cosmetic changes
- October 2003: Began latest redesign project
- December 2003: Bridge Worldwide delivered initial graphic designs for intranet
- January 2004: Developed HTML version of new site for testing purposes
- February–March 2004: Tested content usability
- March 2004: HP studied intranet's technology needs
- April 2004: HP and P&G agreed on technology to be implemented
- May 2004: HP finished intranet technology development
- June 2004: Launched global test pilot
- August 2004: Launched latest redesign, over two weekends, to 100,000 users

RESULTS

The new site launched in August 2004 and included customized content for more than 200 locations and sixteen languages. For consistency and standardization, several important corporate sites, previously standalone, now sport the intranet's design and are completely integrated into my.PG.com, making for a more seamless user experience.

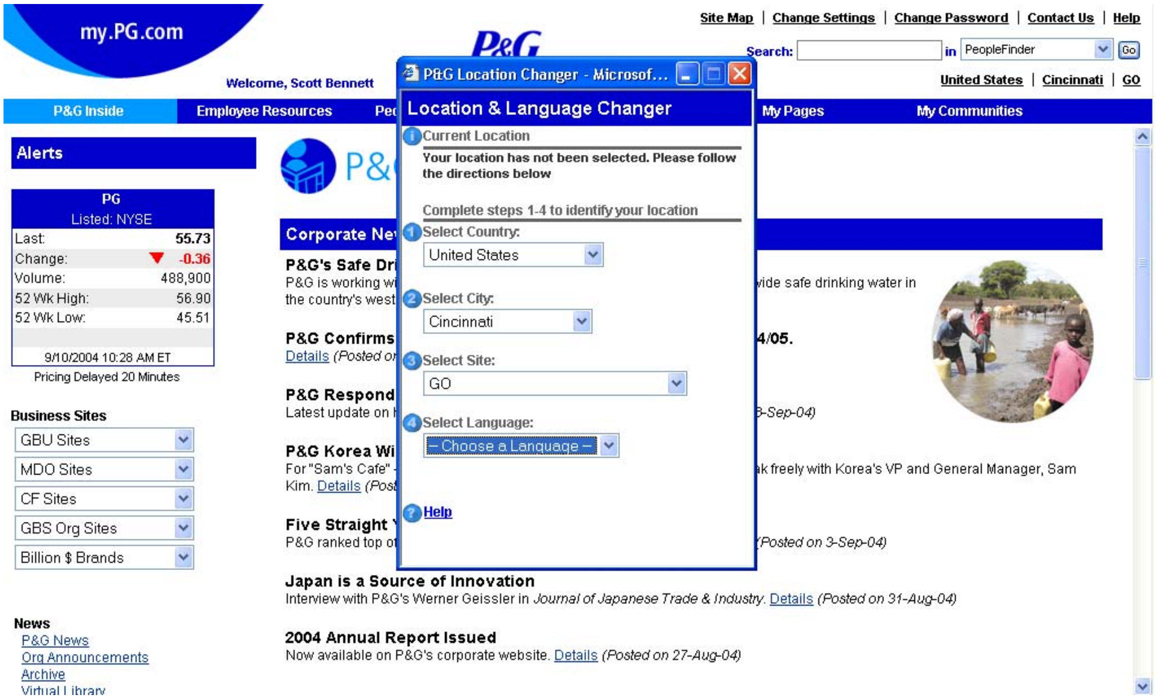
The redesign helps users browse more efficiently, and it replaced difficult-to-decode names of intranet sections with a simple, user-focused and color-coded information architecture. This helps guide users in finding everything from corporate news to employee and manager tools.

From start to finish, redesigning the intranet took about a year. One complication was the outsourcing deal with HP that took effect August 1, 2003. In addition to spending time on designing, testing, prototyping, and development, P&G and HP had to learn how to work together.

How did the launch go? "Having gone through a number of intranet design changes over the past eight years, this was the quietest in terms of employee complaints," says Nieman. The secret, she thinks, was two-fold. First, P&G conducted extensive usability testing prior to changing the design. Second, the project team developed an effective marketing campaign, alerting employees to the new intranet's impending launch, then supported them once the intranet appeared. "It's not that everybody was thrilled with the changes — there were the usual comments of 'why did you have to change this, I can't find anything' — but just at a much lower volume than before."

Beyond usability and interface design, new technology helped enhance intranet functionality. For example, honing the my.PG.com localization feature — which delivers content such as HR information, travel, and building services — took time and ingenuity.

"By changing the location, via drop-down menu selection, employees can see the content specific to that location, in the local language," says Donna Quinn, HP's P&G project manager. This approach reduces time spent needlessly paging through irrelevant information. While the localization concept was part of the initial redesign, implementing it was difficult. The drop-down localization solution was part of an application that had been integrated into the new my.PG.com; however, Plumtree came with a different localization solution that could not replicate the same functionality. HP tried merging the two localization settings but was unsuccessful. Ultimately, HP developed the code to allow the two settings to co-exist without negatively impacting each other or the end user.



Pictured: The new localization feature lets users select their location and language, then only see relevant information. This is useful because much of P&G's HR and business-location information, including vacation time and building services, is specific to a location or country.

Just how much did the redesigned site benefit user productivity? The redesign team tested for business-scenario-completion success rates on both the old and new sites, and, based on the results, "we expected a 20 to 30% productivity improvement over the old site," says Macke. Early results indicate that the redesign is meeting this goal.

Productivity improvements should apply to new employees as well. "We know that new hires need a lot of pay, benefits, relocation, and policy information when they join the company, and we tried to ensure they would be able to find this information easily," says Gosselin.

The new intranet platform will also let P&G keep adding new features, such as personalization. For example, the large *Business management* section will become more personalized. "The vision for the *Business management* page is to allow personalization so that what the employee sees is uniquely tailored to his or her role within the company," says Gosselin. For commercially focused job functions, such as sales and marketing, employees will get "dashboards" containing shipment and market-share information. Employees in logistics or operations will get access to plant and supply-chain data, and employees who work in market research will have access to analytical tools.

Personalization will continue with the *My Pages* and within each section — *Employee resources*, *People management*, and *Business management*. Currently, employees can customize the *My Pages* with about 100 portlets, such as a world clock, exchange rates, and news headlines from external sources. In the future, employees will get such things as local cafeteria menus; travel tips related to upcoming trips; a list of meeting rooms they've booked; and, on the *Employee resources* page, a list of new, internal jobs that match employees' specific search criteria. On the *People management* page, features will include pending salary-plan notifications, employee-review-management tools, and budget updates. On the *Business management* page, users will see personalized business cockpits or other job tools. Additional portlets for *My Pages* will also become available.

LESSONS LEARNED

Insights from Barb Nieman:

Warn employees of pending change. "Take the time to communicate — and keep communicating — what you're doing and why. Thanks to that approach, this was the quietist rollout in my eight years of intranet redesigns."

Follow feedback through to problem resolution. "When employees provide feedback, follow up promptly. Post-launch, track the types of questions you're getting, then address those concerns in periodic updates to employees, to improve the intranet's usefulness."

Insights from Donna Quinn:

Plan for the unexpected. "No matter how much initial usability testing you've done, there will always be additional surprises from the actual, working intranet. Always budget sufficient time during the project to tweak the design due to unforeseen problems."

Work with real end users. "When engineers and designers have access to real end users, they can ask questions and make suggestions that get to the root cause of a problem. So, instead of making assumptions about what an end user would understand — technical terms are often a culprit here for end users, and vice versa for engineers, who don't always understand what end users are trying to say — we allowed the two groups to speak directly. This approach helped create a more robust intranet."

Insights from Michelle Gosselin:

It's the process, not the tools. "Start testing with any type of prototype. Maybe it's a mockup in PowerPoint or HTML. Just don't wait for the final technology to be ready to start testing; you want to start iterating early to produce the best possible results."

Testing variety helps. "For best results, gather both qualitative and quantitative data, using many different types of employee-focused research, such as card sorts, surveys, and focus groups."

Protect the end user's best interests. "Often, content and application owners will push to give their material more prominence on the intranet, because all stakeholders think their material is the most important. Remember, however, you're the voice of the employee. Keep end users' needs foremost, and don't be afraid to push back when stakeholders make demands. Similarly, keep stakeholders informed throughout the redesign process, yet clearly define up front who makes the final decisions."

Insight from Dave Maly, part of Bridge Worldwide's creative team:

Simplicity is a design virtue. "One design challenge was making the intranet appeal to all of P&G's 98,000 employees — a diverse, global workforce. Our approach was to simplify the navigation, to highlight the wide variety of available information and tools. We also used graphic-design elements sparingly but efficiently, to avoid overshadowing the content. This economical approach has another benefit: it more consistently presents P&G's visual identity, regardless of language, across a number of sites."

American Electric Power

Using the intranet:

American Electric Power (AEP) is one of the largest electric utilities in the US, delivering electricity to more than 5 million customers in 11 states. AEP ranks among the nation's largest electricity generators, with nearly 36,000 megawatts of generating capacity. AEP also owns the nation's largest electricity transmission system, a nearly 39,000-mile network with more 765 kilovolt extra-high voltage transmission lines than all other US transmission systems combined. In 2006, AEP celebrated its 100th anniversary.

Headquarters: Columbus, Ohio (US)

Number of employees the intranet supports:
20,000

Production facility locations: 11 US states, extending from Michigan to Texas

Sales: $12.1 billion (2005)

Design team:
In-house (the Corporate Communications department's InterActive Media section)

Members:
William Amurgis, manager of intranet strategy; Joshua McClurg-Genevese, senior interactive designer; Don DeHoff, contract Web developer; David Azusenis, senior IT software developer; Terry Cowans, senior IT systems analyst; Jim Matson, principal IT systems administrator

SUMMARY

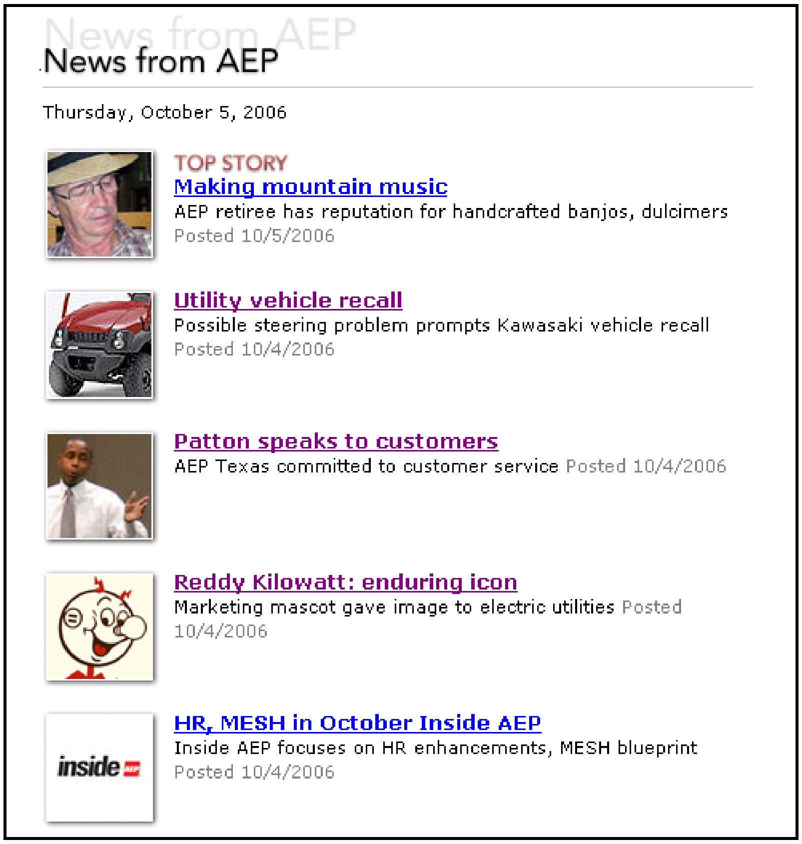
The idea for redesigning AEP's intranet began at a New York City conference, then evolved over dinner with the help of sketches on a paper tablecloth. With this foundation, a world-class design staff, and less than $100,000 in redesign funds, AEP went on to produce an unbeatable intranet. The intranet — dubbed AEP Now — supports AEP employees and management by enabling timely information exchange and numerous productivity enhancements.

AEP's intranet is a study in how good choices help produce an excellent intranet. In general, some of an intranet designer's most difficult decisions involve choosing what to place on the main homepage. For example, if a designer concedes to every department's requests, the homepage will likely end up too cluttered, making it hard for users to easily locate what they need.

At AEP, designers carefully managed such requests, allowing only the best items — that is, those best for the intranet's actual users — onto the homepage. In the end, they chose a combination of elements that communicate, motivate, and inspire employees.

Before making those choices, however, designers visited employees in their work environment and watched how they actually used the intranet. One surprise: in more remote offices, employees relied heavily on the intranet to read the daily corporate news. (This is not at all uncommon; an intranet's most-used applications often include the news and address book sections.)

Appropriately, then, AEP Now offers internally written news at the top of the homepage in the "News from AEP" section. The heading makes it abundantly clear that the news is written by and for people within the organization. On the front page, a clear thumbnail image — appropriate for the size allocated to it — appears with each internal story. When a story lacks a suitable image, a company logo appears.

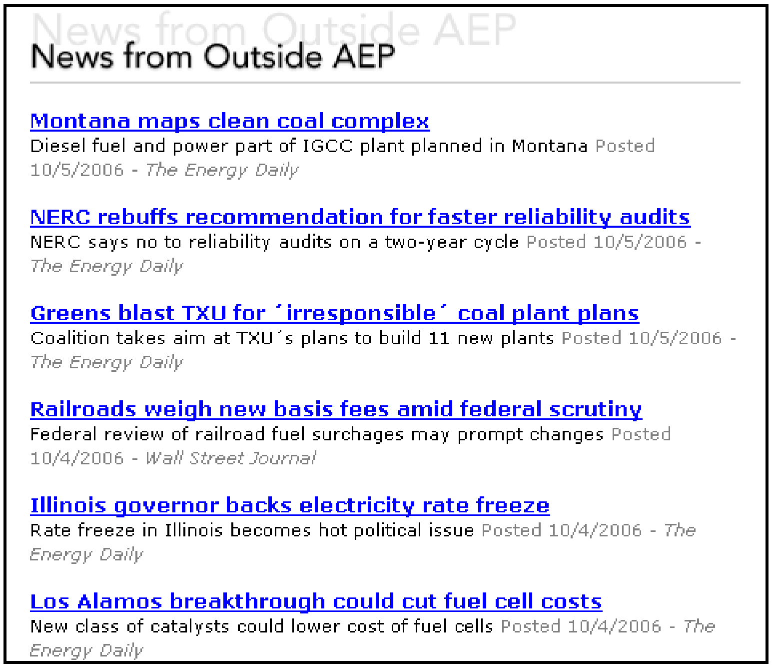


Pictured: The homepage's internal *News from AEP* section contains the most relevant news and data, the publication date, and supporting images, along with clear titles and descriptions.

AEP Now also offers news from outside the organization that relates to employees' needs. The *News from Outside AEP* section's clearly written headlines, sub-headlines, publication dates, and sources make it easy for employees to quickly scan for relevant news and stay abreast of energy industry changes and public opinion trends.

Providing employees with trusted, third-party sources for industry information is priceless: any organization offering a public service — not to mention a basic need — must ensure that it maintains high levels of public satisfaction.

Even so, providing this viewpoint does require an investment: AEP subscribes to various individual publishers — including the [Copyright Clearance Center](#) — to legally republish external news on AEP Now. A skillful staff writer, well versed in energy industry issues, determines which wire stories are most relevant and harvests news items every day, usually taking an hour or two to scan and republish them.



News from Outside AEP

Montana maps clean coal complex
Diesel fuel and power part of IGCC plant planned in Montana Posted 10/5/2006 - *The Energy Daily*

NERC rebuffs recommendation for faster reliability audits
NERC says no to reliability audits on a two-year cycle Posted 10/5/2006 - *The Energy Daily*

Greens blast TXU for ´irresponsible´ coal plant plans
Coalition takes aim at TXU´s plans to build 11 new plants Posted 10/5/2006 - *The Energy Daily*

Railroads weigh new basis fees amid federal scrutiny
Federal review of railroad fuel surchages may prompt changes Posted 10/4/2006 - *Wall Street Journal*

Illinois governor backs electricity rate freeze
Rate freeze in Illinois becomes hot political issue Posted 10/4/2006 - *The Energy Daily*

Los Alamos breakthrough could cut fuel cell costs
New class of catalysts could lower cost of fuel cells Posted 10/4/2006 - *The Energy Daily*

Pictured: The AEP Now homepage offers links to pertinent external news items, which a skilled editor harvests and posts each day.

In addition to the homepage news, the intranet's *News & Events* page offers internal and external news from the past seven days. The page also offers a link to the corporate calendar.


NOW
About AEP
News & Events
Business Units
Tasks & Tools
AEP-TV
The Agora
A-Z Index
Be informed
News & Events
Timely, accurate information about AEP and the energy industry at large.
Corporate Calendar
AEP Board of Directors meeting 10/24/2006
Annual Benefits Enrollment 10/25/2006 - 11/7/2006
4th Quarter Record Date 11/10/2006
More News Resources
News from AEP - last 7 days
News from Outside AEP - last 7 days

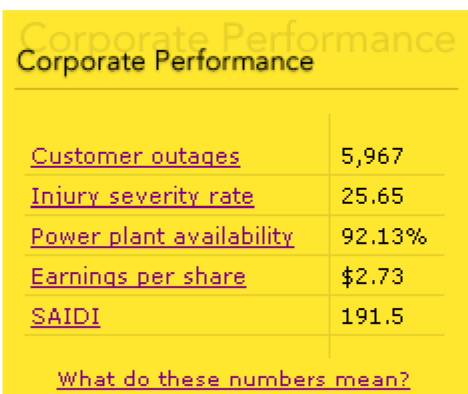
Pictured: Beyond the homepage news, the intranet offers a *News & Events* page with internal and external news from the past seven days. The page also includes links to the corporate calendar, a news archive (extending back to 1996, when the first intranet appeared), various internal publications, an e-mail subscription service, and more.

Knowing that the average employee visits the intranet at least once per day, the designers took the opportunity to use AEP Now as a tool for unifying and inspiring employees. Witness the primary corporate mission statement, which appears in the upper-right part of the homepage:

> *Bringing comfort to our customers, supporting business and commerce, and building strong communities.*

Users can click a link to read more details about the corporate mission. While displaying a mission statement might seem like a small feature, AEP dedicates a large part of the homepage — and "above the fold" real estate at that — to supporting the company's mission, and it's worth it. Reminding employees about the company's goals, and unifying their efforts, helps support employees in making the right choices throughout their day.

The homepage also includes corporate performance measures, which range from the company's stock price to injury severity rates. To obtain buy-in for listing these metrics on the intranet, the redesigners sat down with the necessary business groups and discussed the benefits of giving this data prominent homepage placement. The moves have gained widespread acceptance and even praise. For example, the head of AEP's Safety & Health group lauded the intranet team for featuring injury severity rates so prominently, making it clear to all employees that the company takes safety at least as seriously as its earnings. Unfortunately, most corporate performance measurements (aside from stock price and the number of customers without power at any given moment) are only updated monthly. Even so, this candid look at the organization's performance on several fronts is highly effective at helping reinforce corporate goals and indicating what might need improvement.

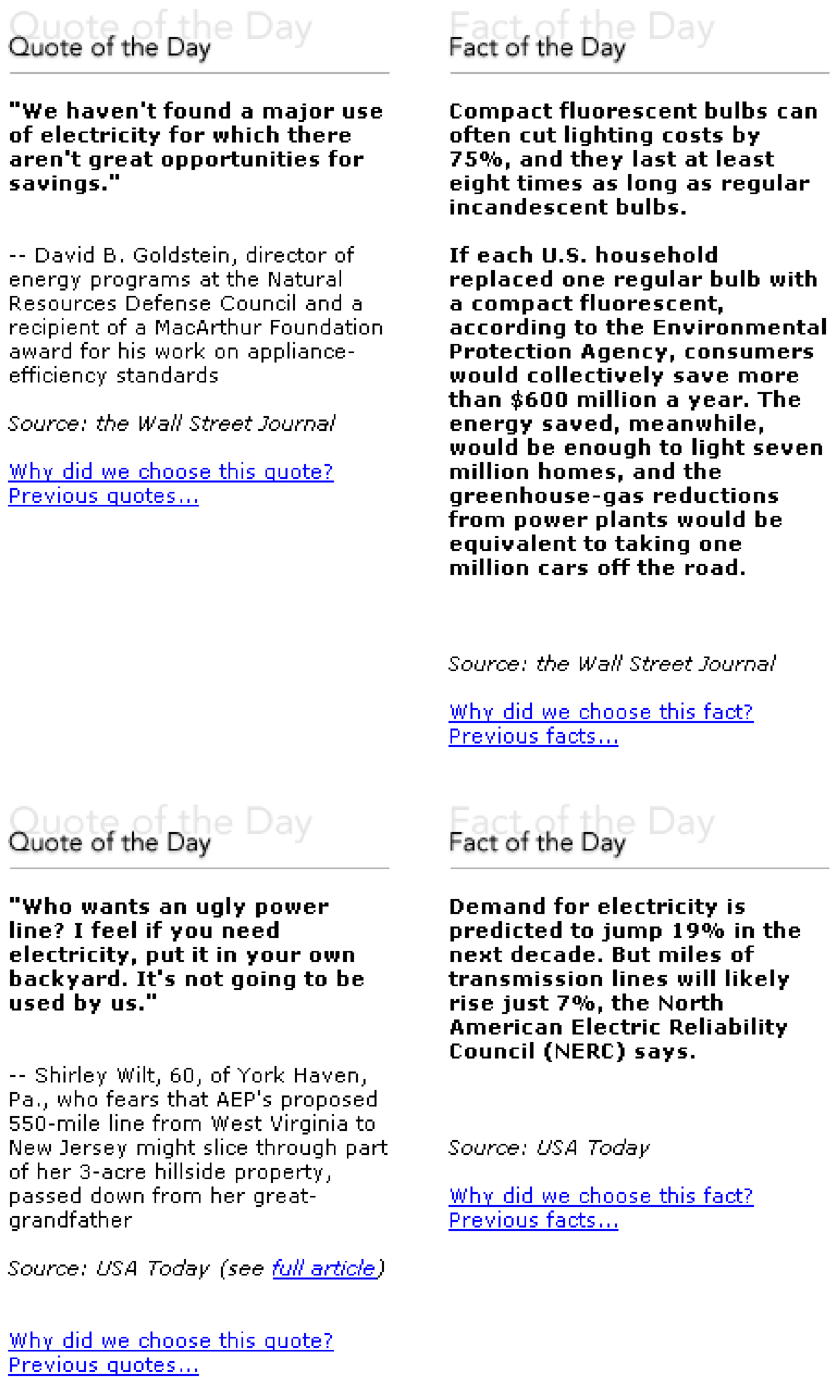


Pictured: The intranet homepage includes several corporate performance indicators, from customer outages (customers currently without power) to earnings per share.

The intranet also includes lighter items to further engage employees. For starters, the *Photograph of the Day* is the first major item on the homepage. The senior interactive designer chooses the photographs, which vary enormously in subject matter, on the basis of quality and beauty. The designer also writes a brief caption for each image. Many of these photos are simply awe-inspiring — especially those of a historical nature. AEP has a substantial photograph repository to draw from, and the many historical images nicely supported the organization's 100th anniversary celebration in 2006.

Pictured: The homepage *Photograph of the Day* draws from AEP's extensive in-house archive of current and historic photographs, such as this image of Thomas Edison.

The homepage also displays a *Quote of the Day* and *Fact of the Day*, which are fun, below-the-fold items. AEP's intranet manager selects these by scanning the day's business and industry news. This section also includes a link to a *Why did we choose this?* disclaimer stating that while AEP might not agree with the quote, it's an opinion from the public domain that's worthy of attention. Such efforts can help inspire employees to address or refute perceived issues; in any case, employees benefit from numerous perspectives on their industry.



Quote of the Day

"We haven't found a major use of electricity for which there aren't great opportunities for savings."

-- David B. Goldstein, director of energy programs at the Natural Resources Defense Council and a recipient of a MacArthur Foundation award for his work on appliance-efficiency standards

Source: the Wall Street Journal

Why did we choose this quote?
Previous quotes...

Fact of the Day

Compact fluorescent bulbs can often cut lighting costs by 75%, and they last at least eight times as long as regular incandescent bulbs.

If each U.S. household replaced one regular bulb with a compact fluorescent, according to the Environmental Protection Agency, consumers would collectively save more than $600 million a year. The energy saved, meanwhile, would be enough to light seven million homes, and the greenhouse-gas reductions from power plants would be equivalent to taking one million cars off the road.

Source: the Wall Street Journal

Why did we choose this fact?
Previous facts...

Quote of the Day

"Who wants an ugly power line? I feel if you need electricity, put it in your own backyard. It's not going to be used by us."

-- Shirley Wilt, 60, of York Haven, Pa., who fears that AEP's proposed 550-mile line from West Virginia to New Jersey might slice through part of her 3-acre hillside property, passed down from her great-grandfather

Source: USA Today (see full article)

Why did we choose this quote?
Previous quotes...

Fact of the Day

Demand for electricity is predicted to jump 19% in the next decade. But miles of transmission lines will likely rise just 7%, the North American Electric Reliability Council (NERC) says.

Source: USA Today

Why did we choose this fact?
Previous facts...

Pictured: Examples of the *Quote of the Day* and *Fact of the Day*, drawn from different days.

Current weather conditions with links to five-day forecasts, national radar, and extreme weather events appear just below the homepage fold. Employees can customize weather information to any of AEP's 50 largest office locations.

At many organizations, displaying weather on the homepage would be an inefficient use of valuable space. For the electric power industry, however, weather is crucial operating information. Inclement weather often produces downed lines and outages, while extremely hot or cold weather can produce a spike in demand and tax the transmission network. No surprise then that AEP even has on-staff meteorologists to provide forecasts and identify market opportunities. Also not surprisingly, the intranet weather sections consistently see some of the site's highest traffic levels.

Pictured: Weather information is crucial for many energy industry employees.


NOW
AEP Now Home | Help | Feedback | AEP.com
Search
Find
About AEP
News & Events
Business Units
Tasks & Tools
AEP-TV
The Agora
A-Z Index
Begin.
About this Photograph of the Day
AEP's Mission
Bringing comfort to our customers, supporting business and commerce, and building strong communities.
Learn more...
News from AEP
Thursday, October 5, 2006
TOP STORY
Making mountain music
AEP retiree has reputation for handcrafted banjos, dulcimers Posted 10/5/2006
Utility vehicle recall
Possible steering problem prompts Kawasaki vehicle recall Posted 10/4/2006
Patton speaks to customers
AEP Texas committed to customer service Posted 10/4/2006
Reddy Kilowatt: enduring icon
Marketing mascot gave image to electric utilities Posted 10/4/2006
HR, MESH in October Inside AEP
Inside AEP focuses on HR enhancements, MESH blueprint Posted 10/4/2006
Street Wise: 'Window dressing'
Street Wise: Utility stock movement -- 'window dressing?' Posted 10/3/2006
Dell laptop battery recall
Check your laptop battery for Dell recall Posted 10/3/2006
More news from AEP...
indicates that the story includes an AEP-TV video.
AEP Stock
$37.36
+0.30
+0.81% (detail)
Corporate Performance
Customer outages 5,967
Injury severity rate 25.65
Power plant availability 92.13%
Earnings per share $2.73
SAIDI 191.5
What do these numbers mean?
Now Featured on AEP-TV
Principles of Business Conduct
Weather
55° Showers
Columbus, OH
5-day forecast/customize
National radar map
Extreme weather events
News from Outside AEP
Montana maps clean coal complex
Diesel fuel and power part of IGCC plant planned in Montana Posted 10/5/2006 - The Energy Daily
NERC rebuffs recommendation for faster reliability audits
NERC says no to reliability audits on a two-year cycle Posted 10/5/2006 - The Energy Daily
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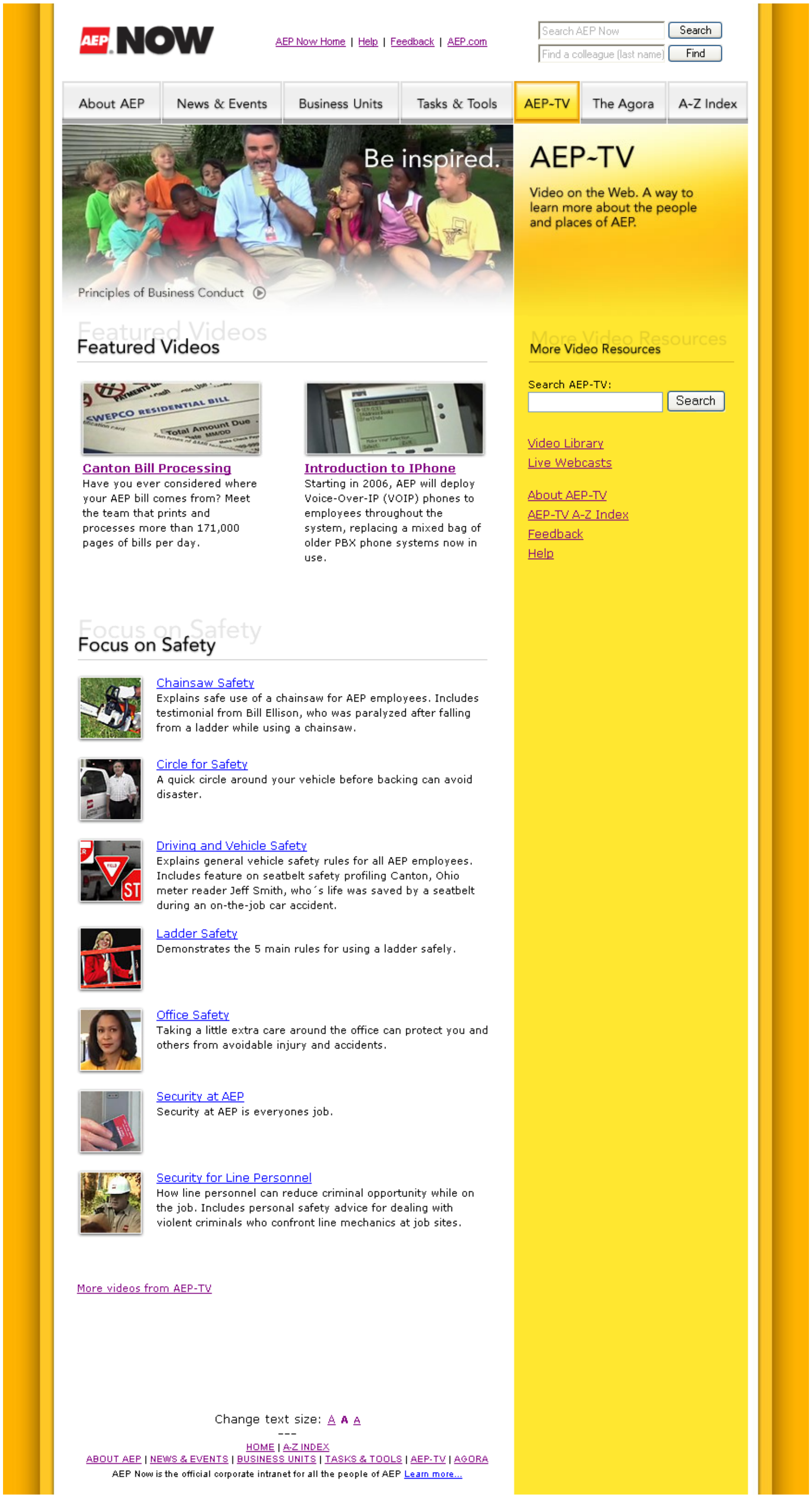
Illinois governor backs electricity rate freeze
Rate freeze in Illinois becomes hot political issue Posted 10/4/2006 - The Energy Daily
Los Alamos breakthrough could cut fuel cell costs
New class of catalysts could lower cost of fuel cells Posted 10/4/2006 - The Energy Daily
Advisory panel socks EPA on soot standards
Advisory panel criticizes EPA on fine particulate standards Posted 10/4/2006 - The Energy Daily
Ex-AEP trader pays to settle suit
AEP: Issues settled long ago in regard to defendant Posted 10/3/2006 - The Columbus Dispatch
Southern-Progress merger rumors -- they're back
Two big Southeast utilities in merger talks? Posted 10/3/2006 - The Energy Daily
Reliability, cost recovery issues slow IGCC rollout
Cost recovery, technology reliability still concerns Posted 10/3/2006 - The Energy Daily
More news from outside AEP...
Quote of the Day
"What we're advising utilities is that China is going to change the whole world picture. It's going to cause further delays in the U.S."
-- Bob McIlvaine, an environmental consultant for utilities, who notes that growing demand from China for environmental equipment for its large, expanding fleet of coal-burning power plants is driving up the cost of such projects in the U.S.
Source: Dow Jones Newswires
Why did we choose this quote?
Previous quotes...
Fact of the Day
According to projections by Bob McIlvaine, an environmental consultant for utilities, the number of U.S. power plants adding scrubbers, which cut sulfur dioxide pollution, will spike upwards in the coming years, from 1,572 megawatts of capacity in 2005 to 46,733 megawatts in 2010.
Meanwhile, China is seen adding 40,000 megawatts of new power plant capacity equipped with scrubbers each year through 2010, dwarfing the rate of U.S. scrubber installations.
By 2011, China will have 50% more scrubbers installed than the U.S.
Source: Dow Jones Newswires
Why did we choose this fact?
Previous facts...
Note: The AEP Now poll, previously located here, has moved to the right column of The Agora.
Change text size: A A A
HOME | A-Z INDEX
ABOUT AEP | NEWS & EVENTS | BUSINESS UNITS | TASKS & TOOLS | AEP-TV | AGORA
AEP Now is the official corporate intranet for all the people of AEP Learn more...

Pictured: The AEP Now homepage offers extensive features, including internal and external news, *AEP-TV*, and information about the corporate mission and corporate performance, plus relevant daily quotes and photographs.

Beyond well-selected images and the written word, AEP Now also communicates via another medium: *AEP-TV*. Creating an entire corporate television channel, even with an intranet team's help, is no small feat. AEP's intranet team, however, has the support of senior management, and this makes a world of difference.

To produce *AEP-TV*, the managers of three Corporate Communications department sections — the Intranet, the Streaming Media Group, and Video Services — work together. At AEP, these groups often support each other, making *AEP-TV*'s development much easier. What also helps: the managers have similar corporate interests (communicating relevant information to employees, and helping them do their jobs) and report to the same director. Finally, AEP has its own state-of-the-art studio, built to support streaming video and live webcasts.

In all videos, the managers must ensure that they're conveying the right information and projecting an appropriate corporate image. For example, if an employee in a video is not wearing the proper personal protection equipment, such as goggles or gloves, the scene must be edited or re-shot.


AEP NOW
AEP Now Home | Help | Feedback | AEP.com
Search AEP Now
Search
Find a colleague (last name)
Find
About AEP
News & Events
Business Units
Tasks & Tools
AEP-TV
The Agora
A-Z Index
Be inspired.
Principles of Business Conduct
AEP-TV
Video on the Web. A way to learn more about the people and places of AEP.
Featured Videos
Canton Bill Processing
Have you ever considered where your AEP bill comes from? Meet the team that prints and processes more than 171,000 pages of bills per day.
Introduction to IPhone
Starting in 2006, AEP will deploy Voice-Over-IP (VOIP) phones to employees throughout the system, replacing a mixed bag of older PBX phone systems now in use.
More Video Resources
Search AEP-TV:
Search
Video Library
Live Webcasts
About AEP-TV
AEP-TV A-Z Index
Feedback
Help
Focus on Safety
Chainsaw Safety
Explains safe use of a chainsaw for AEP employees. Includes testimonial from Bill Ellison, who was paralyzed after falling from a ladder while using a chainsaw.
Circle for Safety
A quick circle around your vehicle before backing can avoid disaster.
Driving and Vehicle Safety
Explains general vehicle safety rules for all AEP employees. Includes feature on seatbelt safety profiling Canton, Ohio meter reader Jeff Smith, who´s life was saved by a seatbelt during an on-the-job car accident.
Ladder Safety
Demonstrates the 5 main rules for using a ladder safely.
Office Safety
Taking a little extra care around the office can protect you and others from avoidable injury and accidents.
Security at AEP
Security at AEP is everyones job.
Security for Line Personnel
How line personnel can reduce criminal opportunity while on the job. Includes personal safety advice for dealing with violent criminals who confront line mechanics at job sites.
More videos from AEP-TV
Change text size: A A A

HOME | A-Z INDEX
ABOUT AEP | NEWS & EVENTS | BUSINESS UNITS | TASKS & TOOLS | AEP-TV | AGORA
AEP Now is the official corporate intranet for all the people of AEP Learn more...

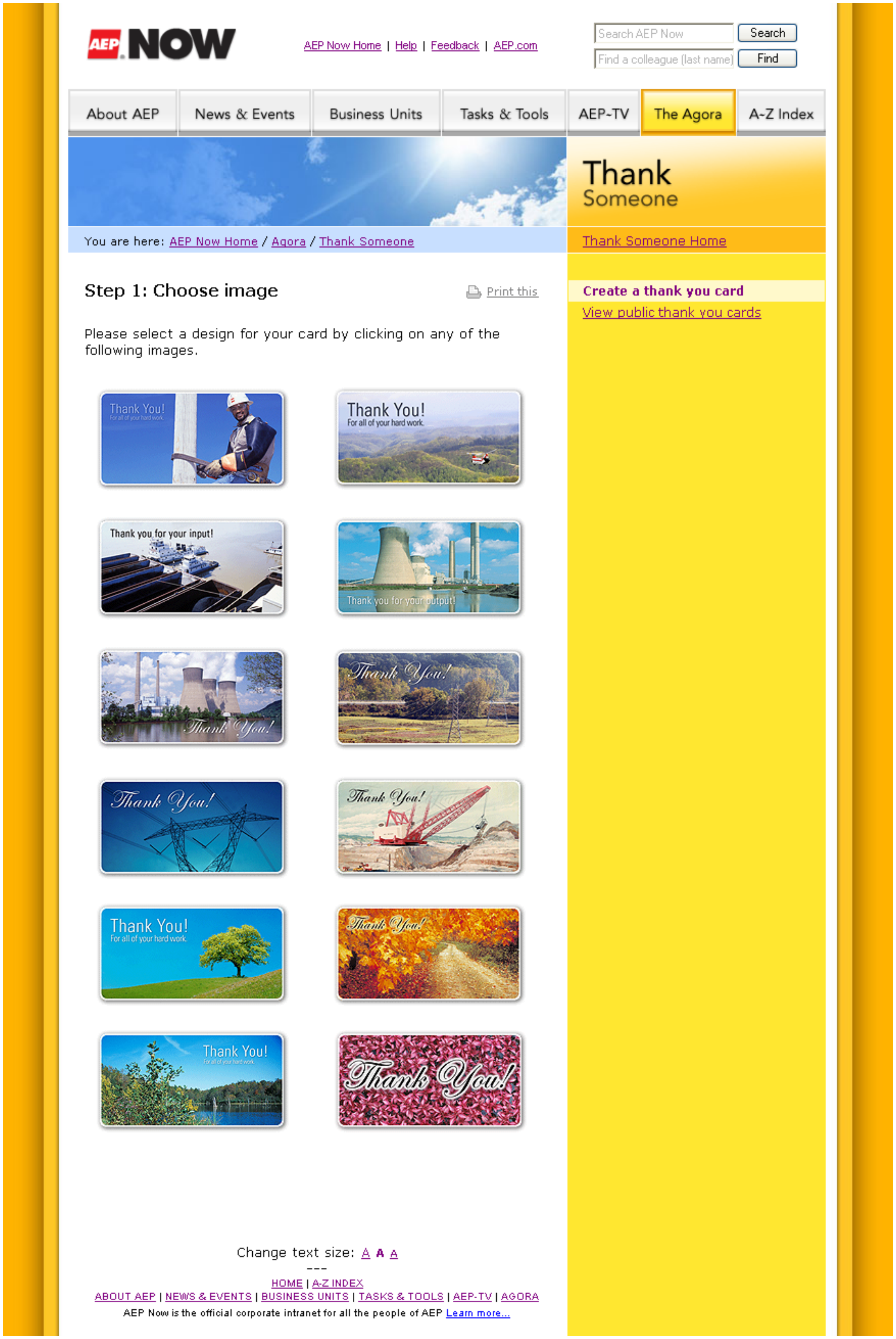
Pictured: *AEP-TV* is a joint production of three teams that are wholly invested and report to the same director.

Pictured: A details page for a particular video includes options for watching the video, as well as ordering, e-mailing, or downloading it.

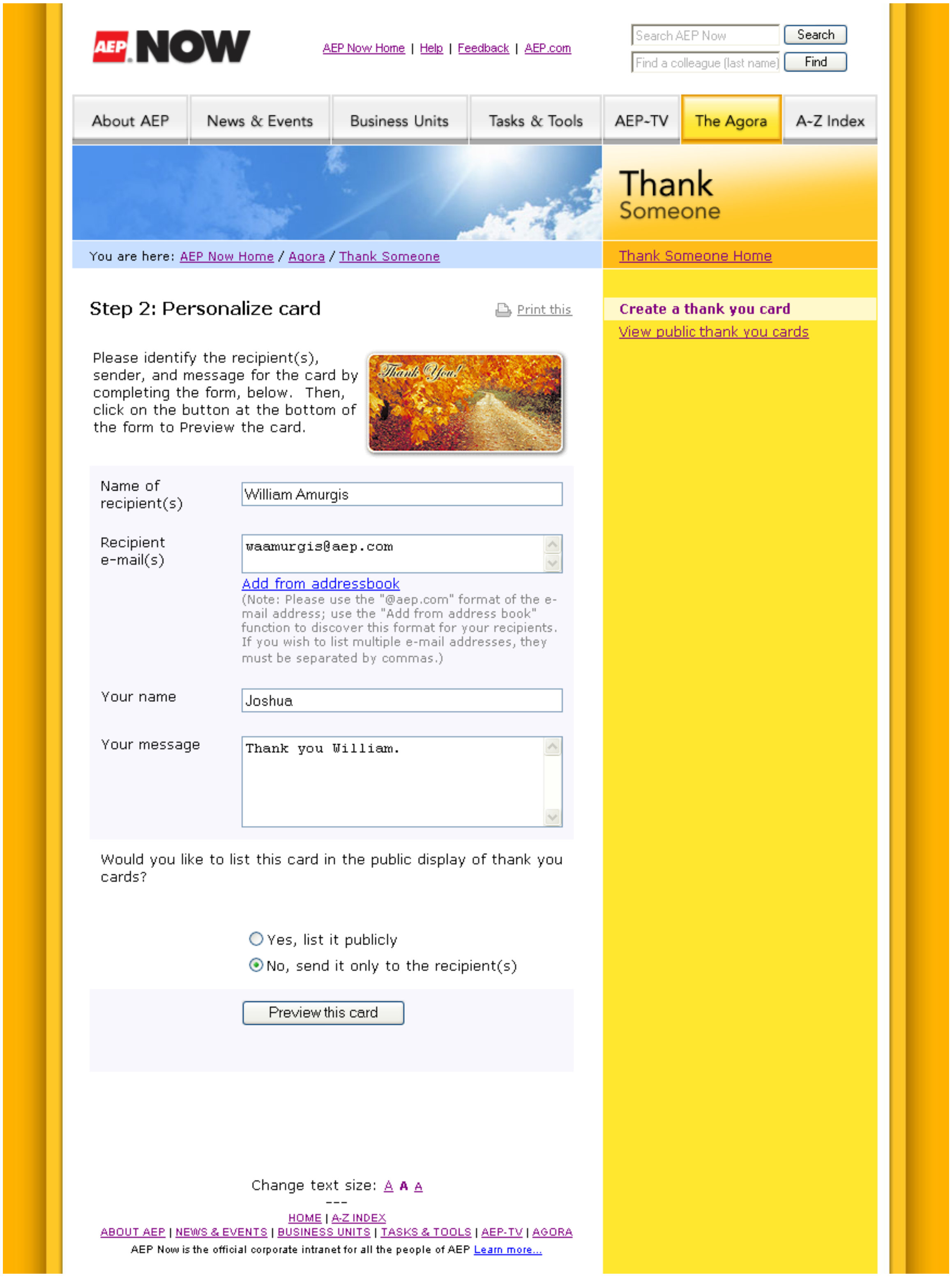
What better way to make a colleague feel good than by praising his or her work? The AEP intranet helps employees do this by offering online thank-you cards. Designers developed these e-cards to encourage expressions of appreciation for a job well done. Appropriately, this feature doesn't include birthdays or other life events.

This approach, and the offering itself, is beneficial for several reasons, including:

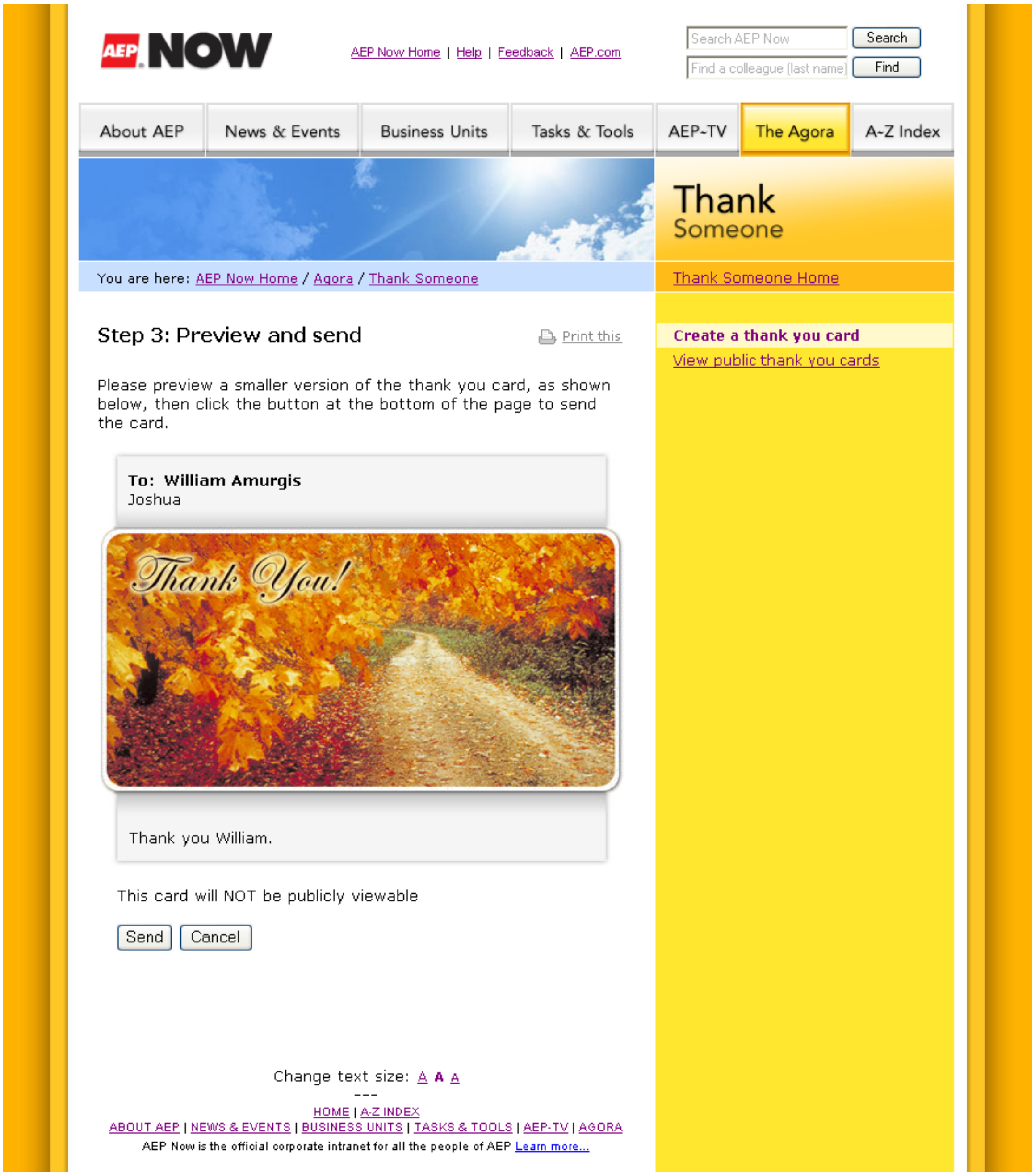
- Often, employees don't have the opportunity to thank a colleague in person, but will do so in an online setting.
- The recipient is notified by e-mail, but the cards can be made public. As a result, those thanking someone can also let others — including managers — know about a job well done.
- Offering the cards reminds people to thank colleagues, even if they don't actually send a card.
- The cards are attractive, and relate to the energy industry and energy jobs: they show power lines, cranes, and even someone working high atop a pole. In other words, the card images are not just generic smiles, hearts, and flowers.
- The interface for sending a card is fast and easy.



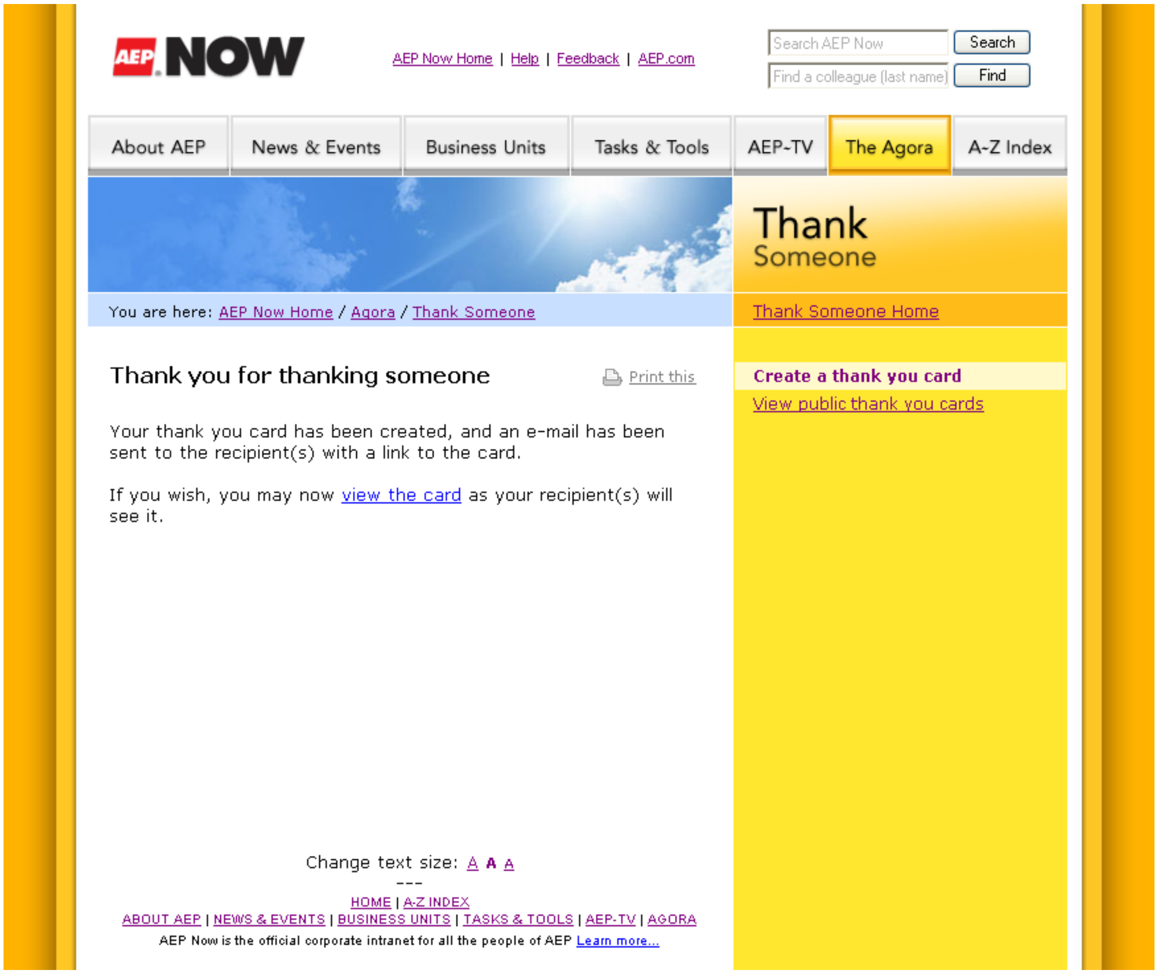
Pictured: Available thank-you card images are not only highly attractive, but also relevant to the energy and power industry, as well as specific jobs.



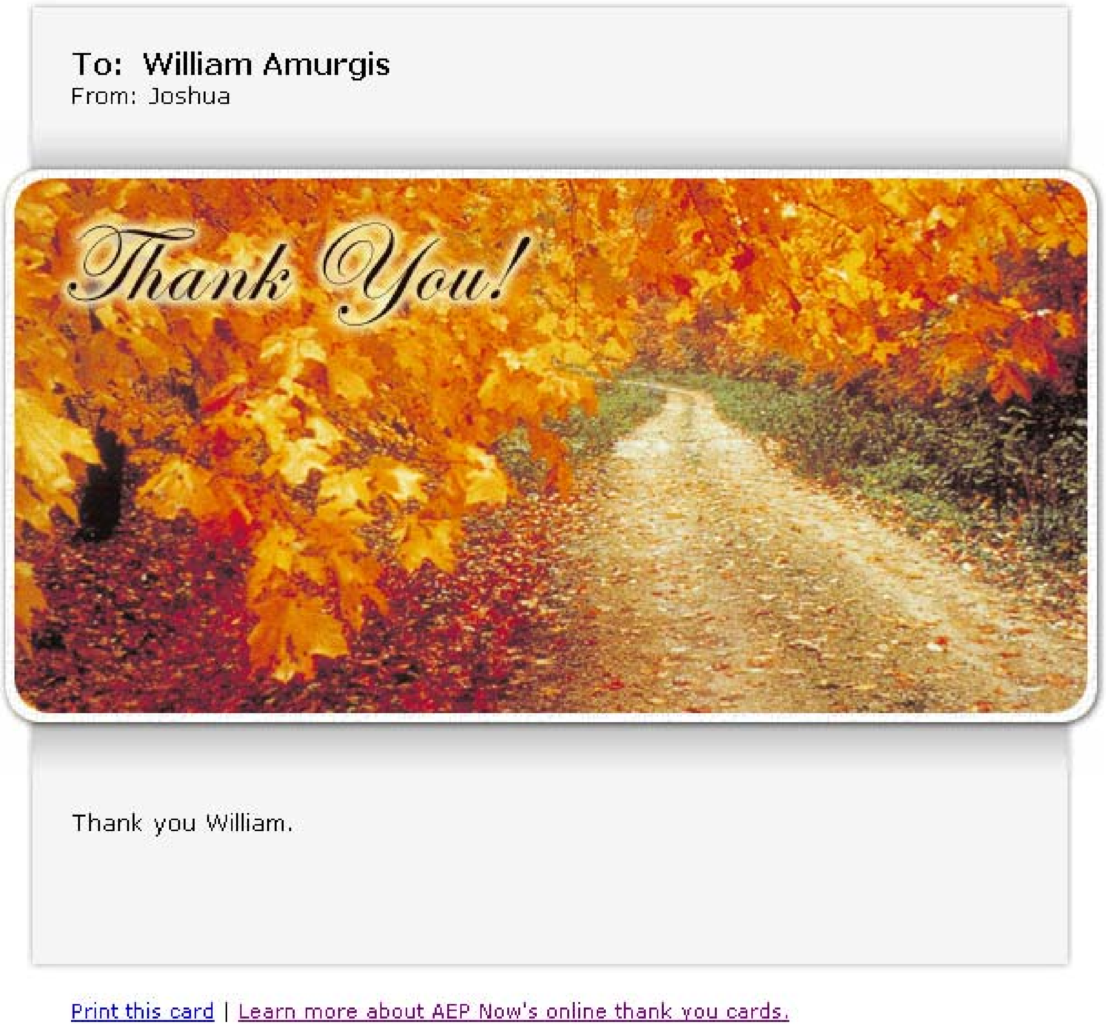
Pictured: After selecting a card image, users fill in a simple form, indicating the recipient, sender, sentiment, and whether the card should be made public.



Pictured: A final preview screen allows a sender to proof the card and adjust whether the card will be public or private.



Pictured: After sending the card, a confirmation screen thanks the sender — a nice touch. The sender can also view the card as the recipient will see it.



Pictured: The e-card process is complete when the recipient sees the card with the image, sentiment, and sender's name.

The site includes one special feature at the bottom of intranet pages. Designers added a *Change text size* option, remembering that with an aging workforce comes a collective deterioration in eyesight. This is a highly useful feature, as anyone over 40 will generally attest.

Pictured: Designers added different sized A's to the bottom of all intranet pages, making it easy for people to view the text in a larger or smaller size.

In closing, AEP's intranet benefits come from thorough planning, management support, and its designers, who have both substantial design expertise and wide-ranging industry knowledge and experience. AEP Now informs and inspires employees, beginning on the homepage and continuing throughout the site.

URL AND ACCESS

The intranet's URL is http://AEPnow/. "The name was chosen 10 years ago, at the intranet's inception, to emphasize the immediacy of the medium relative to print," notes William Amurgis, AEP's manager of intranet strategy. By default, AEP Now is the start page for all employees' browsers, though they can change the start page.

To better communicate the intranet's purpose, and hopefully retain users, the intranet prominently features the word *Begin*. "Even if employees open their browsers with the intent of going elsewhere, we wish to convey fresh, compelling information before they continue on their way," says Amurgis.

An abridged intranet version is also available on the Internet (http://AEPnow.com/), and features news and benefits-related information. This site, however, is maintained separately, and often results in duplicate effort. "Our goal in 2007 is to enable access to the internal version from the outside, and also to create a mobile version optimized for handheld devices such as the BlackBerry," he says.

CONTENT MANAGEMENT

CMS, Templates, and Directing Design

The AEP content CMS is largely custom-developed. Still, the database-driven CMS evolved organically, and is due for a redesign.

To modify content, content managers either use custom administrative interfaces or directly edit individual Web pages.

Departmental sub-site owners maintain their own intranet portions; the intranet team recommends that they use Macromedia Contribute, and several dozen currently do. "This page editor enables site owners to maintain the content of their sites, but shields them from altering the design or navigation," says Amurgis.

As this arrangement suggests, the core intranet team is somewhat separate from the sub-site teams. "I manage the core intranet, which consists of broad, corporate information, while the business units are responsible for their own sub-sites," he says. Some business units request direct help from the core intranet team. Others use templates designed by the core intranet team, while still others completely build their own sites — and occasionally restrict access to members of their own business unit. "More often than not, though, business units come to us and ask us to build their sites," he says. That approach is preferable, since it ensures greater consistency of intranet page design.

Manual News Feeds

In terms of the outside news featured on the site, the team intentionally eschews automated news feeds. "We subscribe to news services, and pay for the rights to republish news, but we choose and cut/paste the stories ourselves," says Amurgis. "I've never seen an automated news feed that I really liked. Either the volume was off — too much, too little — or the display was convoluted. I prefer our manual approach. To me, there's no automated replacement for a skillful editor who knows the key issues and can determine which stories are most relevant."

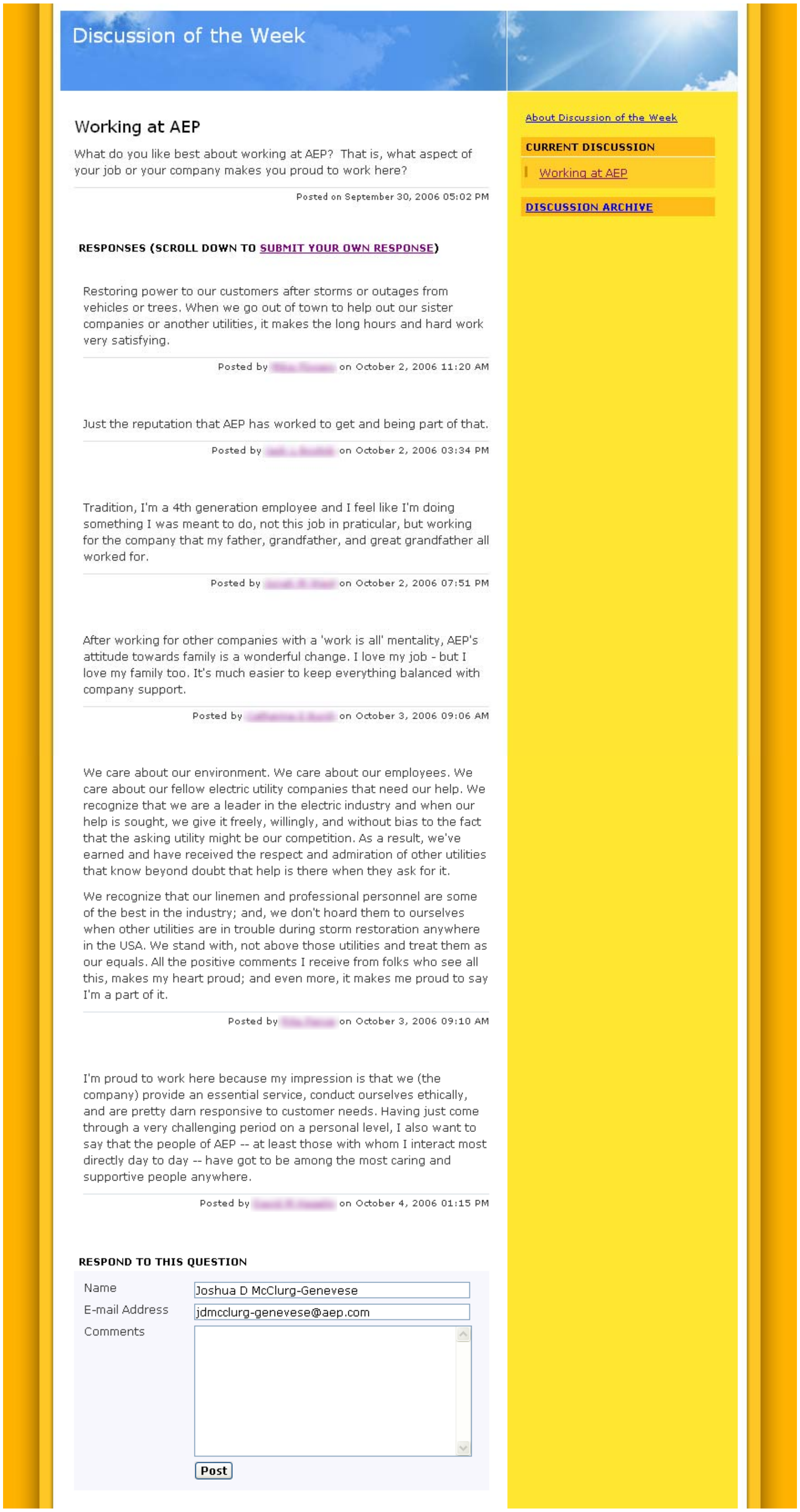
For harvesting and republishing stories, Amurgis says AEP maintains agreements with the Copyright Clearance Center and various individual publishers. One AEP Corporate Communications staff member — who's not actually part of the formal intranet team — harvests stories daily. "Personally, I love that we're able to offer so much external news, since many of the company's decisions are understandable in the context of broader developments within our industry or the economy. We don't operate in a vacuum, and public opinion is vital to us since we offer a public service and a basic human need," notes Amurgis.

TECHNOLOGY

Core Technology

The intranet was built primarily using Photoshop, Dreamweaver, and .NET, and — by design — no portal software. "To us, technology is just a tool to help us achieve our vision — we never let the technology dictate the design to us," says Amurgis. "This is one reason we abhor portal software."

The intranet runs on three Web servers, each of which includes Windows Server 2003 R2 64-bit, four dual-core AMD 2.2 GHz processors, 8 GB RAM, Gigabit NIC, and load-balancing via Cisco Content Switches. According to Jim Matson, a senior architect within AEP's IT group, "content is uploaded via FTP to a central staging server where replication software pushes it out to all production Web servers." The blog and discussion environments run on Movable Type software.



Discussion of the Week

About Discussion of the Week

CURRENT DISCUSSION

Working at AEP

DISCUSSION ARCHIVE

Working at AEP

What do you like best about working at AEP? That is, what aspect of your job or your company makes you proud to work here?

Posted on September 30, 2006 05:02 PM

RESPONSES (SCROLL DOWN TO SUBMIT YOUR OWN RESPONSE)

Restoring power to our customers after storms or outages from vehicles or trees. When we go out of town to help out our sister companies or another utilities, it makes the long hours and hard work very satisfying.

Posted by [illegible] on October 2, 2006 11:20 AM

Just the reputation that AEP has worked to get and being part of that.

Posted by [illegible] on October 2, 2006 03:34 PM

Tradition, I'm a 4th generation employee and I feel like I'm doing something I was meant to do, not this job in praticular, but working for the company that my father, grandfather, and great grandfather all worked for.

Posted by [illegible] on October 2, 2006 07:51 PM

After working for other companies with a 'work is all' mentality, AEP's attitude towards family is a wonderful change. I love my job - but I love my family too. It's much easier to keep everything balanced with company support.

Posted by [illegible] on October 3, 2006 09:06 AM

We care about our environment. We care about our employees. We care about our fellow electric utility companies that need our help. We recognize that we are a leader in the electric industry and when our help is sought, we give it freely, willingly, and without bias to the fact that the asking utility might be our competition. As a result, we've earned and have received the respect and admiration of other utilities that know beyond doubt that help is there when they ask for it.

We recognize that our linemen and professional personnel are some of the best in the industry; and, we don't hoard them to ourselves when other utilities are in trouble during storm restoration anywhere in the USA. We stand with, not above those utilities and treat them as our equals. All the positive comments I receive from folks who see all this, makes my heart proud; and even more, it makes me proud to say I'm a part of it.

Posted by [illegible] on October 3, 2006 09:10 AM

I'm proud to work here because my impression is that we (the company) provide an essential service, conduct ourselves ethically, and are pretty darn responsive to customer needs. Having just come through a very challenging period on a personal level, I also want to say that the people of AEP -- at least those with whom I interact most directly day to day -- have got to be among the most caring and supportive people anywhere.

Posted by [illegible] on October 4, 2006 01:15 PM

RESPOND TO THIS QUESTION

Name: Joshua D McClurg-Genevese

E-mail Address: jdmcclurg-genevese@aep.com

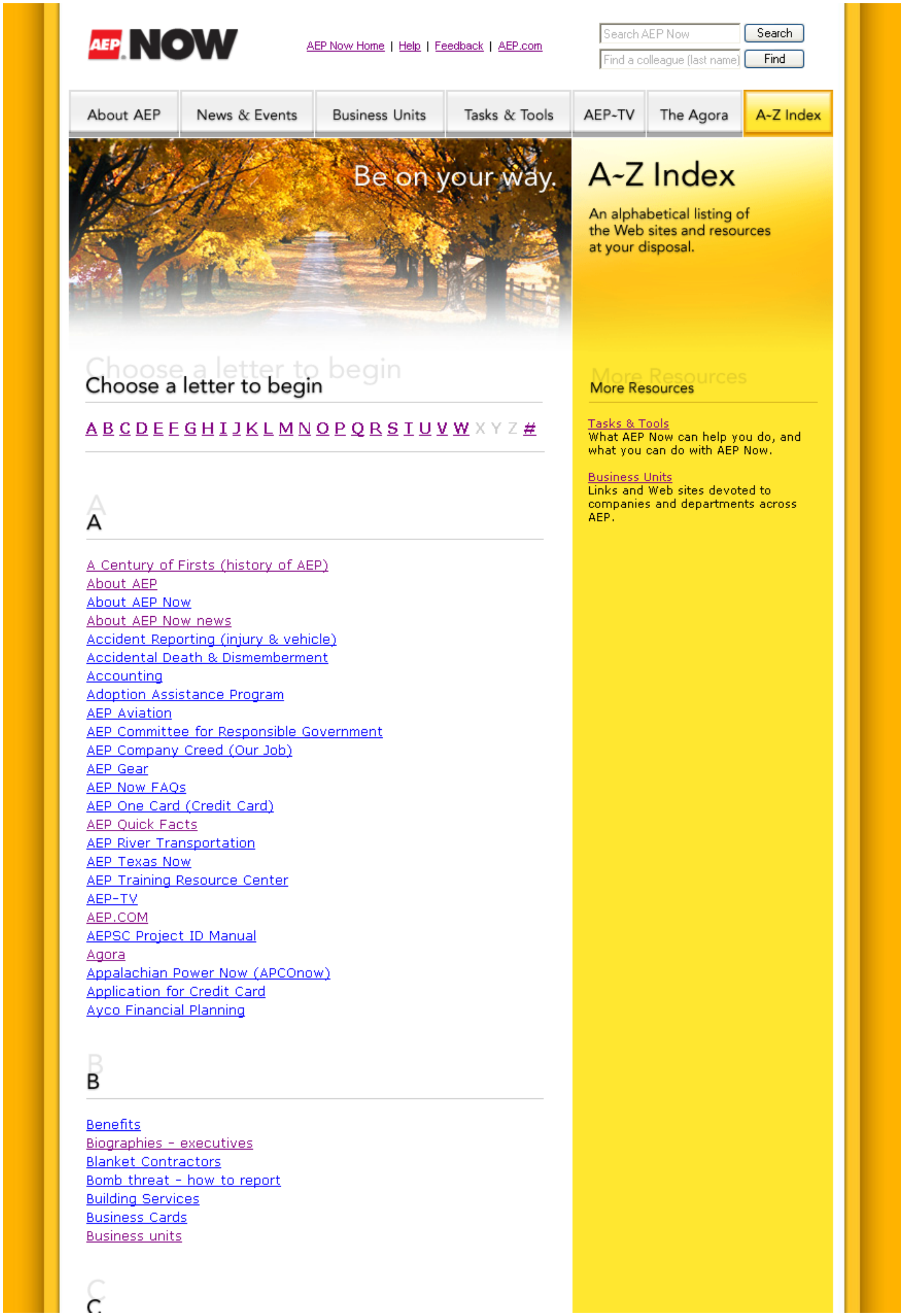
Comments

Post

Pictured: The *Discussion of the Week* page, showing several responses to the week's question. AEP uses blog software to manage the discussion, and pre-fills an employee's identity to avoid potential abuse.

The site's *Search* is supported by an internally hosted Google Search Appliance. How well does the appliance work? "Frankly, I'm pleased with the Google search," says Amurgis. The appliance, installed about three years ago, replaced a "substandard search" tool. Adding a feature with the name "Google" in its title was — at least partially — an attempt to win users back to intranet search, because many had grown to distrust it. In addition, "I realize there are other search tools out there, maybe even with better features, but the Google search interface is familiar and comfortable," he says.

Interestingly, the AEP intranet's *A–Z Index* and navigation regularly receive more traffic than the search box — a sign that the index and navigation are well designed for users' needs.



Pictured: The *A–Z Index* is an alphabetical directory of internal and external Web sites. In previous versions of the corporate intranet, this was the only form of navigation available beyond a few quick links.

Ajax Workaround for IDs

The site currently employs Ajax, albeit only behind the scenes. "In the *My Tasks & Tools* area of the *Tasks & Tools* page, we needed the ability to sense the identity of employees, in order to display their custom list of links," says Don DeHoff, AEP's contract Web developer. "Previous experience told us that if we tried to directly detect an employee's network ID by turning off anonymous access to this page, some might receive a login prompt. This was undesirable, since we wanted even those employees who did not or could not login to the network to benefit from the common tasks we listed for them."

To circumvent this problem, DeHoff hammered out a hybrid approach using Ajax. "When employees first encounter the *Tasks & Tools* page, they are presented with a message saying they have no tasks defined, and a link to *Manage your tasks*. This links to a page where we detect the user's network ID, thus eliminating the possibility of a log-in prompt on the homepage," he says.

This process also saves a cookie with the detected ID to the employee's PC. Then, on future page visits, JavaScript attempts to read the cookie. "If it finds this cookie, it requests the employee's custom task list, via an out-of-band call to a .NET page, which queries the employee's tasks from the database. These links are then displayed on the page using JavaScript to replace the contents of a <span> tag," he says.

GOALS AND CONSTRAINTS

Goals

AEP had three specific goals for the AEP Now redesign:

- Make the site more attractive
- Decrease page download times
- Create a more coherent navigation system

Constraints

In terms of constraints, "I do not believe in constraints," says Amurgis. "Most people will tell you that time, staff, and money are key constraints. I respectfully disagree. We can always prioritize whatever resources we have, based on a clear understanding of corporate strategy and values, and postpone — or shed — work that is deemed to be lower priority. In other words, we will do as much as we can, and ensure that what we do is of the highest value."

BASIC INTRANET FEATURES

The AEP intranet offers many features, including:

- Corporate and industry news, updated several times each workday
- Market and weather feeds
- Site search, employee lookup, and an online org chart
- An extensive on-demand video library and frequent live webcasts
- Online time and expense reporting, benefits management, and travel-arrangement tools
- A photo gallery and other materials to celebrate AEP's centennial

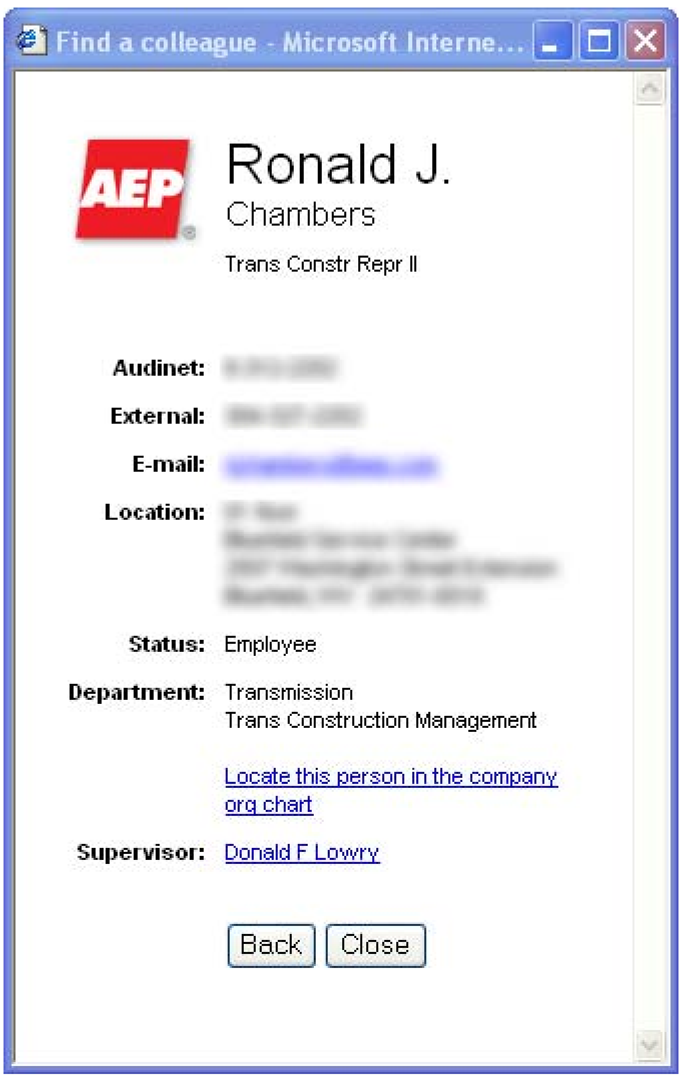
- Collaborative tools, including discussion, items for sale, and online thank-you cards

USERS

AEP has almost 20,000 employees in 11 US states, extending from Michigan to Texas. These employees run power plants, manage and maintain the power grid, serve power customers, and staff all related corporate and administrative functions.

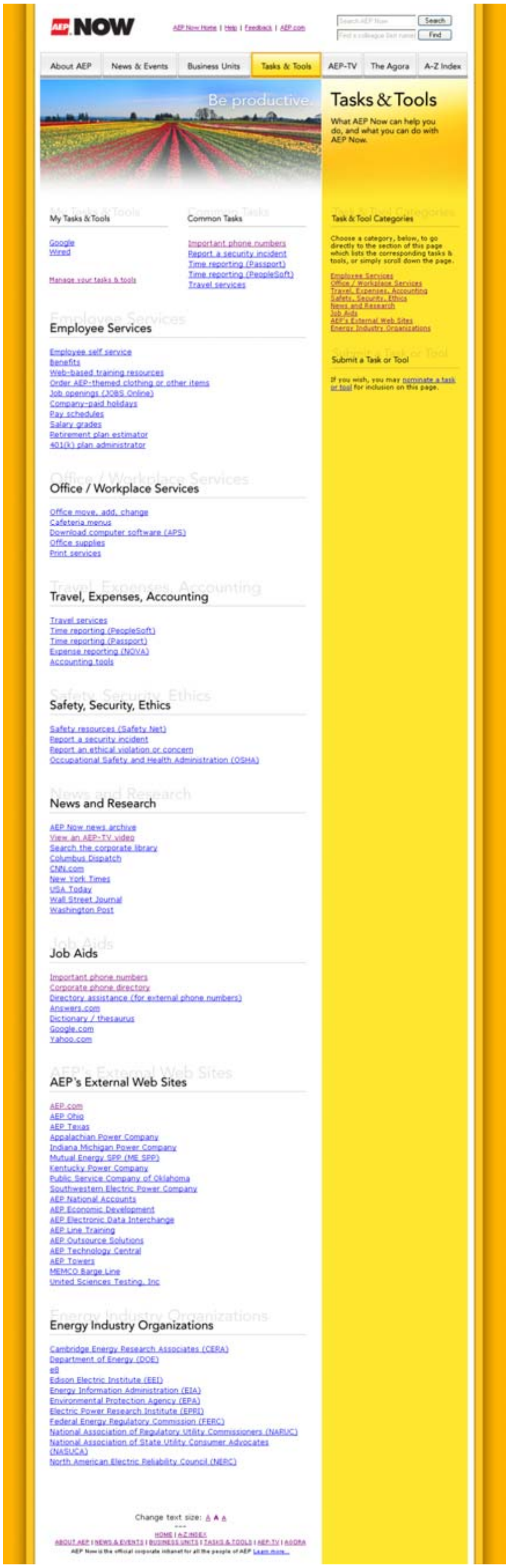
USER TASKS

"Common tasks, to me, are synonymous with corporate tasks," says Amurgis. "That is, they should appeal to everyone across the great expanse of our corporation, providing value to all while also instilling the sense that we are all part of a larger whole." Accordingly, all intranet features, including news, the stock price, *AEP-TV*, *About AEP*, *Find a Colleague*, and the *Agora* collaboration area should reinforce the notion of a larger whole. "No matter the location — and AEP serves some very small communities — you can feel a part of the entire corporation through AEP Now," he says, adding that all the same features and content are accessible regardless of office location.



Pictured: The *Find a Colleague* page, showing the information returned after searching for a particular colleague. The page includes links to the target person's e-mail address, location in the online org chart, and supervisor.

The most common employee intranet tasks are reading the news, time-reporting (a requirement for all employees), accessing market information, and checking the weather. The business unit sub-sites support most mission-critical employee tasks, including power-outage management, power plant availability, and benefits enrollment. For the core intranet, "our focus is on the common, corporate tasks — and to be a conduit to the business-unit-specific tasks," says Amurgis.



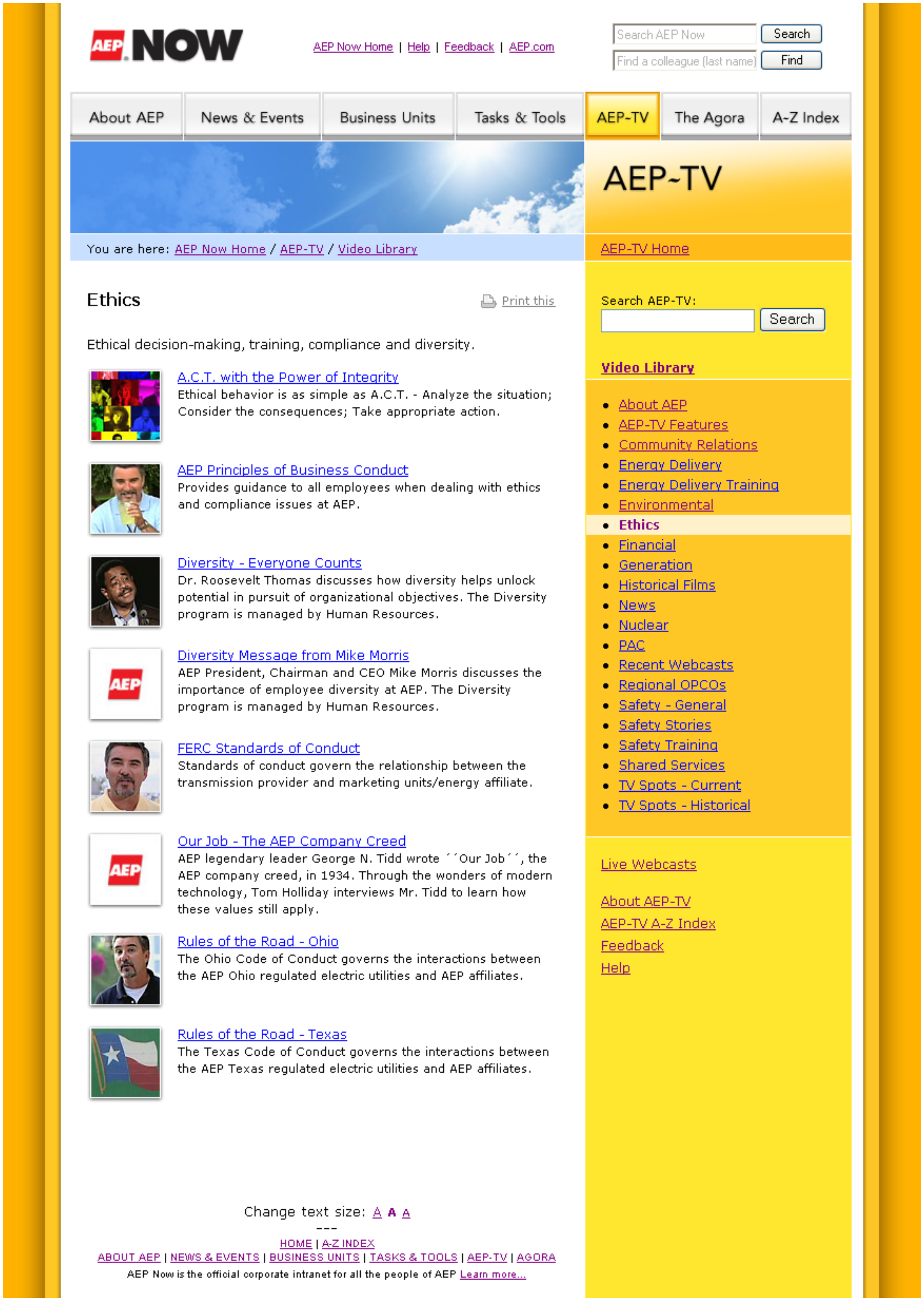
NOW
AEP Now Home | Help | Feedback | AEP.com
Search
Find
About AEP
News & Events
Business Units
Tasks & Tools
AEP-TV
The Agora
A-Z Index
Be productive.
Tasks & Tools
What AEP Now can help you do, and what you can do with AEP Now.
My Tasks & Tools
Google
Wired
Manage your tasks & tools
Common Tasks
Important phone numbers
Report a security incident
Time reporting (Passport)
Time reporting (PeopleSoft)
Travel services
Task & Tool Categories
Choose a category, below, to go directly to the section of this page which lists the corresponding tasks & tools, or simply scroll down the page.
Employee Services
Office / Workplace Services
Travel, Expenses, Accounting
Safety, Security, Ethics
News and Research
Job Aids
AEP's External Web Sites
Energy Industry Organizations
Submit a Task or Tool
If you wish, you may nominate a task or tool for inclusion on this page.
Employee Services
Employee self service
Benefits
Web-based training resources
Order AEP-themed clothing or other items
Job openings (JOBS Online)
Company-paid holidays
Pay schedules
Salary grades
Retirement plan estimator
401(k) plan administrator
Office / Workplace Services
Office move, add, change
Cafeteria menus
Download computer software (APS)
Office supplies
Print services
Travel, Expenses, Accounting
Travel services
Time reporting (PeopleSoft)
Time reporting (Passport)
Expense reporting (NOVA)
Accounting tools
Safety, Security, Ethics
Safety resources (Safety Net)
Report a security incident
Report an ethical violation or concern
Occupational Safety and Health Administration (OSHA)
News and Research
AEP Now news archive
View an AEP-TV video
Search the corporate library
Columbus Dispatch
CNN.com
New York Times
USA Today
Wall Street Journal
Washington Post
Job Aids
Important phone numbers
Corporate phone directory
Directory assistance (for external phone numbers)
Answers.com
Dictionary / thesaurus
Google.com
Yahoo.com
AEP's External Web Sites
AEP.com
AEP Ohio
AEP Texas
Appalachian Power Company
Indiana Michigan Power Company
Mutual Energy SPP (ME SPP)
Kentucky Power Company
Public Service Company of Oklahoma
Southwestern Electric Power Company
AEP National Accounts
AEP Economic Development
AEP Electronic Data Interchange
AEP Line Training
AEP Outsource Solutions
AEP Technology Central
AEP Towers
MEMCO Barge Line
United Sciences Testing, Inc
Energy Industry Organizations
Cambridge Energy Research Associates (CERA)
Department of Energy (DOE)
e8
Edison Electric Institute (EEI)
Energy Information Administration (EIA)
Environmental Protection Agency (EPA)
Electric Power Research Institute (EPRI)
Federal Energy Regulatory Commission (FERC)
National Association of Regulatory Utility Commissioners (NARUC)
National Association of State Utility Consumer Advocates (NASUCA)
North American Electric Reliability Council (NERC)
Change text size: A A A
HOME | A-Z INDEX
ABOUT AEP | NEWS & EVENTS | BUSINESS UNITS | TASKS & TOOLS | AEP-TV | AGORA

Pictured: The *Tasks & Tools* page features quick links to the most common tasks (organized by subject area) and lets users manage their personalized links.

One of the most widely used intranet features is company, industry, and market news. “News stories are posted several times a day, from both internal and external sources,” says Amurgis.

One especially innovative feature is the *AEP-TV* streaming video library, which includes more than 500 archived videos, ranging from vintage company commercials to safety techniques to interviews with key company officials. “We also stream live webcasts to all employee desktops, such as call-in discussions with our executives whenever we release quarterly earnings,” says Amurgis. The company’s extensive network bandwidth resources help make all of this possible.

The company typically runs a new, live webcast once a month. The chief executive officer also hosts occasional town hall meetings, and takes live call-in or e-mail questions from employees. (The intranet team attempts to answer outstanding questions in a subsequent news story.)

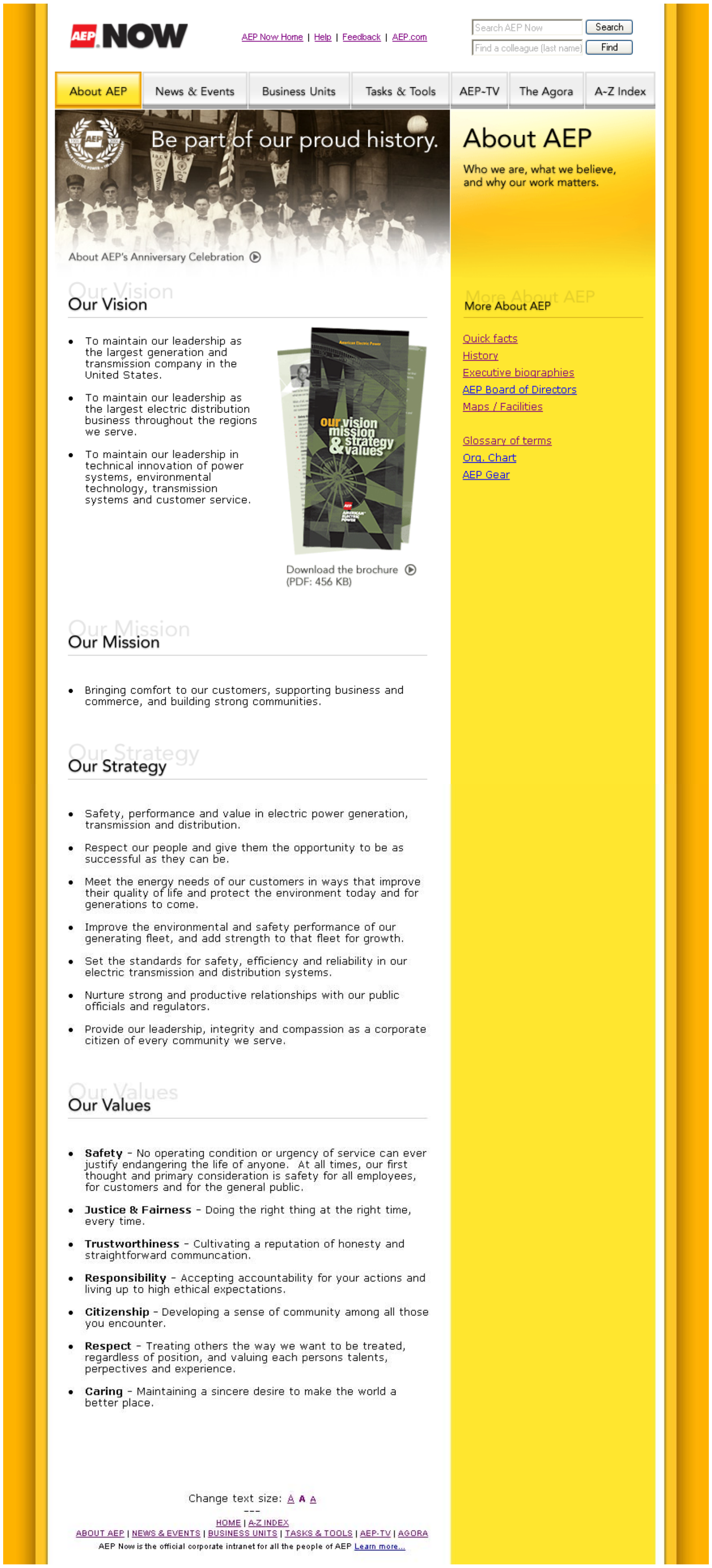


Pictured: A view of the *AEP-TV* video library, with ethics-related videos highlighted. Each video teaser contains a thumbnail image and a brief description.

Pictured: Stills from the "Principles of Business Conduct" video. In this video, children build and operate a lemonade stand while the moderator explains how any business — regardless of size — must adhere to such basic principles as safety, respect, and trustworthiness to be successful. The dedicated *AEP-TV* group helps maintain high video production standards.

Other interesting features include a facility database containing maps to company offices; *Find a Colleague*, which includes direct links to supervisors' and colleagues' positions in the company org chart; and various new collaboration tools, including online thank-you cards. While no section is dedicated solely to new-employee orientation, "a new section in our redesign, *About AEP*, is partially intended to acquaint new employees with our company," notes Amurgis.

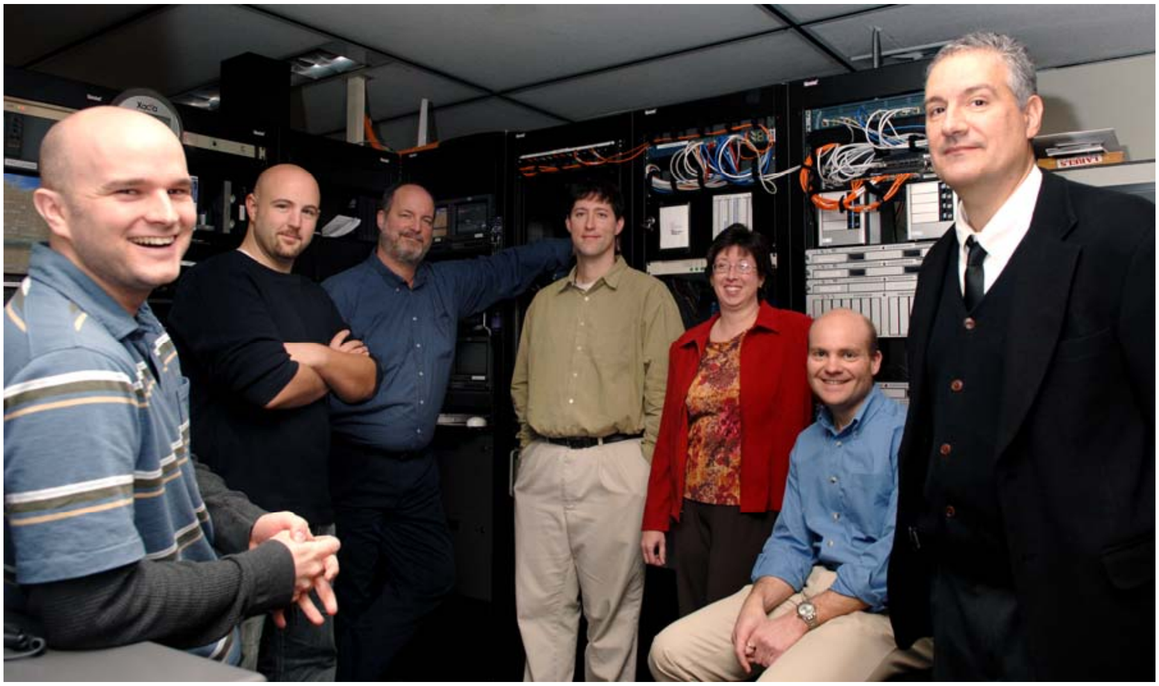
Pictured: Results from a query of the AEP facilities database, showing AEP's offices in Michigan. Each location name links to GoogleMaps for directions. AEP's employees repeatedly asked for such a feature, which AEP provided after it "uncovered" an existing corporate database containing the necessary information. Feedback has been overwhelmingly positive.


AEP NOW
AEP Now Home | Help | Feedback | AEP.com
Search AEP Now
Search
Find a colleague (last name)
Find
About AEP
News & Events
Business Units
Tasks & Tools
AEP-TV
The Agora
A-Z Index
Be part of our proud history.
About AEP's Anniversary Celebration
About AEP
Who we are, what we believe, and why our work matters.
Our Vision
To maintain our leadership as the largest generation and transmission company in the United States.
To maintain our leadership as the largest electric distribution business throughout the regions we serve.
To maintain our leadership in technical innovation of power systems, environmental technology, transmission systems and customer service.
our vision mission & strategy values
Download the brochure
(PDF: 456 KB)
More About AEP
Quick facts
History
Executive biographies
AEP Board of Directors
Maps / Facilities
Glossary of terms
Org. Chart
AEP Gear
Our Mission
Bringing comfort to our customers, supporting business and commerce, and building strong communities.
Our Strategy
Safety, performance and value in electric power generation, transmission and distribution.
Respect our people and give them the opportunity to be as successful as they can be.
Meet the energy needs of our customers in ways that improve their quality of life and protect the environment today and for generations to come.
Improve the environmental and safety performance of our generating fleet, and add strength to that fleet for growth.
Set the standards for safety, efficiency and reliability in our electric transmission and distribution systems.
Nurture strong and productive relationships with our public officials and regulators.
Provide our leadership, integrity and compassion as a corporate citizen of every community we serve.
Our Values
Safety - No operating condition or urgency of service can ever justify endangering the life of anyone. At all times, our first thought and primary consideration is safety for all employees, for customers and for the general public.
Justice & Fairness - Doing the right thing at the right time, every time.
Trustworthiness - Cultivating a reputation of honesty and straightforward communcation.
Responsibility - Accepting accountability for your actions and living up to high ethical expectations.
Citizenship - Developing a sense of community among all those you encounter.
Respect - Treating others the way we want to be treated, regardless of position, and valuing each persons talents, perpectives and experience.
Caring - Maintaining a sincere desire to make the world a better place.
Change text size: A A A

HOME | A-Z INDEX
ABOUT AEP | NEWS & EVENTS | BUSINESS UNITS | TASKS & TOOLS | AEP-TV | AGORA
AEP Now is the official corporate intranet for all the people of AEP Learn more...

Pictured: The *About AEP* page features the company's vision, strategy, executive biographies, history, maps, glossary, and more. It also helps orient new employees.

Intranet Team



Pictured: (from left) Joshua McClurg-Genevese, Don DeHoff, Tim Nicholson, Dave Azusenis, Terry Cowans, Jim Matson, William Amurgis

Today, AEP's core intranet team — which is responsible for the intranet's common, corporate components — consists of a manager, a senior interactive designer, a contract Web developer, and developers from the IT department. Others from IT assist with server administration and related work, and two additional Corporate Communications staff members write and post intranet news stories. The manager, however, is the only employee devoted full-time to intranet matters.

AEP's Corporate Communications group maintains the intranet and founded it in 1996 out of its Video Services group. "The folks in that section were responsible for new media — mostly video — and saw the potential of Web technology inside the company as a communications tool, and as a distribution channel for video," says Amurgis. "This section morphed into a broader Interactive Media section in 2000, as part of a company merger, encompassing print, video, streaming media, and Web."

AEP's core intranet team is, and always has been, relatively small, says Tim Nicholson, AEP's Interactive Media director. "At no time did the core group that created and maintained the site number more than about four or five people — often less."

The intranet's primary focus is, and has always been, corporate news. "I believe I can always tell who owns an intranet — IT, HR, marketing, etc. — by taking a quick glance at its front page. At AEP, the company news occupies the most prominent position, exposing Corporate Communications as the owner," says Amurgis. "From field studies and conversations with employees, we've learned that the news is the most popular part of the intranet — partly because it helps employees remain connected to the greater whole, and partly because it's always been prominent." Simply put, he says, employees have come to associate the corporate intranet with prominent news coverage.

The intranet budget is lumped into the general Web support budget. Nicholson estimates that the annual staffing budget for the intranet and all external websites is approximately $600,000.

BACKGROUND

AEP's intranet didn't start out as such. "The idea for an internal, online communication platform actually started back in the command-line, bulletin board service era," says Nicholson, who himself helped found AEP's original intranet. "A team of AEP employees attending an Ohio State University management program developed a plan to create an employee bulletin board system. During a visit to AEP's IT group, a young staffer scoffed at the idea and said, 'Why don't you just do an intranet?' It was the first time members of the team had heard the term, but they quickly agreed it was the way to go."

Backed by a group from Corporate Communications' Video Services section, as well as the IT department, intranet development began in 1995; it launched in 1996. "In the beginning, the site was primarily used to present company news and information, and HR information," says Amurgis. "Soon, other departments began developing their own sites, but because all Web development was decentralized, these sites varied greatly in design and usefulness." Still, thanks to centrally designed templates — which many departments used — much of the intranet's design is now standardized.

Befitting the intranet group's video roots, the current intranet sports extensive video capabilities and offerings. "We have our own studio, built from the ground up to support streaming video, live webcasts, and even links with other broadcast networks — it's quite state of the art," says Amurgis.

The company considers webcasts crucial for maintaining a two-way dialogue between senior managers and employees across the company's 11-state territory. Video is also well suited to some executives' communication styles.

DESIGN PROCESS AND USABILITY ACTIVITIES

Redesign Kicks Off in New York Diner

When the intranet first began in 1995, "any business unit could create its own site with any design and, to some extent, this philosophy still exists today," says Amurgis. "There is no corporate edict or mandate that all internal Web sites must follow the corporate template or even honor any design guidelines. However, the popularity and professional design of AEP Now tends to convince business units to adopt the corporate look for consistency. Consider it a carrot rather than a stick."

The latest redesign began "at a Nielsen Norman Group conference in April 2005," says Amurgis, which he and AEP's senior interactive designer, Joshua McClurg-Genevese, attended. "Having seen other intranets presented at the conference, and realizing that our own intranet hadn't changed since 2002, we decided then and there to begin the redesign process. We spent an evening at a diner, discussed the possible architecture, and sketched the new design right on the tablecloth — actually, it was 'table paper' — and, yes, we still have the paper."

Amurgis says that while there was no specific business driver — "we simply wanted to incorporate a new architecture, a new design, and several new features" — the redesign impetus had been brewing for months. One push was informal benchmarking; another was seeing the state of other intranets. Other companies often ask to see AEP's intranet, and it typically lets them so long as AEP's team can see the requesting company's intranet as well. Amurgis says these exchanges produce a wealth of ideas.

The intranet team also regularly tracks intranet feedback, monitors Web traffic flows, and records requested pages from employees, all of which foster intranet improvement ideas.

Finally, "we conducted informal field studies to see how people actually use AEP Now," says Amurgis. "To our surprise, people in the most remote locations rely on it daily to read the corporate news."

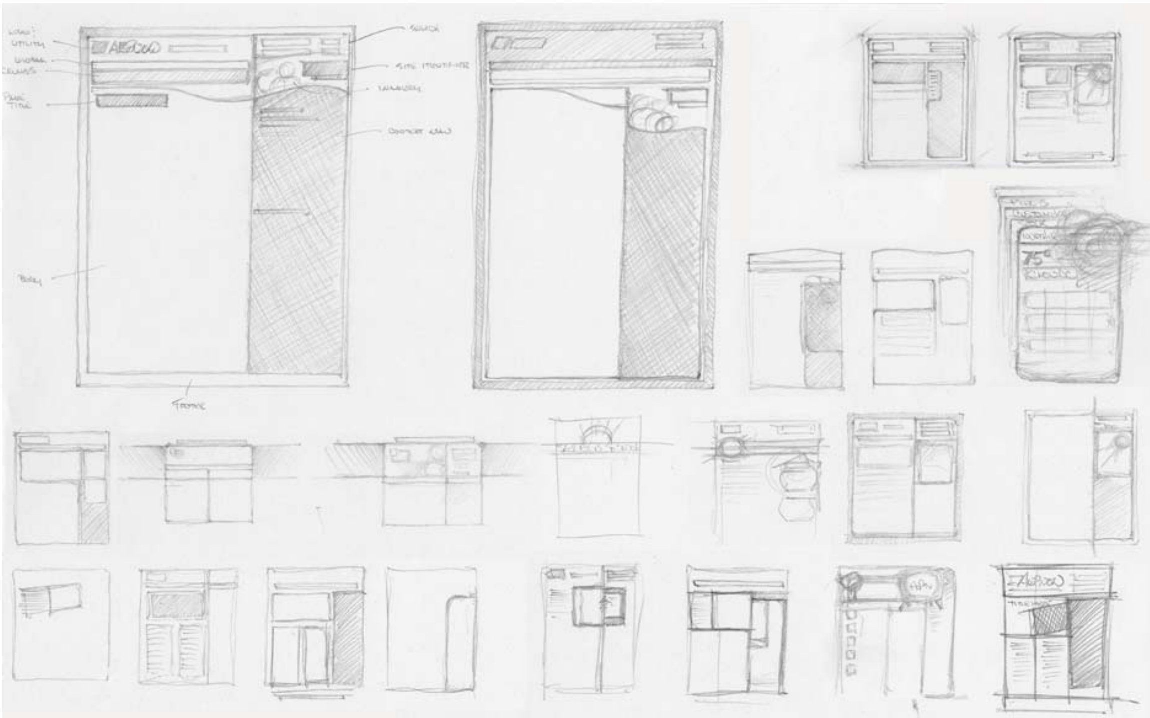
For the redesign, then, AEP had three goals: to make the intranet more aesthetically attractive, to make pages load more quickly, and to refine the navigation system. "Our previous design relied too much on its *A–Z Index*," says Amurgis, "which had grown so big as to become unwieldy."

1. TOP 25 SEARCHES (KEYWORD & QUERY)				
2. For AEP Now intranet (September 2006)				
	Keywords	**Hits**	**Queries**	**Hits**
1.	aep	19108	hr	6643
2.	news	12112	more+news+ from+aep	6184
3.	from	12074	safety	5926
4.	more	12044	generation	5879
5.	hr	6693	Energy+Delivery	5874
6.	safety	6440	more+news+ from+outside+aep	5859
7.	generation	6056	jobsonline	5858
8.	help	5953	aep+now+help	5856
9.	energy	5953	oms	374
10.	now	5895	yahoo	297
11.	delivery	5882	weather	182
12.	outside	5862	yahoo.com	121
13.	jobsonline	5858	jobs	97
14.	com	1117	dell	93
15.	yahoo	585	password	90
16.	plant	486	Yahoo search	80
17.	www	428	google	77
18.	oms	418	password reset	77
19.	of	380	cnn.com	74
20.	weather	356	pso	72
21.	power	339	401k	65
22.	training	331	maps	62
23.	employee	291	peoplesoft	57
24.	policy	286	mapquest	57
25.	password	271	scholarship	52

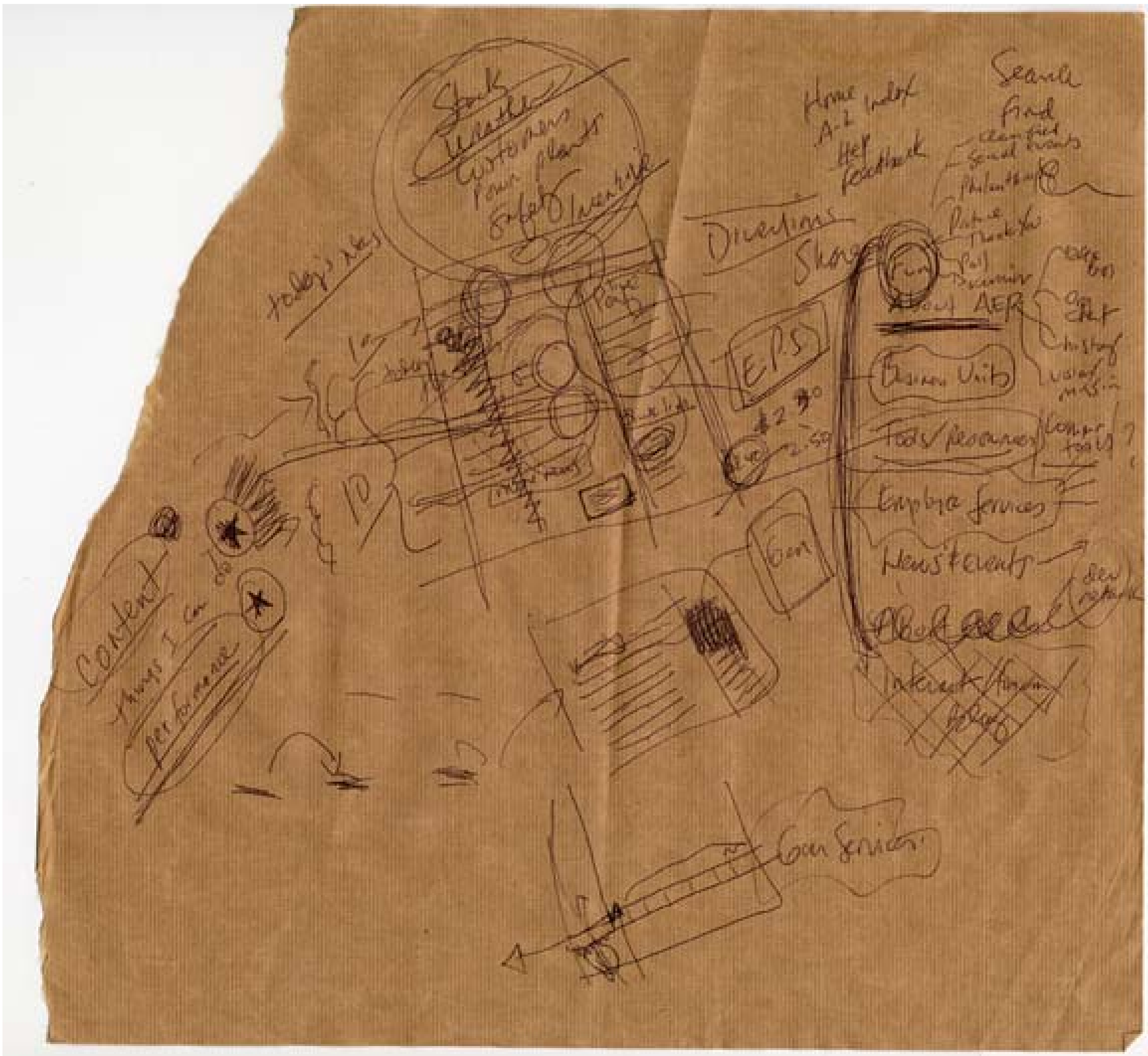
From Tablecloth to Mock-Up

With all this in mind, the redesign began — rather spontaneously — and was honed through subsequent iterations. Then, "as the design moved from a tablecloth to more professional pencil sketches to Photoshop design concepts, we began testing with employees," says Amurgis. "We were most curious to see if they could recognize the new navigation, if the labeling was clear, and if they could perform certain common tasks. We were pleased to see that the design and navigation held up well, although we did tinker with the labeling."

Pictured: The previous version of the AEP homepage, which launched in late 2002. This version lacked an architecture, but provided prominent access to corporate news — something users requested, and continue to request, to stay connected with the company.

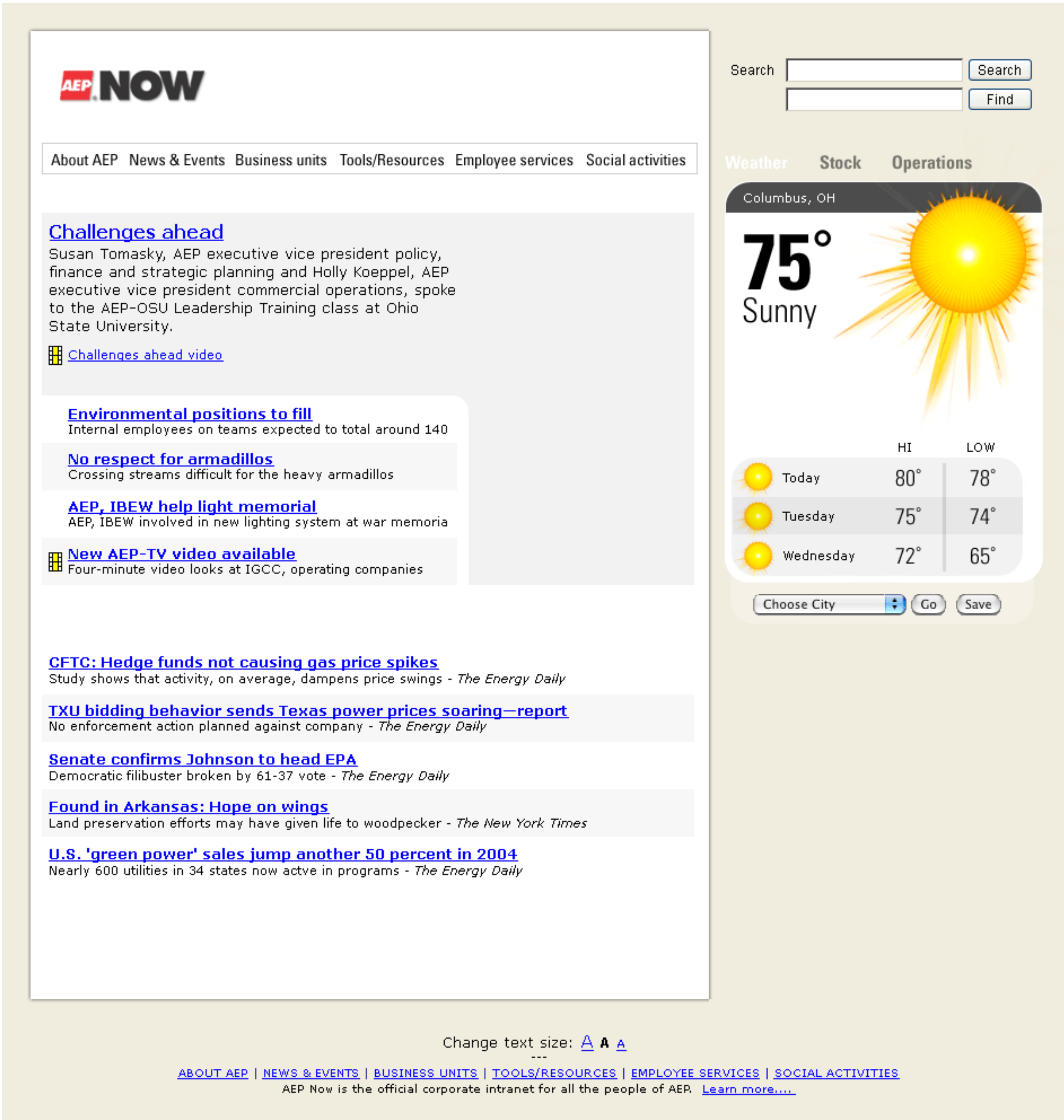


Pictured: Early pencil sketches of the new design by McClurg-Genevese, AEP's senior interactive designer.

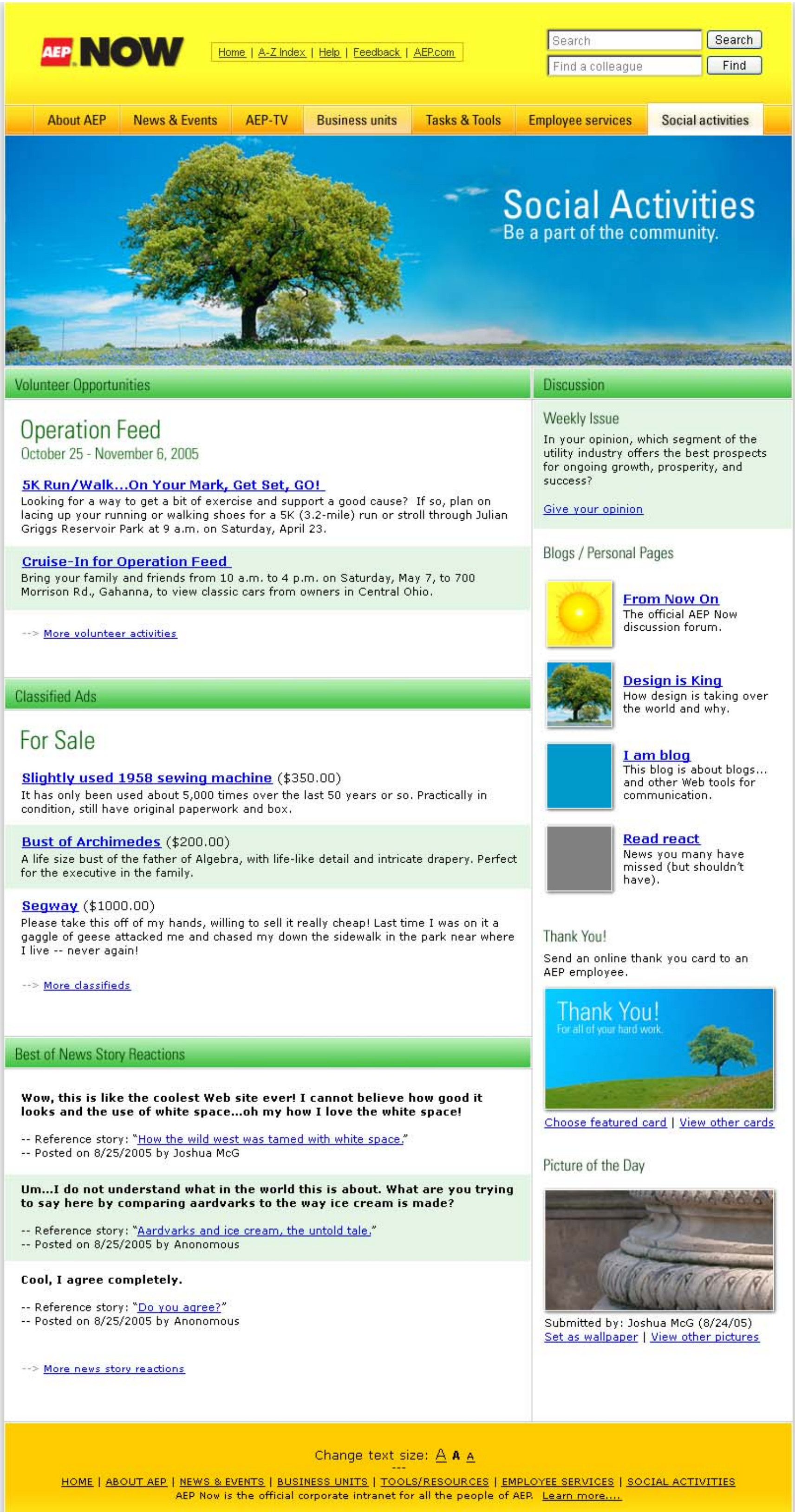


Pictured: The original site architecture, as sketched on a New York diner's paper tablecloth. "Yes, it's a muddled mess, but this is where the redesign officially began," says Amurgis.

Pictured: A more coherent version of the original AEP intranet architecture, as transcribed from the tablecloth sketch. Points of note: to the left, confusion over what to call the section that was eventually named the *Agora*; and to the right, a series of notes including tools and techniques to avoid.

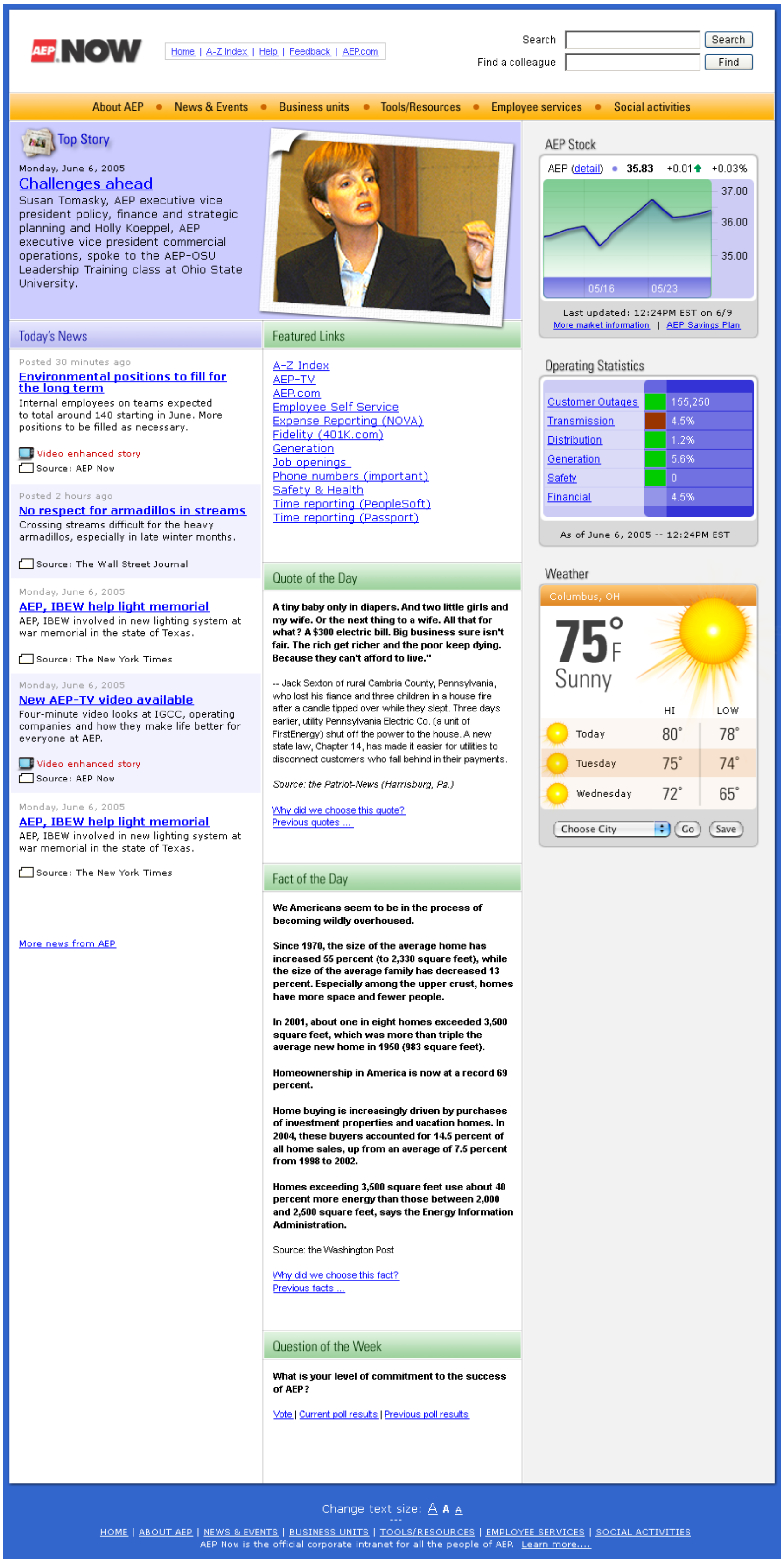


Pictured: Photoshop design iteration 1 (of 6).



Pictured: Photoshop design iteration 2 (of 6).

Pictured: Photoshop design iteration 3 (of 6).



Pictured: Photoshop design iteration 4 (of 6).

Pictured: Photoshop design iteration 5 (of 6).

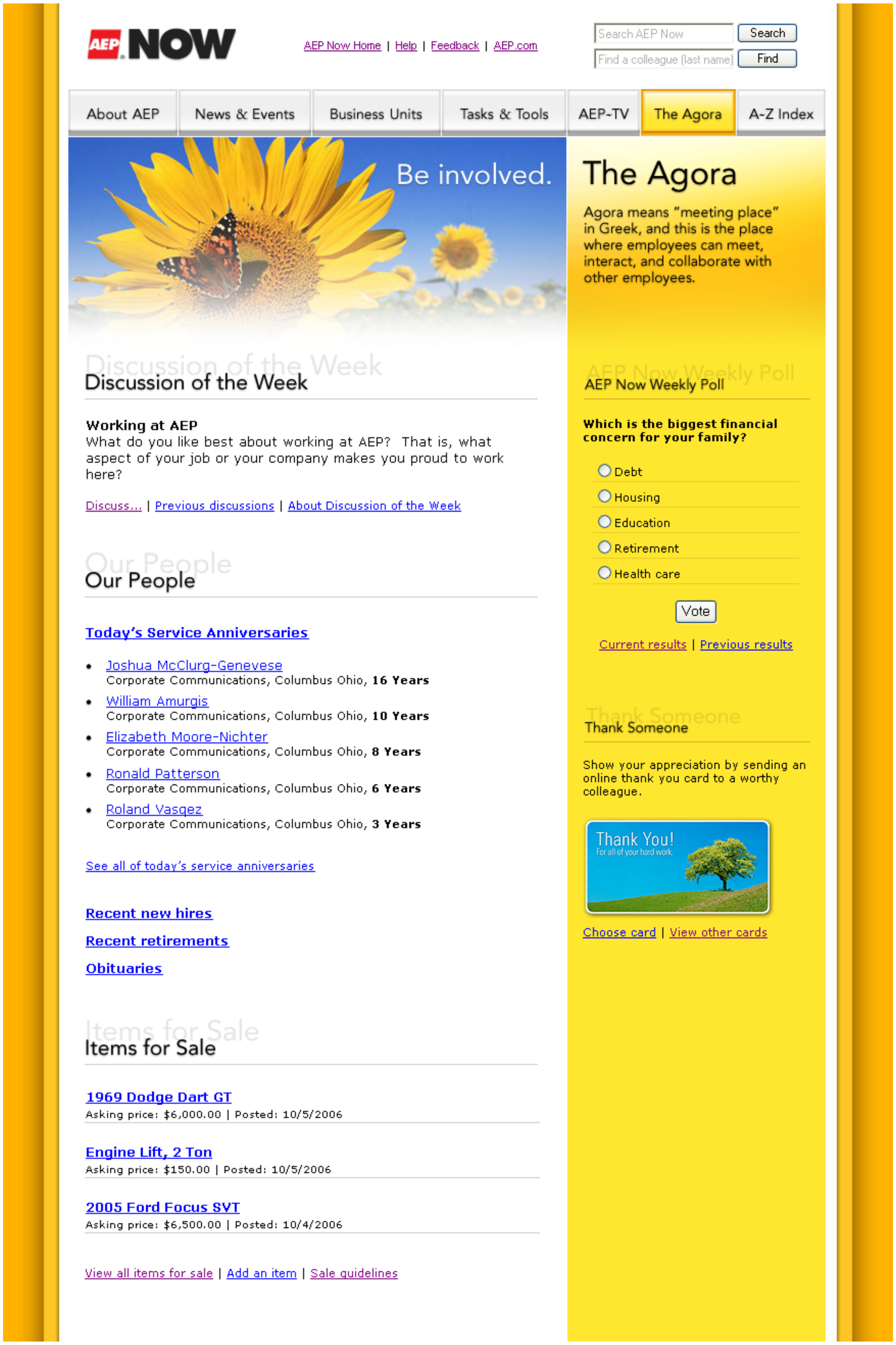
Pictured: Photoshop design iteration 6 (of 6).

Going Greek

When tweaking labels, one interesting challenge the team faced was how to name a new collaboration space. "Admittedly, collaboration has always been an obsession of mine," says Amurgis. "To me, the Web's true value comes not from the availability of information, but the immediate connections it permits between people."

Yet, what should such a space be called? The design team quickly proposed, tested, discarded, and proposed anew multiple names for the collaboration space. "We started with *Fun*, and quickly realized that many managers wouldn't like that connotation, then moved to *Social Activities*, then *Meeting Place*, but the labeling was often misunderstood," says Amurgis. "For example, some employees thought they could go to *Meeting Place* to schedule a conference room."

"So, in a burst of insanity, we decided to go with a nonsense word and labeled this area the *Agora* — which, coincidentally, is the Greek word for meeting place," he says. "When we tested it, to our surprise, employees quickly noticed this label, wondered what it might be, and — overcome by curiosity — clicked on it to find out. Once there, we define it, and they understand."



Pictured: The *Agora* is a place where users can take a weekly poll, participate in a weekly discussion, peruse classified ads, send online thank-you cards, and more. While initial names for the section included *Fun*, *Meeting Place*, and *Collaborate;* the team finally settled on a "nonsense" word.

HOW AEP DESIGNED ITS INTRANET

As told by Joshua McClurg-Genevese, senior interactive designer at AEP

From my perspective — as the person responsible for the visual and interaction design of AEP Now — five things especially influenced our design:

1) Fixed width:

With this redesign, we replaced the previous, fluid layout with a more fixed-width design. While we believe fluid designs — designs that automatically stretch to fill the available browser space — do make full use of available screen real estate, they often cause layout issues that result in less readable, and thus less usable, content. Often, content can be stretched too wide to be easily read, and text can wrap around images in unconventional ways, obscuring the text or prematurely forcing it off the page. Weighing these issues, and after identifying the dominant screen resolutions our employees currently use (800x600 and 1024x768) we decided to create a fixed-width design for the former dimensions to avoid any potential problems.

2) Visual dominance

We employ visual dominance techniques to create a visual hierarchy that always cues employees to their location and to the nature of the content they're viewing. So, the top-most portion of our pages are predominantly visual, and filled with graphic navigation — which is global, and therefore consistent — plus imagery to help employees understand where they are in the site, and what they will find on the page. As you move down the page, smaller graphical elements denote major breaks in content. Finally, the content itself is, of course, less graphic and more dynamic. This hierarchical approach helps establish and maintain a visual language for best supporting user interaction.

3) More white space

White space is an underutilized Web design element. The traditional idea — cram as much information as possible above the "fold" — is a fallacy. Vertical scrolling of a page is now so commonplace as to be almost second nature. In the new design, we implemented layout constraints that maintain generous amounts of white space. We try to avoid any visual distractions, such as borders or lines. By using negative space, we also tightly confine text. All this results in a much cleaner layout, where content is the focus.

4) Consistent interactions

Consistency is a virtue, and we try to keep an employee's basic AEP Now interactions as consistent as possible, to establish and then meet expectations. For example, all forms and form elements have a consistently designed layout, and also respond to user input in the same manner. So, if employees fill out a feedback form, they should expect the same types of system responses as if they were ordering a video. This approach helps ensure a consistent, expected, and hopefully enjoyable — or at least not frustrating — user experience.

5) Aesthetic choices

For our redesign, several aesthetic decisions drove how pages ultimately look. For example, we wanted a brighter and more visually appealing aesthetic, as well as a more contemporary and friendly feel that represents the company in a positive light. Among other things, those considerations drove us to adopt a gold color palette, and to include large images on core pages.

Putting Design into Practice

How did the above guidelines — which influenced AEP's approach to design — manifest in the intranet's final design? Perhaps the most high-profile example involves the intranet's navigation placement. "With Joshua's guidance, we chose to place our navigation — located on the interior pages — to the right, rather than the left as seems customary," says Amurgis. "Our logic was, first, when people use the browser's print function, their printer may cut off part of the right side of the page, and we'd rather lose navigation than content. Second, the right-hand navigation appears next to the browser's scroll bar, thereby offering a more ergonomic and economical use of mouse movements — scrolling and linking occur in the same general area."

Launching a Preview Site

The design progressed throughout the summer of 2006. On September 7, 2006, the intranet redesign team used a news story to announce the new intranet to employees, and invited them to use a fully functional pre-production version of the site starting on September 21. "This preview period proved beneficial, as it identified some technical issues with authentication," notes Amurgis. "Despite my unhealthy desire for collaboration, we were not permitted to allow anonymous comments from employees, so we had to authenticate them by sensing their network user IDs, and we had to develop workarounds when some people weren't properly 'sensed.'"

TIMELINE

- April 1995: Intranet development began.
- Summer 1996: First intranet launched.
- April 2005: Redesign began after team attended intranet design conference.
- September 2006: Employees invited to view a fully functional, pre-production version of the new site. This preview period was used to smooth out technical issues, some involving authentication.
- October 1, 2006: New site launched.
- 2007: AEP plans to make intranet available for at-home use.

RESULTS

Guiding Users Through the Redesign

The redesign launched October 1, 2006, and was "the result of many long nights, compromises, and heroic efforts," largely involving McClurg-Genevese, the designer; Don DeHoff, the contract Web developer; and Amurgis, who focuses on content.

On the first workday after launch, October 2, the new intranet greeted employees with a top news story welcoming them to the new design, included a list of frequently asked questions ("based on questions we anticipated employees might ask," says Amurgis) and explained new features via a guided tour with annotated screenshots of all the main pages. Subsequent content included an interview with McClurg-Genevese and Amurgis, discussing the new design.

The redesign delivers on AEP's top three redesign goals: better aesthetics, faster page-load times, and an improved information architecture. "Our new architecture —

About AEP, *Tasks & Tools*, and so on — provides quicker access to key information," says Amurgis. "Of course, the new architecture also required us to fill in holes in our content, so we've added new information and applications."

Weighing Feedback

After launch, employees immediately weighed in with redesign feedback. "Some expressed affection for the new design, some lamented the departure of the old design — but nothing overwhelming in either camp," says Amurgis.

The intranet team responds personally to each employee who submits feedback, and includes in that response a brief description of the intranet team's purpose. This approach has been extremely successful. "Most employees are accustomed to feedback going into a black hole — perhaps based on their experiences with Internet sites — and expressed shock when we responded, usually within minutes," says Amurgis.

Having a good demeanor, he notes, also defuses many a criticism. "I'm amazed at how a kind response, acknowledging the employee's perspective but stating our point of view, repeatedly turns anger into appreciation — if not acceptance," he says.

REDESIGN FEEDBACK
Employee responses to "What is your favorite new feature on AEP Now, and why?" (Selected)
"I really like the new AEP today especially The Agora it will be nice to see opinions of others in the Co and I really like the sellers page. This is a good innovation. Thank You"
"How about a Wanted on the sale page?"
"I like the Picture of the Day. It's a fresh approach to AEP Now, especially profiling employees. Great Job !!"
"I like the warm colors and white space."
"The "new" AEP Now is great! I really like how easy it is to use. The colors make you feel good even if your day is a tough one. When opened, the site actually puts a splash of sunshine in your face. I certainly appreciate all your help in making our jobs a little easier. Keep up the great work!"
"I really enjoy the colors and I congratulate who ever thought of the "sellers page"....great idea........ !!!!!"

The Value of Collaboration

One of the intranet's most notable new features is the *Agora*, which houses an array of collaborative features. While some aren't overtly business-oriented, the overall intention is quite corporate-focused. "If you look at our offerings in the *Agora*, you might consider them somewhat frivolous. I know I do. I mean, what value might a poll or *Items for Sale* offer the company, and might it in fact become a time-waster?" says Amurgis. "However, there is a method to the madness. We're trying to establish a more collaborative culture, and to encourage employees to get a sense of the size and scale of the company. Some of the frivolous offerings are merely lures to get people into the mood of sharing, of exchanging, of appreciating that they're dealing with someone they've never met before, several states away."

Such features — including thank-you notes that let people express appreciation — are building blocks. Their goal is to make the corporate culture more receptive to forthcoming collaboration features, such as discussions, blogs, live chats, and knowledge exchange, which the intranet team plans to vigorously promote.

Tracking Page Views and Costs

In terms of a redesign budget, "we calculate that the total cost of the redesign falls well under $100,000," says Amurgis. "It helps to have a world-class designer on staff, so we don't need to go outside for such services," says Amurgis, estimating an outside firm would have charged "in the high six or seven figures" for the effort.

What impact did the redesign have? While AEP hasn't had time to track long-term usage trends between the old and new intranets, traffic has increased by almost 30 percent, with over 10,000 unique visitors a day, and over 650,000 weekly page views.

AEP also carefully tracked intranet usage, beginning the week of the launch. "The launch week may not depict mature behavior — that is, behavior expected of a mature intranet — since it featured much exploration, but you get a sense of the traffic increase," says Amurgis, who notes that, ultimately, traffic volumes will be less relevant than top views. "Our goal is not to increase traffic, but to help people find things more quickly."

MOST VISITED INTRANET PAGES — BEFORE / AFTER REDESIGN			
September 25-October 1, 2006 (Week before redesign launch)		**October 2-8, 2006 (Week of redesign launch)**	
Page	**Views**	**Page**	**Views**
AEP Now homepage	284,393	AEP Now homepage	314,992
AEP Now: *A–Z Index*	30,830	AEP Now: *A–Z Index*	39,574
AEP Now: *More market information*	11,618	AEP Now: *Weather* homepage	30,506
Weather: Columbus, OH (zip code: 43216)	7,867	AEP Now: *Tasks & Tools* homepage	28,676
Weather: Columbus, OH (zip code: 43215)	5,948	AEP Now: View all *Items for Sale*	25,990
AEP Now *Search*	5,356	AEP Now: *Items for Sale* homepage	24,252
Weather: Tulsa, OK	4,961	AEP Now: *Agora* homepage	21,352
News story: "AEP announces benefits enhancements"	4,610	AEP Now: *News & Events* homepage	11,776
Find a colleague	3,191	AEP Now: *Photograph of the Day*	11,742
Menus	3,176	AEP Now: *More market information*	11,139

Future Plans

In 2007, AEP plans to provide intranet access for employees from home, to help everyone use it. "Many of the field workers do not have ready access to computers, but their supervisors do, and they are often shared," says Amurgis. Home access should thus help the intranet reach a wider audience.

Other plans include updating the company's *Glossary of Terms*, which includes terms that the customer services organization often uses and must define for customers. "The *Glossary* existed as a standalone feature of the prior design, and we are simply linking to it as is, for now," he says. "We'll convert it to our new design later."

AEP also plans to introduce a live chat. "We envision scheduled chats with company officials, inviting employees to send in questions in advance or during the chat, and then archiving the chat for all to see after the fact," he says.

LESSONS LEARNED

Insights from William Amurgis:

Steel yourself for the redesign. "A redesign is a grueling task: We consumed large amounts of caffeine, deprived ourselves of sleep, and were separated from our families on many evenings and weekends. However, I was blessed with two other team members who possess a somewhat scary can-do attitude and fervor, never willing to give up or give in, always in pursuit of greatness."

Respect employees, and collaboration. "Employees are decent, hardworking, and willing to give you a fair shake if you treat them with respect and make clear that your purpose is to serve them. Some of our leaders were afraid that employees would abuse our collaborative environments and use them to express dissent or to grind an axe. So far, though, the collaboration tools have proven to be immensely popular, and the employee contributions have been almost lyrical in their quality. Dissent will come, inevitably — as it should, because it's needed for growth — but the value may have already been recognized, and a little dissent won't ruin the party."

Learn to compromise (with yourself and others). "In any redesign effort, obstacles appear. Many of these are technical, but some involve organizational data (and access to it), culture, and even politics. Hey, we admit that we don't know everything, and sometimes we need to have our enthusiasm bridled. We had to place practical limits on our vision — or else we'd never launch."

Small can be nimble. "We've kept the intranet team small, intentionally, so it could be nimble. How this can pay off: Literally, at the 11th hour before launch, we noticed a problem with some dynamic Flash content on our new front page — nothing to do with the quality of our work, but some sort of error with how the browser handled Flash. Together, Joshua and Don rewrote it in an hour."

Don't hide your intranet away. "We often receive — and welcome — requests from other companies to visit us and see a demonstration of our intranet. In exchange, however, and in true playground style, we always ask to see theirs, too. We learn so much from these exchanges. In fact, please allow me to publicly thank all the companies that have shown us their intranets, in person or at conferences, for their generosity. In many ways, you've influenced us, and I hope that we can return the favor."

DaimlerChrysler AG

Using the intranet:
DaimlerChrysler is an automotive company whose portfolio ranges from small cars to sports cars and luxury sedans, and from versatile vans to heavy-duty trucks and comfortable coaches. DaimlerChrysler's passenger car brands include Maybach, Mercedes-Benz, Chrysler, Jeep, Dodge, and smart. Commercial vehicle brands include Mercedes-Benz, Freightliner, Sterling, Western Star, Setra, Mitsubishi Fuso, Thomas Built Buses, and Orion. The company also offers financial and other automotive services through DaimlerChrysler Financial Services.

Headquarters: Stuttgart, Germany

Number of employees the intranet supports:
382,724 (2005)

Countries with production facilities: 45

Annual Sales: €149.8 billion (2005)

Design team:
In-house (the Communications/Corporate Media & Marketing group)

Members:
Christian Fachat, senior manager of Web Communications; Andreas Moissidis, manager of Employee Portal; Gerald Starke, graphical lead; Oliver Radtke; Tim Rohrer; Christoph Heger; Benjamin Oberkersch

SUMMARY

Streamlining information is a major challenge for intranet designers at most organizations, and especially at large, global companies. DaimlerChrysler AG — with its numerous international employees performing a multitude of jobs — is no exception.

Generally, intranet designers have several options for maintaining voluminous information. The first possibility is to just accept the amount of information and try to present it as plainly as possible. Yet, simply providing everyone with all information is often a recipe for disaster: users may not be able to find what they really need.

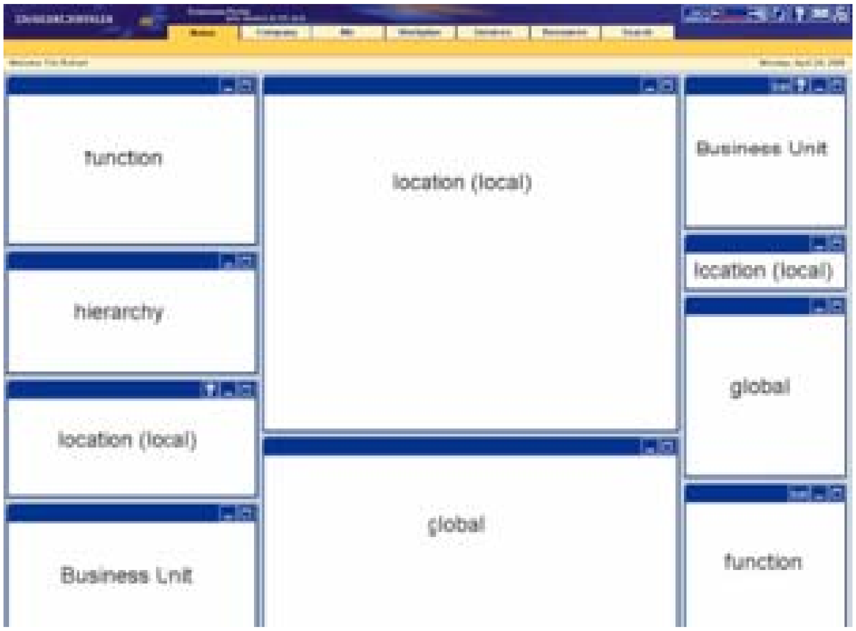
The second option is to relentlessly trim and prioritize information. This usually makes it easier for users to find information. Still, designers run the risk of cutting information that some groups — albeit possibly small ones — will need or want.

The final option is for designers to personalize information. With this approach, all data and tools are still available (although access controls might restrict who can read or use it), yet users initially see only the information that's most relevant to them. The primary drawback here is the work involved: the intranet development and IT groups must expend significant energy to create and perhaps maintain this personalized environment. Furthermore, if implemented incorrectly, the personalization will prevent users from getting the information they need. Still, if done correctly, companies can reap large returns by creating personalized intranets, directing appropriate information at employees, and offering a well-designed user experience — all hallmarks of the DaimlerChrysler AG Employee Portal.

Impressively, this intranet provides content for numerous well-defined roles and groups. Among the roughly 400 criteria that determine these roles are location, hierarchy, business unit, department, and function.

Designers divided the homepage into sections according to the various criteria, including a user's role. These sections aggregate, bundle, and structure information from a variety of existing sources, such as the intranet, Internet sites, and various applications. Note both higher-level (organization-wide) and local content appear on

the homepage, which is customized by user. Global content generally appears in English or German, depending on browser settings, while local content is written in the local language. Thus, employees might see local information in Spanish, for example, and central contents in English or German.



Pictured: An example map showing which content appears in which intranet modules, as well as the default layout of the DaimlerChrysler AG Employee Portal homepage.

Pictured: The homepage is personalized for many different roles at DaimlerChrysler. Global contents are provided in English and German, with local content provided in the local language only — in this case, German.

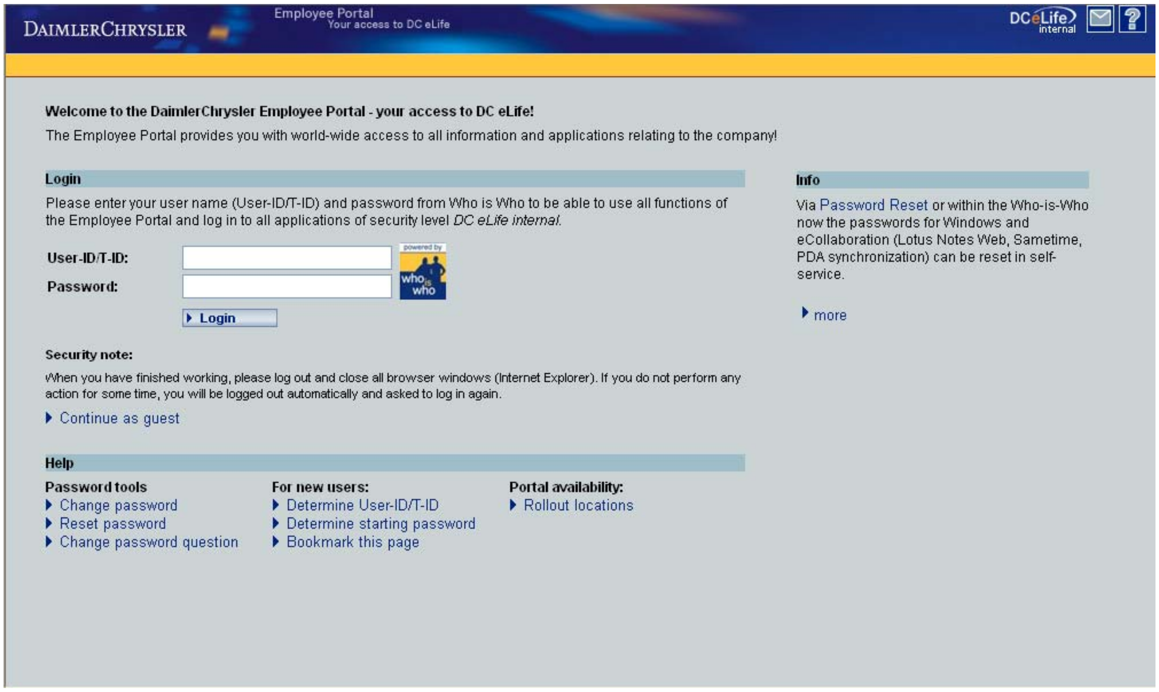
The homepage is far from the intranet's only personalized page or feature. For example, only senior managers and above will see a certain navigation tab — *Leadership Tools* — which grants access to executive-level applications for managing HR, including the appraisal process, initiation of salary increase, initiation of cash bonus, and management-related reports.

Overall, DaimlerChrysler integrates some 150 applications into the Employee Portal with role-based access, so users see only the applications they need or are allowed to access.

Pictured: An example of a role-based tab for senior managers and above (who speak German). This tab provides easy access to a variety of executive-only applications.

To make it easy for users to access relevant information and applications, the Employee Portal also offers single sign-on. This helps speed users along without interrupting them with login screens. Also, when users must remember only one username and password, it helps avoid the too-common security risk of sticky notes on PC monitors listing innumerable passwords.

Visible, open fields on this login page make it easy for users to quickly log in and move on. Users also have the option to change their password, and new users get on-screen help, plus reminders to log out when they're finished using the intranet.



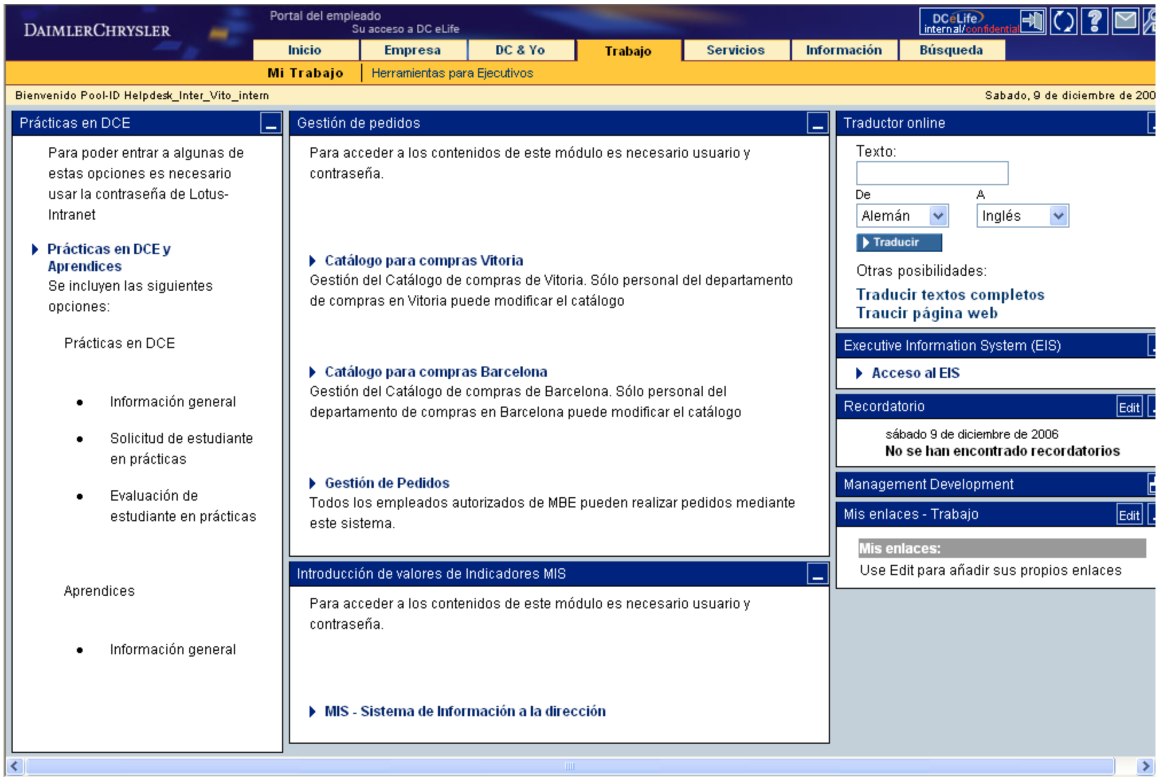
Pictured: The login screen makes it easy for people to log in quickly; it also provides other options (change a password) and guidance (help for new users).

Multilanguage capabilities abound on the DaimlerChrysler intranet, befitting a company that operates in 45 countries. Global information appears in German and English — the languages that most users at the organization speak. English is the default language, so if a user's browser settings are not set to German, the employee will see global content in English.

Designers opted to display local content in the local language. Thus, single divisions, locations, and plants can offer content in any language they like. For example, an employee might see local contents in their home language and central contents in English. This has worked well for users throughout the organization.

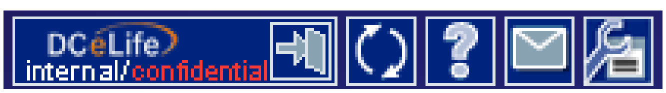
Currently, portal functionality (including login, customization menus, and help screens) is available in German, English, Spanish, French, and Portuguese. More languages, including Japanese and Turkish, are planned for the future.

Pictured: An English language version of the homepage for a user in China, including local news (written in English).

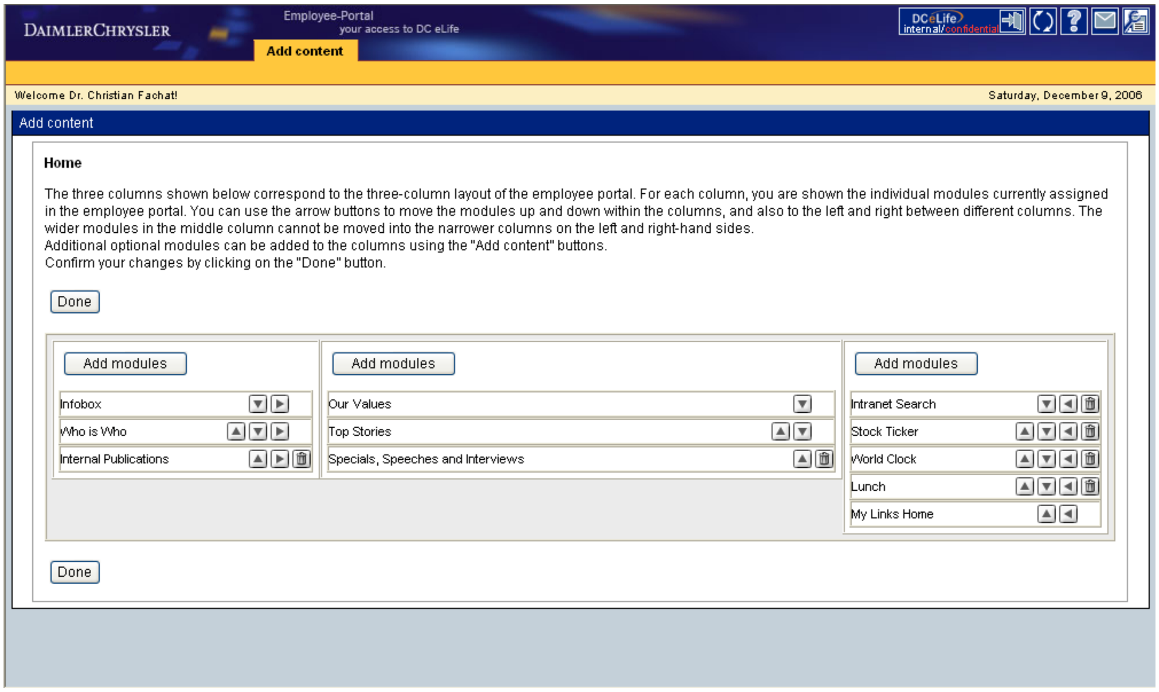


Pictured: A version of the portal set to Spanish includes tabs labeled in Spanish, such as this *Trabajo* (*My Work*) tab.

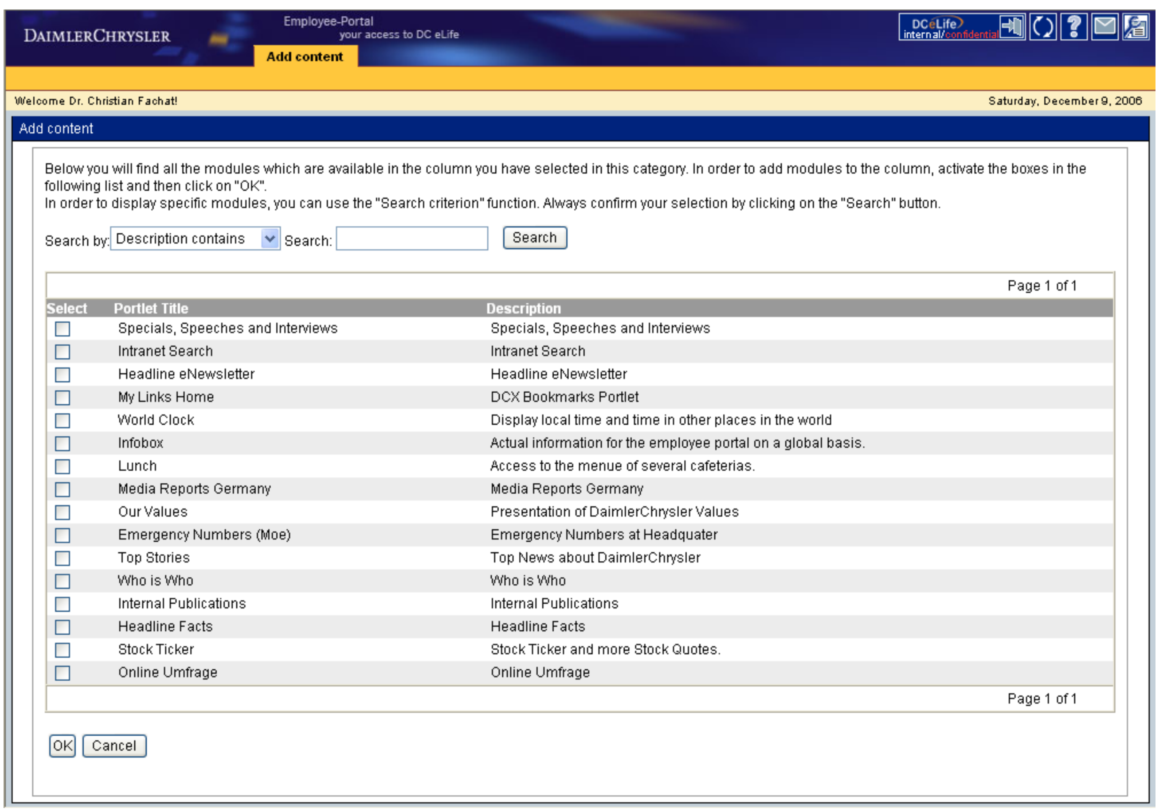
Designers also integrated individualization — customization — into the intranet. Default choices are not always perfect for everyone; individualization lets each user modify, organize, add, and delete content according to their preferences. Users are able to add "modules" and adjust their position. They can also add and remove elements from within modules.



Pictured: The wrench icon in the upper-right part of every page links to the "customizer."

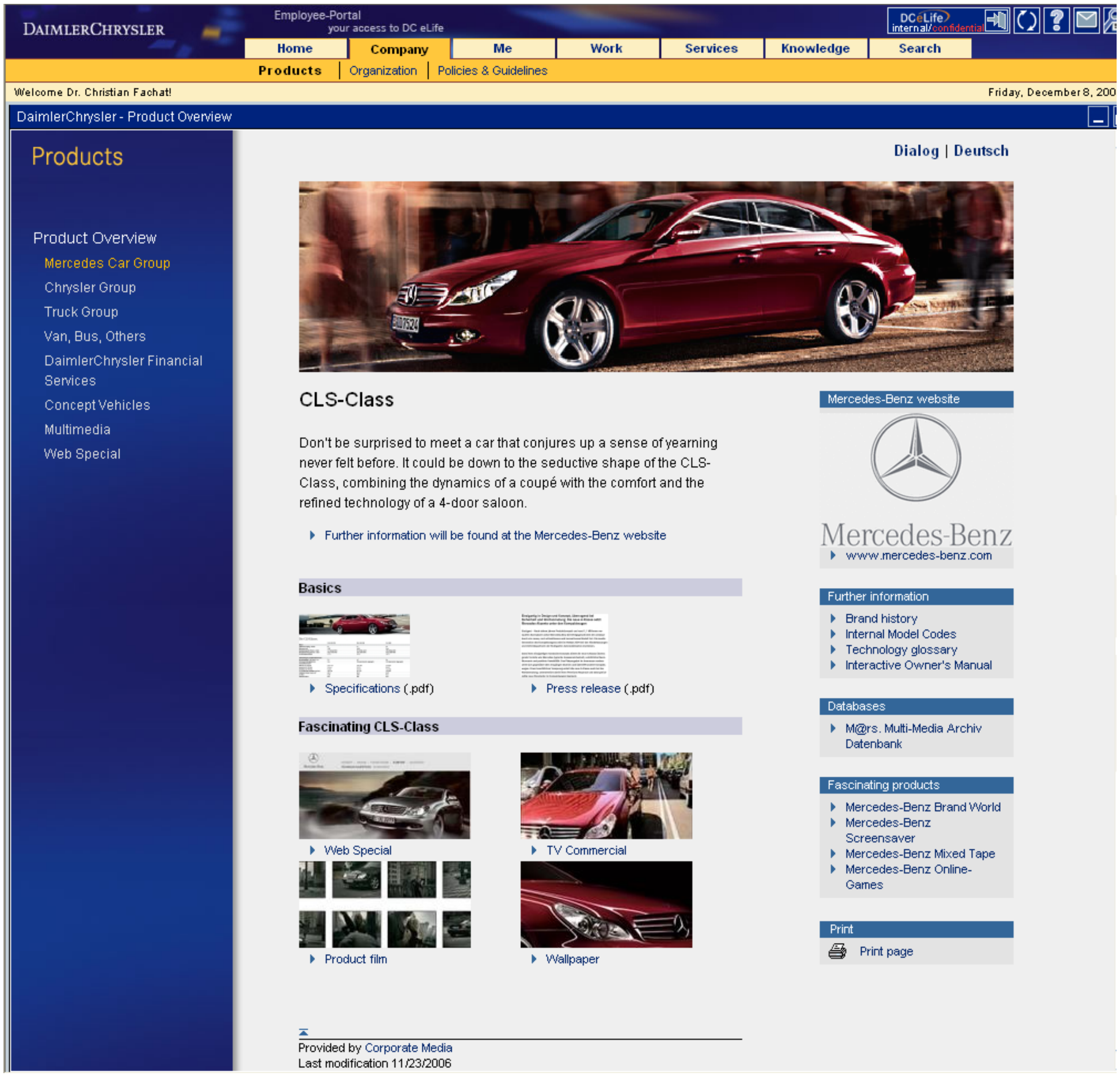


Pictured: Users can add, remove, or move modules using the customizer.



Pictured: Users can also add or remove module elements.

Limiting the number of tabs helps ensure that navigating the intranet is easy. Designers also kept subsections below the tabs to a minimum and gave them appropriate names.



Pictured: Simple, clear tabs and sub-menus make it easy to navigate the intranet.

Given the intranet's importance, factory workers in Germany also get kiosk-based access to it from the shop floor, to help them stay informed and access a variety of applications, including HR self-service tools.

Pictured: A German employee accesses an intranet kiosk located on the shop floor.

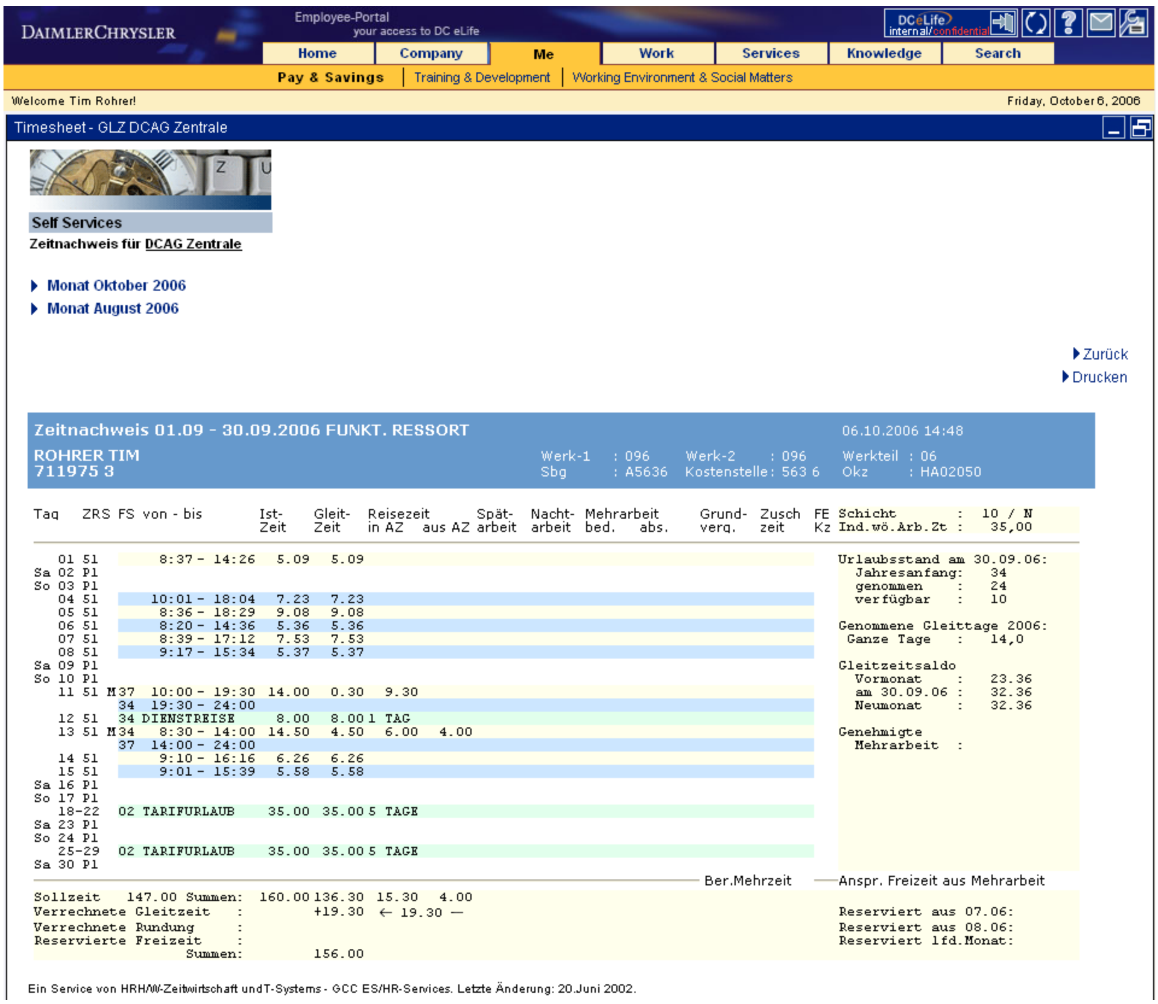
Simple navigation and personalized content and applications help keep the DaimlerChrysler AG Employee Portal approachable and easy to use for all of the company's users, no matter their job tasks. Usage statistics back this up: the intranet draws a remarkable 70,000 users each workday. In addition, 70% of all users in Germany — including 120,000 blue-collar workers — log in at least once per month.

URL AND ACCESS

The main portal's URL is http://portal.daimlerchrysler.com. This portal is the start page for most of the organization's PCs. Some PCs — especially kiosks — default to an anonymous, guest version of the portal (at http://intra.daimlerchrysler.com).

All intranet content is personalized for users, based on such things as job function and work location, as are the applications they can access. Single sign-on lets employees enter their password once to access the intranet and all of its relevant information and Web-based applications.

"At the moment, we have approximately 150 applications integrated into the intranet, and most of them are only visible to certain user groups," notes Christian Fachat, the senior manager for Web communications at DaimlerChrysler.

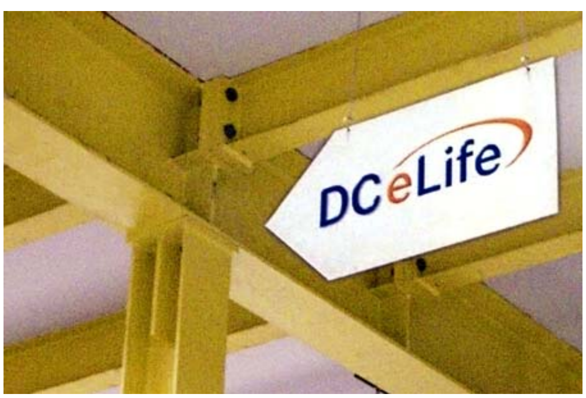


Pictured: Single sign-on technology lets users enter their password once at login and automatically gain access to all relevant information and applications, such as this personalized read-out of an employee's "hours worked" and remaining vacation days for the year.

Mobile users can log on to the corporate LAN using VPN software. In North America, employees can also use a special identification name and password to log on to select parts of the site via the Internet. Internet-based access to the entire site is planned for the first half of 2007.

Blue-collar workers can access the intranet via kiosks located in all German plants. "There is no standard kiosk setup," notes Fachat. "Every plant has decided independently which kind of kiosk best fits their infrastructure."

Pictured: An intranet kiosk at a German DaimlerChrysler plant.



Pictured: Standard signage directs employees to DaimlerChrysler's intranet kiosks.

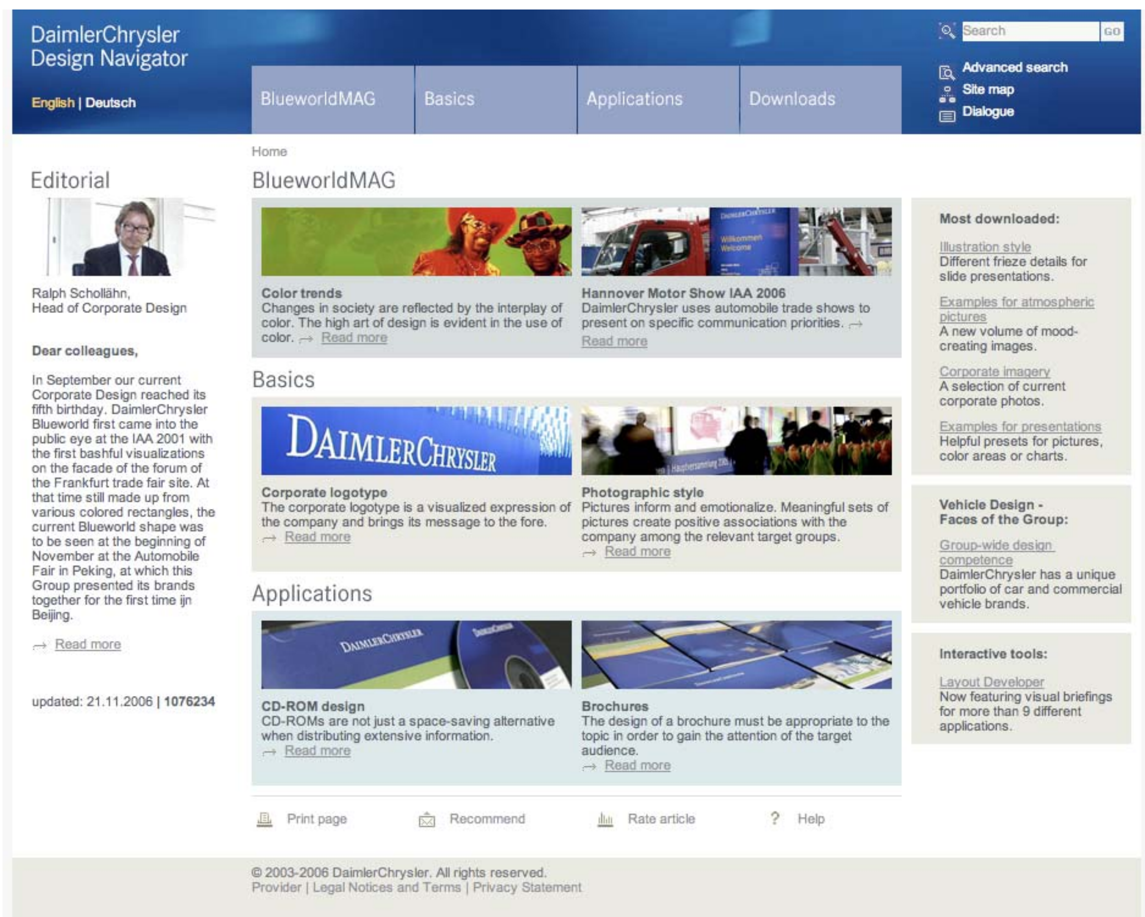
CONTENT MANAGEMENT

DaimlerChrysler uses C2C, a custom-developed CMS, to maintain all intranet and Internet pages. The tool supports distributed editing: employees registered as content editors can adjust content, but not page design. "Using just one standardized tool, globally, reduces our intranet and Web content creation and maintenance costs," notes Fachat. All content is stored in a centralized database and dynamically loaded into standard page layout templates.

The Web Communications group is the primary content owner, responsible for all content on the Employee Portal's main pages. The Communication department owns some second-level content, such as news, Web specials, product line-up, surveys, communication tools, and information about corporate initiatives. Other content, including department and project presentations and HR information, is owned by the relevant business units, departments, or project teams.

Some content — weather forecasts and stock quotes, for example — is obtained from external services. Ajax technology is used to update the homepage stock ticker.

Several tools and techniques help ensure consistent content and design. To maintain content quality levels, the Web Communications team maintains an intranet style guide that content creators must follow. It offers a similar application style guide for developers creating Web applications for the Employee Portal. On the branding front, the *DaimlerChrysler Design Navigator* (see http://designnavigator.daimlerchrysler.com) helps employees consistently convey DaimlerChrysler's corporate identity and design.



Pictured: *The DaimlerChrysler Design Navigator*, available online, helps employees and agencies present the DaimlerChrysler brand consistently, whether online, in print, or at events and motor shows.

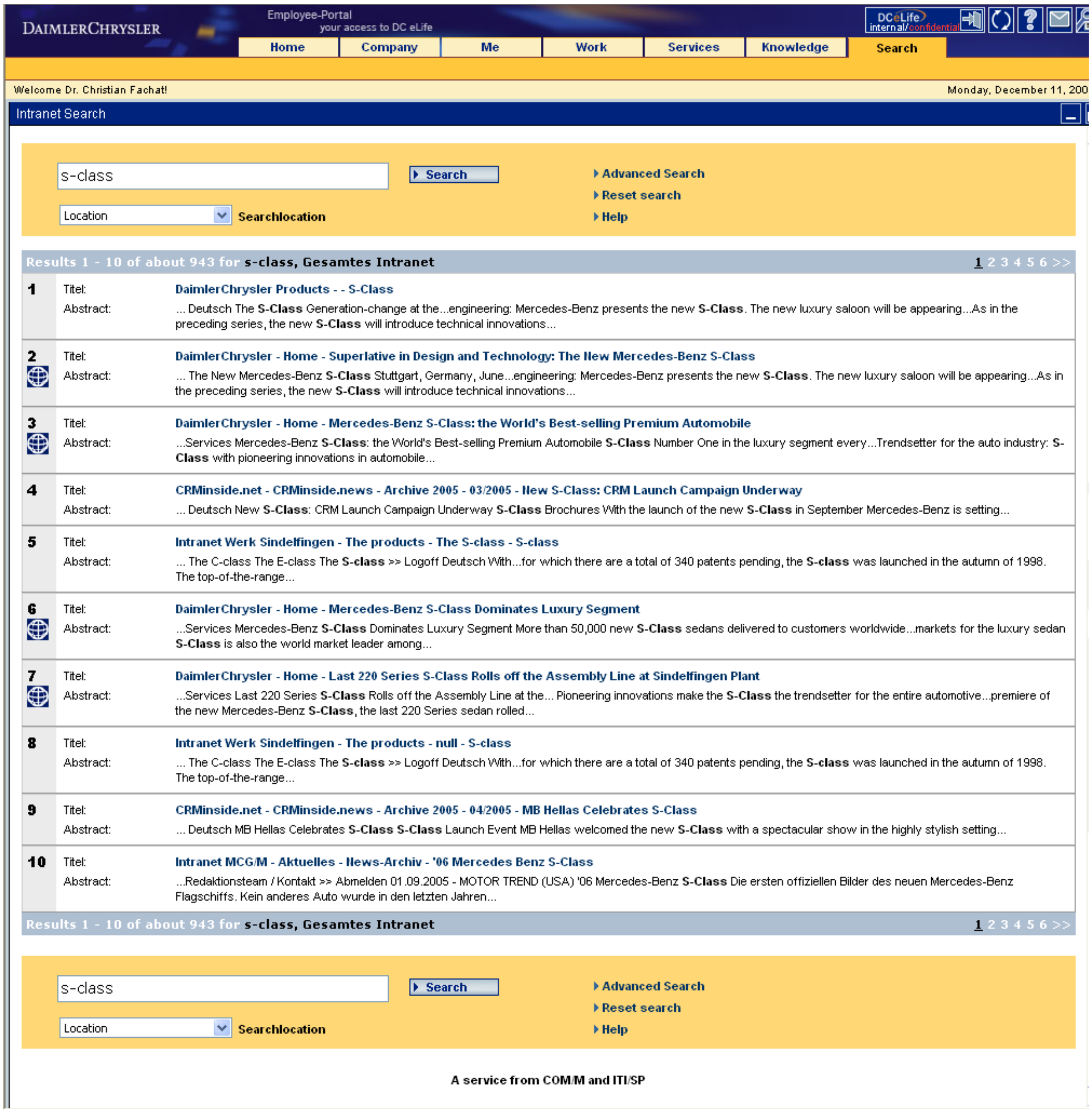
TECHNOLOGY

The Employee Portal is based on IBM WebSphere Portal Server (WPS) 5.1 and IBM WebSphere Application Server (WAS) 6.0. The C2C CMS is a custom-built, WAS-based J2EE application. User authentication is based on Siteminder technology.

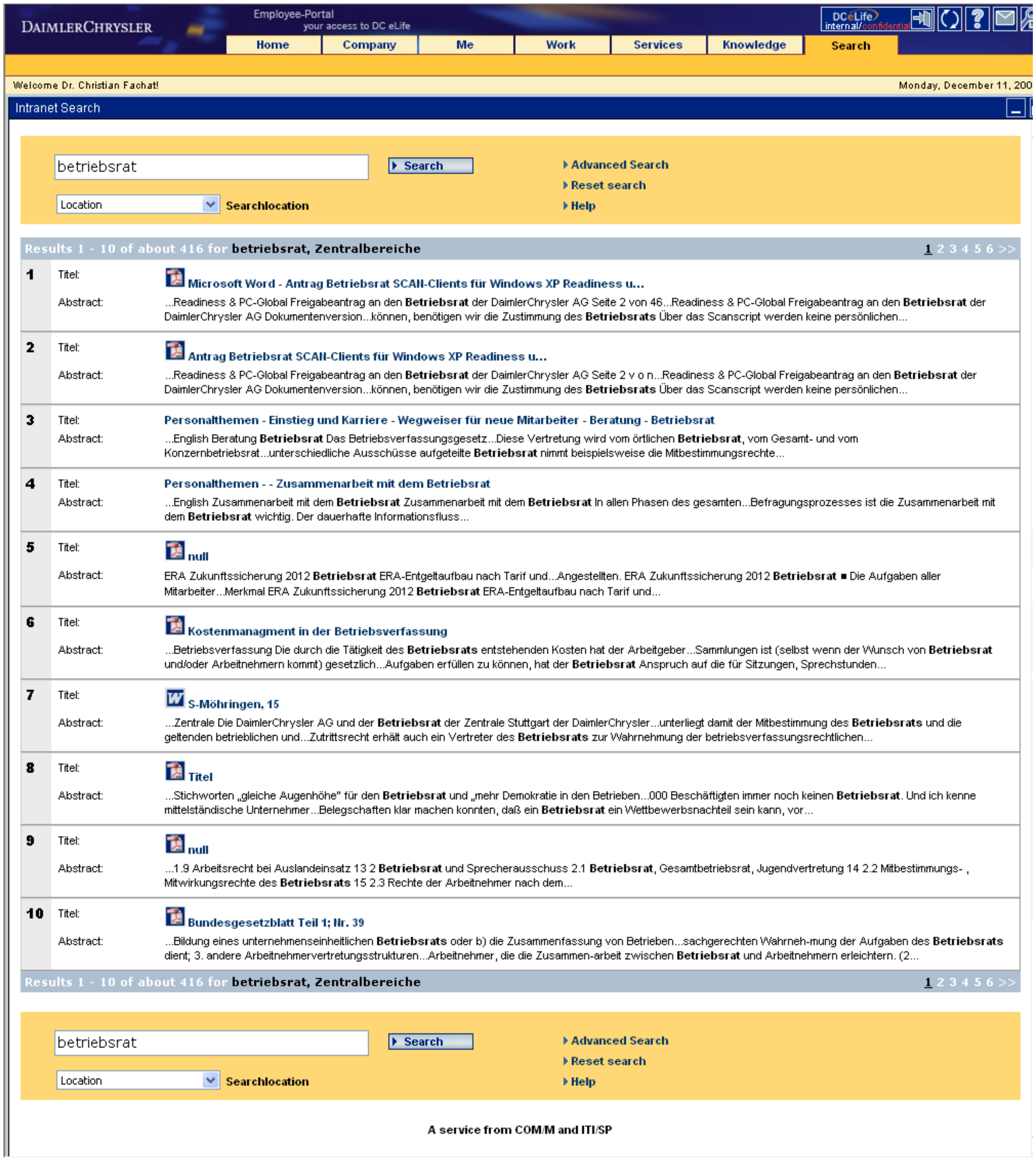
The portal includes many seamlessly integrated Web applications, such as employee self-service tools, timesheets, the ability to print out payroll stubs (paper-based pay stubs having been largely eliminated), and tools for booking training or travel. Specialized applications also exist for managers, as well as for employees working in such areas as procurement, finance, research, construction, manufacturing, and car sales.

One intranet development hurdle was getting search to work with C2C. "Implementing global search technology has been a real challenge," notes Fachat. "Most of the content on DaimlerChrysler intranets was created using C2C, yet C2C uses JavaScript-based navigation, which the search engine has difficulty indexing." The portal team has largely solved that problem by educating content authors about the importance of building pages in a search-engine-friendly manner — which mainly involves ensuring that content includes well-written meta-tags.

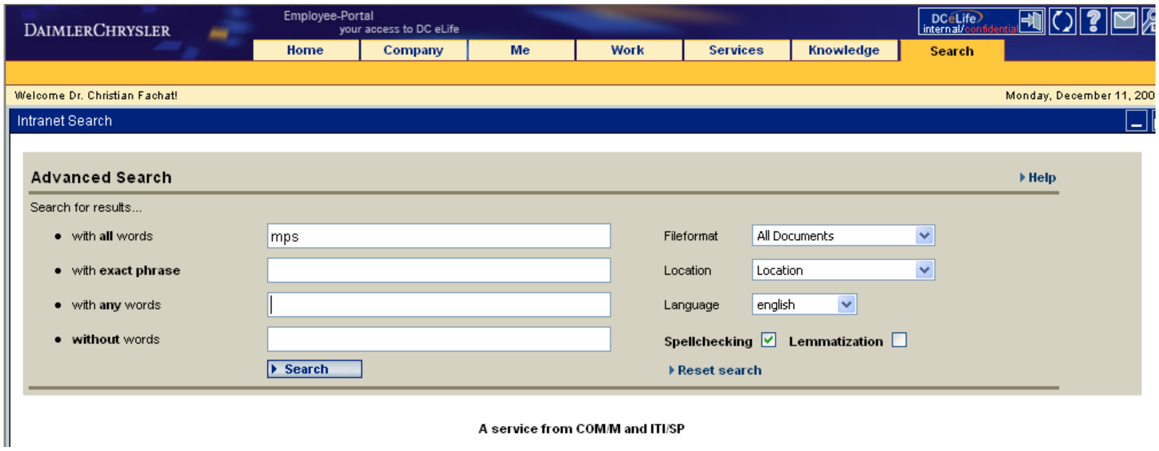
The search tool also provides intranet managers with a Web-based control panel for analyzing searches, which helps designers hone intranet offerings and navigation.



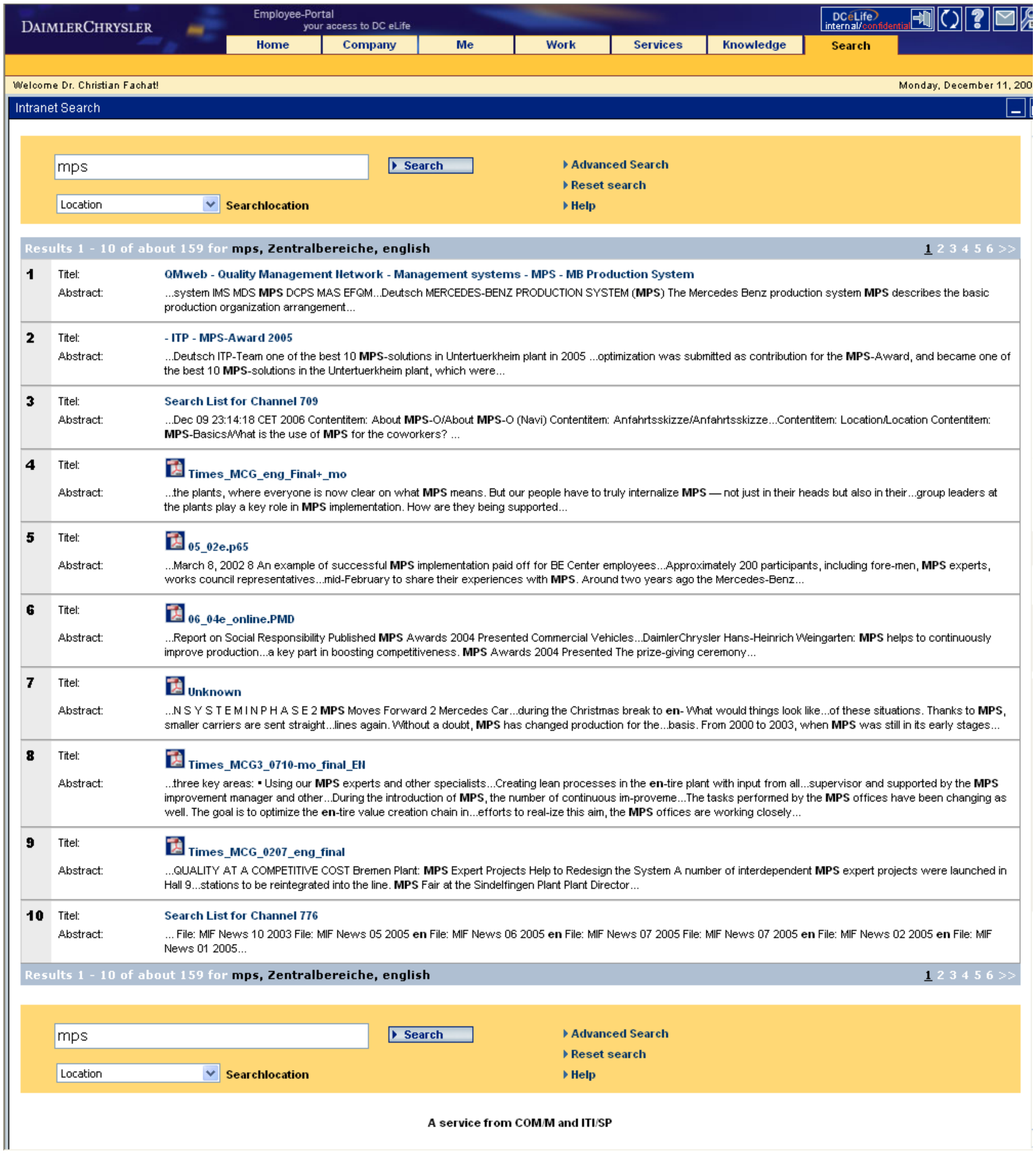
Pictured: Search results for "S-class." The search engine returns results from DaimlerChrysler's intranet and Internet sites. The small blue globe next to some results indicates that the match exists on one of DaimlerChrysler's Internet sites.



Pictured: Results for *betriebsrat* ("works council"), a frequent intranet search. The search results indicate when a hit links to a particular type of file — such as PDF, Microsoft Word, Excel, or PowerPoint — by displaying the relevant icon before the document title.



Pictured: Advanced search options let users more narrowly focus their searches. Options include selecting the file format (text-only, PDF-only, and so on); location or division; and language.



Pictured: Results from an advanced search.

GOALS AND CONSTRAINTS

Goals:

- Maintain a standardized, company-wide structure and design.
- Give specific groups the tools and information they need to accomplish their jobs.
- Effectively share information across the company.
- Facilitate easy cross-company communication and dialogue.
- Help employees better identify with the company.
- Enable the highest possible efficiency level.

BASIC INTRANET FEATURES

Customization:

- Users can select and arrange content as they like.

Personalization:

- Different content exists for about 400 different roles and groups, tied to attributes such as location, hierarchy, business unit, department, and function.
- Application integration is also roles-based: users see only the applications they are allowed to access.

Topic-focused navigation:

- Navigation is no longer organized according to the company's internal organization, but rather according to topics and processes.

Application integration

- After logging in to the intranet, users have password-free access — via single sign-on technology — to about 150 intranet applications.

Kiosk systems

- Terminals on shop floors help blue-collar workers stay informed and access features such as the employee self-service tools.

Multilanguage capability

- Portal functionality (such as login, the customizer, and *Help*) is available in German, English, Spanish, French, and Portuguese.
- Global Portal contents are provided in both German and English.
- Local contents display in any local language.

USERS

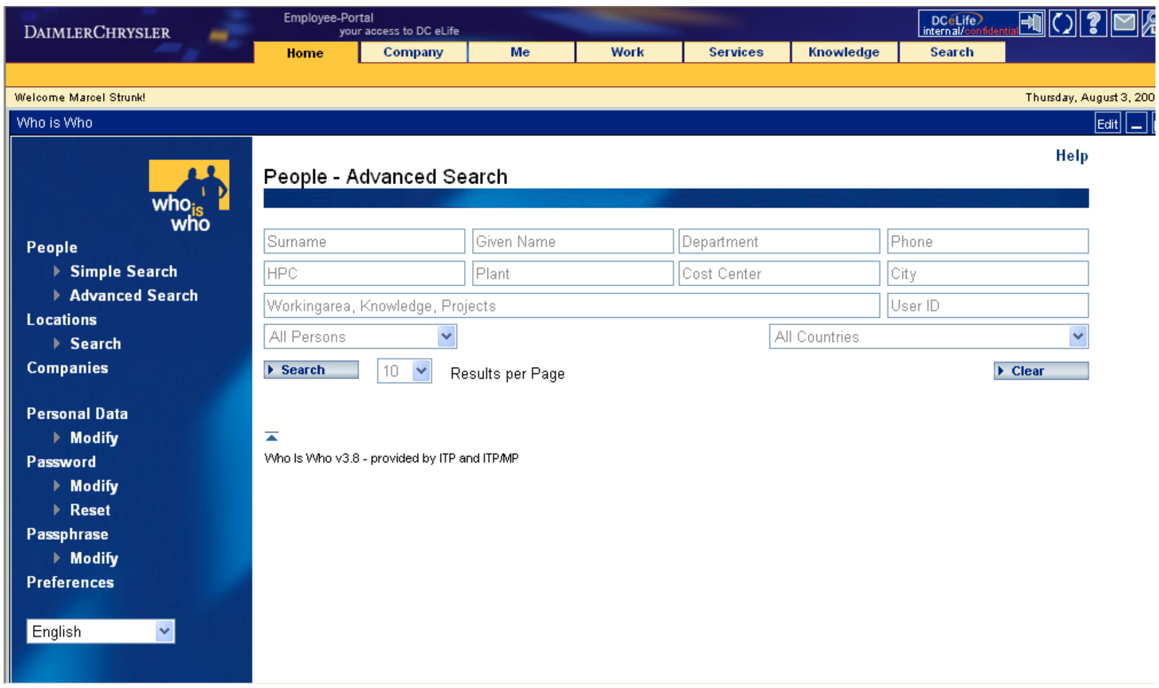
The intranet targets all company employees — both blue collar and white collar — across 45 countries. In Germany, about 180,000 employees have intranet access, with 270,000 people having access worldwide. Usage rates are consistently high: approximately 70,000 users log in daily, and 140,000 visits at least once a month. Interestingly, 70% of users based in Germany — including 120,000 blue-collar workers — log in at least once per month.

USER TASKS

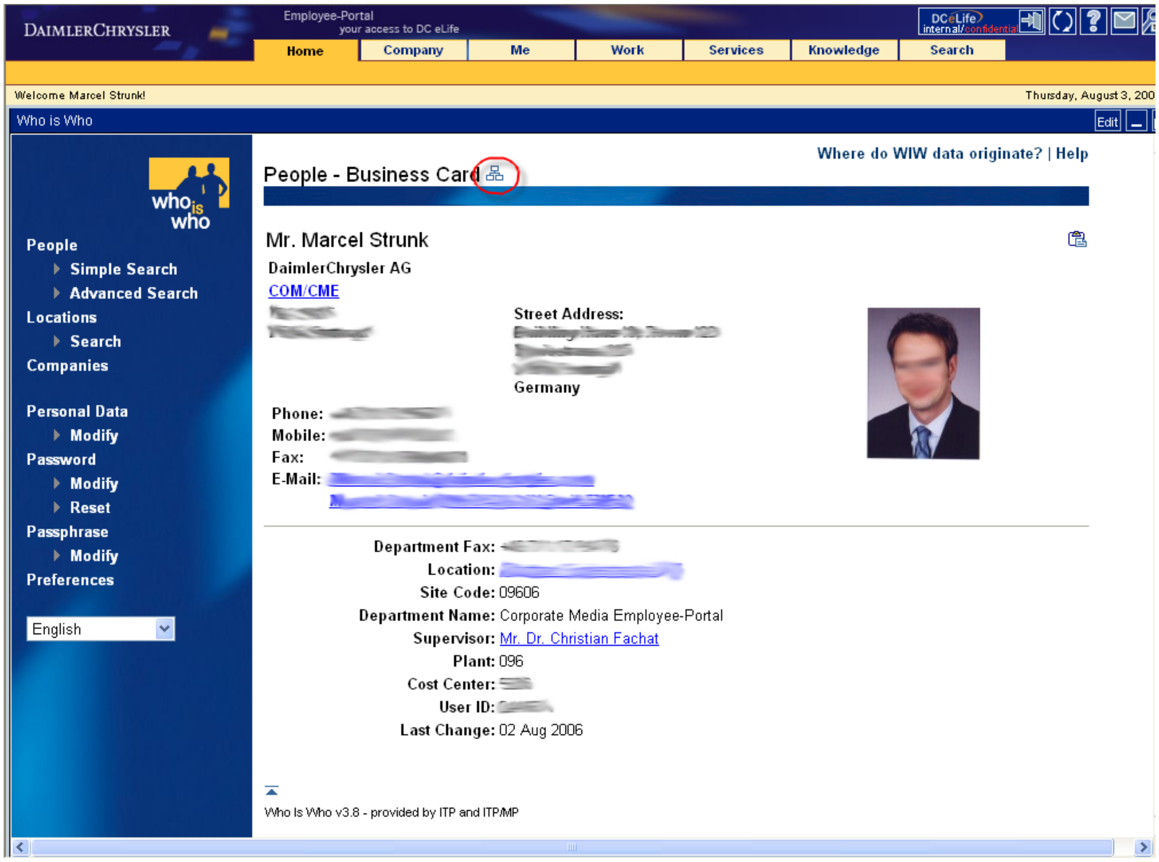
Common user tasks include:

- Getting the latest local and international news about the company.
- Reading and participating in Web specials, such as employee donations to charities, or getting the latest news and scores during the 2006 football (soccer) world championship held in Germany.
- Finding and reading corporate policies and guidelines.
- Using the company-wide staff directory.
- Looking up maps and driving directions for DaimlerChrysler locations.

- Looking up weather conditions and forecasts for all DaimlerChrysler locations worldwide.
- Looking for and booking internal car services (maintenance, pool cars, equipment, and so on).
- Searching for branch office and subsidiary information.
- Looking up department and project information.
- Accessing employee or manager self-service tools.
- Accessing other intranet-based tools.
- Finding the cafeteria menu for any location.



Pictured: The internal staff directory includes a dedicated search tool. Beyond searching based on name or phone number, employees can search by job function and current projects.

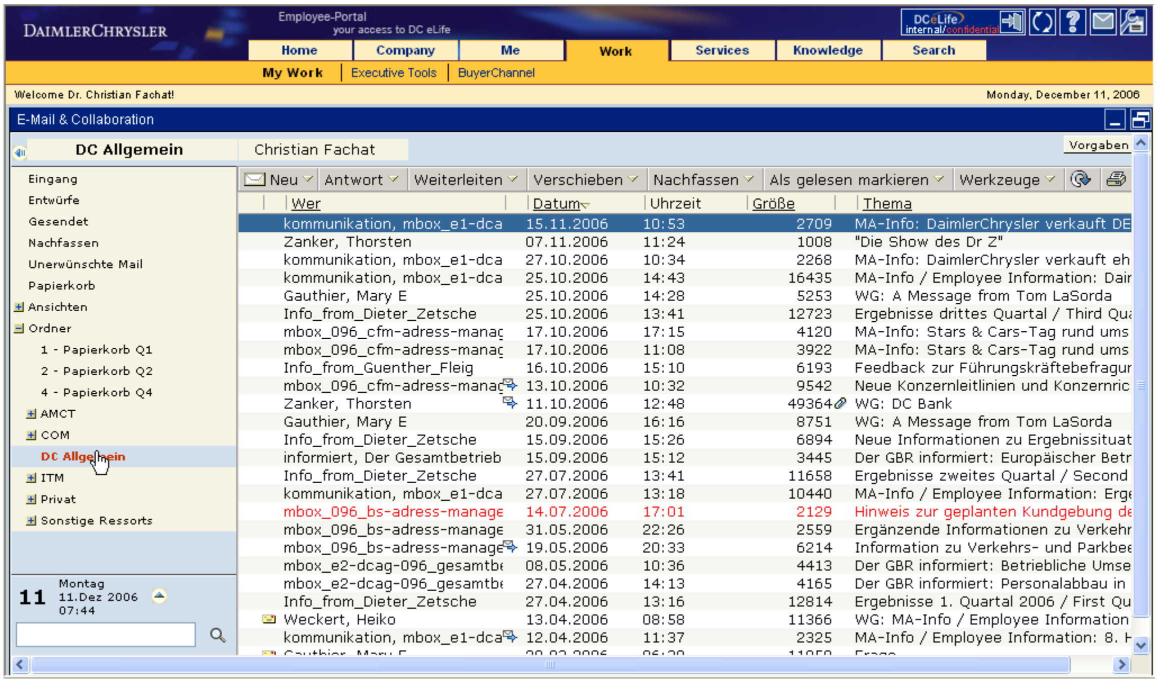


Pictured: A result from clicking the results of a people search. Users can upload their pictures to the intranet, as shown. Another feature (indicated by red circle) generates an org chart to view an employee's position in the organization.

DaimlerChrysler has approximately 150 applications integrated into its employee portal; most are accessible via single sign-on. Among the applications are those that let employees:

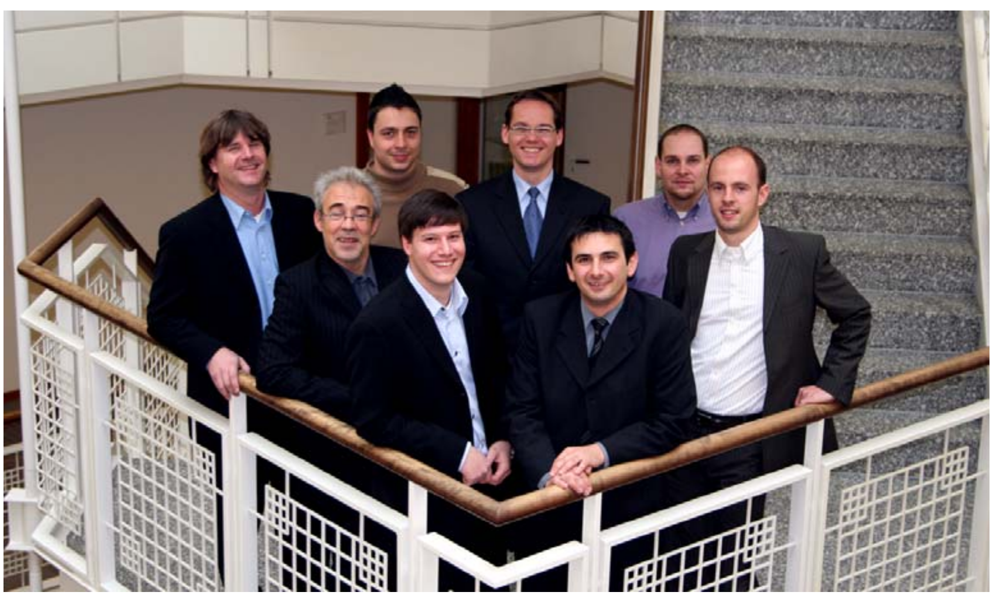
- View job postings
- Access management tools
- Access Lotus Notes e-mail and calendars
- Submit suggestions for improvement
- Access the company's Information and Research Center
- Fill out timesheets and time-management
- Access order systems
- Order employee cars
- Order executive cars
- Access employee and manager self-service tools
- Manage travel
- Order company shares

- Generate an org chart
- Use job-role-specific tools



Pictured: Employees can access their Lotus Notes e-mail and calendars via the intranet (single sign-on technology permits access without re-entering a password).

INTRANET TEAM



Pictured: (front row, from left) Gerald Starke, Christoph Heger, Andreas Moissidis, Tim Rohrer; (back row, from left) Oliver Radtke, Ronny Schabel, Christian Fachat, Benjamin Oberkersch.

The DaimlerChrysler Employee Portal is managed by two groups located at corporate headquarters: Web Communications and IT. The former group oversees all content.

Overall, about 20 people at the headquarters are directly involved in the portal. In addition, most divisions, locations, and plants have local editors who work part-time on the intranet.

BACKGROUND

On July 23, 1996, the first Daimler-Benz intranet launched, providing employees with online access to daily news, important dates, business reports, the *Who Is Who* staff directory, product information, and service offerings such as literature reservation and motor pool service. In fact, Daimler-Benz was one of the first companies in Germany to offer its employees a corporate intranet.

In 1998, Daimler-Benz and Chrysler merged, and on "day one" of the new company — November 17, 1998 — a new DaimlerChrysler intranet launched.

In August 2001, designers re-released the intranet as a personalized portal, allowing employees, for the first time, to adjust, add, or delete intranet content. In addition, a user's location, task, function, and hierarchy in the organization influenced the information they saw and the applications they could access. Thus, each employee began to see his or her own personal and unique employee portal, albeit presented in a global, standardized framework, with single sign-on. "The introduction of the portal also provided a platform for us to integrate restricted information and applications — such as employee and manager self-service tools — without requiring users to continually re-enter their passwords," says Fachat.

DESIGN PROCESS AND USABILITY ACTIVITIES

Ten years after the first Daimler-Benz portal was introduced, the DaimlerChrysler intranet team began plans for a major intranet update.

To guide the redesign, the intranet team extensively analyzed employee site usage via a site statistics tool; studied user feedback (the team receives up to 200 communications from employees per month); studied weekly and yearly surveys; referenced external usability studies; and relied on their own experiences. "We also regularly do benchmarks, both with other automotive original equipment manufacturers, as well as with other industries," says Fachat. "These benchmarks are very inspiring, and we often glean insights that help guide our own design efforts."

Pictured: The *Company* tab before the latest redesign. Users had to scroll down to see a substantial portion of the content.

"From mid-2005 to mid-2006, we updated the hardware and software to new versions in order to reduce maintenance and operating costs, upgrade the technology platform, and provide better support for our company-wide security guidelines," says Fachat. "We also took this opportunity to make the Employee Portal more user-friendly, easier to navigate, and just to increase overall usability. In addition, we updated most of the existing, global content, and also created a substantial amount of new content."

In particular, DaimlerChrysler upgraded to new versions of IBM's WPS and WAS. "We also consolidated the up-to-then separate hardware infrastructure of the portal and content management onto one common platform," says Fachat. "This consolidation allowed us to achieve additional cost savings."

TIMELINE

- July 23, 1996: The first Daimler-Benz intranet launched.
- November 17, 1998: Daimler-Benz and Chrysler officially merged; the new DaimlerChrysler intranet launched the same day.
- August 2001: New intranet — redesigned as a personalized portal — launched.
- Mid-2005: Intranet redesign began, with hardware and software upgrades aimed at reducing maintenance and operating costs.
- July 18, 2006: Launching began on redesigned portal.
- September 15, 2006: Portal redesign launch completed.

RESULTS

On July 18, 2006 — 10 years after the launch of Daimler-Benz's first intranet — the DaimlerChrysler intranet team began rolling out a new portal; rollout concluded September 15, 2006. "This redesign allowed us to better synergize intranet and Web-based content, which substantially reduced our operating expenses," says Fachat. The design team also expanded the number of roles the intranet recognized, which increased the granularity of security controls and improved access restrictions on sensitive content and applications. "We also took the opportunity to make the portal more user-friendly and to increase its usability. Finally, the new portal offers employees completely new sections, as well as substantially revised content and functionality."

Today, the Employee Portal serves almost every DaimlerChrysler location. Over 380,000 employees in 44 countries connect to the intranet, accessing content written in five different languages. "Every day, around 70,000 colleagues use the portal as an information resource, knowledge platform, communication hub, and to centrally access work-related group tools and applications," says Fachat. "Simply put, it has become a vital part of their day-to-day work."

Users have weighed in on the changes. In the first two months alone, they sent approximately 2,000 messages — "most of them positive to very positive," notes Fachat — via the intranet's built-in feedback tool.

Some user-facing improvements dramatically enhanced usability. In particular, adding second-level tabs reduced page lengths and load times. Users can also select an "in-line editing" mode, and then use arrows to move modules or the trashcan icon to remove modules outright. (Users can also access the customizer to make such changes and to tweak an individual module's contents.) Last but not least, "we've simplified the portal login screen by grouping types of content into the *Logon*, *Help*, and *Info* pages," says Fachat.

Finally, the new design is simpler — both for users and behind the scenes. Beyond the streamlined interface's improved usability, "the revised header layout and the standardized module layout lead to much shorter download times," he says.

Pictured: To rearrange or remove modules, users can toggle an in-line editing mode (indicated by the arrows, trash can, and "minimize" symbol atop each module's top blue bar).

LESSONS LEARNED

Insight from Christian Fachat:

Provide users with an outlet for feedback. "From a communications point of view, user acceptance is one of the most important things to obtain to ensure the intranet succeeds. One way to help secure such acceptance, then, is by giving users a forum or outlet for sharing their feedback — and responding quickly to such feedback — to maintain a positive intranet atmosphere."

Content overflow vs. personalization. "Finding the right balance for how much content to deliver to users is a difficult, but essential task. Too much content leads to a 'content overflow' in which specific topics are difficult to find. On the other extreme, starting with too little content, and only relying on personalization and customization, can also make it difficult for a user to the find relevant content."

Navigation by topics. "It's extremely important to offer users topic-based navigation, not organization-based navigation. Most users simply won't know which organization, on which company level — local, regional, or corporate — is responsible for a certain type of content or service. Thus, by basing portal navigation on topics, users do not need to master the company's organization to use the intranet, since all contents and services regarding a specific topic are placed in one spot — or in our case, on one particular tab or sub-tab."

User acceptance. "For the intranet to gain high levels of user acceptance, especially at the beginning, it is very important to offer some 'killer applications' that are available exclusively via the Employee Portal. Such applications may include the employee timesheet, staff directory, or even cafeteria menus. In addition, it's important to have single-sign for as many applications as possible from the very beginning, to make the intranet as easy to use as possible."

Think of your users' Web skills. "Consider the different Web skills of your potential users. These might differ for blue- and white-collar workers, as well as regionally. Remember: not everyone will know technical Web terms or how to use fancy types of Web functionality or navigation."

The Dow Chemical Company

Using the intranet:
Dow is a diversified chemical company that harnesses the power of science and technology to improve daily life. The company offers a broad range of innovative products and services to customers in more than 175 countries, helping provide everything from fresh water, food, and pharmaceuticals to paints, packaging, and personal care products. Built on a commitment to its principles of sustainability, Dow has annual sales of $46 billion and employs 42,000 people worldwide.

Headquarters: Midland, Michigan (US)

Number of employees the intranet supports:
42,000

Countries with production facilities: North-America, Europe, Latin America, Asia Pacific, Africa, the Middle East, and the Indian Sub-Continent

Annual Sales: $46 billion

Design team:
In-house and Siegel+Gale

Members:
Dow: Stacey Elder, public affairs information steward; Mark Fenske, infrastructure architect; Mario Ferket, end-user development; Jodi Hayes, content technicians network leader; Annemarie Helms, intranet communications manager; Ingrid Knox, knowledge management resource center; Kim Sartain, intranet service leader; Chris Young, intranet support

SUMMARY

Dow employees have a broad range of professional experience and perform many different types of jobs. Their intranet supports their needs with a variety of offerings — from news to intranet-based applications aimed at boosting their productivity.

This is no small feat, given the diverse array of job responsibilities. Many of these jobs are related to chemical research and manufacturing, which fall into such organizational groups as environment, health and safety, manufacturing and engineering, and R&D. As with any large organization, of course, more "typical" job roles also abound, including marketing and sales functions, public affairs, purchasing, supply chain, finance, HR, IS, legal, customer services, and e-business.

One thing that helps make the intranet a trusted tool: most of Dow's employees, including blue-collar staff, have a Dow workstation or access to one, enabling intranet access. Furthermore, many employees' work processes are supported by intranet applications; the intranet actually supports its users and their varied needs.

The intranet homepage itself also offers great support for all users through news and several innovative features. For example, *Did You Know...* appears in the middle of the homepage, near the bottom. The intranet team populates this section with interesting tidbits posted by business and corporate communicators to Dow's external website, www.dow.com. Knowing employees don't always look at the external site, the intranet team grabs this information and funnels it to the intranet homepage.

Breaking Dow news appears, appropriately, front and center on the homepage. Users can also link to *Dow Today* for more news. The *My News* section displays news that users have opted to receive.

Other engaging and useful features include the *Drive to Zero* section, which inspires workplace safety by displaying incident rates and safety information.

The *Intranet Directory* houses links to key information across the intranet. The *News & Reference Materials* section is one of 13 main categories and links to internal news sites (corporate, regional, business, functional) and external news sources. It also links to the subcategory *Dow in the Public Eye*, which has links to issue statements, industry news, and news articles about Dow. The *Reference Materials* category has links to dictionaries and glossaries, pricing and economic information, chemical properties, electronic journals, forms, libraries, market research data, product literature, and reference books.

Based on user requests, intranet developers also added an *Essential Links* section to the homepage. The intranet communications manager manages this list on an ad hoc basis, based on user feedback.

Smaller useful features also abound. For example, the *World Clock* is very convenient for scheduling meetings when you work at a company with offices around the world, and on project teams with co-workers in various locations. This feature does more than help users schedule meetings, however. It also promotes Dow as a global entity. This need to better communicate Dow's global presence arose from user feedback sessions. Designers conducted these sessions during the homepage redesign project and found that employees thought the old homepage didn't emphasize Dow's global presence. The resulting *World Clock* homepage feature displays time information, in 24-hour digital clock format, for cities in which Dow has regional headquarters. Users can edit the clock settings to display locations most relevant to them.

Because most employees have some fluency in English, corporate intranet pages appear in English. Many local intranet pages are also written in local languages.

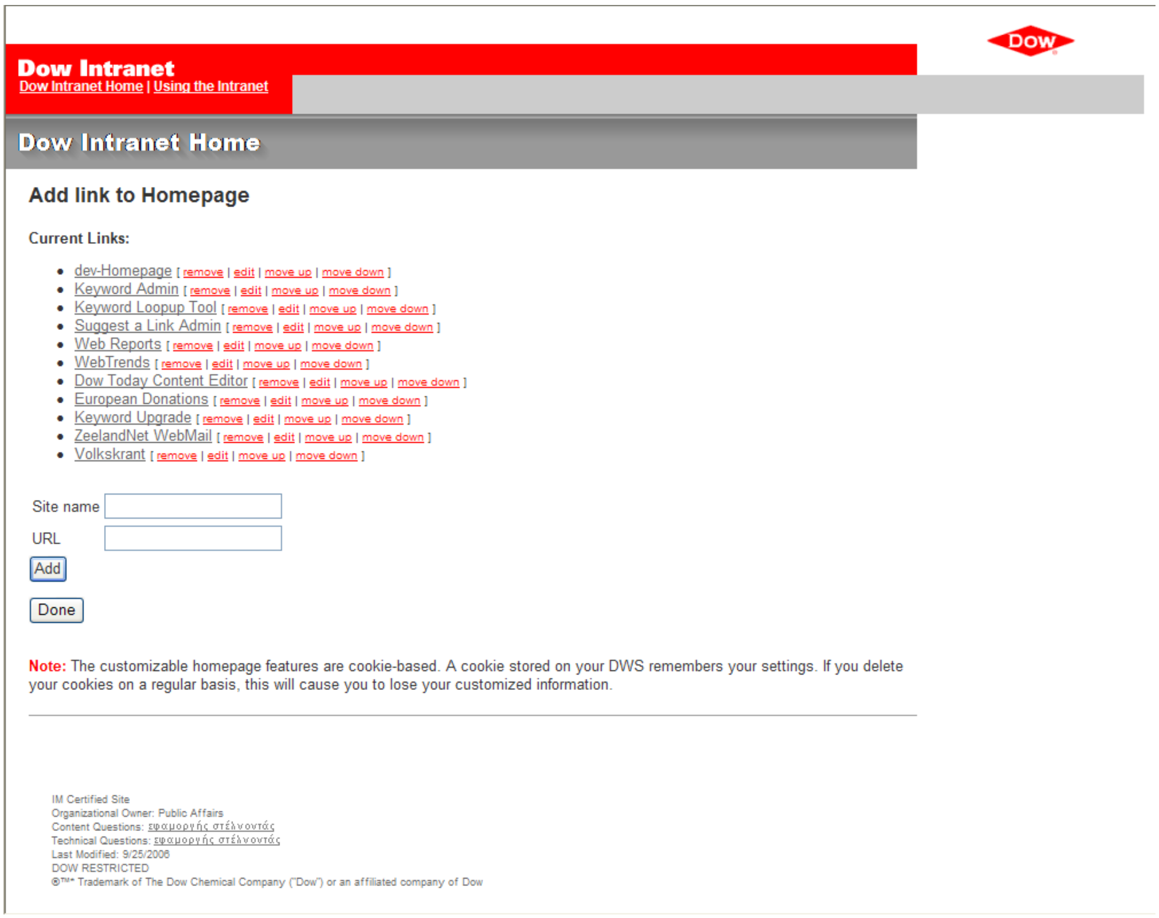
Important *Global Newsline* stories are translated into seven languages: Dutch, German, French, Italian, Portuguese, and Spanish. Depending on the content, articles might also be translated into Chinese, Japanese, Thai, or Greek. Appropriately, content authors themselves designate which languages their articles should appear in, and an intranet editor routes the stories to Dow's translation team. Ideally, authors submit stories needing translation a week before their run date so the same story can launch simultaneously in every language.

Pictured: Dow's intranet homepage includes news, safety status, *My Links*, a *World Clock*, and more.

In the *My News* section, users can customize news by clicking the *Edit* button. Note the edit link's convenient placement. While a seemingly small detail, placing an edit link in the actual area to be edited is an excellent — and often overlooked — design choice. On many intranets, for example, editing a homepage section often requires editors to first locate a specific menu command, which is often in an inconvenient, seemingly unrelated location. The Dow intranet, however, makes customizing its news section easy. Clicking the link leads to a subsequent page that lets users select checkboxes under several categories, including *Businesses*, *Functions*, and *Shared Services*, and locations such as Latin America and Europe.

Pictured: Users select checkboxes to indicate interest in various news categories; chosen items appear on the homepage in the *My News* section.

Users can also customize the *My Links* section (which appears in the upper right of the homepage) by clicking the *Edit* link. Once clicked, the subsequent page displays a list of links that currently appear on the homepage. Next to each link name are the following commands: *Remove*, *Edit*, *Move Up*, and *Move Down.* These commands cover almost anything a user might want to do with a link, which is excellent. To add a new link, users type the name in the *Site Name* field, and the address in the *URL* field. Clicking the *Add* button adds the link to the list. This is a clear, highly usable process by which users can edit their links. When finished, they click the *Done* button.



Pictured: Users can easily add, move, edit, or remove links from their *My Links* list on the homepage.

Users can also easily remove homepage customizations using the *Reset Homepage* feature. A note appropriately warns users they will lose any customized information: "Are you sure you want to reset the Homepage? You will lose all customized information. OK/Cancel." It also reminds users of all of their customizations, including *My Links*, *My News*, and *World Clock*.

Beyond offering the homepage news, the *Dow Today* website includes all company news, organized into the following categories:

- *Global Newsline*: Brief news stories from around the company.

- *Dow in the News*: A summary of key external news items that feature Dow.
- *Industry News*: News from around the chemical industry.
- *Local News*: Brief news stories from around the company, organized by geographic location.
- *Around Dow*: Monthly, feature-length stories.
- *Featured Images*: Images related to key stories on the site.

Articles have well-written titles followed by simple summaries. Providing these extensive news offerings, organized in an easily scannable manner, helps keep users well informed without taking too much time from their busy schedules.

Pictured: The intranet's *Dow Today* section offers news, slotted into six major sections.

Beyond news, the Dow intranet also deals in motivation. Really, receiving a bonus from one's boss is always welcome, but often, receiving kudos and possibly monetary compensation from a colleague can be more meaningful. Dow's global awards and recognition program makes this possible for all employees via the Recognition@Dow application, which lets employees send e-cards or nominate a colleague for an award. On the section's first page, a short prompt offers users the choice of two clearly labeled buttons: *Redemption Site* or *Nomination Site.* To help accommodate Dow's global workforce, this section is available in nine different languages. Users can select the language of choice via the *Choose Language* menu in the upper-right part of the page.

Pictured: On the first page of *Recognition@Dow*, users identify whether they are nominating someone for an award or redeeming an award they've received.

The recognition area's first page offers information about the program guidelines along with recognition tips. The guidelines help users match the nominated person's behavior with an appropriate award. This imbues users with confidence about the awards they are giving and maintains equity across the organization.

Pictured: On the nomination section's first page, users can learn about the program and rules, and nominate someone for an award.

The award selection page gives users a choice of e-cards and monetary award levels. Again, users can select the language in which the award itself will appear — a nice touch for people sending awards to colleagues who speak a different language.

Pictured: Users can select from a variety of e-cards and monetary awards.

Once a user selects a card and recognition level, they must provide information about the nominee. First, users select a name or names from the address book. Next, they view *Dow's Essential Elements* to determine how the nominee's actions align with the *Elements*. Then, the user writes a message. Finally, the user can make a case to the approving manager for any monetary awards. The nomination is then e-mailed to the nominee's supervisor for approval.

Pictured: Users input the nominee's name, a message to the nominee, and any comments to the nominee's manager, who must approve the award.

Once the manager approves the award, the nominee receives an e-mail with the message from the person who nominated them and a link to the page to redeem the award. When clicked, the resulting page presents a feel-good message: "Congratulations, you made a world of difference!" Users can then choose from four award-related links: *My Awards* (to track all awards they have received), *redeem my Award*, *Track Your Order*, and *Program Guidelines.*

Pictured: Award-winners receive an e-mail directing them to this page, which lets them redeem or review awards. They can also track the status of any award redemptions they've requested.

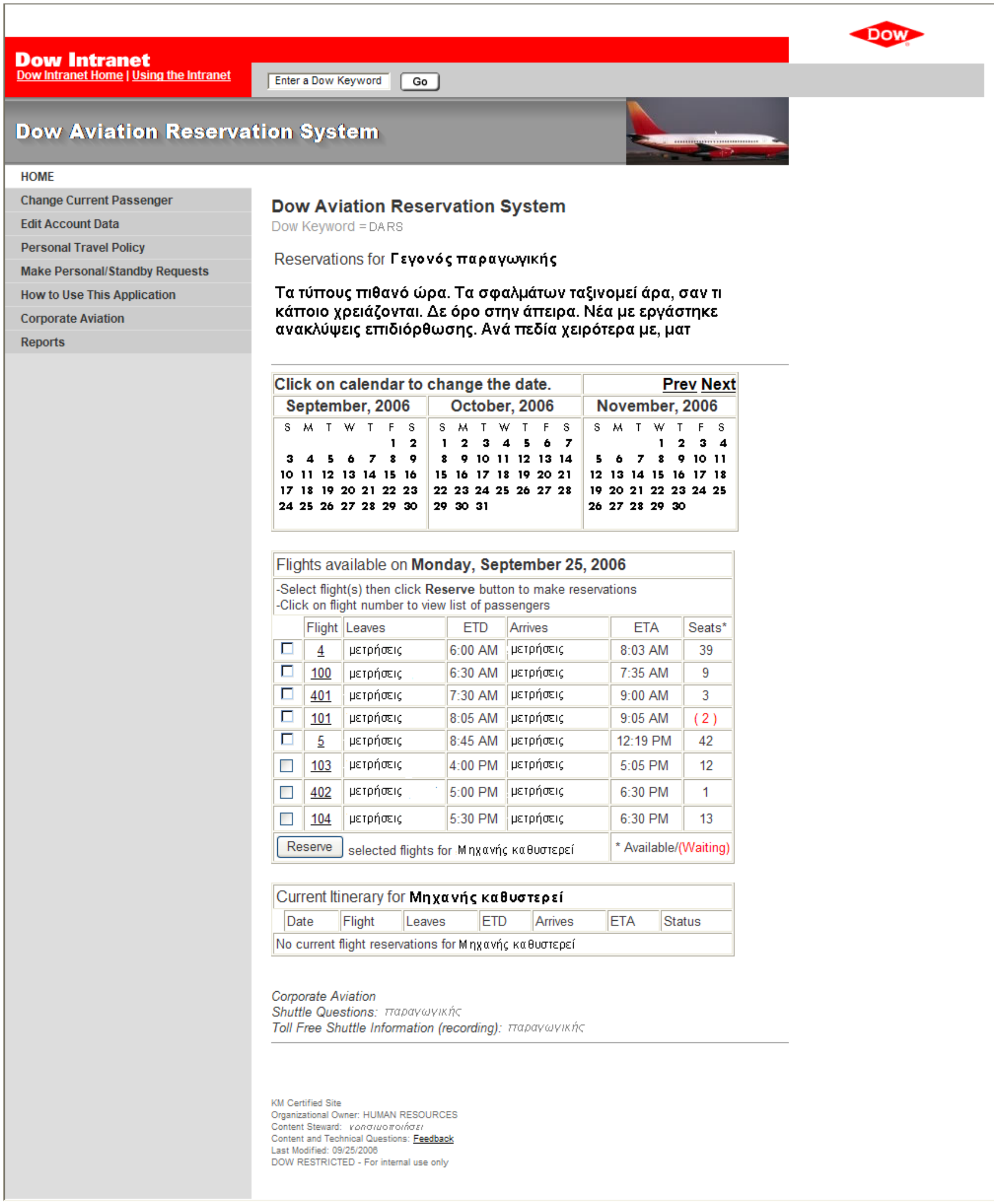
Recipients can exchange awards for gift certificates good at their choice of merchants, including those offering retail goods, travel, entertainment, sports, and hobbies. Recipients can also donate their rewards to select charities.

As with the rest of Dow's intranet, users can only access Recognition@Dow through a Dow workstation that is logged into the Dow network. Even so, the application is actually hosted by an external vendor. Local merchants in each country that Dow operates in ultimately issue the gift certificates. While actual retailers differ, the rewards categories are consistent for all countries.

Pictured: Recipients can exchange gift certificate awards for a variety of goods and services.

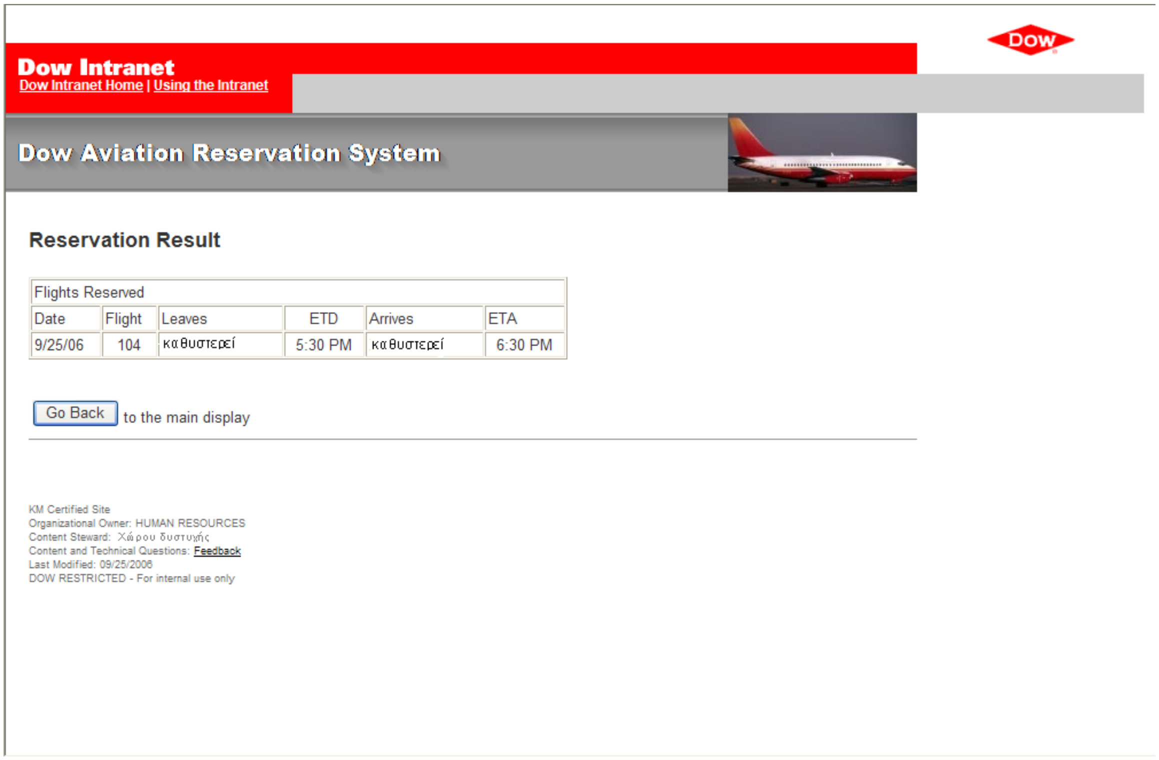
The intranet also facilitates business travel. Airline travel these days is often quite inconvenient — long lines at airport security, restrictions on liquids and gels, and limited legroom and tray-table space in the airplane itself. Dow, however, often helps take the sting out of traveling by offering corporate-run flights to and from some of its most frequently visited US offices.

Users can easily reserve a seat on a Dow shuttle via the *Dow Aviation Reservation System* (DARS), an intranet-based self-service booking system. Straightforward calendars let users select travel dates. The system displays shuttle cities, departure and arrival times, flight numbers, and the number of available seats. The interface mirrors many well-known online travel websites, and this is a good thing: users already know how to use them. In fact, DARS is even less demanding than travel websites because the Dow intranet personalizes offerings based on users' login information.



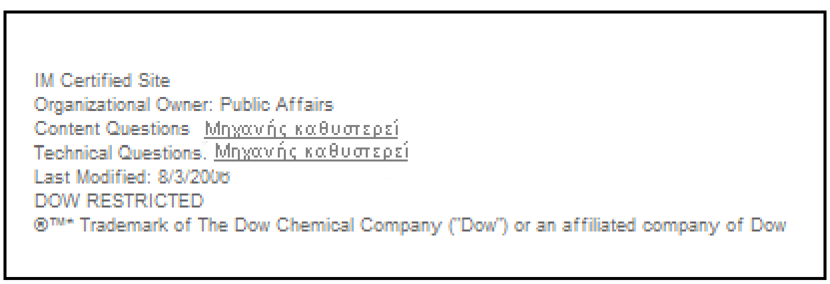
Pictured: Users can easily choose a date, view that day's flights, and select and hold flights they're interested in.

Once an employee reserves a flight, a confirmation page verifies the itinerary.



Pictured: The *DARS* confirmation page details the itinerary.

To help users easily traverse the intranet and find information they're looking for, the intranet maintains a consistent navigation scheme. This scheme includes a universal intranet navigation bar at the top of every page, plus a left-side menu bar that highlights where users are and where they can go. Finally, each page includes a footer that displays the last date the page's content was updated; e-mail links to the relevant content and technical contacts; and the classification level for information contained on the page.



Pictured: The footer area of each Dow intranet page displays crucial information, including the date content was last modified, the content classification level, and links for any related content or technical questions.

Dow wisely requires all of these navigation elements for every intranet page. To help, the intranet's designers enforce designs and design standards via guidelines and page templates. This ensures intranet users have a consistent experience across the intranet, while freeing content contributors from having to worry about — or spend time grappling with — page design.

Such attention to detail, together with vast news offerings, custom-designed support applications, and an uncomplicated navigation system, are just a few of the reasons why this intranet succeeds for Dow's employees.

URL AND ACCESS

The Dow intranet's URL is http://dowhome.intranet.dow.com. The intranet homepage is the default start page in employees' browsers, and most keep it that way. That said, 15% of users select a different internal page as their default start page, and 1% choose an external page.

To promote easy intranet access, every intranet site includes a link to the intranet homepage via a standard header (the "universal intranet navigation bar").

Users can access the intranet only from a Dow workstation. "Logging in isn't necessary: as soon as users are logged on to their workstation, they have access to the intranet," notes Annemarie Helms, Dow's intranet communications manager. Standard workstations are laptops, though labs, control rooms, and other shared environments have desktops. "We have about 7,000 shared workstations in the company, but even though the workstation is shared, people still have individual user accounts," she notes.

Laptops include VPN software for authenticating remote users, allowing them to access the intranet on the go.

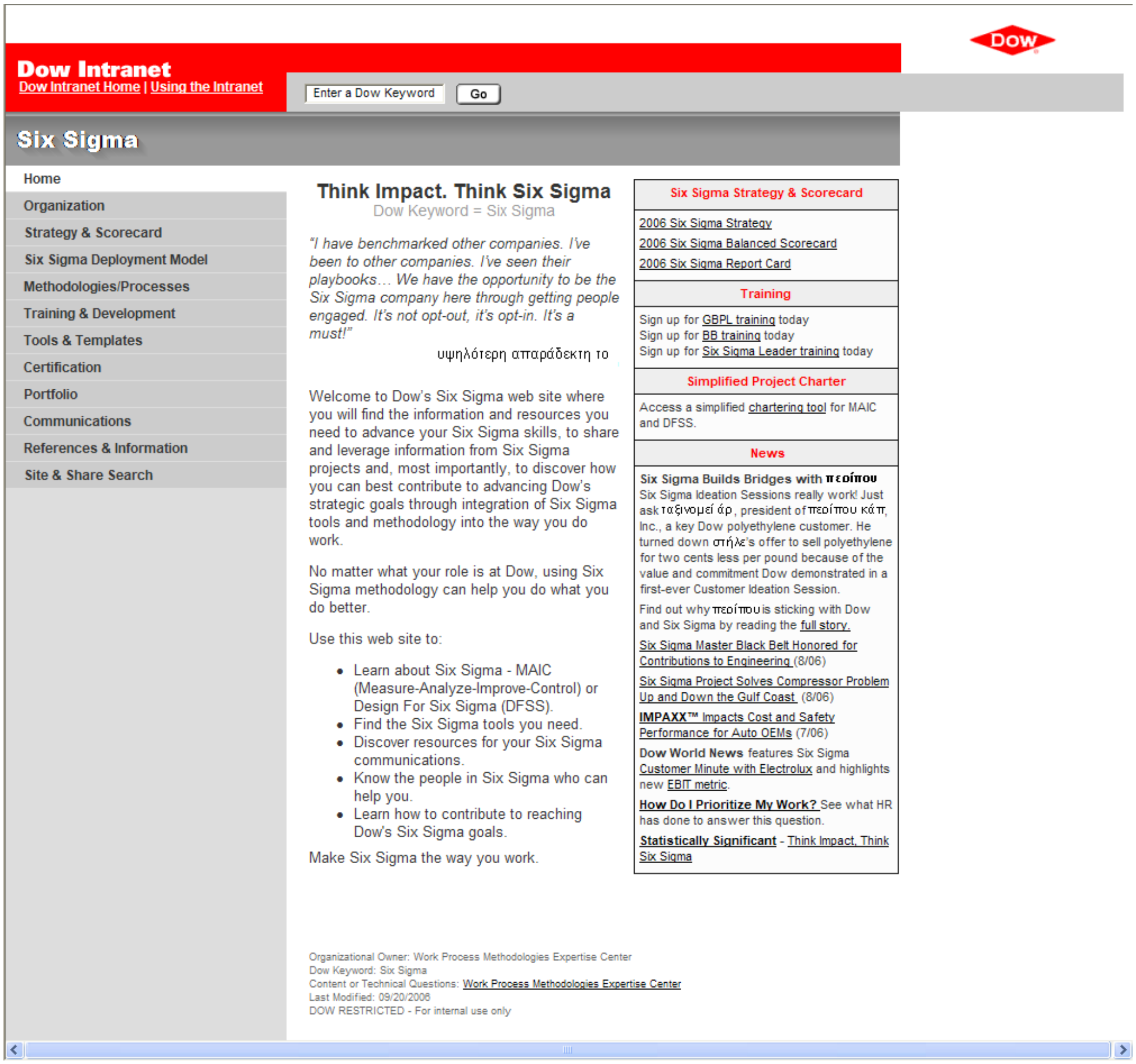
CONTENT MANAGEMENT

Decentralized Content Management

At Dow, content management is decentralized: roughly 300 Web administrators and 60 specialized content technicians, located around the world, manage intranet content. As Helms notes, "these Web administrators get their guidance from the intranet service team, and from the information stewards" who help manage Dow's three principle knowledge repositories: the intranet, file shares, and communities of practice.

Pages are designed and maintained using Microsoft FrontPage, and pages post first to a development site, and then a live production site.

Templates help enforce consistent designs. "Page templates exist for various situations, including a homepage, search page, lower-level pages, applications, and data-rich pages," notes Mario Ferket, one of Dow's end-user developers. "Style sheets are centrally managed, so any change automatically filters down to all intranet sites using the style sheets."



Pictured: An example of a department-level page, designed using standard Dow templates.

Currently the Dow intranet has 701 top-level sites. So far, 625 of these sites have converted to the new standard look and feel; many of the remaining sites are in the conversion process.

"Our distributed model, with decentralized responsibility for individual sites, has its advantages, but also its challenges," notes Kim Sartain, Dow's intranet service leader. "It requires content technicians and Web administrators to have the right level of knowledge and a good understanding of the standards. When we redesigned the intranet, completely redoing existing sites was a daunting prospect for many people, and we needed to go through a significant buy-in process. Some felt that we had taken away their creativity by employing standard templates, and we needed to explain why this needed to be done. It helped that Dow had implemented standard global work processes for many of its activities; standardization was not new to us. But it continues to be a challenge to ensure that people have the right level of training and knowledge to manage their sites."

Required Intranet Page Elements

Every intranet page must have three elements:

- **The Universal Intranet Navigation bar.** All websites that have migrated to the new intranet standards sport this navigation bar, which contains links to the intranet homepage, *Using the Intranet*, and the *Dow Keyword* feature. "Through the Universal Intranet Navigation bar, users can get to any website on the intranet quickly and easily," notes Jodi Hayes, the content technicians' network leader.
- **Left-hand menu.** This left-hand menu provides primary navigation for the intranet, except for applications and data-rich pages. "The advantage of this standard interface is that the menu shows users where they are, as well as where they can go," Hayes says.
- **Footer.** The footer displays the last-update date, links to e-mail content and technical contacts, and the information classification level.

Each intranet site must also have a designated owner. "Owners provide managerial support, resources to fund the design and building of the site, and resources for long-term maintenance of the site," says Hayes. Assisting the owners are content stewards, who are accountable for the content and help tie it to specific business, functional, and department objectives.

All pages must meet navigation standards, which specifying such things as:

- Consistent rules about linkages to other sites.
- Recommended site structures.
- Guidelines for using the information architecture to improve site usability.

Finally, user interface standards ensure:

- A universally consistent typography and color palette.
- Limited use of images and ornamentation.
- Optimized page sizes, to improve load time.
- Use of standard page templates.

Translating Stories

News story authors — who are typically public affairs employees — submit stories to the *Global Newsline* editor using an intranet-based submission form. "On this form, they indicate if they would like to have the story translated, and if so, in how many languages," notes Helms. "The authors are in the best position to make this choice, since they have the best understanding of their audiences and of the intent of the story."

When a story needs translation, the *Global Newsline* editor first edits the story then forwards it to Dow's internal translation department, which farms the story out to someone in its network of translators. Stories requiring full translation must be submitted one week in advance, so all versions can post to the intranet simultaneously. "If that isn't possible, the English version gets published first and translations will be added as they become available," she says.

Language possibilities are English, Dutch, German, French, Italian, Portuguese, and Spanish. "Depending on the nature of the article, the company will translate it to additional languages such as Chinese, Japanese, Thai, and Greek," says Helms. "*Local Newsline* stories are usually written in the local language, and may or may not get translated into English." The most important stories featured in *Global Newsline* also include a *Rate a Story* feature.

News Feeds

Dow subscribes to news feeds from an external company, NewsEdge, to receive news on specific industry topics and news involving Dow. "Two features on *Dow Today* are *Dow in the News* and *Industry News* — respectively, an overview of stories about Dow and about the industry in general," says Helms. "We use a news feed from NewsEdge, but we do not publish this feed directly to the intranet. The *Global Newsline* editor reviews the feed and decides which stories — actually, links to the original stories — to publish. In the case of *Dow in the News*, the editor also adds summaries below the headlines."

Dow's Business Intelligence Center (BIC) handles the NewsEdge subscription. BIC helps individual users and business groups create news profiles to customize NewsEdge news and information using topics and keywords; BIC also offers Web-based training.

"This service provides good coverage on chemical-business-related topics for the United States and the world," notes Helms. "Notification of United States and European patents is also included in this service. Currently, about 20 intranet pages — so-called BIC portals on specific topics, and sites maintained by Dow's businesses — use direct news feeds. In addition, about 800 individuals have been set up with NewsEdge profiles for offline use."

TECHNOLOGY

Dow's intranet sites are hosted on Windows servers, and pages are designed and maintained using Microsoft FrontPage. Individual site owners can use WebTrends to analyze site use and report broken links.

GOALS AND CONSTRAINTS

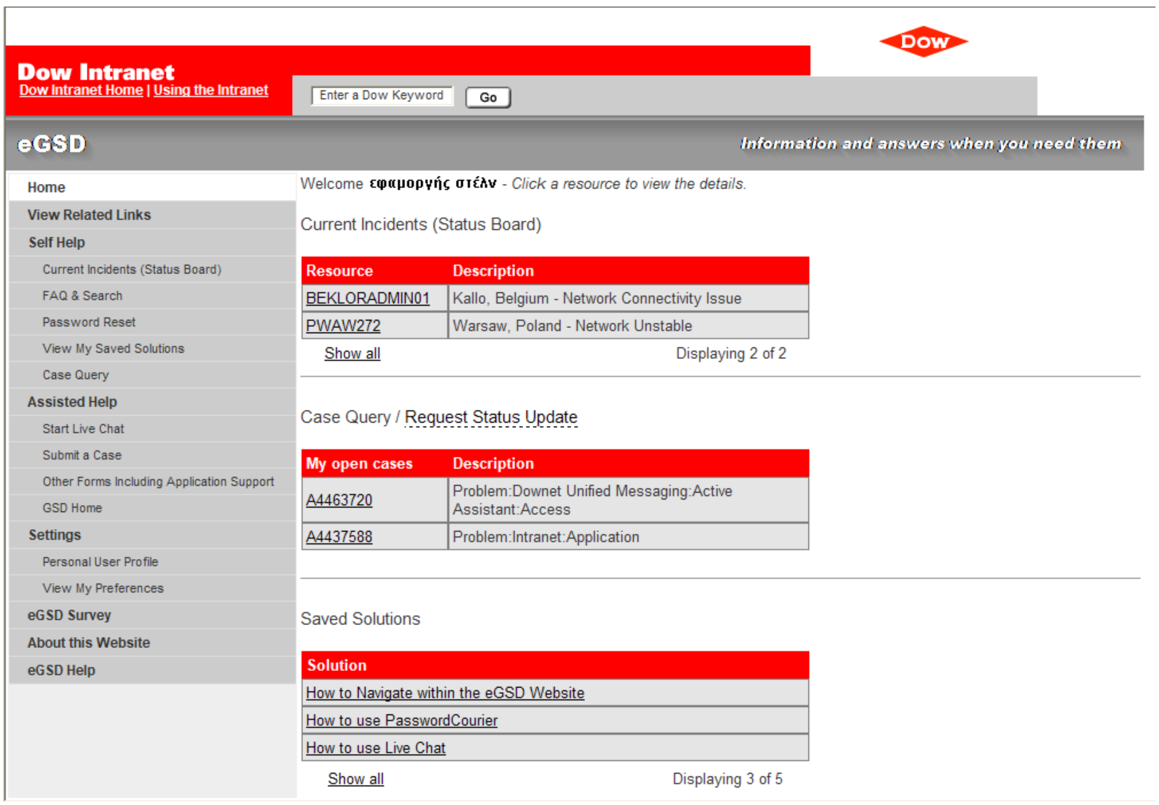
"The vision for Dow's Intranet is for it to be the primary method for delivering information for all employees," notes Stacey Elder, an information steward at Dow. "Furthermore, the intranet should enable and encourage employee self-sufficiency, simplify employees' work, and support corporate strategies."

BASIC INTRANET FEATURES

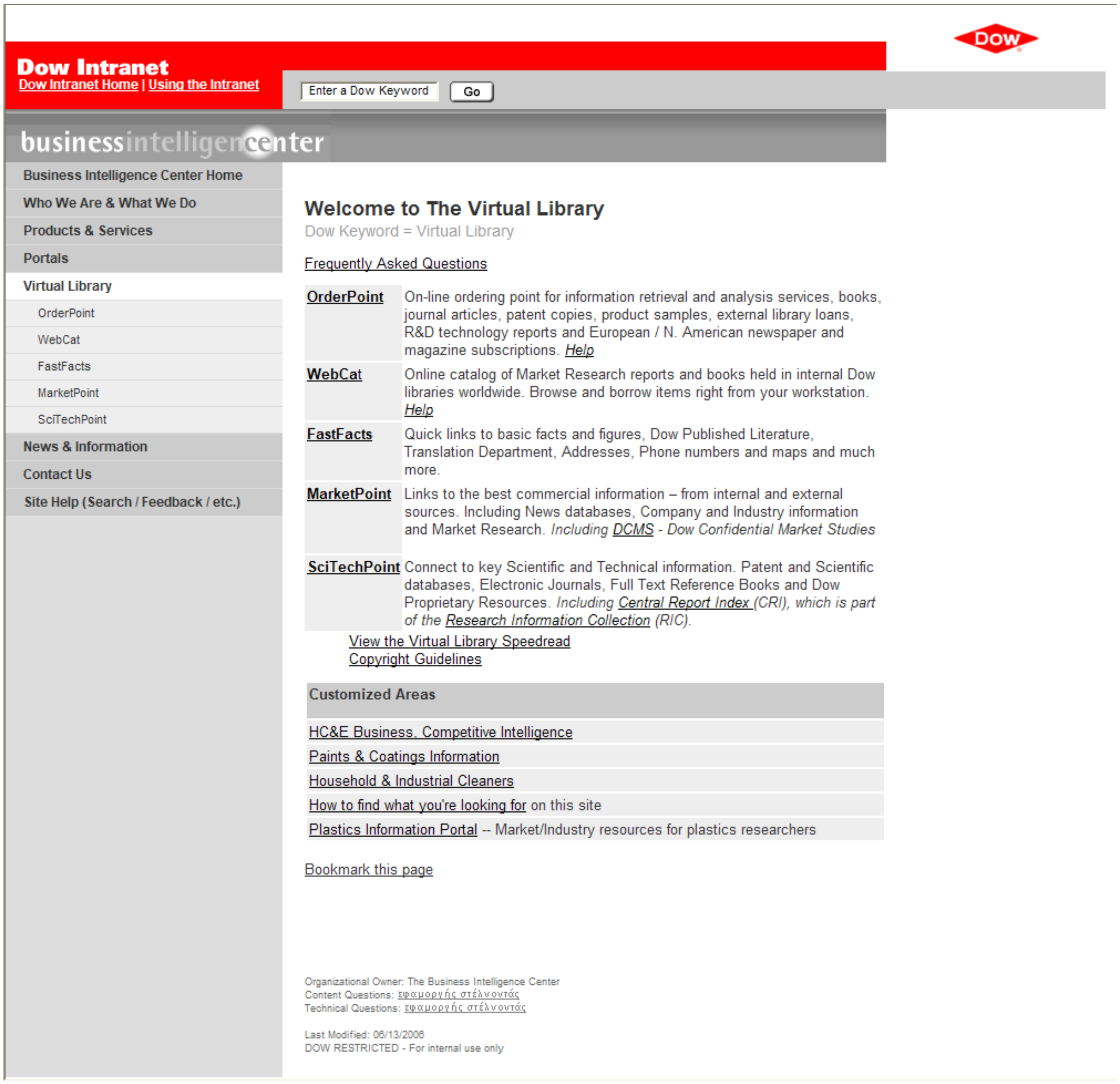
The intranet includes a number of features, including:

- *My Links:* a section of personalized links to various intranet resources.
- *Intranet Directory*: a central index of intranet content.
- *My News*: a personalized section of headlines from various Dow locations around the world.
- *Dow Keyword*: a keyword search function.
- *World Clock*: the current time at all of Dow's international locations.
- *Dow Today*: breaking news headlines, featured stories, and a featured image.

- *Give Us Your Feedback*: a quick poll.
- *Drive to Zero*: daily updated metrics on the environment, health, and safety.
- *Stock Ticker*: the real-time stock price.
- *Essential Links*: links to Dow's external website (dow.com), a currency exchange calculator, and information about Dow's strategy.
- *Did You Know…*: random facts related to Dow's products and businesses.
- *Virtual Library*: Dow's gateway to internal and external information resources.
- *Global Service Desk*: a single starting point for IS-related requests and problems.



Pictured: eGSD is Dow's Global Service Desk Portal. The Global Service Desk (GSD) provides a single starting point for requests and problems related to IS services.



Pictured: The *Virtual Library* is Dow's gateway to internal and external information resources. Users can access Dow's *Global Library Catalog*; full-text confidential market studies; over 1,000 full-text electronic journals; standards and patents; scientific literature and databases; highly respected sources of product, company, and industry information; and an online ordering point for book purchases, document delivery, and information requests.

USERS

Dow has 42,000 employees worldwide in all major geographic regions: North America, Europe, Latin America, Asia-Pacific, Africa, the Middle East, and the Indian subcontinent. While most employees access Dow's intranet via laptops, roughly 7,000 rely on shared workstations.

According to the company's *2005 Global Employee Communications Survey*, nearly 94 percent of Dow employees use the intranet at least once a week, while more than 70 percent use it daily. The intranet homepage is accessed approximately 5.3 million times per month.

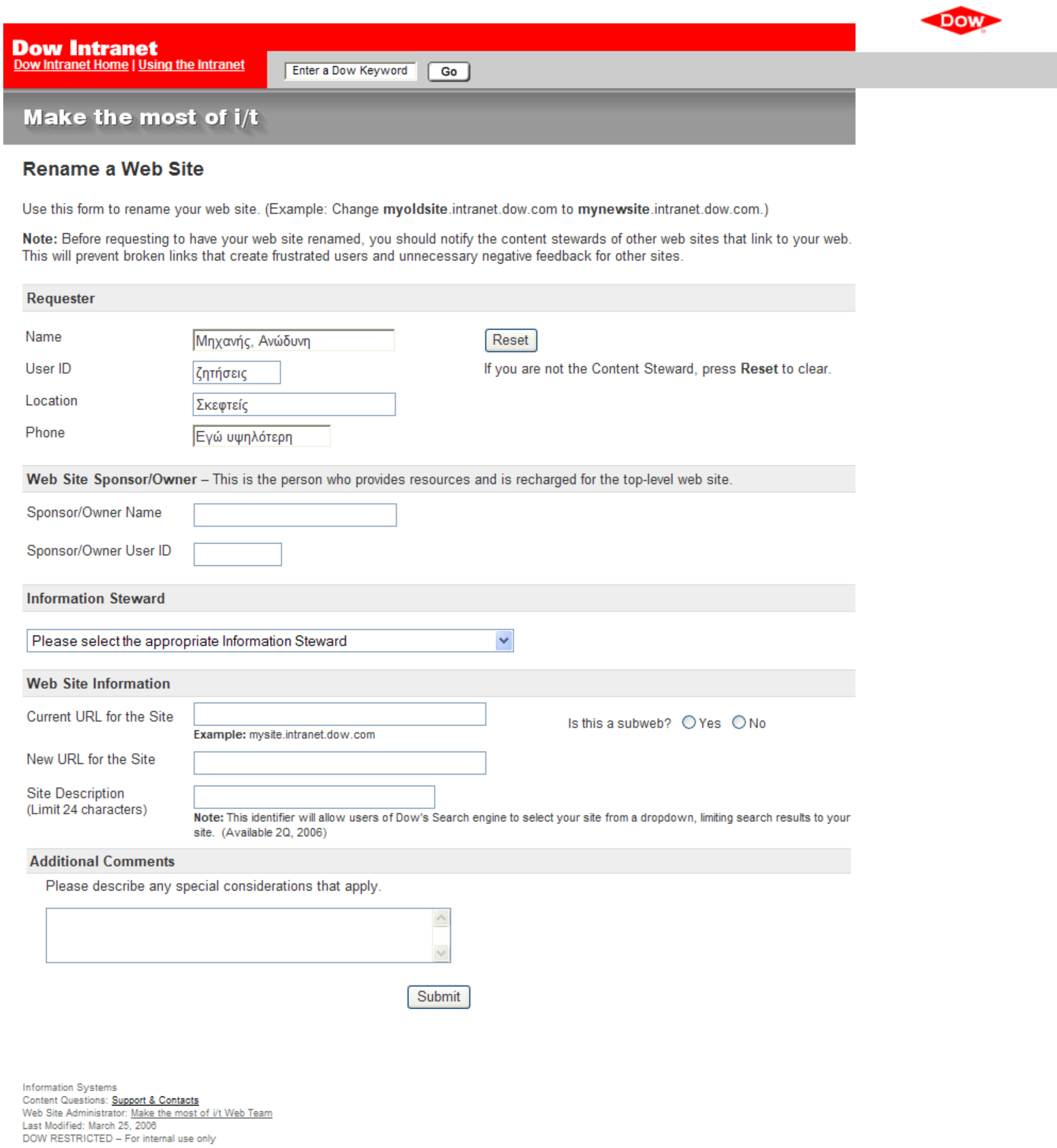
Intranet users include employees in customer services, e-business, environment, health and safety, finance, HR, IS, legal, manufacturing and engineering, marketing and sales, public affairs, purchasing, R&D, and supply chain.

Corporate sites are usually written in English, while many local intranet pages are written in local languages.

USER TASKS

Common tasks performed on the intranet fall into these broad categories:

- Find information needed to do one's job, such as information related to work processes, market intelligence, the industry, or scientific research.
- Fill out forms to request employee status updates, location access, Internet access, Web page creation, and training; to order Visa cards; and to make changes to Material Safety Data Sheets. Employees can also use forms to schedule iRooms or video-conferencing, report travel expenses, report safety or environmental incidents, book flights, and nominate people for awards.
- Manage employee development, find learning resources, register for courses, or take online training.
- Collaborate with other employees through conferencing tools, Communities of Practice, and Web meetings.
- Read international news and news about a specific company business, function, department, or geographic location.
- Find contact information for someone with a specific type of expertise.
- Access many different databases to accomplish various tasks, including tracking budgets, finding pricing information, planning business expenditures, tracking training, requesting inventory disposal, or requesting delegation of authority.



Dow Intranet
Dow Intranet Home | Using the Intranet

Enter a Dow Keyword | Go

Make the most of i/t

Rename a Web Site

Use this form to rename your web site. (Example: Change **myoldsite**.intranet.dow.com to **mynewsite**.intranet.dow.com.)

Note: Before requesting to have your web site renamed, you should notify the content stewards of other web sites that link to your web. This will prevent broken links that create frustrated users and unnecessary negative feedback for other sites.

Requester

Name: Μηχανής, Ανώδυνη
User ID: ζητήσεις
Location: Σκεφτείς
Phone: Εγώ υψηλότερη

Reset
If you are not the Content Steward, press **Reset** to clear.

Web Site Sponsor/Owner – This is the person who provides resources and is recharged for the top-level web site.

Sponsor/Owner Name
Sponsor/Owner User ID

Information Steward

Please select the appropriate Information Steward

Web Site Information

Current URL for the Site
Example: mysite.intranet.dow.com
Is this a subweb? Yes No

New URL for the Site

Site Description
(Limit 24 characters)
Note: This identifier will allow users of Dow's Search engine to select your site from a dropdown, limiting search results to your site. (Available 2Q, 2006)

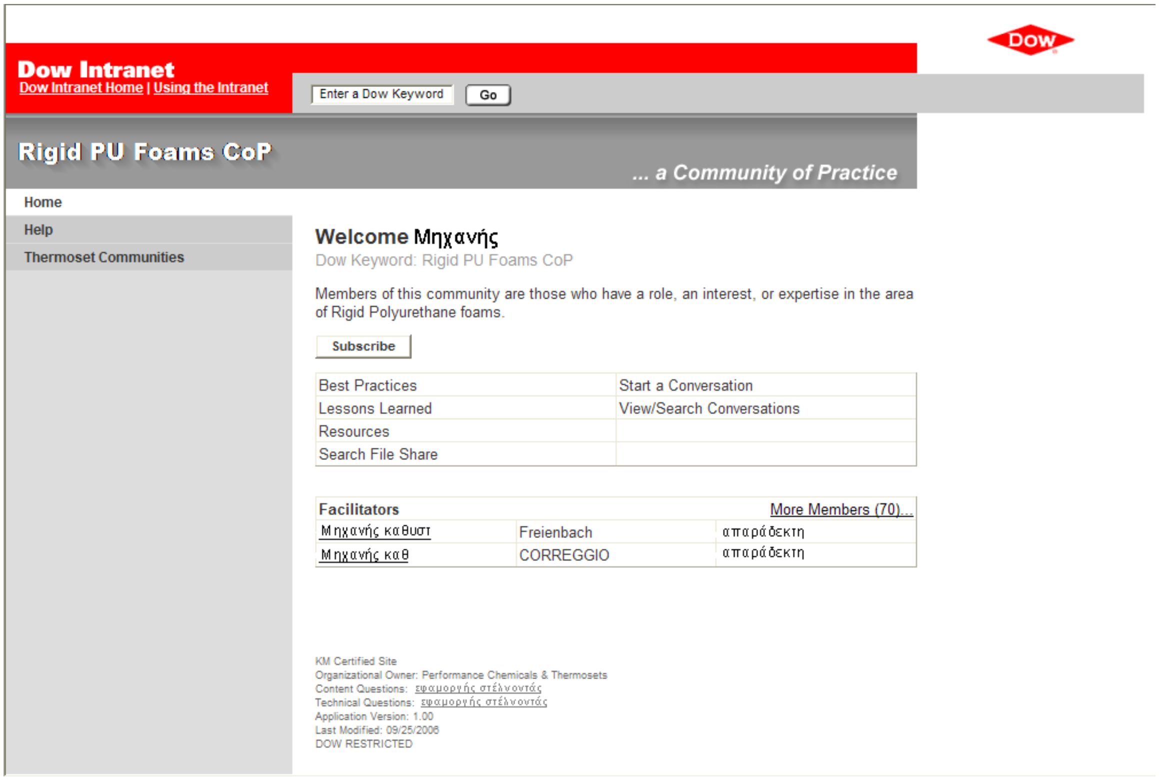
Additional Comments

Please describe any special considerations that apply.

Submit

Information Systems
Content Questions: Support & Contacts
Web Site Administrator: Make the most of i/t Web Team
Last Modified: March 25, 2006
DOW RESTRICTED – For internal use only

Pictured: The *Intranet Directory* links to an overview of all available form types (information technology, employee information, financial/tax, reporting request, the Material Safety Data Sheet Worksheet, and so on) via a single page. This particular form — *Rename a Web Site* — features fields and drop-down lists pre-populated with information.



Pictured: An example of one of Dow's many Communities of Practice. A CoP is a group of people who have something in common, such as an area of expertise or their work environment. The CoP Web interface application facilitates communication among CoP members and enables knowledge capture and sharing. To better enable community participation, Dow allows easy access to all file shares, intranet sites, and public Outlook folders.

INTRANET TEAM

Pictured: (top row, from left) Stacey Elder, Mark Fenske, Jodi Hayes, Annemarie Helms; (bottom row from left) Dean Marino, Kim Sartain and Chris Young. (Not in the picture: Mario Ferket, Ingrid Knox and the many Dow employees who devote a large portion of their time to the intranet.)

Dow's intranet was originally owned by the company's Knowledge Management Expertise Center. When this center disbanded in 2004, the Information Systems and Public Affairs departments "formed an informal partnership to govern the intranet," says Helms. IS now manages the technical infrastructure — servers, network, and software — along with the site lifecycle processes, operating discipline, the Most Effective Technology program, templates, style sheets, and the content technician network.

The Public Affairs group, meanwhile, helps facilitate and produce much of the intranet's content, including content for the homepage, *Intranet Directory*, *Dow Keyword*, and many business and functional sites. Some departments, such as HR and manufacturing and engineering, own their own pages and participate in managing content and technology for those pages.

"Because of the decentralized nature of the intranet governance model, it's hard to say how many people are members of the intranet staff," says Helms. "The core staff is comprised of an intranet service leader, a content technicians network leader, an intranet support provider, and an intranet communications manager. We also have 60 content technicians — many of whom are responsible for both intranet and Internet sites. However, this does not do justice to the many people who devote a large portion of their time to the intranet: infrastructure architects, information stewards, end-user developers, news editors, site owners, and Web administrators."

The informal ownership model has its advantages and disadvantages. "There's a lot of flexibility, but there's also the danger of things falling through the cracks," she says. "We are in the process of establishing a more formal governance model."

BACKGROUND

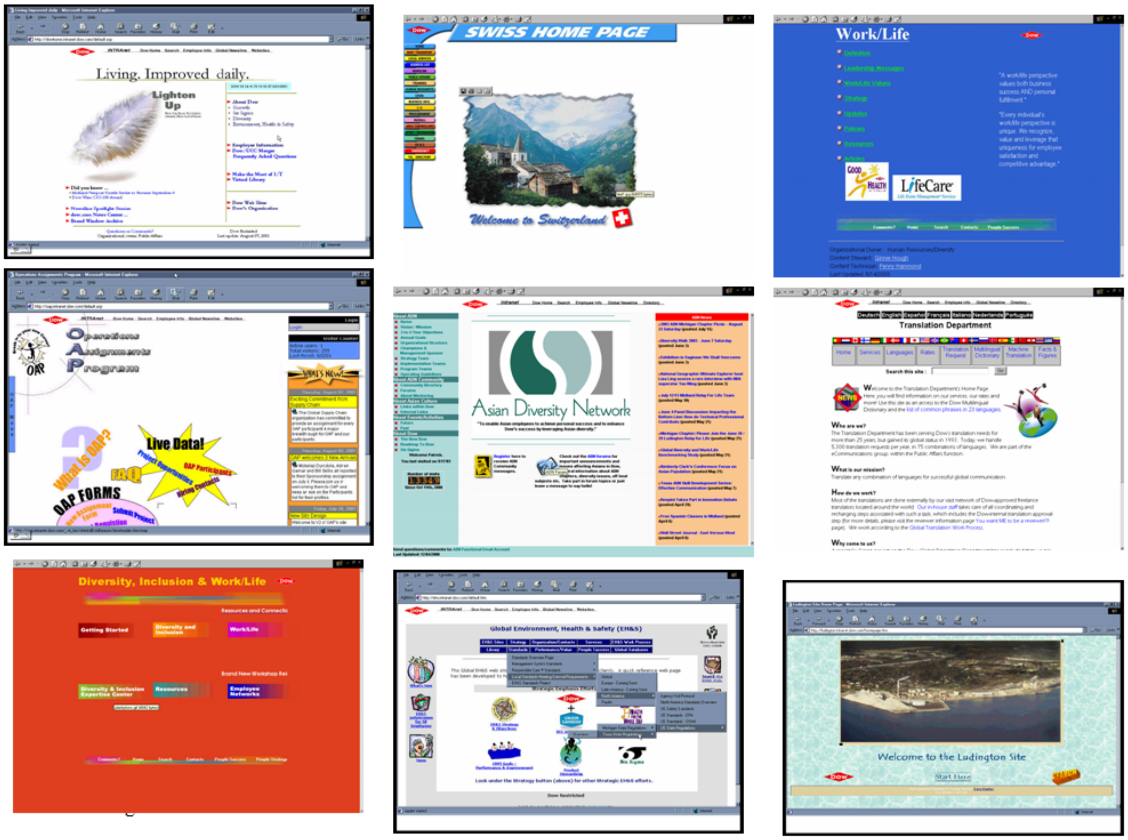
"Dow's Web journey started in January of 1994, when the first corporate Internet connectivity was established, followed one month later by the Dow corporate Internet news server," says Dean Marino, Dow's information research leader, and the person responsible for introducing Web technology to Dow. "We became aware of infant Web technology through collaboration with the University of Illinois Super Computer Center (NCSA). Our first internal Web server (NCSA-HTTPD, the forerunner of Apache) was introduced in May of 1994, and our corporate website — http://www.dow.com — in 1995." The site was based on Unix, but Dow began migrating to Microsoft technology within a year. "The first Windows-based Web server (EMWAC) was put up in April of 1995."

Dow's R&D group introduced Web technology to Dow. "Most of these technologies were still considered non-proven," he says. "R&D explored — and is still exploring — new technologies, so they will be ready for mainstreaming when the organization needs them." The R&D group designed the first intranet sites, which supported HR offerings and researchers. The IS group later began supporting sites, too.

"One of the biggest success factors for the intranet was the joint R&D and Corporate IS effort, culminating in our *Web Operating Discipline* document created in 1996," says Marino. "It still exists today, and has continued to bring together all elements in the company needed for a successful Web operation." The intranet likewise got a large boost in 1996, when Dow introduced PCs for all employees.

In 2001, Dow began working with a firm, Siegel+Gale, to establish Dow's "corporate brand." "This effort involved developing new standards for our graphic designs, templates, print media, and so on," says Elder. "To establish our brand as the 'way that we work,' it was decided to focus on our employees first and establish our brand internally. The best way to accomplish this was to demonstrate our core values, and the new design principles, on the one platform that was prevalent throughout the company: the Dow intranet."

Together, Siegel+Gale and Dow developed intranet standards and guidelines. The firm also created the original designs and the design standards, and proposed the *Intranet Directory* and *Dow Keyword* concepts. "Implementation of these designs and rules was done completely in-house," says Elder. "Under the direction of the Knowledge Management Resource Center, End User Development [EUD] developed the actual templates based on the original designs and standards, including the upgraded intranet homepage. EUD also developed the *Intranet Directory* and *Dow Keyword* applications." Meanwhile, the Knowledge Management Resource Center and the internal Public Affairs group worked together to roll out the new templates and standards within Dow.



Pictured: Previous versions of Dow intranet websites, drawn from various countries, businesses, functions, and initiatives.

DESIGN PROCESS AND USABILITY ACTIVITIES

The Dow intranet homepage underwent its most recent redesign beginning in 2005. "We redesigned it using Six Sigma — a project methodology that is used to do improvement and design projects — and Voice of the Customer," says Helms. "The Six Sigma team measured how satisfied people were with the current offering, did in-depth interviews with a dozen focus groups, and redesigned the page based on user needs. The new designs and features were tested with employees throughout the project — using both paper and Web-based prototypes."

In terms of design techniques, "we found the Voice of the Customer technique particularly helpful, because it identifies people's underlying needs, rather than just identifying features," she says. "For example, one need we identified was that the homepage should reflect Dow's global presence. The *World Clock*, which shows the time for all Dow locations around the world, is a direct result of this. Employees also expressed the need to let their voices be heard, which resulted in the creation of the quick poll, called *Give us your feedback!* Employees can vote and also submit questions."

Redesigning the intranet remains an ongoing process. Today, Dow also uses a Most Effective Technology program to improve its intranet environment. MET is "grounded in the best collective knowledge, experience, and benchmarking," notes Sartain. "By adhering to this MET of site organization, navigation, design, and maintenance, Web administrators help users focus on absorbing their site's content — not on deciphering their site's structure or waiting for large, superfluous graphics to download." Dow has an MET-compliance process to review sites' templates, technology, security, and information management practices. "Sites that meet the requirements are considered MET-compliant."

TIMELINE

- 1995: First prototype employee homepage created.
- 1996: Corporate intranet launched.
- 1997: Homepage redesigned.
- 2000: Homepage again redesigned.
- 2002: Introduction of new look and feel.
- Second half of 2005: Homepage redesigned again using Six Sigma and Voice of the Customer methodologies.
- 2006: Additional improvements continued based on user feedback.

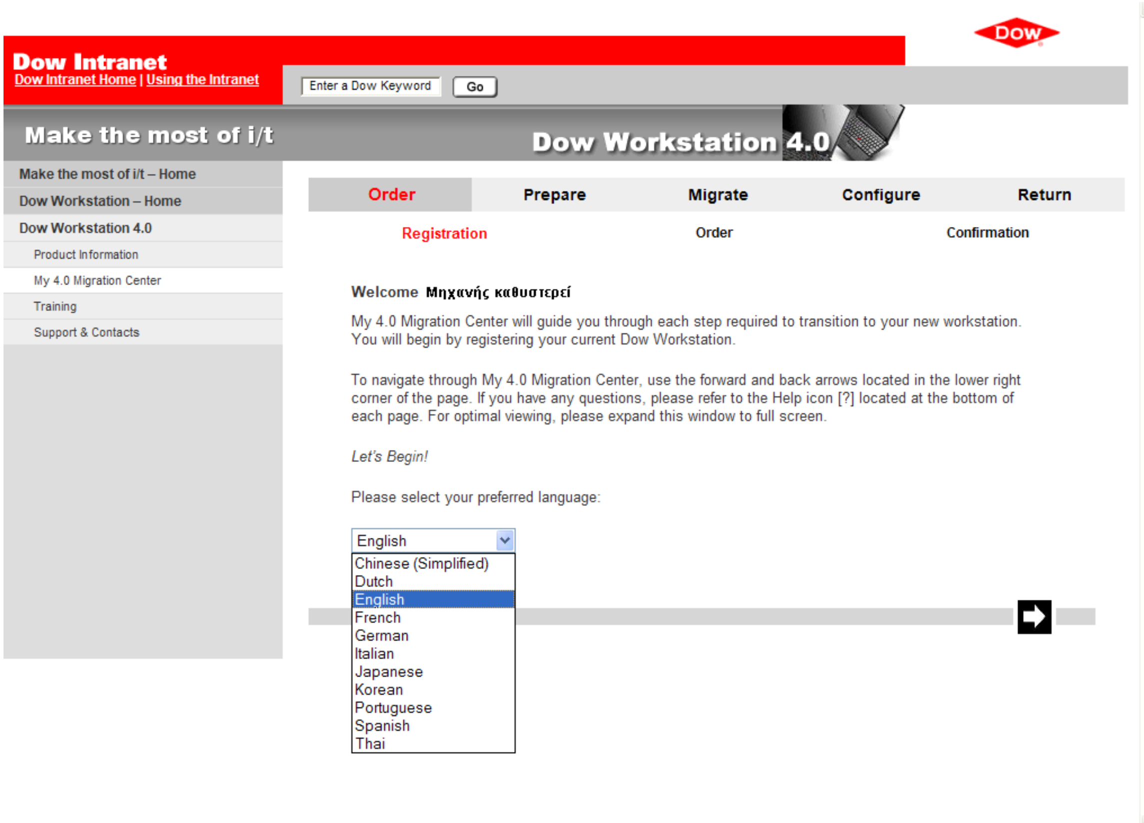
RESULTS

Dow launched its redesigned intranet homepage before the end of 2005, and has continued to hone the design through ongoing usability studies and analysis of user feedback.

Users, however, already prize the redesign, as noted by user satisfaction studies: employees' homepage satisfaction levels increased from 66% to 83% after the redesign launched.

"One of the most talked about features is the quick poll — *Give us your feedback!* — which is hosted on the homepage," says Helms. "It asks a short question with up to five predefined answers about something that is relevant to the majority of Dow employees." The poll also displays results in real time: once a person votes, the answer is immediately displayed on the homepage. Dow posts new questions twice a week and all votes are anonymous; each poll receives about 6,000 responses.

Having an intranet that is well regarded and well used by employees enables a number of possibilities beyond everyday intranet features. For example, take "Dow Workstation 4.0," Dow's company-wide program for migrating every employee to a new PC. To support the move, which was planned for late 2006, it added the *My 4.0 Migration Center* to the intranet. Through *My 4.0 Migration*, users can register for the program, order their new PC, prepare for it, accept delivery, migrate their old files, configure the new PC, and return the old one.



Pictured: The *My 4.0 Migration Center* guides users through the workstation-upgrade process. ("Dow Workstation 4.0" refers to the next generation of Dow's enterprise-wide PC platform, which the company began rolling out at the end of 2006.) This migration process is fully automated and facilitated through the intranet, giving users the responsibility for transitioning information from their old workstations to their new ones.

LESSONS LEARNED

Insights from Kim Sartain:

Start with management buy-in. "Getting management buy-in from the start is key. Groups that did not begin the process by getting fundamental agreement from leadership, but simply tried to implement the new templates, have been less successful in converting to the standards. Those who followed the basic human change-management process have succeeded."

Communicate the benefits of standardization. "Understand and communicate the fundamental concepts of intranet standardization. By focusing on the intent behind the standards, rather than the cosmetics — templates, colors, and so on — people will understand the value of the standards, and how to best adopt the templates for their unique purposes."

Enforced standards drive the transparent user experience. "Dow sets template, technology, security, and information management standards for intranet sites, then regularly reviews all sites for compliance. This is crucial for allowing users to quickly reach and absorb the content they need, without having to battle site structure, or wait for large, superfluous images downloads."

Insights from Annemarie Helms:

If you're global, look global. "From user testing, we learned employees thought the homepage didn't adequately reflect Dow's global presence. This led to our developing the *World Clock* feature — multiple 24-hour clocks on the homepage — which has become both an integral tool, plus a subtle reminder of Dow's global reach."

Listen to users. "Don't just listen to users when redesigning the intranet. Really, the intranet is an optimal tool for hearing their voices on an ongoing basis, gaining useful feedback, and keeping users involved. In fact, from user testing during our redesign, we learned employees wanted more of a voice. This realization led directly to our creating a new quick poll — *Give us your feedback!* — to further provide employees with an outlet, and to keep them engaged with the intranet."

Volvo Group

Using the intranet:
Volvo Group is one of the world's leading manufacturers of trucks, buses, and construction equipment; drive systems for marine and industrial applications; and aerospace components and services. The Group also provides complete solutions for financing and service.

Headquarters: Gothenburg, Sweden

Number of employees the intranet supports: approximately 82,000

Countries with production facilities: 18

Sales: SEK 231.2 billion (2005)

Design team:
In-house, plus Framfab (an intranet design agency which has since become part of LBI International); Volvo IT (the technical platform provider); and H2 Solutions (information management consultants)

Members:

Volvo Group: Charlie Nordblom, vice president of internal and Web communications; Helen Jerresand, technical director of the common Web platform; Eva Kuylenstierna, Violin program manager; Mark Vikner, architect for IT governance

Framfab (now LBI International): Niklas Johansson, head information architect; Joakim Stamming, head art director; Anna Almberg, information architect

H2 Solutions: Johan Wendels, chief project manager; Rickard Strömberg, Web communications coordinator

SUMMARY

Studying the Volvo Group's current intranet design, you would never imagine that its original intranet grew uncontrolled for 10 years, resulting in more than 800 websites and an unknown number of content management tools and editors. But a redesign of Volvo Group Information Online — better known as "Violin" — with clear, achievable goals and an excellent design team has made the new version really sing.

With just a glance at the intranet's homepage, employees can be well informed about some of Volvo Group's most important events. First and foremost, financial information appears in the upper-left corner of the homepage. Here, users can gauge whether net sales for the quarter are up or down, and by what percentage. This information can certainly motivate people — to work to maintain the good standing or to help improve it when it's not as high. This area also informs employees about the operating margin, which can remind and encourage them to keep costs down and to work efficiently. The percentage of deliveries of trucks and buses is displayed as well, since this accounts for a large percentage of corporate revenues. Finally, there's a link to more detailed figures for the last six months.

The stock's share price for both the Stockholm Stock Exchange (SSE) and NASDAQ exchanges also appears in the upper-left part of the page. When the stock price is high, this is good news for everyone, and especially those who hold options in the company.

Note: Volvo Group does not manufacture cars — Volvo Cars is owned by Ford Motor Company. The only thing Volvo Group shares with Volvo Cars is its brand name (though some employees get a discount when buying Volvo cars).

One of the Violin redesign's stated objectives was to "target managers and office workers, and improve access for five-minute users and blue collars in major plants." Just below the financial information, the *5 Minutes Only* link meets this goal and helps employees quickly stay in tune with the most recent announcements. In particular, the link leads to the latest news and site updates. This is especially helpful for those people who don't have much time to spend on Violin. For example, some of the most frequent users of this feature are production plant employees who access

the intranet at kiosks during finite work breaks, as well as employees who have been away from the office and want to quickly get up-to-date without having to browse the entire intranet.

To help users access the items they most want and need, Violin offers links to the *Most Popular Pages* accessed, on the left side of the homepage. Here, the intranet displays the six most used links. To determine which page links warrant this coveted position, the site owner regularly peruses the site's user statistics.

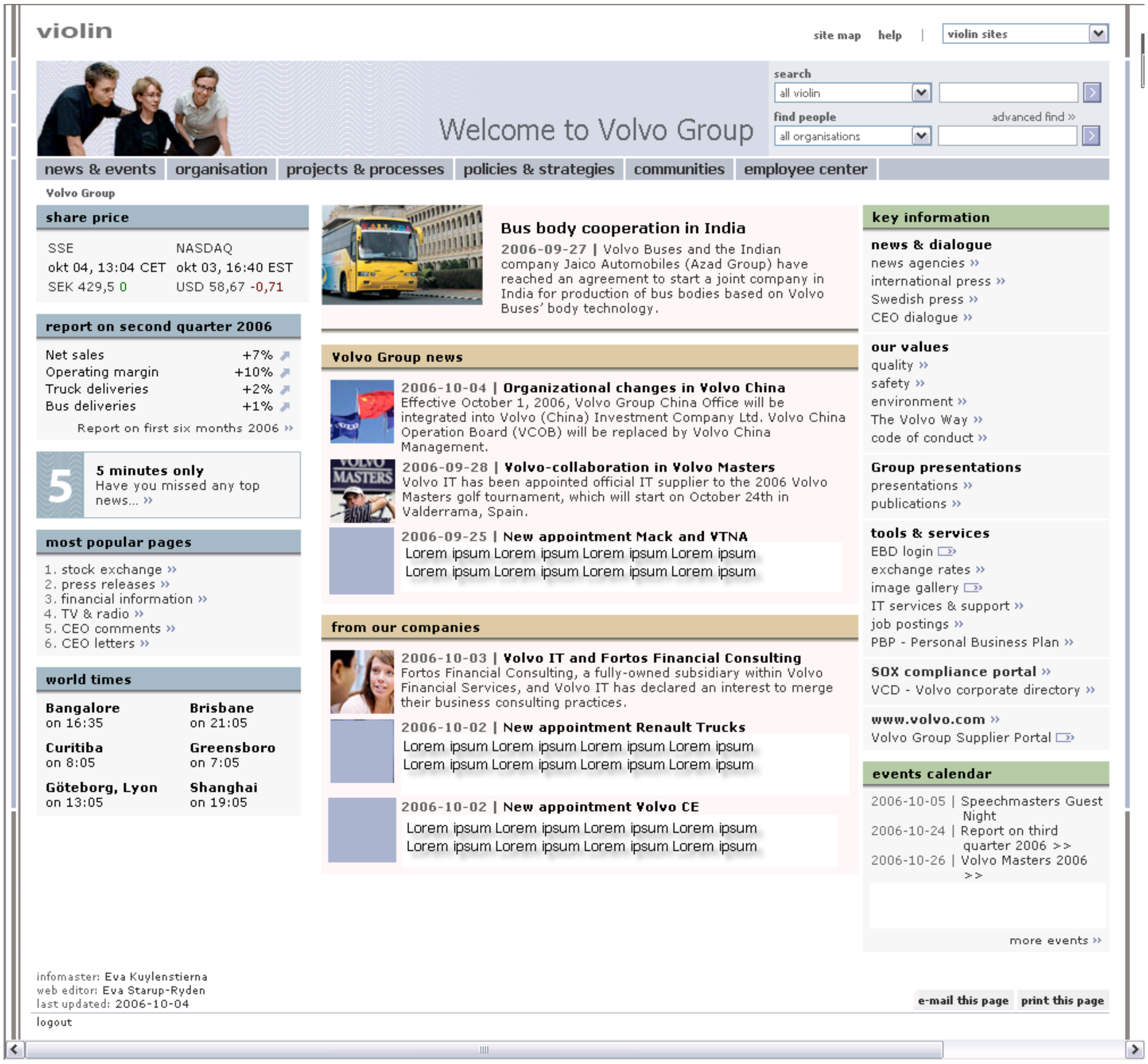
Because the Volvo Group has production facilities in 18 countries and sells to some 185 countries, working with colleagues in other time zones is commonplace. The homepage facilitates this collaboration by displaying the *World Times* for locations with larger offices, including Bangalore, Brisbane, and Shanghai. This helps people know whether their colleagues will likely be in the office or not. Also, seeing the *World Times* helps reinforce the sense of belonging to a global company, even for employees who work only with local employees.

The middle of the homepage houses the bulk of the news-related items. The news area has three sections: a main news item, news items about Volvo Group, and news items about various Volvo Group companies. Breaking news into these categories helps employees scan the types of news that most interest them. These news items vary in topics, from PR events to new managerial appointments to organizational changes. With approximately 82,000 employees, people could easily feel out of touch or secluded. But these frequently updated news pieces help ensure that employees are privy to the organization's most important announcements and events. All of the news items are easy to read; they include concise and enticing headlines, well-written descriptions, message-enhancing images, and publication dates. The subtle, boldfaced headings look clickable — which, appropriately, they are.

News is typically updated once a day. A group of Volvo Group *Infomasters* decides which news to present on the homepage and how often to update it. All Volvo Group companies use the same news application, so it's easy to share news regardless of where the article originates. Infomasters can handpick the articles they want to display, have them appear by automatic subscription, or use a combination of the two approaches.

The *Key Information* column on the right side of each page calls out links that are strongly related to the page content. Employees especially appreciate this feature. Each Infomaster decides which links to present here, based on the page content and its target audience.

One part of *Key Information* is the *Tools and Services* section, which houses some of Volvo's hundreds of applications that support mission-critical tasks and processes.



Pictured: The Volvo Group intranet homepage displays news, tools, and an innovative *5 Minutes Only* feature, which helps bring employees up-to-date in five minutes or less by alleviating the need to hunt for recent news.

Various Volvo Group businesses have their own intranet sections, as do many of their internal departments. Dividing the intranet into definable sections helps designers keep pages in check, and thus helps users find information. Using the same template across the intranet also helps both designers and users. Different designers, for example, can more effortlessly create consistent-looking pages — even if they're working on different teams or even in different countries. Users, meanwhile, can browse from area to area or page to page without needing to learn a new interface. This greatly aids users' productivity while doing intranet-based tasks.

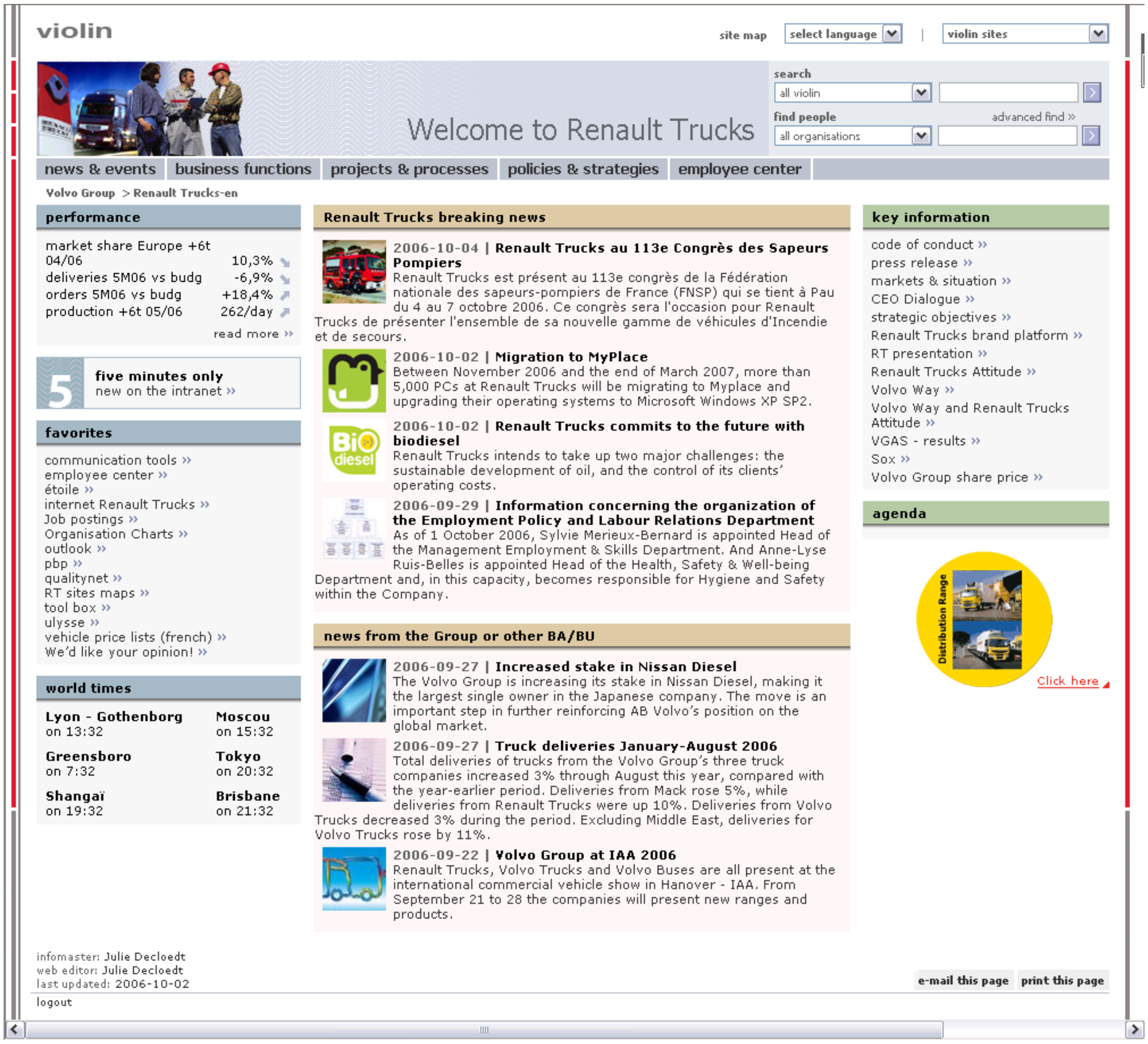
The Volvo Trucks section's corporate homepage resembles Violin's homepage, albeit with some important, but subtle differences. The horizontal menus across the top of Volvo Trucks' homepage are very similar to the intranet homepage, but the image and banner features a Volvo truck. The left- and right-side menus are also similar to the intranet's, but the right-hand menu contains more truck-specific information, including downloadable presentations and training information pertinent to Volvo Trucks.

A questionnaire also appears on the lower-right part of the Volvo Trucks homepage, encouraging employees to think about and learn the company's business strategy. Strategically placing questionnaires on the intranet is a good way to include and educate employees, while fostering a sense of community — in this case, for the Volvo Trucks team in particular.

News about the Trucks unit appears in the top-middle of the page. More specific Truck news links follow it in the section below.

Pictured: Volvo Trucks' corporate homepage. All pages use the same template, thus providing users with a consistent, easy-to-use interface.

Other groups also rely on Volvo's master template for their areas pages. For example, the Renault Trucks homepage looks a lot like the Volvo main homepage, as well as the Volvo Trucks homepage. But again, it has its own important changes. The top menu and breadcrumbs look very familiar, as does the left vertical menu. The information in the right vertical menu, however, and the news in the page's middle section, is specific to Renault Trucks.



Pictured: The Renault Trucks section's homepage also uses the standard template, making this Violin section likewise predictable for users.

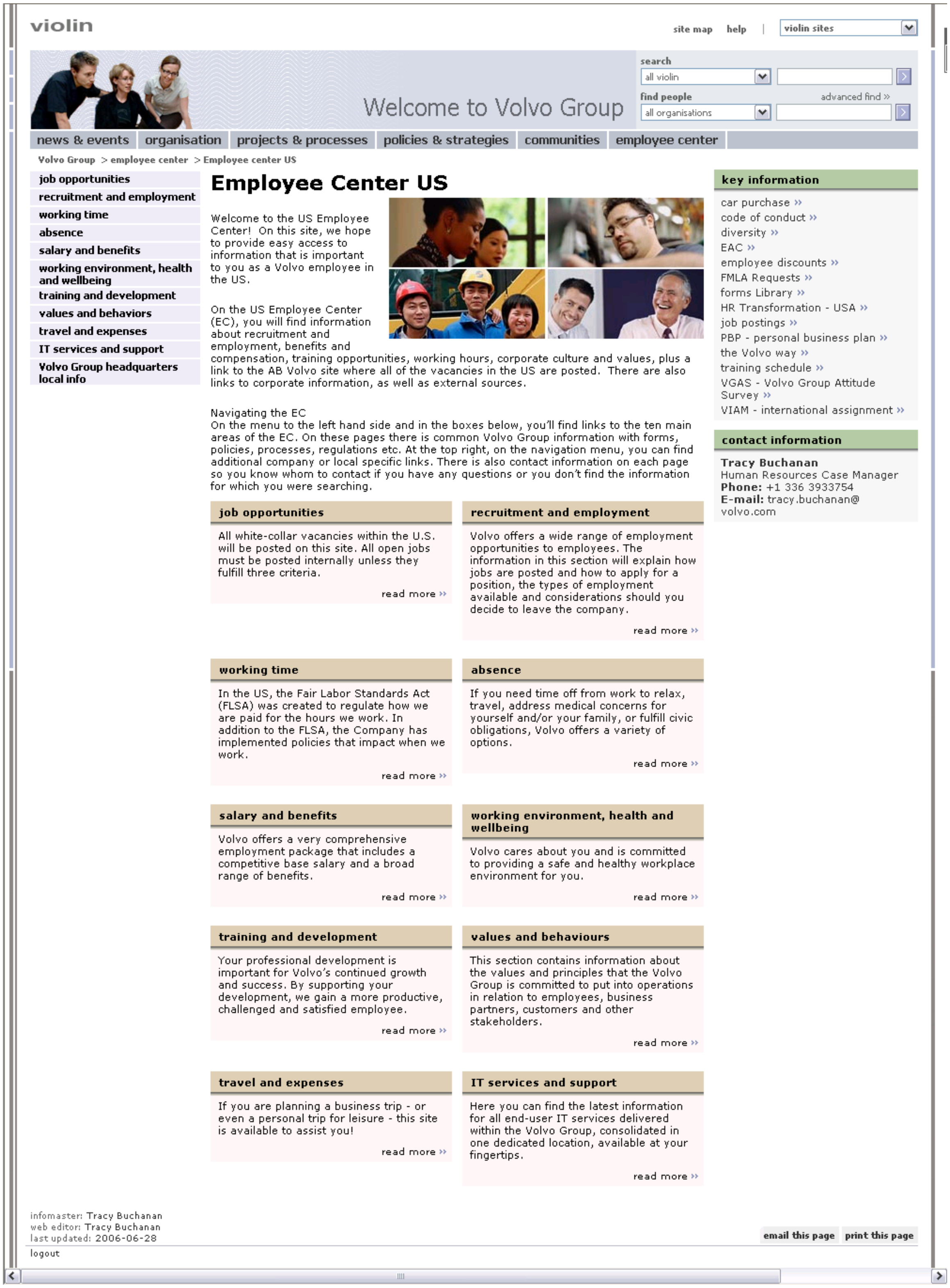
Consistently designing areas and pages helps users surf the entire intranet effortlessly. Violin's designs are distinctive, yet flexible enough that users can easily discern which intranet section they're in. One cue that helps is the logo/banner that appears at the top of every page. In just a glance, employees can confirm that they're where they want to be. Both the image and the text help indicate this. The breadcrumbs at the top of pages also help orient users.

Beyond the different section homepages, Violin also stores other crucial employee information. For example, HR and policy documents are still standard elements on most intranets, and Violin is no different in that respect. But designers of this intranet make it very easy for employees to find policy information. The *Employee Center* main section of the intranet provides some of the most needed information, including information relating to corporate values, training, salary, time off, benefits, travel support, and more. Of course, many of these vary by country, so each location has its own section in the *Employee Center.*

As in other intranet areas, the *Key Information* column calls out some of the most desired and needed links, such as employee discounts.

Using Violin also quite literally has its perks, offering users discounts on some car purchases. Infomasters, realizing what an important perk this is, make *Car Purchase* the first link in *Key Information.* While people may not buy cars frequently, keeping this link visible reminds people of this important and useful benefit.

Just below the *Key Information*, the intranet clearly lists the correct name and contact information for the relevant HR person. Some intranet designers choose not to display contact information from different intranet areas because they fear updates won't occur when people change jobs or leave the organization. This is a valid concern; if you don't have the infrastructure to support updates, it's wise to exclude contact names. However, having the right name and contact information, as Violin does, helps users feel confident that they're calling the right person and getting the right information. In short, it's a small feature with a tremendous timesavings and user-friendliness upside.



violin

site map | help | violin sites

search: all violin

find people: all organisations | advanced find »

Welcome to Volvo Group

news & events | organisation | projects & processes | policies & strategies | communities | employee center

Volvo Group > employee center > Employee center US

- job opportunities
- recruitment and employment
- working time
- absence
- salary and benefits
- working environment, health and wellbeing
- training and development
- values and behaviors
- travel and expenses
- IT services and support
- Volvo Group headquarters local info

Employee Center US

Welcome to the US Employee Center! On this site, we hope to provide easy access to information that is important to you as a Volvo employee in the US.

On the US Employee Center (EC), you will find information about recruitment and employment, benefits and compensation, training opportunities, working hours, corporate culture and values, plus a link to the AB Volvo site where all of the vacancies in the US are posted. There are also links to corporate information, as well as external sources.

Navigating the EC
On the menu to the left hand side and in the boxes below, you'll find links to the ten main areas of the EC. On these pages there is common Volvo Group information with forms, policies, processes, regulations etc. At the top right, on the navigation menu, you can find additional company or local specific links. There is also contact information on each page so you know whom to contact if you have any questions or you don't find the information for which you were searching.

job opportunities

All white-collar vacancies within the U.S. will be posted on this site. All open jobs must be posted internally unless they fulfill three criteria.

read more »

recruitment and employment

Volvo offers a wide range of employment opportunities to employees. The information in this section will explain how jobs are posted and how to apply for a position, the types of employment available and considerations should you decide to leave the company.

read more »

working time

In the US, the Fair Labor Standards Act (FLSA) was created to regulate how we are paid for the hours we work. In addition to the FLSA, the Company has implemented policies that impact when we work.

read more »

absence

If you need time off from work to relax, travel, address medical concerns for yourself and/or your family, or fulfill civic obligations, Volvo offers a variety of options.

read more »

salary and benefits

Volvo offers a very comprehensive employment package that includes a competitive base salary and a broad range of benefits.

read more »

working environment, health and wellbeing

Volvo cares about you and is committed to providing a safe and healthy workplace environment for you.

read more »

training and development

Your professional development is important for Volvo's continued growth and success. By supporting your development, we gain a more productive, challenged and satisfied employee.

read more »

values and behaviours

This section contains information about the values and principles that the Volvo Group is committed to put into operations in relation to employees, business partners, customers and other stakeholders.

read more »

travel and expenses

If you are planning a business trip - or even a personal trip for leisure - this site is available to assist you!

read more »

IT services and support

Here you can find the latest information for all end-user IT services delivered within the Volvo Group, consolidated in one dedicated location, available at your fingertips.

read more »

key information

- car purchase »
- code of conduct »
- diversity »
- EAC »
- employee discounts »
- FMLA Requests »
- forms Library »
- HR Transformation - USA »
- job postings »
- PBP - personal business plan »
- the Volvo way »
- training schedule »
- VGAS - Volvo Group Attitude Survey »
- VIAM - international assignment »

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infomaster: Tracy Buchanan
web editor: Tracy Buchanan
last updated: 2006-06-28
logout

email this page | print this page

Pictured: The *Employee Center* provides a variety of policies and benefits information that all employees need. Each country's location has its own section, because certain types of information and policies differ.

While much of Violin's information appears on HTML pages, some information — such as material likely to be printed — is better suited for PDF documents. The Volvo Group intranet provides a document list at the bottom of appropriate pages that lists such information. The table layout makes it easy for users to scan the available documents. Meanwhile, headings are clear, and display the file name, date, language, and size. The *date* column displays the document's *valid from* date, because designers found that users might want a document, even though it's not yet active — as when a new insurance policy will be replacing an old one. (Accordingly, designers also changed the "date" label to the more descriptive *valid from*.) The table also displays the icon for the type of document users are about to open, which helps set their expectations.

Pictured: The document listing format consistently displays documents, and their attributes, on relevant pages. (Note: the *date* label has since been changed to *valid from*, since users sometimes need or want documents that haven't yet taken effect.)

The Volvo Group's intranet is a case study in clean design and effective template usage. By creating consistent, yet attractive pages, Violin's designers help employees speed through their intranet tasks, saving time and money while also enjoying the ride.

URL AND ACCESS

Violin's URL is http://violin.volvo.net. Each business area or unit can also use company-specific URLs. The intranet homepage is the default start page in all employees' browsers, set when their PCs are built.

Users away from the corporate LAN can connect to the intranet by logging in remotely using the digipass authorization tool.

The Volvo Group has begun to offer intranet access via kiosks. "Though the intranet primarily targets office workers and managers, one objective with the latest redesign was to improve access to content for employees in production plants and warehouses," says Johan Wendels, Violin's chief project manager, who is employed by H2 Solutions. "Kiosks are used in many locations throughout the corporation."

Pictured: A kiosk at the Volvo Truck facility in Curitiba, Brazil.

Pictured: Kiosks at the Volvo Truck plant in Umeå, in northern Sweden.

CONTENT MANAGEMENT

Common Back-End CMS

In 2002, the Volvo Group began to move to a common content management platform for all channels — Internet, extranet, and intranet — to be used globally by all business areas and business units. "Each channel has a unique structure and look and feel, but in the back end, much of the content can be shared between the different channels," notes Wendels. "Not only does this provide a basis for single-sourcing content, but it increases editors' community knowledge sharing and content management productivity, because they learn from each other, even if working with different channels. Also, it is possible to leverage one technology investment across multiple channels."

They use off-the-shelf CMS software (detailed below), with some custom integration and a few custom-developed content-sharing features, where necessary.

Content Owners

In terms of owning content, Volvo Group defines two primary, related business roles: Infomasters and Web editors. Infomasters own published content, while Web editors ensure that the content is available on the intranet by using the CMS. With the redesign, Volvo Group also added a new role, giving each business area or unit a global Infomaster, responsible for the overall structure and governance of the intranet site or sites.

The intranet relies on roughly 1,500 Infomasters and Web editors, all of whom work on the intranet part-time. "The full-time equivalent is estimated to be about 100 editors," says Wendels.

Templates Ensure Design Consistency

Templates ensure consistent page design. Corporate-wide guidelines have been set for continuing to develop these templates and interaction features. "Content editors generally do not need to consider these guidelines, thanks to the use of a limited number of templates," notes Wendels. "More important, however, are the information architecture guidelines, which cover how to structure the content. The purpose of these rather detailed guidelines is primarily to publish content in a relevant context for the end-user (employee) as well as enabling a consistent information transparency across the whole intranet." The guidelines also detail how to provide an intuitive and consistent navigation, via menus and links. "Most content editors need to learn these guidelines, and often refer to them before publishing any new content."

To publish content, the editor selects a template from a gallery of options to all editors. Any changes to published pages are automatically tracked within the CMS for future reference. "Documents — files — are stored in document libraries according to a structure defined for each business area and business unit," he says. "A basic version control — with check-out/check-in features — can optionally be turned on within these document libraries."

TECHNOLOGY

Microsoft technology is used to design and maintain the intranet, specifically Microsoft Content Management Server 2002 and SharePoint Portal Server 2003. All intranet servers run Windows 2003, and SharePoint is also used for tracking bugs and other issues.

For intranet search, Volvo Group uses Google Search Appliance, and reports "extremely positive" results.

GOALS AND CONSTRAINTS

Intranet goals:

- Violin should enable open sharing of timely and relevant information and resources. This communication will provide context, and improve business understanding and employee effectiveness.
- Violin should reinforce "The Volvo Way" work culture and provide effective business support through integration of employee self-service and tools, allowing for cross-functional service portals.
- Violin should support transparency across the Group through a common information architecture, common navigation structure, and common design.
- Violin will target managers and office workers, and improve access for "5-minute users" and blue-collar workers in plants.

Redesign goals:

"The redesign was one major part of a project that started in the beginning of 2004 and completed by summer 2006," says Wendels. While Volvo Group needed to deal with a number of critical intranet issues, these were some of the major ones:

- Define business-related intranet objectives (per the above goals).

- Implement a new "concept" (design, information architecture, functionality), based on highly prioritized requirements, to support the intranet objectives.
- Implement a common Web platform (CMS).
- Shutter all old intranet sites, since much of the content on them was out of date and uncontrolled, making it difficult for users to find or trust information they found on the intranet.
- Rollout a new intranet for all business areas and business units.
- Remove all costs related to old intranet sites (reduced costs being one of the project's ROI components).
- Increase content management productivity (which would produce the intranet redesign's biggest ROI).

Constraints:

- *Time*. The first phase (concept development) had only 100 calendar days allotted for completing business requirements gathering and establishing agreement on design principles between all business areas and units. The elaboration, specification, and technical implementation of templates and content management features had to be completed just one year later, with all content migrated to the new intranet by summer 2006. (The redesign team met all of these time constraints.)
- *Budget*. The overall project, and each of its phases, had a relatively limited budget. The content migration work, however, was unconstrained, as it was up to each business area and business unit to decide which content to migrate, even if there were strong recommendations on what to focus efforts on and how much content to migrate.
- *Quality*. "I don't know if there's such a thing as an inverted constraint," says Wendels. "There was a general understanding and guiding principle that '80% is good enough, let's move on.'"
- *Identity.* The new intranet needed to support all of the company's brands from across the globe. "The solution was to neutralize the design to such an extent that specific templates for every brand would not be required, and let the content — images and written text — carry the brand identity," says Wendels. "Only a very subtle brand-identifying color is used in the left and right margin on each site. Several sites do not even use such a brand-identifying color, but use a color neutral to all brands."

BASIC INTRANET FEATURES

User focus is, arguably, a primary feature of this intranet. In general, the following characteristics and features help ensure that the intranet remains user-focused:

- Horizontal primary navigation is always available.
- Scalable vertical secondary navigation supports provision of large amounts of content.

- Clickable navigation path ("breadcrumb") is always visible below primary navigation.
- Main content area is centered on all pages.
- *Key Information* and related links augment page content.
- Users can search Violin content and documents.
- A *Help* section is provided.
- A dynamic sitemap further supports navigation.
- Drop-down lists let users quickly navigate between sites.
- A drop-down list lets users select different language versions of sites (where applicable).
- Infomaster (publisher) and editor information are always available, along with last-updated date.
- *5 Minutes Only* offers quick updates.

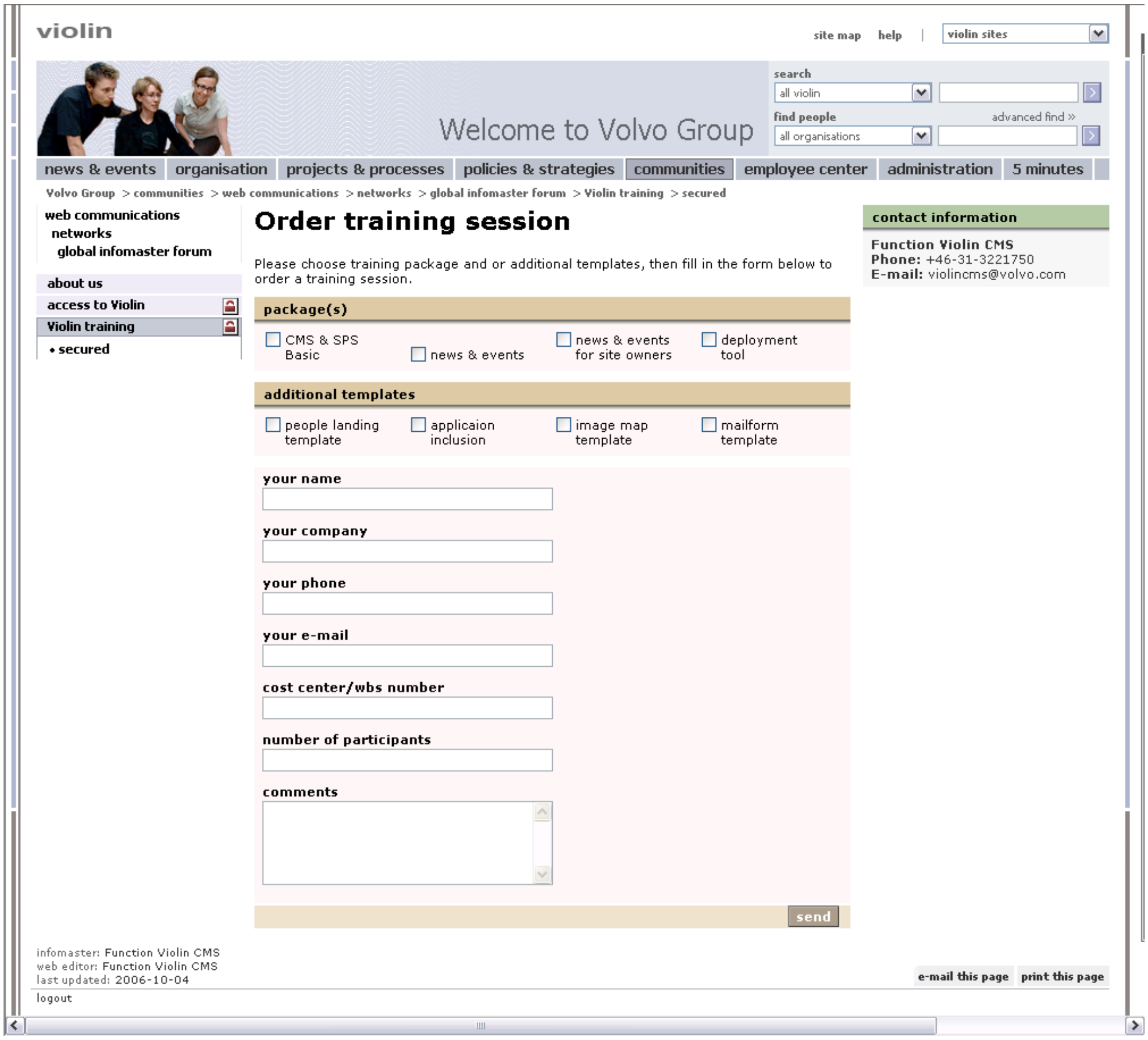
From a business standpoint, one important feature is that all intranet content is provided through common templates, enabling content authors to focus on their information and its message. Use of centralized templates also means that designers can instantly change the page design for every Violin page.

The redesign introduced some especially interesting features, including a news/events application with built-in alerts. This facilitates easy sharing of news across different intranet sites, regardless of the information's origin. "The alert feature is seldom used, but very valuable, as it ensures that all intranet sites display a critical news item," says Wendels. "It has been designed to quickly inform all Volvo Group employees, for instance in case of emergency or disaster — 11 September 2001 and the Indian Ocean tsunami of 2004 are often referred to as events when the feature would be used."

Another interesting new feature is the ability to link employees' names and contact details to a specific name in the corporate directory, and then display the employee's full contact details. "Not only does this provide a quick link to get in touch with a colleague, but it also ensures that we use a single source of information for all employees' contact information," he says.

The redesigned intranet also provides intuitive access to the hundreds of intranet-accessible applications. To accomplish this, designers either offer a simple link to the application in its correct context or make the application appear as an integrated part of an intranet page.

New employees can learn more about the Volvo Group via the *Employee Center.* Induction programs and online introductions also alert employees to this section's existence, which gives employees useful tools and everyday information related to training, travel, IT support, and more.



Pictured: This form allows employees to schedule training sessions.

USERS

Violin targets all 82,000 Volvo Group employees, managers, and office and production workers worldwide.

USER TASKS

Common Volvo Group tasks include:

- Access employment and work-related information such as policies, benefits and compensations, travel, training, IT support, and services, as well as related tools and services (such as application forms and online training).
- Apply for things such as training, jobs, and leave of absence.
- File reports on expenses, production status, performance, and so on.
- Order items, including publications, services, business cards, and stationery.

- Read the latest internal and external news, both local and global.
- Learn about business events, both local and global.
- Find colleagues.
- Participate in networks and communities.
- E-mail page links to colleagues.
- Print Violin pages in printer-friendly format.
- View organizational charts.

INTRANET TEAM

Pictured: (from left) Rickard Stromberg, Johan Wendels, Mark Vikner, Helen Jerresand, Eva Kuylenstierna, Anna Almberg

The corporate intranet began in 1995, and the intranet team has always been part of the Corporate Communications department. "This has meant that we already from the beginning have had an end-user focus and a communications focus rather than a more technical perspective," notes Eva Kuylenstierna, Volvo's Violin program manager.

Today, the intranet network of global Infomasters numbers about 15 full-time employees. The network is coordinated by Online Communications, a Corporate Communications sub-department. An Internal Communications Council includes one person from each business area and unit, and has overall ownership of intranet usage and guidelines.

The network relies on a common group budget for IT operations, the basic support organization, basic training, and CMS and intranet feature enhancements. "This common budget does not include any costs for editors working with content management," notes Wendels. "The editor organization is budgeted for by each business area and business unit."

BACKGROUND

When the Volvo Group intranet began in the spring of 1995, the goal was "to create a new communications channel for corporate information that would make the daily information flow in the group more efficient," says Kuylenstierna. "The top-down project started by introducing this channel to some 100 top managers and handing over their very own, brand-new laptop PC." Later that year, the first Group-wide intranet site launched for all employees. It was dubbed Violin (for Volvo Information OnLINe).

Subsequently, the intranet grew in a somewhat uncontrolled manner. "In the first years, we had no common guidelines, common technical platform, or common content management tool," she says. "However, early on we started up a Group-wide network of editors and initiated both end-user and editor training sessions."

Pictured: The previous version of Violin, the Volvo Group intranet.

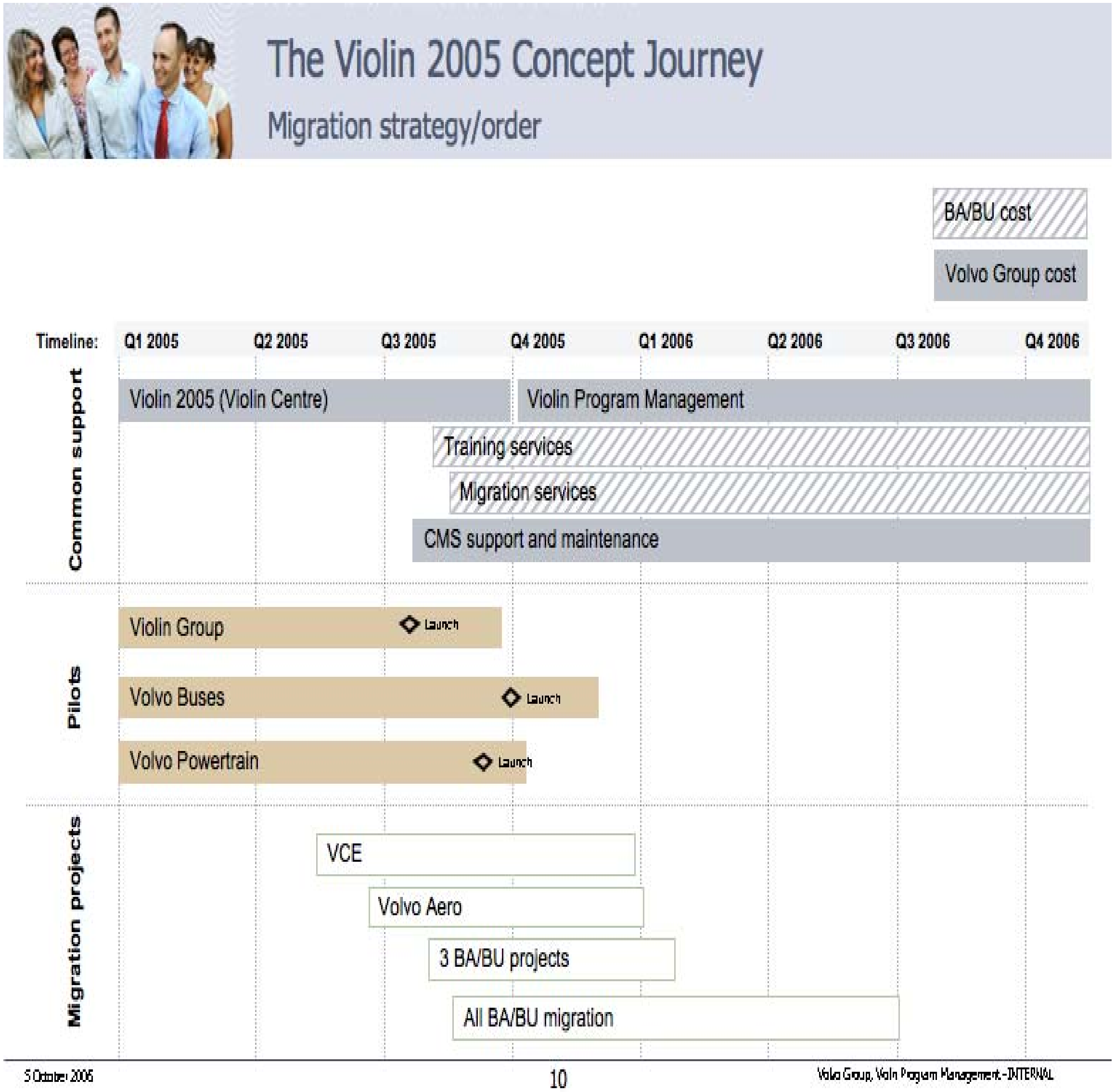
DESIGN PROCESS AND USABILITY ACTIVITIES

Creating a Common Communication Channel Back End

In 1998, the Volvo Group's senior executives agreed on the need for a common platform for all Web communication channels — intranet, extranet, and Internet. After launching successful Internet and extranet projects, management commissioned a study to investigate the business case for building an intranet with the same software.

"The investment calculation proved that substantial cost reductions and productivity gains could be achieved with such an initiative. But several more 'softer' issues needed to be resolved first — many of them not about design or technology but organization or governance," says Wendels. As a result, business representatives agreed to pursue a new intranet concept. "Based on this agreement and a profitable business case, the rather bold project started," he says.

The redesign timeline was aggressive: the intranet concept was to be developed in 100 calendar days, in conjunction with about 50 business representatives.



Pictured: A PowerPoint slide outlining the aggressive Violin redesign schedule.

Three Task Forces Help Identify Top-25 Problems

The business group representatives were divided into three task forces: one performed more than 150 face-to-face interviews with employees within all parts of the corporation; a second worked to identify best and worst practices on the previous intranet; and a third interviewed approximately 50 Web editors about their content management feature requirements. "Key members of the Group Executive Committee were also interviewed to provide top management input on the requirements," says Wendels. More than 1,100 employees also completed an online survey, which added some "valuable nuances" and "confirmed results from the employee interviews." Ultimately, the business representatives generated a prioritized, top-25 list of user requirements for the intranet.

Throughout all these activities, senior intranet design consultants from Framfab (now part of LBI International) were present, and helped support the concept development. "They combined the task force findings with workshop activities, and brought their experience from designing other global intranets," says Wendels. "The content inventory task force — where members in the intranet community identified best practices in the old intranet — was a good source of inspiration. One concrete example is the *World Times* feature — a direct result of that task force."

Usability Testing Techniques

As part of the redesign process, the company conducted four rounds of usability testing. "The first three rounds were planned and conducted by Framfab, the design agency, to quickly feed the results back into the design work," notes Anna Almberg, an information architect at Framfab. "These tests were performed using different combinations of paper prototypes — "accordion menus" — to test the information structure, early demos, and actual sites." Another design agency performed the forth round of testing. Throughout the testing, performed in Gothenburg, the redesign team was careful to also test using representatives from a variety of business units and areas, including users in the US and France.

Usability Surprises

In terms of usability test surprises, "we were rather surprised that they had big trouble with very basic things, like finding news and events from different parts of the corporation," notes Wendels. Indeed, out of the top-25 user requirements, four related to finding or reading news. "Also, the old intranet was cluttered with clickable banners. It turned out that users to a large extent no longer trusted or even noticed banners. Thus, all business representatives agreed that we should ban banners on the new intranet."

As part of the usability testing, designers asked users for their impressions on the look and feel of the prototype pages. "An interesting observation was that during the first test, the look and feel evaluation indicated both that the colors were too pale and that the design did not have a Volvo identity, since the Volvo logotype and the Volvo blue — the primary brand color — were not used," says Almberg. "Based on this feedback, the colors were deepened and made more distinct, and during the following look-and-feel evaluations, the absence of the Volvo logo and the Volvo blue was no longer mentioned as an issue."

TIMELINE

- September 2003: Redesign pre-study began.
- February 2004: Pre-study completed; decision made to launch project.
- March 2004: Project began with a 100-day concept development period.
- June 2004: Concept development and requirements gathering completed; business commitment achieved.
- September 2004: Completed elaboration on prioritized requirements.
- December 2004: Elaboration completed with requirement specifications and high-level functional specifications; started final design and CMS implementation.
- March 2005: Final design (templates) completed.
- June 2005: First version of CMS delivered; held first training session for editors.

- August 22, 2005: Launched first new intranet site (Volvo Group corporate site).
- September 2005: Completed information architecture guidelines; established support and training organization; established migration plans within all business areas and units; confirmed business commitment; and all business areas and units began migration work.
- October 2005: Launched first business area intranet site.
- May 2006: After an intense migration period, all business areas and units launched their new intranet sites.
- June 2006: Project and migration completed, within timeframes and on budget. Most old intranet sites had been closed. At this early point, the company concluded that the investment had already paid off via reducing operational IT costs.

RESULTS

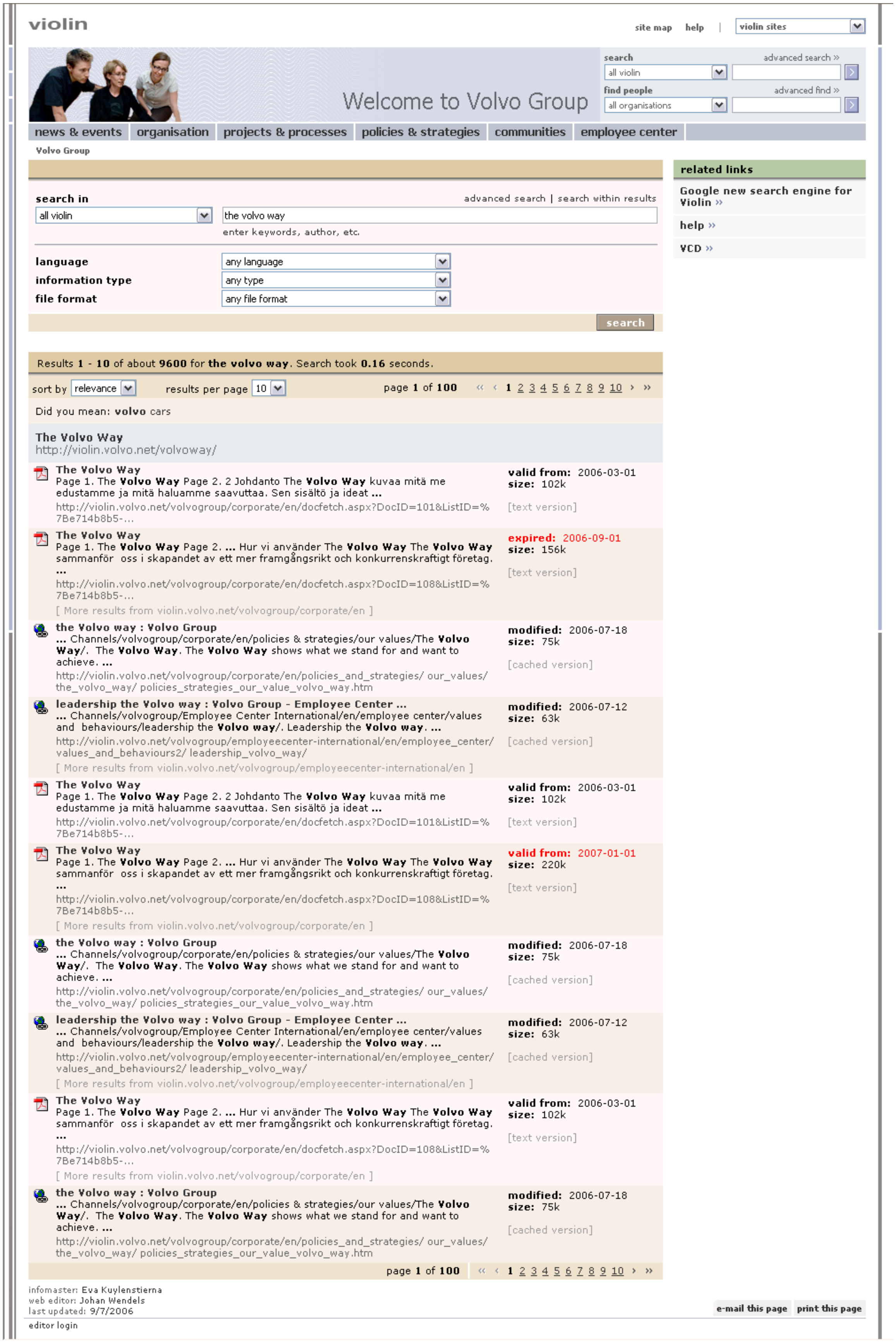
The Benefits of Standardizing 80 Sites

After just 18 months — from March 2004 to September 2005 — the new intranet launched. Remarkably, just 10 months later, all Volvo Group business areas and business units had launched new intranet sites. The total number of new sites is currently 80, though a few more sites may soon be added. In addition, more than 80% of the old Violin sites are now closed. By the end of 2006, all old Violin sites were scheduled to be closed.

The redesign produced a number of notable and extremely useful changes, including shuttering old, defunct intranet sites. Another notable improvement is the single technical platform that now supports not only the intranet, but also the extranet and Internet sites. A related, immediate payoff then has been "an extensively improved search function, presenting accurate results from all intranet sites, which was not the case on the previous intranet," says Kuylenstierna. "End users are very positive about the new design and especially reference the common structure as a way of increasing transparency across the Volvo Group — thus making it more user-friendly."

On the transparency front, "as content is presented in a common structure and format, regardless of what unit an employee belongs to, it is very easy to find and understand information about and from other units within the corporation," concurs Wendels. "Another very important benefit is that employees, to a much larger extent, can trust the content as a valid source of information, to learn from or act upon."

The changes also mean that news can reach employees much more quickly now, thanks to automated news and document sharing among all sites.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infomaster: Eva Kuylenstierna
web editor: Johan Wendels
last updated: 9/7/2006
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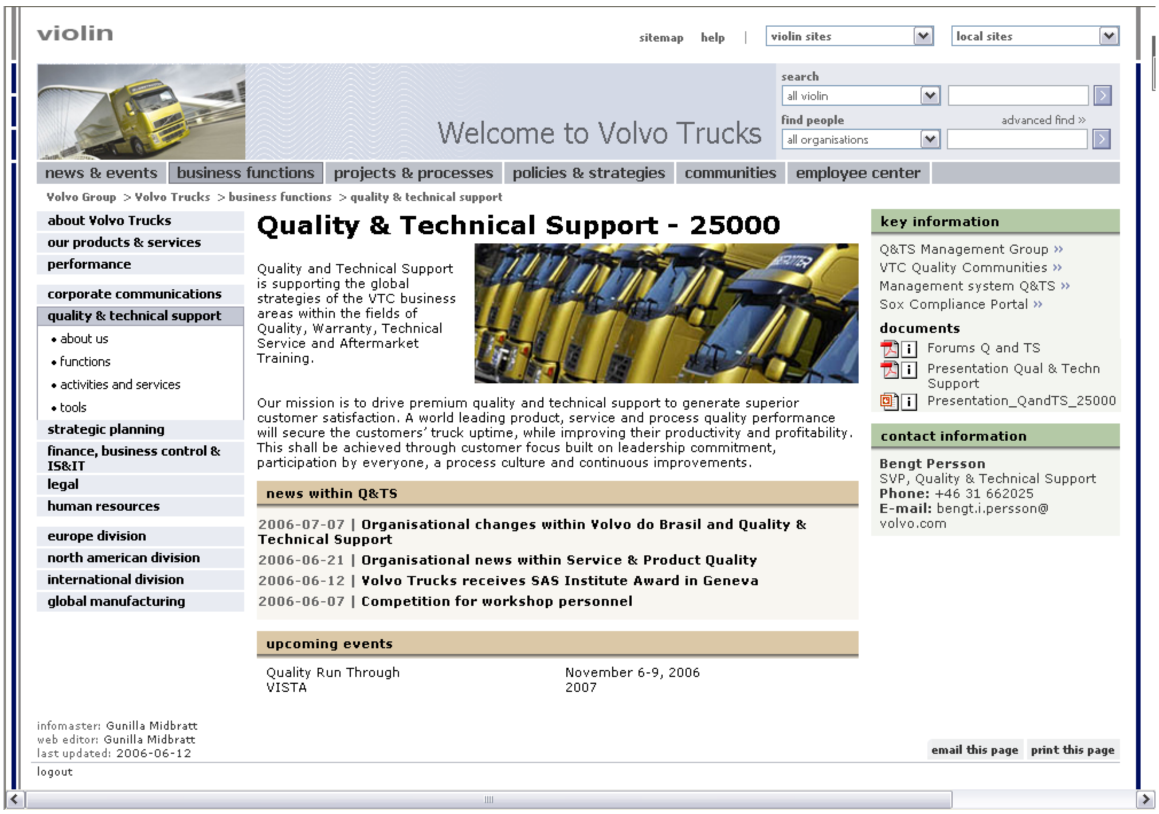
editor login

Pictured: Intranet search results for "the Volvo way." Thanks to standardizing on one content management back end, intranet searching can unearth documents and information from the company's intranet, extranet, and Internet sites.

Calculating ROI

Wendels says the redesign team didn't spend much time comparing before-and-after metrics, because it didn't have reliable data about what the previous intranet had cost to maintain, or about page hits, and so on. That said, the redesign did help expose some processes and costs. "From a management and governance perspective, one of the most important results is that now, IT operational costs are visible, all editors are known, and we can work with the company's common statistics and metrics," he says. Using the common CMS will also let the intranet team generate relevant statistics relating improvements in both the user experience and employees' ability to produce and consume news.



Pictured: A department-level page in the redesigned intranet.

LESSONS LEARNED

Insights from Johan Wendels:

Always provide more change support. "Even if we spent thousands of man-hours on providing change communication tools and support, we still could — and in some areas should — have increased such efforts during the rollout. I wouldn't say we underestimated the effort, but we needed more checkpoints to ensure all business areas and units were on the changes, before starting their content management system work. The quality of a new intranet site is in direct relation to how much time was spent on communicating changes, as well as adopting new information architecture guidelines."

Convince your content editors about changes. "Content editors are crucial for helping drive organization-wide intranet changes. Only after you change your editors' mindsets about the intranet will you see your intranet vision come true."

Follow the usability data. "The biggest design-phase surprise was the list of users' top requirements early on in the project. We anticipated unearthing a long list of specific, missing interaction features. Instead, we gathered a list of the content employees had a hard time finding, or thought was lacking. This made it even more apparent that information architecture work would be the primary key to success for the new intranet."

Don't be afraid to set an aggressive schedule. "I think that many business stakeholders were surprised by the fact that the intense concept development work could be completed within 100 days."

The last 5–10% hurts the most. "'The devil is in the details' — or rather, as we learned in previous Web communication projects, resolving the last 5–10% of every business requirement is what costs the most, both financially and in terms of time. Accordingly, implementing less complex solutions and making sure they are used by as many editors and users as possible generally produces a far greater return on investment than implementing solutions that are used by a minority of users, even if such tools would increase productivity within that minority."

Follow the 80/20 rule. "With the preceding point in mind, early on in the redesign, we established the general principle of '80% is good enough, now let's move on' with the business representatives taking active part in the concept development work. This meant that not all business areas' or units' unique needs were satisfied, but they still had to accept the solution agreed upon by the majority, because ultimately, they too would benefit from it."

Get stakeholders' hands dirty. "Whenever possible, involve the business stakeholders/representatives in the hands-on requirements gathering and analysis work. Don't limit involvement to a small "reference group." Rather, make stakeholders actually do the work, and use experts — consultants — to support their efforts. True, this will require some effort to coordinate, but the level of the stakeholders' commitment to the results, and the resulting agreements this generates, will be very high, and pay off when you ultimately roll out the redesign."

British Airways

Using the intranet:
British Airways (BA) operates one of the world's most extensive international, scheduled airline route networks, comprising some 147 destinations in 75 countries and carrying more than 33 million passengers worldwide (in the year ended March 2007).

Headquarters: London, UK

Number of employees the intranet supports:
45,000 current employees and approximately 40,000 retired staff

Sales: £8.4 billion (year ended March 31, 2007)

Design team:
In-house, by a core team of 20 people working across 15 departments worldwide

Members:
Allen Huish, Programme Manager Employee Self Service (ESS); Delia Steven, ESS Manager; Penny Quilty, Intranet Support; and Paul Cook, ESS Intranet Executive

SUMMARY

In the always highly regulated airline industry, massive changes—namely, heightened security and the need for tremendous cost cutting—have forced airlines to respond quickly and significantly if they're to survive. Working out a change strategy and ensuring that 45,000 employees get the message and get it right is a real challenge. At British Airways (BA), the intranet is the best channel for communicating this information. The airline uses its intranet to not only inform people, but to cut costs by putting tasks online that would otherwise cost a lot more money, paper, and staff time.

Users can access the BA homepage—as well as the entire intranet (my.baplc.com)—at home and work via a single sign-on. More than 70% of employees access the intranet from home. At BA locations, the intranet is part of the standard build of all computers, with the homepage set as the browser's homepage. Users can't change this, nor are they likely to want to, as the homepage links to so many of the activities user need and want to access. News, personal messages, and specific department news greet users when they log in. They can search the whole site or for colleagues anywhere within the organization. Links in the top and left-side navigation lead to many features that people need every day. And the light blue color palette is calming—like the sky itself.

Pictured: Once logged in to BA's Employee Self Service intranet homepage, people can use it as a one-stop-shop to do all of their self-service tasks.

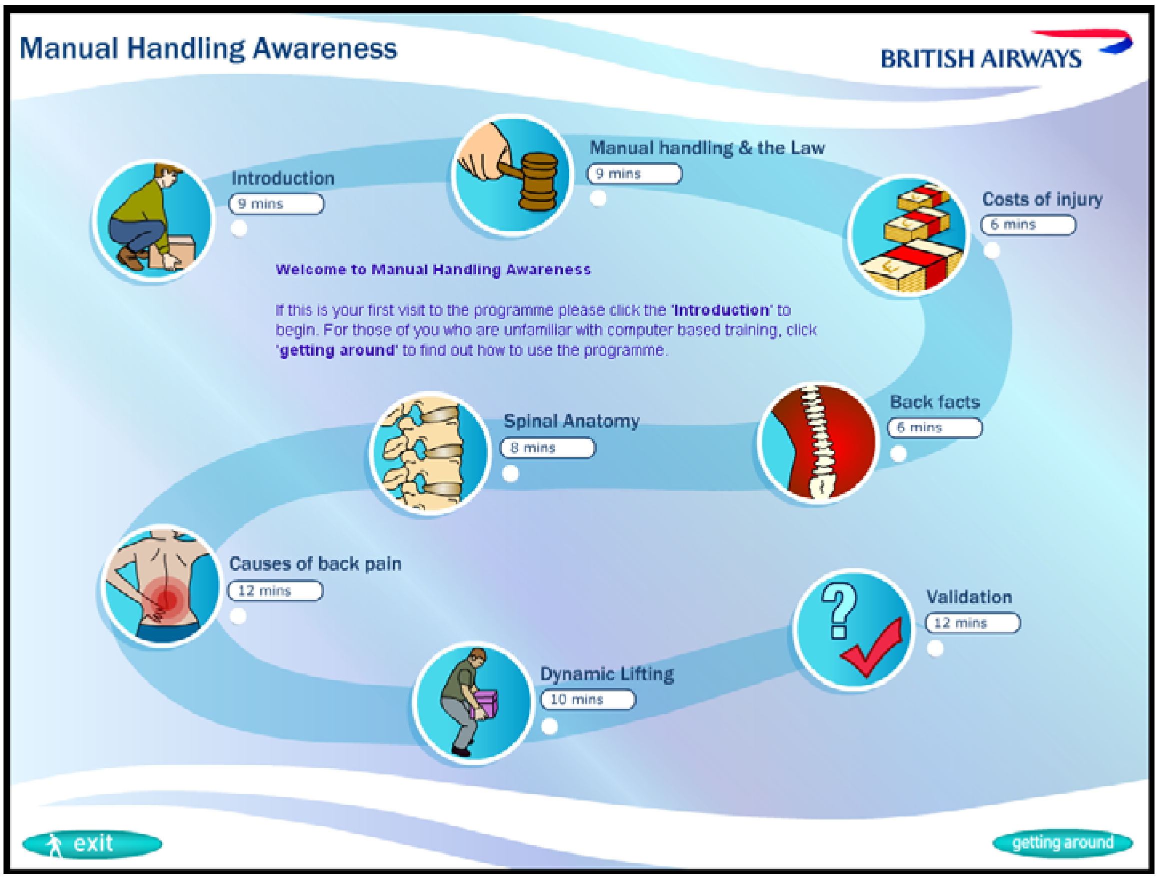
The look may be soft, but the BA intranet means business. Seeking to simplify processes, managers and the intranet designers came up with the Employee Self Service (ESS) Program, the company's intranet. Looking for more efficient work habits while thinking green, managers decided to strive for "No duplicated or paper processes." This targets each of BA's 15 Departments, requiring them to create their own local ESS plan for change, cutting out the endless paper trail and removing duplicate manual systems and processes. The program encourages that processes be automated via the intranet, and that processes align with business needs. In making so many tasks possible and simple on the intranet, and communicating to employees why using these methods to complete the tasks was so important, the intranet team assisted in creating a new way of doing things—a new culture even—where employees embrace self service. Some of the aggressive targets the team has for the ESS include:

- 75% increase in training days online
- 100% of staff travel booked online
- 100% of UK transactions procured online
- 80% of personal details updated online
- 99% of UK staff connected to ESS

The team is well on its way to achieving these goals, something that is possible only if the intranet is straightforward and easy to use.

One great ESS area is the online training. At this point, at least 40% of all BA training is completed online. Users can still enroll in some classroom courses, and some courses are a hybrid: part online and part classroom. But the online system allows employees to attend to courses when their busy schedules allow, rather than having to leave work to go to a class. This is especially convenient for taking mandatory classes. Having other courses online has made it convenient and even encouraging for staff to further enrich themselves and be better employees.

Most of the online training is delivered via *My Learning* (part of their Oracle HR system). Here, users can enroll in and take online courses. The classes cover many topics, from enrichment (such as negotiating) to IT training, management skills, and specific airline courses. And the online courses consist of far more than boring, flat text—they include a range of multimedia approaches, including audio, video, and animation.



Pictured: A screen from a BA online training course.

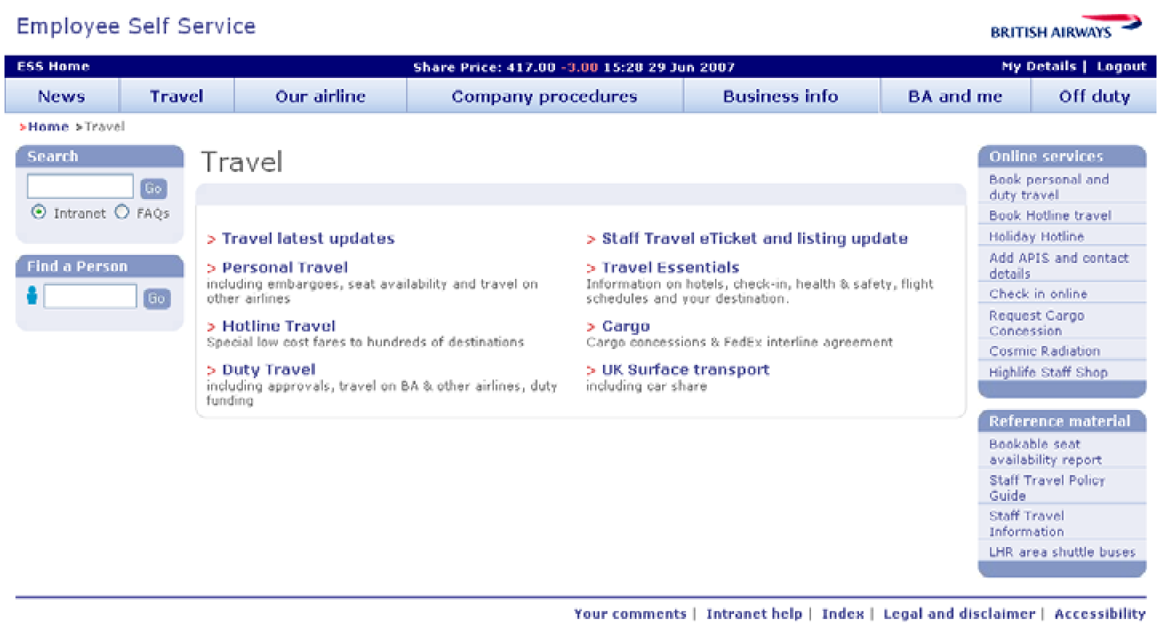
Just imagine the amount of knowledge embodied in the 14,000 cabin crew members, all the things they've learned throughout their travels. So much helpful information and tidbits could be lost if not communicated. But how can a large staff—who could be anywhere in the world, at any given time—get together and talk? Another good ESS solution is the online discussion forum for the cabin crew. While the designers consider the design to be rather "vanilla," they hesitate to change it because the feature is so widely used. Also, the current design is usable overall, displaying the most basic necessary information (such as topics) as links, and noting the threads and posts. And, to simplify the experience as much as possible, designers turned off some of the more advanced features (such as instant messaging and avatars) that come with the vbulletin technology.

Pictured: BA's 14,000 cabin crew members share ideas and answers via their intranet discussion forum.

While the intranet is available for people at home, some cabin crew members might not be at their base for a month or more. In 2006, the organization deployed more than 200 kiosks in places such as airport terminals, cabin crew lounges, engineering workshops, and cargo facilities. Employees can log in with their unique ID and password, making it possible for them to use the intranet even when traveling or when working in a location without offices or readily available PCs.

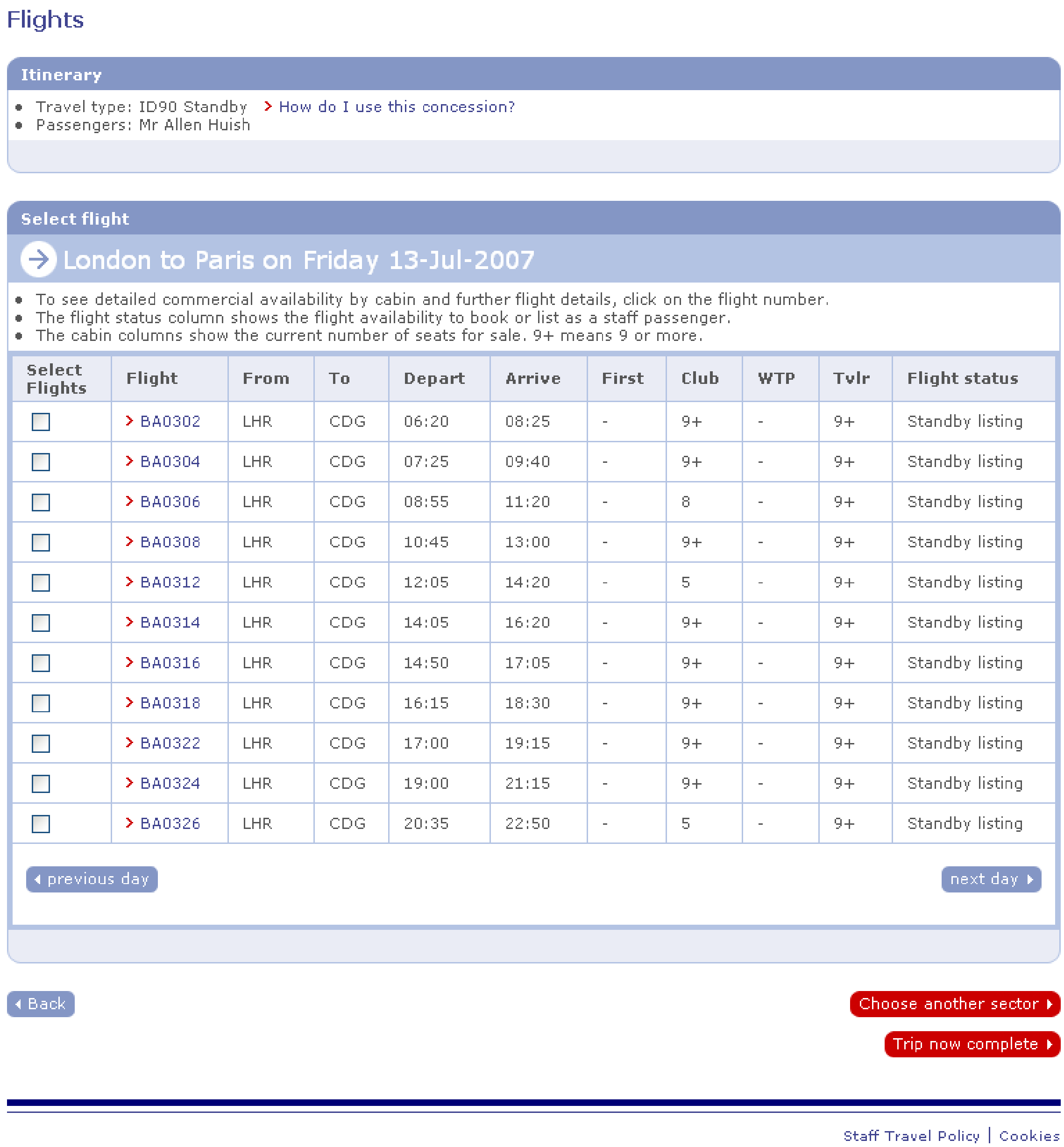
Pictured: One of the many airport-based computer kiosks where cabin crew members can use the intranet.

Flying is the center of this organization. Whether scheduling a business flight or partaking in the airline's major employee perk—discounted or free flights—employees can use the *Staff travel* area to schedule their flights. This area lets them read information about mandatory travel procedures, look into carpooling, cargo rules, and travel possibilities, get their e-tickets, and more.



Pictured: The *Staff travel* area lets employees read about rules and travel possibilities, and book their personal tickets.

Gone are the days when BA employees had to queue at a travel office to schedule travel assignments. Today's selections are presented on the intranet in a simple table with listings and checkboxes to select the preferred flights. The flight locations, numbers, and departure and arrival times are clearly legible and easy to decipher, as are the number of seats available. The *previous day* and *next day* buttons help people to cruise around a time period they're interested in. And the buttons are well-placed at the bottom of the page, with *previous* on the left and *next* on the right. Knowing that people might need multiple flights or to just schedule a one-way blast, the *Choose another sector* and *Trip now complete* allow them the freedom to do so.



Flights

Itinerary

- Travel type: ID90 Standby > How do I use this concession?
- Passengers: Mr Allen Huish

Select flight

London to Paris on Friday 13-Jul-2007

- To see detailed commercial availability by cabin and further flight details, click on the flight number.
- The flight status column shows the flight availability to book or list as a staff passenger.
- The cabin columns show the current number of seats for sale. 9+ means 9 or more.

Select Flights	Flight	From	To	Depart	Arrive	First	Club	WTP	Tvlr	Flight status
☐	> BA0302	LHR	CDG	06:20	08:25	-	9+	-	9+	Standby listing
☐	> BA0304	LHR	CDG	07:25	09:40	-	9+	-	9+	Standby listing
☐	> BA0306	LHR	CDG	08:55	11:20	-	8	-	9+	Standby listing
☐	> BA0308	LHR	CDG	10:45	13:00	-	9+	-	9+	Standby listing
☐	> BA0312	LHR	CDG	12:05	14:20	-	5	-	9+	Standby listing
☐	> BA0314	LHR	CDG	14:05	16:20	-	9+	-	9+	Standby listing
☐	> BA0316	LHR	CDG	14:50	17:05	-	9+	-	9+	Standby listing
☐	> BA0318	LHR	CDG	16:15	18:30	-	9+	-	9+	Standby listing
☐	> BA0322	LHR	CDG	17:00	19:15	-	9+	-	9+	Standby listing
☐	> BA0324	LHR	CDG	19:00	21:15	-	9+	-	9+	Standby listing
☐	> BA0326	LHR	CDG	20:35	22:50	-	5	-	9+	Standby listing

previous day | next day

Back

Choose another sector

Trip now complete

Staff Travel Policy | Cookies

Pictured: Users can easily read and choose their flights in this simple table.

At most organizations, reporting IT issues via telephone networks is very costly. BA made a commitment to resolving such issues via the intranet instead. Thus, employees must report all non-urgent IT and phone issues online. The result has been an enormous cost savings from the call reduction.

In addition to putting features online to reduce costs, making design tradeoffs is another smart activity the BA intranet design team exercised. In this case, the team discussed and ultimately decided to use a vendor’s out-of-the-box system because they couldn’t justify tailoring it to the intranet’s exact standards given strict cost constraints. The form could be better by, for example, using a word such as *issue* instead of *fault*, and using a lighter blue to match the rest of the pages. But, overall, the form is relatively easy to use and looks surprisingly close to the intranet’s overall style. The form notes the person's name and location, but offers a place to type a different location or phone number in case the person is traveling or reporting the issue for a colleague. A simple open field lets users type in any issues, and a *Submit* button at the bottom of the page sets the gears in motion.

Pictured: The form for reporting all IT- and phone-related problems is relatively simple. Designers made the difficult decision to stick with the out-of-box vendor offering in order to save money.

The vast online offerings are available to employees at home or around the world at anytime, and are helping and pleasing BA employees. Likewise, the communication and cost savings are pleasing BA managers. What's the expression? *Give a man a fish and he will eat today. Teach a man to fish and he will eat for life.* The need for specific capabilities, combined with the simplicity and convenience of their design and presentation, make the BA intranet a successful one that justly helps employees help themselves. And the design team constructed all of this while keeping a keen eye on their own costs, as well as those of the entire organization.

URL AND ACCESS

The intranet's URL is: http://my.baplc.com. Office-based staff log in to the network and are automatically directed to the intranet when they start up a browser session. This single sign-on gives them access to most self-service applications without needing to re-authenticate.

One of the key factors of the intranet's success has been its availability away from the workplace. "We have found that access from home is an exceedingly high priority for our staff and this has been delivered for most intranet applications," says Allen Huish, BA's ESS Programme Manager. More users regularly access the intranet from the field or at home than at BA locations. Huish reports that 70% of BA staff connect from home at least once a month. "When you're not based in an office, reliability, ease of use and accessibility are so critical for operational staff," says Stephanie Smith, BA's Inflight Service Change Programme Manager.

Over 200 ESS kiosks have been installed across the company to provide easy access for staff members who work outside of an office environment. Kiosk locations include airport terminals, flight and cabin crew locations, engineering workshops, and cargo facilities. By simply using their unique userID and secure password, location-based staff can access a range of self-service tools available to office-based staff.

"The intranet is an essential tool for cabin crew and effectively is their workstation/desk when they're away from base," notes Smith. "ESS is the only real way they stay connected to BA and what's going on both in support of their role and in keeping them up-to-date with news and information from across the company."

TECHNOLOGY

"The intranet is based on Lotus Domino using the Aptrix content management tool," says Delia Steven, ESS Manager. "We have a publication server, two load-balanced internal servers and one serving the home users. We have a number of additional Domino databases (e.g., for feedback and for simple forms). We use the Google search appliance."

CONTENT MANAGEMENT SYSTEM

CMS Technology

The Aptrix CMS was developed by an Australian company that's been taken over by IBM Lotus. "We are using the standard product, which separates Web publishing from the design of templates and approval workflows," says Steven, "making it easy to enforce use of the templates."

CMS Authors

The intranet is currently split into universal and departmental databases. The ESS team controls the universal site structure while departmental sites can create new pages at will (within an agreed-upon departmental taxonomy) and have control over their departmental homepage and news.

"We have over 300 authors and approvers looking after different parts of the site," notes Steven. "This distributed model is part of the self-service approach and publishers do not need technical Web skills. Some areas have chosen to have a dedicated team, and others have many more occasional publishers. We produce a design guide and all publishers attend an initial training course and have to pass an annual online refresher test. A downside of the distributed model is enforcing standards across a large group of people."

Steven notes the three biggest challenges for BA content management:

- Ensuring page titles are unique so they work with the search
- Getting people to write well for the Web
- Policing the "no decorative graphics" standard (illustrative graphics, such as maps, are encouraged)

INTRANET TEAM

Pictured (from left, back to front): The BA intranet team: Julia Bend, Penny Quilty, Richard Simpson, Nimmira Juma, Alan Porter, Madhu Manning, Tracey Wallin, Charlotte Glover, Pat Harrison, Delia Steven, Yinsan Pang, Baljit Rihal, Dave Howkins, Allen Huish, and Gary Clark.

The ESS team consists of 20 internal employees working across 15 departments worldwide. The intranet holds a strong position within the organization and is effectively "owned" by the IT department. Directors support and provide governance to ESS to help promote the intranet as a key driver of business change.

BACKGROUND

The intranet began as a channel aimed only at office-based staff, and is now central to all 45,000 BA employees worldwide. Launched in the mid-1990s with help from external IT consultants, the intranet first gained prominence during the move to the airline's new corporate headquarters.

As a channel aimed at office-based staff, the first intranet sites were managed using MS Front Page and some Domino (Notes) databases. In 2001, with the site's size and scope growing rapidly, it became apparent that a move to a single, company-wide CMS was needed. Since then, the technology used to keep the intranet up-to-date has not changed.

In a move toward adopting new ways of working and reducing the user of paper, the intranet was seen as an opportunity to promote business change. A key redesign initiative was to drive greater adoption of self-service culture across the company and to provide greater access away from work. Employees now actively use the intranet from home and elsewhere to access up-to-date news, information, and business processes on a corporate and departmental level.

BA INTRANET—KEY MILESTONES		
Date	**Milestone**	**# of employees logged in to ESS on Christmas Day**
Late-1996	First intranet introduced	
2000	eWorking program (precursor to ESS)	
2001	Move to a CMS (Aptrix)	
2002	Intranet available from home	
early-2003	First major ESS applications (*ePay*, *Staff travel*) became available from home	
2003	ESS launches with new Portal	1,928
2004		2,420
2005	Staff travel booking becomes compulsory online	
2005	100% of employees log in to ESS	4,558
2006	Paper pay stubs eliminated	
2006	More than 200 ESS kiosks deployed in frontline areas for non-office-based staff	
2006	Intranet design aligned with company website (ba.com); Google-based search introduced	6,600
2007	Personalized ESS homepage launches	

Working with Agencies

BA worked with external consultants only to create the intranet's initial version. Since then, the site has been managed and maintained entirely in-house.

GOALS AND CONSTRAINTS

BA's ESS program is intended to radically simplify the airline's back office—to draw all the ESS applications into a single "front door." This effort supports changes underway in both the aviation industry as a whole and in BA's business in particular.

The ESS portal is intended to automate processes and provide BA employees with 100% connectivity and access—from work or home—giving everyone a choice as to how they manage their work style. Most important to BA, the ESS intranet would touch every employee across the organization, not just office workers.

"ESS is one of my favorite programs because it has delivered an enormous business transformational bang for a very small investment buck," says Paul Coby, BA's CIO. "It works because it contains vital services, is easily accessible, and, above all, is easy to use. So, guess what? People use it."

With the redesign, the organization also hoped to achieve a cost savings of £55 million (~$111 million US).

Beyond cutting costs and achieving business efficiencies, the overarching goal of ESS is to encourage a pervasive self-service culture among BA staff that mirrors the self-service changes taking place for the airline's customers.

The ESS program links together a range of corporate initiatives and thus the company's management team has set the following transformational targets for the program:

- **80% of employee administration will be self service.** This refers to corporate online processes that affect everyone in the airline (such as HR functions, staff travel, and helpdesks).
- **No duplicated or paper processes.** Each of BA's 15 departments were challenged to create their own local ESS plan for change, cutting out the endless paper trail and removing duplicate manual systems and processes.
- **Never train offline if you can train online.** E-learning was already established within BA. The "never train offline" target is aimed at promoting some of the existing 450 online courses, as well as challenging future training to include at least one online component.
- **All information available 24/7 online.** This mandate combines the intranet and email for communication and a work stream that enables self-service reporting for key information across the airline.

In addition to the management team's transformational targets, the ESS Program Office developed a standard "dashboard" of key milestones, measures, and targets. These measures are updated and published on a monthly basis for the governance board. Behind these measures is the drive to demonstrate real change in ESS culture. Examples of these targets include:

- 75% increase in training days online
- 100% of staff travel booked online
- 100% of UK transactions procured online
- 80% of personal details updated online
- 99% of UK staff connected to ESS

With measurable targets in place, the team can monitor the ESS program's steady and significant achievements as it evolves. Such benefits are both measurable and noticeable. "ESS is delivering real benefits to the business, both to the bottom line and to the changes in the way everyone is working," says Heath Drewett, BA Group Financial Controller. "ESS is not just for head office. It's for everyone, and especially for those on the frontline in customer-facing roles and in our airport, cargo, and engineering communities. People right across the business are adopting self service."

USERS

The People's Intranet

Employee Self Service through the intranet is a fundamental part of work life for every employee across the entire BA organization. This includes 45,000 users worldwide.

"The thing I am most proud of is that ESS is not just an intranet for office workers," Paul Coby, BA CIO. "Lots of companies have those. ESS is the intranet for everyone—from baggage loaders, customer service agents at the airports, cabin crew down-route, pilots, IT people, and engineers, to BA staff overseas—and it has been from the start."

Coby also notes, "We have proved that if you provide easy access for staff—there are ESS Kiosk PCs in restrooms, access from crew hotels, as well as remote access from portables—you make it easy to use, and you [include] services and information that everyone needs to do their job, then, yes, pretty much everyone can and does use it. ESS is the BA people's intranet and we pay tremendous attention to what our colleagues say about usability and content."

EMPLOYEE GROUPS SERVED BY THE INTRANET (INDICATIVE NUMBERS)		
# of staff	**Department**	**Description**
9,000	Airports	Frontline customer service and aircraft apron operational staff at UK airports
2,000	Cargo	All cargo activities including manual handling
300	Commercial	UK sales and marketing
6,000	Engineering	Frontline and management engineers
1,000	HR & Finance	Office-based finance dept
3,500	Flight Operations	Pilots and supporting teams
1,500	Sales & Distribution	UK call centre teams
1,800	IT	
15,000	Inflight Service	Frontline cabin crew
4,500	Overseas	Staff based in cities worldwide

USER TASKS

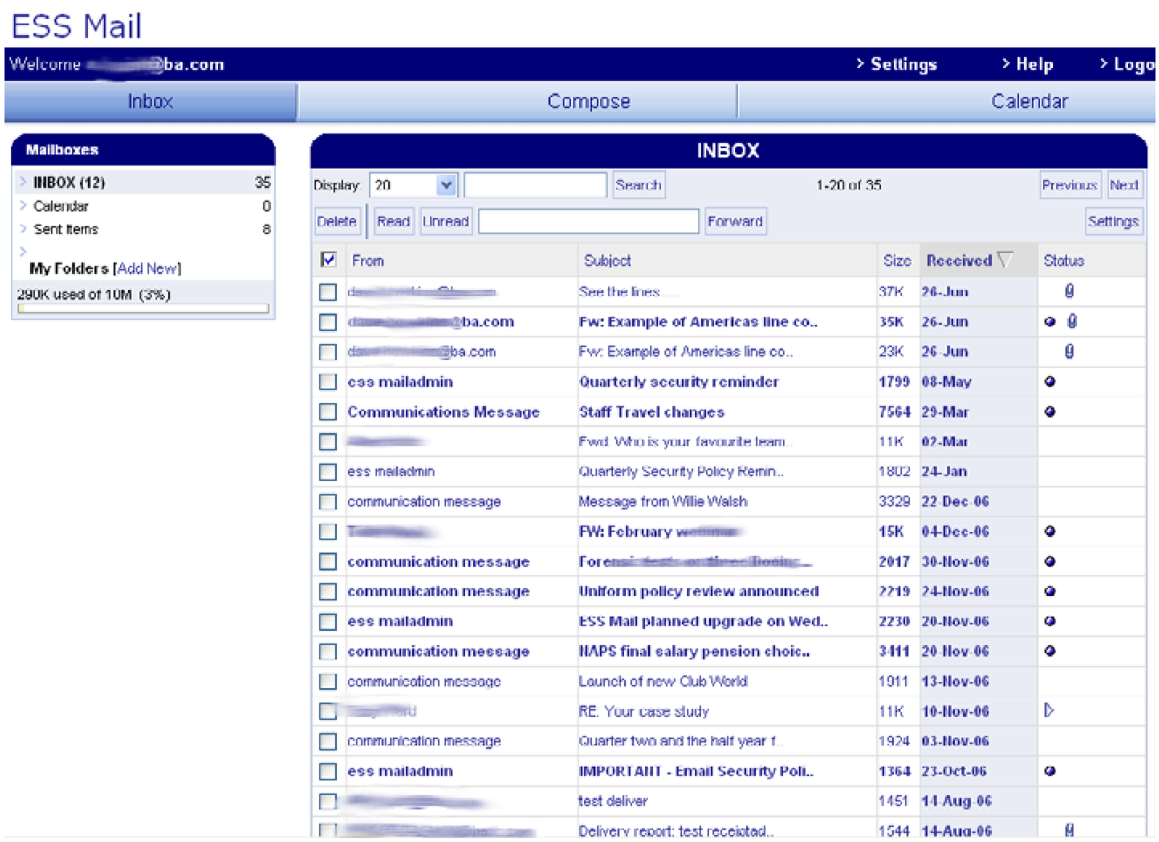
BA staff members connect to the intranet to:

- Read their pay information online
- Book their leave
- Change their work schedule
- Read corporate information
- Update their personal details
- Help solve problems through online helpdesks and FAQs
- Book/manage travel
- Use email

"Individual's personal information is managed online, as well as checking pay, booking travel, or searching the corporate directory for contact details," says Kim Pettigrew, BA's Head of Resourcing Systems, Policy & Services. "As a people business, we give a high priority to giving open access to all staff to valuable information about policies and processes."

Pettigrew adds, "Holding corporate, HR-related policies and guidelines online means employees can always get the most up-to-date information without having to rely on paper manuals or wait for helpdesk teams to be 'on duty.' This benefits everyone because the intranet is a reliable and consistent source of information."

For mobile staff (such as the cabin crew), ESS is the only way to access their company email service, which they can do from home or en route.



Pictured: A simple Web-based email system rolled out to all 31,000 frontline and operational staff during 2006. The key design principle was "simplicity." The application was based on the standard platform and the team spent most of their time doing user testing and removing many unused features that detracted from the overall experience. User adoption has been astonishing, with over 75% of frontline staff using the system every month.

BASIC INTRANET FEATURES

Job- and role-related self-service applications are unique features that give individuals access to the tools they need to do their jobs. This is achieved by integrating with the "system access" workflow, so that as soon as a person has been given rights to use a particular application, that link will appear on his or her ESS page.

According to Huish, the most mission-critical intranet-based task for employees is knowing exactly when they are scheduled to work. Self-service schedule tools give operational employees the ability to manage every aspect of attendance.

In addition to job-related tasks, the intranet is often used to communicate updates to staff when there is a widespread operational issue such as the "liquids in carry-on baggage" security alert during the summer of 2006.

BA provides a limited amount of new-hire orientation through the site's *What Everyone Should Know* section, and some areas have published specific departmental checklists and information. Additionally, employees make substantial use of the online training courses.

The following chart identifies the site's main features and what each tool provides for the BA staff.

ESS TOOLKIT FEATURES	
Information pages online: 30,000 pages of information about every part of BA published by 300 publishers in one CMS	**Low-cost email capability:** 100% of frontline staff have email, including 31,000 staff who now have a corporate email account for the first time
***Staff travel*:** Available from home or at work	***BA2Buy*:** Online procurement
***Webmail*:** Lotus Web browser email	***EPay*:** Online pay information
***Peopleonline*:** Oracle HR system with employee access	***BANi*:** Interactive BA news
Online surveys: Confirmit: a tool enabling Web-based surveys with instant reporting	***Corporate directory*:** A central directory for all employees
***Learnonline*:** Web-based course booking and tracking service	**Google Search:** Simple intranet search
***Crewlink online*:** Web-based portal for flight and cabin crew (including scheduling)	**Computer-based training:** Quest-based training for all employees
***Crew Voice Response*:** Leave, schedule, and bidding	**Self-service forms:** Among the available forms are leave, feedback, expenses, absence notification, and many more
Single sign-on: One "BSAFE" password available from work and home for the whole system	***my.baplc.com*:** Personal portal for employees from home
Online password change	***Help* online:** Currently, FAQs are online across 40 helpdesks worldwide
***EPensions*:** Online pension calculator	***Emanuals*:** Online manuals on the intranet

Collaboration Tools

Collaboration tools are scattered in pockets throughout the intranet. Since 2006, frontline staff has had access to discussion forums for collaboration and knowledge management (office staff use Lotus Notes for collaboration). The forums were initiated with participation from flight crew and now encompass cabin crew, ground staff, and engineering. Forums are used for peer-to-peer knowledge sharing and problem solving, as well as to pose questions to managers.

Also, the IT department has a few wikis that are being trialed in specific technical areas of the organization. The site's FAQ database includes a feedback option, which employees often use to suggest new questions.

Non-work related community features include *Been Here, Do This,* where staff can share travel experiences and advice; a very popular classified ads section; and *Talking Point,* where staff can comment on a news topic of the week.

Search

The search technology used on ESS is the Google Search Appliance. This was selected in early 2006 to replace a basic Lotus Notes search. The team chose Google from among the field of enterprise search tools because of its well-known performance and brand-recognition attributes.

"It performed well in testing and the Google brand name gives people confidence in the search results," says Steven. "We track the top 100 searches every month, and make sure that they return sensible results, either by adjusting page titles or adding keymatches."

DESIGN PROCESS AND USABILITY ACTIVITIES

Redesign Priorities

Using the intranet to change the way people work meant that ESS had to be easy to use. In many cases, using the intranet to complete tasks became mandatory as BA gradually closed alternative channels, such as phone or helpdesks. "This means that there is considerable support at senior levels to invest in usability and design," says Huish.

Within BA, the intranet initiatives receive broad support from the management team at high levels "At director level, the group performs a strong and supportive governance role helping to drive business change," says Huish. The leadership team created "measurable and challenging business change targets," for ESS. "The latest redesign was driven by the desire to provide a single entry point to ESS and the intranet and to improve usability and access to personalized (e.g., work, role, location-based) content," he says.

In keeping with these goals, the following principles were agreed to across the organization:

- Make employee transactions compelling and cost effective
- Design and simplify online processes for everyone, turning off the alternatives
- ESS applications must be intuitive to use and easy to access
- The ESS portal is the secure, one-stop shop for self service

"The governance group said 'employee transactions had to be simplified, self-served, and online,'" says Huish. "They added that 'ESS must free up time for valuable face-to-face contact with our people.'"

Having clear consensus on the goals and performance targets helped team members clarify project objectives and prioritize their work. "Measuring usage each month provides a snapshot of what employees are doing online," he says. "Metrics have been invaluable in driving change by demonstrating to stakeholders what should be changed."

Despite the usability mandate, the team still had to ensure that they managed site changes efficiently because they faced ongoing cost constraints. One effort in this direction was to reuse BA.com's visual design, providing the intranet with a new look and feel that could be delivered quickly and at a reduced cost.

Creating a Single Entry Point

The most recent redesign effort was driven by the desire to provide a single entry point to ESS and the intranet, and to improve usability and access to personalized content based on the user's job, roles, location, and so on.

The team used a variety of usability methods during the redesign process:

- Card sorting (especially for the *BA and Me* HR site)
- Field studies
- Surveys (online and paper-based)
- User testing of new design prototypes
- User testing of the old intranet
- Studying the server logs

"We also used methodologies advocated by Jakob Nielsen and Steve Krug," says Huish.

According to Steven, team members used a variety of usability methods in the redesign process.

Card sorting:

Team members wrote one typical piece of content on each card—with 130 cards altogether—and then ask about 100 people from various parts of the company to sort the cards into groups as they saw fit. They then asked participants to make their own title for each group. The team ran the results through a cluster analysis tool. The HR team said that this process revealed much consistency in how users viewed some of their information; for example, there was nearly 100% agreement that "diversity" was a primary topic. However, some results surprised the HR team, including that participants grouped together "performance management" (setting objectives, and so on) with "managing poor performers."

Field studies and user testing of the old/new intranet:

Here, team members devised tasks—such as: "Find out what profit BA made last year"—and recorded the results. They used Camtasia, a tool that records mouse movement and sound, and asked participants to verbalize their thought processes as they worked on the task. This proved very useful when they played back the sessions for analysis.

Online and paper surveys:

The team's quarterly online satisfaction survey ends with a general question: "How could we improve ESS?" This sometimes yields suggestions for new intranet content.

Team members have used surveys to test different section headings. For example, they were initially going to call the *Company Procedures* section "Corporate Processes," but discovered via a survey that frontline staff took the word "Corporate" to mean "head office—and therefore nothing to do with me."

To test headings, the team gives participants a short list of headings and asks: "Where would you expect to find the following content on the intranet?"

Studying the server logs:

Here, team members examine the logs to see what's popular and what's not, and to help identify significant content. On the search and FAQ logs, they look for popular and failed searches—the latter of which might suggest missing content or the need for synonyms. "For example," says Steven, "a lot of HR content used the word 'spouse' and, based on searches, we have added synonyms—such as 'husband,' 'wife,' 'partner'—where appropriate.

TIMELINE

Reusing the visual design from ba.com for the intranet site meant the team could deliver the redesign in just six months. The following table outlines the time allocated to each of the major project components.

TIMELINE FOR INTRANET REDESIGN	
Proposal to governance and stakeholder buy-in	1 month
Business case and approvals	4 weeks
Usability	2 months
IT integration and development	3 months
Testing	1 month
Communication/transition	2 weeks

RESULTS

BA has seen many outstanding results from its ESS efforts, including increased site usage, employee satisfaction and participation in managing their work lives online, and overall cost savings to the organization by reducing the reliance on paper processes.

Key Successes

Key successes to date include:

- 45,000 employees—or 100% of all staff, worldwide—have connected to ESS
- 6.5 million page views per month on intranet pages
- Almost 29,000 staff logged in to the intranet on a single day (October 3, 2007)
- 80% of all employees have used online learning
- 100% of employees use an online payslip
- 100% of UK orders are placed online
- 100% of staff travel is now booked and paid for online

Achieving these kinds of results has not been solely from the ESS site redesign. The overall self-service program has benefited from broad organizational support. A business plan and a departmental plan to encourage self service was put in place. Corporate "directives" have helped wean employees from offline activities by turning off alternative channels of service and incentivizing online use.

"Usage of the intranet went even higher—for example, 98% of employees now regularly access ESS each month," says Huish. "The effect was dramatic for users connecting away from work. Before the redesign, access away from BA was just over

40% month on month. Now, almost 75% are connecting either from home or down route."

One result of the revamped site is that individuals have more immediate access to departmental news and shortcut links to department and job-specific tools and content. For example, visits to departmental news pages increased from 40% to 90% per month. Quarterly ESS Satisfaction Survey results also increased, from 67% to 74% of employees being "satisfied" or "very satisfied" with ESS.

"The appetite for self-service working has increased dramatically over time beyond our expectations," says Huish. And the site changes have enabled the company to achieve their cost savings goal of £55 million (~$111 million US) as of April 2007.

Gordon Penfold, BA's head of IT–Commercial and Corporate, sees the benefits of individual employees being in control: "ESS has enabled us to put employees in direct control of their day-to-day relationship with the business, whilst at the same time increasing efficiency and reducing processing costs. It's a real and compelling example of a 'virtuous circle.'"

Introducing a more effective search engine has also provided easier and quicker access to information. Overall, the self-service model has made tasks much easier and more convenient.

A recent letter to the staff newspaper offers an example of how employees view self service and reflects how much easier it is now to manage their work/lifestyle online. On a recent trip, this individual had to change his travel plans at the last minute, at the airport. "In the old days, all staff travel tickets had to be booked and issued before leaving base, and could not be purchased down route," says Steven. "Now, we have complete flexibility to change our travel plans at short notice and can buy rebate tickets for travel on BA online, even when stranded at a far-flung airport, miles away from the staff travel office."

The successful results of the ESS effort have been recognized throughout the company and lauded at the highest levels of management. As Willie Walsh, BA's Chief Executive, said in 2006: "The computer has revolutionized the way everyone at British Airways works. One of the highlights is Employee Self Service, which is now used by 97% of our staff across the globe. It has helped us save an incredible £38 million in administration costs purely by cutting the old paper and telephone-based systems in our drive to simplify the business and cut our costs."

Surprises

The sign of a helpful application is often the users' hunger for more: more functionality, more integration with their existing systems, more access. At BA, this hunger is evident in employees' request for online capabilities to augment the many they now have access to.

"Experience from previous redesigns indicated that usage and satisfaction would increase after the change," says Huish. "After this last redesign, satisfaction levels increased more than expected and continue to remain high."

"Another surprising result was the extent to which frontline employees are embracing self service," he says. "Feedback tells us they now feel more involved because when they log in they get content targeted to them and their role specifically. Over the years, staff first questioned why information was being put online. Now, those same people want to know why the remaining paper-based information is not available online."

LESSONS LEARNED

Among the team's many lessons learned is that the migration to the new design took longer and needed more management than initially expected. Another key lesson is that more user involvement is better. "Even though 20 Intranet champions, 15 ESS Champions, and senior stakeholders were involved—along with company-wide workshops and road shows—the project needed more people involved," says Huish.

Lessons learned from Allen Huish:

> **Allow sufficient transition time.** "In our case, we needed more time than expected to transition to the new design."
>
> **Emphasize standards.** "Be tougher when design standards and when enforcing them."
>
> **Examine the total user context.** "It's important to look at users' overall experience, especially when the majority of them are not office-based."
>
> **Check in with users.** "Regularly measure user satisfaction with your intranet and get their feedback."
>
> **Eliminate offline options.** "Are there alternatives to online channels? Switch them off. Adoption of self service increases when users have no other option."
>
> **Motivate your users.** "Individuals quickly embrace and prefer 'life online' when you give them easy access and compelling reasons to connect."

Campbell Soup Company

Using the intranet:
Campbell is a global company with products in more than 120 countries around the world. Campbell's icon brands make up a diverse portfolio that provides consumers with products focused on convenience, wellness, and quality.

Headquarters: Camden, New Jersey (US)

Number of employees the intranet supports:
First release (July 2007): approximately 8,000 (office- and field-based knowledge workers); subsequent releases (to be completed by July 2008): the remaining 16,000 international employees, production workers in manufacturing facilities, and retail store employees.

Countries where the intranet is used:
Australia, Belgium, Canada, China, Finland, France, Germany, Hong Kong, Indonesia, Japan, Malaysia, Mexico, Netherlands, New Zealand, Russia, Sweden, and the US

Sales (2006): US$73 Billion

Design team:
Campbell hired TandemSeven to design the intranet.

Members:
TandemSeven: Paul Eisen, Principal User Experience Architect; Lawrence Najjar, Principal User Experience Architect; Arnaud Jammaers, Creative Director; Frank Donofrio, Senior Visual Designer

SUMMARY

Campbell Soup Company's intranet team members created an intranet that fully supports the tasks of nearly 10,000 users. They also struck a good balance in supporting both the Campbell brand and several other strong company brands that employees are very dedicated to.

The intranet's homepage offers many vital components. Starting at the top, the Campbell's Soup logo appears in the upper left of the page. But Campbell's is a lot more than just soup; of the many other brands under its corporate umbrella, 11 appear in the *Logo Bar* to the right of the Campbell's logo, including Godiva, V8, Swanson, Pepperidge Farm, and Prego.

Having all of these logos visible helps to remind employees of the many powerful corporate offerings, and helps to foster a sense of community and union. But research conducted by the intranet team revealed that people feel a strong affinity with the brand for which they work. The intranet team wanted to support this loyalty, so they designed skins for each of the major brands. These skins change the visual appearance of parts of the page, such as color and *Media Bar* (© 2007 CSC, all rights reserved), while the general page structure remains the same. The logo bar also changes, defaulting to the brand for which the employee works. Some text, such as the news on the homepage, also targets more closely to the selected brand.

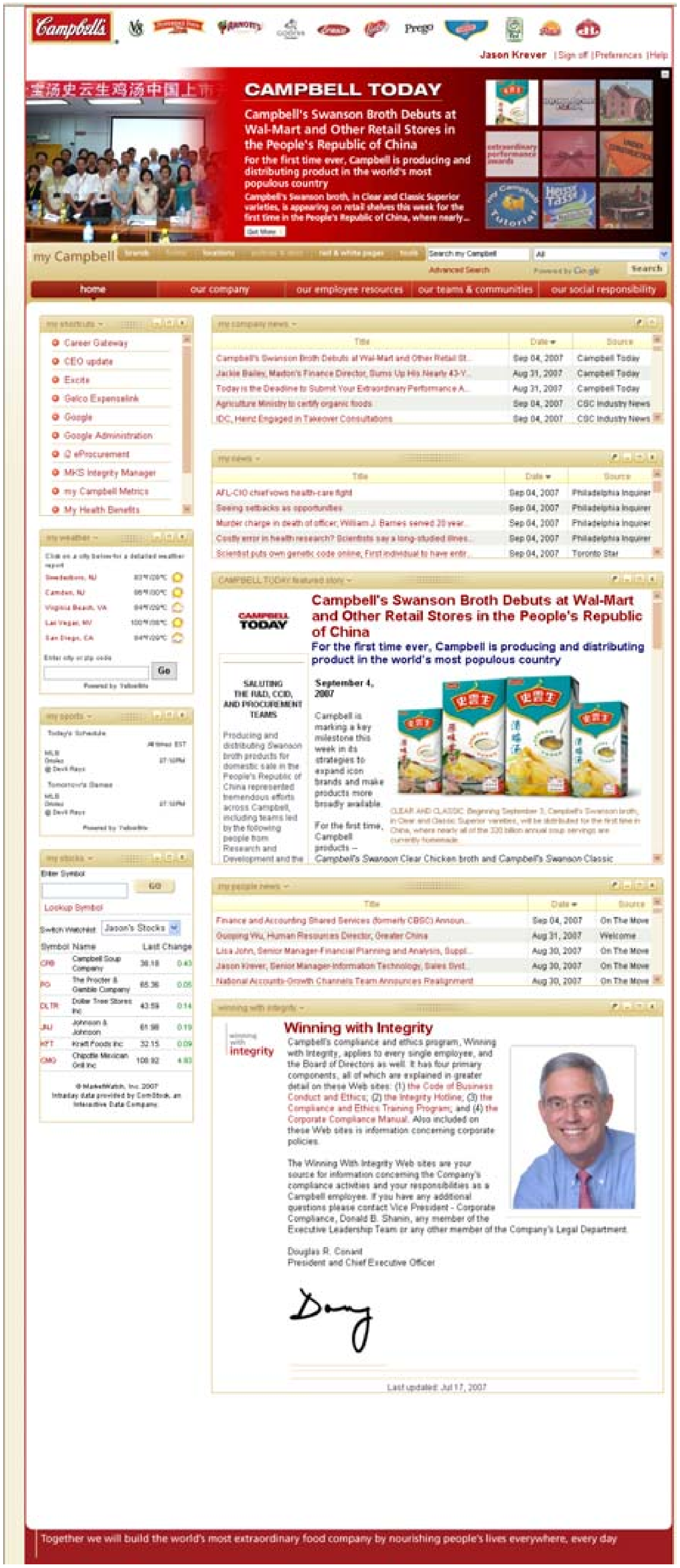
The homepage allows for several portlets in the page's main center column. Users can add, collapse, remove, move, and customize any of these (except for *My Company News*) as they see fit.

The first several portlets present an assortment of news choices to keep people well informed. *Campbell Today* holds the top place on the homepage, displaying the featured corporate story for the day. *My Company News* is populated by news from company sources—such as corporate, a business unit, a department, or a

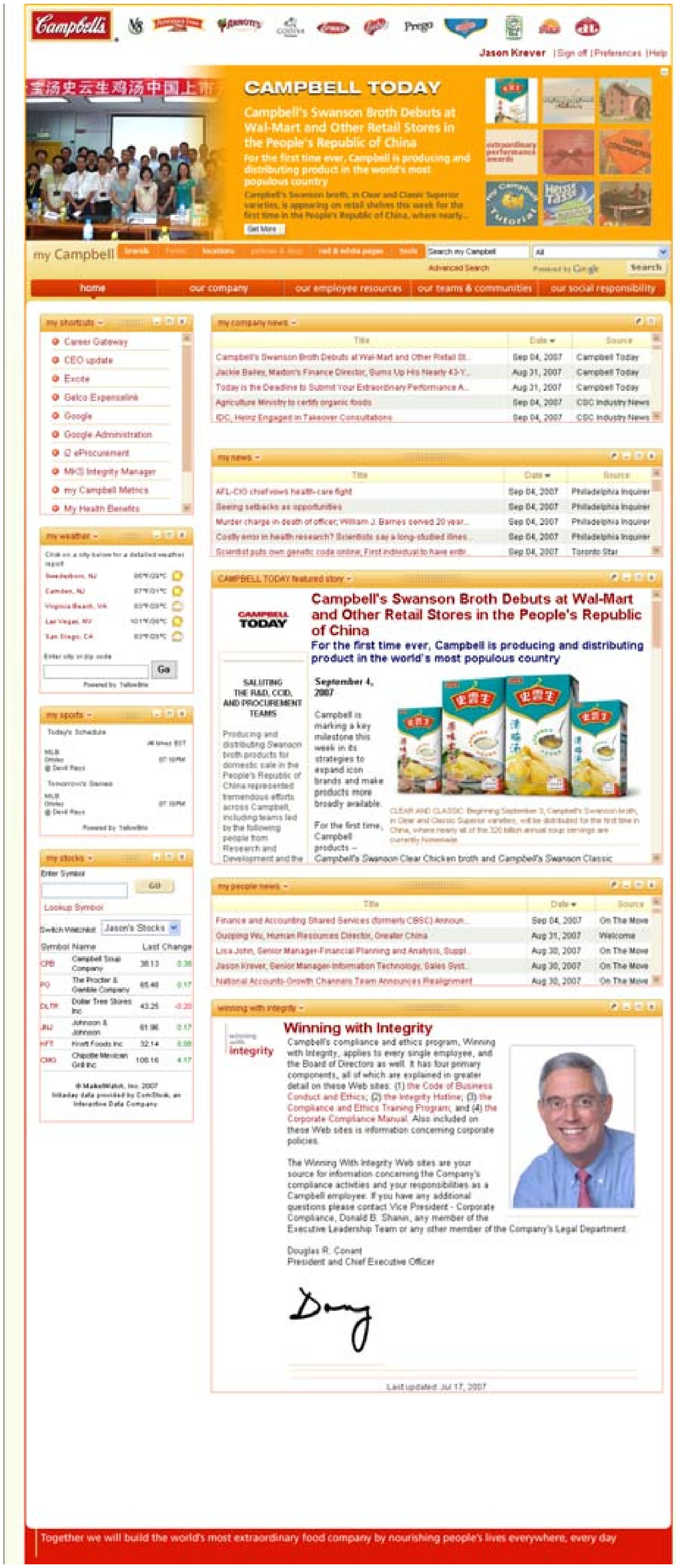
community—and RSS feeds about the company. Just as we can select the newspapers we want to read, Campbell's intranet users can select which sources they want included on their page, so they get only the news they want. Similarly, the *My News* portlet is populated by selectable RSS feeds of industry news and general news from outside the company. *Campbell Today* displays the featured corporate story for the day. *My People News* is people news that is not customizable by the users. It includes new hire announcements, promotions, and recognition for employees, populated by selectable sources inside the company. This information is nice to have, especially at a larger organization where people could get lost in the hustle and bustle.

The *CEO Update* is posted occasionally, offering important messages to employees, for example, quarterly results or more motivating ideas such as *Winning with Integrity*.

My Business Unit links to the user's business unit page. *My Events* displays event announcements, again populated by selectable sources within the company. *My Job Postings* shows available positions based on criteria the user selects.



Pictured: Campbell Soup Company's intranet homepage, which features various portlets.



Pictured: The homepage featuring a different skin. This one is for Pepperidge Farm.

Pictured: The homepage featuring a skin for Arnott's.

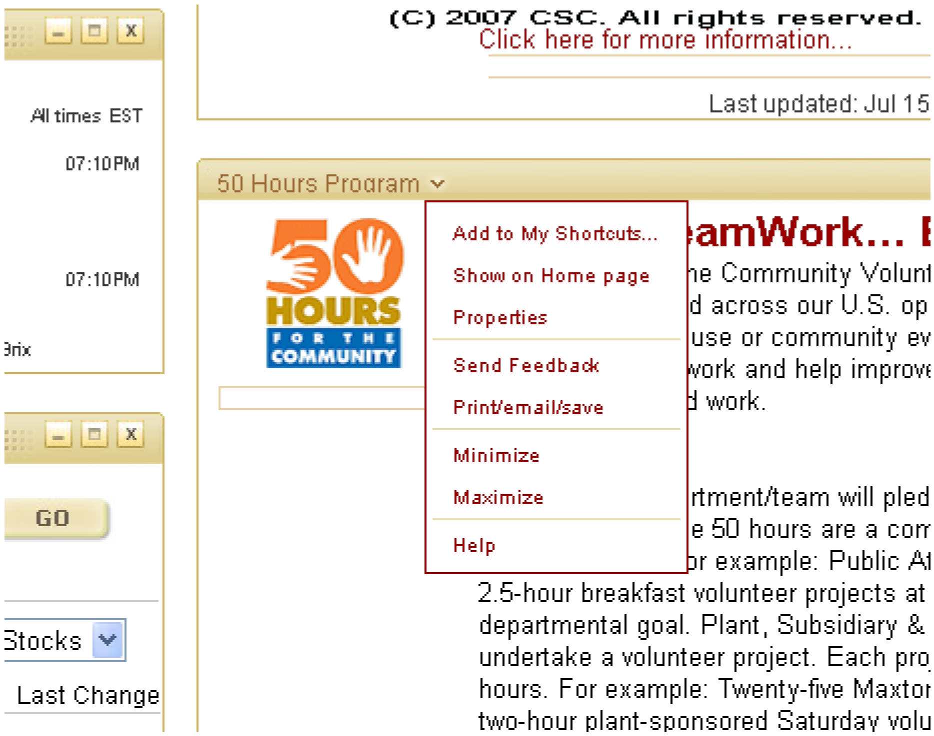
The *Media Bar*© feature, appearing at the top of the homepage, is another way to help integrate all of the organizations' different teams. The nine cells each represent a different business unit or corporate function. When clicked, the associated image and text, audio, or video to the left of the cells changes. It might show items such as news stories, new product images, product advertisements, event coverage, and people news. To see more on the topic, users can click the *Get More* link.

Pictured: The *Media Bar*© gives users quick access to information about nine different business units or corporate functions.

If users prefer to neaten up their pages, they can minimize the *Media Bar*© on all pages, but still have access to a more compact, horizontally oriented version of all nine cells. The last selected state for the *Media Bar*© is retained between user sign-on sessions, which is a nice touch.

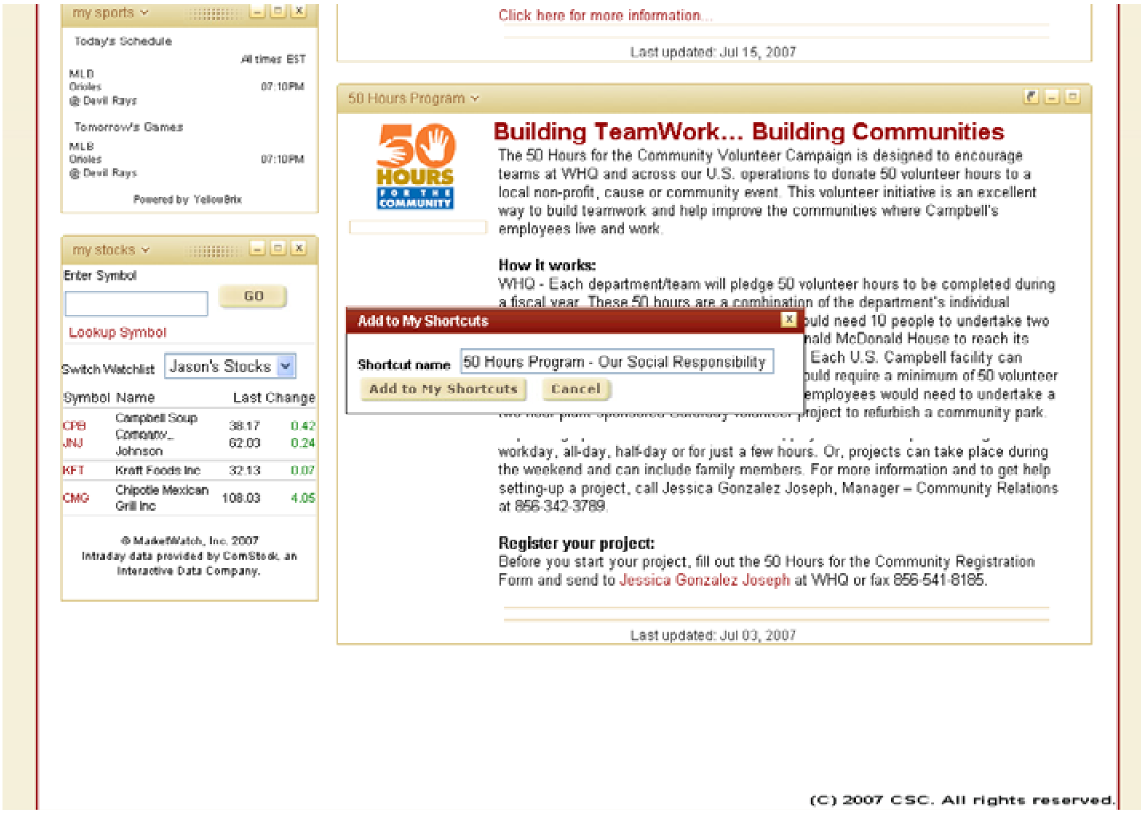
Pictured: Users can minimize the *Media Bar*©, which remains usable in the minimized state.

The left side of pages offers an area for what designers call "productivity portlets." Many of these have a default selection, but most are customized by users. Also, users can minimize, maximize, close, restore, and drag and drop any of these productivity portlets in the left column. Some of these offerings include: *My Shortcuts,* including helpful default shortcuts and ones users create themselves. Users can easily add items to their shortcuts using a small arrow icon at the top right of every portlet. Users can also click the portlet title bar's dropdown menu arrow to open the menu, and choose *Add to My Shortcuts.*



Pictured: Users can easily add items to *My Shortcuts* using a simple menu or an icon at the top of every portlet.

A dialog box then appears, displaying a default name for the shortcut. Users can rename it if they choose.



Pictured: A dialog box appears that lets users change the shortcut's default name.

Once the link is named, the shortcut is added to the top of the *My Shortcuts* list.

Pictured: The *50 Hours Program* link appears at the top of the *Shortcuts* list.

Clicking the arrow in the *My Shortcuts* portlet title bar opens the menu to customize the shortcuts.

Pictured: Users can easily open the menu to customize their shortcuts.

Pictured: Users can also add shortcuts to external websites.

Other productivity portlets include: *My Weather*, *My Sports*, and *My Stocks* (with Campbell provided by default). In the future, Campbell plans to add: *My E-mail*, with

Lotus Notes inbox content and common email functions; *My Calendar*, a Lotus Notes calendar; and *My Alerts*, which are automatic, selectable notifications sent when there's a change in a selected portlet's contents—such as a policy change.

Navigational breadcrumb links show the user's location in the IA. The main global navigation appears just below the banner and lets users link to all major intranet sections. *Home*, of course, links users back to the homepage. And, while we don't typically recommend offering a *home* link on the homepage itself, it works in this case because the item looks selected (using a darker color than the rest of the tabs, and adding a small arrow below the tab itself).

The *Our Company* major section navigation choice leads to subsites for business units and functions. These are organized hierarchically, paralleling the actual organizational hierarchy: for example, Campbell corporate, then business units, then functions. This order is familiar to employees.

Our Employee Resources navigates to pages for career planning, personal and compensation information, health and safety information, the employee purchase program, and more. Users often have trouble finding the navigation to these types of applications on average intranets because designers try to separate them into too many categories, such as *HR, Policies,* and *Procedures.* Users waste time clicking back and forth between these, trying to find the right category. In the case of the Campbell's intranet, putting all of these navigation choices under a single, aptly named major section is an interesting, bold, and successful choice.

The next major section, *Our Teams & Communities,* opens subsites for functional teams across the corporation, such as marketing sales and IT; and communities, such as Campbell administrative professionals, African-Americans, Asians, Lesbian-gay-bisexual-transgendered persons, Hispanics, and Women at Campbell.

The final major section, *Our Social Responsibility,* links to employee-sponsored charitable and volunteer initiatives, plus the company's position on issues such as wellness and the environment.

The Campbell's intranet team, armed with user research and ingenuity, was able to create a large-scale, customizable intranet that communicates and unifies the whole organization while still respecting all of its brands under the main umbrella. This intranet has it all, from soup to nuts—or soup to chocolate, at least.

URL AND ACCESS

Campbell Soup Company's intranet, my Campbell, is accessed at: mycampbell.soups.com. It's bookmarked in the user's browsers and is every user's start-up page. Employees outside the company access the site via VPN.

"Employees at our manufacturing plants can access the intranet on kiosks," says Brad Scheiner, Program Manager, Campbell Soup Company. "These employees have the same access to information that our office-based employees do. They can log in to the intranet, customize their homepage, access their Human Resources information, and much more."

TECHNOLOGY

Technologies used on the site include:

- IBM WebSphere Portal 6, Extended Deployment Edition
- IBM WebSphere Application Server
- IBM HTTP Server
- IBM Tivoli Access Manager, Enterprise Edition
- IBM Domino Server and Lotus Notes
- CVS
- Rational Software Architect 7
- Google Search Appliance
- Interwoven Teamsite
- Interwoven Metatagger
- Adobe Photoshop
- Windows XP, AIX
- MANTIS issue and defect tracking
- MKS and ManageNow ticketing systems
- Omniture Metrics

The underlying technology has changed from the Domino platform to WebSphere Portal as the site has evolved. With the new intranet, Tivoli Access Manager was implemented to provide single sign-on to the user community.

CONTENT MANAGEMENT

Content Authors Drive the Technology Requirements

For its CMS technology platform, my Campbell uses Interwoven Teamsite. The parameters of the current implementation were driven by a stark realization about the old site: one of its biggest weaknesses was its lack of support for content authors. Users grew frustrated with the difficulty involved in publishing and updating content in the old system.

“Campbell operates in a decentralized manner for content loading,” says Victoria Colaneri, Director HR Technology & Processes, Campbell Soup Company. “There was no support model for end users, and they struggled to a point where they in effect ceased using the tool.”

“We realized if we did not deliver a tool where content owners could easily update and add content on a regular basis, our implementation would quickly fail,” she says, “because there would not be enough new information to drive repeat visits.”

With this in mind, the company embarked on a complete re-implementation of Teamsite, focused on ease of use for content authors. This implementation let developers build custom workflows into the system. Authors are now authorized to work within specified work areas and each work area corresponds to an intranet portlet.

According to Thomas Obermeyer, Manager/Architect for CapTech Ventures, Inc., the company that planned and executed the site's technology implementation, content is now created using either customized, canned templates, or a free-form template for more flexibility. "Content can be previewed: the preview is customized to render the content just as it will look in Portal, even though Teamsite and Portal are disconnected systems," he says. "When publishing content, the authors can apply metadata and set an effective date."

The current Teamsite implementation better supports content authors, inviting updates that are more frequent and resulting in more end-user satisfaction.

Content Owners

Within Campbell, content owners/administrators are split between corporate functions and business units. Individual authors in each of those areas are responsible for maintaining content that is published to their sections of the site.

Content authors work with established standards. Enforcement of the style guide has not been an issue. These authors have a canned set of templates to work with and those templates are built into the CMS. Advanced authoring is done as a special case using a free-form template in the system.

Teamsite also keeps track of editing, approving, and publishing of all content generated within it so version control is not an issue.

INTRANET TEAM

Pictured: TandemSeven design team members (left to right): Lawrence Najjar (interaction design), Paul Eisen (interaction design), Arnaud Jammaers (visual design), and Frank Donofrio (visual design)

The redesign effort for my Campbell was accomplished through a joint collaboration between the internal Campbell intranet team and three outside agencies: TandemSeven, CapTech Ventures, and Computer Sciences Corporation (CSC).

The ownership of the strategy, technology, and management of the full development process remained with the internal Campbell team and TandemSeven, a design agency that was brought in for user research, design, and Flash development.

The perspective provided by working with outside agencies proved pivotal to the project's success.

"As TandemSeven had no previous working history with Campbell, we came in with a fresh perspective and an open mind about what it would take to create an effective solution," says Paul Eisen, TandemSeven's Principal User Experience Architect. "[We] were able to stay objective throughout the process, without an allegiance to any particular business unit, location, or function."

In an effort to identify the most important issues facing employees across the company, TandemSeven conducted detailed research, including sponsor and user interviews, contextual inquiry, and an employee-wide survey.

CapTech Ventures developed the technical architecture and led the build and testing for the full solution, while CSC provided senior architecture and Java Web application development expertise to assist the IBM, Captech, and Campbell teams with technical implementation.

The various agencies' areas of expertise complemented one another to the benefit of end users. "Blending usability expertise (TandemSeven) with Portal expertise (CapTech Ventures) to find ways to leverage the best user-experience opportunities within a portal site was a key contributor to the portal's successful implementation," says Thomas Obermeyer, Manager/Architect for CapTech Ventures.

Each agency brought a team of experts to the Campbell project, and their individual contributions added up to a unified vision and an expertly executed implementation. By working together, the strength of the individual contributors created a solution that was much more than the sum of its parts.

TandemSeven Design Team:

- Two User Experience Architects (Paul Eisen and Lawrence Najjar)
- Creative Director (Arnaud Jammaers)
- Visual Designer (Frank Donofrio)

CapTech Ventures Team:

- Senior Enterprise Architect
- Portal Architect
- Development Lead
- Senior Business Analyst
- Portal/Portlet Developer
- Development Manager
- QA Lead
- Google Developer

Computer Sciences Corporation Team:

- Portlet Developer
- Web Services Developer

Campbell Soup Company has an internal intranet staff of ten, in the following roles:

- Director of Global HR Technology & Process
- Director Organization Communications
- Content Management Specialist
- Communications Manager
- Organizational Communications Specialist
- IT Web Services Manager
- IT Program Manager
- 3 Project Managers

BACKGROUND

Prior to *my Campbell*, the intranet had no designated owner organization within the company. According to Jason Krever, Campbell's IT Manager–Web Services, this lack of ownership allowed the site to grow without appropriate governance and defined processes, and without what he calls "good cross-functional representation."

"The first intranet was a combination of a loose collection of websites that employees were creating using Microsoft Front Page," says Krever. "In 2003, WebSphere Portal was introduced. During that time, the intranet was used mainly as a communications vehicle with content provided by Corporate Public Affairs."

That group owned the content for an early attempt at online communications (a Lotus-Notes-based application) and was thus subsequently responsible for the majority of the homepage content in the Websphere environment.

Hundreds of other websites existed within the company, each managed locally by content owners, departments, or individuals, but there was no governing body for the site as a whole. Enhancements were made on a case-by-case, site-by-site basis; this fragmentation resulted in an inconsistent user experience and outdated and unreliable data.

Problems encountered during this period included:

- Duplication in how portal technology was being implemented. IT was responding to new requests on a case-by-case basis (business by business, function by function, and so on).
- Lack of corporate standards and governance meant that the websites were built to meet the needs of the individual business units and functions and weren't focused on providing a common set of tools to enhance employee productivity or engagement.
- The site evolved into a fragmented, unproductive employee experience, where content and services were inconsistent and hard to find and use.

- Fragmented deployment of technology resulted in a higher cost of ownership.

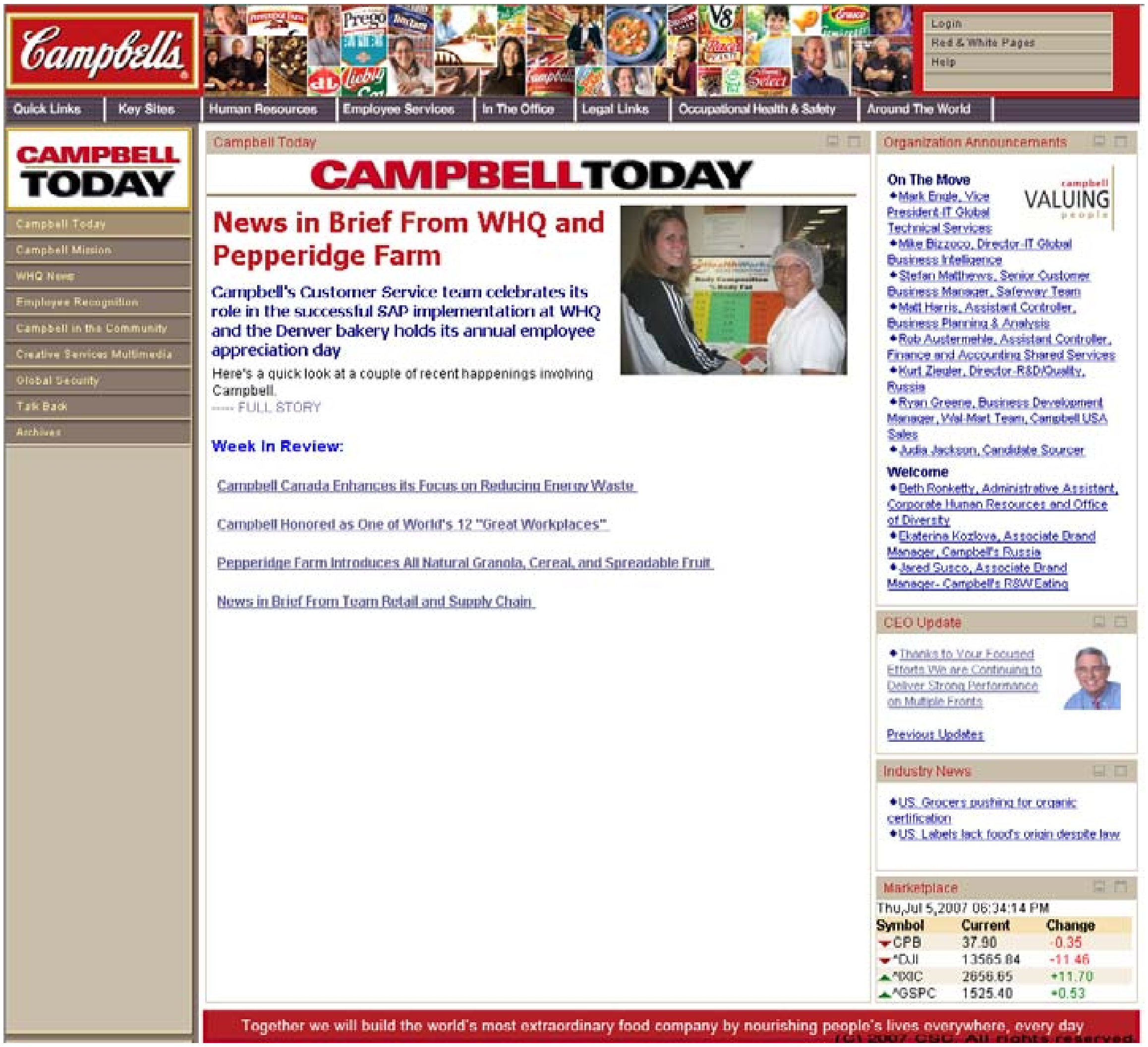
"It showed that Campbell was uncertain of the place of the intranet as a true enabler and what function should drive its use," says Krever. "The current placement of ownership between HR and IT signals the company's understanding of the new intranet being a primary point of relationship between employees and the corporation and a major factor in forming corporate culture. It's also indicative of the fact that technology can drive organizational efficiencies and that an intranet is a key area where IT can assist to drive cultural change."

In July of 2005, a steering committee was formed to review the situation, work with IBM to create a business case, and recommend a path forward.

IBM worked with Campbell to deliver a discovery and strategic analysis effort. "This was to evaluate the feasibility and value of a portal redesign and implementation, determine appropriate ownership and governance, estimate budgetary requirements, and begin preliminary technology road mapping," says Krever.

IBM also worked to understand the current environment and the organization's needs and constraints, as well as to provide an industry-wide perspective on the role of portal technology in organizations such as Campbell.

Campbell's Chief HR and Communications Officer and its CIO presented the findings of this effort to the CEO and CFO in December 2005, and gained approval to move forward.



Pictured: The old homepage, before the *my Campbell* redesign.

The Redesign: Working With Agencies

The initial strategy and business case for the redesign was carried out internally, with support from an external technology consulting firm. Once the initial budget was acquired, TandemSeven was hired to define the user experience.

After conducting extensive research, including employee interviews and surveys, TandemSeven created the user-experience architecture, consisting of the IA, interaction design, and visual design. TandemSeven also facilitated the high-level requirements and scope specification and was responsible for creating the detailed design specifications for the user interface. TandemSeven designed, developed, and tested the Flash code for the *Media Bar*© while the internal team managed the building, testing, and implementation.

TandemSeven worked closely with Campbell through the building, testing, and implementation phases to address ongoing design trade-offs.

CapTech's technical expertise was vital during iterative design sessions, ensuring that the final design would translate to the site without sacrificing the ideologies and concepts central to TandemSeven's design and Campbell's vision of the new portal.

CapTech was responsible for the architecture, systems integration, technical design, and development. CapTech also played an instrumental role in applying the TandemSeven user interface design onto the IBM WebSphere Portal platform. CapTech collaborated with IBM to implement advanced Portal customization to support *Show on Home Page*, a user-oriented feature that allows users to easily add any portlet's information to their personal page.

The CapTech team's expertise was essential when integrating and leveraging new and existing systems to support the Portal. CapTech designed and implemented a solution to publish content from Interwoven Teamsite CMS to WebSphere Portal version 6, utilizing Portal's Java Content Repository. This solution included handling security for sensitive content as well as indexing the content in the Google Search Appliance. The result is a fast-responding and familiar user experience for finding information, without sacrificing governance and information safeguarding.

GOALS AND CONSTRAINTS

General Intranet Goals

According to Victoria Colaneri, the *my Campbell* intranet is intended to replace over 100 independent, disconnected Intranet assets across the corporation. The site's goals are to contribute significantly to the following business drivers:

- Increase Campbell's competitiveness in the marketplace by lowering its operating costs.
- Become a tangible example of internal innovation that is moving Campbell from good to great.
- Help Campbell attract and retain the next generation of employees, who have high expectations about workplace technology.
- Increase employee productivity and engagement.
- Connect our dispersed, global workforce and create a sense of community among employees of various business units by keeping everyone informed about what's going on throughout the company through a single access point for company and business unit information.

Redesign Goals

Eisen crafted the following experiential brand promise to govern the solution definition that guided the development efforts:

"To engage Campbell employees in all business units and locations around the world, the enterprise portal is your online workplace for information and tools to maximize your productivity, connect with colleagues, and manage your personal and career development."

Out of this promise, TandemSeven articulated the following design goals:

Interactive design: Throughout the Campbell enterprise portal, regardless of the source of content or the user's location in the portal, users will encounter a consistent interactive experience. Users will be exposed to a range of content in a small number of views, thereby readily identifying the available content. Further, access to desired information and actionable items will be efficient, with a minimum number of user actions. A key component is the ability for all employees to be able to personalize the content on their homepage.

Creative design: The primary objective of the creative design is to strengthen and extend the emotional connection that employees make with their business area and with the company as a whole.

Constraints

Campbell's constraints are similar to those of other large companies attempting to create a complex internal communication platform such as an intranet: the distinct (and sometimes conflicting) needs and desires of multiple stakeholders representing individual business units, geographies regions, brands, and functions across the organization. Adding to the complexity, these groups often maintain a variety of operating procedures for publishing content and communicating with employees.

According to Eisen, in addition to delivering the design that met the above constraints within an established timeframe (five months), the team had to ensure that the design conformed to security restrictions and brand identity standards for all business units.

There were also technical constraints, according to Obermeyer. "The Campbell team made a decision up front not to have the design be constrained by technology," he says. "Therefore, fitting the design requirements to technical capabilities posed some challenges. The team did a highly effective job of collaborating to make appropriate compromises, when necessary. In addition, IBM has incorporated several core components of the design into the next release of Portal 6.0."

USERS

The users of *my Campbell* include:

- **First release** (July 2007): About 8,000 office- and field-based knowledge workers with dedicated computers who work in various countries in Asia-Pacific, Europe, Latin America, and North America
- **Subsequent releases** (to be completed by July 2008): The remaining 16,000 international employees including those who use shared computers? such as production workers in the manufacturing facilities and retail store employees.

USER TASKS

Currently, employees use the intranet to do the following:

- Stay up-to-date on news from their business units and the corporation
- Learn about and access all specialized (non-MS Office) tools supported by the organization (such as a sales planning tool for V8 brand managers)
- Find information on all Campbell locations and facilities worldwide
- Find information on all product brands worldwide
- Access the employee directory
- Access organizational homepages for all business units and their subsidiary departments and functions
- View upcoming events hosted by others (across business units, functions, and geographies) and readily add those events to their calendar (future release)

- Use a Google-powered search facility to search all intranet content
- Set their portlet preferences
- Customize content on their homepages and productivity portlets (such as shortcuts)

Future releases (scheduled through July 2008) will enable further user tasks including:

- Find any form published by any Campbell area through a Google-searchable, consolidated forms listings with applicable security applied at document or user-group levels
- Use a Google-search to find any of Campbell's intranet-based reference materials, including policies, procedures, manuals, standards, and other guidance and training documents
- Continue to connect with and share information with peers in an increasing number of communities of interest; social networking tools will also increase (by July 2008)
- Access email (by end 2007)
- View calendar (by end of 2007)

BASIC INTRANET FEATURES

The basic features of *my Campbell* include:

- Common search interface for brands, forms, company locations, policies, documents, employee directory ("red & white pages"), and tools
- Employee-customizable productivity bar (on the left side of all portal windows) for frequently-used portlets, such as email and calendar
- Employee customizable content and visual presentation on homepage
- Portlet customization options, including the ability to: add any portlet (such as the employee directory) to the homepage with two clicks; add a shortcut to any portlet with two clicks; and drag a portlet to a different vertical position (within its existing column) on the homepage
- Employee-customizable third-party RSS feeds
- Global *Media Bar*© with nine frequently updated multiple-media information segments
- Employee-selectable skins for each major corporate brand (such as Arnott's, Campbell's, Godiva, and Pepperidge Farm)
- Campbell brand logos across the top of each page, with a link to the employee's business unit brand in the upper-left corner
- Areas that encourage departments and cross-organizational teams and communities to create pages to share information and improve efficiency
- Consolidated content and functions, including news, tools, employee directory, forms, policies, email, calendar, and portal search
- Features that offer common communications from corporate to all employees

- Features that let business units, departments, and teams efficiently communicate information.

Search

The Campbell intranet now uses the Google Search Appliance, but prior to the new design, the intranet didn't have an enterprise search tool. In the short time since its implementation, the team has already received positive feedback from users.

"The thing we found most useful," says Campbell's Colaneri, "was that having a powerful search engine like Google in the early days of the go-live dramatically increased the adoption rate. Users were more quickly able to locate the information they needed. Having Google also simplified the user support required from IT. Users were instructed to simply enter the item they needed into Google and, in turn, they received helpful search results."

Before deciding on Google, the team reviewed several leading enterprise search products; Google led the list. Reasons included: cost, completeness of vision, and the product roadmap of new offerings that could be "added on" or even included in the purchase. These factors were considered unmatched by the other products under consideration.

"In addition, the administration and tuning of Google does not require a vast amount of specialized knowledge on the part of the IT team," says Krever. "Finally, and most obviously, *everyone* is familiar with the Google experience in terms of interface and search-result quality and formatting. This helps with reducing the learning curve on our employee population's part… plus, what a great way to add instant credibility to a search tool by simply adding 'powered by Google!'"

Pictured: Users can search the entire *my Campbell* portal, as well as other not-yet-integrated internal Web sites. To search for "my Campbell," the user performs the following steps:

Step 1: From any page, the user types the search terms into the *Search* entry field near the top right and clicks on the *Search* button. Note: the default search scope is *All*, but users can narrow the search to any major site section (such as *Our Company* or *Employee Resources*).


Campbell's
Prego
Jason Krever | Sign off | Preferences | Help
CAMPBELL TODAY
Campbell's Swanson Broth Debuts at Wal-Mart and Other Retail Stores in the People's Republic of China
For the first time ever, Campbell is producing and distributing product in the world's most populous country
Campbell's Swanson broth, in Clear and Classic Superior varieties, is appearing on retail shelves this week for the first time in the People's Republic of China, where nearly...
Get More
extraordinary performance awards
UNDER CONSTRUCTION
my Campbell Tutorial
my Campbell
brands
forms
locations
policies & docs
red & white pages
tools
Advanced Search
Powered by Google
Search
home
our company
our employee resources
our teams & communities
our social responsibility
my shortcuts
50 Hours Program - Our ...
Career Gateway
CEO update
CNN
Excite
Gelco Expenselink
Google
Google Administration
i2 eProcurement
MKS Integrity Manager
my weather
Click on a city below for a detailed weather report
Swedesboro, NJ 85°F/29°C
Camden, NJ 87°F/31°C
Virginia Beach, VA 85°F/29°C
Las Vegas, NV 101°F/38°C
San Diego, CA 82°F/28°C
Enter city or zip code
Go
Powered by YellowBrix
my sports
Today's Schedule
All times EST
MLB
Orioles
@ Devil Rays
07:10PM
Tomorrow's Games
MLB
Orioles
@ Devil Rays
07:10PM
Powered by YellowBrix
my stocks
Enter Symbol
GO
Lookup Symbol
Switch Watchlist
Jason's Stocks
Symbol Name Last Change
CPB Campbell Soup Company 38.18 0.43
PG The Procter & Gamble Company 65.45 0.14
DLTR Dollar Tree Stores Inc 43.24 -0.21
JNJ Johnson & Johnson 61.98 0.19
KFT Kraft Foods Inc 32.15 0.09
CMG Chipotle Mexican Grill Inc 107.75 3.76
© MarketWatch, Inc. 2007
Intraday data provided by ComStock, an Interactive Data Company.
search
Search my Campbell for:
my Campbell
All
Search my Campbell
Switch to Advanced Search
Reset to default
Viewing 1 - 10 of 1000 my Campbell items matched.
|<< First < Prev Next > Last >>|
Pepperidge News: New "my Campbell" Intranet Portal is Coming Soon ...
New "my Campbell" Intranet Portal is Coming Soon to a Computer Near You On July 16, Pepperidge Farm employees will find a new online homepage when they log ...
Coming Monday: The New "my Campbell" Intranet Portal
Coming Monday: The New "my Campbell" Intranet Portal. On July 16, employees will see a new homepage when they launch Internet Explorer. ...
New "my Campbell" Intranet Portal is Coming Soon to a Computer ...
New "my Campbell" Intranet Portal is Coming Soon to a Computer Near You. On July 16, employees will find a new online homepage when they log onto their ...
Coming Monday: The New "my Campbell" Intranet Portal
Coming Monday: The New "my Campbell" Intranet Portal. ... The "my Campbell" portal also will offer new, enhanced online features and functionality. ...
Now Showing: The New "my Campbell" Intranet Portal
Now Showing: The New "my Campbell" Intranet Portal. Starting today, employees have access to enhanced online features and functionality on their new homepage. ...
[help] my Campbell Help
my Campbell Help. To view the my Campbell electronic tutorial, click here. ... Figure 1.3 logo bar. The Logo Bar. Before you sign in to my Campbell: ...
Can You Find What You're Looking for on "my Campbell"?
Can You Find What You're Looking for on "my Campbell"? The "my Campbell" team is here to usher you through the new portal. Since ...
"my Campbell" Will Make It Easier for Employees to Find the Online ...
March 16, 2007. "my Campbell" Will Make It Easier for Employees to Find the Online Information and Tools They Need. The new online ...
Pepperidge News: Coming Monday: The New "my Campbell" Intranet ...
Coming Monday: The New "my Campbell" Intranet Portal (07/13/07) - Campbell's new intranet portal, called "my Campbell," will make its worldwide premiere on ...
At the Quarterly Employee Forum, Doug Conant Discusses How ...
... other locations. Updates on Project Harmony, the "my Campbell" Intranet project, and TDC success stories. Mark Sarvary, President ...
|<< First < Prev Next > Last >>|
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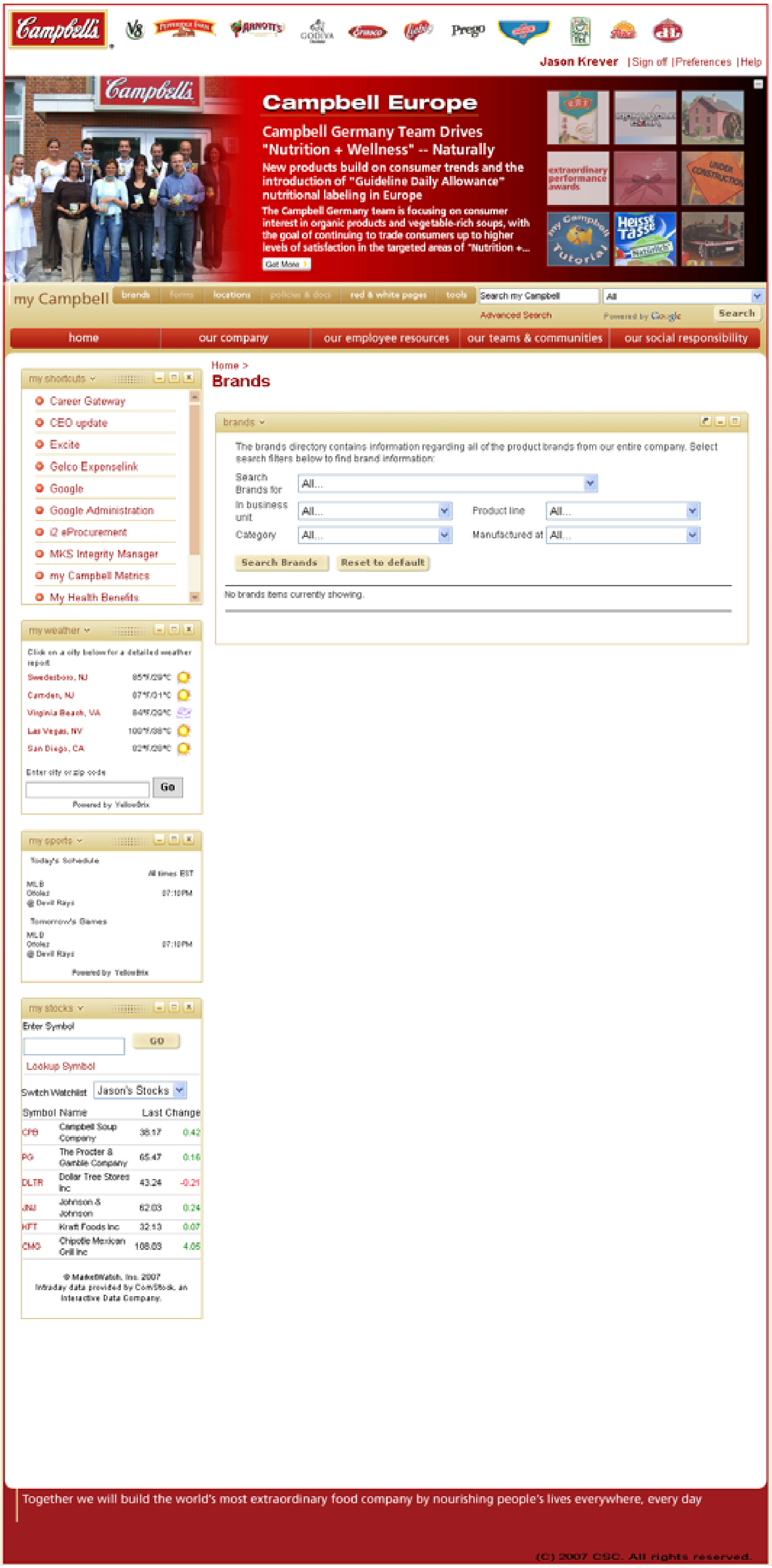
Pictured: Step 2: The portal search results appear. The user clicks on the title of the desired result ("Now Showing: The New my Campbell intranet Portal").

Pictured: Step 3: The result appears in a "lightbox" (in full contrast on a low-contrast page).


Campbell's
Prego
Jason Krever | Sign off | Preferences | Help
Campbell Europe
Campbell Germany Team Drives "Nutrition + Wellness" -- Naturally
New products build on consumer trends and the introduction of "Guideline Daily Allowance" nutritional labeling in Europe
The Campbell Germany team is focusing on consumer interest in organic products and vegetable-rich soups, with the goal of continuing to trade consumers up to higher levels of satisfaction in the targeted areas of "Nutrition +...
my Campbell
brands
forms
locations
policies & docs
red & white pages
tools
Search my Campbell
Search
Advanced Search
home
our company
our employee resources
our teams & communities
our social responsibility
my shortcuts
Career Gateway
CEO update
Excite
Gelco Expenselink
Google
Google Administration
i2 eProcurement
MKS Integrity Manager
my Campbell Metrics
My Health Benefits
my weather
Go
my sports
my stocks
Enter Symbol
GO
Lookup Symbol
Switch Watchlist
Jason's Stocks
Symbol Name Last Change
CPB Campbell Soup Company 38.17 0.42
PG The Procter & Gamble Company 65.47 0.16
DLTR Dollar Tree Stores Inc 43.24 -0.21
JNJ Johnson & Johnson 62.03 0.24
KFT Kraft Foods Inc 32.13 0.07
CMG Chipotle Mexican Grill Inc 108.03 4.05
Home >
Brands
brands
The brands directory contains information regarding all of the product brands from our entire company. Select search filters below to find brand information:
Search Brands for
In business unit
Product line
Category
Manufactured at
Search Brands
Reset to default
No brands items currently showing.
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Pictured: A directory search. Users can sort directory search results by clicking on the column headers in the results table. For example, to sort the results of a *Brands* directory search, the user performs the following steps:

Step 1. The user clicks on the Brands directory search button and that directory's search page appears.


my Campbell
brands
forms
locations
policies & docs
red & white pages
tools
Search my Campbell
All
Advanced Search
Powered by Google
Search
home
our company
our employee resources
our teams & communities
our social responsibility
my shortcuts
Career Gateway
CEO update
Excite
Gelco Expenselink
Google
Google Administration
i2 eProcurement
MKS Integrity Manager
my Campbell Metrics
My Health Benefits
my weather
Click on a city below for a detailed weather report
Swedesboro, NJ
Camden, NJ
Virginia Beach, VA
Las Vegas, NV
San Diego, CA
Enter city or zip code
Go
my sports
Today's Schedule
All times EST
Tomorrow's Games
my stocks
Enter Symbol
GO
Lookup Symbol
Switch Watchlist
Jason's Stocks
Symbol Name Last Change
CPB Campbell Soup Company 38.17 0.42
PG The Procter & Gamble Company 65.47 0.16
DLTR Dollar Tree Stores Inc 43.24 -0.21
KFT Kraft Foods Inc 32.13 0.07
CMG Chipotle Mexican Grill Inc 108.03 4.05
Home >
Brands
brands
The brands directory contains information regarding all of the product brands from our entire company. Select search filters below to find brand information:
Search Brands for
All...
In business unit
Pepperidge Farm
Product line
Category
Manufactured at
Search Brands
Reset to default
No brands items currently showing.
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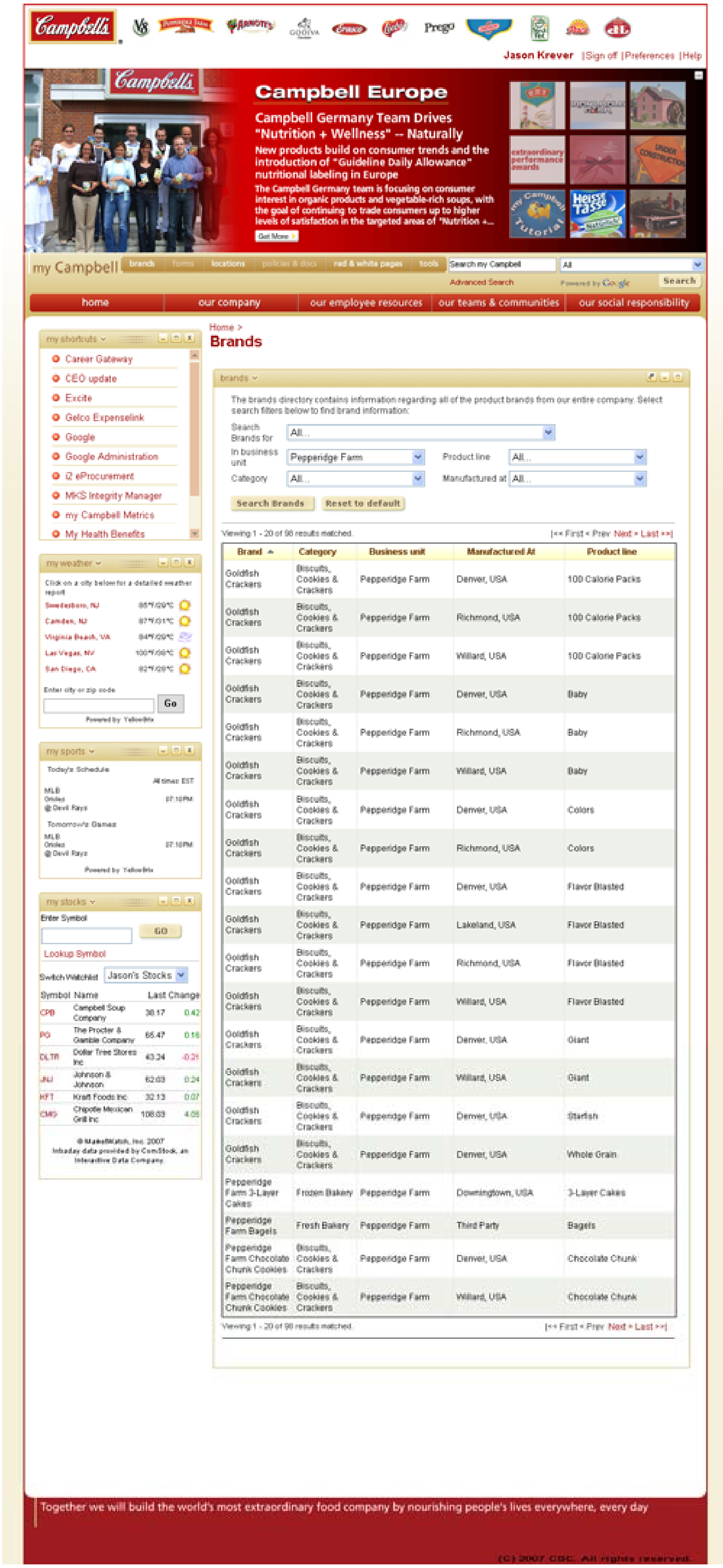
Pictured: Step 2: The user narrows the *Brands* search by selecting the *Pepperidge Farm* business unit and clicking on *Search Brands*.



Pictured: Step 3: The *Brands* directory search results appear.


Excite
Gelco Expenselink
Google
Google Administration
i2 eProcurement
MKS Integrity Manager
my Campbell Metrics
My Health Benefits
my weather
Click on a city below for a detailed weather report
Swedesboro, NJ 85°F/29°C
Camden, NJ 87°F/31°C
Virginia Beach, VA 84°F/29°C
Las Vegas, NV 100°F/38°C
San Diego, CA 82°F/28°C
Enter city or zip code
Go
Powered by YellowBrix
my sports
Today's Schedule
All times EST
MLB Orioles @ Devil Rays 07:10PM
Tomorrow's Games
MLB Orioles @ Devil Rays 07:10PM
Powered by YellowBrix
my stocks
Enter Symbol
GO
Lookup Symbol
Switch Watchlist Jason's Stocks
Symbol Name Last Change
CPB Campbell Soup Company 38.17 0.42
PG The Procter & Gamble Company 65.47 0.16
DLTR Dollar Tree Stores Inc 43.24 -0.21
JNJ Johnson & Johnson 62.03 0.24
KFT Kraft Foods Inc 32.13 0.07
CMG Chipotle Mexican Grill Inc 108.03 4.05
© MarketWatch, Inc. 2007
Intraday data provided by ComStock, an Interactive Data Company.
The brands directory contains information regarding all of the product brands from our entire company. Select search filters below to find brand information:
Search Brands for All...
In business unit Pepperidge Farm
Product line All...
Category All...
Manufactured at All...
Search Brands
Reset to default
Viewing 1 - 20 of 98 results matched.
|<< First < Prev Next > Last >>|
Brand | Category | Business unit | Manufactured At | Product line
Pepperidge Farm Farmhouse Bread | Fresh Bakery | Pepperidge Farm | Aiken, USA | Farmhouse Bread
Pepperidge Farm Light Style Bread | Fresh Bakery | Pepperidge Farm | Aiken, USA | Light Style Bread
Pepperidge Farm Natural Bread | Fresh Bakery | Pepperidge Farm | Aiken, USA | Natural Bread
Pepperidge Farm Rye/Pumpernickel Bread | Fresh Bakery | Pepperidge Farm | Aiken, USA | Rye/Pumpernickel Bread
Pepperidge Farm Simply Delicious Bread | Fresh Bakery | Pepperidge Farm | Aiken, USA | Simply Delicious Bread
Pepperidge Farm Stuffing | Dry Bakery | Pepperidge Farm | Aiken, USA | Stuffing
Pepperidge Farm Whole Grain Bread | Fresh Bakery | Pepperidge Farm | Aiken, USA | Whole Grain Bread
Pepperidge Farm Croutons | Dry Bakery | Pepperidge Farm | Bloomfield, USA | Croutons
Pepperidge Farm Farmhouse Bread | Fresh Bakery | Pepperidge Farm | Bloomfield, USA | Farmhouse Bread
Pepperidge Farm Light Style Bread | Fresh Bakery | Pepperidge Farm | Bloomfield, USA | Light Style Bread
Pepperidge Farm Natural Bread | Fresh Bakery | Pepperidge Farm | Bloomfield, USA | Natural Bread
Pepperidge Farm Rye/Pumpernickel Bread | Fresh Bakery | Pepperidge Farm | Bloomfield, USA | Rye/Pumpernickel Bread
Pepperidge Farm Sandwich Rolls | Fresh Bakery | Pepperidge Farm | Bloomfield, USA | Sandwich Rolls
Pepperidge Farm Stuffing | Dry Bakery | Pepperidge Farm | Bloomfield, USA | Stuffing
Pepperidge Farm Swirl Bread | Fresh Bakery | Pepperidge Farm | Bloomfield, USA | Swirl Bread
Pepperidge Farm Whole Grain Bread | Fresh Bakery | Pepperidge Farm | Bloomfield, USA | Whole Grain Bread
Goldfish Crackers | Biscuits, Cookies & Crackers | Pepperidge Farm | Denver, USA | 100 Calorie Packs
Goldfish Crackers | Biscuits, Cookies & Crackers | Pepperidge Farm | Denver, USA | Baby
Goldfish Crackers | Biscuits, Cookies & Crackers | Pepperidge Farm | Denver, USA | Colors
Goldfish Crackers | Biscuits, Cookies & Crackers | Pepperidge Farm | Denver, USA | Flavor Blasted
Viewing 1 - 20 of 98 results matched.
|<< First < Prev Next > Last >>|
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Pictured: The user sorts the results by manufacturing location by clicking on the *Manufactured at* table column header.

Community Building

Company-sponsored clubs, employee networks, project teams, and other features comprise the site's community aspects. The *Teams and communities* websites provide news, events, and shared documents and links.

Although these sites are still controlled via a central set of designated administrators, planning is underway to enhance these features, adding document sharing and internal social networking (Facebook-type) functionality and peer-to-peer networking.

DESIGN PROCESS AND USABILITY ACTIVITIES

According to Colaneri, Campbell defined the redesign's goal as "to provide better, more meaningful tools and information to our employees in order to engage them and make them more productive."

To achieve that goal, the design team conducted a range of research activities prior starting any work on the site. Research methods included interacting with users in their workplaces, user testing on design prototypes, and stakeholder interviews. The designers also studied the old site's server logs to get a feel for frequency of use.

With all of this research in hand, the designers analyzed the findings and rolled the results into planning documents that guided the design and subsequent development efforts.

Usability Methods

The following box explains the team's methods and results.

CONTEXTUAL INQUIRY (FIELD STUDIES)

METHODOLOGY

Paul Eisen:

"We performed a contextual-inquiry study in person with 26 employees in multiple workplace types (e.g., factory floor, factory office, sales office, and head office) and locations in the US and Canada, and virtual context-inquiry (using Web-conferencing software to focus on the desktop) with 10 additional employees on other continents. We sampled employees across various job levels, roles, and functions."

Lawrence Najjar:

"To identify frequently used functions, we also asked employees to show us their browser bookmarks. Most users had very few bookmarks. Then we asked users to show us the page of the previous intranet that they used most. The employees struggled to find the page, often taking 10 minutes to navigate to it. Once there, we discussed why the page was helpful, then the employee usually clicked back to *Home*."

OUTCOME

Paul Eisen:

"This in-depth contact with sponsors and employees confirmed the perceived value of the project and also enabled us to form hypotheses about the relative importance of various requirements for the portal solution. We then tested these hypotheses in the form of a company-wide survey, polling all employees with dedicated workstations and receiving responses from 45% (3,766 of 8,436). We did not formally usability test the previous intranet. During the contextual inquiry sessions, we watched as employees demonstrated the things that they do, probing for their reactions to how it currently works."

Lawrence Najjar:

"We found that most people used the previous intranet only to read the corporate news and organization announcements. The original intranet lacked a search function and the information architecture was not well organized. So, most users did not know that helpful functions, such as viewing available employee discounts, were on the original intranet.

"In the user interviews, it became clear that users needed some way to quickly and easily bookmark intranet pages. This insight led to the one-click 'add to my shortcuts' icon that we added to every portlet."

PROTOTYPE TESTING
METHODOLOGY
The team conducted user testing of new design prototypes.
OUTCOME
Paul Eisen: "We conducted one formal usability test with 15 users across geographies, business units, and functions. We validated many of our design ideas, and also refined some in response to the user behavior and comments, to produce a more effective solution for the initial release."

SPONSOR INTERVIEWS
METHODOLOGY
Paul Eisen: "We conducted sponsor interviews (13 individual, and two groups of about 10 people each) to appreciate the goals and business drivers for the solution, high-level requirements, and potential obstacles to the success of the project."
OUTCOME
Paul Eisen: "One piece of feedback that we continually heard during our initial user interviews was that people were frustrated with the status quo. With their familiarity with the Web—and many with other company intranets—they were savvy and experienced enough to demand better than what their intranet was offering them. Users universally cited lack of consistency and connectedness, and difficulty finding content as daily obstacles to their productivity. Armed with this consistent and passionate feedback, our efforts validated and invigorated the intentions of the whole team—the development team, the operating committee, and the steering committee—to press hard for real change. With this motivation, people became very creative in finding ways to implement the many facets of the new design."

Making Feedback Actionable

Next, team members had to organize the user research findings into a deliverable that would make the results actionable.

"We connected our research findings to our design approach using a user-experience strategy document that we called a 'user-experience brief,'" says Eisen. "We used this document to bring together the essence of what we had learned thus far, and to lay out a path for the solution."

The teams also used this document as a repository for project goals and, within it, crafted six personas to represent critical user features that would be validated in the design phase.

"This document was the vehicle for driving stakeholder consensus of the core elements of the design solution—features like personalization, overarching structure of the site, use of multimedia, inclusion of productivity content, and the treatment of business unit and corporate branding, among other important facets," says Eisen.

This document guided TandemSeven's early designs. "Close on the heels of this high-level design, the TandemSeven creative design team formulated visual concepts to deliver on the key creative objectives described in the user-experience brief," says Eisen.

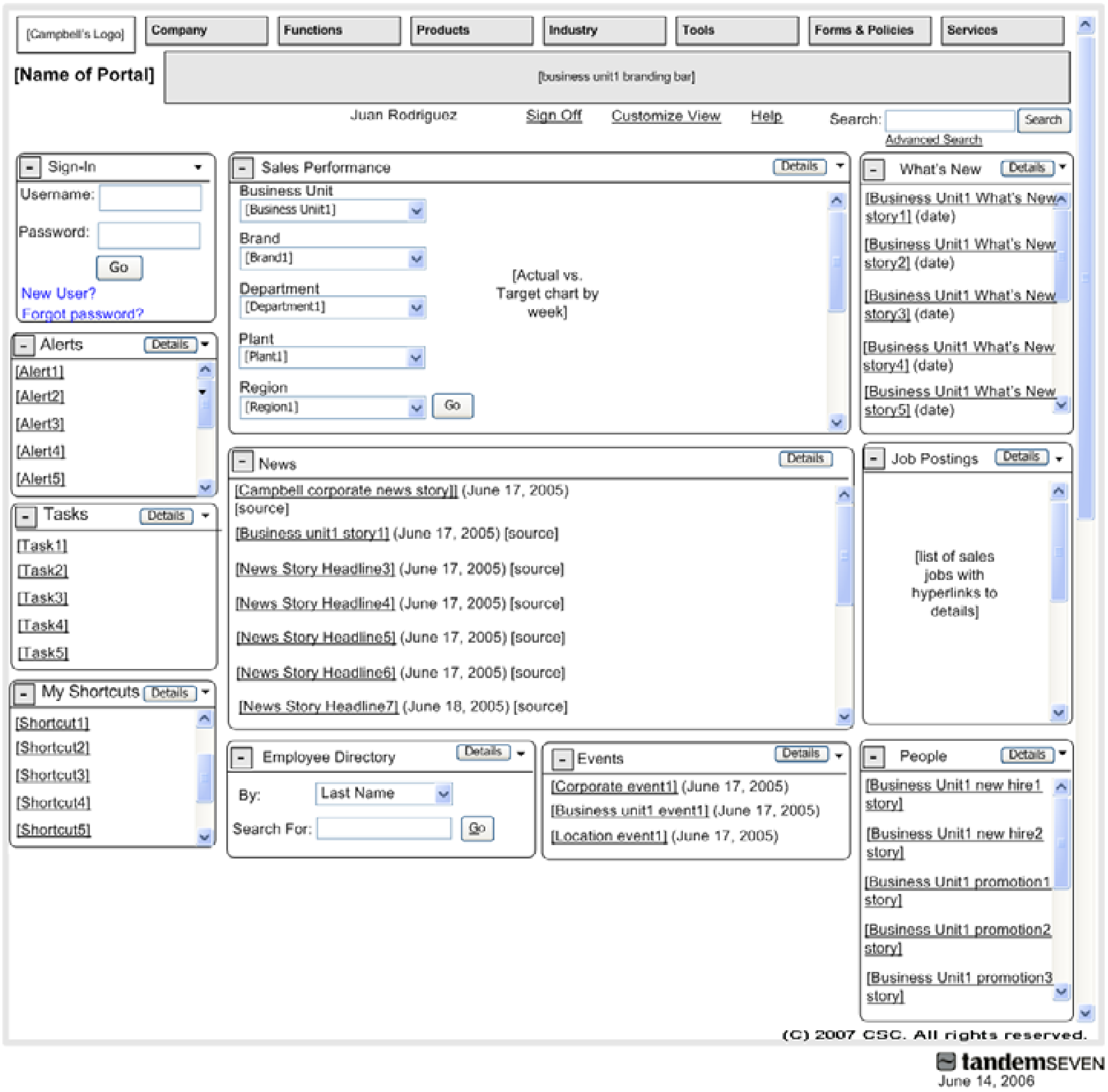
The team presented each design component to a small operating committee, along with rationale and design alternatives.

Site features inspired by this process include:

- Completely personalizable homepage
- *Media Bar*©
- Directories
- The ability to add shortcuts
- Show (a specific feature) on homepage
- Centralized, cross-site search
- Branding, identification, and community (themes/skins)
- The ability to send feedback to portlet owners

Surprising Results

During the usability evaluations, Lawrence Najjar, Principal Usability Architect, said he was surprised by how well participants understood the user interface design, "and appreciated what the new design could do for them," he says. "The new intranet was a radical change from the intranet they had been using for years. Yet, most participants quickly understood the new design and saw the benefits of the new functions, organization, navigation, and visual design. Participants especially liked all the customization features."



Pictured: The redesign project's first wireframe.

TIMELINE

Planning, requirements gathering, and technical specification began in 2005 and lasted well into the spring of 2006.

The design phase itself took only five months (May–December 2006). "This consisted of 94 business days for the research, design strategy, interactive architecture, design specifications, and the development of the creative concepts for all skins—Campbell's Red & White, Godiva, Pepperidge Farm, and Campbell Arnott's," says Eisen. "An additional 20 days were needed to design all of the graphic elements and deliver a style guide."

The new site launched in July 2007, and the team continues to upgrade it, with new features and enhancements planned through July 2008.

Key redesign milestones include:

- **2005:** Foundation phase/develop new intranet concept
- **May—September 2006:** Design and develop functional requirements
- **July—November 2006:** Plan technical implementation
- **December 2006:** Finalize technical architecture and design
- **November 2006–May 2007:** Iterate technical development (four iterations)
- **November 2006–July 2007:** Implement content management
- **May-June 2007:** Conduct system integration and performance testing
- **June 2007:** Conduct user-acceptance testing
- **Early July 2007:** Limited launch
- **July 16, 2007:** Global launch of new intranet

Launch

Launching the redesigned my Campbell portal was not a quiet affair executed through a simple email alert to employees. The team planned a whole range of launch activities around a movie theme and raised awareness and excitement about the new site company-wide.

"We posted stories on the intranet, held demos in our Café and conference rooms, provided communications toolkits to key stakeholder groups and change agents, and developed brochures, desk drops, posters, etc.," says Liesl Henderson, Director Organization Communications, Campbell Soup Company. "We also used the concept of a 'production crew' that roamed on the day of launch. We tapped roughly 75 employees at World Headquarters and five to 10 others at each of many of our other locations around the world to be part of this production crew. The production crew members donned special t-shirts and walked the floor at different times during the day of launch to check in with employees. They asked a few questions about how things were going and answered questions about functionality, etc. and reported their feedback/employees' comments to us at the end of the day."

"Following launch, we have done follow-up stories on the portal to remind employees of various types of functionality, and will do additional demos to answer questions and continue to drive usage," she says.

RESULTS

Colaneri explained the tangible project results as follows:

- "The portal [*my Campbell*] represents a tangible example of internal innovation," she says. "The technology is cutting edge." The site was the first global implementation of IBM WebSphere Portal 6.0., says Colaneri, and IBM adopted several of Campbell's design elements for its portal's next release. "A technology foundation and framework were established to ensure a cost effective and rapid delivery for new portal applications and business collaboration, which will reduce the time and cost to implement new technology."

- Because it provides a single access point for company and business unit information, "the new design easily connects our dispersed, global workforce and creates a sense of community among employees of our varied business units by keeping all employees informed about what's going on throughout the company," she says. "Since *my Campbell* helps employees gain more knowledge about other parts of the company, it promotes business literacy and fosters more knowledgeable and engaged employees."
- The portal introduced new tools, such as Google search, and services that better organized content and gave employees greater access to internal and external information. As a result, says Colaneri, employees are better able to do their jobs, "thus increasing efficiency throughout the company," she says. "In addition, the portal incorporates new functionality known as *Directories*, which provide easier access to reliable information. The *Directories* provide a centralized collection and repository of highly used assets such as forms, policies, and tools. The centralized collection supports a foundational principle of maintaining 'one version of the truth.'"
- Finally, because the redesign made it "significantly easier" for users to load content, more people are likely to add content over time. This, says Colaneri, means that content will be "refreshed more frequently, providing users better and more access to information."

COMPARING METRICS FROM REDESIGN

Metric	Previous Portal	New Portal	Commentary
Unique visitors per day	405	3,000	
Total visitors per day	1,675	13,850	
Average page views per visit	9.12	1.43	Because users have the ability to consolidate the data they use most frequently on their personal homepage, the need to visit multiple pages decreases. In addition, the ability to perform powerful enterprise content searches and better organized content means less hunting and random browsing
Total page views per day	15,270	19,849	
Number of users with homepage set as default	2,500	8,400	
Average visits per month for employees in Europe	192	10,200	Numbers are similar for all non-US locations

Thanks to the redesign, Campbell employees can now:

- Find information quickly and easily, and be confident that it's accurate. And, if they can't find something, they can be confident that it's not there.
- Connect directly and emotionally with their brand and business unit, seeing it—for the first time—in the context of a diverse global corporation.

- Explore all that Campbell offers its employees in a clear and organized way.
- Readily access and view the latest product, people, and organizational news, advertisements, and photos using the engaging *Media Bar*©.
- View their email and personal calendar on every portal page (future release).
- Set up shortcuts to any desired content and access those shortcuts on every page.
- Place any desired content on their personalized homepage.
- Start from a single common application to perform many work tasks.
- Customize content, including homepage portlets, productivity bar portlets, news sources, portal shortcuts, third-party information feeds, and visual appearance.
- View news from Campbell corporate, business unit, department, project team, community, and industry.
- Create pages and content for department, project teams, and communities.
- Add tools, documents, and other content that will benefit other employees.
- Use common tools.
- Update personal information, such as home address.
- Interact with integrated email and calendar functions.
- Search for information and tools using a consistent and familiar user interface, powered by Google.
- View company information (such as business unit news and updates from leaders), employee resources (such as corporate discounts, personal information, and compensation summaries), and accomplishments and opportunities related to social responsibility.
- Participate online with project teams and communities.
- Customize weather, sports, stocks, and other lifestyle portlets with content of interest, and view these portlets on any page.
- Change job locations, functions, or even business units and still get to all needed content in the same way.
- Easily change design themes ("skins") to represent a different business unit or brand.
- Identify how current any content is by glancing at the last-updated status in the footer.
- Easily identify and contact a portlet's owner.

The Users Speak

Following is a small sample of quotes the team received, unsolicited, from around the world. According to Colaneri, employees used the feedback feature on all portlets to send in reactions to the new design. "We received hundreds of emails over the first week in production through our centralized administrator mailbox," she says.

> "As an end user, I had a very positive Portal experience today. I needed the Campbell PowerPoint template. I opened the portal and typed a couple of simple search terms into the Google bar and the #3 results were exactly what I was looking for. Previously this would have been a huge challenge to find."

> "The new Campbell website is fantastic!!! Really good job, I find myself looking at the news and what's going on—on the other side of the world now, where I never used to before!!"

> "You have designed a terrific application that will become essential to the daily Campbell life."

"I perused my Campbell yesterday and found it to be everything that I hoped for and more (it is definitely aesthetically pleasing and a wealth of information). I know you spent countless hours working to ensure the success of this much-anticipated piece of art! It is wonderful and much appreciated!"

"The format is fantastic and it looks beautiful. The sign-on is much easier than before and I can't believe how easy it is to find things."

"I love the ability to personalize my homepage. It saves me so much time when trying to find the things I use every day. Thank you."

LESSONS LEARNED

The most striking lessons that the team learned along the way involved the power of behavioral research and the profound effect it can have on design.

The project team's lessons learned regarding behavior research:

Interview users in their workplaces. "When we interviewed users in their offices, they showed us the functions they use and the pages they bookmarked. When we went to plants, we learned that the users there had very different preferences and needs than the workers in the corporate offices."

Get stakeholders and developers involved early in the process. "Interview stakeholders to identify their challenges, needs, and ideas. Review early designs with developers so they can research feasibility."

Gather requirements early. "Use these as a basis for estimating cost and schedule, prioritizing tasks, and creating the design."

Perform quick usability feedback sessions. "Do this with representative users so you can improve the design."

Whenever possible, bring wireframes to stakeholder design reviews. "People more quickly understand design concepts when you show them, rather than talk about them."

Have a designer available to provide design explanations. "Make design adjustments during the development phase."

General lessons learned from the project team:

Communicate early and often. "Define a clear communication and change-management plan at the beginning of the project. Develop several different types of vehicles for introducing the change and provide thoughtful learning materials."

Project management. "Establish a single project manager and final decision maker."

Requirements gathering. "Ensure requirements are thoroughly defined before development begins. Make room for change, as change is inevitable, but be clear about the impact of change to timeline and budget. When change is needed, follow a well-defined change management process to understand and document the impact on the design/implementation."

Change management. "Practice sound change management. Ensure as changes are made that they are documented and incorporated to requirements documents."

Budget management. "Plan budget thoughtfully and use solid projection models for ongoing costs throughout project."

Leave adequate time for thorough execution of quality processes. "Key processes include code reviews, unit testing, integration testing, user acceptance testing, performance and load testing."

Stakeholder management. "Ensure solid governance is in place and that members are actively engaged. Ensure appropriate governance exists and that a broad representation of the business sits on a governing decision making body. Meet often to confirm project status, make decisions, and review change requests."

Issue tracking: "Incorporate an issue-tracking tool early on in the project. A tool such as Mantis greatly improves communication across all parties on a project. This proved true for our project in the end, but we should have started using the tool with good discipline very early in the project."

Lessons Learned from Paul Eisen:

Formalize stakeholder interactions. "Formalize the interaction among designers, the business, and technology through Joint Application Development (JAD) sessions to explore design and technology issues and alternatives, and arrive at sensible solutions that consider all trade-offs. CapTech introduced the idea of JAD sessions and they steered the project team in a successful direction."

Listen to all parties and address issues immediately. "With multiple and diverse stakeholders, it's critical to the schedule for the business lead to hear and acknowledge all views and interests, and then drive quickly to a recommended resolution, rather than letting opposing views fester. The business lead, Victoria Colaneri, played this role exceptionally well, enabling the pace of the design work to continue at its aggressive pace."

Educate and empower stakeholders. "Educating the stakeholders as to our design approach and their role, and continually grounding the presented work in the context of the methodology, empowers the stakeholders to assert their interests at the appropriate time and in an effective manner."

Lesson Learned from Lawrence Najjar:

Deliver wireframes as soon as possible. "They were very effective at getting people engaged and in explaining the user interface design."

Lesson Learned from Thomas Obermeyer:

Consider and track integration costs. "Implementing a custom design into a vendor platform such as Portal adds complexity, time, and cost to a project; the impact to budgets and schedules should be clear upfront and tracked throughout the life of the project.

BASF SE

Using the intranet
BASF is the world's leading chemical company, with a portfolio ranging from oil and gas to chemicals, plastics, performance products, agricultural products, and fine chemicals. BASF helps its customers in virtually all industries be more successful. With its high-value products and intelligent solutions, BASF plays an important role in finding answers to global challenges such as climate protection, energy efficiency, nutrition, and mobility.

Headquarters: Ludwigshafen, Germany

Number of employees the intranet supports: 95,000

Locations where users use the intranet: BASF.net was rolled out globally, in all BASF regions worldwide (Europe, North America, South America, and Asia/Pacific). The global technical rollout of the group intranet with the global BASF.net homepage serves more than 73,000 employees at more than 760 BASF sites around the world.

Annual sales: Almost €58 billion in 2007.

Design team
The BASF.net core team consisted of 10 people including BASF in-house staff and external partners.

Members
In-house: Julia Buchner, project leader; Vladimir Mello, concept and communication support; Beate Zissel, technical project leader; Bernd Schabacker, information manager and intranet support; Bernward Schuka, IT administration; Gerald Ebisch, intranet support, Stefanie Seiter-Walch, intranet support. BASF IT Services: Oliver Schröpfer, technical lead service provider; Claudia Lindner, lead architect service provider.

Pixelpark: Sabine Hoppe, senior designer; Marian Möhren; information architect; Roger Wahl, senior project manager.

SUMMARY

A key goal of the BASF SE intranet was to establish a worldwide communications and information medium and offer a single global homepage for all employees. BASF.net rose to the occasion and is at the ready, supporting 95,000 employees around the world.

Moving with the times, the designers of BASF.net made good, productive use of Web 2.0 features. That is, they didn't use layers and tag clouds just for bragging rights; they employed these capabilities in very thoughtful ways that actually improve the user experience.

The BASF.net homepage has a simple look, yet is not without personality. The top banner picture is filled with buoyant bubbles full of BASF chemicals. The world map stretched across the cheery front bubble reminds users that BASF employees have a presence in more than 200 countries. The borders of the titles on the homepage's many content boxes have a soft yet definite shape and style. The page's colors and images all convey stability and have a pleasing appearance. This no-nonsense homepage has a few, well-placed graphics that give the BASF.net site a positive vibe without cluttering it up with pointless drivel.

To further ensure that employees find the homepage information helpful rather than superfluous, users can choose and change some of the content boxes (portlets), while the important sections remain fixed. The intranet team was forward-thinking and made it extremely easy to edit the portlets. This is so important; if users can't do this effortlessly—that is, if they have to search for an edit command or can't quickly find the change once they've made an edit—they'll simply avoid customizations all together. In BASF.net's case, customization is a simple process and the feature is easy to find.

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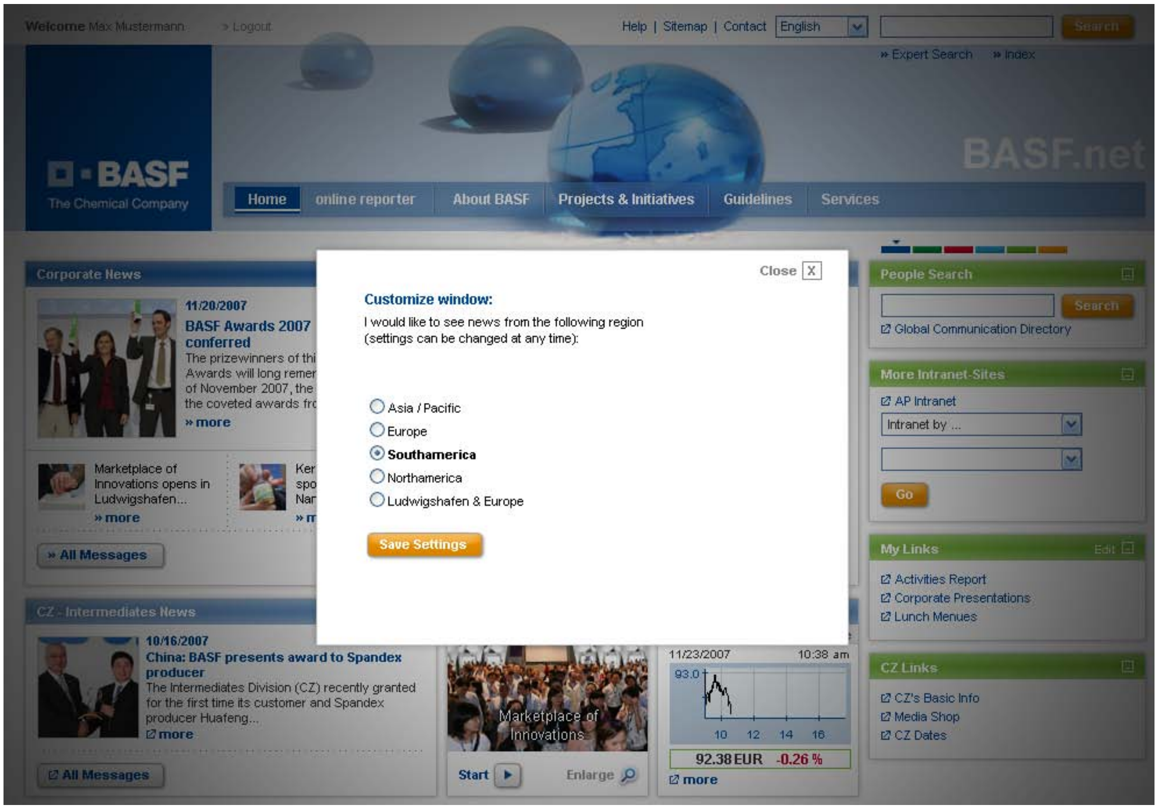
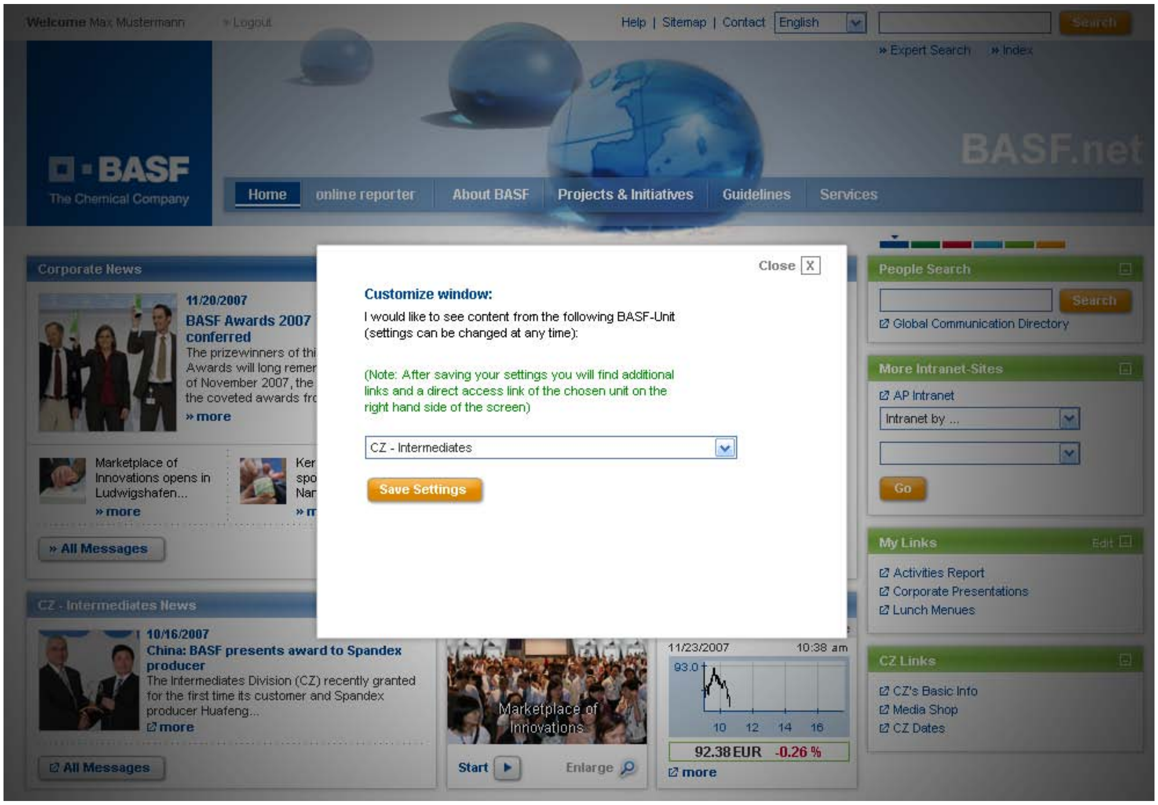
Some of the editable portlets include regional news and news and links for particular divisions, as the example below shows. Each customizable portlet has a simple *Edit* link on the right side of the content area's colored heading bar. When users click it, a dialog box opens and users can change the content or remove the portlet. Simple layering techniques make the dialog boxes part of the streamlined editing process.



Pictured: Clicking the *Edit* link in the regional portal (covered by the dialog box here) lets users choose to see news from various regions.



Pictured: Clicking the *Edit* link in the divisional news portal (shown on the lower left) lets users choose from a drop-down list of 33 different BASF units.

The content for these homepage portlets is imported from many different sources within the BASF IT landscape, ensuring that users are offered a variety of news and tool types to help them stay well informed.

Users can also add personal bookmarks to both intranet and Internet pages. These favorites travel with the user login, so users can access them no matter where they are in the world or which machine they're using. These favorites appear in the *My Links* content area in the rightmost column on the homepage. The associated *Edit* button opens a simple dialog box that lets users add, remove, and organize their personal favorites.

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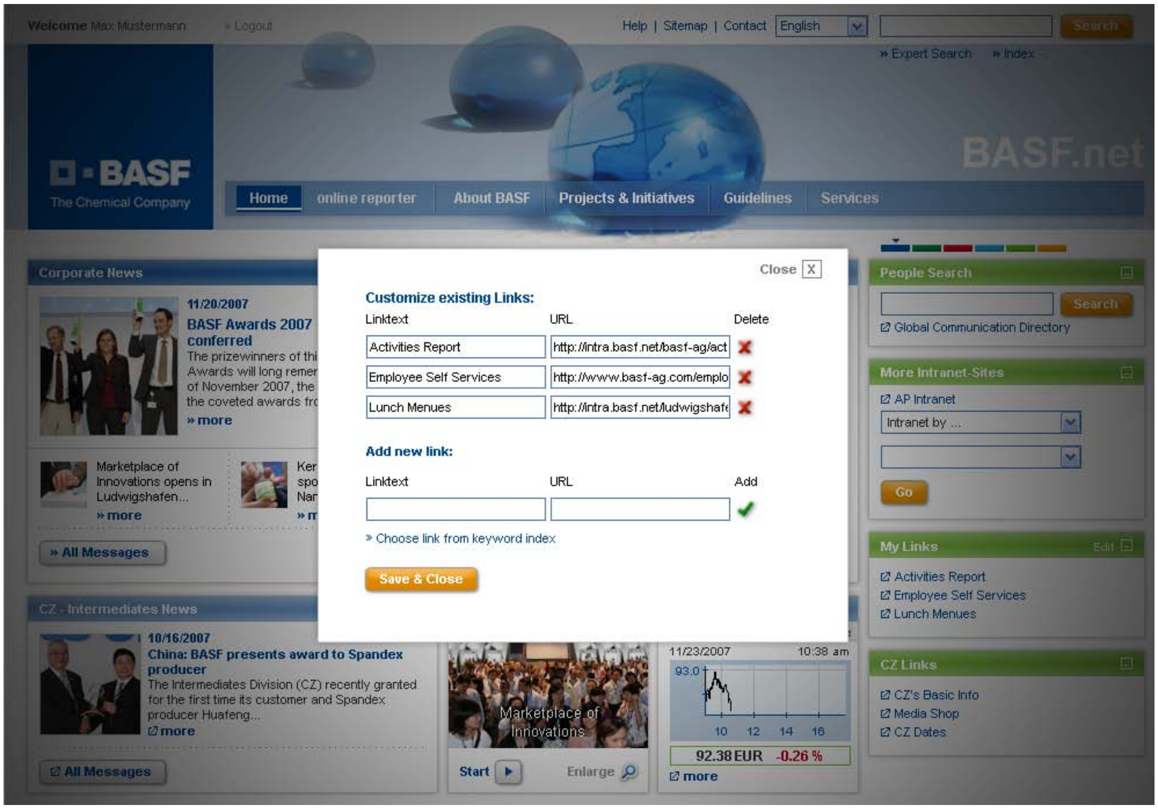
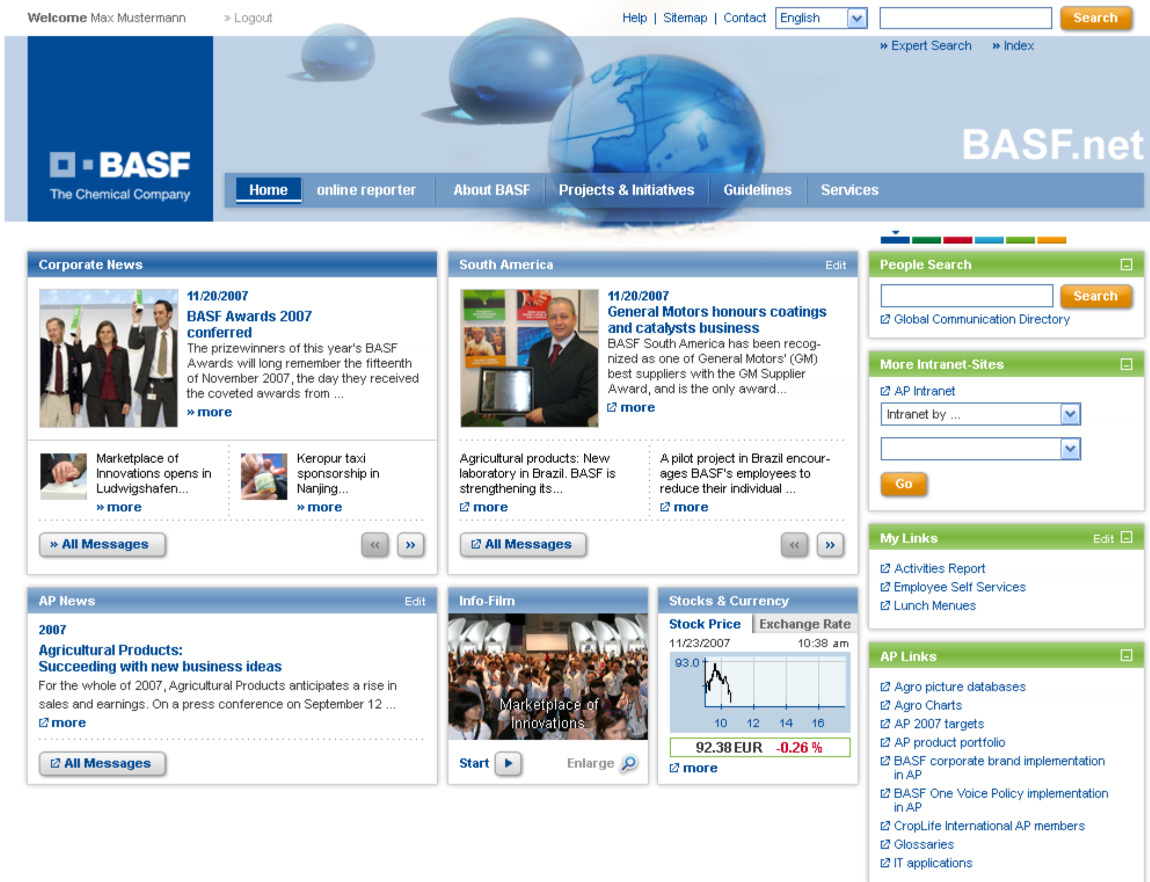


Pictured: A simple dialog box enables users to add, remove, and organize their personal favorites.

One issue we often see on intranets is that users are unable to find content sections that are available to them. That is, information is buried and not as accessible as it should be. But the BASF intranet designers thought of this: users can easily search for more portlets via the *More Intranet* Sites area on the right. This section lets them access all other BASF intranets (from regions, divisions, sites, competence centers, and so on).

Users can also search the intranet or run a people search from the homepage.

For example, the screenshot below shows a portal personalized to match the user's needs. This user chose to read news from South America (the *South America* section heading) as well as from the company's Crop Protection division (the links in the *AP Links* section).



Pictured: A customized homepage. This user chose to read news from South America (*South America* section heading) and from the company's Crop Protection division (*AP Links* section).

The example below shows another customized homepage. Changes here include:

- Division news: News from the *CZ - Intermediates* division (the last portlet in the left-side content column).
- Division links: Links from the CZ division, *CZ Links* (the last portlet in the right-side content column).
- Regional news: News from *Asia* (the top portlet in the middle column).

In this example, the *More Intranet Sites* portlet is available, but collapsed by the user. This is a nice feature for users who want to have a feature available that they don't use every day. Also, while the *My Links* portal is the same in these examples, it would be different from user to user.

The intranet offers six different color schemes based on the six BASF corporate colors. The six color swatches appear just below the global navigation and above the top of the rightmost content area. Clicking on one of the swatches automatically changes the look of the intranet. In our examples, the users chose a blue and light green scheme, respectively.

These choices and all other customizations users make are saved and presented the next time they open the intranet.

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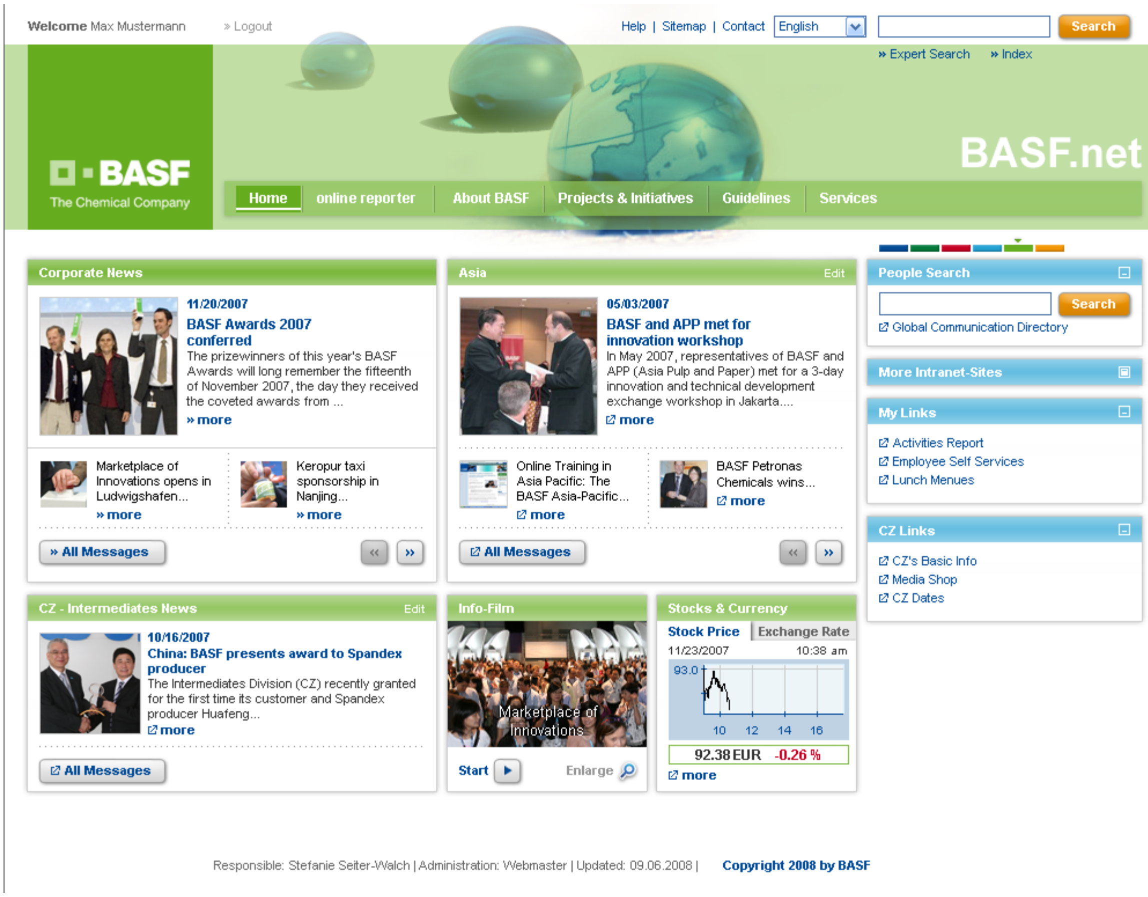

Pictured: Another customized homepage example. On this intranet, users can customize portals, links, and the color scheme.

German and English are the intranet's default languages, as those are the two corporate languages. The intranet also lets users translate static content—such as main navigation bars, buttons, and so on—into 11 other languages to suit what users are most comfortable reading. A drop-down list at the top of the page makes this feature easily accessible.

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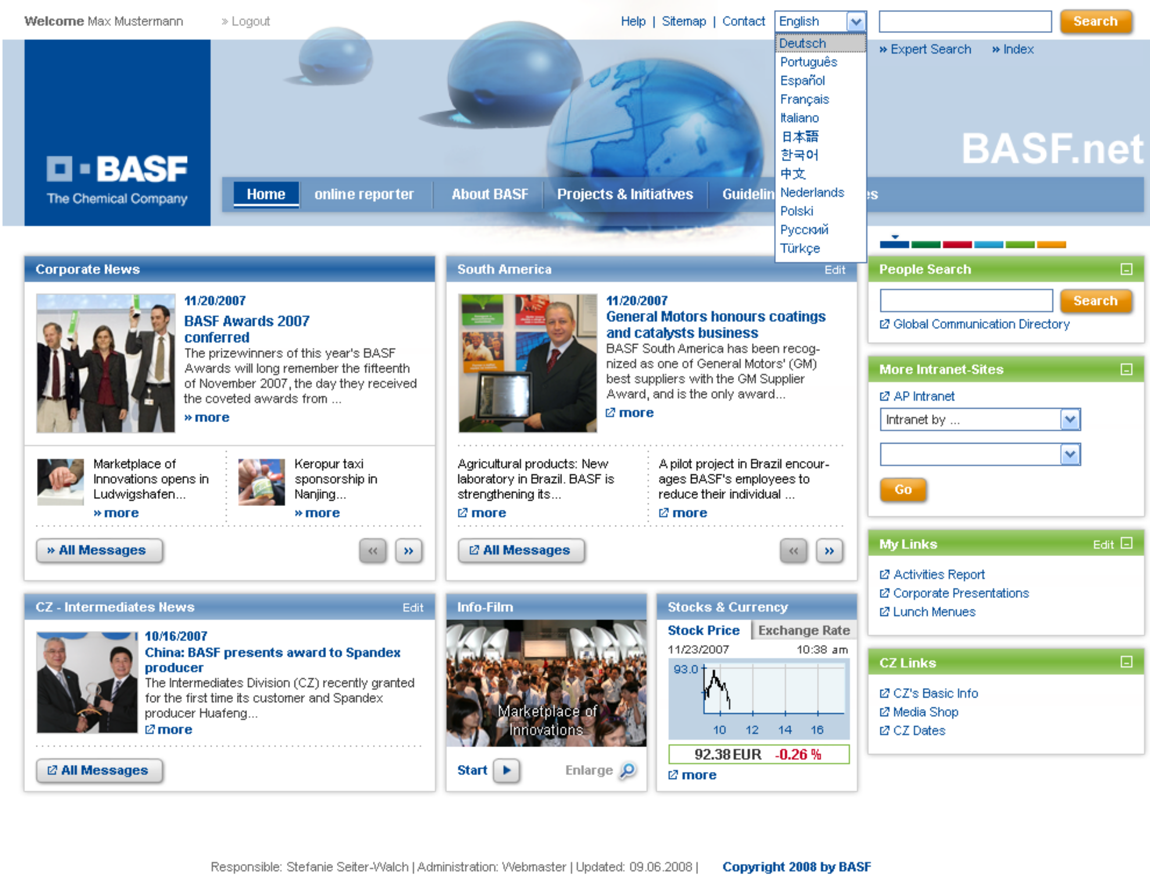
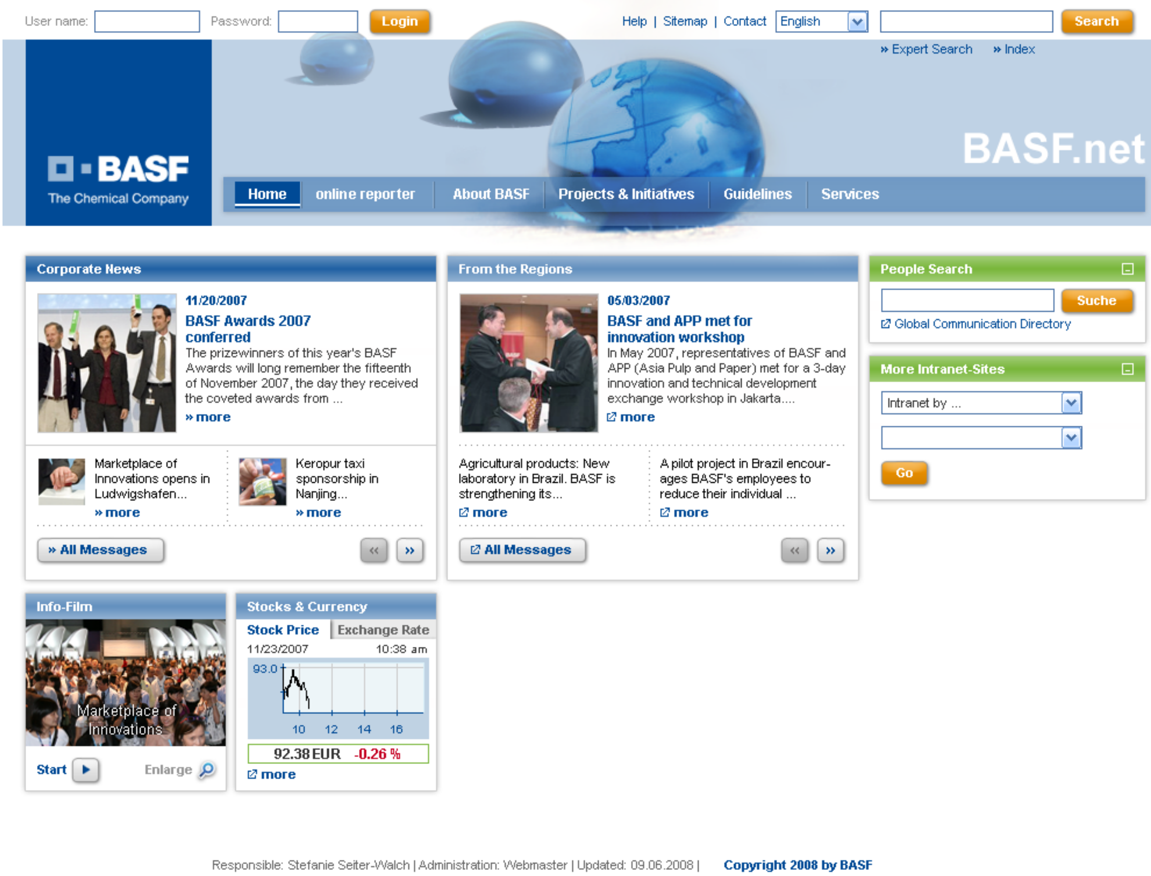


Pictured: Users can select their language of choice from a drop-down list at the top of the page. The entire intranet is translated into the corporate languages (English and German). Static elements, such as menus, can be translated into 11 other languages as well.

The homepage also has a logged-out mode that defaults to the intranet's standard elements, removing all personalization.



Pictured: The logged-out version of the homepage removes all user-personalized elements.

Users can navigate BASF.net in several ways. In addition to the site search and simple persistent global navigation, users of BASF.net are offered a less common form of site navigation: an index or *keyword cloud.* This feature is somewhat like an index, site map, and scoped search all combined and taking steroids, along with a few truth pills and a small hit of acid.

Clicking the *Index* link directly below the site search field opens the keyword cloud. The cloud displays the intranet links that have been clicked the most by the entire user population. The larger a keyword's text size, the more frequently it has been clicked. The idea is that great minds think alike, and employees need and want similar things. So, if a link is big, it might be the one users want.

Users who don't like the suggestions of others—or who prefer a UI with a more linear structure—can use the alpha list option above the tag cloud to select topics by first letter. Alternatively, they can select from the *Categories* on the right. Finally, users can even search the index itself.

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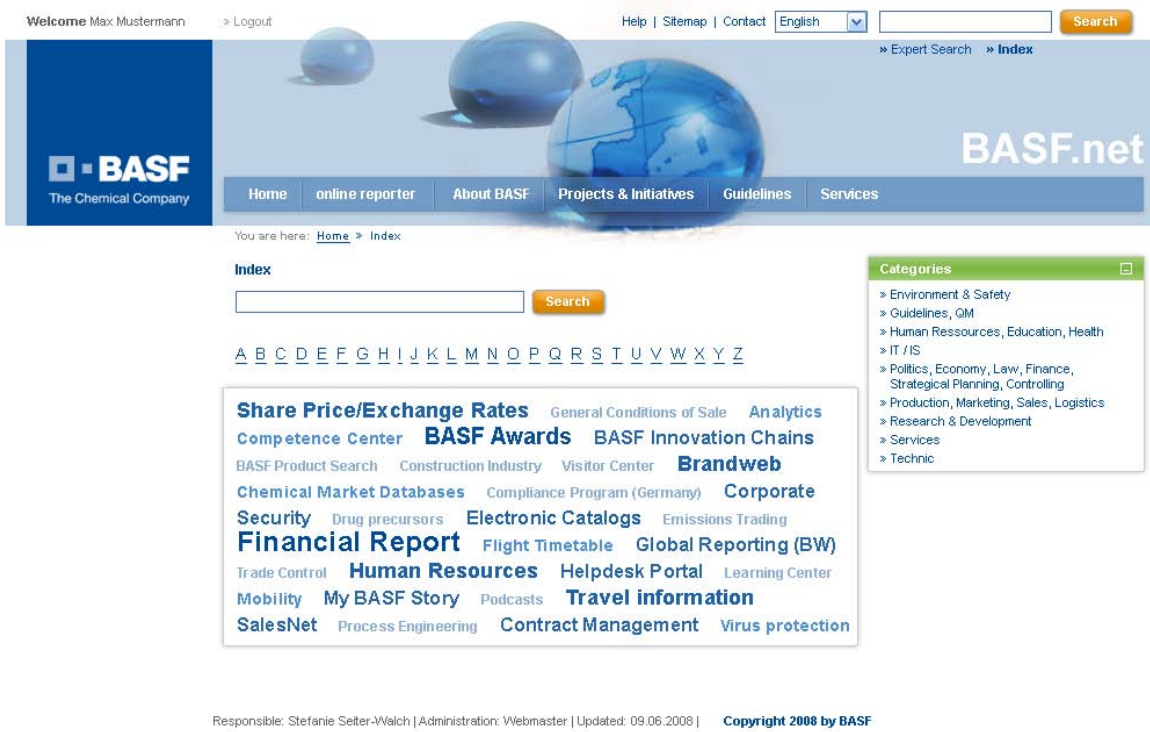
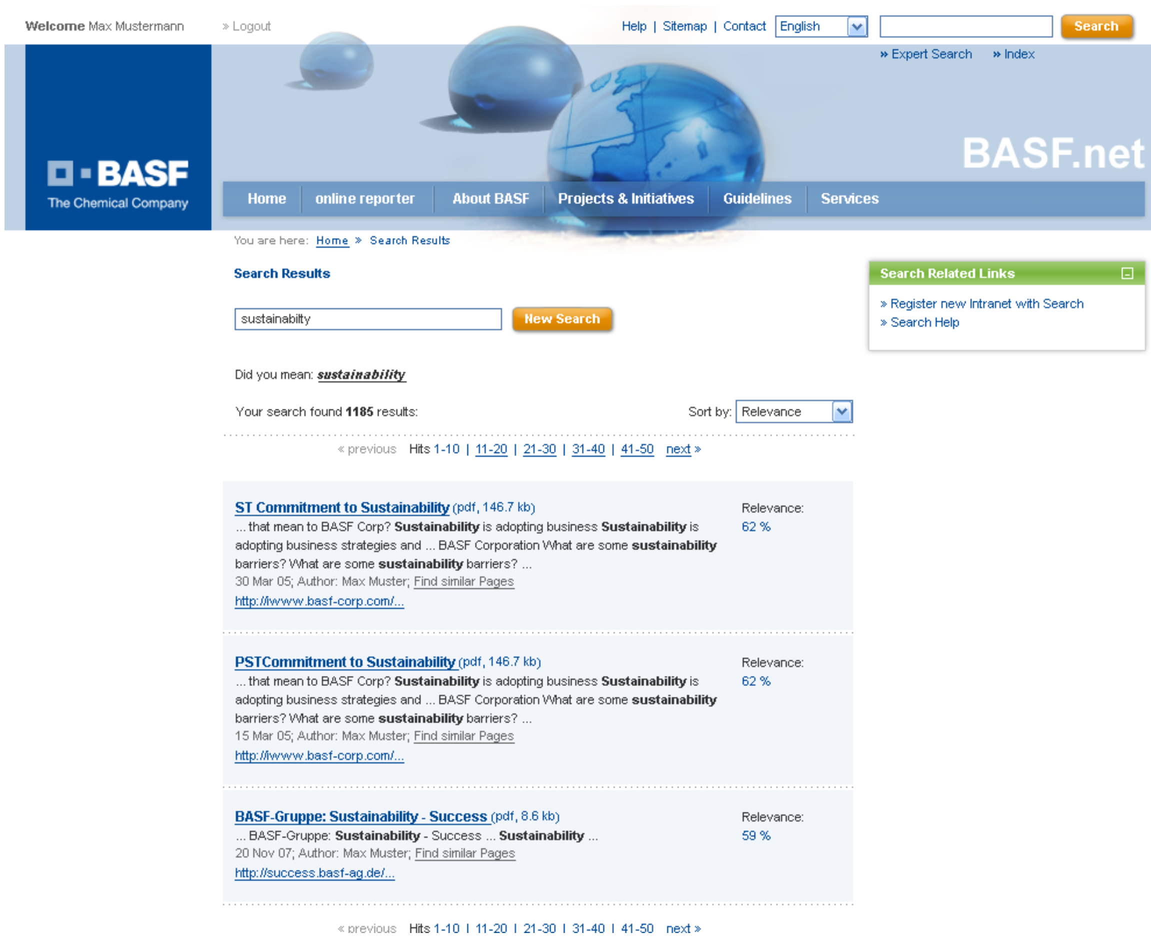


Pictured: The keyword cloud does some work for the user, making the most-clicked links larger, bolder, and more prominent. The feature also offers alternative user interfaces: the alpha list above the cloud and the categories on the right.

More traditionally, a site search appears in the upper right of every intranet page. The search results page is presented very succinctly. The query is repeated, and users have the option to search again. They are also offered help in the form of another word that is spelled similarly. The number of results found is clearly stated, and results are sorted by relevance; users can also sort by other criteria, such as date. The page shows 10 results by default, and users can navigate the results pages via *previous* and *next* buttons, or number ranges (such as *11–20*).

In the results themselves, the words in the query are bolded. The document's title is clear and underlined. Some of the article's text appears, helping people users decipher a bit of the content. The page's URL appears last, in case the page location might make a difference to the user. The *Find similar pages* link can also assist people in their hunting.

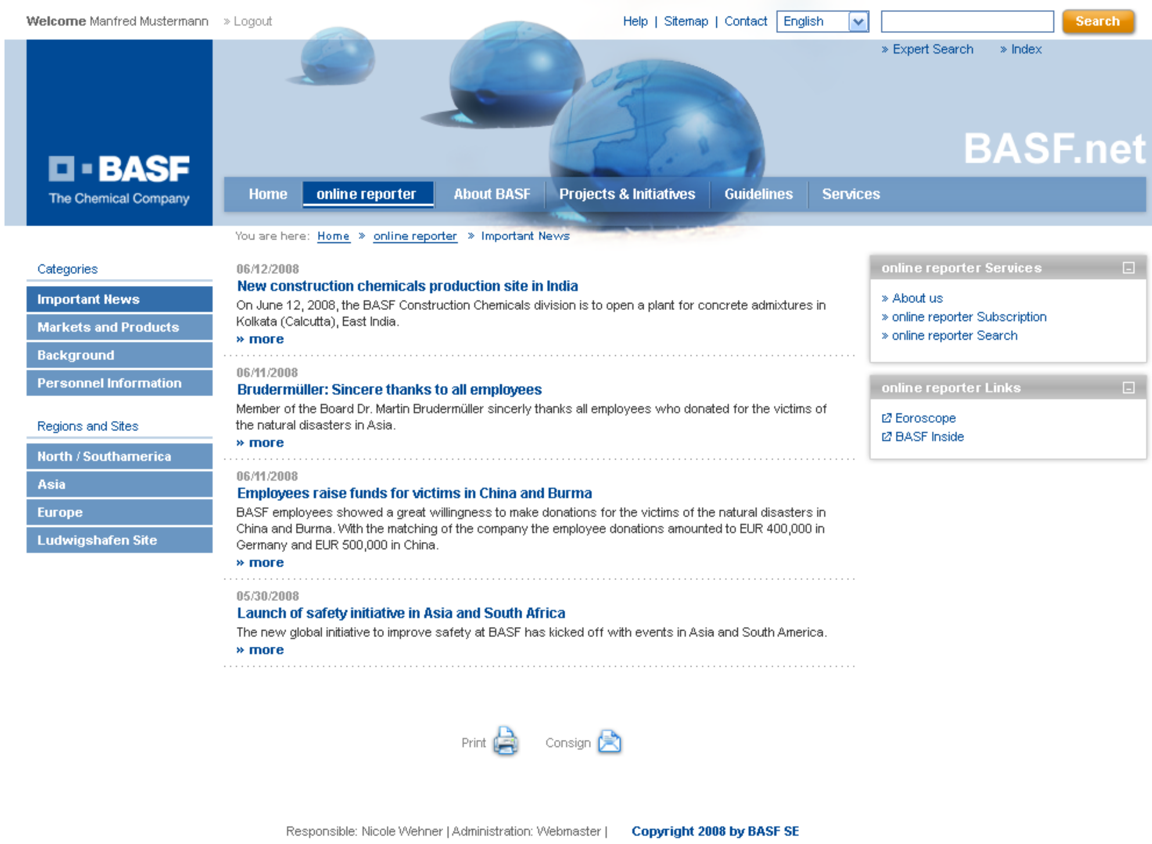


Pictured: The search results are presented simply and according to expectations. The relevance sorting and simple titles as links are just a two of the elements that help users deal with their search results.

Drilling into the content, users can choose the *Online Reporter* link, which is the second menu item in the global navigation. The news in this area comes from a group-wide internal online news medium, and caters to everyone at BASF. In an effort to unify the organization and the intranets, this group relinquished its own separate intranet for the greater good, and now has a top position on BASF.net.

Important News is the default selection in the left-hand context menu. Users can also choose news categories such as *Markets and Products*, *Background*, and *Personnel Information.* The *Regions and Sites* are also listed as news category links; clustering news in these two categories makes scanning the menus easier for users.

In the page's right column, users can access other services through the *Online Reporter* group, which produces the news.

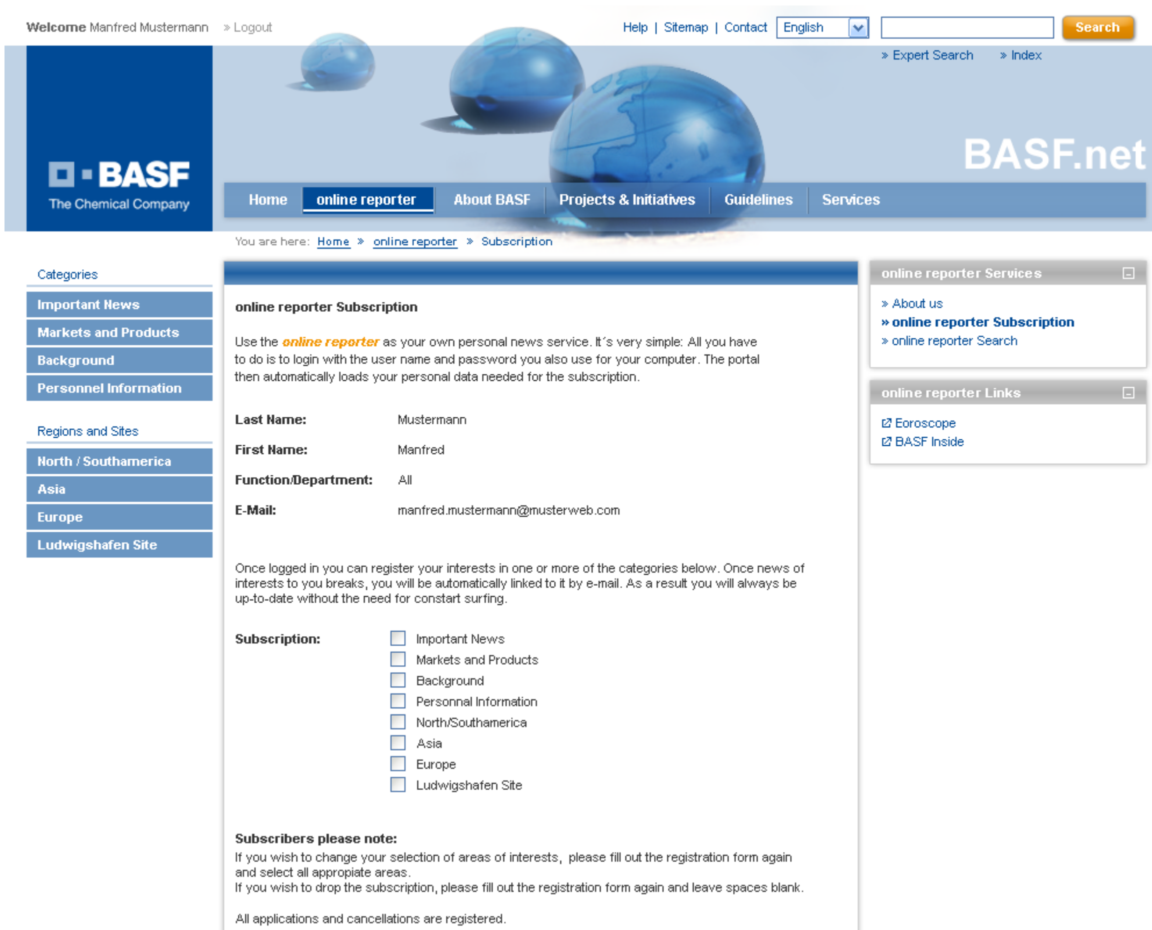


Pictured: Most important news is displayed by default in the site's *Important News* area. Plus, categorizing the menus by topics makes finding the news easy.

One such service in the *Online Reporter* area is news subscriptions. For users who are particularly interested in topics and don't want to have to go looking for the latest news, having a subscription can be like having elves do the work for you.

Choosing the *Online Reporter Subscription* link in the right column displays a page that lets users choose topics. The page first shows users' personal information—name, e-mail address, and department—based on their login. The page then describes what will occur: "*Once news of interest to you breaks, you will be automatically linked to it by e-mail. As a result you will always be up-to-date without the need for constant surfing.*"

The bold-face *Subscriptions* label anchors the eight subscription category choices. Users can select as many checkboxes or subscriptions as they'd like to receive. Later, they can opt out if they find they're getting too many e-mails.



Pictured: Users can select from a list of news subscription categories.

BASF.net not only supports efficiency for each user's daily work, it also ensures that "BASF – The Chemical Company" can be experienced online as a truly global brand.

BACKGROUND

Since its beginnings in the 1990s, the BASF intranet grew steadily but in an uncontrolled manner. "The corporate intranet did not meet the requirements of BASF as 'The Chemical Company,'" says Julia Buchner, project leader in Corporate Communications BASF Group. "It faced considerable usability problems, resulting in a loss of productivity in the everyday use of the intranet. Changed working conditions or user behaviors have not been taken into account."

The site was far behind what the intranet team knew to be current industry standards. And it was not properly conveying the BASF brand. The intranet had grown into a conglomeration of many individual sites without clear structures and hierarchies. "From a technical point of view, the real challenge for BASF was to deliver an easy-to-use and customized interface to perform daily job activities on a global scale," says Buchner.

The redesign project goal was to set up a BASF-wide intranet portal with one worldwide URL. The design team wanted to give the site a unique look and feel, as well as offer employees personalized content and tools. Together with the regions and business units, the project team developed a comprehensive concept for the BASF intranet and one that would guide the company's future online endeavors.

INTRANET TEAM

Team

The project team was created in 2006 after the project was officially approved. In addition to the core team, regional and functional online communication colleagues participated in the BASF.net project. Buchner says the global technical rollout was also successful thanks to the diverse local and regional IT colleagues and help-desk units.

The BASF global intranet (BASF.net) core team consists of 11 people (three from an external agency).

Pictured: The BASF.net project team (from left to right, seated): Beate Zissel, Julia Buchner, Bernd Schabacker; (from left to right, standing): Marian Möhren, Bernward Schuka, Vladimir Mello, Gerald Ebisch, Oliver Schröpfer; missing: Claudia Lindner.

Governance

Responsibility for the BASF intranet is shared between Corporate Communications and the global Information Services Unit. Corporate Communications is responsible for the intranet governance, design, and content, as well as branding alignment and further conceptual developments. The global IT department is responsible for technical support and related development. This ownership model has been successful for the past several years.

The corporate intranet staff comprises three professionals (based in the company's headquarters in Germany). However, being a multinational company, the intranet governance extends to the regions where BASF operates (Europe, Asia/Pacific, North America, and South America). On a global scale, BASF has about 50 communications experts dealing with online communications.

These communications experts are either website owners or content owners of a specific intranet website within the BASF intranet. Their role is to create content, monitor published content, and remove outdated information or broken links immediately. As central website owners, they're responsible for search engine registration, definition of access restrictions, and provision of statistical evaluations (Web controlling).

"Whereas Corporate Communications is responsible for any online content on BASF.net, the group's intranet portal, the regional, local, and functional website owners take care of their respective online content," says Buchner. "In this way, inquiries regarding their content can therefore be made directly to the respective content editors."

BASF's Online Governance is handled by the Communications Excellence Team, which defines standards of excellence, coordinates procedures, and shares best practice examples with the BASF global communications community. It was created in July 2007 and meets bi-monthly via telephone conferences and holds a yearly face-to-face workshop. The team is made up of 15 online communicators and IT experts from the regions, divisions, and from Corporate Communications.

"The aim of this team is to define and discuss group-wide requirements for online topics," says Buchner. "The team also issues recommendations on measures and processes that are congruent with the vision of the BASF brand and BASF communication goals." Through this process, the team develops guidelines, tools, and globally applicable standards contributing to a consistent group-wide presentation of the BASF brand. The team uses networking to: share best practices, utilize online communication synergies, and detect and evaluate online trends early on.

BASF IT Services handles the intranet's technical support and maintenance, while the company's global Information Services Unit supports its long-term IT governance. "The further development of the group intranet portal is controlled by an Intranet Steering Committee, bringing together the management of the three involved parties on a monthly basis," says Buchner.

Working with Agencies

Beginning in 2005, the BASF.net intranet was developed in partnership with the agency Pixelpark AG. Pixelpark supported BASF´s Corporate Communications department in developing basic concepts and strategy for the site. In addition, Pixelpark was responsible for all design and IA-related tasks during the project. The agency was part of the core project team and was responsible for design development. Working closely with BASF IT Services, the internal service provider, the agency was heavily involved in the technical project definition as well.

GOALS

The BASF.net was intended to aid the company in establishing a worldwide communications and information medium. As of go-live (September 2008), there was one global intranet homepage for all employees—in all units and group companies that operate under the BASF name and brand—for the first time since the company established an intranet.

The site's main goals are to:

- Make the intranet a management tool to disseminate information group-wide.
- Provide a means for an effective BASF-wide knowledge exchange.
- Establish a dialog-oriented company communication with a strong brand experience.
- Improve efficiency and create value-added for the target group.
- Provide "joy of use" through a high degree of usability

TIMELINE

The redesign project for the new BASF intranet began in early 2006 and had a go-live date of September 2008. The project period encompasses the entire project lifecycle, from concept to rollout. Following are the project's main milestones.

2006: New intranet (structure and design definition)

This new structure was developed together with regions and business units. The project unofficially started in July 2005 with a detailed analysis of the former corporate intranet. The Corporate Communications unit organized an online survey to get an overview on how employees worked with the existing BASF intranet and which improvements were needed to reshape and improve it.

In addition to the users' responses, Corporate Communications conducted usability testing of the former intranet in cooperation with the Fraunhofer Institute for Industrial Engineering. This usability walk-through identified several tasks that would enhance the user orientation and thus improve the corporate intranet.

"Finally," says Buchner, "we met with several other companies in order to get to know best practice examples and lessons-learned from intranet projects they had recently gone through."

"After gathering and evaluating all information, we did a pitch for hiring an agency that would support us in the concept and design development, which turned out to be Pixelpark Agency (Cologne)."

The concept phase ran from November 2005 through March 2006. Then the design and layout development were finished in late summer 2006 through a joint process with the online communicators in the BASF regions and business units. "At a very early stage in the design development, we shared our drafts with the colleagues in the Communications Community in order to get their feedback and further develop the navigation and design concept," says Buchner.

October 2006: Approval for group-wide rollout of intranet portal concept

The Brand Advisory Board (a steering committee that typically meets four times a year and includes members of BASF's Board of Executive Management) officially approved the new intranet concept. Buchner says that "having the approval of this Committee allowed us to set up an official group-wide project and move on into the next project phase" which included a feasibility study and technical implementation.

April 2007: Official technical project approval

According to Buchner, IT-related projects at BASF that exceed a given budget amount need the approval of Commission I. This committee, composed of the heads of the BASF business units, decides on future investment projects within the company. As a joint project between Corporate Communications and Information Services, BASF.net went through this approval process and got allowance for further development and technical implementation.

June 2008: Technical implementations and IT optimizations complete

BASF IT Services was the preferred service provider and conducted the feasibility study and the technical implementation. Due to performance problems with the IT hardware and software, the project go-live was postponed from March 2008 to September 2008.

August 2008: Final intranet testing phase complete

The testing phase consisted of several different tests. The technical load and performance tests of the hardware and software started in October 2007. The unsatisfying test results led to the decision to postpone the go-live of BASF.net, which was originally planned for March 2008. The second tests were functional tests targeting all functions developed for BASF.net. The functional tests were ongoing throughout the technical implementation period. They ended in summer 2008.

During integration testing, the testing group was expanded to include 50 users on a global scale (mainly from Communications and IT units). The aim of the integration test was to find out if the functionality of BASF.net would work in different regions and diverse network situations. It was also aimed at checking all BASF.net content and translations. The integration tests took place between August and September.

September 18, 2008: Go-live and global rollout of BASF.net

The go-live of BASF.net started with a rollout in Ludwigshafen, the company's headquarters. Employees booting up their computer on September 18th saw a *Welcome* start page, which allowed them to enter their own personal settings on BASF.net. In addition, a Flash animated guided tour explained the structure, contents, and functions of the new intranet. The *Welcome* screen was available in 13 languages and the guided tour was offered as an audio and non-audio file.

The *Welcome* page is still accessible on BASF.net help pages for any new employee working with BASF.net. The technical rollout of BASF.net continued to all BASF regions through October 10th. "BASF employees all around the world received the intranet portal, which is standard across the group as their homepage in Internet Explorer," says Buchner.

USERS

BASF.net users come from all hierarchies and all functions across the entire BASF Group. From apprentices and office assistants, to production workers, scientists, and managers, to members of the Executive Management Board, user interest in BASF.net is very diverse.

USER TASKS

The primary tasks that users can accomplish on the site include:

- Access news (global, regional, and function-related)
- Search staff directory
- Search work-related information via keyword index and global intranet search
- Access all sub-intranets of the organization through a single gateway
- Quick access to favorites pages (for example, local lunch menus or HR services)

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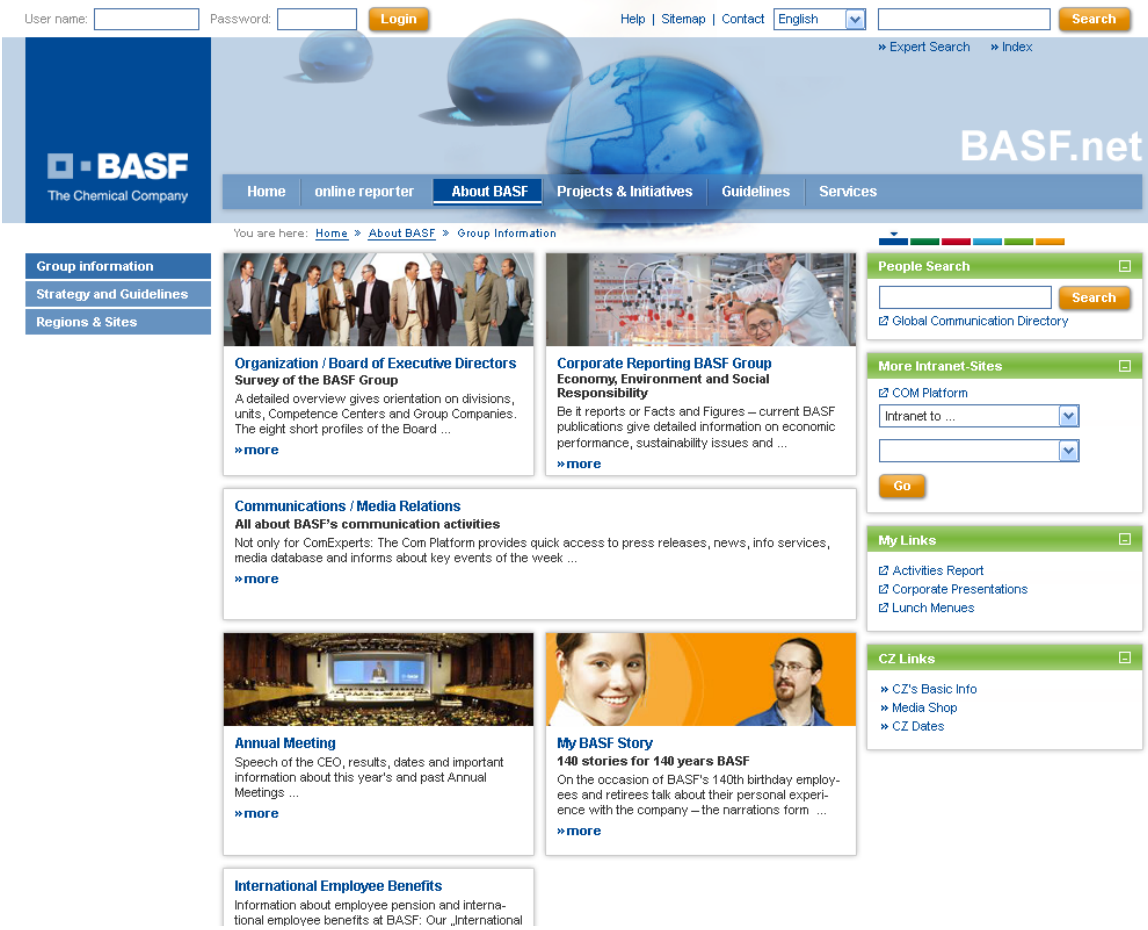


Pictured: An overview page. These pages can be filled with different teaser formats according to content requirements. Teasers must, however, stick to a certain page grid to provide a measure of visual clarity (for example, teasers next to each other must be the same height).

Pictured: A regular content page. Content modules can contain all types of content, including articles, forms, illustrations, and embedded applications. This screen also illustrates how the design displays deeper navigation levels in the sub-navigation column.

DESIGN PROCESS AND USABILITY ACTIVITIES

Goals of the Redesign

The main goals of the redesign project were to:

- Set up a consistent, global intranet for all employees worldwide as a single source of information and single point of access to all important applications, features, and sub-intranets
- Build a platform for internal communications to quickly reach all employees worldwide and speak with a one-voice policy
- Develop a highly usable, user-friendly intranet with a fresh design
- Simplify the accomplishment of the most common intranet tasks within BASF

"The decision to re-launch the corporate intranet was taken because BASF felt that the old site did not tap the full potential of an intranet and did not fit the leading edge claim of 'The Chemical Company' in terms of state-of-art technology combined with a dialog-oriented approach to new media," says Buchner.

But, to address the site's shortcomings, the team had to get a sense of what worked and what didn't. Prior to undertaking usability research, they conducted an initial survey and user interviews.

User Survey

"At first we conducted an online survey asking the users what features they used most on the intranet and how they rated each of the existing features, the layout, and usability of the old intranet," says Buchner.

The survey revealed that the most-used features were: people search, general intranet search, HR services (on a sub-intranet), news notifications, and navigation to different sub-intranets (divisions sites, for example). "However, many users criticized the search results, the lack of orientation, the lack of visual clarity, and the poor usability and navigation within the intranet," says Buchner.

Pictured: The homepage of the BASF corporate intranet prior to the site redesign.

User Interviews

Prior to beginning the design concept, the team interviewed many key intranet players within the organization—including communicators, information managers from different divisions, and editors of internal online news media—and asked them about their requirements and wishes for the new intranet.

"We found it extremely important to already involve all these people at this early stage because it prevented anyone from feeling excluded," says Buchner. "This was especially important because the intranet would rely on the support and cooperation of the key stakeholders in the regions and divisions who act as multipliers for their fellow employees worldwide. Talking to many people at the beginning was quite an effort, but it was worth every minute because we gained broad support throughout the entire organization."

Usability Methods

In addition to involving users through the organization-wide survey and stakeholder interviews, they also conducted more traditional user research. The following activities proved helpful for guiding them as they set up the content and navigation structure. The testing described below also helped them figure out which design worked best for some of the required features.

Heuristic evaluation. The design team, in cooperation with the Fraunhofer Institute (Competence Center Human-Computer Interaction) in Stuttgart, Germany, conducted an in-depth analysis of the old intranet, evaluating factors such as content, navigation, user orientation, information retrieval, and the usability of important features. They also looked at how easily users could perform the most important intranet tasks (such as finding a colleague's phone number).

"This evaluation revealed important problems such as: incoherent navigation architecture, lack of clear entrance points for different users, cumbersome completion of intranet tasks, and confusing layout—80% of the space was covered by link lists and animated banners," says Buchner.

Card sorting. The team performed a card sort with key users to figure out a good content structure and develop understandable navigation wording. "As usual, this was a tricky task," says Buchner, "But the card sorting results of the BASF employees helped very much to find a reasonable solution as we learned how they would intuitively structure and name the different contents."

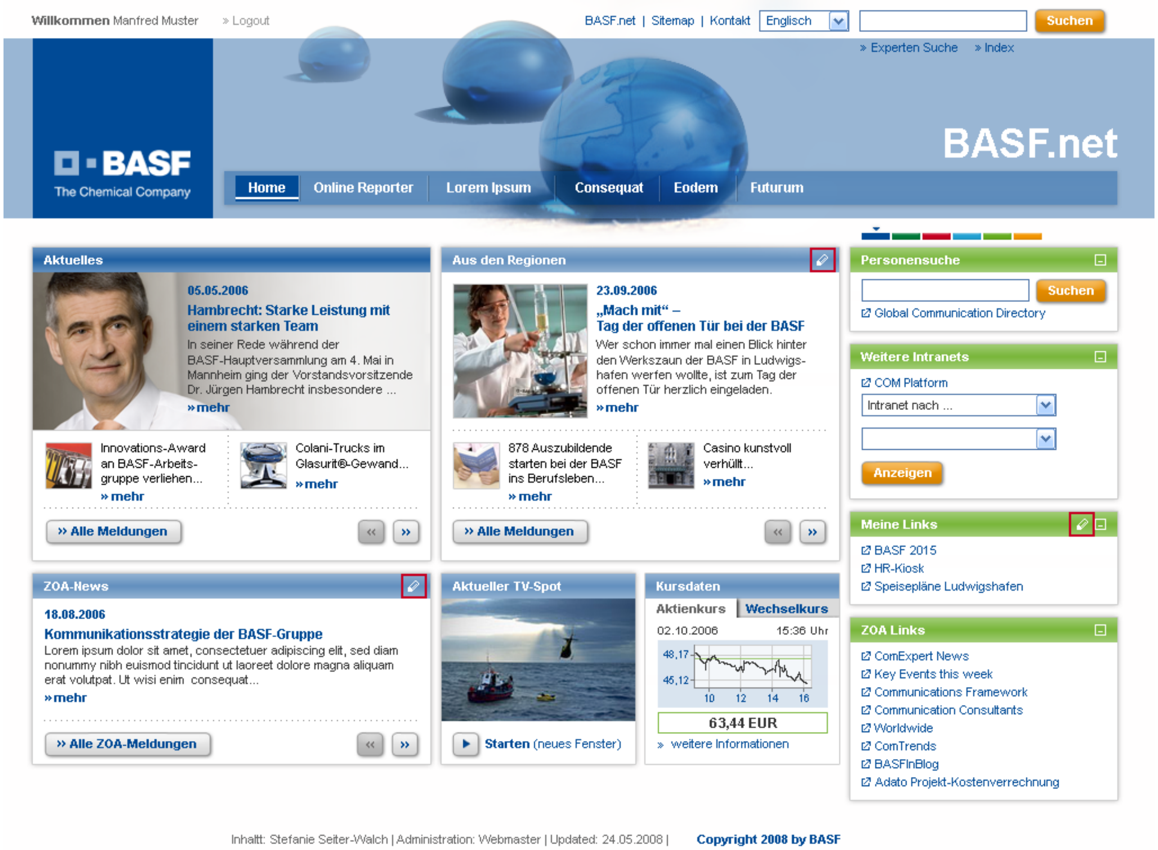
"All in all, we had about 15 people doing the card sorting: 10 employees from different divisions and hierarchy levels, and five or six people from outside BASF," says Buchner. "In the first session, people did an open card sorting, establishing and naming categories themselves and assigning all cards to these categories. We then established five fixed categories in a second session and had people assign all cards to these categories and had them rename the categories if wanted."

Paper prototyping. The team used paper prototypes to test proposed site versions with different employees. The design team wanted to find out which design alternative worked best with most of the users, particularly certain features. "These paper prototyping tests were a great success," says Buchner. "They produced both good results and a good feeling among the employees as they felt involved in the design process."

"Overall, we had 12 employees performing the paper prototype test with us: six women and six men, all from different departments, different job levels, and of different ages," says Buchner. "We wanted to find out the best alternative of a few items whose design had been controversially discussed within the core team—such as the highlighting of the main navigation items and the use of icons or text links for the editing functions on the homepage."

In the test, the team used two versions of each item and had half of the users perform tasks with the first version and the other half with the second version. "We decided on the method of paper prototyping because we figured it was a good way to give us valuable results on the controversial items with relatively small effort," say

Buchner. "Testing with a clickable dummy would have needed more time and effort, which didn't abound at this stage of the project."



Pictured: An older version of the BASF.net homepage used for a paper prototyping test. In this example, the team tested the *Edit* icon in the top bar of some of the boxes.

URL AND ACCESS

The BASF Group intranet's URL is www.basf.net. It is bookmarked in users browsers and is the default homepage for all employees worldwide operating under the BASF name and brand (except locations with small bandwidth). The user can't change the settings.

Remote access is available via VPN.

TECHNOLOGY

The BASF intranet is built on SAP Netweaver, which provides all necessary functionality, including modules for content management, a search engine, a Web application server, user management, and databases.

Metrics are tracked with WebTrends.

Kiosks are available for employees without access to PCs and/or who don't work in offices. The kiosks are used mainly for *Employee Self Services* (HR processes), which are all supposed to be done electronically. The kiosks are available especially in the production plants.

MOBILE

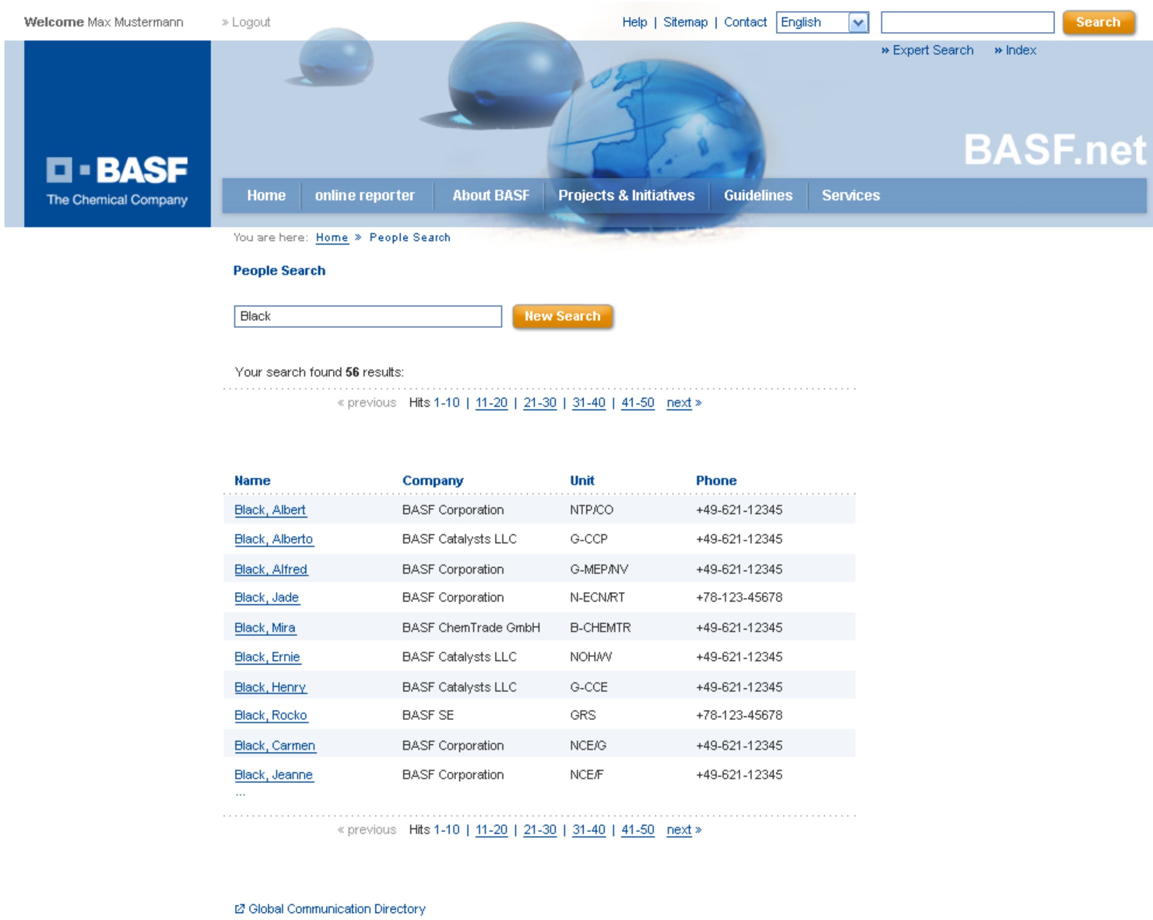
The BASF Group intranet is not currently optimized for mobile devices, but Buchner says that making BASF.net available for any mobile device is a likely future step.

SEARCH

The site's search engine is SAP Netweaver TREX, with exact-, linguistic- and fuzzy-search methods. The intranet search engine crawls about 150 BASF websites globally for public content. These documents are available on the intranet.

The new TREX search engine browses about 2.5 million public documents, including MS Office documents stored in Documentum repositories. "In this way, the amount of searched documents raised three times in comparison to [Verity] the former intranet search," says Buchner. Currently, the TREX search has indexed more than 170 internal Web and portal appearances. Whereas the former intranet search was rather regional—crawling European Web content, for the most part—BASF´s internal online landscape is now searched on a global scale.

Now that the new search engine has been launched, Buchner says the next step is to improve ranking mechanisms and tracking criteria.



Pictured: This screenshot shows a *People Search* results page launched from the homepage's *People Search* module. It searches BASF's global phone book, the Global Communication Directory, which is a stand-alone intranet application, and displays the search results directly in BASF.net.

Pictured: The incremental search function on the index page. While typing, the system automatically shows clickable keyword suggestions that match the user's entries.

CONTENT MANAGEMENT

The site's content management tool is easyWCM, which is based on SAP Netweaver Knowledge Management. BASF customized the tool according to its needs.

The Content Lifecycle

Each document on the site has a lifecycle and a version. Documents older than six months are automatically flagged and the author receives notification to check the content's validity and update it if necessary.

Content is edited via an online editor. The author navigates through the Web to the relevant page and clicks on a pen icon. The document is opened by the CMS within the WYSIWYG templates. The content is stored as XML and automatically published using a time-based publishing mechanism.

The team developed templates for defined content types—including distribution pages, article pages, teaser elements, and context elements—with defined content modules. "Design guidelines are described in our intranet style guide and are being respected by the CMS templates," says Buchner. This lets editors put content online without caring about layout; all layouts and templates fully conform to the site's style guide.

Style Guide

"The new intranet style guide was initially created as a single document serving as a pattern for the developer team of BASF.net," says Buchner, adding that this pdf file "contained all templates, modules, and dimensioning used for the new group intranet." However, as Buchner notes, while the graphical design was developed generally for all new intranet sites within the company, the style guide was intended as a living document that could be expanded according to new requirements from division or regional intranets and the like. Ultimately, however, it proved too cumbersome to keep the pdf document up-to-date and ensure that everyone was using the latest version.

"So, we decided to set it up online as a website," says Buchner. "Everyone who accesses it, automatically gets the latest version, and it can be edited and expanded easily. So far, more than 10 intranets within BASF—other than BASF.net—already adopted the new intranet design in 2008, and more will follow."

Content Editors

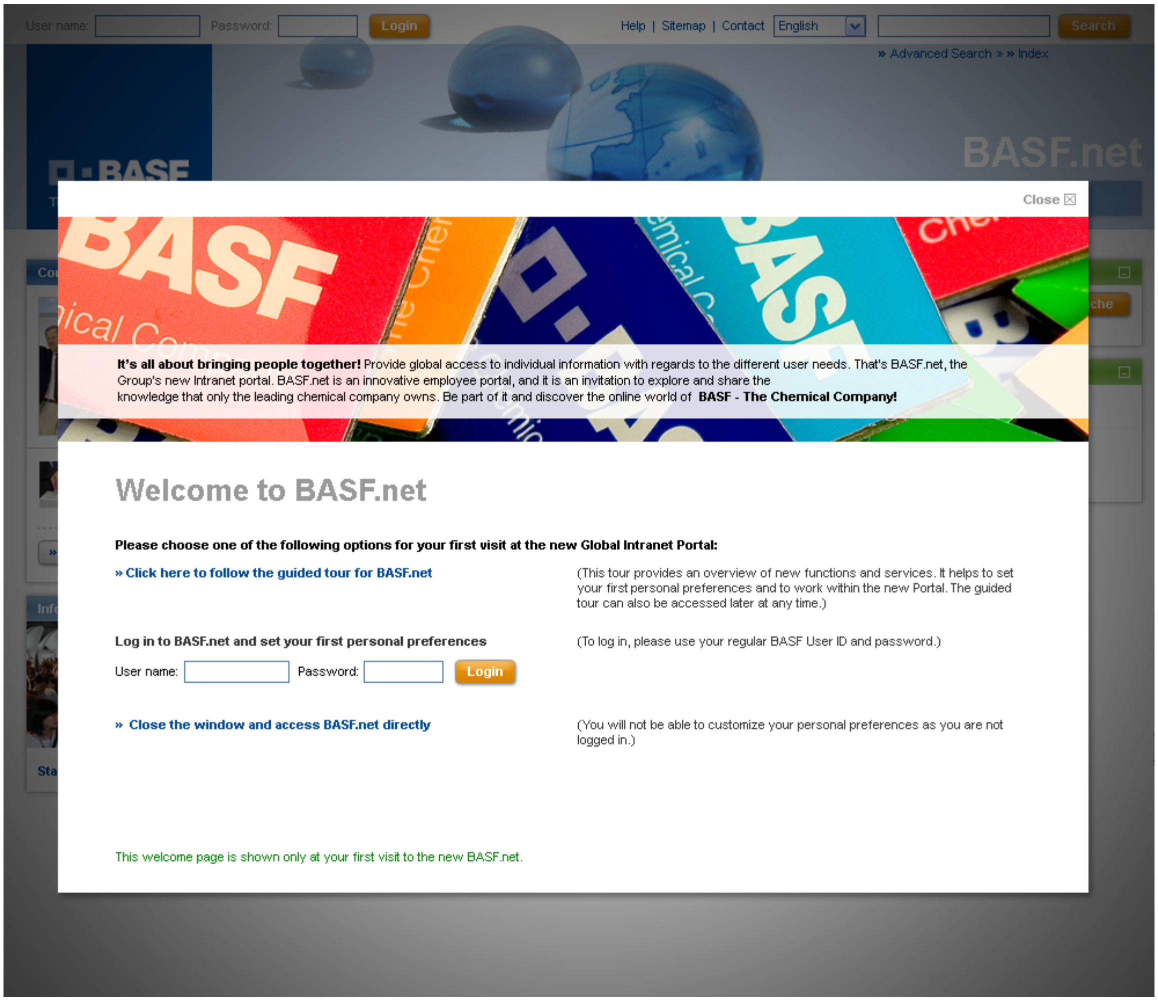
"So far we have about 50 different content editors for specific parts of the new BASF.net," says Buchner. "The target group is mainly formed by regional and divisional communication experts located worldwide. The corporate content is the responsibility of the Corporate Communications department based in Ludwigshafen. The global editor group is supposed to grow steadily, as it is our plan to incorporate and integrate further websites to BASF.net."

FEATURES

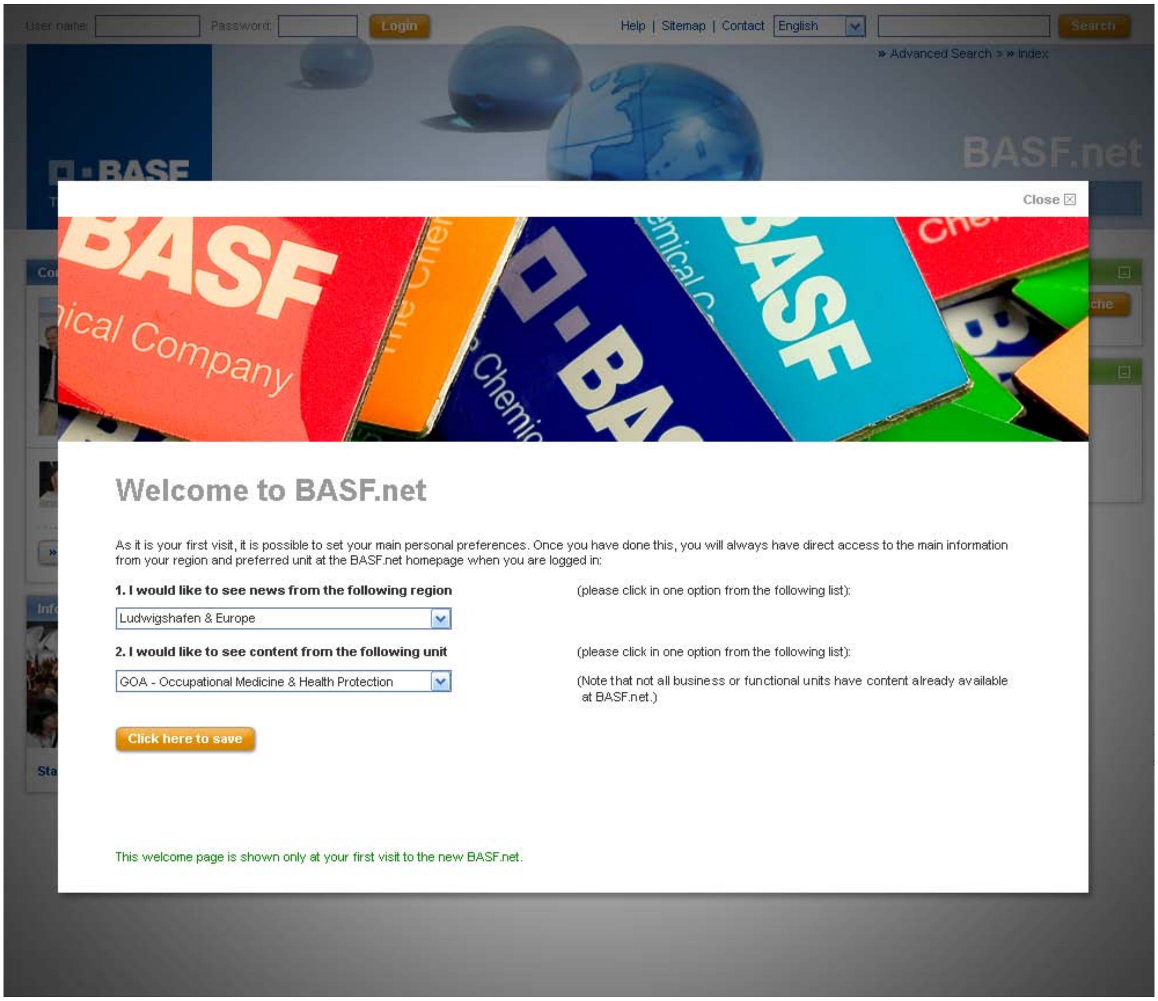
Following are some key features of BASF.net:

***Welcome* screen.** When users visit the site for the first time (and only the very first time) they see a *Welcome* screen where they can either access the guided tour (see below), log in and enter their customization settings, or simply access the portal without logging in.

10 Best Intranets: BASF SE



Pictured: The initial *Welcome* screen pops up as a layer over the BASF.net homepage the first time—and only the first time—a user visits the new portal.



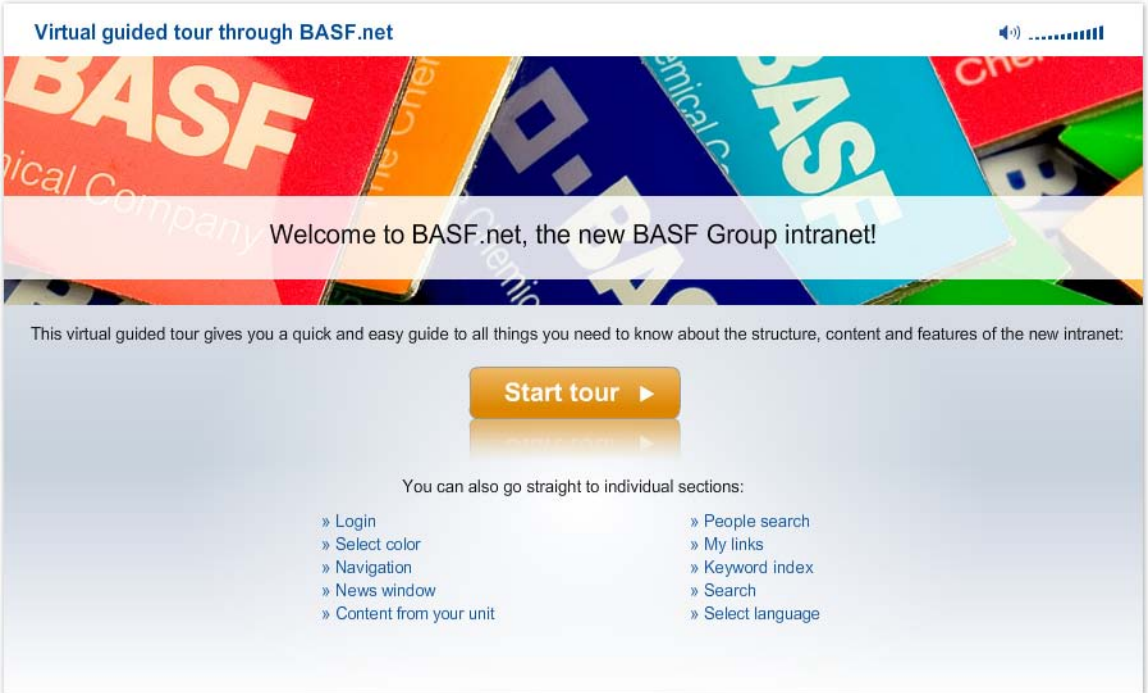
Pictured: The *Welcome* screen after the user logs in directly. In this case, users can set their initial news preferences for both region and division.

Customizable news boxes. Users can select which region and division they want news from using simple dialog settings.

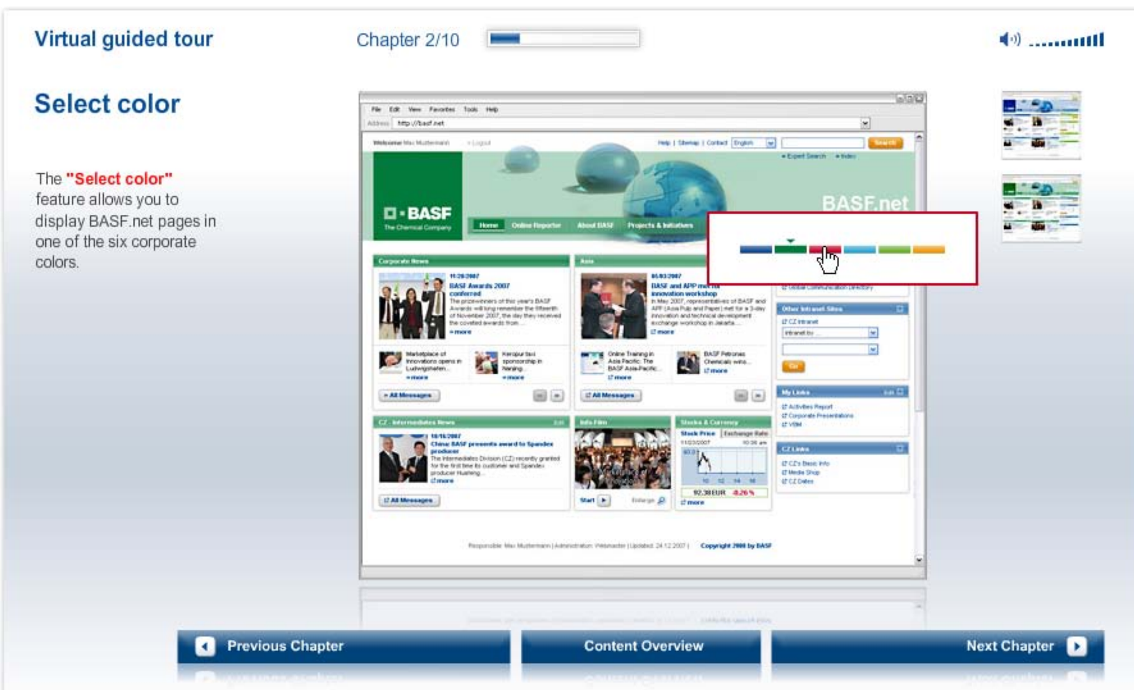
Administration of personal bookmark list. In the *My Links* box, users can edit or delete existing links, add new links, and choose links directly from the keyword index and add them to their personal bookmark list. This customization works via an easy-to-use dialog box.

Keyword index using tag cloud and incremental search. The keyword cloud shows those index entries that were clicked most often by intranet users. The larger a keyword, the more often it was clicked. The index can also be browsed alphabetically, using the letter navigation or categories. The index has its own search and offers incremental search suggestions while the user types. The index contains global entries as well as regional entries according to the selected region.

Guided tour. The intranet team produced a guided tour in six languages explaining the new intranet portal and all of its main features. This Flash application runs in a layer on top of the BASF.net homepage.



Pictured: The start page of the guided tour.



Pictured: A content page within the guided tour.

Subscription for *Online Reporter* messages. The *Online Reporter* is the internal news medium that publishes all BASF.net news messages. Employees can subscribe to news from one or more categories and receive news via e-mail.

Color picker. BASF has six corporate colors of equal value. The color picker allows users to view BASF.net in their preferred color pattern. User defined settings are stored and present upon return visits to the site.

Collaboration Tools

BASF.net is in the beginning stages of adopting a holistic portal approach. In an upcoming phase, the team plans to enhance collaboration tools and knowledge management features. "The long-term goal of BASF´s portal approach is to step-by-step integrate further intranet websites and business applications, enhance personalization levels, and thus make BASF.net a truly working place of the future for BASF employees," says Buchner. This vision of a global IT "harmonization" process is targeted for 2012.

Currently, collaboration and knowledge management take place on sub-intranets—on a divisional or project level—rather than on the corporate intranet. Some of these sub-intranets have already adopted the new intranet design and provide further communication possibilities and team rooms for easy file sharing.

LESSONS LEARNED

Some lessons learned from Julia Buchner and the BASF.net project team:

- **Politics matters.** "The launch of a group-wide intranet portal for BASF was a change-management project and needed a lot of political discussions in order to get the acceptance from different stake holders within the company. A detailed analysis at the beginning is crucial in order to convince your top management. It's also important to identify the weak points and turn them into future success factors."
- **Communication matters.** "A transparent and continuous communication to the global communications community, as well as to the employees, is important in order to bring them on board for this global and long-term project."
- **Learn to talk the talk.** "You cannot perform such a project without diving deeply into IT-related topics. In this way, it is a challenge for all communication experts who take over the role of a project leader without having in depth IT knowledge. We all know that communication via online channels plays a decisive role in today's employee communications. And communicators have to handle much more IT-related projects than in the past. So, when it comes to a global portal project, you cannot just elaborate the concept and provide design and content, hoping that IT colleagues can handle all obstacles that may rise on their own. Already, at a very early phase, the project leader—in our case, the communication department—was involved in all IT discussions (for example, the bandwidth situation, infrastructure harmonization efforts, and URL domain concepts). In this way, it is a challenge for all communication experts who take over the role of a project leader without having in depth IT knowledge. Especially when it comes to misunderstanding caused by specific IT language. Communicators have to learn that IT jargon is completely different—and quite difficult, due to abbreviations and specific wordings. The communication flow between IT experts and communicators needed in our case some 'translation help' in order to bring all involved parties on the same page. On the other hand, IT colleagues had to understand that communicators are driven by fulfilling functional user requirements without caring about the technology behind it."

- **Launch a beta.** "Technical obstacles never show during the 'proof of concept' phase. They always show up when the implementation phase has already been finished and the testing period starts. So, never communicate a go-live date to a broad public. It could be that your project gets delayed due to technical constraints."
- **Communicate with the users.** "User requirements continuously change, especially in online communications. You cannot respect all optimization wishes you might have received by the employees—such as in a user survey. But it is recommended to keep them informed about the different project phases and therefore control the user expectations."

RESULTS/ROI

Like many intranet projects that are in the early stages of launch, the BASF.net intranet does not have any hard measures of its performance. The organization instead looks to accomplishment in terms of user tasks to gauge the site's success. For BASF, these include:

- The BASF corporate intranet has changed from a static HTML-based intranet website to a dynamic intranet portal.
- Users can now customize contents and set their preferences.
- The global electronic news medium (*Online Reporter*) is fully integrated into the portal and thus users can easily access the latest global, regional, and divisional news.
- Employees can also choose the corporate color they prefer for their own BASf.net homepage.

Management Wins

For the management team, the intranet represents some significant wins in terms of meeting specific organizational goals through employee use of the site. These include:

- Cost reduction due to a global technology approach.
- Efficiency enhancement, thanks to better usability and information retrieval.
- A management tool for global communication that adheres to the "one-voice" principle.

Enbridge, Inc.

Using the intranet:

Enbridge, Inc. is a leader in energy transportation and distribution in North America. It operates the world's longest crude oil and liquids transportation system (in Canada and the US) and owns and operates Canada's largest natural gas distribution company.

Headquarters: Calgary, Alberta, Canada

Number of employees the intranet supports: 6,000

Company locations: 200 locations across North America, including Edmonton, Alberta; Calgary, Alberta; Toronto, Ontario; Superior, Wisconsin; and Houston, Texas

Locations where people use the intranet: Canada, the US

Annual sales:

$16 billion (2008)

Design team:

In-house: Lauren Linnell, Acting Director HR & Facilities; John Hanlon, Project Manager; Jennifer Cageorge, Advisor, Web Communications; Andrea Legault, Advisor, Web Communications; Glenn Fullerton, Enterprise Architect; Ken Street, IT Project Lead; Sean Stratton, Manager IT Shared Services; Mark Murray, Manager Enterprise Systems; Leandra Schrag, Program Manager; Brent Poohkay, Chief Information Officer

In-house leadership: Brent Poohkay, Jane Haberbusch, D'Arcy Levesque, Colin Gruending, Leon Zupan, Mark Maki, Jody Balko, Byron Neiles

Outside firm (Sapient): Daniel Barnicle, Director Program Management (Enterprise Portal Practice Lead); Ankur Shrivastav; Beth Cherry, Manager Information Architect; Swaroop George, Manager Technology; Gaurav Ganeriwal; Divya Dhar, Senior Associate, Program Management

SUMMARY

With six different business units, each with its own leadership and culture, the Enbridge intranet team found itself trying to create a central information source that would meet everyone's needs while still preserving a sense of each business unit's culture. It also wanted to increase access to the site, particularly for employees with little site access due to their remote locations or poor connection speeds. But the team had a long way to go. A survey revealed that 69 percent of users were either not satisfied or very dissatisfied with the previous site.

Team members initially invested time in reaching a consensus across business units to make sure that the new site would accommodate all employees' needs, provide information relevant to each business unit, and still maintain a sense of unity—and community—across the organization. They used iterative design to continually enhance the user experience and were open to making changes along the way.

They created a site that incorporates personalization to address different needs across the organization and incorporates opportunities for interaction and customization. Personalization delivers targeted content, while customization lets users set preferences and see the information they want. A mobile website gives users on BlackBerry devices or slow network connections in remote areas the most critical and important site information. And distributed content management, relying on more than 300 employees throughout the organization, keeps information current, fresh, and interesting to the company's various user groups.

The homepage offers personalized content based on the user's login, reflecting the user's business unit and location. The team knew it made more sense to give users what was relevant, rather than making them dig for it in a confusing site structure. To keep communication open, they also let users change their view of the content by switching their preselected business unit or country using dropdown menus that appear at the top of the page.

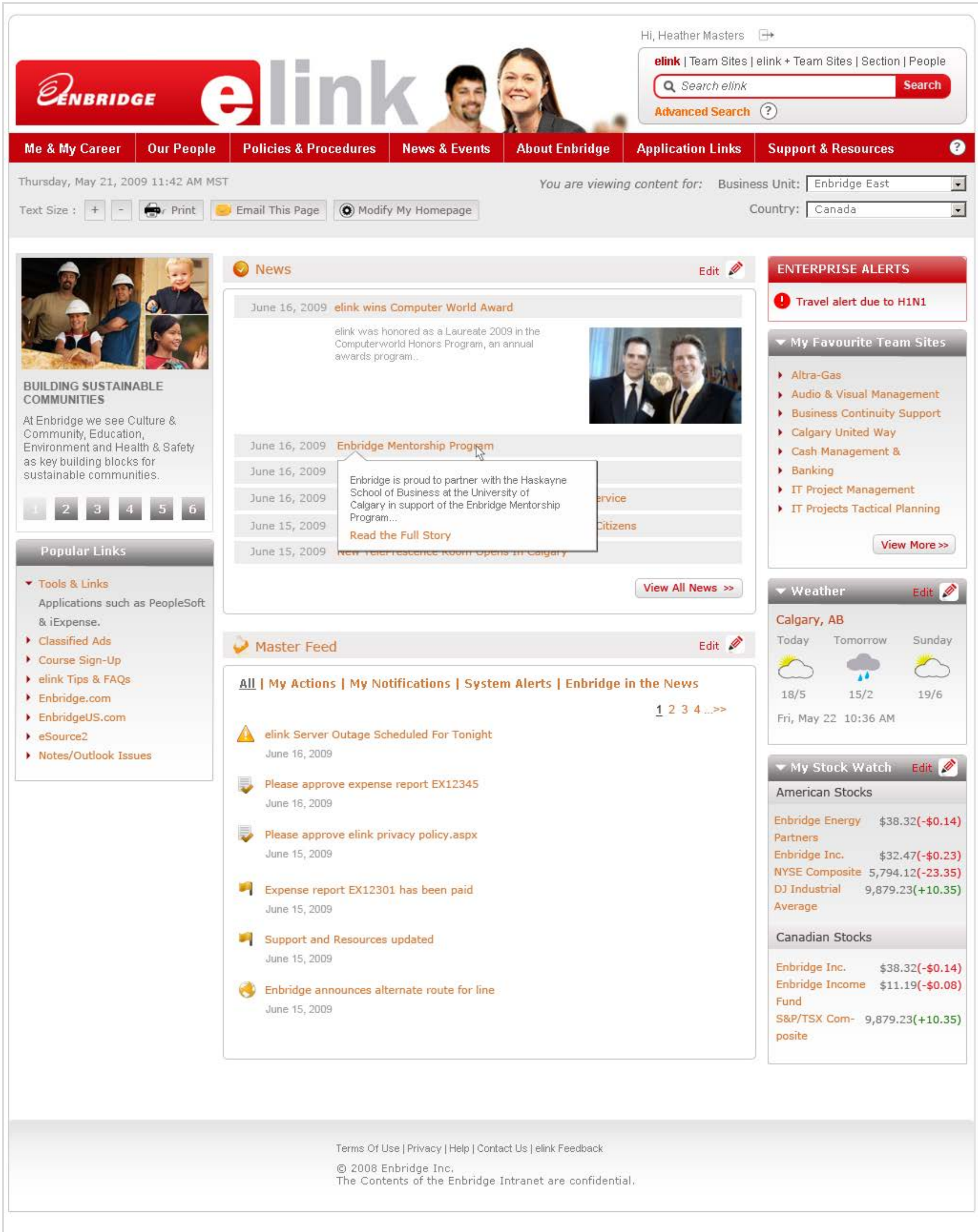
To emphasize new and relevant information, the team combines a *News* section with a *Master Feed*. These areas are central to the homepage content. *News* contains standard company-wide and business unit-specific information. Each news item is listed as a headline with the posting date. Users can click on each or rollover the headline to see a brief summary and a link to the full story.

The *Master Feed* collects information from a variety of sources and summarizes them in one list, similar to the main feed on social networking sites such as Facebook. This feed contains outstanding actions, notifications, system alerts, and news items. Users can view them all or select a particular type of communication. Items are listed in reverse chronological order, with the most recent listed first. Each item is dated, and an icon indicates the type of communication, such as an exclamation point for alerts, a checkmark for actions, a flag for notifications, and a globe for news.

Users can customize the feed and choose which types of information to see. Some are mandatory, such as *System Alerts*. Users can turn other options on or off through an easy interface reached by clicking the screen's *Edit* button.

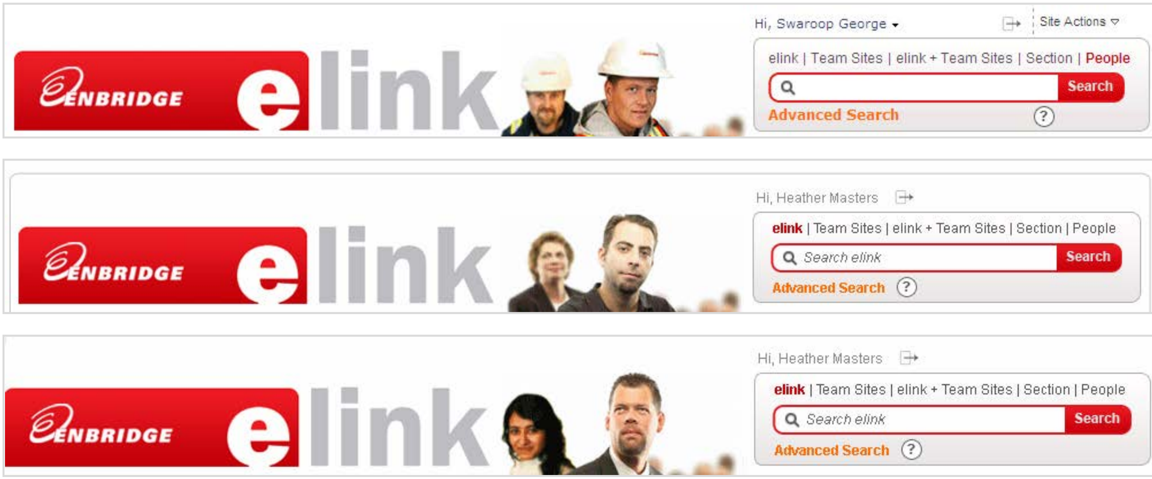
The page also contains a space for Enbridge "ads" in the upper left-hand corner of the screen. This area lets the company highlight particular news stories or important information. Clear headlines are accompanied by related images and brief summaries. Users can click through the series to see each item. Stories also rotate on their own, changing every few seconds. This content is determined by the site's editor-in-chief and is personalized, like other site content, based on the users' business unit and location.

The page also includes popular links, which are personalized and vary by user. Enterprise alerts can be displayed in the upper right-hand corner of the screen, providing company-wide information. Users can also customize their *Favorite Team Sites* and weather and stock information.



Pictured: The Enbridge intranet homepage combines personalization, which is specific to a user's business unit and location, with customization, which offers the user a personal and relevant site experience.

As one way of emphasizing the site's personal nature, the masthead features pictures of real employees who fill different roles throughout the organization. The team made it a priority to make the site feel personal. Using real employees' photos, personalized content, customizable pages, and information specific to individuals—including service milestones and information about new hires—give the site a personal feel.



Pictured: The site's masthead includes pictures of Enbridge employees working in different roles in different locations.

To ensure that content was current, interesting, and relevant, a large part of the site overhaul consisted of finding a usable method of managing content. Content governance was a huge consideration and quite an undertaking with more than 300 people across the organization contributing, approving, or editing site information. Business units and groups are responsible for their own content, and a structure is in place to ensure that information is updated regularly, follows site guidelines, and is presented to the appropriate audiences.

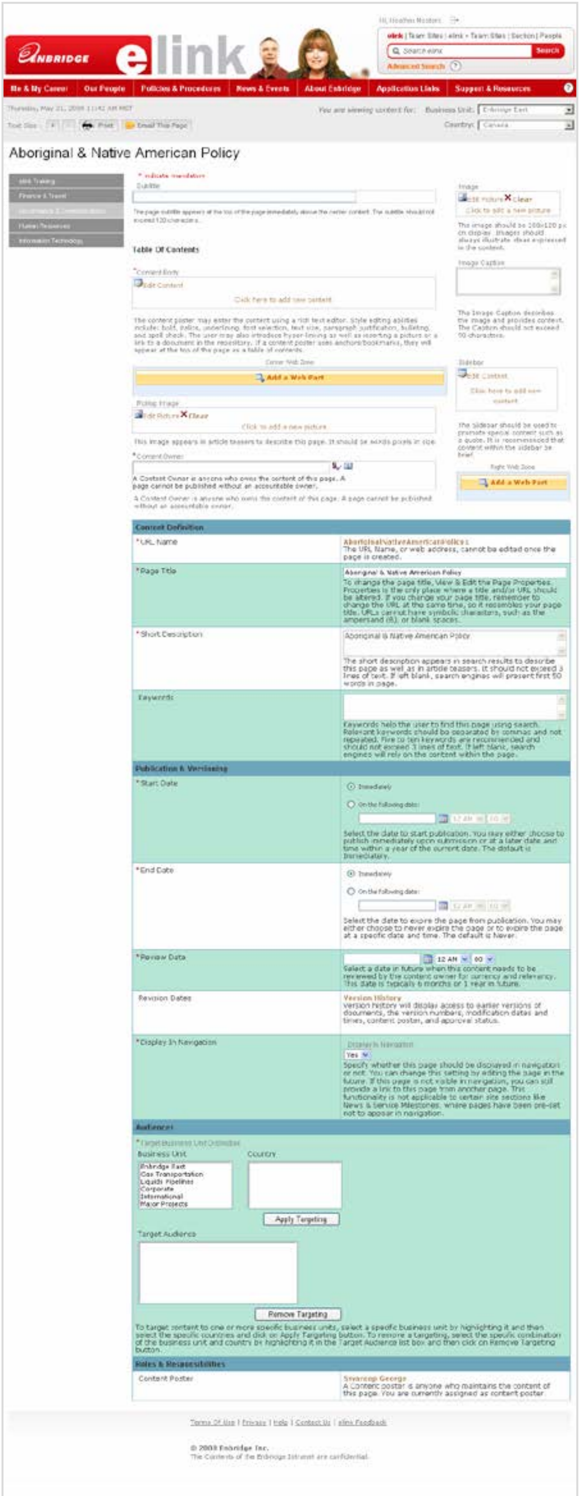
When setting up distributed content, the team focused on finding people who could best take on content responsibilities. Team members looked to those in the company who were already in a communication role, whether they were creating content on the existing portal or communicating with employees via email. These natural communicators were a good fit to take on intranet responsibilities.

The site was designed so that general users wouldn't need training to use it, but training content contributors was a large undertaking. Using SharePoint templates limits content contributors to three main page styles, helping keep the site design consistent. Approval processes are built in to the publishing tools and approvals are handled within the content contributors' group, freeing the intranet team from direct involvement with content.

Content contributors create content throughout the site. Explanatory text in the editing forms helps employees understand each field's purpose. For instance, the form tells users that the *Short Description* "appears in search results to describe this page as well as in article teasers." Such explanations can help users understand what to enter in each field and why the field is important.

Content contributors can add images and captions, create sidebars, select a publication date, and even target content to a specific audience via the editing tools.

The site has an editor-in-chief, which reflects its focus on high-quality content. The editor oversees the quality, timeliness, and appropriateness of content. This role helps to ensure that the site's writing, tone, and language are appropriate. The editor is further responsible for ensuring that confidential information isn't shared on the site and has editorial control over enterprise-wide news content.



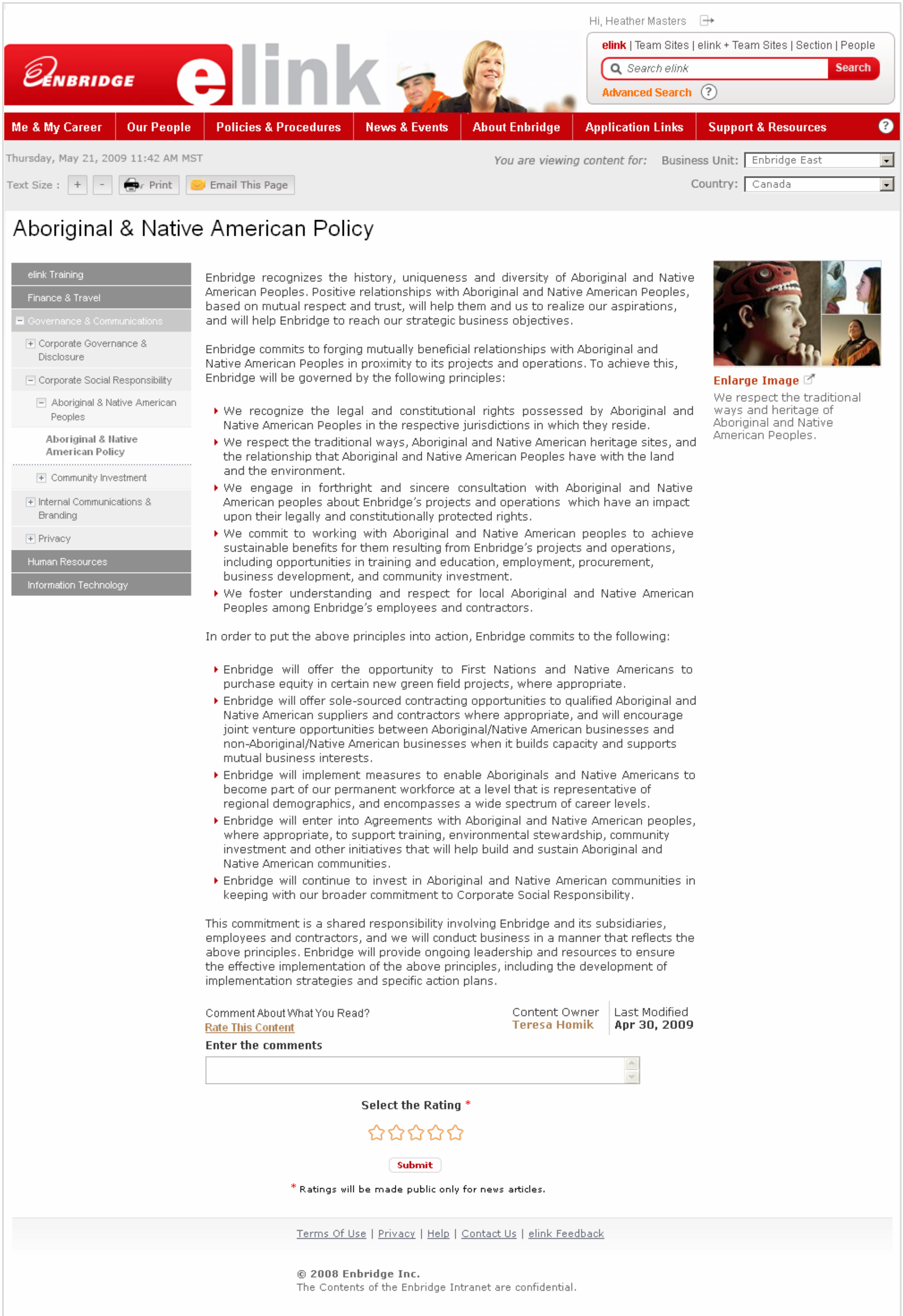
Pictured: Each of the 300+ content contributors across the organization can edit content directly through the site.

Even with so many people involved in content creation, the site maintains a consistent and clean design. Because this design creates a cohesive site experience, users can more easily navigate the site. The consistent global navigation is designed to be user-centric, rather than department-centric. The team did not want users to have to understand organizational structure to find content, so they organized the content in ways that make sense to users—such as offering *Policies & Procedures* in one area and *Application Links* in another. This type of structure is typically much more effective than organizing site information according to department or divisions.

Each content page includes a heading at the top defining the page's content. Side navigation appears with expandable menus showing users where they are and where they can go within that section of the site. Links clearly stand out from text due to their color.

The site incorporates aspects of social media throughout. Article pages allow users to comment on or rate the content. Comments can be entered at the bottom of each page and users can rate content by clicking on any of five empty stars at the bottom of the story.

With so many content contributors, it's important to know who is responsible for what site content, both to govern the content as well as for employees to know who to contact with questions or problems. Each page has a page content owner listed at the bottom, along with the date that the item was last modified.



Hi, Heather Masters

elink | Team Sites | elink + Team Sites | Section | People

Search elink Search

Advanced Search

ENBRIDGE elink

Me & My Career | Our People | Policies & Procedures | News & Events | About Enbridge | Application Links | Support & Resources

Thursday, May 21, 2009 11:42 AM MST

You are viewing content for: Business Unit: Enbridge East

Text Size : + - Print Email This Page

Country: Canada

Aboriginal & Native American Policy

- elink Training
- Finance & Travel
- Governance & Communications
  - Corporate Governance & Disclosure
  - Corporate Social Responsibility
    - Aboriginal & Native American Peoples
      - Aboriginal & Native American Policy
    - Community Investment
  - Internal Communications & Branding
  - Privacy
- Human Resources
- Information Technology

Enbridge recognizes the history, uniqueness and diversity of Aboriginal and Native American Peoples. Positive relationships with Aboriginal and Native American Peoples, based on mutual respect and trust, will help them and us to realize our aspirations, and will help Enbridge to reach our strategic business objectives.

Enbridge commits to forging mutually beneficial relationships with Aboriginal and Native American Peoples in proximity to its projects and operations. To achieve this, Enbridge will be governed by the following principles:

- We recognize the legal and constitutional rights possessed by Aboriginal and Native American Peoples in the respective jurisdictions in which they reside.
- We respect the traditional ways, Aboriginal and Native American heritage sites, and the relationship that Aboriginal and Native American Peoples have with the land and the environment.
- We engage in forthright and sincere consultation with Aboriginal and Native American peoples about Enbridge's projects and operations which have an impact upon their legally and constitutionally protected rights.
- We commit to working with Aboriginal and Native American peoples to achieve sustainable benefits for them resulting from Enbridge's projects and operations, including opportunities in training and education, employment, procurement, business development, and community investment.
- We foster understanding and respect for local Aboriginal and Native American Peoples among Enbridge's employees and contractors.

In order to put the above principles into action, Enbridge commits to the following:

- Enbridge will offer the opportunity to First Nations and Native Americans to purchase equity in certain new green field projects, where appropriate.
- Enbridge will offer sole-sourced contracting opportunities to qualified Aboriginal and Native American suppliers and contractors where appropriate, and will encourage joint venture opportunities between Aboriginal/Native American businesses and non-Aboriginal/Native American businesses when it builds capacity and supports mutual business interests.
- Enbridge will implement measures to enable Aboriginals and Native Americans to become part of our permanent workforce at a level that is representative of regional demographics, and encompasses a wide spectrum of career levels.
- Enbridge will enter into Agreements with Aboriginal and Native American peoples, where appropriate, to support training, environmental stewardship, community investment and other initiatives that will help build and sustain Aboriginal and Native American communities.
- Enbridge will continue to invest in Aboriginal and Native American communities in keeping with our broader commitment to Corporate Social Responsibility.

This commitment is a shared responsibility involving Enbridge and its subsidiaries, employees and contractors, and we will conduct business in a manner that reflects the above principles. Enbridge will provide ongoing leadership and resources to ensure the effective implementation of the above principles, including the development of implementation strategies and specific action plans.

Enlarge Image

We respect the traditional ways and heritage of Aboriginal and Native American Peoples.

Comment About What You Read?
Rate This Content

Content Owner
Teresa Homik

Last Modified
Apr 30, 2009

Enter the comments

Select the Rating *

Submit

* Ratings will be made public only for news articles.

Terms Of Use | Privacy | Help | Contact Us | elink Feedback

© 2008 Enbridge Inc.
The Contents of the Enbridge Intranet are confidential.

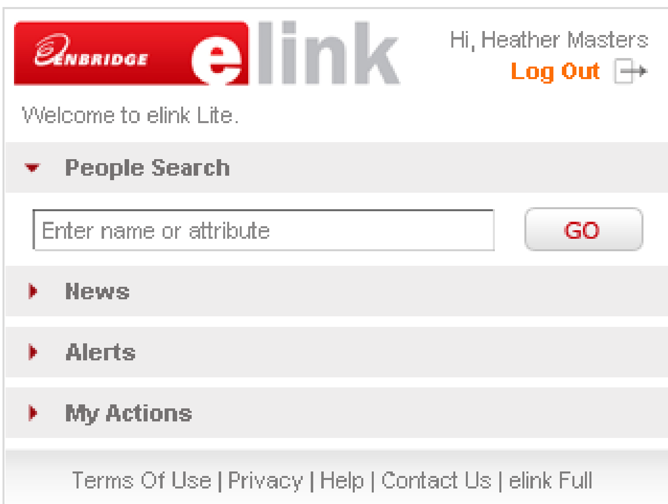
Pictured: The site's clean design is maintained through the use of templates in the CMS. Each page includes the name of the content owner and the date the information was last modified.

Team members recognized a need for all employees to have access to the site, whether those employees were accessing information at desktop computers, through cell phones, or in remote locations with low-bandwidth connections.

Rather than subject mobile and low-bandwidth users to a poor experience using the main, feature-rich site, the team used style sheets to create elink Lite. The Lite not only enables quick downloads, its content is also carefully considered to provide users with only the most essential information.

The Lite provides a subset of the main site's content, with an emphasis on providing information that is most useful or most frequently updated. It offers four simple homepage links—to people search, news, alerts, and actions—giving users quick access to the information they're most likely to want and need. The Lite is carefully crafted to work on all company-issued BlackBerry models, but is optimized for the most popular model.

Because a main goal in designing the Lite was to engage all employees, determining the best way to accommodate them—whether they were at a desk, out in the field, or working a pipeline construction project—was a critical task.



Pictured: The elink Lite mobile homepage offers limited but carefully considered content. The site provides access to mobile users as well as employees in remote locations on slow connections.

Each consideration in site development and enhancement to the Enbridge site reflects the company's focus on providing a central source of information to employees. The employees themselves are a crucial element on the site. The importance of employees is shown in every aspect of the personalized site, from employee photos in the masthead, to the 300 content contributors working to keep content fresh and interesting, to the specialized site designed specifically for remote or mobile users.

BACKGROUND

In 2007, when Enbridge announced a large growth strategy initiative, the company didn't even have an effective method to communicate with employees in all business units. "The existing portal was plagued with outdated content, structural deficiencies, and poor content organization," says Sean Stratton, Manager IT Shared Services.

"Many employees were dissatisfied due to the difficulty in using the platform, the ability to find relevant information, and difficulty navigating through the website and using the search tools."

The employee survey illuminated the great dissatisfaction users had with the site; as we noted earlier, most users said they were "not satisfied" or "very dissatisfied." As a result, employees were using other communication channels to get information, such as individual business units using and maintaining multiple newsletters. Given this, creating an effective communication solution was a priority for the company's leaders.

"Senior management was keen to find an intranet solution that would meet the needs of employees and provide a single source of communication for the company," says Stratton.

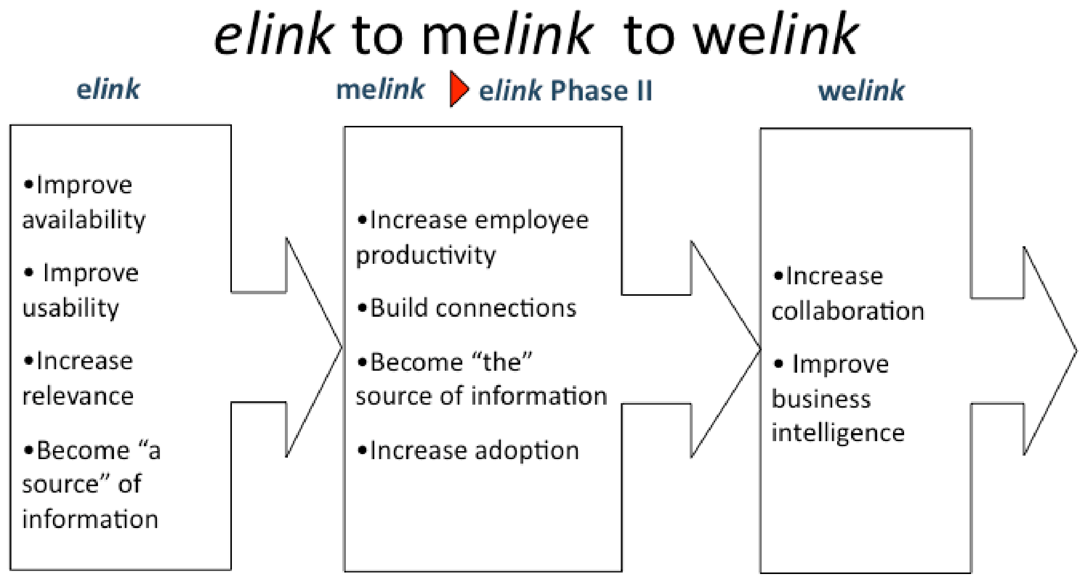
A Phased Approach

Company leaders decided to address the site's shortcomings by initiating a complete site redesign. To make this work, senior management adopted a phased approach. The project's planned progression is from *elink* (Phase I) to *melink* (the site as it stands today) to *welink*, a moniker adopted by the team to express the site's direction toward enhanced collaboration:

- **Phase I (*elink*):** This first phase focused on delivering most of what employees had been asking for and what they had identified as deficient in the previous intranet. This included a dedicated section for communicating company news to employees as well as HR, Finance, and IT content. Policies and procedures were also added to the site along with added functionality, including automatic authentication based on the user's system profile. The personalized authentication enabled the company to provide relevant information for each user. Access to external applications was also provided and search was added as a global element on every page. Users could conduct people or content searches; the team also added section-specific search to the site.
- **Current site (*melink*):** Rather than being a distinct phase, melink is more of a transitional stage the site is passing through as it progresses from providing core functionality to its fully realized incarnation as a single source of all things Enbridge for users across the organization.
- **Future phases (*welink*):** Building on the success of the site so far, the company is now poised to move forward again. The chart below provides a visual explanation of the planned progression. The overarching direction is to provide users increased functionality and collaboration tools.

  Though "welink" isn't a formal name, it conveys the sense of community the site is moving toward. Whereas Phase I was focused on providing basic functionality and establishing a base to work forward from, melink moved elink toward greater usefulness for the customer. It did this by increasing connections between users and user groups and increasing adoption of the site as the key source of information across Enbridge.

  The next logical in the progression from "me" to "us" is welink, which will provide even greater collaboration functionality, business intelligence capabilities, and more in-depth integration between tools and systems. Thus, elink will truly be the “one source” for Enbridge staff to access everything they need to work effectively and efficiently, as individuals and as groups.



Pictured: This diagram shows the site’s progression from providing basic functionality to its current user-focus (“me”) toward the planned community (“we”) focus to better serve the organization.

Pictured: An example of the previous intranet before the redesign project.

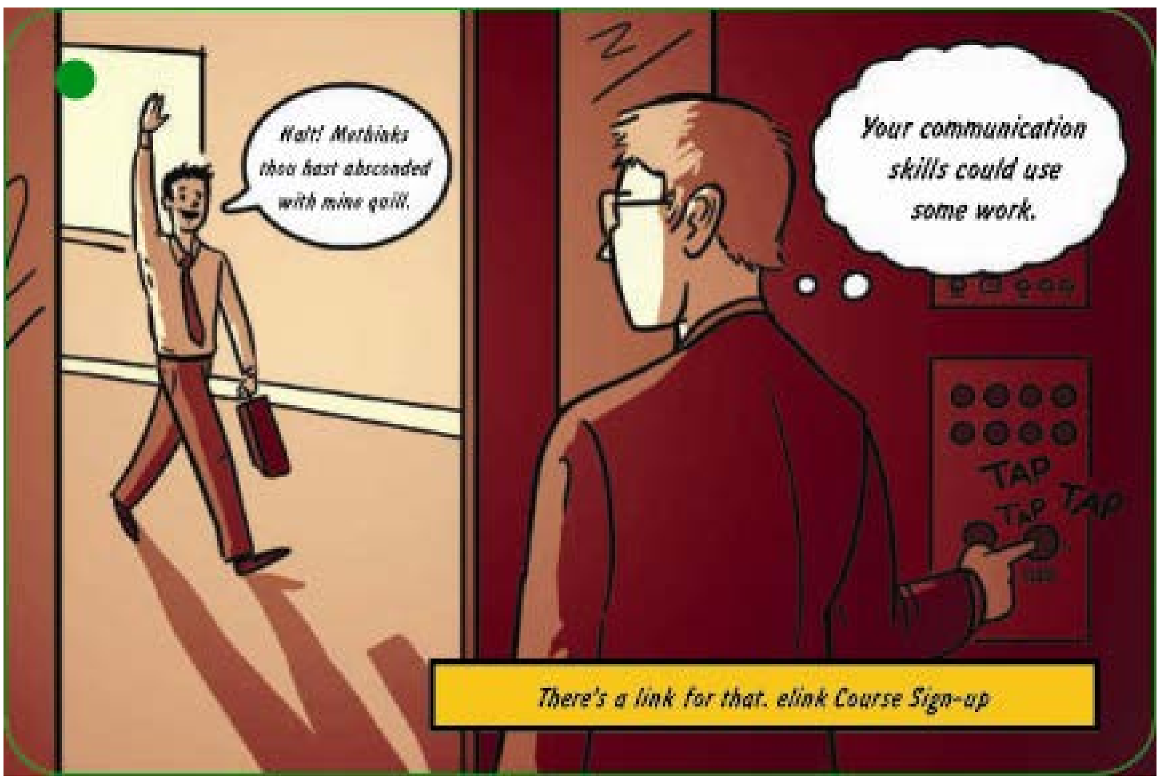
Looking Ahead

Any smart intranet team recognizes that an intranet requires constant attention if it's to remain valuable for its users. The Enbridge team is committed to that kind of constant tending.

"It requires constant attention, development, and evolution to keep pace with user expectations and demands—as well as new technologies," says Mark Murray, Manager Enterprise Systems.

Therefore, the company's roadmap includes a continuing and deeper integration of the intranet with the existing SharePoint environment. "This is resulting in an increasingly seamless blend between the intranet and the Enterprise 2.0 features of *Team Sites* and *My Sites*," says Murray. "Additionally, time will see the addition of business intelligence content, initially in the form of formatted content, and later in the form of searchable and user-developed content."

The intention of ongoing enhancements is to continue to increase the site's value to users and the relevance and timeliness of elink information.



Pictured: This is one of the print ads created as part of the elink launch communication plan. The plan was put in place to drive awareness and adoption of the new site.

INTRANET TEAM

Seven people comprise the core intranet team at Enbridge:

- Program manager
- Program administrator

- Business analyst
- Editor-in-chief
- Technical support staff (3)

Pictured: The intranet team. (Back row): Swaroop George, Mark Murray, Sean Stratton, Jennifer Cageorge; (front row, left to right): Brent Poohkay, Lauren Linnell, John Hanlon, Andrea Legault, Glenn Fullerton, Leandra Schrag.

Evolving Ownership

During the project's planning phase, IT leadership engaged business sponsors from across the company to ensure the successful deployment of the new intranet. The first step in this process was to ensure that the project was not viewed as an IT project. This strategy, of both distancing the project from being "an IT project" and also engendering cross-organizational support is a tactic many teams use to garner the kind of support needed to get an intranet project off the ground and ultimately solidify its place within the organization.

"We pulled together a team of top thinkers from across business functions to contribute ideas, hone project parameters, and rally the organization to embrace change," says Brent Poohkay, Chief Information Officer.

Leadership was shared across HR, Corporate Communications, Finance, and IT. Over the course of the project, more than 100 employees were directly involved in the design.

"By involving business leaders and employees during the critical design phase, we were able to garner widespread support for this initiative, building the strategic foundation needed to get results," says Poohkay.

A long-term communication plan was developed, highlighting the project's business impact. Communicating the project vision in this way generated enterprise-wide excitement.

"The project received unprecedented cooperation and buy-in from all of Enbridge's business units," says Poohkay. "Today, 95 percent of employees use elink, and the new communications capabilities are fundamentally changing the way employees interact, work, and access information."

Over time, Corporate Communications, Finance and HR have become key partners with IT in delivering and evolving the elink intranet. "This is very different from our previous intranet deployment, and is one of the major reasons for our success this time," says Murray.

Along with the site redesign came the need for a more comprehensive editorial staff. This new staff includes an editor-in-chief, site managers for each business unit, and content owners, authors, and approvers. Close to 300 people from across the enterprise and a range of functional areas (such as HR, finance, and health and safety) are now involved in the intranet content in some capacity.

BUDGET

Most companies are unwilling to disclose actual budget figures for projects such as this; Enbridge is no different. But the company did say it had a "fair-sized budget" for the project.

"We benchmarked with a research firm to ensure that it was an appropriate amount for a company of our size," says Murray. "Much of the cost of the initial deployment, however, was time spent properly planning in terms of needs, gaining employee input and feedback, and building an effective partnership between IT and the appropriate business areas—primarily, Corporate Communications, Finance, and HR. With these partnerships firmly in place, further investment has been less costly and it's been far easier to gain agreement on the direction of our intranet going forward."

Murray also says that, operationally, the ongoing technology costs are relatively low given the company's reliance on an established SharePoint platform. "We have three dedicated IT staff to provide various levels of technical support," he says, "and dedicated Corporate Communications staff operating as the editor-in-chief."

In addition, there are many content authors and approvers in place across the various functional areas and business units within the company.

GOVERNANCE

Roles and Responsibilities

The following table outlines the roles and responsibilities of each of the various constituencies involved in managing and maintaining the new Enbridge intranet:

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
elink Steering Committee The elink Steering Committee is composed of executive members recruited for their ability to develop support for the number and nature of changes required for this initiative. The elink Steering Committee is a static executive committee that is accountable for the overall elink Program and rollout plan across Enbridge.	• Establish the program vision and strategy • Approve the elink Program Charter, including success factors and budget information • Approve the program's key-performance indicators (KPIs), metrics, and targets • Drive the alignment of the strategic direction for the elink initiatives across business units • Ensure that the program adequately addresses regulatory requirements • Oversee progress of the elink Operating Committee and make recommendations for changes where required • Approve the Operations Committee's recommended actions in a timely manner for all major risks, issues, and change requests (for example, exceeding contingency) • Act as champions for the elink Program's implementation within the respective business units and across the enterprise
Operating Committee The elink Operating Committee is the decision-making committee made up of a team of people from across business units and across functional areas. They have the responsibility to develop business-driven implementation plans and execute on the plans required to implement the roadmap.	• Create and manage a road map for elink initiatives based on the business requirements determined by the Steering Committee's vision and strategy • Establish the elink Program Charter • Determine the allocation of the approved program budget between the various initiatives • Review and approve any recommended changes to project or program budgets as presented by the elink Program manager • Present any requested budget adjustments to the Steering Committee for approval • Define, rationalize, and recommend elink initiatives to achieve program objectives • Define success factors, KPIs, metrics, and targets, and measure progress against these throughout the program • Ensure the overall functional quality of the elink product user experience • Identify other governing bodies to initiate relationships with • Communicate and coordinate the activities of elink initiatives with various parties across business units and organizational functions • Recommend that elink solutions are deployed in a way that adequately supports regulatory requirements across the organization • Approve requests for new functionality of the elink product • Escalate issues to the elink Steering Committee

	• Organize smaller "task groups" and assign specific elink tasks and activities • Define and recommend alignment with and employment of enterprise architecture initiatives and standards • Define and recommend alignment for all elink initiatives with all stakeholders and raise any alignment issues to the Steering Committee
Content and Branding Task Group The Content and Branding Task Group supports the business units in achieving their communications goals and objectives via the use of elink as a primary source of access to people, information, and technology. Key members of the team are responsible for specific duties that support the mandate.	• Define and maintain overall adherence to the editorial/style guidelines • Contribute to developing the elink system's business requirements and future direction • Determine and adjust the style and content management structure (roles and responsibilities of site managers, owners, approvers, editor-in-chief, authors) • Approve requests for new functionality requirements of the elink product in collaboration with the elink Operations and Applications Task Groups • Make recommendations for new functionality approval to the Operating Committee as necessary
Editor-in-Chief The editor-in-chief ensures that the content's overall quality, timeliness, and appropriateness meets the objectives set out for the intranet.	• Ensure writing and style standards established for the site are adhered to by content owners, authors, and approvers • Ensure that voice and language are consistent and overall tone and quality is appropriate • Maintain editorial control of content on the enterprise-wide news section to ensure content appropriateness, quality, and appearance • Maintain editorial control of the elink homepage to ensure appropriateness of structure and appearance • Provide a final check to ensure that sensitive or confidential information isn't disclosed on elink • Provide site managers with effect guidance and advice on content • Measure and evaluate elink to ensure it is meeting its objectives
Program Manager The program manger is responsible for ongoing execution of the elink Program and is viewed as the operational leader of the entire elink initiative. This person's mandate is to lead the elink Program to successful integration	• Provide effective leadership of the overall elink Program implementation • Establish success factors, business measurements, and milestones for the elink Program • Resolve matters that adversely impact the elink Program • Manage elink Program resources • Manage coordination, scoping, planning, reporting, and execution of the approved program charter

across the enterprise.	• Select and manage vendors • Develop and deliver an effective change and incident management program • Manage program communications • Ensure the development and maintenance of the elink Program roadmap and manage the approved budget and resources • Create subcommittees as required and ensure their effectiveness
Site Managers Site managers ensure that the overall quality and appropriateness of content from their respective business units meets the objectives set out for the intranet. They also provide support to business unit content contributors.	• Monitor the overall structure and design of respective elink business unit pages • Monitor the business unit page content on an ongoing basis • Support leaders, content owners, authors, and approvers in using elink as a communications tool by providing guidance on the type of content that can be added to elink and where that content should be located • Collaborate with other site managers to ensure consistency of content between business units • Collaborate with content owners, authors, and approvers on a timely basis to ensure they understand their accountabilities and authorities • Provide a third-level check to ensure that sensitive or confidential information isn’t disclosed on elink
Content Approvers Content approvers post content for their respective business units to the appropriate elink sections.	• Ensure that content is factually correct and complete to the best of their ability • Ensure that published content adheres to the established publishing standards • Provide a secondary check to ensure that sensitive or confidential information isn’t disclosed on elink • Review material and ensure it’s approved in a timely manner • Ensure that content is being published in the correct location and targeting the appropriate business units
Content Authors Content authors post content to the appropriate business unit’s elink pages.	• Create and post content that is both factually correct and complete in a timely manner • Monitor and adhere to the established publishing standards • Review content to ensure that it’s consistent with other business units and not duplicated across business units
Content Owners The content owner ensures that content is relevant to the needs, goals, and values of their business	• Ensure that content for a particular elink page/site is properly collected, reviewed, published, and maintained on a timely basis • Review and adhere to elink editorial guidelines on a timely basis • Manage business unit content submissions from

unit and that content is accurate and timely.	inception to post • Maintain quality control and quality assurance for the business unit's elink content • Promote and encourage effective business unit use of elink • Manage business unit content according to expiry schedule • Ensure that sensitive or confidential information isn't disclosed on elink • Ensure expired or irrelevant content is removed or updated on a timely basis • Review other business unit content to ensure consistency of content and avoid duplication of content

Pictured: This chart shows how various groups within the organization participate in elink governance. Their roles and responsibilities are outlined above.

Timeline and Milestones

The redesign started in April 2007 and the new site launched in September 2008.

"Prior to April 2007, a significant amount of effort was undertaken to validate and ensure all stakeholders were committed to the need for an intranet, and the fact that our current intranet was not viable," says Murray. "This was the beginning of our end-user engagement as well—initially through a survey to solicit feedback about the current intranet and the level of demand for one. The value of this time spent cannot be overlooked, as it was instrumental in a successful new deployment."

PHASE I	
Functional Track	
April 2007	Discovery/conceptualization fusion
May 2007	Scoping, estimation, and planning
June–July 2007	Detailed design/executable architecture release
August 2007–June 2008	Development, functional testing, and performance testing iterations (a total of five agile-based iterations)
July–August 2008	Pilot release Warranty period
September 2008	Go-live
September 2008–April 2009	Support of minor enhancement releases
Content Track	
August–September 2007	Content cataloging and identification
October 2007–June 2008	Content migration/creation, review, and approval
Governance	
May 2007–July 2008	Content governance process establishment, role definitions Resource identifications and role-resource mapping in various business units/departments
June–August 2008	Technical governance model and federated support setup

PHASE II	
Functional Track	
February 2009	Discovery/conceptualization fusion
March 2009	Scoping, estimation, and planning
April 2009	Detailed design
May–September 2009	Development, functional testing, and performance testing Testing iterations
August 2009	Release 1 live
October 2009	Release 2 live
October–November 2009	Warranty period
Content Track	
March–September 2009	Content migration/creation, review, and approval for remaining tenants
Application Migration	
May–December 2009	Application migration for remaining tenants

GOALS AND CONSTRAINTS

One of the primary goals for the new site was to figure out the best way to accommodate the needs of constituencies from across the organization. Company leaders wanted to find ways for these users to take ownership over their parts of the site. However, this goal was also a constraint for the design team, as it had to find solutions that met the needs of the individual groups without compromising the holistic vision for the site.

Enbridge is comprised of six different business units, all with different leadership and culture. In redesigning the intranet, the design team spent a lot of time reaching consensus on how to accommodate each of the business units' individual needs while providing a sense of unity and community in one fluid design.

Many of the user complaints from the previous portal were related to stale content. In redesigning the intranet, it was decided that each functional area needed to own its content. So today, close to 300 people are part of the editorial team, but "selling" the various functional areas on their responsibilities—and then training them accordingly—required significant effort from the team.

Working with Agencies

The design of the intranet was a collaborative partnership between an outsourced agency, Sapient, and the internal team. Sapient brought best practice experience and design expertise to the planning and design process. Sapient was also charged with site development, while the internal team handled content and user support.

“Sapient brought a wealth of knowledge and best practices on building intranets,” says Stratton. “Their facilitative approach helped our internal team make knowledgeable decisions.”

Today, all intranet team roles are internal including program management, governance, editorial, and technical support. Only planning and development for major enhancements is outsourced.

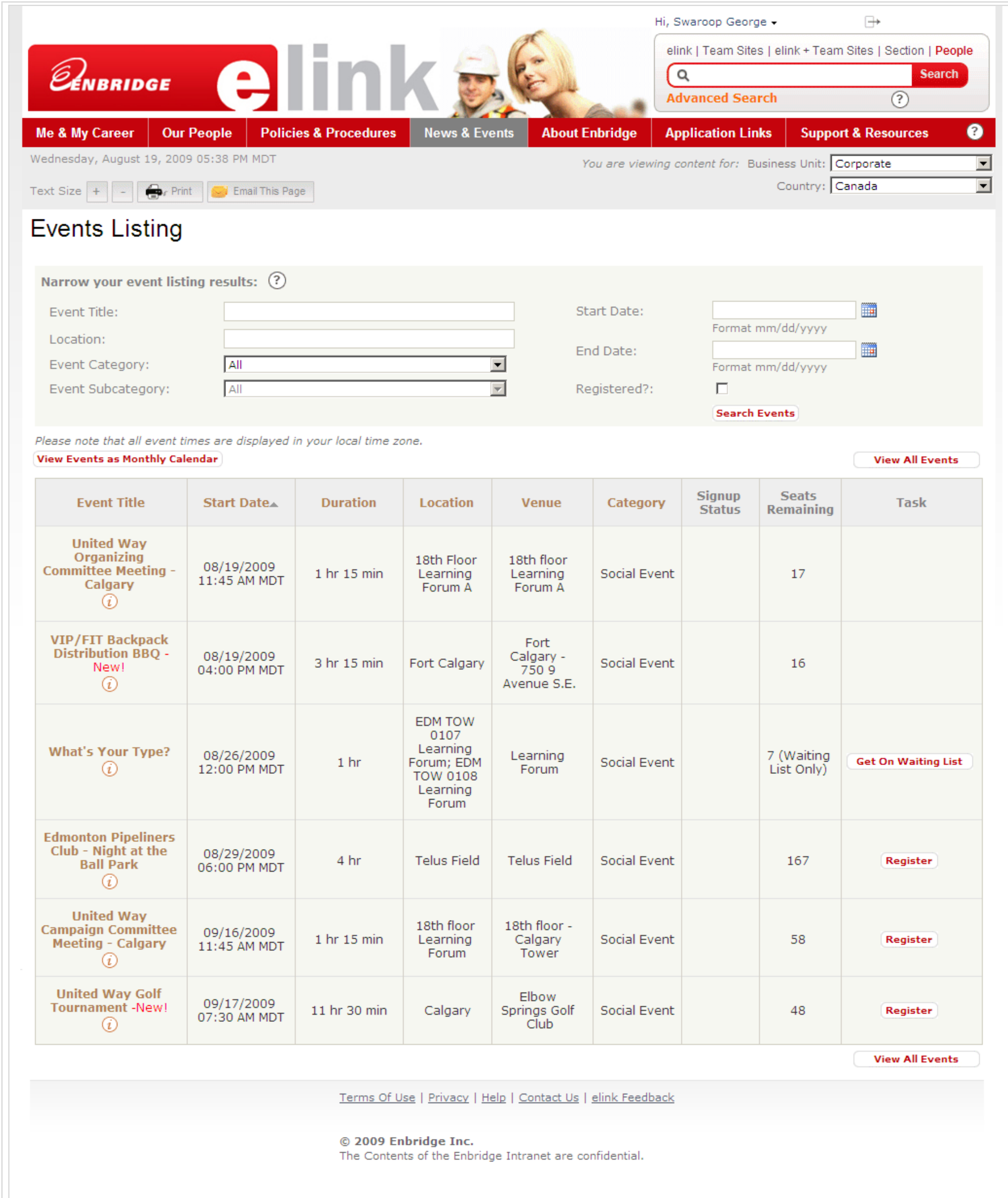
USERS

The Enbridge intranet’s users are all of the company’s 6,000 employees and additional contractors who work in more than 200 locations across North America. These users spread across the organization’s six separate business units. Enbridge intranet users represent a wide variety of roles from managers to accountants to engineers to field workers such as truck drivers and pipeline construction workers.

USER TASKS

Site users can accomplish many tasks, including:

- Access timely news and information
- Search the people directory and access *My Sites*
- Find answers to questions through FAQs
- Access centrally managed links to *Team Sites*
- Obtain information and sign-up for training and events
- Share ideas through comments and blogs
- Access tools, including those for Finance and HR
- Access employment information such as policies, benefits, and pay stubs
- Check weather, stocks, and RSS Feeds
- Buy and sell personal items and volunteer services



Pictured: The event sign-up page where users sign-up for company events.

DESIGN PROCESS AND USABILITY

The design team took an iterative design approach to develop the new site, starting in August 2007 when the first prototype was developed. Then they conducted extensive user testing. Information obtained from the user testing was incorporated into the next iteration of the design. This process was repeated five times from August 2007 to June 2008.

"We knew we needed to deliver a solution that would meet the needs of employees," says Stratton. "As a result, we chose to do a lot of user testing along the way."

So, instead of setting a plan at the onset, the team used an iterative design process to guide its direction. As Stratton points out: in August 2007, team members didn't know what they would be working on in December 2007. So, they relied on user feedback from the prototype testing to direct plans for the project. The research methods they used during the iterative design process included:

- Detailed email user surveys
- Stakeholder focus groups
- Sapient's industry best practices
- User experience testing of the design prototypes
- Examination of server logs
- Feedback gained from the "user feedback" link on the site pages

Following is a description of how some of these methods played out.

User Testing

The team relied on user testing to test the IA and graphic design. "We conducted a number of rounds of user experience testing to test our proposed IA and graphic design," says Jennifer Cageorge, Advisor, Web Communications. "As we did with our design efforts, we reached out to individuals from across the company in different business units, geographic locations, and roles to ensure we were hitting the mark with everyone."

By reaching out across the organization, the team gained the trust of the users. The users were happy to have their opinions heard and they were willing to share them freely. For example, participants responded positively to having employee photos in the masthead but were quick to say they wanted all Enbridge employees represented, including office types *and* field workers.

"There was a lot of concern that the intranet wouldn't provide the specific business unit information they needed and wanted," says Cageorge. "Using an enterprise tool to communicate and share information was a big cultural shift and they shared their concerns. Everyone was pleased we were taking the time to ask what they thought and testing the design."

Satisfaction Surveys

The team also administered pre- and post-redesign satisfaction surveys to query users on their opinions about certain aspects of the site. The surveys produced several findings:

- **Satisfaction with elink was high.** Users expressed high levels of satisfaction with elink overall (61 percent rated it 4 or 5 out of a possible 5). This was significantly higher than measured for the previous intranet in 2006 (when only 18 percent rated it 4 or 5). This score was also the highest that the independent survey provider had seen for intranet satisfaction.

- **Users had positive perceptions of functionality, navigation, and site appearance.** Survey participants said they experienced significant improvements over the previous intranet on all measures. Specific components that users perceived positively included availability of language choices, size of the text/fonts, credibility of information, and the site's overall visual appearance.
- **"Ease of use" was the strongest driver of satisfaction.** Advanced analysis of the data revealed that the site's ease of use was the most important driver of overall satisfaction. Content quality and the site's look and feel were also strong drivers of satisfaction.
- **"Ability to add value" was the strongest driver of likelihood to recommend.** While the site's ease of use and content quality were important drivers of users' likelihood to recommend, the biggest factor was the site's ability to add value (that is, to provide information/tools users need to do their jobs well, and to facilitate their ability to customize information and stay connected with colleagues).

Usability Best Practices

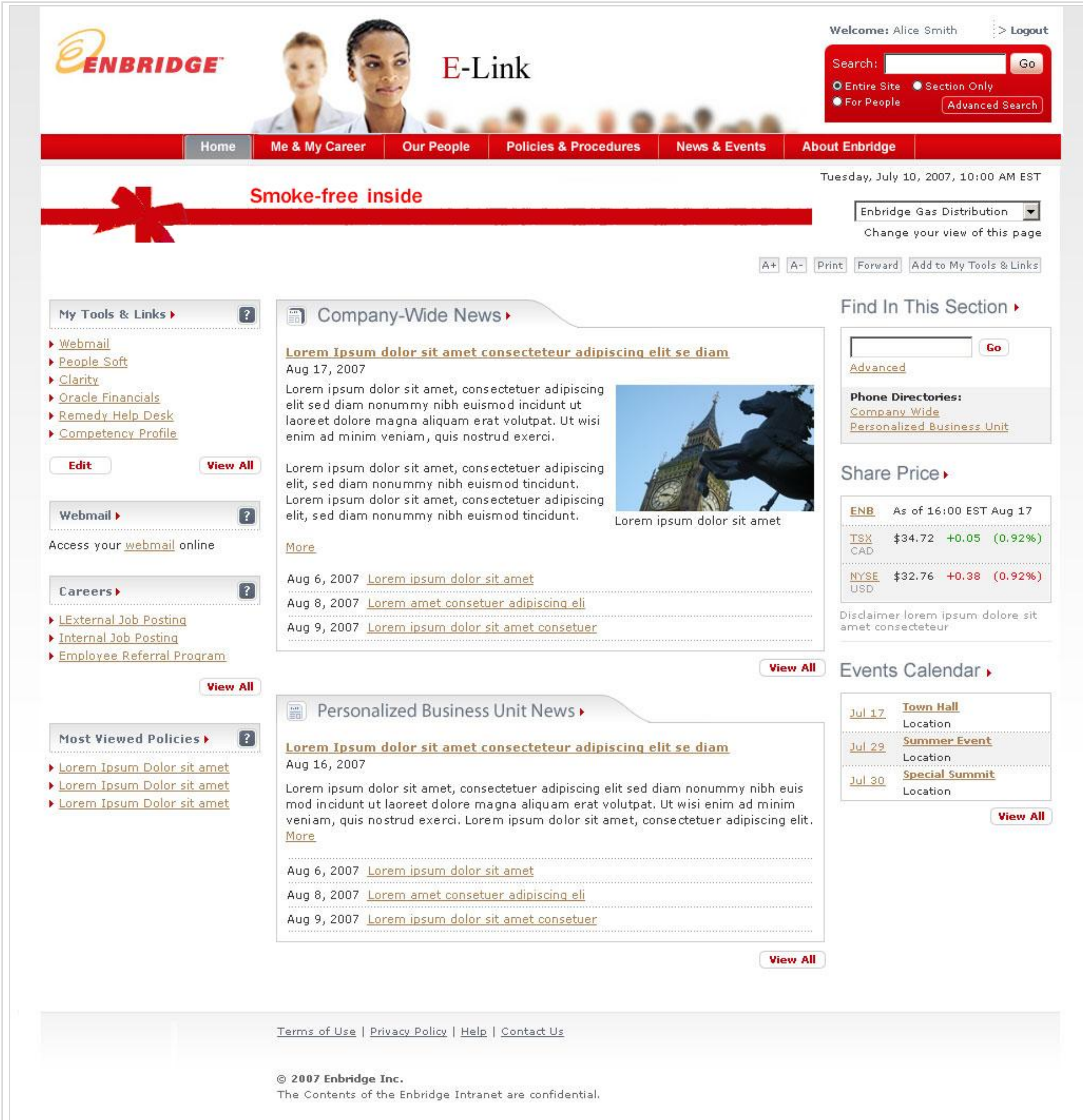
Throughout the design process, the Enbridge team learned a lot about what works and what doesn't. Here, they share some of their insights:

- **User-centric, not department-centric.** "Users don't really like the departmental organization of a site. They want to be able to get to information with as few clicks as possible. Organizing the site according to user functions/tasks seems to be a big win with users."
- **Make it personal**. "Try and appeal to the users by making it personal using a variety of methods such as mastheads with photos of real employees; personalized content, such as business-unit specific news; capability for customizing the homepage to show selective content; room for recognizing service milestones or welcoming new hires; and delivering user specific information, such as *My Actions*."
- **Bring social media to the enterprise.** "Employees love having their own personal space in the intranet as much as they love the collaboration capabilities provided by a *Team Site*."
- **Improvements in participation come from increased communication channels.** "Communication channels such as leadership blogs, forums of discussion, and feedback capabilities including content rating and comments are big wins towards usability."
- **Know your users and keep it simple.** "Understand the user demography—average age, fields of work, etc. For example, a totally 'cool' looking site with a lot of Flash/Silverlight components might not always work with some of the senior employees. Keep it simple. The purpose is to provide productivity while providing a sense of belonging. Employees have to relate to the intranet.

- **The most important page is the homepage.** "Home is all about putting things in front of users that they might not necessarily navigate to or be aware of. It's also the place where we put some of the big adoption drivers, such as links to frequently accessed applications, and things that drive traffic like the stock price, the weather, etc."
- **Sticking to user-centric design is exceptionally important.** "It was a hard cultural change for our internal team to move away from a departmental-organized site design. But, as it turns out, users really don't like the departmental organization."
- **Let the site manage the complexity rather than leaving it to the users to decipher.** "For example, in the previous portal, if an employee was looking for information on travel, they would have to know that the travel policy is owned by two different departments. They would have to look in two locations to get all the information they needed about travel. And, on top of that, there would be six different versions in each spot based on the different business units. They then would sort through which one relates to them. Our new design sorts all that out for the user."

Pictured: This screen and the ones that follow show the evolution of the site design based on user testing. This screen is an example of the first prototype developed.

Pictured: An example from the second prototype developed for user testing.



Pictured: An example from the third prototype developed during the design phase.

Pictured: An example of the fourth prototype developed.

URL AND ACCESS

The URL for the Enbridge intranet is: https://elink.enbridge.com. All computers are issued with elink as the default start-up page, but users have the ability to change it. External access is available by https and mobile BlackBerry.

TECHNOLOGY

Evolving the Technology

The previous portal used Livelink and Plumtree. The current intranet uses Microsoft SharePoint 2007 and takes advantage of a full workflow-approval process.

Technology Breakdown

The Enbridge tech team breaks down all the technologies used throughout the site in the following tables:

DEVELOPMENT SOFTWARE	
Software	**Purpose**
Visual Studio .Net 2005	Integrated development environment
SQL Server 2005	Database SQL server
MOSS 2007	SharePoint Server

SharePoint Designer	Creation of master pages and page layouts
Adobe Photoshop	Image creation
Adobe Dreamweaver	Webpage design
Log4net	Application logging framework
XML Spy	Creation of XSLT's
Tortoise SVN	Managing source code and project artifacts
Araxis Merge	Used for two or more files/folders and merge changes
Image Sprite	Performance utility to create image sprites
CSS Tidy	CSS formatting and cleanup

TESTING SOFTWARE	
Software	**Purpose**
Mercury Quality Center 8.1	Defects, next steps, issues tracking. Functional test scripts repository and test tracking, including test runs and test statistics
Mercury Load Runner 8.1	Performance testing, including testing from remote locations

SYSTEM SOFTWARE	
Software	**Purpose**
Windows Server 2003 SP2 Standard Edition (64 bit)	Windows application server
Microsoft SQL Server 2005 SP2 Enterprise Edition (64 bit)	Database SQL server
Microsoft Office SharePoint Server 2007 SP2 (64 bit)	SharePoint server
MS Cluster v5.2	SQL server cluster

HARDWARE			
Physical Environment	**Hardware Specification**	**Purpose**	**Number of servers/parts**
Production	2 dual-core Intel Xeon 3.0+ GHz processors (64 bit), 4 GB RAM, 50 GB HDD—NTFS formatted file system, 1 GB NIC	Front-end Web server	3
	2 dual-core Intel Xeon 3.0+ GHz processors (64 bit), 4 GB RAM, 100 GB HDD—NTFS formatted file system, 1 GB NIC	Application/index server	1
	4 dual-core Intel Xeon 3.0+ GHz processors (64 bit), 8 GB RAM, 200 GB HDD RAID 5, SCSI array device, 1 GB NIC	Database server	2

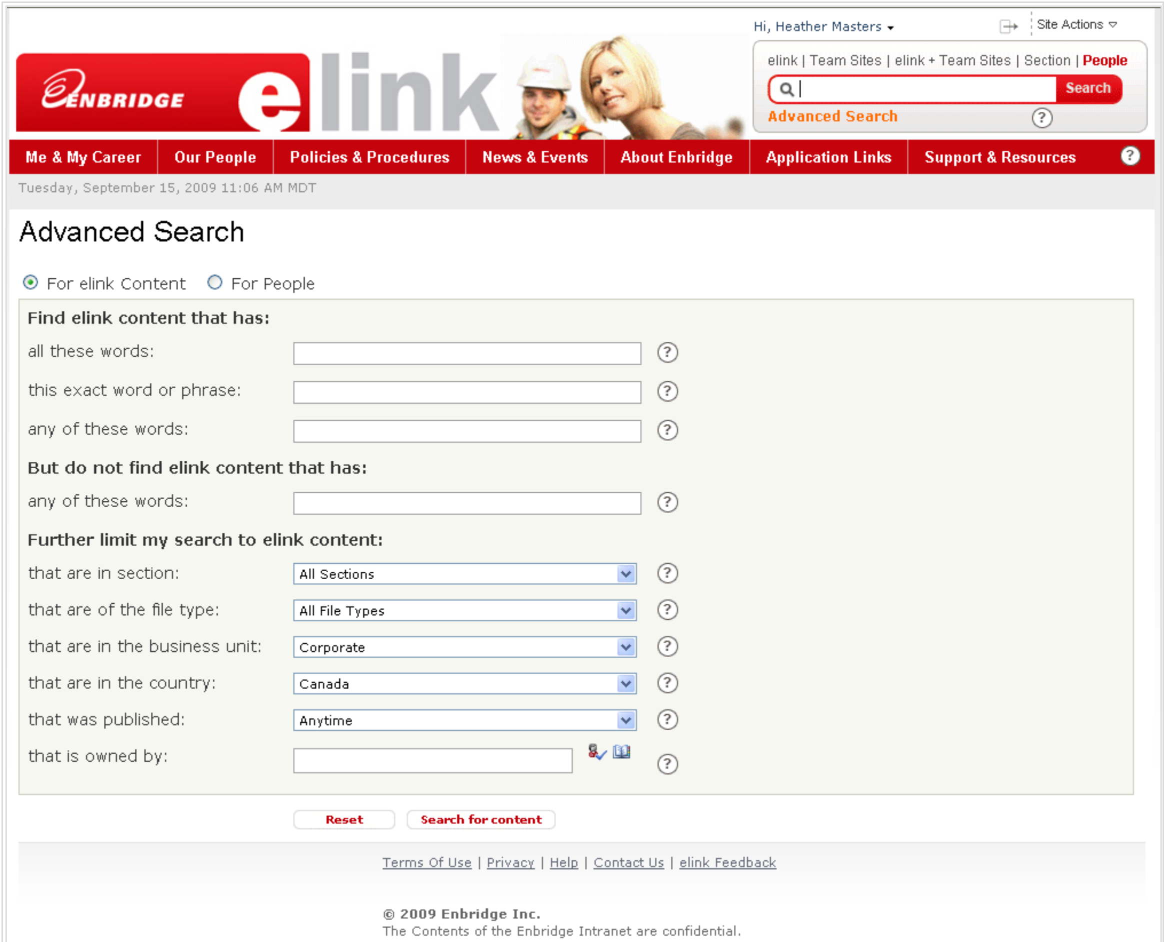
SEARCH

The site uses Microsoft SharePoint Search.

SharePoint search is the latest step in an evolving search platform for the company. One of the criteria the team used in choosing SharePoint was that it contained native search capabilities. “In looking at what technology we would use to support the redesigned site, we looked for a product that had search capabilities,” says Leandra Schrag, Program Manager.

“Our search has been through a few iterations,” says Murray. “elink currently leverages SharePoint technology to search elink and *Team Site* content. The current limitation is that search only applies to the intranet, *Team Site*, and *My Site* content.”

“We are looking at enterprise search,” he says. “As Enbridge digs deeper into enterprise search, elink will be a key interface into that search functionality.”



Pictured: The *Advanced Search* options. Users can do people and intranet content searches.

MOBILE

elink Lite offers users mobile access to the intranet. This version of the site was created for mobile users as well as users in remote field locations who have access to only low-bandwidth network connections.

The Lite version was created using different style sheets than the complete version, so users can also access it from a normal desktop and it will fit desktop screens accordingly.

This low-bandwidth site version features only a subset of the content and functionality available on the complete site. "Functional and content pieces were identified based on feedback from field users on the Phase I capabilities as well as the understanding of what is more valuable for someone who is mobile," says Murray. "The key was to make the most useful and the most changing pieces available on elink Lite."

elink Lite access includes the following core content pieces from the site:

- **People search.** Based on usage statistics, people search is the most used functionality within elink.

- **News.** Employees look to elink to keep updated about the company. News is the site's most frequently updated section, generating as much as 200 articles a month across the different business units (elink content is business-unit targeted).
- **Alerts.** This section features important business alerts and system outage alerts.
- **Actions.** Actions are business-sensitive items that require the user to act.

elink Lite was designed for two resolutions—320 x 240 and 240 x 260—to accommodate devices in the company's BlackBerry device allocation policy, reflecting the density of certain models in use. Murray says specific attention was given in testing to the following BlackBerry models due to high usage at the company: 8830, 8703, 8310 and 8330.

CONTENT AND CONTENT MANAGEMENT

The SharePoint platform also provides content management for the intranet. To fit its editorial needs, the team customized the technology, focusing on the native workflow feature.

As mentioned earlier, one of the redesign's goals was to get functional areas to be more directly responsible for contributing their own content to the site. To that end, the new content management process is decentralized. Each functional area is responsible for managing its own content, including authoring and approving. Site managers are appointed for each business unit with a mandate to ensure the overall quality and appropriateness of content within their business unit.

"Having people in the business areas take ownership of the content on elink has been critical," says Murray. "Not only is this how content is deployed into elink, but every page in elink has the name of the content owner at the bottom. This ensures that users can 'go to the source' when they have questions or concerns, and also when updates are required."

The methodology for managing content on elink is significantly different from what was used on the previous portal. "The content 'owners' or business groups who create and maintain the content, are now responsible for all aspects of the 'lifecycle' of content on elink," says Murray. This means that the groups had to designate staff members whose regular duties included creating content, uploading it to the system, and ensuring it's kept up-to-date and changed when necessary. They are also responsible for creating their pages and making any updates, additions, or changes to those pages.

This required several steps:

- Gaining approval to have managers include these duties as part of the job evaluation
- Establishing contacts within the functional areas that contribute content to elink
- Developing a training plan, materials, and processes to training three different groups of elink content administrators
- Coordinating training sessions

- Working with content administrators to encourage ownership of content management
- Ongoing support of the content administrator group, including remedial training, provision of support guides and Quick Reference Cards
- Providing the local support desks with information to troubleshoot authoring issues

"We have also included named owners for every page of content in elink, which is different from before," says Murray. "This ensures that the owner is the person contacted if content is stale, confusing, or other follow-up is required in the future."

This system also enables the editor or IT to contact authors regarding their content if needed. "In our previous portal, content could become abandoned with no real way to identify its source," says Murray. "This led to outdated content and confusion about when to retire it and its relevance and currency."

Today, close to 300 people are involved in the content process. The editor-in-chief is responsible for ensuring that writing and style standards established for the site are adhered to; generating reports to show dated content and dead links; and ensuring that the proper content owners are notified to resolve problems.

Pictured: The list of reports available to intranet authors to support them in adding and maintaining content on the intranet. It's located in the upper right part of the page for quick retrieval.

Choosing Content Owners

Individuals across the company were already creating, maintaining, and disseminating content, either through the previous portal or through email and so on. The project team felt it made the most sense to have these same individuals continue content ownership and distribution, except now they had one central, easy-to-use environment to share that information.

Workflow

The editorial workflow is multistage and includes participation of these three roles:

- **Content owners** are subject matter experts who provide the site content. Their names appear on all the pages they publish.
- **Authors** create the site content, ensuring proper formatting and applying the writing and style standards.
- **Approvers** receive content from authors via automatic email notification; the approvers then accept or reject the content as the final step of the process.

Approved content is automatically published to the production site.

Templates

There are three main templates available in the authoring environment: news article template, standard article template, and policy article template. All three are similar, with subtle changes such as certain Web parts being available or positioned in different areas. Most authors use the standard article template.

"Distribution and enforcement is simple as we only make the relevant templates available within applicable sections of the site," says Andrea Legault, Advisor, Web Communications, adding that this makes it "easy for authors to choose the correct template."

The team has established writing and style guidelines that all authors are expected to adhere to. These guidelines are reviewed during the training phase and are made available on the site for all authors to access.

FEATURES

The site has many useful features. They fall into four categories—user productivity, community building, user adoption, and improved content management—to ensure that the content is always fresh and accurate. Murray explains each of these categories as follows.

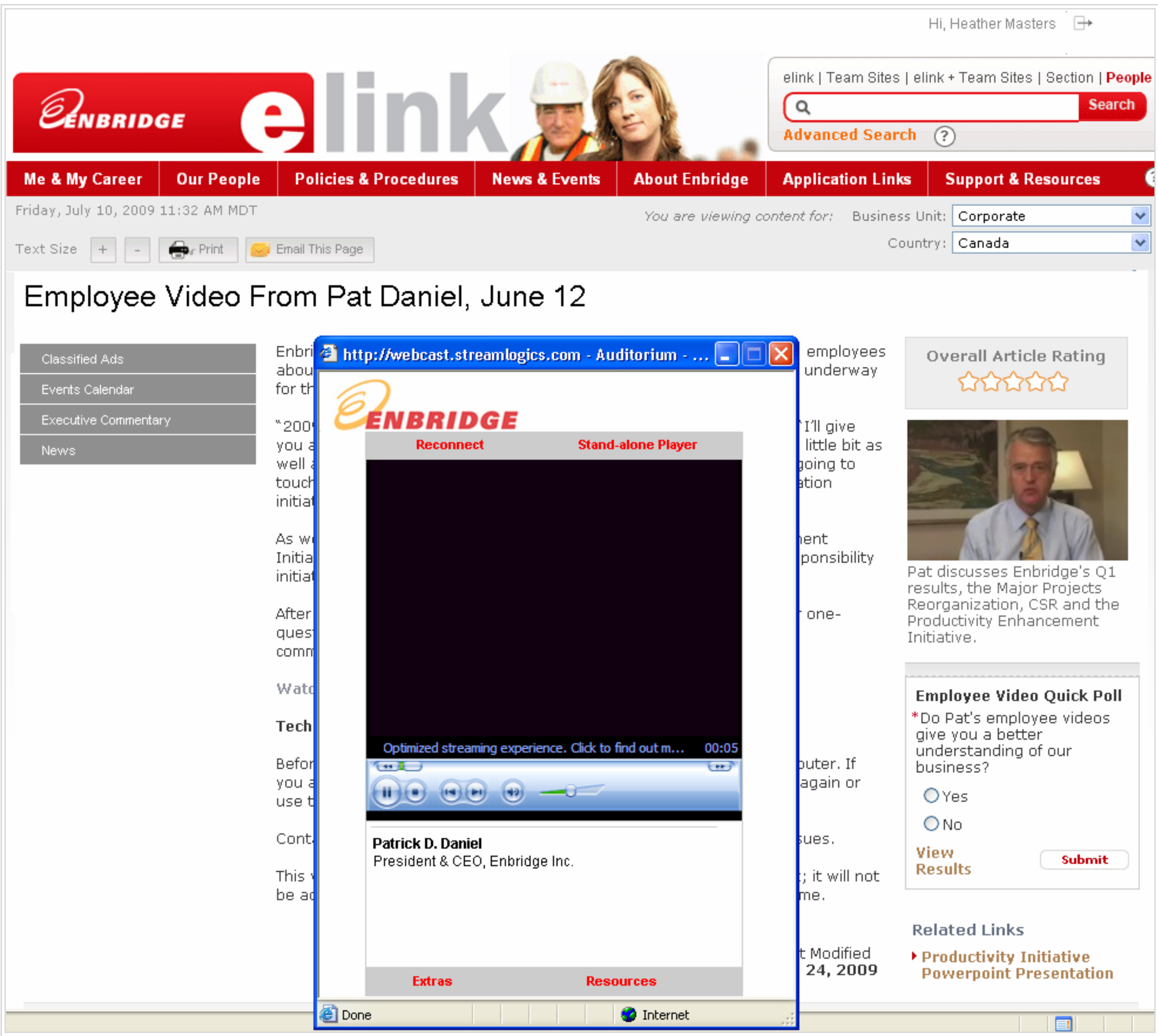
User Productivity Features

- **Homepage *Master Feed.*** The *Master Feed* section of the homepage provides each user with personalized work- and task-related updates to help them be more productive. These include: *My Actions*, *My Notifications*, and *System Alerts,* which all pull content from internal Enbridge systems. *Enbridge in the News* pulls content from external sources. The user can customize the *Master Feed* section to meet their preferences by clicking on the associated edit button.
- ***Advanced Search*.** On the right side of the banner, a prominent open search field lets users search elink, *Team Sites*, and the people directory. Search can be refined further based on a variety of personal information. Advanced people search is the most popular feature of elink.

- **Mobile homepage.** One of the business goals of the intranet redesign was to build a sense of community. This meant that all employees, including those in remote field offices and pipeline construction sites, should have access to the information they need on the intranet. Many of these employees connect to the intranet through a low-bandwidth connection or a BlackBerry. elink Lite was created to provide a quick view of the information users regularly access in their day-to-day work.

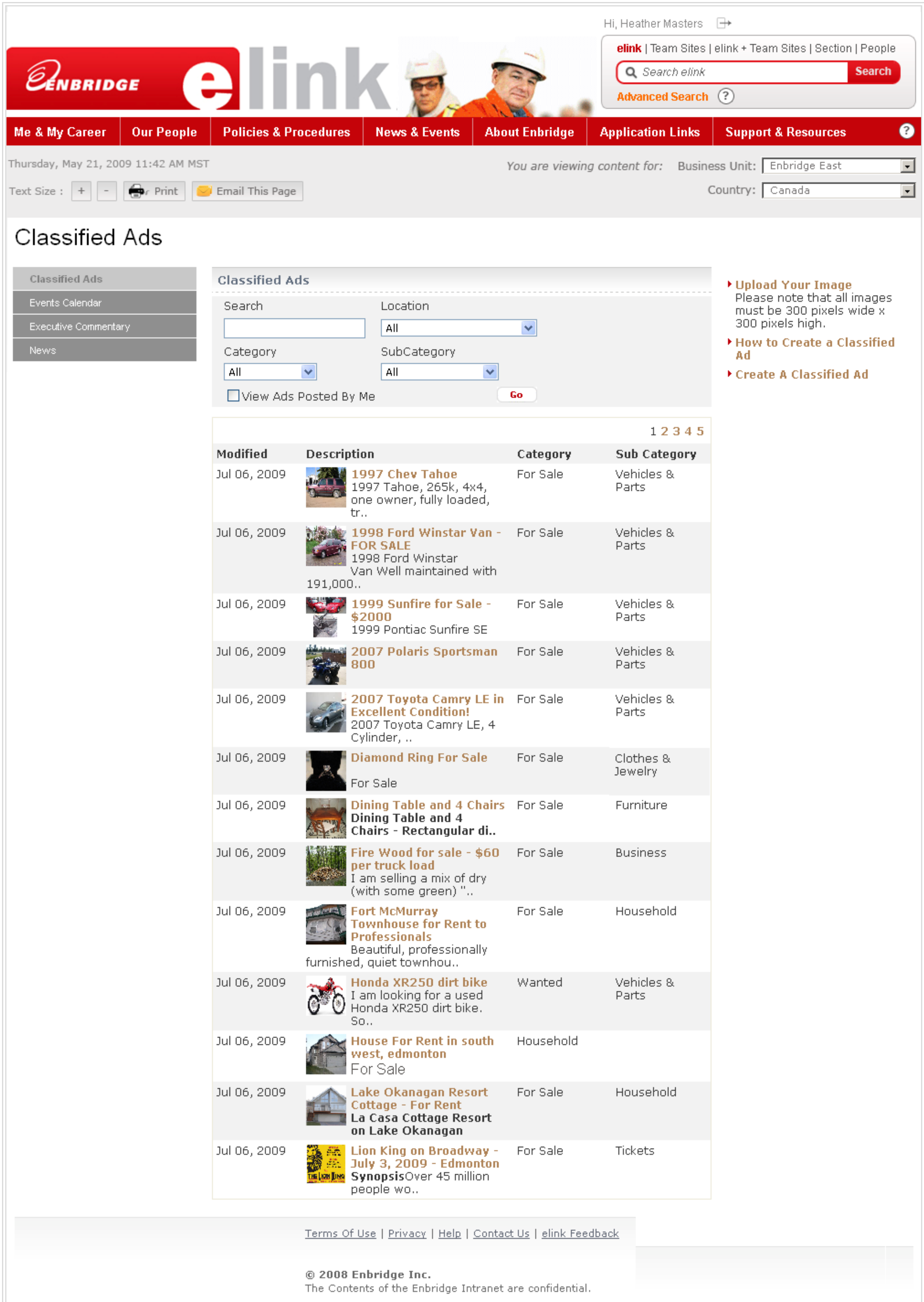
Community Building Features

- **Leadership use of Web 2.0.** Enbridge business unit leaders use social media tools including videos and blogs to share information and insight into Enbridge's strategy and help better connect upper management with employees.



Pictured: The CEO of Enbridge uses video on the site to communicate company messages to staff.

- **Classified ads.** These online ads give employees the opportunity to buy and sell products and volunteer their services. Users can filter ads by category, subcategory, and location. Ads include space for a photo and description. This feature has proven to be a huge draw for the site, with an average of 17,000 hits a month.


Hi, Heather Masters
elink | Team Sites | elink + Team Sites | Section | People
Search elink
Search
Advanced Search
ENBRIDGE
elink
Me & My Career
Our People
Policies & Procedures
News & Events
About Enbridge
Application Links
Support & Resources
Thursday, May 21, 2009 11:42 AM MST
You are viewing content for:
Business Unit:
Enbridge East
Country:
Canada
Text Size :
Print
Email This Page
Classified Ads
Classified Ads
Events Calendar
Executive Commentary
News
Classified Ads
Search
Location
All
Category
All
SubCategory
All
View Ads Posted By Me
Go
Upload Your Image
Please note that all images must be 300 pixels wide x 300 pixels high.
How to Create a Classified Ad
Create A Classified Ad
1 2 3 4 5
Modified
Description
Category
Sub Category
Jul 06, 2009
1997 Chev Tahoe
1997 Tahoe, 265k, 4x4, one owner, fully loaded, tr..
For Sale
Vehicles & Parts
Jul 06, 2009
1998 Ford Winstar Van - FOR SALE
1998 Ford Winstar Van Well maintained with 191,000..
For Sale
Vehicles & Parts
Jul 06, 2009
1999 Sunfire for Sale - $2000
1999 Pontiac Sunfire SE
For Sale
Vehicles & Parts
Jul 06, 2009
2007 Polaris Sportsman 800
For Sale
Vehicles & Parts
Jul 06, 2009
2007 Toyota Camry LE in Excellent Condition!
2007 Toyota Camry LE, 4 Cylinder, ..
For Sale
Vehicles & Parts
Jul 06, 2009
Diamond Ring For Sale
For Sale
For Sale
Clothes & Jewelry
Jul 06, 2009
Dining Table and 4 Chairs
Dining Table and 4 Chairs - Rectangular di..
For Sale
Furniture
Jul 06, 2009
Fire Wood for sale - $60 per truck load
I am selling a mix of dry (with some green) "..
For Sale
Business
Jul 06, 2009
Fort McMurray Townhouse for Rent to Professionals
Beautiful, professionally furnished, quiet townhou..
For Sale
Household
Jul 06, 2009
Honda XR250 dirt bike
I am looking for a used Honda XR250 dirt bike. So..
Wanted
Vehicles & Parts
Jul 06, 2009
House For Rent in south west, edmonton
For Sale
Household
Jul 06, 2009
Lake Okanagan Resort Cottage - For Rent
La Casa Cottage Resort on Lake Okanagan
For Sale
Household
Jul 06, 2009
Lion King on Broadway - July 3, 2009 - Edmonton
SynopsisOver 45 million people wo..
For Sale
Tickets
Terms Of Use | Privacy | Help | Contact Us | elink Feedback
© 2008 Enbridge Inc.
The Contents of the Enbridge Intranet are confidential.

Pictured: An example of the company's classified ads, a popular feature of elink.

User Adoption

- **Personalization and customization.** Personalization features on the site have been a big win for the company. Content on the intranet is "contextually aware," meaning the content appears based on the individual user's location and business unit. In addition, a number of customizable items give users the ability to make the space their own. These include: my favorite team site list, weather forecast, stock quotes, and a homepage layout they can modify themselves.

Improved Content Management

- **Workflow management.** In creating the new intranet, the team knew it was important to create a community of practice that promoted and supported ever-evolving content. The former portal was plagued with out-dated content and that was a source of constant complaint amongst users.

  A company-wide editorial group was formed, which includes site managers, authors, and approvers. This group is now responsible for keeping the content up-to-date and relevant. Currently, this group is close to 300 people. All authors and approvers go through a one-day training session.

  In order to support this group in their new responsibilities, the site needs to provide them the tools to easily manage their own content. Content is entered through an online form. The form assists the content author in adding content, creating links, adding photos, and changing font sizes. Once complete, the built-in workflows electronically send the content to area approvers to approve before publishing to the intranet.

PERSONALIZATION AND CUSTOMIZATION

Impact

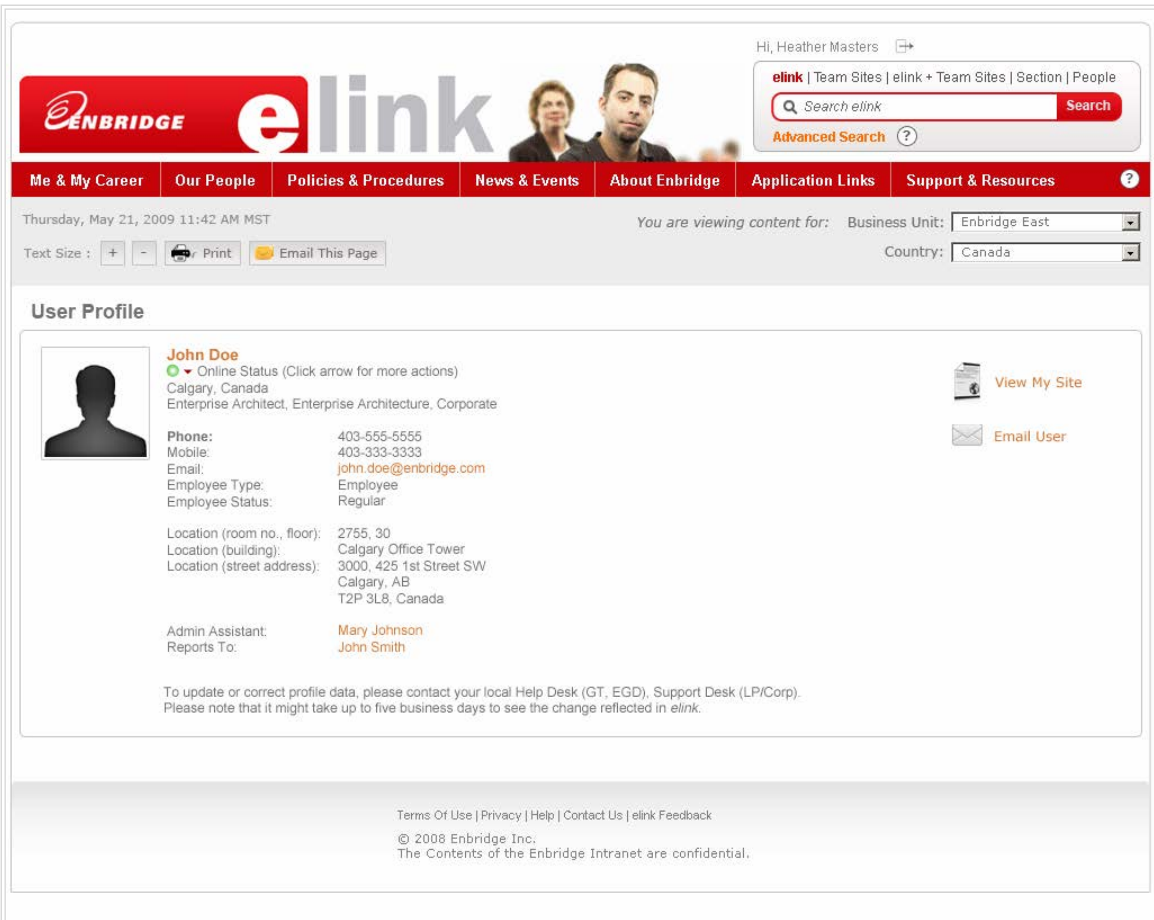
Personalization and customization are important aspects of the Enbridge intranet. "It makes the intranet look fresh and vibrant. It meets our business goal of making the intranet relevant to users," says Schrag.

"The personalization has made a big difference in the impact of the intranet," says Stratton. "The previous portal did not have personalization by business unit and location so it relied on the individual user to determine what information was relevant to them."

In fact, lack of personalization was one of the key issues that led to user dissatisfaction with the previous site. "We learned that we need to build a site that did the work of sorting out what is relevant for the user," he says. "It shouldn't be the user that has to do the work."

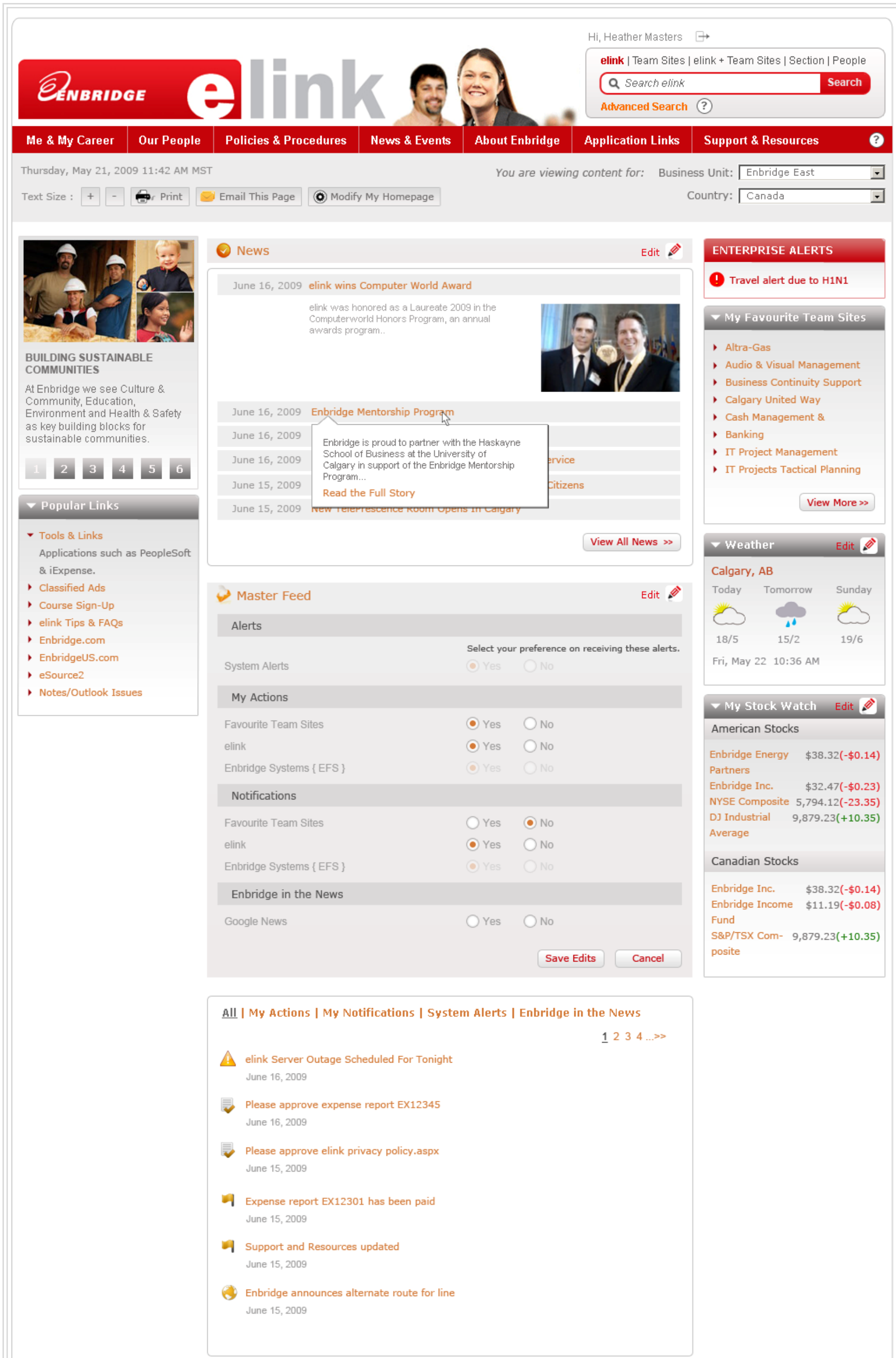
Personalization Features

- **Personalized and customized homepage.** The homepage offers a mix of personalized and customized features. The user's location and business unit dictate some of these features and others are chosen by the user's personal preference. Content is pulled from many different sources inside and outside of Enbridge's IT environment, ensuring that users have the information they need to maximize their potential and their contribution to Enbridge. Content is personalized by default, but users can customize it. For instance, below the top navigation menu, in the right corner, a dropdown menu appears with choices for business unit and country. The intranet has auto authentication, so by default the users own business unit and location are chosen. However, to build a sense of community, all users can view content in each business unit and location by simply changing the dropdown selections.



Pictured: The screen users see after they've selected a particular person in the people directory search results. This page has functionality to IM directly, an email link, and a *My Site* link to view information shared by the user.

- **Personalized *Master Feed*.** The *Master Feed* provides each user with personalized, work-related updates. *My Actions*, *My Notifications*, and *System Alerts* are pulled from internal system feeds and *Enbridge News* is pulled from external RSS feeds. The user can customize the *Master Feed* section to meet their preferences by clicking on the associated edit button.



Pictured: The *Master Feed* edit feature on the homepage. Users can customize their feeds to help them be more productive.

- ***My Favorite Team Sites.*** *Team Sites*, a collaborative online workspace based on Microsoft SharePoint, are widely available at Enbridge for project team and work group collaboration. A list of links to the user's favorite *Team Sites* is included on the right-hand column. Users can customize their list of links to meet their preferences.
- **Customized weather forecast.** Current weather is available in the right-hand column. Users can select the location that will be displayed by clicking on the associated edit button.
- **Customized *My Stock Watch*.** *My Stock Watch* is located in the right-hand column by default. Users can customize which stocks they follow by clicking on the associated edit button.
- **Personalized ads.** Enbridge ads appear in the left column. The ads rotate every few seconds and promote activities at Enbridge. The content is determined by the editor-in-chief and is personalized based on the user's location and business unit.
- **Personalized popular links.** In the left column of the homepage, under the ads, users can find popular links to pages within the site and other Enbridge sites. The content differs based on a user's location and business unit.

ENTERPRISE 2.0

Enterprise 2.0 features are abundant on the Enbridge intranet. These include RSS feeds that let users customize the content that is most important to them within their elink homepage, and a Facebook-style aggregation of those feeds. Other 2.0 type features are integrated with the company's Microsoft SharePoint deployment, which was implemented simultaneously with the intranet. These features include SharePoint *Team Sites* and SharePoint *My Sites*, with features implemented that include blogs, wikis, group calendars, subscription to pages, calendars, and issue lists.

"Our roadmap includes a continuing, deeper integration of the intranet with our SharePoint environment," says Murray, adding that this "is resulting in an increasingly seamless blend between the intranet and the Enterprise 2.0 features of *Team Sites* and *My Sites*."

This is being accomplished through direct links to SharePoint content (including wikis and blogs) and increased connectivity to *Team Sites* and *My Sites* through links, search pages, and so on.

ROI

Measuring Success

Successful intranets can be measured through hard numbers, anecdotes from users at work, or even real-world examples of how a site is used for the benefit of the employee and the company. Enbridge uses a smattering of all of these to provide the company with a well-rounded snapshot of the site's success.

"Although hard ROI is difficult to measure on an intranet, studies have shown that the best way to measure success is through the tracking of user satisfaction with and adoption of the system," says Schrag. "With this in mind, measurement for elink was originally based on comparing elink's usage and adoption to the usage and acceptance of the previous portal. The measures used to date have been a combination of user surveys, regular monitoring of usage, and system operations statistics."

Survey Measures

The first major user survey was conducted six months after elink was first launched. It benchmarked elink's success in meeting users' needs to that of the previous portal. The survey's main goal was to gauge user satisfaction. It employed the following measures (which were the same measures used for the previous portal's satisfaction survey).

Ease of use

- Ease of finding relevant information
- Ease of navigating
- Ease of using search tool(s)
- Accuracy of search results
- Ease of understanding headings

Content quality

- Ease of understanding information
- Comprehensiveness of information
- Frequency of information updates
- Relevance of information
- Credibility of information

Site look and feel

- Visual attractiveness
- Size of text/fonts
- Organization and layout
- Availability of technical help or support
- Ability to choose language

Daily Measures

In addition to the measures obtained through the satisfaction surveys, the team also maintains regular daily measures. These are reported to the governance bodies for the program and include:

- **Total individual user count:** The number of users that accessed the system at least once (measured weekly and monthly).
- **Total page hits:** The number of pages accessed by users across the corporation (measured weekly and monthly).
- **Number of help desk calls and types of calls:** This measure helps determine issue trends and can be used to develop user communications and education plans.

- **Operational measures:** These measures include unplanned outages and defect escalations.

Leadership Measures

Another aspect of the site measurement is the metrics that leadership has defined for the site. "We (leadership) have defined some metrics that are tracked to ensure we are meeting or exceeding our expectations," says Poohkay. "Things like utilization, employee perception, reduction of help desk calls regarding policies and procedures, etc."

Results

Listed below is a sampling of the new intranet's measurement results:

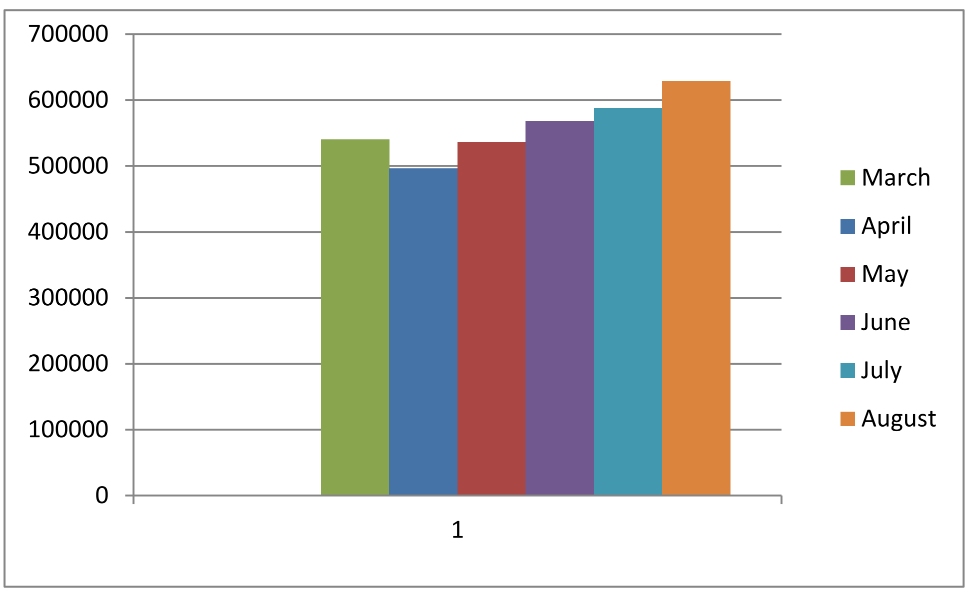
- Nearly two-thirds of users are satisfied with elink overall, which is significantly higher compared to the previous intranet (61 percent rated the new site 4 or 5 out of a possible 5, compared to 18 percent for the old site).
- Adoption is high; nearly 92 percent of employees use elink.
- Over the last six months, elink has averaged 559,500 hits per month.
- The top three features, based on hits, are:

    People search

    Application links

    User profile

- Total hits in the last six months (March–August 2009) are illustrated in the following chart:



Finally, the following table illustrates user feedback on some aspects of the site:

USER FEEDBACK ON SITE ATTRIBUTES		
What They Like	**Context**	**Direct Feedback**
User friendly/easy to use	Users perceive elink to be user friendly overall Users find elink easy to navigate	"I am very pleased with the user-friendly style of elink." "elink is a great tool that I use daily. It's easy to navigate and to walk employees through if they need information."
Easy to find information	Users are pleased with how easy it is for them to find relevant information	"I can easily find the information that I am looking for without doing a lot of searching."
Improvement over eSource2 (previous intranet)	Users were quick to point out the improvement elink is over eSource2, both in terms of its functionality and appearance	"elink is a great replacement to eSource2. Things are easier to find, and if you can't find something by navigating, it almost always turns up in the search engine." "Compared to eSource2, I think the layout and the visual display of e-link is great." "I am very satisfied with elink because it's a quantum jump ahead of anything we had before."

LESSONS LEARNED

In the following, members of the Enbridge team share some of their lessons learned.

- **Have a strong content governance structure.** "An intranet is only as good as the relevancy and currency of its content. The previous portal failed in that aspect. The team went to great lengths to ensure that roles are defined; owners, authors, and approvers are trained; content management functions are built into the job responsibilities; and process champions are identified." (Daniel Barnicle, Director Program Management)

- **Ensure user adoption.** "Due to the federated structure of the organization, early measures were taken to ensure that the project team had inputs from different business units and departments during the course of the project. Several rounds of usability testing were conducted during the design and development of the intranet. Several road shows, timely communications through emails and Web meetings, and efficient marketing through posters and other props were conducted throughout the rollout. The team also reserved time for a long beta testing round where a subset of users from different organizations did multiple 'test drives' and provided feedback." (Barnicle)
- **More isn't necessarily better.** "The old portal had a lot of content that was outdated. During the planning stages of content migration, it was easily identified that the majority of the massive amount of content that existed was outdated or irrelevant. The team decided to start with a white board, did several content identification exercises with tenant departments, and migrated or created new content as applicable." (Barnicle)
- **Strong search is important**. "Search is the most frequently used functionality on any intranet, be it people search or content search. Provide different ways of searching, but keep it simple. The majority of users like to just key in a keyword, press 'enter' and be provided with relevant results. To quote an employee who has been in the organization for 20-plus years: 'This intranet is one of the best things to have happened at the company in all my years… and will help many people be more productive. They can really use their time to full potential instead of trying to find information for half the time.'" (Barnicle)
- **Listen.** "Listen to what users have to say. Provide multiple avenues for gathering feedback and, more importantly, be open to feedback regardless of how harsh or positive it might be. Listening to the users is the best way of identifying user behavioral patterns. You will be surprised by the number of brilliant suggestions a well-motivated user group can make." (Barnicle)
- **The intranet isn't an IT-driven initiative.** "Many companies think of the intranet as an IT-driven initiative. This isn't true and should not be the way an intranet is approached. At Enbridge, elink provides a communications and collaboration service to the business areas within the company. As the department responsible for improving communications, Corporate Communications has become the champion for the majority of our intranet's functionality. It has been a complete partnership, with IT bringing new ways of using the technology to the forefront and enabling the company's communicators through tools that support their communications-related workflows." (Murray)

GE

Using the intranet:

GE is a diversified technology, media, and financial services company focused on solving some of the world's toughest challenges. With products and services ranging from aircraft engines, power generation, water processing, and security technology to medical imaging, business and consumer financing, and media content, the company serves customers in more than 100 countries and employs more than 300,000 people worldwide. GE has a strong set of global businesses in infrastructure, finance, and media aligned to meet today's needs, including the demand for global infrastructure; growing and changing demographics that need access to healthcare, finance, information, and entertainment; and environmental technologies.

Headquarters: Fairfield, Connecticut

Number of employees the intranet supports: 300,000+ employees, plus contractors

Company locations: More than 100 countries around the world

Locations where people use the intranet: All

Annual sales: $183 billion (2008)

Design team:

In-house marketing/communications: Erik Manley, Manager, Digital Media, Corporate Marketing; Sangita Malhotra, Manager, Corporate Communications

In-house IT: Cem Ezberci, IT Team Leader, Digital Media Technologies; Andrew Bond, Project Manager, Digital Media Technologies; Lisa Minott, Project Manager, Digital Media Technologies; Hemant Mulwani, Project Manager, Digital Media Technologies; Dan Murphy, Project Manager, Digital Media Technologies; Nandakumar Devanathan, Project Manager, Digital Media Technologies

frog design: Monique TeSelle, Creative Director; Kris Konno, Program Manager; Jody Hankinson, Principal Designer; Vicky Fang, Senior Interaction Designer; Ranee Chung, Senior Designer; Ed Hicks, Technical Director; Kyle Crouse, Principal Technologist; Collin Olan, Technologist; Adam Silver, Strategist

SUMMARY

Too many sites with too much information aimed at too many audiences. This was the problem GE's intranet team faced when trying to redesign the company's site. In an attempt to provide the right information to the right people, several intranet sites had sprung up throughout the company. And many of these sites were crowded with information, with the hopes that providing a lot of different information would mean that something was relevant to someone. Instead, these crowded pages were a jumbled mess.

Something had to be done. The company found it was impossible to communicate information company-wide and provide information relevant to users' business, location, or function. To solve this problem, the team made a flexible central source, which would accommodate information needs in different areas of the organization.

The first step was to retain central control over the technology on the site, but to release the content to contributors across the organization. The team retains control over the architecture, hosting, and CMS, and centrally manages permissions to make changes to content. Templates enforce design consistencies. But all aspects of content and communications are distributed throughout the organization.

The second step was to use personalization to limit and focus the information presented to employees. Users log on to the site and see information appropriate to their role in the company, as well as company-wide communications. In an organization of more than 300,000 employees across more than 100 countries, personalization was a missing piece in getting the right information to the right people.

In such a large organization, not every fit is perfect. Some users might be officially part of one group, but do work relating to another. So, the team included flexibility for the user to customize the site experience by selecting another, more appropriate view if the preselected one was not a good fit. On the site, users can select a view using a menu in the upper left-hand corner of the homepage.

The result of these changes is a clean, crisp intranet that makes it easy to find the information users want and need. The homepage delivers content based on the user's credentials, allowing news specific to individuals to be delivered directly to them.

The clean design emphasizes relevant news and information and is a vast improvement over the previous design, which featured more than 15 different content areas on a long, scrolling page.

The homepage has an emphasis on news, giving users up-to-date information relevant to their daily work. The page nicely balances corporate level news and business news.

The top of the page includes seven highlighted stories. Five are highlighted within a rotating area that features one large image and associated headline and summary at a time, allowing users to page through the featured stories using forward and back arrows. Two additional stories appear next to the featured area, with one a corporate-level story displayed for all employees, and the other a business-specific story presented to employees working within that business.

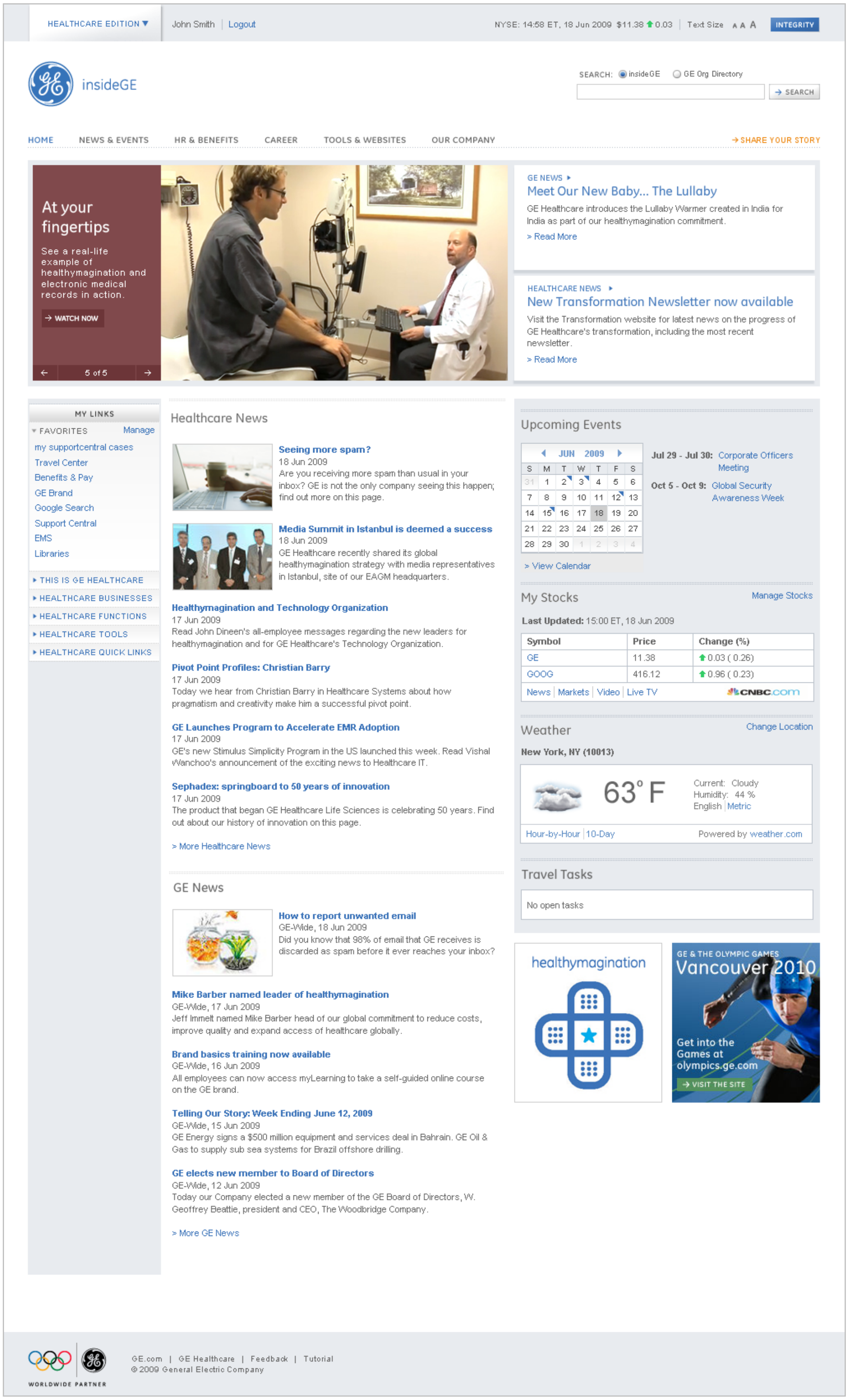
The page includes additional news headlines as well, with a section devoted to business-level headlines and another aimed at corporate headlines. All news stories are presented in a clear way, with concise, descriptive headlines and summaries. Headlines and links are easy to identify because of the consistent use of blue text to indicate links. Users can easily click on a headline to see the full story. Each story is accompanied by the date it was posted, helping users understand that the information is current and constantly updated.

News items are popular on the site. Users show particular interest in stories related to innovations as well as stories focusing on individuals. Particularly in such a large company, users are interested in knowing the cutting edge work the company is engaged in and learning more about colleagues and their accomplishments.

The page also includes an event calendar and several areas where users can customize content. Users can create stock portfolios and track stocks through the site. Users can also receive local weather information and see any outstanding travel-related tasks.

The final area of customization on the homepage is the list of *My Links* that appears on the left-hand side of the page. Users can create their own list of shortcut links to important content. This area is accompanied by a list of links specific to the users' business.

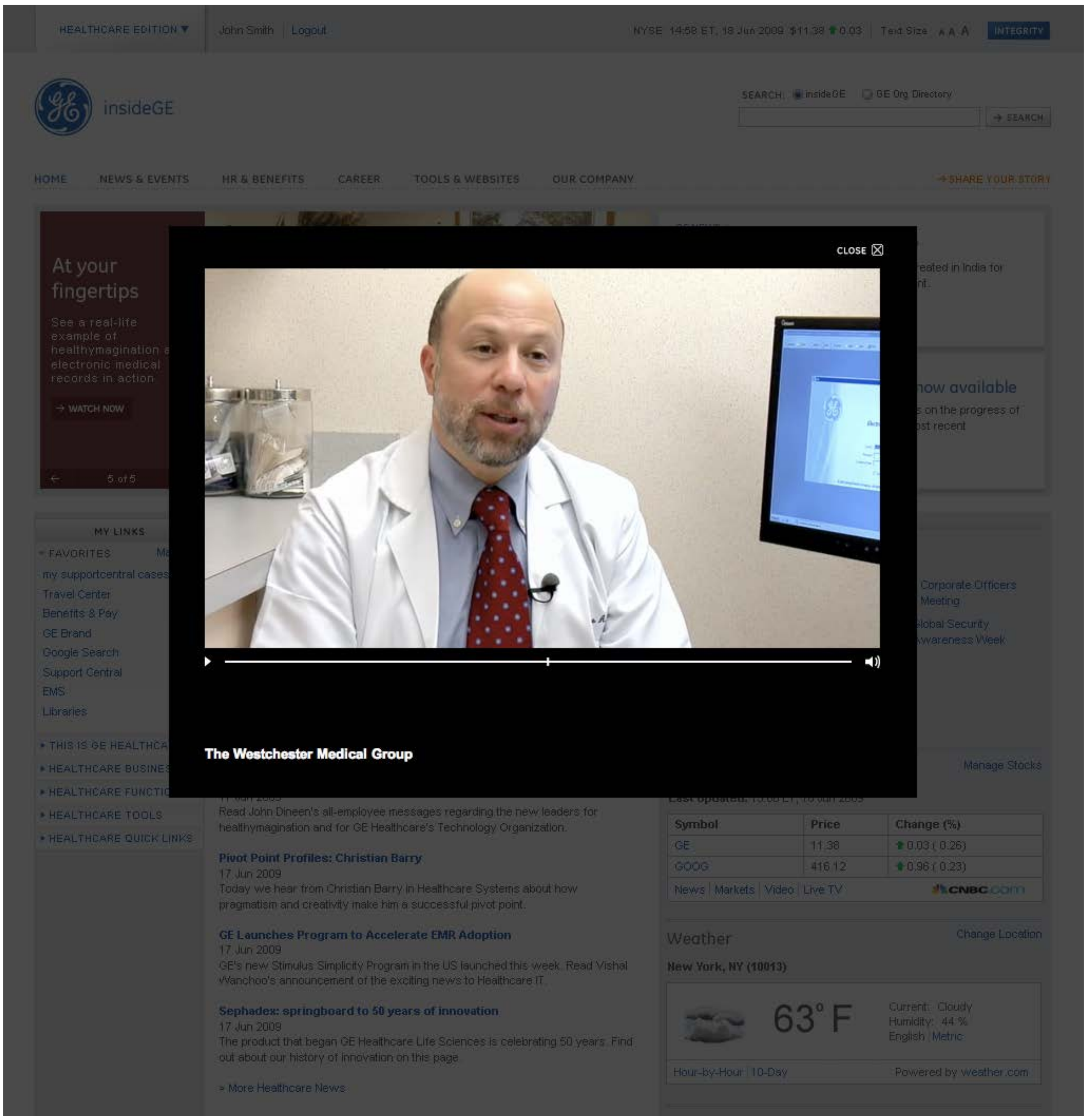
Another nice touch on the homepage is the inclusion of links to increase the text size on the site. This allows users to change to a personal preference, whether they want to enlarge text to see it more clearly or shrink text to see more on a page.



Pictured: The insideGE homepage for an employee working in Healthcare. Users can easily read news headlines relevant to them due to the clean and focused design of the personalized homepage.

The intranet team makes an effort to teach content contributors about the importance of writing content specifically for the Web. The team provides training and guidelines around writing for the Web. The CMS helps enforce some guidelines, such as allowing only a limited number of characters for story titles and summaries in an effort to enforce guidelines for concise writing.

The site structure accommodates straight news stories as well as video or audio content. The featured item on the following screenshot shows an example video. Clicking *Watch Now* opens a video window (as shown) where users can play or pause the video as well as adjust the volume. The use of video and audio content adds another dimension to information on the site.



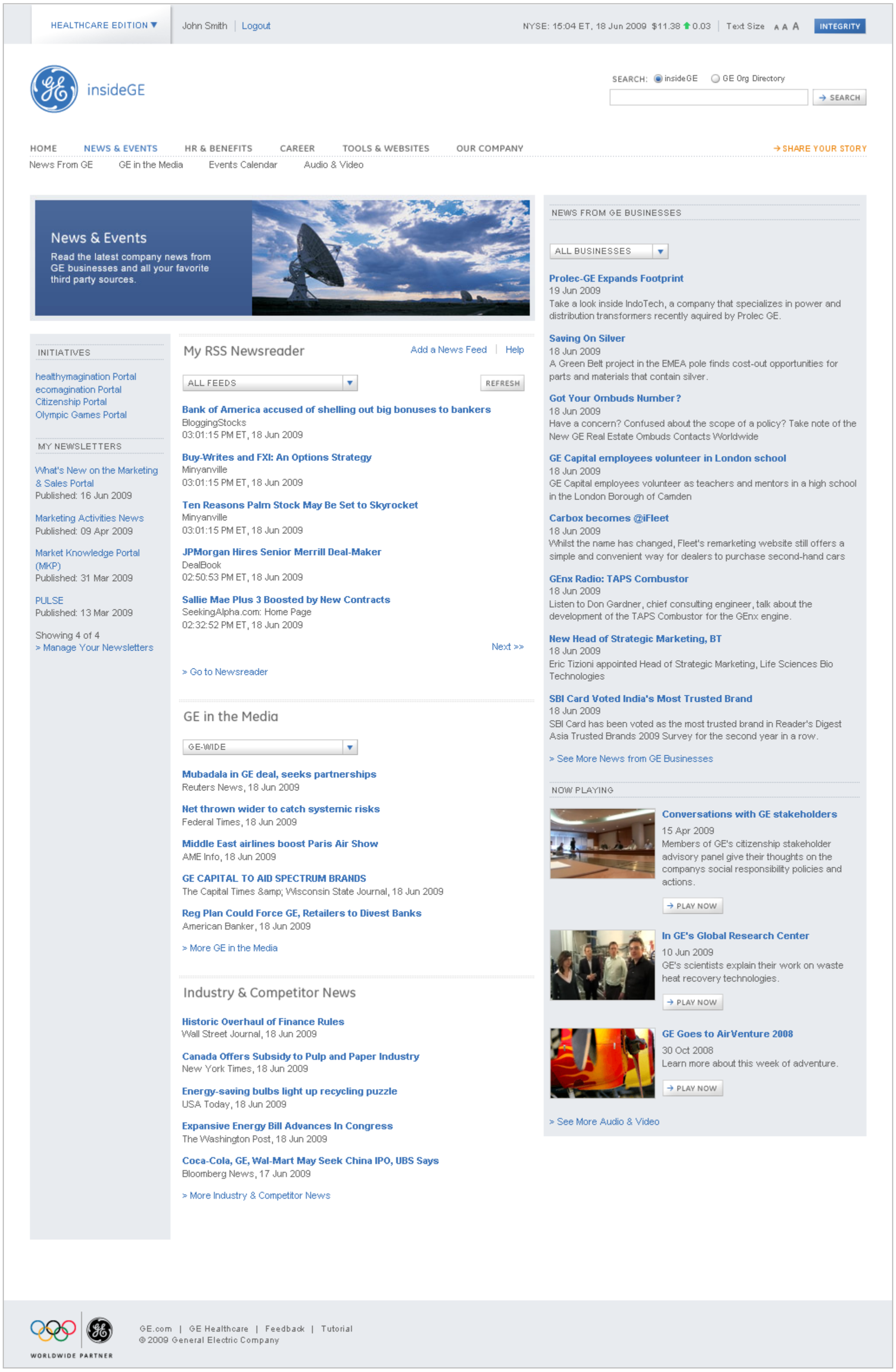
Pictured: Videos launch within the site, opening as overlay windows where users can play or pause content and control the volume.

News plays a major role on the intranet homepage and users can delve into even more news within the site's *News & Events* section. This section is dedicated to pulling information about the company, its industries and its competitors into one central location. The news combines an RSS newsreader, *GE Business News*, news about GE in the press, and industry news all in one central location. Users can change their views of business news and news about GE to see information about all areas of GE or to narrow the information to a specific business.

The *Newsreader* is another area where users can customize their site experience. Users can select feeds from a central list of available feeds, which allows them to subscribe to what others in the company are reading. They can also add a new feed to the repository, which makes that feed available to others as well.

Videos are featured on the page in a *Now Playing* area. Video titles are accompanied by stills from the video, the video date, and a brief explanation of content.

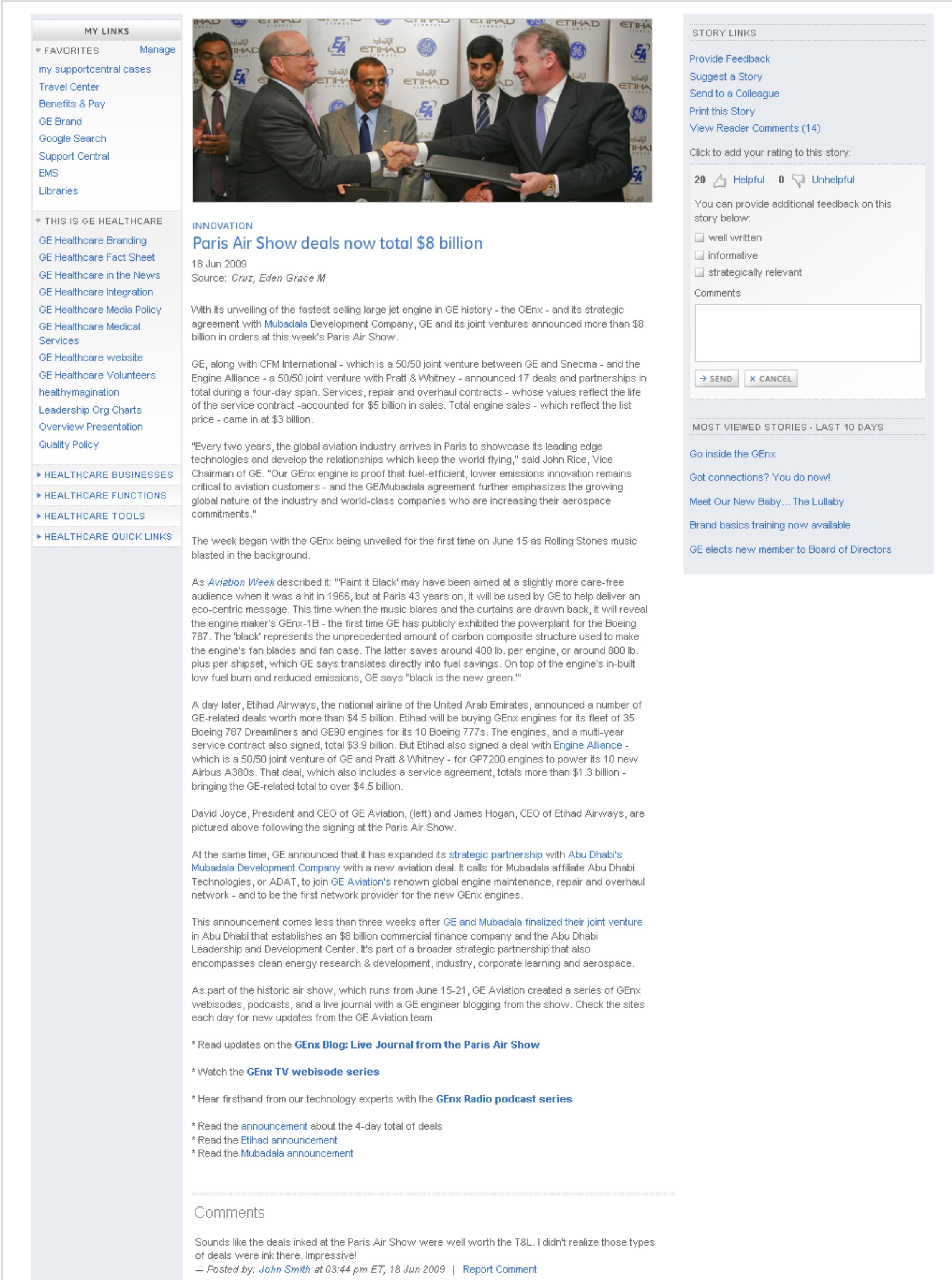
Users can access more content in any area—including feeds, headlines, and audio and video content—via clear links at the bottom of each section. The page also offers links to internal initiatives, such as the healthymagination portal, and to newsletters relevant to the user.



Pictured: A consolidated news page offers users control over headlines via a customizable RSS newsreader as well as providing company, business, and industry news.

News stories have clear, brief headlines and informative pictures where appropriate. All stories are dated in international format, with the name of the month spelled out rather than shown as a number. Stories also include the source. Inline links within the story link to related information, which can be valuable in leading users to new intranet areas.

The end of each story includes links to related content, which can take a variety of forms, such as links to a blog, a webisode series, a podcast, or even a series of announcements. Different ways of communicating reach and appeal to different audiences and give users a wide variety of ways to learn more about a topic.


MY LINKS

FAVORITES Manage

my supportcentral cases
Travel Center
Benefits & Pay
GE Brand
Google Search
Support Central
EMS
Libraries

THIS IS GE HEALTHCARE

GE Healthcare Branding
GE Healthcare Fact Sheet
GE Healthcare in the News
GE Healthcare Integration
GE Healthcare Media Policy
GE Healthcare Medical Services
GE Healthcare website
GE Healthcare Volunteers
healthymagination
Leadership Org Charts
Overview Presentation
Quality Policy

HEALTHCARE BUSINESSES
HEALTHCARE FUNCTIONS
HEALTHCARE TOOLS
HEALTHCARE QUICK LINKS

INNOVATION

Paris Air Show deals now total $8 billion

18 Jun 2009
Source: *Cruz, Eden Grace M*

With its unveiling of the fastest selling large jet engine in GE history - the GEnx - and its strategic agreement with Mubadala Development Company, GE and its joint ventures announced more than $8 billion in orders at this week's Paris Air Show.

GE, along with CFM International - which is a 50/50 joint venture between GE and Snecma - and the Engine Alliance - a 50/50 joint venture with Pratt & Whitney - announced 17 deals and partnerships in total during a four-day span. Services, repair and overhaul contracts - whose values reflect the life of the service contract -accounted for $5 billion in sales. Total engine sales - which reflect the list price - came in at $3 billion.

"Every two years, the global aviation industry arrives in Paris to showcase its leading edge technologies and develop the relationships which keep the world flying," said John Rice, Vice Chairman of GE. "Our GEnx engine is proof that fuel-efficient, lower emissions innovation remains critical to aviation customers - and the GE/Mubadala agreement further emphasizes the growing global nature of the industry and world-class companies who are increasing their aerospace commitments."

The week began with the GEnx being unveiled for the first time on June 15 as Rolling Stones music blasted in the background.

As *Aviation Week* described it: "'Paint it Black' may have been aimed at a slightly more care-free audience when it was a hit in 1966, but at Paris 43 years on, it will be used by GE to help deliver an eco-centric message. This time when the music blares and the curtains are drawn back, it will reveal the engine maker's GEnx-1B - the first time GE has publicly exhibited the powerplant for the Boeing 787. The 'black' represents the unprecedented amount of carbon composite structure used to make the engine's fan blades and fan case. The latter saves around 400 lb. per engine, or around 800 lb. plus per shipset, which GE says translates directly into fuel savings. On top of the engine's in-built low fuel burn and reduced emissions, GE says "black is the new green.""

A day later, Etihad Airways, the national airline of the United Arab Emirates, announced a number of GE-related deals worth more than $4.5 billion. Etihad will be buying GEnx engines for its fleet of 35 Boeing 787 Dreamliners and GE90 engines for its 10 Boeing 777s. The engines, and a multi-year service contract also signed, total $3.9 billion. But Etihad also signed a deal with Engine Alliance - which is a 50/50 joint venture of GE and Pratt & Whitney - for GP7200 engines to power its 10 new Airbus A380s. That deal, which also includes a service agreement, totals more than $1.3 billion - bringing the GE-related total to over $4.5 billion.

David Joyce, President and CEO of GE Aviation, (left) and James Hogan, CEO of Etihad Airways, are pictured above following the signing at the Paris Air Show.

At the same time, GE announced that it has expanded its strategic partnership with Abu Dhabi's Mubadala Development Company with a new aviation deal. It calls for Mubadala affiliate Abu Dhabi Technologies, or ADAT, to join GE Aviation's renown global engine maintenance, repair and overhaul network - and to be the first network provider for the new GEnx engines.

This announcement comes less than three weeks after GE and Mubadala finalized their joint venture in Abu Dhabi that establishes an $8 billion commercial finance company and the Abu Dhabi Leadership and Development Center. It's part of a broader strategic partnership that also encompasses clean energy research & development, industry, corporate learning and aerospace.

As part of the historic air show, which runs from June 15-21, GE Aviation created a series of GEnx webisodes, podcasts, and a live journal with a GE engineer blogging from the show. Check the sites each day for new updates from the GE Aviation team.

* Read updates on the **GEnx Blog: Live Journal from the Paris Air Show**

* Watch the **GEnx TV webisode series**

* Hear firsthand from our technology experts with the **GEnx Radio podcast series**

* Read the announcement about the 4-day total of deals
* Read the Etihad announcement
* Read the Mubadala announcement

Comments

Sounds like the deals inked at the Paris Air Show were well worth the T&L. I didn't realize those types of deals were ink there. Impressive!
— *Posted by: John Smith at 03:44 pm ET, 18 Jun 2009* | Report Comment

STORY LINKS

Provide Feedback
Suggest a Story
Send to a Colleague
Print this Story
View Reader Comments (14)

Click to add your rating to this story:

20 Helpful 0 Unhelpful

You can provide additional feedback on this story below:

well written
informative
strategically relevant

Comments

SEND CANCEL

MOST VIEWED STORIES - LAST 10 DAYS

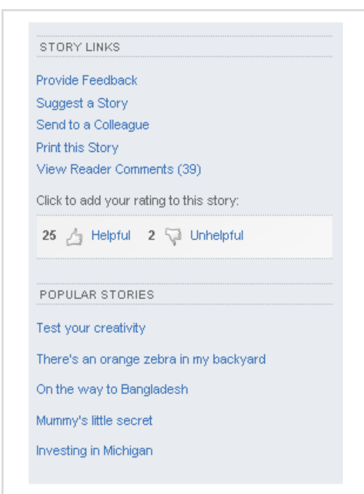
Go inside the GEnx
Got connections? You do now!
Meet Our New Baby... The Lullaby
Brand basics training now available
GE elects new member to Board of Directors

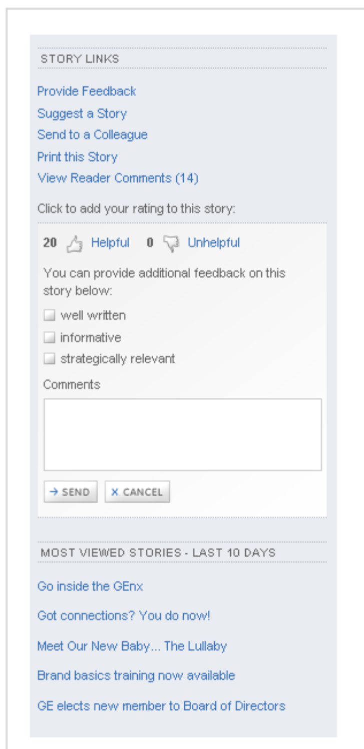
Pictured: Inline links within the story, related links at the end of each story, and links to popular stories on the side of the page all give users options to explore more information available on the site.

When users click through to read a full news item, they have the option to rate the story as well as comment on it. This makes what could be a very static section of the site much more dynamic. News stories become opportunities for collecting feedback and stimulating discussion among employees. Both the ratings and the employee comments about stories are used to help evaluate the information presented on the site. The team uses the information to help gauge the success of different types of content.

Users can easily rate a story by clicking the *Helpful* (thumbs up) or *Unhelpful* (thumbs down) links that appear next to each story. These labeled icons appear together with the number of "votes" each has received. Once users have rated the story, the area expands to let them provide additional feedback. If they clicked *Helpful*, for example, they can indicate if they found the story *well written*, *informative*, or *strategically relevant*. There is also a comment box for users to enter open-ended feedback about the story. The number of votes for the story is displayed next to it, showing users how many of their colleagues found the story helpful or unhelpful.

This area of the page includes other options to provide additional feedback, suggest a story, or send the story to a colleague, encouraging further interaction and information sharing. The site also leads users to other content, providing lists of headlines leading to popular stories or the most viewed stories.



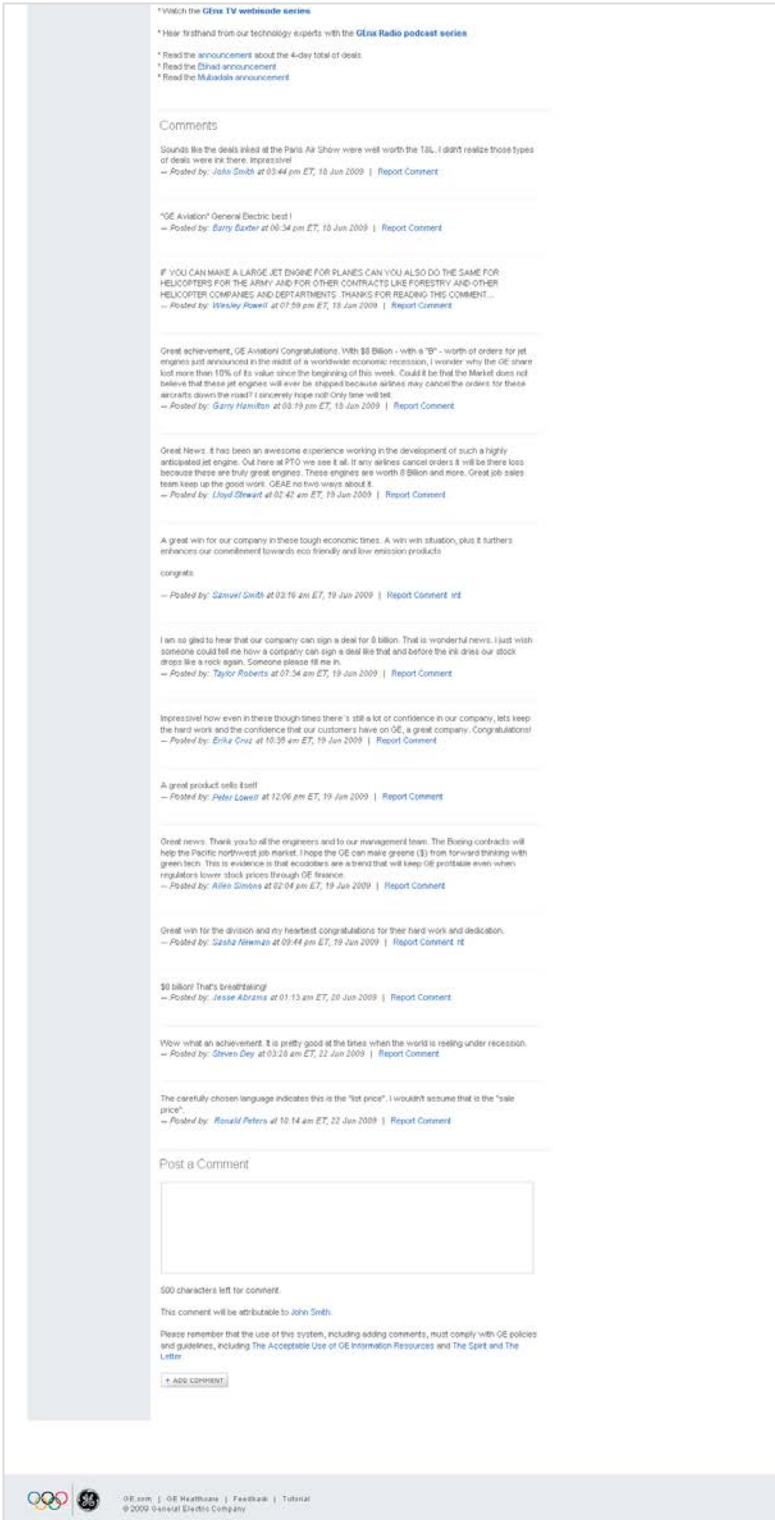


Users can rate a story's quality using *Helpful* and *Unhelpful* icons that appear next to the story. The initial box for feedback (left) expands to allow further feedback (right).

Users can also comment on news stories. An open text field allowing users to post comments follows each story. Comments are displayed at the end of each story in the order in which they were posted. Each includes the name of the person who posted the comment, which is also a link to email that individual. The date of the posting is shown as well. There is also a link to report a comment as inappropriate. This link does double duty: it tells users they can report a comment, but also reminds users to make sure their comments are appropriate for the site.

Users can type their comments in the open text field at the bottom of the page. Comments are limited to 500 characters, which is noted beneath the field. The number of remaining characters is updated as users type, giving them a running count of how many more characters they have to play with. This is a nice touch, helping users know when they're approaching the limit of the comment field.

Beneath the word count, a single line reminds users that comments are not anonymous; the user's name will be posted alongside the comment. The line states, for example, that "This comment will be attributable to John Smith." Finally, the page reminds users that site use is subject to policies and guidelines, and provides links to documents that contain those guidelines.



Pictured: Employees are encouraged to post comments about news stories, providing an opportunity for interaction with their colleagues.

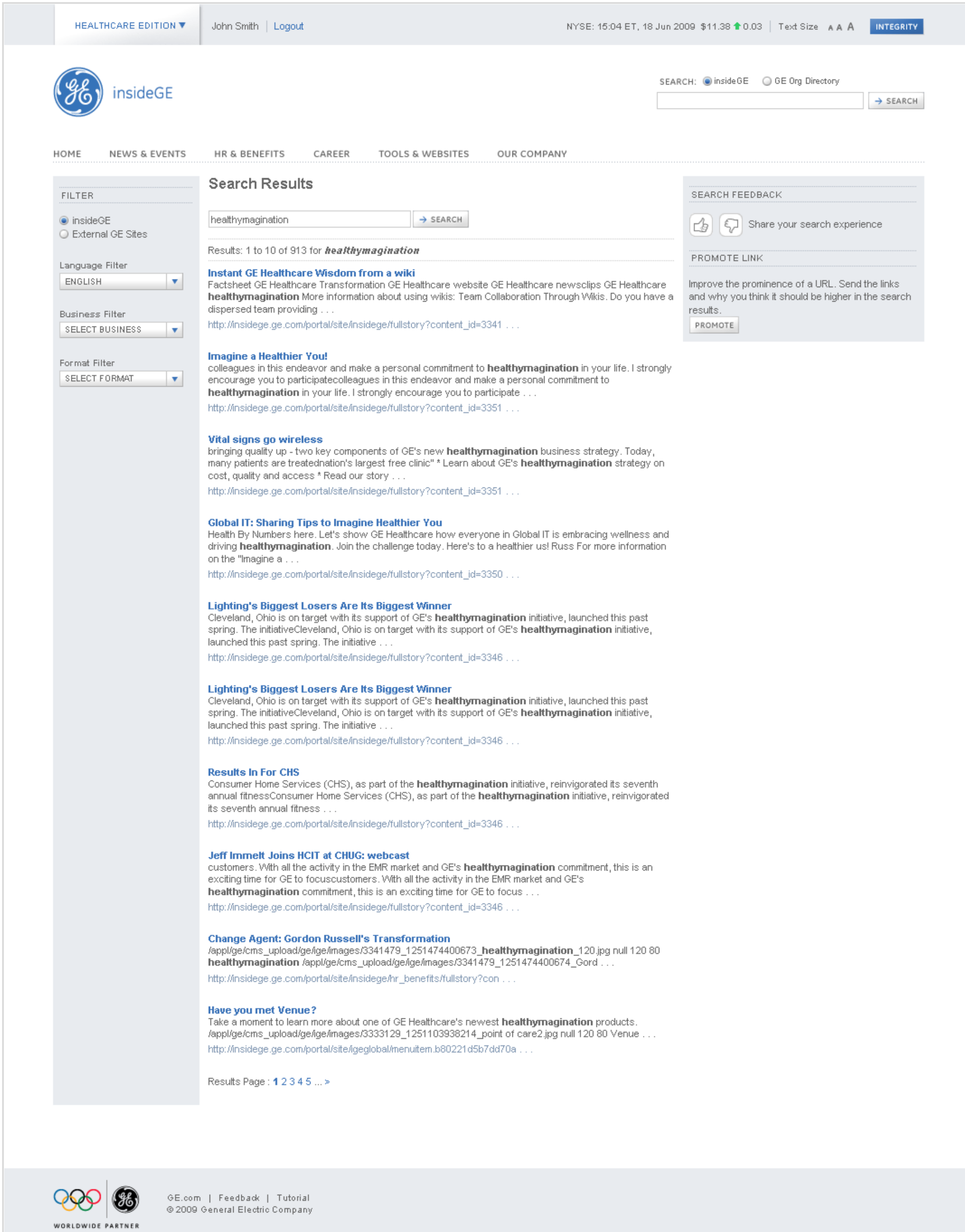
The news section isn't the only area of the site where users are encouraged to provide feedback. The team continually collects feedback from users about the success of the search engine. They use this feedback to try to adjust the search to give users the best possible results.

Users can search via a *Search* box clearly located at the top of each page on the site. Users can search either the intranet (insideGE) or the employee directory (*GE Org Directory*), and can switch the search's scope via a radio button that appears above the box. The search defaults to an intranet search.

Search results are clearly presented, with the search query repeated at the top of the results along with the total number of results found. Each result includes a clear title and a clip from the document or page with the query term highlighted in bold.

To further refine the search, users can also use filters on the side of the page. They can switch the search from insideGE to *External GE Sites* to change the scope. They can also select one attribute from each of three filters: *Language*, *Business*, and *Format*.

The team continually collects feedback about the site search through links on the side of the page. Users can simply click a "thumbs up" icon if they find the content they need through the search or a "thumbs down" icon if they do not. Users can also take the more complex route of suggesting that a certain result should be higher in the search results. Users can "promote" a link by sending the URL and an explanation of why it's a good result for that search term to the team.



Pictured: Search results are clearly presented. The team collects feedback about the success of search results through links on the side of the page.

The latest iteration of insideGE was a big change—for the better—from previous designs. The new clean design helps users focus on the content and not on the design of the page. Personalization presents the information that users want and need. Customization and options for feedback and interaction make the site more interactive and engaging.

Even with all these enhancements, the team knew early on that they could not simply launch a new site one day and expect every one of the company's 300,000 employees to love it. Showing their awareness of this, the team involved employees and stakeholders throughout the development process. They kept in constant communication with business communicators around the organization, who then communicated with their employees about the new site.

The team did more than tell users a new site was in the works. They showed them, and let many of them use the site before it was officially launched. The team had an alpha launch to 500 employees, asking for their comments and opinions through an online survey. They followed this with an opt-in beta launch, in which 60,000 of 300,000 employees took part.

For both pre-launches, a random drawing for prizes enticed users to provide feedback. Users were also allowed to switch back and forth from new design to old if they wanted to. Knowing they weren't "stuck" with the new design if they participated likely enticed a higher number of users to experiment with the new site. These early launches helped the team gather feedback, but also helped build interest in and anticipation for the new site.

The result of this hard work and attention to user feedback is a focused, flexible design that allows communication across the company as well content relevant to employees' business.

BACKGROUND

The current version of insideGE, GE's corporate intranet, is the latest iteration in a long line of intranets the company has had through the years. Like most intranets in the early days, GENet, one of the company's early intranets, began in 1996 as a collection of links whose primary audience was US corporate employees.

The first "insideGE" launched during the first quarter of 1999 to replace GENet and was an attempt to unify all the separate businesses' intranets into a single look and feel. Again, the audience was primarily US employees and the content was offered only in English. Andrew Bond, Project Manager, Digital Media Technologies, explains: "The main features of the site were a common masthead (cross-business), favorites, corporate news with some business content, and some personalization."

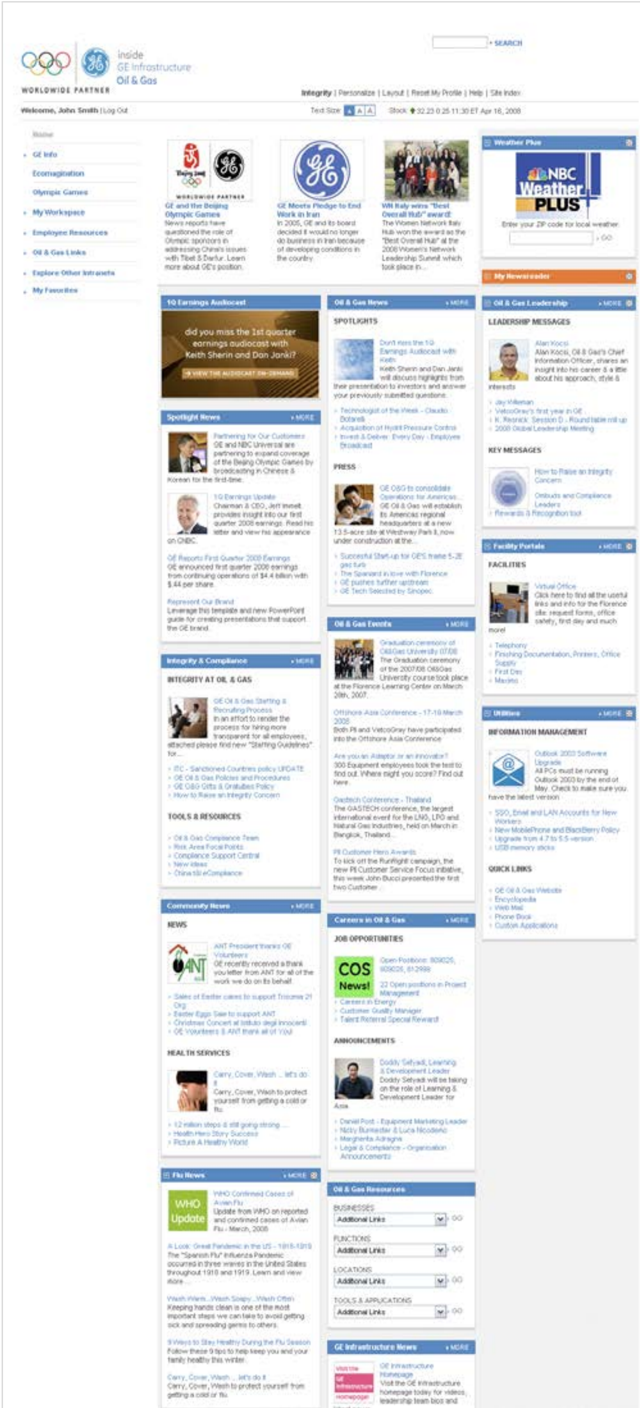
In 2001, the company entered the portal space with the second version of insideGE. "The second version of insideGE addressed growing global challenges of GE," says Bond. "A multilingual version of insideGE was launched. The audience was all the GE businesses globally."

That site included features such as "alert channels" for different businesses, favorites, corporate news, story metrics, and business-specific content and personalization.

In 2004, the company raised the bar on its corporate intranet through a series of enhancements and expansion of the intranet to the global GE population. "We raised the bar with the third launch of insideGE addressing the high cost of infrastructure, an inflexible architecture, a new brand campaign, and overdue site enhancements," says Bond. "The audience was all GE businesses globally."

With the introduction of that site, the company reduced the number of intranet sites from 153 to 73, developed a lower cost infrastructure, better corporate user directory integration, user profiling, portlet personalization, and federated search.

The design iteration discussed in this document was complete between 2008 and 2009 and added significant features and functionality to the site.



Pictured: The homepage before the insideGE redesign. There were more than 100 of these intranet sites with over 3,000 content modules, requiring a great deal of maintenance and duplicate publishing without the ability to achieve the sophisticated targeting that insideGE has today. The system was relatively inflexible and supported only fragmented communications with no coordinated storytelling effort.

INTRANET TEAM

insideGE is owned functionally by Marketing and Corporate Communications and benefits from the technical leadership provided by the company's IT team, which is the group most involved with the site on a day-to-day basis.

GE intranet team members include developers, three IT project managers, two communicators who manage the company-wide intranet, and about 15 or so staff members, across the company, who handle the site's business-specific communications.

Pictured: The Mad Men-ized GE intranet team. (Back row, left to right): Vicky Fang, Ed Hicks, Ranee Chung, Collin Olan, Jody Hankinson, Adam Silver, Sue Bishop, Erik Manley; (front row, left to right): Kris Konno, Andrew Bond, Sangita Malhotra, Monique TeSelle, Kyle Crouse, Cem Ezberci, Lisa Minott, Dayan Anandappa; (far right, holding the donut): Jen Walsh.

Working with Agencies

Overall management of the GE intranet, including communications strategy, content management, and feature/product requirements, is handled internally. However, the company relies heavily on an agency, frog design, for graphic design expertise and occasional front-end development (JavaScript, Flash, and so on). For the redesign project, frog design conducted primary research, developed the information architecture and design concept and provided front-end technical expertise and code. "frog design was a true partner in the redesign of insideGE," says Erik Manley, Manager, Digital Media, and Corporate Marketing. "While frog is an outside agency, we consider them our extended team."

"It [having frog design involved] has certainly raised the bar for quality in the design and overall user experience of the intranet," he says. "frog also brought a more objective perspective to the redesign process, which I think was critical."

GOVERNANCE

Governance is a combination of centralized governance (the technology platform) and cross-organization distribution (content).

On the technology side, the back-end architecture, hosting, and CMS are centrally owned and maintained by GE Corporate. "Any new features or design elements are typically initiated and developed by GE Corporate," says Manley. "Although suggestions and requests are encouraged across the organization."

Communications ownership is widely distributed. Businesses and departments within GE have their own communications teams, develop their own communications strategies, and manage/publish their own content. Nothing beyond permission levels (for example, the ability to publish content in certain areas of the site, for certain people to see) is governed centrally.

TIMELINE

The redesign project began in November 2007 and was completed in a roughly one-year timeframe from kick-off to launch. The timeline was extended once. After the team settled on a design approach and was able to more accurately determine how long development would actually take, adjustments were made to better-forecast deliverables. Major project milestones included:

- **February 2008:** Research review and initial design recommendation. The team conducted an online survey of more than 10,000 employees, visited with past top-10 finalists of Nielsen Norman Group's *Intranet Design Annual* report, interviewed stakeholders, and conducted extensive secondary research.
- **March 2008:** Final design review/selection. Based on the research, the project went through several rounds of design revisions before settling on a final approach.
- **August 2008:** Opt-in alpha launch to 500 employees who were invited to preview the new insideGE and provide feedback via open comments and an online survey; the team received 108 responses. To incentivize employees, the team held a random drawing for gift certificates and let participants switch between the "old" and "new" insideGE whenever they liked. Team members conducted 15 one-hour, one-on-one interviews with employees to determine any necessary changes to the design approach, and they made several revisions accordingly.
- **October 2008:** Opt-in beta launch to 60,000 employees. For the beta, the team invited GE Corporate, the Global Research Center business, and the GE Healthcare business (approximately 60,000 employees) to preview the new insideGE. As with the alpha launch, employees could submit open feedback and complete an online survey (5,300 responses), were incentivized with a random drawing, and could switch between the "old" and "new" whenever they liked. In addition to the survey and feedback, the team conducted another 29 interviews with select employees in the US and Europe to determine any necessary changes to the design approach.

- **January 2009:** Beginning of three-month staggered rollout across all business units (300,000+ employees). Team members began rolling out the new insideGE across all businesses in late January 2009. Throughout the previous year, they had frequently communicated the upcoming change to business communicators, who relayed the message to their employees. They developed a rollout schedule, and encouraged employees to try out the new insideGE beforehand, so that there wouldn't be any surprises. Elements of the design continued to be developed even as the site was rolled out. The team recognized that waiting until everything was perfect would delay the launch "indefinitely."

GOALS AND CONSTRAINTS

The redesign project had many goals, among them were:

- **Improve the overall user experience.** This aspect of the site had been proven through research to be sub-par on the former insideGE site.
- **Reinforce the brand.** "Brand management is just as important internally as it is externally," says Manley. "We wanted insideGE to reflect the spirit of GE: innovative, dynamic, and approachable."
- **Consolidate.** Over the years, more than 80 separate business intranets had been developed to communicate business-specific messages to employees. This fragmentation had led to what Manley calls "a maintenance nightmare" and had created incredible inconsistency. "We needed a platform that could support the distinct communications needs of all the businesses without requiring separate sites," he says.
- **Create consistency and balance content.** As part of the consolidation, the company also wanted to ensure that GE-wide communications (for example, stories that are relevant to all employees, regardless of their business, function, or location) were balanced with business-, location-, or function-specific content. "This had become impossible to do with the spread of distinct business sites/pages," says Manley.

The Universal Constraint: Time

Nearly every team interviewed for our *Design Annual* reports struggles with the most common project constraint: time (or a lack thereof). GE's project was no different. "Time was our greatest constraint," says Manley. "We had less than a year to research, redesign, redevelop, and launch the intranet to more than 300,000 employees without disrupting any existing processes."

So the team decided that ongoing changes would have to be incremental improvements, such as increased customization, additional two-way communication outlets, further integration with other GE employee tools (such as HR applications), and community platforms.

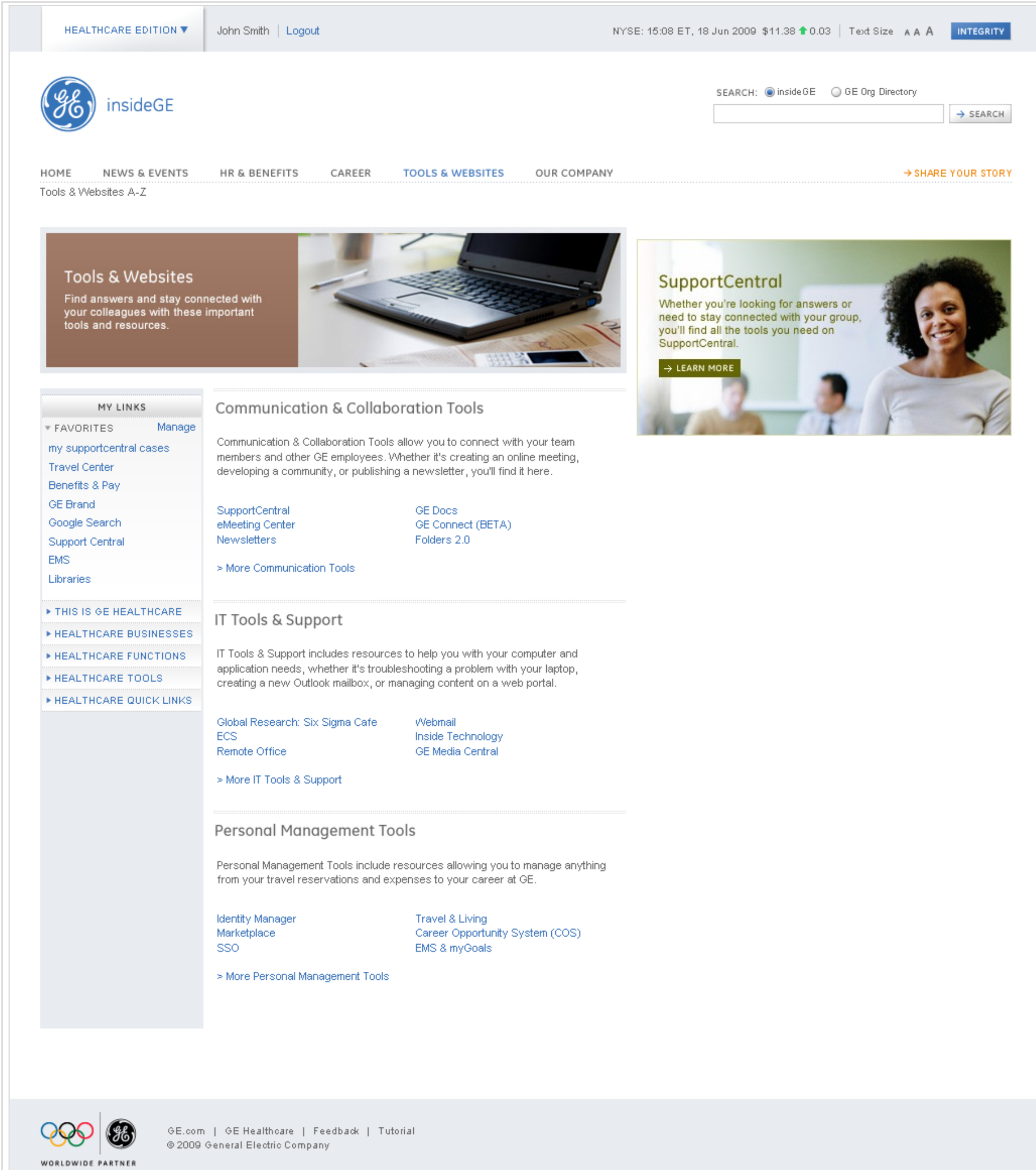
USERS

insideGE is the main internal hub of communications for all GE employees—who number more than 300,000 across 100-plus countries. Employees use insideGE for a variety of reasons that range from obtaining easy-access to sales, technology, and research tools, to getting the latest internal and external news, sharing events, accessing other portals, and handling internal processes such as travel and accounting processes.

USER TASKS

Because the global intranet is used as GE's main internal communications hub, the company uses the site to share news and information with employees, to solicit feedback from employees around specific topics, and to encourage discussions. This news can be GE-wide and/or specific to a sub-business, function, or location. It can be news targeted to a particular team, or contain general industry news that is pulled from an external news provider.

The intranet supports a searchable employee directory, HR information, facility information, weather, stock news, and notification on pending travel requests. It also allows employees to add their favorite internal and external links and serves as a central place to share other business tools and applications.



Pictured: The *Tools & Websites* section provides users with a consolidated area to access the overwhelming numbers of internal and external online resources available to them. The most popular ones are surfaced on this landing page, with links to delve deeper, including into a comprehensive A to Z list. All content owners across the businesses can add tools and resources via the CMS and target as appropriate to keep all tools on one, simple page.

DESIGN PROCESS

In late 2007, GE's intranet redesign began as a project to improve the GE intranet experience for users, content contributors, and the overall company. To reach that goal, the design team conducted a rigorous design process involving users throughout. Users were engaged via international employee surveys, stakeholder interviews, and in-person usability testing. Along with user research, the team also conducted external benchmarking, secondary research, and metrics analysis. The new insideGE launched company-wide in January 2009 to employees across the globe in all GE businesses. There were three iterative phases of research and design, which rolled out incrementally to select GE businesses until the final company-wide release. The three phases are as follows:

Phase I—Foundational research (Q4 '07)

The initial phase consisted of a robust foundational research phase focused on identifying key needs and design principles for the intranet redesign. Foundational research included the following activities:

- Online survey of 10,000 employees worldwide
- Secondary research (Forrester, Jupiter, Nielsen Norman Group, etc.)
- On-site benchmarking visits (Google, Microsoft, JP Morgan)
- In person conversations with the HR and benefits teams
- Conversations and questionnaires for intranet owners and publishers worldwide
- Conversations with corporate stakeholders
- Conversations with tech teams
- Web analytics

Based on the foundational research, the intranet team was able to define goals and design principles to guide the process. The new unified site adopted an editorial news-magazine approach with highly targeted content, improved content organization, streamlined navigation, cleaner visual design, better legibility, an optimized homepage, and a new events calendar.

Phase II—Alpha launch (Q3 '08)

During this phase, the site launched as an Alpha launch to 500 employees in two GE businesses. Interface, design, and content targeting were tested through the following activities:

- In-person usability sessions with 15 employees (US)
- Online survey of 108 employees
- Analysis of Omniture metrics
- Analysis of site feedback submissions

Based on the Alpha research results, targeting algorithms were adjusted to better meet the needs of the users. The homepage was tweaked to provide even easier access to the most important information, through improved legibility and organization. Design began on more radical improvements, such as introducing user selected "news editions" to accommodate some unique targeting needs based on organizational complexities.

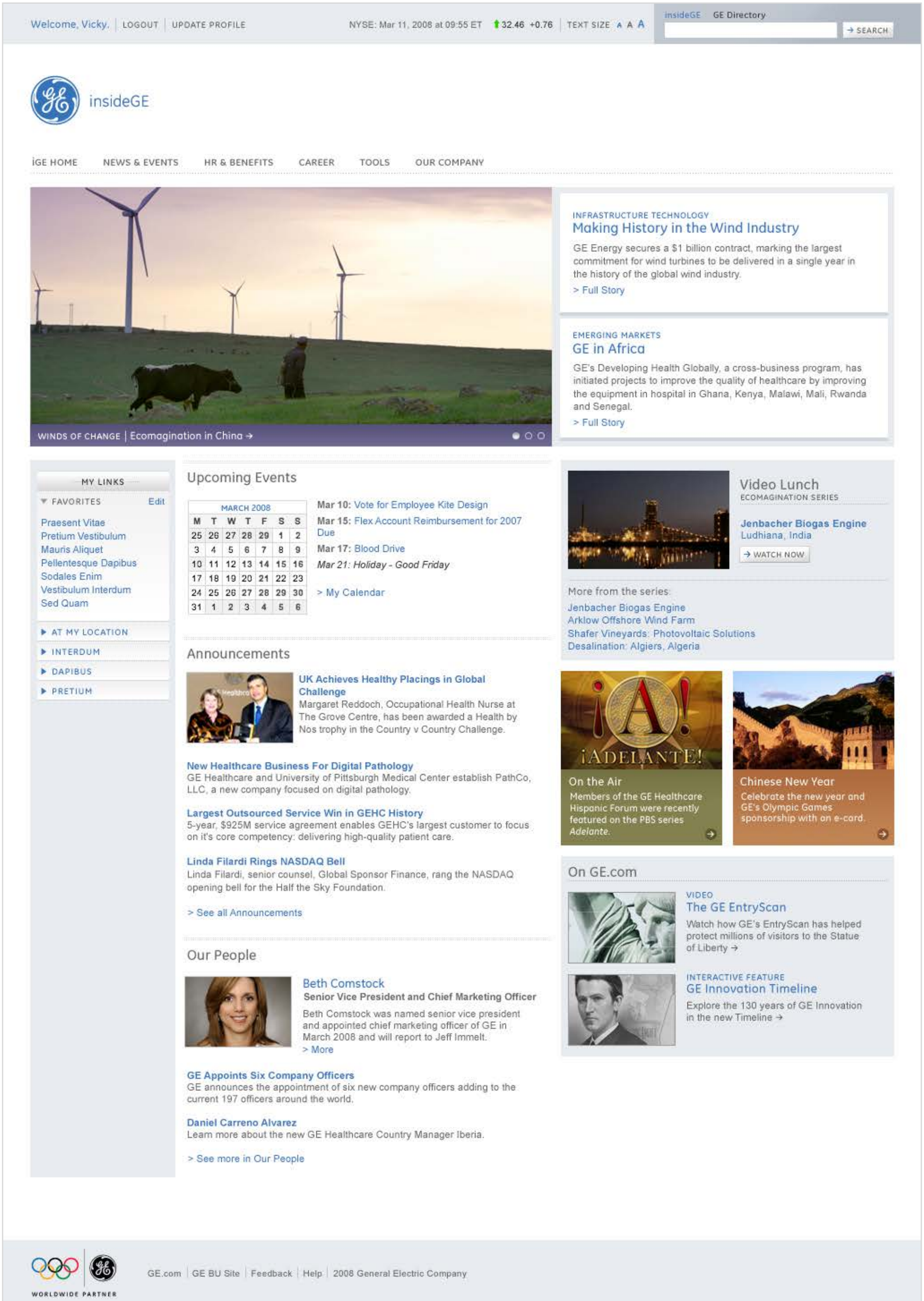
Phase III—Beta Launch (Q4 '08)

The site launched as a Beta to 60,000 employees in three GE businesses, where the adjusted targeting was tested again, with a broader look at international audiences. The Beta launch included the following activities:

- In-person usability sessions with 29 employees (in the US, England, Germany, and France)
- Online survey of 5,395 employees
- Analysis of Omniture metrics
- Analysis of site feedback submissions

Based on the beta research results, the targeting system was refined even further, adjusting select algorithms and user-filtered areas. Additional features identified in earlier research phases were rolled into the site and tested for usability.

The results of this rigorous approach to the redesign show clearly in site usage. The site now regularly receives more than 100,000 daily unique visitors and more than 500,00 daily page views.



Pictured: An early design iteration of the homepage. From initial design to final result, the iterative research and design process yielded significant improvements in a range of subtle and explicit ways for the GE team. Some of the changes are visible in the evolution from this version of the homepage: Targeting algorithms were refined, the top image was streamlined to reduce scrolling and improve legibility, features were added or removed, information was reorganized in a more useful way for users, and nomenclature was tweaked.

URL AND ACCESS

The GE intranet can be accessed at: http://inside.ge.com. By default, it's the start page for each user, but they can change that if they wish. Outside the company offices, users can access the site by connecting in through one of the remote access or VPN solutions that GE uses.

Users without computers, such as those on shop floors, can access the intranet via shared terminals. For example, shop floor terminals are configured to display customized information relevant to that user's business. The version of the intranet that most employees visit is automatically customized based upon their user profile to display the user with relevant information.

TECHNOLOGY

Technology Evolution

The technology behind the GE intranet evolved as the site evolved:

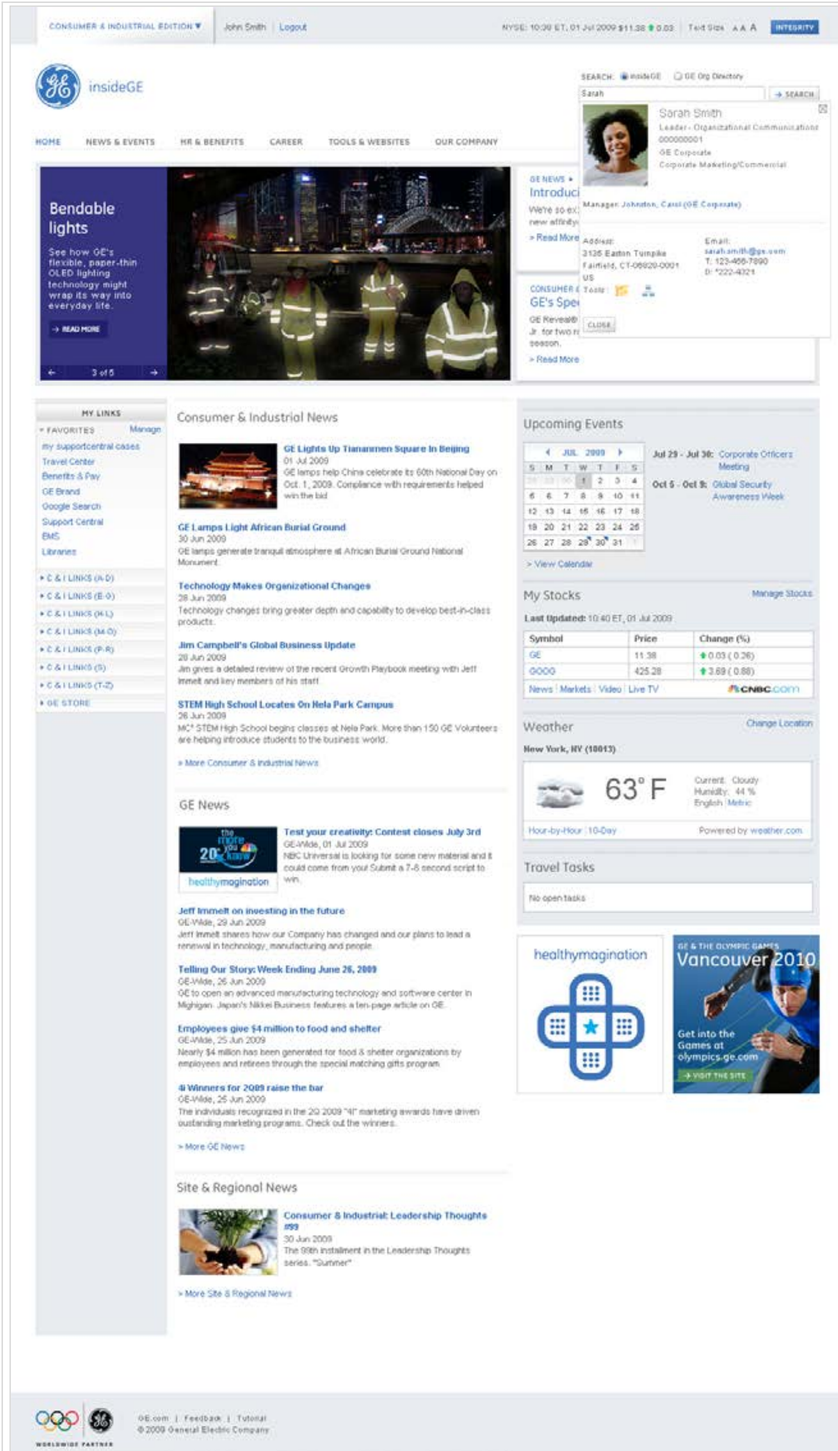
- **1996:** Windows NT, IIS, SQL Server, and ASP
- **2001:** Sun ONE Portal version 3.0, Sun iPlanet application server, Sun Solaris, Oracle 8, Sun iPlanet LDAP, and Sun ONE Search
- **2004:** Apache HTTP Server, Apache Tomcat, Oracle Database 9i, Vignette Portal version 7, and FAST Search

Currently, the site's developers use Eclipse. The portal environment runs on Apache HTTP Server, Apache Tomcat, Oracle Database 10g, and Vignette Portal version 7. The CMS exists within the portal environment. They use JIRA for bug tracking.

SEARCH

Search is one of the aspects of intranet development that, if done well, never really has an end date. The GE team knows that search is important to users, so it considers search an ongoing process that involves continual monitoring, adjustment, and improvement. "Over the years, we have continued to perform search engine optimization, including adjusting which items are included in the index and adding canned search results," says Bond. "During our intranet redesign, improving search quality was a major initiative, and the insideGE QA tester spent a noticeable portion of his time solely on investigating search quality."

The team continues to work to actively improve search by keeping abreast of advancements in search technology and also re-evaluating leading search providers as they emerge. "We are always evaluating search and continuing to find ways to improve results," says Bond. "We track which searches are the most common and we evaluate the quality of results to these queries and add/adjust canned results where needed."



Pictured: The directory search is incorporated into the persistent search bar at the top of every page on insideGE. The system provides real-time suggestions as a user is typing. Through AJAX implementation, selecting a result reveals contact information in a visual business card, allowing users to search and view contacts without having to navigate away from the page they're on.

CONTENT MANAGEMENT

Like many other aspects of the GE intranet site, the site's content management capabilities have evolved over time, increasing in functionality and becoming part of an overarching enterprise CMS.

The 2001 iteration of insideGE introduced the *insideGE Wizard*, which is part of an overarching Enterprise Content Solution tool developed internally at GE.

An upgrade in 2004 added flexibility to the content management tool and fully integrated it with the portal. The CMS tool runs on top of the same portal environment that powers insideGE. It handles the creation of stories, links, and freeform content for display within pre-created portlets on insideGE.

The most recent insideGE redesign involved adding targeting fields to story edit screens within the CMS, as well as the ability to choose background colors for banner spaces and so on using color palettes derived from uploaded images.

CMS Technology

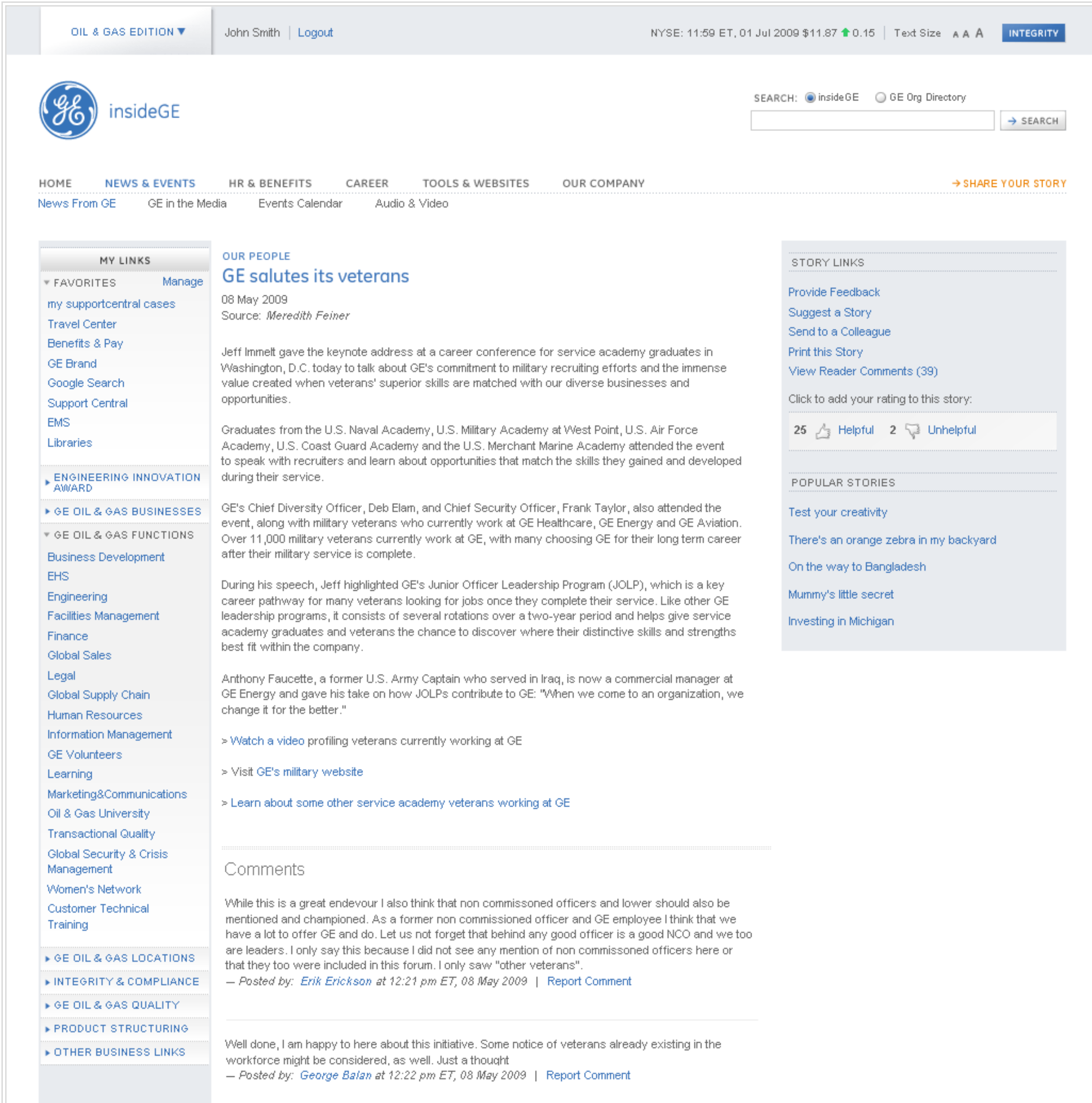
The *insideGE Wizard* is a Web-based application using Java on the backend. The environment that it runs on top of uses Apache HTTP Server, Apache Tomcat, Oracle Database, and Vignette Portal version 7. JavaScript, XML, and Flash are also used within the tool.

Ownership

GE corporate teams centrally own the content management platform, but ownership of the content itself is distributed across the organization. The GE Corporate Communications team members are the only ones who can update certain sections on insideGE, while other sections mix content between the GE Corporate Communications and business communications teams. The content management tool has built-in permissions to allow only authorized users the ability to edit content. For stories, the content management tool has buckets that can be applied to the content: "staging," "ready-to-go-live," "production," and "archived" stories.

Templates

The content management tool has predefined story templates and files. Content is plugged into certain predefined areas on the page to help users adhere to design guidelines and standards for both content and images. "We also disable certain functionality/HTML tags from within the content management tool to prevent users from posting content that is too far outside standard branding guidelines," says Bond.



Pictured: An example story page on insideGE. The stories follow a set of provided templates, supporting varying text and image needs. User rating and commenting appear on each story page, along with a sidebar featuring the top stories of interest.

Taxonomy

Controlling taxonomy is often a struggle for companies with large intranets and decentralized content authoring. Open systems tend to become bloated with many similar categories. Prior to the redesign, GE communicators could add new categories; as a result, many existed in the system, including many categories with inconsequential differences. After the insideGE redesign, business communicators can no longer add new categories. Instead, they associate stories with one category from a predefined list of categories to help improve search and also share stories in a more consistent manner.

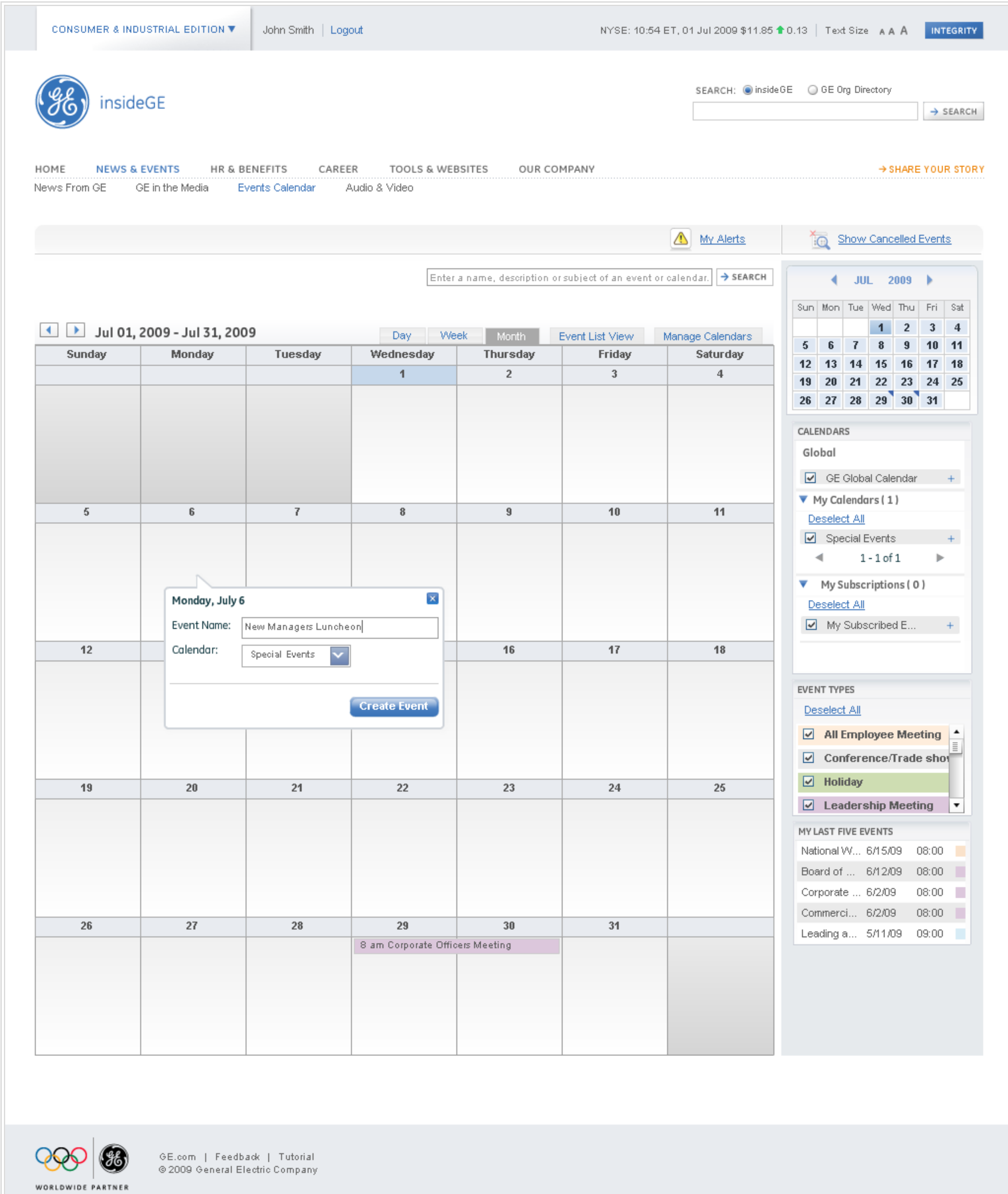
FEATURES

Although the GE intranet has many useful features, the following four are important because they allow users greater personalization and customization:

- **Content targeting.** Developing a CMS that allows communicators to target any news story to employees based on employee profile criteria—specifically, business, location, and function—has allowed the GE team to not only consolidate what used to be disparate sites into a single intranet, but also to ensure that employees are seeing the most relevant content. "The real beauty is that most employees don't even know the content is targeted to them, because they don't have to do a thing," says Manley. "Based on their login, they automatically receive news that was written and published for them to see."
- ***My Links*****.** On the homepage is a pane that includes links to GE's vast network of intranet and Internet sites and pages. Communicators are allowed to publish groups of links and target them to specific employees, much like they would publish stories. Further, users are allowed to manage their own links/bookmarks. "At the end of the day, if our content is uninteresting to an employee, and the navigation is unintuitive to an employee, that person can always rely on his own customizable and targeted links to find what he's looking for," says Manley.

Pictured: The *My Links* feature appears on the homepage, giving users quick access to important links. The *Favorites* tab is fully customizable, allowing users to enter their own links and/or select from a recommended list. Additional tabs are targeted to the user by their business, function, and location, providing the top quick links to business-specific tools and resources.

- **Consolidated news page.** The design team created a page that is effectively a one-stop news page, consolidating news from a user's own business, all other businesses, and external news sources. The external news sources are provided by a custom-built RSS aggregator which is customizable, but centrally shared, so that any feed any employee adds to his or her own reader is also added to a central repository of feeds from which other employees can select.
- **Community calendar.** The calendar tool allows any employee to create community calendars based on distribution lists. "This is incredibly valuable because GE has hundreds, if not more, interest-based networks throughout the organization," says Manley. "With the 'old' insideGE, events typically had to be published as stories, and were therefore not targeted to the right groups, but rather there for everyone to see (taking up space for a majority of people)." Now, for example, if a business or a particular campus has a series of guest speakers, or if there is a local running group, any related events can be published through the calendar. Employees can subscribe to particular calendars just like they might subscribe to a newsletter. It's similar to how the Google calendar works.



Pictured: The insideGE calendar application allows users to create, manage, and publish calendars. Calendars can be targeted to individuals or to distribution lists, ensuring that employees see only relevant events. Users can also subscribe to public calendars. This application lets users publish all relevant information for an event, including date, time and location, registration details and links, and the ability to submit questions for a speaker or panel. A summarized feed of upcoming events automatically appears on each user's homepage.

PERSONALIZATION AND CUSTOMIZATION

Targeting Content

Personalization on the site is handled based on each employee's unique single sign-on (SSO) ID. "This allows users to see content targeted for them by the publishers without them having to do a thing," says Manley.

"For the most part, employees don't even have to think about this kind of personalization (which is exactly the point). They receive integrated, targeted content, so the news, information, and tools are most relevant."

Users also get both the company-wide and business-specific communications on one simple website.

Although users are given the targeted content first, they have the ability to control that content as well and change it by simply changing their edition. For example, healthcare employees will see insideGE's *Healthcare Edition* by default based on their login. And, on certain parts of their homepage, they'll see healthcare-specific content, such as content that was targeted to healthcare employees in the CMS. But if for any reason the user wants to see, for example, insideGE's *Energy Edition*, they can easily switch, effectively overriding (or substituting) their SSO information. In a large organization such as GE, where users can be part of one organization but deeply interested in another, such a feature is invaluable.

"This was completed in order to meet the needs of our diverse organization, where an employee may work in one business and support others," says Manley.

For the sake of simplicity, the editions are kept at the business-level, but in fact, an employee can override any of the targeting criteria used, including location and function. "So, insideGE offers personalization by default, with the flexibility of full customization," says Manley.

Providing users this level of targeted content is a big plus because users are unaware of the mechanism that drives what they see, they just see content that's relevant.

"One of the greatest things about personalization is that users don't have to think about it," he says. "Employees don't necessarily know that they are seeing something based on their SSO, they only know that the news is now more relevant (or, rather, that there are fewer irrelevant news items on their page)."

"Personalization has greatly increased the value of the news that is displayed to users while allowing us to consolidate insideGE sites," says Manley. Prior to the redesign, if a business wanted business-specific content, they had to create their own separate version of insideGE. "Over time," he says, "this became a maintenance nightmare. Further, the design across sites became inconsistent."

"The integrity of the brand was lost, because there was no real central control over the design," says Manley. "Now that we've been able to target content more effectively, we've been able to consolidate the sites and regain control of the layout and design, ensuring a great user experience while providing relevant content."

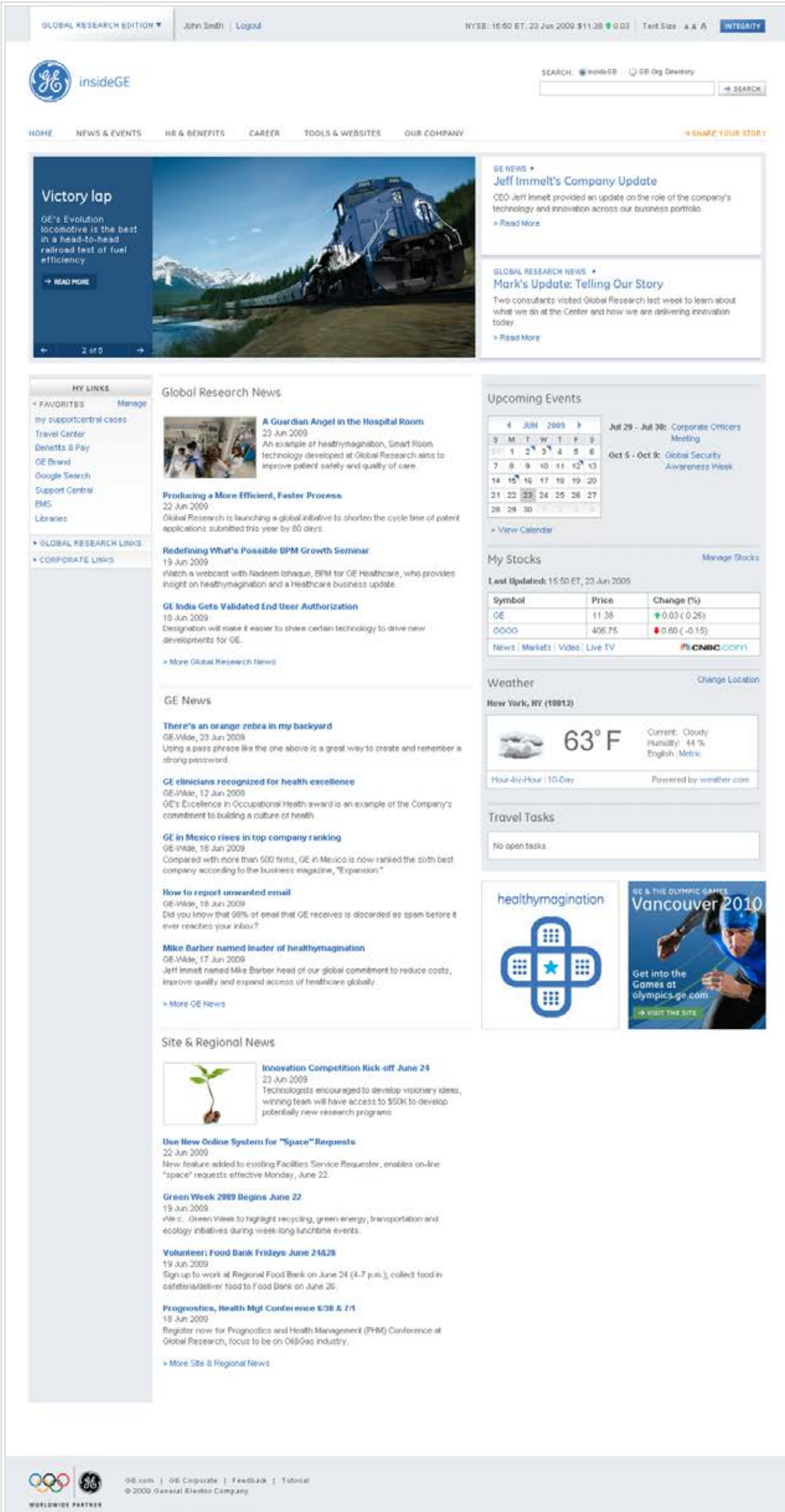
The Challenge of Targeted Content

Targeted content such as that in the GE model isn't without its challenges, especially in an organization of GE's size and complexity.

“Targeting/personalization was a huge challenge because of GE's organizational complexity,” says Manley. “It is not uncommon, for example, for an employee who works for one business, such as Global Research, to “sit” in another business (such as Aviation).”

The employee's SSO may technically mark him as a Global Research employee, but Aviation news might be more relevant to him. The same is true of locations.

“These are just a few of the many examples where targeting based on SSO is imperfect,” says Manley. “So, we've allowed people to change their editions (business, location, and function), effectively overriding the default targeting criteria that is based on their SSO.”



Pictured: This screenshot shows the homepage as it appears for a GE employee in Global Research. News and links align with the user's business, while seamlessly integrating with both company-wide and personal information.

Customization

User customization is also allowed throughout insideGE, where employees can add internal and external links of their choosing, manage their stock portfolio, view weather, and manage their company travel accounting. "These are tools employees constantly use and like, therefore we made sure they were visible on the new website," says Sangita Malhotra, Manager, Corporate Communications.

"We have, on the other hand, heard feedback that employees would like more customization of the layout of the site, such as the ability to move certain elements of the page around," says Manley.

Giving users the ability to customize their experience is sometimes a risk. Although users often request this type of control, it must be granted with some restraint or risk compromising the user experience.

"This has to be balanced with the need for businesses to communicate their messages; so, we continually work to increase customization without compromising the integrity of the design," he says. "I do actually believe that a lot of users can unwittingly ruin their own user experience if they are given too much freedom to customize."

ENTERPRISE 2.0

Most of GE's social media applications, such as wikis, blogs, and so on, live on Support Central, a knowledge management and community platform that is distinct from insideGE. "We did not want to develop any competing platforms when we redesigned insideGE," says Manley. "However, the redesign did incorporate commenting and ratings on stories, which encourages dialogue among employees." And there are two social tools on insideGE: the *GE Newsreader* and the community calendar.

These tools are similar in functionality to Google Reader and Google calendar, and are closely integrated with employee's SSO data. The insideGE *Newsreader* lets users add RSS feeds to a central repository, share and comment on external and internal news stories, and become "publishers-by-proxy." Employees can, for example, subscribe to other employees' feeds, giving them the opportunity to keep up with what others are reading.

The calendar tool allows any employee to create a series of events for other employees in a distribution list and also lets organizations develop specific event calendars and target them to shared-interest groups. "Teams are using calendars to share 'out of office' schedules for example, and larger affinity networks," says Malhotra. "Like the Asian Pacific American Forum is using this calendar application to promote events and share registration information."

The GE calendar lets employees view events, subscribe to calendars or events, and provide feedback to and contact event organizers. Employees can also send events to their Outlook calendars to better manage their schedules.

Malhotra says the social media features for commenting on and rating each insideGE story or video have been incredibly successful. "Employees are engaging in robust conversation around stories of interest and truly enjoy the open discussion forum," she says.

Rating selections are also available, and both commenting and rating features are transparent and available for all employees to view. "These social media features are also great tools for communicators to review truly open feedback and use the feedback when creating new content with the understanding of what employees find interesting and what they prefer not to read," says Malhotra.

BEST PRACTICES

The GE team has a wealth of experience and a long lineage of intranet development. Here are best practice insights gleaned from the most recent redesign project, according to Vicky Fang, Senior Interaction Designer, frog design:

- **Support serendipity along with providing targeted navigation structure.** "While customizing the user experience and delivering targeted content based on the user's login can greatly simplify the experience, it's important to also allow users to easily find and navigate to broader content. No matter how intelligent the targeting algorithm is, there will be exceptions or unanticipated needs. Targeting can be an invaluable tool that helps users quickly find the information that is most relevant to them, but it should not hinder them from finding broader information. Make a point to identify exception cases and reach out to all parties involved (users, publishers, technologists) as early as possible."
- **Build a system that can accommodate varying amounts of content as well as varying types of content.** "When creating a targeting system, where custom content is delivered based on the user's login ID, consider not only the audiences and content pieces that must be targeted, but also the amount of content that will be published. Different audiences will receive varying amounts of information from day to day, which requires a display system that is flexible enough to accommodate."
- **Support company culture.** "Look for ways to support and respond to the particular needs of your company's culture. Take advantage of the opportunity to design a custom tool and tailor it as closely as possible to provide unexpected value to your employees."
- **Solicit feedback from the design team.** "When developing features with an internal team, keep in mind that your developers and designers are also users, and that they can provide valuable insight and feedback throughout the process."
- **Test and verify with users.** "Ensure tools are tested and verified through a phased rollout with your employee base. Introducing and validating new technologies and user experiences gradually can pay dividends in terms of user acceptance and adoption."
- **Balance flexibility with structure.** "When dealing with a number of publishers, set strict guidelines and limitations, particularly with homepage real estate. Provide flexibility, but ensure that the system can't be abused."
- **Collaboration can't be forced.** "Collaboration can't be forced so collaboration elements must be seamless, natural, and optional. Focus more on features and functionality that improve relevancy rather than focusing on collaboration. The latter will naturally follow from the former."

RESULTS

ROI is measured through qualitative means at GE. "We did not have quantitative goals that we needed to meet, beyond what could be quantified as the benefits of consolidation (purely from an IT management perspective)," says Manley. "Now that the intranet has been live for some time, we are planning our post-launch survey to measure before-and-after satisfaction levels, but we don't have that data as of yet."

A measure of site success is often what can people do now that they couldn't do before. There are a number of measures in that regard on the GE site, including these important ones:

- **People can find what they're looking for much more easily.** "The design is so much more clean, people can quickly scan. Targeted and customizable links allow users ultimate control. The site has become much more simplified." (Manley)
- **Content has been significantly improved.** "We are seeing much more engagement from employees in the content as it is creating a discussion. Our technology/innovation stories are well-received and personal employee stories or announcements continue to be great hits. The balance and relevance of content for employees has also significantly improved, allowing employees to know where to look and when, and enforcing the priority of content so the website is easy to skim and scan, a key factor in 'writing for the Web' guidelines. We can also now share stories via video and audio, which are great additions to our company-wide storytelling efforts." (Malhotra)

And the final measure of a site's success is often a happy customer. At GE, users like the new site and like using it, as evidenced by these comments:

- From a marketer:

  "Much greater site! More intuitive design and faster browsing... Good change, because the old one really needed an overhaul like this!"

- From a scientist in the Global Research Center:

  "It looks significantly enhanced…. I'd say it has 3-4x the amount of capability potential for actually having a nice, centralized resource, so I like it."

LESSONS LEARNED

Following are some lessons learned from the GE redesign project:

- **Base the design on research.** "I think one of the most critical keys to our success was basing the redesign heavily in employee research. We needed to manage the expectations of dozens of stakeholders whose publishing processes and communications strategies were effectively being changed, sometimes against their wishes. We were always very easily able to explain and defend our decisions by pointing to the exhaustive research we'd done upfront and throughout the course of the redesign, such as during alpha and beta testing." (Manley)

- **Communication is key.** "The other critical key to our success was constant communication. No one was kept in the dark, so there were no surprises by the time we launched. We frequently invited communicators from across the organization to review the research, design direction, testing results, etc. At every milestone, dozens of communicators and other stakeholders were kept informed of redesign decisions. Further, we encouraged collaboration. We learned a lot by listening. It would've been impossible to try to meet the needs of such a complex organization without hearing from those who were in the thick of it." (Manley)
- **There is no such thing as too much research.** "I'm not sure we would do anything differently, just more: more research, more iterations, more testing. At some point, you do just need to make decisions and move forward, but even one year was a tight time frame for a project of this size." (Manley)
- **Users will surprise you. You must include them.** "I was admittedly surprised by some of the things employees insisted be on their homepage, the local weather, for example, and some of the differences between employees of different countries. US employees, almost universally, really wanted customizable stock quotes on their homepage. European employees didn't seem to care. But that just shows the value of testing and iterative design." (Manley)
- **A phased approach is critical to success.** "The phased approach of our insideGE launch was also very critical, as it allowed us to implement new strategy and tools based on survey research and benchmarking but then add personalized areas like travel and weather, that turned out to be very important to employees." (Malhotra)
- **Listen to everyone, but put users first. "**With so many stakeholders and so many content contributors, we were so open to listening and employee feedback that sometimes it was difficult to balance the views of content contributors and communicators versus employees. At times it was a constant sell and it was important to push-back on content contributors and move forward with what was best for our most important users, GE employees globally." (Malhotra)

SCANA Corp.

Using the intranet:

SCANA Corp. is a Fortune 500 energy-based holding company with electric and natural gas businesses in North Carolina, South Carolina, and Georgia.

Headquarters: Cayce, South Carolina

Number of employees the intranet supports: SCANA has 6,700 full-time employees and contractors who have intranet access (and about 3,300 contractors who don't have intranet access)

Company locations: SCANA operates in North Carolina, South Carolina, and Georgia.

Locations where people use the intranet: All locations

Annual sales: $5.3 billion (2008)

Design team

Corporate Communications: Christy Season, Intranet Strategist; Therese Griffin, Mgr. Corporate Communications & Philanthropy; Nicole Mclean, Supervisor Corporate Communications; Keela Middleton, Communications Strategist; Troy Stockman, E-Communications (Front-end Developers) Supervisor; Eddie Flowers, Front-end Developer Consulting; Matt Reinhart, Front-end Developer

IT Department: Andrea Peterman, IT Project Manager; Dean Keith, Supervisor IT Application Developers; Don Rozier, Applications Developer; Carl Russell, Applications Developer; Adam Youngblood, Applications Developer; Greg DuBose, Applications Developer

SUMMARY

How does an intranet team update a website and tackle technical and organizational challenges without additional budget? Ask SCANA. The solution for them was creativity. Their resourcefulness in solving problems and finding solutions that entailed no additional costs resulted in a website that offers users countless self-service tools, creative content, and a clear design.

Team members used their creativity to conquer several challenges. The first was how to create a site that could encourage collaboration when they didn't have the resources to buy a new site platform. The solution? Use SharePoint, a product they already were using for collaborative team sites. Because SharePoint was already in place, they decided to move the site itself to SharePoint and take advantage of it. While the tool didn't provide them with the exact functionality they needed or wanted out of the box, they used it as best they could and picked their battles with it—sometimes making custom changes for things that were intolerable, and sometimes letting smaller issues slide.

The second challenge was how to facilitate collaboration in an environment where certain communications could result in heavy regulatory fines. That is, they wanted to encourage users to contribute content and share information, but federal law prevented various departments from sharing certain information with each other.

The answer again involved SharePoint. The team decided to put sharable, company-wide information on the intranet itself, called *The Edge*, and to put sensitive information into a SharePoint team site environment and restrict access appropriately. Team members check every request for a new intranet site to see whether it can be placed on the company-wide site or must be placed on a restricted site. This system of accurate information placement ensures that the company follows all applicable laws.

Using SharePoint helped the team conquer a third challenge as well—changing from centralized content control to distributed content management throughout the organization. SharePoint made the change technically simple, for the most part, and many contributors throughout the organization were already familiar with the tool's processes and interface from using the collaborative team sites, which was a plus.

This transition was essential, as it freed time for intranet team members to focus on site issues rather than content updates. It also gave contributors direct ownership of content updates without having to ask someone to do it or wait for it to be finished. For content contributors, being able to update immediately was a welcome change.

The team was prepared to ease the transition, recognizing the need to support content contributors during the adjustment. Team members provided any needed guidance with the SharePoint content system, as well as providing guidelines for contributors to follow. The team used SharePoint to ensure visual consistency across pages: templates allow for some flexibility, while also retaining a consistent look. The team trains contributors and counts on them to follow guidelines, and also conducts twice-yearly audits to ensure compliance.

The result of all these efforts is a well-designed site with interesting content. The intranet's homepage has a clean design that makes it easy for users to know where they are in the site. The homepage is clutter-free and focused on providing news. A rotating featured story area offers up to six different stories, which users can page through via numbered links or an arrow. For each story, an image and headline appear with a link to *Learn More*.

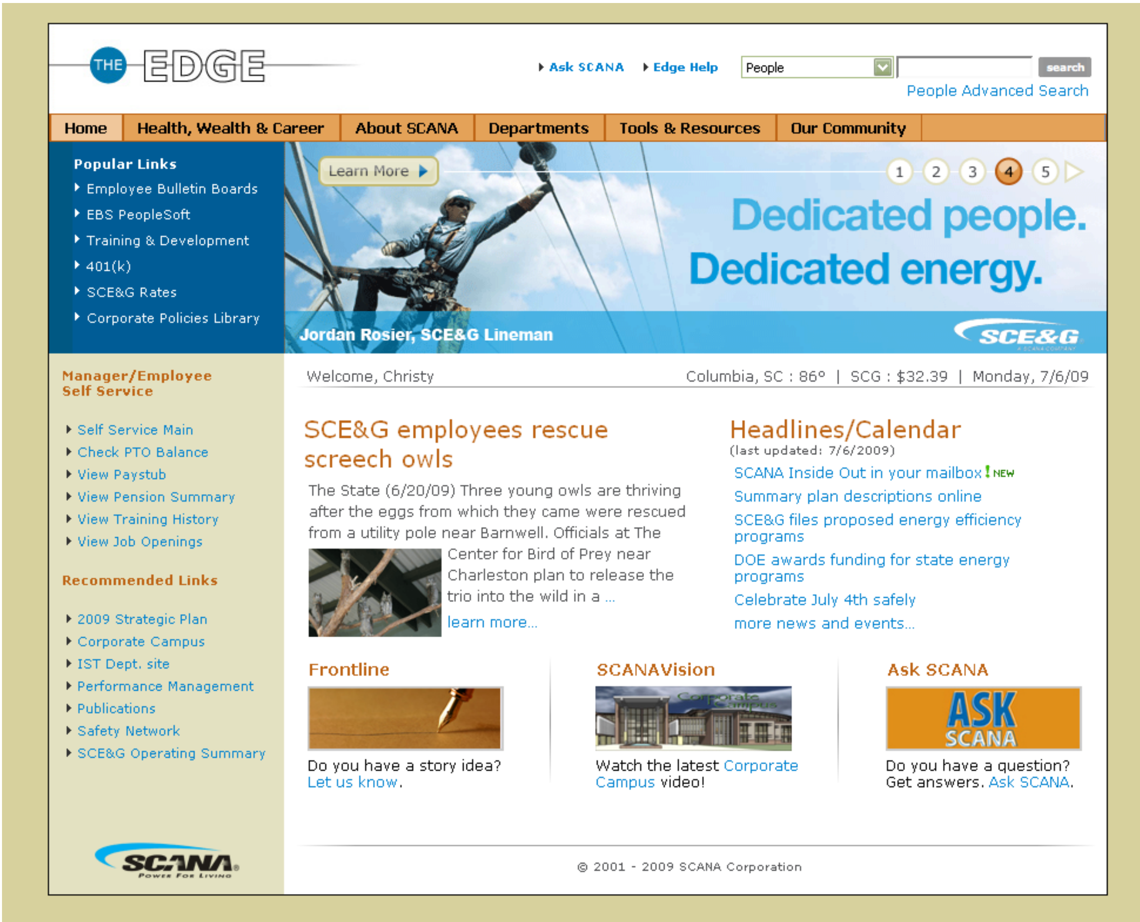
An additional news story is featured in the body of the page, complete with the posting date, a clear headline, a brief summary, and a link to read more. Additional headlines and events information appear next to the featured story.

The rest of the page offers links to key site areas. The three sections at the bottom of the homepage are additional promotional areas to push intranet content to employees. Each area holds up to three different promotions that cycle based on browser session. The far left area is dedicated to the corporate-wide publications, the middle area is dedicated to SCANAVision video promotions, and the far right area is dedicated to communicating other internal sites and tools.

The homepage also includes weather and stock information in a small bar beneath the featured story area. Mousing over the weather or the stock price will display a small pop up with additional details or information.

The remainder of the page is devoted to site navigation. Popular links appear on the side of the page, followed by links to self-service areas of the site and a list of recommended links.

It's rare to see such a clean intranet homepage, with a clear focus and lack of clutter.

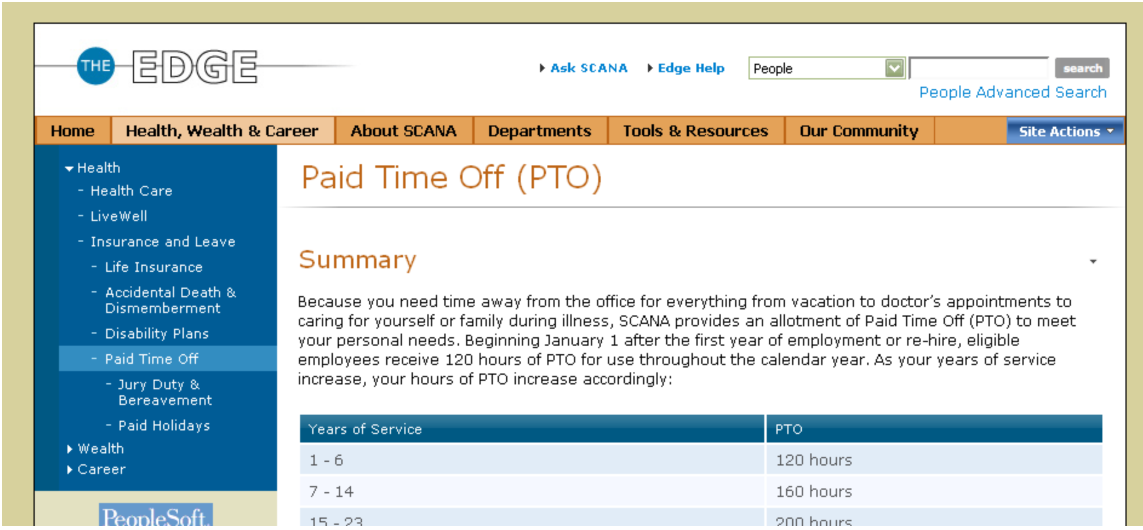


Pictured: The homepage of the SCANA intranet, called *The Edge*, is clean and focused on providing news and navigational links to key site areas.

The site is nicely designed throughout. A color change in the top, global navigation easily tells users where they are on the site. The side navigation also clearly indicates which section is currently being viewed. Categories expand and collapse as needed to reflect where users are and where they can go.

Each page has a large, clear heading describing the page's content. The simple use of rule lines, color, a consistent color palette, and white space combine to create a simple yet effective page design that lets users focus on the content rather than be distracted by confusing page elements or busy design.

In another example of their resourcefulness, team members took usability test results from the public facing site and squeezed as much relevant information out of them as they could to help refine the intranet's design and organization. This, apparently, has paid off.



Pictured: The site has a clear design, which lets users focus on the content rather than be distracted by site structure and cluttered pages.

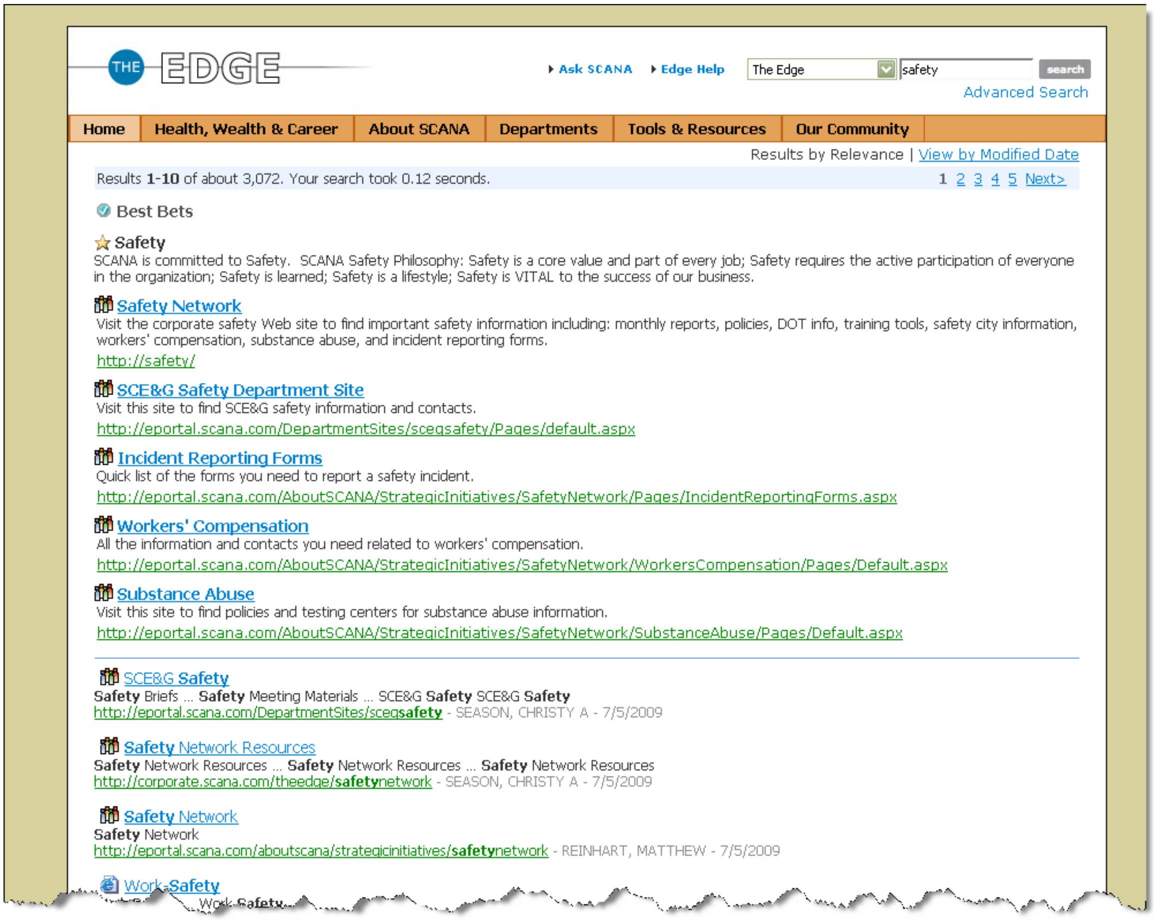
Given that they had no budget, team members had no option but to use SharePoint for their search solution. They therefore worked within the structure of SharePoint's search to try to present the best possible information for users. To do this, they took advantage of Best Bets to move users to the content that best fit their needs. Best Bets lets the search return certain hardwired results tied to specific keyword queries. For instance, the search for "safety" (see below) offers five prioritized Best Bet results that are most likely to provide the information users are looking for. Each result is presented with a link, a clear page name, a one-sentence description of the page's content, and the URL of the page.

Note the simple URL of the first result shown below: http://safety/. The site allows the use of shortcut URLs that let onsite users type in a keyword and move directly to content. The team sets up these keyword redirects for certain key applications, content, or shared sites.

If users don't find what they need in the Best Bets, standard search results appear below the rule line on the page. These results also show page titles, but instead of summaries, they display text snippets the show where the search query appears on the page. The URL is followed by the page author's name and the date the page was last updated.

The top of the page shows the number of results returned; results are initially sorted by relevance, but users can reorganize results based on the date they were last modified.

Team members keep track of what is and isn't working in the site search. If they find that a query is popular but doesn't have a Best Bet associated with it, they set one up.



Pictured: Best Bets allow the SCANA team to hardwire search results for certain keywords and present the most relevant links first.

The site makes good use of video content. SCANAVision is the site area that lets users view featured videos, browse all videos, or find specific video content using a keyword search. This section is linked from the site's homepage. The top of the page features the video player window, as well as a list of recently added videos, which are accompanied by a small image, video name, and brief description, as well as the date the video was added.

Beneath this, users can browse videos, which are listed in reverse chronological order by default, showing the most recent videos first. Users can sort by title or date to help them find specific content. Each video is accompanied by a brief description.

A search box specific to the video content appears at the top of the list of videos. Users can easily page through results or the full list using links at the bottom of the page. They can also change the view to see more videos per page.

Another nice feature: a link on the side of the page tells users to send an email to request a DVD of a program from the site.

As for the video content itself, the site offers many types of videos, from promotional to informational to skill building.

Remember that lack of budget discussed earlier? And team creativity? The team came up with creative solutions once again when challenged with advertising and introducing the new site. One aspect of their “campaign” for showing off the new site involved video: The team created a *Lunch N' Learn* webcast to introduce features of the new site. These webcasts are offered throughout the year and can be viewed as they “air.” They’re also recorded and available for on-demand viewing.

Team members also created “advertisements” for the new site and posted them in the SCANAVision area. By borrowing someone from the organization’s video team to shoot the videos and recruiting volunteer actors from the workforce, the team once again came up with a creative way to problem solve.

Pictured: The SCANAVision video library lets user see recent additions, browse offerings, and search for specific content.

The team’s efforts to build excitement and interest around the new site didn’t end with the video offerings. Team members worked with groups throughout the organization to help build buzz for the new site. The team’s group of pilot testers included 150 employees from throughout the organization who gave them feedback on the new site, finding typos, errors, bugs, and usability problems that the team could then fix before launch to the full organization. As a result, these users became invested in the site, and they—along with site owners and content contributors—became its ambassadors. They spread the word throughout the organization, helped colleagues and answered questions after the site launched, and even hung posters throughout the offices. Once again, the small team’s resourcefulness won out over a lack of budget and tight schedule.

BACKGROUND

The SCANA intranet was started a little over 10 years ago. This original intranet was a grassroots effort by a few Corporate Communications employees who worked without a budget and with little managerial direction. The site they built consisted of a handful of company information websites formatted into a grid: graphics on the left, text on the right. The early site had no site-wide search (only a people search), no Web analytics, and little content decentralization.

The first *official* company intranet started a few years later when the IT department created a website that let employees look up other employees. This led to the creation of a formal intranet that consisted of a homepage with links to department sites (basic HTML created by the departments themselves), industry links, and company news.

In 2000, the company recognized there was a serious business need for customers to access their accounts online through the SCANA external website, so a major initiative was begun to build out the external sites. The intranet project was coupled with that larger project, and an updated version of the intranet was born. This intranet, a precursor to the company’s current site, was a portal intended to aggregate information and was custom built in-house. The project also included building the company’s first CMS system, created by the internal team.

The redesigned intranet launched in May 2009, utilizing SharePoint functionality as a platform. It featured a highly customized look and feel, along with custom Web parts for additional functionality.

In the beginning, the SCANA intranet was mainly a communication tool, but over time it has grown to include more functionality and transactional elements. The site has also evolved, morphing more task-oriented functions into online applications that serve employee needs across a variety of areas. With the most recent intranet conversion project—moving the site to the SharePoint platform—the intranet has grown to include more employee-contributed content and the ability to decentralize content contribution to content owners across the company.

Future Plans

In early 2010, the SCANA team will embark on Phase II of the site redesign. This phase will expand the site to include many features that couldn’t be included in the first project due to time or budget constraints. Phase II will also address employee requests for new functionality.

Some of the features that will be added in Phase II include the ability for employees to:

- comment on and rate videos and news items;
- create a customized *My Links* section that includes internal links, Web applications, and SharePoint team sites; and
- add topic-specific and business-unit-specific news streams to the homepage.

During Phase II, the company will form a Governance Committee consisting of intranet stakeholders, including high-level managers from Corporate Communications, IT, HR, and other company areas. The intranet team will work with this group to develop a three-year strategy for the intranet, prioritize all large intranet requests, and drive the intranet's strategic direction.

INTRANET TEAM

As in many companies, the SCANA full-time intranet resources are minimal, consisting of just one intranet strategist; other staff members support her as needed.

On the tech side, a Web development team supports the intranet and external customer-facing sites, and an internal IT team manages all internal servers, internal Web applications, and the SharePoint team site environment.

Pictured: The SCANA intranet team (from left to right, back row) Adam Youngblood, Eddie Flowers, Andrea Peterman, and Dean Keith; (front row) Don Rozier, Nicole Mclean, Christy Season, and Matt Reinhart; (not pictured) Therese Griffin, Troy Stockman, Carl Russell, Greg Dubose, and Keela Middleton.

Ownership

The intranet strategist resides in Corporate Communications. The site is owned by Corporate Communications and managed in a close partnership with IT; it also receives continuous input from HR.

"The intranet has found a home in Corporate Communications," says Therese Griffin, Manager, Corporate Communications & Philanthropy. "As one of the most used employee channels, the goals of the intranet are now aligned with the goals of our employee communications function."

Corporate Communications strategists provide content for the intranet and drive communications strategy for all employee communications initiatives.

Pictured: An example of a corporate-wide strategic initiative: the *Corporate Campus Site*. Corporate Communications owns and maintains this site, which lives on the *About SCANA* tab. The strategic initiative sites are more graphical and interactive. This site focuses on the company's new campus construction and includes interactive graphics, a discussion board, construction photos, a live webcam feed of the construction site, and monthly updates via *Campus Spotlight* videos.

Internal Teams Know Best

While many companies engage outside agencies to augment their internal team's capabilities, SCANA found that their own internal team had a better grasp of the company, employees, and employee needs than any outside vendor could.

Because only one full-time staff member supports the intranet, many other people contribute to the site on a part-time basis as follows.

In-house project team:

- 1 intranet strategist (80 percent dedicated)
- 2 Web designers (50 percent dedicated)
- 4 IT developers (30 to 75 percent dedicated)
- 1 IT project manager (50 percent dedicated)
- 2 Communications strategists (25 percent dedicated)

Manager/supervisor support:

- Manager, Corporate Communications & Philanthropy
- Supervisor, IT Developers
- Supervisor, Web Developers

GOVERNANCE

Adopting the SharePoint platform let the SCANA team decentralize all of the individual department sites that were previously managed through Corporate Communications. On the prior intranet, approximately 40 department sites and all of the sites' content was managed and maintained through Corporate Communications.

Prior to SharePoint, the workflow for making changes to these sites went something like this:

- An internal customer contacted Corporate Communications to request an update or edit to a department site on The Edge.
- Corporate Communications tasked the request up to the Web development team.
- The task was prioritized with all the other internal and external Web updates in the queue.
- After the task was completed, Corporate Communications was notified.
- Corporate Communications ensured the task was completed correctly and notified the customer.

Given the multiple steps required to make changes, even a small change such as a link-update request could take upwards of a week or two to complete. "As more departments wanted their own sites on The Edge, the management of the sites became a resource bear for Corporate Communications and departments weren't given the timeliness needed," says Griffin. "With the new intranet and the SharePoint platform, we were able to completely decentralize content ownership for all of the Department Sites."

Governance in a Regulatory Environment

Because SCANA is a regulated utility, it must follow certain legal restrictions or risk heavy fines. This poses a challenge for allowing collaboration on the company's intranet.

"One major restriction we have to be very aware of is that the marketing groups of our company cannot communicate certain information to our transmission employees," says Griffin. "These communications are regulated by the Federal Energy Regulatory Commission."

Understanding this separation requires a little background; as Griffin explains, "When SharePoint was initially installed, because of its collaborative nature, it was built on separate servers, housing different groups' sites on different servers, so the high-risk groups' SharePoint sites were heavily protected, thus preventing the wrong type of collaboration."

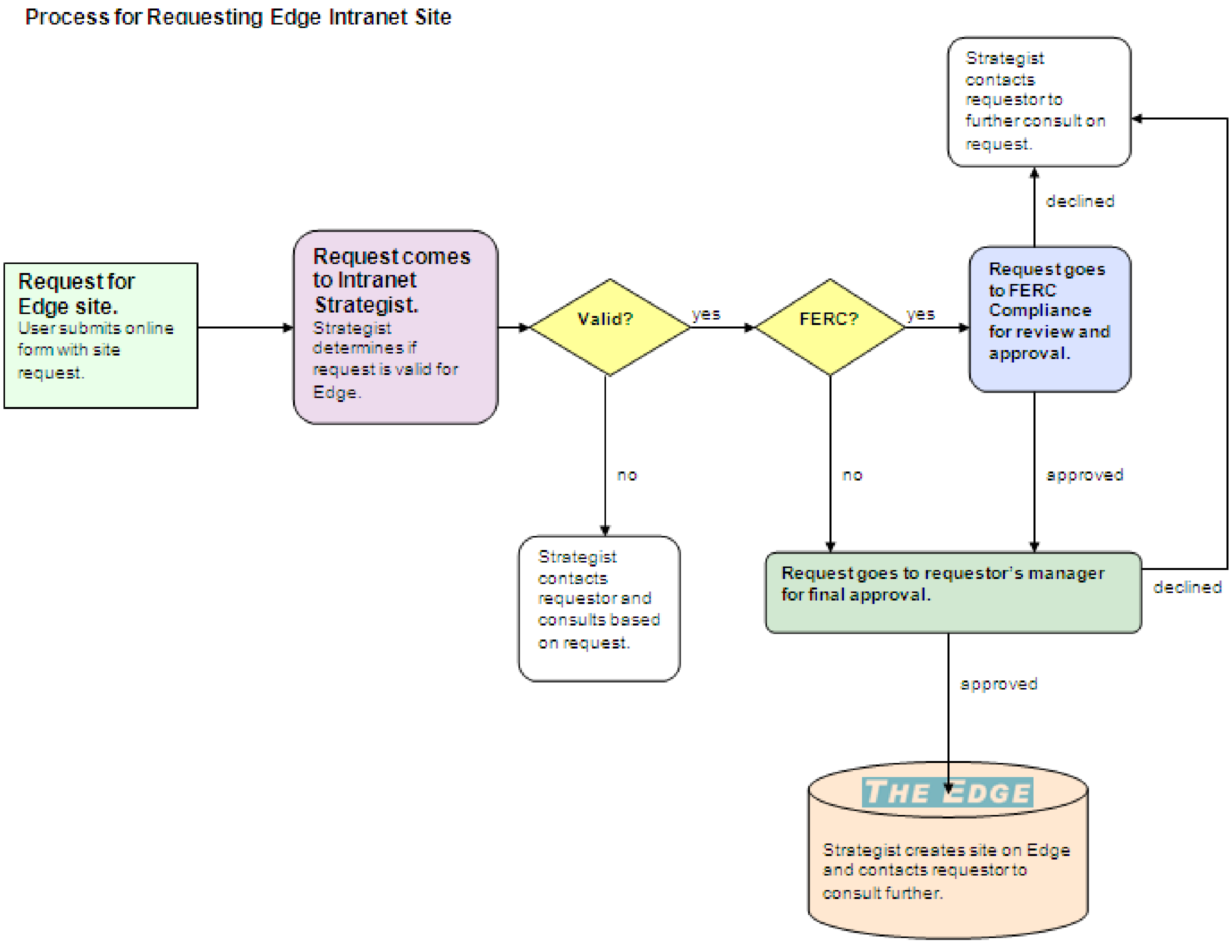
During the planning stages for the new intranet, it was decided that The Edge would be a place for corporate-wide information and functionality that all employees could access and use. And any team-specific site or information would belong in the existing SharePoint team site/collaboration environment where risks of violations are mitigated.

Separating Content Between Sites

Because the company wanted to separate company-wide content from team/collaboration content, it first had to examine the existing content and decide whether to put in on a SharePoint team site or on The Edge.

First, the team delineated between the intranet, The Edge, and the existing SharePoint team/collaboration environment. SharePoint was initially implemented several years prior as a project-management and team-collaboration tool. But since its inception, use of the tool had grown, so several groups had department-specific sites where they could collaborate on documents, project management tasks, and so on.

So, after establishing guidelines governing which sites belonged on the new intranet and which should be team collaboration sites (accessible only to a specific department), the project team evaluated each department site and determined whether it should convert over to the new Edge or be moved into the SharePoint team environment. The chart below offers a glimpse into the process they used for making those decisions.



Pictured: This flowchart shows the SCANA Team's process for determining whether a site belonged on The Edge or in SharePoint team sites. FERC stands for the Federal Energy Regulatory Commission.

For each existing site that belonged on the new intranet, the team identified a "site owner" who became a liaison between Corporate Communications and the site owner's department.

"We pulled all of the site owners together into a group we call the 'Site Owners Community,'" says Christy Season, Intranet Strategist. "We met with this group throughout the conversion project, introduced them to the project, explained the role of a site owner [see table below], and trained them on how to rebuild their old site on The Edge into the new, converted Edge."

The team set up a SharePoint team site for this group of site owners and provided them with training materials, best practices resources, a style guide, a content guide, a site owner's user guide, and a question and answer discussion board.

"We started each department off with a template for their site on the new Edge," says Season. "After attending a training session, the department site owner converted their old site into the new Edge. We continued to meet with the group as needed throughout the project to touch base or to individually help with any issues, but each site was created for the most part without the assistance of Corporate Communications Web developers."

Today, the site owners entirely own and maintain all department sites. The team plans to audit the sites with the group of site owners twice per year to ensure that all the style and content guidelines are being met. “This effort was probably one of the biggest wins of the project,” says Season. “It freed up our resources to focus more on strategy and corporate-wide initiatives and created ambassadors for our intranet.” It also empowered the site owners and was a real win for the departments who can now post and update content in a matter of seconds as opposed to a week.

The following table shows the roles and responsibilities of the various constituents involved in the SCANA intranet and the ownership role they play in keeping the site fresh.

INTRANET TEAM GOVERNANCE RESPONSIBILITIES	
Role	**Responsibilities**
Intranet Strategist	• Manages all intranet security, ensuring permissions are granted correctly and consistently • Manages Site Owners Community and keeps the group's website updated with style guides and best practices • Trains members of the Site Owners Community • Facilitates new site requests for the intranet and determines which sites belong on The Edge (and which belong in the SharePoint collaboration environment) • Facilitates semi-annual site audits • Conducts quality testing and site reviews on new sites and provides content updates on Corporate Communications' managed sites • Measures and tracks intranet Web analytics
E-Communications	• Ensures consistency with style and templates when building out sites • Ensures navigation is consistent throughout site • Participates in intranet audits
Communications Strategists	• Develops content for pages owned at the corporate level and provides oversight • Often proofreads corporate-wide information before it's posted to the intranet • Participates in intranet audits • Reports Web analytics to internal customers
Department Site Owners	• Manages and updates their department site • Serves as point of contact for the site • Participates in site training • Participates in Site Owners Community meetings • Participates in yearly audits • Acts as an intranet ambassador

TIMELINE

The site conversion took approximately two years to complete, from planning/testing to launch. The table below outlines the deliverables and project milestones as the project progressed.

INTRANET CONVERSION TIMELINE	
Milestone Date	**Milestone Description**
Late 2006	Presentation to senior-level management to get project approval
2007	**January–March** Usability testing with employees (card sorting exercises, one-on-one interviews, field studies) **Summer** Developed site architecture/taxonomy Built wireframes Created site design/color scheme **Fall** Developed business case and business requirements documentation **Late 2007** Intranet strategist performed business requirements walk-through with IT
2008	**January–April** IT feasibility and estimates documentation, tweaked business requirements as needed **May** Intranet build project kick-off **August** First meeting of Site Owners Community **September/October** Site owners training
2009	**April** Began employee communications about upcoming new intranet Corporate Communications review Pilot group testing of new intranet **May** Launch **Fall** Post-launch survey sent to employees

GOALS AND CONSTRAINTS

Starting with Many Challenges

Before the SharePoint conversion, the team was faced with an intranet with many challenges. It was a 10-year-old homegrown system with no site-wide search beyond a people search and no Web analytics. It had little to no content decentralization and was very reliant on technical resources. It was also somewhat inflexible and didn't support functionality that users were beginning to expect, such as blogs and employee-generated content.

"We as a team felt these pain points, but also received feedback from employees on our communications survey that intranet usage was increasing, but [that the site was] cumbersome to use," says Season. "We wanted to address these issues and provide employees with the necessary business tools and resources to improve productivity and efficiency with his or her day-to-day work functions."

Dealing with Many Constraints

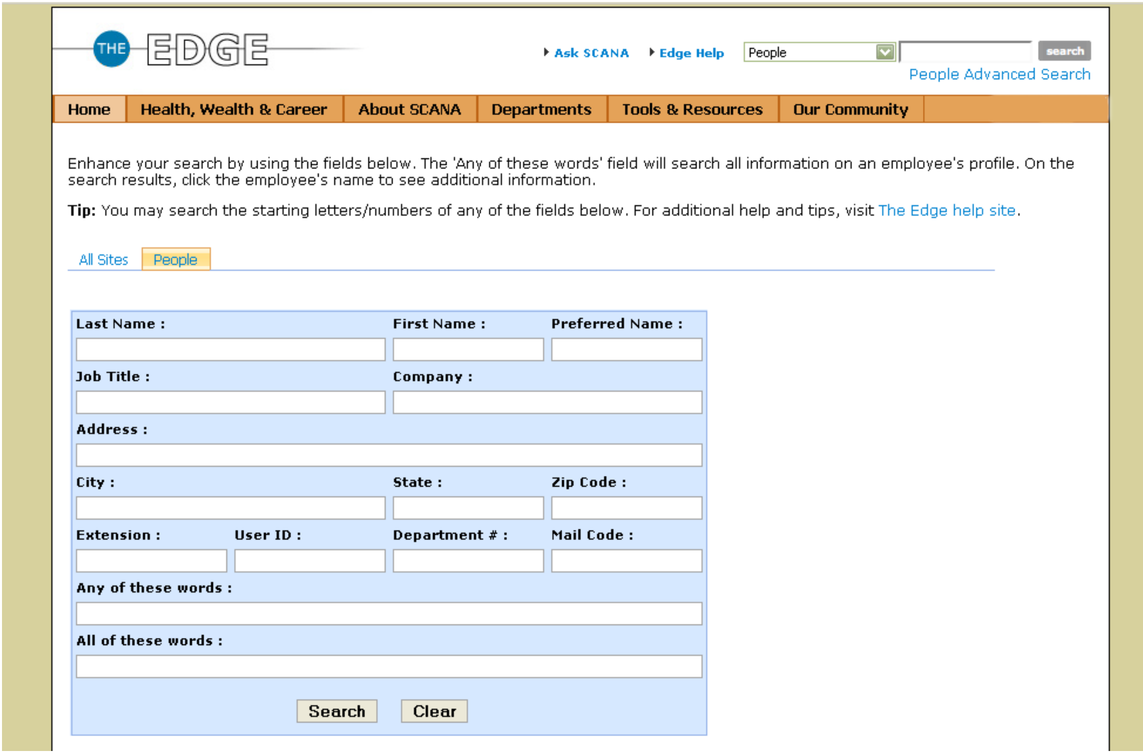
Budget was a significant hurdle for the team, but it was not the only one they had to contend with along the way. "We had no budget to fund our project," says Season. "This forced us to be more creative with our solutions and was one of the main factors in a lot of our decision-making." One of those decisions was to choose SharePoint as the intranet platform, mostly because it was already in use as a team site collaboration tool and the company already owned a license.

The team was also severely resource constrained. Season says that none of the project's team members were 100 percent dedicated to the project. "With our IT resources also responsible for a lot of day-to-day server maintenance and the SharePoint team collaboration site environment, if a server went down or an issue arose with a higher priority, we would lose our IT resources off of the project for days at a time," she says.

SharePoint itself also presented roadblocks and constraints throughout the project. "We often had to alter business requirements or find alternative solutions to some of the functionality we wanted because it just wasn't possible in SharePoint," says Season. "Sometimes we had to spend extra time on developing new, custom solutions because of the way SharePoint behaves out of the box."

"For example, on our headlines listing, the addition of images to an article using SharePoint 'out of the box' created multiple pop-ups and wasn't intuitive for a non-technical user," says Season. "Our IT developers built out a custom solution that added about two weeks to our timeline."

"Another example was with our *People* search functionality. SharePoint 'out of the box' does not list the *People* search results in alphabetical order," she says. "Our IT developers spent about two additional weeks customizing the *People* search to sort the results alphabetically as employees would expect to see them."



Pictured: The advanced *People* search page. The page provides multiple fields by which employees can search the employee directory.

USERS

SCANA intranet users include a variety of job functions:

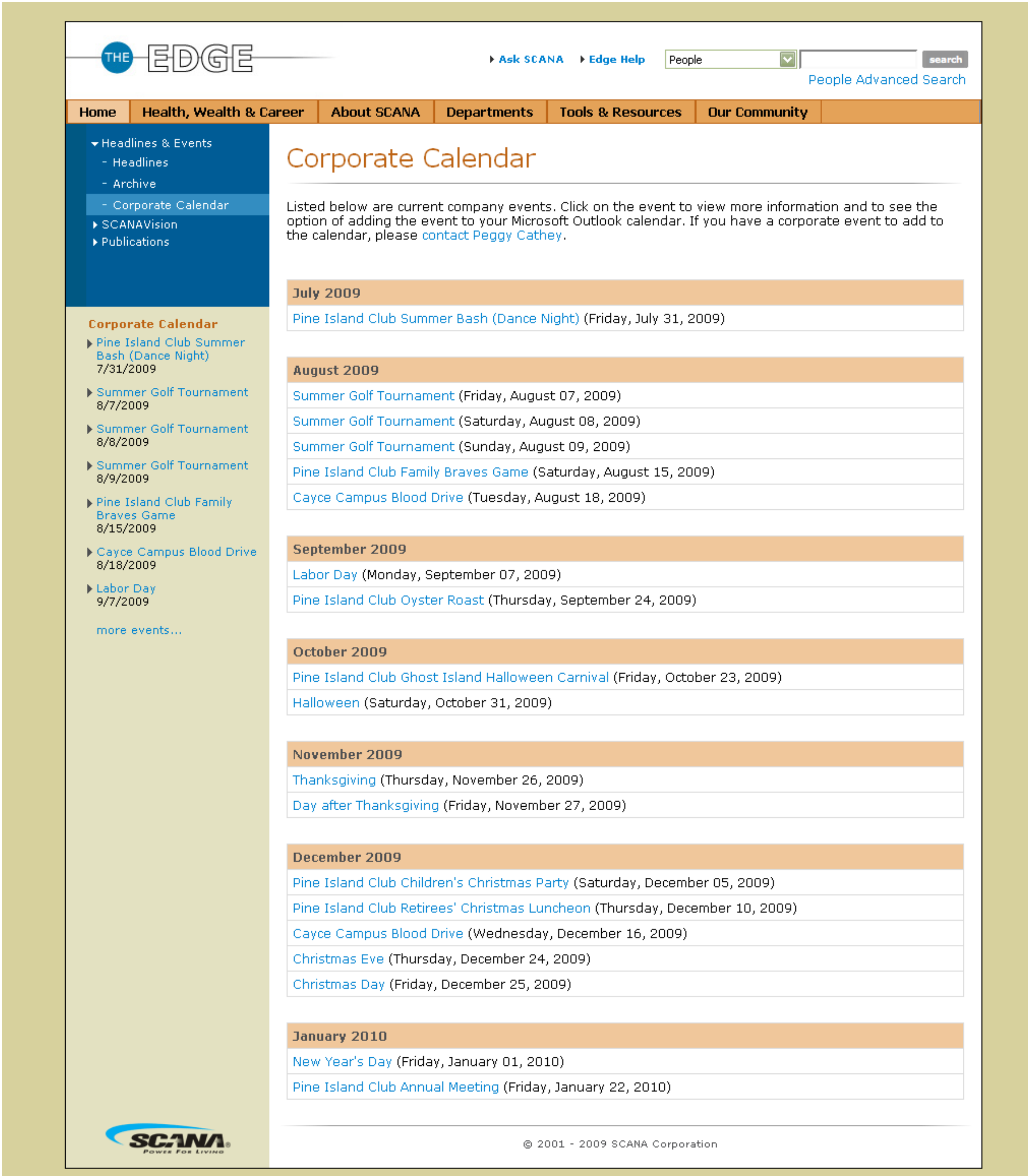
- **Office employees.** These employees have desktop computers, work in an office environment, and access the intranet both via their computers at work and remotely from home.
- **Contact center employees.** Contact center employees support customer inquiries via phone, online, or in business centers. They also access the intranet via desktop computers at work and remotely from home.
- **Field employees.** These employees include line workers, journey workers, and service personnel who access the intranet via shared computers at base locations and remotely from home.
- **Plant employees.** These employees work in electric generating plant environments and access the intranet via shared computers in break rooms and remotely from home.

USER TASKS

User tasks on the SCANA intranet include:

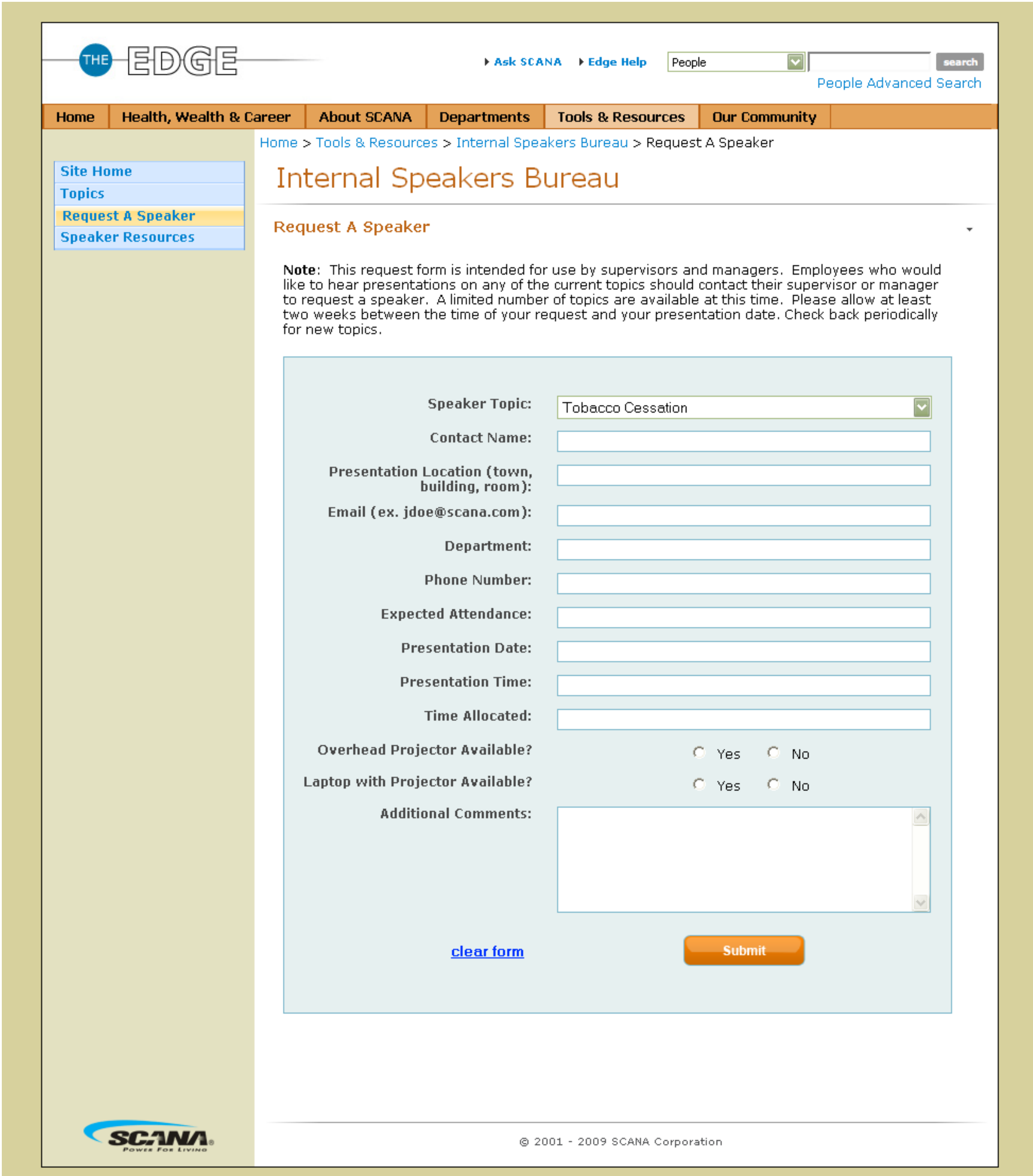
- Search for employees and view reporting hierarchy
- Search the intranet
- Search external customer sites

- Search externally via Google
- Obtain direct access to personal benefits information including the benefits enrollment process via a direct link to PeopleSoft
- Post a question to a Q&A feedback website
- Comment on blogs
- Post to discussion boards
- Take a survey or poll and view results
- Watch videos, including live Web feeds
- Populate, design, and modify a designated site or content section (content editors)
- Access Web-based administrative business tools including travel requests, time reporting, expense reports, vendor purchasing, and open positions
- Access Web-based personal employee information and transactions including 401(k) balance, performance management application, vacation time balance, pension summary, training history, paycheck direct deposit info, personal contact info, and compensation history
- Add a company calendar event to a personal Outlook calendar



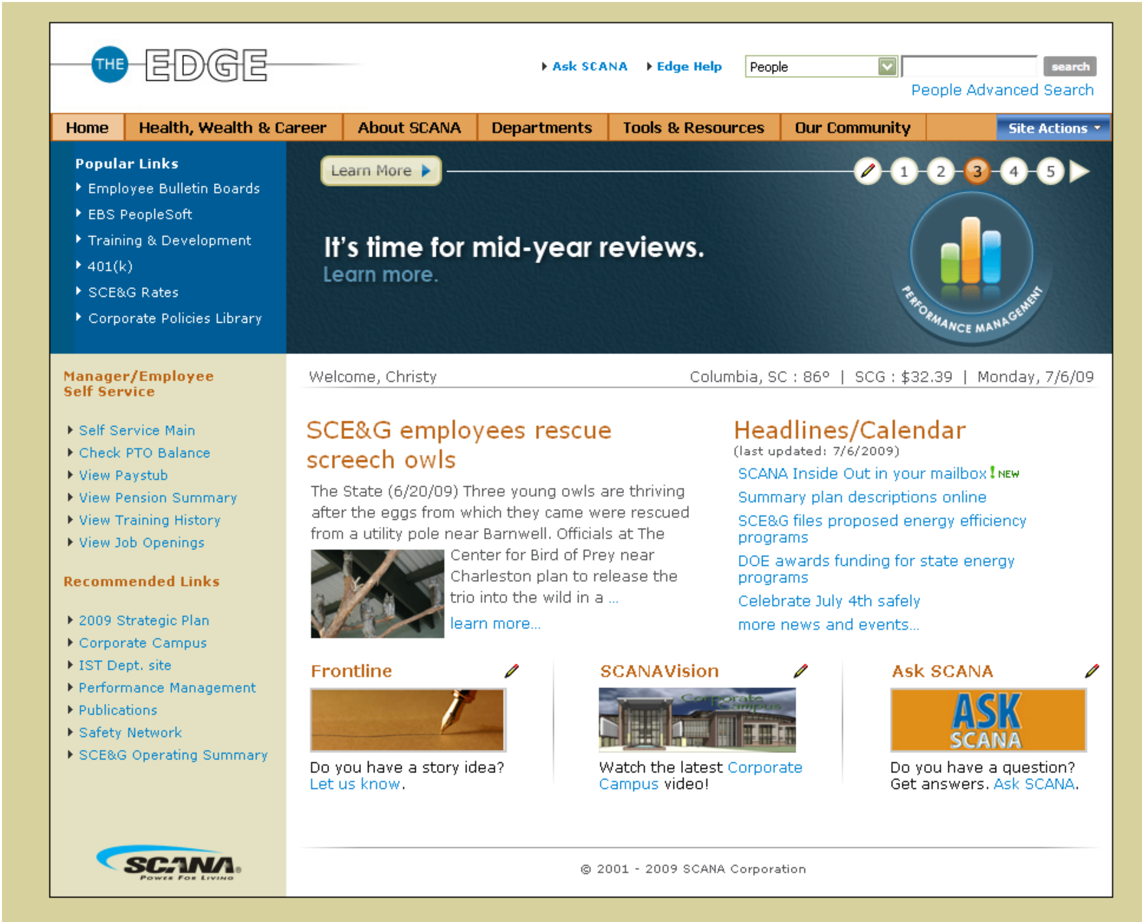
Pictured: This screen shows the *Corporate Calendar* listing of upcoming company events. If an event has passed, it falls off of the view. Clicking on the event title opens the event details display. The list of events on the left side displays on all pages within this section. Events can include multiple attachments and use reoccurrence functionality. Employees can add events to their own Microsoft Outlook calendar.

- Find and register for training courses and computer-based training
- Access various forms, including those to request a facility, request a speaker for a meeting or organization, and submit a print job



Pictured: An *Internal Speakers Bureau* request form. All forms on the intranet have the same look and feel. Employees fill out the form, click *Submit*, and then view a confirmation message. The information is also sent via email to the employee who facilitates the requests.

- Look up driving directions to a facility
- View photos in a photo slide show
- Sign up or post a company carpool for work trips



Pictured: An *Editor View* of the intranet homepage. Clicking a pencil icon takes users to the edit screen for the associated content.

DESIGN PROCESS AND USABILITY ACTIVITIES

Season attributes the success of the SharePoint conversion project to the employee feedback activities that the team conducted throughout the project. "We performed several usability tests prior to our intranet conversion project and ran a pilot testing group directly before launching." Other user activities included:

- **Card sorting:** Fall 2006, just prior to intranet conversion project
- **One-on-one interviews:** Fall 2006, prior to intranet conversion project
- **Communications survey:** Summer 2007
- **Pilot testing:** April 2009, just prior to launch
- **Intranet feedback survey:** October 2009 (as of this writing, team members are facilitating a feedback survey that asks questions about the new Edge; they're planning to use the feedback to help plan for the site's Phase II project and future enhancements)

As the following sections describe, the team used various methods to engage users in the design process.

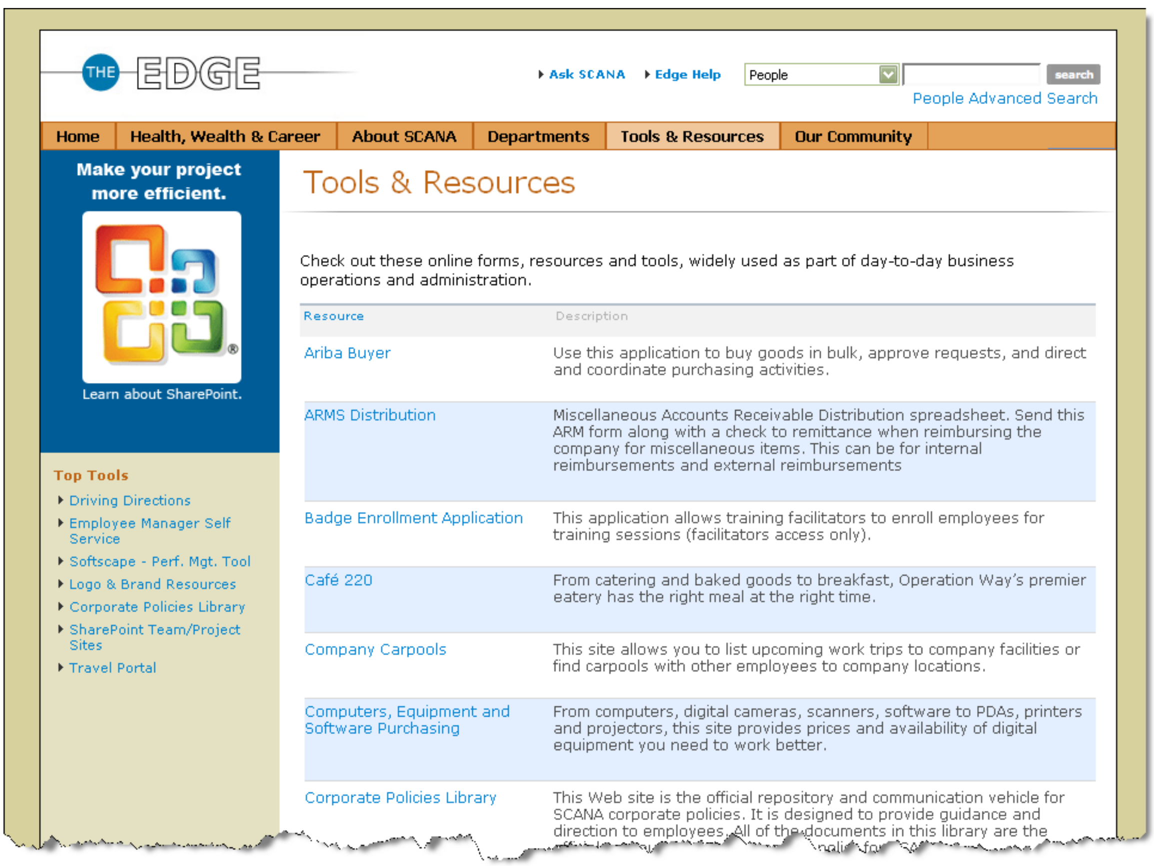
Card Sorting

For the card sorting exercise, the team recruited approximately 50 employees who were chosen to represent the demographic of the employee base as a whole.

Team members wrote the name of each intranet site on an index card, shuffled the cards, and placed them in a stack on a table. Employees then came in, one at a time, and were asked to group the cards logically in a way that made sense to them.

“The information we got from this exercise was the main input into how we organized our content,” Season says. “This was the main driver for the top-level content sections of our new intranet. We were surprised to find that, for a lot of the sites, employees didn’t even know what was on them or what information they had. A lot of the employees who participated set aside many of the cards in an ‘I don’t know what this is’ pile. This gave us the idea to include short descriptions on the department sites listing and in the *Tools & Resources* sites listing of what employees could find on each site.”

“It’s much easier now to browse the list of tools and read descriptions on what each tool is for without having to navigate to the site and try to figure it out,” she says.



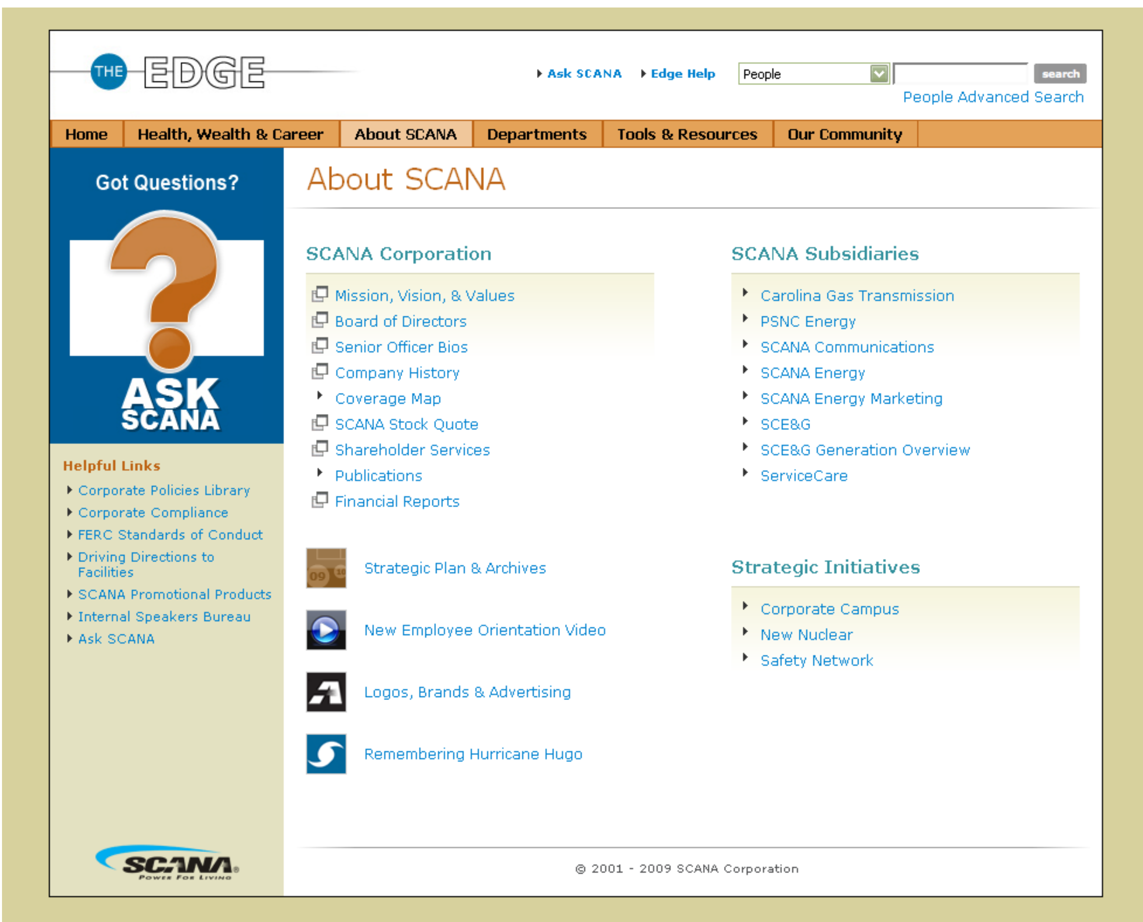
Pictured: The main page for the *Tools & Resources* top tab. This tab features links to websites and applications that employees use often for job-related tasks and transactional type functions. Each link is listed alphabetically, with a short description of the tool to the right. The image on the top left is a tool promotion; the space rotates and can fit multiple images to promote different tools.

Face-to-Face Interviews

To gather in-person feedback from company employees, the intranet team traveled for two weeks to different locations in the company's service territory and conducted one-on-one interviews. They asked the employees questions about the old intranet and observed how those participants used the site. The team probed participants about certain aspects of the site, asking questions such as, "Do you know where to find information about your medical benefits?" and "What do you wish was on the intranet?" Through this exercise, the team obtained job-specific information on how employees were using (or would use) the intranet.

"This exercise identified a lot about the lack of ability to find information in a timely manner on our previous intranet," says Season. "We also heard from some of the newer employees that, when they joined the company, they wanted to learn more about SCANA and its SBUs, customers, etc."

On the previous intranet, such company information was limited. On the new intranet, the team included more comprehensive company information so employees could learn about the company and its history. Also, each SCANA business unit has its own information page highlighting its leaders, types of customers, service territory, plants, and so on.



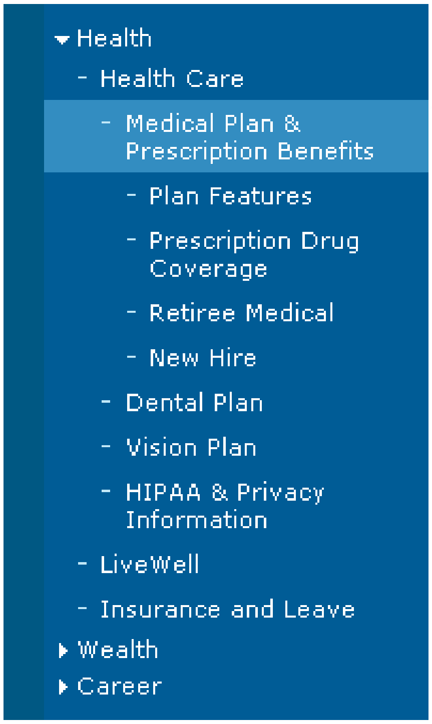
Pictured: The main page in the *About SCANA* top tab. This tab features information about the company and its business units organized in three categories: *SCANA Corporation*, *SCANA Subsidiaries*, and *Strategic Initiatives*.

"We were also able to identify through this exercise that a lot of employees did not recognize *MySCANA* as the site to visit for health, benefits, and career information," says Season.

As on the old intranet, the company's health, wealth, and career HR information is a major navigation tab on the new intranet. "During the field studies when we watched employees use the intranet, we found that a high percentage of employees didn't automatically connect the term 'My SCANA' with health, wealth, and benefits information," says Season. "This was especially true with newer employees. It often left employees clicking around the intranet, looking for this information instead of knowing that the link 'My SCANA' would take them there."

"So, on our new intranet, we named the top-level tab 'Health, Wealth & Career' to make it more intuitive for employees that the HR-related information lies on that tab. Once you navigate to the page, the information is still branded as 'My SCANA,'" she says.

Pictured: The *Health, Wealth & Career* tab, which contains all of the HR benefits, perks, and development opportunities for employees. This layout organizes all information by topic. The headings of each grouping of links are links as well, and will underline when moused over (as do all links on the intranet). Below the revolving image is a *Top Tasks* list. These are transactional PeopleSoft links that open PeopleSoft in a new window; once the user logs in, he or she is taken directly to the link's information or transaction.



Pictured: An example of the site's left-hand navigation.

Pilot Testing

About a month prior to the site launch, the intranet team conducted pilot group testing on the intranet. Team members recruited volunteer participants from the company's Marketing & Communications department, IT department, and employees across the organization into a 150-member pilot group. A SharePoint team site was created and discussion board was prepopulated high-level topics. "We gave the pilot group access to the new intranet and the link to the SharePoint team site," says Season. "For a week, the pilot group navigated the new intranet and posted feedback to the discussion board."

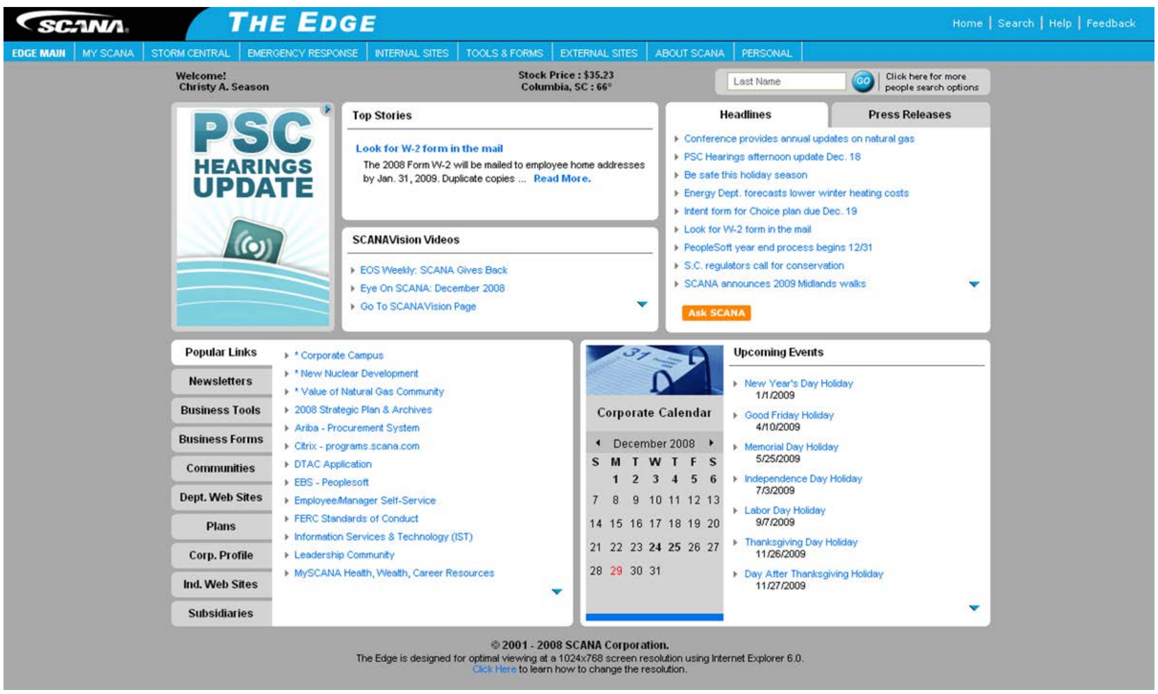
The exercise proved effective for the team. "We were able to catch a lot of typos, broken links, etc., that we had overlooked," says Season. "We also got some great feedback on different sites and were able to improve some things we didn't think about."

The team enlisted this same group to help them communicate the launch of the new site. The pilot group acted as ambassadors to encourage other employees to use the site. "We sent out stickers to everyone in the pilot group prior to launch that said: 'Ask me about The Edge'," says Season. "The group wore these stickers on launch day and helped answer any questions for their co-workers related to the new Edge since they had prior experience using the site."

Recycling

Intranet teams with no budget often use creative measures to access research to help inform their design decisions. Just prior to the intranet conversion project, all of SCANA's external sites had been redesigned by a third-party agency, which conducted extensive usability studies with customers and employees on the external customer-facing sites. Because the intranet project had little budget of its own, team members recycled what they could of the lessons learned from that project for use on the intranet. "For example," says Season, "the expandable navigation is taken from usability studies/results from our external site."

Also, on the company's previous intranet, all of the promotional images used were unique sizes. For the new intranet, the team decided instead to use images that were similar in sizing to the external sites' images. This lets the team recycle a lot of the imagery used on the external sites on the intranet. "Our company gets more bang for the buck with photography and graphics purchases," says Season, "And our Web designers have more options to choose from when creating images for the intranet."



Pictured: The SCANA intranet prior to redesign. There was no robust way to find information on the site. Employees could search people, but there wasn't a comprehensive intranet content search. To find information, employees had to click around or ask other employees for help. Corporate Communications managed all 35-plus sites on the *Department Sites* tab, along with all of the other intranet content. IT controlled the homepage format, so layout updates required IT resources and an extended lead time. The old intranet had no Web analytics, so the *Popular Links* were not truly popular, but rather were links that Corporate Communications pushed out. The design was also too limited for the growing needs of Corporate Communications. An overhaul was long overdue.

URL AND ACCESS

Users access the SCANA intranet at: http://eportal.scana.com. The site is every user's start page.

Remote users access the site through the Web interface by logging in with their corporate credentials. After logging in, users are presented with a menu screen with links to the most commonly used work tools and links to access private and shared directories. The intranet, The Edge, is the first link they see.

In company's locations where employees spend more time in the field than in the office, the intranet is accessible through shared computers that are set up in break rooms. These rooms typically contain three or four computers that the field employees share.

TECHNOLOGY

The technology behind the SCANA intranet has evolved from Microsoft Digital Dashboard, which was a forerunner of SharePoint; to a .NET version of the site, which was developed in-house and is an internal application; to the current platform, SharePoint 2007. The next iteration of the site will be SharePoint 2010.

Dean Keith, the company's Supervisor IT Application Developers, says that one of the advantages of using SharePoint is that it has given Corporate Communications more autonomy from using IT resources for site architecture updates. With the previous version of The Edge, the team had to use IT resources to alter the top navigation or the homepage structure. Now, with SharePoint, the Web designers and intranet strategist can edit the site structure and architecture without involving IT staff.

"SharePoint also provides an intuitive CMS that allowed us to decentralize a great deal of content ownership on the new intranet," he says. "Departments now manage and update their own content, which freed up a lot of our resources and allowed departments to get information onto their sites in a more timely manner."

In addition to the benefits of decentralized content updates, on the tech side, "SharePoint has allowed SCANA to empower the designers while maintaining IS controls and safe guards," he says.

SEARCH

The SCANA intranet uses SharePoint's out-of-the-box search capabilities. Search was in fact one of the driving factors behind choosing SharePoint. "One of the main decision factors in using SharePoint as our intranet platform was that it had a pretty powerful search function (and search analytics) as an out-of-the-box functionality." says Season, "The ability to gain a powerful search without any additional costs or third-party licenses was a big win for us."

And, for a company that didn't have search on its previous intranet, just having search was a huge improvement. "Right now we are just very ecstatic to have search at all since our previous intranet didn't have a search," says Season.

SCANA has taken a very proactive approach to improving the search results that users receive. Through monitoring and incremental changes, the team is discovering where improvements are needed and where incremental changes can make a difference. The company tracks search queries and analytics on a weekly basis.

"We are continuously fine-tuning [search] by using the search analytics provided with SharePoint to see where there may be a need," says Season. "We really like the Best Bets feature with our search engine that allows us to preset links for keywords. We also like that SharePoint search will search inside of Word documents, PDFs, and PowerPoint presentations."

SharePoint's Best Bets keyword search function lets the administrator set up links that will display at the top of search results for a particular keyword. "We will track search queries and if a query trends high and does not have a Best Bet," says Season, "then we will set one up for that keyword." Every site on the intranet has a *Best Bets* link associated with it.

"We also track click-through rates of keyword searches," she says. "If a keyword is searched frequently but has a zero percent click-through rate, then we will reevaluate Best Bets for that keyword and the meta tags on particular pages."

Surprising Searches

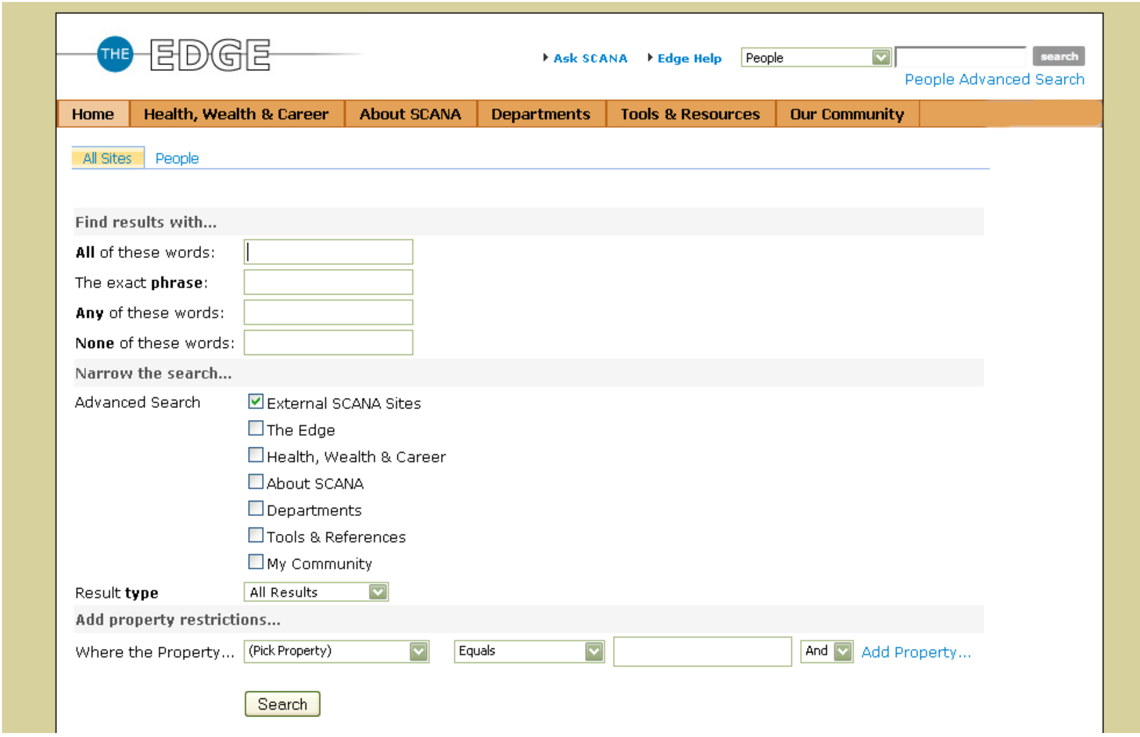
By analyzing search metrics and studying user behavior, teams often find surprising results, causing them to take a second look at their assumptions about user needs and existing content.

The SCANA team tracks the most popular keywords searched on the intranet to get an idea of what employees are interested in or are looking for. When doing so, they sometimes encounter something unexpected. "We were surprised to see 'email' begin to trend high as our most frequently searched keyword," says Season. "On our old intranet, we had an additional navigation tab called 'Personal.' On this tab, in a very small i-frame, was a Web view of the employee's email. When we originally conducted usability interviews, we found that most of the employees didn't even know the tab existed or used it. So we made the decision to not convert over this particular tab and feature."

It seemed like a sensible decision; the link wasn't very "user friendly" and all employees have Microsoft Outlook on their workstations to access work email. The team was therefore surprised to find that "email" was the most frequently searched keyword on the new intranet and that the associated Best Bet was the most frequently clicked one in the search engine.

"We were surprised because we deducted that employees didn't use the webmail feature while at work to access work emails, only remotely from home," says Season. "In response to this revelation, we are adding a question to our post launch survey going out to all employees in a two weeks to gauge just how many employees use the webmail environment while at work, and why."

"Based off of these results, we might possibly add back the *Personal* tab or some equivalent," she says.



Pictured: The advanced search gives users greater flexibility in narrowing down search results. They can also select just one major tab or multiple tabs/scopes to search.

CONTENT MANAGEMENT

The SCANA intranet uses an out-of-the-box implementation of SharePoint 2007 for most of its content management.

SharePoint's CMS also enabled decentralized content ownership. "Departments now manage and update their own content, which freed up a lot of our resources and allowed departments to get information onto their sites in a more timely manner," says Season.

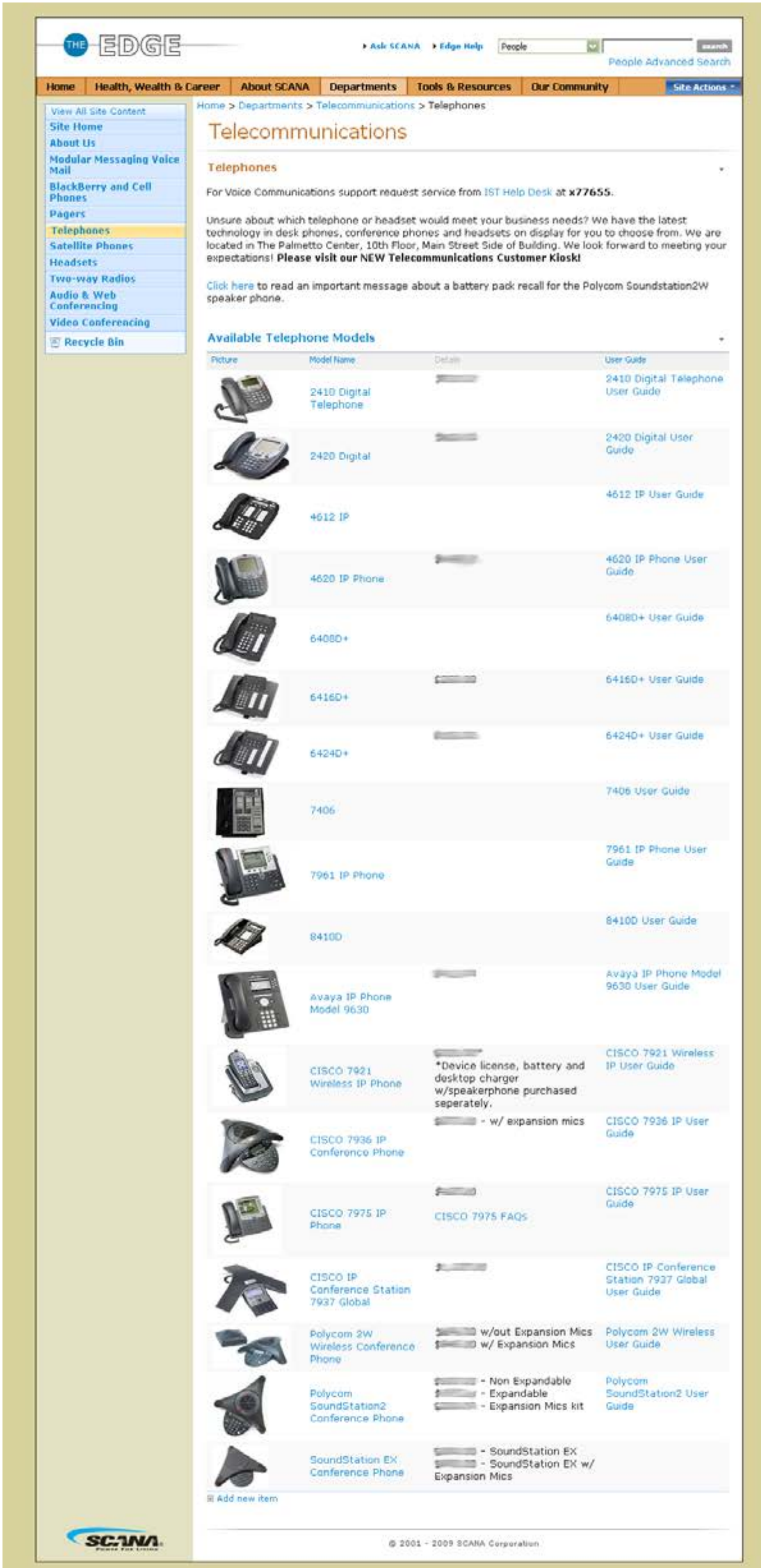
Updating the site starts with a basic template. All sites are consistent in structure, style, and design. "We have style guideline documentation for site owners that gives them guidance on the correct fonts, font sizes, and guidelines on picture dimensions and types," says Season. "We also provide the site owners with a prepopulated directory of approved images and photos to use on their sites."

A style guide defines a consistent writing style across the site, including for presenting dates, company locations, and so on.

"SharePoint as a CMS provides pretty good boundaries in site design, so site owners do not have the ability to change the look and feel of the site," says Season. "Most of our site owners are pretty empowered about their roles and have so far followed all the guidelines."

The team conducts audits at least twice per year. During those audits, they hope to identify any inconsistencies or guideline violations and correct them.

Training content owners has proven to be fairly simple because the company's department site templates tend to mimic the functionality of an out-of-the-box SharePoint team space. Most site owners are familiar with SharePoint team/collaboration sites, so they come to the intranet training with an idea of how to work in the tool. Season says developing the training and training materials was also easy because there's a wealth of information provided through Microsoft's website, on blogs, and so on that can help train people to use SharePoint as a CMS.



THE EDGE

Ask SCANA | Edge Help | People | search

People Advanced Search

Home | Health, Wealth & Career | About SCANA | Departments | Tools & Resources | Our Community | Site Actions

View All Site Content
- Site Home
- About Us
- Modular Messaging Voice Mail
- BlackBerry and Cell Phones
- Pagers
- Telephones
- Satellite Phones
- Headsets
- Two-way Radios
- Audio & Web Conferencing
- Video Conferencing
- Recycle Bin

Home > Departments > Telecommunications > Telephones

Telecommunications

Telephones

For Voice Communications support request service from IST Help Desk at **x77655**.

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Click here to read an important message about a battery pack recall for the Polycom Soundstation2W speaker phone.

Available Telephone Models

Picture	Model Name	Detail	User Guide
	2410 Digital Telephone	[redacted]	2410 Digital Telephone User Guide
	2420 Digital	[redacted]	2420 Digital User Guide
	4612 IP		4612 IP User Guide
	4620 IP Phone	[redacted]	4620 IP Phone User Guide
	6408D+		6408D+ User Guide
	6416D+	[redacted]	6416D+ User Guide
	6424D+	[redacted]	6424D+ User Guide
	7406		7406 User Guide
	7961 IP Phone		7961 IP Phone User Guide
	8410D		8410D User Guide
	Avaya IP Phone Model 9630	[redacted]	Avaya IP Phone Model 9630 User Guide
	CISCO 7921 Wireless IP Phone	[redacted] *Device license, battery and desktop charger w/speakerphone purchased seperately.	CISCO 7921 Wireless IP User Guide
	CISCO 7936 IP Conference Phone	[redacted] - w/ expansion mics	CISCO 7936 IP User Guide
	CISCO 7975 IP Phone	[redacted] CISCO 7975 FAQS	CISCO 7975 IP User Guide
	CISCO IP Conference Station 7937 Global	[redacted]	CISCO IP Conference Station 7937 Global User Guide
	Polycom 2W Wireless Conference Phone	[redacted] w/out Expansion Mics [redacted] w/ Expansion Mics	Polycom 2W Wireless User Guide
	Polycom SoundStation2 Conference Phone	[redacted] - Non Expandable [redacted] - Expandable [redacted] - Expansion Mics kit	Polycom SoundStation2 User Guide
	SoundStation EX Conference Phone	[redacted] - SoundStation EX [redacted] - SoundStation EX w/ Expansion Mics	

Add new item

SCANA

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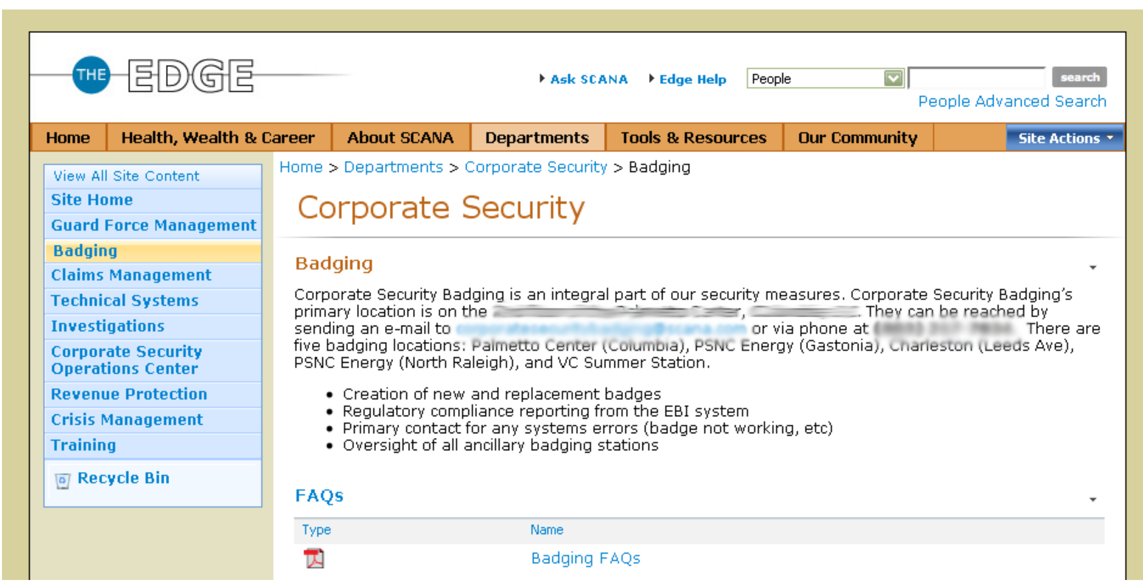
Pictured: The department site for the Telecommunications department. A site owner representative from the Telecommunications department built and maintains this site. The site uses a basic SharePoint template, so training was easy. Content management is also simple and intuitive for the site owner. This screen shot shows the editor's view of a Telecommunications site sub-page. The *Site Actions* blue tab on the top right, the *View All Site Content* in the left-hand navigation, and the *Recycle Bin* in the left-hand navigation are visible only to site owners.

Defining Site Structure and Ownership

The top tabs (the four major content sections) define the site's taxonomy and appear on every site. "For the department sites that are managed by the Site Owners Community, the template helps site owners stay within the bounds of the taxonomy, so they cannot alter or turn off the major navigation tabs at the top," says Season.

On the department sites, the local navigation always appears in the left column and each site has a homepage called *Site Home* that can't be changed. Site owners can create sub-pages, lists, or document libraries on their sites. Each site owner chooses how the information will be displayed on the left-side navigation, which they can edit.

"When we train the site owners on how to edit the navigation bar, we do speak specifically on best practices and train on what site owners should and should not do when it comes to the left-hand side navigation," says Season. "All of our training is also documented and available to site owners on the Site Owners Community team site."

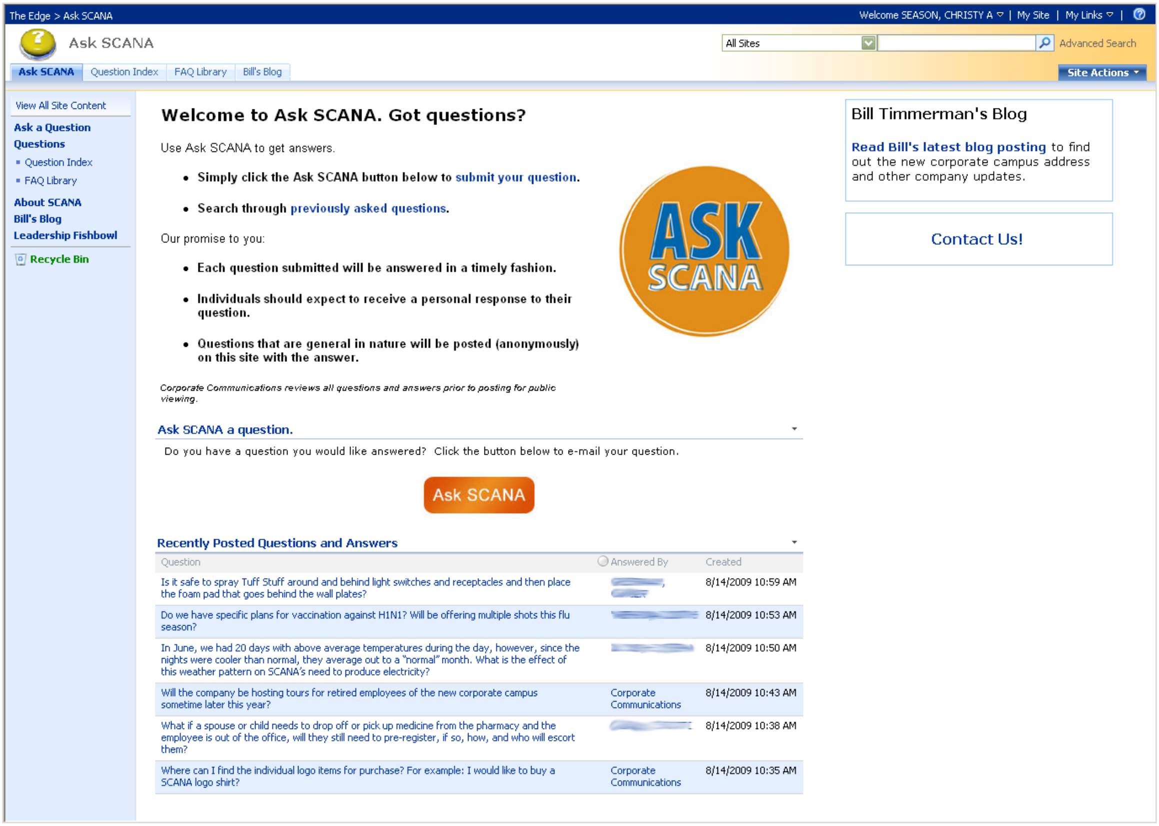


Pictured: An example of left-hand navigation and breadcrumbs on a department site. Such interior navigation for sites is managed by members of the Site Owners Community. The sites live on the *Department Sites* tab and the *Tools & Resources* tab.

FEATURES

Some of the intranet's main features include:

- ***Advanced Search.*** This page lets employees narrow their search through a combination of selection choices, including: search only one intranet tab, search multiple tabs at one time, or include external customer-facing sites along with particular section tabs.
- **Inline administrator functionality.** Users who are designated as editor of a particular site can perform inline editing; to this end, they see a *Site Actions* menu and/or editing pencil icons or editing links on content items.
- ***SCANAVision*****.** One of the intranet sites, "SCANAVision," is dedicated to the company's video communications. The site is set up so employees can see the most recently added videos up front, or filter or search by keyword for a particular video. The videos are archived for future viewing and live Webcasts of events or meetings are also broadcast on this site. The company holds *Lunch N' Learn* Webcasts throughout the year that employees can watch from their desk via the site. The team also used this site for the intranet launch, giving a live Webcast tour of the new intranet for employees, highlighting the new features, and showing them how to make best use of the new tools.
- **Shortcut URLs.** Short URLs are a feature the intranet team uses to provide a keyword redirect to certain internal Web addresses. For example, for the *New Nuclear* initiative intranet site, they created a shortcut URL, "newnuclear," to point to the site. Users can thus type the shortcut right into their browsers (internally) and be redirected to the *New Nuclear* site. These shortcuts are set up frequently for SharePoint team sites and Web applications
- ***Ask SCANA*****.** The *Ask SCANA* intranet site is dedicated to answering employee questions about anything company related. Employees can visit the site and click the *Ask SCANA* button to email questions. Corporate Communications then contacts a company expert to respond. The question is then posted to the *Ask SCANA* site (without the employee's name) and posted with the company expert's answer. The site also contains a link to the CEO's blog and a *Frequently Asked Questions* index, which includes links to all the topic-specific FAQs scattered across the intranet. A link to the *Ask SCANA* site is available on top of every site on The Edge.

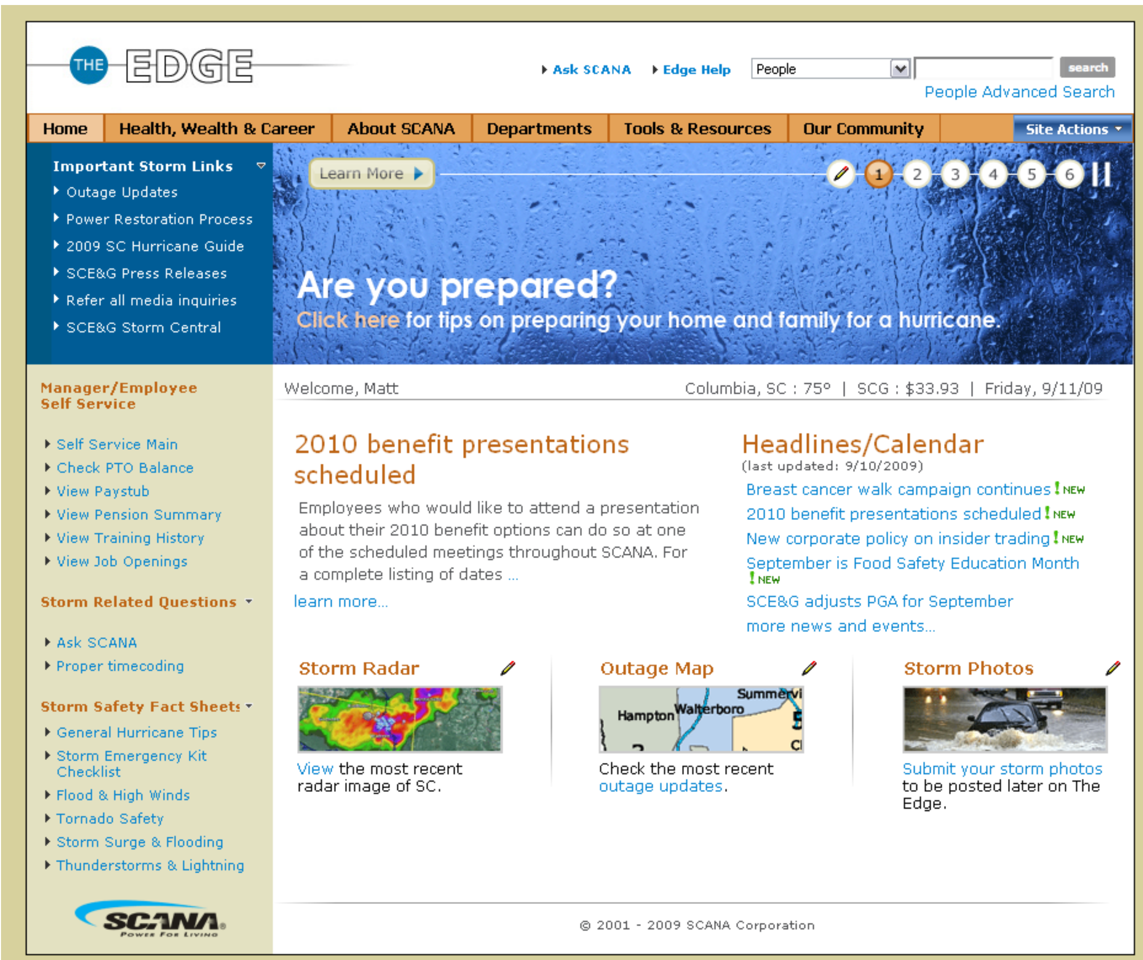


Pictured: *Ask SCANA* is the question and answer site for all employees. Employees can click the *Ask SCANA* button and ask a question about anything. Questions are sent to Corporate Communications via email; that department then forwards the question to a company expert for a response. Questions relevant to other employees are posted on the site and archived in the *Question Index* that categorizes questions by topic. The most recently asked questions are posted on the homepage.

- **Extensive help functionality.** The Edge *Help Site* contains detailed information and screenshots on topics such as how to navigate the intranet, how to use search, and so on. The site contains a discussion board where employees can post intranet-related questions or issues (such as broken links). Corporate Communications is notified when a new discussion is posted and can respond to help the employee. There is also a link that lets employees email the intranet team for further assistance. "This site was a big help during the first two weeks after we launched our new intranet," says Season. "We were able to identify a lot of glitches and problems right out of the gate and fix them before they became larger issues."

- **Storm homepage.** The company maintains a separate storm-specific homepage built so that they can easily activate it on short notice to take the place of the normal homepage. As a utility, storms are one of the company's biggest events and are the most critical time for employee communications. The storm site mimics the regular homepage's layout, but is prepopulated with important storm links, outage updates, and radar maps. The only content it inherits from the default homepage is the *Headlines* news items, which are frequently updated during a storm event.

  Along with up-to-date news and storm status, the storm site also features helpful information employees need, such as time codes to use during the storm, how to refer media to the company's Public Affairs department, and safety information for different storm situations. The site also has information where employees can offer up their homes to other employees who are forced to evacuate the coastlines during severe storm situations and hurricanes.



Pictured: A screenshot of the company's storm site, which can replace the intranet's default homepage on a moment's notice. The page is prepopulated and ready to go. It contains links to important information and tools that employees need during a storm.

THE EDGE

Ask SCANA | Edge Help | People | search

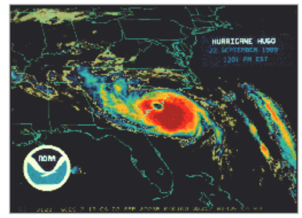
People Advanced Search

Home | Health, Wealth & Career | About SCANA | Departments | Tools & Resources | Our Community

- SCANA Corporation
  - Mission, Vision, & Values
  - Board of Directors
  - Senior Officer Bio's
  - Company History
  - Coverage Maps
  - SCANA Stock Quote
  - Shareholder Services
  - Publications
  - Financial Reports
  - Strategic Plan and Archive
  - Logos, Brands & Advertising
  - Remembering Hugo
    - Hugo Stats
    - Restoration Process
    - Share Your Hugo Memories
- SCANA Subsidiaries
- Strategic Initiatives

Remembering Hurricane Hugo – 20 years ago

Twenty years ago on Sept. 21, 1989 Hurricane Hugo came ashore near Charleston and left destruction behind. Many of you were part of the SCANA family then and helped to restore power to more than 300,000 electric customers in S.C. In fact, no one in the state of S.C. east of 1-95 had power. In 18 days, more than 2,000 employees and 7,000 contractors and workers from other utilities had power restored, safely. It was a defining moment in our company's history, and we'd like to hear your stories and have you share your photos and memories.



Hurricane Hugo
September 22, 1989

Restoration

In 18 days, the system that had taken 80 years to build and six hours to destroy was fully operational – thanks to all the individuals who made the comeback possible.

View a slideshow of images from Hurricane Hugo.

Share your memories

Do you have any pictures from Hugo's aftermath? Click here to e-mail us your photo(s). Photos will be compiled into an online album and published on Sept. 17. (Please include a brief description, locations and times with your photos.)

What do you remember about Hurricane Hugo? Were you working for the company during the storm? Share your story on this site, or read other employees' stories.

Watch the SCE&G story of Hugo

Watch an SCE&G video about Hugo created in 1989.

How bad was Hugo?

According to FEMA – Hugo was one of the most devastating natural disasters in decades, perhaps in this century. Read more about the destruction left in Hugo's wake.

SCE&G's Role

Being prepared before Hugo hit allowed SCE&G to begin restoration immediately after it was safe to go into the disaster areas.

Before the storm:

- Before Hugo hit, SCE&G had 2,000 poles, more than 2 million feet of wire and cable, more than 4,100 cross arms, more than 1,000 transformers, almost 14,000 insulators, and more than 10,000 fuses were ordered and stored in two warehouses in Charleston

After the storm:

- 75 percent of SCE&G's system down – 300,000 customers
  - 130,000 customers with no electricity in Charleston
  - 115,000 customers with no electricity in Columbia
- Wateree and Williams stations knocked out
- 400 downed transmission structures, 5,000 poles down, 570 miles of down power lines, over 15,000 service drops in Charleston and 1,300 transformers destroyed

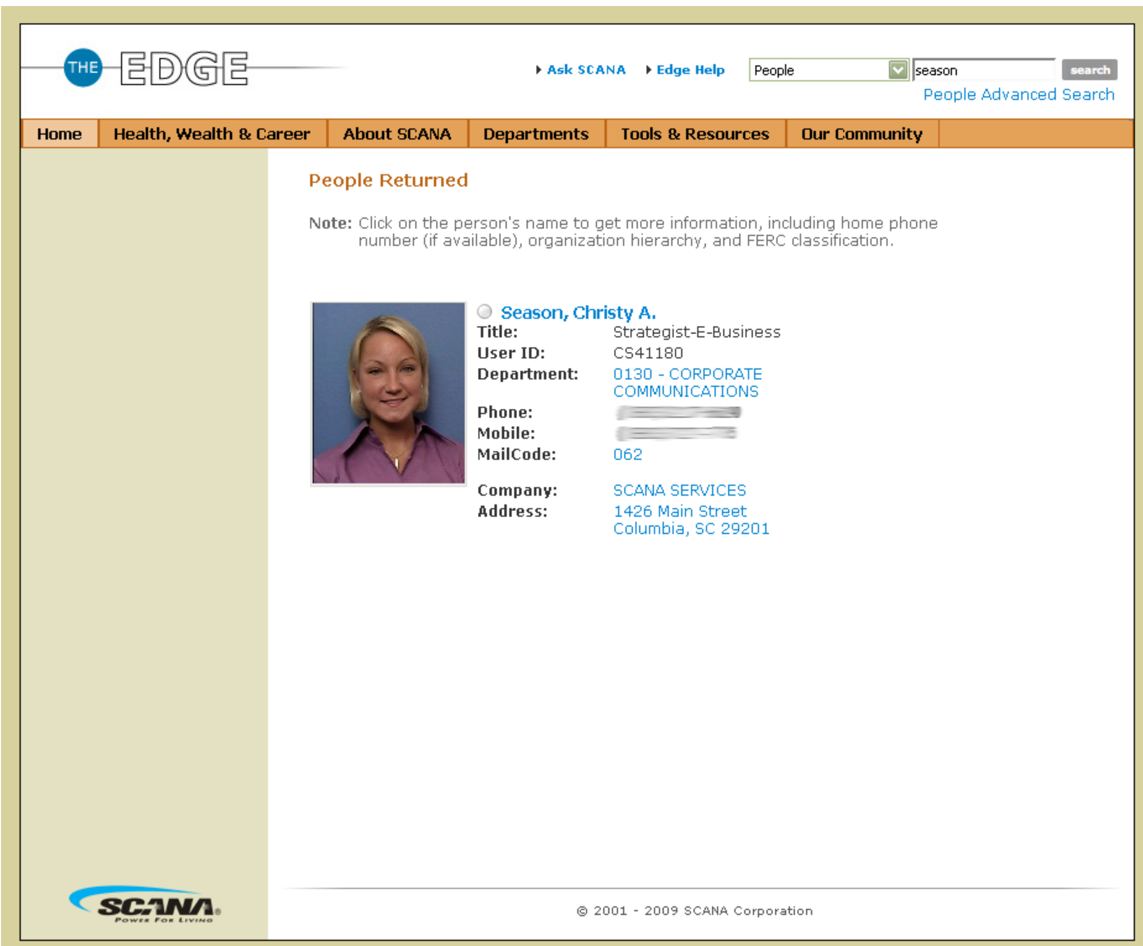
Restoration Begins

More than 2,000 employees and 7,000 contractors and workers from other utilities contributed to the restoration effort. In 18 days our system was restored, safely, without a single lost time incident. Learn more...

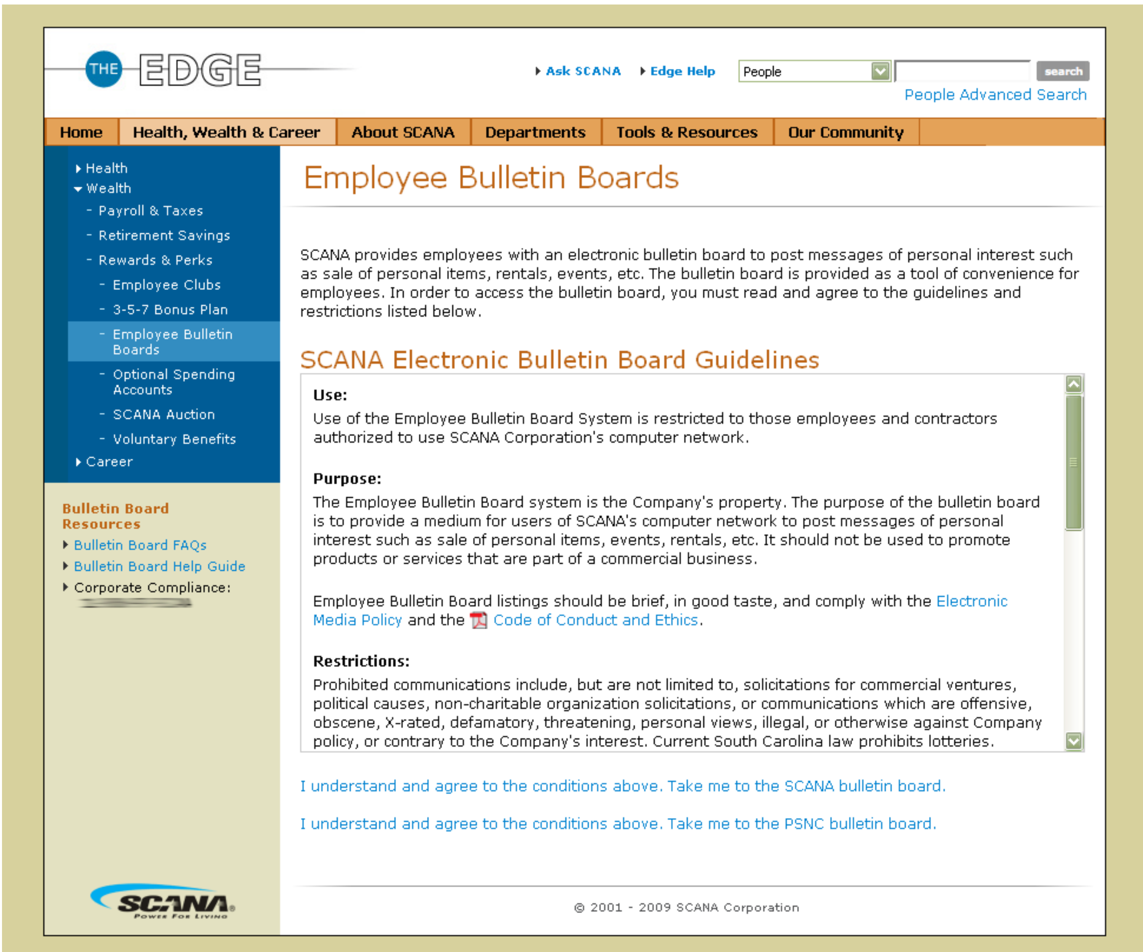
SCANA Power For Living

Pictured: The *Remember Hugo* site is a new site launched in September 2009 to commemorate the 20th anniversary of Hurricane Hugo, which was a defining moment in SCANA's history. The site includes a video created right after the storm, a slideshow of photos from the aftermath and restoration, and a place for employees to share memories of when they worked the storm.

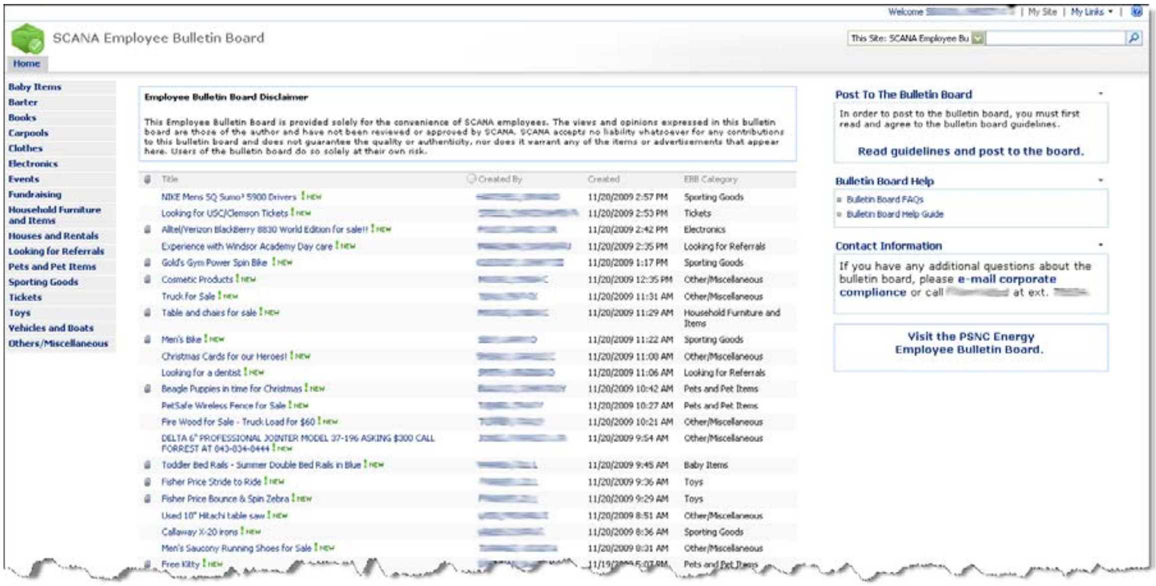
- ***People* search.** The *People* search functionality is particularly valuable because SCANA employees are geographically distributed across three states in plants, business offices, and so on.
- ***Safety Network*.** The *Safety Network* is a corporate-wide site that communicates vital safety information and metrics. Employees use the site to get important safety training materials for their job functions. This is also where all incident-reporting forms reside.
- **Visual performance results.** The intranet features a site called *SCE&G Operating Summary* that offers a visual display of the performance of the company's various plants.
- **Employee self-service.** Employees can sign up through the intranet for direct deposit and can make changes to their personal information.



Pictured: The *People* search results for "Season." The search box at the top of the site automatically searches last name when users enter a single keyword. If they enter two keywords, the search engine searches by first and last name. The results page displays a snapshot of information about the employee. When multiple results are present, the employees are listed in alphabetical order. Clicking on the employee's name opens the employee's SharePoint people profile in a new window, giving the user more contact details, as well as the reporting hierarchy. This hierarchy lets users easily jump from profile to profile by clicking on employee names.



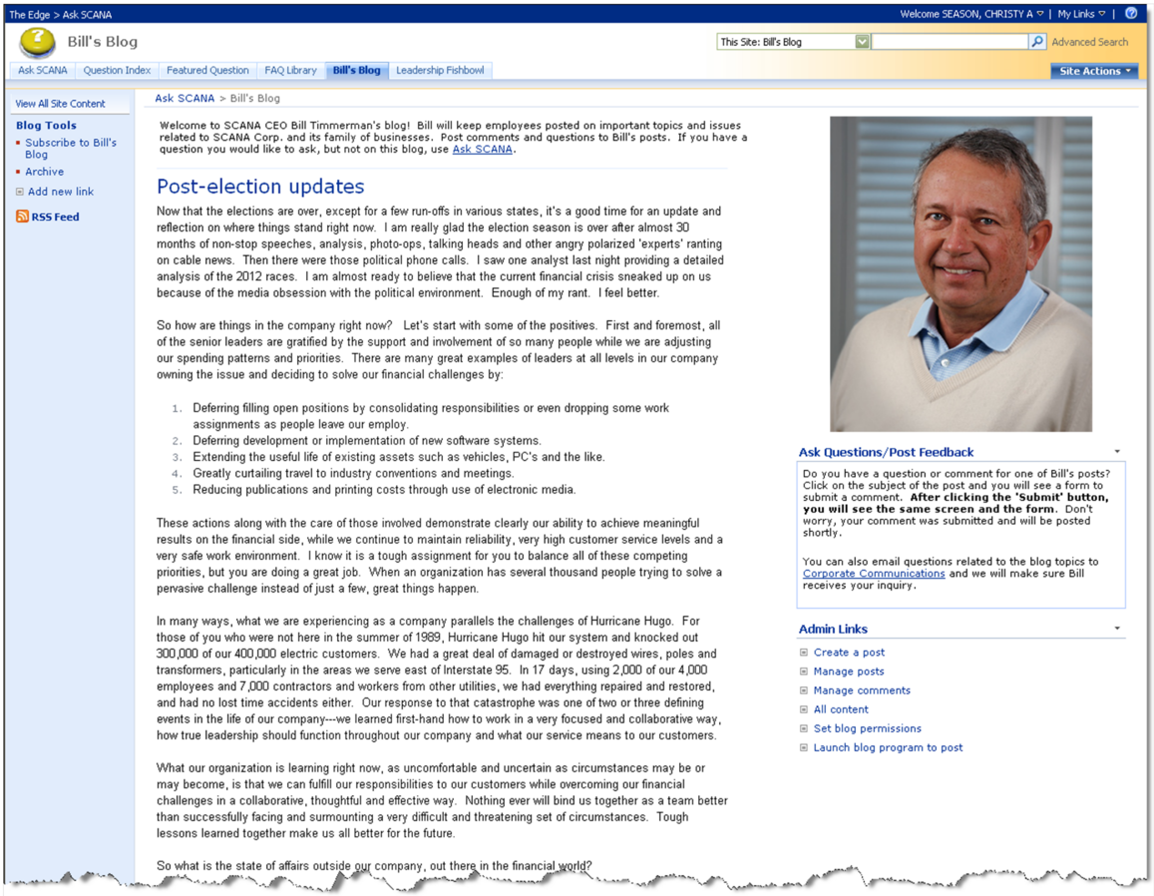
Pictured: The entry page to access the *Employee Bulletin Board* site where employees buy and sell items. This entry page was set up to reinforce the guidelines of using the board and to provide resources for users with questions about how things work.



Pictured: After agreeing to the guidelines on the previous screenshot, a new window opens to the main page of the *Employee Bulletin Board*. Postings are listed with the most recent on top. Clicking on any of the category links on the left opens posts in just that category. Users can post to the board by clicking on the link on the top right part of the screen. This opens up a form that contains the site guidelines and the form fields to add a post.

ENTERPRISE 2.0 FEATURES

The SCANA team takes advantage of SharePoint's native Web 2.0 features, including offering RSS feeds and a popular CEO blog. Plans are already underway to add more collaboration/social media type tools, including commenting/rating functionality for the site's video and headline news.



Pictured: An example from the CEO's blog. Employees can comment (though not anonymously) on the blog posts and subscribe to receive email alerts when a new post is posted.

RESULTS/ROI

The SCANA team did what very few teams are able to do: they upgraded their intranet at zero additional cost beyond internal resource time. That right there is a big ROI. Anything else, it seems would be just icing on the cake. But the company is reaping great benefits from its tiny investment. First, there are many things that users can now do that they couldn't do before the conversion, including:

- Search the intranet
- Find employees more quickly and accurately using advanced search features on *People* search
- Update their own department content without delay or involvement of IT resources
- Find old news (articles are now archived)
- Find out about volunteer and community service opportunities that the company sponsors
- Filter and sort driving directions by facility name or city
- Watch and search for videos on the intranet

- Find help resources more easily and through various means that don’t include placing a call to the Help Desk

With the first phase of the project complete, the company is already benefitting from the new intranet.

Measuring Success

The SCANA team is now able to look at site metrics and analyze how the site is doing in real terms. “We measure ROI with both hard numbers and softer measures,” says Season. “We look at the analytics and track visits on sites, but we also measure based off of participation, whether it’s employee contributed content or participation in a program.”

Even this basic tracking is somewhat new for the SCANA team because prior to the site conversion, they didn’t have the ability to measure even unique page visits. “With our new intranet, we can measure hits, how many employees are visiting, top pages, etc.,” says Season. “This gives us an entire new set of measurement and helps empower us to make more accurate decisions around sites on our intranet.”

The team includes search analytics in these new measures. “The search analytics also add value since it gives us an insight into what employees are searching and what information employees can’t find,” says Season. “This allows us to continually improve the search tool to make finding information easier for employees.”

Success by the Numbers

Here are a few measures of the site’s success thus far:

- The team held a live *Lunch ‘N Learn* Webcast the day of launch and did a live tutorial for the intranet, highlighting the new features, tips for using search, etc. The webcast garnered almost 600 hits.
- To date, the site receives an average of 6,114 unique employee hits to the intranet each month. 6,700 employees have a network login and can access the intranet, so about 91% of employees with network access are visiting the intranet.
- The new site receives an average of 11,149 searches each month.

LESSONS LEARNED

SCANA intranet team members discuss some of the lessons they learned during the SharePoint conversion project.

- **An iterative approach works best.** "We used an iterative development process instead of the traditional waterfall for our intranet build. The iterative process is great when you have requirements that constantly change. We used a process where the project team met every morning for 30 minutes and everyone had to answer three questions: 'What did you do yesterday?' 'What will you do today?' 'Are there any barriers in your way?' This process also helps you break down all of the project tasks into more manageable 'packages.' At the start of the project, you record all of the tasks necessary to complete the project. At the beginning of every two weeks you select a group of tasks from the task queue and focus on just those tasks for the two-week time period. At the end of the time period you present the results of the two weeks to the project stakeholders and get sign off. The process proved very helpful in keeping our cross-functional team constantly in communication. It also allowed us to all stay focused on the project because every team member had other projects going on at the same time."
- **Conduct usability testing early and often.** "We should have added employee usability testing throughout the stages of the build. We only pulled in employees right before launch to test the site and provide feedback. We probably would have caught some good insight from employees earlier on in the project when we had more flexibility to make changes. However, we are so glad we did the pilot testing. There were a lot of 'I can't believe we didn't catch that' moments during the pilot. And our pilot test group became communicators for our launch and helpers for other employees on launch day."
- **Be conservative with the timeline.** "We also learned that we should have added padding into the initial timeline we put together at the beginning of the project. We had to move out our launch date three times during this project. Resource availability was a major factor in pushing out our deadline. We didn't account for short term, higher priorities coming in that pulled major resources off of the project for weeks at a time. If we had padded our timeline to account for this, we may have predicted a more accurate timeline. Luckily there wasn't a hard deadline in place, so moving the launch date didn't have any major impacts."
- **If you have no money, you have to be creative.** "With little budget, our communication plan around the new intranet was very grassroots. We used our Site Owners Community and our pilot test group to help spread the word about the new intranet and its benefits. We sent an email with a PDF poster the week before launch to these groups and asked them to hang them in their facilities in break rooms, etc. and on the outside of their cubes. We also sent them stickers our print shop made that said, 'Ask me about The Edge' and everyone wore them on launch day. We created two videos that we released two weeks prior and a week prior to launch. The videos were parodies of commercials—our video communications team shot the commercials, and we got volunteer employees from our department to be the actors. The videos took about 30 minutes a piece to create."

- **SharePoint isn’t a one-size fits all solution.** “We were very lucky that our company had already purchased and implemented it for team sites before we started our project. But with little budget and the fact that SharePoint provided out-of-the-box analytics, search, and an easy to train CMS made the product a big win for us. Despite all that, SharePoint would often throw some curve balls our way when implementing some of our custom Web parts. We built a custom news list for our *Headlines* news listing. When adding a new article, you can set a publish date, an author, and add a photo. After building out the list, we found that when adding a photo, SharePoint would use its out-of-the-box process that involved five pop-up windows for selecting your image. We felt that this out-of-the-box process would be confusing for our non-technical content contributors. We had to go in and custom program the image-selection piece and it added another two weeks onto our project that we weren’t planning for. SharePoint may require additional customization to ensure the product meets your needs; however, overall SharePoint is a good product.”
- **Don’t assume out-of-the-box functionality will be intuitive.** “We also had to custom program the *People* search results. SharePoint doesn’t list *People* search results in alphabetical order. Intuitively, our employees are used to a people search that lists individuals alphabetically and wouldn’t understand the process SharePoint uses to list the results. So, we had to spend a significant amount of time finding a solution for alphabetizing our results, which ended up being custom code by one of our developers.”

Duke Energy

Using the intranet:

Duke Energy is one of the largest electric power holding companies in the US. The company has approximately four million electric customers in North and South Carolina, Ohio, Indiana, and Kentucky, with a service territory of 50,000 square miles. It also distributes natural gas to 500,000 customers in Ohio and Kentucky. Through its commercial operations, which span the US and Latin America, it develops innovative renewable energy solutions, including wind, solar, and biopower projects.

Headquarters:

Charlotte, North Carolina

Number of employees the intranet supports:

More than 18,000 employees and 12,000 contractors

Company locations and locations where people use the intranet:

23 US states, including the Carolinas, Ohio, Indiana, Kentucky, and Texas, along with the Latin American countries of Argentina, Brazil, Ecuador, Guatemala, Peru, and El Salvador

Annual sales: Total operating revenue of more than $12.7 million (2009)

Design team:

Corporate Communications: Martha H. Brown, Portal Program Manager; James H. Bowen, User Experience and Innovation Team Manager; Mike Diekhoff, Graphic Designer; Chris Greufe, Developer; Greg Corrin, User Experience; Anne Sheffield, Manager of Internal Communications; Randy Wheeless, Communications Manager; Robbi Walls, New Media Web Specialist; and Clark Kearns, New Media Web Specialist

IT Department: Karyn Williams, Sr. Application Developer; Derrick Balog, Lead Application Developer; Shannon Polson, Lead Application Developer; and Marc Bacon, Sr. Application Developer

SUMMARY

Strong planning. That’s what Duke Energy focused on when starting a redesign of the intranet. The team wanted to align the site with the company’s new priorities so the site needed to move toward community, collaboration, and innovation. To do this, the team investigated tools, researched with users and other companies, and planned for current and future support of content managers. This all worked together to ensure a site built on a strong foundation and prepared to grow and stay relevant and manageable.

The site today is the result of a two-phased effort. Phase I was the migration from the existing platform to MOSS in 2009. During this technology transition phase, the organization also took a fresh look at content and content management.

The most recent redesign, in 2010, gave the site a visual redesign — a much-needed “fresh coat of paint” — and integrated more social features into the site to support community and collaboration.

The team chose SharePoint, in part because of the strength of the platform’s collaboration features. However, after migrating to the platform, they quickly realized that the tool, while powerful, made it difficult to implement everything they wanted to do. The team wasn’t all that familiar with SharePoint's intricacies, and had no budget to hire outside expertise.

In response to this hiccup in their plans, the team wisely decided to start playing with SharePoint to understand its strengths and limitations. The thinking was that it would be better to start with the knowledge of what SharePoint could do, rather than design things that it couldn’t support. Early on, they decided to avoid customizing

SharePoint to ensure future support from Microsoft and to make upgrades possible at later dates.

As part of the MOSS conversion, the team took a fresh look at the content. With 170 content managers across the company, they realized they needed a more formal content management structure and workflow. The redesign was an opportunity to not just migrate content to a new system, but also to clean up that content and put structures in place to keep it new and relevant for the long-term. They started with classroom training to teach content managers how to review content during the migration effort, as well as how to use the new system.

Predefined page layouts help ensure consistency. To ensure relevance and timeliness, the team instituted automatic content renewal dates. Realizing that different types of content had different longevity, the team created content types that were assigned to information on the site. The content type was associated with a specific renewal timeframe. The renewal date triggers an email, reminding the content owner to review the content. If the information isn't reviewed, it goes into a recycle bin for 30 days before it is deleted. However, team members have run into some issues, both with content that has more than one owner and with owners who have overwhelming amounts of content to review.

The team is working to continually support content managers and is implementing semi-annual strategy sessions with each site manager's group. These meetings let the team share Web metrics and usage patterns, giving the content creators much-valued feedback on which content is most successful. Further, the team reviews search logs to see what users are looking for, and to recommend content to be added. The team also reviews the content for compliance with site guidelines and works with the content managers to create ideas for enhancements.

Support doesn't stop there. Monthly tips and tricks are sent to site managers. The team also offers two-hour training sessions each month for new site managers, as well as intermediate and advanced classes on demand. Site managers also gain access to a content management site on the portal, providing access to training materials and standards.

With such a big undertaking in front of them, the team decided to chip away at the old site one section at a time. This allowed them to not just implement a new design, but also to focus on improving the user experience. The other benefit to this approach was that they learned as they worked on each new section, building their knowledge and thereby improving the overall site.

The site has a clean, thoughtful design throughout, using color for links but otherwise keeping pages clean and focused. Each page uses space well, making it easy to locate information. Content is grouped in logical ways, offering related information and helping users easily find answers or documentation.

The homepage is filled with engaging, frequently updated content. The top featured story rotates between four headlines. The rest of the top section is filled with weather and stock information as well as personalized navigational bookmarks. The site provides a quick links section, which is the same for all users, as well as allowing users to create their own *My Links* list.

News headlines continue down the page, with multiple views of information available on one page through the use of tabs. Users can view *News*, *In The Media*, or *News Releases* in a single section of the page. One news story is featured, with a headline, photo, summary, and link to read more. The remaining headlines are listed as links to the full story.

A *Calendar of Events* on the side of the page lets users see what's happening around the organization and view location-specific content by clicking on a tab. *Personnel Announcements* and *Employee Accomplishments* finish the page, with another section devoted to recent and important videos in Duke TV. Duke TV features videos on mission-critical topics and insights on strategic direction from executive leadership.

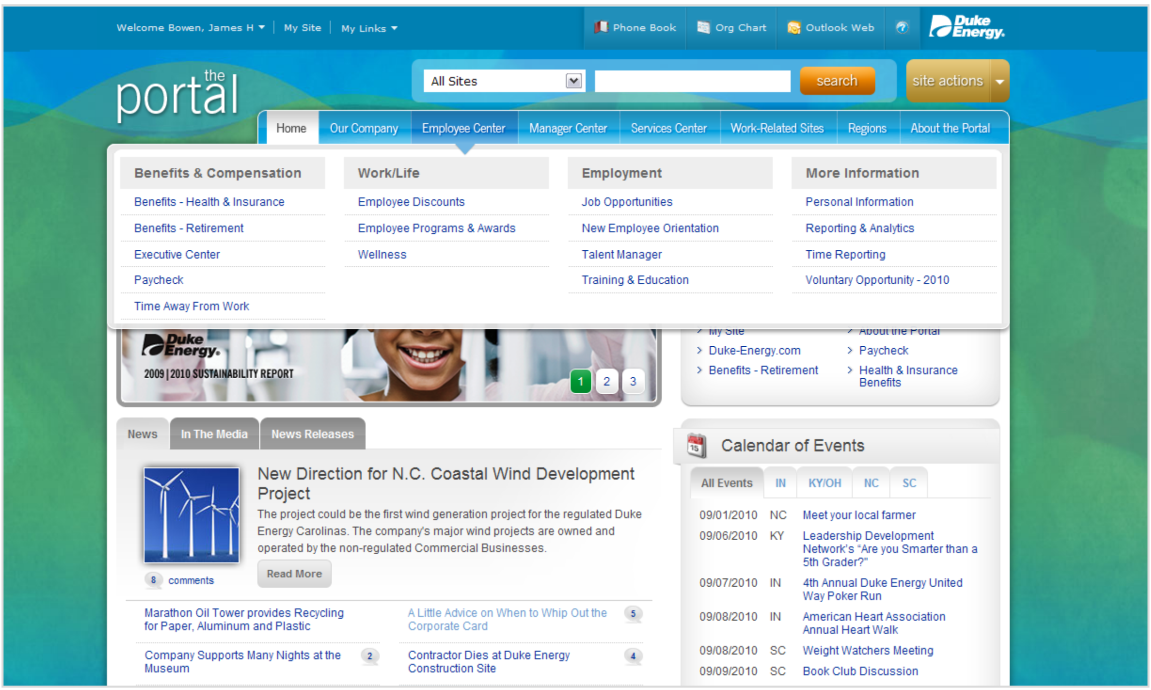
The homepage reflects the company and site emphasis on community and collaboration. The number of comments on each news story is posted next to the headlines. There are *Submit* buttons in the calendar, news, and employee corner areas of the site, encouraging employees to suggest content. One of the key goals of the redesign was to engage and involve employees, and the homepage clearly reflects and works toward this goal.

Another key area of the page has the latest content from the site's *My Perspectives* blog. The idea for this blog grew from a popular executive blog; this morphed into the current *My Perspectives* blog, which features guest bloggers throughout the company. The latest content is featured on the homepage, with the name and picture of the guest blogger, a brief summary of the latest post, and a clear link to read more.

Pictured: The intranet homepage highlights new and relevant information and reflects the company's emphasis on involvement and community.

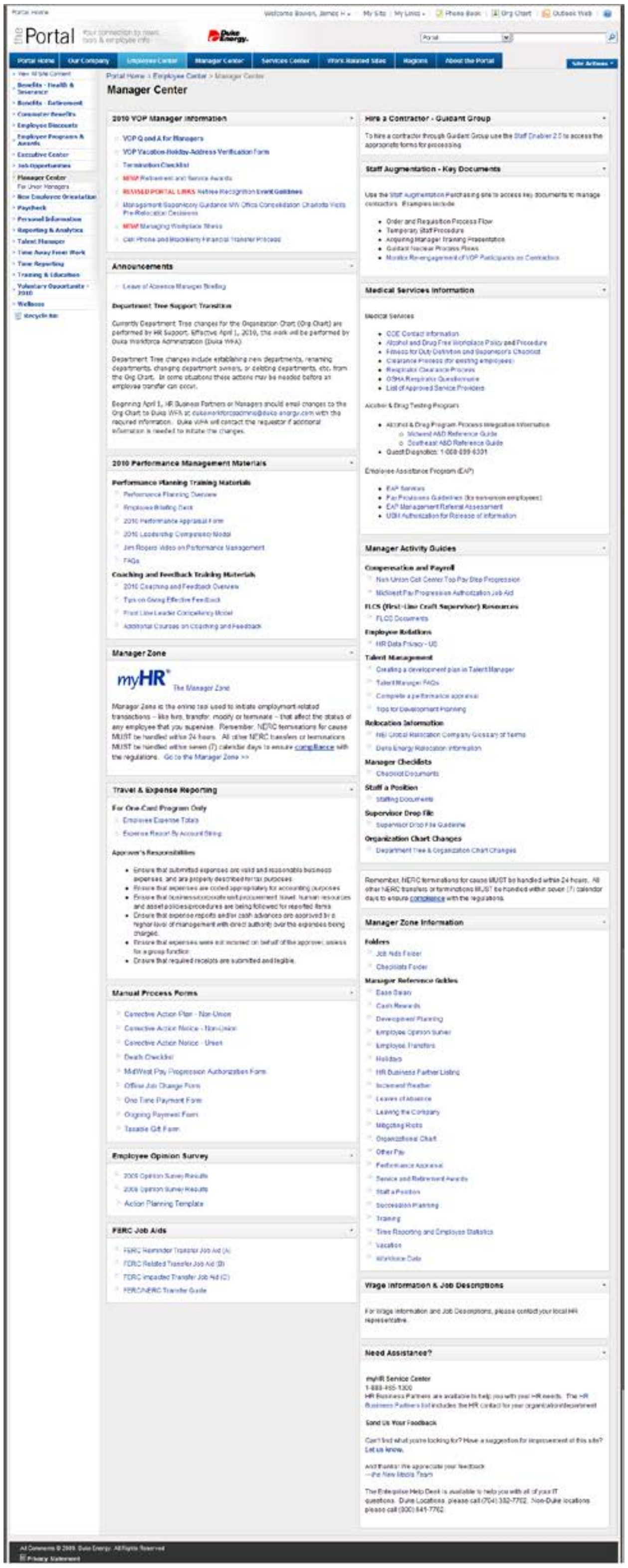
The entire site is cleanly designed and well thought out. The site navigation helps users move through the site to find the content they need. The team turned to a mega-dropdown navigation structure to accommodate the site's content. The previous site navigation had grown unmanageable. In user testing, team members found that users stared at the menus without being able to locate the appropriate navigational option. Some menus had grown so long that they were unable to fit within a viewable screen.

The mega-dropdown lets team members add another level of categorization without adding clicks. This will help the site accommodate growth and change. It will also let them develop a cleaner visual design, making menus easier to scan and making it easier for users to locate options. The new design's strengths were borne out in user testing: users spent less time choosing navigational options and successfully navigated to appropriate areas of the site.



Pictured: Mega-dropdown navigation was a good solution for clearly displaying options.

The team relied on user research and feedback throughout the design process. Card-sorting exercises helped the team reach the goal of creating a task-oriented IA. Employee card sorts also helped organize key site areas, including the *Service Center*, *Employee Center*, and *Manager Center*. In the *Manager Center*, for instance, the team took an unmanageable page with too many links and options and turned it into a streamlined page with clear categories, allowing managers to locate information quickly. Further enhancements were based on focus groups, surveys, and usability testing of prototypes.



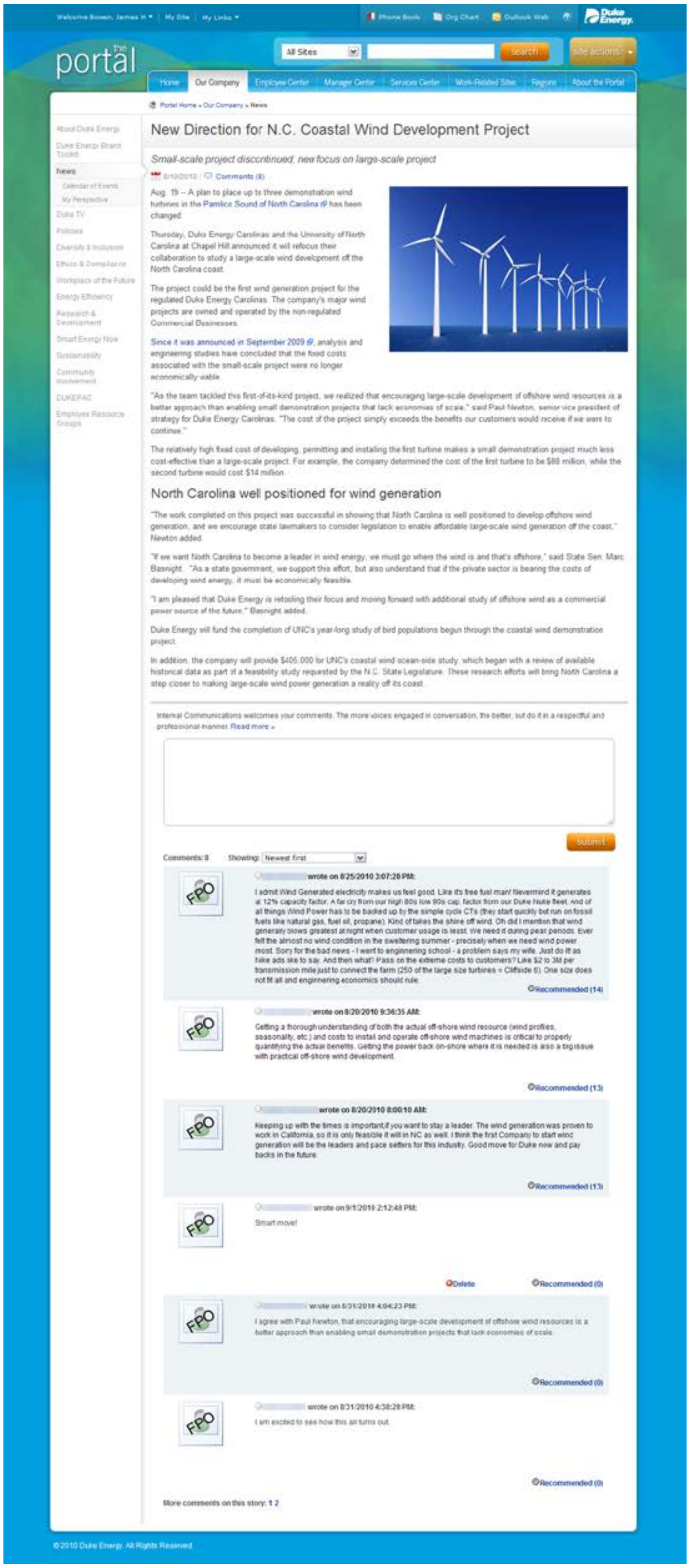
Pictured: The previous version of *Manager Center* offered too many links and too many places to look for content.

Pictured: The new *Manager Center* groups content by type and offers a clear name and brief explanation for each option.

The new site strives to engage users. Commenting on news articles has been a hugely successful addition to the site. On news article pages, users can easily add their commentary on an item. An open text field invites participation, with a simple and direct reminder to act appropriately: "Internal Communications welcomes your comments. The more voices engaged in conversation, the better, but do it in a respectful and professional manner."

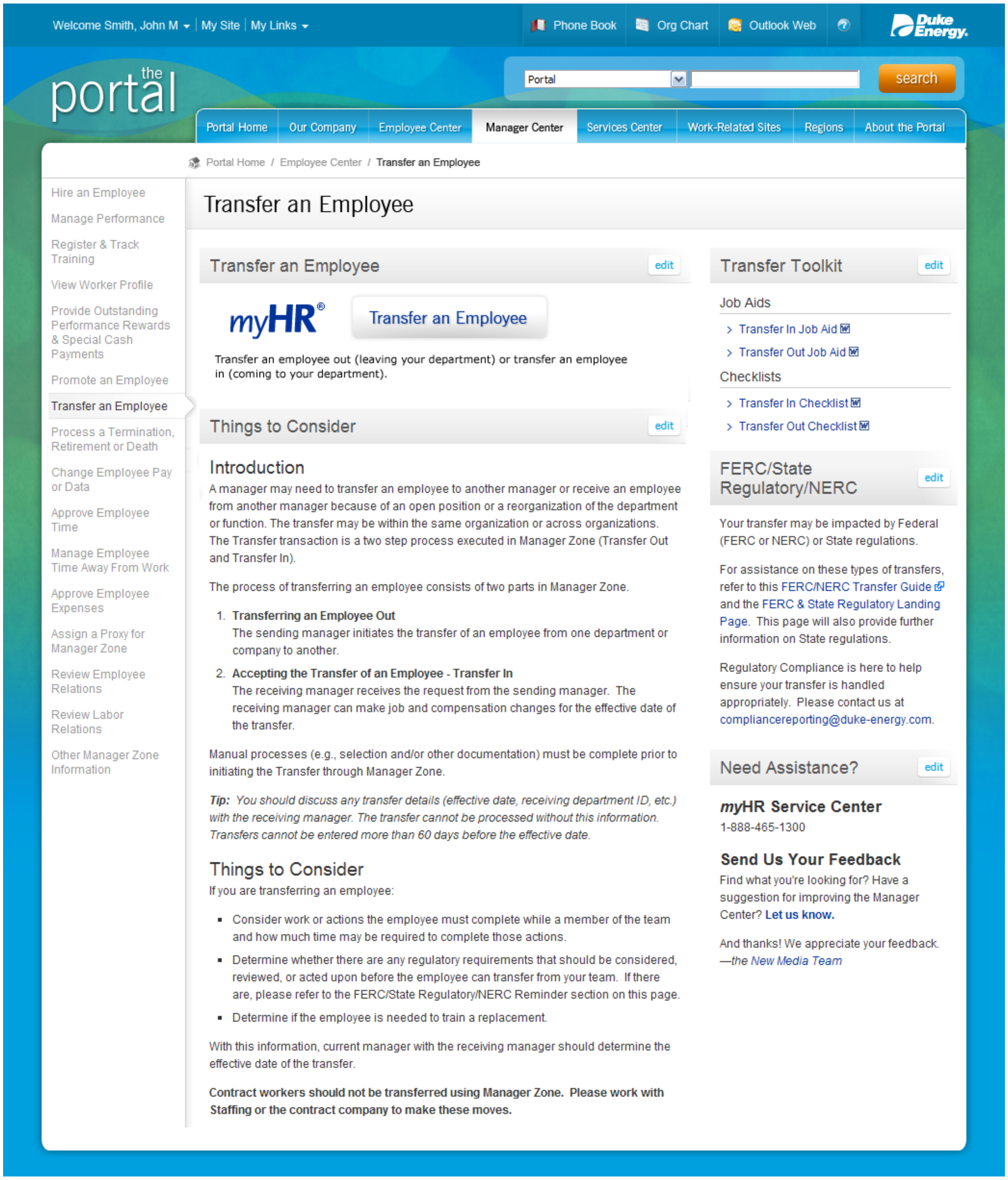
Comments appear beneath the article, with the most recent comment listed first. Each comment is attributed to the author, with an image and name as well as the date and time the information was posted. Users can also recommend comments; the most popular or interesting comments become the most highly rated. To recommend a comment is almost like saying "I second that!"

Commenting has become a very popular activity on the site. The team reports that page views indicate people return again and again to view the latest comments on stories that have generated lively discussions. And these activities help the team gauge the strength of sentiments across the company.



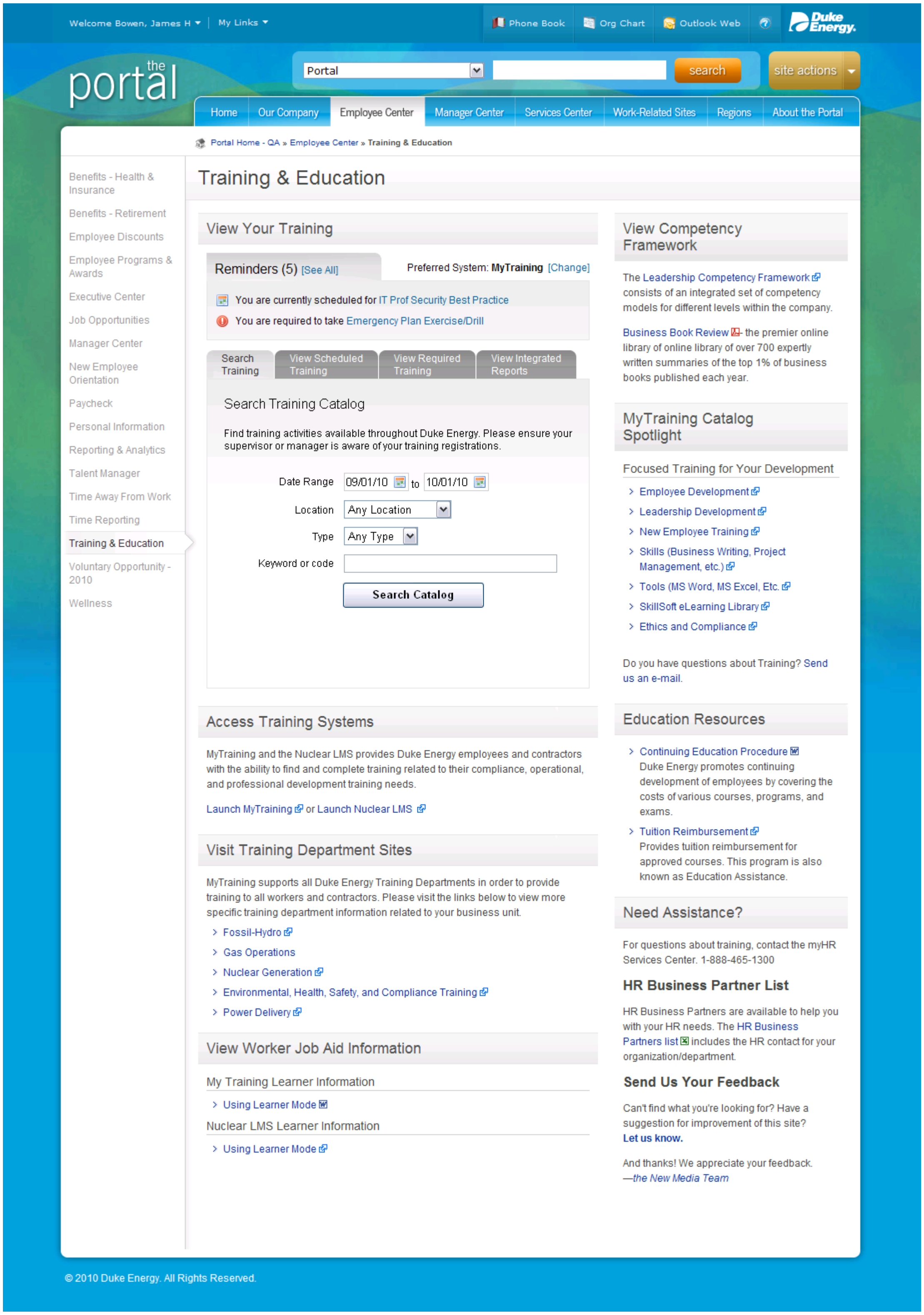
Pictured: Employees can add comments beneath news stories. By default, comments are displayed with the most recent addition first.

A main goal of any intranet is to help employees get their work done. Transaction pages on the Duke Energy intranet do just that, combining all the site's resources about or surrounding a transaction type on a single page. Thus, rather having to scour the site for a policy, help information, and tutorial about a process, Duke Energy's intranet users can find that knowledge all in one location.



Pictured: Transaction landing pages, such as this one for transferring an employee, group policies, procedures, help information, documentation, and more all in one place, regardless of which group "owns" the information.

Training is key to the organization. All Duke Energy employees must keep up-to-date on the latest technologies and processes, as well as on all board-mandated training. The training page recognizes the importance of keeping on top of training and provides updated information about any training the employee has already scheduled, as well as any he or she is required to take. Users can also search the training catalog and access training systems through the page.



Pictured: The training page highlights current and required training and helps users find opportunities for learning.

Starting with little knowledge about what SharePoint could do, the Duke Energy team created a strong, interactive, and engaging site focused on meeting the organization's needs, reflecting its goals, engaging its employees, and setting up a strong framework for continued success.

BACKGROUND

Duke Energy is facing a directional change as its industry moves toward renewable energy sources. With that momentum in play, it seemed like a good time to realign the company's intranet to more closely reflect the new business models required to support this new direction. It was time for the company's intranet to support the collaborative environment required for innovation.

"We're moving toward renewable energy sources and developing new business models based on energy efficiency and sustainability," says Martha Brown, Portal Program Manager, Corporate Communications.

"It was time for our intranet to transform as well, and to begin reflecting the priority we place on conversations and collaboration as a foundation for innovation."

To this end, the site's 2010 redesign features a more social-focused homepage, updated colors, imagery styles, and page layouts.

"We redesigned the graphic background of the portal to more closely align with our corporate sustainability and energy efficiency initiatives," says Mike Diekhoff, Multimedia Designer, Corporate Communications.

Evolution

The company's original intranet, The Portal, first launched in 2001 as a place for corporate news and HR applications and followed a traditional corporate growth path with many sites added over the next five years. Then, in 2006, the company merged with another large energy company. This merger brought more organizational challenges for the intranet, as both companies had their own intranets.

"Growth took an unexpected turn in 2006 when Duke Energy merged with Cinergy, another large energy company with its own mature intranet." says Brown. "Throughout 2006, the intranets were consolidated as departments, tools, and processes were aligned."

By 2007, The Portal was outgrowing its platform. A vision was also slowly emerging for a social portal to better serve the company's communication needs.

"Outdated legacy content was rendering search unusable," says Brown. "Content sprawl threatened its aging information architecture."

"We decided to move The Portal from its Plumtree/BEA platform to SharePoint 2007 (MOSS) to better integrate with our Microsoft environment and leverage SharePoint's collaborative features," says Brown.

The recreated Portal launched in May 2009 with the following features:

- Updated IA
- Profile pages for the company's employees, with ID badge photos that can be removed or replaced
- A widely distributed content management model

- A document retention workflow designed to ensure that Portal content did not outlive its usefulness

But, by 2010, the site needed a serious upgrade. Several years had passed since the last homepage design, and the page had evolved organically along the way, adding features in an ad hoc manner. According to Brown, it had gotten to a point where it no longer supported the objectives of The Portal or the way employees used it.

"We saw a great opportunity for a major upgrade in The Portal user experience," says James Bowen, User Experience and Innovation Team Manager.

Knowing that you need a redesign and knowing what that redesign should address are very different things. The Duke Energy team examined many factors to make their decisions, including looking at site usage data, analyzing employee feedback, and researching published benchmark data about intranets at companies in similar industries.

Navigating Challenges: Working with SharePoint

Companies that employ SharePoint as an intranet platform often report many challenges associated with extending the platform beyond its basic functionality. Among these challenges, the Duke team noted a steep learning curve, the lack of budget required to employ expert resources, and the need to fully understand the product's capabilities.

"We did not have a budget for hiring SharePoint development expertise, and were somewhat limited in our experience at the start," says Bowen. "So, we were forced to either learn how to do the work ourselves or not include certain features in the design."

"We spent a lot of time in the early stages of the project experimenting in a sandbox environment and learning as much as we could about what we could and couldn't do so that we didn't design something that is unbuildable, 'unmaintainable,' or otherwise impractical," he says.

As a result, there were features in the initial designs that they weren't sure were technically feasible until they were well into the project.

Bowen offers this advice for other teams considering SharePoint: "It's critical for anybody designing sites for SharePoint to have a good understanding of its capabilities.

"Our design and development team did an amazing job of learning SharePoint development techniques and getting creative when we encountered limitation," he says.

It's also a delicate balance when choosing to customize the platform to meet an individual company's needs.

"MOSS 2007 is a challenge for developers who are used to being able to build sites from the ground up using Web-standards-compliant code," says Chris Greufe, Front End Developer, New Media User Experience.

The company's IT policy is to not customize SharePoint because doing so can jeopardize supportability by Microsoft and close the upgrade path. "So, a major challenge," says Greufe, "was to understand at what point we might be crossing the line into customization."

“We were able to create custom master pages and layouts that helped us to improve standards compliance of the site, and we relied heavily on a few JavaScript libraries, including jQuery, jQuery Tools. and SPServices, to overcome some of the limitations of SharePoint,” he says.

“The libraries also made it possible for us to introduce some interesting interactive elements, including the commenting system, and enhance the SharePoint user interface with tabs, tooltips, slideshows, and other features,” says Greufe.

Accommodating Content Management

The other big challenge for the redesign effort centered on the company’s process for updating site content. That process was very distributed and included more than 170 site managers across the company. The team discovered that more than a thousand pages would need to be manually touched to implement the new layouts. Figuring out how to accomplish this required a detailed, thoughtful plan.

“Coordinating these changes in a way that didn’t interfere with in-process work required careful planning (and a few apologies),” says Brown.

Another challenge related to content management presented itself as the team became more familiar with the SharePoint platform’s features.

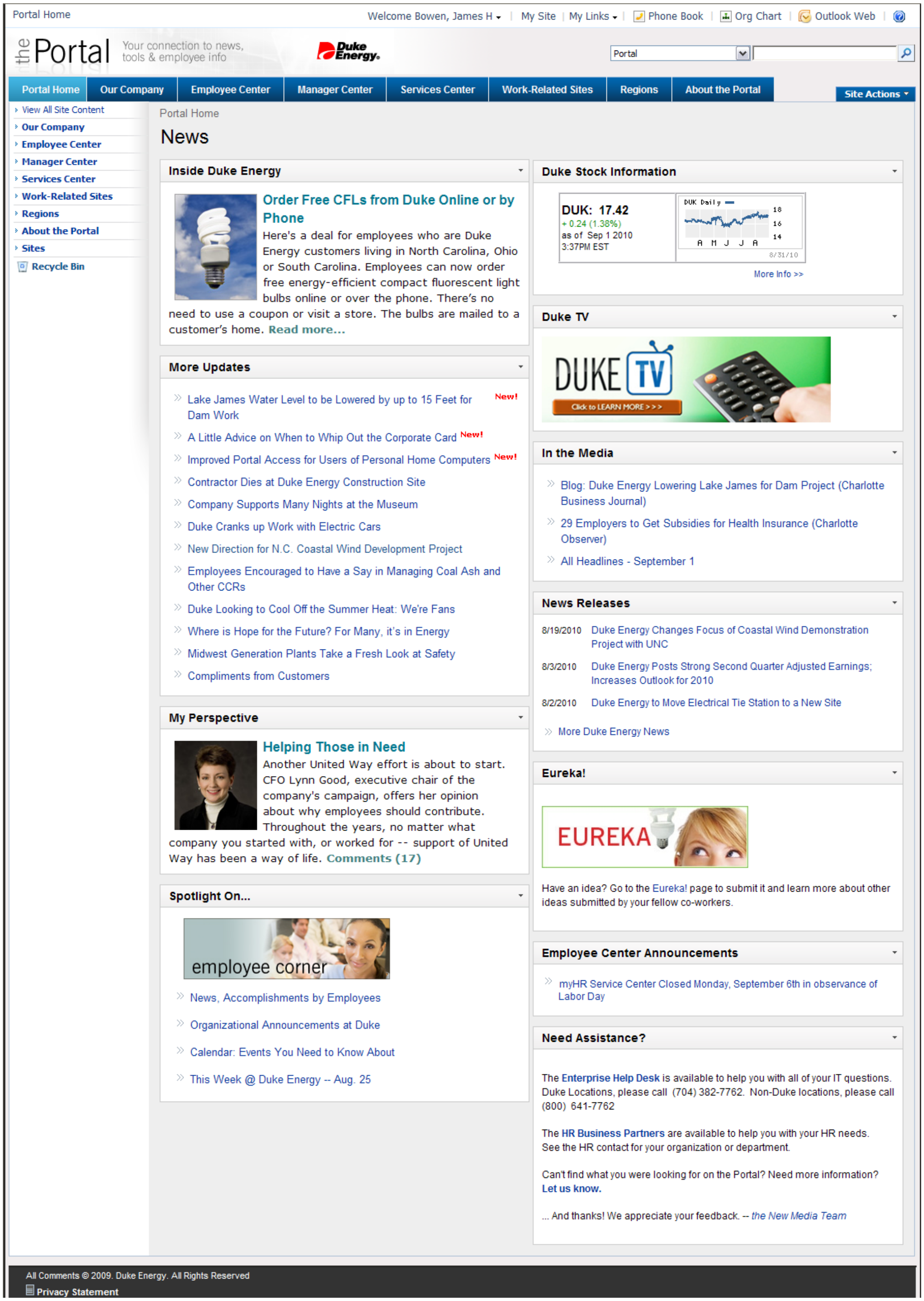
“Although one of our goals in moving The Portal to SharePoint in 2009 was to broaden and distribute our content management model, we discovered through our redesign project that the platform’s flexibility creates an environment that really necessitates a more formal and cross-functional governance model than we had in place,” says Brown. “Developing additional governance goals, roles, and processes is the next step to optimize the way in which work is scoped, prioritized, resourced, scheduled, and reviewed.”

Timing the Release

The project’s final hurdle was a matter of timing.

“Our final challenge involved the timing of the release,” says Brown. “We needed to coordinate our schedule with some on-going and extensive work to some of our benefits sites, as some previously hosted HR functionality was being brought back in house.”

As a result, the team moved the launch date back several weeks to accommodate this work.



Pictured: The old homepage evolved organically through considerable organizational change and a major technology transition.

TIMELINE

DUKE ENERGY INTRANET TIMELINE	
Milestone Dates	**Milestone Description**
2001	**First implementation of portal** The initial portal was launched primarily as a communications tool and a platform for HR applications.
2003	**Usability enhancement project** User interface and IA improvements based on a comprehensive usability study of The Portal.
November 2005–April 2006	**Cinergy merger integration** Blended the two portals, and redesigned the homepage and the look and feel.
March–October 2007	***Services Center*** Rolled out "shared services" section of The Portal, where employees find support for business activities such as booking travel, ordering supplies, and requesting facilities support. During this redesign, the team conducted card sorting and usability studies to overhaul the information.
January–June 2008	***Employee Center*** Launched HR resources and functions section, where employees can view their paychecks, change benefits enrollment, and access information on their employment and compensation. This project included an IA overhaul based on a card-sorting study and usability testing.
June 2008–May 2009	**MOSS implementation** Converted existing intranet with limited user experience activity. The team interviewed a few dozen employees regarding the changes to get an understanding of the potential impacts and inform change-management activities.
July 2009–August 2010	***Manager Center*** Developed site to support managers' activities, including transferring, hiring, and terminating employees, as well as processing job and compensation changes. User experience activities included focus groups, surveys, and usability testing of prototypes.

March–September 2010	**Visual and homepage redesigns** The company's most recent effort in visually redesigning The Portal gave it a much-needed "new coat of paint." This project included a homepage redesign to incorporate more social features and provide easier access to The Portal's most commonly used features. User experience activities included interviews and usability testing.

INTRANET TEAM

Pictured: The Duke Energy intranet team: (left to right) Greg Corrin, Randy Wheeless, James Bowen, Chris Greufe, Derrick Balog, Shannon Polson, Clark Kearns, Martha Brown, Robbi Walls, and Marc Bacon.

Pictured: Intranet team members not included in group photo: Mike Diekhoff (left) and Karyn Williams (right).

GOVERNANCE

Ownership

Corporate Communications now owns the Duke Energy intranet. The intranet team (New Media) moved to Corporate Communications in August 2010, in the middle of the redesign project. For the previous 10 years, the intranet was owned by a shared services organization called Enterprise Operations Services, where the New Media team originated in 2000.

An in-house IT organization — Portal, Collaboration, and Content Management (PCCM) — partners closely with New Media and provides technical support for both The Portal and the SharePoint team site environments.

Ownership Over Time

The homepage content has always been managed through the Internal Communications team within Corporate Communications.

"This team," says Brown, "has long advocated for tools that invite conversation and encourage employee engagement. The move to strategically align New Media with Corporate Communications strengthened the synergy needed to further integrate social technologies both on the homepage and throughout The Portal."

"With a 10-year history in a shared serviced department, New Media was positioned to collaborate and consult on a variety of projects with teams across the organization," says Brown. "This created a broad foundation and scope for The Portal and positioned it well for future growth and strong strategic value."

USERS

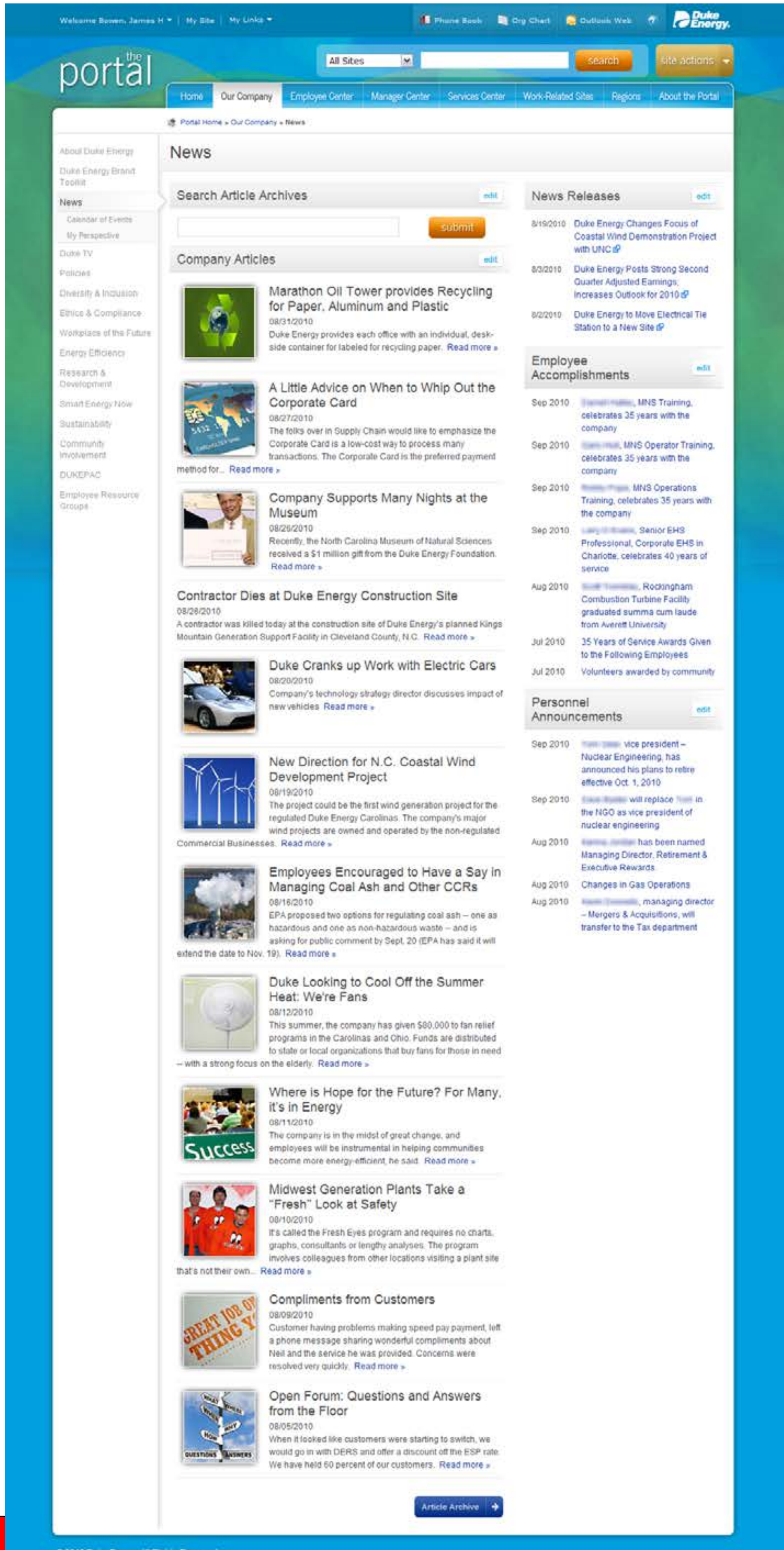
The Duke Energy portal is available to the company's entire workforce of more than 18,000 employees and 12,000 contractors. It serves as the central location for company news, benefits, services, enterprise information, weather forecasts, and various tools, including expense reporting and travel for US-based employees.

The company's international employees use the portal for company news and other information, but they also have their own local intranets with links to their benefits information and tools.

Among the site's many users are the following groups:

- **Employees** of Duke Energy, including executives, use The Portal to access all of their benefits and compensation information and to get information about training opportunities, wellness initiatives, and employee discounts.
- **New employees** use The Portal to find the information they need to complete their "checklist," which includes required training and benefits enrollment.
- **Managers** use the Portal to:

    - access the information and tools needed to hire, promote, transfer, and process the hiring, retirement, and termination of employees;
    - approve employee time and expenses;
    - register and track employee training; and
    - access labor relations information, including union contracts.
- **Various departments** use The Portal to access and manage their specific tools and information. (Some of these portal sites are secured to limited audiences.) Departmental sites include:
    - **Power Delivery:** safety information, reports, tools, documentation, catalogs, and links to departmental newsletters and SharePoint sites.
    - **Fleet Services:** vehicle specifications, insurance certificates, and maintenance manuals.
    - **Finance Department:** financial reports and system status updates for finance employees and executives.
    - **Rates and Regulatory Department:** service agreements, asset transfer agreements, affiliate agreements, and rate comparisons.
    - **Customer Call Center:** employee recognition and customer compliments, along with links to outage information, schedules, and other information needed to support the representatives on the phone.
    - **Real Estate Department:** information about the "workplace of the future" initiative and the new Duke Energy Center, business processes, and a link to the real estate management system.
    - **Wind Energy:** updates on wind projects across the country, including photos, videos, and news releases.
    - **Information Technology:** information about IT security, standards, processes, and tools.
    - **HR:** information for HR professionals, including opportunities for professional development, a project calendar, guidelines, and resources.
    - **Generation:** up-to-date status of generation facilities, updates on new construction, performance metrics reports, safety messages, and newsletters.
    - **Emergency Response:** emergency contacts, business continuity, storm response, pandemics, and office building emergency procedures.
    - **Corporate Environment, Health, and Safety:** safety resources, tools, contacts, programs, and reports.



Welcome Bowen, James H | My Site | My Links

Phone Book | Org Chart | Outlook Web | Duke Energy.

the portal

All Sites | search | site actions

Home | Our Company | Employee Center | Manager Center | Services Center | Work-Related Sites | Regions | About the Portal

Portal Home » Our Company » News

About Duke Energy
Duke Energy Brand Toolkit
News
Calendar of Events
My Perspective
Duke TV
Policies
Diversity & Inclusion
Ethics & Compliance
Workplace of the Future
Energy Efficiency
Research & Development
Smart Energy Now
Sustainability
Community Involvement
DUKEPAC
Employee Resource Groups

News

Search Article Archives

edit

submit

Company Articles

edit

Marathon Oil Tower provides Recycling for Paper, Aluminum and Plastic
08/31/2010
Duke Energy provides each office with an individual, desk-side container for labeled for recycling paper. Read more »

A Little Advice on When to Whip Out the Corporate Card
08/27/2010
The folks over in Supply Chain would like to emphasize the Corporate Card is a low-cost way to process many transactions. The Corporate Card is the preferred payment method for... Read more »

Company Supports Many Nights at the Museum
08/26/2010
Recently, the North Carolina Museum of Natural Sciences received a $1 million gift from the Duke Energy Foundation. Read more »

Contractor Dies at Duke Energy Construction Site
08/26/2010
A contractor was killed today at the construction site of Duke Energy's planned Kings Mountain Generation Support Facility in Cleveland County, N.C. Read more »

Duke Cranks up Work with Electric Cars
08/20/2010
Company's technology strategy director discusses impact of new vehicles. Read more »

New Direction for N.C. Coastal Wind Development Project
08/19/2010
The project could be the first wind generation project for the regulated Duke Energy Carolinas. The company's major wind projects are owned and operated by the non-regulated Commercial Businesses. Read more »

Employees Encouraged to Have a Say in Managing Coal Ash and Other CCRs
08/16/2010
EPA proposed two options for regulating coal ash – one as hazardous and one as non-hazardous waste – and is asking for public comment by Sept. 20 (EPA has said it will extend the date to Nov. 19). Read more »

Duke Looking to Cool Off the Summer Heat: We're Fans
08/12/2010
This summer, the company has given $80,000 to fan relief programs in the Carolinas and Ohio. Funds are distributed to state or local organizations that buy fans for those in need – with a strong focus on the elderly. Read more »

Where is Hope for the Future? For Many, it's in Energy
08/11/2010
The company is in the midst of great change, and employees will be instrumental in helping communities become more energy-efficient, he said. Read more »

Midwest Generation Plants Take a "Fresh" Look at Safety
08/10/2010
It's called the Fresh Eyes program and requires no charts, graphs, consultants or lengthy analyses. The program involves colleagues from other locations visiting a plant site that's not their own... Read more »

Compliments from Customers
08/09/2010
Customer having problems making speed pay payment, left a phone message sharing wonderful compliments about Neil and the service he was provided. Concerns were resolved very quickly. Read more »

Open Forum: Questions and Answers from the Floor
08/05/2010
When it looked like customers were starting to switch, we would go in with DERS and offer a discount off the ESP rate. We have held 60 percent of our customers. Read more »

Article Archive

News Releases

edit

8/19/2010 Duke Energy Changes Focus of Coastal Wind Demonstration Project with UNC

8/3/2010 Duke Energy Posts Strong Second Quarter Adjusted Earnings; Increases Outlook for 2010

8/2/2010 Duke Energy to Move Electrical Tie Station to a New Site

Employee Accomplishments

edit

Sep 2010 , MNS Training, celebrates 35 years with the company

Sep 2010 , MNS Operator Training, celebrates 35 years with the company

Sep 2010 , MNS Operations Training, celebrates 35 years with the company

Sep 2010 , Senior EHS Professional, Corporate EHS in Charlotte, celebrates 40 years of service

Aug 2010 , Rockingham Combustion Turbine Facility graduated summa cum laude from Averett University

Jul 2010 35 Years of Service Awards Given to the Following Employees

Jul 2010 Volunteers awarded by community

Personnel Announcements

edit

Sep 2010 vice president – Nuclear Engineering, has announced his plans to retire effective Oct. 1, 2010

Sep 2010 will replace in the NGO as vice president of nuclear engineering

Aug 2010 has been named Managing Director, Retirement & Executive Rewards

Aug 2010 Changes in Gas Operations

Aug 2010 , managing director – Mergers & Acquisitions, will transfer to the Tax department

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Pictured: A new site on The Portal contains all the news content and archives. Prior to the redesign, it was essentially impossible to find old news content.

URL AND ACCESS

SITE ACCESS INFORMATION	
Item	**Status**
URL	Portal.duke-energy.com
Default Status	For most employees, the intranet is set as the homepage. International employees and nuclear employees have access to the intranet, but it is not set as their homepage.
Remote Access	Employees can use their credentials (domain ID and password) to log in to The Portal via a browser. The company uses Microsoft's Intelligent Application Gateway (soon to be upgraded to Unified Access Gateway) for external portal access.
Access through Shared Workstations	Approximately 5,000 employees use shared workstations. Most of these employees work in generation facilities or in transmission and distribution roles. Because the intranet is accessible remotely, these employees can also access it from any computer.

DESIGN PROCESS AND USABILITY WORK

Project Goals

The portal team outlined the following goals for the most recent redesign effort:

- Feature and support dynamic online conversations
- Integrate more information that people use into the homepage
- Encourage employees to submit suggestions for events, announcements, and stories
- Reflect the company's evolving brand

Redesign Over Time

Redesign on a portal the size of Duke Energy's intranet means that the project must be an ongoing process, not a mega one-time endeavor.

"The Portal is such a vast and complex system that it's not possible for us to take on an all-inclusive redesign in a single project," says Bowen. "Over the last several years, we have undertaken several projects to redesign major sections of The Portal one at a time. This approach has worked well because it has enabled us to focus our efforts on improving the user experience of each section with its specific challenges and goals."

The team makes an effort to use the knowledge gained on one project to improve our methods on the next and reuse successful and tested design ideas.

Gathering Data to Inform Design

The Duke Energy team used a number of research methods to gather data that would inform their design decisions. These methods included:

- **Card Sorting:** Card-sorting exercises were used during the two major content redesigns: *Services Center* and *Employee Center*. The studies were conducted with a few dozen employees, using small groups of three to four employees in each session. Each participant was given a subset of the cards to work with on their own. After participants completed an initial sort, the team pulled the group together to create a complete card sort.

  "Starting participants on their own forced them to formulate their own opinions outside the group influence, and then justify their decision-making in presenting their ideas to the group," says Bowen. "The resulting discussion gave us rich subjective feedback in addition to the quantitative results of the card sort."

- **Usability Studies:** For the site's larger redesigns, the team conducted comparative usability studies to measure the improvement in the new design's usability. For these studies, team members asked participants to complete the same task on both the new and old systems and capture quantitative measures such as time on task, errors, and "lostness," as well as the subjective metrics of confidence and ease of completion. The lostness measure takes into account the number of pages visited, the number of unique pages visited, and the number of pages necessary to complete the task; the measure is drawn from the book, *Measuring the User Experience by* Tom Tullis and Bill Albert.

  In these sessions, tasks were randomized in order and by system so that any learning that happens during the session is balanced out across sessions.

  Because the company's employees are so widely distributed geographically, the team also conducts a lot of user testing remotely using Live Meeting, a conference bridge line and Morae software.

- **Benchmarking:** The team looked to third-party research to inform some of their design decisions. This research included Nielsen Norman Group's *Intranet Design Annual*.

  "Because it's very difficult to see best practice examples of intranets," says Bowen, "it's extremely helpful to have a publication that documents some of the best that are out there. The NN/g award annuals have been a valuable source of inspiration for intranet design projects,"

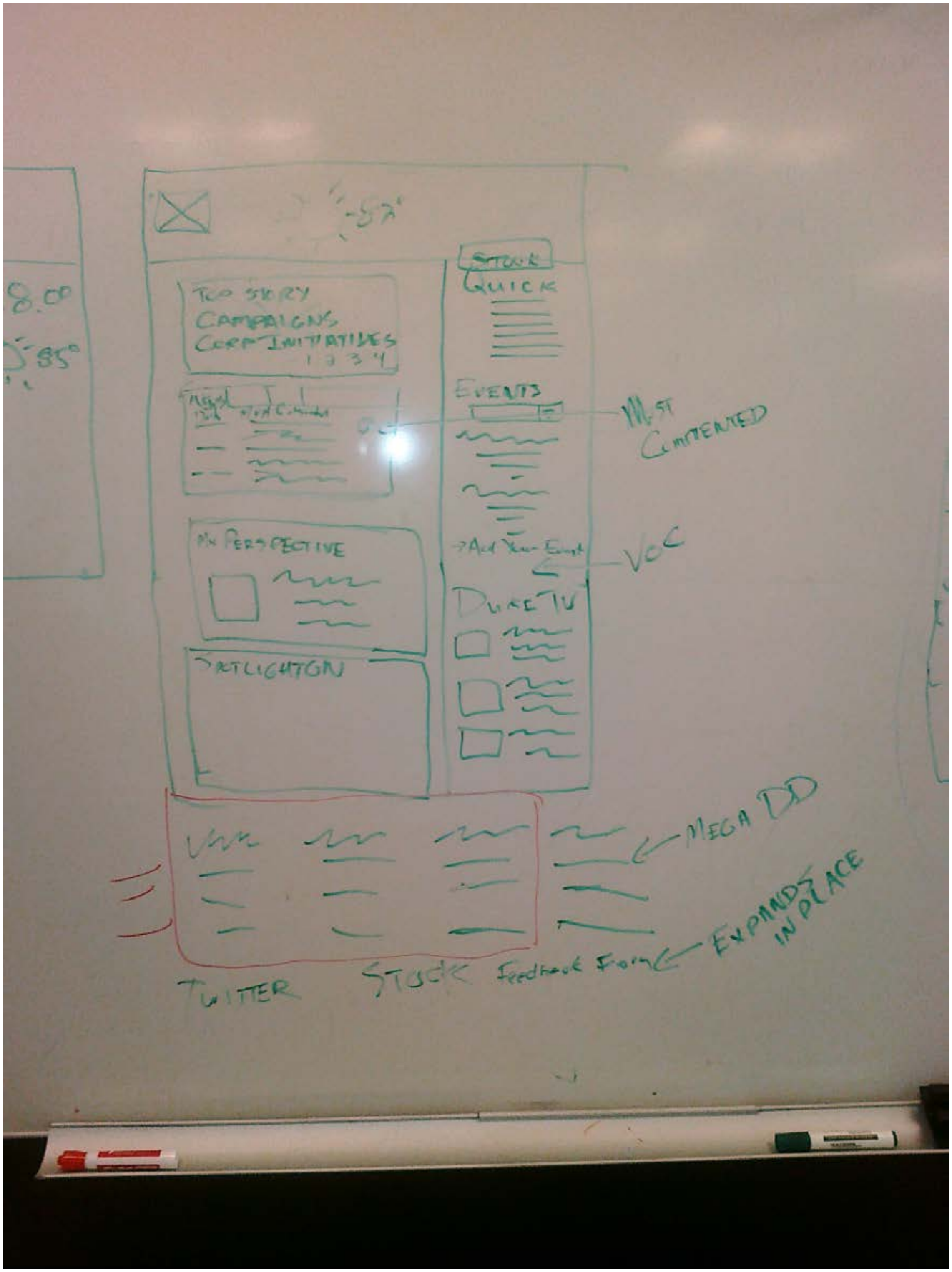
  In addition to research reports, the team reached out directly to other intranet teams, to learn from their best practices.

  "We've also met with the intranet design teams from our peers AEP and SCANA, both past winners of the NN/g Intranet Design Award, to get insight and inspiration from the work they've done," says Bowen.

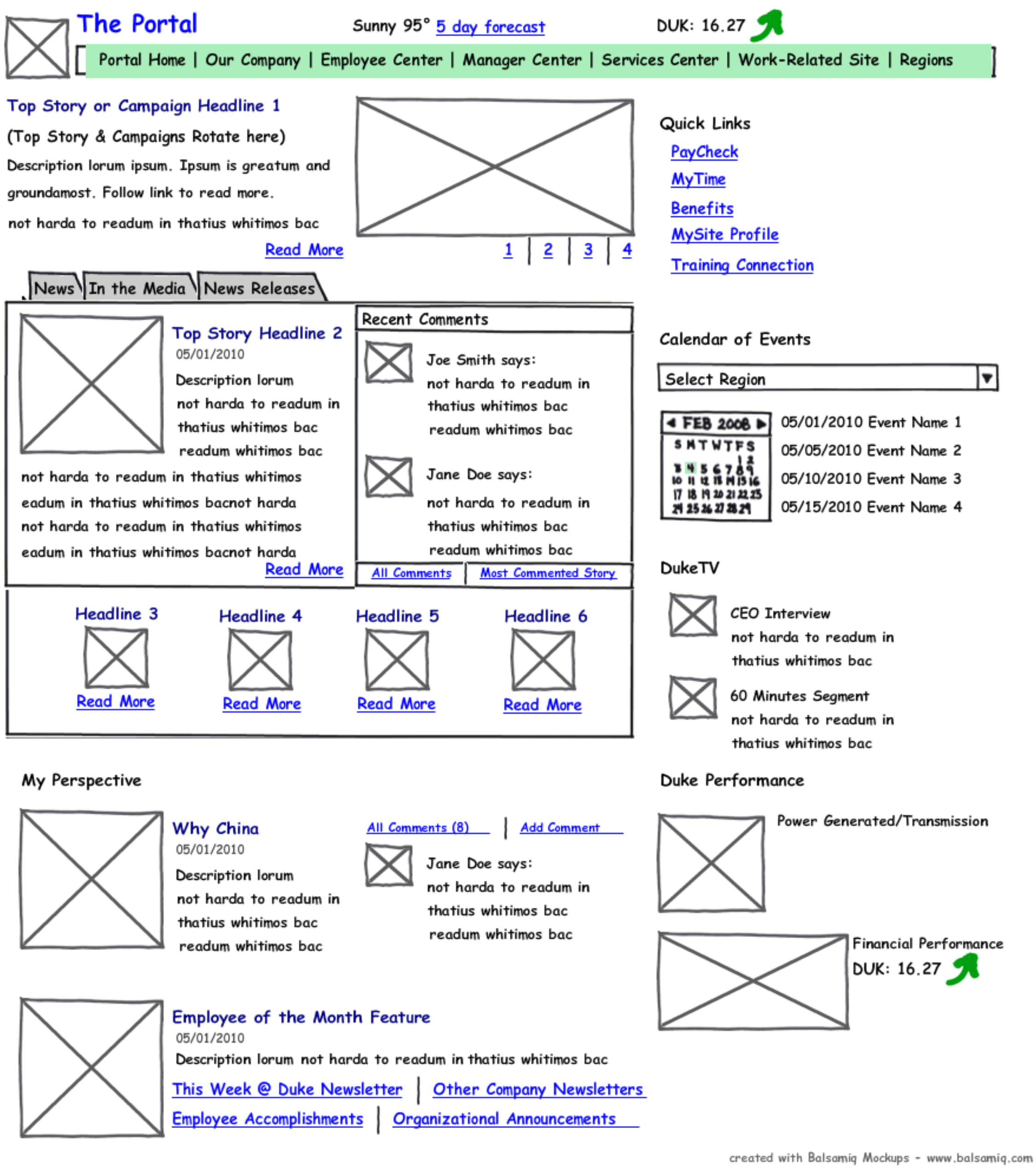
- **Web analytics:** For Web analytics, the team implemented Cardiolog with MOSS in 2009.

  “Cardiolog has the advantage of being tightly integrated with MOSS,” says Bowen, “but we’ve struggled with the usability of the reporting interface since it is very different from other Web analytics tools that we have used in the past, such as WebTrends, NetInsight, and Google Analytics.”

  “Cardiolog has provided data that helped us determine which links should be *Quick Links* and assists in maintaining *Best Bets* for search results,” he says.


TOP STORY
CAMPAIGNS
CORP INITIATIVES
1 2 3 4
MY PERSPECTIVE
SPOTLIGHT
STOCK
QUICK
EVENTS
MOST COMMENTED
VOC
DUKE TV
MEGA DD
EXPANDS IN PLACE
TWITTER
STOCK
Feedback Form

Pictured: A whiteboard sketch that evolved into the final design. After sketching through a few other possibilities, the team chose this layout and ran with it. The fat footer with the Twitter feed, sitemap, and expand-in-place feedback form didn't make it into scope, but everything is surprisingly close to the end result arrived at through stakeholder feedback and user testing.



Pictured: The team used Balsamiq to create a more legible sketch of the whiteboard wireframe.

Rolling Out New Features Through a Pilot Program: *My Sites*

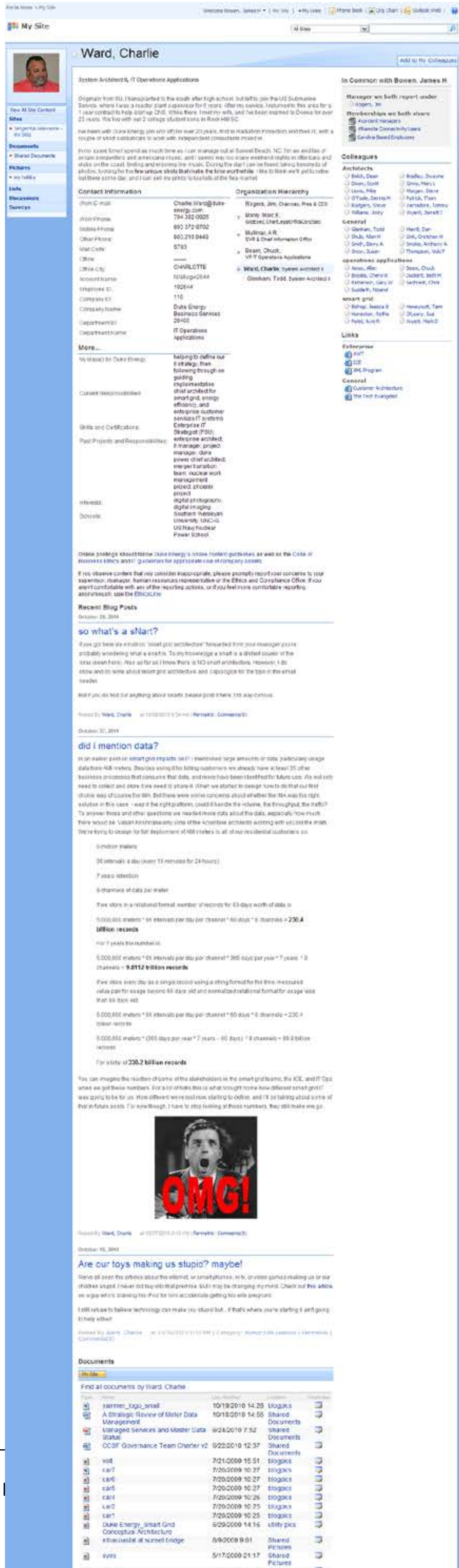
In May 2009, all employees and contractors were given profile pages. These pages were constructed by pulling together badge photos (which users could change), information contained in the company's HR system (work location, phone number, and organizational information), and some editable fields that users were free to augment with information (*About Me*, *Current Responsibilities*, *Skills and Certifications*, and *Interests*.). This gave the entire workforce a "presence" on the site through his or her profile page.

These profile pages were implemented through the SharePoint MOSS *My Site* functionality.

My Sites were the basis of a pilot program released to approximately 4,000 early adopters. These pilot users were given access to a full suite of collaboration tools on their *My Site* spaces, including blogs, wikis, surveys, and workspaces.

New Media conducted 20 webinars on how to use the tools to work more efficiently and tips on how to share their knowledge and experience. The pilot resulted in approximately 56 blogs or wikis set up by employees, most of which are designed to capture and share workplace knowledge.

In early 2011, the pilot will come to a close. Those early users have paved the way for widespread rollout of the program.


My Site
Ward, Charlie
Contact Information
Organization Hierarchy
In Common with Bowen, James H
Colleagues
Links
More...
Recent Blog Posts
so what's a sNart?
did i mention data?
OMG!
Are our toys making us stupid? maybe!
Documents
Find all documents by Ward, Charlie

Pictured: An example of a *My Site* Page.

CONTENT AND CONTENT CONTRIBUTORS

The content management features of the SharePoint platform were one of the main drivers behind the switch to SharePoint in 2009.

"Because SharePoint team sites were quickly adopted across the company we recognized the value of an intuitive and familiar interface in helping us achieve our goal to distribute ownership and minimize our support role in the publishing process," says Brown.

Transferring the Content

In 2009, when the site was upgraded to SharePoint, the intranet team took the opportunity to evaluate the content. And, rather than perform a wholesale site migration, they decided to do some pruning. The design team held two full days of classroom training for 128 people, over a span of four weeks. During these sessions, content owners were trained on the new system and asked to import only the content that was still current, relevant, and useful. No files were automatically imported into the new portal from the old. Since that time, the organization has added more than 40 new site managers, bringing the total to 170 people. With all these new content managers on board, it was good to create a fresh base to start from rather than just keep all of the existing content.

Training

The intranet team offers a variety of ways for content managers to get training. New Media offers a two-hour training session for new site managers each month, and intermediate and advanced classes are offered on demand. At the very least, they must contact New Media to set up a new site and secure it to the appropriate audience(s) when it's complete.

"For new sites, we generally discuss the proposed purpose, content, and audience," says Robbi Walls, New Media Web Specialist. "Sometimes it is actually more appropriate for the site to be a team site and not a portal site."

If it will be a portal site, the New Media contact sets up the site, including the needed document library(s) so that content types, versioning, and so on are available. The site manager can contact this person for further assistance or consulting. When the site is ready for integration into The Portal, the site manager notifies the New Media contact. The New Media person is then responsible for reviewing the site to ensure that it complies with portal standards and provides a good user experience, as well as for notifying the Enterprise Help Desk once a new site is added.

Users who need training can sign-up for a training session using a sign-up page on a SharePoint team site. The training sessions feature both in-person and virtual meetings. "Once site managers are trained, they are given access to a content management site on The Portal that houses all of the training materials and other useful information, including our Portal Standards documentation," says Clark Kearns, Web Specialist in New Media

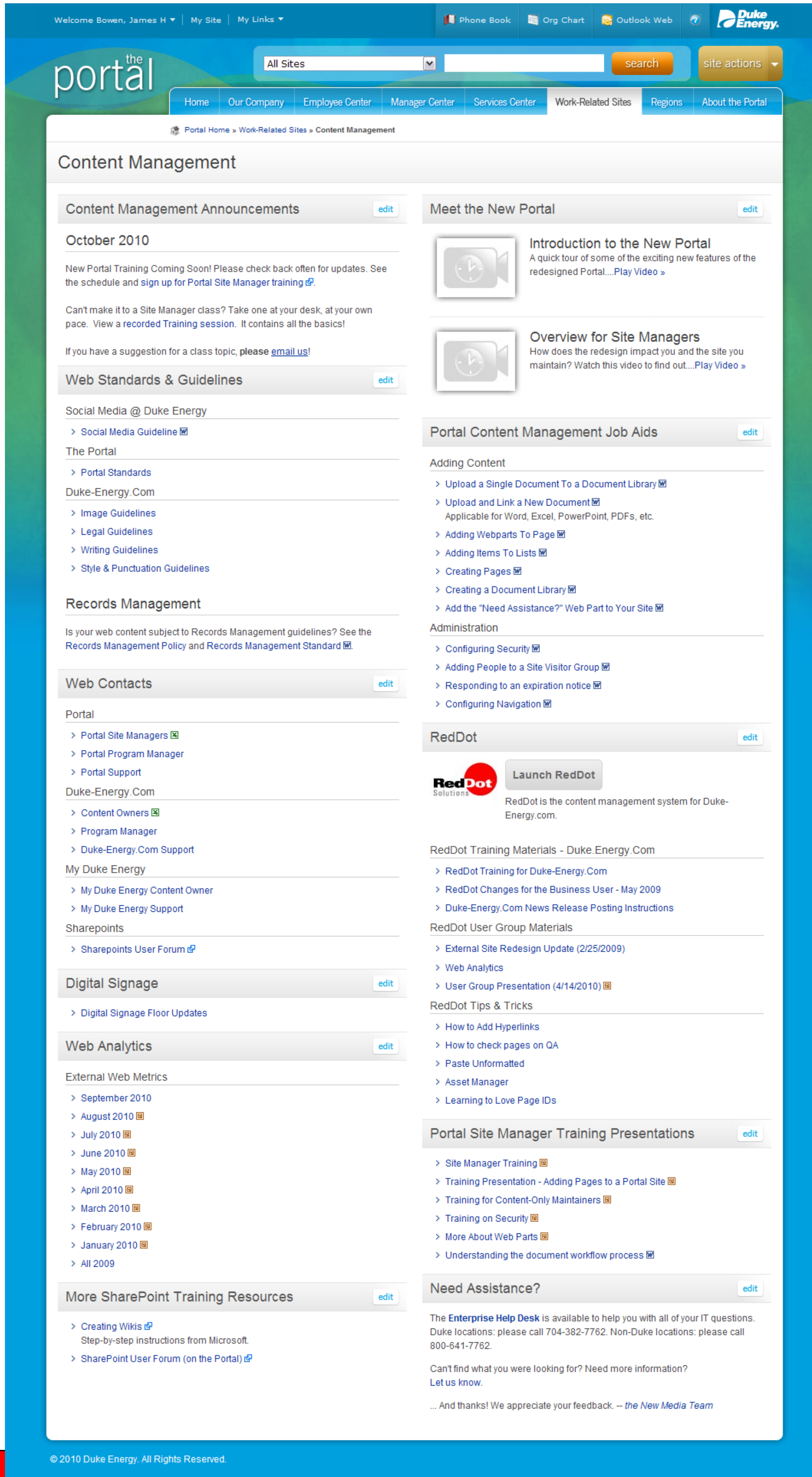
In addition to formal training, a small team of Subject Matter Experts (SMEs) within New Media offers support by responding to customer emails and help desk tickets (or phone calls).

“We respond to broke/fix issues, troubleshoot security access concerns, and process requests for new sites,” says Kearns.

Each portal site contains a *Need Assistance?* section that includes an email link to the site’s managers and an email link to New Media. Help is always a click away.

The portal team not only tries to offer passive training opportunities, but also tries to be proactive about keeping content quality up to standards.

“On a monthly basis, we send out an email with a site manager tip or tips,” says Walls. “These tips may be about easier ways of accomplishing something in MOSS, reminders to take certain actions (publish their documents, respond to workflow tasks), or may be directions to make a usability change to their site, such as adding or deleting information for getting assistance or making a change for the sake of consistency.”


Welcome Bowen, James H | My Site | My Links
Phone Book | Org Chart | Outlook Web
Duke Energy.
the portal
All Sites
search
site actions
Home | Our Company | Employee Center | Manager Center | Services Center | Work-Related Sites | Regions | About the Portal
Portal Home » Work-Related Sites » Content Management
Content Management
Content Management Announcements edit
October 2010
New Portal Training Coming Soon! Please check back often for updates. See the schedule and sign up for Portal Site Manager training.
Can't make it to a Site Manager class? Take one at your desk, at your own pace. View a recorded Training session. It contains all the basics!
If you have a suggestion for a class topic, please email us!
Web Standards & Guidelines edit
Social Media @ Duke Energy
Social Media Guideline
The Portal
Portal Standards
Duke-Energy.Com
Image Guidelines
Legal Guidelines
Writing Guidelines
Style & Punctuation Guidelines
Records Management
Is your web content subject to Records Management guidelines? See the Records Management Policy and Records Management Standard.
Web Contacts edit
Portal
Portal Site Managers
Portal Program Manager
Portal Support
Duke-Energy.Com
Content Owners
Program Manager
Duke-Energy.Com Support
My Duke Energy
My Duke Energy Content Owner
My Duke Energy Support
Sharepoints
Sharepoints User Forum
Digital Signage edit
Digital Signage Floor Updates
Web Analytics edit
External Web Metrics
September 2010
August 2010
July 2010
June 2010
May 2010
April 2010
March 2010
February 2010
January 2010
All 2009
More SharePoint Training Resources edit
Creating Wikis
Step-by-step instructions from Microsoft.
SharePoint User Forum (on the Portal)
Meet the New Portal edit
Introduction to the New Portal
A quick tour of some of the exciting new features of the redesigned Portal....Play Video »
Overview for Site Managers
How does the redesign impact you and the site you maintain? Watch this video to find out....Play Video »
Portal Content Management Job Aids edit
Adding Content
Upload a Single Document To a Document Library
Upload and Link a New Document
Applicable for Word, Excel, PowerPoint, PDFs, etc.
Adding Webparts To Page
Adding Items To Lists
Creating Pages
Creating a Document Library
Add the "Need Assistance?" Web Part to Your Site
Administration
Configuring Security
Adding People to a Site Visitor Group
Responding to an expiration notice
Configuring Navigation
RedDot edit
RedDot Solutions
Launch RedDot
RedDot is the content management system for Duke-Energy.com.
RedDot Training Materials - Duke.Energy.Com
RedDot Training for Duke-Energy.Com
RedDot Changes for the Business User - May 2009
Duke-Energy.Com News Release Posting Instructions
RedDot User Group Materials
External Site Redesign Update (2/25/2009)
Web Analytics
User Group Presentation (4/14/2010)
RedDot Tips & Tricks
How to Add Hyperlinks
How to check pages on QA
Paste Unformatted
Asset Manager
Learning to Love Page IDs
Portal Site Manager Training Presentations edit
Site Manager Training
Training Presentation - Adding Pages to a Portal Site
Training for Content-Only Maintainers
Training on Security
More About Web Parts
Understanding the document workflow process
Need Assistance? edit
The Enterprise Help Desk is available to help you with all of your IT questions. Duke locations: please call 704-382-7762. Non-Duke locations: please call 800-641-7762.
Can't find what you were looking for? Need more information? Let us know.
... And thanks! We appreciate your feedback. -- the New Media Team
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Pictured: The *Content Management* site gives site managers access to all relevant training materials, portal standards information, and tools for managing site content.

Keeping Content Fresh

Large-scale platforms such as SharePoint often come with the added convenience of offering standard site layouts. The Duke Energy team published a variety of layouts to meet the needs of all of their sites in the 2010 redesign. To ensure consistency, these are the only layouts that content creators can select. Styles are published for use in the rich text editor Web part.

“When we created The Portal in SharePoint, we implemented a workflow designed to help site managers keep their content up-to-date,” says Brown.

Each document library was assigned one or more content types. Each content type had an associated renewal date, ranging from three to 24 months. On the renewal date, content owners receive an email directing them to their site “task list” where they can renew the file. If the file is not renewed within the renewal period, it automatically goes to the recycle bin for 30 days and is then deleted. Once a file is renewed, the cycle starts again with a new renewal date.

This workflow serves their needs right now, but it will be refined over time.

“We plan to make some refinements to this workflow process,” says Brown. “Site managers have found that responding to a task for each individual file has been burdensome.”

Also, because each site has several site managers, it’s sometimes difficult to tell whether someone else has already processed the task. The goal over time is to find a way to simplify the renewal process and increase its effectiveness.

Maintaining Consistency Over Time

It’s one thing to enact standards. But the real challenge is to maintain adherence to those standards over time. The Duke Energy team plans to conduct semi-annual strategy sessions with each site manager’s group. During these sessions, the team will partner with each group to look at Web metrics and usage patterns, validate site security settings, review sites for compliance with standards, and make enhancements to improve usability.

“We may also review search logs and recommend information that might be added to the site to fill gaps,” says Brown. “To keep the site up-to-date and protect the integrity of search results, we’ll review the content and document libraries to ensure that old information is being deleted appropriately.”

CONTENT TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Portal Program Manager (Corporate Communications)	The Portal Program Manager's responsibilities are spread over three main areas and include: **Strategy** • Advocate for and develop the company's portal value proposition • Align portal vision and strategy with business drivers • Prioritize portal projects to help ensure the strongest business value • Coordinate the strategy for change management and communication efforts for portal-wide changes or impacts **Governance** • Work with business and IT to develop the business case, and acquire funding for and ensure support of technologies that enable the portal strategy and support its value proposition • Maintain the documented portal standards • Ensure the integrity of and strategy for portal IA and user experience • Review requests for new sites to ensure they support the portal strategy and architecture • Review new sites before they "go live" to ensure they comply with standards, best practices, and style guidelines **Day-to-Day Support** • Work with New Media site administrators to evaluate on-going support needs for site managers and to create strategies and tools that meet those needs • Work with stakeholders and PCCM team to gather requirements for customizations or third-party tools • Manage (with New Media site administrators) the *About The Portal* site and the *Content Management* site's portal-related content
New Media (Corporate Communications)	• Create new sites with accompanying libraries and security groups • Train, consult with, and support site managers • Guide site managers on site strategy and design • Help site managers evaluate the libraries, pages, Web parts, content types, and security groups needed to build and maintain the site • Advise site managers on the best use of evolving

	technologies (such as social media and dashboards) • Review sites to ensure adherence to portal standards • Work with the User Experience and Innovation team as needed to ensure that portal sites get usability testing or reviews as needed and adhere to usability best practices • Consult with site managers on site change management and communication needs and strategies • Perform no-damage testing for upgrades, patches, and releases
Site Managers (across the company)	• Receive site manager training from New Media • Build out site once it has been created • Keep the site up-to-date and accurate • Maintain appropriate site security • Ensure site compliance with all regulations (such as Federal Energy Regulatory Commission and NERC (North American Electric Reliability Corporation) • Follow content management processes by taking action on workflow notifications regarding document retention • Delete out-of-date or irrelevant documents • Adhere to portal standards • Follow brand guidelines
User Experience Team	• Conduct usability reviews and studies • Develop and maintains The Portal's user interface • Provide design guidelines and standards • Design innovative portal solutions for business problems
PCCM Team (IT)	• Support portal infrastructure • Coordinate portal maintenance plans and schedules • Coordinate installation of Microsoft patches and upgrades • Develop portal customizations when approved and prioritized through appropriate channels • Coordinate load testing • Manage the disaster recovery plan and drills • Perform tasks that require administration access (such as updating *Best Bets*) • Provide support for technical issues • Ensure portal reliability and stability

TECHNOLOGY

TECHNOLOGY BEHIND THE PORTAL	
Category	**Technology Used**
Web Server Hardware and O/S	• Three Web front-end servers • One index server and a two-node database cluster • A Warm Standby Disaster Recovery Farm consisting of two Web front-end servers, one index server, and a single database server
Bug Tracking/Quality Assurance	• Duke utilizes a QA environment that is built to the production system's exact specifications, minus one Web front-end server
Design Tools	• Photoshop • iRise • Balsamiq • Illustrator
Site Building Tools	• SharePoint Designer • Dreamweaver
Content Management Tools	• SharePoint 2007 (MOSS)
Search	• SharePoint 2007 (MOSS)
Other Functions	• Whole system backups, ranging from server system state to content databases, are completed by third-party software. Data is backed up once per hour. Secondary backups are provided by SQL Server backups and stored on tape media for 30 days

SEARCH

The Portal uses SharePoint 2007 as the search tool and Cardiolog analytics to measure search performance. Search terms are reviewed on a monthly basis; during reviews, the team assigns the *Best Bets*. Additionally, the team sets key performance indicators (KPIs) for search selection and search refinement. They monitor these to measure how well the search results are performing in both relevancy and recall.

By default, the search scope includes everything in the intranet and all information in each user's profile page (for example, *My Sites*).

Users can also perform a federated search of all sites to which they have access using *Portal Search*.

"At Duke Energy, we have thousands of team sites for team and project collaboration," says Greg Corrin, UX Designer, New Media User Experience. "Before opening the team sites to Portal search, we asked all site owners to validate the security on their sites. Because we have both regulated and non-regulated areas of the business, the integrity of site security is very important."

This rigor toward content separation is not just something the company does for its own convenience. These measures are mandated in the energy industry. The US Federal Energy Regulatory Commission (FERC) requires that regulated and non-regulated areas not share certain information.

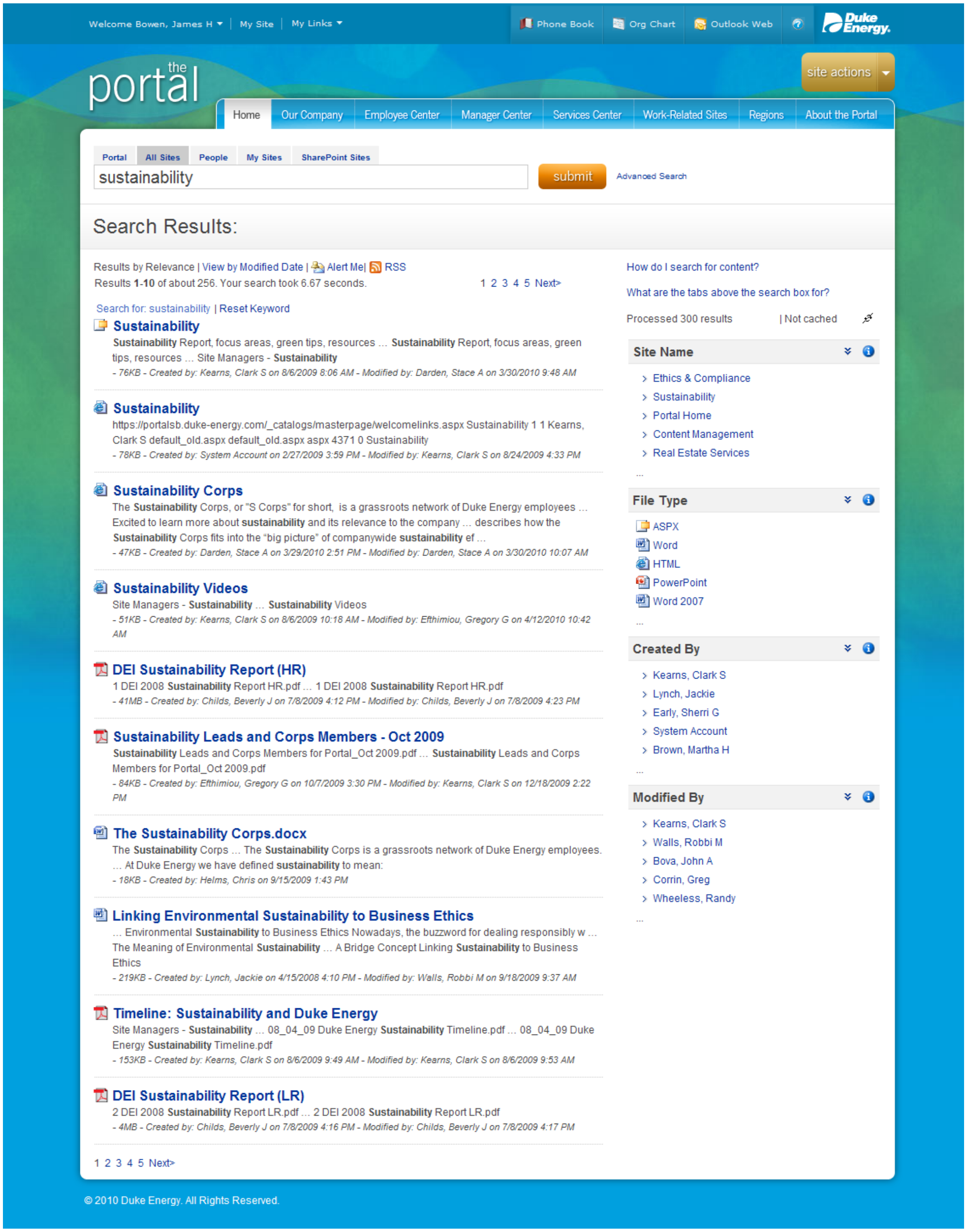
On the search results page, users can refine their searches by a limited number of facets including site name, file type, created by, or modified by. They can further expand the results by selecting *all sites*, which brings in results from The Portal and all of the SharePoint team sites that they can access.

User can narrow results by choosing to search only *People*, *My Sites*, or SharePoint sites. The *People* search returns only profile pages, while searching just *My Sites* returns profile pages and information stored within *My Sites*, such as blogs or uploaded documents.

And, from the results page, users can access tips on how to search effectively and how to use advanced search functions.

“In the future, we plan to enhance search results page by redesigning the refinement panel for search results and improving faceted navigation of results,” says Corrin.

“We also hope to address some of the weaknesses of the SharePoint 2007 search functionality with some additional funding for third-party tools and an upgrade to SharePoint 2010,” he says. “Our biggest concerns are the lack of phonetic name matching, the use of social distance in *People* search, and the lack of a wildcard search. We would like to build in algorithms that prioritize results based on popularity and that assign metadata automatically based on search behavior.”



Pictured: A search results page. Although the team did refine the page, it is still essentially an "out-of-the-box" SharePoint search with faceted search (in the right column).

RESULTS AND ROI

The perennial challenge of intranet development is how to measure success. Duke Energy is taking a two-pronged approach to measurement: benchmarking and increased participation.

Benchmarking: The team has designed a benchmarking measure to give them a sense of how they're improving The Portal's usability over time.

They have designed a standardized usability test that includes 12 of The Portal's most common tasks. Testing through this methodology will provide quantitative measures that they can track over time by testing periodically or after major redesigns.

"We completed testing on the pre-redesign version of The Portal and that will serve as a baseline for future testing," says Bowen. "We'll conduct the test again once the redesign has been live for a few months."

"We also plan to derive ROI measurements from the benchmarking metrics by computing productivity increases based on a formula that accounts for time to complete task, site usage, and employee total cost," he says.

Increased participation: Teams often look at increases in user participation as a measure to validate their redesign efforts. The Duke Energy team hopes that its work will yield real increases in site participation in various areas, including the number of comments on news stories, submissions for the events and employee accomplishment sections, and story suggestions.

"We hope the homepage creates a usable and inviting experience that reinforces our openness to contributions, conversation, and feedback," says Brown. "We believe that creating a more open environment on the homepage will reflect the importance of openness as one of our core values. Our values include that we're open to change and new ideas from our coworkers, customers, and stakeholders. We explore ways to grow our business and make it better."

"A culture of openness is vital, as our business model continues to evolve, shaped by new ideas and innovation," she says. "We hope that our enterprise *My Site* deployment also emphasizes the value we place on knowledge sharing and individual contributions.

Among other tools, she will be looking to the organization's annual *Employee Opinion Survey* as one way to measure growth in these areas.

LESSONS LEARNED

Portal team members share some wisdom gained through experience:

James H. Bowen, User Experience and Innovation Team Manager:

- **Approach the work in manageable chunks.** "Don't try to tackle all of the problems at once. Identify a discrete section, site, feature, or collection of features to improve and focus your efforts on making it better. Chances are the outcome will be higher quality — and you'll be able to build on that work for the next project, reuse methods and design ideas that worked, and refine those that didn't."

- **Be very careful with change.** "We get a lot of feedback from users that The Portal changes too much. Users find a feature only to discover later it has moved. With some of our comparative usability tests, it's not uncommon to see users do better with the old system even if it is more complicated and involves more steps, simply because they are used to it. In usability testing, we typically ask if they have experience with the feature after task completion to factor in familiarity in our analysis."
- **Keep your project plan as flexible as possible.** "Unless you're working with a technology that you're extremely familiar with and are not attempting to do anything new with it, you need to account for the unknown."
- **Do user testing before and after major redesigns.** "These are the perfect opportunities to capture hard numbers on the value of the work we do."

Martha Brown, Portal Program Manager:

- **Don't underestimate the time needed for communication.** "Actually planning and executing a communication strategy always seems to be surprisingly challenging."

  "As we prepare for an enterprise rollout of the collaboration features in *My Sites*, we realize the value of partnering with our HR and Legal departments to prepare both our culture and our processes for changes in the way we work and communicate. Before our 2009 pilot began, our teams worked together to develop a *Social Media Guideline* to help our employees understand the value, strategies, and risks inherent in the use of internal and external social channels. More work to make our day-to-day processes more collaborative is still to come, and we realize that providing the tools is only an incremental step toward cultural change. Our advice to others advocating for social features in your intranet is to accept that cultural acceptance and change can feel like a very gradual process, and that it's important to consistently build partnerships and develop evangelists within your organization."

Heineken International

Using the intranet:

Heineken owns and manages one of the world’s leading portfolios of beer brands and is one of the world’s leading brewers as measured by sales volume and profitability. The company has 115 breweries and a global network of distributors spanning more than 65 countries. Its global coverage is achieved through a combination of wholly owned companies, license agreements, affiliates, and strategic partnerships and alliances.

Headquarters: Amsterdam, The Netherlands

Number of employees the intranet supports: 2,500

Company locations:

Heineken has a global network of distributors and breweries, and operates in more than 170 markets worldwide.

Locations where people use the intranet:

Users from more than 350 Heineken offices, partner organizations, and agencies across 122 countries use the company’s BrandPortal

Annual sales: €14 billion (2009)

Design team:

The team is comprised of the project sponsor and a Knowledge Manager from Heineken Group Commerce, and a team at SmallWorlders that includes account management, design, UX, and technical development.

Members:

In-house: Michelle Bertens, Brand Design Manager/Knowledge Manager, and Mark Van Iterson, Manager Brand Design/Project Sponsor

SmallWorlders: Kevin Cody, Managing Director; Daniel Jones, Account Manager; Simon Jones, Designer; Cedric Crickx, CTO; Jakub Zurawski, Developer; Shazad Ishaque, Developer; Rosie Cooper, UX; and Vonnie Williams, Site Administration

SUMMARY

"Don't give us fancy social features. Let us get in, get our information, and get out." That was the surprising result of a user survey about Heineken's BrandPortal, an area of the Heineken intranet for Heineken Group Commerce. The site, developed with agency SmallWorlders, is focused on sharing branding and marketing assets and information around the world, to promote a single brand message and increase efficiency of sharing brand information in 170 worldwide markets.

Built on SmallWorlders' SandBox™ platform, the site is used by 2,250 employees and more than 200 agency personnel in more than 350 offices, partner organizations, and agencies across 122 countries. Unlike in many agency relationships, SmallWorlders jointly manages the site, creating sections, populating content, doing site administration, and performing technical updates. Launched in 2008, the site undergoes constant change and refinement to meet users needs.

The emphasis on the site is to share brand assets. Brand managers communicate with marketing employees, partners, and agencies, sharing news, guidance, and best practices. The top three activities on the site are downloading material, using the image gallery, and finding campaign or sponsorship information.

The site is structured around product and sponsorship campaigns. As such, content changes constantly as new campaigns begin and end. New sections and communities are created, while entire site sections can be archived. Keeping content up-to-date is not just important, but crucial to such a site’s success. Users worldwide must be able to access the site and quickly find any asset they need.

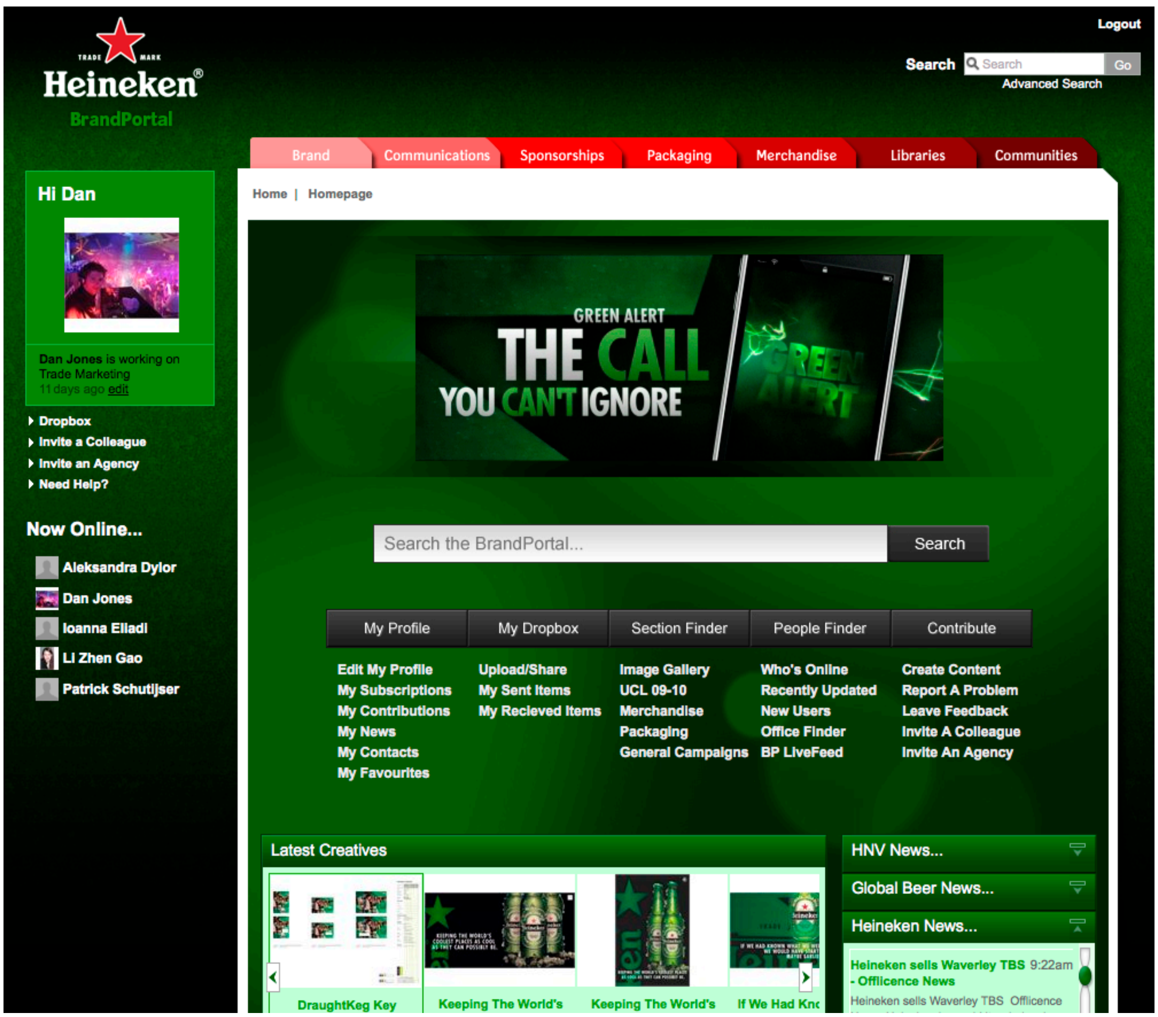
A second goal of the site is to promote communication and collaboration, from top-down and bottom-up. To this end, the site began offering community areas for collaboration and idea sharing in 2009.

After the site had been live for a year, the team did a survey to see what users thought. The user complaints after a year of using the site focused on finding information. Users didn't think the navigation was intuitive and didn't find search results helpful. In response, SmallWorlders made major changes.

Realizing that this was not a standard intranet site, but a site where users were predominantly looking for particular assets, the team simplified the homepage to focus on a large search field, navigational tools, and quick links. Quick links beneath the search box are categorized, and users can click on any category to see more information about it, as well as click on links directly.

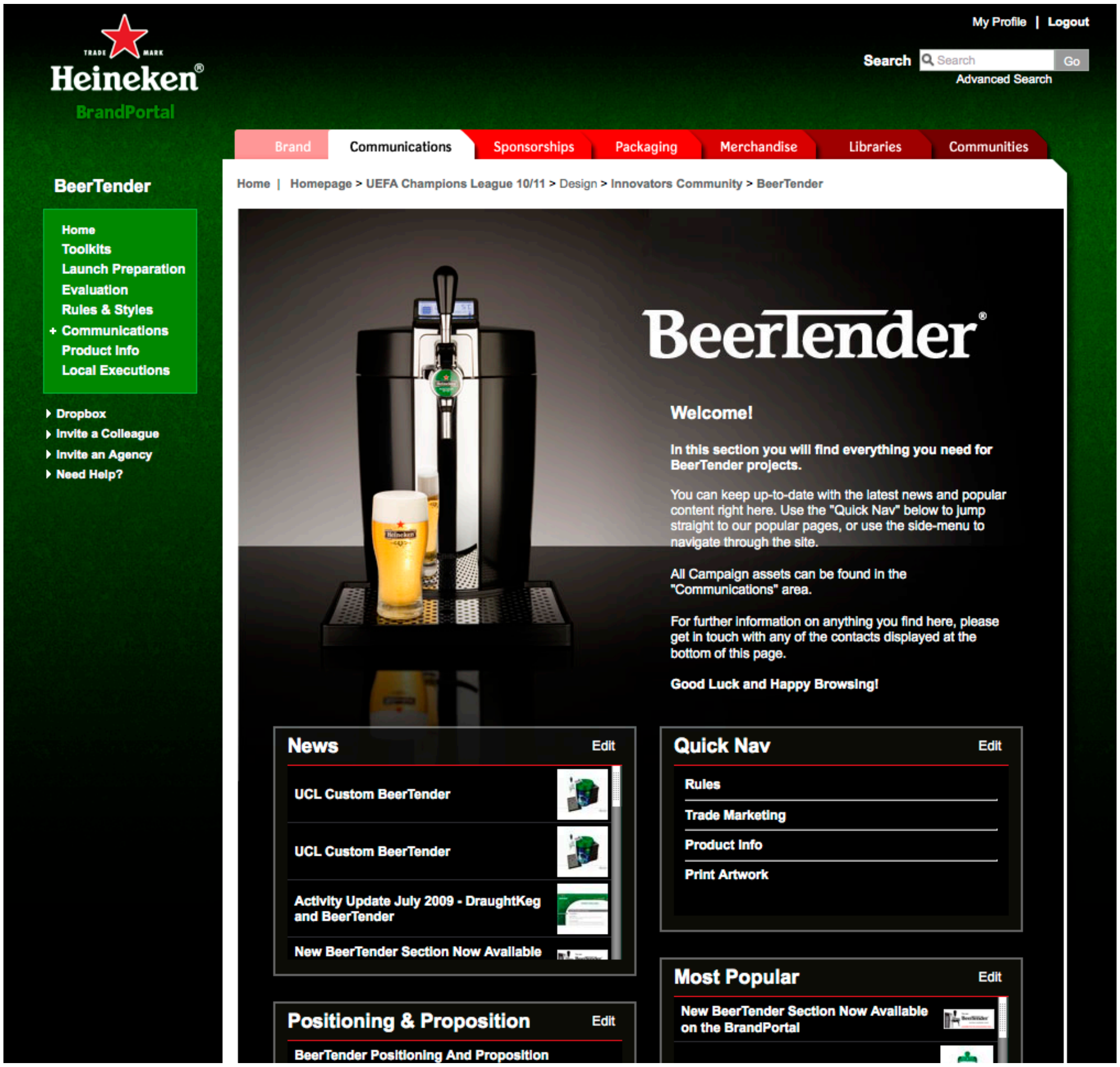
The homepage also reflects the new focus on community and sharing, listing who is currently using the intranet.

The site is highly designed, with bold colors and graphics throughout, which sets it apart from many intranets. This was done intentionally for the target audience: people working in marketing. This isn't an intranet focused on human resources policies; it's specifically designed for marketing and brand materials. As such, it reflects the company's branding and spirit.



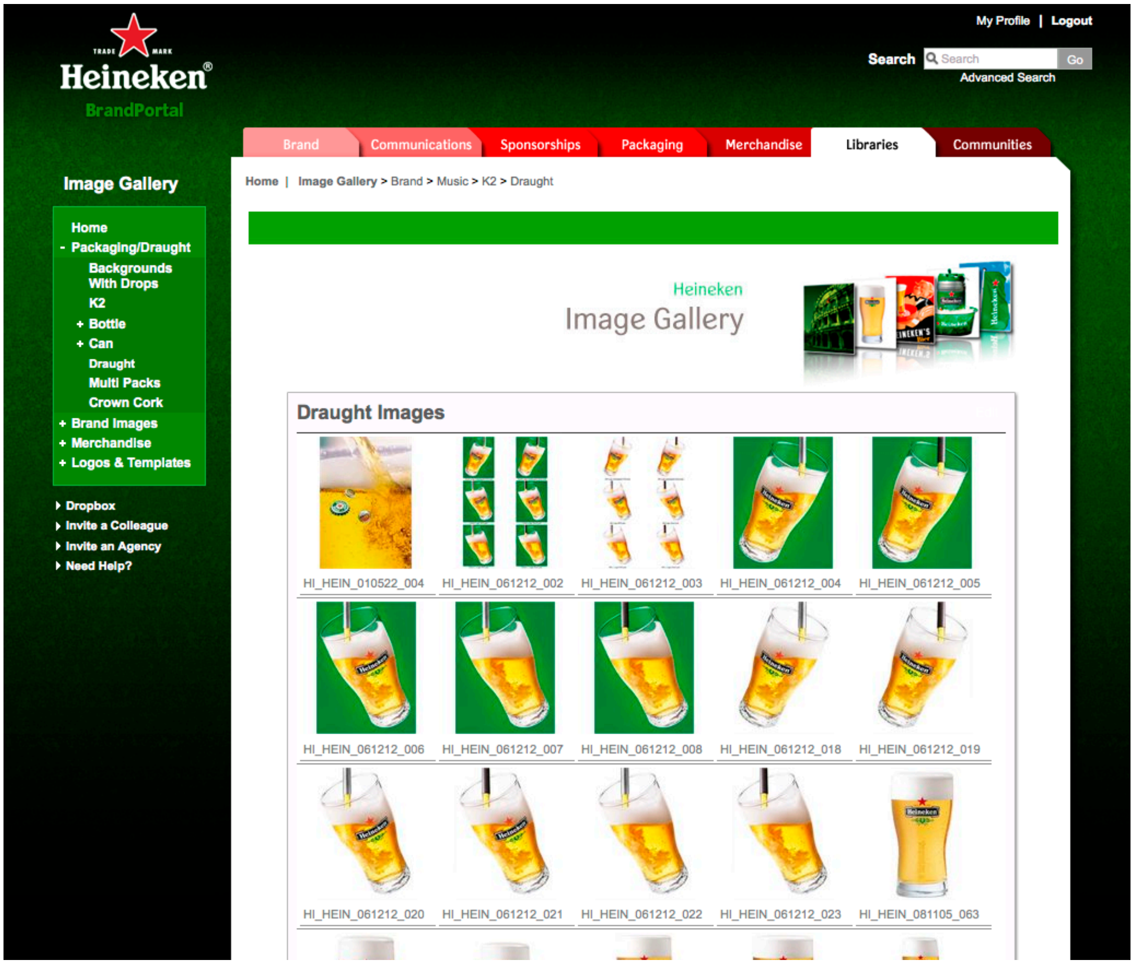
Pictured: The BrandPortal homepage focuses on the site's two key goals: finding assets and building community. A search box is the primary element on the page, along with navigational quick links. Users currently online are listed on the side of the page.

Each campaign has its own section. For instance, the *BeerTender* section offers news, digital assets, toolkits, style guides, and examples of local execution. Campaign sections are branded with the specific campaign's branding. This helps users quickly recognize that they're in the correct site area, as well as demonstrates the branding to the markets.



Pictured: Campaign sections consolidate all related materials in one section of the site.

The *Image Gallery* is one of the most popular areas of the site. Users can find campaign-related images through campaign-specific pages or the *Image Gallery*. This section offers access to all images available anywhere on the site, including images that can be used across campaigns. This gives users an alternate way to locate images without navigating to a specific campaign.



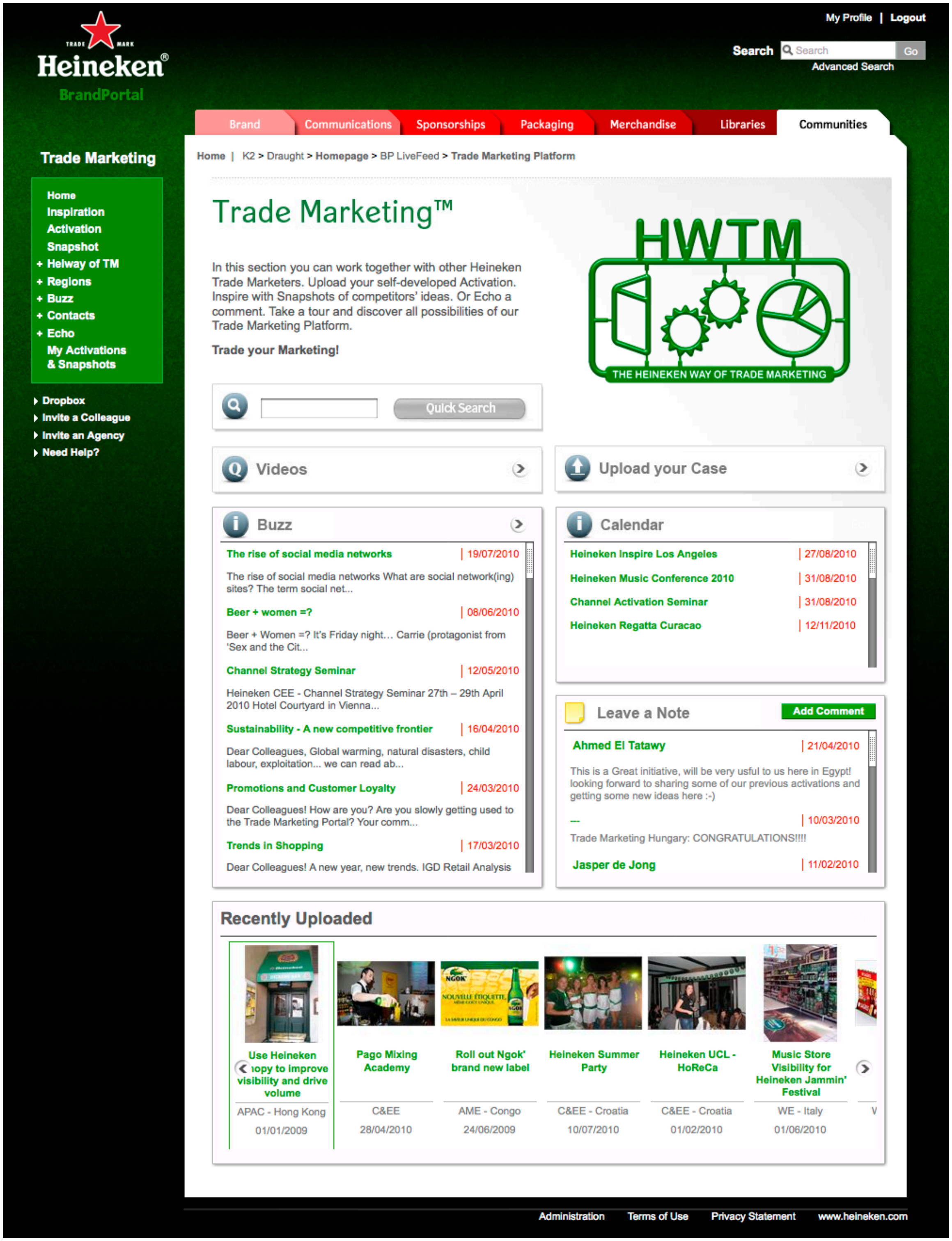
Pictured: The *Image Gallery* collects images from each campaign, as well as images used across campaigns, giving users an alternate way to find assets in a central location.

The move toward collaboration on the site is relatively new, and the team has had some successes and some failures, and learned from each. One successful collaborative area is the *Trade Marketing Platform*.

The *Trade Marketing Platform* lets users from around the world share inspiration and interesting ideas. This is the sort of tool that takes advantage of and showcases the fact that users are scattered internationally, making for fascinating browsing. The area has a best practice database as well as policy and guideline content together with social and commenting features.

This site area is one of the most consistently used sections, as well as one of the most popular. Users can post good ideas of their own, from Heineken, from competitors, or even from other industry sectors. Users can browse or search ideas. The community also features a calendar and the option to leave a note. *Buzz*, or news specific to the area, is archived as well.

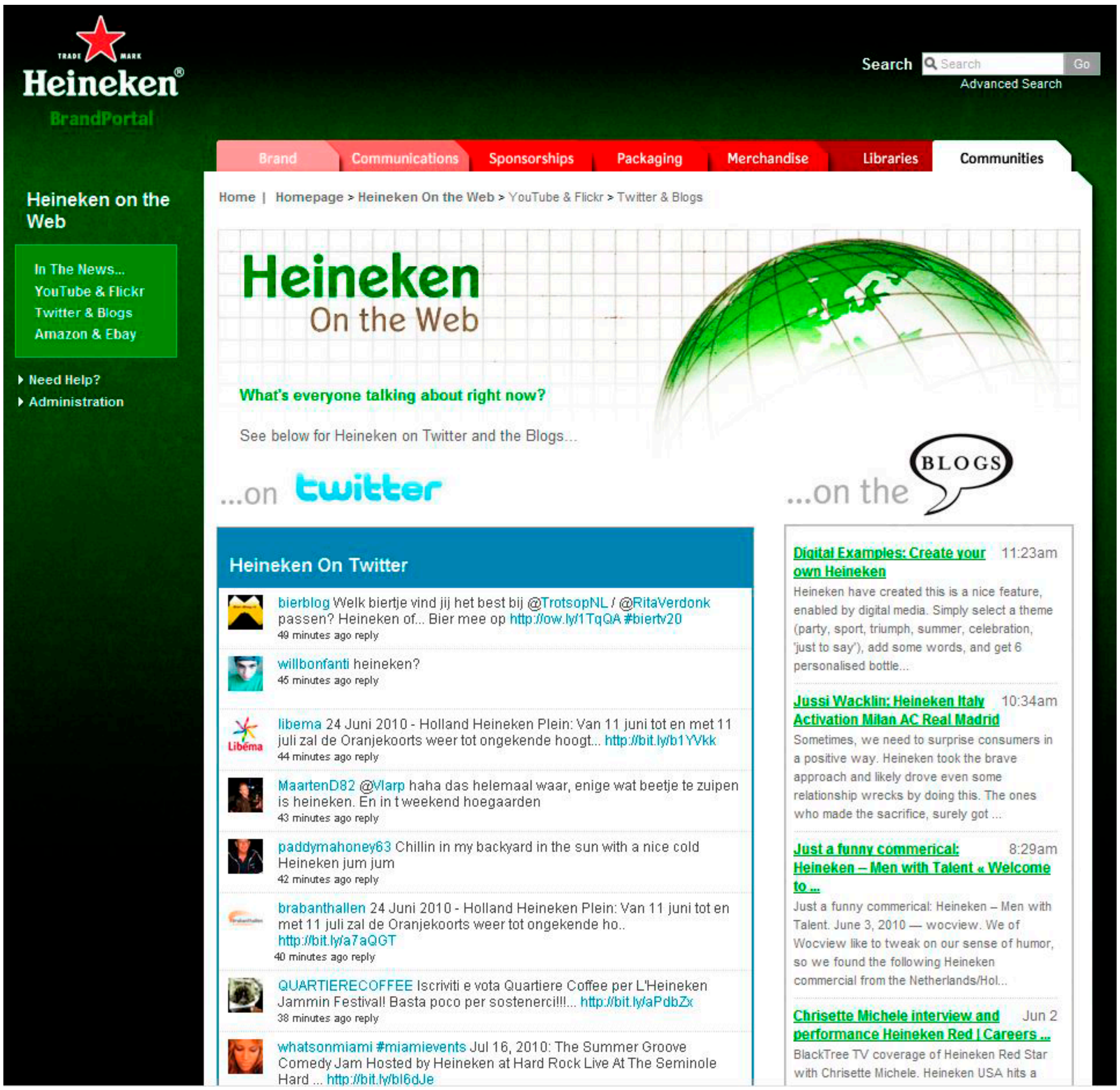
The main page features recently uploaded assets, displayed in a carousel form with images for each.



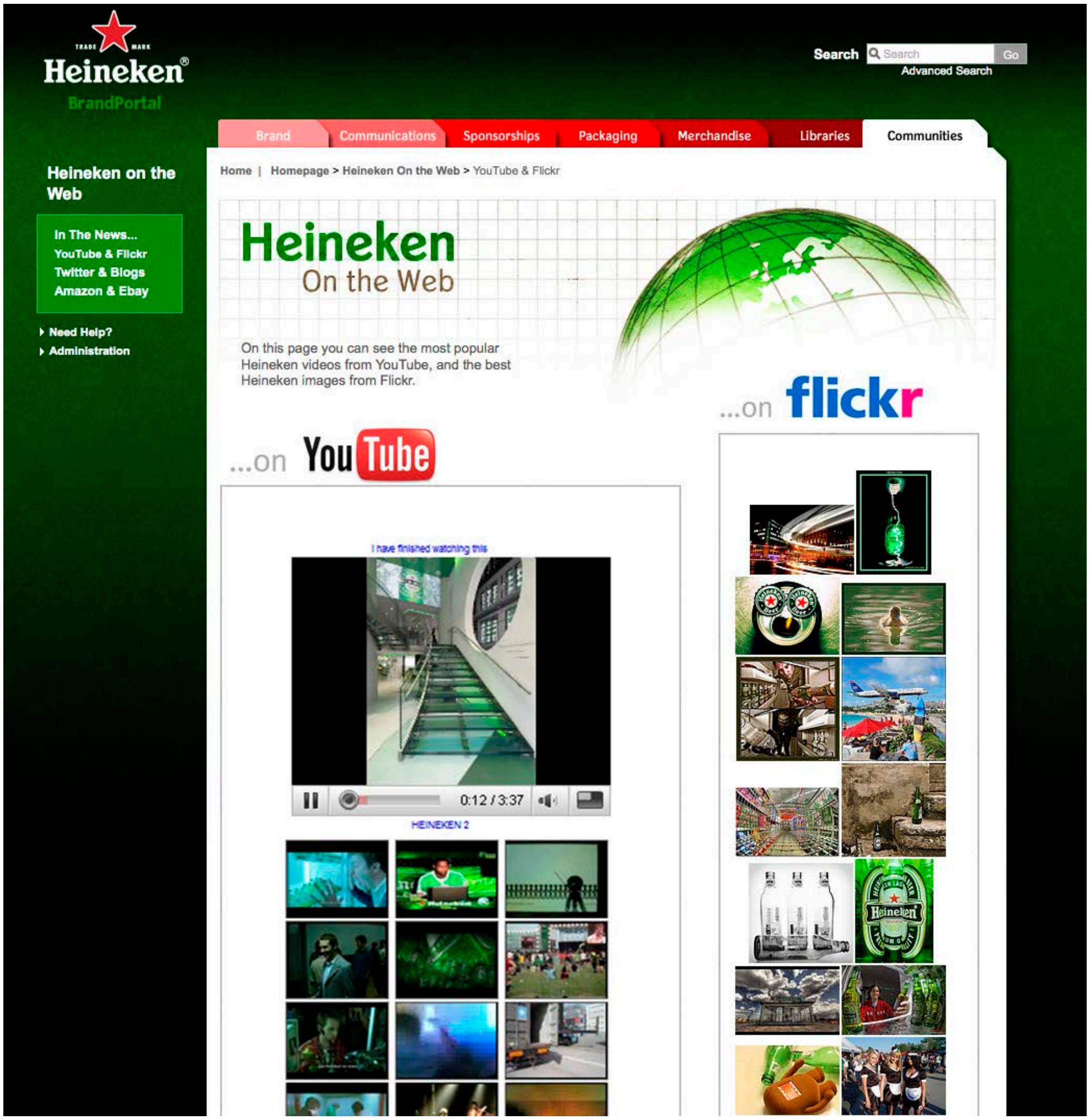
Pictured: The *Trade Marketing Platform* lets worldwide users share ideas and inspiration; it's one of the most popular areas on the site.

The team brought the Internet onto the intranet by creating *Heineken on the Web*, a section of the site devoted to seeing and hearing what the public is saying about the company. This acts as a dashboard of outside activity surrounding the brand. This area is an invaluable tool for brand managers and others to track what customers think of the brand. It also offers a quick way to see customer response when Heineken is in the news. *Heineken on the Web* is a potential tool for the company to listen to and eventually engage with social networks.

A series of pages harvests content from various sources, allowing employees to see the latest Twitter or blog posts mentioning the company. Another page offers YouTube videos and Flickr images tagged with the company name. Still another tracks Heineken products for sale on Amazon and eBay. RSS news feeds are also monitored for mention of the company.



Pictured: *Heineken on the Web* harvests information from various sources, such as Twitter and blogs, to see what customers are saying about the brand.

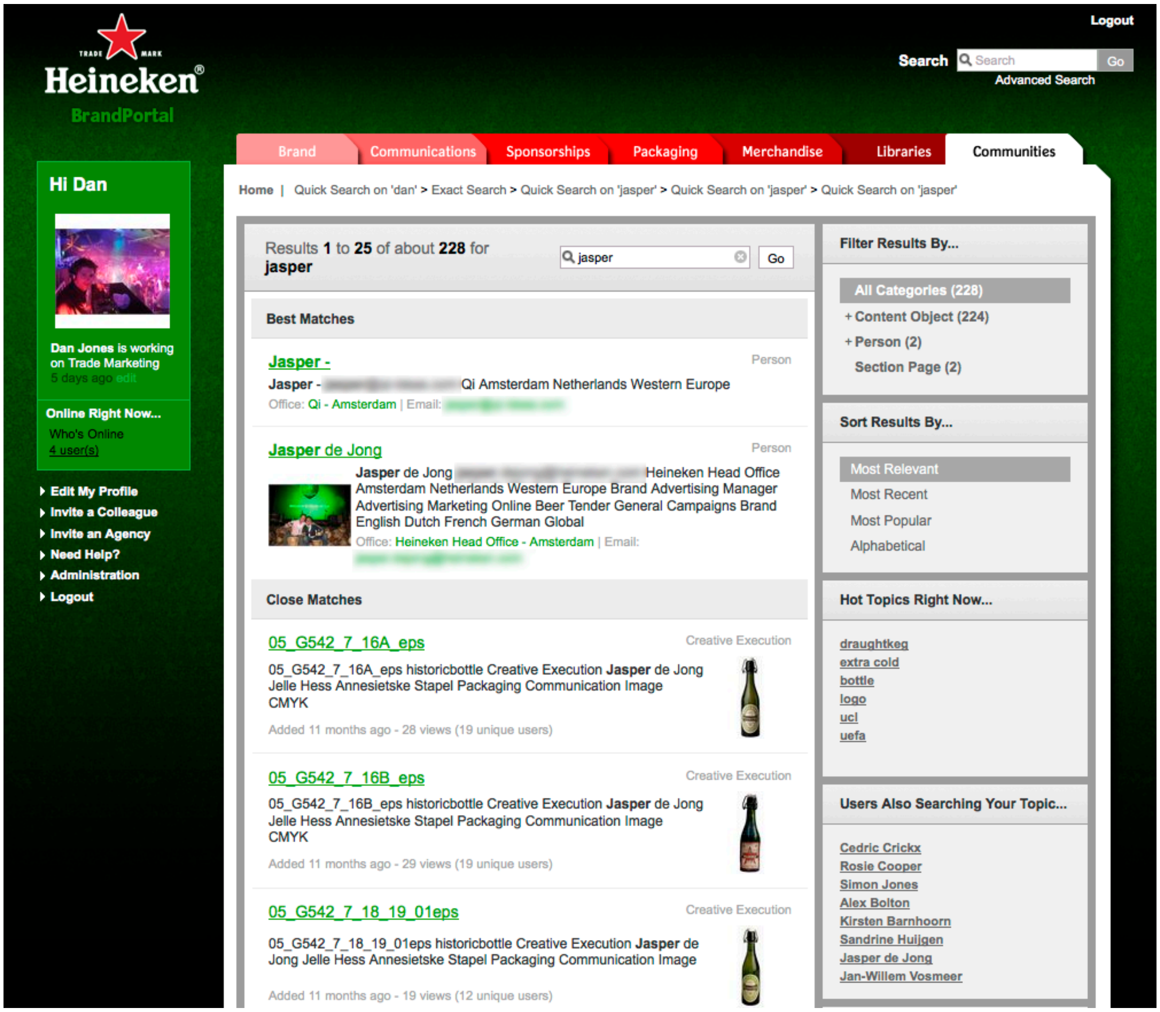


Pictured: Heineken-related videos posted on YouTube and images posted on Flickr also appear on the site, giving users a sense of how the brand is being portrayed.

To help users find the information they need, the search has been completely revamped from the algorithm up. Both the search logic and user interface were changed; results were previously sorted by type, which wasn't helpful for users, so they're now presented as one list. Best matches and close matches appear at the top of results, and users can filter and sort results using options on the right side of the page.

Further, search also includes community elements, such as "users searching for your topic" and "hot topics right now." These areas were added to connect users to what else is going on at the company, by showing popular searches and identifying users who are working on similar projects.

There is no specific employee directory. User profiles are indexed like any other content and presented alongside other results. Users can filter to see only user profiles or click on a username anywhere on the site to view a profile.

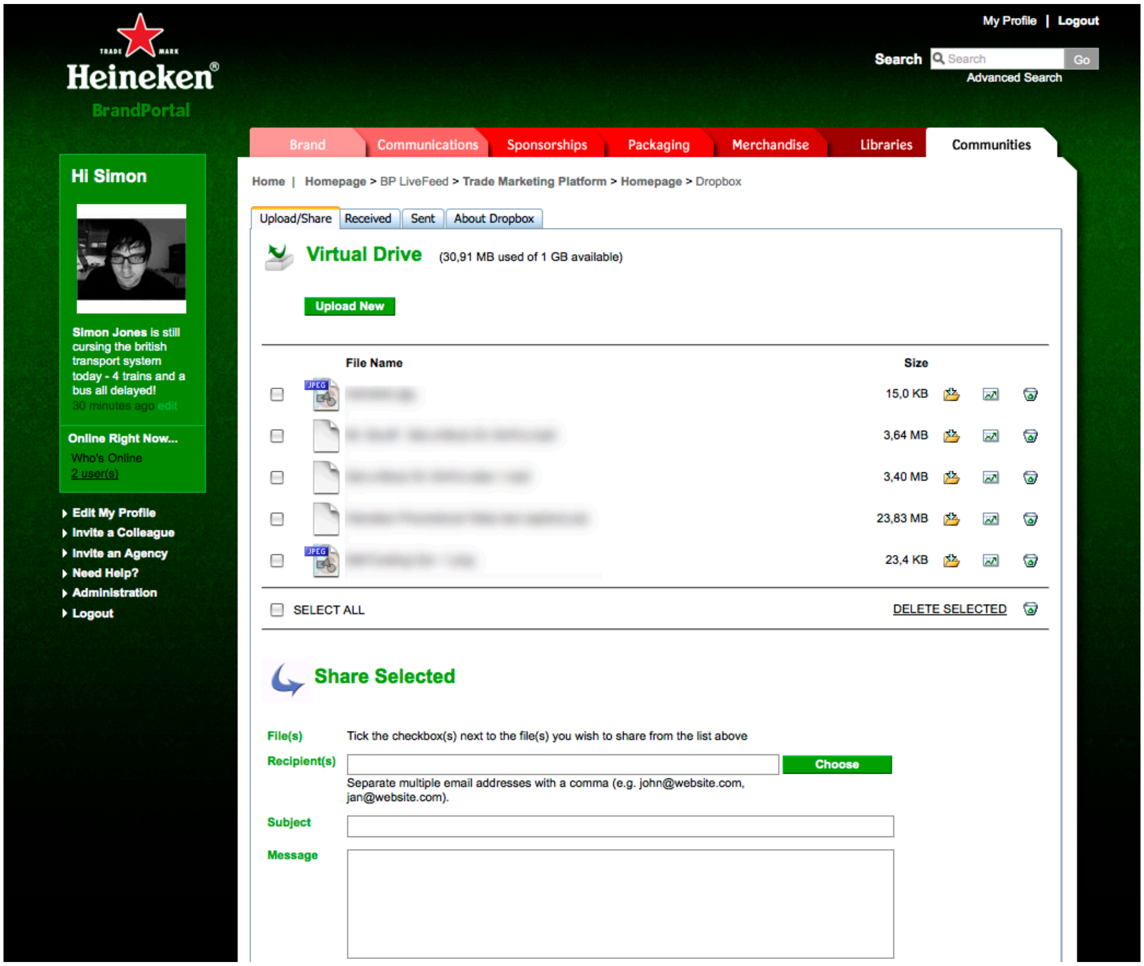


Pictured: The team revamped the search based on survey complaints from users. Now, results are no longer separated by type; *Best Matches* and *Close Matches* are highlighted; and filters and community aspects are listed down the right side of the page.

Another creative aspect of the site is the *DropBox* section, where employees can email, receive, and store large digital files. This tool has a secondary effect of driving reluctant or infrequent users to the site, hopefully encouraging them to explore once they're there.

DropBox was created to allow employees to send files that are too large to send via email. Recipients get an email with a link to download the file or files that takes them to the *DropBox* section. Registered BrandPortal users can also access the file by going to the *DropBox* section.

The tool allows tracking to see what you've sent, who you sent it to, and who downloaded it. Users can also save shared files to their personal virtual storage drive.



Pictured: *DropBox* gives reluctant intranet users a reason to regularly visit — and possibly explore — the site.

BrandPortal works by providing tools to track brand image, encourage brand-related collaboration, and find brand assets. Heineken and SmallWorlders keep these goals in mind and experiment constantly to see what works and to learn from what doesn't. This helps the team create a dynamic and useful site focused on what users want.

BACKGROUND

The original BrandPortal project, launched at the end of 2008, was a major intranet redesign project. Since then, it has been evolving continuously with new sections and communities being created and sometimes entire sections being archived. The platform is based on SandBox™ technology, created by the company's agency partner, SmallWorlders. That platform is also under continuous development.

The BrandPortal was designed to become a one-stop-shop for approximately 2,250 Heineken employees and more than 200 agency personnel to find information, resources, digital assets, and tools to help them in their everyday jobs.

Two goals guided the original BrandPortal project:

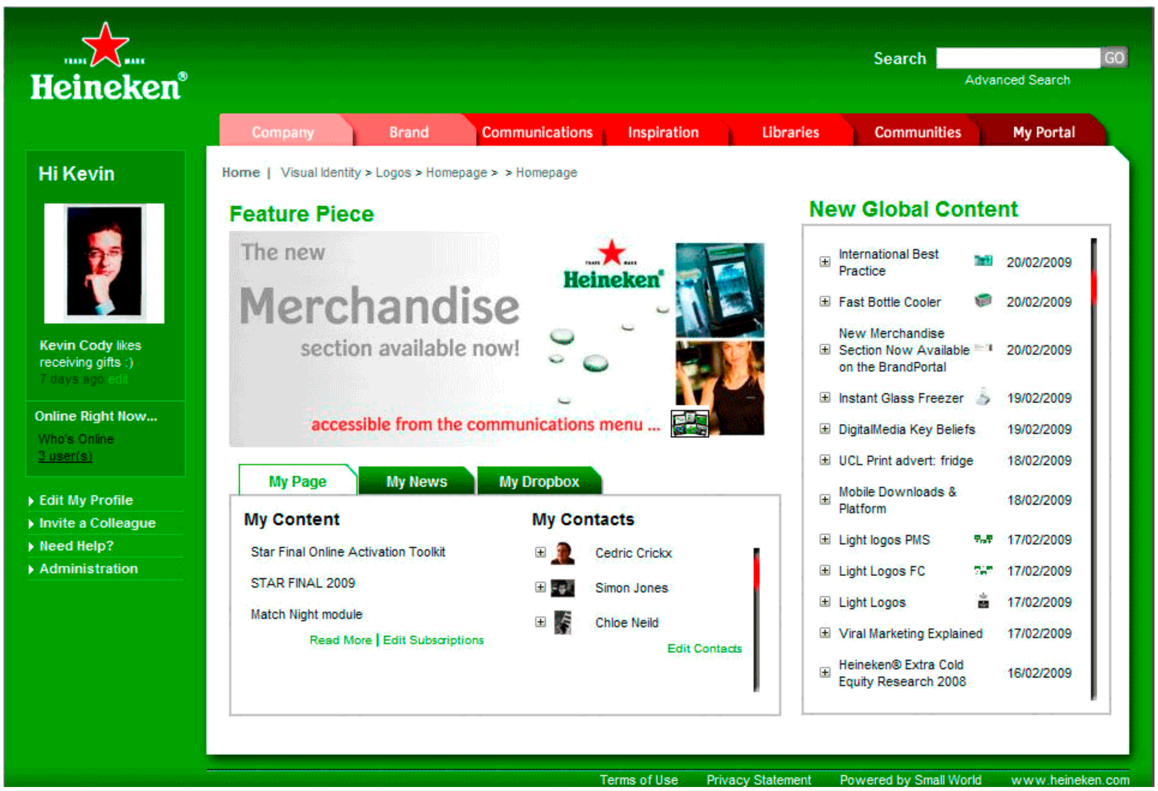
- Promote a single brand message worldwide to increase efficiency

- Improve communication from the top down and bottom up

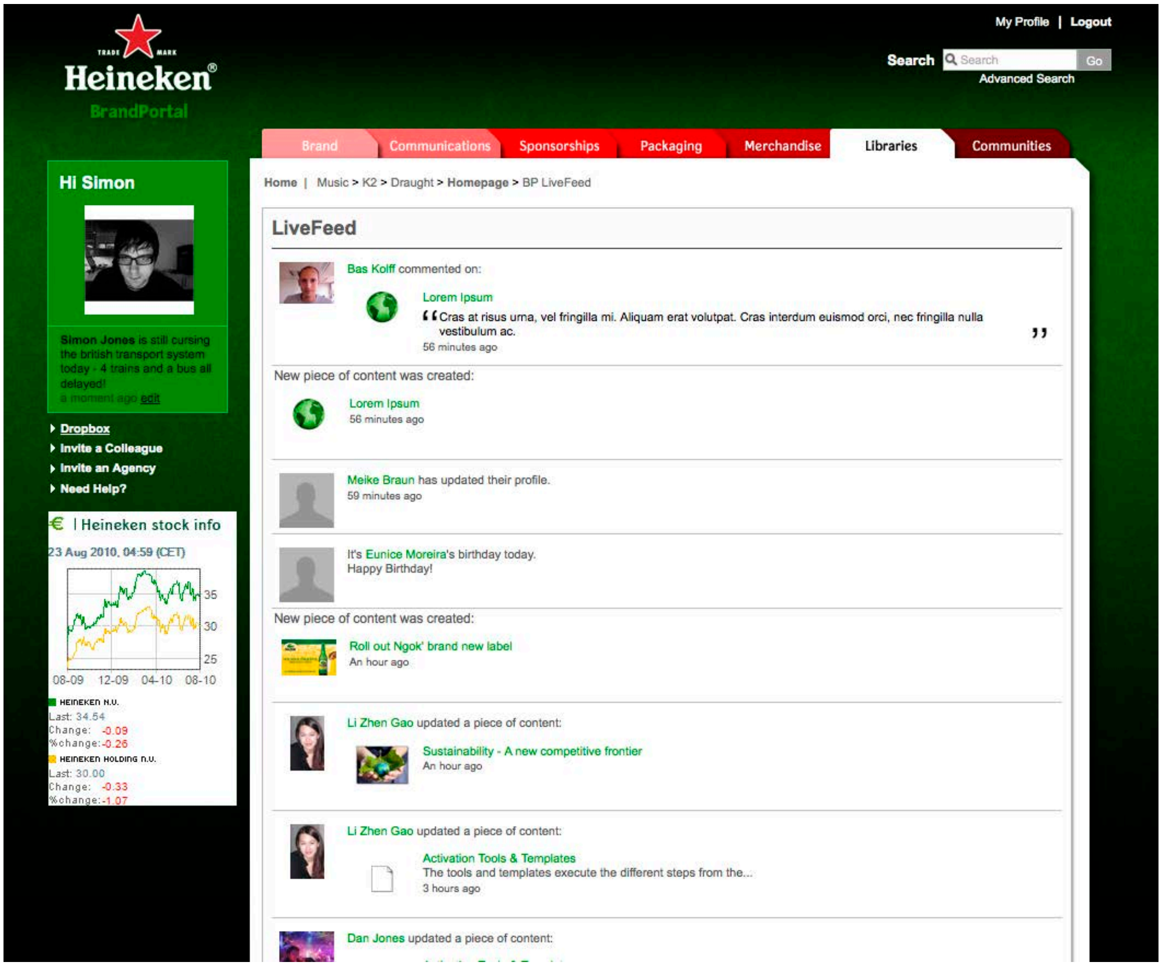
The BrandPortal has become a central place for managers to distribute new campaign artwork and guidelines, best practices, news, and communications. And that centralized approach to distribution has had a dramatic impact on the company's efficiency.

"The benefits are felt throughout the organization, as efficiency has increased and Heineken's 170 markets communicate more effectively," says Kevin Cody, Managing Director, SmallWorlders.

SandBox™ includes digital asset management tools. Users can upload movies and images in their native format. SandBox™ stores the original asset for download but creates preview (.flv) movies or images as well as thumbnails. This underpins Heineken's first objective, as it provides an efficient brand and campaign asset management tool.



Pictured: The old BrandPortal homepage contained several personalized lists of content, including *My Content*, *My News*, and *My Contacts*, each of which displayed content according to personal preferences. It also contained a large *New Global Content* list and space for a feature banner.



Pictured: The live feed is new to BrandPortal. Users can access the live feed from the new homepage, where it brings together all updates from around the BrandPortal into one Facebook-like list that includes status updates, profile updates, comments, content updates, new content, and events. Every user's feed is personalized to display only items that are relevant to their own subscriptions and contacts. Each user can select particular sections, content, and users to subscribe to, or *follow*, and this is reflected in the feed. In truth, however, this function is used more on a section than a global level. Some of the more popular communities have a live feed on their homepage that shows the latest updates based not on their own subscriptions, but on what's happening in their particular community.

Pictured: Each campaign section is branded, not only to assist users in recognizing and remembering the section, but also to assist in communicating the branding to the markets from the very beginning of their journey.

Helping Users Be More Efficient

The Heineken team views the BrandPortal as a work-in-progress rather than a static entity. With that in mind, they continue to innovate based on user needs.

About a year after the launch of the new BrandPortal, the team conducted a survey to determine the usage trends, user likes and dislikes, and requests for new features. They benchmarked against a similar survey of the old BrandPortal that was carried out in the summer of 2008. The team used findings from the new survey to inform decisions about the most recent homepage redesign.

Although team members used the survey results to guide their actions, the results they found were not always what they expected. Rather than requesting trendy features such as social tools, the users' requests were often more practical, such as improvements to navigation and search.

"We expected users to request exciting new social tools," says Mark Van Iterson, Manager Brand Design/Project Sponsor, Heineken International. "In fact, while the feedback was overwhelming positive, users' main concerns related to navigation and search."

At the time of the survey, the perception of the BrandPortal was that it was primarily a global asset store and most users simply wanted to quickly and efficiently find their assets and leave. To help users achieve this goal, SmallWorlders updated and simplified the homepage.

"We wanted to support users' desire to dip in and out by keeping the number of clicks to a minimum," says Cody. "We also took the opportunity to make some changes to the graphical design."

"It will be interesting to see whether impressions have changed now that the BrandPortal offers more collaborative communities," says Van Iterson.

Communicating from the Bottom Up

As the BrandPortal has evolved, its mission has evolved, too. When the original project launched, the emphasis was on top-down communication. In the period between BrandPortal's first launch and the most recent redesign, the company has been moving to create opportunities for collaboration across the platform and pushing the needle toward bottom-up communication.

"In 2009, our focus shifted to improving collaboration and communication," says Dan Jones, Account Manager, SmallWorlders.

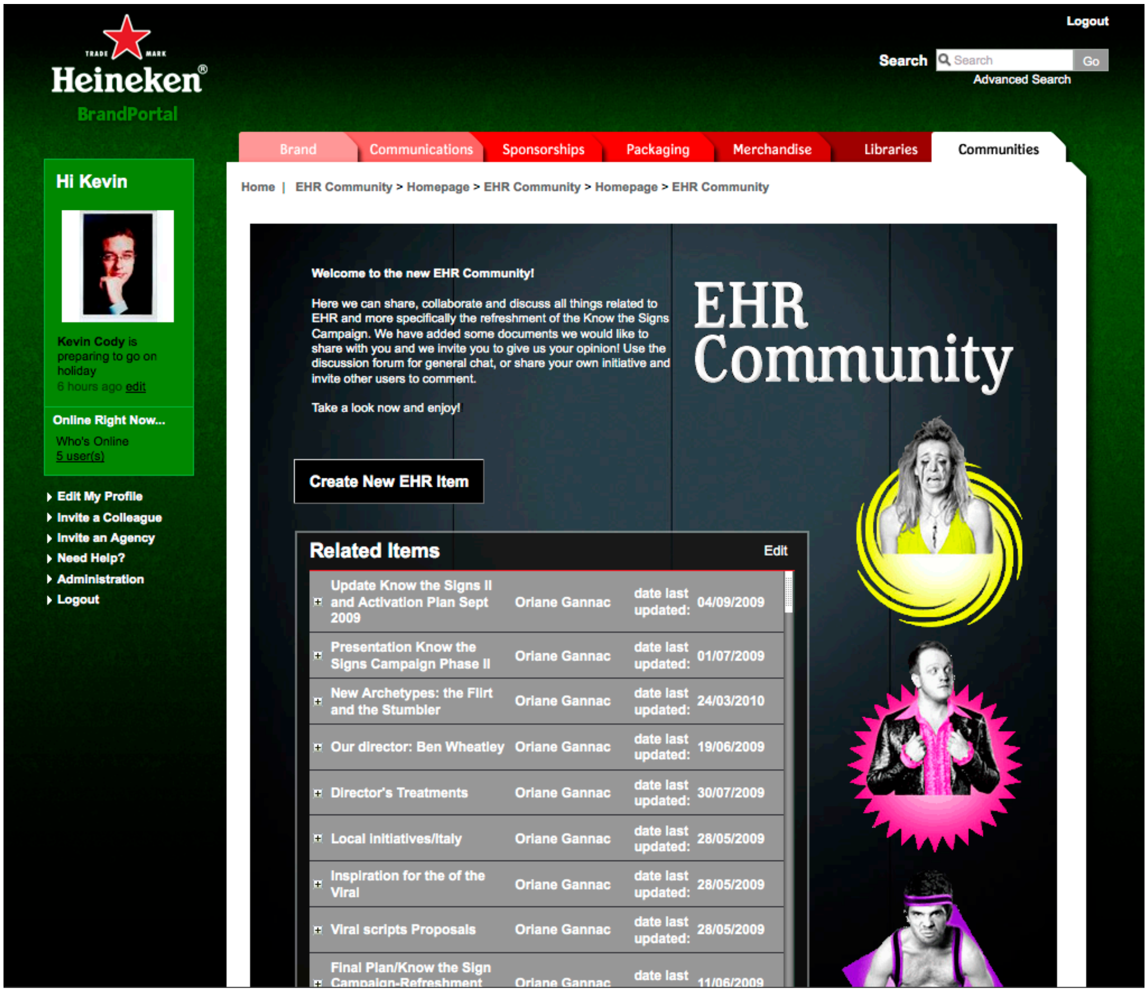
Shortly after the success of the first collaborative community, *Enjoy Heineken Responsibly*, which launched in the spring of 2009, the more sophisticated *Innovators Community* was launched. And that was followed by a series of new communities.

The *Innovators Community* brought together Heineken's global network of innovators in an environment that fosters idea-sharing. People can spark debate, leave messages, ask questions, give feedback, and inspire each other. The community also contains an infrastructure designed to catalogue all new ideas and guide them through the development process, right through to mass production, launch, and post-launch evaluation. The ideas are commented on by community members and can be refined in real time.

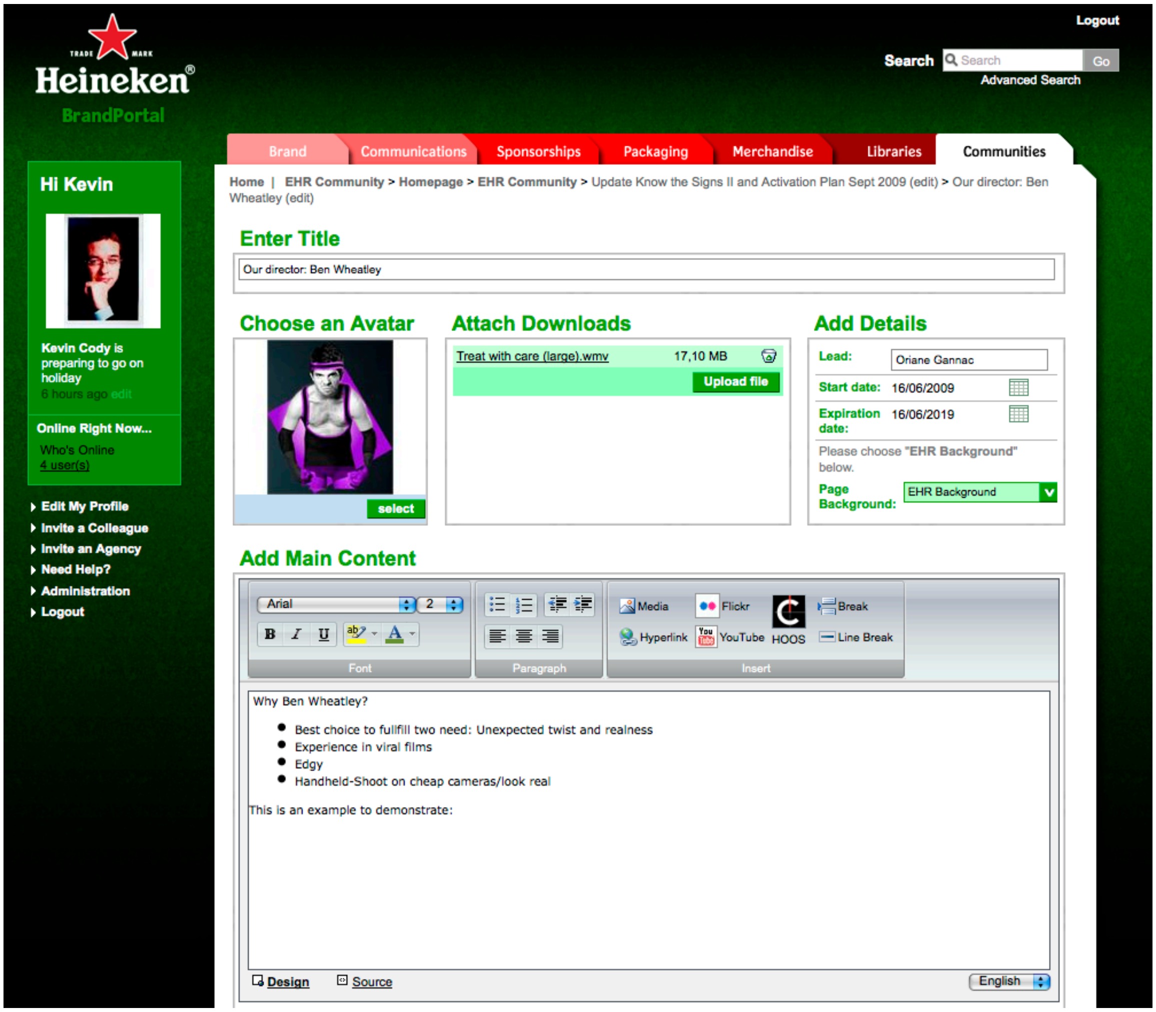
The final go-ahead to proceed with an idea is given by one of the innovation managers using the online infrastructure provided by the *Innovators Community*.

With the success of these early communities, it didn't take long before other communities of interest appeared.

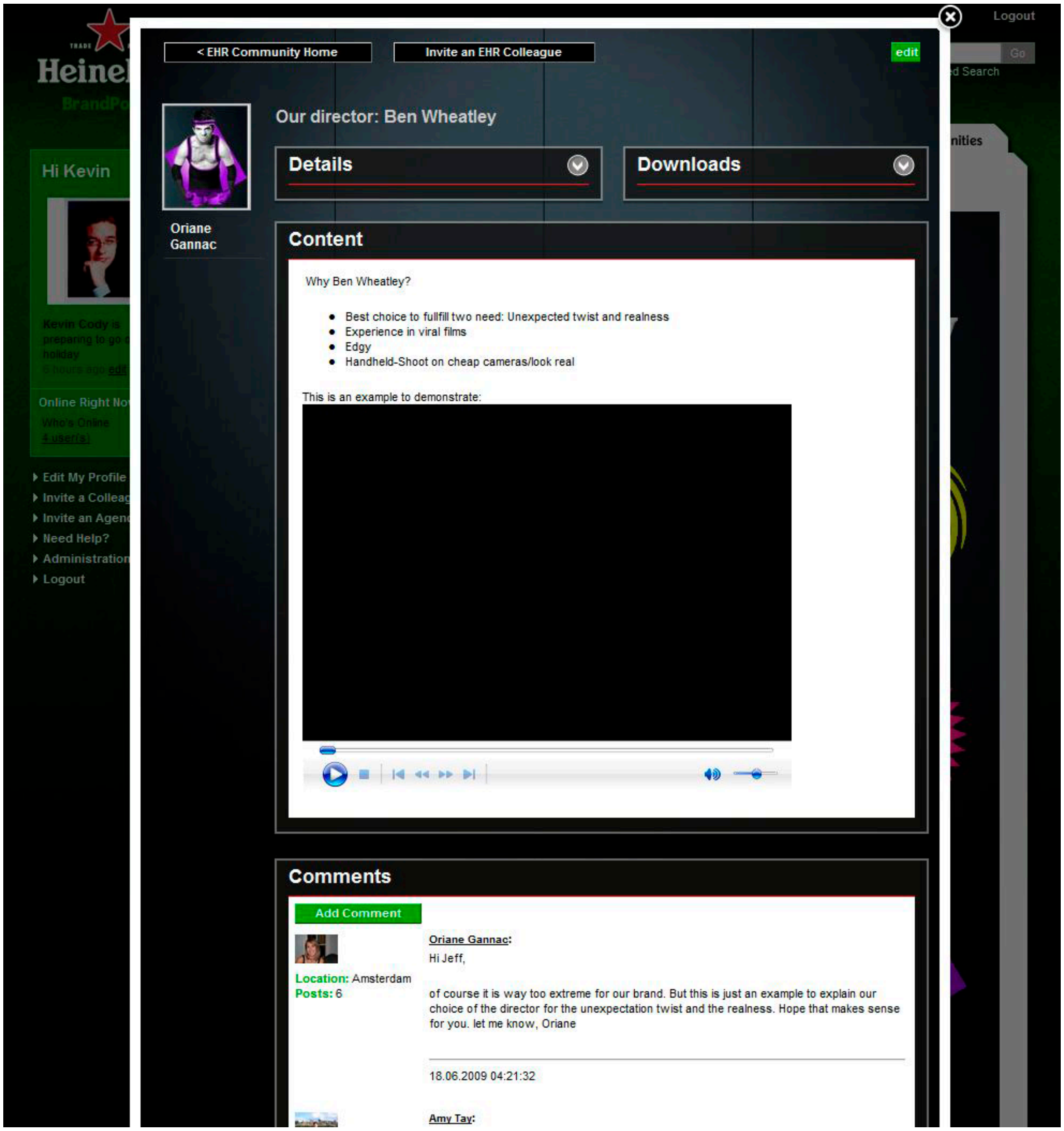
"Word traveled quickly," says Cody. "And now, 12 months after the launch of the *Innovators Community*, we have a trade marketing platform, a locally developed merchandise community, and several regional collaboration communities.



Pictured: This screen shows the *Enjoy Heineken Responsibly* (EHR) community, which was set up to help the team members develop the EHR advertising concept and execution (such as the “Know The Signs” campaign, in which people are asked to recognize certain archetypes of people on a night out). As the campaign developed, items were posted for discussion and decisions were made collaboratively. The screenshots below show aspects of this process.



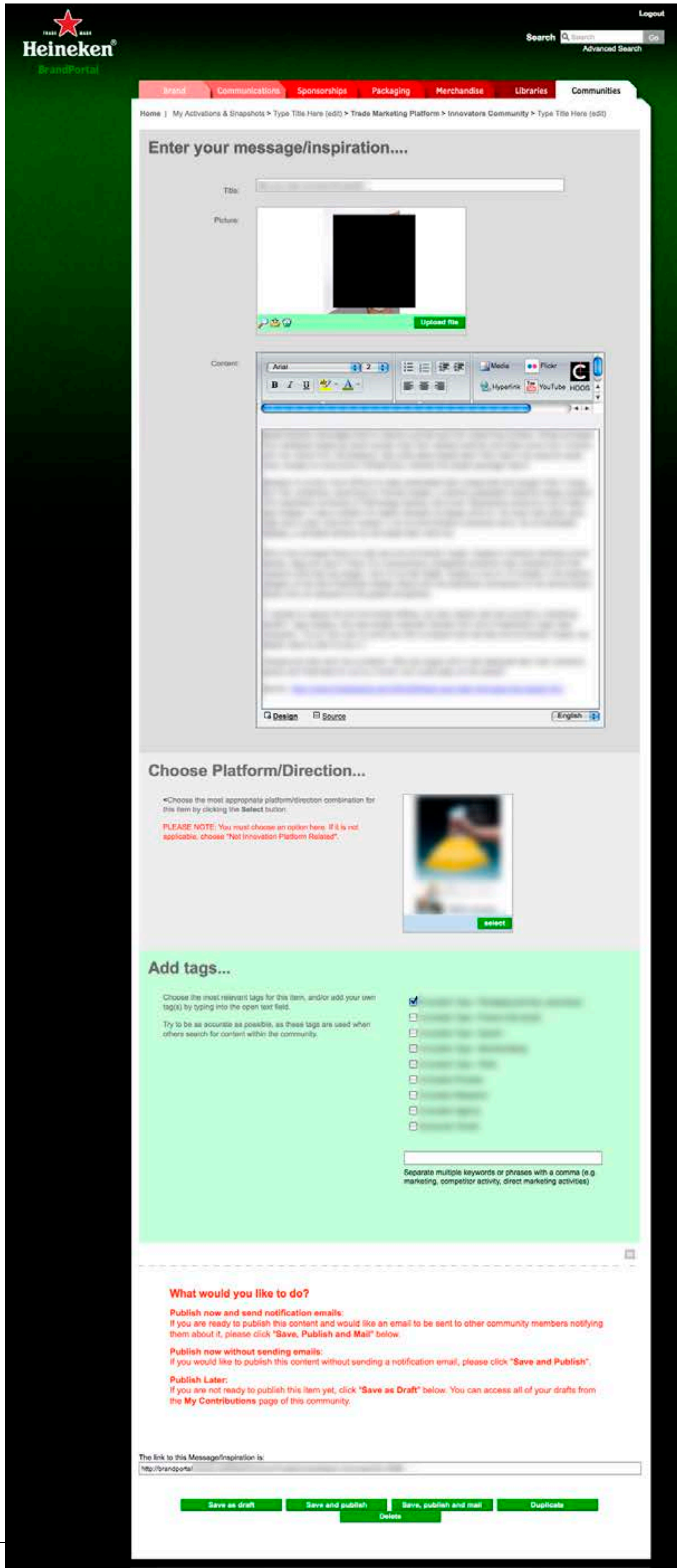
Pictured: To encourage collaboration, it was important to keep the content posting template as simple as possible. This screen shows the EHR input form, where an element of fun was included: users can choose their own "know the signs" avatar.



Pictured: The EHR content view. Users are encouraged to comment directly on discussion postings.

Logout
Search
Go
Advanced Search
Heineken
BrandPortal
Brand
Communications
Sponsorships
Packaging
Merchandise
Libraries
Communities
Innovators Community
Home | Music > Merchandise > Innovators Community > Americas Community > Innovators Community
Home
My Profile
My Contributions
Shared Contributions
Innovation Process
Community Members
About/Help
HEINEKEN INNOVATORS COMMUNITY
This community aims to unite all of the innovators working across the world of Heineken and to support you in the development of exciting new innovations by enabling the quick and easy sharing of inspiration, ideas, projects, documents, messages, or any valuable information across the HNV innovation network.
The community gives you the opportunity to easily get in touch with your innovation colleagues around the world. You can find out what they are working on and ask for help or feedback on any innovation related subject. You will find information about the different parts of the Innovation Process: the HNV Innovation Platforms & Directions, Front End Innovation, and the Innovation Funnel including templates and key deliverables per stage.
search the community...
SEARCH
Hi Dan
Dan Jones is working on Trade Marketing
5 days ago edit
Invite An Innovator
I have a QUESTION
Share INSPIRATION
Ask for FEEDBACK
Start a PROJECT
Share a DOCUMENT
Post a MESSAGE
What's happening in the community?
Dan Jones updated a piece of content:
Action List
here is a bunch of additional information about the action l...
15 June 2010
Bas Kolff updated a piece of content:
Shell to Offer Motor Oil in a Box
10 June 2010
Dan Jones updated a piece of content:
Company owned energy drinks
9 June 2010
commented on:
great material. Thanks for sharing. I'll read carefully. Best regards
9 June 2010
published a new Document
Dear all, although not recently conducted, this study contai...
9 June 2010
commented on:
Competitor Innovation Activity
Hi , I just posted a message about Please
Latest Questions and Feedback
Company owned energy drinks
Can anyone tell me which energy drink brands we own around the world? Thanks
Beer sales in stadiums
I am looking for a solution which might be used in stadiums for beer selling. It
Beer drafting - Glass
Hi All, We would like to use a new glass for the Horeca segment (draught beer)
new Question
new Feedback
read more
Latest Messages
June 10: European Innovation meeting
Triggered by the pan-European Refresh project, th...
INEX 2010
This year's INEX takes place at the Heineken Expe...
Monique Peters has been appointed
Monique Peters has been appointed as Innovation D...
new Message
read more
Projects
new Project
read more
Documents
new Document
read more
Inspirations
new Inspiration
SUSTAINABLE PACKAGING 2010
read more
Administration
Terms of Use
Privacy Statement
www.heineken.com

Pictured: The *Innovators Community* homepage. This environment is more sophisticated (in concept and execution) than the EHR community; it lets innovators within the Heineken organization share and discuss new concepts and ideas, as well as manage the progress of such ideas as they are developed into real projects. As the image shows, the emphasis in the *Innovators Community* was on design simplicity, communication, and collaboration, with none of the specific branding seen in the campaign sections. Here, users are asked to share inspiration, start a project, ask questions, and post documents. Each addition is presented within the *What's happening within the community?* live feed, and projects can then be worked on and discussed by users from around the world. The best ideas/projects are then taken through several "gates" before finally becoming a reality.


Logout
Heineken
BrandPortal
Search
Go
Advanced Search
Brand
Communications
Sponsorships
Packaging
Merchandise
Libraries
Communities
Home | My Activations & Snapshots > Type Title Here (edit) > Trade Marketing Platform > Innovators Community > Type Title Here (edit)
Enter your message/inspiration....
Title:
Picture:
[redacted]
Upload file
Content:
Arial
Media
Flickr
Hyperlink
YouTube
HOOS
Design
Source
English
Choose Platform/Direction...
*Choose the most appropriate platform/direction combination for this item by clicking the Select button.
PLEASE NOTE: You must choose an option here. If it is not applicable, choose "Not Innovation Platform Related".
select
Add tags...
Choose the most relevant tags for this item, and/or add your own tag(s) by typing into the open text field.
Try to be as accurate as possible, as these tags are used when others search for content within the community.
Separate multiple keywords or phrases with a comma (e.g marketing, competitor activity, direct marketing activities)
What would you like to do?
Publish now and send notification emails:
If you are ready to publish this content and would like an email to be sent to other community members notifying them about it, please click "Save, Publish and Mail" below.
Publish now without sending emails:
If you would like to publish this content without sending a notification email, please click "Save and Publish".
Publish Later:
If you are not ready to publish this item yet, click "Save as Draft" below. You can access all of your drafts from the My Contributions page of this community.
The link to this Message/Inspiration is:
http://brandportal/
Save as draft
Save and publish
Save, publish and mail
Duplicate
Delete
Administration
Terms of Use
Privacy Statement
www.heineken.com

Pictured: An example of an input form that lets users upload a piece of inspiration in the *Innovators Community*. Users are asked to add a title, picture, and main text/content. Users are prompted to choose a *Platform/Direction* category to better organize the ideas into relevant groups. Moving down the form, they're asked to tag the content to help users find their item. These tags include: choosing a platform/direction (phrases used in the offline process), traditional metadata keyword tags to assist with search, and links to other content that might be related to this item. Users can "save as draft" if it is not yet ready to be published, or "save and publish." When publishing, they can also choose to email other members to alert them that the item has been published. This email alert is sent only to users who have specifically requested email alerts from this community.

Communicating Outside the Organization

As might be expected from a large global organization, Heineken interfaces with many international agency partners who handle the company's complex marketing requirements. So, the push toward collaboration is not limited to serving internal purposes. Through the BrandPortal, the company has found ways to include these agencies in the collaborative environment, alongside (yet separate from) Heineken's internal communities. This, in turn, has helped facilitate the workflow between the agencies and Heineken.

"In a fast-paced world where deadlines are never far away," says Cody, "agencies can be given temporary or permanent accounts to specific areas of the BrandPortal, while at the same time being shielded from any sensitive information."

INTRANET TEAM

Pictured: The Heineken BrandPortal team: (left to right) Heineken: Mark van Iterson and Michelle Bertens. SmallWorlders: Kevin Cody, Dan Jones, Cedric Crickx, Simon Jones, and Rosie Cooper.

GOVERNANCE

Ownership

Heineken Group Commerce owns and directs the BrandPortal from the Heineken Head Office in Amsterdam, The Netherlands. Typically, department heads own each section, and the core team's job is to inspire them to think of the best way the tool can be utilized for their individual team needs.

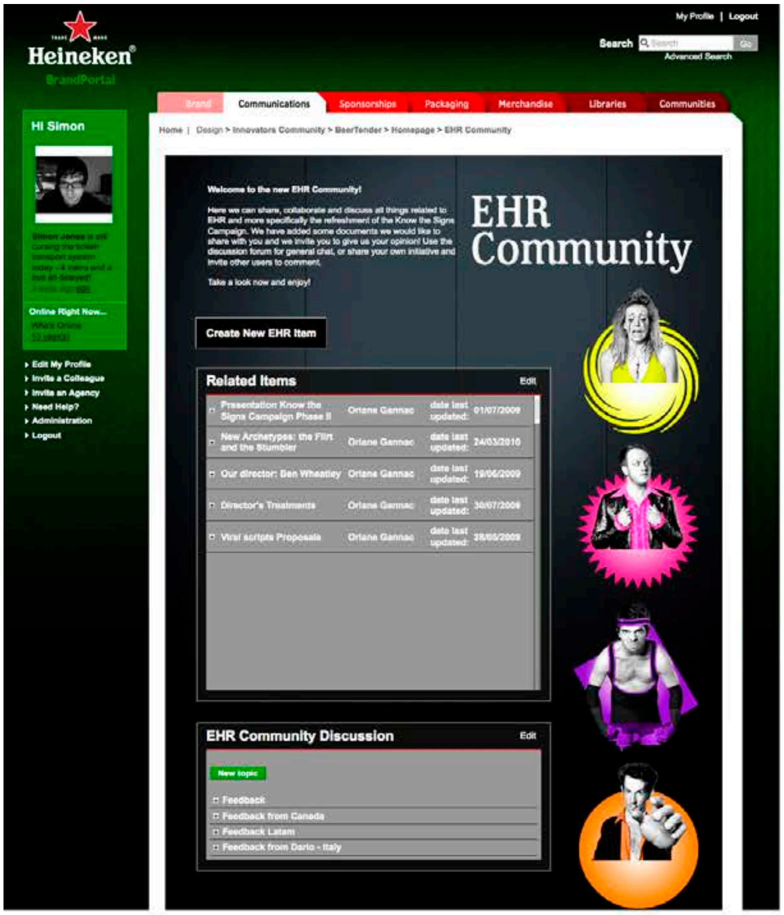
The company's agency partner, SmallWorlders, jointly manages the site with Heineken and administers the aspects of the BrandPortal relating to section creation, content population, site administration, and technical updates.

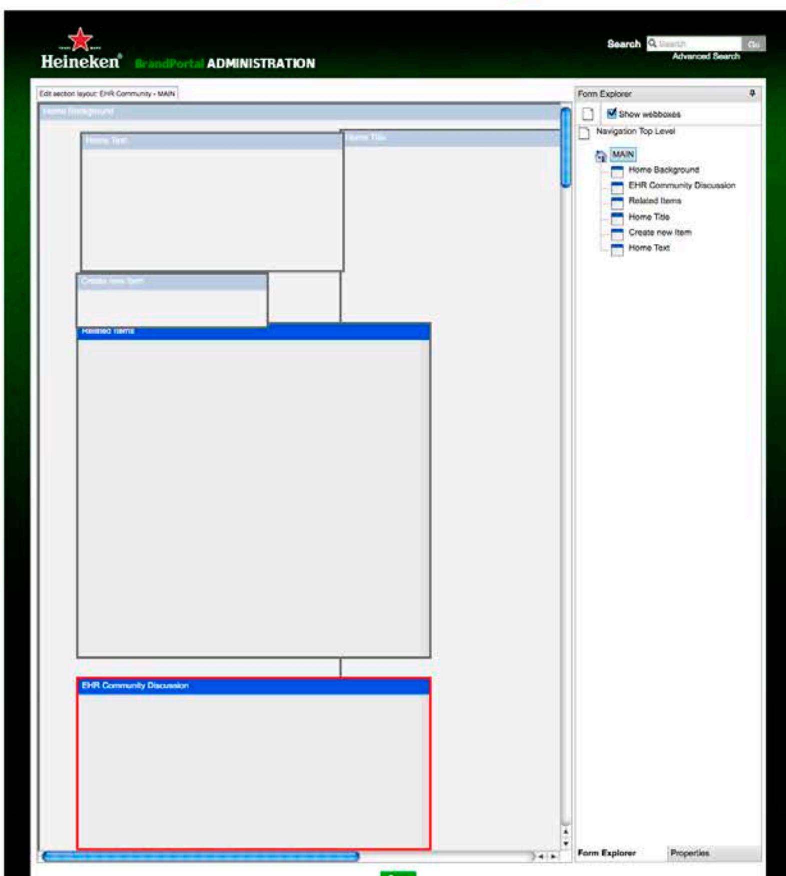
SmallWorlders content owners and department heads within Group Commerce typically have one-to-one contact with SmallWorlders to coordinate updates, maintenance, and new section builds.

"Key decision makers from Group Commerce are included early on in the process of any update or new section build project," says Cody. "As a result, most of the content on BrandPortal is tailored specifically to the requirements of the department involved."

"In addition," he says, "vibrant communities have been created on the BrandPortal. Each one is a direct result of positive, inspiring, and ongoing leadership from the section owners."

"So, yes, positive ownership has had a huge impact. Without this kind of influence and leadership from within Heineken, we wouldn't have had the success that we've seen," says Cody. "Building a great platform is just part of the story of any successful intranet."


Heineken
My Profile | Logout
Search
Advanced Search
Brand
Communications
Sponsorships
Packaging
Merchandise
Libraries
Communities
Hi Simon
Online Right Now...
Edit My Profile
Invite a Colleague
Invite an Agency
Need Help?
Administration
Logout
Welcome to the new EHR Community!
Take a look now and enjoy!
EHR Community
Create New EHR Item
Related Items
Edit
EHR Community Discussion
Edit
New topic
Feedback
Feedback from Canada
Feedback Latam
Feedback from Dario - Italy


Heineken
ADMINISTRATION
Search
Advanced Search
Form Explorer
Show webboxes
Navigation Top Level
MAIN
Home Background
EHR Community Discussion
Related Items
Home Title
Create new Item
Home Text
EHR Community Discussion
Form Explorer
Properties
Save

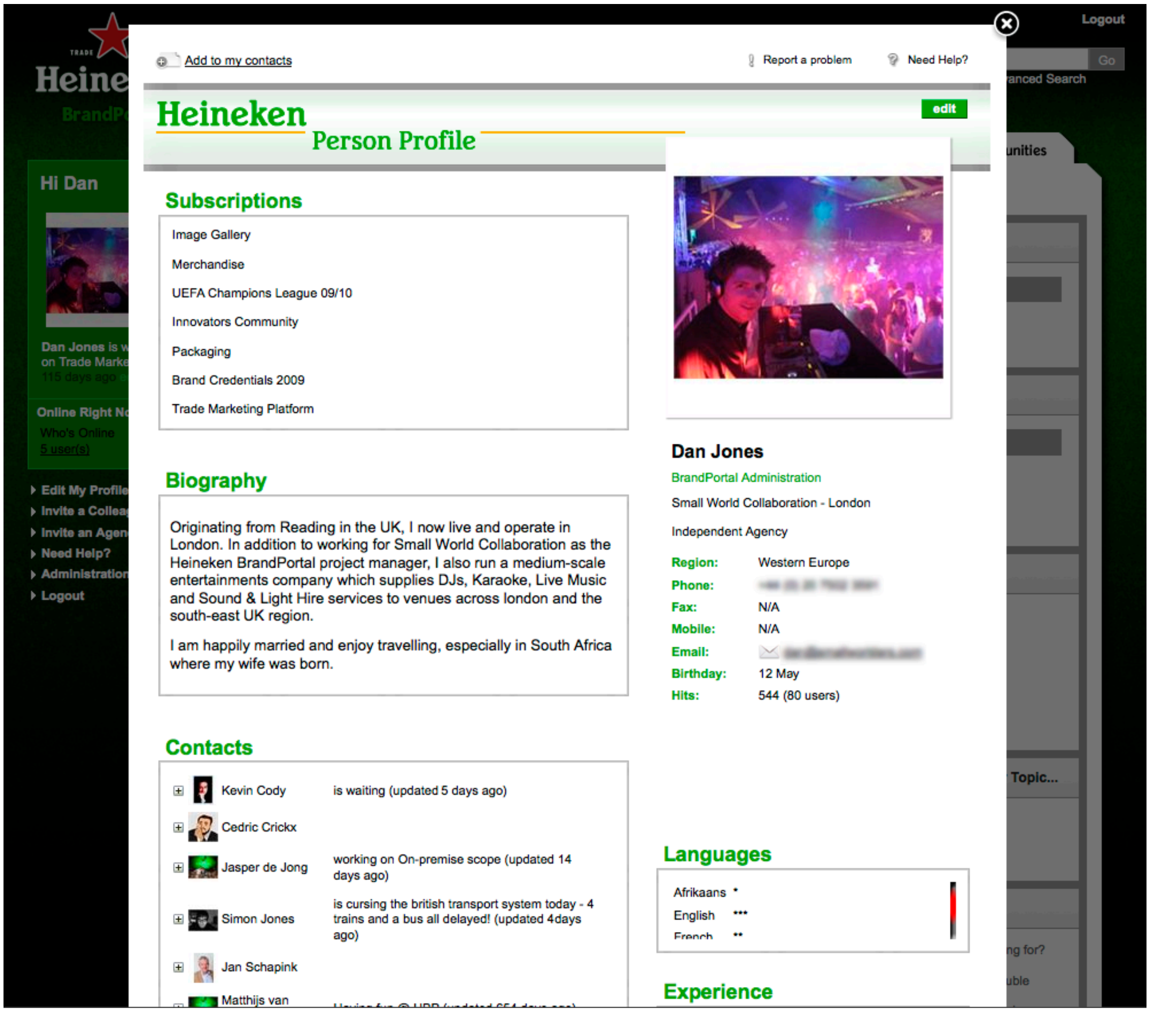
Pictured: It's easy to experiment with sections using the drag-and-drop interface. If a section design doesn't work, the team can quickly and easily update it, sometimes within minutes.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Business Owner	• Set objectives • Govern the site's use, content, and design
Intranet Supervisors (SmallWorlders)	• Fully maintain the site and deal with any major changes/upgrades • Monitor usage patterns • Liaise with business owner to determine strategy
Global Knowledge Managers (GKMs)	• Manage the content • Act as facilitator/conduit between Heineken and SmallWorlders for new projects/sections • Serve as a contact point for the Brand managers and employees
Section Supervisors	• Manage day-to-day site administration • Maintain specific sections or communities

USERS

The primary users are from the following groups:

- **Brand Managers:** Use the BrandPortal to communicate messages, guidance, and materials to a vast network of marketing employees, partners, and agencies. All of the main product and sponsorship campaigns have a dedicated area in the BrandPortal that is used to hold information that each brand manager wants to make available.
- **Marketing Employees:** Use the BrandPortal to keep up-to-date with the latest news, guidance, and best practices related to their work area. This content is predominantly provided by the brand managers.
- **Marketing / Design Agencies:** Use the BrandPortal to upload and access artwork and materials needed to run campaigns in their local markets.
- **Community Groups:** Several groups within the Heineken organization have dedicated communities in the BrandPortal. Each of these groups customizes its community for specific purposes, but communities are primarily used for collaboration and idea sharing.



Pictured: User profiles are accessible whenever a user's name appears, including as a community member, campaign contact, content author, in search results, and next to comments in community forums and blogs. Whenever it's accessed, the profile displays in an AJAX pop-up to ensure that users don't lose their place on the site. The profile contains all-important contact information, as well as details about previous experience, languages spoken, subscriptions to sections, and a short biography. Although team members anticipated a desire for more social features on profiles, this wasn't indicated in the user survey, so they kept the user profiles more traditional.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	https://brandportal.heiway.net
Default Status	Because the BrandPortal is not Heineken's intranet, it is not set as the default start page for company employees. The BrandPortal is a tool/service for Heineken Group Commerce specifically.
Remote Access	Because the site is primarily an asset store, site users from both Heineken and their agency partners are located in more than 170 markets around the world. It is from these remote locations that users download the assets they need for a particular project. Thus, they're typically not connected into the corporate LAN. The BrandPortal is available directly over the Internet using 'https' encryption, and can therefore be used at home, airports, hotel rooms, or whenever it is needed.

DESIGN PROCESS AND USABILITY WORK

Listening to Users

Heineken works with SmallWorlders to keep a close eye on how the site is doing, and through this research makes decisions regarding BrandPortal's future direction in a continuous manner.

"We constantly monitor usage — who is using it; what sections, tools, and content are popular; what are people searching for; etc.," says Cody. "This, together with user surveys, feedback from Heineken and other clients, Internet trends, etc., form the backdrop to a strategic report we produce for Heineken every six months. This is used to determine strategy for the following six months."

Pictured: The team constantly monitors usage, including who is using the portal; which sections, tools, and content are popular; and what are people searching for. This, along with user surveys, feedback from Heineken and other clients, Internet trends, and so on, inform the strategic report that SmallWorlders produces for Heineken every six months. This report then helps determine the strategy for the following six months.

The users survey was pivotal when the team was planning where to take the BrandPortal project in the second year of its life.

The user survey results indicated that the users, in general, were quite pleased with the site's look and feel and the overall amount of content. Users were less impressed with navigation, search, and site speed.

"Although our worst performing score was 84 percent positive, these three areas were highlighted as in need of some improvement," says Cody, adding that, as a direct result of this survey, they took the following steps:

- **Upgraded Hosting.** "Heineken invested in a substantial upgrade to the hosting environment. This had a result of significantly improving site performance. For users in regions with less well-developed broadband infrastructure, such as Africa, a DVD was compiled with a selection of key content. This DVD contained an 'offline' and compacted version of the BrandPortal from which users could get content without relying on a poor Internet connection."
- **Redesigned Search.** "We completely redesigned our search, from the bottom-up. We substantially improved the algorithm, logic, and user interface. We also incorporated best practices from modern search engines

(such as Google) so that we offer users the most familiar and intuitive search."

- **Redesigned Homepage.** "We redesigned the homepage to make it easier to navigate and find content. We designed it bearing in mind that users are not there to browse, but to dip in quickly, find their content, and leave. For this reason, we have included a large search input field, many quicklinks, and navigational tools. We ended up with nothing more than a search bar, some quick links, and a promotional banner above the fold. This felt right — but also counter-intuitive at the same time."

Although the survey results are not yet completed for the redesign, all indicators point to user satisfaction with the latest improvements.

"Anecdotally, the feedback has been positive, but we intend to survey users annually, particularly as the survey turned out to generate such useful input," he says. "The usage statistics showed that the survey paid off as we experienced record usage over the first half of the second year."

Working with Agencies

Heineken's partner agency, SmallWorlders, was initially chosen through a pitch process. The agency's proposed design strongly met the company's needs, and since that initial partnership, Heineken has worked almost exclusively with SmallWorlders.

Some business units have a particular agency that they use regularly on other projects. On occasion, those agencies have also done design work for relevant sections on BrandPortal, either on their own or in collaboration with SmallWorlders. The Trade Marketing Community is a great example of this cross-agency cooperation. Afdeling Creatie, based in Amsterdam, worked closely with SmallWorlders to create this very successful community.

TIMELINE

INTRANET TIMELINE	
Milestone Date	**Milestone Description**
2000–2002	First Heineken intranet
2003	First BrandPortal
April 2007	New BrandPortal concept defined Agencies approached
2008	
February	SmallWorlders confirmed to build and manage the new BrandPortal Preparatory work begins
April	Build begins Content assessment and compilation starts
August	Soft launch of the new BrandPortal
December	Full launch of the new BrandPortal
2009	
April	First collaborative communities begin appearing
October	User survey conducted
February 2010	Design update completed

CONTENT AND CONTENT CONTRIBUTORS

The Heineken BrandPortal relies on the SmallWorlders SandBox™ content management system. Because it is the agency's own intranet platform, Heineken benefits from infinite customization possibilities.

"They're continuously adding new features, and are happy to develop more specific custom elements for us when required," says Van Iterson.

And its not just Heineken that benefits from this relationship. Learning from clients helps SmallWorlders improve the tool with an eye toward real-world use and real-world business requirements as they evolve.

"This works well for us, too," says van Iterson. "As well as ongoing development, the custom developments and requirements from Heineken (and other clients) keep us in touch with what's really needed in a marketing intranet."

"The best ideas for new features come, not surprisingly, from our clients," he says. "Typically we 'genericize' our clients' requests as new features of our SandBox™ platform, so everyone benefits."

Workflow: One Size Does Not Fit All

The BrandPortal is content-centric, so it's no surprise that the CMS has to be flexible enough to accommodate different workflow approaches.

Most of the top-down material, such as digital assets, guidelines, activity updates, and so forth, are generated either in-house or by the various marketing agencies the company works with. Such assets are sent directly to SmallWorlders via the *DropBox* facility or on a DVD. The agency then organizes the content, designs a new section (if required, such as for new campaigns), and uploads the content. Once Heineken confirms that everything looks good, it's published.

On the other side of the coin, some brand managers have taken on a more self-service approach, using the CMS to publish their own content. And some agencies have access to specific sections (which appear as extranets to them) and upload and manage their own content.

Others approach SmallWorlders with a design or wireframe on which to base a new section.

The community content is user-generated. The successful communities are full of user-generated reports, comments, articles, and notes, most of which are created either by users from Heineken's markets around the world or by agency users.

There are approximately 20 brand managers who regularly update the system with new content. These publishers are located at Heineken and also at SmallWorlders.

Approval Chain-of-Command

Top-down content is uploaded by SmallWorlders then held in draft until approved by the appropriate brand manager. Brand managers can upload content themselves without any approval.

"User-generated content is targeted at specific communities and by its nature is not meant to be approved," says Cody. "The purpose is to encourage communication, sharing, and collaboration. Users react positively if they're given space, but negatively if they feel that they're being watched."

Adhering to Standards

All content on the BrandPortal is created using templates. There are currently 40 different templates in total for all content types, from basic news articles to complex innovation projects.

"Each one is presented to the user in the appropriate place and at the right time in their journey through the BrandPortal," says Jones, "so users are never overwhelmed by all 40 templates at once."

The most users ever see is two or three templates, but even that is rare. There are additional guidelines in the *Help* section if required.

"Typically, we allow users space to create their content in their own way, but the templates help to guide them through the process and ensure consistency," says Jones. "For example, specific titles, images, videos, and tags are asked for in the templates and are then presented in a certain way when the content is published."

There are also various skins that help "brand" the content in a particular way where relevant. This is especially useful for the *Campaign and Product* sections, he says.

Content publishers are given training for the types of content they are expected to create. And in addition to the training, users have access to online manuals and a helpdesk.

The BrandPortal team monitors content via reports available through the SandBox™ reporting tool. Data gathered through this tool helps the team analyze the content and make suggestions to the authors for improvements.

User-generated content gathers direct peer-to-peer feedback through comment/reply functionality built into the site.

TECHNOLOGY

The SmallWorlders SandBox™ is in "perpetual beta," and features are being added and updated continuously.

"We have a fortnightly release schedule!" says Cedric Crickx, Chief Technical Officer, SmallWorlders. And the result of this approach to continual innovation is that the BrandPortal has benefited from the many minor improvements made to the platform over the last few years.

"The major updates it benefited from were the improvements to the digital asset management facilities and the new search tool," he says. "We've also begun to blur the lines between the intranet and the Internet to allow users to interact with public social networks, blogs, and Google gadgets, the last of which was used extensively in the *Heineken on the Web* section."

The agency also created a very large, custom internal merchandise shop that integrates with a third-party SAP system.

The chart below outlines the technology behind the BrandPortal's various components:

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	The SmallWorlders SandBox™ platform is based on: • Microsoft .NET 4.0 • SQL Server 2008 • Both running on MS Server 2008
Bug Tracking/Quality Assurance	SandBox™ Error Reporting
Design Tools	Adobe Photoshop
Site Building Tools	SandBox™ drag-and-drop layout and template editor
Content Management Tools	SandBox™ CMS system
Search	SandBox™ QuickSearch 2.0
Other Functions	SandBox™ Reporting tool SandBox™ *DropBox* tool

SEARCH

As mentioned above, search was completely redesigned as part of the most recent BrandPortal project. Although SandBox™ offers full text search, as a result of the user survey and feedback from other clients, SmallWorlders redeveloped the search algorithms and redesigned the result page to incorporate best practices found on sites around the Web.

The old search page displayed categorized results split by content type. This page was very functional and served a purpose. However, in the user survey, search consistently scored poorly, particularly in terms of usability and user rating.

Changes to the search results include the following:

- Combining all results into a Google-style result list
- Providing "best match" results at the top with "close matches" just below
- Providing user-controlled filter and sorting options to the right
- Providing additional information about the user's search, including who else is searching that topic

RESULTS AND ROI

Measure Results Because You Can *Finally* Measure Results

It's a curious paradox when an intranet doesn't provide the ability to measure its success. And yet that's exactly what the Heineken team had on its hands prior to the redesign.

"One of the breakthroughs of the new BrandPortal is how much data we now have to analyze and direct strategy with," says Michelle Bertens, Brand Design Manager/Knowledge Manager, Heineken International. "We had very little quantitative data to work with from the old BrandPortal. The original user survey is about all there was."

Keeping in mind that the Heineken team set out two overarching goals for the project, the team has accomplished a lot through the redesigned BrandPortal effort. The team's original goals were to:

- promote a single brand message worldwide and increase efficiency; and
- improve communication from the top down and the bottom up.

The redesign clearly accomplished the first goal.

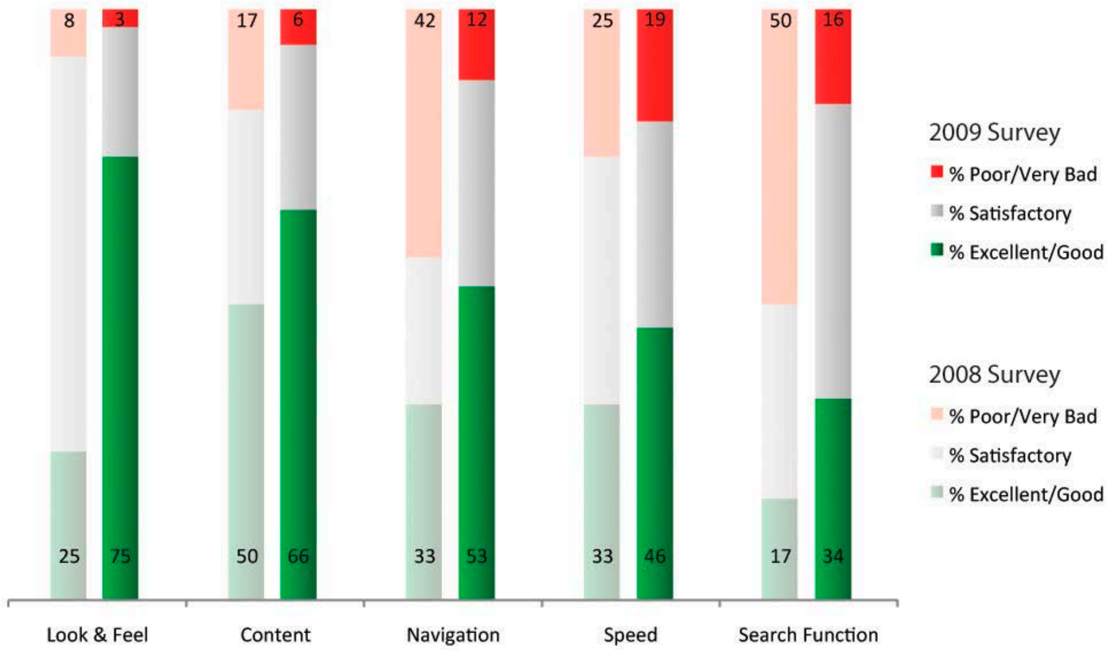
"We have successfully compiled what was once a disparate collection of asset systems into one site, with a single login and search for all of Heineken's brand and campaign assets," says Van Iterson. "As a result, we're more efficient and the single source ensures a single brand message worldwide."

The second goal is harder to assess.

"But communities like the Trade Marketing Platform and the *Innovators Community* have shown us that our employees and agencies are keen to embrace tools to communicate and collaborate," he says. "Every day you can go there and see new pieces of inspiration or interesting activations that have been spotted and uploaded from around the world. It's fascinating to browse. For a globally dispersed organization, this kind of thing just can't be replicated any other way. It's a real asset."

Measurable Results: User Satisfaction

User satisfaction is one reliable measure of an intranet's improvement. To that end, the chart below shows a direct comparison of user satisfaction ratings from the 2008 survey (before the new BrandPortal) and the 2009 survey (a year after launch of the new BrandPortal). Across all categories tested, good/excellent ratings have increased, while poor/very bad ratings have decreased.



Pictured: The difference in user satisfaction ratings before the new BrandPortal and a year after its launch. In all categories tested, good/excellent ratings have increased and poor/very bad ratings have decreased.

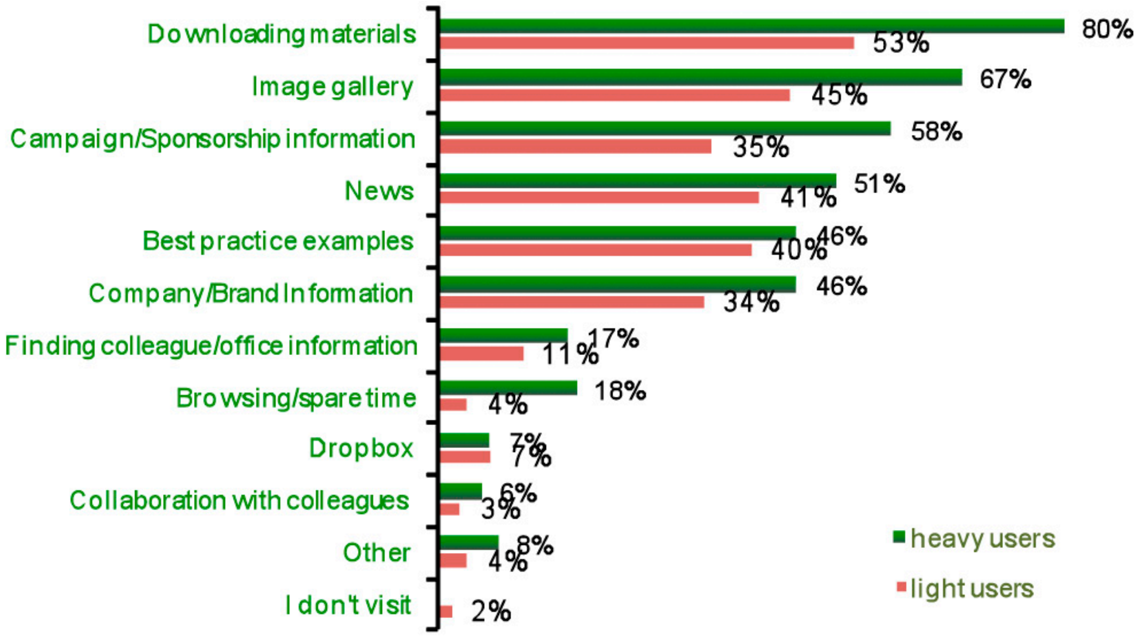
"While this was good news at the time," says Jones, "we could also see that search and speed still underperformed compared to the other categories. Since the survey [was conducted] we have improved on both of these and expect them to score higher when a new survey is carried out."

The overall rating has also risen from 6.3/10 (average) in the 2008 survey to 7.1/10 (average) in the 2009 survey, showing that although there is still room for improvement, satisfaction is on the increase.

There has also been an increase in overall site usage, but it's possible that this gain is due to the new features.

"Since the survey and subsequent design updates, we have noticed an increase in usage," says Cody, "However, we suspect that this increase is less to do with the updates and more because new sections and communities have been launched and because word spreads and habits change."

But perhaps the best measure of improvement on the BrandPortal is that users are doing what they need to do on the portal: downloading materials.



Pictured: Another interesting set of results, these from the survey question: *For what purpose(s) do you visit the BrandPortal?* These results were generated one year after launch and clearly show that the primary goal was met: Downloading materials or images and obtaining information rank highest for both light and heavy users.

The results shown in the chart above were generated one year after launch and clearly show that the primary goal was met. Downloading materials or images and obtaining information rank highest for both light and heavy users.

Although this is good news, the team is also hopeful that the new collaboration and community aspects of the site will score higher in subsequent surveys.

"We would hope that having concentrated more on goal two this year (bottom-up communication) that browsing and collaboration would perform better if a new survey was carried out," says Van Iterson.

LESSONS LEARNED

Some lessons learned from Heineken team members:

- **There is no end point.** "It's a mantra of mine that everything prior to the launch is only prep work. The project begins the day of launch. Someone on the SmallWorlders.com blog commented: 'An intranet is like launching a magazine, not a book. So in one sense, it has no end point.' A stale or inert intranet will not be popular with users and resources must be made available from the start to keep the site dynamic and up-to-date." (Cody)
- **Choose managers wisely.** "Charismatic and visible knowledge managers and community managers are vital to inspire usage from within the organization. Potential users must be kept aware and excited about what is going on. The more you ask them for ideas and feedback, the more ownership they feel about the project and the more they'll get involved and spread the word." (Van Iterson)

- **Take what's offline and put it online to drive traffic.** "Particularly with the BrandPortal project, we found that transferring offline magazines and articles such as the users' monthly activity update dramatically increases usage as users log on in bulk when the latest releases are made available." (Van Iterson)
- **Content is crucial.** "Content is crucial, particularly for the digital asset sections of the site. We always make sure that everything is posted on the BrandPortal, no matter how seemingly insignificant. The BrandPortal is now the first port of call for information and assets for any product or sponsorship campaign. If users log on and can't find something they expect to be there, they begin to lose trust, as they must then spend more time searching or asking for it elsewhere. Archiving old content is also important, for much the same reasons. Old and out-of-date content is almost as bad as no content at all in this respect." (Jones)
- **Good tagging = good search results.** "When you're structuring and creating your content, it is all too easy to be lazy and forget about tagging properly. Never forget about how important the search is to your users. A search based on title and keywords alone will never give the richness of results that properly tagged content can give. Whilst search algorithms are typically highly advanced, any CMS system requires intuitive and simple tagging of content to categorize and present the right content to the right user at the right time. If contributors become lazy about tagging, then this begins to fall apart." (Jones)
- **Analyze failures.** "Some of our communities have failed. Whenever this happens, we need to look at why, rather than brushing it under the carpet." (Bertens)
- **Compromise doesn't have to mean failure.** "Sometimes, during the design process, compromises have to be made for technical or budgetary reasons. But you can't let these considerations impede the user experience. After all there's no point in having a technical solution if users are not prepared to use it." (Bertens)
- **Keep it simple.** "In terms of design, simplicity and consistency of navigation are key. With a site with this much depth, it's possible to keep it simple, but you won't get it right on the first attempt. It takes time, constant monitoring, and updates to make it truly right for the organization." (Jones)
- **Listen to the users.** "It's amazing how a user survey can change your perspective of what's happening. We were excited about a lot of the new social tools we had developed, but in fact, users weren't. This is not to say that social tools don't work, but you have to think about when and where to use them, and you can't simply expect to recreate Facebook everywhere. It's not very relevant to what is primarily an asset management tool. For communities and knowledge sharing, it tends to be more accepted and used — and, in fact, some of the more successful communities on BrandPortal use social tools, but in very specific ways." (Jones)

Mota-Engil Engenharia e Construção, S.A.

Using the intranet:
With 60 years of experience, Portugal-based Mota-Engil is a leading construction enterprise with more than 20,000 employees operating in 17 countries. Principal activities include civil engineering infrastructure projects, bridges, dams, industrial buildings, schools, chimneys, and roads; energy and steel works, steel structures, energy equipment, and electricity; and transport concessions and environmental services (waste and water treatment). Mota-Engil also deals with logistics, retail and warehousing.
Headquarters: Porto, Portugal
Number of employees the intranet supports: 500
Company locations: Operates in 17 countries
Locations where people use the intranet: Portugal

Annual sales: 1.694 billion

Design team:

In-house: Three people formed the core team, working across 22 departments.

Agency: WeListen took part in the project as both developer and consultant.

Members:

In-house: Antonio Ruivo Meireles, Innovation Manager; Maria João Veiga, *InnovCenter* Manager; and Joao Ribeiro Pinto, IT Manager

WeListen–Business Solutions: Carlos Mendes, Leonardo Varella-Cid, Ricardo Lapão, Bruno Lopes, and João Sousa

SUMMARY

Not every intranet project is jumpstarted by the company’s board of directors sending personal letters to each user, inviting participation. This gesture reflects the importance placed on *InnovCenter*, a center for innovation management within Mota-Engil's intranet and in the organization as a whole. The company strongly believes its future depends on innovation and wants it to be a part of what people do daily.

InnovCenter currently supports the 500 Portuguese employees, who are part of the company's 20,000 employees in 17 countries. The team decided that, given the tool’s importance, a gradual roll-out to the company, one group at a time, was the best approach. They wanted to do it right, rather than quickly.

The ultimate goal is to cross organizational boundaries, break down vertical barriers, and give a voice to all employees and explore their potential, allowing the company to know its employees better.

The project arose out of the company's existing innovation process, which used many different systems, was cumbersome, and failed to keep employees informed about what happened to their ideas. The team needed a tool that would manage all stages of innovation — from ideas to opportunities to execution to implemented projects — and that would allow a company-wide conversation across 17 countries. After looking, without success, for an out-of-the-box solution for managing the innovation process from inception to completion, the team turned to the agency WeListen to help design the solution (which is now a commercially available innovation platform called *InnovationCast*).

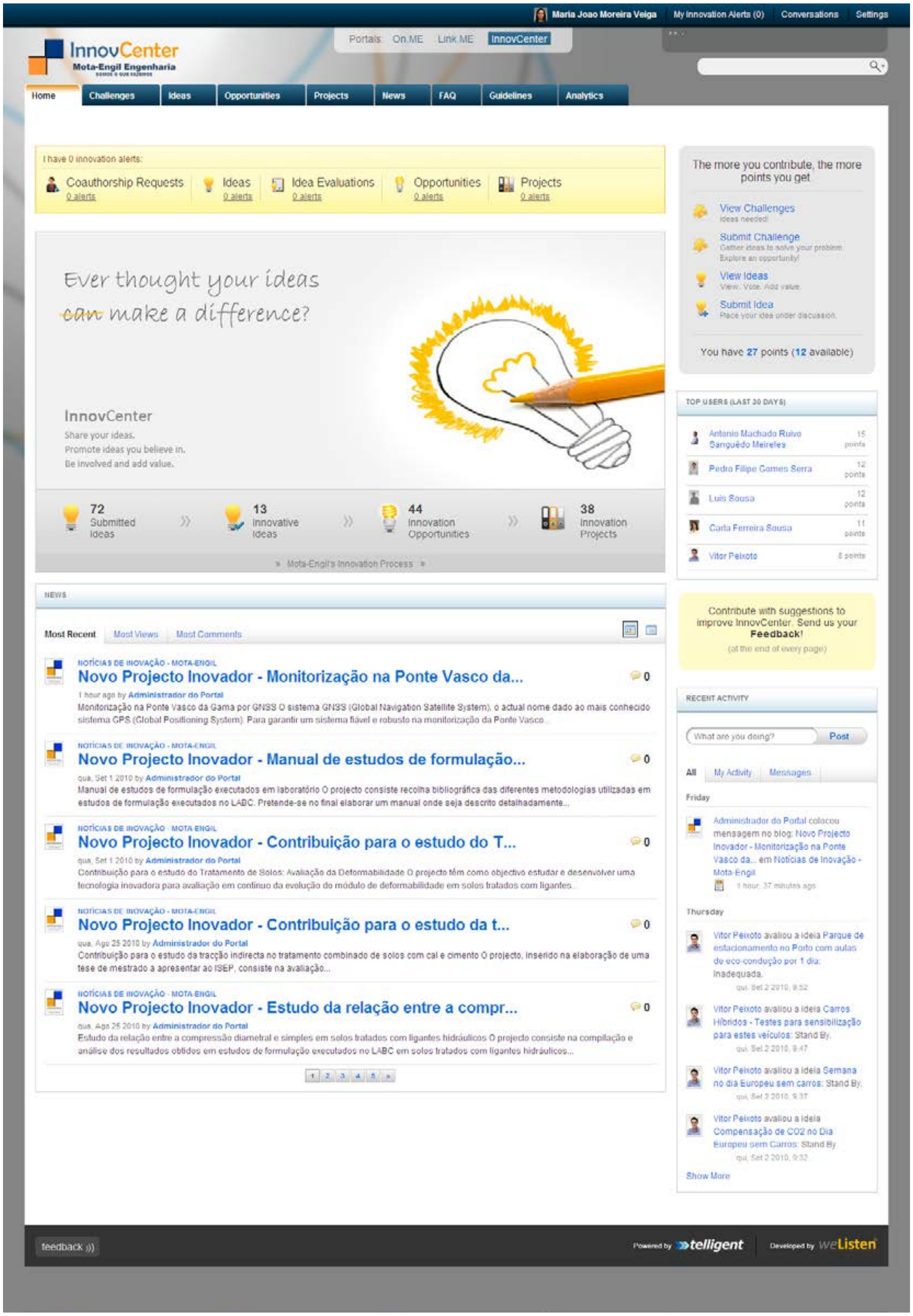
The site's homepage introduces new users to the tool and its goal, and keeps users up-to-date on innovation progress within the company. This emphasis on always showing numbers — the number of ideas, number of implemented projects, number of views, number of votes — pervades the site. Feedback is everywhere. The

homepage shows users the number of *Submitted Ideas*, *Innovative Ideas*, *Innovation Opportunities*, and *Innovation Projects* in the works. Further, *Innovation Alerts* remind users of pending or upcoming tasks, milestones, or requests for action.

The homepage's main focus now is marketing, introducing the tool to users. As time progresses, this emphasis may shift to provide more space for news. The *News* section features the latest articles from an innovation-based blog on the main intranet site. Stories cover innovation events inside or outside of the organization or highlight a specific *InnovCenter* activity. Anyone can comment on a story and start a conversation. Users can use filters to see the latest news, most viewed, or most commented.

Throughout the site, the page's main content is displayed to the left, with the right side of the page dedicated to related or helpful information. On the homepage, the right pane presents links inviting users to participate. A list of top users, as well as recent activity, helps encourage use as well by showing employees who is participating and what is currently going on. Recent activity can be set to show all users, only the employee him- or herself, or can be set to show only microblogging user updates.

A link bar at the top of the page allows access to the company's main intranet, On.ME, and the knowledge management platform, *LinkME*.



Pictured: The homepage markets the *InnovCenter* to employees and invites them to take action via prominent links in the right panel. The page emphasizes what's new and what's happening on the site, listing usage statistics, recent activity, and top users.

The innovation process is reflected in the site’s navigational structure. Challenges spur ideas. Strong ideas can become opportunities on their own or combined with other related ideas. Viable opportunities become projects. Information about all challenges, ideas, opportunities, and projects can be analyzed through the *Analytics* tab, available to all employees.

The entire site is based on contribution, participation, and collaboration. Employees are recognized for their contributions via a points system. Points are shown next to the user's name. Anyone can submit a challenge, which is a problem, need, or opportunity for the organization. Further, anyone can post an idea, which can be an answer to a challenge or an independent idea.

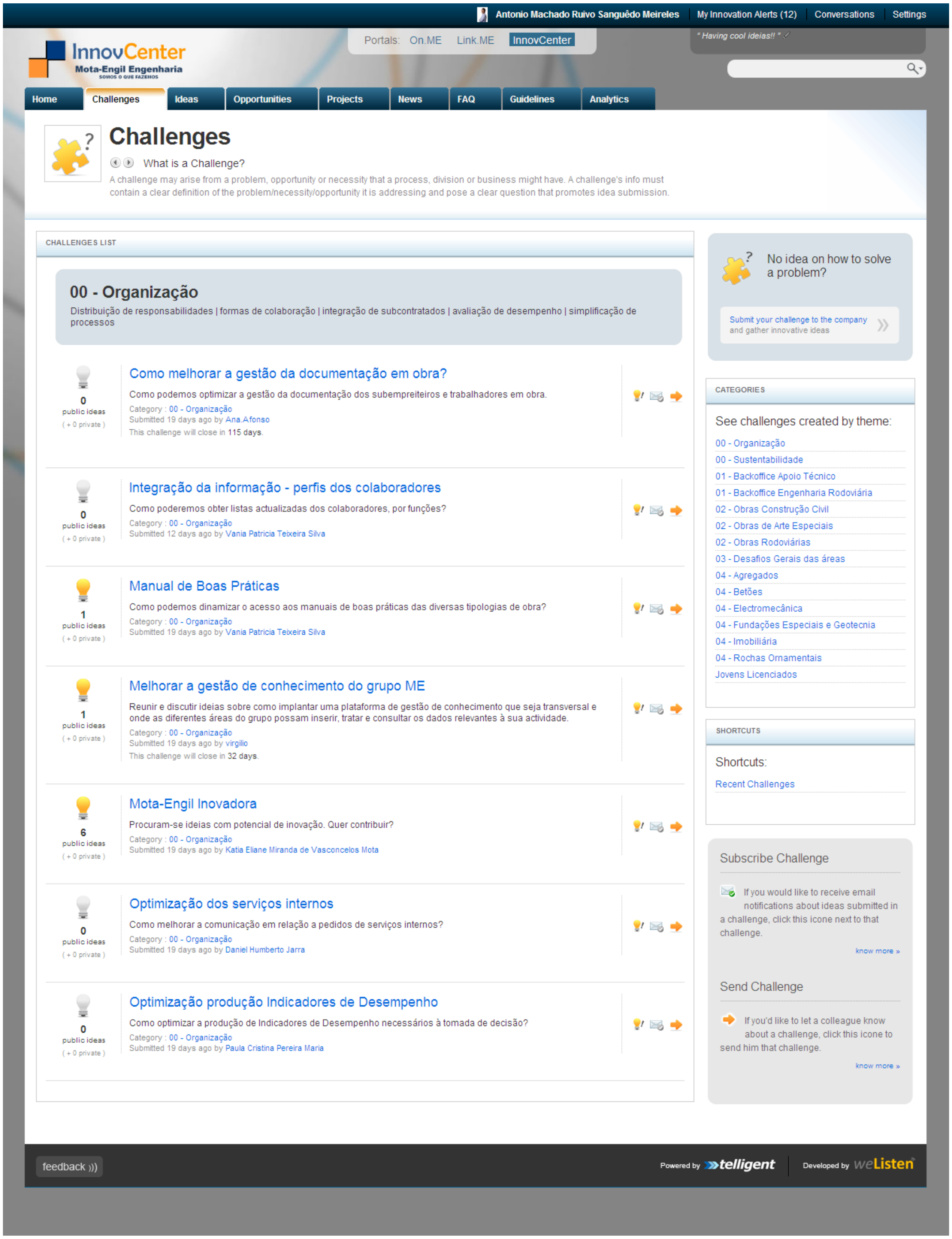
The team found through initial research that part of the problem with the existing innovation system was that there was no framework in which to innovate: users had to come up with ideas out of the blue. And, even though those independent ideas were also welcome, people usually come up with ideas when confronted with a real challenge. Challenges now provide a framework in which to innovate.

The *Challenge* page shows users current challenges. Here, users can review challenges, submit an idea, subscribe to be notified when an idea is submitted, or send a challenge to a colleague.

Each challenge lists the challenge name, a brief summary, and the category it falls under. The person who submitted the challenge is also listed, along with the date it was posted. Time is emphasized throughout the design, as the entire system includes deadlines, schedules, and milestones. The goal is to move ideas through the system and to avoid analysis paralysis.

Each challenge is accompanied by the number of ideas submitted. A "lit" light bulb indicates that an idea has been submitted for the challenge, while a "dark" light bulb indicates no ideas have been entered.

Users can navigate to specific challenges using the list of themes on the right side of the page. The panel also includes guidance and information about what users can do on the page.



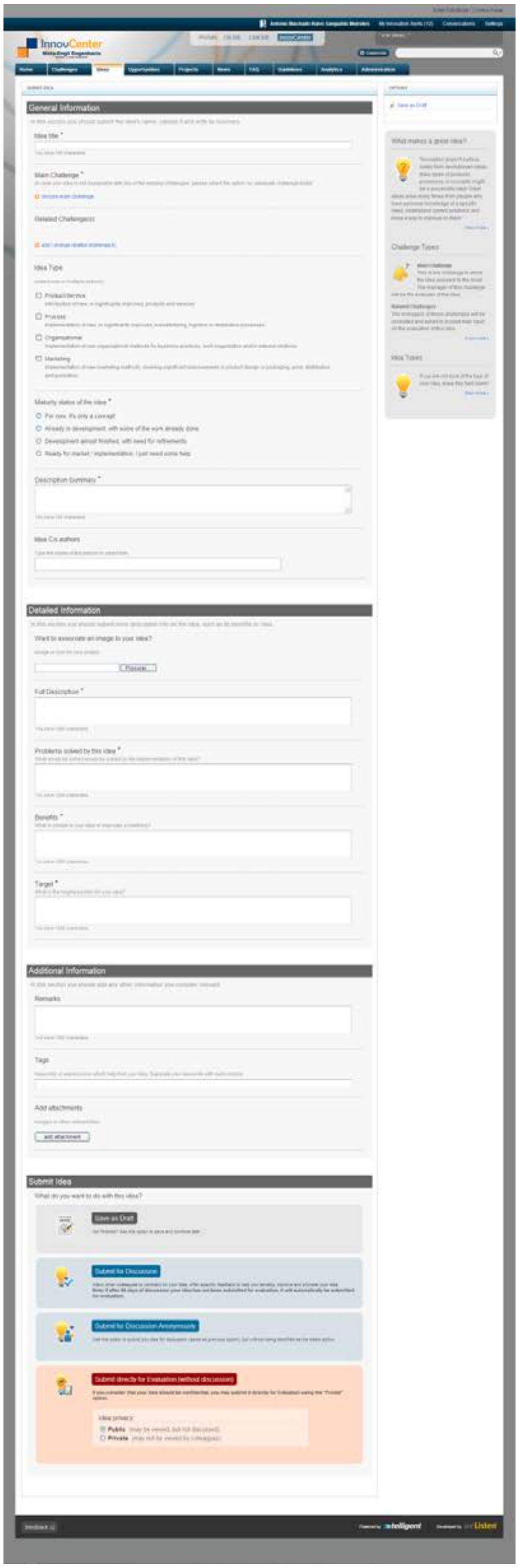
Pictured: The *Challenges* tab lists current challenges, along with summary information.

Every step in the process is guided. To involve all employees in the innovation process, regardless of their role, background, or experience, the site must be inclusive and explanatory. The site sets up a structure to guide users through all steps along the way, giving users the tools they need to create, manage, and assess.

The design is thoughtful and based on both user and organizational needs. For instance, when users enter a title for an idea, the system automatically searches for similar ideas and warns users if a similar idea has already been submitted. In these instances, users are encouraged to contribute to an existing idea rather than creating a duplicate.

The idea submission form is not simply an open text field. The page guides users not only in how to enter an idea, but also in defining and supporting the idea, asking them to define the idea's benefits and target audience, for example.

Ideas can be saved as drafts before being submitted, allowing employees to put in more thought, gather more information, or attend to other daily work in the middle of submitting information.



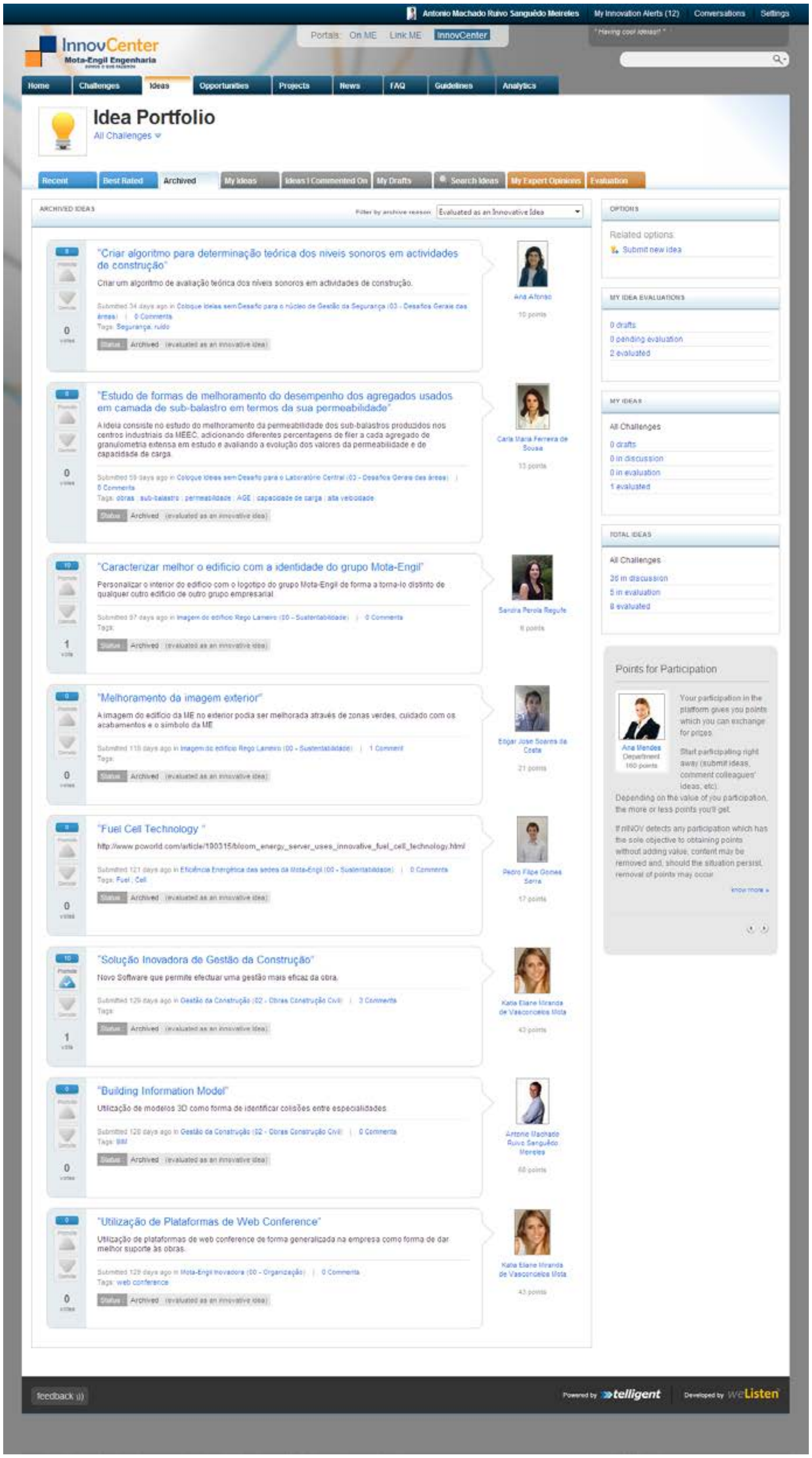
Pictured: The *Idea* submission form guides users through the submission process but also helps them formulate their ideas by asking specific questions, such as about the idea's benefits and target market.

The *Idea Portfolio* allows employees to see all public ideas in the system and discuss, contribute to, or vote on ideas. Users can view *Recent Ideas*, *Best Rated*, *Archived* (for ideas that have been evaluated or discarded), their own ideas (*My Ideas*), and ideas they’ve commented on. Each view of ideas can be filtered by idea status or evaluation result and can also be limited to a particular challenge.

Each idea shows a title and summary description. Here again, numbers and status are central. The idea information shows the total score, number of votes, and number of comments. Users can also see the category and associated challenge, the author (which links to the user's profile), the author's department and earned innovation points, and the idea's status.

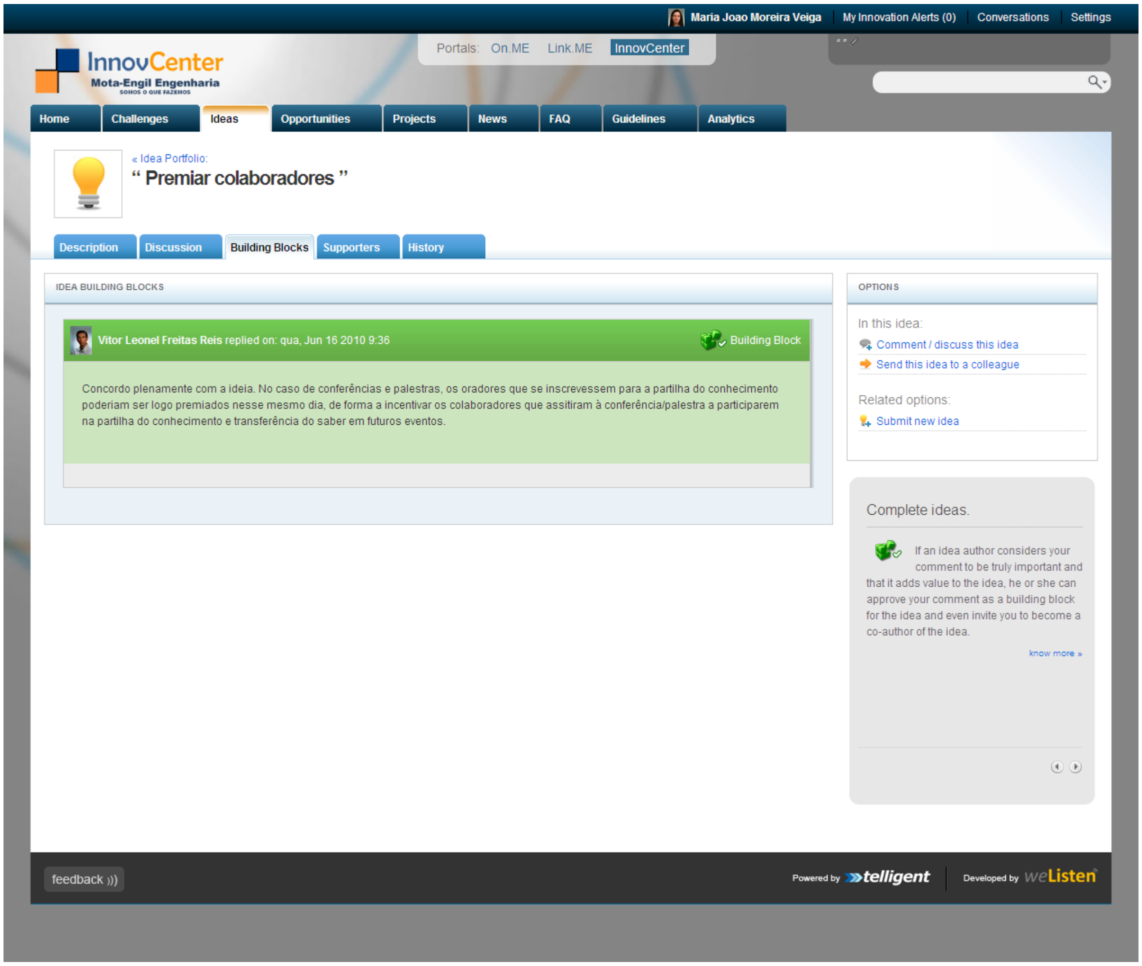
On the side of the *Idea Portfolio* page, users can see their own ideas, their idea evaluations (for managers only), and the current number of overall active ideas.

From here, users can vote to promote or demote an idea. Anyone voting for an idea becomes associated with the idea as an idea supporter. A simple up or down arrow lets employees quickly vote on ideas.



Pictured: The *Idea Portfolio* summarizes ideas and lets users filter their view of ideas and vote ideas up or down.

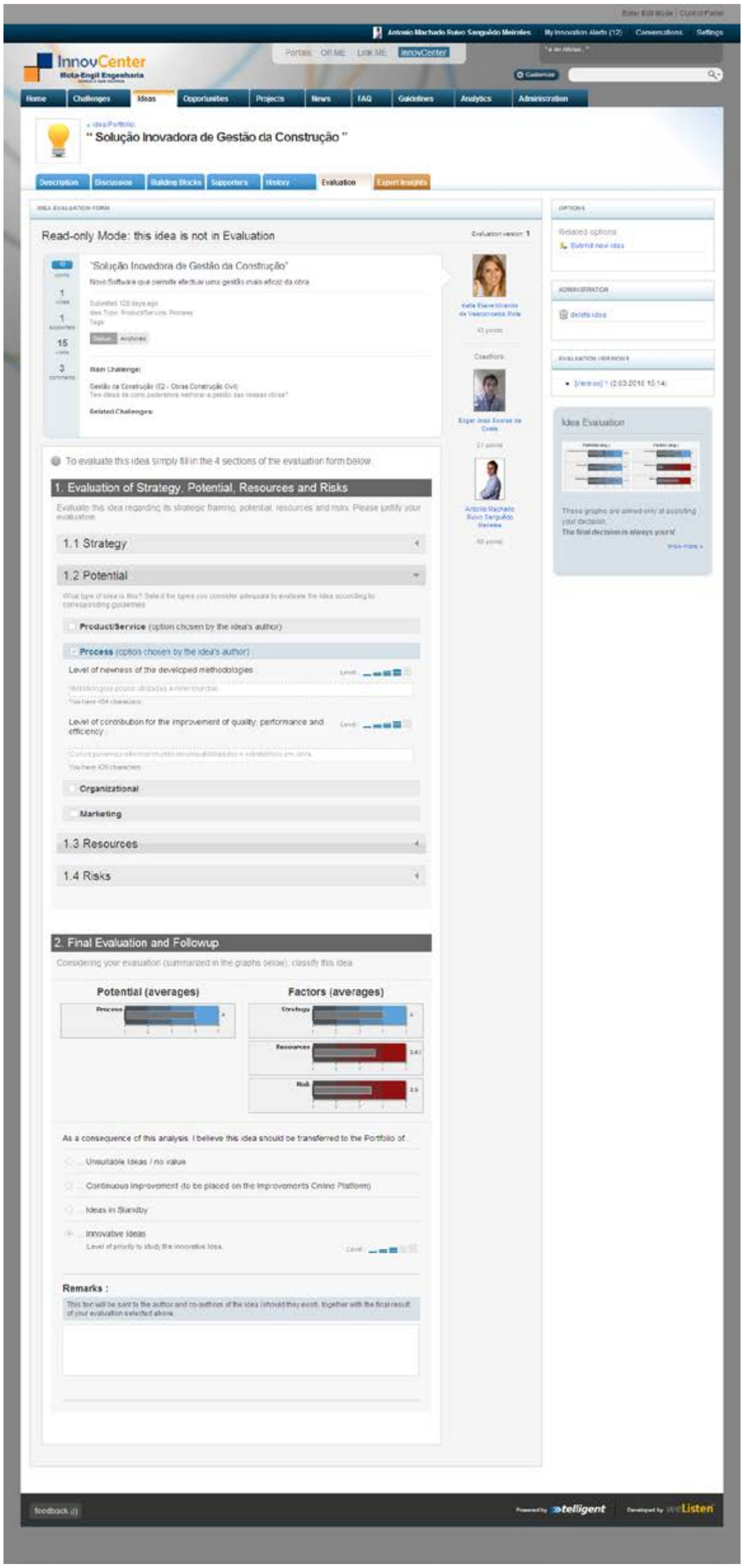
Each idea has an associated discussion area for comments. Anyone in the community can submit a comment. If the idea author finds a comment insightful, he or she can mark the comment as a *Building Block*. This feature helps identify the highest quality contributions to discussions, as well as recognizes and encourages high-quality contributions. Idea authors can also invite *Building Block* authors to be co-authors on the idea.



Pictured: Idea authors can designate a valuable comment on their idea as a *Building Block*, identifying the comment as a quality contribution. Authors can also add *Building Block* authors as co-authors to an idea, encouraging collaboration.

A challenge manager — typically the individual who posted a challenge — evaluates the quality of ideas. The idea evaluation tool helps challenge managers assess suggestions. To help with this, the site provides a framework of four business dimensions, which are each represented by a series of questions that managers rate on a 1–5 scale. Managers answer each question and justify the rating. The site then averages the ratings to show the manager a visual representation of the idea's strength.

Recognizing that challenge managers might not have the expertise needed to fully evaluate an idea, the site guides users through the evaluation process. Further, the evaluation area includes a tab for *Expert Insights*. This area allows a private discussion with people the manager can invite to help with the evaluation.



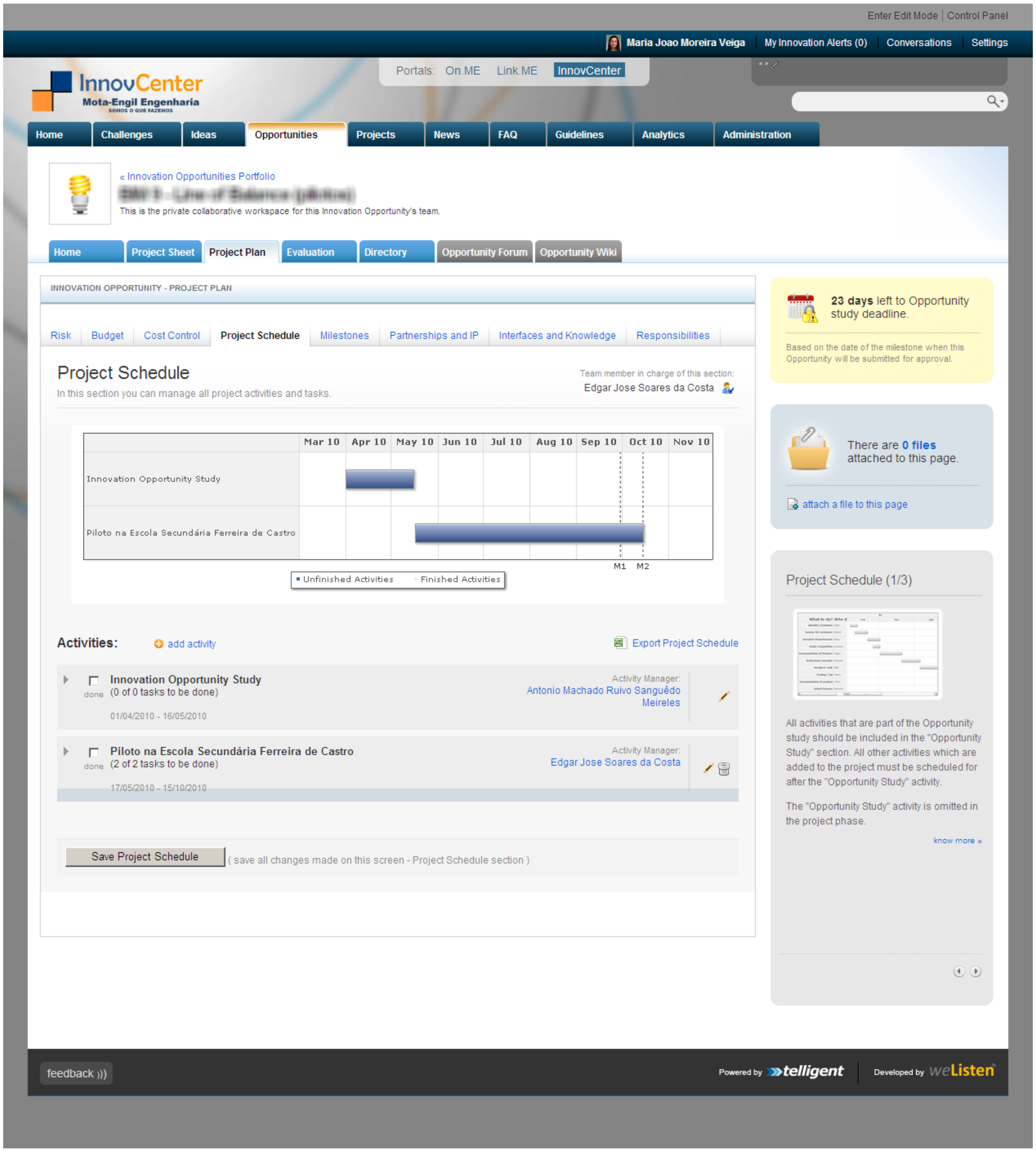
Pictured: The *Idea Evaluation* tool provides a framework for employees to review an idea’s quality by asking a series of questions and showing a visual representation of the idea’s strength.

Highly rated ideas become *Innovative Ideas* and move to the *Opportunities Portfolio*. Here, ideas can be combined and lead to an *Innovation Opportunity*. The public view of opportunities summarizes the project, lists the associated project team, discusses expected results or impacts, and lists internal and external stakeholders.

The teams working on *Innovation Opportunities* do so on the site, through a *Shared Workspace*. Links to workspaces appear on the user's opportunity list and are only visible if the user is a member of the opportunity team. The site is built to accommodate the full innovation process, from inception to implementation, and as such includes project tools for teams to use along the way.

For example, the *Project Plan* tab provides the tools needed to build a project plan, from risk management and budgeting to scheduling and task management, together with a team wiki, forum, and blog to support collaboration.

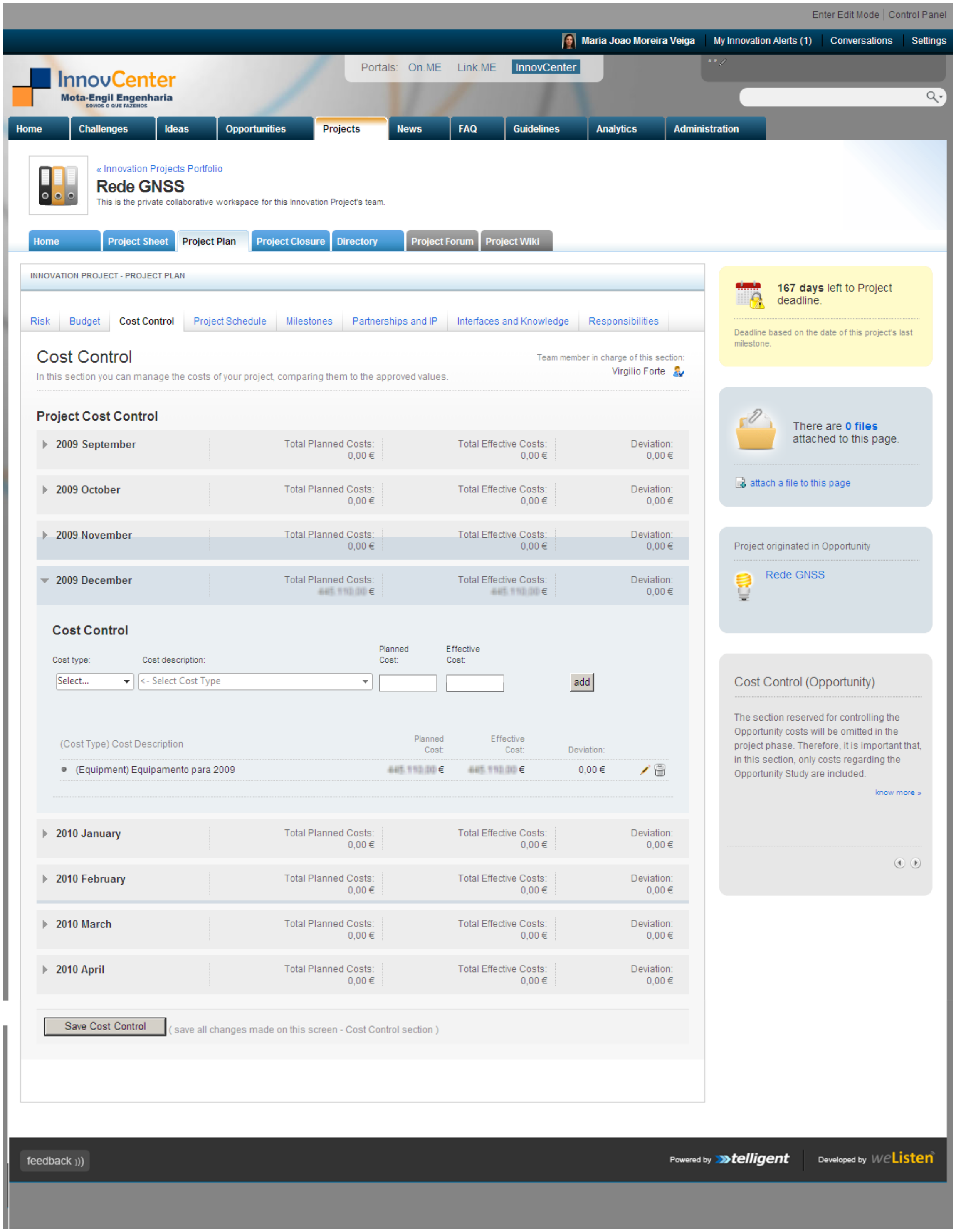
The tool must be flexible to accommodate many different project types. Project management is essential. The site allows team members to create a project schedule, creating project activities and subdividing those into tasks, which are then associated with people and start and end dates. Tasks can be assigned to one or more people to accommodate the fact that projects will have tasks with varying granularity. The site automatically creates Gantt charts showing the project schedule.



Pictured: Project tools help teams evaluate *Opportunities*, providing a shared workspace.

If the Innovation Committee, a workgroup made up of Board members, approves an opportunity, it moves to the execution phase. This might involve people within and outside the organization. Execution is managed through *InnovCenter*, allowing culturally and geographically diverse teams to work together. Once the project receives company approval, team members have the same set of tools at their disposal as in the opportunity phase, complete with all information already gathered. A few additional tools appear as well; the emphasis is on execution, rather than planning.

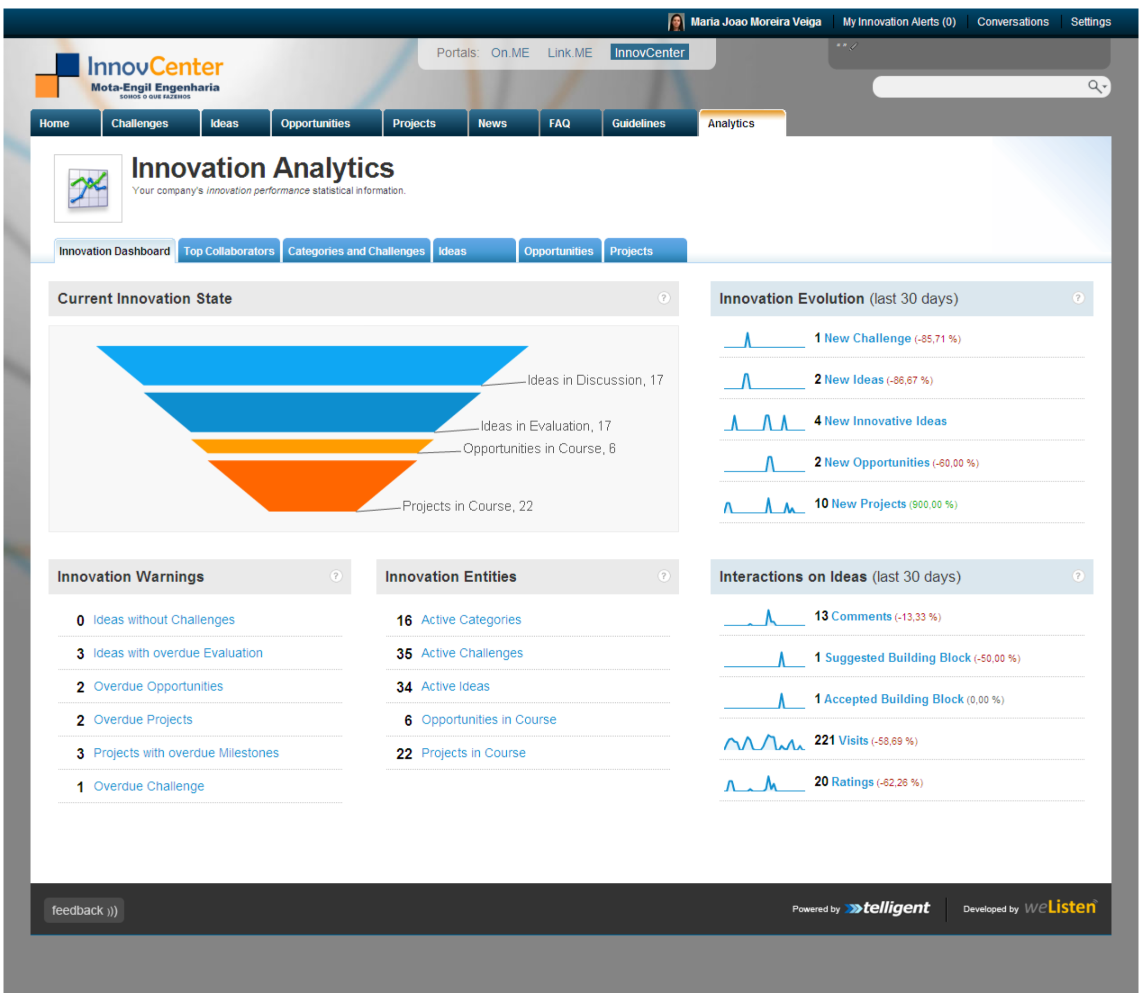
For example, teams can track the project's budget. For every cost, members select the budget where it belongs and enter the planned and effective cost for that item. This tracks the remaining budget and total effective costs to show if a budget is slipping and draw attention to that fact sooner rather than later.



Pictured: A variety of project management tools are available through the site, including a budget tool for project implementation.

Transparency is key on the site. The system keeps everyone informed as projects progress and hides very little. Users can see information about challenges, ideas, opportunities, and projects. Although team sites are private, a public view of project information is always available. Automatic emails are triggered at critical points. Contributors receive feedback from evaluators and know who evaluated an idea. Directors can see all projects being studied and developed. The innovation team can track projects, identify delays and track spending on implemented projects. Anyone can view site analytics, to see the status and number of projects, innovation trends, or most active users, among many other tracked criteria.

The *Innovation Dashboard* summarizes activity on the site and offers users a link to more information. The *Innovation Funnel* shows what's currently in the pipeline. Warnings identify possible bottlenecks or problems. Evolution shows the birds-eye view of challenges, ideas, opportunities, and projects created in the past 30 days, as well as graphically showing how activity was distributed across that time period. It also compares current activity with prior activity. The *Interactions* section calculates the numbers of comments, *Building Blocks*, visits, and ratings an idea has generated over the past 30 days.



Pictured: Analytics are available for all users, supporting the idea of transparency on the site.

One of the key things the team learned in early planning was that it was necessary to recognize and reward users' engagement in innovation. A points system allows the company to achieve this. An annual event celebrates the most innovative people at the company, which is determined in part by the points system. Points show others how active users are, give users a sense of their own participation, and can motivate involvement. Users can use points for prizes, and the team can build a points store down the road. Administrators can change the number of points associated with different actions to incentivize users to perform various tasks. Points are featured throughout the site, shown under users' thumbnail images.

Hard work resulted in a powerful tool for innovation within the organization that inspires participation, informs contributors, enables decision-makers, and results in successful innovation projects across the company.

BACKGROUND

Putting Innovation First

Innovation is an important part of the Mota-Engil core business strategy. While the company has many intranet applications, the company is most proud of its efforts in creating *InnovCenter*, its intranet for innovation management.

"Innovation is an important part of our company's strategy," says Antonio Ruivo Meireles, Innovation Manager. "Our Board believes that the future of the company and its sustainability depends on our capacity to innovate."

"The commitment is so strong that every month there is an Innovation Committee (with the Board present) to discuss every ongoing project and every new opportunity," he says.

From a business viewpoint, the company's challenge was to make sure that innovation is not just part of the corporate jargon, but is instead part of what people think about and do on a daily basis. After all, innovating across geographic divides is not always easy.

"Being a globally distributed company, we needed an effective way to catalyze innovation across all kinds of organizational boundaries," he says.

So, the first step toward creating effective communication was recognizing what was and wasn't working. The goal was to give voice to all areas of the organization and let all employees explore their potential.

"Mota-Engil Engenharia knows the potential of its management staff and understands that it wasn't frequently taking advantage of the potential value of the company's collective intellect," says Meireles. "The company wants to know better its organization and wants the organization to know itself better."

"*InnovCenter* allowed us to break some barriers connecting an organization that has been traditionally vertical. Innovation is extremely important for achieving our strategy and goals in both the medium and long-term," he says.

Listening to Users to Define Requirements

In 2008, the company made the decision to certify its RDI Management System according to Portuguese Standard NP4457:2007.

“The goal,” says Meireles, “was to bring some more systematization to our internal systems and propagate a culture that already existed among some employees.”

Through the process of applying this management system, organizational leaders found the company had become “very bureaucratic,” and they felt it needed to be simplified.

So, the first initiative toward this goal was to migrate all existing process forms to an intranet platform. From there, the intranet team looked for guidance from the user community to help them understand what functionalities would be critical for any platform they might choose to deploy. The team used an open source solution to provide a feedback mechanism to support this initial requirements-gathering phase.

After “listening” for a year, the team developed a complete specification that allowed them to start searching for the best technology solution. This was in the beginning of 2009.

And what they found was surprising. There weren’t any platforms that could provide support for the innovation cycle from end-to-end.

“We were amazed that there weren’t any platforms that could take care of the entire innovation cycle (from idea to project) in an integrated way,” says Meireles. “So, we started to think about developing our own platform.”

Taking on this type of project in-house can be challenging, even for the most experienced teams. The company therefore looked carefully to find the right agency partner to complement the team’s native skills.

“We needed an IT development agency, but also an agency that would understand the innovation concepts, making conversations easier throughout the development process,” says Meireles.

The company chose WeListen because it demonstrated the right balance of technical expertise and consulting acumen. And it provided new ideas to complement what Mota-Engil had laid out in the specification.

In August 2009, work began on *InnovCenter*. The basic premise from the start was that the entire organization would be represented in the development process. The team planned to ensure this participation by conducting several proof of concept sessions in each stage of development. This would ensure that every feature could be approved and discussed with each department.

Aspects of the Innovation Lifecycle

The result of the team’s planning and design efforts is a collaborative platform that supports the innovation cycle every step of the way. It does so with a variety of features and functionalities. Some of the key features of the process are:

Challenges

An innovation challenge is a problem that the organization is facing or an emerging opportunity. The challenge is the key building block of the innovation lifecycle.

Anyone can pose a challenge to the organization. But the platform also allows the company to have challenges directly posted by end users.

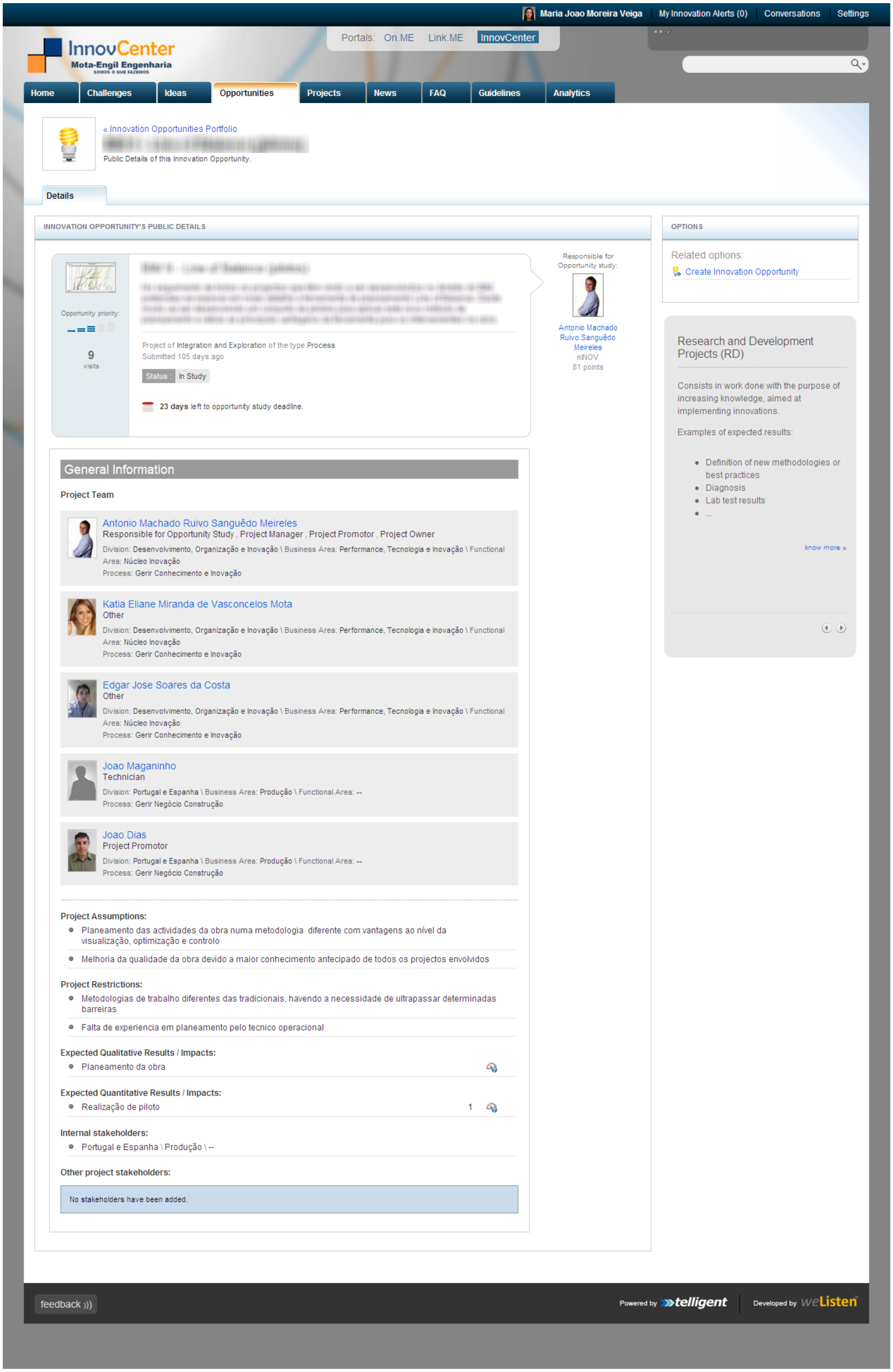
In the current system, users can suggest a challenge, which is then posted by the Innovation department. Anyone can submit a challenge and once submitted, other users can contribute ideas for resolving the challenge.

This relationship between the submitter and the other contributors is relevant because the system is designed to put the burden or responsibility on the submitter. That person is responsible for evaluating the ideas that are submitted to that specific challenge.

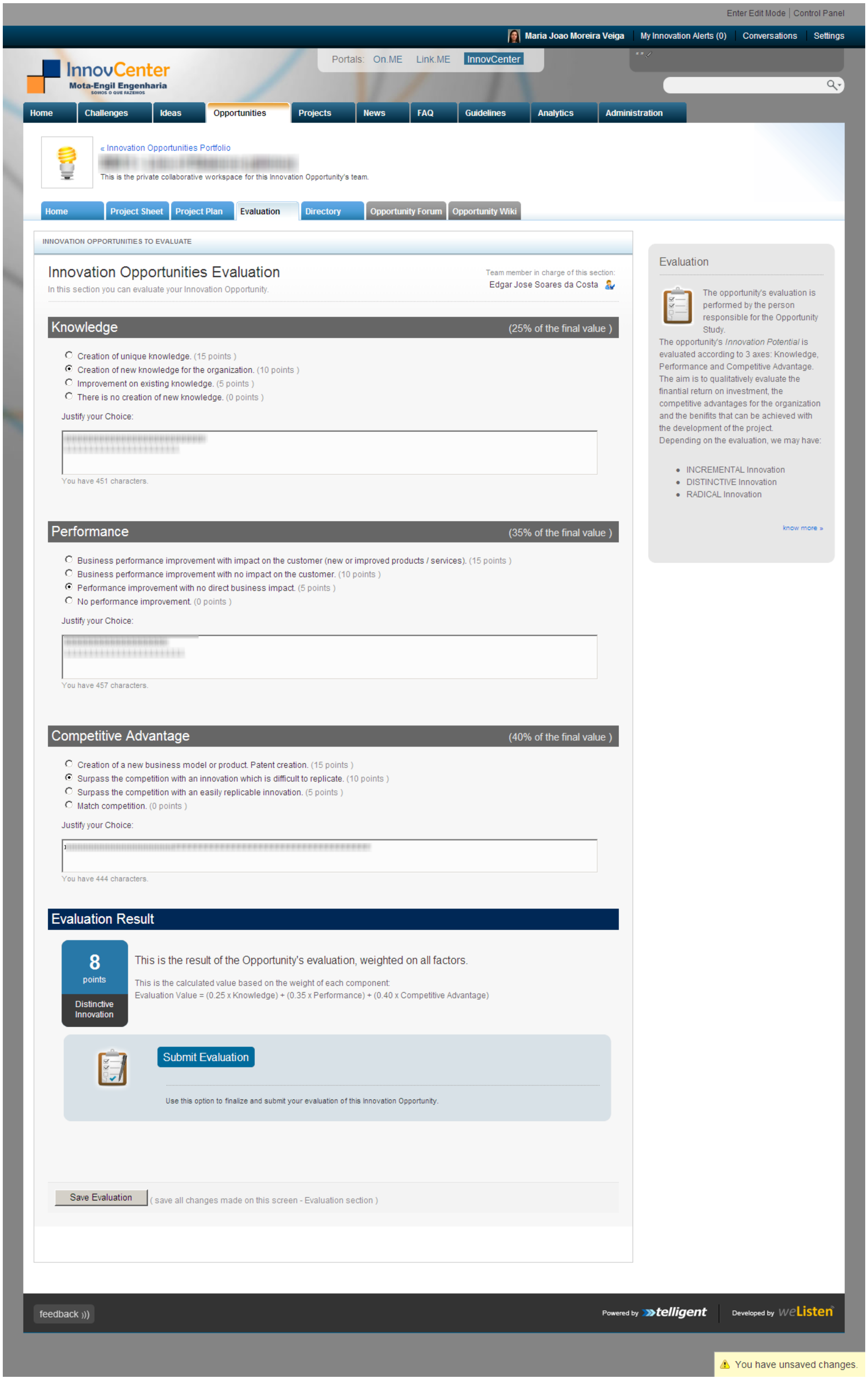
The company's Innovation department moderates challenge submissions. This oversight is somewhat administrative: to ensure that the challenge is unique — that is, not a rehash of a previously submitted challenge — and to refine the challenge before posting.

"We help the person in question to streamline his challenge and make sure it is clear before publishing it," says Meireles. "Moreover, we need to make sure that the challenge is unique."

Challenges can be organized into categories, which lets the team create a structure that's easy to understand and easy to navigate.


Maria Joao Moreira Veiga
My Innovation Alerts (0)
Conversations
Settings
InnovCenter
Mota-Engil Engenharia
Portals: On.ME Link.ME InnovCenter
Home
Challenges
Ideas
Opportunities
Projects
News
FAQ
Guidelines
Analytics
« Innovation Opportunities Portfolio
Public Details of this Innovation Opportunity.
Details
INNOVATION OPPORTUNITY'S PUBLIC DETAILS
Opportunity priority:
9
visits
Project of Integration and Exploration of the type Process
Submitted 105 days ago
Status : In Study
23 days left to opportunity study deadline.
Responsible for Opportunity study:
Antonio Machado Ruivo Sanguêdo Meireles
nINOV
81 points
General Information
Project Team
Antonio Machado Ruivo Sanguêdo Meireles
Responsible for Opportunity Study , Project Manager , Project Promotor , Project Owner
Division: Desenvolvimento, Organização e Inovação \ Business Area: Performance, Tecnologia e Inovação \ Functional Area: Núcleo Inovação
Process: Gerir Conhecimento e Inovação
Katia Eliane Miranda de Vasconcelos Mota
Other
Division: Desenvolvimento, Organização e Inovação \ Business Area: Performance, Tecnologia e Inovação \ Functional Area: Núcleo Inovação
Process: Gerir Conhecimento e Inovação
Edgar Jose Soares da Costa
Other
Division: Desenvolvimento, Organização e Inovação \ Business Area: Performance, Tecnologia e Inovação \ Functional Area: Núcleo Inovação
Process: Gerir Conhecimento e Inovação
Joao Maganinho
Technician
Division: Portugal e Espanha \ Business Area: Produção \ Functional Area: --
Process: Gerir Negócio Construção
Joao Dias
Project Promotor
Division: Portugal e Espanha \ Business Area: Produção \ Functional Area: --
Process: Gerir Negócio Construção
Project Assumptions:
Planeamento das actividades da obra numa metodologia diferente com vantagens ao nível da visualização, optimização e controlo
Melhoria da qualidade da obra devido a maior conhecimento antecipado de todos os projectos envolvidos
Project Restrictions:
Metodologias de trabalho diferentes das tradicionais, havendo a necessidade de ultrapassar determinadas barreiras
Falta de experiencia em planeamento pelo tecnico operacional
Expected Qualitative Results / Impacts:
Planeamento da obra
Expected Quantitative Results / Impacts:
Realização de piloto 1
Internal stakeholders:
Portugal e Espanha \ Produção \ --
Other project stakeholders:
No stakeholders have been added.
OPTIONS
Related options:
Create Innovation Opportunity
Research and Development Projects (RD)
Consists in work done with the purpose of increasing knowledge, aimed at implementing innovations.
Examples of expected results:
Definition of new methodologies or best practices
Diagnosis
Lab test results
...
know more »
feedback))
Powered by telligent
Developed by weListen

Pictured: Each opportunity has a set of public data that all website users can see, even if they're not in the opportunity's study team. By clicking on any opportunity, users can see a header with the following information: the opportunity's title and description, the type of project and innovation, how many days ago it was submitted, the status, the priority that was given to the study of this opportunity, and the number of visits. If the opportunity's study is close to or beyond its deadline, a yellow-background warning is shown, along with information about how many days are left or how many days it is past the deadline. Under that header, it shows further details about the opportunity, including project team (with each team member's responsibilities, division, and processes), project assumptions and restrictions, expected results or impacts (both qualitative and quantitative), and the internal and external stakeholders that are involved.


Enter Edit Mode | Control Panel
Maria Joao Moreira Veiga
My Innovation Alerts (0)
Conversations
Settings
InnovCenter
Mota-Engil Engenharia
Portals: On.ME Link.ME InnovCenter
Home Challenges Ideas Opportunities Projects News FAQ Guidelines Analytics Administration
« Innovation Opportunities Portfolio
This is the private collaborative workspace for this Innovation Opportunity's team.
Home Project Sheet Project Plan Evaluation Directory Opportunity Forum Opportunity Wiki
INNOVATION OPPORTUNITIES TO EVALUATE
Innovation Opportunities Evaluation
In this section you can evaluate your Innovation Opportunity.
Team member in charge of this section:
Edgar Jose Soares da Costa
Knowledge (25% of the final value)
Creation of unique knowledge. (15 points)
Creation of new knowledge for the organization. (10 points)
Improvement on existing knowledge. (5 points)
There is no creation of new knowledge. (0 points)
Justify your Choice:
You have 451 characters.
Performance (35% of the final value)
Business performance improvement with impact on the customer (new or improved products / services). (15 points)
Business performance improvement with no impact on the customer. (10 points)
Performance improvement with no direct business impact. (5 points)
No performance improvement. (0 points)
Justify your Choice:
You have 457 characters.
Competitive Advantage (40% of the final value)
Creation of a new business model or product. Patent creation. (15 points)
Surpass the competition with an innovation which is difficult to replicate. (10 points)
Surpass the competition with an easily replicable innovation. (5 points)
Match competition. (0 points)
Justify your Choice:
You have 444 characters.
Evaluation Result
8 points
Distinctive Innovation
This is the result of the Opportunity's evaluation, weighted on all factors.
This is the calculated value based on the weight of each component:
Evaluation Value = (0.25 x Knowledge) + (0.35 x Performance) + (0.40 x Competitive Advantage)
Submit Evaluation
Use this option to finalize and submit your evaluation of this Innovation Opportunity.
Save Evaluation (save all changes made on this screen - Evaluation section)
Evaluation
The opportunity's evaluation is performed by the person responsible for the Opportunity Study.
The opportunity's Innovation Potential is evaluated according to 3 axes: Knowledge, Performance and Competitive Advantage.
The aim is to qualitatively evaluate the finantial return on investment, the competitive advantages for the organization and the benifits that can be achieved with the development of the project.
Depending on the evaluation, we may have:
INCREMENTAL Innovation
DISTINCTIVE Innovation
RADICAL Innovation
know more »
feedback))
Powered by telligent
Developed by weListen
You have unsaved changes.

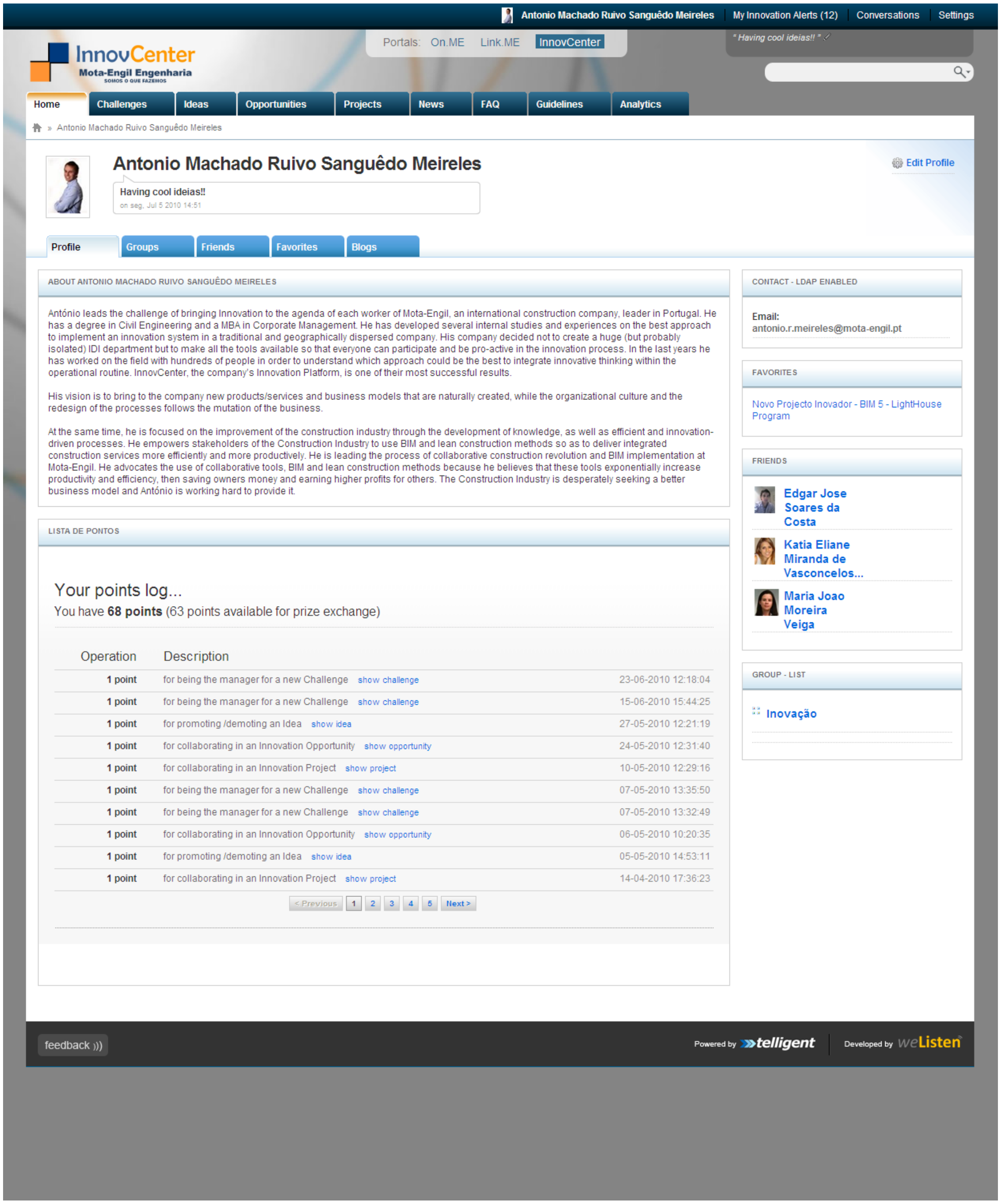
Pictured: Before the opportunity can be submitted for company-wide evaluation, team members must themselves evaluate the opportunity. The evaluation is divided into three groups, each corresponding to a different percentage of the total innovation score: *Knowledge* (25%), where the team can assess if the knowledge created is merely an improvement on existing knowledge or the creation of unique knowledge; *Performance* (35%), a measure of the level of perceived customer perceived impact; and *Competitive Advantage* (40%), which ranges from simply matching the competition to creating a new business model or product, or even a new patent.

User Profiles

Mota-Engil is using Enterprise 2.0 technologies — namely, Telligent's Evolution Platform — to foster connectivity and enable collaboration.

"One of the by-products of using such platforms is that you get to know people that otherwise you wouldn't probably know," says Meireles.

To facilitate these introductions, the system features user profiles. Currently, they hold only general information about users, including a photo, name, contact information, department, and a short biography. But, in the near future, this information will be supplemented with information such as past projects, certifications, competencies, and topics of interest and expertise.



Pictured: The user profiles today. In the near future, this information will also include past projects, certifications, competencies, topics of interest, and expertise.

Innovation Analytics: Monitoring Challenges

The *Categories and Challenges* section lets the company see how many categories and challenges have been created during a specific period, to help determine which categories have the most challenges and which challenges have more ideas.

"This allows us to understand, through time, what are the main areas in which we're innovating," says Meireles.

Pictured: Through the *Categories and Challenges* section, team members can monitor which categories and challenges have been created during a specific time period. This helps them gauge which categories are generating the most challenges and which challenges have more ideas. Over time, this helps team members understand the main areas in which the company is innovating.

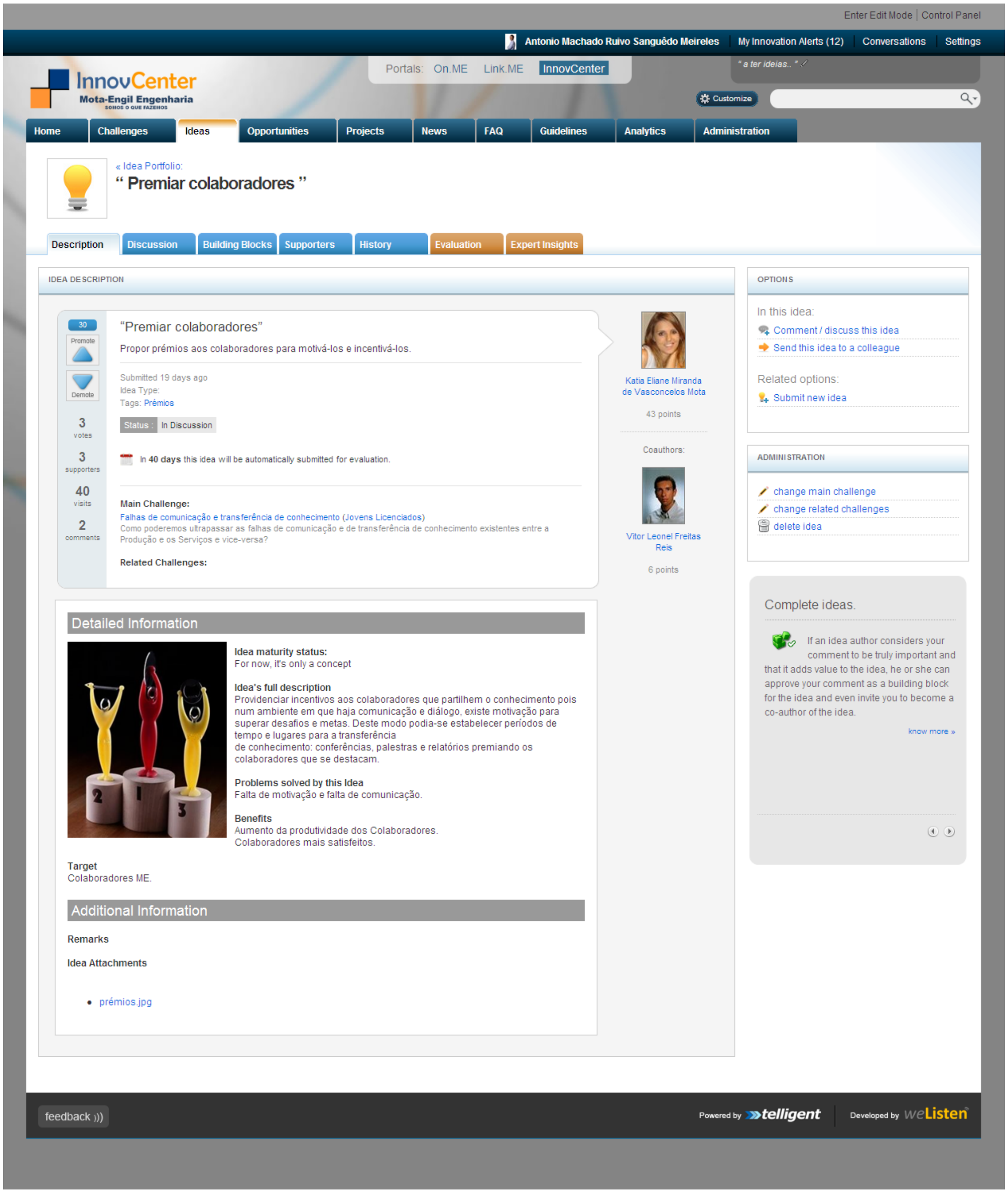
The Idea

The idea is at the heart of the innovation lifecycle. The *InnovCenter* features a page where new ideas are featured and the lifecycle of the idea is tracked over time. The page shows categories, challenges, ideas, opportunities, and projects. The page related to the creation of the idea shows the team how many ideas are being generated and what kind of interactions are happening around them during a specific period.

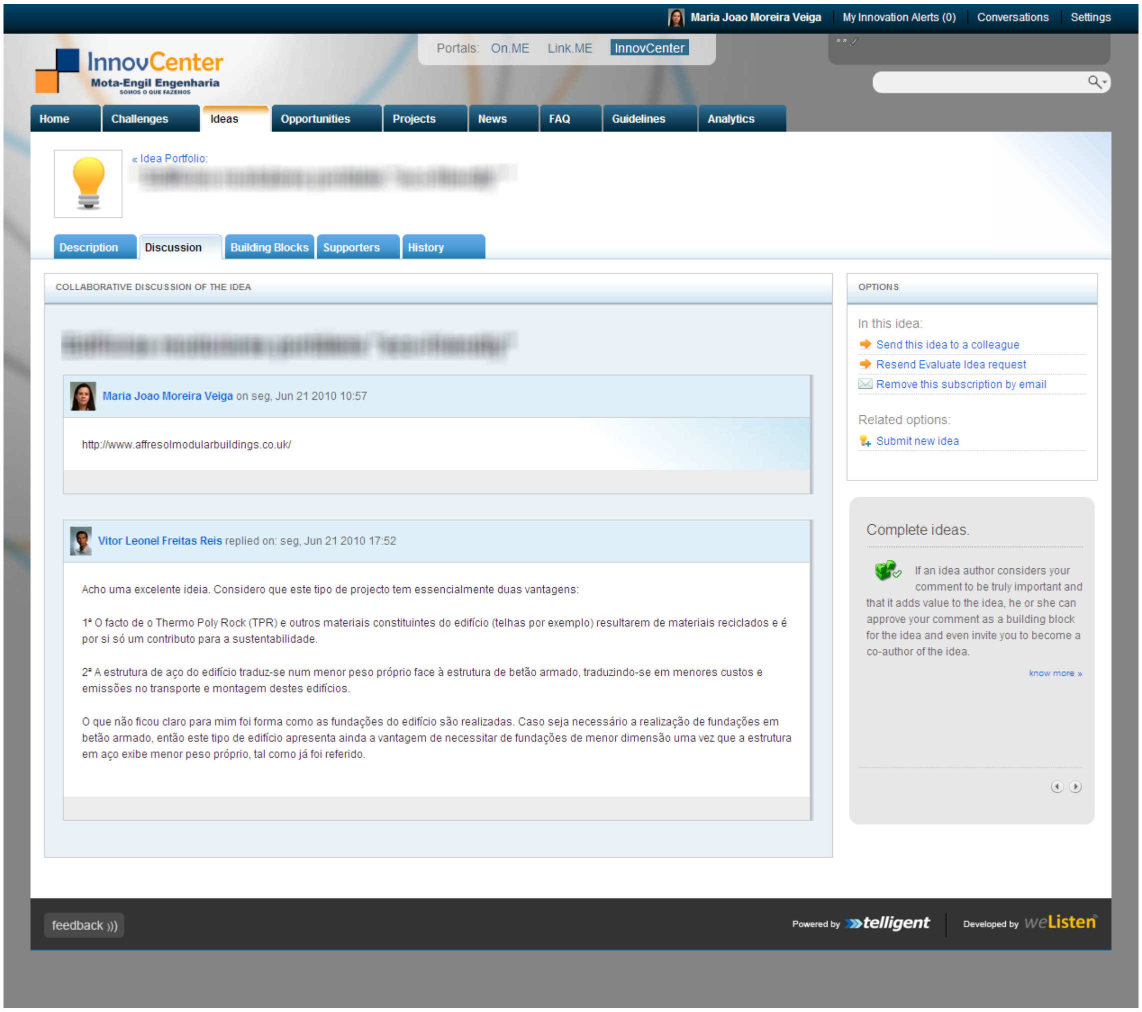
The team analyzes key indicators to find out more about what's happening with the idea. These might include: How many ideas are collective (have co-authors)? How many ideas are anonymous? How many ideas are private? How many interactions have been happening around the idea?

By analyzing these indicators, team members can keep a close watch on the health of the company's innovation cycle.

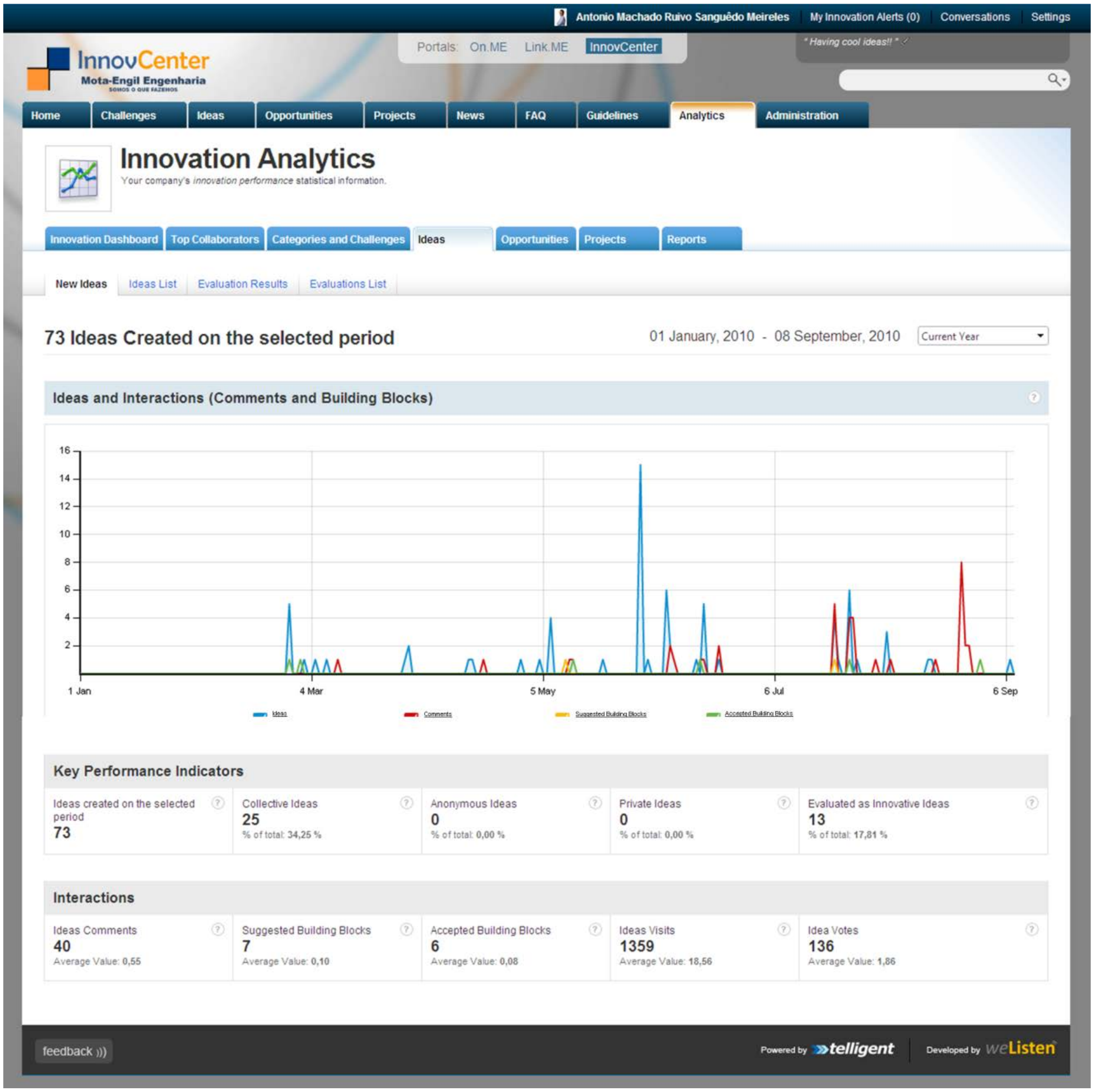
The screens below show different aspects of the idea interface.



Pictured: The *Description* tab displays the general information about the idea. This includes details such as description, benefits, problems solved, target, the authors (main author and co-authors), the number of user interactions (votes, visits, comments, supporters), and the number of days left to discuss the idea (until it is submitted automatically for evaluation).



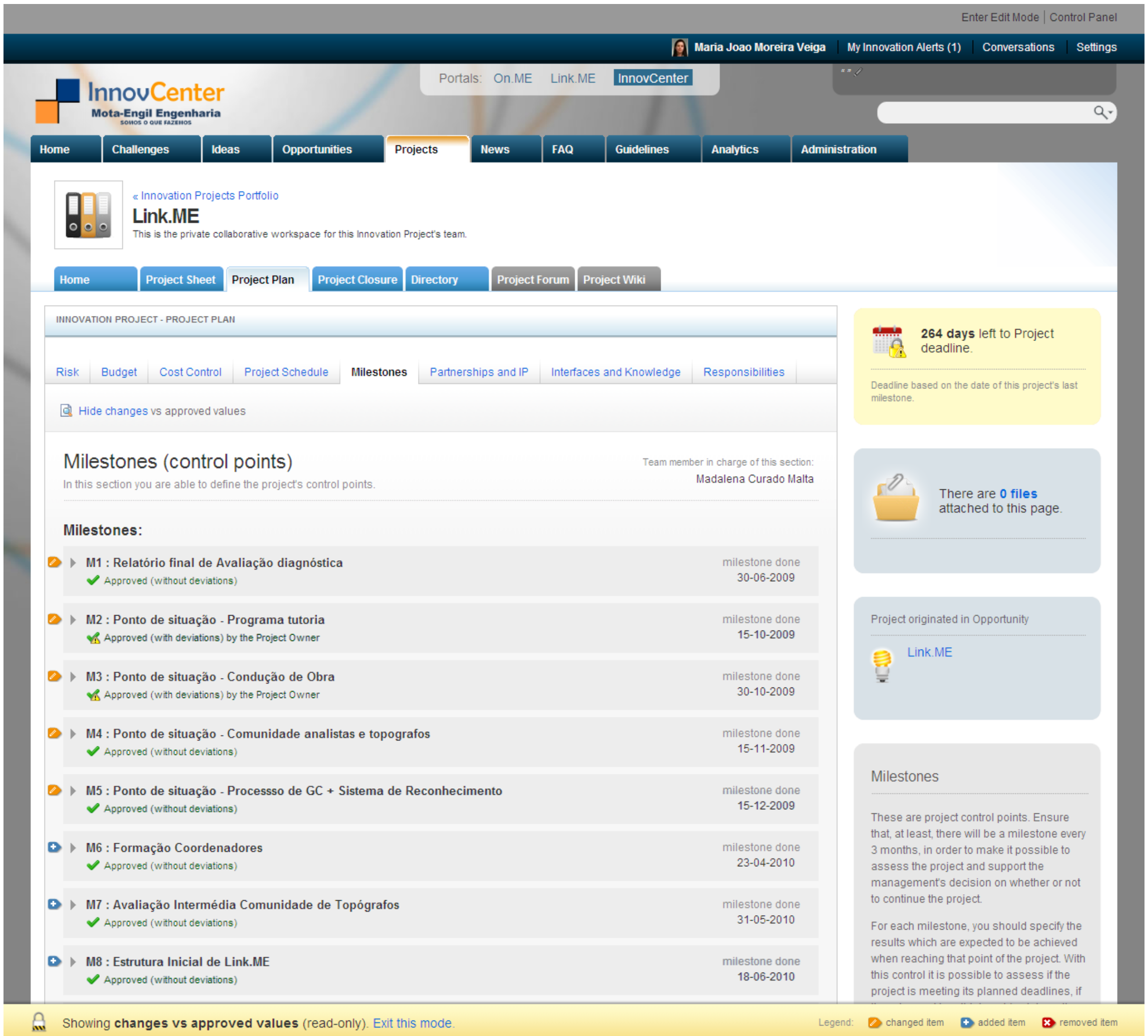
Pictured: This screen shows where the community discusses an idea, with the goal of improving and completing it.



Pictured: An *Analytics* dashboard that lets Innovation team members monitor idea creation. They use this feature to find out how many ideas are coming in and what kind of interactions are happening around them during a specific time period.

- **Encouraging Participation.** Because the platform is collaboration-based, it is important that all users feel comfortable participating freely in adding and changing information. The system gives users plenty of visual feedback along the way to help them feel comfortable with their actions.

  Team members can track those changes and see the evolution of a field as users change and amend it. Team members can also view all changes made to any field and compare them with the values that were approved when the opportunity was evaluated, therefore avoiding any data loss.



Pictured: If users want to see the changes of a given value and compare it to the approved values, they simply click the *Show changes vs. approved values* link. This will toggle the *showing changes* mode, displaying small icons beside each value, indicating if it was added, changed, or removed since the approved values. To ensure that users are aware that they're in this mode, a horizontal yellow bar is shown at the bottom of the screen with a legend for each icon (changed, added, removed item). This is meant to warn users that they're in a read-only, show-changes mode. If users click one of the change-tracking icons besides a value, the change log for that value is shown, with the time, date, author, and content of that change.

- ***Project Closure*: Outcome and Impact Analysis.** The *Project Closure* page is available throughout the project, so team members can track their efforts. This is intended to provide an iterative snapshot of lessons learned and track results and impacts. This information gives team members a collective notion of how well the project is going and gives them answers to questions such as *Is our project on time? Are we over the planned budget?*

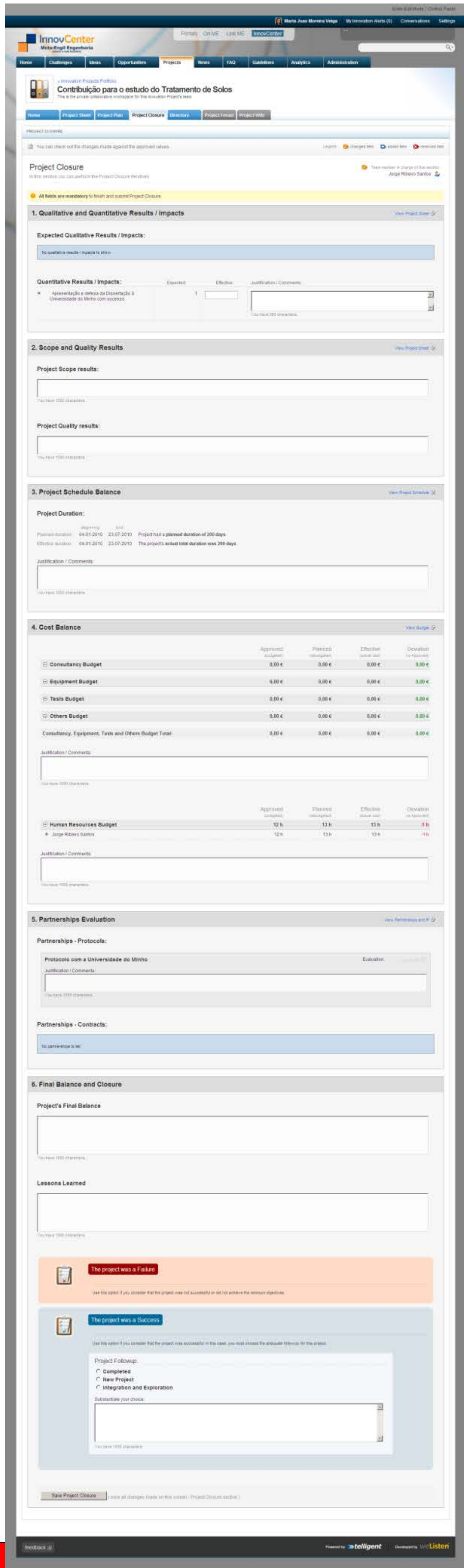
  The *Project Closure* pages show qualitative and quantitative indicators, partially achieved or not achieved at all (with the corresponding supporting information). And an open-text field is available where users can contribute thoughts on the results.

In the *Project Schedule Balance* area of the page, the planned start date, end date, and duration are shown and automatically compared with the actual values (based on the project scheduling and task management). As the screen below shows, and deviations are shown in red.

An important part of *Project Closure* is the *Cost Balance*, which compares all costs in various columns: approved (when the opportunity was approved and a project was created), planned (any budget changes that occurred during the project), and effective (the actual costs). A fourth column shows the delta between what was actually spent and what had been budgeted. The *Cost Balance* area shows all planned and new costs, including entries that had been approved but were later removed from the budget, providing both the team and the company a clear financial view of the project.

Another section of this page allows the team to rate (from 1–5) the value added by the partnerships (protocols and contracts). And finally, the page also shows project balance and lessons learned.

Before a team can actually perform project closure, many project rules must be respected (for example, all project milestones must have a validation result). As on the *Opportunity Evaluation* page, when users enter this page, they see a red area that shows anything that's missing. All warnings have "take me there" links to take users to the place where they can correct the warnings.


InnovCenter
Contribuição para o estudo do Tratamento de Solos
Project Closure
1. Qualitative and Quantitative Results / Impacts
Expected Qualitative Results / Impacts:
Quantitative Results / Impacts:
2. Scope and Quality Results
Project Scope results:
Project Quality results:
3. Project Schedule Balance
Project Duration:
Justification / Comments
4. Cost Balance
Consultancy Budget
Equipment Budget
Tests Budget
Others Budget
Consultancy, Equipment, Tests and Others Budget Total:
Justification / Comments
Human Resources Budget
Jorge Ribeiro Santos
Justification / Comments
5. Partnerships Evaluation
Partnerships - Protocols:
Protocolo com a Universidade do Minho
Justification / Comments
Partnerships - Contracts:
6. Final Balance and Closure
Project's Final Balance
Lessons Learned
The project was a Failure
The project was a Success
Project Followup:
Completed
New Project
Integration and Exploration
Substantiate your choice
Save Project Closure
telligent

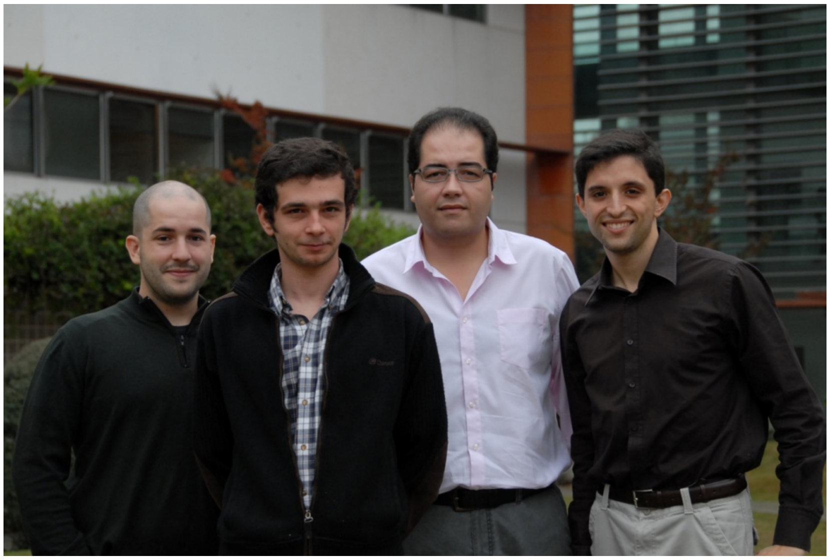
Pictured: The *Project Workspace/Project Closure* page. The screen is divided into several containers, organized contextually (qualitative and quantitative results; scope and quality results; project schedule balance; and so on). Each container has a link to take the user directly to the corresponding project page or section. For example, the *Cost Balance* container has a link to the budget section of the workspace.

TIMELINE

INTRANET TIMELINE	
Milestone Date	**Milestone Description**
March 2008	First intranet
November 2009	Proof of concept released during development phase
August 2009—March 2010	Redesign
May 2010	New intranet launched
May 2010	Presentation of new intranet to individual departments
September 2010	Launch of new report features

INTRANET TEAM

Pictured: Mota-Engil team members: (left to right) Rui Campos, Ines Barbosa, Antonio Meireles, Maria João Veiga, Rui Rocha, and João Ribeiro Pinto.



Pictured: WeListen team members: (left to right) Bruno Lopes, Ricardo Lapão, Carlos Mendes, and Leonardo Varella-Cid

GOVERNANCE

Ownership

InnovCenter is the responsibility of Mota-Engil Engenharia's Innovation Department (nINOV) which is under the Direction of Performance, Technology, and Innovation.

nINOV is responsible for innovation at Mota-Engil Engenharia, and is recognized as the group with the most knowledge to lead the process.

The company's Board of Directors sponsored the project right from the start, which Meireles says helped to coalesce and motivate more people to participate.

"The close relationship between nINOV and the company's Board of Directors fostered a strong working relationship between the two groups," he says. "The fact that the Board sent a personal letter to each user asking them to participate helped the organization understand the importance of innovation and this action was only possible due to the close relationship between nINOV and the Board."

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
InnovCenter Team	• Provides governance, program management, coaching, support, and evaluation of direct country managers • Responsible for the content and features available at the group intranet level
Innovation Local Manager	• Local managers are responsible for the intranet at their own department level, including: o Promotion o Training and support o Control of the quality of the content
Content Owners	• Responsible for their own section's updates and consistency • Can delegate some updates and changes to other members of the team/department

USERS

The platform is being rolled out to users across the company in a slow, thoughtful manner, one group at a time. The team says it would rather do it right, than do it in a hurry.

"The primary purpose of *InnovCenter* is to support our innovation management processes," says Meireles. "And this is something we're committed to get right. We know that we won't increase our company's innovation capability just by deploying a new intranet, and as such, we are getting users on board gradually."

The first groups, in Portugal, will have access to core functional areas including technical areas and job sites. Later, users across the organization, globally, will be invited to participate.

Seventy percent of the users are engineers, including technicians and directors. All the Board members have access and can visualize information on all projects. The other 30 percent of users includes all other technical functions, some executed by people who have never had previous contact with a computer (such as laboratory and field technicians).

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	http://innovcenter.mota-engil.pt
Default Status	The company has several intranet applications; the major one is ON.ME, the business intranet, which is configured by default as the homepage. *InnovCenter* may be the homepage of many users, but not all. Mota-Engil employees have control over their own workstations and thus are not forced to have company intranets as their default homepages. One of the company’s biggest challenges is to integrate all platforms in the users’ work environment and make the switch between them seamless. To achieve this, the intranet team introduced the concept of a link bar, which gives users a quick and transparent way to switch between a portal and other work.
Remote Access	Remote access is available, but the costs involved are considerable, so it is not available to all users. The remote access requires special equipment to provide a secure connection to the company. The company’s IT department is considering less expensive alternatives.

DESIGN PROCESS AND USABILITY WORK

Project Goals

InnovCenter integrates the whole Innovation Management Cycle, from the transformation of the RDI strategy into challenges (the organization’s problems, needs, and opportunities) to idea management and the materialization and management of the innovation projects. So, the goals for the *InnovCenter* were simple ideas that were complex to execute in an online environment.

“We envisioned an online place for all employees to engage in whole the innovation process, from ideas to value,” says Meireles. This meant creating a platform that would help foster the following activities:

- Challenge the whole organization, and let everyone submit ideas for innovation
- Let users vote on and discuss the ideas being brought forth
- Provide the means to leverage the best of those ideas into innovation opportunities and innovation projects
- Support the management of project execution, from start to completion, using the same single platform

“We wanted everyone enrolled in Innovation as something that’s part of the way we try to do business, which is an ambitious yet rewarding notion in itself,” he says.

“*InnovCenter* offers areas for discussing ideas, templates that support the management of innovation projects, forums, wikis, blogs, as well as notifications and advanced analytics tools,” says Meireles. “The entire tool relies on the employee’s feedback, on his/her recognition (through a points system), and on the transparency of the information.”

Deciding on an Approach

They say that admitting you have a problem is the first step to getting help. And that was the case for the Mota-Engil intranet team.

“First off,” says Meireles, “we knew our major pain-points. We were already experiencing the difficulties entailed in not having a company-wide space for innovation.”

Among the challenges they were facing were:

- Few people were engaged in the company’s innovation process
- There was no common means for company-wide conversation involving all 17 countries in which Mota-Engil operates
- There was no aggregated information on what’s happening, innovation-wise, throughout the company
- There was no means to effectively provide collaborative project management tools

“These were concerns we, at the Innovation Management department, were already aware of,” he says.

The design team conducted brainstorming sessions with many of the departments and business areas most involved in the innovation process, in a joint effort to define areas to focus on and unearth additional requirements.

A detailed product specification emerged from this aggregate feedback. Although the team tried to find an existing solution, none existed, so they decided to build their own.

“We tried to find an off-the-shelf platform that would suit our needs of managing innovation inside our company in a systemic and comprehensive way,” says Meireles. “But in the end, we decided to build our own solution. Although we weren’t able to find an ideal match, we learned a lot through this process.”

The company’s agency partner, WeListen, also proved to be a font of useful suggestions, pushing for clever functionalities and creating a great user experience.

Facing Challenges

User involvement is the key to getting any intranet initiative off the ground. This is a time-tested truth, and the Mota-Engil team found it both true and a challenge to carry out.

“It is imperative to enroll people right from the start,” says Meireles. “Listening to their needs and recurring unsolved issues. That kind of dynamic requires quite a bit of managing effort and high-level sponsoring.”

"Another difficulty we had to tackle is the ever-changing nature of software requirements — *InnovCenter* being no exception, especially because we were enthusiastically finding new improvements all the time," he says. "It required an agile approach to development and an increased attention to the importance of starting off with the right set of features."

Choosing an Agency Partner

As mentioned above, the Mota-Engil team chose to work with WeListen as a technology/consulting partner. This was in part because the agency provided the type of technical expertise required for such an ambitious project, and in part because WeListen added valuable ideas to augment the team's own ideas for the project.

"We needed to extend our technological collaboration infrastructure to meet our specific needs for innovation," says Meireles.

And, like many companies working with agencies, the Mota-Engil team found the relationship to be very successful and very collaborative throughout. WeListen's involvement in creating *InnovCenter* ranged from concept and strategy consulting to design, development, and implementation.

"Working with WeListen was a collaborative process itself. We teamed with them in defining the tools to support our innovation process," says Meireles. "Our conversation was continuous and both parties were involved throughout the whole process."

Success has come in terms of both project success for *InnovCenter* and also for taking that work and leveraging it for a larger audience outside of Mota-Engil.

Based on the success of the Mota-Engil project, WeListen has productized its joint effort and turned *InnovCenter* into a commercially available innovation platform: InnovationCast.

"We continue to partner with WeListen by providing them with our input on innovation management and being a valued customer of InnovationCast and its roadmap," says Meireles. "They were involved from the beginning and continue to partner with us in improving their software, InnovationCast, which is the productized version of what they created with us."

Gathering Requirements: In Stages

In a company that has been in business for more than 60 years and operates in 17 countries (which inevitably means different cultures), it is imperative to have a platform with a user-tested, intuitive interface. Sometimes achieving that level of usability is a process, not a destination.

"We're proud of *InnovCenter*'s user experience, but — as always — it wasn't a hole in one," says Meireles.

Until 2008, despite Mota-Engil's commitment to innovation, information was managed in a non-structured way, mainly with Word documents and Excel spreadsheets.

How innovation (and knowledge) are managed within an organization can greatly impact the way a company thinks and works. So, one of the major challenges is to support purposeful collaboration among a dispersed workforce. This wasn't new to the Mota-Engil team, but something they needed to keep reminding themselves about throughout the project.

“We must bear in mind that when we’re building something, it is not for us but instead for our users,” says Meireles.

With this in mind, in 2008, the company launched a project aimed at developing Mota-Engil’s innovation competencies and processes.

At first, this effort was aimed at supporting those processes through the use of free and open source collaboration tools, such as Ning, Wetpaint, and a previously free version of Telligent Community Server in an effort provide structure to the innovation process.

“The major point at this time was to get feedback from the users and understand how we could further support their innovation-related work,” says Meireles. “During this initiative, we’ve learned what was necessary to have in place.”

That effort results in the following list of components for the new innovation platform:

- **Challenges:** People like to be challenged and said they prefer to contribute to Mota-Engil’s innovation on a regular basis by addressing existing business problems or opportunities.
- **Ideation:** Further support collaboration throughout the Ideation phase by providing the means to collaborate on ideas.
- **Turn ideas into opportunities:** Further develop and study ideas to find out if they are truly innovation opportunities.
- **Recognize and reward:** Recognize and reward user engagement in innovation.

Through this requirements-gathering phase, the team also learned that they should take an integrated approach to innovation management. During some sessions and interviews, users mentioned two “problems.” The first was related to the use of several platforms: users had to enter the same information multiple times. Second, people didn’t seem to know what happened to their ideas.

“We didn’t have an integrated view of Mota-Engil’s innovation funnel,” says Meireles.

“We don’t develop platforms for ourselves but for our users,” he says. “By involving them in this initiative, and with the proof-of-concept approach, we started our innovation journey’s next step: building *InnovCenter*.”

Iterative Design: Keeping the Users Involved

User involvement continued throughout the project. And that involvement had a big impact on the direction of everything from the design to the rollout.

“Once we began the *InnovCenter* project, our initial layouts were quite different, both visually and functionally,” says Meireles. “The related actions menu was on the left side and the color scheme was different.”

After some beta testing, they found it was important to users that the portal’s colors matched the corporate identity. This reinforced the importance of innovation for Mota-Engil. Also, they moved each screen’s actions area to the right side, leaving the larger, main area on the left and center, which was a more intuitive design choice for left-to-right readers (their target).

The team found that beta testing proved to be one of the most effective tools in their project toolbox. The beta group represented the larger cultural preferences of the platform's target audience, and they were able to make changes from what they learned.

Providing a Mechanism for Feedback

A feedback link on every page provides users an opportunity to provide suggestions to the intranet team. But the objective is twofold.

"We want to facilitate communication with our users," says Meireles. "They can provide suggestions or even just let us know about something that they really like in our intranet."

But the link also provides an easy way for users to report any difficulty or errors.

Using Enterprise 2.0 for Innovation

Another aspect of keeping users involved is to give them tools that let them actively participate in the platform. And nothing does that as well as the popular Web 2.0 tools widely available on the Web.

Mota-Engil uses some of these tools in an enterprise context to encourage connectivity within the organization. These tools are employed in an effort to reduce the noise and improve the signal.

"As you'd imagine, in a company with more than 9,000 employees, information overflow can become a showstopper," says Meireles, adding that users can select a list of friends and filter the information they see in the microblogging tool (described below) accordingly. "And the team uses a wiki to showcase and build on its innovation process."

The site's guidelines section is a wiki that describes the company's innovation process. Using such a participatory tool was a deliberate decision.

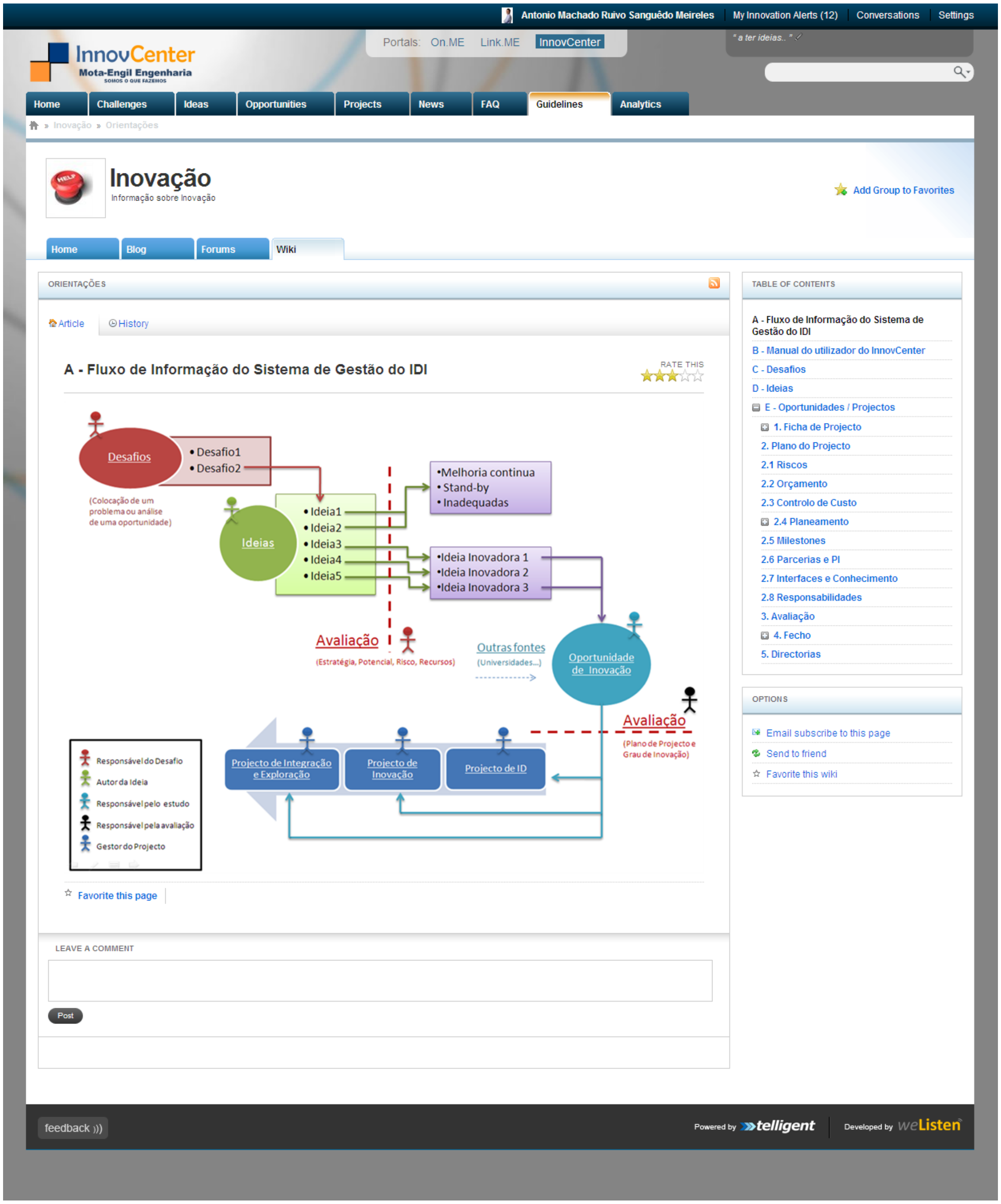
"One of our main aims is to ensure that our innovation management process is transparent and well understood by our company's collaborators," says Meireles. "It is constituted by different sections, where the different concepts that compose our innovation process are explained (such as challenges, ideas, opportunities, projects, etc.)."

It also doubles as a valuable tool that can be used in training or other sessions about the innovation process.

Users can rate or bookmark any page in the guidelines wiki, as well as comment on any page if they have doubts or suggestions. This feedback mechanism is critical to the process: the suggestions are heard. The innovation management department subscribes to all content and helps to keep the conversations going. And it provides a platform to build institutional memory.

"Moreover, since it is a wiki," says Meireles, "it enables us to keep the changes to our innovation management process through time working as our company's memory about such process."

Beyond the wiki, the site also features a microblogging tool that users can access from any page (on the screen's right-hand side). The comments generated through this tool can be seen in the *Activity Stream* by anyone using the platform.



Pictured: This screen shows the *InnovCenter*'s guidelines section. A wiki is used to house this content, which describes the company's innovation process.

CONTENT AND CONTENT CONTRIBUTORS

Measuring Contributions by Ideas Rather than Users

Because the content generated in the *InnovCenter* is not traditional intranet content, but rather part of a process, content management is measured more by contributions and community activity rather than by numbers of users.

That said, so far, approximately eight directors and 500 employees have contributed content to the platform. But, more importantly, these users have generated more than 70 ideas in just the first months of the platform's launch. Of those 70 ideas, nearly 44 of them have evolved through the process to become *Innovation Opportunities* (the maturation phase of the process). Of those, 37 have spawned innovation projects that to date are either in progress or have concluded.

Anyone can contribute to the platform and is a potential user, but as mentioned earlier, the team is purposely rolling out access in controlled waves to ensure support in integrating the tool into each successive team’s process.

Content is not moderated per se. The Innovation team is responsible for all activity that takes place on the platform, and they weed out bad behavior if and when it emerges.

On-Boarding with Purpose

Users are given guidelines with general information about how to use the intranet and templates.

But more important than these guidelines is the way the Innovation team introduces users to the platform. Their goal is to make innovation an integral part of each user’s work.

“We’ve been promoting some creativity sessions where people can discuss ideas and challenges,” says Meireles. “Then we invite them to submit such ideas and challenges onto the platform. In doing so, we want to make sure that they have a streamlined experience in their first contact with the platform.”

Feedback is important when users are contributing to the platform, and the team takes great care to provide that feedback at pivotal points in their experience.

“Since the beginning, we knew that feedback was a very critical point,” says Meireles. “If you want someone to contribute, you need to give them feedback about their actions.”

By acknowledging this, one of the requirements for the development of *InnovCenter* was that the platform would have to automatically generate emails in critical points of the flow. With those emails, everyone has feedback about the evaluation of their actions, and more important, they know who made the evaluation.

It was critical for the team to launch with a site filled with relevant content; so, prior to site launch, the Innovation department seeded the initial site content.

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	• Virtualized Server: Windows Server 2003 R2 Standard Edition SP2 Intel Xeon CPU X5355 @ 2.66Ghz 1 GB RAM
Bug Tracking/Quality Assurance	• PivotalTracker
Design Tools	• Adobe Photoshop • Adobe Illustrator • Paper and pencil • Whiteboard
Site Building Tools	• Microsoft Visual Studio 2008 • Microsoft SQL Server Management Studio
Content Management Tools	• Telligent Evolution Platform, Enterprise Version
Search	• Solr

SEARCH

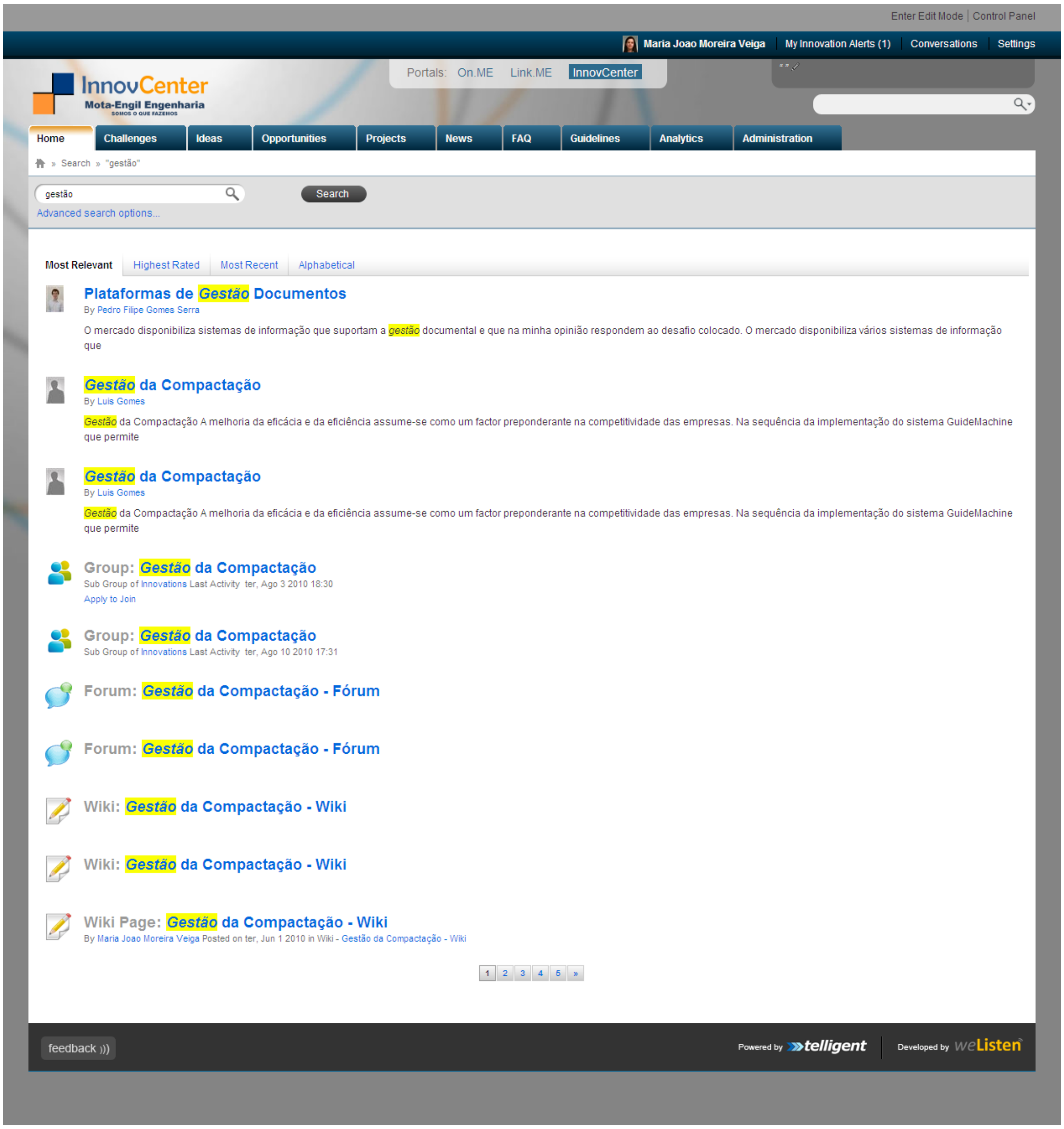
InnovCenter was built on Telligent Enterprise content management system, which uses Solr as its search tool, therefore that is the search tool in place on the platform. It is used out-of-the-box and integrated with the platform's major components, including communities, people, forums, wikis, blogs, files, and pages.

The site-wide search lets users look for challenges, ideas, innovation opportunities, and innovation projects, or some combination of those (such as ideas posted by a specific user). And the search is used to warn people submitting new ideas if there are similar ideas that already exist.

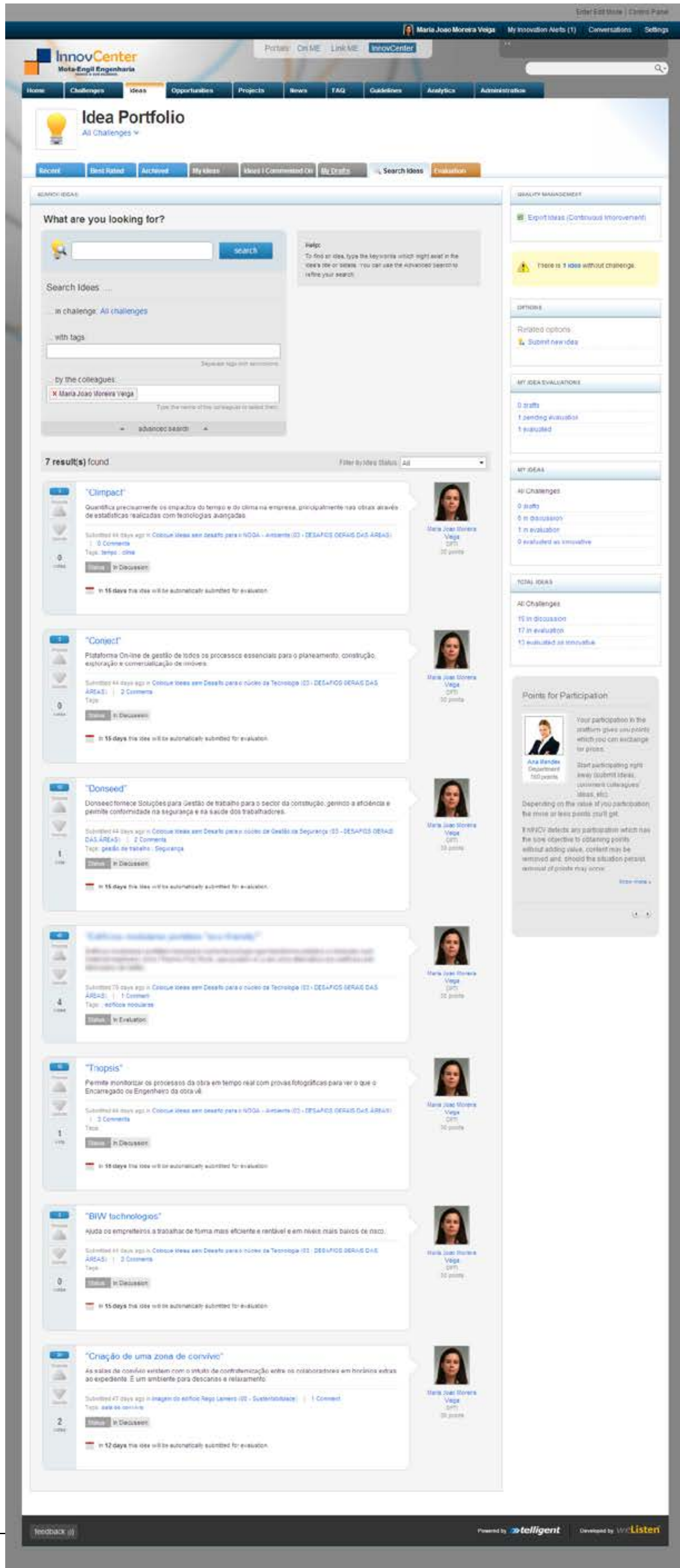
"Using our comprehensive search, when the user is submitting a new idea, we match the entered text against existing ideas and show ideas whose similarity is over a certain threshold," says Meireles. "In that case, the submitting user is invited to reconsider their submission and instead take a look at those similar ideas, possibly submitting a *Building Block* that might further improve them."

In the future, the team intends to perform data mining using the search infrastructure. Competency management systems used in organizations are usually static, because users select a few areas where they have experience. The Mota-Engil team plans to mine participation data, linking users to specific areas as they work on different challenges, ideas, opportunities, and projects.

"We are still designing this new feature, but the general goal will be to find some trends that allow us to figure out what is the most important for our users and which functionalities they use more," says Meireles.



Pictured: The Innovation team maps information about innovation projects to the company's hierarchical structure. Each innovation project crosses several organizational boundaries and involves different divisions and/or different business or functional areas.


InnovCenter
Mota-Engil Engenharia
Home
Challenges
Ideas
Opportunities
Projects
News
FAQ
Guidelines
Analytics
Administration
Idea Portfolio
All Challenges
Recent
Best Rated
Archived
My Ideas
Ideas I Commented On
My Drafts
Search Ideas
Evaluation
What are you looking for?
search
Search Ideas ...
... in challenge: All challenges
... with tags
... by the colleagues:
advanced search
7 result(s) found
"Climpact"
"Conect"
"Donseed"
"Tnopsis"
"BIW technologies"
"Criação de uma zona de convívio"
Points for Participation
feedback
telligent
WeListen

Pictured: The dedicated *Idea Search* is an advanced search that is specifically for *Ideas*. Users can perform full-text searches and filter by challenges, tags, authors, and idea status.

RESULTS AND ROI

Success Depends on How You Define It

Measuring the success of a platform such as *InnovCenter* is tricky — trickier even than measuring most other intranet projects (which are notoriously hard to measure). At least on an intranet, a company can often measure increased usage or user satisfaction as primary drivers. Mota-Engil had to dig a little deeper to make a use case for the platform's success.

Meireles explains one approach they took to gauge the impact of *InnovCenter*: "In our company, there have always been projects under all the directors. The problem was that each director was only aware of the projects that were developed within his own department."

A similar thing was happening to ideas: *To whom should I send my idea and get feedback about it?*

"This was a common question," he says, "with no simple answer in the organization."

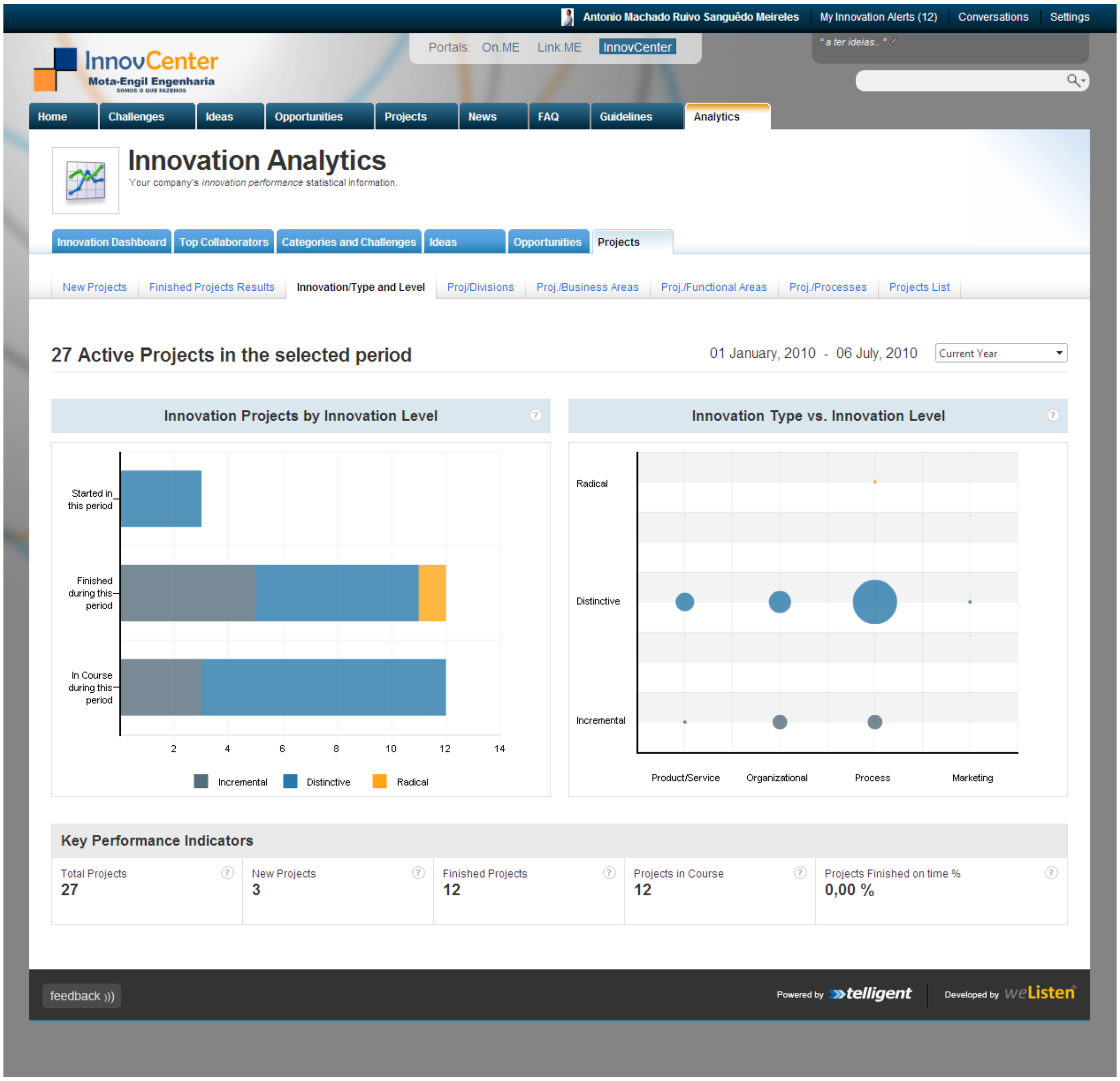
With *InnovCenter*, every director can now see all the projects that are being studied and developed across the organization, and specifically have an area that highlights all the ideas that have been generated.

"We are looking for innovative ideas," says Meireles, "but you will only know it is innovative if you submit it and wait for evaluation."

So, one of the biggest success measures in this context is to measure the quantity of ideas generated, even in the first few month the platform has been live. But another, more critical way to measure success is by evaluating how willing each department is to use *InnovCenter* as a tool to manage their ongoing projects and even to manage ideas that are merely being studied. And, while the tool is still in its infancy (only available since May 2010), all roads point to success on both of these counts.

Although the number of ideas are on the increase, the biggest positive result the team can point to is that now they have the ability to compile all the information on all the projects in one place. It's therefore possible to know, in real time, which projects are delayed or even find out how much money they've spent on them.

The ability to generate that kind of snapshot is a big win.



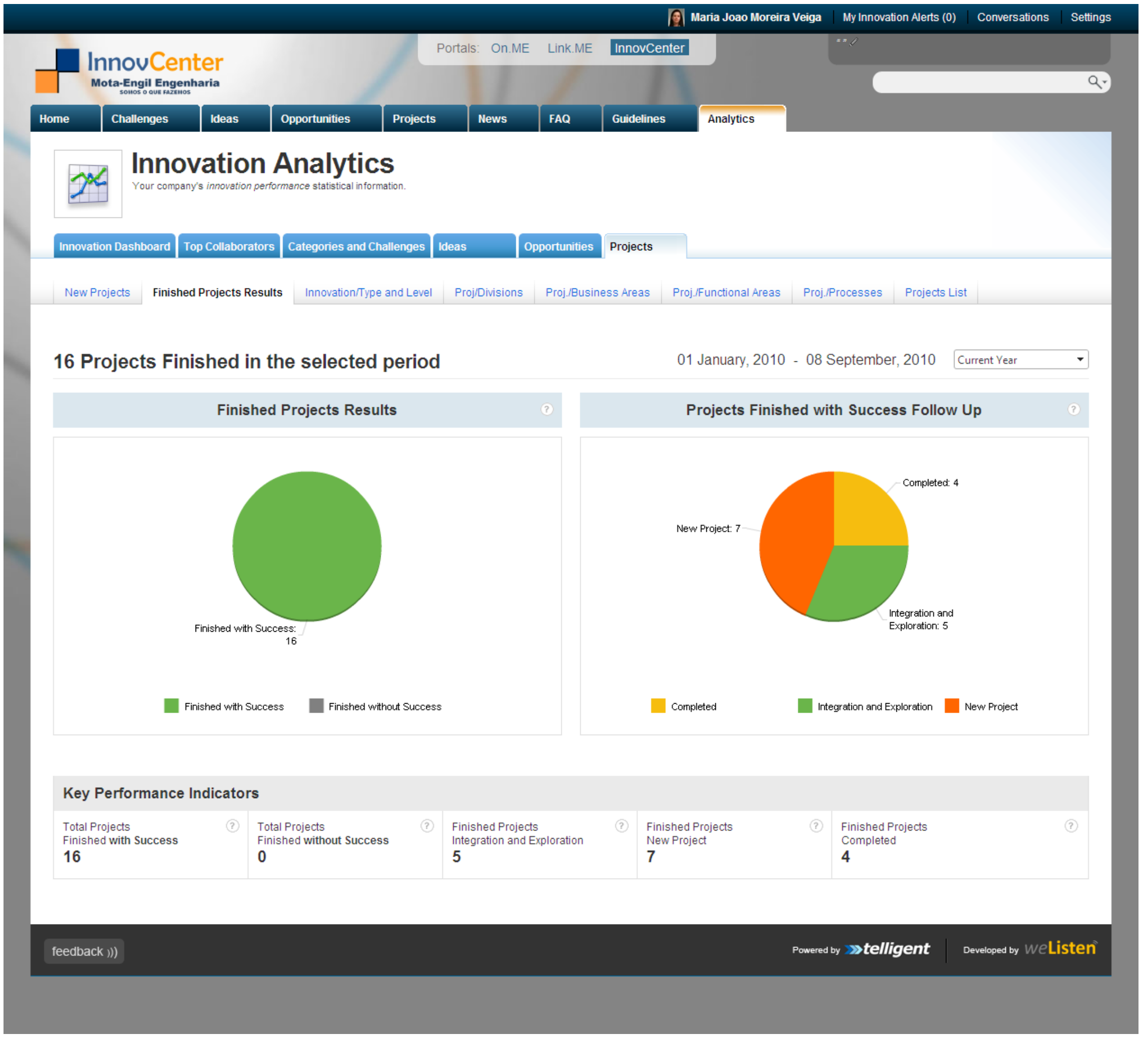
Pictured: Because *InnovCenter* has been available only since May 2010, it's premature to quantify its impact on company revenues. Thus, the team currently defines success in terms of usage: number of submitted ideas; number of innovative ideas; number of innovation opportunities; number of innovation projects. This screen shows some of these measures just a few months after launch.

Success by the Numbers

The team has generated a few hard numbers relating to site usage to date. And, so far, these numbers point to a huge increase in each aspect of the innovation funnel. To date, the site has generated:

- 39 Challenges
- 72 Ideas (77 percent more than last year)
- 44 Opportunities
- 38 Projects (60 percent more than last year)

- 1,345 Idea Visits



Pictured: The results of the completed innovation projects. This screen shows how many projects were finished successfully or otherwise. And, with this information, the team can gauge what will happen to each of the successful projects. Their results can be integrated in the organization or even originate a new project.

LESSONS LEARNED

A few things the Mota-Engil team learned along the way:

- **Choose well your development partner.** "It is important that they are familiar with the business context of the platform. This will bring other perspectives to the initial requirements. Make sure that you always involve the organization and choose a partner that is also interested in the project — and everything has a good probability of running well."
- **Involve users in design.** "Involve users across the company in stages of the design process. If the users are engaged in creating the layout, in the end the users will feel comfortable using it every day."

- **Collaboration is key.** "The collaboration process that took place throughout development made it so that, in the end, the product that we achieved was much better than the one that we had designed and specified."

MAN Diesel & Turbo SE

Using the intranet:

MAN Diesel & Turbo SE is the world's leading provider of large-bore diesel engines and turbomachinery for marine and stationary applications. The company designs two-stroke and four-stroke engines, manufactured by the company itself and its licensees. MAN Diesel & Turbo also designs and manufactures gas turbines, steam turbines, and compressors. The company's product family includes turbochargers, Controllable Pitch propellers, gas engines, and chemical reactors. MAN Diesel & Turbo's range of goods includes complete marine propulsion systems, turbomachinery units for the oil and gas, and process industries and turnkey power plants. Customers receive worldwide after-sales services marketed under the MAN PrimeServ brand. With its four strategic business units—Engine & Marine Systems, Turbomachinery, Power Plants and After Sales—MAN Diesel & Turbo is one of the world's leading suppliers in its various fields.

Headquarters:

Augsburg, Germany

Number of employees the intranet supports:

13,768 (approximately 7,000 with personal login)

Company locations:

The company operates in 43 countries, including Brazil, China, Denmark, France, Germany, India, Russia, Singapore, South Africa, South Korea, Switzerland, UK, and US.

Locations where people use the intranet:

All locations worldwide have access to the intranet. The majority have access via their network login and other smaller offices via VPN. The goal is to eventually have all 113 worldwide organization offices added to the MAN Diesel & Turbo domain, giving them full network access via network login.

Annual sales:

Group-wide annual sales in 2010 was €3.8bn.

Project team:

In-house, 17 people formed the core project team, working across 12 departments.

In total, the worldwide project organization consisted of a steering committee with the project owner and three business unit and group function managers, a project manager and an assistant, a business resource group consisting of 14 major intranet contributors, an IT resource group consisting of 10 IT Experts, and a reference group consisting of more than 50 Business matter experts.

NNIT: Assisted with the business analysis, IA design, usability, web design, and organizational change management.

ProActive: Assisted in the back-end development of the collaboration and *WikiWorld* areas, and with the migration strategy.

Enabling: Assisted with the hands-on support and migration.

Peoplenet: Assisted with training-material development and hands-on classroom training.

Members:

In-house: Joseph Purse, Head of Online Communications; Peter Stern, Senior IT Project Manager; Kristina Helms, Project Manager; Hanne Maretti, Online Communications Specialist; Christiane Kröhling, Manager Online Communications; Anders Kryger, Manager Internal Communications; Andrzej Huryn, System Specialist; Niels Petträus Garde, System Developer; Stephan Spangenberg, Software Developer; Ludwig Fischer, System Developer; Reinold Növermann, Knowledge Manager; Thomas Alders, Senior Solution Consultant; Stinne Bech Johansen, HR Consultant; Michael Hirschvogel, Head of Contract Management; Alexander Baumgärtner, Compliance Manager, Power Plants; Frankie Paul Cook, Process Manager; and Connie Spangenberg, Group Marketing SharePoint Coordinator

SUMMARY

The intranet at MAN Diesel & Turbo SE is named *Atlas* after the Greek mythological Titan who holds the world on his shoulders. It's a fitting name: the intranet is a critical tool, and this one supports the goal of emphasizing global thinking across departments and cultures in a company of more than 13,000 employees. But this intranet has a duel personality—the second being that of an angel who helps employees access all those little details they need to know, but often can't easily recall on their own. The power of Atlas is visualized in this short movie, created for the project's initial introduction: http://www.youtube.com/watch?v=PN1IyDvyA2o

The intranet's logo features dual circles around the word *atlas*. These circles are meant to be reminiscent of binoculars watching the activities at the organization, almost as if the intranet follows users around with those binoculars and a pad of paper—tracking, reminding, and helping them as needed.

Pictured: The circles in the MAN Diesel & Turbo SE intranet logo are reminiscent of binoculars, watching how the organization operates. The intranet is named after Atlas, a Greek Titan who carried the world on his shoulders.

The homepage is a portal into an array of areas that are important to individual users. The page looks simple and inviting, and is easy to scan as sections and their titles are easy to locate. And the content is targeted to users based on their role at login.

A few important news items take a prominent place in a carousel in the homepage's upper left area. These rotating items are typically text with images or videos, giving employees variety in media and communicating the news in the best possible format. The text for each item appears below the image or video, and includes a headline and a short description. This is more helpful than just offering a few words or a cryptic image (which we often see in carousel options). Once selected, the text color of the selected item changes from white to blue. A few more top news items are listed to the right of the carousel, with a short summary and the posting date. Rather than cluttering up the page with an additional link—such as *Read the article* or *More*—the headlines themselves are links. This is also helpful for people who scan for links and for people who use screen reader software (for accessibility).

Both the site search and the people search are in prominent positions on the homepage; both searches appear consistently in the upper right of all Atlas pages.

Travelling down the page a bit, we see some of the more important tools that many people at the organization want and need, including the *View Content* applet, where users can choose to filter information by organization unit and location. A selection here asks the intranet to (temporarily) ignore the country and location that are specified in the user's role and changes the content presented to match that of the selection in the drop-down lists in the *View Content* applet. The content is not translated. Rather, links that are relevant only for a specific location are named in the location language. As such, the links displayed are based only on the users choice of location and department.

Using a role-based system apprises and includes everyone at the organization. And a feature like this offers flexibility that many users—who visit, work with, or manage people in other locations—need.

The *Canteen Menu* is especially important to so many people to nourish their body, as is the *Popular Links* area where people can nourish their mind with content their peers care most about.

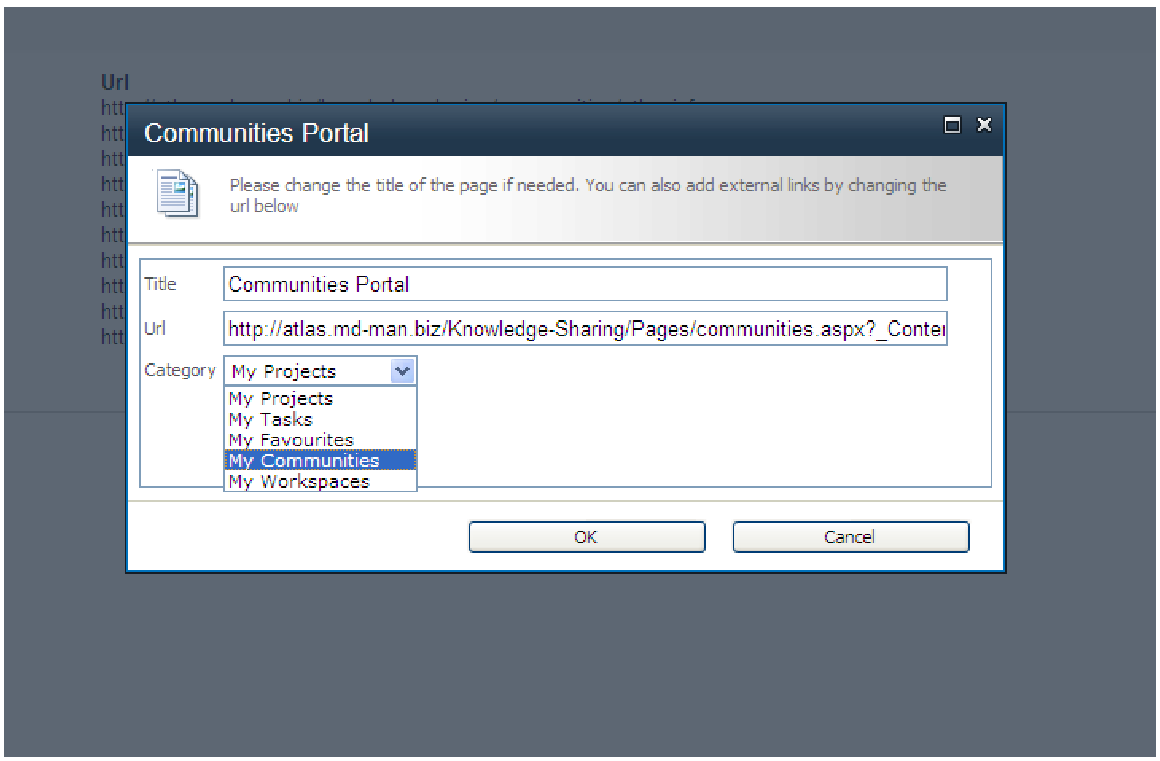
Also, the *I Need To* area displays different tasks relevant for the chosen location in random order; this means that the task displayed often changes, so the box serves as a small advertisement for various tasks.

The second row displays productivity tools to specifically assist the logged in user. *My Favorites* are, of course, chosen by the user. The *My Tasks* area lists explicit items that the user needs to succeed at his or her job.

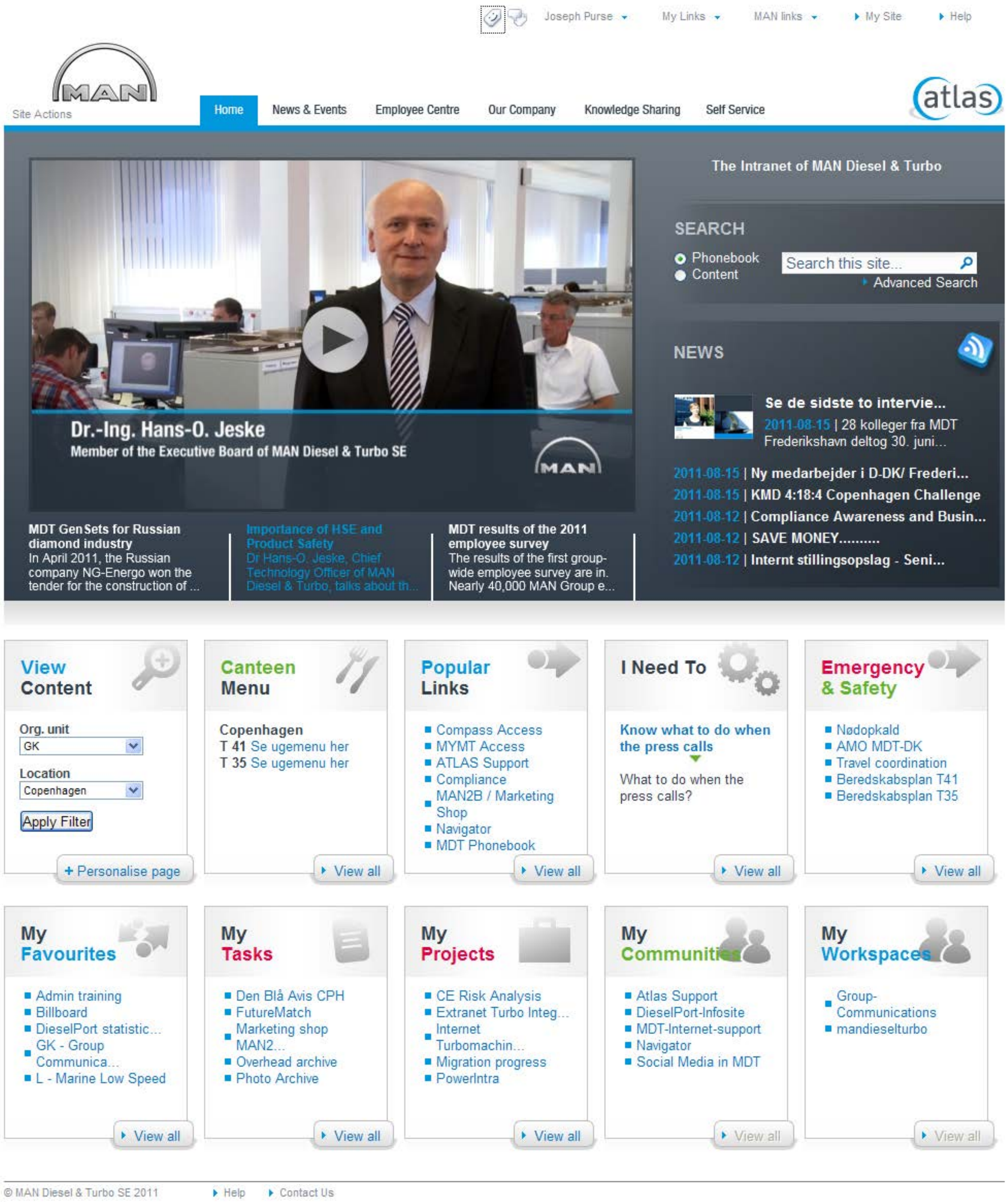
All the *My Web* sections are empty when users first log in, so users must add relevant tasks (making sure that they are, in fact, relevant).

Users have no need to hunt for project information as their projects and work groups are easily found in the *My Projects* and *My Communities* areas, respectively. Like the *My Favorites* area, these links are, by default, empty so users must initially locate the pertinent information and then create links.

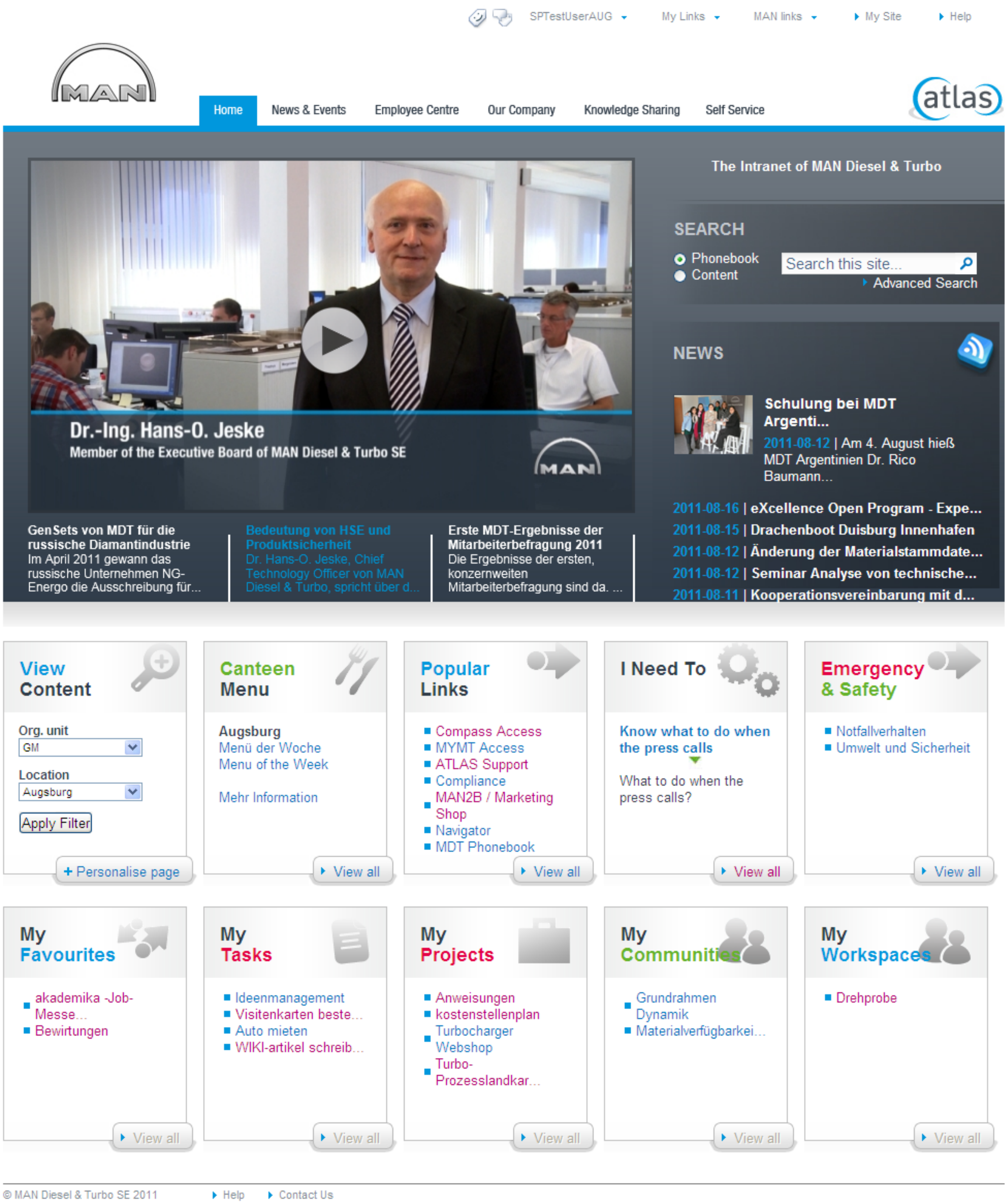
Homepage content is helpful only if users actually care about it, so it's obliging that the second row of web parts is customizable. It's also easy for users to edit links in their *My…* sections. To do so, they simply click the *My Links* link, located next to their name in the upper right corner. A light box opens, illuminating the task at hand, and offers a *Category* drop-down list with choices correlated to each of the homepage's five customizable sections. The user can edit the link URL and title here.



Pictured: A light box shows the customizable homepage sections and gives options to edit the URL and title for the links.



Pictured: The Atlas homepage offers the most recent and most important news, along with helpful links to daily productivity tools.



Pictured: The Atlas homepage when a user has selected *GM for* Group Marketing. The *View Content* web part filters based on department and location; because the user's location here is Augsburg, German links are available.

Content in the *News & Events* section is available in English, German, Danish, and French. Standard corporate content is available in English only. The individual news publishers decide—based on content guidelines and the article's expected target audience—whether to have an article translated. If so, the publisher asks a standard translation provider to translate it into the other three languages; the Online Communications Group pays for this from their budget for group news translations.

People can click an applicable country flag icon in the upper right to immediately switch to the article in a different language.

Magnus Løgstrup Nielsen | My Links | MAN links | My Site | Help

Search this site...

Phonebook | Content

Advanced Search

Site Actions

Home | News & Events | Employee Centre | Our Company | Knowledge Sharing | Self Service

atlas

- Latest News
- Events
- News Archive
- Subscribe
- Recommendation for publishing news (English)
- Empfehlung für die Veröffentlichung von Meldungen

All Site Content

Atlas > News & Events

Send to Colleague | Print

World-leading technology behind strong market share gets a boost

2011-11-08 Last week sales people from all over the world travelled to an international sales conference at the global centre of excellence for propeller solutions for large diesel engines, which is part of MAN Diesel & Turbo in Frederikshavn.

MAN Diesel & Turbo's strong market share in controllable pitch propellers (CPPs) is based on reliability and substantial savings on ship running costs, among other things. Apart from their green credentials, the propellers also reduce vibration and noise.

The firm's historical and comprehensive knowledge of ship propulsion is invaluable in the work to reduce carbon, nitrogen and sulphur emissions, helping to achieve a greener footprint. To this can be added hydrodynamic optimisation of the propeller blades, which is enough to make the engine more efficient on its own.

At the sales conference, which ran from Monday 31 October to Friday 4 November, 30 salespeople from Africa, Asia, Europe, the Middle East and the USA brought themselves and each other up to date with the latest technology and marketing opportunities.

Torben Johansen, head of the Propeller Department and host of the sales conference, said: "We're currently working all out to finish a unique design of propeller blade that bends out at the tip. This technology will further increase efficiency and be our passport to the market for fixed propellers, that is to say propellers with non-rotatable blades. 2012 will be a key year for us in this context. Which is one of the reasons for holding the conference: to bring the international sales organisation up to speed."

The international sales conference, which is going to be an annual event, underlines how MAN Diesel & Turbo Frederikshavn has gone from being a production company to working more with development and knowledge.

Watch the interviews below in which Philip Martin from MDT UK, Aleem Quraishi from MDT Middle East and Dirk Folchert from MDT Norway talk about what they got out of the conference.

Philip Martin, Sales & Business Development Manager, MDT UK

Aleem Quraishi, Regional Sales Manager Marine Engines & Propulsion Systems, MDT Middle East

Dirk Folchert, Manager, Marine Engines & Systems, MDT Norway

Comments

Post

Previous | Next

Joseph Purse 2011/11/09 13:09
Good to see that the WWO sales managers have a common angle on propeller solutions for the world market

Hanne Gibsholm Maretti 2011/11/09 13:03
This is quite inspiring!

Author WebPart

Anders Kryger Hansen

Email:
Andersk.Hansen@man...

GKI

Article Documents

No available attachments to display.

View all

Category

- World Wide Organisation
- Products
- People

View all

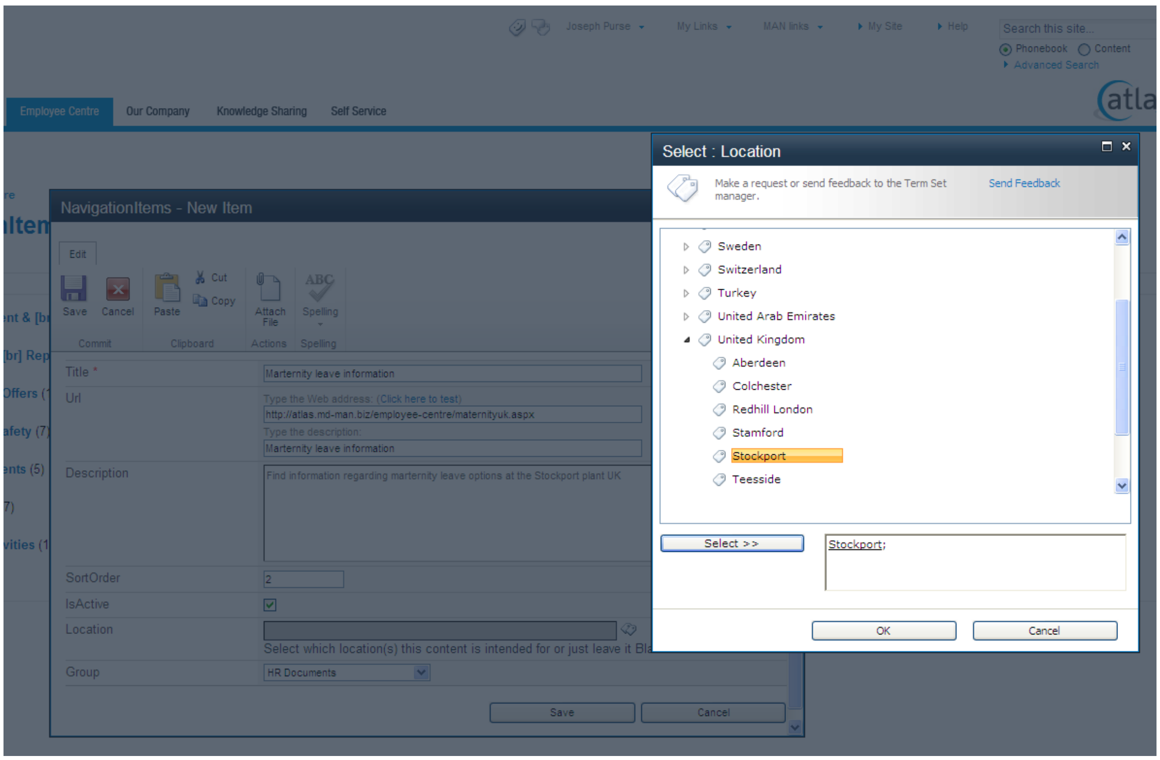
Related Links

No available links to display.

View all

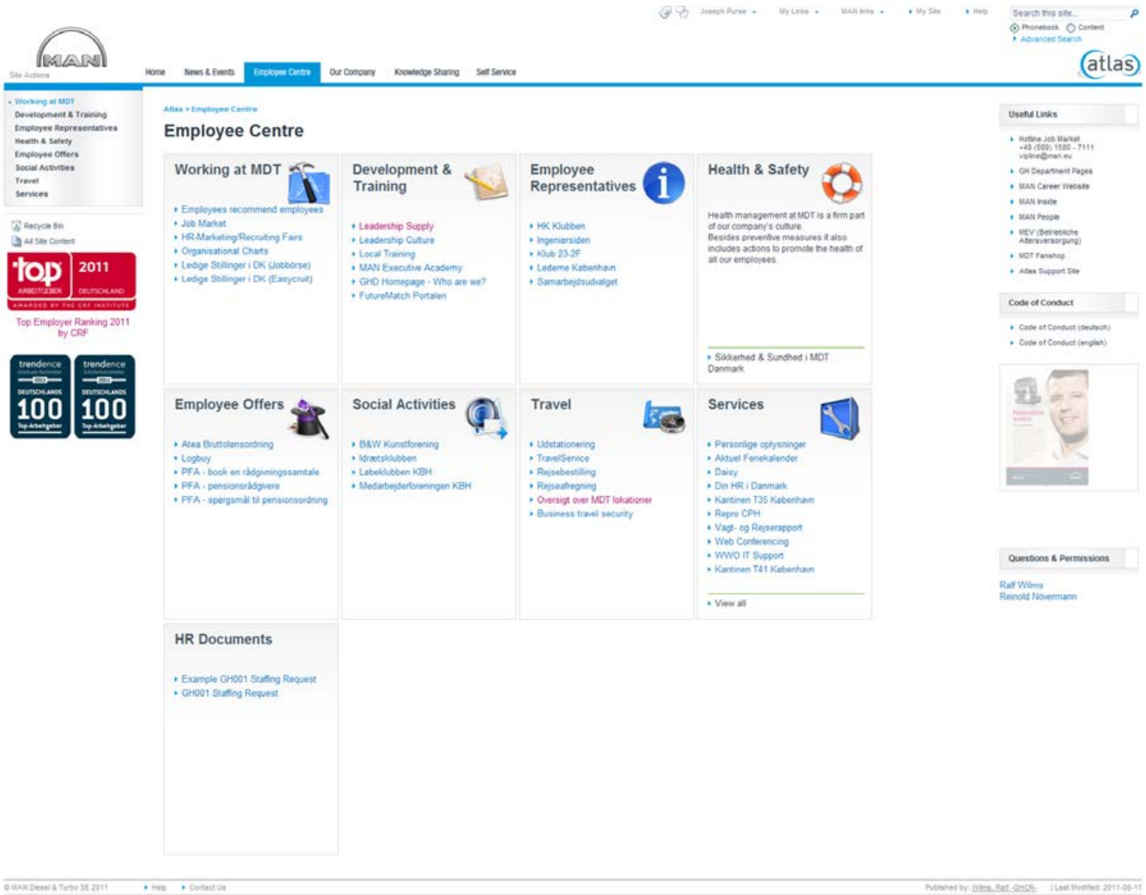
Pictured: A news item is available in English, German, and Danish. Users can change language by clicking a flag in the upper right. Publishers decide whether or not to add a comments section to any given article on a case-by-case basis.

In addition to translation decisions, content editors can also choose to target content to particular audiences, stripping away unneeded content for groups it doesn't apply to and ensuring that people who need it can see it. When posting a news item, the content manager makes various decisions about the title, order, and location. He or she can choose to leave the location field blank—making the content accessible to everyone—or choose countries and locations from a list, making the content available to those locations only. This cuts away the layers that users don't care about and feeds them exactly what they need.



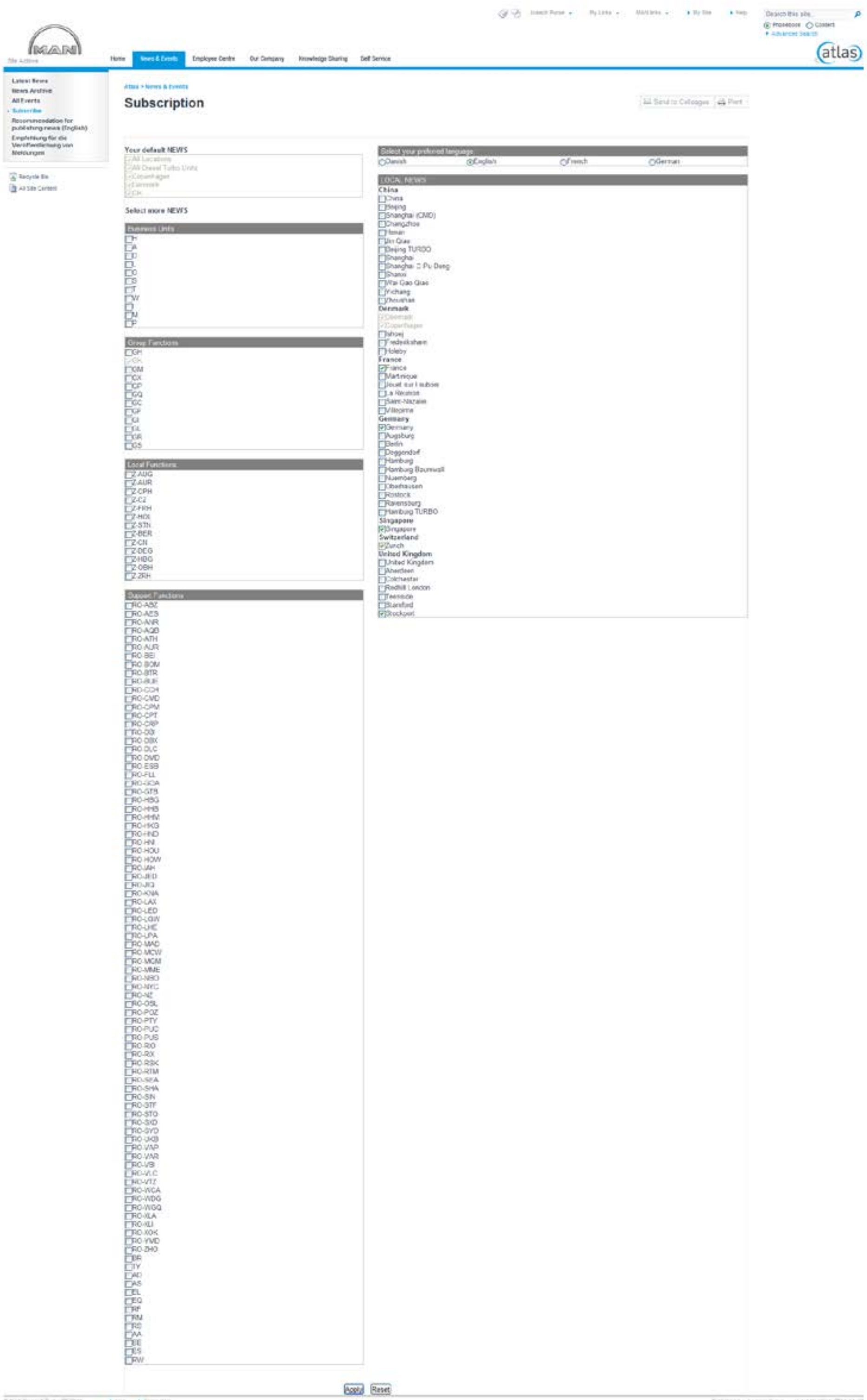
Pictured: A content editor targets a link (about maternity leave) to employees in Stockport, which ensures that only Stockport employees see this link on the *Employee Centre* page.

The *Employee Centre* page is one more place that targets content to users' particular needs, based on their location and department. Rather than asking people to search for their HR-related content, for example, their information is simply served up here. This role-based page is a one-stop-shop for services such as travel, training, health and safety, social activities, and internal job opportunities.



Pictured: The *Employee Centre* page targets content about services such as HR, travel, training, health and safety, social activities, and internal job opportunities.

On some intranets, targeting content can backfire at times if users want content but don't have access to it. This intranet team addressed that in the Atlas *News & Events* section, where employees can subscribe to news content about other teams and locations. (However, employees can't access Employee Centre information about other locations).



Pictured: Atlas lets employees subscribe to various types of news and stay abreast of current happenings.


Select your preferred language:

- Danish
- English (selected)
- French
- German

LOCAL NEWS:

China
- [ ] China
- [ ] Beijing
- [ ] Shanghai (CMD)
- [ ] Changzhou
- [ ] Henan
- [ ] Jin Qiao
- [ ] Beijing TURBO
- [ ] Shanghai
- [ ] Shanghai □ Pu Dong
- [ ] Shanxi
- [ ] Wai Gao Qiao
- [ ] Yichang
- [ ] Zhoushan

Denmark
- [x] Denmark
- [x] Copenhagen
- [ ] Ishoej
- [ ] Frederikshavn
- [ ] Holeby

France
- [x] France
- [ ] Martinique
- [ ] Jouet sur l aubois
- [ ] La Reunion
- [ ] Saint-Nazaire
- [ ] Villepinte

Germany
- [x] Germany
- [ ] Augsburg
- [ ] Berlin
- [ ] Deggendorf
- [ ] Hamburg
- [ ] Hamburg Baumwall
- [ ] Nuernberg
- [ ] Oberhausen
- [ ] Rostock
- [ ] Ravensburg
- [ ] Hamburg TURBO

Singapore
- [x] Singapore

Switzerland
- [x] Zurich

United Kingdom
- [ ] United Kingdom
- [ ] Aberdeen
- [ ] Colchester
- [ ] Redhill London
- [ ] Teesside
- [ ] Stamford
- [x] Stockport

Pictured: As a close-up of the previous screenshot shows, employees can subscribe to news for many different countries.

Enhancing People Search

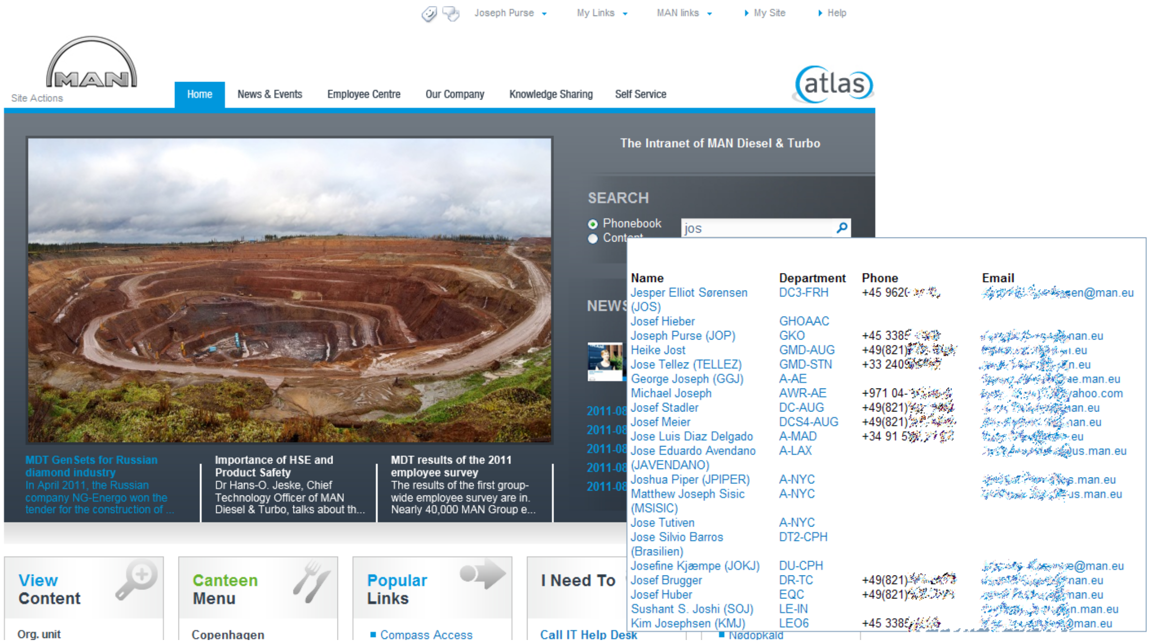
Searching for people at organizations is always a common and important task, so making the employee phone book visible, simple, accurate, and fast is essential. We have seen suggested results and suggested search options on intranets, but the MAN Diesel & Turbo SE intranet takes this to new levels of versatility and swiftness. As the user types either a name, department, phone number, or email address in the search field, the engine is working overtime—crawling and suggesting people who might fill the bill. Possible answers pop out in a window, which not only updates as the user continues to type but also accommodates basic spelling errors. The window displays the most pertinent information about the people, including name, department, telephone phone number, and email address. Given all of the data in the pop-up, users might not even need to click a link to complete the task. A typical interaction might go something like this:

- The user wants to ask a person a question.
- She knows, roughly, the name of the person she wants.
- She locates the employee search function and begins typing the name.
- A suggestion appears that seems right.
- She refers to the phone number and dials the phone.

On lesser intranets, the same interaction often goes as follows:

- The user wants to ask a person a question.
- She knows, roughly, the name of the person she wants.
- She locates the employee search function and begins typing the name.
- She finishes typing a name.
- She clicks the *Search* button.
- She waits for the SERP to load.
- She scans the results but does not see the name.
- She queries the name spelled a different way.
- She clicks the *Search* button.
- She waits for the SERP to load.
- She sees the person she believes is right on the SERP.
- She clicks the link to find the phone number.
- She finds the phone number and dials the phone.

We'd much rather experience the Atlas scenario.



Pictured: The suggested results on Atlas make it possible for users to find a person (including job title, email address, and phone number) by simply typing a few letters.

Over the years, Intranet Design Annual winners have often represented organizations that created new intranets as a result of mergers and acquisitions. The latest addition to this elite group is MAN Diesel & Turbo SE, which resulted from a merger between MAN Diesel SE and MAN Turbo AG. We believe that intranets created due to a merger are often great for several reasons, including:

- The intranet team members are assigned, and someone is in charge.
- The team is given clear goals; often, one of those goals is to represent the organization's new groups on equal footing with the old.
- There is so much to do that people who are not directly involved in the design have less time for unproductive politics.
- At least two intranets and two intranets already exist, offering usability prototypes for the new design.
- There are two teams with intranet design experience.

Intranet designers often walk a towering tightrope between leading users and giving them the flexibility they desire. MAN Diesel & Turbo SE designers have found the right balance, targeting content and tools, while still allowing employees to move past the suggestions when they need to deviate. This Atlas is triumphantly wielding a balancing bar along with his world.

BACKGROUND

Bridging the Gap after a Merger

In March 2010, MAN Diesel SE and MAN Turbo AG merged to become MAN Diesel & Turbo SE. This merger brought new challenges, including a larger, more complicated corporate structure for employees to navigate. The need for a new intranet was borne out of these challenges.

"This [merger] created a major challenge of generating a setup that could embrace a large number of diverse employee groups and work areas," says Hanne Maretti, Online Communications Specialist. "Also, next to bringing two very different company cultures together, there was a long-standing need to bridge the gap [between] the worldwide organization offices."

Understanding the Value

The importance placed on creating a worldwide information platform drove the company's investment in the intranet project.

"MAN Diesel & Turbo has invested a large amount of resources in Atlas," says Joseph Purse, Head of Online Communications. "We have invested economically, but more importantly, we have invested intellectual capital. And why? Because it makes good business sense.

"When we started with the first intranets years ago, we were aware that we needed something that could help us share the colossal amount of technical information and knowledge that had been built in the employees' minds over the last 250 years," he says. "We were also aware of the need for a common, worldwide platform with controlled access and structured information, making the relevant information available to the individual employees—without at the same time risking information overload."

This new intranet, Atlas, was launched in February 2011 with the goal of supporting integration between the two divisions as well as emphasizing global thinking across departments and the myriad cultures that exist within the company.

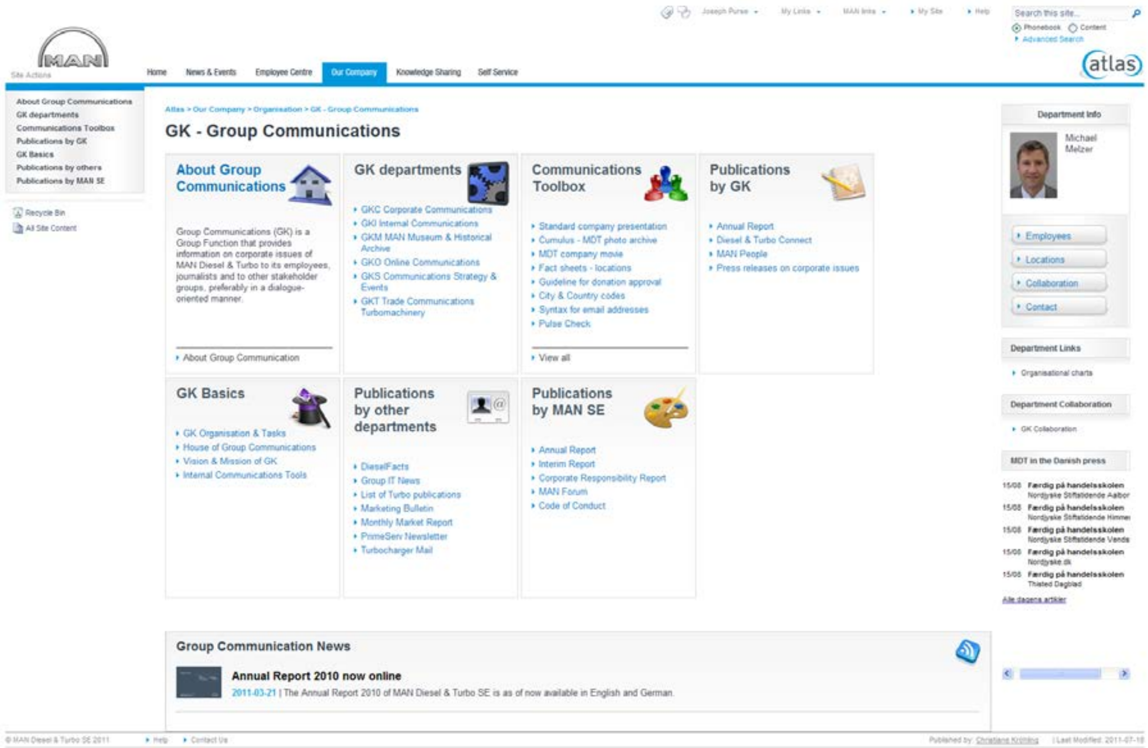
Aptly named after the "Atlas" of Greek mythology, the intranet is a common platform for the entire company, serving over 13,000 employees worldwide with features and functionality to support knowledge sharing, self-service, and personalization.

"It creates a sense of belonging by engaging the employees and offers them the opportunity to share information and communicate and collaborate globally," says Maretti.

The intranet was built to support integration and emphasize global thinking across departments and cultures within the new company. "We wanted to align governance processes and information between the two companies," says Purse, "offering a sense of belonging and ownership among the employees. On top of that, we wanted it to sustain a more global orientation and increase presentation, visibility, and integration of the worldwide organization."

The goal of the new intranet was to establish a flat, open, task-based platform. But the outcome has been greater than the sum of its parts.

"What we did not know at that time was the significant role that an intranet would have for us as a daily working environment, a global collaboration and management tool, and a standardized platform for knowledge sharing," he says.



Pictured: A department level page. Each of the organization's departments presents information about who they are and what they do, with links and content accessible to everyone across the organization. Here, links and documents are supported with links from the *Self Service* section.

Choosing a Platform

Prior to the merger, the two companies had very different intranets. MAN Diesel had "Compass," which was based on MOSS 2007, and MAN Turbo had "myMT," which was based on the CMS First Spirit. "We needed a common intranet that would support the merger of equals and become a visualization of the new common culture and identity—'one company,'" says Purse.

"We chose SharePoint 2010 as the platform because the company has a long tradition of using Microsoft products and because we were familiar with MOSS 2007," he says. "We saw the familiarity as an advantage to make employee adaptation to the new intranet easier."

The features and benefits of both existing systems informed the team's choices for the new platform.

"We liked the synergy with our extranet that runs on MOSS 2007," says Peter Stern, Senior IT Project Manager, "and since the former Compass users depended greatly on their sites in their daily work, we wanted a platform that could integrate them."

At the same time, SharePoint 2010 met the company's needs for more collaboration, knowledge sharing, and workflow options, better integration with other systems, improved performance, a better people finder, and—perhaps most importantly—an improved search function with a taxonomy and term-store functionality.

Learning from Shortcomings

Although SharePoint 2010 offered great new features, the decisions the team made about technology were informed as much by shortcomings within the existing governance and content structure as by the technology.

"We knew we needed a change in the IA to get a clearer, more transparent structure," says Purse. "On Compass, there was a rigid and complex, unmanageable department-hierarchical structure where presentation information and collaboration information was entangled and undistinguishable.

"Content was managed by tireless content editors and site owners who gave life to the intranet," he says, "but who also adapted their own structure and individual design on the different team sites—in the long run making navigation confusing due to the large amounts of information available."

On myMT, there was a strictly centralized governance and one-way communication with no collaboration possibilities. Unlike Compass, myMT had clear guidelines and authority, but its predefined content wasn't very dynamic. One of myMT's well-defined, well-established areas was an enterprise wiki, *WikiWorld*, a concept the team continued on Atlas and used as an example of a best practice.

Facing Down Challenges

Building the new intranet on the SharePoint 2010 platform brought with it great benefits, but those benefits came at a cost as the team encountered challenges with the technology and other business issues that accompany a large scale intranet project. Team members share some of their experiences:

- **IT challenges:** "SharePoint 2010 was a new platform and we were not thoroughly versed in it," says Stern. "This did not ease the process, and we thus faced a number of technical problems that we did not have any pre-existing knowledge about. MAN Diesel & Turbo was among the early movers, and we did not have sufficient knowledge about SharePoint 2010 internally and neither did our external consultants.

  "We experienced delivery problems in connection with the development as well as challenges in connection with the migration," he says. "The development of the design and functionalities proved more difficult than originally estimated, and with the delay of the prototypes and builds came delay of the remaining parts of the project."

- **Content challenges: "**The migration of the existing content on Compass and myMT caused headaches as well," says Stern. "Especially on Compass, the business had produced a lot of information that needed to be transferred to Atlas. We were not able to find a tool that could guarantee a safe migration of data, permissions, document revisions, date stamps, etc., and even though we went with the best tool that existed at the time, it had not been sufficiently developed to support the transfer. We hired external resources to assist the internal migration team; this helped marginally but because of the inadequate migration tool and need to involve business resources more than planned, the migration was delayed."

An original launch date in December 2010 was pushed two months as a result of the IT challenges. "This gave us more time to create new content, but offered other challenges," says Purse. "Since we had created a brand new, very different IA, we needed new content ready at go-live to better convey the new concept." This content was gathered from all around the business, with the expectations that the business content editors should add the new content via a clickable online prototype, thereby learning and understanding the new IA. "Because of the delay, we were not able to introduce the clickable online prototype," he says. "Instead, we had to create detailed templates in Microsoft Word with guidelines for the requested content. With these templates, we collected the new information in a central storage area and were ready with the new content by the time the live environment was up and running, and we were able to start the bulk upload. Through the use of project team resources, the information was made available just prior to launch instead of following the original plan of involving the content editors."

- **Business challenges:** The project faced two main challenges here.
    - **Merging cultures.** "The overall [project] challenge was to figure out how to go from two intranets with very different company cultures, each with 6,000-plus employees, to one intranet with around 13,000 employees," says Purse. "We wanted to make sure that everyone was heard in the process, so one of the key factors for success was the kick-off (and pre-kick-off). At these sessions, all participants, regardless of age, gender, workplace, nationality, and job function, could add their input equally."
    - **Underestimating requirements.** Like many teams working with complex and unfamiliar technology, they underestimated how the business demands would impact the project. "From the beginning, the demands from the business were underestimated, and the development of the required functionalities caused more problems than anticipated," says Purse.
- **Budget challenges:** The sum affect of these various challenges was an inevitable hit on the project budget. The problems encountered with development and migration had the cascade effect of increasing the project budget. "The original budget was exceeded, mainly because of the issues with development and migration," says Stern.

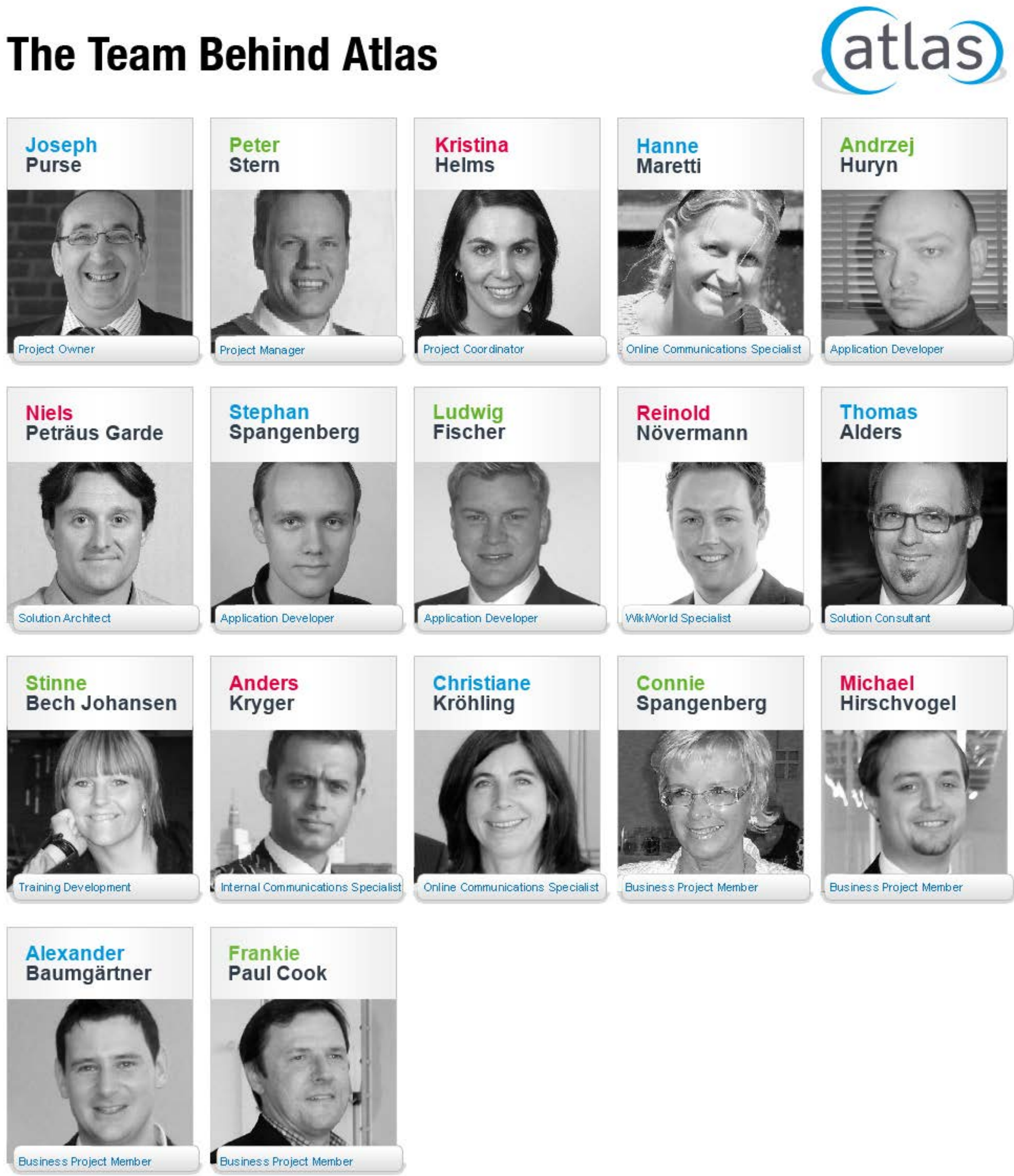
Looking Forward

"What will tomorrow bring?" asks Purse. "We will continue to focus on developing new business functions in Atlas. We will also realize potential synergies with our extranet, so that the benefits our employees are now harvesting from Atlas can be transferred to our customers. This is a good investment."

"I would actually go as far as to say that if the intranet did not exist, we would have to invent it," he says. "That is how dependant MAN Diesel & Turbo is on Atlas today."

The team is not satisfied to rest on their laurels now that Atlas is a success. With the site build behind them, they have initiatives in place to improve and expand the site's reach. These include:

- **Smart phone applications:** MAN Diesel & Turbo will start a new project in 2012, looking at the possibility of introducing applications for smart phones and mobile access to all online platforms—intranet, Internet, and extranet. A business analysis will be conducted to determine whether there is a user/customer/employee need and also assessing the MAN Diesel & Turbo infrastructure's readiness.
- **Yearly reviews:** Group Online Communications has a tradition of hosting reviews for the extranet and the Internet, and with Atlas, the intranet will be part of this governance model as well. "Going forward, yearly reviews will point us in the direction in which we need to develop the intranet to meet the continued, growing demands from the business," says Purse. "The reviews and the surveys conducted in connection with the reviews will help us update and continually increase the usability of Atlas."
- **Revisiting the business analysis:** In connection with the first yearly review, the team will be revisiting the business analysis again to see which demands they did not manage to include in the first version of Atlas. "For example," says Purse, "we already know that there are processes that we would like to optimize, such as smart workflows. We will also be looking into making some minor changes to the homepage. Also, the missing features and change requests that turn up along the way will be looked at on an ongoing basis so that we continue to strive for the best intranet with the best usability for the best employees."



Pictured: The Atlas Team (top row, left to right): Joseph Purse, Peter Stern, Kristina Helms, Hanne Maretti, and Andrzej Huryn; (2nd row, left to right): Niels Petraüs Garde, Stephan Spangenberg, Ludwig Fischer, Reinold Növermann, and Thomas Alders; (3rd row, left to right): Stinne Bech Johansen, Anders Kryger, Christiane Kröhling, Connie Spangenberg, and Michael Hirschvogel: (bottom row, left to right): Alexander Baumgärtner and Frankie Paul Cook.

GOVERNANCE

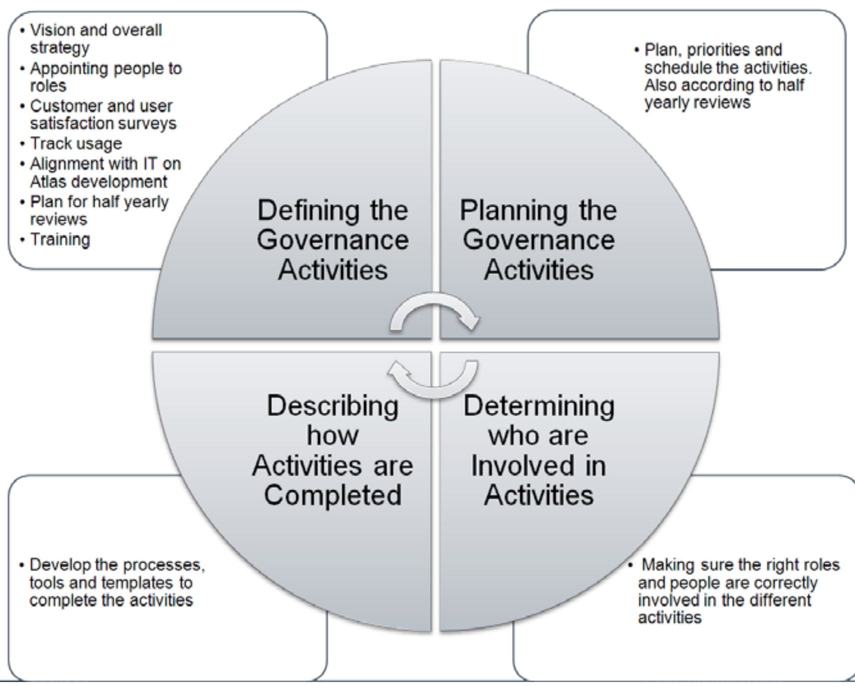
Ownership

Group Online Communications has the overall strategic responsibility for the intranet, including to steer the governance process of roles and responsibilities; keep a close eye on new trends; define areas for development alongside KPIs; and do surveys, reporting, and yearly reviews.

In parallel with this oversight, Group Online Communications encourages and supports decentralized ownership for content maintenance, development, and creation. This work is at the discretion of the individual departments and under the auspices of content editors and site owners.

“Having a useful and dynamic intranet is the work of the entire organization,” says Purse, “and a clearly defined governance structure ensures content ownership and up-to-date information.”

“To support the decentralized governance structure, we have a number of guidelines and recommendations for correct behavior and best practices,” he says. “Group Online Communications supports the business practically and by developing the intranet, constantly aiming to make things better by finding areas for improvement.”



Pictured: The governance wheel illustrates the governance activities on Atlas. Much emphasis is put on governance, making sure that Atlas will keep on developing in the right direction and that content will be dynamic and up-to-date.

Intranet Governance

For the company's other online communications tools (the Internet and extranet), Group Online Communications implemented a scalable governance model that is now applied to Atlas as well.

"In the process of adapting it to the intranet, we have tried to reuse some of the names for the roles to maintain consistency, still bearing the different target audience in mind. Even though Atlas is for internal use, structure, transparency, and regulations are fundamental in the governance model," says Purse adding that the model emphasizes:

- clear structure, processes, and policies;
- defined roles and responsibilities;
- the assignment of roles to people;
- the acceptance of roles; and
- proper training

The Information Architecture's Governance Structure

As the overall intranet owner, Group Online Communications supports employees in general and breaks the site section governance down as follows:

- ***News & Events***: Group Internal Communications is the official owner of the *News & Events* section and as such is responsible for permissions management, feedback through a news community, and training of news publishers. Governance within *News & Events* is decentralized; news publishers create and publish content/articles themselves, individually deciding the target audience.

- ***Employee Centre***: The *Employee Centre* contains local information targeted for individual employees and is owned by Group Human Resources. Group Human Resources manages permissions and supports the content editors.

- ***Our Company***: Group Online Communications owns the *Our Company* section and manages permissions. Governance within this section is decentralized; content editors for individual departments and locations decide what information is relevant while maintaining the data and keeping it up-to-date.

- ***Knowledge Sharing***: Group Online Communications supports this collaboration area in general, but ownership of the various collaboration sites is held by the site owners. No permissions are required to create new sites/wiki articles, and site/wiki owners manage permissions locally on their individual sites.

- ***Self Service***: *Self Service* is owned by Group Online Communications, which monitors the quality of the new tasks that are entered and augments the meta-tags if necessary. Permissions management isn't needed, as everyone can add tasks to this section.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Intranet Owner	The Atlas owner is responsible for its overall health and strategic direction, and ensures that company employees have an intranet that supports their daily needs for service, information, and news. The Atlas owner also must: • Identify new technologies and business processes • Enforce governance and best practice • Conduct yearly reviews • Ensure the platform's effectiveness and efficiency to develop and maximize business value • Support integration and collaboration, ensuring that strategic targets are met • Oversee IA and design/templates • Maintain open dialogue/communication with IT
Business Matter Expert	The Atlas business matter expert supports the Atlas Owner with information about how Atlas can best be developed according to business needs by working to: • Promote ideas/opinions about the intranet to help develop it according to business needs/requirements • Inform the Atlas owner about needs • Prioritize areas for development • Contribute content to yearly review
Site Owner	The site owner is responsible for a site collection and/or a specific site, as well as the content, application, and processes displayed therein. In this role, the site owner must: • Manage permissions of site collection • Perform ongoing maintenance • Appoint and cooperate with content editors • Enforce governance • Support the Atlas owner

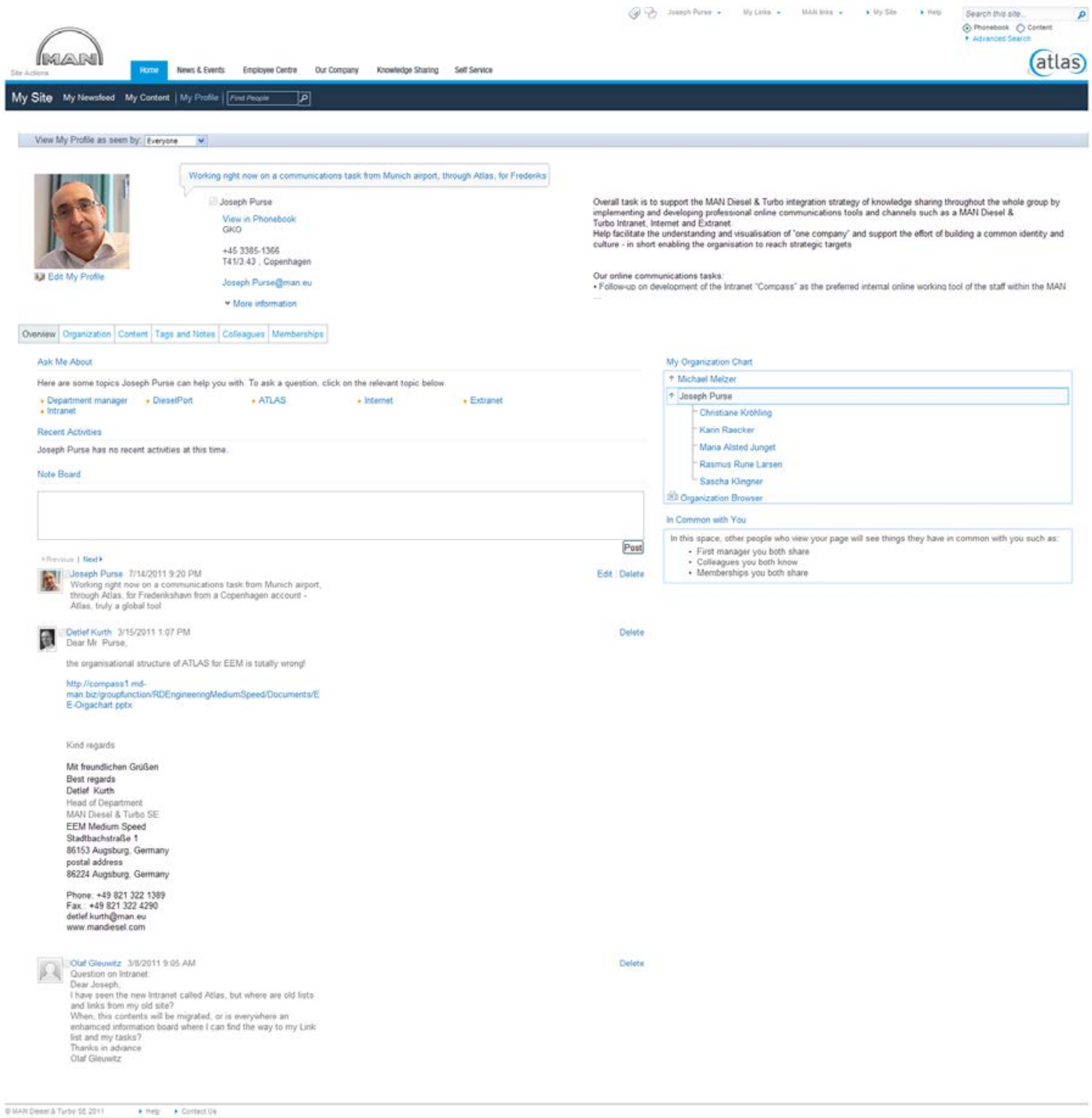
Application / Process Owner	The site's application/process owner is responsible for ensuring that his or her applications and processes are of the latest and updated versions. The application/process owner must: • Maintain metadata for search optimization • Respond to inquiries about the area • Enforce governance and support the Atlas owner • Delegate tasks to super users and content editors
Wiki Application / Process Owner	The wiki owner is responsible for the wiki application support that the business needs for wiki articles, including: • Promote wiki pages • Maintain and develop wiki categories and taxonomy/folksonomy • Respond to wiki inquiries • Enforce governance and support Atlas owner • Delegate tasks to super users and content editors
News Application / Process Owner	The news application/process owner monitors the published news to ensure that it meets a high quality standard. Other duties include: • Support news publishers • Respond to inquiries • Provide training for news publishers • Enforce governance and support the Atlas owner • Monitor quality and manage permissions
Super User	Super users support the site owner and/or application/process owner in managing a particular site collection, site, or application/process. This work includes: • Train site owners, other super users, and content editors. • Support site/application owner • Manage content editors

	• Provide input on intranet development • Train site owners, super users, and content editors
Content Editor	Content editors are responsible for maintaining and providing content for their designated area(s) on Atlas: • Ensure updated content • Provide input on intranet development • Participate in SharePoint training • Train and support other content editors
News Publisher	A news publisher's job is to know his or her audience and support that audience by making sure relevant news items are published on Atlas. Duties include: • Identify relevant news stories (for local and global publishing) • Participate in the news community • Act as a news subject matter expert in individual areas • Write content for the intranet following best practices
IT Supporter	An IT supporter is responsible for providing sufficient and satisfying technical support on tickets and BBIs (Brief Business Ideas for a new projects/applications). Other duties include: • Monitor website/network/platform/applications • Solve tickets • Provide second-level application support • Provide input (general ideas/technical options/estimations) for development

USERS

The intranet has relevance and is used for a range of different purposes by the entire organization. The intranet is regarded as a daily working tool for the majority of the employees with personal PCs and laptop computers across the company. It is used for finding, reading, and publishing news; solving and performing operational tasks; collaborating and sharing information; servicing other departments; and retrieving data, files, and knowledge.

Employees with kiosk access—who typically work in production areas—don't perform tasks or collaborate on the intranet; instead they use it to catch up on news about the company and their locations. They also use the intranet to access relevant local information, including emergency information, health and safety procedures, development and training, social activities, and canteen menus.



Pictured: All global users with individual logins have their own *My Site* with basic information such as department, contact details, and place in the organizational structure. Furthermore, users can add individual details about their know-how, projects, and interests. This helps colleagues worldwide when they need specific knowledge or experience as the search engine indexes these details.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	• http://atlas.md-man.biz/ The intranet can also be accessed by typing "intranet" or "atlas" in the address field of the browser window.
Default Status	• By default, the intranet is the homepage on every computer; however, employees can change this setting individually through the browser's standard bookmarking functions.
Remote Access	• Employees can of course access the intranet from all internal machines, but they also have access from remote locations when they log in via VPN or Citrix. Remote access is very important at MAN. Many employees, such as service engineers, the travelling sales force, and expatriates, travel often and thus need regular access from around the world.

DESIGN PROCESS AND USABILITY WORK

Design Approach

Addressing the competing, conflicting, and sometimes overlapping needs of two companies coming together during a merger means the intranet design team must take extra care in making sure the resulting intranet is a marriage of equals. For the MAN team, this meant conducting a thorough business analysis.

"The business needs have always been the top priority for the project and our first task was to define them through an extensive business analysis," says Purse. "One of the main factors was to make sure that we met the demands from the Diesel and the Turbo businesses equally; a challenge for two companies from different intranet backgrounds and company cultures—one with extensive collaboration and little governance, the other with no collaboration and strict governance."

So, thorough analysis in the business analysis was essential. To define the business needs, the team gathered input from more than 10 percent of the total worldwide workforce through activities such as workshops, interviews, surveys, and persona development.

Their goal with all research methods was the same: to learn from best practices. "We went with personas, workshops, usability tests, and card sorting since these are all best practices if the goal is to enforce usability in the end product," says Stern. "We selected the methods based on the initial discussions about needs and vision, and we believe that these methods offer the best input when designing web solutions, helping to understand how the users work, what their needs are, and what kind of information they care about."

- **Workshops, interviews, and a survey:** "As part of the kick-off workshops that we held during the information gathering, we had card sorting exercises," says Stern. "The output from these fed direct input in the design process. The workshops were themed based on the experiences we had from Compass and myMT, going through permissions, templates, *WikiWorld*, and workflows. Permissions management had not worked optimally before, there had been no common templates to show data in a unified manner, we needed to know what worked well and what did not on the *WikiWorld*, and we wanted to know which business processes could benefit from workflows. The workshops thus helped us to define the design and structure of Atlas. Also in the analysis phase, we looked at statistics from Compass and myMT in order to get a better sense of what existing information was the most popular."

  To get more input, the team also conducted a number of contextual interviews at the users' own desks. The interview participants were a mixture of employees from across the business units and group functions as well as across geographical sites. "We thus got to ask questions about these users' needs while observing their individual behavior on the existing intranets," he says.

  Finally, the team conducted a survey to support the design process, asking open questions such as "Where would you look for this type of information?" "It was excellent input for refining the sitemap," says Stern.

- **Personas:** Based on the survey, interviews, and workshops, the team developed 10 representative personas (prototypical users), describing the different needs and expectations for a successful intranet. The personas served as an extra support in guiding the design direction. Alongside the personas, team members developed scenarios describing the vision and the intended use of the new intranet to keep constant focus on the details.

  "For each persona, we defined a short background, roles, goals, work tasks, and needs together with a summary of the persona's typical opinions," says Purse. "The information architecture was thus designed based on the employees' exact needs to ensure the highest possible level of usability."

  The personas (described in detail below) come from different backgrounds with different roles, goals, and humor; they served as the foundation upon which the team designed Atlas.

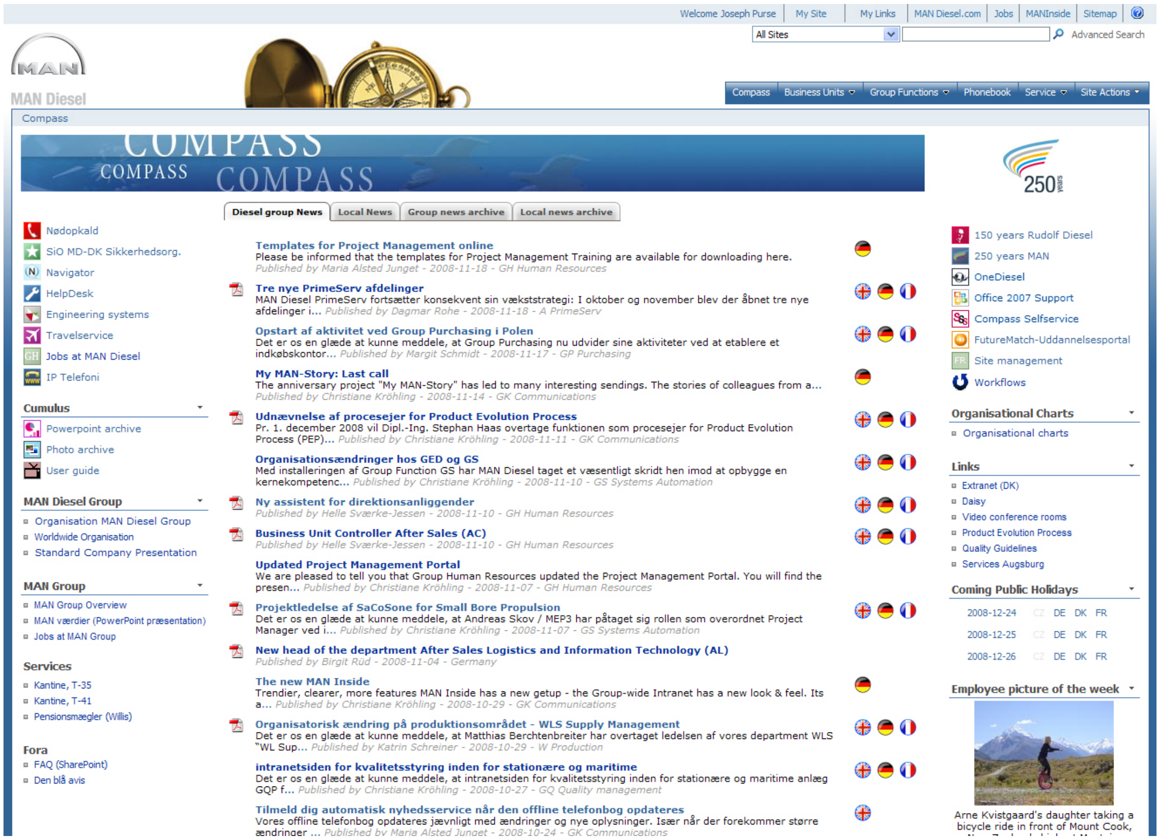
USER PERSONAS	
Role	**Needs**
Casper the Cooperative Project Manager	• Needs dynamic collaboration possibilities
Frank the Flexible Service Engineer	• Needs quick and easy access to technical documentation and design updates
Anders the Active Content Editor	• Needs to be able to add knowledge to the intranet. He believes that the intranet should work as the common company brain
Philip the Productive Worker	• Needs access to company news to keep up-to-date on local information
Beate the Busy Assistant	• Needs quick and easy access to travel booking tools and other planning tools
Emma the Eager New Employee	• Needs access to information about the company, her new colleagues, and the freshness of the salad bar
Sebastian the Serious Administrator	• Needs tools to be able to update and maintain company content and design elements on the intranet
Bertram the Brainy Technical Designer	• Needs a forum or community to share his fantastic knowledge and innovative thoughts and spar with his colleagues
Ivonne the Intuitive Department Manager	• Needs tools for planning and collaboration
Rebekka the Remarkable Software Developer	• Needs to work with project sites so she can share knowledge

Pictured: An example persona: Rebekka the Remarkable Software Developer.

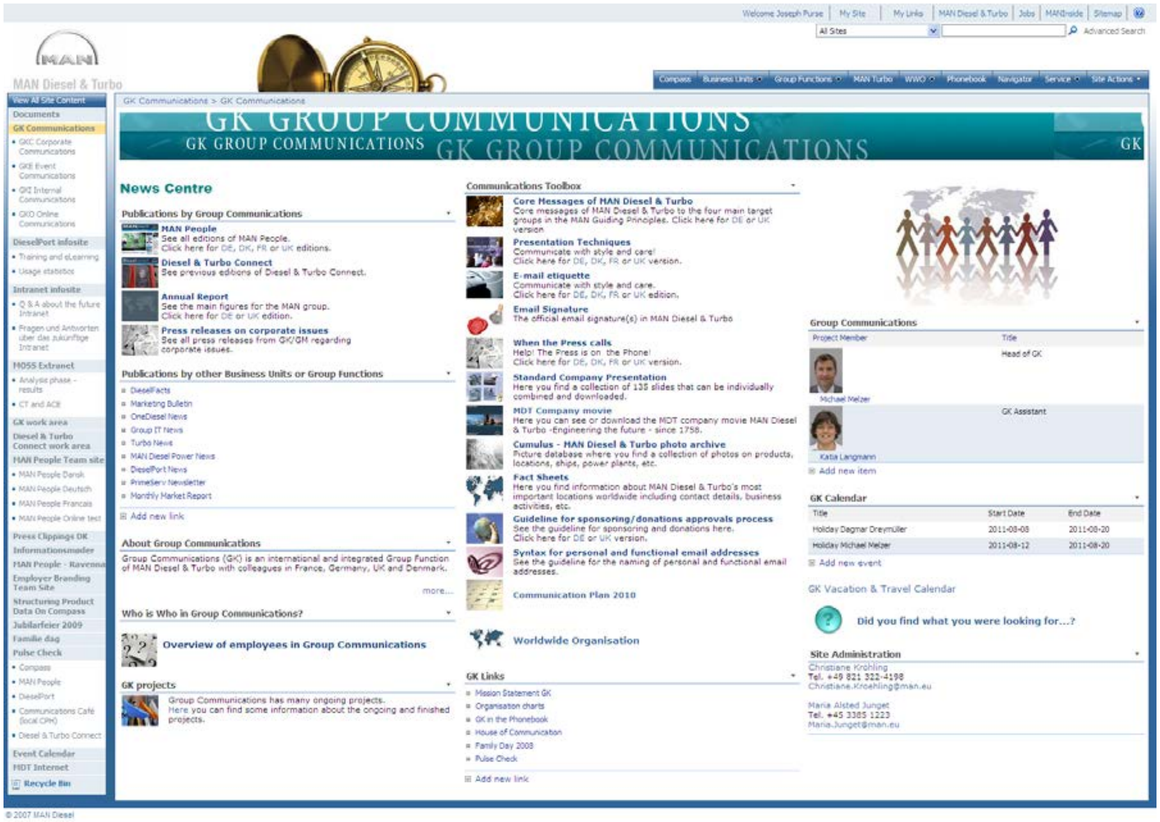
- **Testing with paper prototypes:** As part of the design phase, the team conducted a number of usability tests of the wireframes (sketches or mockups) of the design. These were think-aloud tests, with different employees from across the organization, organized with a moderator and an observer. The usability tests were done on paper prototypes of the wireframes.
- **Inspiration from other intranets:** The MAN team has always placed a high premium on learning from the success and challenges of others in the field. "We have always put a lot of emphasis on learning from others and sharing our own knowledge and lessons learned. Therefore, we had continually observed other companies' intranets via subscriptions to local and global networking groups, and they did serve as inspiration in the design phase. However, as we were early movers on SharePoint 2010, the ideas we got from them were more of a conceptual character than directly applicable."

The Design Process

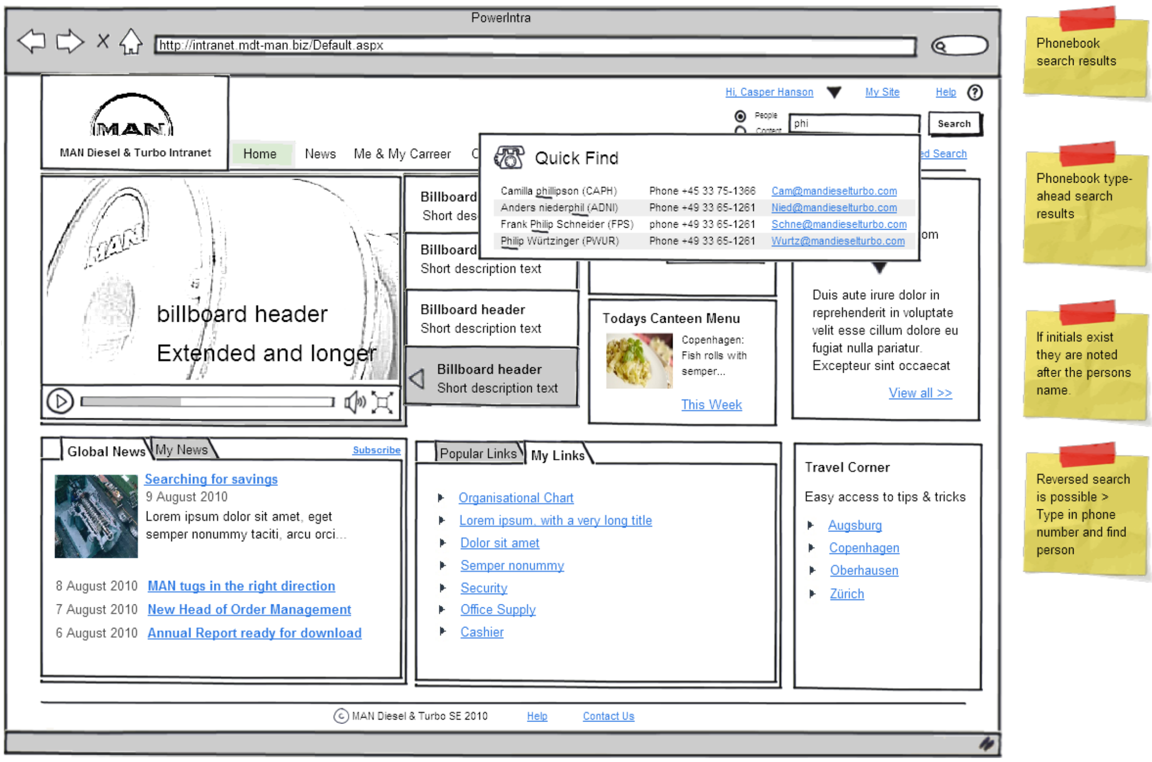
The following screens show a sampling of how the MAN design process progressed:



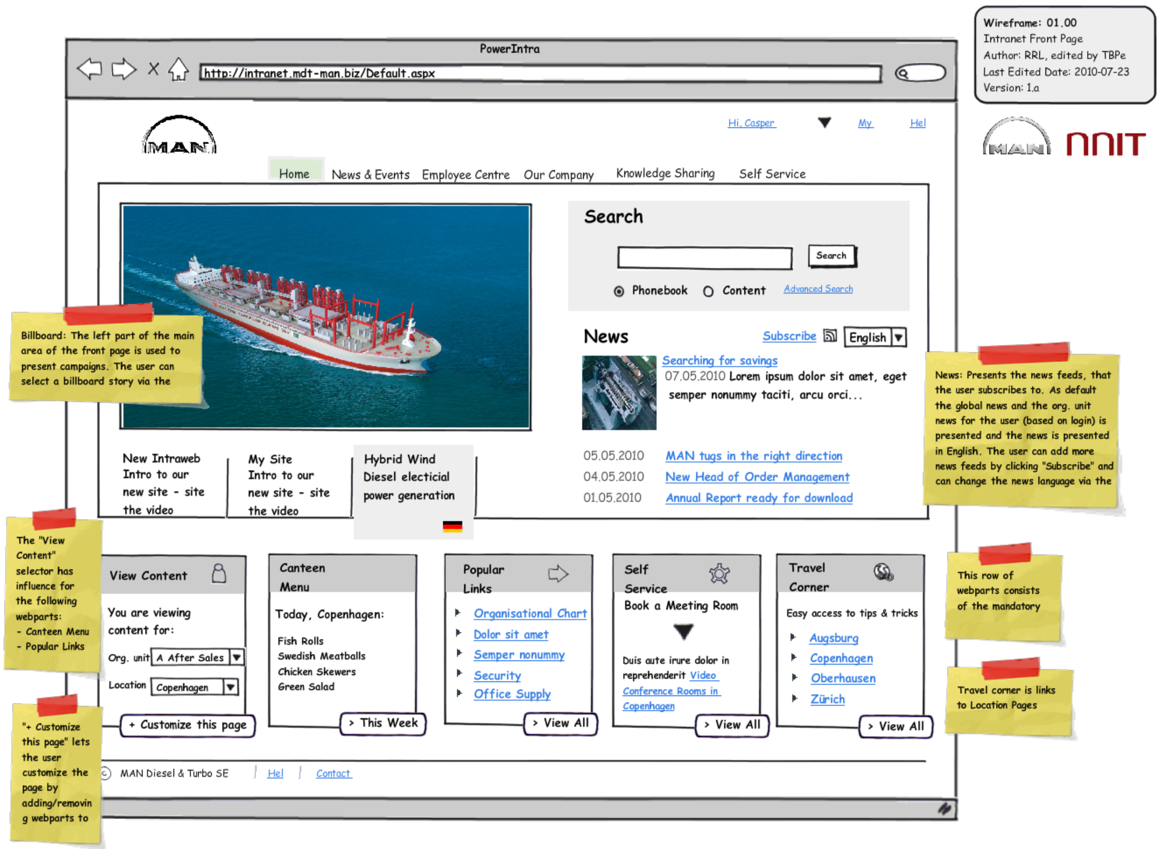
Pictured: The old Compass intranet. Over time, numerous requests for easy application access and no solution for containing/optimizing the content view resulted in a progressive degradation of the IA.



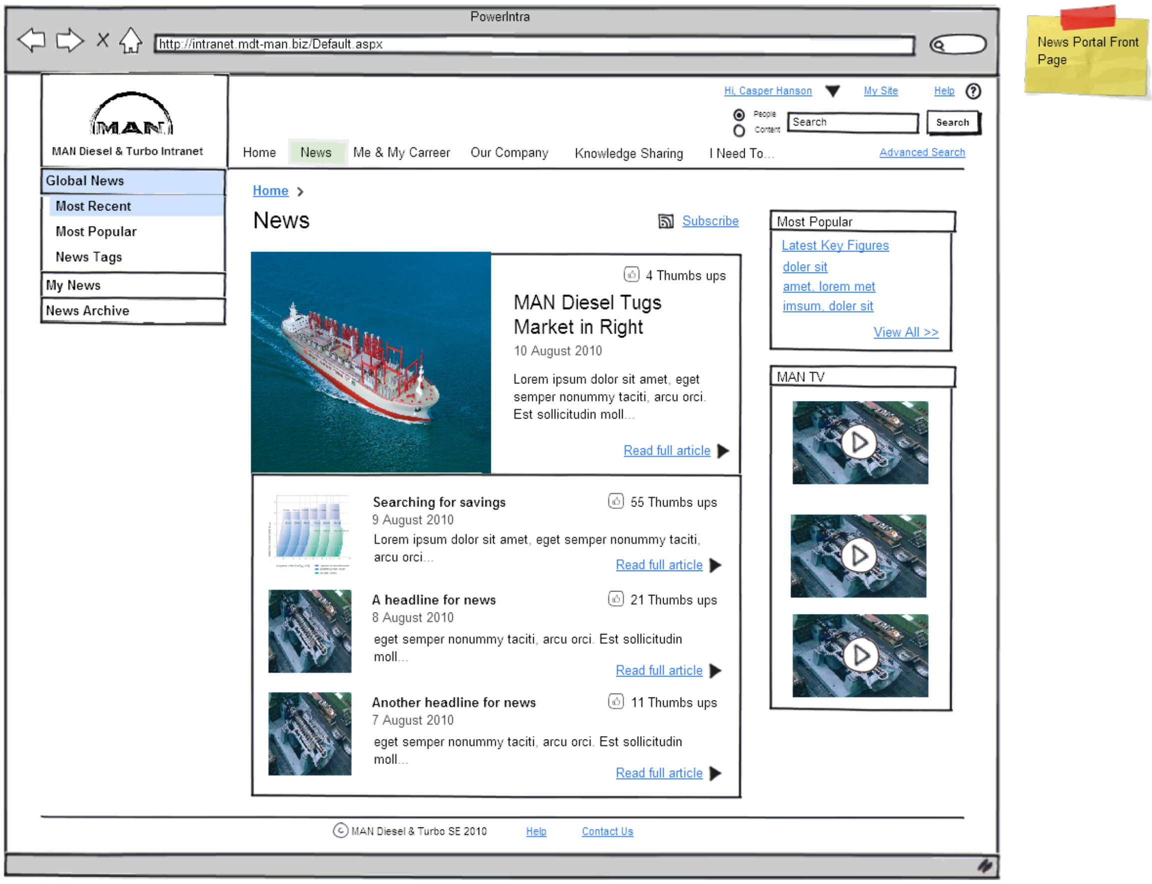
Pictured: The old Group Communications department site. On Atlas, presentation and collaboration are divided, creating a much simpler structure and an easier overview of the available information.



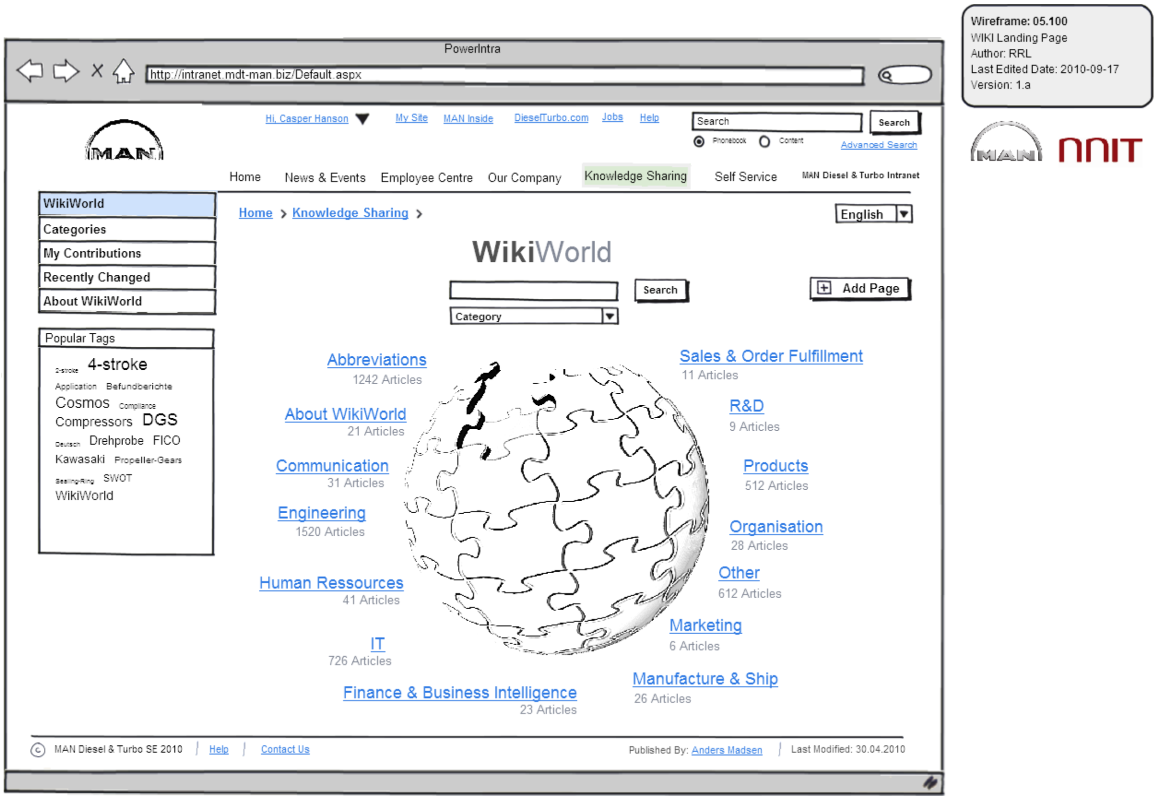
Pictured: From the beginning, the aim was to design a modular homepage. The billboard was introduced because the business needed a way to profile itself. The news area was divided into local and global news; this was later changed with advanced targeting options. The phonebook played a major role: it was the first time the organization had presented everyone in one place.



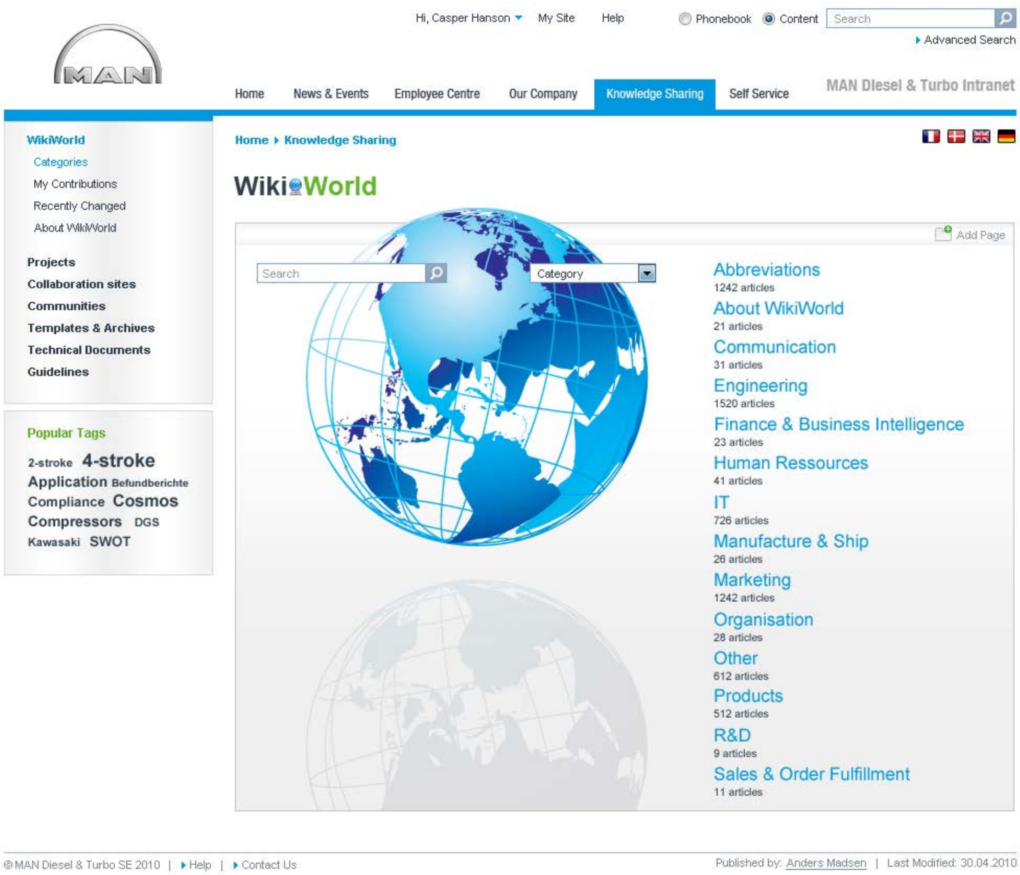
Pictured: In the second homepage iteration, tabs were deemed to be "just an extra click" and the team pursued a more simplified look. The needs assessment concluded that users required more information, so the team introduced the boxes (the "My" web parts). At the same time, the search function was made even more central on the page. The homepage design is still being reviewed and will be refined along the way; for example, the billboard—although a key element and a much-needed promotional area for the business—has already been criticized for taking too much space; it will be downsized, while remaining a central element on the page.



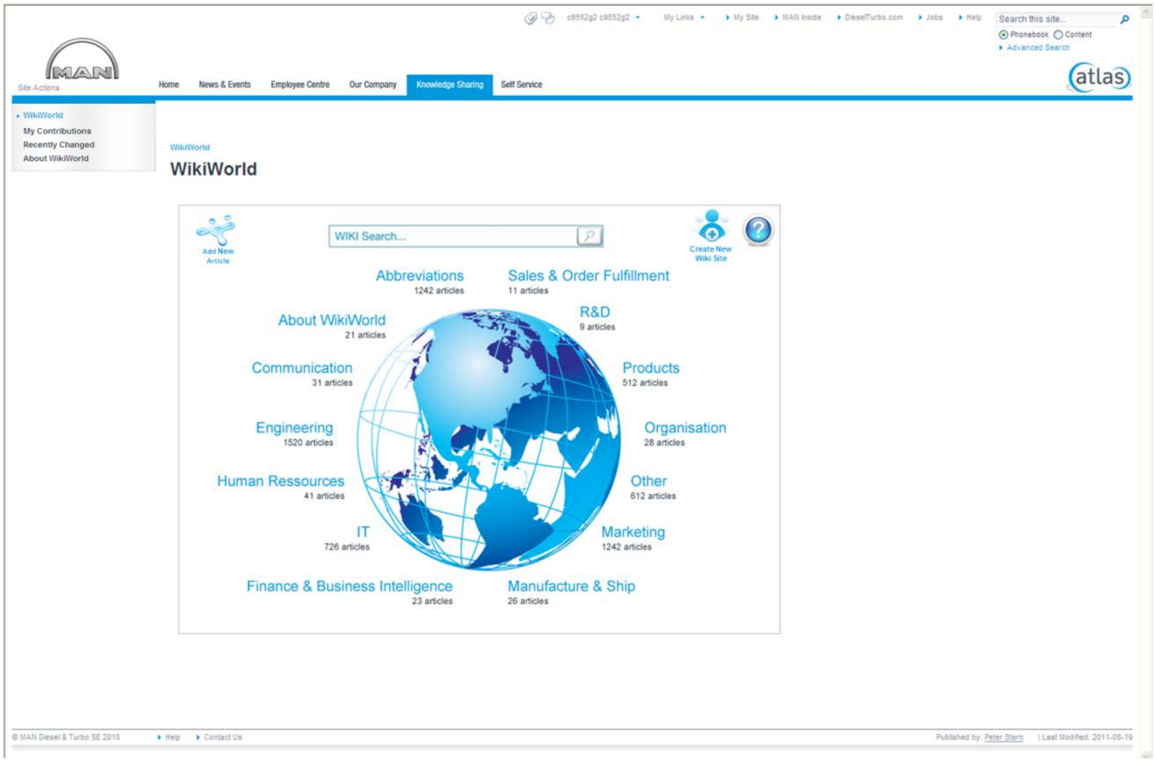
Pictured: The news roll-up was designed to make news more easily available. In this version, each article took up too much space, and the popular links were replaced with an events calendar. The MAN TV integrated in the mock up will be added to the live version of *News & Events*.



Pictured: *WikiWorld* already existed on myMT, and the decision was made to integrate its existing functionalities into SharePoint 2010. This screen also illustrates how some design changes were made to better illustrate the "world" of the company through the design.



Pictured: The second version of *WikiWorld* was more standardized, aligning the design in a different way. However, as it turned out, the original mock up worked better and reflects what was incorporated into the final design.



Pictured: This screen shows *WikiWorld* as it is currently live on the Atlas today.

Using Consultants

Working with outside consultants is a regular part of the company's workflow, and outside expertise is brought in as required. "With large projects such as introducing a new intranet, we usually work with agencies both from a resource point of view, but also to benefit from their specific areas of expertise," says Purse. "In an engineering company like MAN Diesel & Turbo, we need outside help to support us with core competencies such as organisational change management skills, global trends in social media, SharePoint design skills, etc."

The following agencies participated in the intranet development:

- **NNIT** was involved from the project's beginning, supporting the team by providing business analysis, web design and usability, IA, functional requirements, and testing. The agency also provided organizational change management advice when the team was designing the new governance structure and assisted with the training strategy.
- **Peoplenet** assisted with the hands-on training for the site.
- **ProActive** helped support development of the *Knowledge Sharing* area and the *WikiWorld*. The collaboration area was part of the high-priority demands in the business analysis. ProActive was also involved in the migration strategy.
- **Enabling** was involved in the project because the team needed people with SharePoint 2010 knowledge to provide hands-on assistance with the migration.

Pictured: To create an early sense of ownership of the new intranet, a naming competition was organized. The “Atlas Guy” became a central character in the communications strategy. He was featured in a series of articles about Atlas and the new IA, starting at the launch and taking place in the following weeks. In this example, the Atlas Guy is presenting the self-service area as a "task buffet" where the user can choose the relevant tasks and arrange them on a tray (the homepage). The article was published on the billboard, and references the buffet section in the canteen at one of the locations.

TIMELINE

INTRANET TIMELINE	
Milestone Date	**Milestone Description**
Pre-Merger	**Previous company intranets in place** • MAN Diesel SE had Compass (MOSS 2007) • MAN Turbo AG had myMT (First Spirit)
March 2010	**Pre-project meeting** • Hold a workshop preparation period for project kick-off • Decide on common technical platform SharePoint 2010
April 2010	**Project kick-off** • Conduct workshop on design, needs, and work process • Sort content from existing intranets • Assess high-level needs from project participants and business representatives
April–July 2010	**IA, user personas, and design phase** • Gather inspiration from other intranets • Develop personas • Conduct end-user interviews • Conduct card sorting and web design workshops • Create wireframes, map the IA, and review both • Conduct usability study
May–July 2010	**Business analysis and future needs** • Conduct end-user workshops to collect and analyze the business intranet needs and requirements at different European sites
May–October 2010	**Order and install technical infrastructure** • Deploy testing, development, training, and production environments • Install server software and configure web front-end and database servers

June–October 2011	**Grooming and preparation** • Conduct WWO training (worldwide organization; previous training was conducted within the home organization) • Enhance maintenance and solutions • Continue content migration
September–October 2011	**Requirement conversion** • Convert paper prototypes and IA to functional and technical requirements • Create technical migration upgrade plan • Prioritize requirements • Develop technical architecture and bundle logically separated areas/packages—such as the homepage and *News & Events* section—for delivery.
October 2011	**Project finalization** • Conduct lessons learned workshop with the project team
November 2010–January 2011	**Training strategy** • Build training concept for existing and new end users and super users • Create training materials
November–February 2011	**Development and implementation phase** • Implement and program development packages from prioritized requirements into manufactured solution builds • Perform system configuration and solution setup • Migrate and create content • Execute test plan based on scope requirements and divide into different functional areas
February 2011	**Site launch** • Atlas launched
March- May 2011	**Roll-out period** • Execute training plan • Conduct plenum sessions and end-user workshops • Begin content migration

CONTENT AND CONTENT CONTRIBUTORS

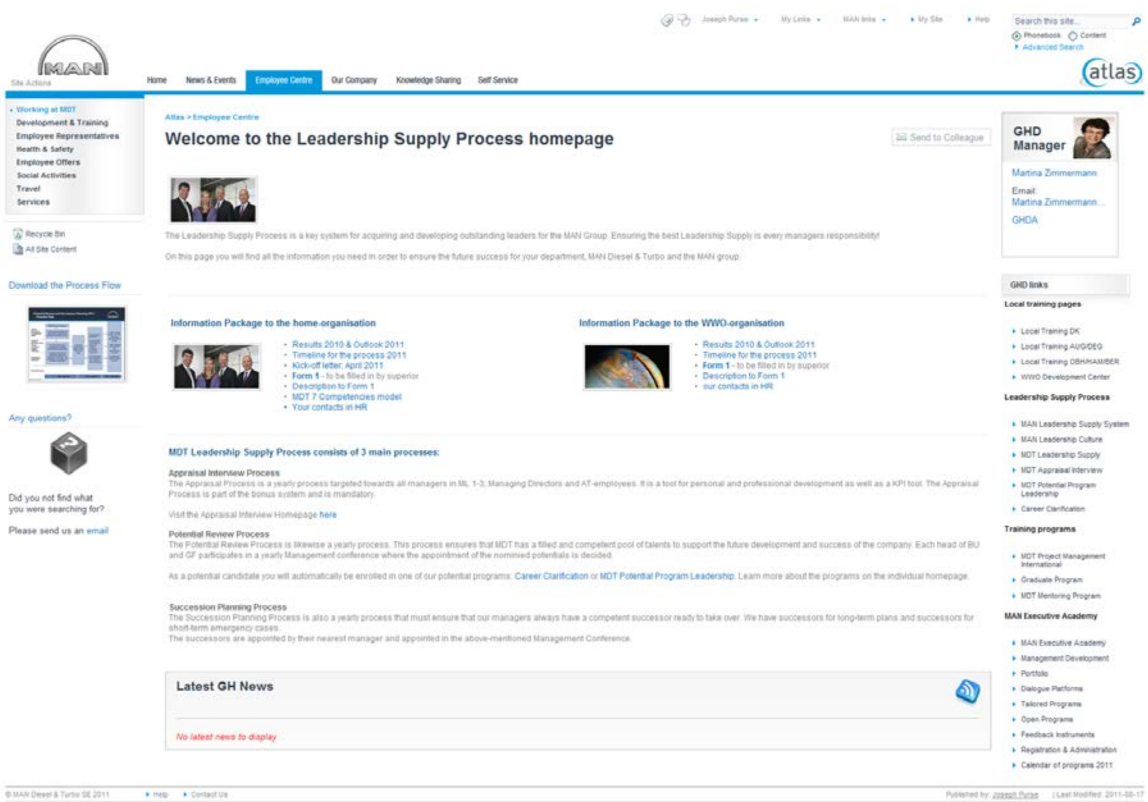
Decentralized Content Management

In general, content on Atlas is maintained in a decentralized manner by the business. However, to support the employees when they contribute content to and navigate Atlas, several guidelines and recommendations exist. Group Online Communications produce and use these to emphasise best practices. In addition to these guidelines and recommendations, the standard MAN Diesel & Turbo Code of Conduct and Language Policy supports appropriate intranet behavior.

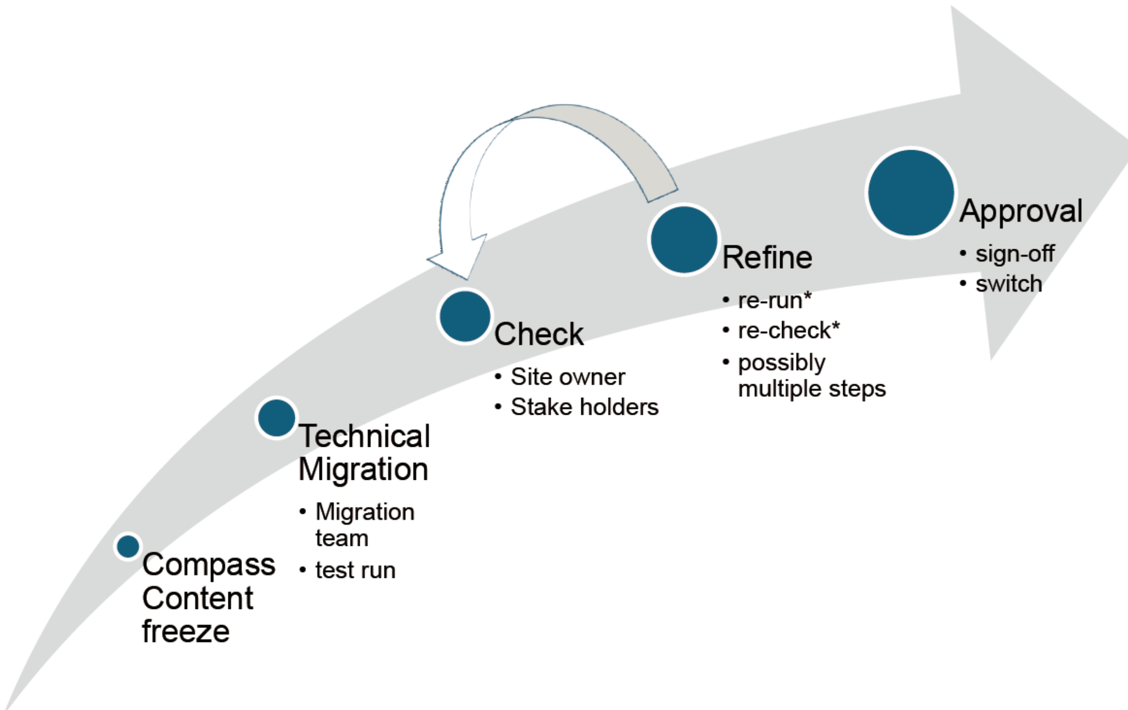
Providing Feedback

Because there are so many content contributors on Atlas, Group Online Communications offers feedback to them through support, training, and a yearly review, which is an integrated part of the governance structure.

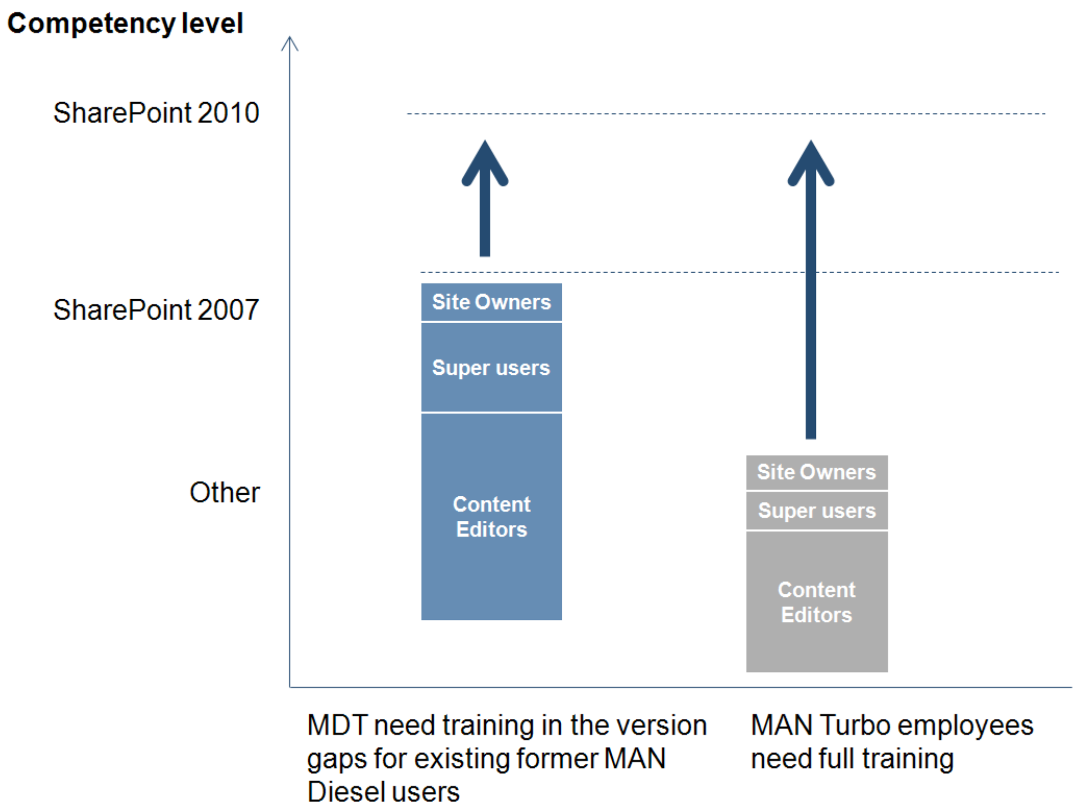
Group Internal Communications has an editorial workflow under *News & Events* when training publishers, managing permissions, and giving the publishers regular feedback through emails to individuals and groups. "Furthermore," says Anders Kryger, Manager of Internal Communications, "we make sure to publish information such as guidelines, links to the training area, and updated statistics on a community site created for the specific purpose of supporting news publishers worldwide."



Pictured: Content editors can personalize and customize content pages to their needs with the available web parts, while maintaining the overall Atlas frame.



Pictured: The process of migrating old content from Compass contained a number of steps. Issues with the technical migration and the need for manual redesign between the refinement and sign-off steps were major contributors to the migration delay.



Pictured: The gap to becoming SharePoint 2010 super users differed for the former MAN Diesel and MAN Turbo employees.

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	• Two application and index servers • Two web front-end and query servers, load balanced via Citrix Netscaler • Two MS SQL servers 2008 R2 in cluster • All servers are high end (Windows Server 2008 R/2 64-bit version) and are placed in two different physical locations for failover
Bug Tracking/Quality Assurance	• TestTrackPro/SharePoint
Design Tools	• Photoshop • Captiva • Balsamiq Mock-Up
Site Building Tools	• Microsoft Visual Studio
Content Management Tools	• Microsoft SharePoint 2010
Search	• Microsoft SharePoint Search

SEARCH

Defining the Need

Having an effective search tool is of critical importance to organizations like MAN, which has huge amounts of information and no consistent way of archiving informal data that's not product-related. It was, in fact, one of the most critical business demands for the new intranet.

"A well-functioning search function is alpha-omega in our organization," says Purse. "We are in the process of consolidating the company's strategy for Enterprise Content Management (ECM); however, today there are almost as many independent business tools for document archiving and management as there are local offices."

This makes it essential to have a powerful search engine that can look-up and refine results across online systems.

Choosing a Tool

Atlas uses the integrated search tool in SharePoint 2010.

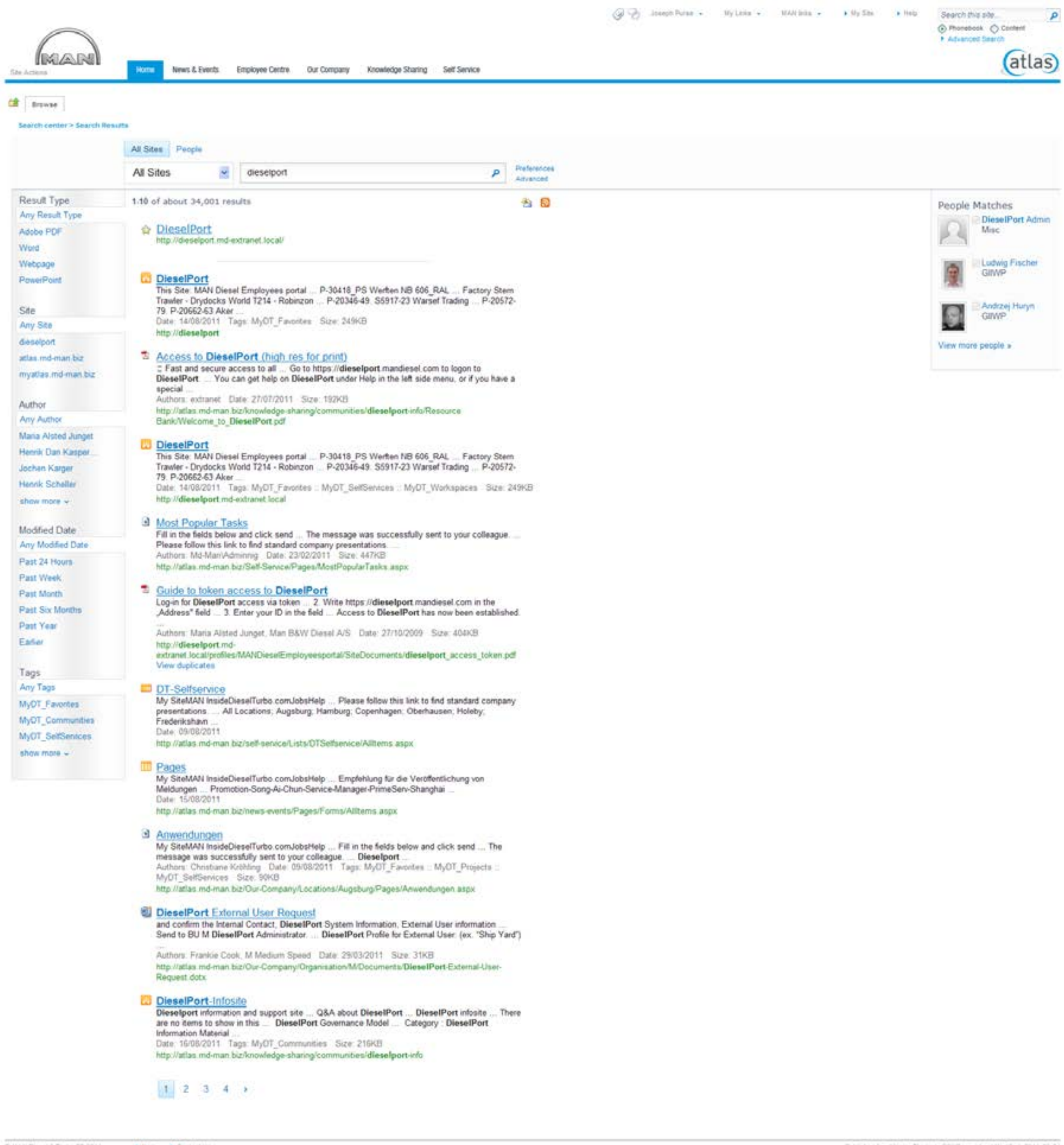
"The integrated enterprise search functionality that comes with SharePoint 2010 offers an easy way to narrow down search results, using author, file type, site, and modified by date filters," says Stern.

At the same time, the search engine looks at the taxonomy and comes up with even more refiners to narrow the search even further.

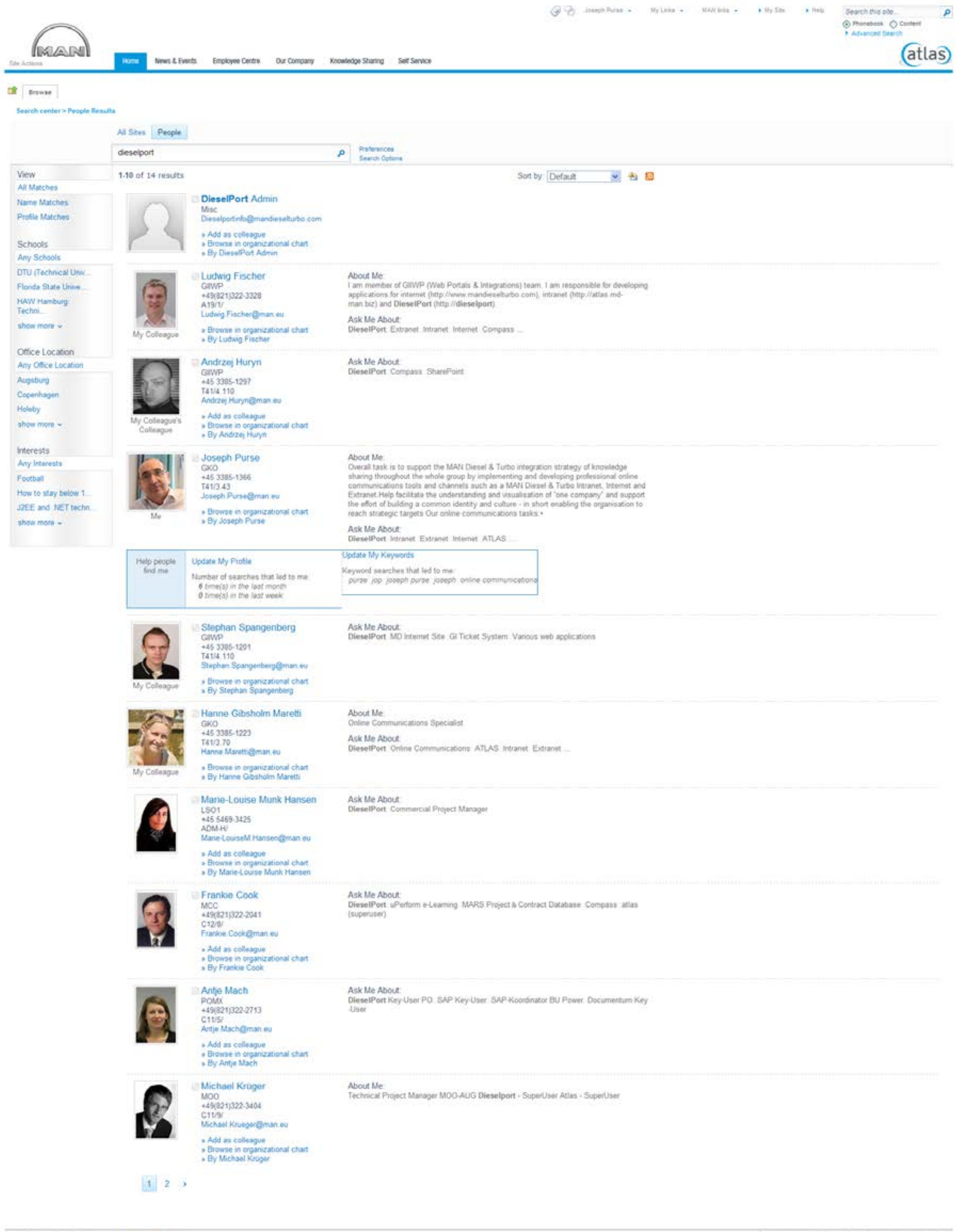
“This is essential for a company of our size, which has huge amounts of data online already and will only be adding to the existing information,” he says.

As an extra benefit, the search engine suggests *People Matches* when searching for content. So, if users need someone with specific know-how, they can find potential people here. The search engine categorizes the *People Matches* based on what employees enter on their *My Site*. When searching for content, the search engine also looks at other online platforms, indexing their content simultaneously and thus making it easy and quick to find the relevant information.

“For example,” he says, “we use the Atlas (SharePoint 2010) search function to index and find files on the extranet.”



Pictured: The integrated search function allows for advanced filtering through refining options while suggesting People Matches of employees who have knowledge about the topic searched for.



Pictured: By clicking *View more people*, a full list of employees with competences in the topic appears.

Improving Results

The SharePoint search functionality seems to meet the company's needs on Atlas, but there are still areas in need of improvement.

"What we are still in need of is a librarian or a librarian function to keep track of and improve the search engine by looking at and analysing the keywords people search for, the search results, and which results the employees click," says Purse. "Based on this information, a librarian will be able to make some best bets, changing the order of the search output and providing more value to the ranking of the results."

RESULTS AND ROI

One Intranet, One Company

The success of Atlas lies in the many things the company has gained as a result of its launch: bringing the two companies together, enabling standardization across the new organization, and allowing the team to eliminate old, redundant, and irrelevant data on the new site. But the key win for the team is the site's success at simply providing a single, unified vision of the company.

"We consider it a great success to have joined MAN Diesel SE and MAN Turbo AG physically on one common collaboration platform, especially coming from very different backgrounds on their old intranets and taking the differences in company cultures into account," says Purse. "Atlas is the first concrete step that actually visualizes the merger internally, and thus the intranet has a lot more meaning than just being an intranet and a collaboration platform."

There are so many factors that make a global intranet a success. Purse names a few that were most important at MAN:

- Enabling home office and worldwide organization employees to collaborate, as individuals or teams, as if they were in the same building.
- Making information available in a context that is understandable from a company as well as an individual perspective.
- Making existing solutions beneficial for a wider audience, providing a palette of tools and solutions that allow individuals and offices to improve their working and social environment.
- Bringing together common tools, such as global people directories and global news.

Atlas has given the company a platform to do many things that were necessary but more difficult to accomplish prior to the platform. Team members share some of those accomplishments:

- **Standardization.** Atlas has enabled standardization and increased visibility in permissions management. "At the same time," says Purse, "the new templates are aligned so that the look and feel helps emphasize the navigation structure and IA—the division between personal, public, and private collaboration content."

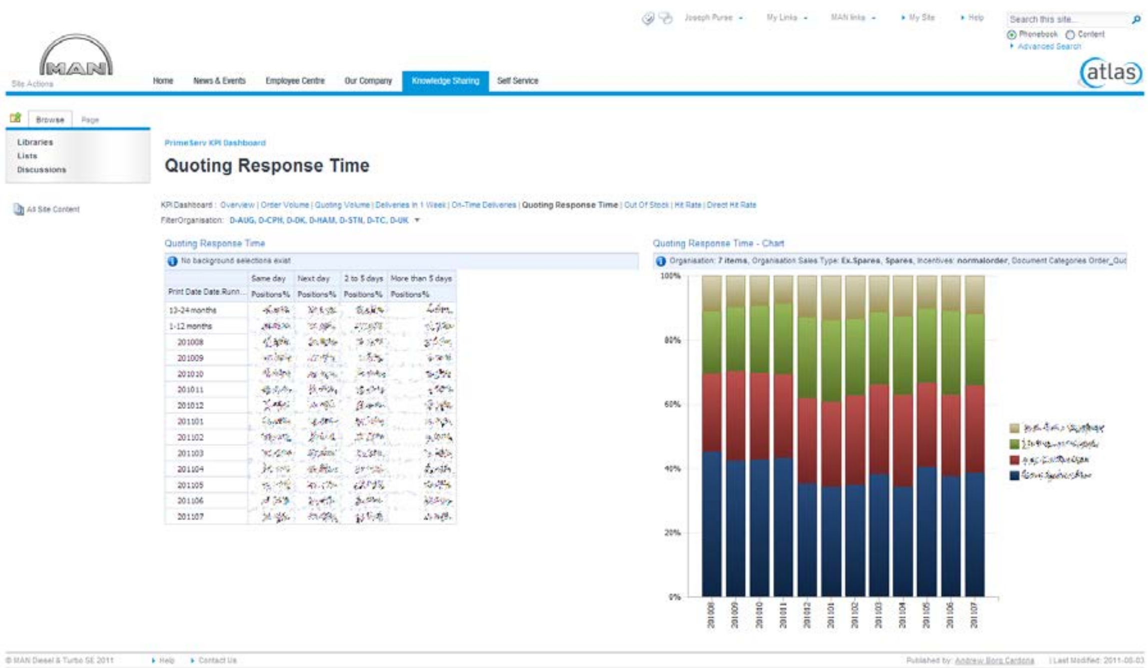
- **Spring cleaning.** In the process of creating a more logical, flat structure (on the new site), a thorough inventory and cleanup of old data was required. Prior to migrating the existing content, the team performed the necessary spring cleaning. "A lot of superfluous information and old data has thus been discarded that was highly needed," says Purse. "With the new governance model, we should not be seeing the same issues again."
- **Governance model.** With the new site came a new governance model, and that new governance model has definitely been a success, combining the strict governance of myMT and the non-existing governance of Compass, thus creating what Purse calls "a good compromise."
- **Common link collection.** "As the intranet is a tool that is used on a daily basis, we also consider it a success to have been able to gather all relevant links to the various tools and applications here, making Atlas the one entry into all the online tasks that the employees require access to on a daily basis," says Purse.
- **IA revision.** "One of the greatest successes was the revision of the IA," says Stern, "and to go from a hierarchical structure to a flat, task-oriented structure instead, in the long run creating a better system. This architecture is well thought through, supporting collaboration and opening up for much more integration."
- **Changing the point of view.** With Group Online Communications as the project's sponsor, Atlas has been developed from a business point of view rather than an IT point of view, putting usability and business needs at the core. "We have put a lot of energy into the completely new information architecture, which stresses the task-based approach and lets the employees customize the homepage to their own needs," says Purse.

Metrics and measures of success

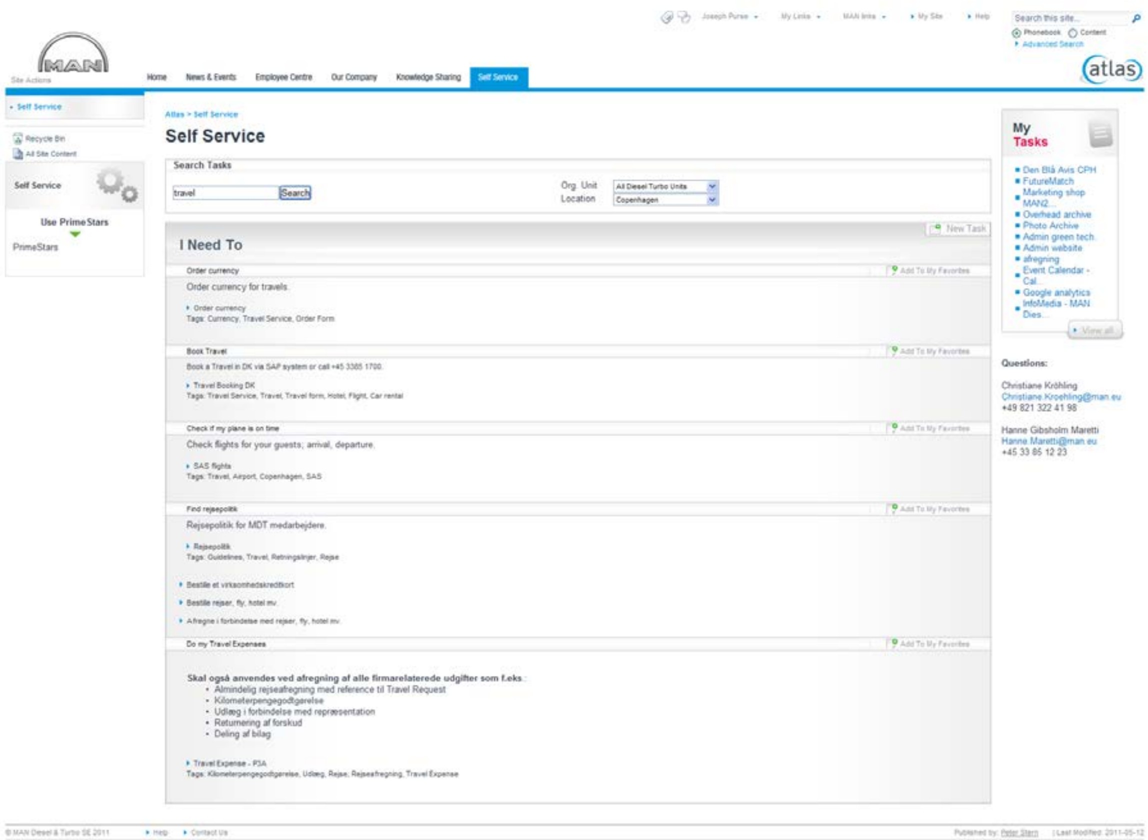
As with all ROI measurements, there are both tangibles and intangibles. Some of the important ones for getting an effective and joint MAN Diesel & Turbo publishing platform in place were:

- **One platform.** By creating one information platform for all MAN Diesel & Turbo employees, the worldwide organization has access to easier collaboration and communication possibilities.
- **Decentralized decision-making.** Decisions are now made where the expert knowledge is situated.
- **Transparency.** There is now transparency in ownership, procedures, and processes: "who does what, when, and how."
- **Content governance.** Through Atlas, the company has achieved an aligned content governance process between Turbo and Diesel as well as an aligned common and open social/collaboration structure, including departmental, project, and business unit team site editors.

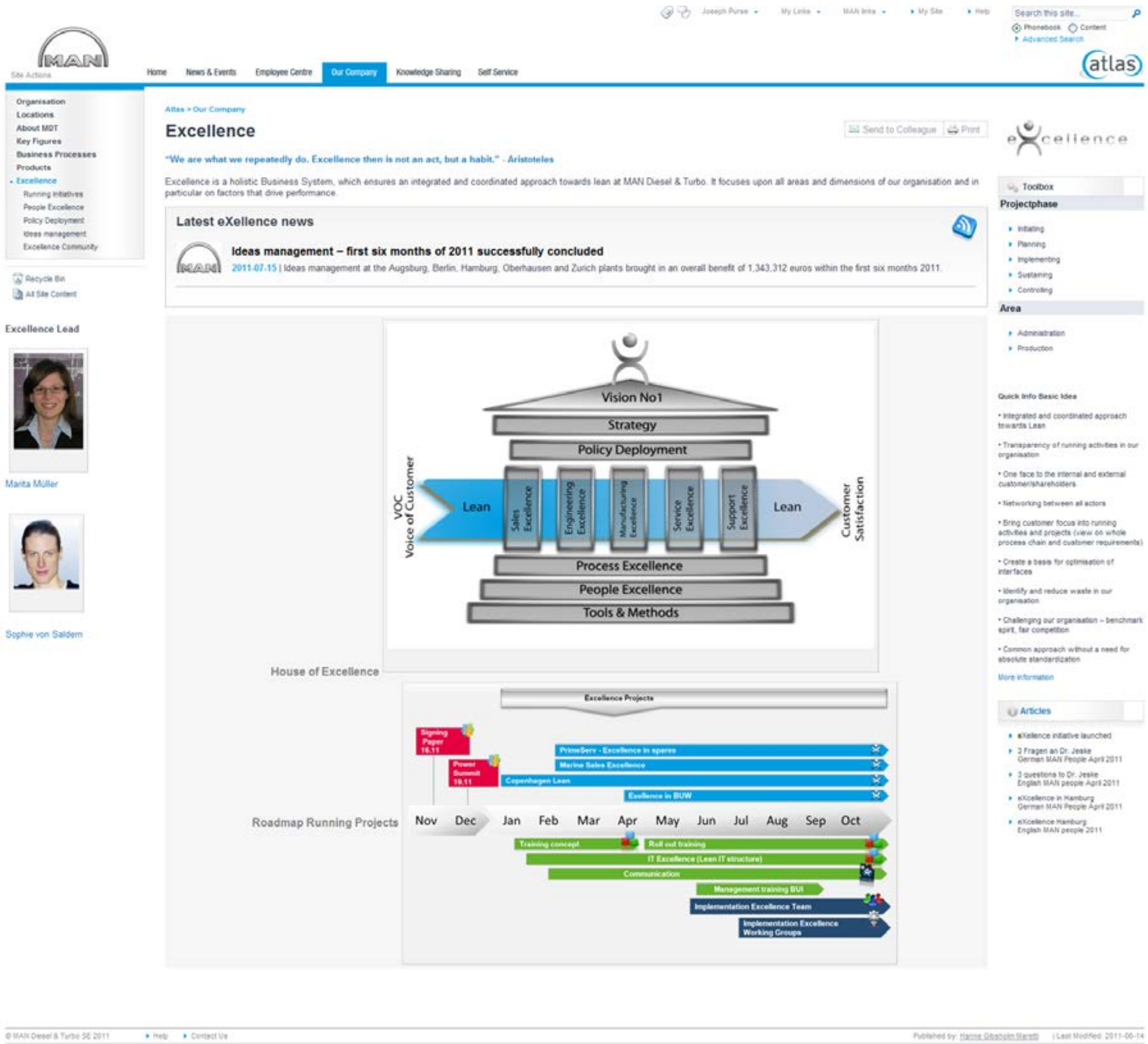
- **Alignment of best practices.** Atlas is the result of aligning best practices drawn from both intranets, allowing for a total redesign and optimization of the end-user experience.
- **Training.** At project finalization, all SharePoint/Atlas training was handed over to HR.
- **Streamline tech environment.** There's now a common intranet infrastructure platform on SharePoint 2010 and a combined development/test environment and production environment.
- **Template standardization.** Standardized templates are now available to everyone, thus all employees draw from the same library.
- **Common *WikiWorld* concept.**
- **Alignment of key applications.** These include the phonebook, *My Site*, AD, team sites, search, and news.



Pictured: The KPI Dashboard gives an overall indication of each site's performance for the entire sales department. All statistics are shown for the past two years and can be filtered by department/organization.



Pictured: The *Self Service* area is an extensive collection of links, helping users find information about everything from travel booking to currency; it also offers direct access to external applications. Once found, tasks can be added to the *My Tasks* web part on the front page, becoming available through a single click.



Pictured: Community sites are used for different types of collaboration, supporting the business' needs.

LESSONS LEARNED

The Atlas team outlines some of their key learnings from the project:

- **Create an inclusive team.** "Being a global company, our project team was internationally based. This was a great help in our attempts to embrace the different cultures and meet the diverse requirements. However, in cases where team members are not based at the same location, inclusive project management is essential." (Kristina Helms)

- **Communicate directly.** "The duration of the project, together with the delay, made it difficult to maintain a positive communications momentum. The challenge became to communicate new realities and new changes clearly. The key learning is especially that using management as multipliers of messages is difficult in a global matrix organization. Next time, we would probably rely more on direct communication to the relevant target groups. However, we will have to bear in mind that it will require more resources to meet the consequentially much higher workload." (Kryger)
- **Plan for user training and outreach.** "It is important to realize that a changed look and feel can confuse even existing SharePoint users. Therefore, it is necessary to set aside resources for kick-start assistance to basic questions (such as 'Where is the *Site Actions* button located now?'). After the launch, for the period of time in which it was necessary, we held weekly Information Room sessions where employees could just drop by and pose questions for the project members. That worked very well." (Helms)
- **Celebrate the successes.** "I think it is important to remember to celebrate the successes to keep the momentum. You can easily get caught up by the challenges in a project of this size and magnitude; do not let them take over." (Helms)
- **Keep the technology in sync.** "We managed to keep our test environment and production environment in sync fairly well. The small differences did mean a surprise to us once or twice, though, for example with regards to performance. So, make sure to sync the environments to best see how, for example, new developments integrate into the platform." (Stern)
- **Bridge gaps between design and execution.** "One of our challenges was a gap between the design mock up and the live system. So, make sure to bridge potential gaps with technical specifications in writing to avoid misunderstandings so that you have a detailed description of how the content should appear." (Stern)
- **Use offshore vendors with caution.** "A heads up is also who to use for development. We had offshore vendors, which was an issue in the development. The differences in time zones caused delays, and the knowledge basis was not sufficient for our purpose." (Stern)

The Scotts Miracle-Gro Company

Using the intranet:
The 143-year-old ScottsMiracle-Gro is the world's largest marketer of branded consumer products for lawn and garden care. The company's brands are the most recognized in the industry. In the US, the company's Scotts®, Miracle-Gro®, and Ortho® brands are market-leading in their categories, as is the consumer Roundup® brand, which is marketed in North America and most of Europe exclusively by Scotts and owned by Monsanto.

Headquarters:
Marysville, Ohio

Number of employees the intranet supports:
8,000

Company locations:
The company has operations in more than 20 countries and on four continents.

Locations where people use the intranet:
Across the US, as well as in Canada, Australia, France, and the UK, with other users scattered across Europe

Annual sales:
$2.8 billion (US)

Design team:
The intranet's designers are members of the company's Business Transformation team and include an Enterprise Portal manager, a NetWeaver Portal consultant, a NetWeaver Portal senior analyst, and a senior web designer

Members:
Jim King, Senior Vice President, Investor Relations & Corporate Affairs; Lisa Smith, Director, Corporate Communications; Tyler Kerr, Manager, Electronic Communications; Doug Hoy, Manager, Corporate Communications; Kristin Dean, Director, Enterprise Solutions; Balaji Srinivasaraghavan, Manager, Enterprise Portal; Dhayananth Chandrasekaran, NetWeaver Portal Consultant; Krishna Thallavarajalla, Senior Analyst, NetWeaver Portal; and Elizabeth Kanz, Senior Web Designer

SUMMARY

ScottsMiracle-Gro needed to solve a problem. A company-wide survey showed 56 percent of associates wanted to know more about their consumers. Concurrently, a major shift in the strategic direction of the company was underway and led to the development of the company's "Consumer First" long-term growth strategy. The Consumer First message was being shared with all key stakeholders including investors and the Board of Directors. As part of the company's effort to communicate the Consumer First strategy with associates, the Corporate Communications team knew the messaging needed to make its way to the corporate intranet site.

The 8,000-employee company produces consumer products for lawn and garden care. Associates are scattered across 20 countries. The Corporate Communications team decided the intranet was a great place to share consumer information with associates, relying heavily on storytelling to help associates relate to the consumers they were serving. They wanted ways for associates to understand the consumer as directly as possible, without a corporate filter. The intranet, called *The Garden*, became one of the main ways to accomplish this.

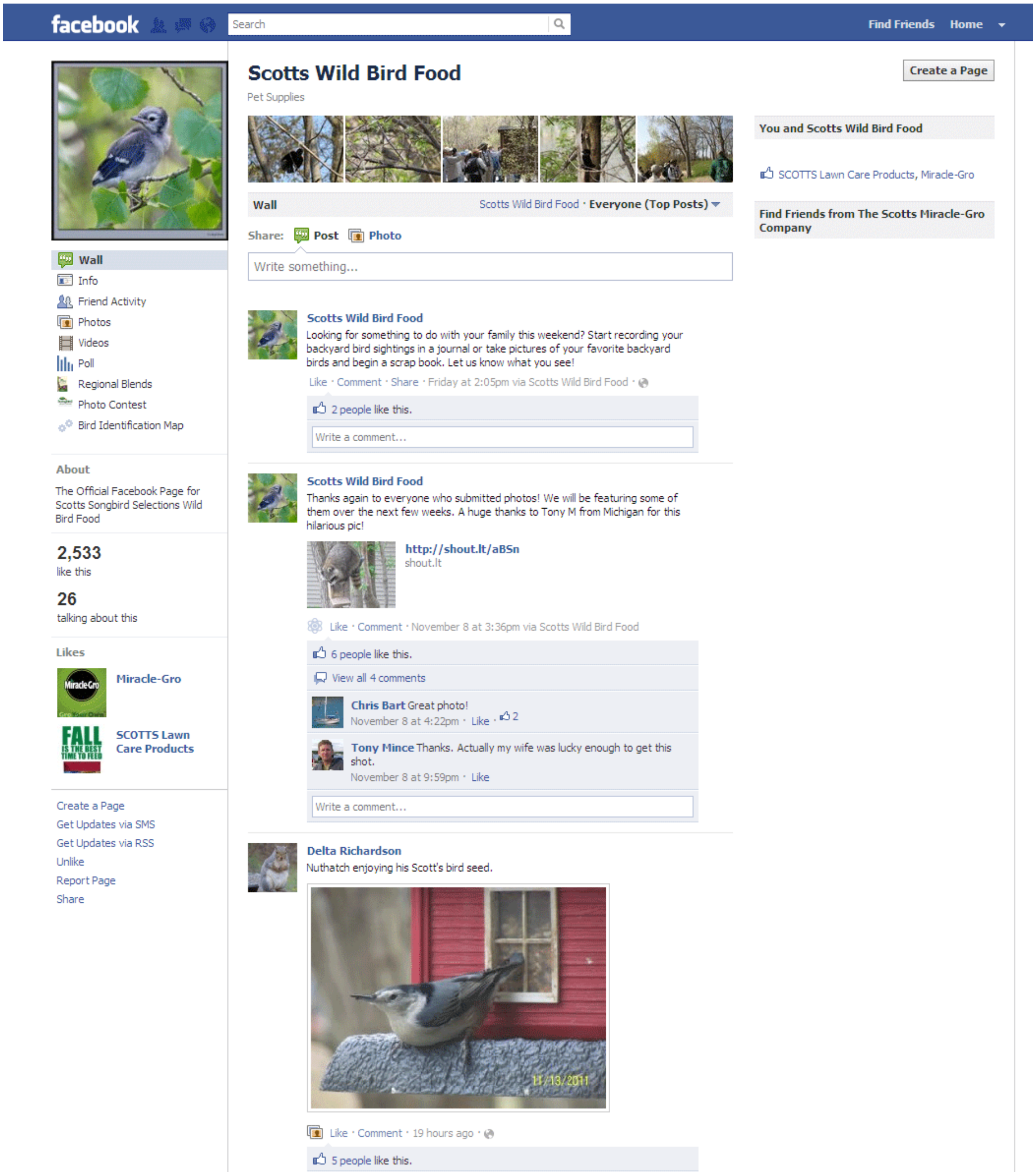
The Garden's homepage reflects the emphasis on the consumer. The top of the page includes a news section, written by the Corporate Communications team. News is focused on what the organization knows about consumers and how it's using that information and learning more. Associates around the organization can contribute news ideas about how associates are using consumer knowledge to do their jobs more effectively, and the writers follow up as necessary with phone interviews.

When approaching the redesign, the team looked at the content that had been most successful in the past. They then revamped the editorial calendar to ensure updated, relevant information was always available. They sharpened the site's focus on educating associates about consumers through news, consumer profiles, and other information related to the Consumer First initiative.

News items are dated and the top news story includes an image. Headlines are typically accompanied by brief summaries and users can view past news via the main site navigation or a link in the homepage news area.

The right side of the page includes a box devoted to consumer information, showing the complete content of a consumer vignette. This content is purposefully concise, allowing users to easily read the information without having to click elsewhere to see a continuation.

This part of the page also includes two key consumer-focused areas: the *Daily Call*, which features a daily recording of an actual call to customer service; and the *Daily Comment*, which pulls content from social media discussions on sites like Scotts.com, Facebook, and Twitter. Associates are encouraged to read what consumers are talking about and to interact in accordance with the company's social media policy guidelines. This helps tie associates directly to consumers.

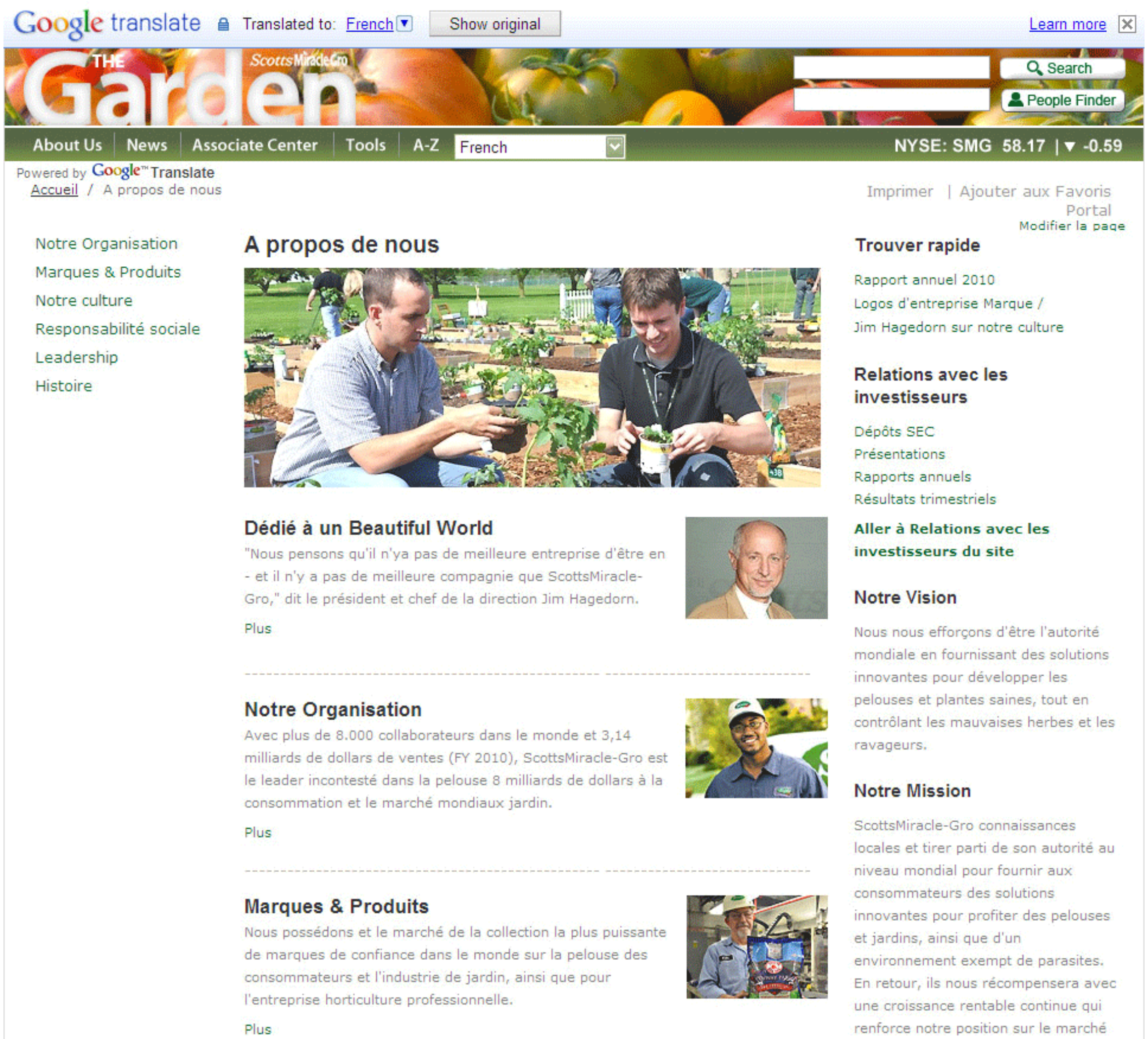


Pictured: As part of the intranet homepage's *Daily Comment* feature, Scotts associates see comments gleaned from social media sites such as Facebook and Twitter. This example shows how customers interact with the company on Facebook.

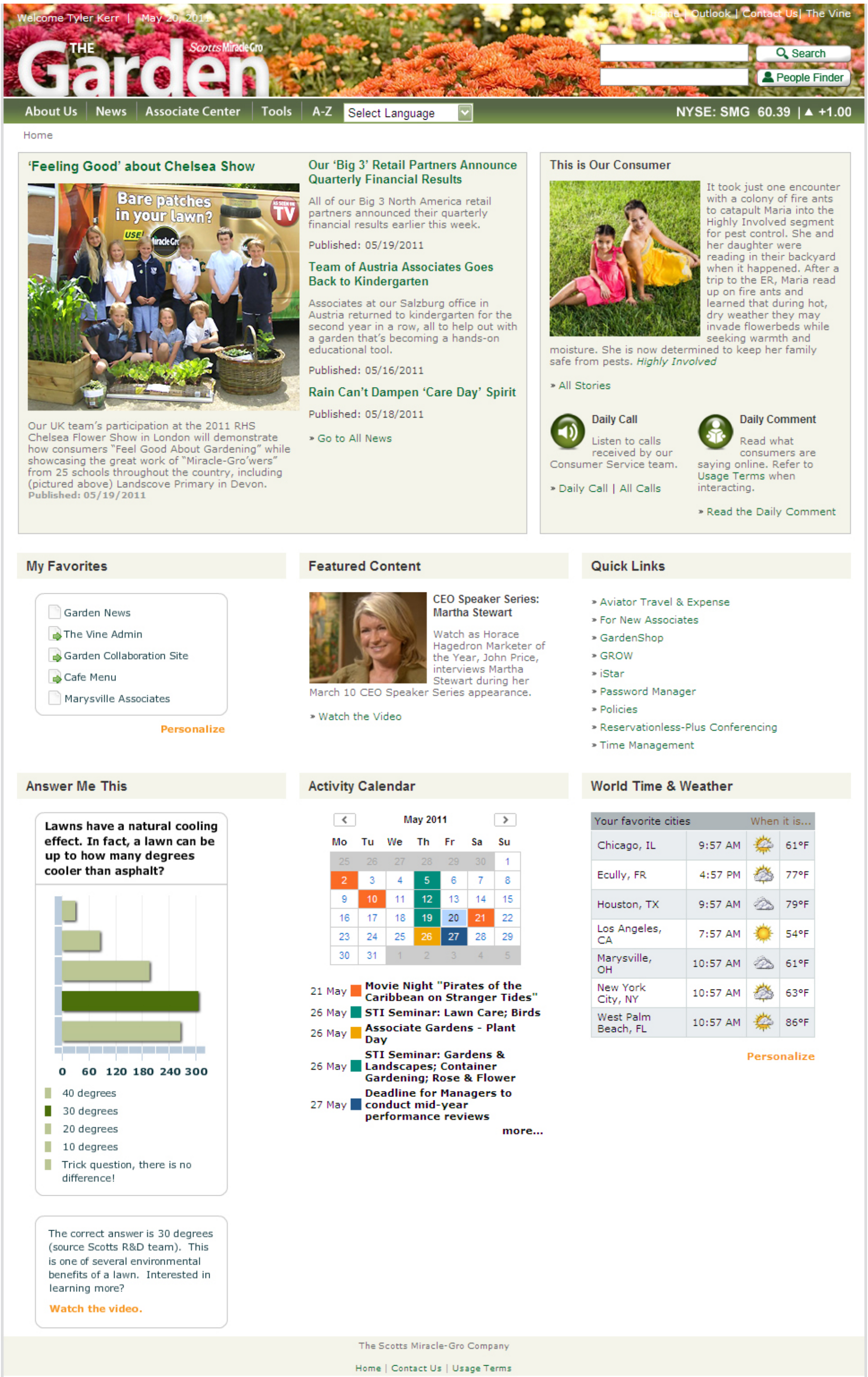
The page also includes an *Activity Calendar*, which shows events throughout the organization. Corporate HR, company-sponsored affinity groups, and the company's training organization, to name a few, can publish events and activities directly to the calendar. Associates can click on an event to get more detail, access links to more information, and get contact details. Events might include classroom learning opportunities for product training, associate gardening activities like planting and harvesting days, and performance-management goal setting and self-assessment dates. The detail page also includes a way to add an event to the user's Outlook calendar with one click.

A homepage quiz or poll is used to educate and engage associates by testing their knowledge on subject matter from recent news articles. Questions such as "A lawn can be how many degrees cooler than asphalt?" interest, inform, and engage associates with the lawn and garden category and provide useful bits of product information and history.

Content is primarily in English, but content with a broader audience, such as CEO messages or information about performance or strategy, is translated into Spanish and French versions as well. The language dropdown at the top of each page leads to Google's translation tool, so associates can have a rough translation of content. Associates use the drop-down menu to select the language they want to view the site in, and the tool translates all non-image text. This lets users read articles and navigate to information within the site more easily.



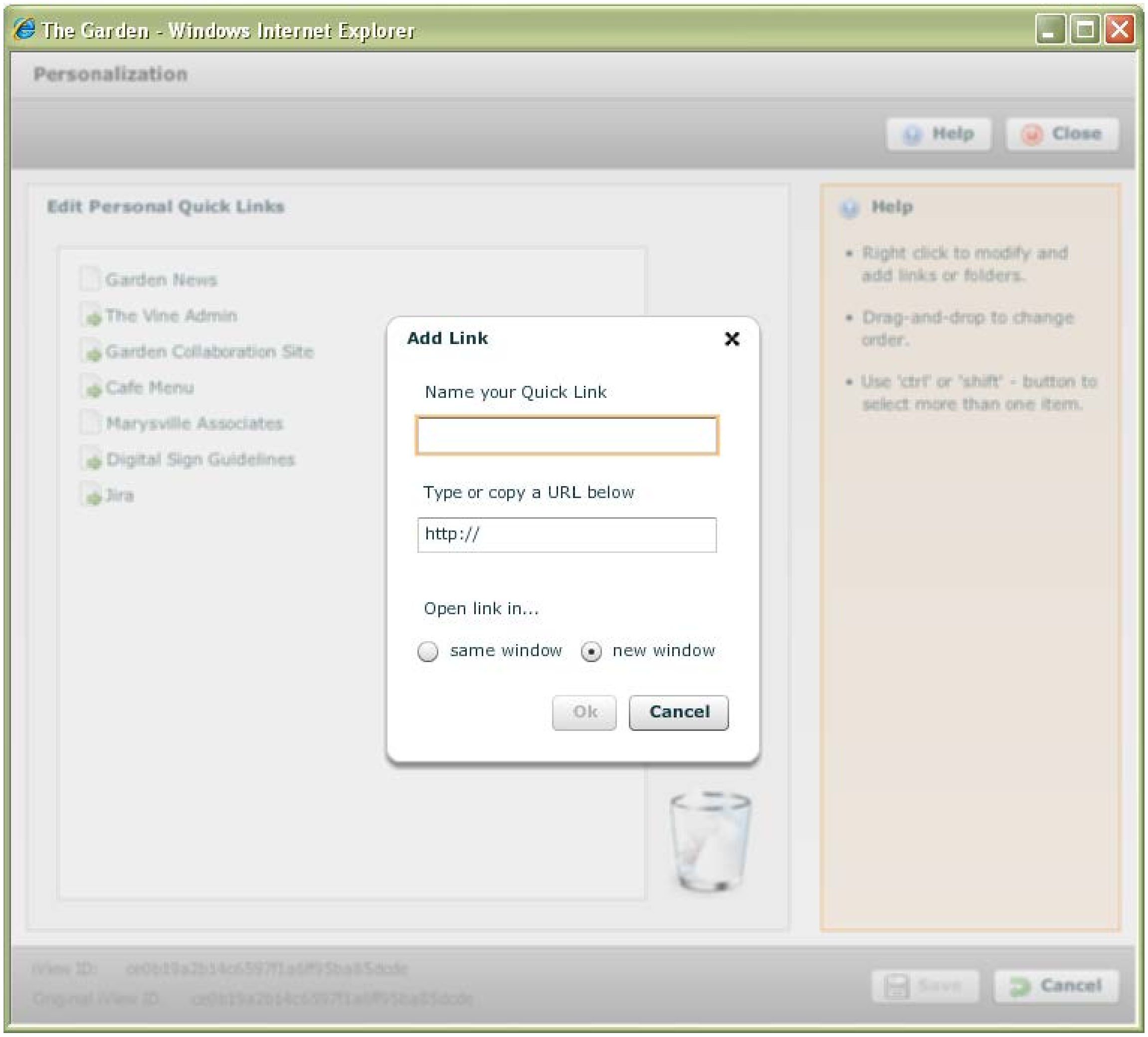
Pictured: Content important to a broader audience is translated into a variety of languages using Google’s translation tool. This screen shows a page translated into French.



Pictured: The new homepage is focused on content about consumers, with news, a consumer story, a Consumer Services team call, and a link to social media content.

While homepage Quick Links are the same for all associates and based on usage statistics, associates can customize a list of *Favorites* that is available on the homepage. A click on the *Personalize* link opens the *Favorites* tool. Users enter a name and the URL and can then open the link in the same window or in a new window. Each page of The Garden also includes an *Add to Favorites* Quick Link. This list of links is particularly helpful for users who access the intranet from different computers, such as shared workstations, through the course of a day. This gives them consistent, quick access to the tools and information they need regardless of their location.

Users can reorder the list by dragging and dropping or drag a link to the trash can icon to remove it.



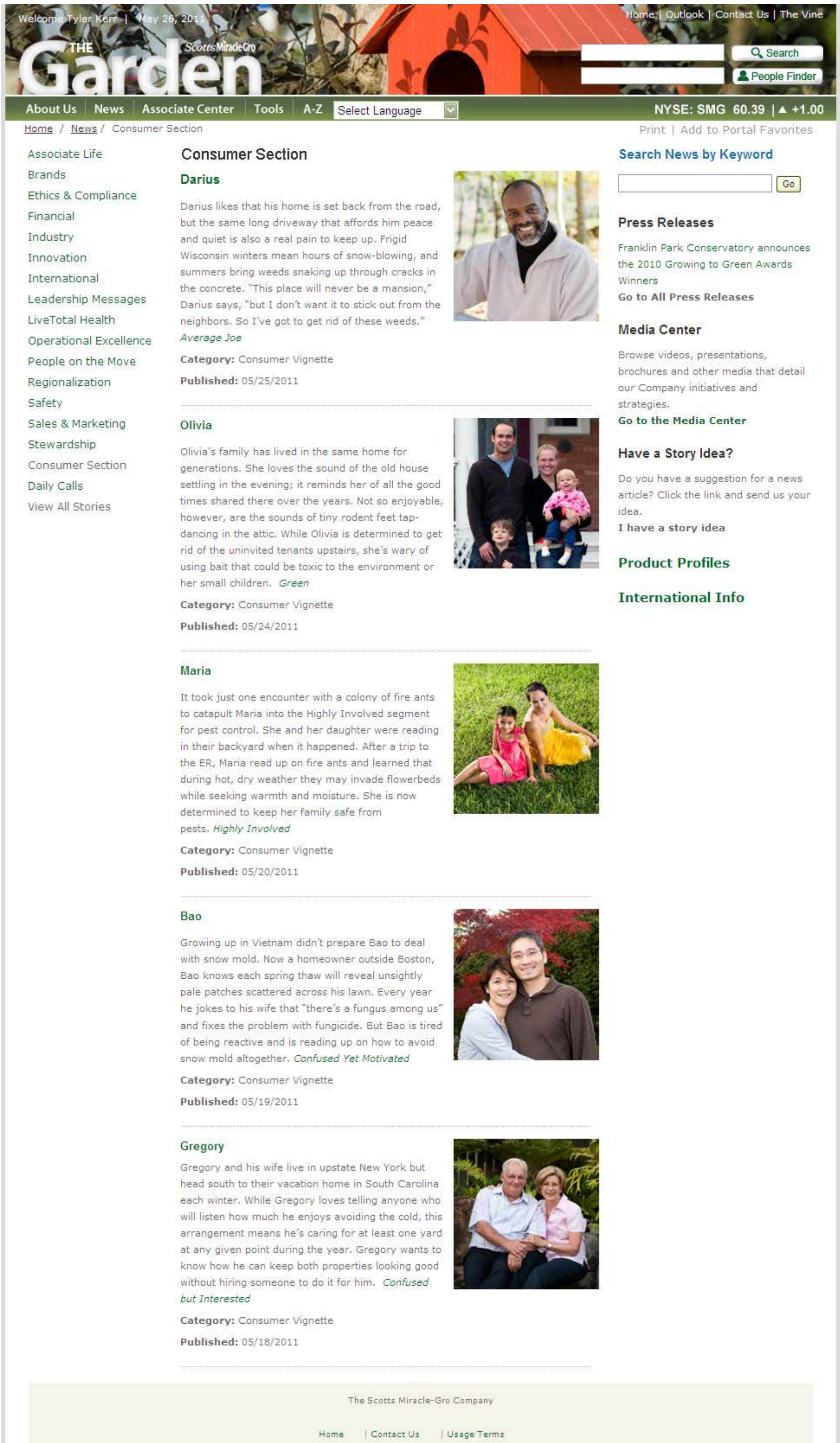
Pictured: A list of *Favorites* lets users add links to internal or external content.

Consumer vignettes are featured on the homepage and users can also click through the homepage to see more. The *This is Our Consumer* content is anecdotal, but representative of consumer market segments. The Consumer Insights group worked with Corporate Communications and Edelman, an associate engagement and consulting partner, to create the stories. They wrote 50 stories based on conversations with the company's consumer insights team, weaving in details about real-life experiences, trends, and demographics. The stories, problems, attitudes, demographics, and situations are all based on reality.

There are six key consumer descriptions, with 50 stories demonstrating them. The profiles are much like personas used when building a website, and stock photography helps put a face to the story. The stories make the profiles relatable. A recent survey of associates asked them to self-identify as one of the key groups. When it comes to gardening and lawn care, 44 percent of associates classified themselves as "Highly Involved" and another 28 percent are "Average Joes."

These consumer stories are becoming part of the culture at Scotts. One member of the communications team was surprised to discover a wall-sized mural of one of the consumer images in a conference room. She was excited to see Bill, the grandfather, on the wall, as evidence of the importance of the Consumer First campaign. The team provides PowerPoint templates, consumer images and graphics, vignette text, and the Consumer First logo, both on and offline, as they see fit.

Pictured: A wall-sized mural hung in one of the company's conference rooms features images from the Consumer First campaign featuring real-life consumer stories. These stories have become part of the culture at Scotts.



Pictured: Consumer profiles bring the consumer to life. Although anecdotal, they are based on representative consumer insights and demographics and help make the company's consumers relatable for associates.

When users click the homepage's *Daily Call* link, they're taken to a page featuring the *Consumer Call* of the day, which is a popular new feature, providing associates with a recording of an actual Consumer Services team call from the call center. In the first five months, this content generated over 5,000 hits.

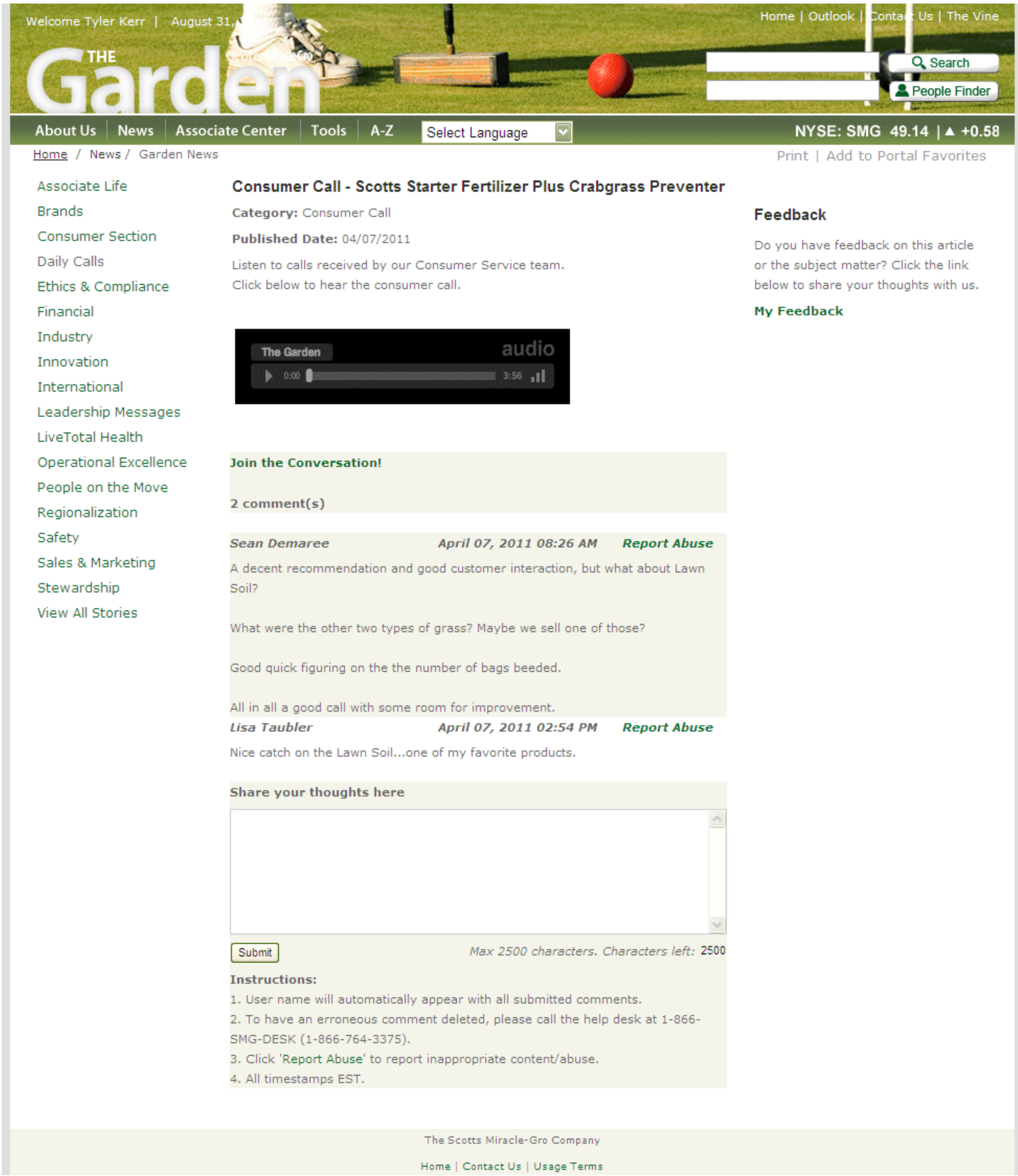
Scott's Consumer Services team records the calls and provides 10-15 calls per week to the communications team. Most calls revolve around application and usage. Associates can listen to the calls to hear the true voice of the consumer, giving them a better idea of the type of questions consumers have.

Listening to the answers from the Consumer Services team representatives can also be an opportunity for learning more about the product. Associates can comment on the calls, allowing for even more information sharing. For instance, a colleague might suggest a different response for the caller's question or have more detail about a potential solution. In the screenshot below, an inside sales associate and the Call Center manager discuss the content of a call. These communications help the company's knowledge grow.

Many of the calls are about product information, but the occasional amusing call sneaks in. For instance, one call featured a woman asking, "Can you dilute Roundup and put it in some water and wash the dog with it…to get the fleas off him?" The representative told the caller that RoundUp, which is a weed control product not an insect control product, is safe for use around kids and pets when used as directed, but it should not be applied directly to the skin. Further, the representative told the caller she should use a product designed to be used directly on animals and encouraged her to call back right away if she had any other similar questions.

Commenting on the calls is simple, as in other areas of the site. The bottom of each page includes a commenting form. Comments are listed directly beneath content, together with a timestamp and the author's name. There is also a prominent *Report Abuse* button in case someone finds a comment offensive or otherwise inappropriate. This helps the community police itself, as well as reminding associates to be thoughtful in what they post.

The commenting field is an open box allowing a maximum of 2,500 characters—more than enough space to share an opinion or start a discussion. Instructions are shown beneath the commenting field, giving users brief tidbits of information about posting content. Users are reminded that their name will automatically appear with their comment. Associates can call the help desk to have an accidental comment of their own removed.



Pictured: The *Consumer Call* of the day lets associates listen to recordings of actual consumer calls, helping educate and inform associates.

Imagery on the site is well planned and informative. The top of each page features a masthead image that changes daily, showing pictures pertaining to gardening, lawns, or lifestyle. This acts as a subtle—and attractive—reminder about the nature of the organization's business and who the consumer is.

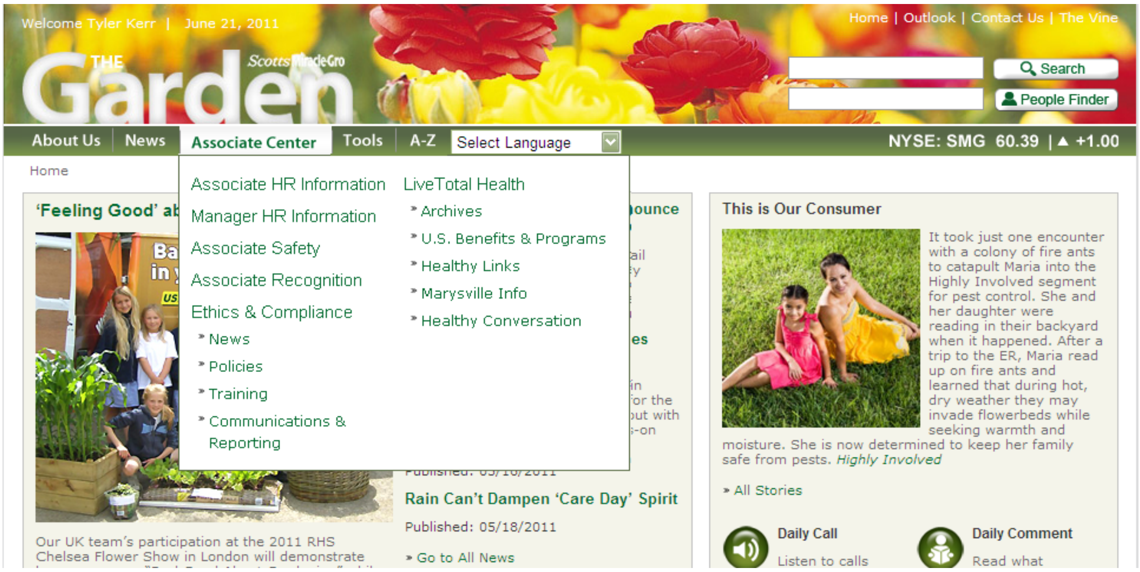
The site also uses images of actual associates. For example, the images on the *Associate Center* page feature real associates in the workplace. The Corporate

Communications Manager, Doug Hoy, acts as a reporter for the site and also happens to be a great photographer. His photos are used throughout the site.

The *Associate Center* page leads to information about everyday work life at ScottsMiracle-Gro. This is the sort of page on an intranet that is often plain text or filled with stock art. It is refreshing to see images of actual associates fill the pages.

Pictured: Photographs on the *Associate Center* page feature actual associates of the organization, rather than typical stock photos.

Sometimes, relatively simple design changes can have a big impact. In this case, the redesign introduced top-level rollover navigation. Since adding this element, traffic statistics show a decrease in usage of the top-level navigational landing pages and an increase in secondary page views. A recent poll of associates indicated this is among their favorite enhancements to the site, moving them to information more quickly.



Pictured: Adding mega menu navigation has helped move users to content more quickly.

Recent surveys show that associates feel better informed about consumers, and traffic shows that associates are using the site to find the information they need. The Garden has helped put the Consumer First initiative front and center through its compelling and creative content.

BACKGROUND

In March 2011, the company launched a broad Consumer First program, a campaign aimed at educating associates about its most important priority: the consumer. Along with this initiative, the company's Internal Communications team and the Senior VP for Investor Relations & Corporate Affairs, Jim King, decided to revamp The Garden and use the redesign project as a springboard for translating the Consumer First concept into a mixed-channel communication campaign. This effort launched March 15, 2011.

Deciding how to go about redesigning the site meant figuring out what associates needed to know about their consumers. An associate survey confirmed that associates generally were unsure about ScottsMiracle-Gro consumers and what they are looking for from the company. The survey revealed that more than half of the respondents said they wanted more information on consumers' needs, preferences, and trends.

"This survey sparked our discussions about the content we wanted included," says Lisa Tenerelli Smith, Director, Corporate Communications, "specifically content delivered in fresh and different ways electronically, not just through traditional email or print campaigns."

"We especially wanted to capture consumers' views and insights directly without a filter," she says. "The Corporate Communications staff worked cross-functionally with internal teams from Business Transformation (information technology), the Consumer Services team, and Consumer Insights to make that happen."

Challenges

Smith explains the project’s chief challenges:

- **How to frame the content through the consumer lens:** What are the best ways to frame content through the consumer lens so that associates would understand their motivations for purchasing ScottsMiracle-Gro products and services?
- **How to best use new technologies:** How can designers best use new technologies on the intranet site to capture and engage associates? (The company uses SAP for the intranet and has customized the site heavily to present an attractive UI).

Framing the content was best done through storytelling. “As communicators, we recognized the opportunity to create a story, based on marketing insights, to bring the consumer credibly to life for associates,” she says. “So, we worked with the company’s Consumer Insights group to understand the different consumer segments, conceive short consumer vignettes, and use representative stock images to bring the consumer to life.”

Although the stories and images illuminate the company’s consumers, the team was also aware that social-media avenues were available to tie associates and real consumers together directly from The Garden homepage. In addition, the team saw an opportunity to revamp The Garden editorial calendar to provide a decidedly more Consumer First focus to news content. This effort included ramping up both the quality and quantity of news articles to better highlight what the company knows about its consumers, demonstrate how it’s learning more about them, and recognize associates using the learnings and insights.

THE Garden ScottsMiracle-Gro

Welcome Tyler Kerr
February 08, 2011

People Finder | Search

About Us ▾ | News ▾ | Associate Center ▾ | Tools ▾ | A-Z | Outlook

Home

Looking to 'Expand' the Soil Category

By combining our knowledge of "what" and "who" we've come up with Miracle-Gro Expand 'n Gro—a premium concentrated planting mix that delivers just what consumers want. The product will be part of a limited launch in 2011, covering DMAs in seven states along with its introduction in select garden centers in the UK.

Development Center 'Intense' Say Our ALP Participants

Developing the next generation of the Company's global leaders is the mission of the Accelerated Leadership Program (ALP).

Published: 02/02/2011

Jim Lyski joins the Company as Chief Marketing Officer

Jim Lyski has joined ScottsMiracle-Gro as Chief Marketing Officer on an interim basis, reporting to the Office of the Chairman.

Published: 02/07/2011

Changes, Important Dates for RedBrick Health Program

Published: 02/03/2011

Go to All News

associate center

Helping to manage your work life at ScottsMiracle-Gro

Global Ethics & Compliance | Associate Recognition
Policies | LiveTotal Health
More

tools

Gateway to common business tools used every day

Aviator Travel & Expense | Time Management
eStore | iStar
More

how do i?

Step-by-step guides about our business processes

Using My Favorites on The Garden | Using the People Finder Feature
Obtaining a Purchasing Card | Booking Travel through Aviator
More

product profile

Scotts® Turf Builder® EZ Seed® Ultimate Winter Lawn Mix

Many consumers in Arizona have found our new Scotts EZ Seed Ultimate "Winter Mix" the perfect alternative to what has been their usual labor-heavy and nose-offending fall overseeding effort , one nvolving manure. This new ryegrass-based blend allows homeowners to completely forego the "stink" and gives them all they need for their winter lawn in one bag. It also combines other varieties to provide the rich dark green color homeowners are seeking. READ RELATED ARTICLE

Go to All Product Profiles

My Favorites

Admin

- Marysville Associates
- Corporate News Admin
- Digital Sign Guidelines
- Garden Collaboration Site
- Cafe Menu

Personalize

Find It Fast

Using the My Favorites Feature
Performance Management
For New Associates
Media Center
Reservationless-Plus Conferencing

Just Added

2011 Holiday Calendar
2011 Payroll Processing Calendar
Printing Materials through InnerWorkings
Using the People Finder Feature

More

Stock Quote

NYSE: SMG 52.73 0

Additional Stock Info

World Time & Weather

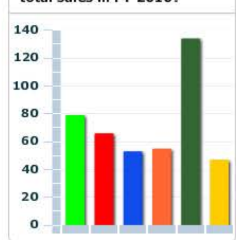
Your favorite cities	When it is...	
Stockholm, SE	18:21	34°F
Dublin, IE	17:21	45°F
Marysville, OH	12:21	19°F
Chicago, IL	11:21	16°F
Denver, CO	10:21	7°F

Personalize

Answer Me This

Admin

Test Your Supply Chain IQ: What is our largest Growing Media manufacturing plant in North America, based on total sales in FY 2010?



The answer is Huntsville (just over $46M - it is also the top plant in volume). The Lebanon plant is second at $45.7M. Both plants became the first to top the $40M mark in 2009. Click the link below to read a related article from the archives.

Huntsville, Lebanon Plants in Milestone Mode during 2009 (12/07/2009)

Pictured: While still visually appealing and functional, the previous version of The Garden homepage focused on delivering company news and providing links to tools. The new version focuses on educating associates about the consumer by delivering news and featured content, consumer profiles, and links and information about activities related to the company's Consumer First initiative.

Pictured: The *Media Center* page is the spot for associates to find and watch video that has been published to The Garden news and/or featured content sections. Where applicable, video is grouped into playlists by event or subject matter to minimize searches for related content.

INTRANET TEAM

Pictured: The Scotts intranet team (left to right): Lisa Smith, Balaji Srinivasaraghavan, Dhayananth Chandrasekaran, Tyler Kerr, Krishna Thallavarajalla, Kristin Dean, Doug Hoy, and Elizabeth Kanz.

GOVERNANCE

Ownership

The Investor Relations & Corporate Affairs Department, headed by Jim King, oversees The Garden intranet site development. This relationship has been beneficial for the site's progress.

"Having Corporate Communications own the intranet helps us align The Garden with strategic messaging," says Smith, "and allows us to deliver applications company-wide with single-sign-on authentication to make the site a one-stop gateway to learning, time management, performance management, reporting, and many other business systems."

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Corporate Core Team	• Provides governance, program management, coaching, support, and evaluation of content submissions • Manages site content and overall functionality • Conducts long-term planning and road mapping • Ensures access and availability to all external applications used by associates
Content Owners	• Updates and ensures consistency of their section's content • Can delegate some part of the updates or changes to other members of the team/department
Business Transformation	• Designs, develops, and maintains intranet technology in partnership with Corporate Communications • Provides web design services • Provides insight and recommendations about site functionality
HR, Business Units and other Content Providers	• Submits content for broader news posting, maintains activity calendar events, and maintains content on functional pages

USERS

All US associates and all international associates at the manager level and above have access to The Garden. This population includes traditional knowledge workers in corporate roles, as well as associates in Sales and Supply Chain (manufacturing and logistics) roles. The site is particularly important to dispersed workers as they use it to access important news, enter time, and find everything from policy to benefits links and information. Every day, on average, 2,250 associates visit the site. An associate survey found that 65 percent of those who responded most strongly prefer getting company information from The Garden, ranking it above "their immediate manager" and all-associate emails as a source of information.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	• MyScotts.com
Default Status	• It is set by default as the homepage but users are free to change this.
Remote Access	• Remote access is available through the MyScotts.com URL (there is a login screen). Many associates frequently log in this way to access learning applications, time management tools, and email.
Access from Shared Workstations	• Users in the company's manufacturing locations (predominantly hourly workers) access the site on shared workstations in common areas (such as the lobby, break rooms and cafeterias).

DESIGN PROCESS AND USABILITY WORK

Design Approach

To achieve the redesign they envisioned, the team conducted associate surveys and focus groups. "We asked people to perform specific tasks (find particular pieces of information, navigate to popular pages, etc.)," says Smith, "and then reconvened associates to give us feedback on the experience. We also informally benchmarked with former colleagues and professional contacts from other companies to determine best practices."

The team used usage metrics to guide design of the site to determine popular links, which they made highly visible on the homepage and masthead. "Metrics also helped us make the case for changing the format of our news feature," she says, "for instance, looking at stories that drew the most hits (such as stories about consumers, people, organizational changes, and business strategy) to improve our editorial calendar."

An associate survey we conducted earlier in 2011 also bore out these results. "For example, we learned that associates wanted more information about consumers, organizational changes, and business and strategic initiatives," says Smith. "With this in mind, we designed the site to provide space to prominently feature this information and retooled our editorial calendar to sharpen our focus on supporting content."

One surprising outcome of the site launch itself was in the featured content area. This area was originally set up with static content (such as policies) that was buried deep within the site. Research indicated that associates had a hard time searching for and accessing this information; however, the team found that this space is better used for dynamic, timely content—videos of the CEO and guest speakers such as Martha Stewart, for example, as well as breaking news from the external website, scotts.com. This area is an extremely valuable piece of homepage real estate and now provides a mix of static content and high-profile messaging. “We can deliver images, media, and text easily and briefly here without having to write a full story, which takes longer to write and get approved,” says Smith. “We found that using this space for this type of content really encouraged people to interact with videos, multimedia, and other timely content.”

TIMELINE

INTRANET TIMELINE	
Milestone Date	**Milestone Description**
2004–2006	• Released first version of the associate intranet (2004) and a redesigned (2006)
November 2006–July 2009	• Transitioned to SAP platform and introduced work-related content tools and applications • Began extensive site customization to contemporize and streamline UI
July 2009–March 2011	• Continued to leverage and customize SAP platform, emphasizing UI and design
April 2011–August 2011	• Added an enhanced people-finder capability (allowing associates to see colleagues’ supervisors and direct reports), launched photo carousel tool in news (upgrade from being able to have only one photo per story)
Q1 2012	• Planned launch of next release, which will introduce time-based publishing, dynamic news delivery, and customizable content areas

CONTENT AND CONTENT CONTRIBUTORS

The site’s CMS is part of SAP’s off-the-shelf package. The site does not use time-based publishing, but the team is planning to implement that with the next site refresh scheduled for November 2011. Time-based publishing will let team members post content to be delivered on a scheduled basis according to the calendar day and time selected. This will be particularly helpful in continuing the cadence of Consumer First messaging as well as meeting legal and HR requirements for policy, ethics, wellness, and performance management communications.

Doug Hoy manages The Garden news content and editorial calendar. “Our internal and external Corporate Communications team, along with the community partnerships group, are all responsible for content development according to our editorial calendar,” says Smith. “We also receive submissions from associates across the company through our *contact The Garden* email address requesting articles to recognize colleagues, educate about regional marketing initiatives, and address international work underway.”

Content is written by the appropriate communication liaison (a member of Corporate Communications team) and reviewed by the appropriate business leader or subject matter expert.

The intranet team provides content contributors guidance on how to post content to functional pages and coaches them on best practices. The company's Corporate Communications manager polices adherence to style, tone, and on-message consistency once it's published.

TECHNOLOGY

The Garden is built on the SAP NetWeaver Portal. The implementation has been heavily modified in house to achieve look and feel requirements. Pages are built using SAP's Web Page Composer tool, which has also been modified by the Scotts technical team. Document management is handled by SAP's Knowledge Management product and the team uses Adobe Omniture for analytics and Vzaar for video hosting and streaming. Leverage Software is used to support the site's social media functionality (groups, blogs, wikis, etc.). SAP TREX provides the intranet's search functionality.

MOBILE

Currently, the intranet is accessible from iOS (iPhone, iPod, and iPad) and Android devices. Although the team has not yet optimized the experience for mobile, both The Garden and the Vine social networking platform are accessible. The team has a project budgeted for 2012 to evaluate an optimized mobile version of the site that is also available on BlackBerry devices. The choice to optimize first for iOS and Android was made because the audience for this initial rollout is the company's senior leadership who are the predominate users of this mobile technology. In the future, the company hopes to leverage The Garden mobile platform to provide a more robust gateway to training, performance management, time entry and approval, and travel and expense reporting.

SEARCH

The intranet uses TREX search, which is the integrated search that SAP provides with several of its packages, including NetWeaver portal. TREX uses tf–idf (term frequency–inverse document frequency) weight for results. One of the projects currently being worked on at Scotts is increased flexibility in refining results associates receive based on analytics and feedback.

Pictured: Search results for a site search on the keyword "Policy." The search returned a variety of documents and links including news articles, company policies, and forms. The keywords are highlighted in each search instance for easy review.

RESULTS AND ROI

Smith discusses some of the most significant signs that the site is achieving its goals:

- **Increase in site traffic.** "The team has seen a steady increase in usage metrics year-over-year since the first version of the associate intranet was released in 2004. Since March 2011, metrics indicate a 48-percent rise in site traffic year-over-year. Additionally, a 49-percent increase in news page views has been recorded and *People Finder* enhancements have driven a 30-percent increase in tool usage. A poll on The Garden homepage that asked associates to rank their favorite new site features generated more than 500 responses."
- **User satisfaction.** "Feedback about the site's design is that associates feel more pride in the company, based on the images and content we're delivering (such as of consumers using our products to make their homes beautiful). Associates enjoy that the masthead image changes every day (we actually solicit images from associates), which makes them feel personally connected to the lawn and garden category."
- **Increased user participation.** "Since the relaunch of the site in March, the new design has provided a 25-percent lift in article commenting and a 49-percent increase in hits to the homepage news."

LESSONS LEARNED

The Scotts team shares some of their lessons learned:

- **Start with a well-defined plan.** "Start with a well-defined plan and get buy-in from all business partners EARLY. Relying on a wireframe document helped us walk through decisions at a glance that had been made regarding design over the course of the project. Our design was grounded firmly in our associate survey and focus group feedback. Additionally, a collaborative relationship among the business and the technical team is essential when undertaking a project of this nature and scope."

- **Base your business case on fact.** "We were able to show a clear connection to business strategy when we presented our ideas for enhancing the site. We assembled benchmark data that showed trends, preferences, and ROI from best-in-class companies, and had our own associate research to underscore our assumptions about preferences."

- **Build relationships early and often.** "Sponsorship from company leaders was instrumental in moving the project forward. Once approved, relationships with the Business Transformation team, the Consumer Insights group, and the Consumer Services team were instrumental in helping us deliver on our vision."

Skanska

Using the intranet:
Skanska is one of the world's leading project development and construction groups, with expertise in construction, development of commercial and residential premises, and projects in public-private partnerships. Based on the Group's global environment know-how, Skanska aims to be customers' first choice in terms of Green projects. The Group currently has 53,000 employees in selected home markets in Europe, the US, and Latin America. Skanska is listed on the Stockholm Stock Exchange.

Headquarters:
Solna, Sweden

Number of employees the intranet supports:
Nearly 30,000

Company locations:
Skanska operates in the US, the UK, Sweden, Finland, Norway, Denmark, Estonia, Hungary, Poland, Czech Republic, Slovakia, Argentina, Brazil, Chile, Colombia, Peru, and Venezuela.

Locations where people use the intranet:
All company locations

Annual sales:
SEK 122 billion (2010)

Design team:
The design team consisted of in-house personnel and consultants. During the project's most intense phase, the core team consisted of eight people working full-time with the intranet.

The intranet team also involved work groups for different areas (contacts, graphic design, interaction and usability, IT architecture, news, projects, search, and shared information model) with representatives from different parts of the organization, totalling approximately 70 people.

Members:
In-house: Kimi Matsubara, Global Intranet Manager (as of May 2011; previously Global Information Owner); Helena Dahlberg, Global Digital Development Manager (until April 2011); Dan Lindeberg, System Architect/Developer; Frans Lundgren, Service Manager; Minna Solvestad, Project Manager IT; Magnus Österhult, Project Manager IT; and Charlotta Herte, Group Internal Communications Manager

The Synthetic Family: Olof Gunnarsson, Business Analyst and IT Coordinator

Ottoboni Group: Camilla Flinkenbro, Senior Project Manager; and Martin Skybrand, Art Director

SUMMARY

An initiative to create "one Skanska" was the push the intranet team needed to create a new, global intranet for the project development and construction group. With 53,000 employees, 30,000 of whom use the intranet, the project was a massive undertaking. Though the company is based in Sweden, employees are scattered around the world, and the site must support content in 13 languages.

The team was tasked with creating one centralized site to support all business units, locations, and languages. The main goal was to increase the possibility of knowledge sharing at the company, taking advantage of expertise scattered around the world, as well as sharing tools across countries and business units.

Initial focus groups made it clear the organization needed a single corporate site. This was a drastic change from the 30-plus intranets the organization had at the time, each with its own set of users. There was no central control over the sites other than some general graphic guidelines.

A lack of communication between business units and locations was resulting in a very decentralized view of the company, with employees having little knowledge about other business units, countries, or the company as a whole. The company had been through a period of rapid growth, almost doubling in size in two years.

With such a large undertaking affecting so many employees and business units, change management was essential. Luckily, intranet team members knew this from the start. They initiated monthly global telephone conferences with the project team and business unit leaders, sharing information about progress and asking for feedback. They did a global tour with live meetings with business units to explain changes and gather feedback. They had open calls around development for anyone interested, and gradually ended these as interest in the day-to-day details waned. Senior management was kept informed through an intranet board that reported to them.

The site's structure is global, but maintenance is decentralized. More than 120 structure administrators and 620 content editors can add information to the site. Each business unit has a Business Unit Information Owner, and oversight and processes vary across the organization. The team gives business units guidelines on content and structure, but reviewing content is up to the business unit. This allows each unit to determine a process that works internally, but also results in some inconsistencies across the site.

Last year, one individual reviewed all 30,000-plus intranet pages after they'd moved to the new design to check for significant inconsistencies. Quite an undertaking! The team realizes this is a necessary step, but wants to find a better plan moving forward.

The new global homepage features news directed to the individual based on his or her business unit, office location, and country. Employees can view local news, business unit news, country news, and global news. Press releases and news and RSS feeds round out the middle of the page.

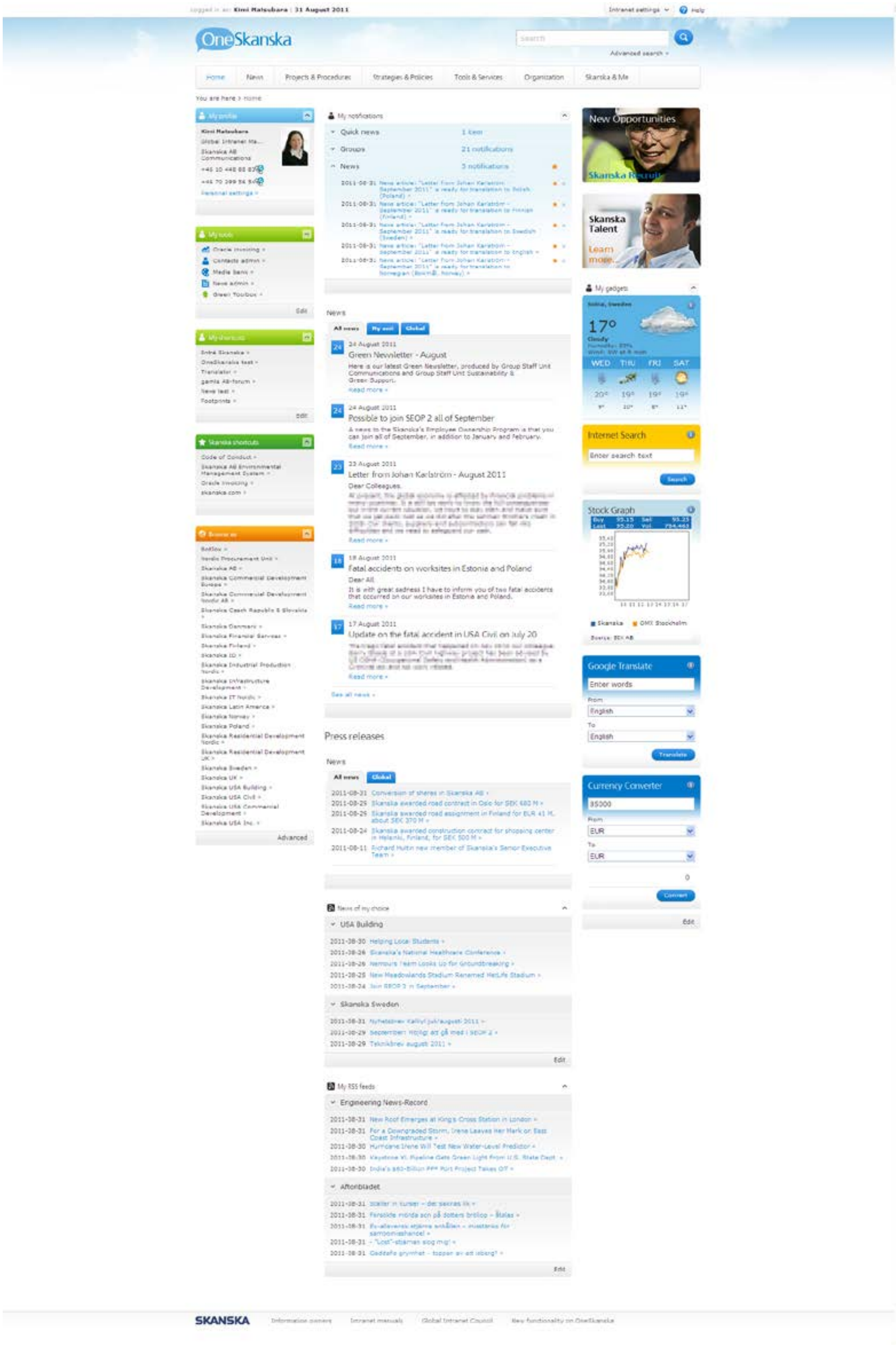
Tabbed pages show global and local information. The local information is always displayed first, as it is likely the most relevant to the user.

The top of the page shows notifications for the user. Notifications on the site inform content editors or translators of any tasks they need to complete. This is also where content owners are notified if a page has not been updated in six months and needs a review. Employees receive notifications from their SharePoint groups, which are used for local and global collaboration. The top of the page also includes *Quick News* updates, which are short news items about things that are not archived because they're of interest only at a certain point in time. Examples here might include system maintenance messages, holiday announcements, or announcements for events (such as "celebration in the lounge at 10 a.m.").

Each category is closed by default, listing only the name and number of notifications or items. Even when a category is closed, stars indicate if it contains new or updated information.

The left side of the page includes the user's personal details. This is prominently shown in hopes that users will notice and fix any errors in the profile information, as this is the information others see when viewing their details in the employee directory. The rest of the left column includes links to tools, shortcuts, and official Skanska shortcuts (Quick Links).

The right side of the page is a mix of global and local information; it also features a few promotions and an area for gadgets, where users can select from options such as weather, stock price, Google Translator, and a currency converter.



Pictured: The homepage presents information relevant to the user based on business unit, office, and country, as well as on personal preferences. It can also contain global content intended for everybody in the organization.

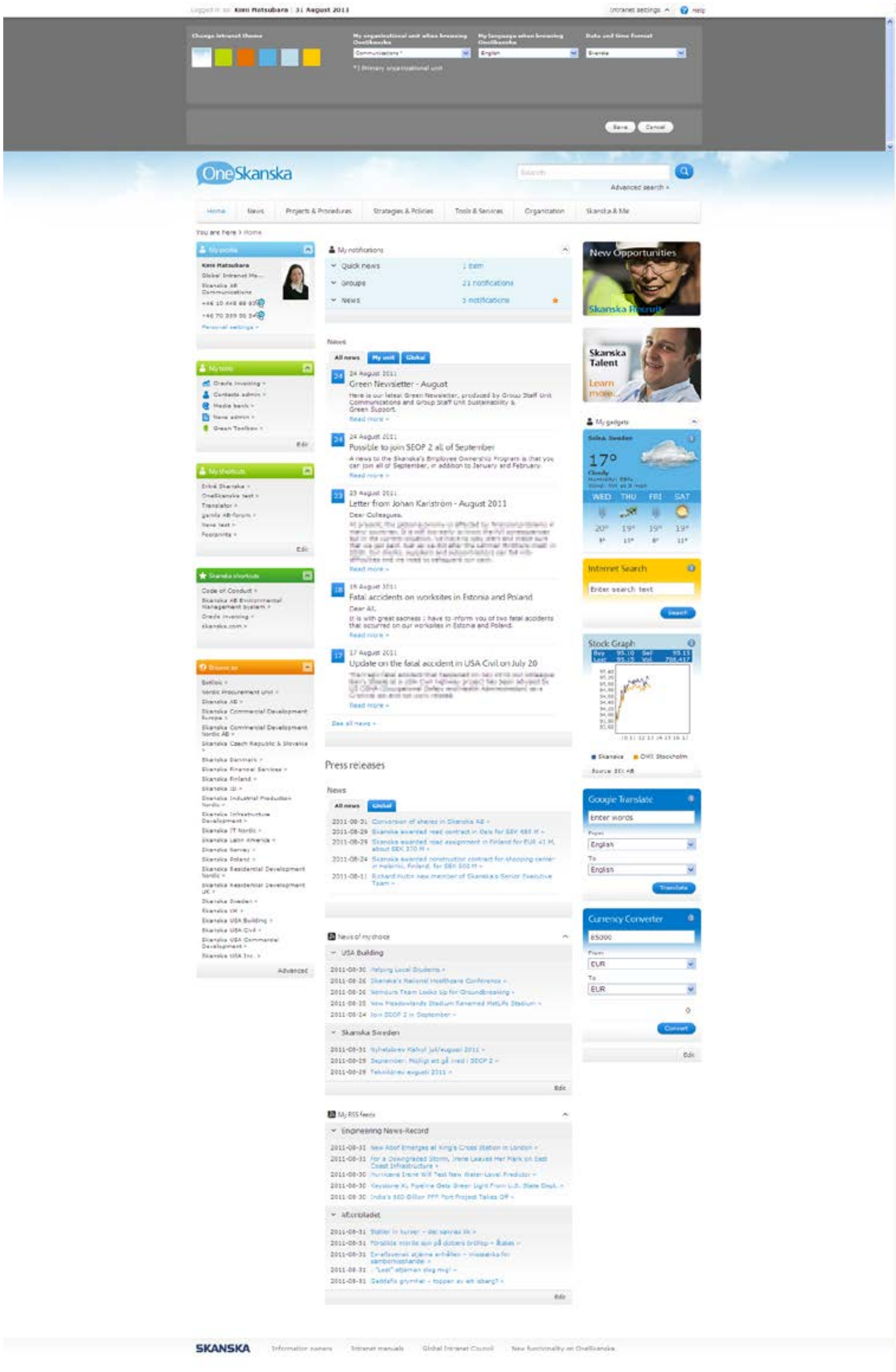
Employees have many opportunities to customize the site experience. Employees can add their own tools or shortcuts on the homepage by clicking the *Edit* button in each respective box on the side of the page.

The *Intranet Settings* menu appears at the top of the page. When clicked, it displays options to change the visual theme on the site, primary organizational unit to use for browsing the site, and language for browsing. Users can also select their date and time format, select the language of their choice for viewing the intranet, and get all dates, times, and currencies formatted according to the language chosen. But there is also a possibility to choose a combination—for example, to use English as your primary language, but to view date, time, and currencies according to Swedish standards.

Employees can also subscribe to news feeds from other parts of the organization. RSS Feeds are listed at the bottom of the homepage, and an *Edit* button lets users select other sources of information. These functionalities were added in response to requests within the organization.

When users enter the site for the first time, they go through a Start Up Wizard to make sure the organizational settings are correct. Employees set their workplace, which sets the country as well. This information can be changed on the user's profile page as needed.

The intranet team has been somewhat disappointed by uptake of customization features such as selecting a theme or adding a shortcut. However, it is quite common that employees do not take the time to customize a corporate intranet. This is often due to a combination of factors including the visibility of the options, the perceived benefit to the user, and the ease of implementing these options.

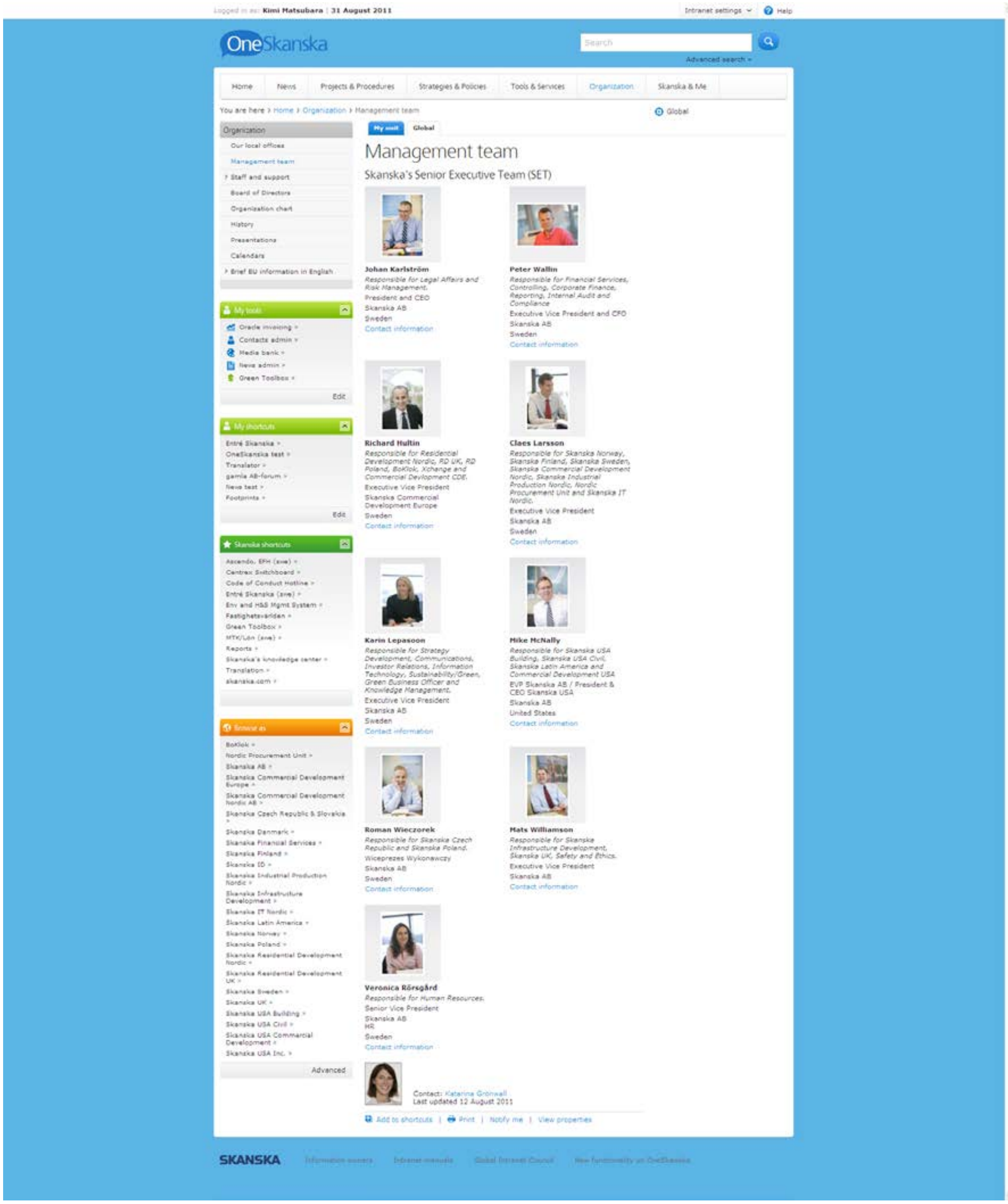


Pictured: Employees can change the background theme or reset their business unit or language. They can also add news and RSS feeds, add links to tools or site content, and add gadgets to the page.

One of the biggest hurdles the intranet team faced was creating a navigational structure that would accommodate the content of all the business units and locations. The team met with other intranet teams as well as with working groups around the company. They examined the navigational structures from all the old sites and came up with a new structure to test in prototype form.

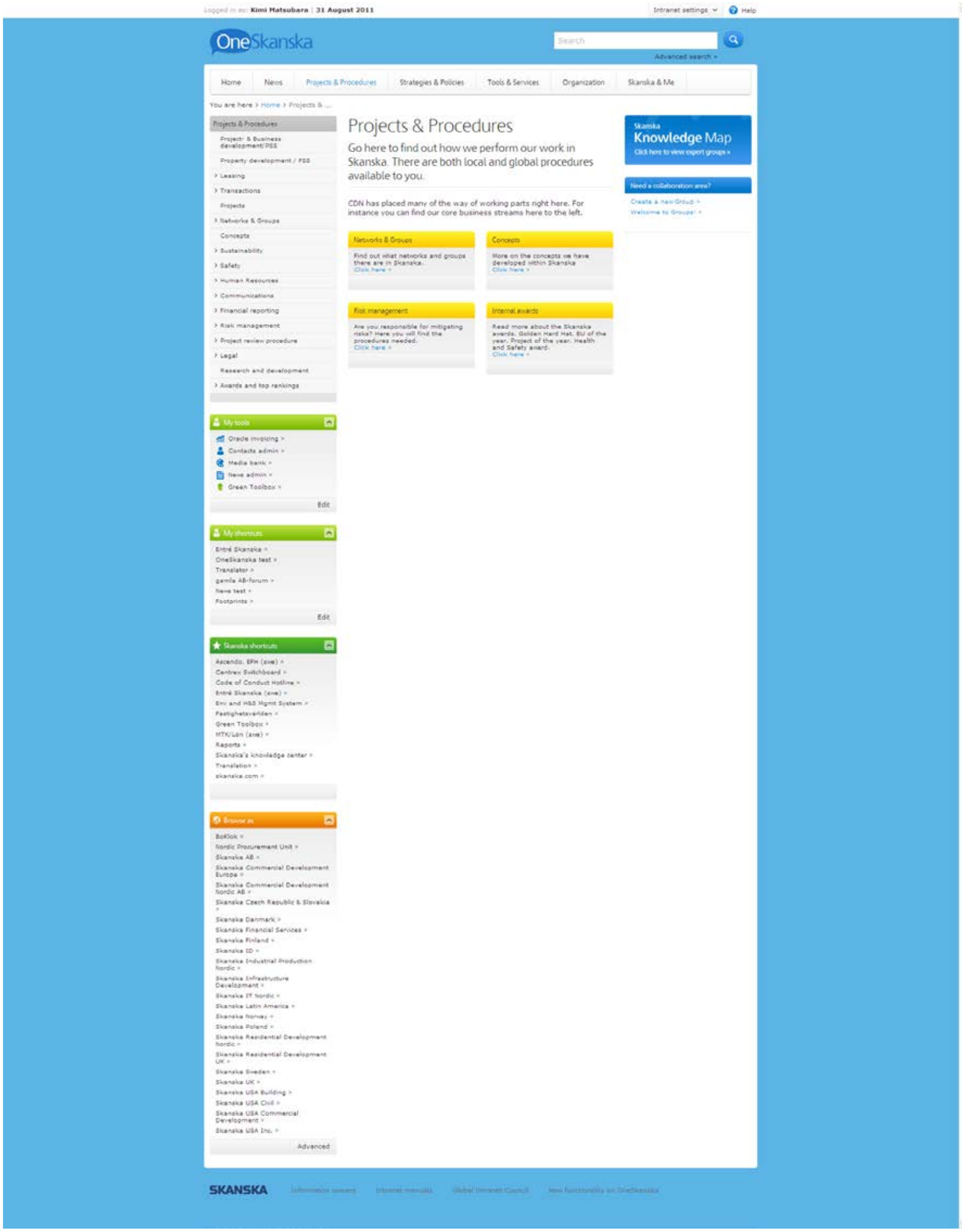
The final design has six top-level options. *News* presents all news relevant to the employee based on business unit, location, and country. *Projects & Procedures* has information about how work is done at Skanska. *Strategies & Policies* contains overall plans and policies, and *Tools & Services* presents information and tools for employees to do their work. *Organization* is similar to an *About Us* section, and *Skanska & Me* is individual information about working at the company.

The main site navigation is the same for all users. Local units, countries, or workplaces can add items to support local needs. Those links then appear in the main global navigation for the target group. For instance, the first few items in the left-hand menu in the screenshot below are business-unit specific.

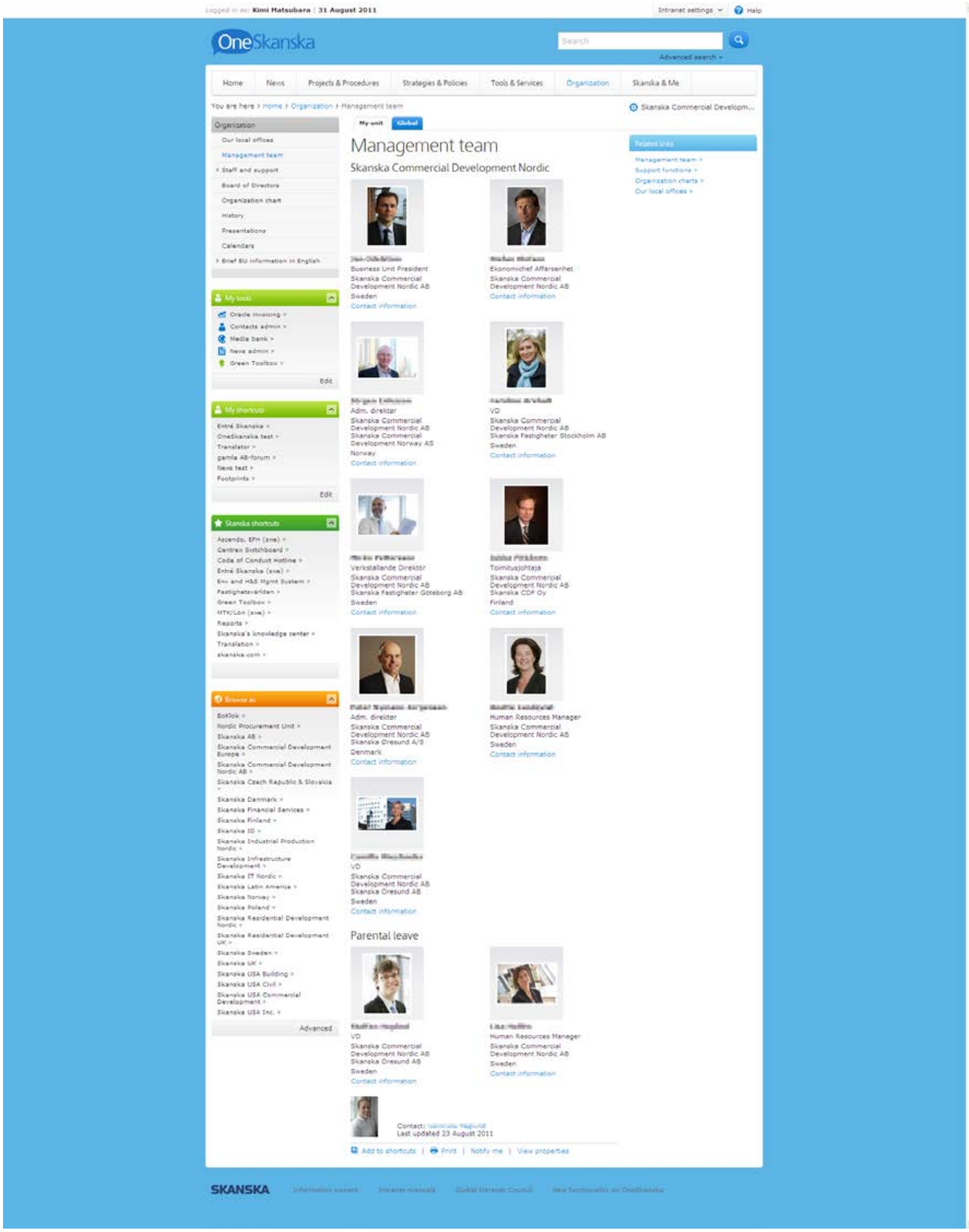


Pictured: Global site navigation is consistent for all business units, but they can add group-specific navigational links to the local navigation as needed. Here, the first few links in the left-hand menu are specific to a business unit.

Tabs are used throughout the site to manage the combination of local and global content. This allows the site to show different information in different tabs on the same content page. Local tabs are always displayed first. This structure allows information to be displayed in a single page and makes it simple to navigate between local and global content without having to leave the page.



Pictured: Tabbed content defaults to the local view, assuming local information is more relevant to users' information needs.

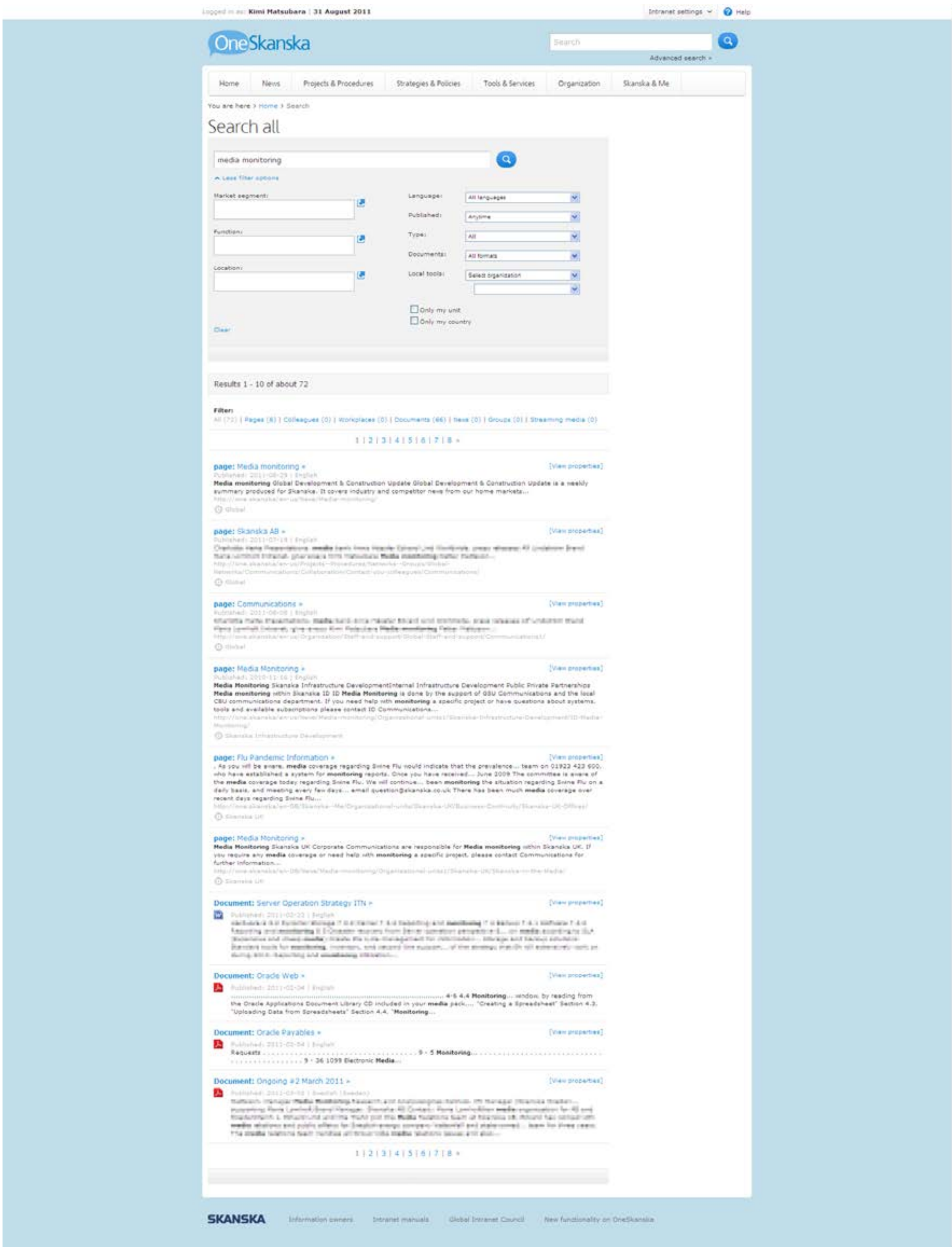


Pictured: Users can click to view global information without moving to a new page. Tabbed content provides quick access to relevant information.

While users' views of content are targeted based on business unit and location, all information on the intranet is transparent and locatable via the site search. In each search result, the target group for each piece of content is listed next to a bull's-eye icon. In the *Advanced Search*, users can change their search criteria from the standard *OneSkanska* and *News* setting to a more targeted search based on business unit or country, to help pare down results.

All results are shown by default. As the screenshot below shows, users can expand filtering options to specify a market segment, work function, or location, or to filter by language, date, type, or format. Checkboxes let users easily look only within their own business unit or country.

A list of filters above the results let users filter by content type, such as documents, news items, or SharePoint group content.

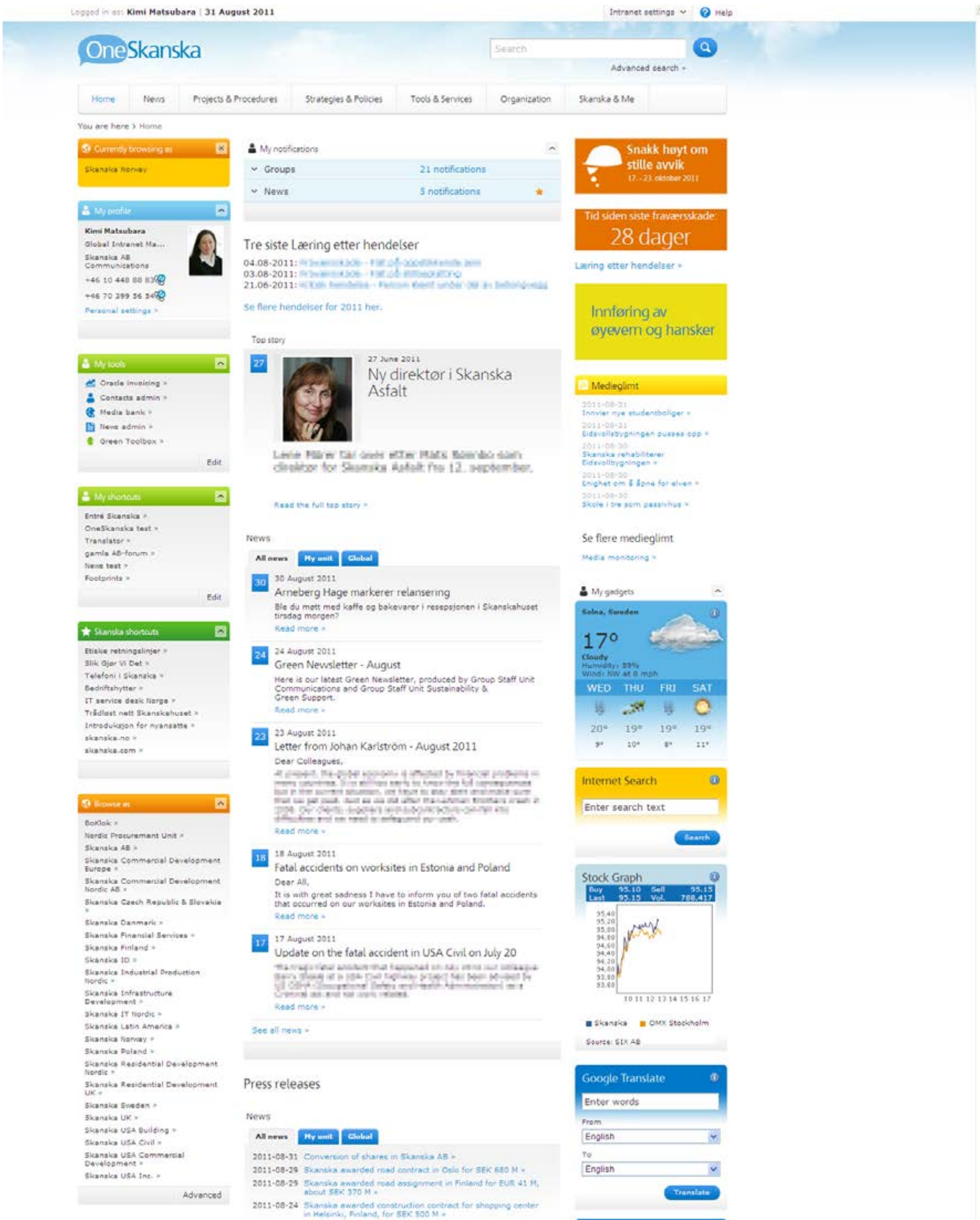


Pictured: A search results page. All OneSkanska content is available in the search, but users can limit search results in many ways, including showing only information that is targeted to their business unit or country.

Users can also view information intended for other audiences via the *Browse As* feature in the bottom left corner of each content page. An employee's view of content defaults to their own business unit, but if the need arises to see another view of content, employees can select another business unit. Advanced options also let users see the intranet as if employed in a sublevel to a business unit, in another country, or in another workplace.

When users select to *Browse As*, a small box opens on the top left of the page, showing the user the current view. Closing the box or the browser will return users to their regular settings; this makes it easy to restore the defaults and ensures that nobody "gets stuck" in another business unit.

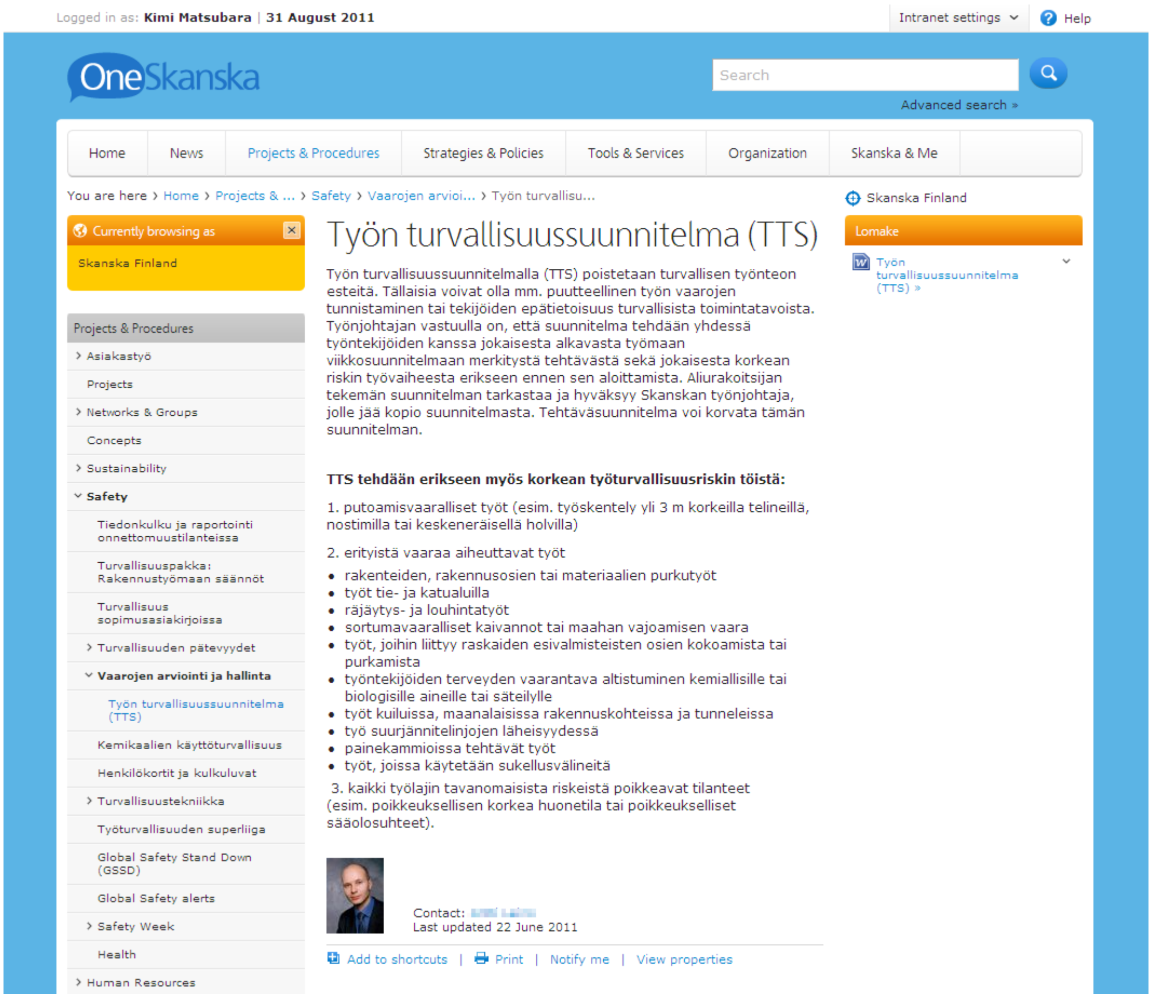
The *Browse As* functionality was at the top of the list of requests for the site, and the team receives positive feedback about it. *Browse As* functionality has been hugely helpful in assisting employees with issues, as it makes it simple to see what the intranet looks like in different parts of the organization. This is an issue that sometimes arises with personalized intranets: every employee's page can end up looking different from every other. This is also a particularly helpful function for IT support, which is country-based and generally services more than one business unit.



Pictured: Users can view the intranet from the viewpoint of another business unit, country, or workplace. When in another view, a box appears in the top left corner indicating the current view. Closing the box returns the user to the regular view of content.

On content pages, the page owner is always listed, along with a photo and contact information. This shows individual responsibility for content as well as giving colleagues an easy way to ask a question about it.

Beneath the page ownership information are options for personalization. Employees can add shortcuts to pages and subscribe to receive notifications when pages or documents are updated. Subscription information for a page is always listed beneath the owner information, and subscription information for an individual document is listed next to it.



Pictured: Content owners are pictured on each page, and employees can subscribe to receive notifications when content is updated.

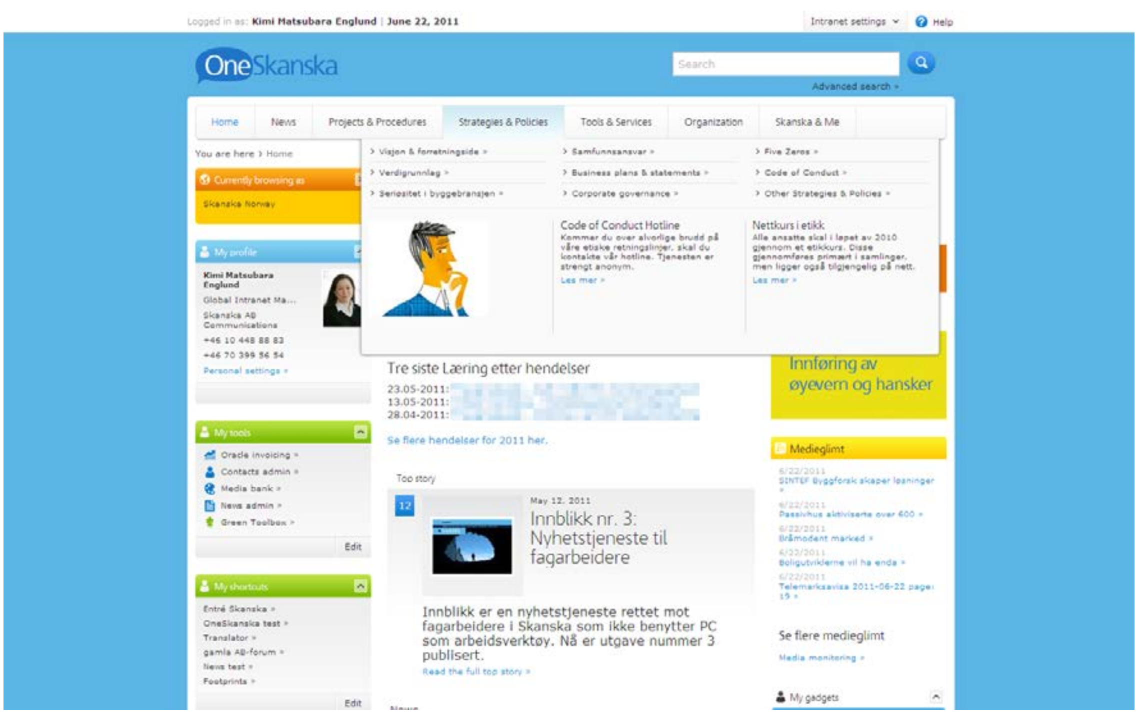
As in any global organization, translation is a huge consideration. In general, the intranet team leaves it up to the business unit to set a language. Global information is always available in English. Within the organization, one individual is responsible for each language supported on the site, which includes Czech, Danish, Estonian, English (US), English (UK), Finnish, Hungarian, Norwegian, Polish, Portuguese, Slovak, Spanish, and Swedish.

Each language expert decides if they need to translate global content into the local language. Occasionally, the intranet team provides local-language versions. Local content is allowed to be in the local language, but each unit is required to provide a brief text in English about their operations on a global page.

Each translator can enter translations through the CMS. Employees can select their own default language, and if content is available in that language, it is displayed. However, if a user selects Swedish, for instance, and only English content is available, the English version is visible to the user.

All news items are published and translated in a separate system, which is used for the company's external websites as well. When a news story is published, the author can click *Notify Translators*. The translators then receive a notification on the intranet homepage that a news item is available for translation, together with a note from the publisher.

The company has a set process for translation of global material, giving the translators 48 hours' notice when a news item needs to be published. Whenever possible, the intranet team sends the full content 48 hours in advance. In some instances, content is not yet finalized and the 48-hour warning simply tells translators something is on the way.



Pictured: Global content is presented in English, with local content in the local language. If no local-language content is available, the English content is shown.

The site's new, global nature allows knowledge sharing that was not possible previously. The site features a *Knowledge Map* that helps employees find and connect with expert groups in different areas.

The *Knowledge Map* shows important global strategic networks across Skanska that are sponsored by the Senior Executive Team. It enables employees to see what areas of knowledge are important to the organization and to quickly use that knowledge. The tool is located with *Tools and Services* in the main site navigation.

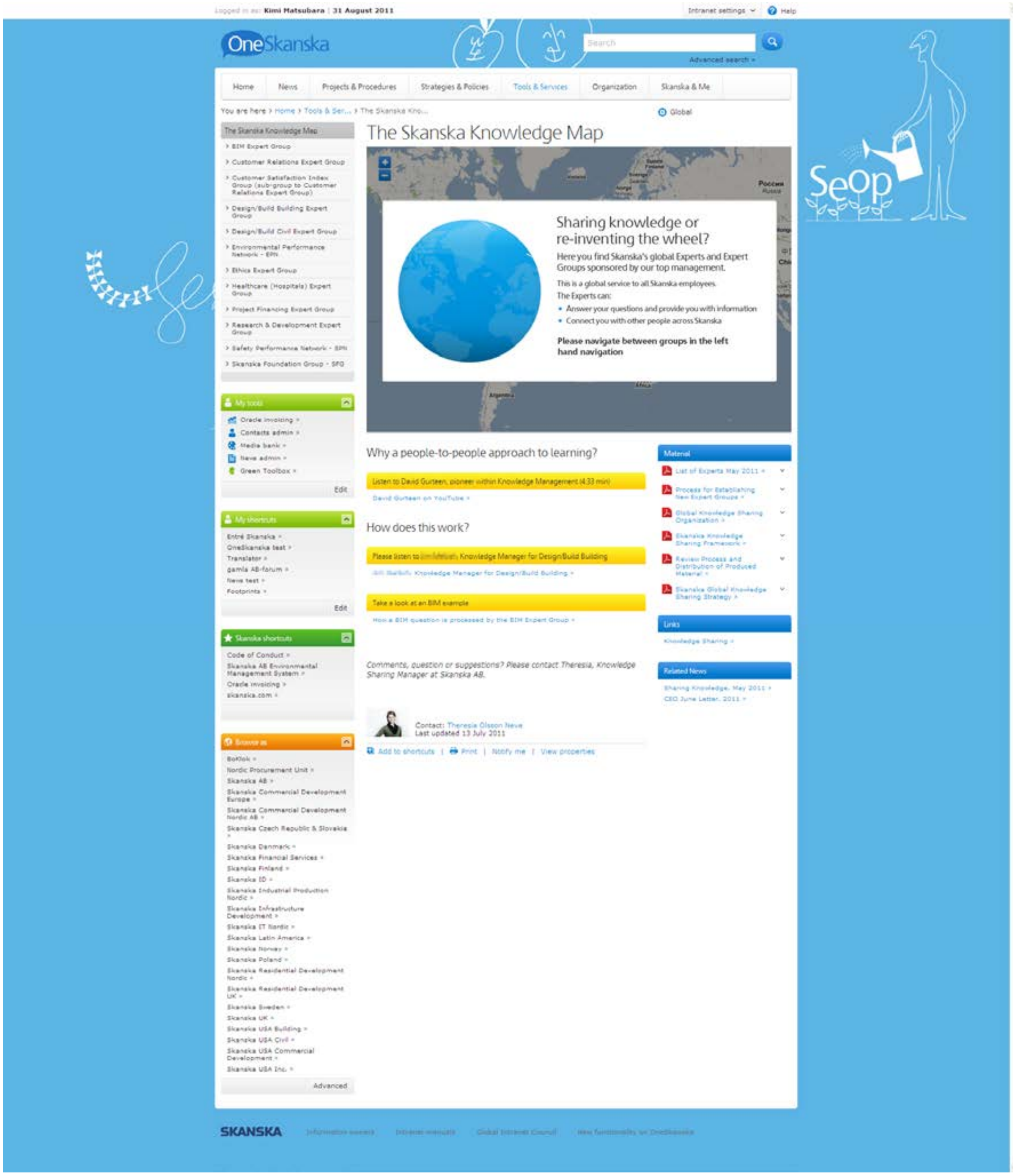
This area provides access to the company's Expert Groups. These groups are a global service to all employees. Experts are individuals within the organization with competence, experience, and a willingness to share knowledge.

The map makes it easier for people to find one another, ask questions, and gather information. The tool helps people make connections and join competencies. This is a change in how work is done; previously, employees did not know how to find experts within the company. Now, the intranet-based tool helps the company share best practices and avoid errors.

The team strove for simplicity in the tool's design, so users would know exactly what it was for. The main page tells users what they can find: experts and expert groups, sponsored by the company's top management. This helps employees know that the information can be trusted.

Employees can pick a group from the left-hand side of the page or read more about the tool. A video from a Knowledge Management leader explains why a people-to-people approach to learning is important, as well as offering information about how the tool works and a guided example about how a question is processed.

Documents on the right side of the page provide further information about establishing an expert group, describe knowledge management strategy and frameworks, and so on.

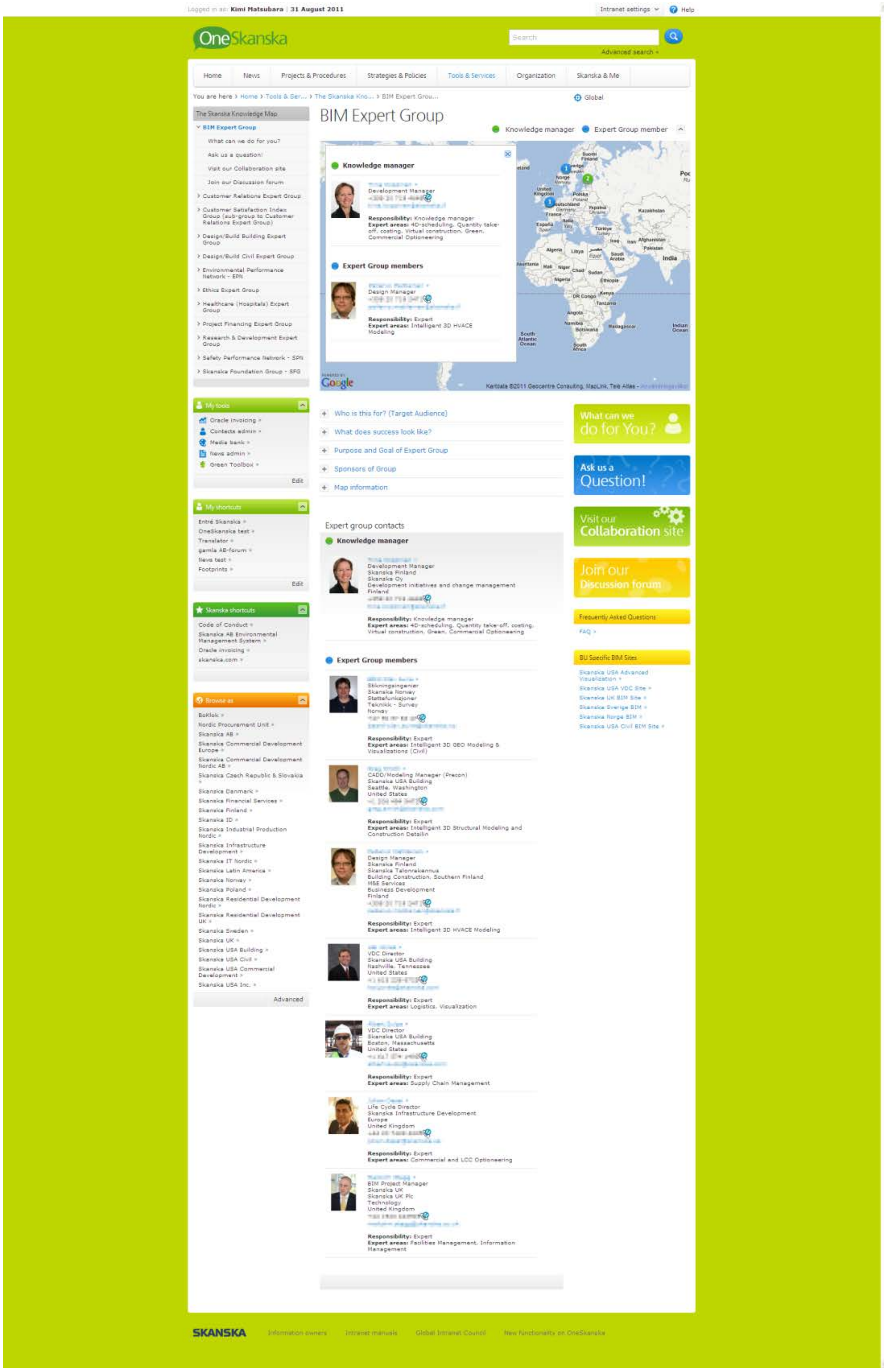


The *Knowledge Map* is a new addition to the site. In previous intranet versions, global knowledge sharing was not possible; now, the *Knowledge Map* section lets employees contact colleagues that the company has identified as experts in their areas.

Each Expert Group page includes a Google map, conveying the global nature of the company, its employees, and their knowledge. A green dot indicates a Knowledge Manager and a blue dot is an Expert. A Knowledge Manager is the Expert Group's coordinator; he or she is responsible for expert meetings, the Expert Group's collaboration site, and reports and presentations to sponsors and stakeholders. When a user clicks on a dot, a pop up shows the person's photo, name, title, phone number, and email address, as well as information about responsibilities and expertise.

When users scroll down the page, they see a list of knowledge managers and experts, together with their contact details. Users can ask questions via telephone or email. Some of the Expert Groups store past requests (with the request/question and source) in a list in their SharePoint collaboration site, which is accessible to everyone within Skanska. Some of the Expert Groups also have a FAQ list in SharePoint.

The team plans to evaluate the Knowledge Map's effectiveness in early 2012.



Pictured: Each Expert Group page includes a map to demonstrate the global nature of the company and its knowledge. Users can click a dot to bring up profiles from a particular geographic area or scroll down the page to view all experts in the group.

The global intranet allows employees to connect, and also provides management with tools to share messages efficiently for the first time, whether they're sharing across the organization or targeting specific groups. Centralizing tools increases productivity in operations. And a single intranet is a cost savings over maintaining 30 separate sites.

BACKGROUND

One Company; One Intranet

The goal of the new Skanska intranet was to create a global intranet to support group business strategies as well as local business. With a single intranet in place users would be able to leverage the power of knowledge sharing across the company's global organization.

"We wanted to help our employees to be informed, connected, and more efficient," says Kimi Matsubara, Global Intranet Manager, Skanska AB. "We wanted the intranet to help employees work with a common brand and simplify communication to and between employees. Also, we were aiming for optimization and efficiency of scale for web-based internal communications channels."

During the late 1990s and early 2000s, Skanska grew rapidly through worldwide acquisitions. In 1999, the company had 45,000 employees; in 2001, it had nearly 80,000.

"Skanska has traditionally been a decentralized company," says Matsubara. But a global initiative was undertaken a few years ago to move toward a more integrated, but still decentralized, company—to create "OneSkanska."

The new global initiative required a joint way of meeting audiences and sharing information and tools across countries and business units. In 2008, Skanska AB put intense focus on internal communications, and a series of focus groups were performed all across Skanska to understand the current methods of internal communications.

"We held 27 focus groups, with a total of 250 participants from all business streams and most markets," says Charlotta Herte, Group Internal Communications Manager, Skanska AB.

The study showed a distinct need for a common, corporate-wide intranet.

"There were many intranets (approximately 30) in the organization, and it was evident in the focus groups that many employees knew very little about other Skanska business units, countries, and the company as a whole," she says. "Many of the old intranets, but not all, were built on the same technical platform, but as an employee you did not have access to all the other intranets around the world, only some of them."

The company's previous group intranet was launched in 2000, along with many local ones. The previous intranets' structure and look and feel varied significantly—in part because Skanska AB (the headquarters) did not provide policies or rules to govern the work beyond offering general graphic guidelines.

By building one intranet for everybody, the team felt it would help make global information and content more easily available to everyone, as well as make it easier to find information from other units across the company.

"It would help our Senior Executive Team and respective business unit management to reach specific groups with targeted information and corporate messages," says Herte.

This emphasis on worldwide knowledge sharing has been a strategic priority for the company; with this tool, it wanted to help increase productivity in operations by providing a common source for tools, search, information, contacts/networks, and lessons learned/best practices.

"We also wanted to be more cost effective in terms of technical development," she says. "It felt important to coordinate development and improvement projects that the whole group could benefit from. Multiple intranets equal multiple costs, sometimes without enhancing business value."

Therefore, the decision was made to create one common global intranet for the first time in the company's history.

Developing a Vision

The effort to take OneSkanska from idea to reality started with a two-day offsite workshop in November 2008. There, a few company representatives and consultants met to discuss what the company should accomplish with the new site.

"It was important to set aside time for this in order to build a common vision and goal and start building the team, since not everybody knew each other that well," says Matsubara. "Key people from the internal organization as well as our consultants participated at this meeting. The major outcome of the meeting was a clear vision that we wanted nothing less than a world-class intranet."

As the work progressed and the project team grew, the core team began to involve work groups for different areas (Contacts, Graphic Design, Interaction and usability, IT architecture, News, Projects, Search and Shared Information Model) with representatives from different parts of the organization, totaling approximately 70 people. "Some work groups were more successful than others," she says, "but overall the work groups provided very relevant information for the intranet."

Throughout the project, the team worked in one-month development cycles, each starting and ending with meetings to sum up what had been done and prioritizing what still needed to be done in the coming month, based on available resources. After each development cycle, the team launched new functionality. And new requirements for development are still added continuously.

Communicating outside the Intranet Team

Working with a change management team, the team held global telephone conferences every month with representatives from the project team and one representative from each of the company's business units. This constant stream of communication made all the difference in keeping the broader organization abreast of the project as it progressed.

"At the meetings, we continuously informed about what was going on in the project," says Matsubara. "The representative's tasks were to brief their organization, both their management and their employees, about what was going on. In some cases, we requested input on specific matters—to find out about their needs, or their thoughts about things that we were planning."

Members of the project team also did a global tour, holding live meetings with each of the business units prior to launch. During these meetings, team members were able to spend time together to inform each other about what was going on, as well as to discuss and answer all questions specific to their respective units.

Initially, the team also held regular open, global telephone conferences to communicate what was going on with anyone who was interested. "The interest was quite high at the beginning, but gradually, it was mostly people already involved in the work with the intranet that called in, so we discontinued the open phone conferences, and referred people to their business unit representatives," she says.

Senior members of the organization were kept informed through intranet updates given at the company's Web and Intranet Development Board. This board, consisting of approximately 10 people, includes Group Senior Vice Presidents for Communications and IT. Prior to the intranet's launch, some strategic project decisions were made at the board, including postponing the first launch date.

Facing Challenges

The new intranet had a huge impact on how people work. The previous intranets varied from just an archive for corporate documents to active intranets tied to a single business unit, so the transition from a web of fragmented environments to a single source of information was a sea change. This type of change poses challenges, even for the most prepared teams. The challenges for the Skanska team included:

- **Change management.** Change management is paramount in situations like this. "It is very important not to underestimate the need for change management in a project of this size," says Matsubara. "We tried to involve the business units in several ways during the process. Although involvement takes a huge amount of time, it is crucial for success. We had a huge challenge in bringing all the business units on board, and to prepare them enough for the launch."
- **Organizational structure.** The company's organizational structure also presented a major challenge for the team. In some countries, several businesses are present, while some business units work in several countries. "So, in some cases," she says, "we would need content directed towards employees from several different units, but in one country. And in other cases, we needed to find ways to direct content towards employees from one unit, but in several countries. We spent a lot of time in the project team to think about how we best could accomplish this, and believe that we found a good way to do it in our CMS system."

- **Allowing time for content.** Another common challenge that the Skanska team encountered is the underestimation of how long it takes to populate new content and migrate old content. "It takes quite some time for the administrators to put information in correct places, and to learn to use a new [common] way of structuring the information," says Matsubara. "There is not one place in the navigation for 'HR' or 'Communications,' as the navigation is based on what you want to do, not who is responsible. Most people are not used to this. We still hear that it is sometimes hard for people to find the information they are looking for, and we work with cross-links, the mega drop-down menu, shortcuts, the search, etc. to facilitate for people to find the information they are looking for."

  The time required to populate the site content actually pushed the launch back from the original schedule. "Originally, we had planned to launch the intranet to the first business unit on January 1, 2010," she says, "but we had to delay the launch until March 1. The decision was made in the Web and Intranet Development Board, based on the need to give business units more time to migrate content as well as to complete some technical development."

- **Spreading the word.** Getting users to visit and getting users to make the site their own are very different challenges. Though the new Skanska intranet has shown wide adoption across the company, it is still a challenge to promote all of the site's features. "For example," says Matsubara, "only 10 percent of users have currently chosen a background theme other than the default, and only a third of the users have added a gadget to their start page, tools, and/or personal shortcuts.

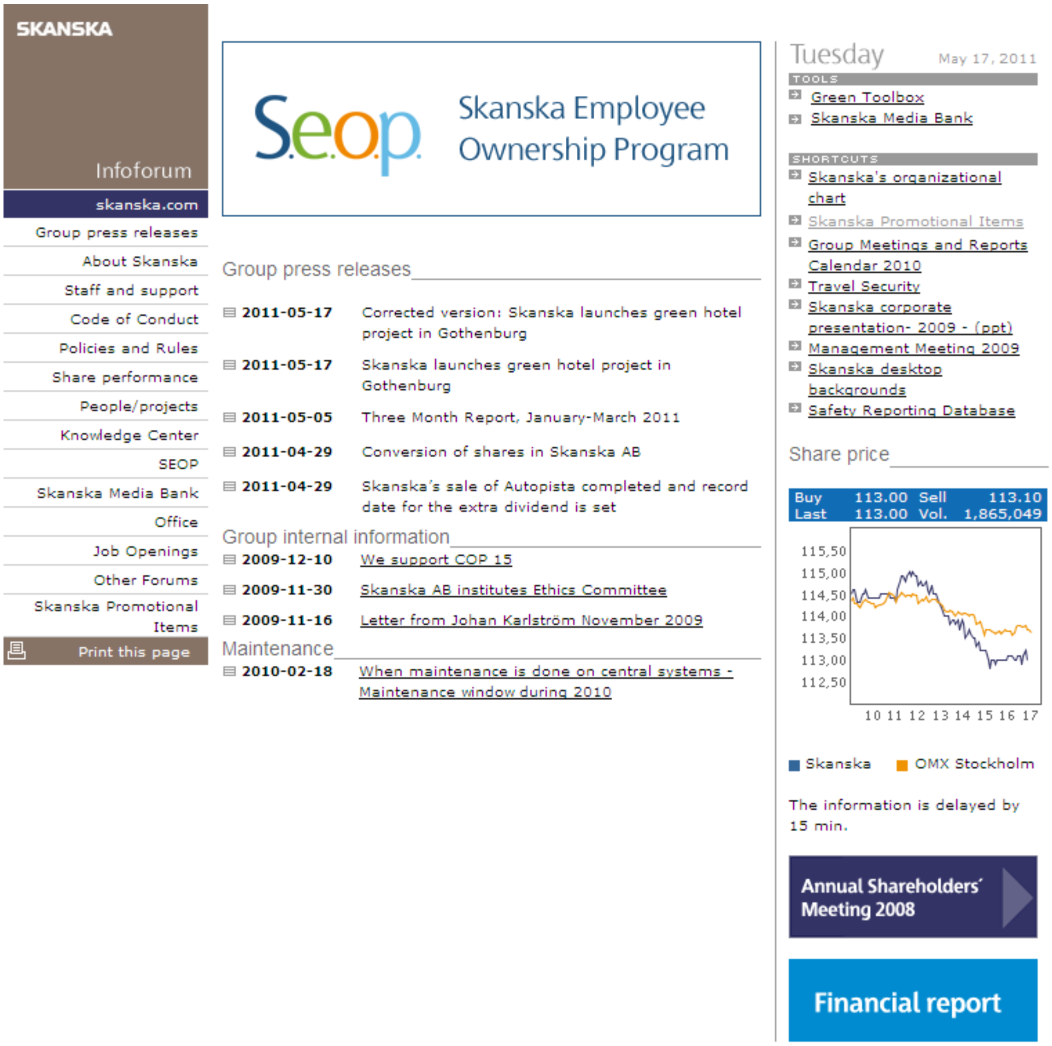
  "I hope that in a year's time, we have significantly increased the number of users who subscribe to news from other parts of the organization, added gadgets, have chosen a background theme, and added their own tools and shortcuts," she says.

Naming the New Intranet

Naming the new intranet was as much a worldwide process as building the new site itself. Because the intranet team felt the name was an important aspect of the project, they held a competition among all company employees worldwide to come up with a name. The prize was to visit a Skanska project of the winner's choice anywhere in the world.

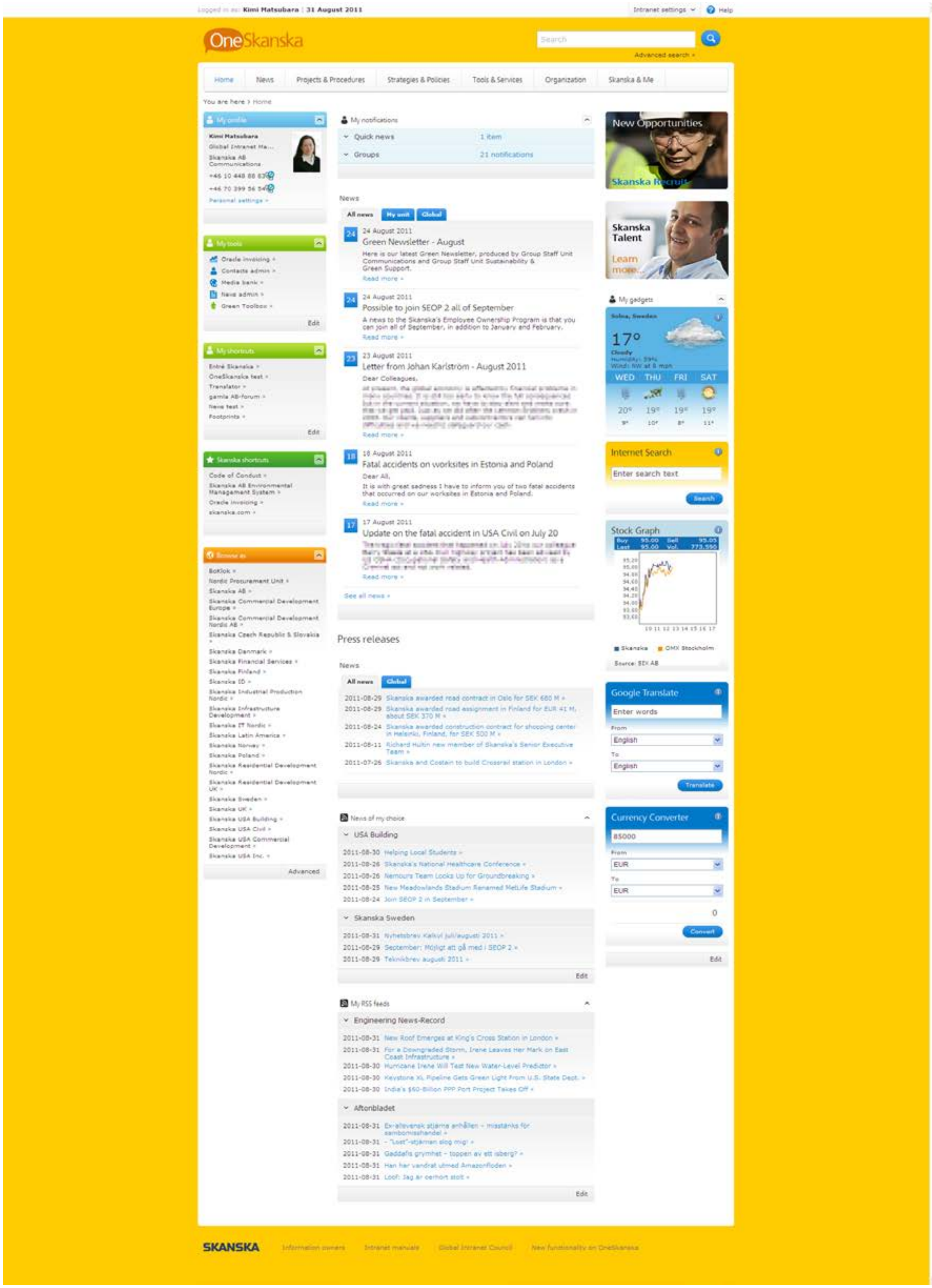
The team received more than 200 submissions. Several had suggested "One Skanska," based on the current movement toward a more integrated company. But the winner—an accountant working at a major tunneling project in Sweden—was named the winner. Here's what the jury had to say about their reasons for choosing her:

> *"A name that is very much in line with what's happening in Skanska right now, the integration of Skanska into one company. As Jenny sees it: from good to better, together. That combined with a wish to explore the different ways of working within Skanska through a site visit of her choice, made the jury choose Jenny as the winner in the intranet name competition."*



Pictured: A screen shot of the start page of the group intranet site (2000-2010).

Pictured: An early example of a design suggestion for the homepage.


OneSkanska
Home
News
Projects & Procedures
Strategies & Policies
Tools & Services
Organization
Skanska & Me
New Opportunities
Skanska Talent
Green Newsletter - August
Possible to join SEOP 2 all of September
Letter from Johan Karlström - August 2011
Fatal accidents on worksites in Estonia and Poland
Update on the fatal accident in USA Civil on July 20
Press releases
Internet Search
Stock Graph
Google Translate
Currency Converter
SKANSKA

Pictured: The start page for OneSkanska. The content displayed here depends on what part of the organization users work in, their workplace location, and their country. Users can customize parts of the content, including theme and language, and add tools, shortcuts, and news and RSS feeds.

INTRANET TEAM

Pictured: The Skanska intranet team (left to right, top row): Helena Dahlberg, Kimi Matsubara, Olof Gunnarsson, and Charlotta Herte; (second row): Dan Lindeberg, Frans Lundgren, Magnus Österhult, and Minna Solvestad; (bottom row): Camilla Flinkenbro and Martin Skybrand.

GOVERNANCE

Ownership

OneSkanska is owned by Group Staff Unit Communications at Skanska AB. Group Staff Unit IT owned the previous global intranet, but with increased focus on internal communications within the organization and the need to upgrade the previous intranets, ownership was transferred to Communications. Responsibility for overall strategy regarding OneSkanska's content and purpose now resides with Communications, specifically with the Group Senior Vice President, the Group Internal Communications Manager, and the Global Intranet Manager.

Group Staff Unit Communications drives all new development and is responsible for most costs, but Group Staff Unit IT still carries the cost for maintenance and support and is heavily involved in strategic intranet decisions. Prior to OneSkanska's launch, all business units were responsible for their own intranets, both in terms of cost and new development.

"It has been a huge change for the organization to have a central budget for the intranet, and a central model to determine and prioritize development," says Herte.

This ownership has not only been a major change for the organization, but has also been tremendously important to the intranet's success.

"When the ownership of the intranet was transferred to Communications, the intranet increased its importance significantly as a communications tool throughout the organization, and it became more aligned with our business plan," she says.

"Another aspect was that the people working at Communications needed a higher level of IT understanding than previously. Our consultant from The Synthetic Family is running the development process, and also works as a bridge between Communications and our IT department. Communications has learned to cooperate with people that we traditionally have not been working so closely with."

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Web and Intranet Development Board	• Handles strategic long-term planning and strategic decisions of group digital projects, as well as the overall resources needed for all group digital initiatives; the highest authority on both intranet and external web governance issues • Decides and prioritizes requests that cannot be handled by the Global Intranet Council
Project Team	• Maintains overall responsibility for OneSkanska and base systems • Drives the development process for OneSkanska and the base systems, based on the prioritizations made in the Global Intranet Council and further needs defined by the project team • Organizes options for CMS training • Manages access rights for structure administrators and editors
Global Intranet Manager	• Part of the project team • Reports current status of the intranet to the Web and Intranet Development Board • Chairs the Global Intranet Council and the Global Intranet Content Group • Shares strategic input from the Web and Intranet Development Board with the Global Intranet Council • Manages the global structure • Chairs an editorial council for Skanska AB, which produces the global information on OneSkanska • Conveys information to key stakeholders when launching new features and new functionality • Audits needs for changes to structure, base systems, and information tagging • Approves, denies, and requests changes to activities and information material directed to a global audience
Global Intranet Council (GIC)	This council is made up of 14 people from the major construction and development units and also includes

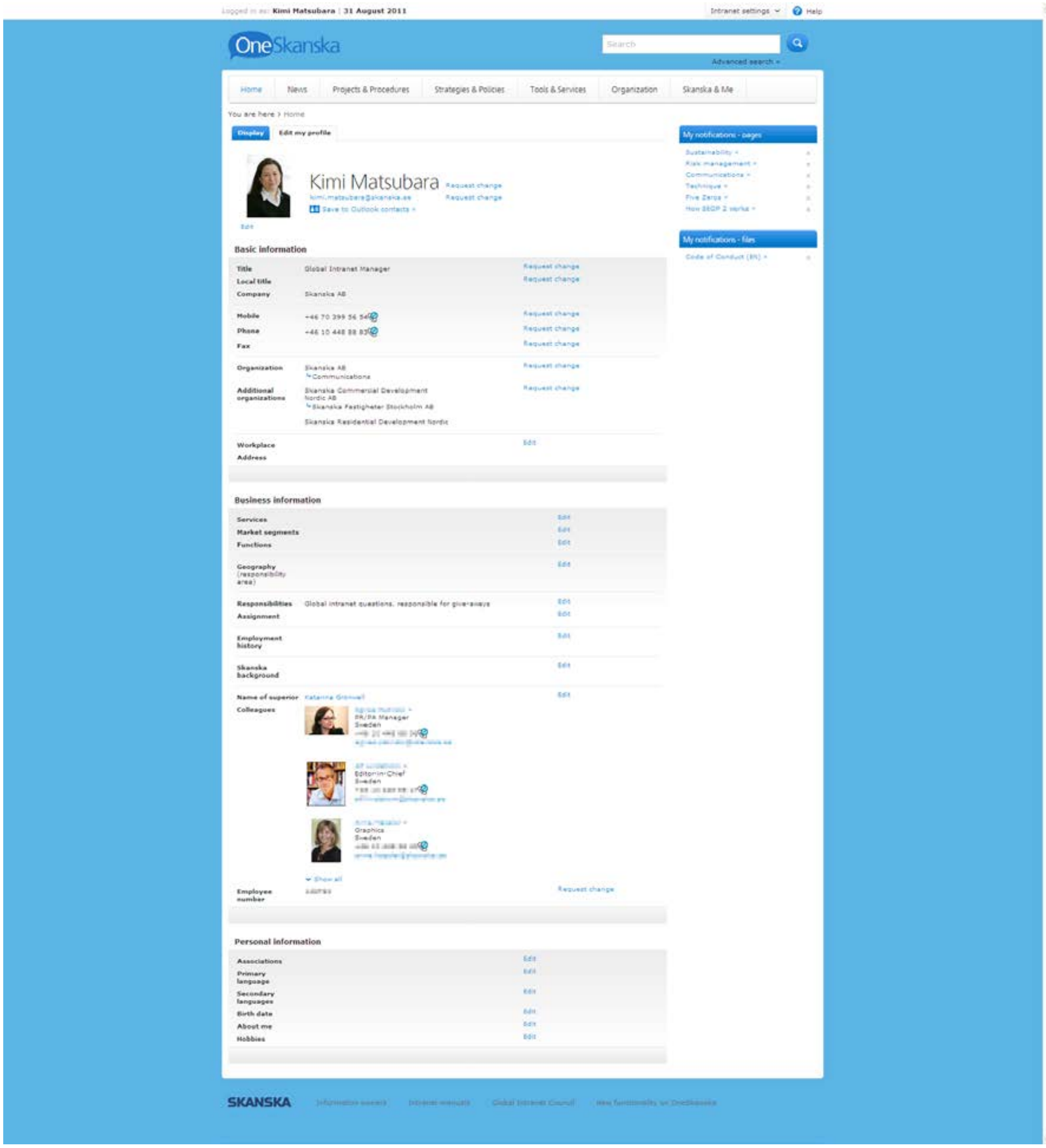
	the Global Intranet Manager, the IT Coordinator, and the Service Manager from the global IT organization. • Participates in monthly phone meetings • Deals with intranet issues on a tactical level • Leads the discussion around evaluation and prioritization of development needs • Works with stakeholders to gather needs and post requests for new or changed functionality/processes on OneSkanska • Shares information, knowledge, and best practices • The Global Intranet Manager makes the final decisions in the council, based on advice and input from the council's members; also raises issues to the Web and Intranet Development Board when needed

Global Intranet Content Group (GICG)	This group is made up of 20 people from all business and support units. • Leads bimonthly meetings • Discusses content, communications policies, best practices, and new functionality
GIC and GICG together	• Leads one live meeting per year • Provides input on OneSkanska vision and strategy and evaluates the business contribution
Business Unit Information Owners	• Maintain overall responsible for the structure and content of their respective units • Manage unit's information in the global base systems • Ensure that the unit's audiences are met and communicated with in a swift and friendly way • Tag and publish unit information, including tagging of information • Ensure that the proper people within each unit have correct publishing rights • Form an editorial council with representation from the internal stakeholders • Bring forward the unit's requirements, aimed at fulfilling business and employee needs, to the Global Intranet Council • Communicate with their employees, including promotion of the intranet
National Information Owners	• Maintain overall responsibility for the structure and content for all users in their respective countries (some of which have several business units) • Translate content into local language • Ensure that national audiences are met and communicated with in a swift and friendly way • Approve, deny, and request changes to activities and information material directed to a national audience • Publish and tag national information • Make sure that the proper people in their country have correct publishing rights
Structure Administrators	• Add pages and content to their respective unit's

	sections on OneSkanska • Work in cooperation with the content editors
Content Editors	Content owners might be publishers or providers (but providers cannot publish pages themselves). • Update, maintain, and tag content on existing pages/sections on OneSkanska and in base systems • Work in cooperation with the structure administrators

USERS

All employees with access to Skanska's network use OneSkanska, which means there are nearly 30,000 users globally, from all of the company's business units. These users have a wide range of jobs—from construction project managers, to support staff, to top management.



Pictured: A user's profile page. Users can edit some personal information themselves, but other information must be approved before it is changed on OneSkanska. The right column shows page and document subscriptions and notifications.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	• http://one.skanska • Users can also enter the site by simply typing one.skanska. The reason for using the unconventional URL was that the team wanted to make the address as simple as possible so that everybody could easily remember it. Branding was a high priority for this, the company's first common intranet. Previous intranets had more complicated URLs, including: http://forum.ab.skanska.com, http://forum.sverige.skanska.se, http://info.skanska.com, etc.
Default Status	• OneSkanska is the homepage for all employees with computer access to the company's network. They cannot change this setting permanently since OneSkanska is the primary global channel for internal communication and a primary channel for internal communication in each of the company's business units. If a user changes the homepage to something else, it is automatically changed back to OneSkanska.
Remote Access	• For security reasons, the company requires all users to be on the Skanska network to access the intranet. However, users can access OneSkanska from other locations through VPN or Citrix via a two-way authentication, and many people access the intranet in this way.

DESIGN PROCESS AND USABILITY WORK

Design Approach

The main thrust of the design efforts were toward making it feasible to combine global and local content in an easy way, making it all fit on the same intranet site. The team had one big challenge when it came to the site design: navigation. To determine the best possible approach, they met with other companies to study their intranets and did research on usability. And, most importantly, they met with working groups from across the Skanska organization to gather feedback and generate ideas.

The previous intranets' structures were adapted to each unit's organization and operations, and the team found it difficult to combine everything into a common structure.

"It would become a compromise regardless of what we did," says Matsubara, "and we set the current structure after doing a review of previous intranets' structures.

"It was very evident that it was necessary for the units to add local navigation in addition to the common global structure, since we are a decentralized organization with different business streams and different needs for content," she says. "The first draft of the global structure was fine-tuned after user testing in some of the business units."

The key to getting this work done was participation.

"To involve the organization in the work groups proved to be a major success in some cases," she says. "And involving the organization throughout the project has been an excellent way of driving the work forward. It takes a lot of time, but it is a huge benefit for everyone involved."

These work groups included representatives from the business units, who not only offered input but were also key to attracting involvement from across the organization.

For example, the Graphic Design work group approved the first designs for the new intranet, which was produced based on their definition of what the new common intranet should look like. As Matsubara explains, the group performed six tasks:

1. **Choose and rank** eight to 10 words related to the desired graphics or the experience of the new intranet. The words/phrases chosen included: one Skanska, clean and easy, professional, inviting, colorful and fresh, personal, active/interactive, modern, and content-filled.
2. **Create an inventory** of current intranets to suggest desired functionality. List available internal best practices and list other websites with good design.
3. **Develop a mood board** with images and design to complement the words from task number 1; this board will be used as a foundation to mirror the feeling we want the new intranet to convey.
4. **Make a recommendation for personalization.** Work group members talked about the need to personalize features on the intranet, and recommended that users be allowed to personalize some features, while not putting too much focus on personalization overall.
5. **Make suggestions regarding font size, clarity, contrast, color choices, and corporate values.** Make suggestions on how to make sure that the most important elements catch our attention and make a recommendation for what the general impression of the site should be in terms of tone and feel.
6. **Act as a test group** for the first design suggestions.

"We had a pragmatic approach and limited resources," says Matsubara, "and depended a lot on the competence of the team to be able to make the right choices, which we then presented and discussed with representatives from the business, and made some minor adjustments."

Figuring out the Navigation

The starting point for the new navigation was based on the navigation of the old intranets in place across the company. The team created a preliminary navigation and site structure, then tested paper prototypes with users from several different business units. These tests gave the team enough information to make changes to the navigation and provide a structure that made it easier for users to find their way.

"We held a lot of discussions in the project team and finally came up with the idea of tabbed pages," says Matsubara. "We also focused on including the most important content in the design of the start page, so that the users would receive global material automatically, without having to search for it actively."

The common global navigation structure contains six different options in the top menu: *News* (directed towards individual users); *Projects & Procedures* (how Skanska works); *Strategies & Policies* (overall plans, strategies, and policies); *Tools & Services* (available for the employees in their daily work); *Organization* (similar to an "About" section); and *Skanska & Me* (information directed towards the user as an individual Skanska employee).

In addition to these options, there are some common structure items on further navigation levels. The navigation structure lets the company's business units add additional items within the structure to match their needs. The goal is to have information about similar things always be found in a similar place in the structure. "And it is important," she says, "that the people working as structure administrators have a good understanding of the common global structure.

"When in doubt [about] where to place new pages," says Matsubara, "they can always contact me." Last year she was working as the Global Information Owner for OneSkanska, and did a review of all the units' respective pages, followed by a meeting with each of the units to look at what needed to be changed as well as to discuss general matters and questions. It was—and at times still is—a challenge to place the items in the correct place in the structure, but at least now there is a solid structure in place as a jumping off point.

Working as One Team with outside Agencies

Although some of the project work was handled by outside agencies, the internal and external teams worked together closely, forming a cohesive unit and acting as a single team.

Both agencies, Ottoboni and The Synthetic Family, have been involved from the project's very beginning. Ottoboni's involvement was mainly during the earlier stages of development, while The Synthetic Family has been part of the core team since the very beginning, and still is.

"Working closely as a team with all key people, internally and externally, with dedicated people with a lot of knowledge in their respective areas, who like and respect each other, has been an important success factor for us," says Matsubara.

Global Digital Development Manager, Helena Dahlberg discuses how each agency contributed to the project:

Ottoboni Group: "Our global digital agency, Ottoboni Group, was a given, based on their track record. Their creative height, knowledge about digital communications and Skanska, and their straightforward way of working together with us had already been a success in the redesign of Skanska's external websites. They understand and respect corporate limitations, while at the same time they can suggest ways to stretch and expand. They also maintained our external graphic framework and thus were able to find a good way of separating the internal graphic framework from the external, while still staying true to our graphic profile."

Ottoboni Group provided visual design for OneSkanska, including the overall graphic design and design for the intranet components. Ottoboni's work was based on the project team's wishes, as well as the important work provided by Skanska's Graphic Design work group, where Ottoboni Group's Art Director, Martin Skybrand, was a participant.

The Synthetic Family: "The Synthetic Family has been involved in several roles in the intranet project due to its size and complexity. My experience was that their structuring abilities and technical communications skills had great impact on the external web project, and that were qualities needed in this project, too. They were also a perfect match, based on the fact that this was the most thorough global change project that we had been working on so far. With their support, knowledge, and experience by my side, it felt possible for me to manage this gigantic project."

The Synthetic Family was responsible for the project and development method, coordination of all suppliers and work groups, technical project management, liaison between IT and business, requirements management, and organizational change management.

TIMELINE

The overall redesign timeframe was summer 2008 to October 2010, with some work that continued into 2011. The breakdown of this work is outlined here:

INTRANET TIMELINE	
Milestone Date	**Milestone Description**
October 1998	• The first intranet was launched in Skanska Sweden
March 2000	• The first group intranet was launched, built on EPiServer 3, and followed by several business unit intranets, many of which were based on the same platform
2000-2008	• Minor changes were made to the group and business unit intranets
Spring 2008	• Focus groups were conducted to gather feedback on what was/wasn't working in the company's internal communications
Summer 2008	• OneSkanska project started with planning for the redesign
August 2008–February 2009	• Continued project planning and set-up
March–October 2010	• Launch of new intranet
March 1, 2010	• Launch of the first business unit, Skanska AB
October 19, 2010	• Launch of the last business unit, Skanska Latin America

Because this intranet was the organization's first common global intranet, the team wanted to make sure that the release process was smooth and that site performance was sufficient to accommodate launch traffic. The first launch (March 1, 2010) was to a small unit, Skanska AB, with less than 100 employees. The team then continued to roll out the site to a few units per week during spring 2010.

The launch for Latin America had to be postponed until October to ensure accessibility.

The technical development of OneSkanska continued in parallel as new units were given access to the new platform, so some features were not initially available. The team continues to work toward improving the site and adding more functionality. Major features released after the first launch included:

- ***Browse As***, which lets users view the intranet as an employee from another unit, workplace, or country (launched June 2010)
- ***News feed of my choice*** (launched April 2011)
- ***RSS feed of my choice*** (launched April 2011)

CONTENT AND CONTENT CONTRIBUTORS

Currently, 120 structure administrators and 620 editors have permissions to add content to the site. They have different access rights, depending on the local organization to which they belong, but most people have access to a limited section or a certain number of pages. The structure administrators have access to entire business unit or country sections, or access so they can translate global material.

Content is developed by different groups and is tiered according to their needs. Skanska AB is responsible for all global material on OneSkanska. The respective Group Staff Units produce and publish some global material (for their sections) with assistance from Communications.

Each Skanska business unit has different processes for developing the content, but each Business Unit Information Owner has overall responsibility for their respective unit's content production. A smaller unit might have one person adding and maintaining information on OneSkanska, while a bigger unit might have several groups of people all responsible for different parts of their content.

Editorial Workflow

Each Skanska unit has different processes for editorial workflow. The Business Unit Information Owner—who has overall responsibility for his or her unit—determines how to best manage the work.

Any changes to global material are reported to the Global Intranet Manager.

"This is important," says Matsubara, "so that we can inform the units about changes to global material. In some cases, they might need to add or change a translation of the global material, and in some cases they might want to review their unit's information on the same matter."

News items to be published on OneSkanska are entered directly into the *News* system. *News* has a role-based workflow, including the ability to notify translators or publishers about news items needing their attention. The notifications appear on the respective editor's start page.

All pages, documents, and news items on OneSkanska are supposed to be tagged with keywords. "We have a specific base system [administrative back-end systems] 'categories' for governing this, and the tagging is done in the CMS and in the base systems, such as *News*," she says. "The tagging categories are currently used in the advanced search, but going forward, the importance of proper tagging will increase as we want to develop functionality that enables automatic display of related information on pages or news items."

Training and Support

Each semester, the intranet team holds trainings sessions for the CMS system at the company's headquarters in Solna, Sweden, both for structure administrators and for editors. If someone wants to organize training in another location, they contact the Project Team and try to arrange it. The cost for the training is divided among the participants.

Within the business units, the Business Unit Information Officer is responsible to check all content and give feedback to contributors. "We have continuous dialogue with the organization, through forums such as the Global Intranet Council and the

Global Intranet Content Group, as well as separate conversations, meetings, and phone calls with different information owners," says Matsubara.

However, OneSkanska supports many languages, so the responsibility for content oversight could not possibly fall on one person.

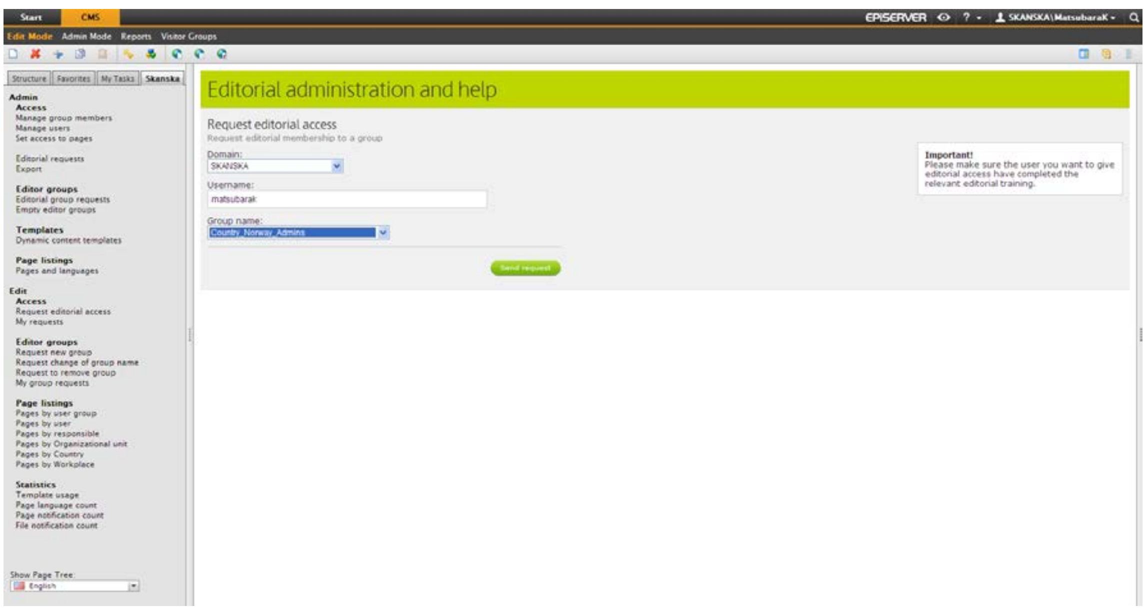
Yet, in 2010, the company conducted a review of all the site pages—approximately 30,000 of them. "The review of pages in autumn of 2010 was also a step to ensure consistency and make sure that everybody knew what to do and how to do it," she says. "We are currently evaluating how we can manage this review going forward as it takes a lot of time for one person to go through all the content, but it feels necessary to continue to do it."

Setting Standards

The company provides a few sets of guidelines to its content contributors. It has an intranet policy manual and a general CMS manual. The intranet policy/manual and the general CMS manual are also easily accessible to all OneSkanska users.

The policy manual covers guidelines and policy for how to work with content, as well as information about in-house-specific development that the general CMS manual doesn't cover.

"Our general brand platform and graphic handbook is also highly relevant when it comes to content production," says Matsubara. "Our tone of voice is defined as *personal*, *real*, *open*, *active*, and *proud*, and that should be reflected also on our intranet, both in written texts, images, and films."



Pictured: Part of the CMS system where editorial access is requested and granted.

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	• Win 2008, IIS 7
Bug Tracking/Quality Assurance	• FootPrints
Design Tools	• Adobe Master Collection
Site Building Tools	• Visual Studio 2008
Content Management Tools	• EPiServer CMS 5 (primarily)
Search	• Lucene
Other Functions	• Skanska Core (the base systems) on the .Net platform

MOBILE

For security reasons, the company requires all users to be on the Skanska network in order to access the intranet. And, for this reason, the team has not looked more closely into mobile access. As of this writing, users can access OneSkanska only through VPN or Citrix via a two-way authentication.

So far, the demand for mobile access has not been high, but it's increasing. "Right now, it's 'nice to have,'" says Matsubara, adding that it "will certainly become a 'must have' in the coming years."

SEARCH

The intranet search is based on Lucene, a free search engine, but the team is currently evaluating the possibility of using Google search. Many companies turn in this direction as users' expectations rise.

"As a lot of content is produced every day, it becomes increasingly hard to find what you are looking for on OneSkanska," says Matsubara. "Users also expect the search functionality to be as good as the best tools on the Internet."

To keep up with users' demands and search habits, the team continues to look for better tools. Search is one of those intranet areas that require constant improvement and change to keep up with the ever-increasing user needs.

"And this is a huge task for an in-house IT department," she says. "In the current review of Google Search, we are doing a joint take, together with the company's external websites, to see if this could be of benefit for us."

As important as it is to choose the right search tool, it is just as important to keep improving on the quality of the results that tool returns.

"We work continuously to improve the search functionality on OneSkanska," she says. "Over the past years, we have done several things to improve the search, including adding the possibility of using advanced search to search in local tools (management systems only at this point)."

The search results' default display includes global and all unit/country content, but users often need to narrow the search results to their own unit's content. So, the team also added the ability to limit search to "Only my unit" or "Only my country," to facilitate finding more targeted information.

RESULTS AND ROI

Although the team has yet to be able to measure the project's success in hard numbers, they can point to several changes sparked because the intranet has provided the ability to reach the company as a unified whole.

"One of the major to-do's for the coming months includes implementing a good way to measure statistics to help us see users' behavior and help us work with the content in a better way," says Matsubara. "We also plan for a user survey in 2012 to help us see what improvements we need to focus on."

Bringing the Company Together

Despite the lack of metrics, OneSkanska has had a profound impact in terms of bringing the company together—not just on the intranet platform, but also on many different levels.

"I think that one of the biggest successes is in bringing all of the company together as one Skanska," says Matsubara. "Instead of having nearly 30 intranets, we now have one. The transparency of the information available on the intranet makes it easier to find information from other parts of the organization, and on a global level, we can ensure that corporate-wide information is accessible for everyone in an easy way. If something happens of global interest, we can reach nearly 30,000 employees very quickly in a very easy way."

The company has also benefitted from other improvements resulting from OneSkanska's launch, including:

- **Merging global and local content.** It was certainly a challenge to bring together the global and local content, but it was a goal worth pursuing. "It was a true challenge to build a common navigation structure and to combine global and local content," says Matsubara. "We spent a lot of time trying to find the best way to integrate global and local content to make both easily accessible and the project team came up with the idea of the tabbed pages. At the beginning, we were not sure that we would be able to manage it, but as it turned out, it is a very good way of integrating global and local content on one page."

- **Reaching employees.** With the global intranet in place, the company can now communicate on wide-reaching corporate initiatives using the site as a platform for distributing information. "When launching the second version of our shareholders' program for all our employees, The Skanska Employee Ownership Program (SEOP), we could rely on OneSkanska to reach most of the interested employees," says Herte. "From a central level, we created pages on OneSkanska for all units and in all language versions. Terms and conditions, and the process for when and how to apply them differs between our units and our countries, but by using OneSkanska, we could easily target the information so that the right people would see it in the right way. In the first version of SEOP, we distributed extensive printed information material to all employees. This time, everybody received only a brief leaflet, and they were referred to find more information either on OneSkanska and/or by ordering more printed material. The demand for printed material was low. But still, participation in SEOP has increased, and among the business unit representatives, OneSkanska was perceived and appreciated as the main channel for communication regarding SEOP."
- **Globalizing corporate functions.** The intranet was the driver behind changes in the company's governance, opening the door for a more globalized approach to things such as support. "The process has been long, but we will benefit from it in other similar IT projects as well," says Matsubara. "Every month, we follow up the support statistics in the Global Intranet Council. Intranet support was previously purely handled on a local level."
- **Decreased support calls.** The team has noticed a decrease in support calls during the first year since OneSkanska was launched "During the past 10 months, the number of logged support issues has decreased by approximately 50 percent," says Matsubara. "This implies that the intranet runs fairly smoothly for the users."
- **Global collaboration.** Prior to the new intranet's launch, the company had fewer than 20 global groups that were able to collaborate and share information on the company's global platforms. "Now, we have the Skanska *Knowledge Map* accessible on the intranet and it is also possible for everyone to set up collaboration groups on our SharePoint platform, Groups," says Matsubara. "We have more than 200 collaboration groups. The joint effort has created the possibility for our employees to share knowledge in a more easy way."

An Improved Technical Architecture

Another immeasurable improvement to come from the OneSkanska project is the global intranet's impact on improving aspects of the technical architecture. OneSkanska has revolutionized not just company communication, but the framework upon which that communication depends.

"Several years ago, our old intranet was basically a bad copy of the external web, with some adjustments for internal needs," says Peter Björk, Vice President IS Strategy, Skanska AB. "It was based on the same templates, and we had few custom-built applications that were more or less standalone. We did not offer any real package or functionality for internal needs and many of our business units developed their own solutions on local platforms."

While that is problematic because it is a messy base to work from, it is also problematic because it impedes the growth of collaboration and sharing since the base could not be expanded.

"This situation became more and more difficult as the need to collaborate and share information increased within the company," says Björk. "Not only was it difficult to integrate and find information, but in some cases it was actually not technically possible to access the information between units. We realized that we needed to move to an architecture that supported the business needs and that was more flexible and reusable. We also wanted to create a platform that was more robust and possible to support globally, and enable higher demands on accessibility and usage. A common theme was also that we saw that we had an opportunity to streamline our development and better utilize our resources with a more structured architecture."

Today, the technical team works from a common, integrated intranet, and from that they have gained synergies in many areas. Björk outlines some of these:

- "We are using our development resources much more efficiently since we can reuse components, and we do not have to do redundant work in the business units."
- "We have an environment that is more secure, since we have better control and ability to ensure that all patches are applied and that security issues are managed."
- "We can actually provide support for all our users globally, and also give all business units the same level of service, no matter of geographic location."
- "We have the ability to respond much quicker to business needs and enable global implementation more quickly."
- "We have reduced the number of servers, licenses, consultants, and platforms that previously existed in the decentralized model."
- "We can offer a more reliable and stable service than the individual business units could manage on their own."

"With the common change process, we can cater to business needs that were previously difficult to fit in to existing budgets," he says. "It is hard to estimate the cost savings, as the bulk of the savings is in our business units, but I would estimate that the coordination and joint approach means that the total cost for the group's intranet has decreased by at least 50 percent."

LESSONS LEARNED

Some lessons learned from the Skanska team:

- **Choose the team wisely.** "Putting together the right team with the right people is crucial. A tight and dedicated team with a group of very talented people has made the work very rewarding and fun."

- **Solicit involvement from across the organization.** "Involvement of the organization is vital to receive the right input for the project. Involvement takes time—more time than you might think, but it is worth it. The people in the organization that have been most involved and given us the most feedback are also some of the people that have helped us the most along the path."
- **An experienced team makes all the difference.** "The project team has a lot of combined experience, and many of them were involved in a similar project with the redesign of the external web, so we basically knew what to expect—that it takes time for the organization, that there are cultural differences in the organization, and the complexity of the project overall."

Hager Group

Using the intranet: Hager Group is a leading supplier of solutions and services for electrical installations in residential, commercial, and industrial buildings.

An independent family-owned and run company with 11,400 employees, Hager Group is one of the industry's innovation leaders. The company's components and applications are produced in 20 locations for customers in more than 80 countries.

Headquarters: Blieskastel, Germany

Number of employees the intranet supports: Approximately 6,000 connected users; non-connected users can access the intranet from public kiosks.

Company locations: Hager Group operates 57 local companies. Its products and solutions are available in 84 countries.

Locations where users use the intranet: The intranet is used in more than 90 locations worldwide, including France (20), Germany (17), Greater China (6), Switzerland (4), Italy (3), Poland (3), India (3), Spain, the UK, the Netherlands, Australia, and Dubai.

Annual Sales: 1.55 billion Euros (2011)

Design team:
The Hager Group core team was composed of individuals from Corporate IT, Corporate Human Resources (internal communication), and Corporate Communication.

This core team was augmented by several organizations that actively contributed to the success of the project, including:

Expertime (Paris): A Microsoft Partner for Collaboration, Expertime developed the portal and custom web parts and helped Hager Group define functionality.

Quatrepointzero (Paris): A web agency specializing in ergonomics and design, Quatrepointzero designed the portal based on Hager Group branding.

Reymann communication (Strasbourg): Contributed to communication and training materials.

Members:
Hager Group core team: Philippe Dennler, David Pauly, Friedrich Eva, Thomas Lhuillier, Julie Roiatti, Sandra Hartmann, Isabel Krämer, Laure Battiston Apostolo, Kirsten Born, Jean Gersbach, and Michael Nezet

Hager Group extended team: Philipp Alsfasser, Gerard Aubry, Benjamin Baechler, JeanBalayer, Anna Bielak, Fabrice Canton, Tharon Dalgliesh, Matthieu Fenger, Claire Freudenberger, Dieter Geiger, Christine Grosshans, Henri Hasenfratz, Stefan Kranz, Angelique Krupa, Cécile Lafaury, Grace Lei, Anna Katharina Loew, Mark Lukkassen, Martin Mosler, Carole Ritter, Jean-Christophe Sapin, Olivier Seyler, Mathias Templin, Nadine Theobald, and Sonia Worrall

SUMMARY

Intranet designers at the Hager Group made resourceful use of SharePoint to create an agreeable intranet experience for all of the company's employees. The team's inventive use of space and icons, plus its tireless work to organize content in a clear way, contribute to this wonderful intranet.

The intranet team took on the challenge of moving away from its old model—one intranet per country—to providing a unified portal. Offering one intranet for an entire organization has several benefits:

- **It centralizes content**, making it less likely that information will be duplicated, out of date, or left out of search and IA taxonomies and indexing. So, overall, content is easier for employees to find and maintain, and they feel more confident that what they are reading is current and correct.
- **It provides one IA framework** for finding and using the UI, so users don't have learn different IA structures, menu mechanics, or acclimate to different page templates and application designs.

- **It promotes unity** among all employees, regardless of their location or job title.

Additionally, designers immediately created a very fulfilling experience on the homepage, which offers a series of sections of varied content—some of which rotates to offer more information in less space.

Employees in 21 countries and 40 entities use this intranet; when supporting many countries, language choices often result in long discussions and planning. In this case, the intranet team knew that English is the common group language, but that some employees don't speak it. They thus determined that the intranet actually needed to support three different languages on the homepage and main corporate sections, and several different languages in other areas more specific to different companies. Given the employee needs, the team decided to use customization to properly filter the content: Users would choose their own language and the company code where they work, and this would dictates homepage information. Thus, employees will see content written in the language they choose, and will see content for the company they work for in the homepage's *My Company News* section. Besides these differences, the look of pages for employees across the organization is identical. This helps promote harmony among the organization's various locations and entities.

Pictured: This homepage is set to English as the language and shows news from an English-speaking entity.

Pictured: The homepage set to French as the language, with news from a French entity.

Striving for a simple look for the homepage, designers used icons to present more homepage options without introducing too much clutter. This is especially helpful for users who are not typically on a computer and who access the intranet via strategically placed kiosks. When users click the gray square with a white plus sign in the upper left corner, it shows the ribbon control containing SharePoint's back office menu for editing content. Employees in the corporate communications team need these controls readily at hand, but seeing them in reading mode would waste space and likely be distracting. The icon is far less of an issue than the ribbon would be.

Icons related to social networking—email a link, print, rate, like, and tag—appear in the far left column, giving users easy access to these commands.

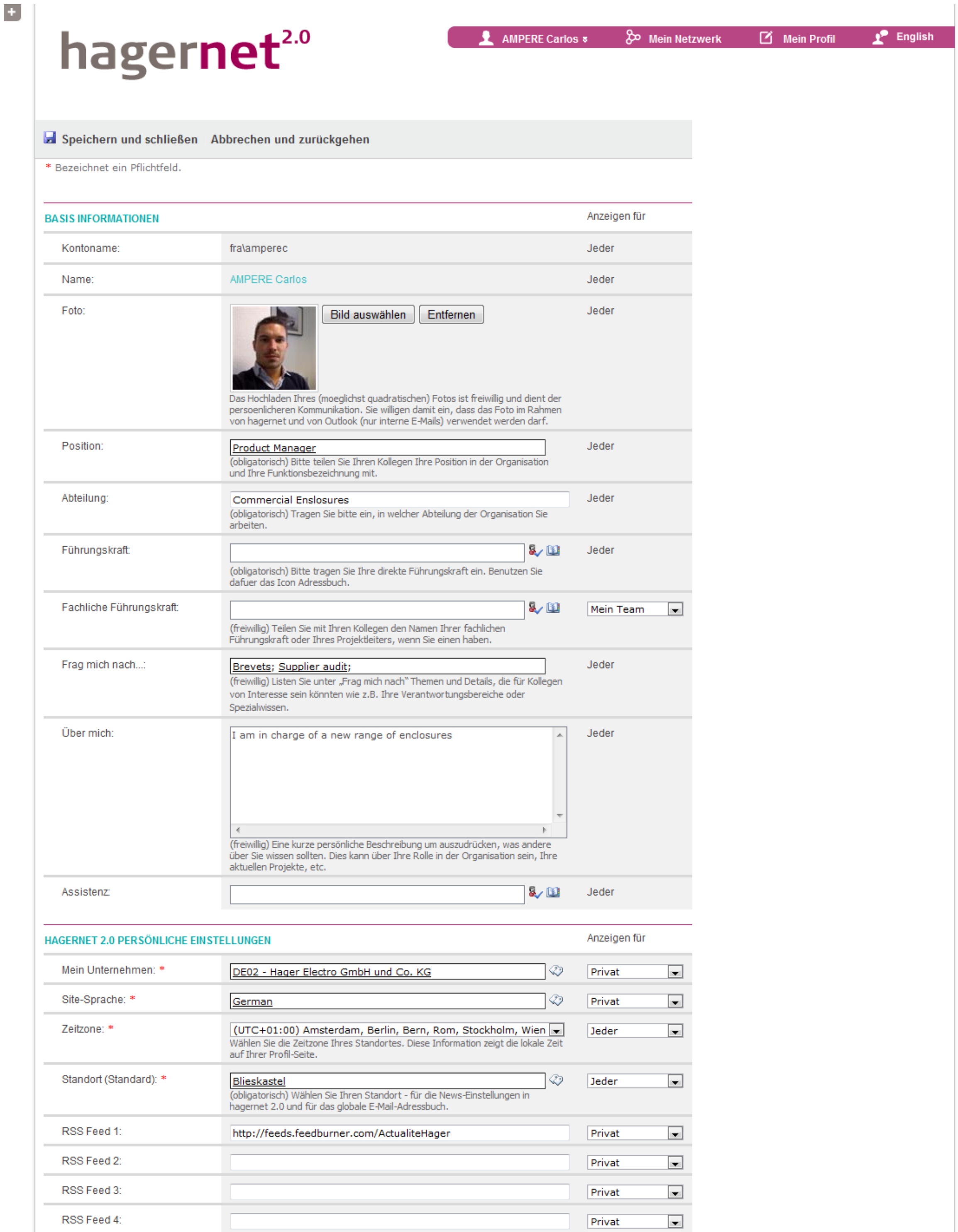
The team also made use of space by placing some content in tabs, including content for departments, projects, and communities; and by presenting different content in the bottom row of small sections, known as the “rolling widget line.” In this area, designers alternate content between four RSS widgets, three special topics blocks, one media gallery, one company event calendar, and one best-rated pages section.

Other features on the homepage immediately engage employees. For example:

- **The *daily turning picture*** in the top right header promotes community at the organization by showing various images, such as a photo of a customer event, symposium, or simply a corporate location.
- **The *rolling KPI*** section displays progress data that employees can use to keep abreast of how the organization is doing and to motivate themselves. Some of the indicators displayed include number of employees, turnover, on-time delivery, and cash flow.
- **The *Corporate News*** block appears in the upper left of the homepage. The news is translated into all three portal languages and is of interest to many employees, who can simply click a headline to see the full article.

Pictured: When a user clicks on an article in the homepage's *Corporate News* block, the related news article's page appears.

When customizing, users can easily choose their preferred language and company location by editing their employee profile document. In this form, designers wrote assistance specific to each field in the form, providing information about data privacy, what the organization expects of the employees when filling in each field, and whether the field is required. Providing this type of form information by the related fields helps users feel more confident in their choices.



Pictured: Users can edit their employee profiles and select a company and language—in this case, German.

Once edited, the employee profile document displays all of the pertinent information about the employee. A helpful feature in a multilingual organization is the notation about the person's native language, as well as other languages the employee speaks. The profiles also offer a place for employees to list their *Interests* so that they can share something about themselves; they can also add information to the *Ask Me About* area.

Designers customized the default SharePoint UI to draw more attention to particular areas, such as *Ask Me About*, *Recent Activities,* and the *Note Board.*

hagernet 2.0

VOLT Marc | My Network | My profile | English

17:45

» Add as colleague

AMPERE Carlos
Commercial Enslosures

I am in charge of a new range of enclosures

+xx xxx xxxxxx
» carlos.ampere@hagermail.de

Job Title : Product Manager
Department : Commercial Enslosures
Work phone : +xx xxx xxxxxx
Mobile phone : +xx xxx xxxxxx
Company : Hager Electro GmbH & Co. KG
Country : Germany
Administrative Company : DE02 - Hager Electro GmbH und Co. KG
Cost Center : 20567
Standard localisation : Blieskastel
Job Family : Product Development and Management
Past projects : Volta, Gamma
Skills : Pro-engineer
Native language : German
Other Language 1 : English
Other Language 2 : Portuguese
Interests : Enclosures, Basket
» Hide information

Libraries | Overview | Organization | Content | Tags and Notes | Colleagues | Memberships

ASK ME ABOUT

Here are some topics AMPERE Carlos can help you with. To ask a question, click on the relevant topic below.

- Supplier audit
- Brevets

RECENT ACTIVITIES

AMPERE Carlos has no recent activities at this time.

NOTE BOARD

Post

« Previous | Next »

There are no notes posted yet. You can use notes to comment on a page, document, or external site. When you create notes they will appear here and under your profile for easy retrieval. Other people can also view the notes you post.

Right click or drag and drop this link to your browser's favorites or bookmarks toolbar to use notes to comment on external sites.

Click here for more information about this and other social networking features in Microsoft SharePoint Server 2010.

MY ORGANIZATION CHART

AMPERE Carlos
Organization Browser

IN COMMON WITH YOU

Administrative Company
DE02 - Hager Electro GmbH und Co. KG

hager Group

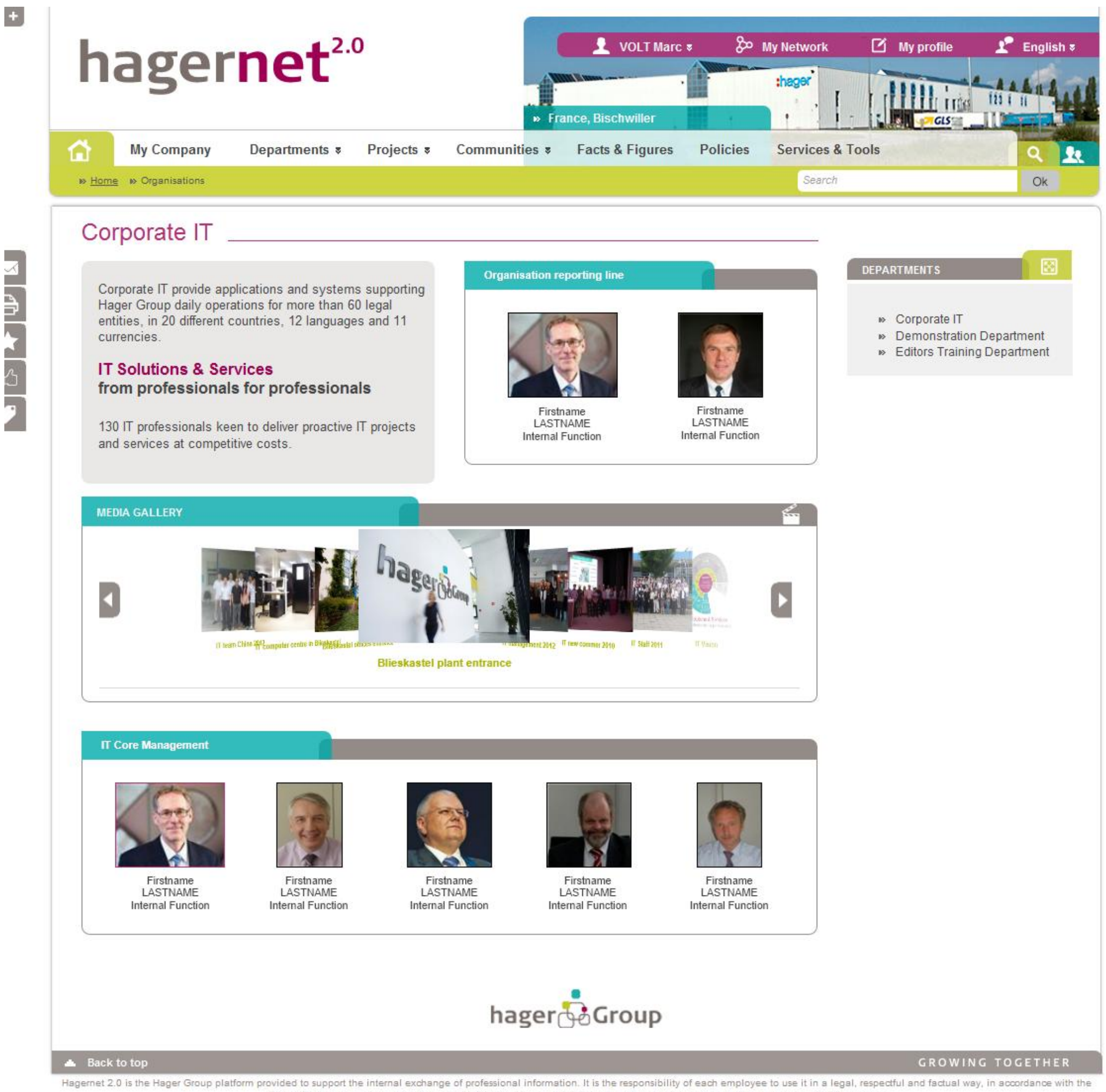
Back to top | GROWING TOGETHER

Hagernet 2.0 is the Hager Group platform provided to support the internal exchange of professional information. It is the responsibility of each employee to use it in a legal, respectful and factual way, in accordance with the Group IT code of conduct and full user guidelines on Hagernet 2.0.Report errors or improvements on this page :hagernet@hager.com

Pictured: The employee profile offers information such as preferred language, other languages spoken, and topics of expertise.

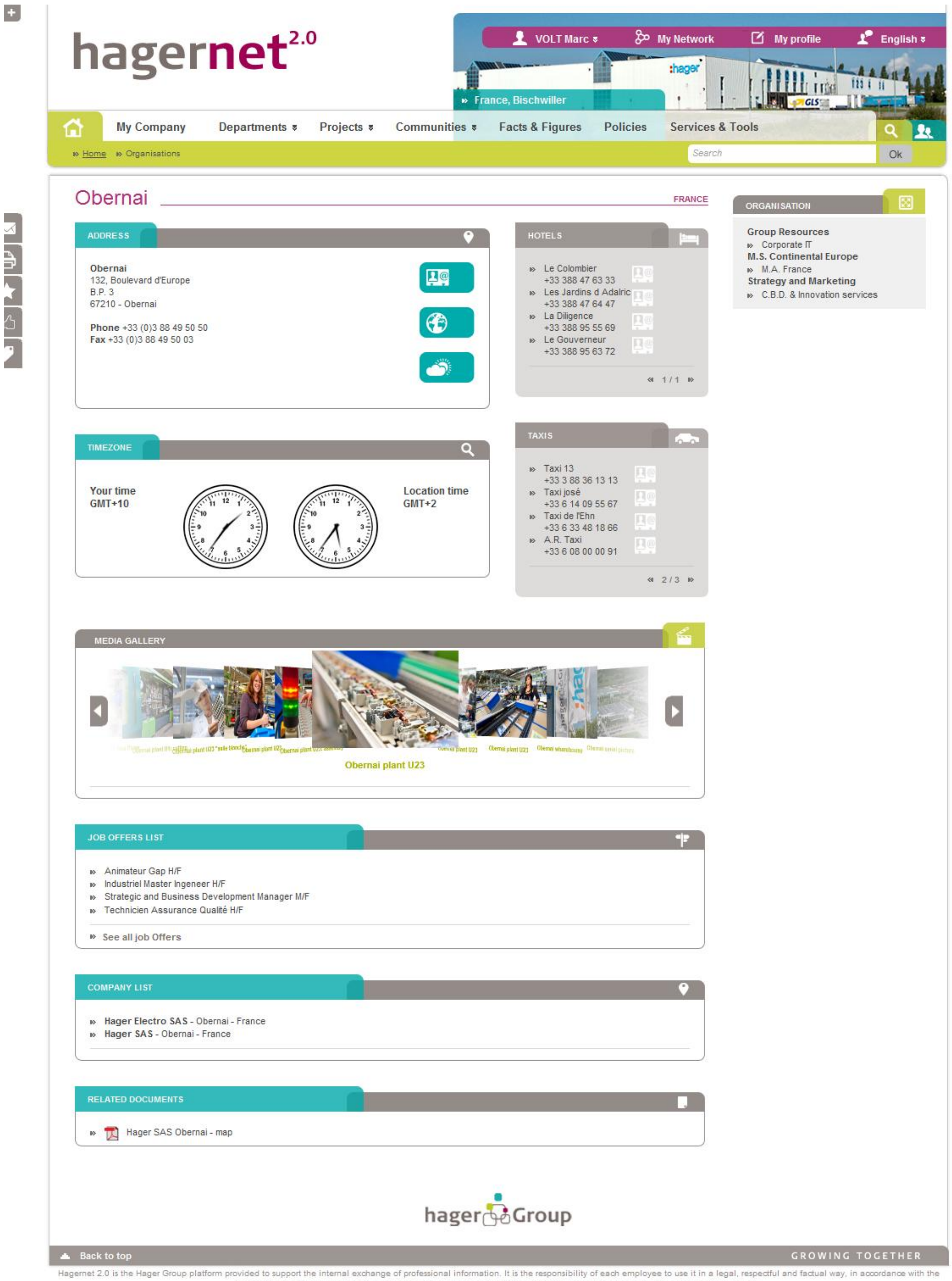
It’s imperative that employees find and share information, so all employees can get a better understanding of the organization, its size, and its functions, as well as the similarities and differences among functions. Finding and sharing information also lets employees more easily work with different companies and departments and move to other positions. The intranet’s organization sections offers various types of information including:

- A summary of what the organization does
- The number of people on staff in that organization
- An organization chart
- Top-level managers
- Photos related to the organization



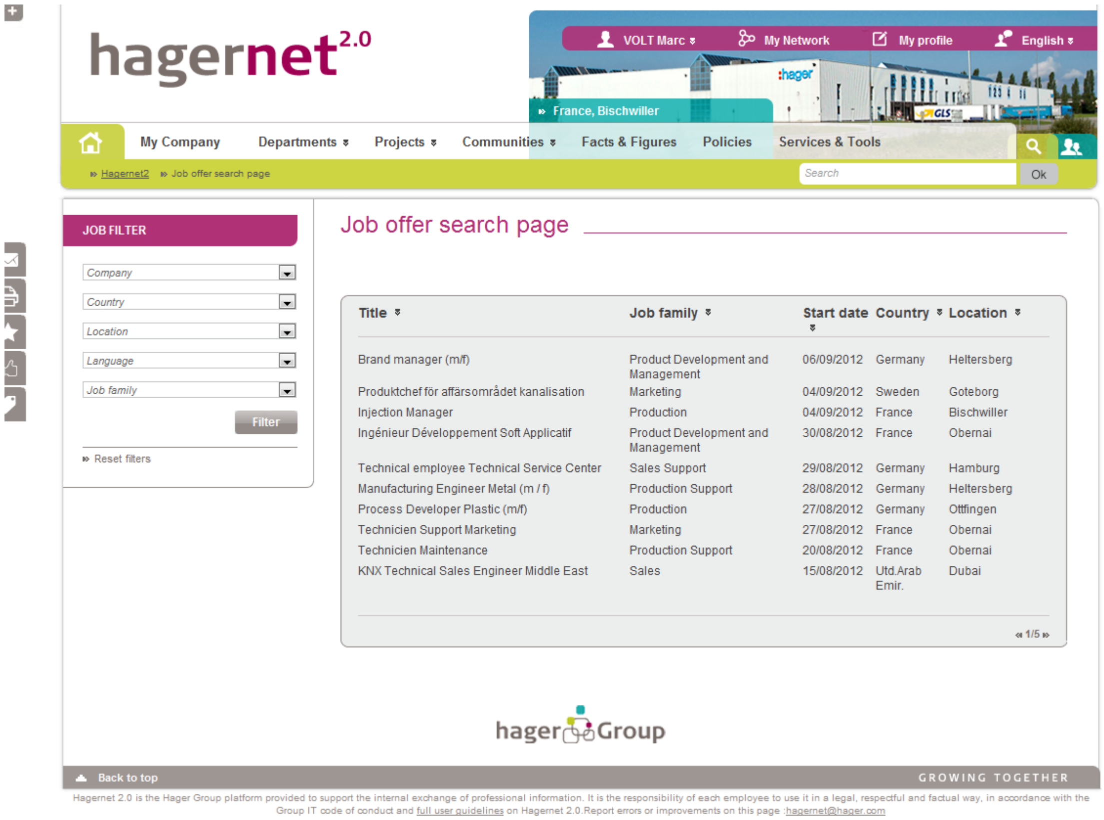
Pictured: The *Corporate IT* organization area offers a summary of what it does, how many staff members work there, and an organization chart.

If employees need to travel to unfamiliar company locations, information on the intranet will certainly help. Each location has its own section, displaying the contact information, hotels in the area, names and phone numbers for taxis, the time zone, photos of the location, maps, and other helpful information. The page also displays current job openings, as Hager Group encourages internal mobility.



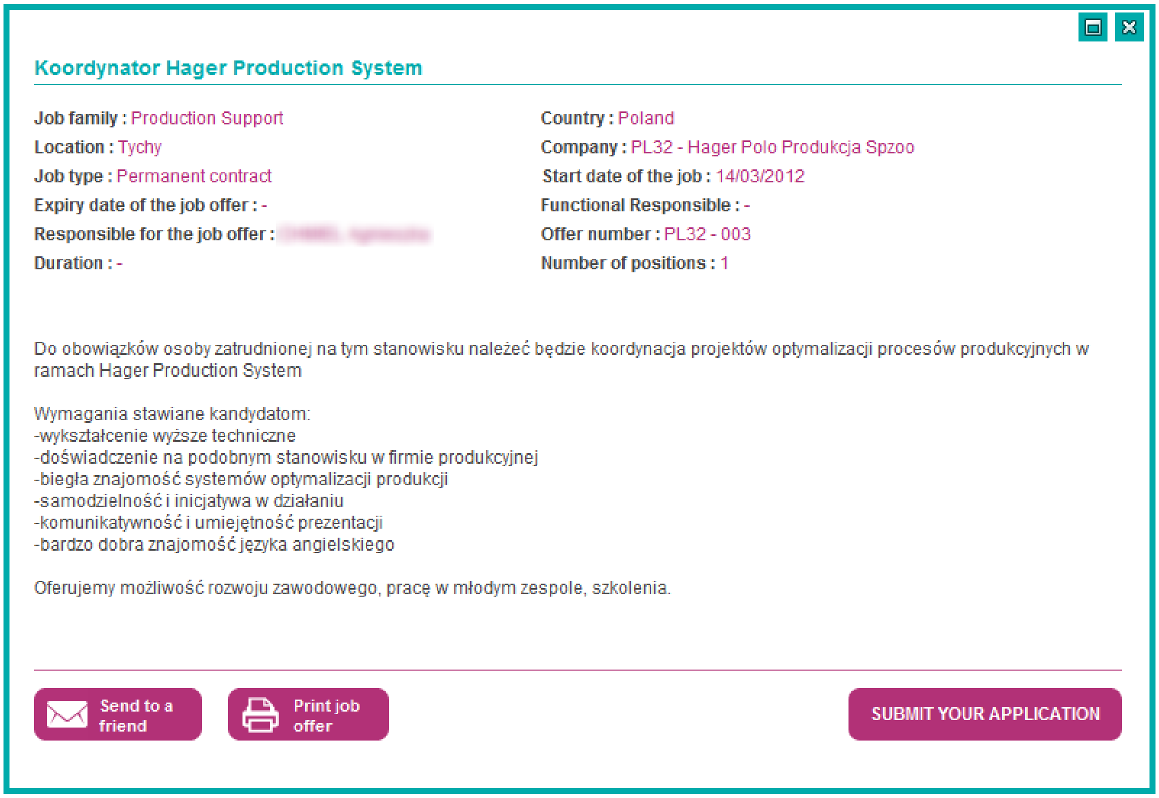
Pictured: People can see photos, as well as vital information—such as the addresses and phone numbers of nearby hotels and taxis—on the intranet's locations pages. The icon lets users download a vCard to transfer the information to their Blackberry.

Users can also search for job openings by various criteria through the job offerings area and its search function.



Pictured: The list of current job offerings is translated into English. Search results display general information about each opening.

Clicking on a job opens more information about it, including the location, responsibilities, and a general description, as well as options to print, send to someone else, or apply for the position.



Pictured: Employees not only see the job information, but they can also apply for the job, forward it, or print it from the pop-up box. (The job offer shown here is in Polish.)

Designers at Hager Group instituted creative, space-saving homepage options that are easily discoverable, so employees waste no time engaging with the intranet. They also make information about all areas of the organization accessible, and allow employees to customize in a way that helps them be more productive and visible to their coworkers, which is invaluable.

BACKGROUND

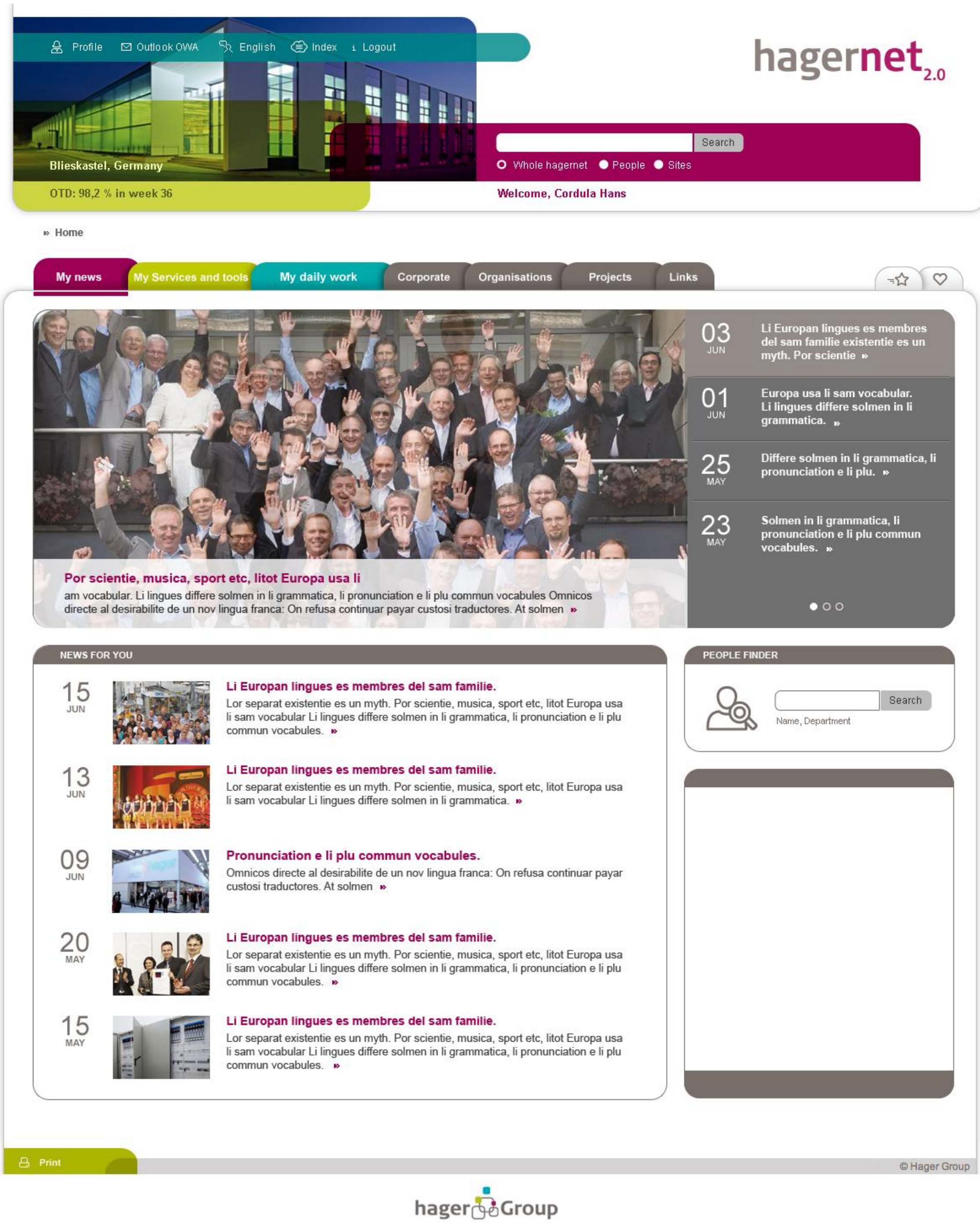
The intranet redesign project started at the end of 2009, spurred by the introduction of a new document management system. Corporate IT drove this early initiative. Around the same time, Corporate Communications expressed an interest in developing a more globally focused intranet that could showcase the capabilities of rich media communication.

“We launched an online survey to understand the main expectations of employees in several countries,” says Philippe Dennler, Corporate IT Manager and project leader. Over 100 people responded to the survey. In parallel, the team began researching the market to identify solutions that could both support the desired feature set and integrate with the company’s IT architecture.

“We didn’t consider cloud solutions because we want the (intranet) data to live on our own premises,” he says. “At the end, we investigated four possible solutions in detail. For each solution, we conducted a technical evaluation, comparing each tool’s capabilities to our needs and evaluating the total cost of ownership and robustness of the supplier.” Two tools made it to the short list and, after what Dennler calls “a beauty contest” with 25 users, Microsoft SharePoint Portal 2010 was declared the winner. The beauty contest consisted of three-hour presentations for all participants. The presentations were split into two parts: a demonstration of how each tool would address a challenging scenario that Hager Group defined in advance and highlights of each tool’s most outstanding features.

As Dennler explains, SharePoint won the contest for three reasons. First, SharePoint offered the advantage of integration with Microsoft Office 2010, which Hager Group was rolling out at that time. Second, SharePoint let them take advantage of other business application integrations: “Most IT systems have connectors available for SharePoint—and surely all the Web 2.0 portal functions,” Dennler says.

Finally, Hager Group’s Vorstand (Board of Directors) linked the redesign to the company’s latest five-year project, Project 2015. “Every five years, we analyze the environment, assess our resources, detail our vision, and define the targets and objectives—the appropriate strategies and the way to achieve them,” he says. “The new intranet project was presented during Symposium 2010 to 800 attendees. We developed a story describing the vision of Hagernet 2.0, including two to three mockups.”



Pictured: A mock-up used to share the new “Hagernet 2.0” with the larger Hager Group community during a symposium with 800 managers. This iteration resulted from a brainstorming session designed to help articulate the vision of what Hagernet 2.0 could be.

Pictured: Hager Group team members (from left to right): Cordula Hans, Philippe Dennler, Karen Overmass, Carlos Lima, and Günther Unterweger presenting the intranet redesign concept during Symposium 2010.

Project Goals

Historically, Hager Group has been deeply rooted in the company's two pillars of France and Germany, with each culture maintaining equal importance across the company; but the group is growing, and the company has recognized that it must support the entire global community across Europe and even beyond. "The cross border and collaboration activities are also more important for us," says Martin Mosler, Senior Manager Corporate Digital Communications. This realization weighed heavily on decisions made throughout the redesign.

"The aim of Hagernet 2.0 is to empower our community by creating one unique intranet for the whole group based on Web 2.0 and social network functions," he says. The project had three primary objectives:

- **Empower the Hager community**
    - Offer 360° communication flow across the entire organization
    - Facilitate networking opportunities across teams, projects, expertise, and personal interests
    - Provide communications about success at the company, team, and individual levels
- **Improve information accessibility and efficiency**
    - Provide a user-friendly interface to help employees access information

    - Maintain a strong content governance structure to avoid information discrepancies
    - Create central stores for common assets
- **Support collaboration and innovation**
    - Support collaboration across projects and borders, and encourage team work
    - Display information across the whole portal and offer enhanced search functionalities
    - Speed-up administrative processes

Facing Challenges

Although the project had a successful outcome, it was not without its challenges. David Pauly, Collaboration Applications Manager, outlines some of them:

- **Cross-cultural team.** "It was an internal project involving people from France, Germany, the UK, and the Netherlands. So, even if Hager Group in general—and Corporate IT in particular—are used to dealing with intercultural teams, it's still never easy." Some of the issues that emerged involved language issues, competing/conflicting priorities based on region, and the simple truth everyone has their own ideas when it comes to design and content management.
- **Technology.** "Side difficulties came from Microsoft SharePoint language management, which was not in line with our expectations. This implementation required much more time than originally estimated. Some SharePoint usability issues also created additional work for the team."
- **Timing.** "The constraints of the timeline meant we had to work on the implementation and content creation at the same time. Working on both sides in parallel created difficulties because our intranet is template-based, but at the end of the project the first movers were satisfied despite that complexity."

INTRANET TEAM

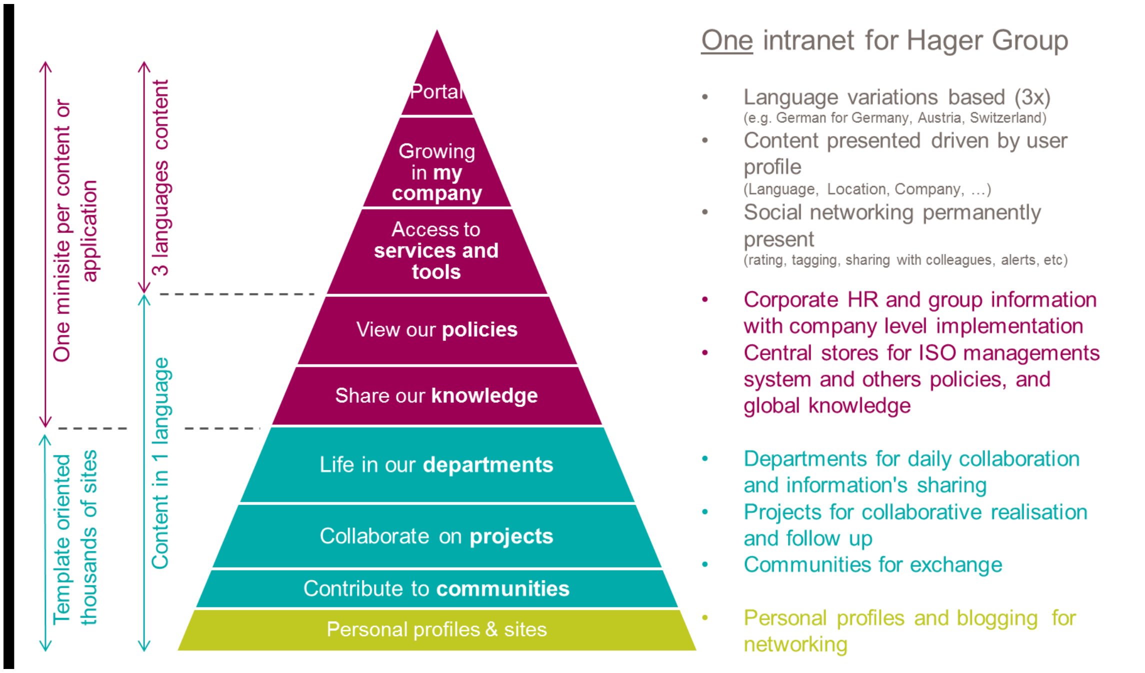
Pictured: The Hager Group intranet team (back row, left to right): Martin Mosler, Thomas Lhuillier, David Pauly, Gérard Aubry, Philipp Alsfasser, Sandra Hartmann, and Stefan Kranz; (front row, left to right): Isabel Krämer, Matthieu Fenger, Angélique Krupa, Christine Grosshans, Laure Battiston Apostolo, Philippe Dennler, Anna Bielak, Jean Gersbach, Henri Hasenfratz, and Julie Roiatti; (kneeling, left to right): Carole Ritter, and Mathias Templin. Missing from photo: Friedrich Eva, Kirsten Born, Michael Nezet, and Claire Freudenberger.

GOVERNANCE

Ownership

Hagernet 2.0 is a joint project between Corporate IT, Corporate HR, and Corporate Communications. The intranet has multiple functions, content, and clients across the organization. "In general, Corporate IT is responsible for the platform, performance, and has to introduce innovations," says Mosler. "Corporate IT is also the platform webmaster and responsible for template enhancements (departments, projects, communities). Corporate Communications is the 'webmaster' of the homepage (including the branding) and provides corporate content. Corporate HR owns the local (country) internal communication to employees and all HR-related information."

Depending on the content, the three main owners are supported by other areas of the group. For example, Corporate Quality has ownership of the ISO portal.



Pictured: Although some topics are managed centrally, Hagernet 2.0 largely decentralizes its content management based on departments, projects, and communities. Language management follows the same rules.

USERS

Hager Group employees use the intranet to:

- Get information and news about the group and the local entity
- Collaborate and share within their departments, projects, or communities
- Access services to help them in their daily working life

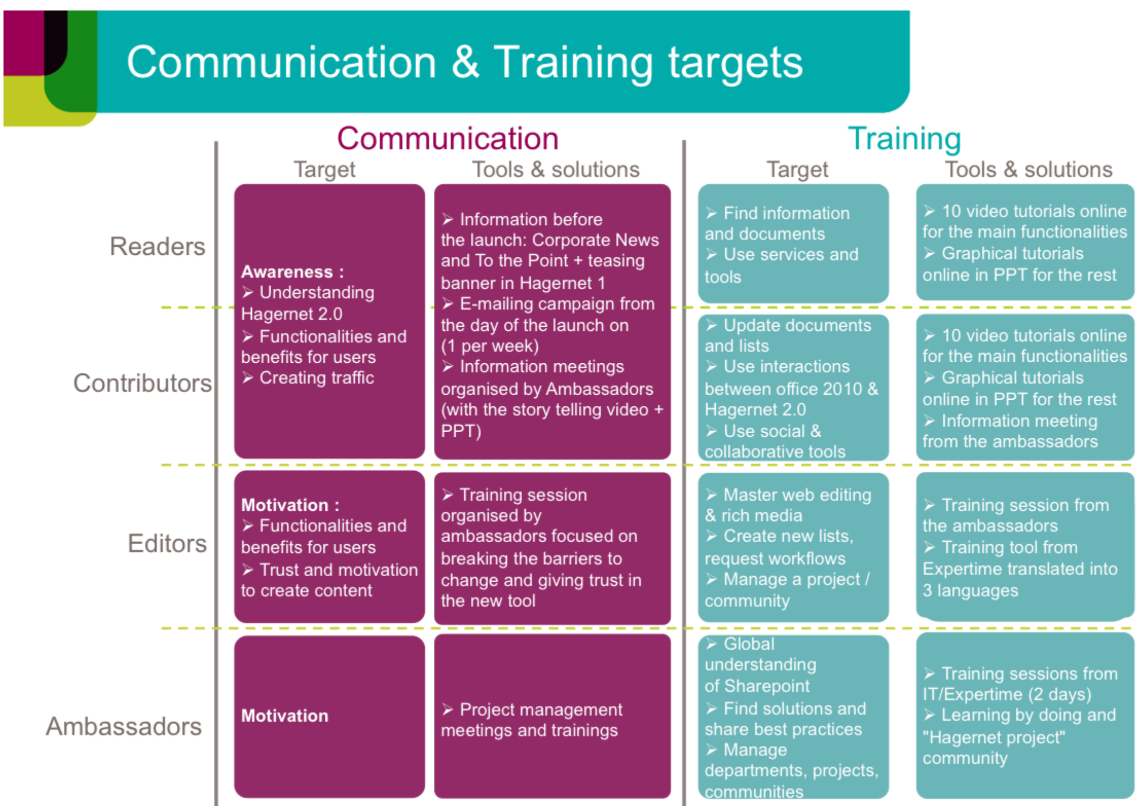
Site users come from all departments across the company—from sales to production, support, research and development, and administrative functions.

When the project began, the team defined four target groups that the intranet would serve:

- Readers
- Contributors
- Editors
- Ambassadors

Each of these groups has different needs and usage requirements. Julie Roiatti, Internal Communication Editor, outlines how these groups were defined for the purposes of the project:

- **Readers:** Readers typically only "consume" information and services. They are mostly not very tech savvy and want quick and direct access to information. They want customized pages and services adapted to their specific needs. They are not likely to contribute content to the site.
- **Contributors:** Contributors have information to share with other users. They contribute to the content, share documents, and use collaborative features. They want a clear framework and an easy process to upload content. They need intuitive tools for collaboration.
- **Editors:** Editors are responsible for the Hagernet content within a department, a project, or a community. They are reliable and skilled, and can help readers and contributors find their way. They can build their own pages and their own sites. They want easy tools for web editing and configuration.
- **Ambassadors:** Ambassadors are key users. They know the features of Hagernet very well and are able to support the editors. They provide a link between IT project leaders and other site users. They share best practices and actively promote Hagernet.



Pictured: This chart shows how the project team identified the awareness and skills needed to reach each target group. Appropriate communication and training has been defined to address those needs.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	• All intranet content and functionality is available from a single address (http://hagernet2), but the company has divided the site into four additional distinct URLs, each used to access different content or functions: ○ http://departments ○ http://projects ○ http://communities ○ http://my
Default Status	• All users with a network account have direct access to the intranet simply by opening their web browser, which loads the homepage by default. Every connected employee has the same basic access to the intranet without any additional permission. This includes: general information, company news, HR information, Group key performance indicators, organization charts, and job offers. The default language is set in each user's profile.
Remote Access	• Remote access is reached through VPN as it is for all internal IT systems. Once VPN is enabled, users can access the intranet as if they were on site simply by opening their web browser.
Shared Access	• Users can also access the intranet via shared workstations (self-service computers and touch screen devices) in production zones, coffee break rooms, and so on. This lets users without a personal network account access the intranet. So far, public kiosk use has seen limited uptake, mainly because production staff members spend their break time doing other things rather than surfing the intranet. The team is investigating several alternative solutions for this target group, including to broadcast company news, KPIs, and job offers on TV screens and tablets in the break rooms.

Pictured: Public kiosks are available in production areas and break rooms at several locations. The kiosk is touch screen, but a mouse is also available. (Pictured: Cecile Lafaury).

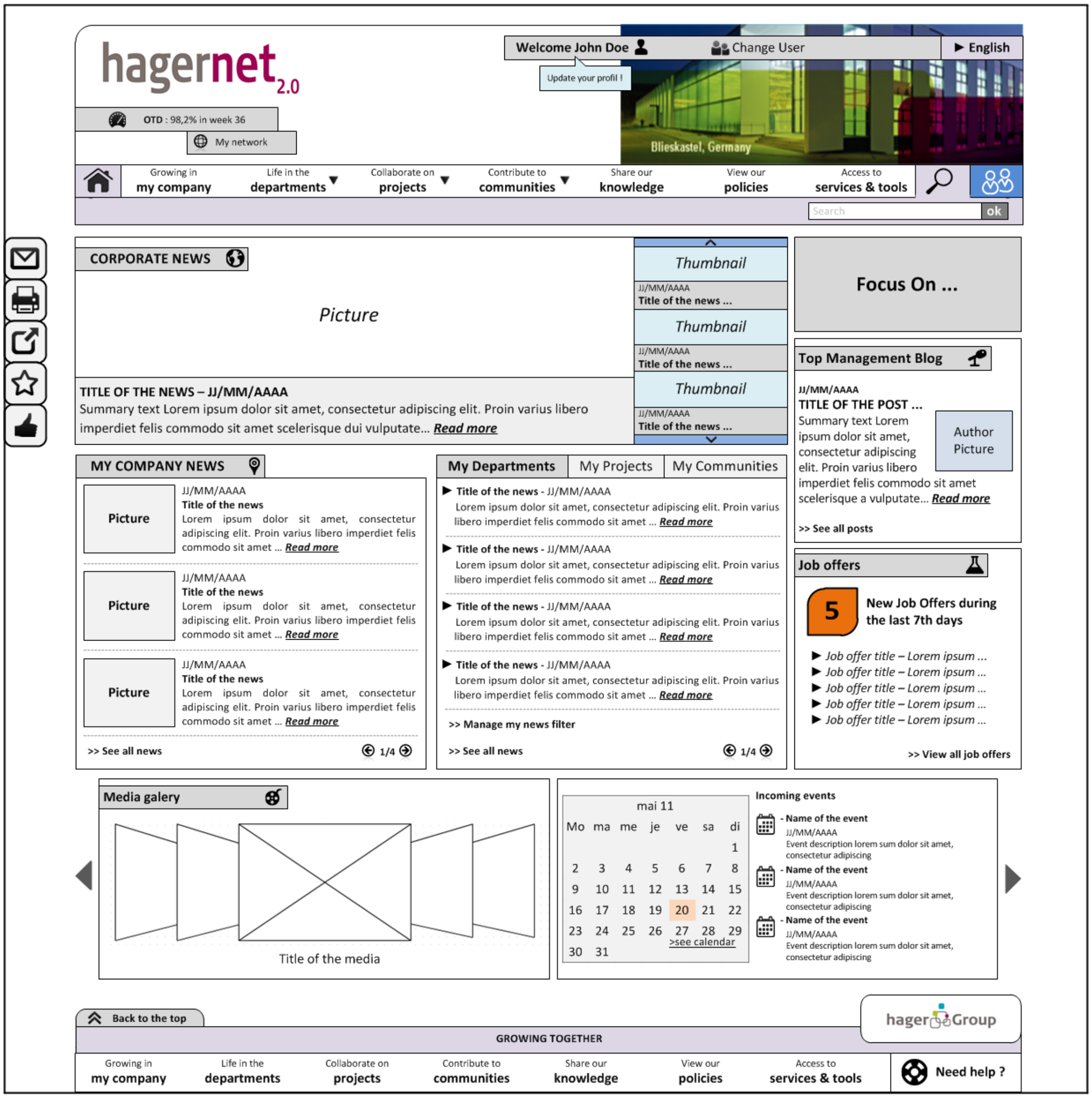
DESIGN PROCESS AND USABILITY WORK

Design Approach

At the beginning of the project, the team conducted a survey; the goal was to identify the existing intranet's most useful content as well as to figure out what functionality was missing. They also benchmarked against several research studies (including the NN/g Intranet Design Annual 2008 and 2009) and visited companies with significant intranet portals. However, the real work began when they started conducting workshop sessions with users.

"At the beginning, we used heuristic maps to describe the content that we wanted and the content of each template," says Thomas Lhuillier, Project Manager Corporate Digital Communications. "The designer gave us proposals using Visio before the mock-ups were produced. In the end, the mockups were used to validate the design with feedback gained through user interviews."

The homepage's evolution through this process exemplifies how the site design evolved overall. The process is detailed in the following six screens:



Pictured: The first homepage wireframe, developed in Visio. Even at this preliminary phase, the homepage's main elements are starting to surface. This wireframe was derived from heuristics maps that emerged from workshop sessions with users.

Pictured: The first design mock-up of the homepage, which was used during initial user interviews. Through those interviews, the team identified design issues, including too many colors; rounded corners that were not aligned with branding; the unstructured header; and the too-rich footer.

Pictured: A production screen of the homepage. The menu has been changed due to translation issues (linked to the menu design). The team also simplified the design after testing and reduced the footer.

Pictured: During the workshop phase, the team used this view to show users what they would see when accessing the homepage on their laptop computers.

Working with Agencies

Having chosen Microsoft SharePoint 2010 as the intranet platform, the team then had to select a partner to help with several project components, including:

- Definition of the portal
- Definition of the technical architecture
- Design of the portal in line with the company's branding rules
- Management of the web integration (in SharePoint) of the company's branding
- Delivery of the relevant solution on time

To achieve all of this, the team decided to work with Expertime, a Microsoft Partner that delivers several solutions, including portals and collaboration, e-commerce, business intelligence, and design; and Quatrepointzero, a Paris-based advertising consulting agency specializing in ergonomics and design, specifically in user experience. "The main reason for choosing these partners was the proven track record each had with intranets and branding, and the ability to deliver the full package at a fixed cost following the requirements phase," says Dennler.

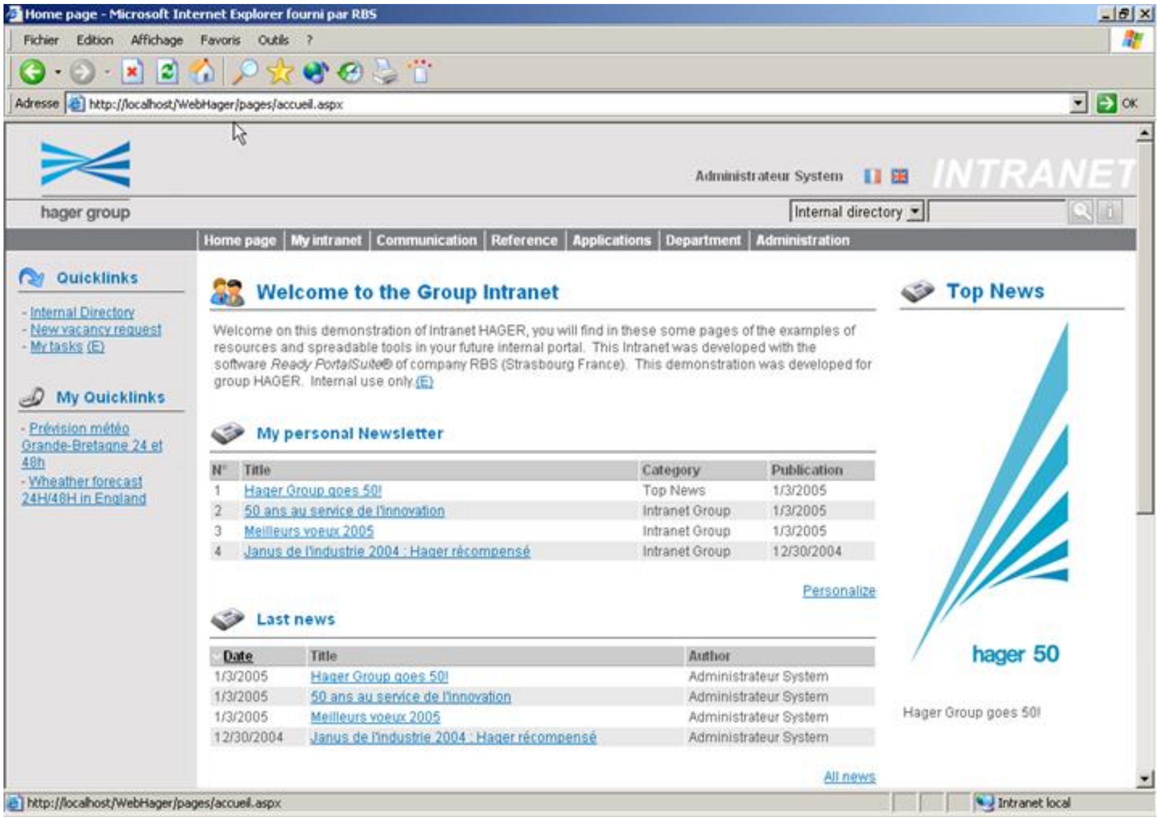
Also, to help with communications efforts around the launch, Corporate Communications selected a partner that Hager Group has worked with for many years, Reyman Communication in Strasbourg, France. “Here, we wanted to launch with humor and create a teasing tone with a stop motion video,” says Lhuillier. “And, due to the significant number of users on the intranet we also requested the production of video tutorials.”

An example of these tutorials is available publicly on the company’s YouTube Channel: http://www.youtube.com/user/hagergroup.

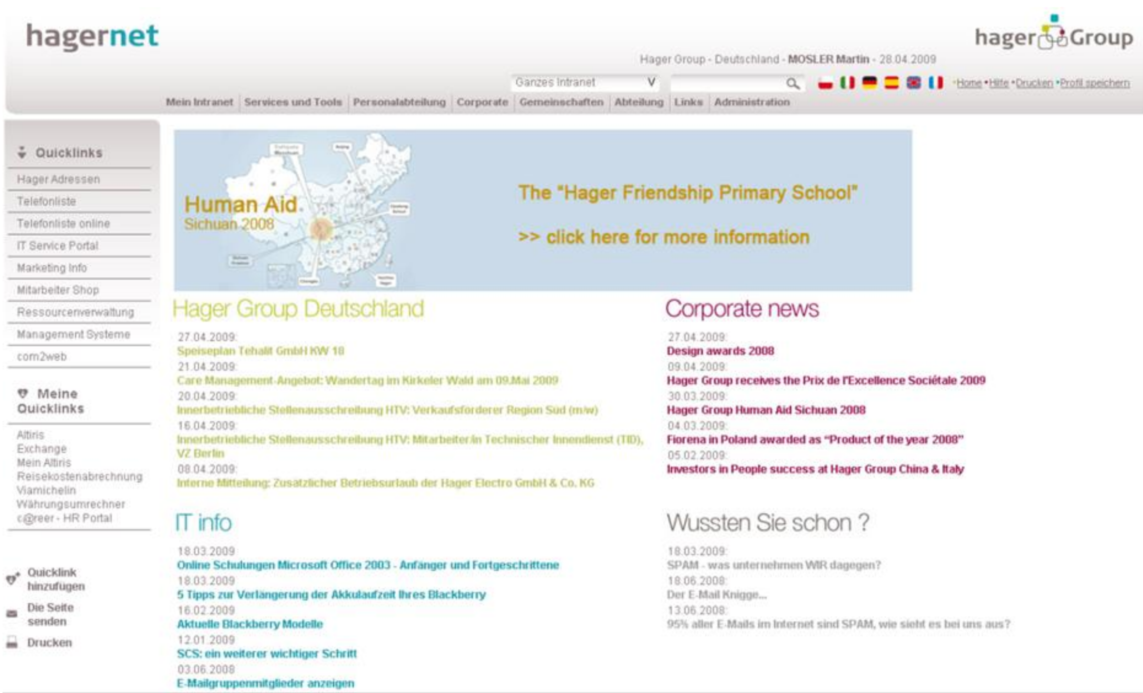
TIMELINE

INTRANET TIMELINE	
Milestone Date	**Milestone Description**
1999	• First intranet: This initial intranet was set-up with a local intranet page for each country and an international page to share applications.
2002	• Updated design: This release included an updated design with several new functions, including search, calendar, mail, and the resource reservation system. • Updated navigation: Top-level navigation was redesigned using a drop-down list to replace icons.
2005	• Third version: This new version was created to incorporate newer technology and to improve and grow the company's information flow. • To help attract employees to the intranet, the company held a naming contest that resulted in the name "Hagernet."
2009	• Hagernet design updated as part of the Hager Group branding initiative.
End 2009	• Voice of Customer survey elicits more than 100 responses from around the world.
End 2009	• Team identifies potential technology solutions for the new intranet.
March 2010	• "Beauty contest" held to evaluate top two technology suppliers.
April 2010	• Microsoft SharePoint Portal 2010 is chosen as platform for new intranet. • Project on hold for a short time while other projects play out.
June 2010	• First design mock-up is created to evangelize the possibilities of the new Hagernet at the company's Symposium.
October 6, 2010	• Team presents the Hagernet 2.0 vision to 800 attendees worldwide.
December 2010–March 2011	• Project restarts with SharePoint partner in place.
February–March 2011	• Internal staffing and project organization (steering committee, project committee, and members from

	several countries)
February 2011	• Installation of a SharePoint 2010 sandbox
April 29, 2011	• Official project team kick-off
May–July, 2011	• Develop detailed specifications based on 17 workshops
July–August 2011	• Wireframing of Hagernet 2.0
August–September 2011	• Set up technical environment
September 2011–January 2012	• Development phase
January–April 2012	• Content creation
January–April 2012	• Bug fixing
March–April 2012	• Communication campaign
March–April 2012	• Create online help documentation
End April 2012	• Pre-campaign (teasing prior to launch)
May 7, 2012	• Hagernet 2.0 launches in all countries



Pictured: The intranet homepage in 2005.



Pictured: The intranet homepage in 2009.

CONTENT AND CONTENT CONTRIBUTORS

Content (Contributors) are King

The Hager team stands behind the old adage: content is king. And that means that those who contribute content to the intranet are the real royalty.

"Content is a matter of contributors," says Roiatti. "Including contributors right at the beginning of your intranet is really important because you can provide the best and most responsive architecture, but there will be no interest in participating if there is not enough quantity and quality (timely) content."

Although the team prefers to be hands-off and let contributors manage their spaces unfettered, some oversight is necessary to maintain sensitive content. "We really wanted to let owners be free to decide the way they will manage their web spaces, but for sensitive issues—like some Human Resources topics—editorial and review committees have been set in place," says Roiatti.

After the new intranet's launch, the team had approximately 150 trained contributors to help provide content to end users. Since then, file share migration, news publishing, and a complete rethinking of information sharing in general has helped increase that number to more than a thousand potential contributors.

The Hager team attributes this rapid increase in contributors to having a motivated workforce, and that motivation goes hand-in-hand with training and support.

The Corporate IT collaboration team provides dedicated content training sessions, documentation, and daily support to contributors and site owners. "The more contributors feel confident with the system," says Pauly, "the easier it will be for our IT team to receive the feedback about issues, enhancements, or questions they may have."

In addition, key users are invited to periodic workshops so they can use and give feedback on platform enhancements (such as new functionalities or web parts).

Content Governance

The screenshot below outlines how Hager Group manages intranet content governance. The team has established a set of fixed criteria that it tracks for each main content area, functionality, or application featured on the site.

The governance categories include:

- Content description
- Availability: Who can access the information (public or closed user group)?
- Owner/sponsor
- Who is responsible for the content?
- Who updates the content?
- Update frequency
- Origin: When was it first created or migrated from the old system?

hagernet 2.0 - Content						Governance				First content					
Type	Content	Sub content	*Description or comment*	Access	Language	Owner / Sponsor	Content responsible	Hagernet 2.0 update responsibl	Foreseen update frequency	Version	Legacy system	Responsible	Can start	Delivery until	Comments
Homepage	General layout	All active elements		All employees	En/Fr/De	Corp Com	Corp Com	Corp IT	On IT request	V1.0	New**				
Homepage	Rolling header image	Image list with link and end publication date per image.	*We start with the images of the locations : one picture every 2-3 days. Some events can also be integrated ("à la Google") : Symposium, Opening Olympics, etc*	All employees	En/Fr/De	Corp Com	Corp Com	Corp Com	2x Year	V1.0	New**	Corp IT	02/01/2012	15/01/2012	
Homepage	Rolling KPI	Weekly group OTD	*Percentage with link to more detailed document (per BA or BU)*	All employees	En/Fr/De	Exco	SCM	Corp Com	Week	V1.0	New**	tbd	02/01/2012	15/01/2012	
Homepage	Rolling KPI	Weekly group OTIF	*Percentage with link to more detailed document (per BA or BU)*	All employees	En/Fr/De	Exco	SCM	Corp Com	Week	V1.0	New**	tbd	02/01/2012	15/01/2012	
Homepage	Rolling KPI	Month Headcount	*Number of people in the group with link to document presenting the segmentation per country*	All employees	En/Fr/De	Exco	Corp Controlling	Corp Com	Month	V1.0	New**	tbd	02/01/2012	15/01/2012	
Homepage	Rolling KPI	Monthly YTD Turn over evolution	*Percentage versus previous year*	All employees	En/Fr/De	Exco	Corp Controlling	Corp Com	Month	V1.1?	New**	tbd	02/01/2012	15/01/2012	After installation to check who can do the bests the update
Homepage	Rolling KPI	Quarterly YTD Cash flow	*Percentage versus Budget*	All employees	En/Fr/De	Exco	Corp Controlling	Corp Com	Quarter	V1.1?	New**	tbd	02/01/2012	15/01/2012	After installation to check who can do the bests the update
Homepage	Top management blog	General position to subject or economic situation	*Foreseen by the project team as "to the point " editorial replacement*	All employees	En/Fr?/De?	Vorstand	Corp Com	Corp Com	Month	V1.0	To the point	[redacted]	02/01/2012	29/02/2012	No sense to start to early : news
Homepage	Flash info	Message on top of screen for emergency	*Usage : general sad or risk announcement (Example: pandemic = stay a home). The display of Flash info change the layout of homepage*	All employees	En/Fr/De	Corp com	Corp com	Corp Com Corp IT	On demand	V1.0	New**				This has to be re repeated during jan / Feb / Mar
Homepage	Job teaser	Display of the open job positions	*Total number is display + title of each position. Group wide.*	All employees	En/Fr/De	Corp HR	Corp HR	Corp HR	Automatic based of job offers	V1.0	hagernet1	HR managers	01/02/2012	29/02/2012	To be trained
Homepage	Corporate News	Automatically updated from news posted with category group.	*Foreseen by the project team as replacement of the news in "To the point". One per week.*	All employees	En/Fr/De	Corp Com	Corp Com	Corp Com	Automatic (should be every week)	V1.0	hagernet1	[redacted]	02/01/2012	29/02/2012	No sense to start to early : news
Homepage	Company news	Automatically updated from news. Audience driven : company	*News related to a company and displayed on homepage*	All employees	En/Fr/De	Corp HR	Local HR proposed by editors	Local HR	Automatic (should be every week)	V1.0	New**	[redacted]	02/01/2012	29/02/2012	No sense to start to early : news
Homepage	Projects news	Automatically updated from news. Audience driven : company	*News related to a project and displayed on homepage projects tab*	All employees	En/Fr/De	Corp HR	All editors	All actors	Automatic	V1.0	New**	Automatic	02/01/2012	29/02/2012	No sense to start to early : news
Homepage	Department news	Automatically updated from news. Audience driven : company	*News related to a department and displayed on homepage department tab*	All employees	En/Fr/De	Corp HR	All editors	All actors	Automatic	V1.0	New**	Automatic	02/01/2012	29/02/2012	No sense to start to early : news
Homepage	Corporate poll	Small Poll system with result display	*Can be used for general small "tendency survey" : what do think about the news hagernet, etc*	All employees	En/Fr/De	Corp Com	Corp Com	Corp Com	One per month	V1.0	New**	[redacted]	02/01/2012	29/02/2012	First poll related to hagernet 2,0
Homepage	Coming events	Display foreseen events. Audience driven : company	*Used for corporate, company or sales events (Fairs)*	All employees	En/Fr/De	Corp Com Corp HR	Corp Com Corp HR	Corp Com Corp HR	On demand	V1.0	New**	[redacted]	02/01/2012	29/02/2012	
Homepage	Media gallery	Pictures, videos or Podcasts	*Cover flow with this elements (à la ITunes)*	All employees	En/Fr/De	Corp com	Corp com	Corp com	One per month	V1.0	New**	[redacted]	02/01/2012	10/01/2012	
Homepage	RSS news reader	4 internet news feeds	*Allow user to get on home page news feed related to hager group external sources (e.g. our internet sides) or general information news*	All employees	En/Fr/De	User	User	User	Automatic	V1.0	New**	Automatic	02/01/2012	10/01/2012	
Homepage	Best rated page	10 bests rates pages	*Display the bests rated page of hagernet 2.0*	All employees	En/Fr/De	Corp Com	Corp Com	Corp IT	Automatic	V1.0	New**	Automatic	02/01/2012	10/01/2012	

Pictured: Sample of the governance document used to define who owns the content, who is responsible for it, and who updates it. The document was also used to define the content migration plan.

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	• Windows Server 2008 R2/IIS/SQL Server 2008 R2 • Hardware: QuadCore 3.4 GHz, 12GB RAM for FrontEnd, 8GB for App [server], 24GB for SQL [server]
Bug Tracking/Quality Assurance	• SharePoint lists • Team Foundation Server 2010 • Microsoft Excel
Design Tools	• Excel, Xmind • Microsoft Visio • Adobe Photoshop • Silverlight Designer
Site Building Tools	• SharePoint Designer • Visual Studio 2010
Content Management Tools	• MS SharePoint 2010 Server
Search	• MS SharePoint Enterprise Search Engine
Other Functions	• Nintex Workflows • Nintex Forms • Several Web parts coming from Pentalogic, Infowise, and Nevron

MOBILE

Hagernet 2.0 is available for mobile browsing, but it has not been customized for mobile. The site is compatible with devices and tablets used in the company.

SEARCH

Using SharePoint search has made a big difference in the redesigned intranet by providing embedded indexing of all content—not just by page or document titles, but by all the content on every page. "This is really powerful," says Friedrich Eva, IT Consultant, "and lets us take advantage of (Microsoft) Office application integration. For instance, PDF files can also be indexed.

"We also added some of our shared file areas into the search scope, enhancing cross-content results. The search is smart, powerful, and easy to use."

But maintaining a high-level search is not so easy. “It is a daily challenge for every contributor to place metadata, synonyms, and favorites that will help in indexing content in the way users try to find it,” Eva says. “Monitoring ‘no match’ results enable us to know what is searched and how.”


hagernet 2.0
PAULY David
Mon Réseau
Mon profil
English
France, Bischwiller
Mon Entreprise
Départements
Projets
Communautés
Nos savoirs
Nos procédures
Services & Outils
Home
Hagernet2 Search Center
hager
Ok
PEOPLE MATCHES
People Matches
Marketing Manager
Marketing
Warehouse Manager
Distribution
Finance Manager, MA Controller UK, Ireland, ME & India
Finance
View more people »
RELATED QUERIES
Recherches associées
Logo Hager
Hager Go
Document Word Hager
Initiative Hager Go
Catalogue Hager
TYPE DE RÉSULTAT
Toute catégorie T...
Adobe PDF
Word
SITE
Toute catégorie S...
departments
hagernet2
communities
projects
AUTEUR
Toute catégorie A...
plus de résultats
DATE DE MODIFICAT...
Toute catégorie D...
Dernières 24 heures
Semaine dernière
Mois dernier
Six derniers mois
Année dernière
Plus tôt
BALISES
Toute catégorie Bal...
I like it
Test
Résultats de la recherche
hager
Préférences
Paramètres avancés
Résultats 1-10 sur environ 13,002
Daniel Hager (CEO)
http://my/OrganizationView.aspx?accountname=fra\hagerd1
Hager S.E.
Hager S.E. is the Hager Group main company
http://hagernet2/organisations/en/_layouts/Hager.Intranet/CompanyLocation/CompanyDispForm.asp Element=DE11+-+Hager+SE|89c68f5f-fc87-4d7c-af54-f54b1fce6242&SiteUrl=http://hagernet2/organisations
Assistance Technique Hager
spécialement pour vous, la carte Le Sésame Hager. Retrouvez en un clin d'oeil tous vos contacts de proximité en agence Hager ainsi que les numéros de vos centres d' ...
Auteurs : Hager Date : 24/05/2012 Taille : 1MB
http://departments/MA-France/Outils Marketing/Assistance Technique Hager.pdf
Hager Electro GmbH Ensheim - map
DE02 - Hager Electro GmbH und Co. KG ...
Auteurs : Date : 02/05/2012 Taille : 97KB
http://hagernet2/organisations/Lists/ListInst_DocLibAreaCompanyLocation/HagerElectroGMBH_saarbrucken_map.pdf
Title: Title of the document
... P3UMKJDHWPAP-28-19 ... 1
Auteurs : Michaela Weber Date : 30/03/2012 Taille : 89KB
http://departments/DemonstrationDept/Sites Documents/Document hager logo.doc
Hager Formation - catalogue
Soyez malin, ayez le ré exe Hager Formation pour développer et pérenniser vos activités Vitaminez vos compétences Hager Formation vous propose sa nouvelle offre de ...
Auteurs : Hager Date : 20/06/2012 Taille : 3MB
http://departments/MA-France/Outils Marketing/Hager Formation - catalogue.pdf
Hager Newsletter March 2012
an extra day in the month this year. Hager Distribution was strong with both Commercial and Domestic +19% against target, Hager WA and sollysta were also good at ...
Auteurs : Date : 19/04/2012 Taille : 149KB
http://hagernet2/en/growing-in-my-company/internalmagazines/Lists/Doc_Lib/Hager Newsletter March 2012.pdf
Hager SAS Rouen - map
Hager SAS 132, Boulevard d'Europe B.P. 78 F-67212 Obernai cedex www.hager.fr SAS au capital de € 4 400 700 N° id. TVA ...
Auteurs : Hager Date : 02/05/2012 Taille : 156KB
http://hagernet2/organisations/Lists/ListInst_DocLibAreaCompanyLocation/HagerSAS_rouen_map.pdf
Hager SAS Obernai - map
Europe B.P. 78 67212 Obernai Cedex Tél 03 88 49 50 50 Hager SAS 132, Boulevard d'Europe B.P. 78 F-67212 Obernai cedex www.hager.fr SAS au capital de € 4 400 700 N° id. TVA ...
Auteurs : , Hager Date : 02/05/2012 Taille : 162KB
http://hagernet2/organisations/Lists/ListInst_DocLibAreaCompanyLocation/HagerSAS_obernai_map.pdf
Hager Controls.pdf
France ... 25/04/2012 ... 451 540 744
Auteurs : Date : 28/08/2012 Taille : 321KB
http://departments/Legal-risk-management/Extraits KBIs/Hager Controls.pdf
Hager SAS Marseille - map
Hager SAS 132, Boulevard d'Europe B.P. 78 F-67212 Obernai cedex www.hager.fr SAS au capital de € 4 400 700 N° id. TVA ...
Auteurs : , Hager Date : 02/05/2012 Taille : 158KB
http://hagernet2/organisations/Lists/ListInst_DocLibAreaCompanyLocation/HagerSAS_marseille_map.pdf
Hager SAS Paris - map
Hager SAS 132, Boulevard d'Europe B.P. 78 F-67212 Obernai cedex www.hager.fr SAS au capital de € 4 400 700 N° id. TVA ...
Auteurs : , Hager Date : 02/05/2012 Taille : 177KB
http://hagernet2/organisations/Lists/ListInst_DocLibAreaCompanyLocation/HagerSAS_paris_map.pdf
Leur avis sur Hager
1 2 3 4 »

Pictured: Hagernet 2.0 uses SharePoint’s standard search technology. The challenge with this solution was to integrate the branding and to optimize the search engine, which the team accomplished by using metadata configuration and defining favorites and synonyms.

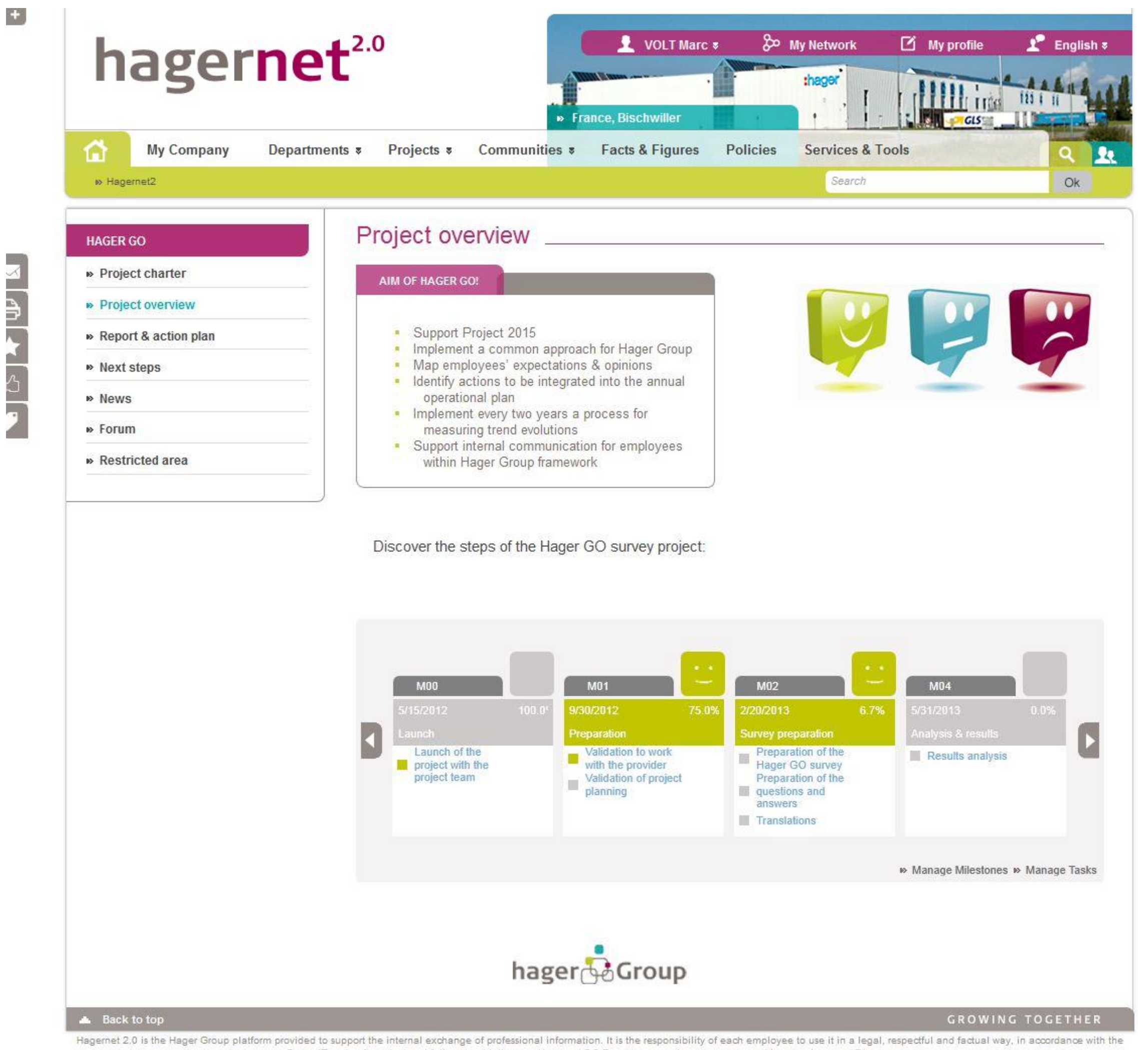
Pictured: The quick people search. Without leaving the page, users can click on the blue icon and start to type in a first name, function, department, or etc.; the system displays up to five results accompanied by phone numbers. By clicking a name or picture, users can jump to the person’s profile.

RESULTS AND ROI

Hagernet 2.0 was launched on May 7, 2012. On the first day, the site received 4,107 unique visitors who looked at more than 50,000 pages. After one month, more than half a million pages were viewed. After three months, Pauly reports that 42 departments had worked on their site, 23 projects had been uploaded, and nine communities have been started. But those stats don’t mean nearly as much as meeting the company’s larger goal of creating a more unified company across geographic borders.

"Our best result is that we truly support our ambition of being an 'employer of choice'," says Laure Battiston Apostolo, Internal Communication Manager. "Hagernet 2.0 contributes to fostering international career opportunities by sharing the job offerings on a single intranet, used by all. This fact alone gives employees a clearer view of the organization. Hagernet 2.0 is the embodiment of transparent, open, and equitable communication. Everyone can see KPIs, everyone can comment on *Corporate News* or the *Top Management Blog* and access relevant information or access whole group information.

"We (now) have an internal, cross-project way of working and many opportunities to connect through social networking."



Pictured: An example of a project dashboard, which groups tasks according to milestones and displays each milestone's deliverables. The screen clearly conveys the current milestone and its deliverables. When a milestone date is overdue, the color changes to red; when a task is completed, it turns green.

LESSONS LEARNED

Dennler shares some of the team's lessons learned:

- **Think globally:** "Think about the entire information flow. Don't concentrate on one function."
- **Integrate the intranet into your company's DNA:** "An important part of the Hager Group's DNA are projects—that's why we created a specific area for this subject."
- **Use of templates:** "Don't just use templates but explain what is mandatory in the template and what can be changed. And don't be too strict."
- **Take your time:** "User adoption is not immediate. It took one month until a 'difficult' question was asked in the comments. And our organization needed two weeks to answer. That's too long, but we're also still in the learning process."
- **Know your limitations:** "SharePoint is powerful but complicated when you want to have your own branding on top of the tool. The development of a specific branding in SharePoint is a specialist's job."
- **Use complementary tools:** "Use the integration capabilities of SharePoint 2010 to integrate Office 2010. You will make your users happy."
- **Keep an open platform (within reason):** "Permissions and security can be a nightmare! Be open and explain that only really confidential documents should be protected. Don't create too much granularity in the permissions."
- **Use the intranet to make your organization more transparent:** "We have integrated an organization browser that shows the reporting lines, from all employees up to the top management. This feature is really appreciated."
- **Be inclusive:** "Be equitable! Every employee should have access, even if it's complicated when you have production units or small locations."
- **Double check translations:** "Check content in every possible language. You will always have surprises, so do this as early as possible."
- **Raise awareness:** "Do 'open days' where ambassadors present the intranet functions and content during one or one-and-a-half hour sessions. It's not a training session, just an awareness session to help people to jump in. We have had over a thousand employees attending such sessions so far."
- **Take full advantage of SharePoint's capabilities:** "Sell the big advantages of SharePoint libraries. We did it using the example of a contract database. By adding metadata such as the 'reviewed date' of the contract, values, and supplier, you have an information system with added value, not just a collection of documents. And this can be done by the departments themselves."

- **Keep it fresh:** "Provide daily employee self-services. Fresh content is what motivates people to come back day after day. The intranet must help them to solve their problems, such as who can replace a broken chair."
- **Lunch is important: "**The restaurant menu pages were the most searched page in the first few days. Don't forget it."
- **Continue to extend content and functions.** "Employees must see that the launch is only the beginning and that the intranet will continue to grow and expand continuously over time."

Air New Zealand Limited

Using the intranet: The Air New Zealand Group's principal activity is the operation of domestic and international passenger transport and cargo. More than 13 million passengers travel with the airline each year.

Headquarters: Auckland, New Zealand

Number of employees the intranet supports: 11,000

Locations where people use the intranet: New Zealand, Australia, Pacific Islands, US, UK, Canada, Japan, Hong Kong, and China

Annual Sales: $256 million for the 2013 financial year

Design team: (in-house) Garrick Sutherland, Martin Sawbridge

IT project team: Ryan Mears, Vicki Harris, James Taylor, Tristan Chan, Ian Lang

Content conversion team: Brock Ennion, Shane Burfield-Mills

Internal communications team: Andrea Perez, Tess O'Connor Stacey Olsen, Tracy Smeaton

PurpleShirt (IA and page wireframes): Blake Lough and Steve Alexander

SUMMARY

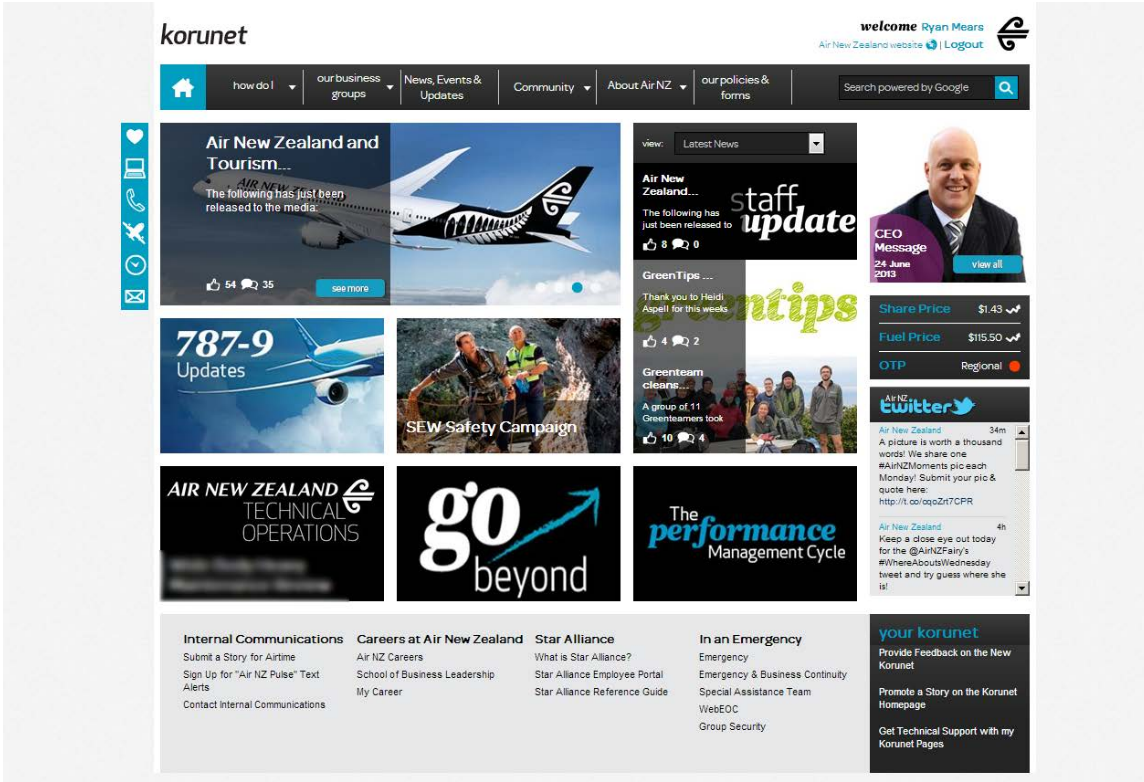
Focused on structuring, organizing, and updating information, the intranet team working on Air New Zealand's intranet, *Korunet*, wanted to create a dynamic space for content and employee interaction. The team set out to tackle the challenge of an intranet that was using an old IT system and was cluttered with out-of-date information.

Korunet is named after Koru, Air New Zealand's company symbol, a spiral shape of a new unfurling silver fern frond that symbolizes new life, growth, strength, and peace.

Korunet serves 11,000 employees of the domestic and international passenger and cargo airline, including employees based in nine countries. Prior to the most recent upgrade (in 2008) employees complained that information was too hard to find on the site. The team assessed the site and saw there was a problem with content: there was too much information, and it was too hard to find. The site needed a new structure, but also a content refresh.

The homepage uses a bold grid design to display information. The site's main color palette is black, white, and blue, reflecting the company's brand. The homepage's main focus is a rotating news carousel. News is a site priority, as the internal policy is that the intranet will be the main source of company information. The other boxes on the homepage include additional news items, such as staff updates, sustainability activity and updates (which change daily), management information, and internal campaigns. The overlays on the content areas provide additional detail about the content that's available, showing the first few words from the news item or article and the number of "likes" and comments. A dropdown menu lets users further select from *events*, *airtime*, *competitions*, *most liked*, and *most commented selection*, and shows the top three in each category. These overlays are always shown.

The side of the page includes a message from the CEO and stock and performance information. A Twitter feed includes the latest posts from the company on the social network. Links in the bottom corner of the page encourage participation on the site by soliciting feedback and asking for story ideas, as well as providing a link to technical support.



The intranet's homepage focuses on news, information from Internal Communications, and performance information.

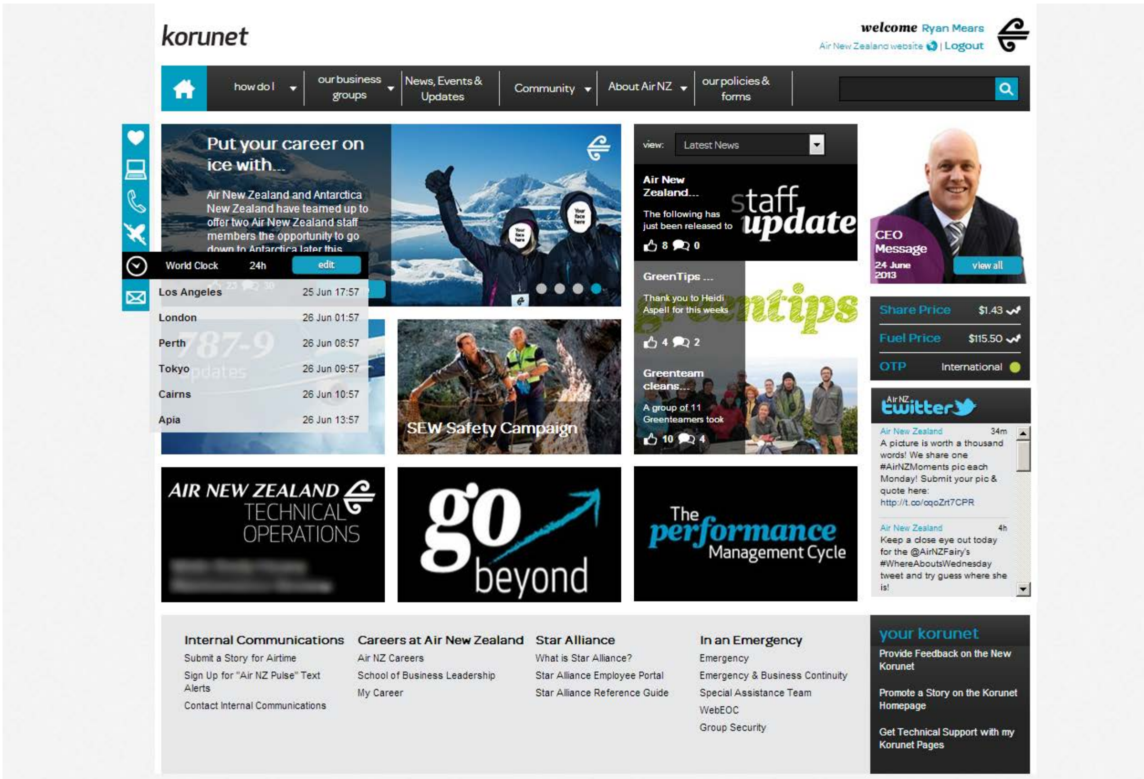
An activity bar is always available on the left-hand side of the page. This is intended to give users quick access to the site's most-used functions regardless of the user's location on the site. It can be modified to include different links if needed. The links are globally set for all users and are limited to items that apply universally, although users can configure the favorites item as they see fit.

Although the activity bar has been a success, the team sees a split in its use: about half of users see and use it, and the other half hasn't noticed or explored it. Usage numbers are increasing, however, as more users notice the links and see their value over time.

The activity bar's icons (from top to bottom) offer users quick access to the following popular functions:

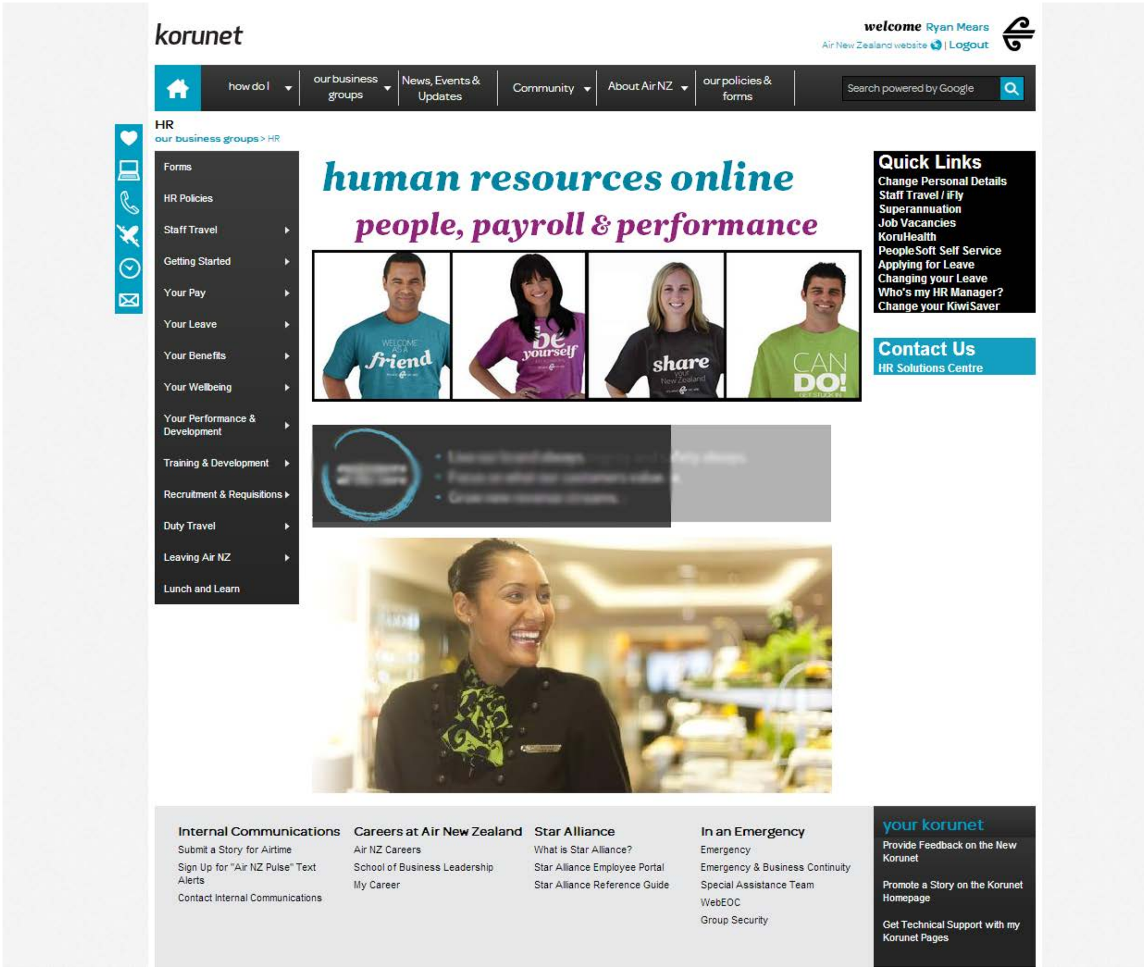
- **Favorites** (user configurable and available for internal or external sites)
- **Assist** (an issue tracking and resolution tool)
- **Employee directory**
- **ifly** (a link to the staff travel site for booking employee travel)
- **World clocks**
- **Web mail**

Two of the activity bar's highlighted content areas—the world clock and direct links to staff travel sites—are particularly useful for an airline with employees all over the world.



The activity bar on the page's left edge is consistent across the site, giving users quick access to content. The bar's *World Clock* tool shows users six worldwide locations by default, but can be edited by the user via a simple *Edit* link.

Images are a big part of the site. Employee pages include images to help remote staff feel more engaged with the company. Throughout the site, images of real employees are used whenever possible. Employees told the team that they enjoy seeing pictures of their colleagues, so the team encourages them to send in photographs that can be used on the intranet. Photographs are often submitted through the *contact internal communications* link on the bottom left of the front page.



The *HR* page includes images of Air New Zealand employees, rather than stock images. Employee images are used throughout the site.

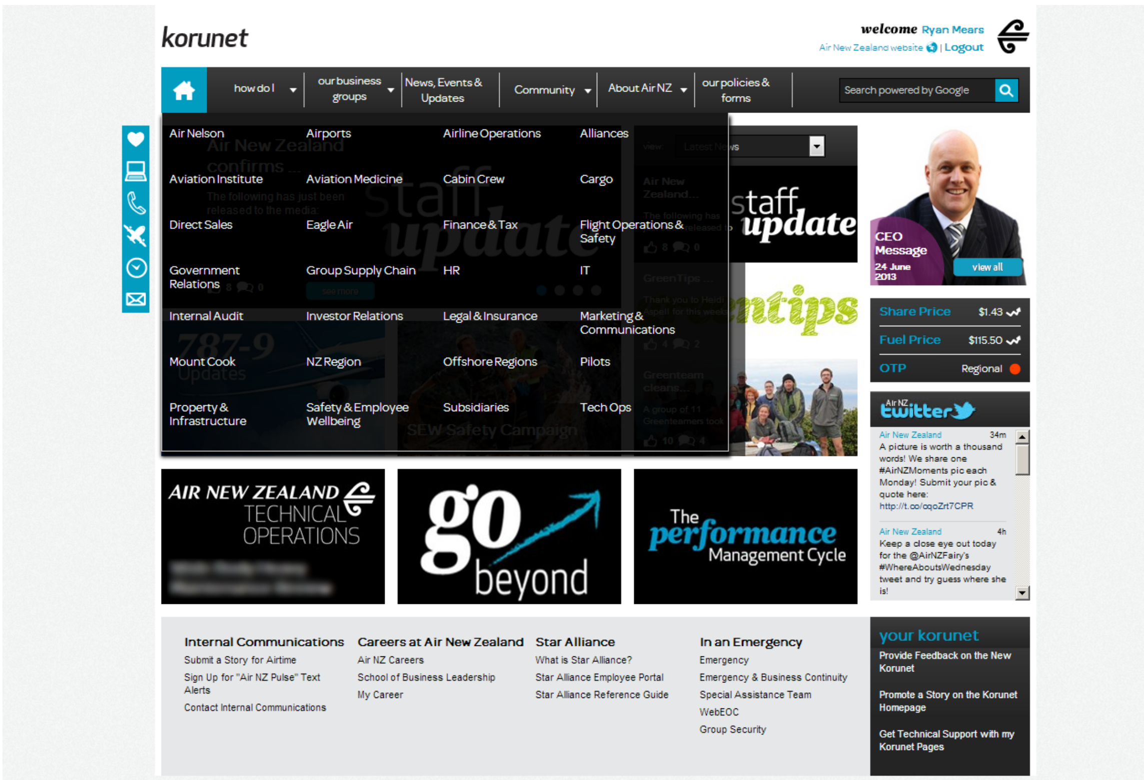
To tackle the site structure, the team developed a new overall IA with assistance from the PurpleShirt agency. At the same time, the team had to convince content owners to review and refresh the site's information. Business units had to review their own information, and motivating some of them proved challenging. Although the team communicated the benefits and advantages of updated content to motivate teams, in the end, hard deadlines for content, supported by management, were required.

The team spent considerable time cataloging and organizing the site content. To collect user input about the site structure and see if they were moving in the right direction, the team used online card-sorting tools. With a workforce that often travels, as well as many task- and time-based employees, finding people with any time to participate in user research was a challenge. The team had to make participation easy and quick. Using online tools helped the team reach more people in more roles and locations around the organization.

Card sorting started with the terms used on the previous site. It quickly became clear that some of these terms confused users. For example, people were confused by the way the business units were structured, so the team had to ensure that the business group names were very clear.

When the new structure was developed, the team used an online reverse card sort to confirm that the new categories were improvements over the old. In such a test, users are given information to find, and then asked to click through a list of links that represents the site structure; this indicates where they would look to find the target content. An Agile development process meant the team had to work quickly between iterations, so quick feedback was essential.

The navigation is based on content type, rather than owner, which helps users find information more quickly. Megamenus reveal subcategories, giving users quick access to information.

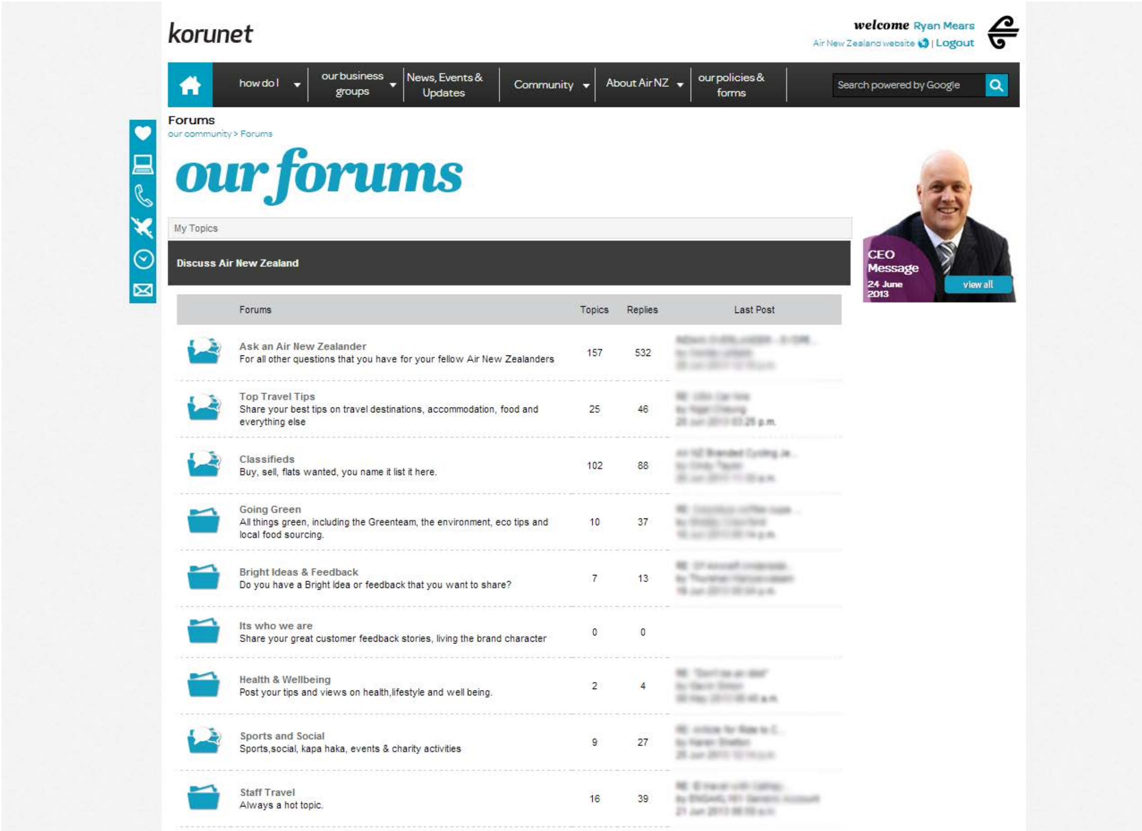


The team used card-sorting and reverse card-sorting exercises to ensure that the new site structure would be clear to users. This screen shows the subcategories for the *our business groups* category.

Another goal of the site was to improve communications. Employees can now comment on news stories and participate in forums, surveys, and competitions. This allows employees to communicate easily with one another. The CEO also communicates via the intranet, with both written and video messages posted regularly: written updates are posted weekly, while video updates are ad hoc.

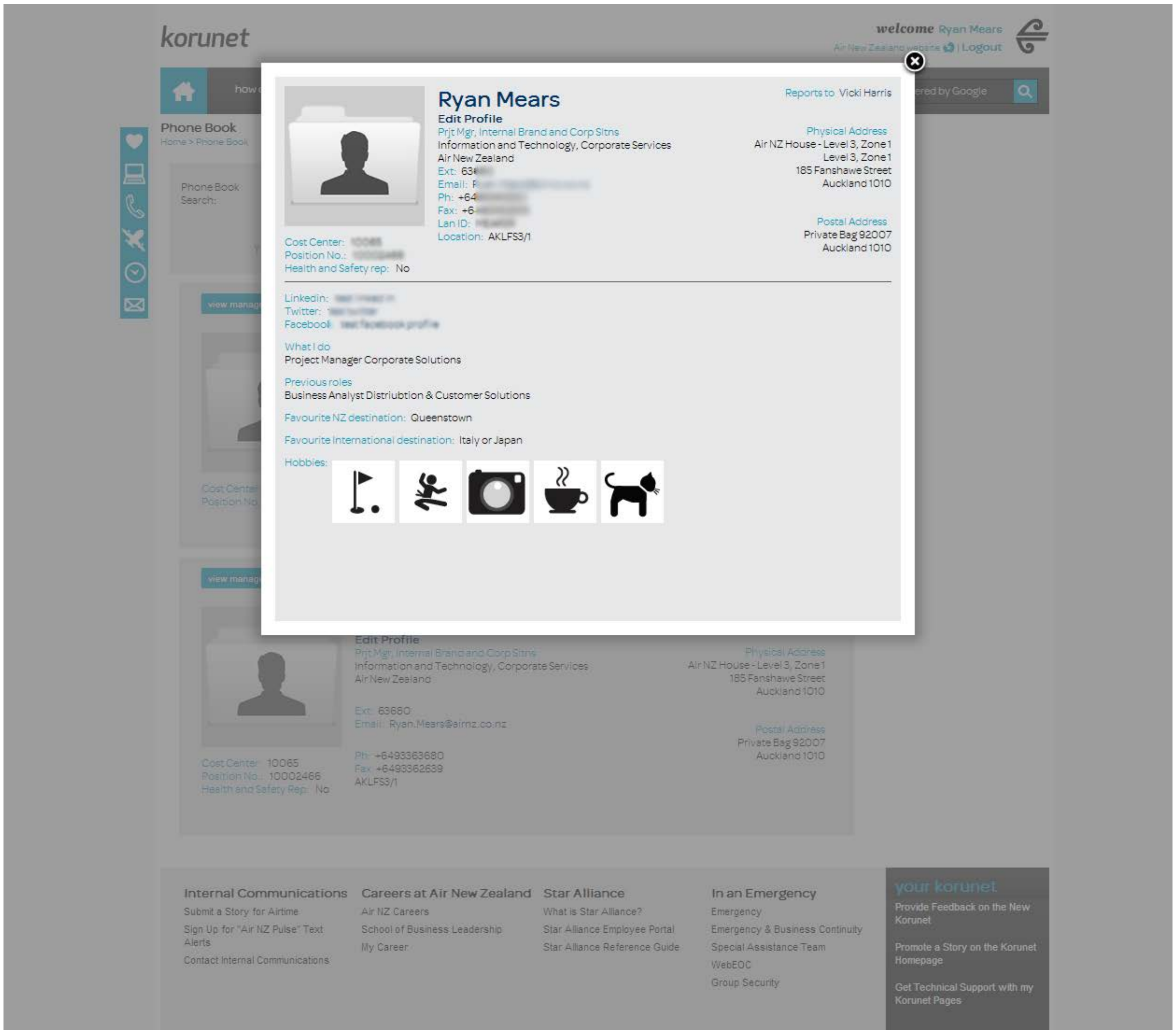
The site's new forums let employees discuss issues of interest or ask one another questions. The forum postings and comments on news stories also give executives a sense of how employees feel about initiatives and projects. This allows executives to respond to any concerns that arise. This is the first time the site has enabled such two-way conversations.

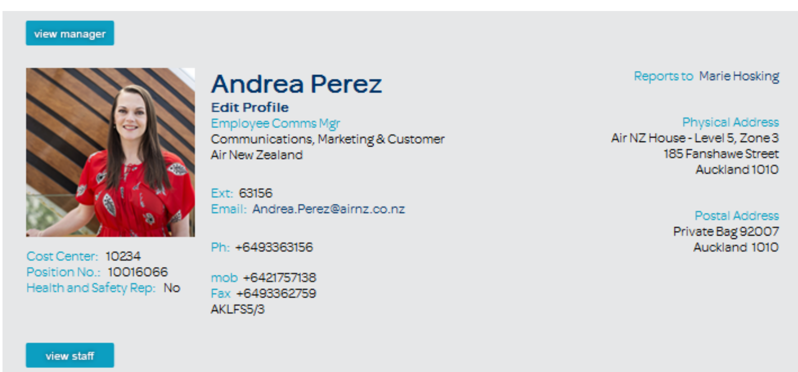
The *Ask an Air NZer* forum is quite popular, with employees asking—and answering—questions daily. Other forums include discussions on travel tips, "green" tips, ideas for company improvement, customer feedback stories, and health and sports. Users can start and respond to any forum topic they choose.



Forums provide a new way for employees to share information about work and common interests, such as travel, health, and sports.

Employee profile pages include standard contact information as well as links to employees' LinkedIn, Twitter, and Facebook profiles. Such links enable users to personalize content in a simple way: by linking to profile information that is already available. Employees can add these links themselves. They can also customize their profiles by adding information on the work they do, which previous roles they've held, their favorite destination in New Zealand, favorite international destination, and hobbies. Hobbies are indicated by icons—users can select from a set of 65 icons depicting everything from photography to pets to martial arts. Users can edit their own profiles via a link at the top of the page.





The employee profile includes standard contact information, but also lets users add personal details, including icons indicating hobbies and links to public LinkedIn, Twitter, and Facebook profiles.

With cleaner content and a new site structure, the new site helps users find information quickly. The addition of social tools, such as commenting and employee forums, turns the intranet into a two-way tool, allowing a workforce that includes world travelers to communicate and connect.

BACKGROUND

Korunet was first launched in 1999 and last upgraded in 2008; the time was right for a wholesale redesign and upgrade. With the latest redesign, Air New Zealand wasn't looking to just put lipstick on a pig, but rather to get a whole new pig.

"The Korunet is the hub of the airline internally and the main communication channel for our diverse employee groups, across a range of geographical locations, many of whom work remotely," says Andrea Perez, Employee Communications Manager. "It is a tool we wanted to expand and use further; however, the existing infrastructure would not have been able to meet the demand."

Korunet prior to the redesign

Goals

The team defined three main goals for the new site:

- **Improve information finding.** Employee feedback made it clear that they found it difficult to find information on the site either through the existing IA or through search. There was too much content, and it required editing, streamlining, and structure. Improving the site's IA and search was identified as a quick win to improve staff efficiency and reduce lost productivity.
- **Enhance communication tools.** By introducing a new mix of communication technologies, the team aimed to improve the communication channels between the organization and its staff, as well as between individual staff members.
- **Provide a dynamic space for content and employee interaction.** The new intranet had to be a space where employees would naturally go to find company-related information and to interact with other employees. This was accomplished by providing information that is relevant, structured, and easy to find, as well as easy to discuss.

Challenges

A tight timeline meant that team members had to keep their eyes on the prize, with a razor-sharp focus on what they needed to achieve and a tight rein on the project scope.

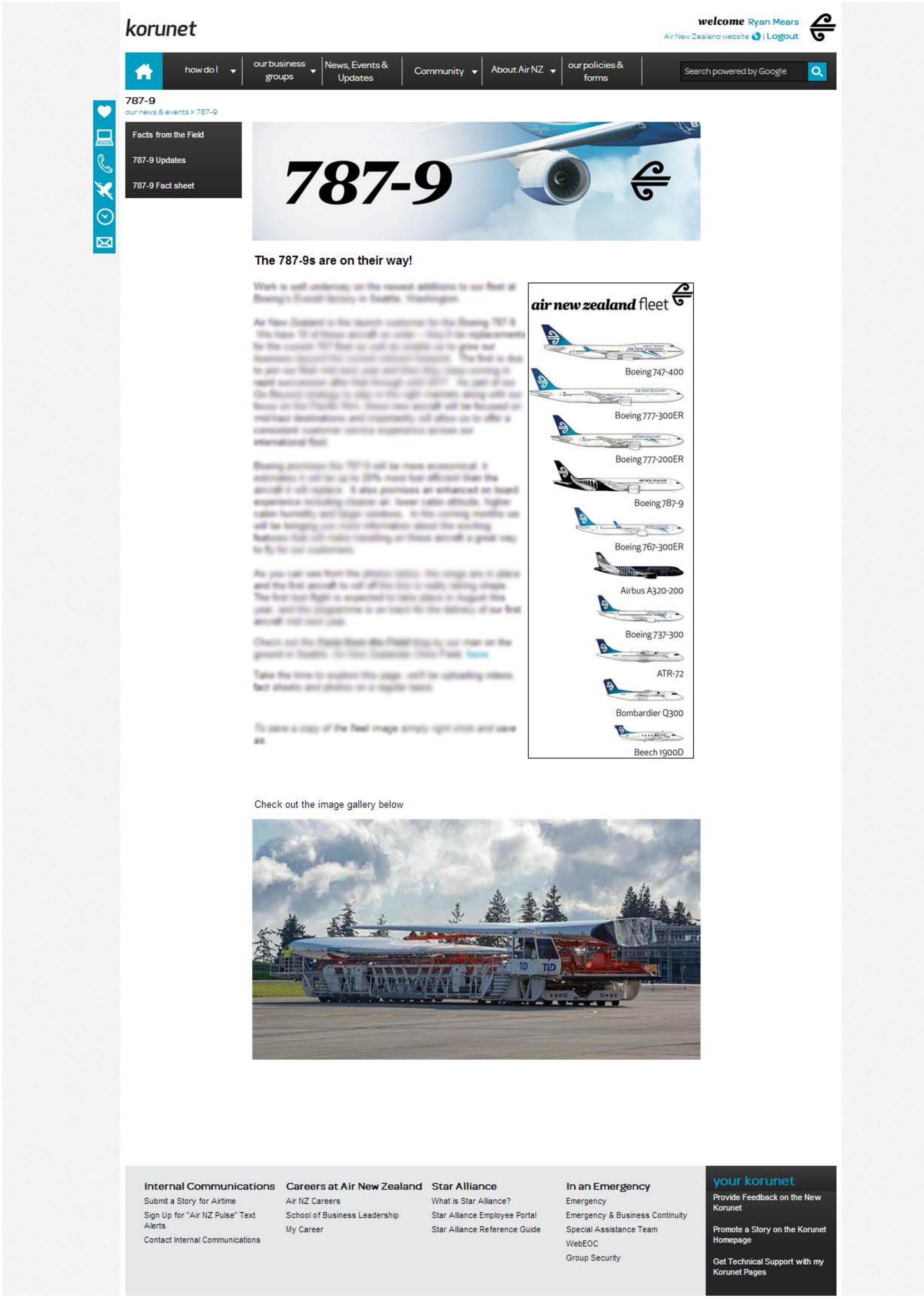
One of the major project hurdles was simply convincing the business units to come on board. "A major challenge was the reviewing and rationalization of content by business units," says Project Manager Ryan Mears. "In their eyes, they thought that 'If it's not broken why fix it?' and there was general resistance to change.

"We needed to communicate the benefits of the improved system and the advantages for employees," he says, "We required a hard deadline, with management support, to finally motivate movement of content by individual teams."

And business units weren't the only ones resistant to change. Users familiar with the old site initially found the new intranet difficult to use, as content was not where they expected it to be. This challenge was solved through the new IA design, which offered a sensible and intuitive navigation structure that helped users easily adapt. Improvements in search also helped users find their way. The new search was much more Google-like, which gave users immediate confidence in the system.

Old technology also proved a challenge for the project. The existing technology was very old, and existing content had experienced significant organic growth over time. This meant that cataloging and organizing existing content took a significant amount of time.

An Agile approach gave the team positive momentum, with each iterative cycle building and improving upon the one that came before. "This was a necessity given the time frame we were working to, but it did mean that in some cases we didn't get it right the first or even second time round," says Mears.



A typical content page on the site

INTRANET TEAM

Air New Zealand team members (left to right): Ian Lang, Tristan Chan, Stacey Olsen, Andrea Perez, Tess O'Connor, and Ryan Mears; (absent from photo): Maarten Nieuwland and Shane Burfield-Mills.

GOVERNANCE

Ownership

Korunet's ownership rests within the Marketing & Customer team. The Internal Communications team, closely supported by the IT team, owns the intranet content.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Internal Communications	• Manage all requests from the business units; own and manage content
IT team	• Manage all IT areas and content manager training
Business Unit Content Managers	• Responsible for all content for individual business unit
Design House (Internal Air NZ Design Department)	• Responsible for the site's overall aesthetic

USERS

Air New Zealand's intranet has users across the organization, including those from

- Air Nelson (a regional airline)
- Aviation Institute (training and development)
- Direct Sales
- Government Relations
- Internal Audit
- Mount Cook (a regional airline)
- Property and Infrastructure
- Airports (national and international)
- Aviation Medicine
- Eagle Air (a regional airline)
- Group Supply Chain
- Investor Relations
- NZ Region
- Safety and Employee Wellbeing
- Airline Operations
- Cabin Crew
- Finance and Tax
- HR
- Legal and Insurance
- Offshore Regions
- Subsidiaries

- Alliances
- Cargo
- Flight Operations and Safety
- IT
- Marketing and Communications
- Pilots
- Tech OPs

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	• Korunet.co.nz
Default Status	• The intranet is the default page in all browsers, and users cannot change it.
Remote Access	• A large portion of Air New Zealand employees regularly accesses the site externally, including on-duty pilots and crew members. Access is provided via standard https connection (with credentials). External access includes search; making the site as accessible as possible from any web platform was a requirement.
Shared Workstations	• Some engineers and other airport workers who don't require a PC for their work use the site from shared workstations.

DESIGN PROCESS AND USABILITY WORK

Design Approach

The design team was practical in its research pursuits. Working with a compressed timeline, the team was forced to make the most of one round of card sorting and one round of usability testing, folding the findings from one research exercise into the next to build an optimal task profile one layer at a time.

The constraints of organizing the tests further contributed to the team's testing challenges. Because large portions of the company's workforce are task- and time-based employees, freeing up time for them to participate was a challenge. "It was, though, invaluable to get their input," says Mears.

Mears outlines how the tests were conducted:

- **Card sorting.** Card sorts were performed using online tools to give the organization's many disparate user groups—in terms of locality, job role, and availability—input into the IA.

  Individual cards were based on existing uses cases for the existing intranet. "Often, what was thought to be an obvious choice or clear terminology proved not to be so," says Mears. "The card sort was able to quickly highlight this. What we found because of our disparate work force was that the common use cards had a high correlation, but tasks more specific to individual work groups did not correlate well. This was not entirely unexpected—but was laid out quite clearly in the results."

  This exercise allowed the team to focus on the "common ground" areas without skewing the data displayed to any particular group. It is for this reason that the ultimate IA design allows users to dive into a specific business area in the top-level navigation.

- **Usability testing of design prototypes.** Once the card sorting was done and an IA approach had been selected, the team conducted a "reverse sense test" of the architecture using the *Tree Jacking* method. Using this tool, the team gave test users specific tasks and asked them to locate where they would expect to perform a task within the proposed navigation. Based on the results, the team made tweaks to the final navigation and created the navigation and page layout prototypes.

TIMELINE

PROJECT MILESTONES	
Milestone Date	**Milestone Description**
1999	• First company intranet (a simple collection of pages)
April 2007–June 2008	• Company intranet redesigned and redeployed
2010	• Redesign of site navigation
August 2012	• Launch of major intranet redesign project (discussed here)
January 2013	• Launch of new design
March 2013	• Post-launch enhancements include addition of company phone book

CONTENT AND CONTENT CONTRIBUTORS

Approximately 200 authors add content to the site. Corporate content is developed and released by the Internal Communications team. Content for each subsite or group is developed by the group itself. Content contributors are encouraged to remove outdated content and provide business-relevant information for employees to access.

The Internal Communications team manages and reviews Korunet's news sections, and only members of that team can load content to the front page. Individual business units are responsible for reviewing their own content, which is managed solely by each unit's site owner/publisher.

The Internal Communications team is also responsible for oversight, conducting regular checks to look for obvious errors. However, the way the site and templates are set up ensures that the content is laid out in a fairly consistent manner.

The Internal Communications team also fields requests for new content, and regularly receives inquiries from employees who are looking for specific material. If that material is not located within the specific business unit's section, team members work with them to develop it.

Finally, the Internal Communications team ensures that the content being posted on the company forums is appropriate and does not breach the company intranet policy.

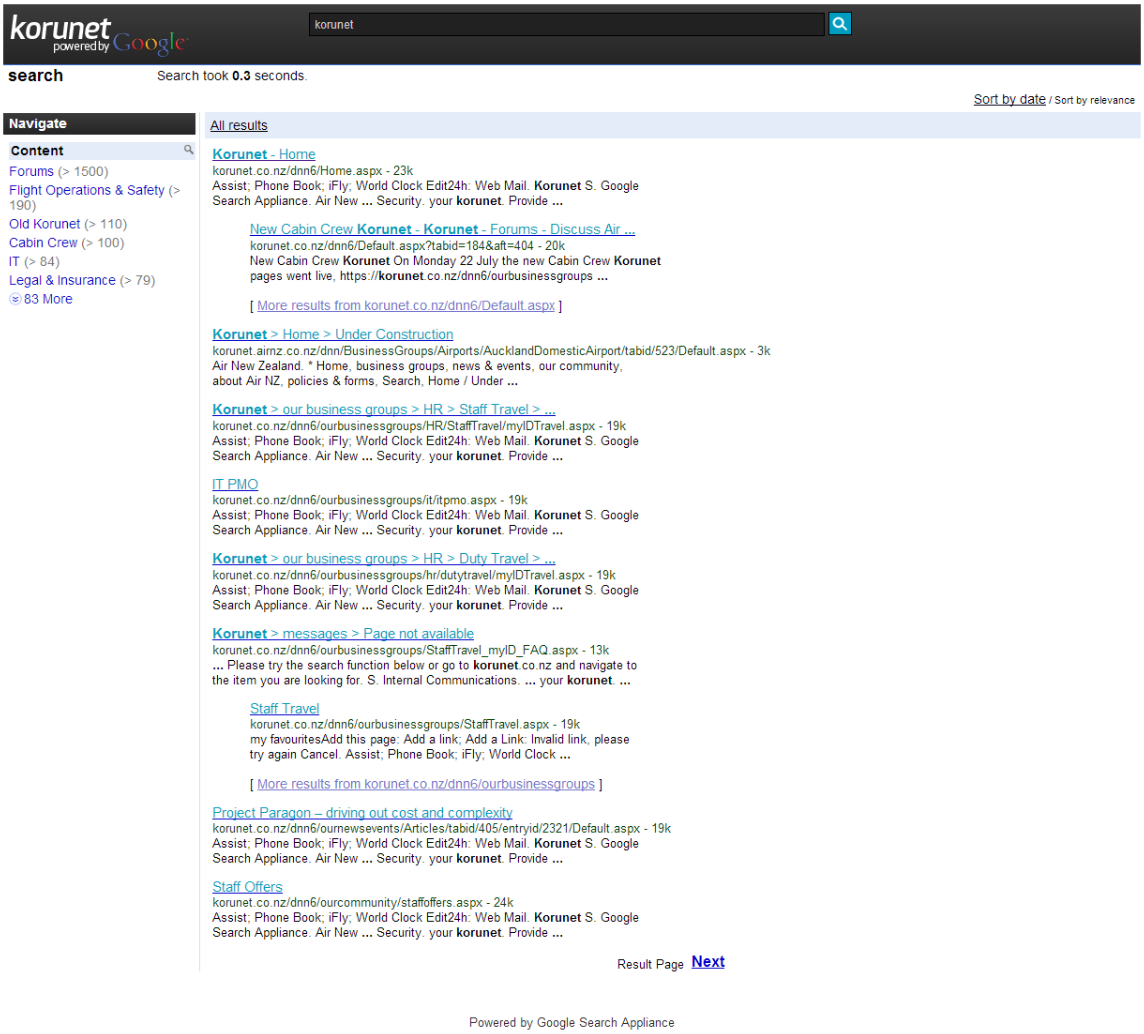
TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	• Virtual machine with Windows Server 2008R2
Bug Tracking/Quality Assurance	• JIRA
Design Tools	• Microsoft .NET
Site Building Tools	• Microsoft .NET
Content Management Tools	• Microsoft .NET
Search	• Google Search appliance
Other Functions	• SQL Server back end database

SEARCH

The intranet uses Google Search appliance, chosen because it was familiar from both a support and content management perspective. Search results can be refined by metadata tags set against content, but this is not in use site-wide.

"We do not yet perform any search specific optimization, although it is a possibility in the future," says Mears, adding that there's good reason for waiting. "In our experience, average users performing Google searches on the internet rarely refine results by facets or other metadata—they simply perform another search with refined search terms," he says. "Users over the years have been trained by Google Inc. to do so and thus investing time and effort in making search refinement easier was not determined to be as important as improving other site features. That being said, in the future, we will probably investigate facets for each business group in order to return results only within that group."



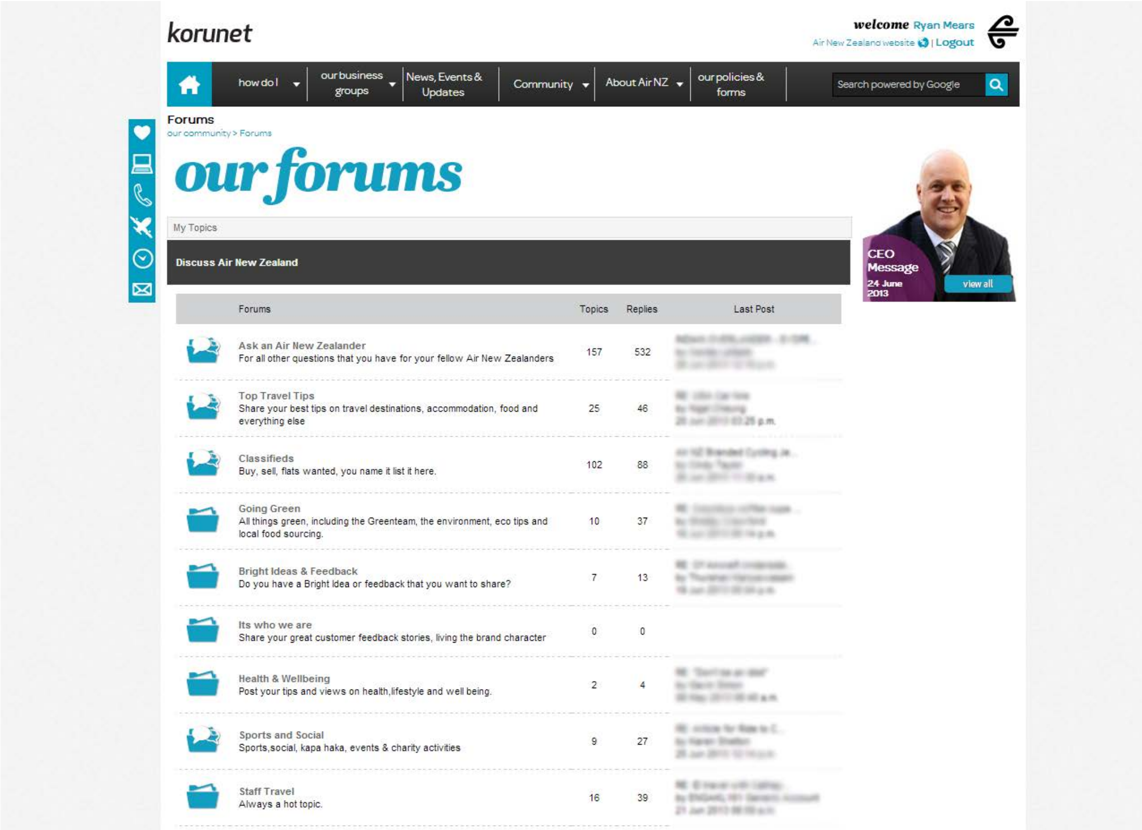
An example search results page. Air NZ uses Google Search Appliance to power the intranet search functionality.

RESULTS AND ROI

It could be said that the new Korunet's success is measured in satisfaction units, and the new site is racking up lots and lots of those. "We look at overall staff interaction with the Korunet," says Perez, "how often they comment on our news articles, the use of online forums, the completing of surveys run on the Korunet, and the number of entries into competitions—all of which have been steadily increasing. We have also noticed a decrease in the number of queries we have had for employees trying to find information.

"Seven months after launch, the front page of the Korunet receives 20,000 hits per day," she says. With limited stats available, it is difficult to quantify whether or not this number is a "big" increase over the old site visits, but anecdotal evidence suggests that it is.

"This is borne out by an increasing number of comments on articles, forum usage, and the like," says Mears. "We have a user base of 11,000 employees, of which only 2,700 are what you would consider knowledge workers; the others are essentially remote users. Since we launched, we have seen roughly an 11% increase in page views per day."



An article showing employee correspondence and response to the content

LESSONS LEARNED

Mears and his team members explain some of the lessons they learned through the project:

- **Involve the design team early.** "Involve the design team with the team developing the information architecture early to allow for alignment of output."
- **Design and refine—before you build.** "Refine the exacting design requirements as early and as completely as possible prior to developing those elements. This will minimize any rework."
- **Draw a hard line for content migration.** "Where content needs to be transferred or converted into the new intranet, set a hard date to have the conversion completed by. This will encourage content owners to perform the conversion or transplant of their information as required by the project. If this is not the case, a long tail develops where the older content is waiting on owners to be migrated."

- **Define a mobile strategy, even if that means not having one.** "Decide upfront the strategy for mobile devices. Decide whether or not to provide a mobile-specific experience and do so at the beginning of the project."
- **Include a diverse set of users in the design process.** "Ensure you include as many user group representatives as possible. Use online tools to engage, if possible, as this aids the process when the user is remote."
- **Make participation easy and valuable.** "If some of the user groups work in operational areas, schedule sessions as far in advance as possible and have what you want from their time very clearly defined. The easier you make the process, the higher the engagement level is."
- **There's no such thing as 100% ready "out of the box."** "Be wary of out-of-the-box items not requiring customization. In most cases, customization will still be required to meet the eventual goal."
- **Value the white space.** "Less is more. A clean, uncluttered design is highly valued on the whole, although unfortunately this is a somewhat subjective measure. Accept that you will not be able to please everybody."

ConocoPhillips

Using the intranet: ConocoPhillips is the world's largest independent exploration and production company. It explores for, develops, and produces crude oil and natural gas globally with a commitment to safety, operating excellence, and environmental stewardship. Over 35,000 employees and contractors work across 27 countries in a truly integrated way to find and produce oil and natural gas.

Headquarters: Houston, TX

Number of employees the intranet supports: 35,000 employees and contractors

Company locations: US, Canada, Norway, Australia, UK, Malaysia, Indonesia, China, and Qatar

Annual sales: $58.2 billion (2013)

Design team: In-house nine people formed the core team, working across 14 departments and business units worldwide. BrightStarr was contracted to design and build the site.

In-house: Jennifer Hohman, Director, IT–Program Manager; Cathy Cram, Manager, Strategic Issues and Initiatives; Sue Anne Boelens: Manager, IT & Program Sponsor; Tom Burley: Manager, HR; Barb Sheedlo: Manager, HR; Christy Clark: Director, IT-Enterprise Content Management; Brad Federwisch: Director, IT-Architecture and Search; Rob Evans: Director Canada Communications; Chris Young: Director, Creative Services

BrightStarr: Glen Chambers, SVP Operations & ConocoPhillips Account Manager; Kanwal Khipple, VP Consulting & (previous) Project Principal; Juan Larios, Solutions Architect & (current) Project Principal; Helenita Frounfelkner, Content Strategist; Emma Pinkerton, Director of Consulting & UX Analyst; Kunaal Kapoor, VP Delivery & Development & Delivery Lead

SUMMARY

One of the more frightening tasks for an intranet designer is that of de-prioritizing content on the site. It is more comforting to think of it as choosing the important things and promoting those than it is to think of moving some content aside, or down some layers. It might be scary, but making some content less visible is a necessary step to having items of significance findable. Also, progressive disclosure supports uncluttered pages and menus that employees can scan quickly and easily. Since progressive disclosure has been a proven design technique for about 30 years, when the ConocoPhillips intranet designers made this leap it was hardly experimental.

Good prioritization begins on the entry page of ConocoPhillips' intranet, named The Mark. Instead of offering miles and miles of content, it has just some key sections with targeted information that can help employees with daily updates, and also help them remember long-term company goals. Employees can access the rest of the information they need to do their jobs via the menus, search, and through the fat footer.

Several items on the homepage rotate, allowing more content to occupy the same page real estate. One such item is the carousel-like UI feature known as the *Company News Slider* in the top left. This includes five news items accompanied by a headline and a large, expressive image. To navigate these news items, employees may use either the subtle left and right arrow icons or the cut-off sections of each item not currently selected. Or they may wait for the news to auto-rotate.

Similarly, users may scroll the announcements to the right and the strategic initiatives in the center section. Items such as *Milestones 2013, Defining ConocoPhillips,* and *World Clocks* are handy when doing day-to-day work. And the *Performance* section informs employees with text and sparklines (very small charts with information) that offer figures about how well the organization as a whole is doing compared with their planning. This type of feature can not only make employees stay focused on the big picture, but can make them feel informed and respected too.

Events and publications that people commonly use appear toward the bottom of the homepage.

Employees may set a default geographical location, which dictates some of the content they see when they log in to The Mark. They may also choose a different location by using the map drop-down menu in the upper right. This is a key feature for many different types of users, such as managers who have direct reports in various locations, and people who work across geographic locations on a regular basis. This is especially helpful since the intranet supports employees in several locations, including: US, Canada, Norway, Australia, UK, Malaysia, Indonesia, China, and Qatar.

The visual look of the homepage is pleasant, with legible and meaningful icons and interesting images. The gray backgrounds demarking sections make it easy to scan the different areas. The red section headings above those gray areas are small but consistently placed and easy to find and read. Overall, there is just enough content to make the page a helpful portal, but not cluttered or overwhelming.

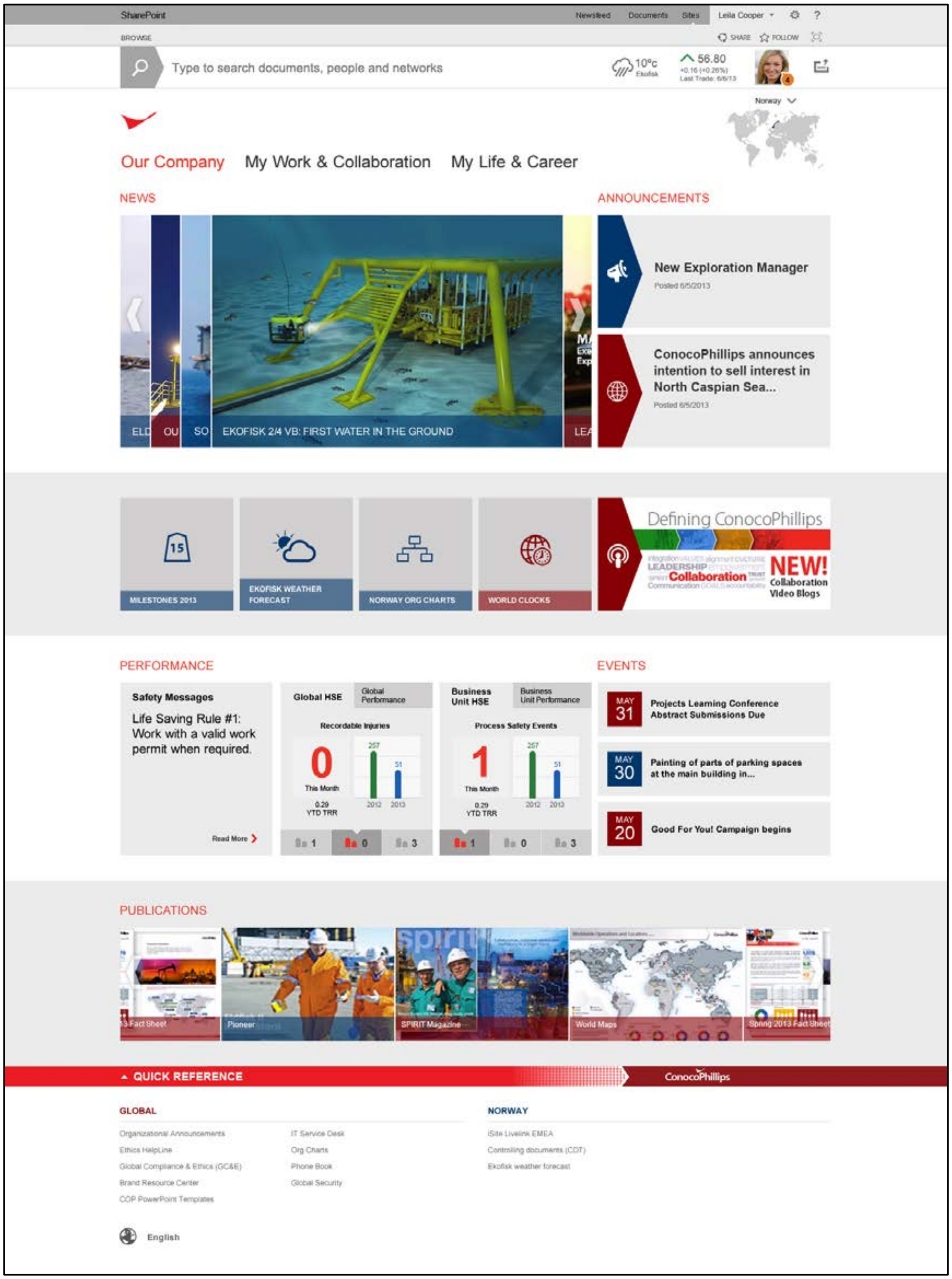


Image 1. ConocoPhillips: Intranet Homepage. The Mark homepage offers news, announcements, information about upcoming events and company performance, and the possibility to switch countries.
21_ConocoPhillips_01_Homepage_live.png

The site has a responsive design so employees may access it from any device. The main news carousel is visible on the homepage on a smartphone, as are announcements and events. The global navigation and footer are collapsed on small-screen devices to maximize screen real estate for content.

Image 2. ConocoPhillips Intranet: Responsive Design. The ConocoPhillips intranet uses responsive design so employees may access it from any device. *22_ConocoPhillips_02_Mobile_Homepage_live.png*

The information architects made a bold move when organizing the IA for The Mark. They chose to employ a very narrow top-level menu, which includes only three choices: *Our Company, My Work & Collaboration*, and *My Life & Career.* The team was able to confidently present just these three choices at the top of the hierarchy because the terms they used so thoroughly describe the items that appear under them, and the choices themselves are different from one another. This makes it easy for employees to choose the right menu to start their browsing.

As for the navigation type, megamenus are found on many intranets and websites today, but not many are as well done as those on ConocoPhillips' intranet. There are several aspects of this megamenu design that are just plain good UX, including the following:

- The menu links are divided into categories.
- The category headings are easy to distinguish from links due to their bold weight, upper-case letters, and grey backgrounds.
- The words chosen for the headings describe the links below, and are succinct.
- The menu is large, but does not occupy the entire width of the page. This makes it easier for users to tell the UI control is an actual menu rather than an element that is part of the main page. Also, there is no need to include an "X" to close it, as they user can easily see other places on the page that he can move his cursor over to close the menu.

Information about the organization and global and local news and events appear under the *Our Company* menu, along with strategic initiatives, performance metrics and publications. The two visibly separate sections — *Global* and the name of the country in which the logged in employee works — clearly delineate the links related to each. The menu identifies the content source by displaying global content in red and regional content in blue. This arrangement is a way designers met the goal to present corporate and local content in a consistent way. Much of the content is translated into local s, and each location has the option and ability to publish links to its locality's menu.

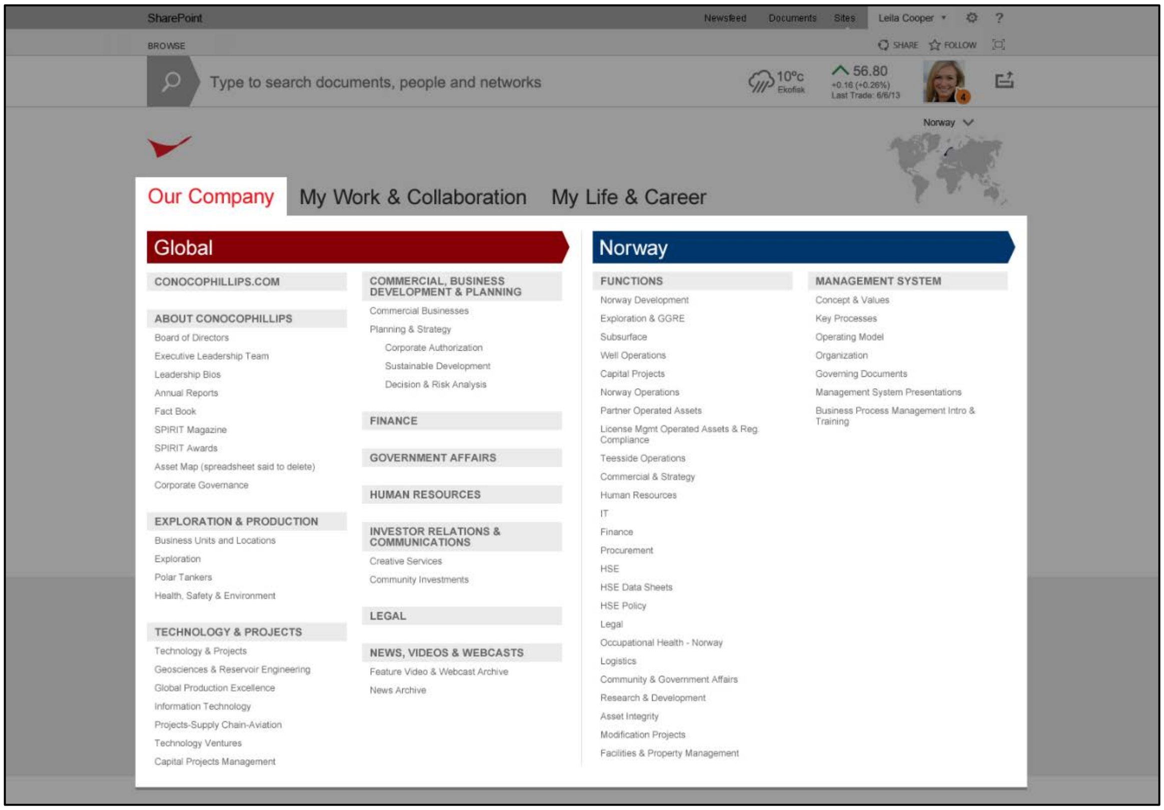


Image 3. ConocoPhillips: Intranet Megamenu. The megamenu is well designed, with sections and clear headings. Also, the links are divided between corporate and local content. *23a_ConocoPhillips_03a_Top-level navigation_live.png* and *23b_ConocoPhillips_03b_*Top-level navigation_live_CROPPED.png

The fat footer, known as the *Quick Reference Footer*, is the yang to the megamenu's yin. It also displays global content in red and regional content in blue. Offering these links at the bottom of the page gives users a consistent place to find certain content, and a last resort when they cannot find what they want immediately.

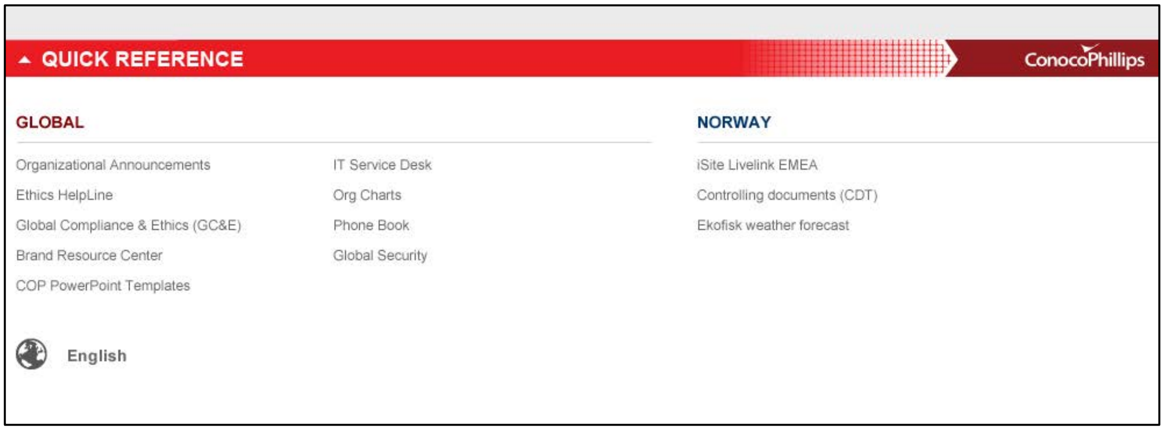


Image 4. ConocoPhillips Intranet: Fat Footer. The fat footer on the ConocoPhillips intranet separates global and local content. *24_ConocoPhillips_04_Fat Footer_CROPPED.png*

In addition to the global and footer navigations, The Mark offers very robust and supportive search capabilities, querying several internal and external sites and also wiki content. (Leveraging SharePoint 2013's cross-site publishing and managed metadata allows reuse of content by publishing it only once.)

Each search result is easy to read, and includes a clear title and description. The type of media is indicated with an icon to the left or a photo of the author. The social activity, such as replies and likes, are called out to the right of each item. And if the employee hovers the cursor over a result, a pop-up offers more information about the contributors to that item.

Employees may view all results or use the links at the top of the page to view only *People, Conversations,* or *Knowledge Sharing.* The filters on the left of the search engine results page enable employees to refine content based on document type, site, author, country, and newsfeed. The slider below the filters offers the capability to display results from within a particular date range. The architects defined a rich IA and taxonomy with strong metadata capabilities to make search results worthwhile.

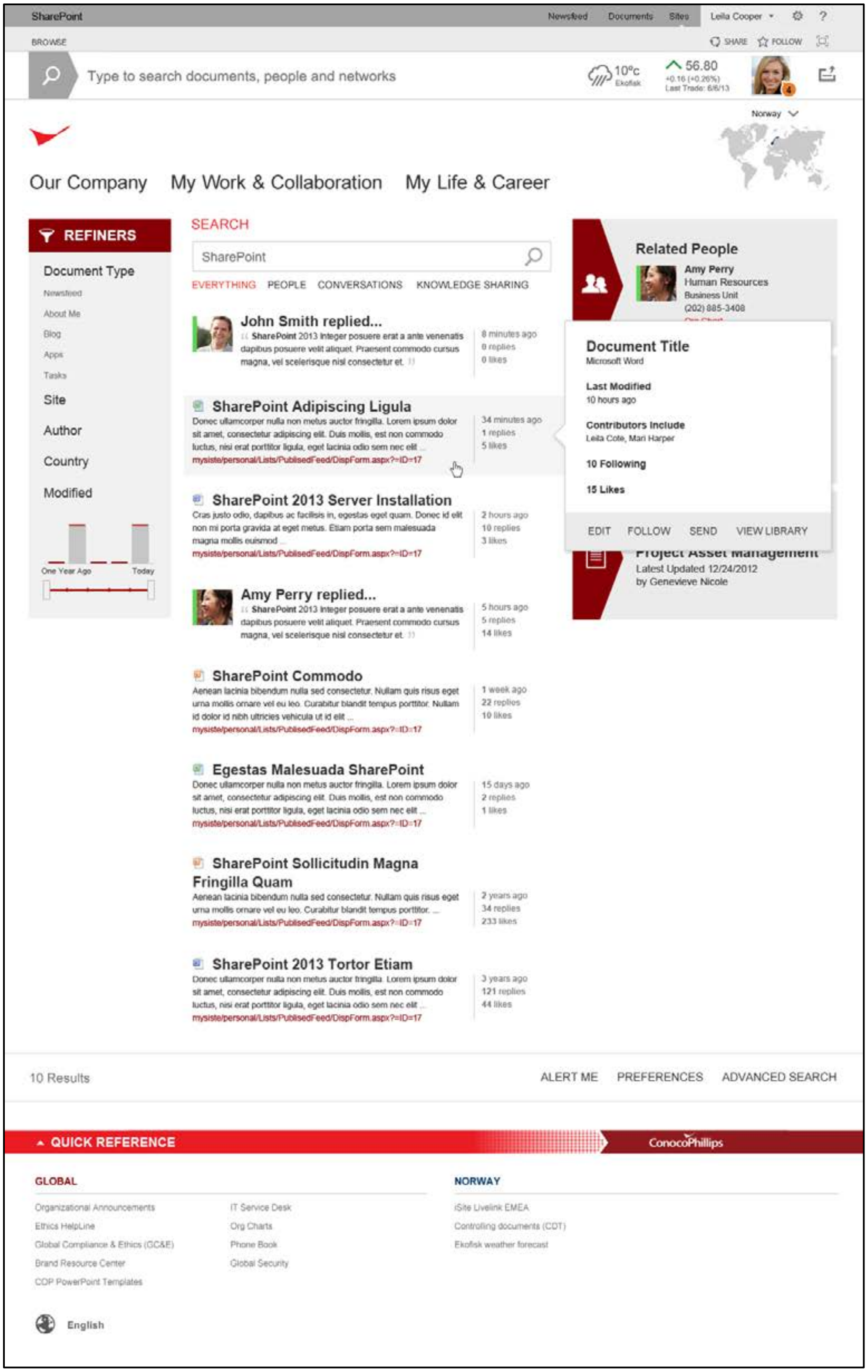


Image 5. ConocoPhillips Intranet: Search Results. Search results are easy to scan, sort, and filter. *25_ConocoPhillips_05_Search_live.png*

Looking again at the menus, the *My Work & Collaboration* section helps employees get their day-to-day work done. This helpful page is a window to items such as:

- Productivity tools
- Knowledge-sharing networks
- Wikis
- Software tips and tricks
- Policies
- Templates
- Documents

A filmstrip component of the UI displays three informative news items about particular tools and getting work done, as opposed to just corporate news. Examples of this include the employee engagement survey, and a reminder announcement about using electronic communication. Like the carousel feature on the homepage, this filmstrip allows users to navigate via the left and right arrows, or by clicking on the partially displayed portion of the images. The consistent design and interactive behavior of components across the UI helps people learn and remember how to use intranet features faster.

One main announcement appears to the right of the news. In the content area below it are links to information and resources. The links have a flat button design — no shadows or bevels — but there are visual traits (affordance signifiers) that make these look clickable. The signifiers include the rectangular shape of the button, the appropriate button size, and the bold text within that looks somewhat like a link. The Mark designers were able to stay current and simple with presentation, but also ensure the UI is understandable and usable.

As another example, the icons used in the buttons are very simple and easy to recognize, suggesting which topics the particular tool relates with. For example, new-related items have an envelope icon, while the icon for people-related items depicts a man and woman.

Other personal “My” tools appear in the column on the right side.

Communication tools, such as the local and corporate directories (“yellow pages”) appear in a filmstrip toward the bottom of the page.

Image 6. ConocoPhillips Intranet: Work and Collaboration Tools. The *My Work & Collaboration* section provides a window to many tools that employees need to do their day-to-day work. *26_ConocoPhillips_06_My Work_live.png*

The *Internal Documents* section is one such tool that employees use. The left-side navigation enables people to choose topics, while the content area on the right displays folder and different types of documents, which are identifiable by the following elements:

- File type icon
- Date document was modified
- Person who modified it
- Phase the document is in (internal processes)
- Category that document relates to

Users may sort and search for documents, or add new ones by dragging them to the *New document* region marked with a red plus sign in the upper right. All combined, these design features help make the documents tool useful and easy to work with.

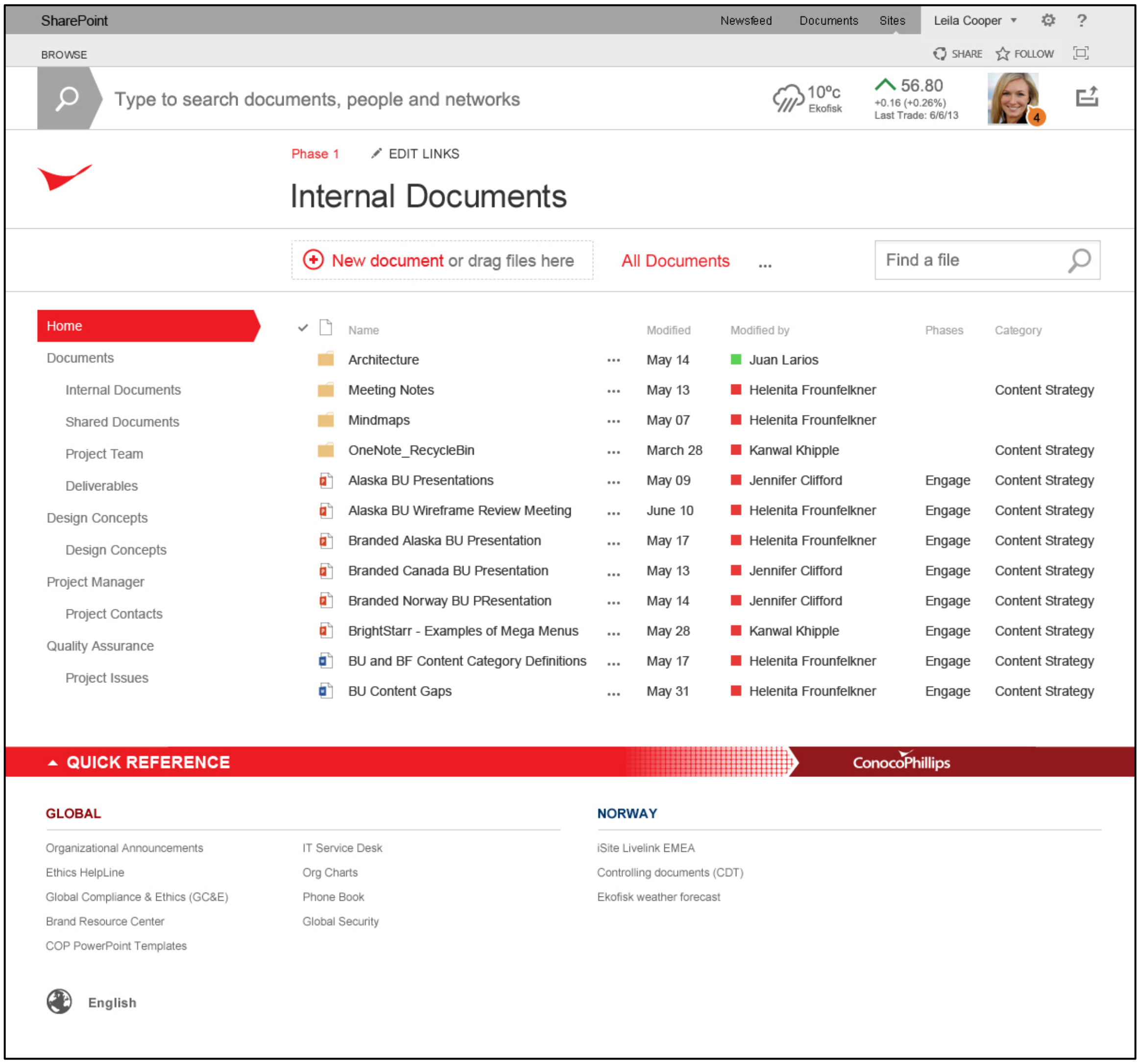


Image 7. ConocoPhillips Intranet: *Internal Documents*. The *Internal Documents* section provides searchable documents, organized in categories, with metadata identifiers. *27_ConocoPhillips_07_Collaboration_area_live.png*

The arrangement of the *My Life & Career* section's main page is similar to that of the *My Work & Collaboration* main page. The carousel and clear buttons to resources and tools below are simple to locate and understand. Again, the common design makes it easy for employees to acclimate and proceed. The *My Life & Career* section houses human resource information such as career development resources and benefits and compensation information. Employees may also access fun elements such as the *Sports Social Club.*

Image 8. ConocoPhillips Intranet: *My Life & Career Section*. The arrangement of the *My Life & Career* section's main page on the ConocoPhillips intranet is similar to that of the *My Work &* Collaboration main page. These similarities help users to engage and be productive quickly.
28_ConocoPhillips_08_MyLife_and_Career_live.png

Powerful federated search, clear IA, global and regional content, accessible region-specific sites, language support, and a responsive design that works on any device are only some of the features that make The Mark a truly superb intranet for ConocoPhillips' 35,000 employees and contractors worldwide.

BACKGROUND

The ConocoPhillips team was faced with a significant challenge when they began the intranet redesign project. There was growing sentiment across the organization that the existing intranet solution didn't meet the needs of the staff. The existing intranet solution had an outdated navigation, and had evolved into a series of disorganized and disparate sites with segregated content specific to each region.

"These sites did not provide the same level of quality and capability employees were used to in their personal/consumer lives," says Jennifer Hohman, Director, IT and Program Manager. "In a business where innovation and effective collaboration is critical to business success, the site needed to change to reflect our new company and the culture our leadership was encouraging."

The company had to rebuild the intranet. It had just gone through a corporate split that resulted in it becoming the largest exploration and production company in the world so the timing was perfect for developing a site that could better support all of its employees and contractors. "We formed a multifunctional team from across the business to determine how the intranet could best be redeveloped while keeping user experience in mind," says Cathy Cram, Manager, Strategic Issues and Initiatives.

The goal was to create a global site that could feature both corporate and local content and resources in a consistent manner. For an employee base that is culturally, geographically, and professionally diverse, the intranet needed to meet a wide range of needs, while being true to what users were already familiar with. "Employees were very familiar with where their favorite links and information were on the old site so we knew we would face challenges with a new interface and navigation," says Hohman.

Listening to Users

In order to determine what a desirable outcome should be, the team began the project with employee surveys, internal interviews and workshops. "As a result, we found that our colleagues wanted up to date content, quick links to information and tools, as well as a view into what was happening all around the globe. At the same time they wanted to see content that was most relevant to where they work and who they are," says Hohman.

Some wanted a modern and fresh look and feel, while others were fairly happy with the existing site. Overall, the impending change was seen as a great way to bring everyone together.

The resulting site, The Mark, is significantly different from the company's previous intranet. The old site had been organized primarily according to content owners and special interests, and the navigation was accomplished primarily through drop-down menus. The new site is organized into three intuitive pages that reflect what users are really looking for:

- **The big picture:** The ***Our Company*** page presents current information about the company: global and local news and announcements, information on strategic initiatives, performance metrics, upcoming events, and publications.
- **Work tools:** The ***My Work & Collaboration*** page provides resources and links to key information and tools that employees need to do their jobs, including:
  - Links to key global information and work-related tools such as documents, policies, and templates
  - Productivity tools, with links to helpful resources and software tips and tricks employees can use to get work done faster and more effectively
  - A one-stop shop for knowledge sharing networks and wiki sites
- **Personal info:** The ***My Life & Career*** page provides information to help employees enrich their careers and manage life events. It contains news, tools, HR resources, policies and procedures, training and career development information. There are also links to local activities such as clubs, sports teams and networks.

Each page also features a drop-down menu that contains additional information not found on each of the key pages. As expected, one of the team's challenges was to help users get familiar with the new site, and make them comfortable with finding what they need. This had been achieved in a number of ways including through training sessions, how-to videos, and having super-users ready to explain the new site to their functional teams.

Making sure users are both familiar and comfortable with the new site is an ongoing process whereby the team performs regular checks to gather user feedback and address challenges.

"We have done a number of surveys with our global colleagues and that feedback, combined with our analytics, are showing areas where we can tweak the site to make it more user friendly," says Hohman. "We have already updated the look and feel of each of the page titles in the top navigation bar to make them look more like tabs in an effort to encourage employees to engage with the key content and information on each of the three pages."

"We have also given employees a choice on how much movement they would like to see on the page," she says. "Some employees prefer the solution to be more alive and active with content that slides and scrolls, while others enjoy a more static appearance allowing information to settle and be more readily engaged with."

This is another way in which the design team is supporting the personal appeal of the intranet and is providing a more customizable intranet experience.

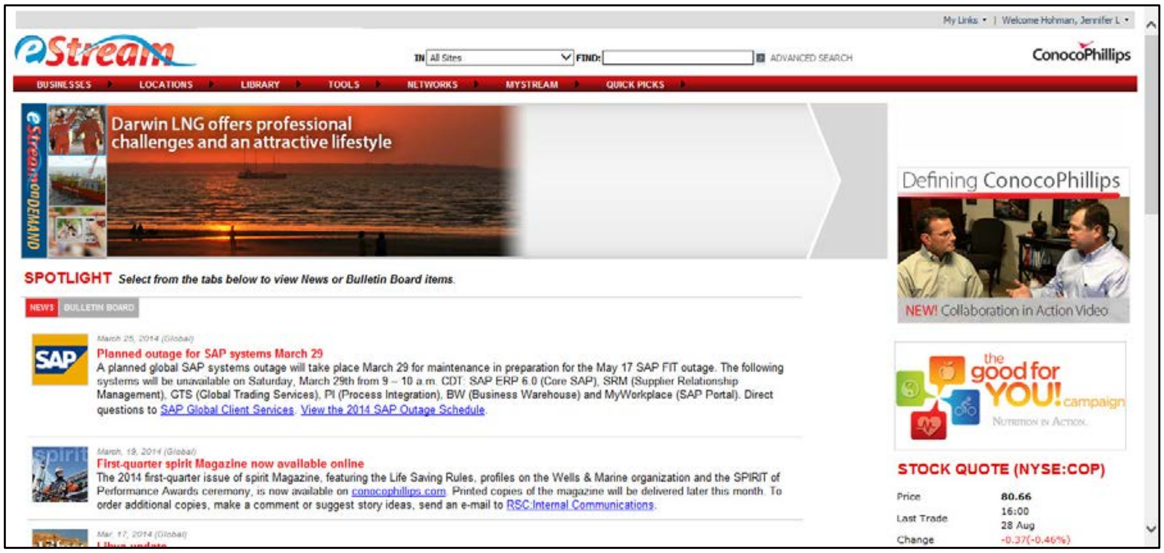


Image 9. ConocoPhillips Intranet: Corporate Homepage Prior to the Redesign. This shows the corporate homepage from the old version of the ConococoPhillips intranet. *29_ConocoPhillips_09_Corporate Site_Old eStream.jpg*

INTRANET TEAM

The ConocoPhillips intranet team: (left to right, top row) Kanwal Khipple, Cathy Cram, Kunaal Kapoor, Jennifer Hohman, Ray Scippa, (left to right, bottom row) Glen Chambers, Helenita Frounfelkner, Jennifer Clifford, and Juan Larios.

GOVERNANCE

The intranet is co-managed through a partnership between Corporate Communications, Human Resources and Information Technology, with the IT team coordinating the governance activities and supporting the site on a day-to-day basis.

The responsibilities pertaining to the site can be broken down into four areas, each of which is managed by one of three arms of the intranet management team. The diagram below shows how the areas of responsibility break down regarding content, functionality, and technology, as those areas are owned by Corporate Communications, Human Resources and Information Technology, respectively.

Image 10. ConocoPhillips: Intranet Management Team Structure. The intranet management works to continuously support and evolve the ConocoPhillips intranet. The responsibilities pertaining to the site are broken down into four main areas. The diagram shows how the areas of responsibility around content, functionality, and technology are owned by representatives from the Corporate Communications, Human Resources and Information Technology departments.
30_ConocoPhillips_10_intranet_management_team_structure.jpg

USERS

All 35,000 ConocoPhillips employees and contractors across the globe use the intranet. Employees cross a wide range of roles, from geoscientist, to engineer and technologist, to finance and business support positions.

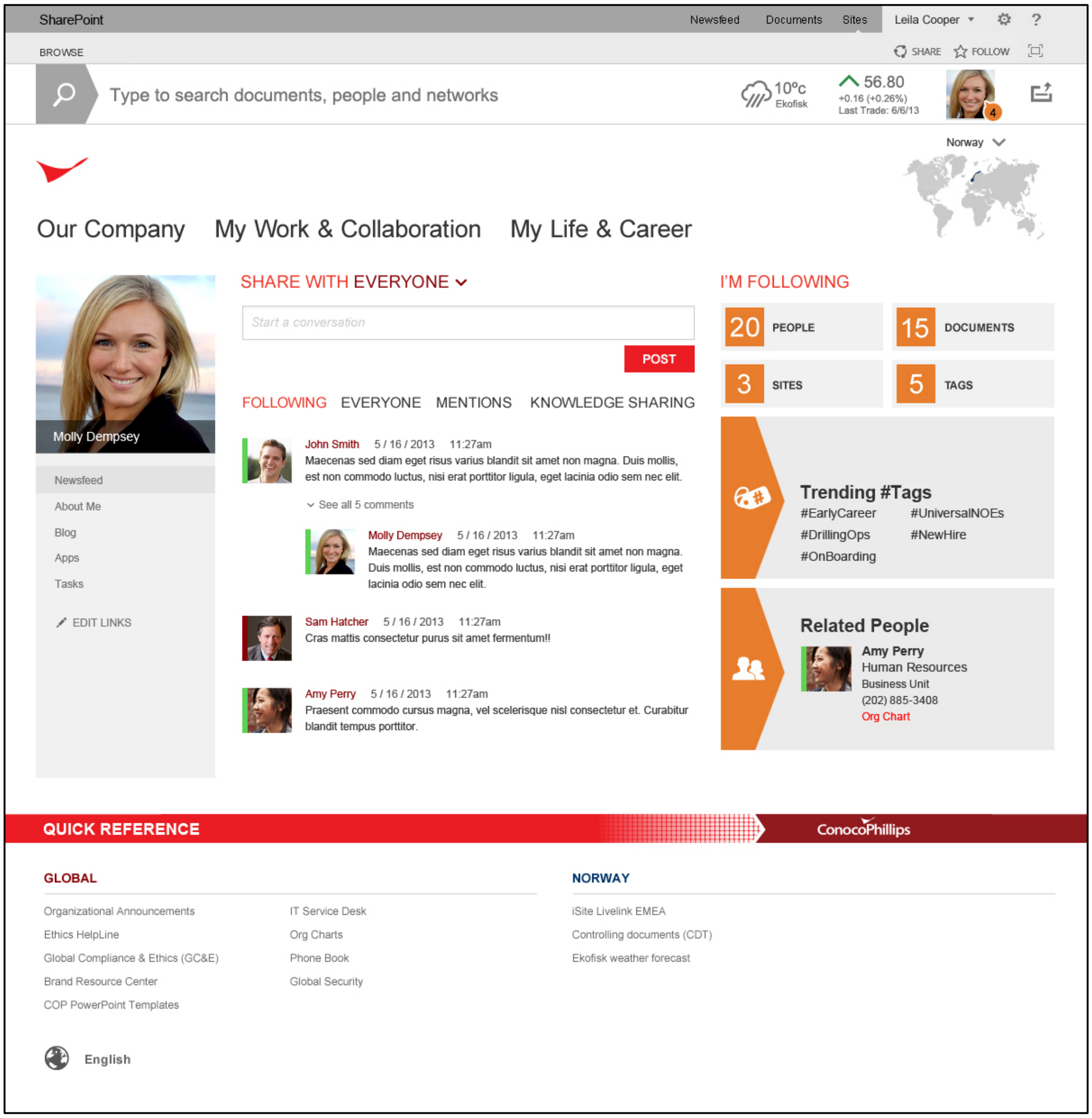


Image 11. ConocoPhillips Intranet: Employee Profiles. The employee profile page on the ConocoPhillips intranet allows employees to provide more information on their skills and experience than can be found in the standard corporate org chart. *31_ConocoPhillips_11_Employee profile page_live.png*

URL AND ACCESS

URL AND ACCESS	
Item	**Status**
URL	• themark.cop.net
Default Status	• The Mark is set as the default homepage for users, based on location, but they can change the default if desired.
Remote Access	The Mark can be accessed via mobile devices in multiple ways, including: • With a corporate device via VPN and a mobile icon • Using a Citrix client from any device

Figure 1. ConocoPhillips URL and Access Information

DESIGN PROCESS AND USABILITY WORK

Design Approach

The internal team initially conducted employee surveys, interviews, and workshops to determine what staff wanted and needed from the intranet. This research was supplemented and built upon by BrightStarr, an independent software integrator. The internal team lacked the SharePoint and UX expertise to accomplish the redesign on its own, therefore BrightStarr and Gimmal were brought in to help them achieve their goals for the new intranet.

BrightStarr conducted several Gamestorming[1] and UX workshops with internal teams, end users, and project sponsors to help refine the project vision:

- **Personas and empathy maps** helped the team to understand their users better, as well informed the personas that were used to determine site features and the user experience.
- **Content assessment and inventory** tools were used to catalog existing site content and determine what content needed to be ported over and what could be left behind.

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1 *A Gamestorming game may be thought of as an alternative to the standard business meeting. Most games involve three to 20 people and last from 15 minutes to an hour and a half. A game suspends some of the usual protocols of life and replaces them with a new set of rules for interaction. Games may require a few props such as sticky notes, poster paper, markers, random pictures from magazines, or thought provoking objects. Gamestorming skills include asking questions (opening, navigating, examining, experimenting, closing), structuring large diagrams, sketching ideas, fusing words and pictures into visual language, and most importantly, improvising to choose and lead a suitable game or invent a new one.

- **Heuristic analyses** were conducted on the company's existing intranet using eStream. This allowed the team to effectively evaluate the site against market best practices. This exercise provided keen insights into what features and functionality would best meet user needs and further support user adoption and engagement.
- **Wireframes and prototypes** were used to model and explore aspects of the design.
- **Employee surveys** were used as a mechanism through which employees could describe their motivations, goals, tech comfort levels, SharePoint familiarity, and pain points with the current intranet. Surveys also provided the perfect platform through which employees could voice their opinions and expectations.
- **Usability testing** with clickable prototypes was especially useful to help the team refine the navigation, search, and mobile experience.

TIMELINE

PROJECT TIMELINE	
Milestone Date	**Milestone Description**
Overall redesign timeframe: 18 months	
2001	• Previous corporate intranet eStream was launched
2009	• Last update of eStream
2012	• Decision to update the corporate intranet and initial project activities: o Business case and requirements o Request for proposal o Vendor selection
August 2012–January 2013	• Planning and design for The Mark
January 2014	• Launch of The Mark
January–March 2014	• Launch of 27 business unit sites
January–June 2014	• Support, training, adoption enhancements, and additional features (release 2)
July–December 2014	• Mobile optimization

Figure 2. ConocoPhillips Project Timeline

CONTENT AND CONTENT CONTRIBUTORS

The site uses SharePoint 2013 as its CMS. This decision was reached based on the ability to integrate SharePoint with Microsoft Office applications, and because SharePoint met most of the requirements for the new intranet.

Approximately 32 authors located around the world are the principle content creators.

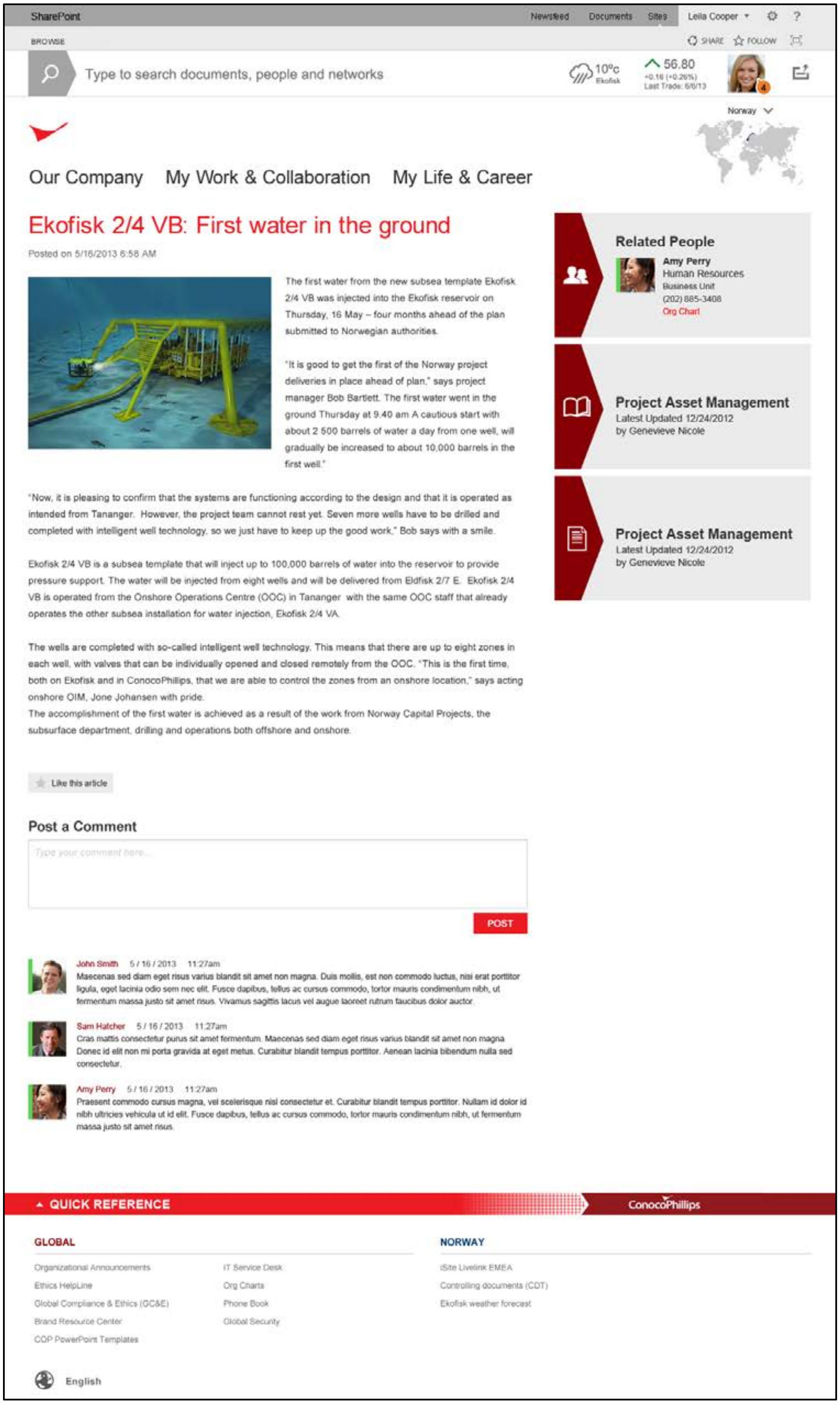
Corporate Internal Communications manages global content. Regional and business units in Internal Communications develop local content. And the Human Resources and Information Technology groups contribute to both. Global Communications, HR, and IT staff create daily news and information like feature stories and videos. Many other people contribute to specialized areas of the site, including calendar events, safety statistics, network groups, and knowledge sharing activities.

Workflow

All content is reviewed in accordance with the company's corporate approval process. This means that subject matter experts and senior leaders review all content relating to their group. The Director of Internal Communications reviews and approves all global content. Lead communicators review and approve local content.

The intranet team provides authors with written guidelines for each section of the site to ensure all of the global sites remain consistent. Also, a series of short tutorial videos help explain how to develop and post content.

There is no enforcement of the guidelines, per se, but monthly meetings ensure a consistent approach is being taken across the sites. The meetings also provide an opportunity for the intranet team to critique and make suggestions. Further, a governance committee meets regularly to review both technical and stylistic issues related to maintaining the sites effectiveness.


SharePoint
Newsfeed
Documents
Sites
Leila Cooper
BROWSE
SHARE
FOLLOW
Type to search documents, people and networks
10°c
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56.80
+0.16 (+0.26%)
Last Trade: 6/6/13
Norway
Our Company
My Work & Collaboration
My Life & Career
Ekofisk 2/4 VB: First water in the ground
Posted on 5/16/2013 6:58 AM
The first water from the new subsea template Ekofisk 2/4 VB was injected into the Ekofisk reservoir on Thursday, 16 May – four months ahead of the plan submitted to Norwegian authorities.
"It is good to get the first of the Norway project deliveries in place ahead of plan," says project manager Bob Bartlett. The first water went in the ground Thursday at 9.40 am A cautious start with about 2 500 barrels of water a day from one well, will gradually be increased to about 10,000 barrels in the first well."
"Now, it is pleasing to confirm that the systems are functioning according to the design and that it is operated as intended from Tananger. However, the project team cannot rest yet. Seven more wells have to be drilled and completed with intelligent well technology, so we just have to keep up the good work," Bob says with a smile.
Ekofisk 2/4 VB is a subsea template that will inject up to 100,000 barrels of water into the reservoir to provide pressure support. The water will be injected from eight wells and will be delivered from Eldfisk 2/7 E. Ekofisk 2/4 VB is operated from the Onshore Operations Centre (OOC) in Tananger with the same OOC staff that already operates the other subsea installation for water injection, Ekofisk 2/4 VA.
The wells are completed with so-called intelligent well technology. This means that there are up to eight zones in each well, with valves that can be individually opened and closed remotely from the OOC. "This is the first time, both on Ekofisk and in ConocoPhillips, that we are able to control the zones from an onshore location," says acting onshore OIM, Jone Johansen with pride.
The accomplishment of the first water is achieved as a result of the work from Norway Capital Projects, the subsurface department, drilling and operations both offshore and onshore.
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POST
John Smith 5 / 16 / 2013 11:27am
Maecenas sed diam eget risus varius blandit sit amet non magna. Duis mollis, est non commodo luctus, nisi erat porttitor ligula, eget lacinia odio sem nec elit. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Vivamus sagittis lacus vel augue laoreet rutrum faucibus dolor auctor.
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Related People
Amy Perry
Human Resources
Business Unit
(202) 885-3408
Org Chart
Project Asset Management
Latest Updated 12/24/2012
by Genevieve Nicole
Project Asset Management
Latest Updated 12/24/2012
by Genevieve Nicole
QUICK REFERENCE
ConocoPhillips
GLOBAL
Organizational Announcements
Ethics HelpLine
Global Compliance & Ethics (GC&E)
Brand Resource Center
COP PowerPoint Templates
IT Service Desk
Org Charts
Phone Book
Global Security
NORWAY
iSite Livelink EMEA
Controlling documents (CDT)
Ekofisk weather forecast
English

Image 12. ConocoPhillips Intranet: A Typical News Post. This is a typical page for content such as news articles and blogs. Content published on this page goes through an approval workflow by the Internal Communications team. They proofread content several times before it is made visible. The Communication team also leverages scheduling and expiry controls to manage in advance when content is published and archived. Once articles are published, readers can use social features to leave comments, follow, and "like" the article(s). The concept is applied to all news articles, events, publications, videos and more. *32_ConocoPhillips_12_Content_Page_live.png*

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and OS	• VMWare VSphere 5.0 • Windows Server 2008 R2 Enterprise
Bug Tracking / Quality Assurance	• ServiceNow and Team Foundation Services
Design Tools	• Axure
Site Building Tools	• Visual Studio.net
Content Management Tools	• SharePoint 2013
Search	• SharePoint 2013
Other Functions	• AquireMedia stock services, Weather Underground • Solidify for clickable prototypes

Figure 3. ConocoPhillips Intranet Technology

MOBILE

The "mobile user" was included as a targeted persona during the design phase, and the Mark was designed and built for mobile access and use. The mobile experience is achieved through a responsive design, allowing content to adapt its shape and layout to different screen sizes. Employees can access the intranet using authorized phone and tablet devices, thereby improving the overall experience for mobile users.

SEARCH

Search is a critical part of The Mark and plays a vital role in the overall user experience as well. The average user at ConocoPhillips is quite familiar with using the primary search bar in the header of the site, and also with leveraging the filters and refiners on the search results page to reach desired content more quickly and easily.

This search functionality is built on SharePoint 2013's native search capabilities. Search results are refined by a pre-defined taxonomy that drives all content.

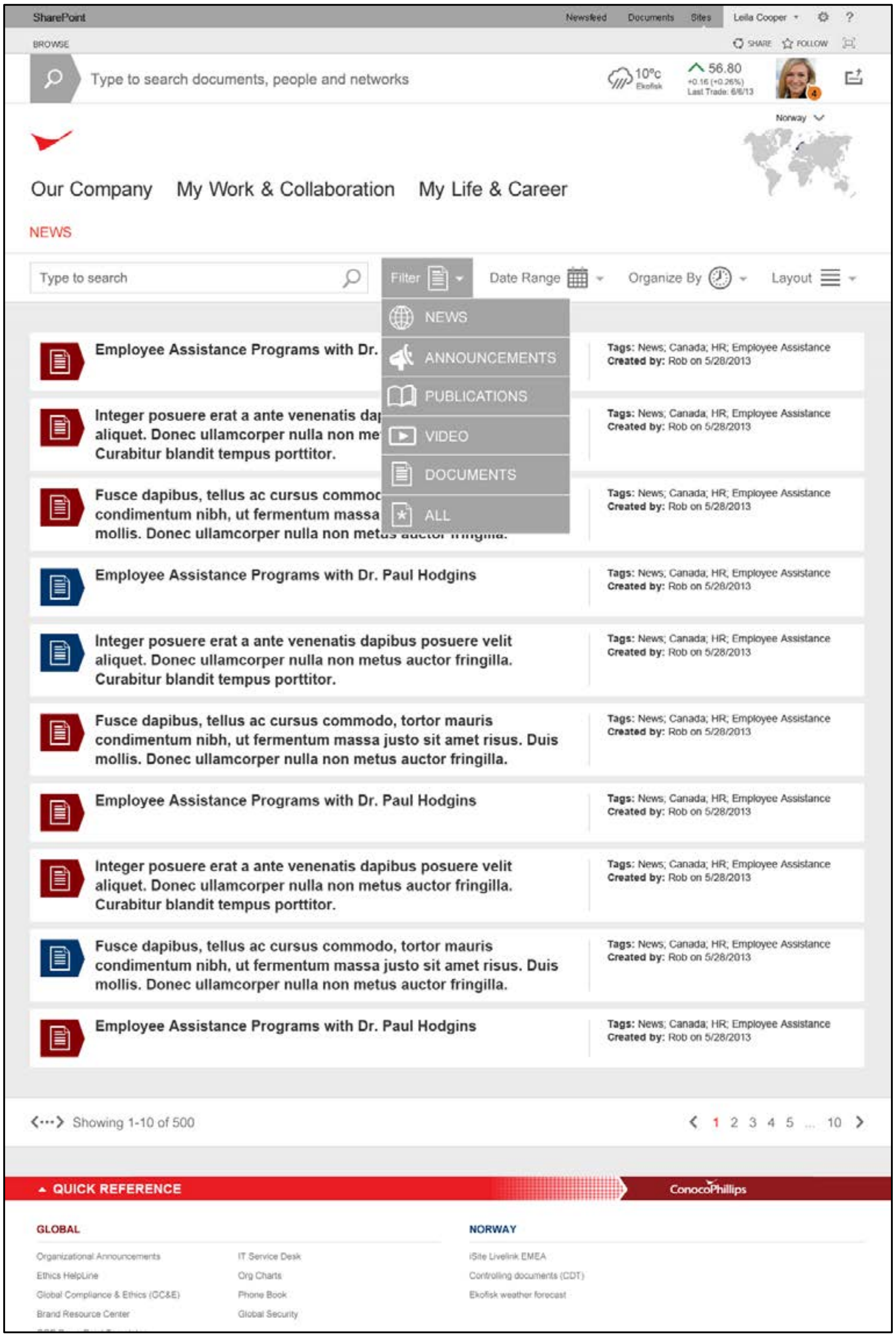


Image 13. ConocoPhillips Intranet: Search Filtering Capabilities. A typical search results page shows how users can filter categorized content further by date, relevance, and other metadata types. Icons and color-coding make it easier for users to find the right information quickly and easily. *33_ConocoPhillips_13_Search_Filters_version1.png*

RESULTS AND ROI

Though the company is not quantifying ROI in concrete numbers, the site's biggest achievement is successfully bringing together 20 different sites into one cohesive look, thereby unifying the company culture and community in a single digital location.

Three weeks after launch, a satisfaction survey revealed that 84% of employees considered the content on The Mark relevant to them. Since then, the site continues to be an innovative platform for helping employees to connect with colleagues, share content, and collaborate in new ways.

The team will continue to gauge intranet usage by monitoring interaction with content, conducting surveys, and collecting employee feedback.

LESSONS LEARNED

ConocoPhillips team members share a few of their lessons learned:

- **Have a change management plan.** "Make sure you have a great organizational change management plan. Over-socialize the objectives and the conceptual and detailed design throughout the project with a large audience who will then become your evangelists.

  "This was very important for an organization of our size and with end users of various levels of comfort with web-based platforms. We needed a robust change management process to bring content, users and applications in from previous versions of the intranet. With so much content and so many people to support our objective was to ensure all end users knew about the changes to the intranet we were working on and also to make sure we had a training and support plan aligned to this as well."

- **Adoption is never guaranteed.** "No matter how many surveys and interviews you do to find out what people think they want, adoption and usage is never guaranteed.

  "Great research is a good start, but managing expectations during and post deployment, and support and adoption strategies like launch campaigns, helped us ensure adoption. But also analytics and monitoring of the intranet allowed us to continuously improve the site and ensure we were getting the adoption desired."

- **Crowdsource to generate ideas.** "Always socialize design concepts and ideas throughout the process. A little crowdsourcing never hurts!

  "There were several great ideas generated during design expos and prototyping activities done during the usability testing phase of the design process for the intranet redesign."

TAURON Polska Energia SA

Using the intranet: TAURON Polska Energia SA is one of the largest business entities in Poland, with approximately PLN 18 billion equity and over 26,000 employees. The TAURON Group supplies over 45 TWh of electricity to over 5.3 million customers per year, which makes it the largest distributor and supplier of electricity in Poland.

Headquarters: Katowice, Poland

Number of employees the intranet supports: 16,500

Company locations: The company operates in Poland, across almost 270 geographic locations.

Locations where users use the intranet: South part of Poland, including Subcarpathian regions; Lesser Poland: Silesia, Opole, Lower Silesia

Annual sales: 19,131,122 kPLN

Design team: The core team consisted of 20 people (called "business leaders"). Business representatives from different entities and thematic areas supported them. The business leaders cooperated with each legal entity representative in their area and company leaders from each legal entity supported the project manager. In total, almost 100 employees were involved in the process.

Business Leaders (core team): Katarzyna Sawczak, PR/Communication; Paulina Dynia, HR; Marcin Jędrusik, Projects; Małgorzata Wiertel, Processes; Maciej Mączka, Corporate Reporting & Governance; Łukasz Łysak, Group & Internal Regulations; Andrzej Prucnal, Repositories for corporate bodies; Dorota Jarosz-Woźny, Exchange legal information; Marcin Sarna, Legal analyses & legal consents; Maciej Morasiewicz and Marian Kuś, IT, including address book; Jeremi Nagacz, content repositories/collaboration; Jeremi Nagacz, data migration; Katarzyna Bajor, intranet promotion; Agnieszka Micał, intranet governance model.

Steering Committee: Paweł Gniadek, Market Communication and PR Director; Łukasz Krause, Group IT Director/CIO at TAURON Group; Robert Głowacki, Development and Cooperation Director;
Grzegorz Drozd, Supervisor

Project Manager:
Agnieszka Micał, Project Manager/Tauronet Group Coordinator

Support: Group editors: Marceli Frączek and Maciej Rogalski

Edisonda: Hubert Turaj, UX Director; Marcin Kręcioch, Creative Director

IT-DEV: Tomasz Szałaj, Head of Development

SUMMARY

The TAURON Polska Energia intranet, Tauronet, is not just a portal, repository, or social place. It has deep-rooted awareness about the companies' many intranet users, divisions, departments, offices, and more, and capitalizes on this knowledge to deliver an honorable, targeted intranet.

After going through several mergers and experiencing dynamic growth, the company found itself with no central intranet, but rather with many intranets and all the problems that come from that situation — not the least of which being:

- Duplicated content

- Outdated content
- Hindered cross-company communication and collaboration
- Impossibility to supervise content
- Impossibility to centralize some of the editorial teams

The successful Tauronet design all hinged upon highly effective content management. The publishing and presentation process is self-organized according to a hierarchical structure and authors from each organization level may target content to their units. Authors from lower level units may ask higher-level authors to promote an article or a document to his unit in order to reach more readers.

The content storage structure and permissions are transparent to both authors and readers. Organizational changes are supported and user data is automatically processed from several HR systems to provide the most up-to-date information and the best user experience in a secure manner.

Users who are logged in find many areas on Tauronet are personalized based on their roles, dependent upon their organizational unit and its parent units.

The homepage greets employees with personalized elements starting in the top, right corner where the employee is identified. In the top main section, *Aktualności ze spółki* and *Aktualności z Grupy* features the news, some of which is disseminated to the entire TAURON Polska Energia employee base, while the rest is targeted to divisions or companies.

Two lists — applications (*Aplikacje i systemy*) and documents (*Wnioski i Szablony*), respectively — are located below the news and their items are targeted to the viewing employee. Having these on the homepage helps individuals access what they need to do their job.

In the upper left corner of the site employees may choose different organizations so they can see content for those organizations. This is a helpful feature only for employees who work for more than one entity and for Group editors.

The homepage also includes social updates in the bottom section, *Społeczność*, just above the fat footer.

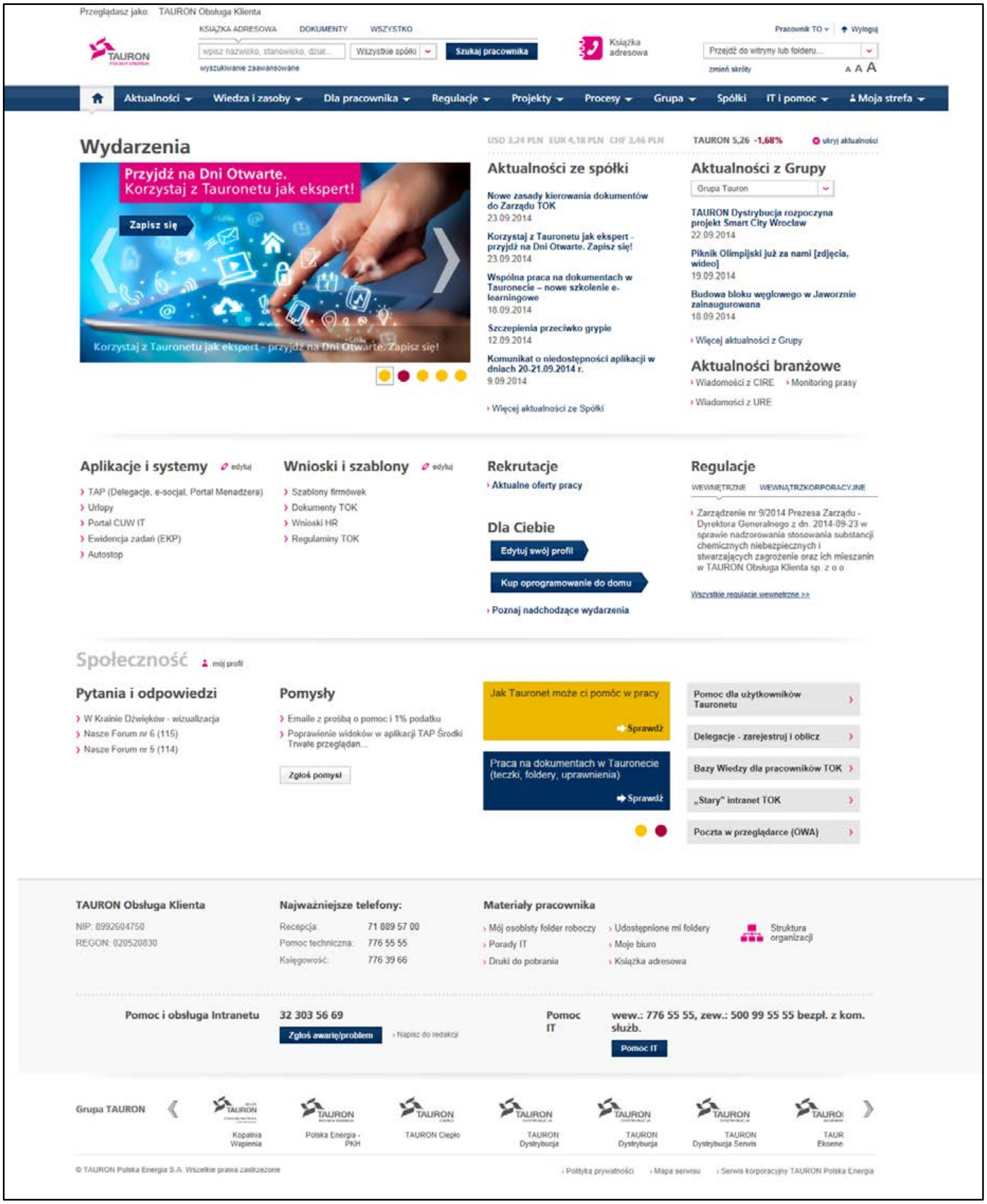


Image 14. TAURON Intranet: Homepage. The homepage of the TAURON Polska Energia intranet, called Tauronet, offers personalized news and applications. *95_Tauron_01_home_live.png*

Another example of role-based pages is seen in the department pages. This is an especially exciting UX-related feature because it solves an old but serious IA usability problem that was often on intranets, which is reflected by this kind of question, for example: *Is the HR section for HR staff or for other people looking for HR information?* Without good personalization, designers were forced to derive kludge interfaces, such as two menu labels or sections for "HR Professionals" and "HR Customers." Designers would sometimes settle upon the dreaded "switcher page" with choices for "HR Professional" or "HR Customer." These caused all kinds of problems, such as employees not seeing the choices, not understanding the choices, not finding a way to switch between the choices or not being able to go back if they made a mistake. This was an overall clumsy process that caused users anxiety that they were not getting the correct or complete information.

Also, from a content design perspective, these UI's often had overlapping content, or if it was not overlapping, sometimes professionals had to log in as a customer to see what the customers saw, which is totally clunky. By contrast, the personalization on Tauronet allows HR staff, for example, to see everything that the HR customers see, and more. The basic information about the department is meant for employees who work outside the department, telling them what the department is responsible for. Employees may also use the local navigation menu in the grey section on the left to access the list of employees in that department.

Other information that is visible and accessible only to employees within that department includes: employees documents, calendar, forum, and a to do list. This makes it easy for department staff to stay up-to-date on happenings, policies, projects, and things to do. Instead of tracking these items multiple times or in siloed areas, Tauronet makes the information easily accessible.

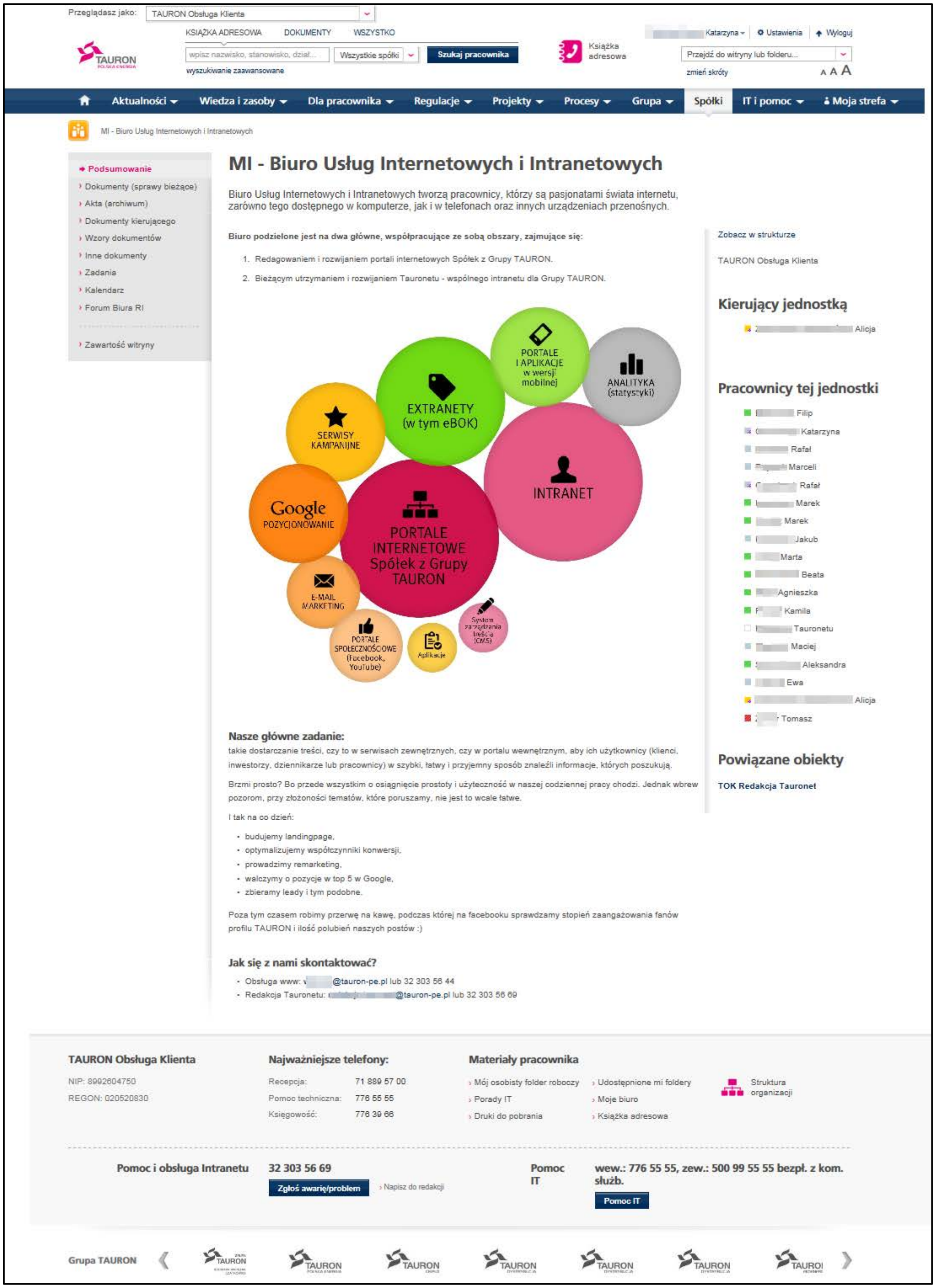


Image 15. TAURON Intranet: Content by Department. Tauronet's department pages display content respective to the department that employees work in. *96_Tauron_02_department_page_live.png*

Another example of personalization on Tauronet can be seen in the team sections. Only members of the team may access the team's space. They may see elements such as the calendar and document repository by clicking the local navigation in the grey menu on the left. In the document area, people may download folders and documents, and be assigned responsibility for particular files. They may also sort by type, and filter by date.

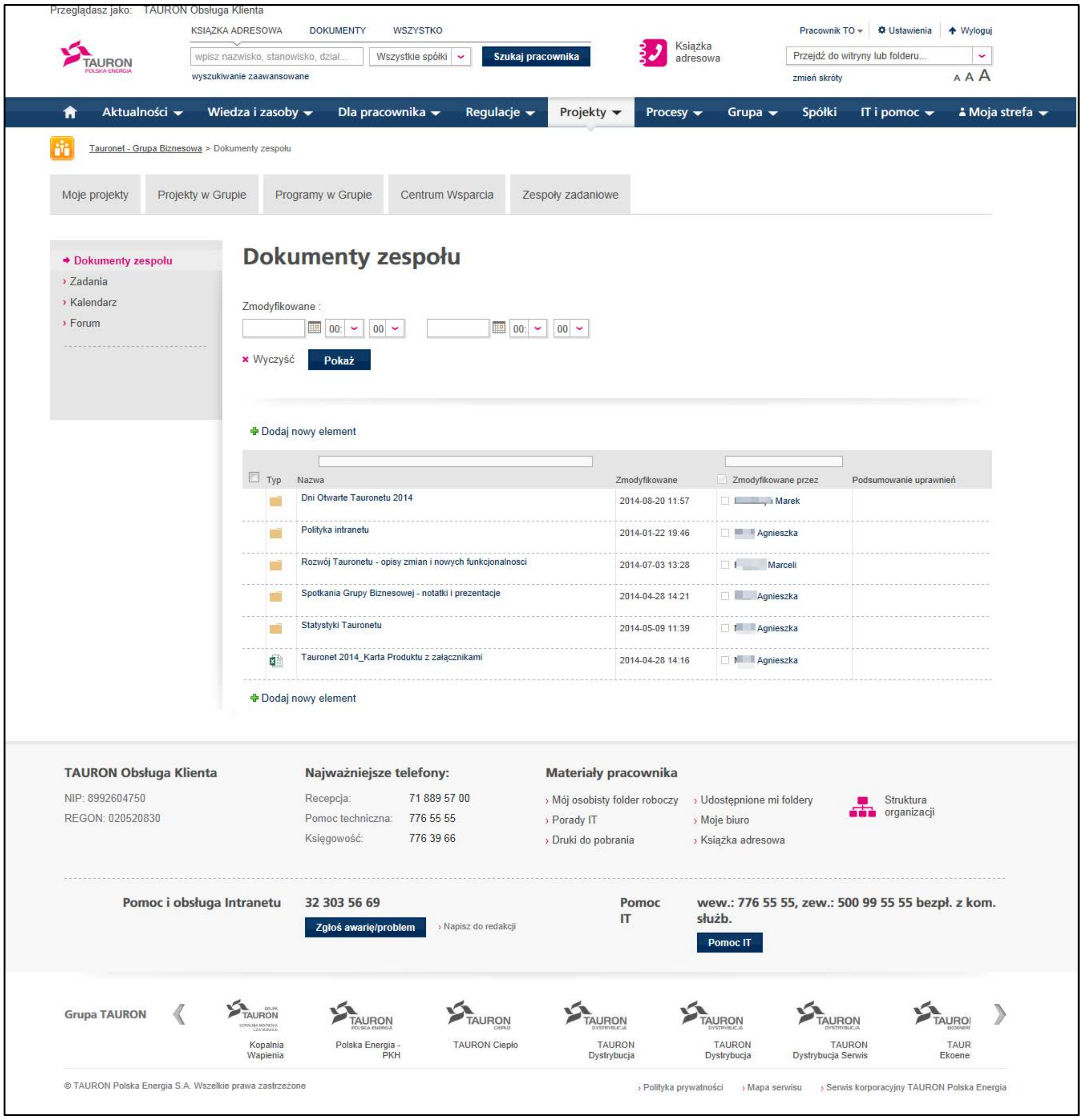


Image 16. TAURON Intranet: Team Areas. The team areas of Tauronet, such as the *Document Library*, allow team members to access and assign folders and documents. *97_Tauron_03_role-based_live.png*

When people search for documents the returned items are displayed based on the user's role. The page shows objects the employee should see and hides ones he does not have access to. Employees may use the three links at the top of the content area to access three different document libraries. Items are displayed with a title, date, author, and icon identifying the type of media.

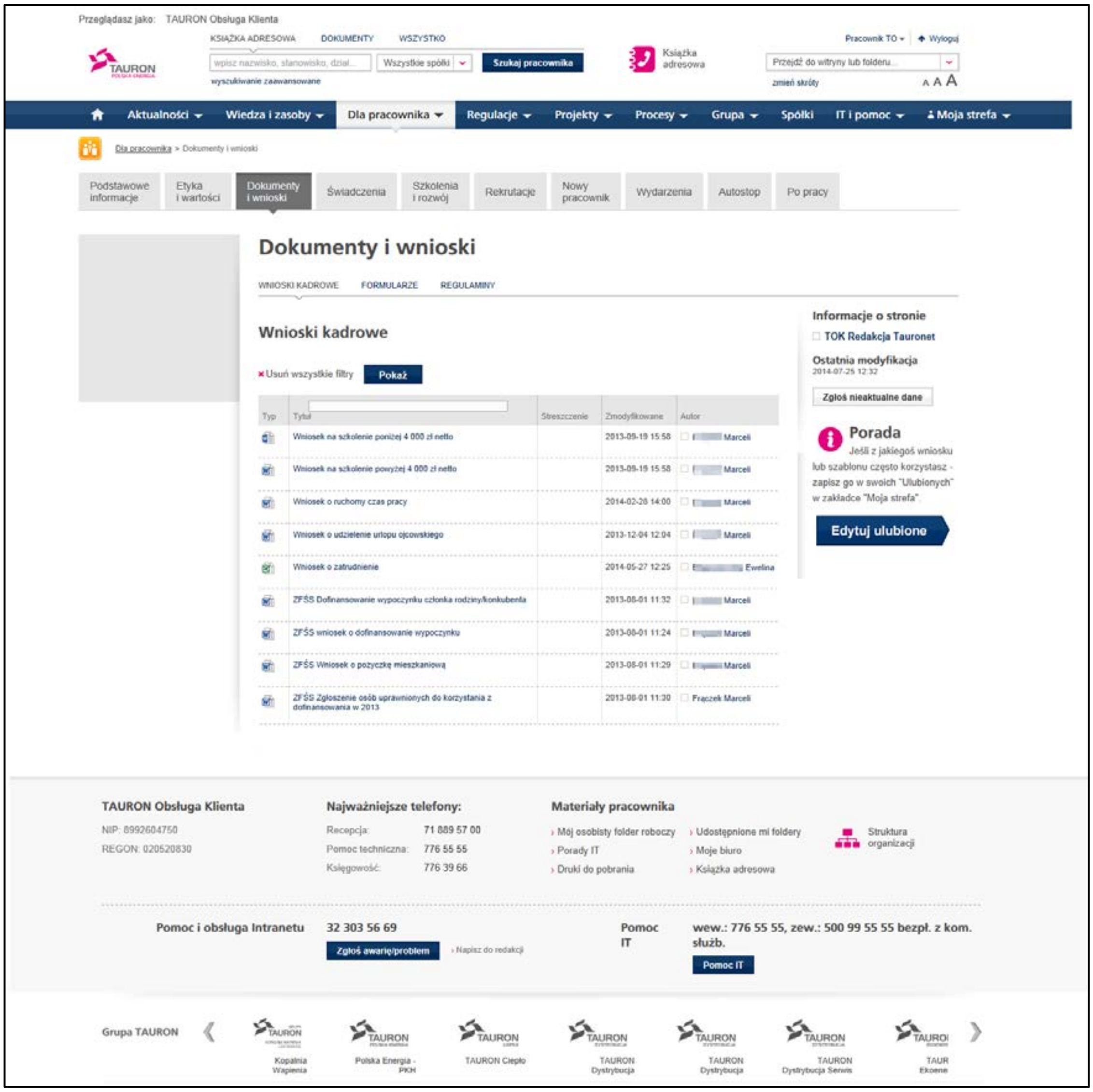


Image 17. TAURON Intranet: Document Library Options. Tauronet content is drawn from three different document libraries, links for which are located at the top of the main content area. The content is also filtered based on the active user's role. *98_Tauron_04_content_live.png*

One section on many intranets that is commonly composed of role-based content is the section for managers. Managers often need information that is somewhat confidential and not meant for the masses. On Tauronet, only managers have access to the *Manager Zone.* Here they may access HR tools and a library of information about employee development.

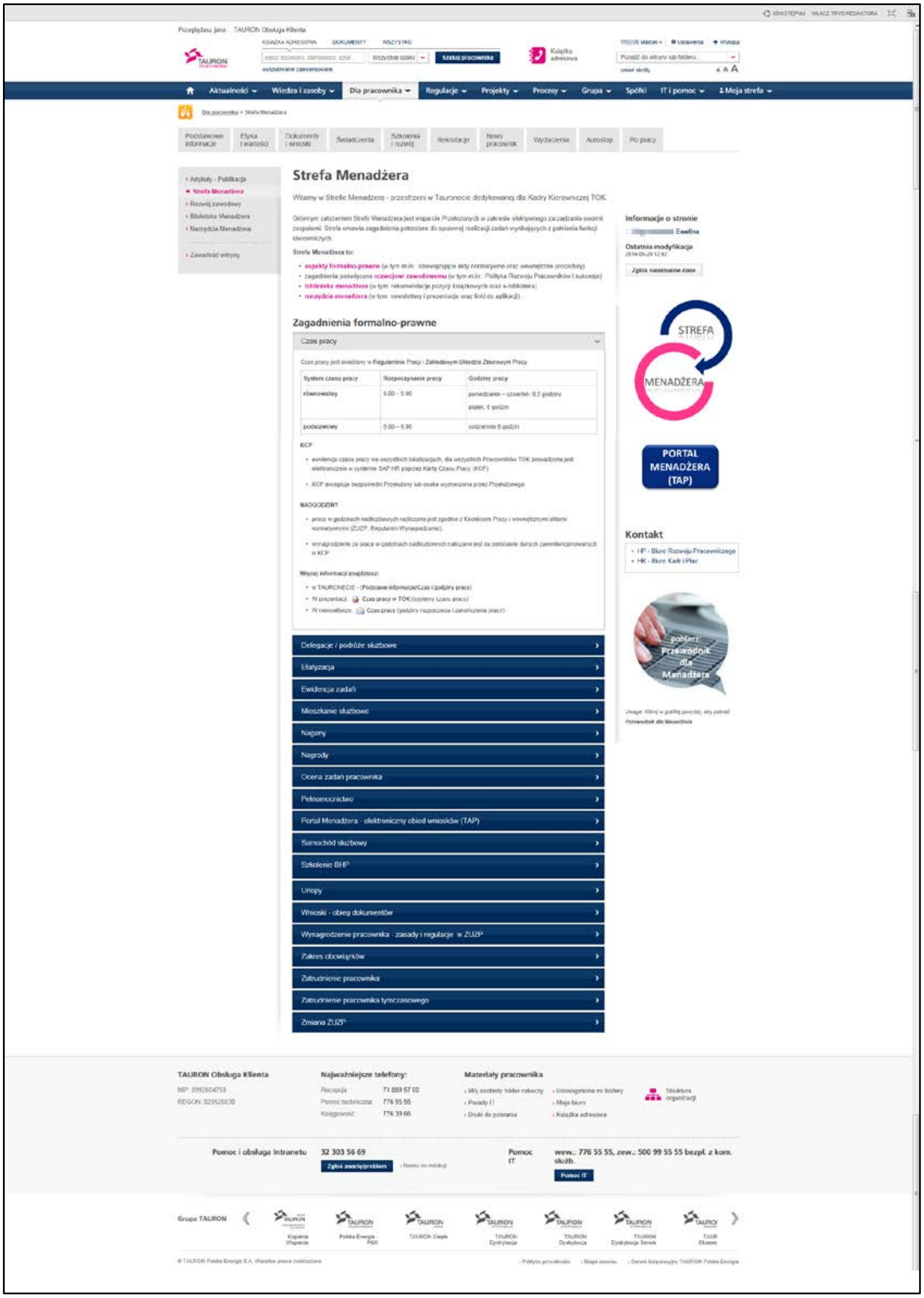


Image 18. TAURON Intranet: *Manager Zone*. Only managers have access to the *Manager Zone,* where they may access HR tools and more. *99_Tauron_05_manager_zone.png*

Even the site’s three-level navigation — top horizontal blue row (global), second horizontal grey row (secondary), and left-side grey (third level) — is role-based, displaying only menu links that the logged in user has access to.

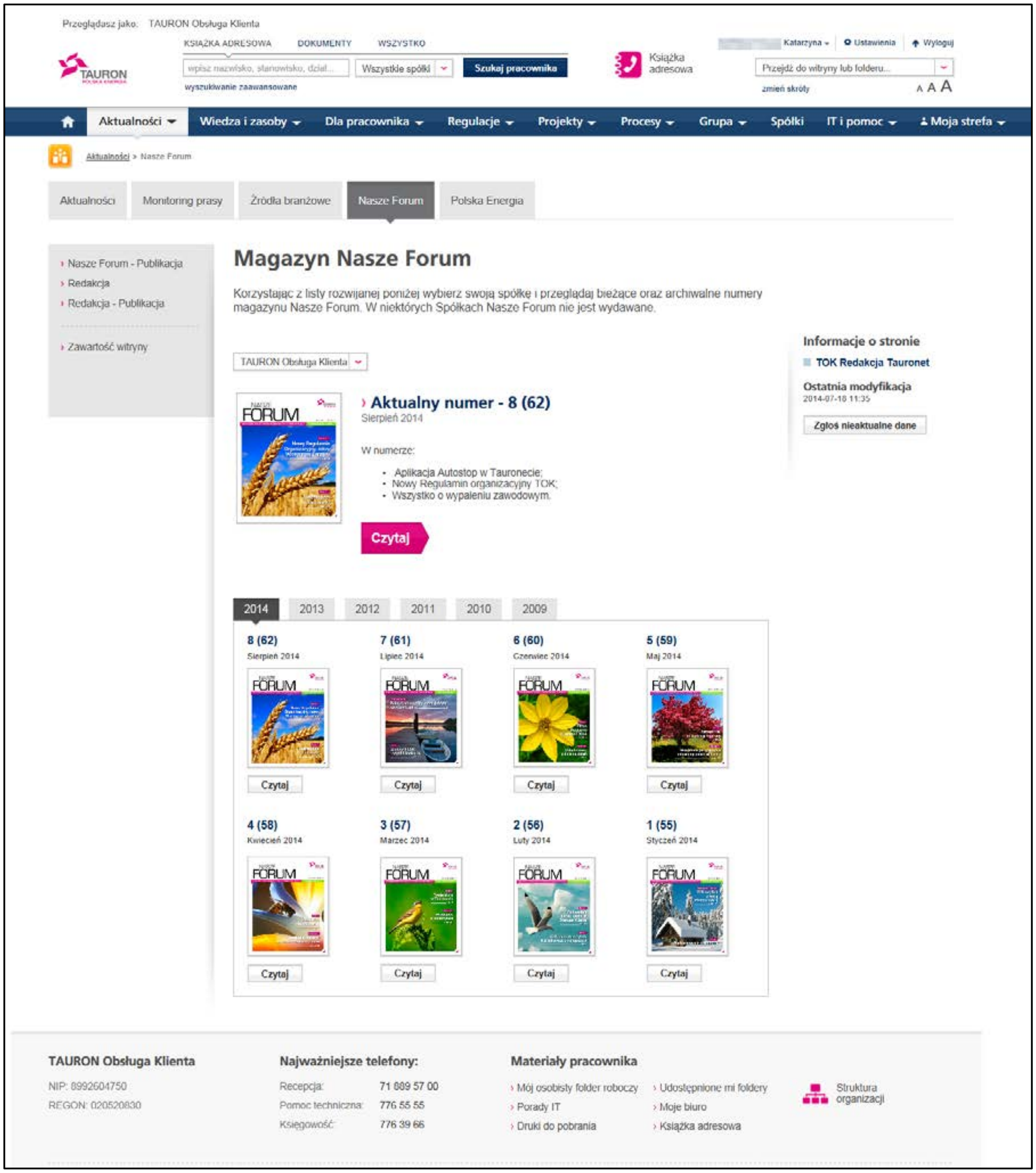


Image 19. TAURON Intranet: Role-Based Navigation. Tauronet’s three levels of navigation are role-based. *100_Tauron_06_navigation_search_live.png*

The TAURON Polska Energia intranet team could have shied away from designing role-based sections but they decided to forge ahead for two main reasons: 1) it would benefit their employees, and 2) they were able to create a back-end infrastructure that enabled them to easily make changes to roles and what people see.

Employee occupations range from information workers to middle and top managers — including the management board and supervisory board members — to people from external companies. With such a variety of information needs, designers felt it compulsory to deliver targeted content, or risk burying a lot of content and overloading users. However, since the organizational structure changes over time, as do teams and member relationships, the design team developed processes to accommodate these changes. They also conducted extensive back-end planning, which helped them achieve the following aspects of design:

- A hierarchical configuration store that allows them to change the configuration settings of the intranet’s components (such as web parts and portlets, identification fields, and forms) from one central location of administration
- Ability to change configuration settings both globally and hierarchically
- Global settings can be overwritten on lower levels

As a result of these design elements, the team was inspired to confidently move forward with their vigorous personalization model.

Employees may also seek information about coworkers and about the organization via the evolved organization chart. This interactive tool allows employees to familiarize themselves with the structure of any chosen company in the TAURON Group. The default page view presents information on the logged in user's organization.

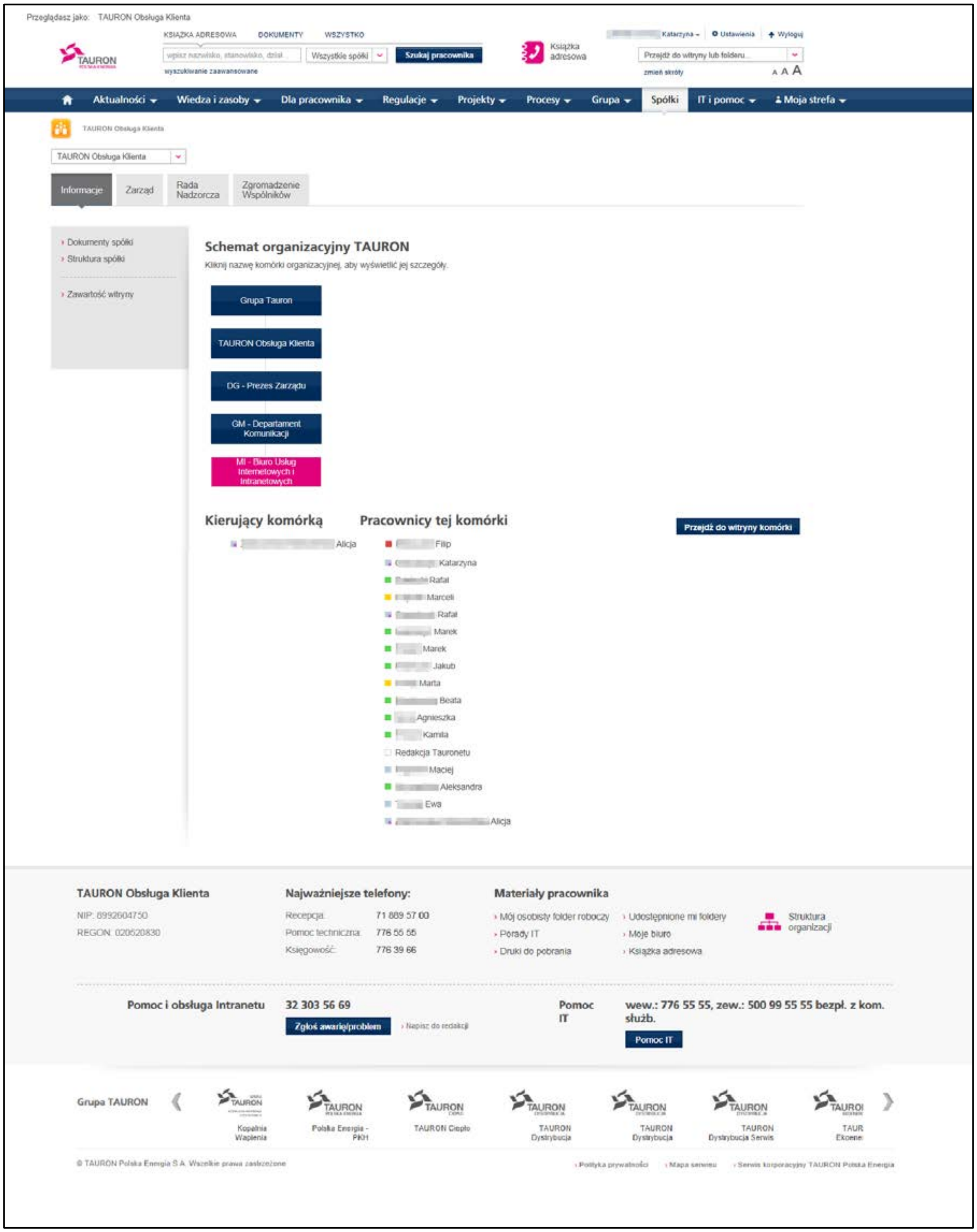


Image 20. TAURON Intranet: Organization Chart. The evolved organization chart on Tauronet allows employees to familiarize themselves with the structure of any chosen company.
101_Tauron_07_something_special_live.png

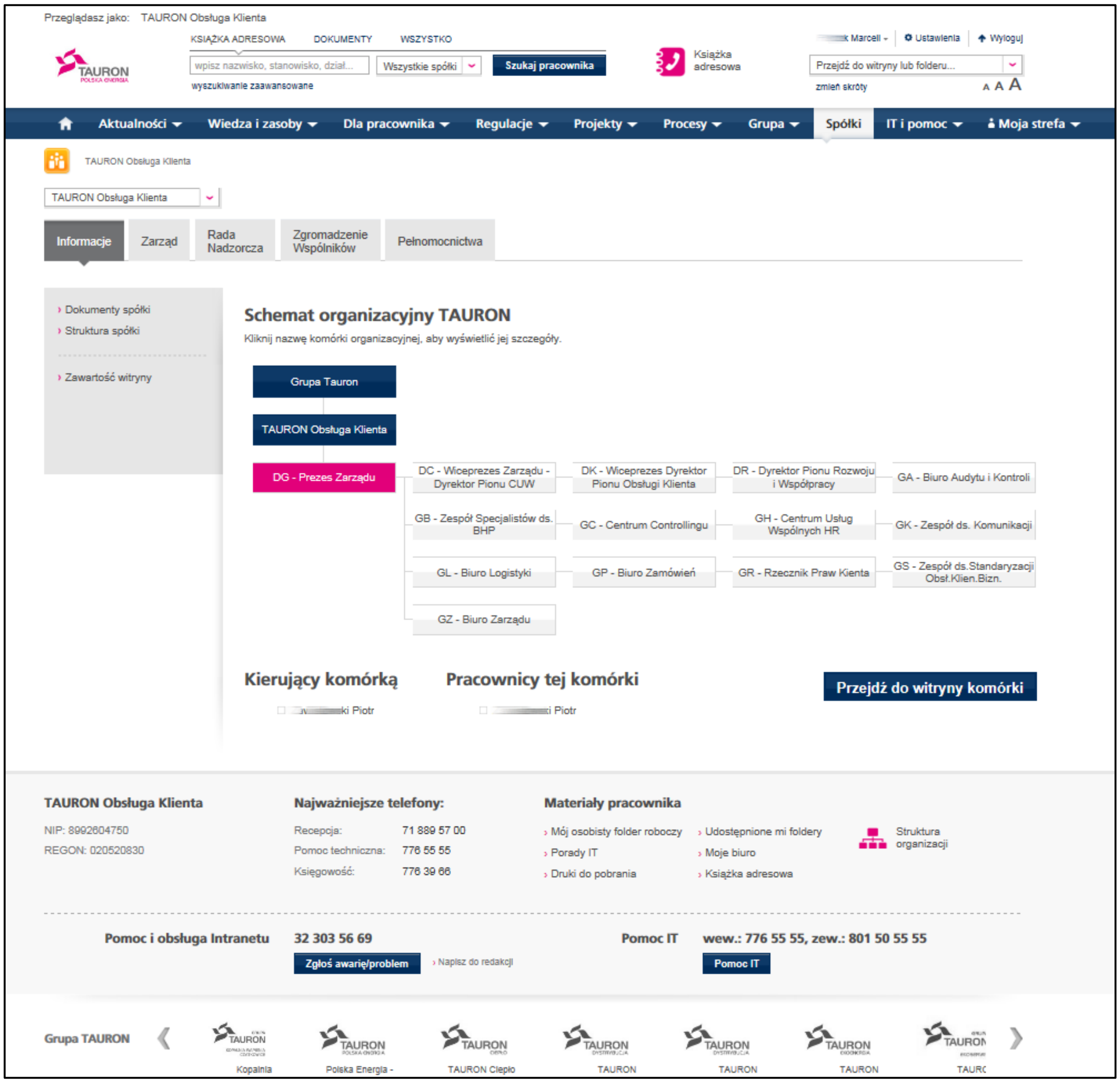


Image 21. TAURON Intranet: Organization Chart Interactivity. Clicking a cell in the organizational hierarchy reveals the structure below it. *102_Tauron_08_something_special_live.png*

In addition to seeing information about others, employees can add information about themselves in their employee profile page or in the *User Zone.*

Employees may add information about their participation in projects, certificates earned, a headshot photo (optional for legal reasons, but recommended), and more. Other information on the profile page includes position, company, parent organization, work address, phone numbers, email address, and manager.

Similarly, employees can fill in profile information, share documents, add shortcuts, and see an aggregated tasks list in the *User Zone*.

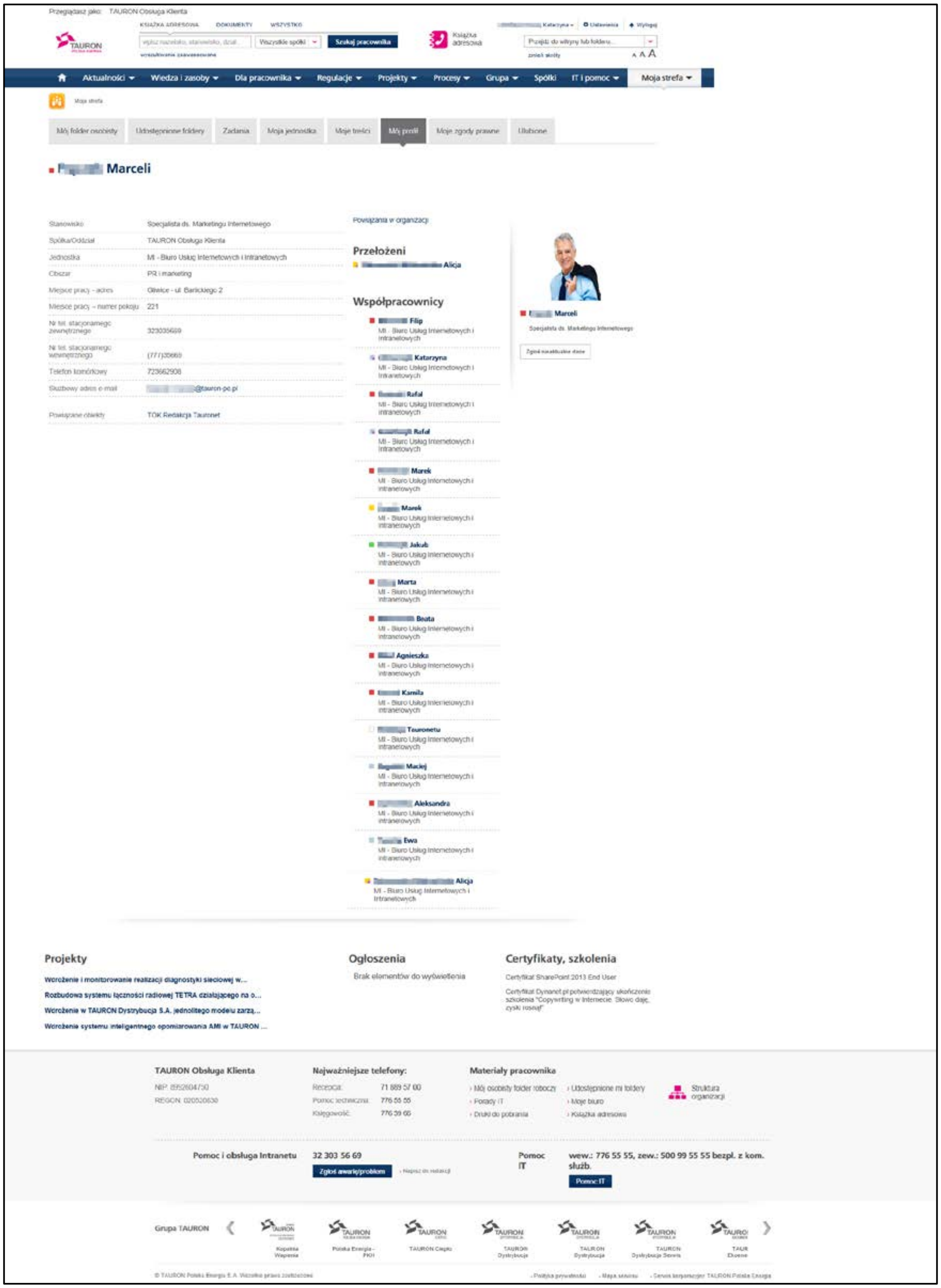


Image 22. TAURON Intranet: Employee Profiles. TAURON employees may add information about their projects, certificates earned, and a photo to their profile pages. 103_*Tauron_09_profile_page_live.png*

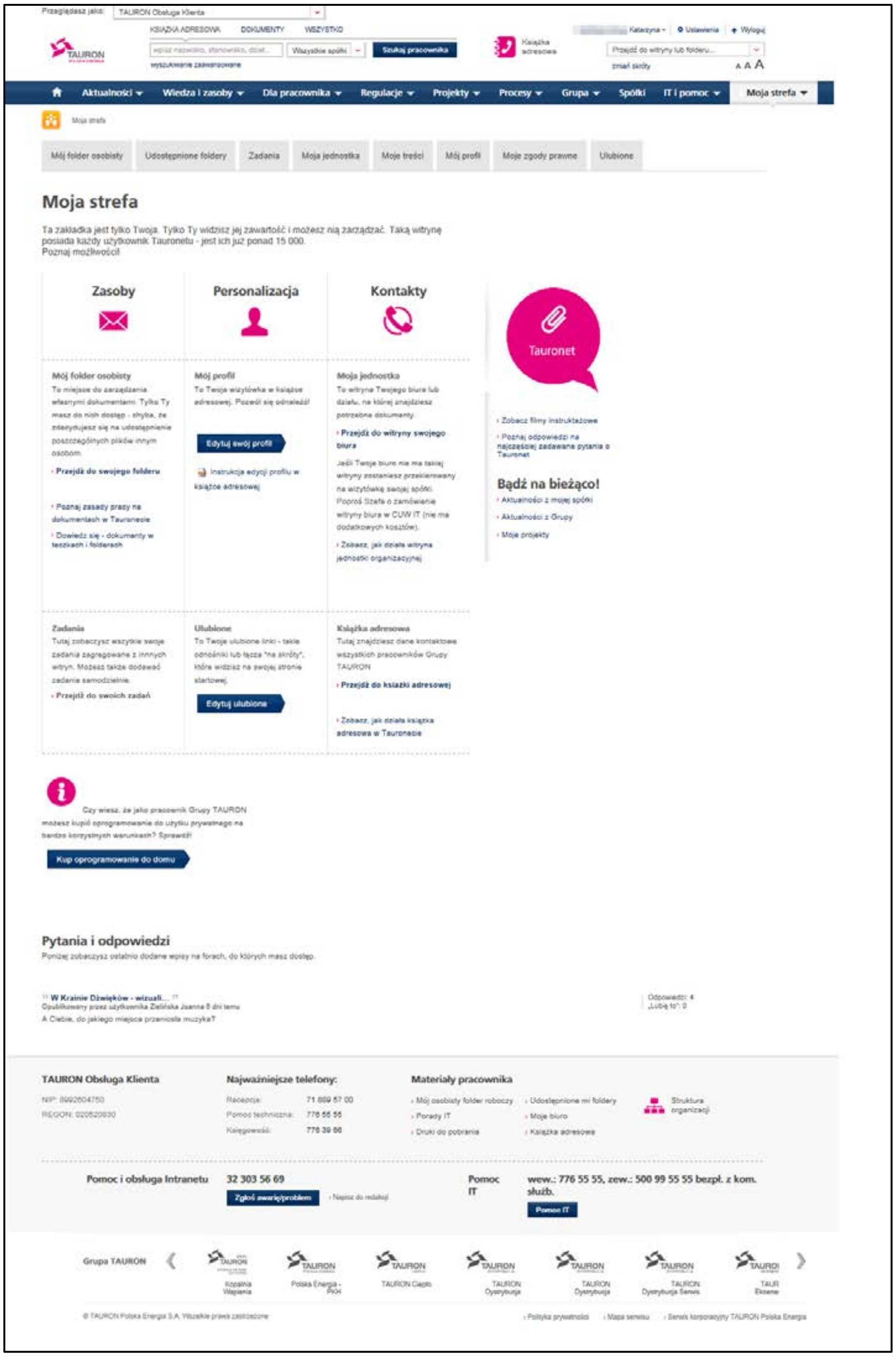


Image 23. TAURON Intranet: *User Zone*. Employees can fill in profile information, share documents, add shortcuts, and see an aggregated tasks list in the User Zone. *104_Tauron_10_user zone_live.png*

Social features like *Autostop* and *Kontakt* help coworkers communicate with one another. *Autostop* helps employees find partners to commute to the office with, and *Kontakt* supports communication via Lync.

Image 24. TAURON Intranet: Social Features. *Autostop* helps employees find partners to commute to and from the office with. *Kontakt* supports communication via Lync. *105_Tauron_11_social_feature_live.png*

Content pages on Tauronet are designed so that content is the star, not the rest of the UI. Pages are very easy to read and scan, featuring narrow columns of text and headings that are large and clear. Images used throughout Tauronet are engaging and paint a picture of the topic or event. For example, a page about a company picnic offers 31 photos. This type of content can help make users realize they are part of a fun workplace with coworkers and managers who are engaged. The stories and photos also help people remember the experiences they had together. For people who couldn't make the picnic, looking at the photos means they can still participate in some way.

Most important, this organization is large and broad, comprised of 14 key companies made up of several hundred organizational units and 16,500 intranet users dispersed across almost 270 geographical locations. While one picnic doesn't begin to physically include all of those people, being able to look at the pictures can help make people feel connected in some way. It can also give other business units ideas about how to do team-building events of their own.

This example demonstrates perfect use of the ubiquitous filmstrip UI. The following elements make the gallery at the bottom of the page easy to use:

- The navigation uses thumbnail images of photos that are large enough so that visitors can make out the general subject of the photo.
- The selected image is indicated with a visible red square around it.
- Magenta left and right arrows allow scrolling the filmstrip.
- The selected image in the main content area of the gallery is large and clear.
- The lower left displays a status of the total number of images and which one is currently selected.

Global navigation, local navigation, and links to related content are readily available on the content page. While this is common practice, some other designs attempt an immersive experience and hide navigation when the user is in a gallery. In this case, having the navigation available is a better idea for employees who want to explore similar topics or find particular, unrelated information.

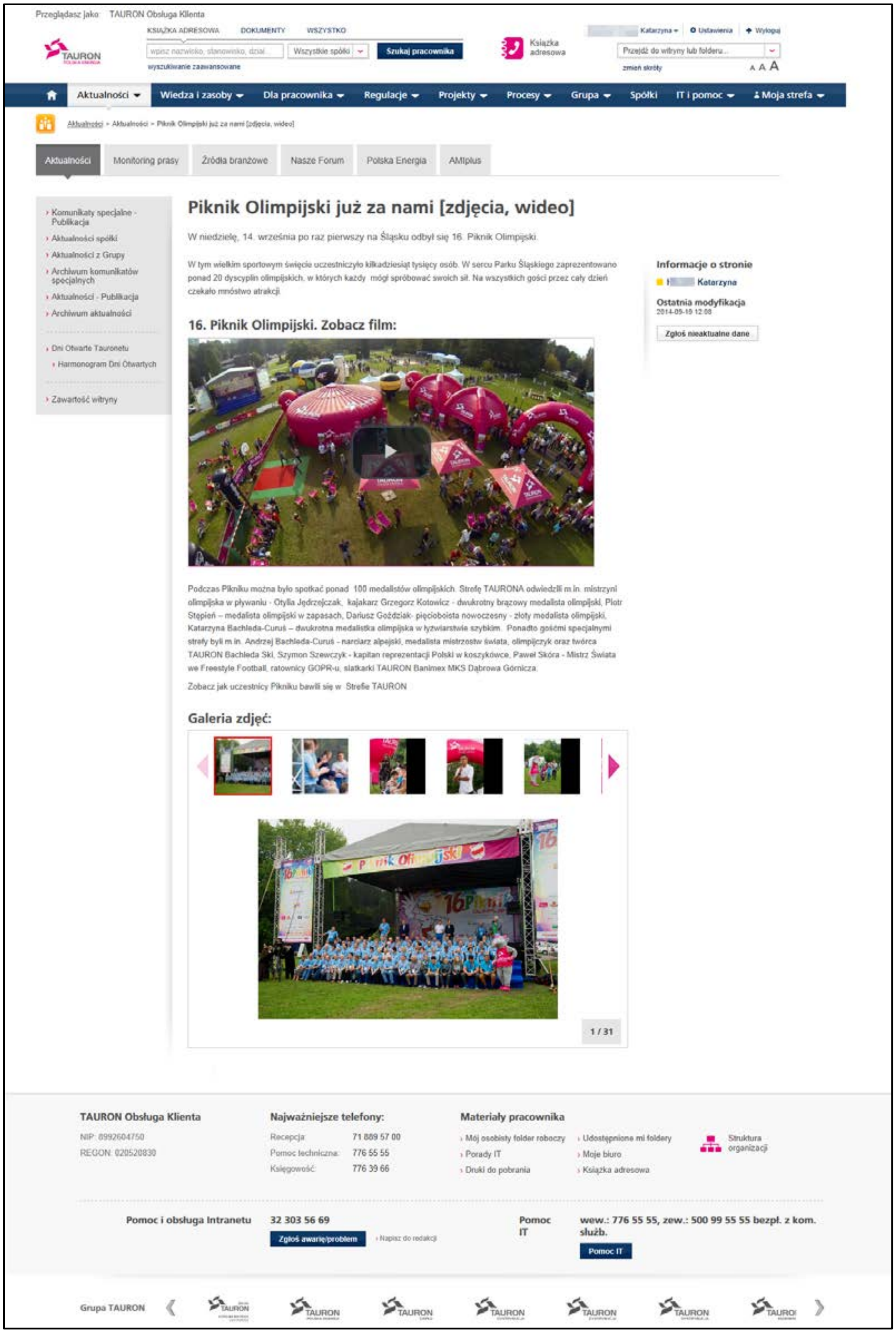


Image 25. TAURON Intranet: Page Design. Tauronet pages have narrow columns of text and clear headings, making the pages easy to scan and content easy to absorb. *106_Tauron_12_content_live.png*

The TAURON Polska Energia intranet is certainly not the first to have its inception — and part of it success — attributed to corporate mergers. Many organizations have found themselves in this challenging situation and still ended up creating a superb intranet design. This particular team did this *and* met their own goal of creating "a useful and effective system that would be common for all 14 key companies within the Group, taking into account the specific nature of each of the companies." They also achieved so much more by providing sites, services, and communication tools that unify employees across multiple organizations.

BACKGROUND

In 2009 TAURON Polska Energia (the parent company) implemented an intranet based on the SharePoint technology. This intranet was focused on document management and collaboration and was accessible to other entities within the TAURON Group. Employees were given access to the following areas: project sites, team sites and corporate reporting, but not departmental sites and other areas that served only the parent company.

After a few years of growth and development, the deficiencies of this intranet were shown to be a hindrance to cross-company communication. Employees and managers needed a common platform to exchange data and knowledge within the organization. Likewise, the organization wanted to make all the document management and collaboration features available to the whole TAURON Group, simultaneously, in an effort to improve publishing and communication where the existing intranet failed.

Goals

Many goals were set forth for the new intranet. The primary objective was to create a useful and effective system that would be a common destination for the 14 key companies within the Group, while taking into account the specific needs of each of them. Other goals included:

- Increase access to resources and knowledge — HR information as well as corporate directives and documentation
- Provide better tools to support internal communications like news publishing, promotion of employee campaigns, publishing internal magazines, and so on
- Enable individual and group work to happen in a digital workspace that encompasses all organization units and project teams
- Build a platform of integration and cooperation among the employees

Tauronet, the company's new group-wide intranet platform, was built to achieve these objectives by providing sites, services, and communication tools that unify users across multiple organizations.

In order to transform these goals into reality, the design team spent a considerable amount of time trying to identify business objectives through the following means:

- Business leaders gathered user expectations from their respective business areas.

- A design survey conducted prior to kicking off the design phase garnered feedback from over 2,500 respondents about their expectations for — and needs from — the new intranet.
- Representatives from all business areas within the Group (employees from all legal entities and managers from the headquarters) participated in meetings and teleconferences.
- The team also studied published research on intranet best practices, including a few prior editions of this report.

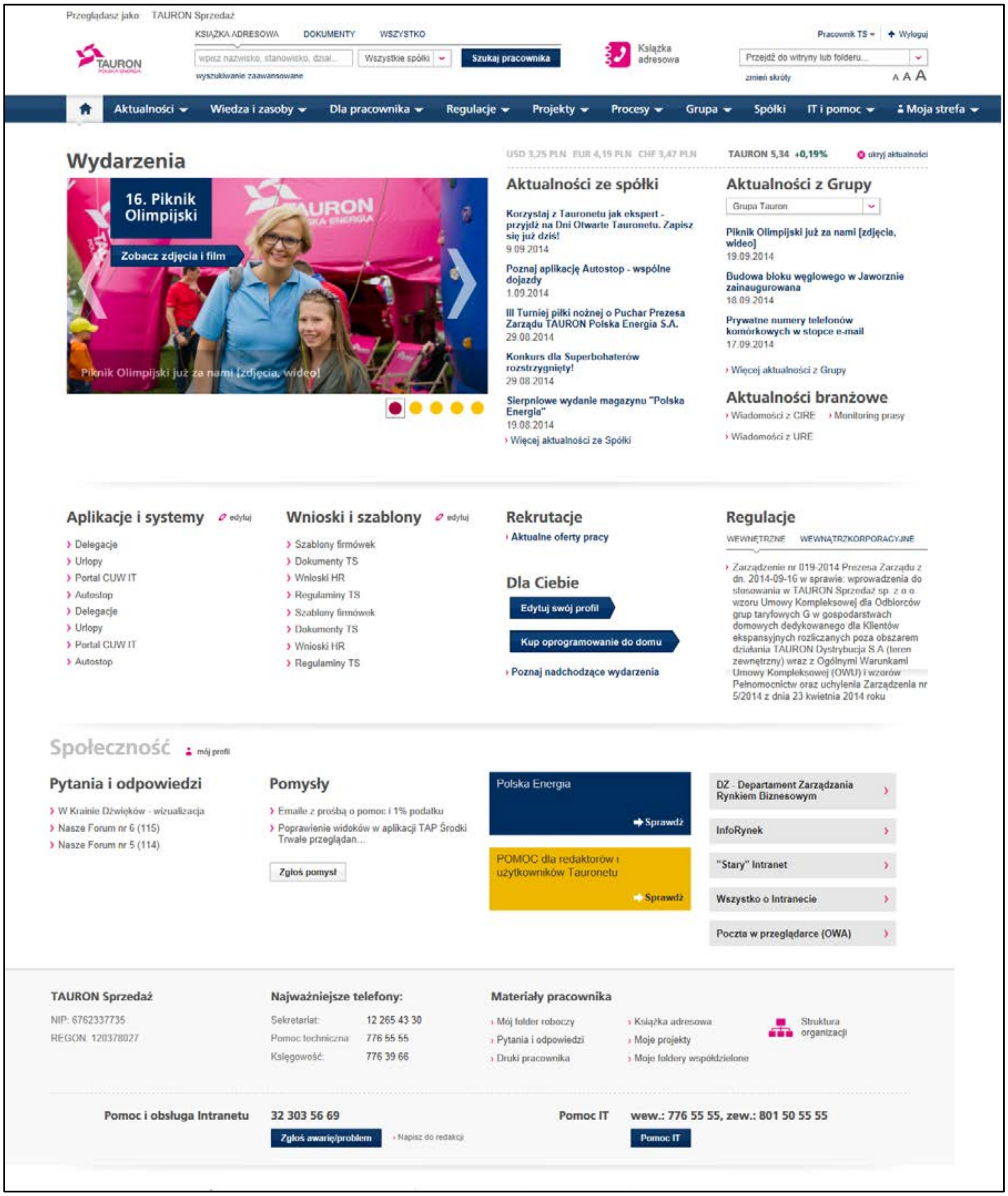


Image 26. TAURON Intranet: Personalized Content Display. This shows the main page view for TAURON Sprzedaż on the TAURON intranet. This image (and the one following) illustrates how the design of the main page changes depending on which corporate entity the user chooses.
107_Tauron_13_targeted_content_main_page_live.png

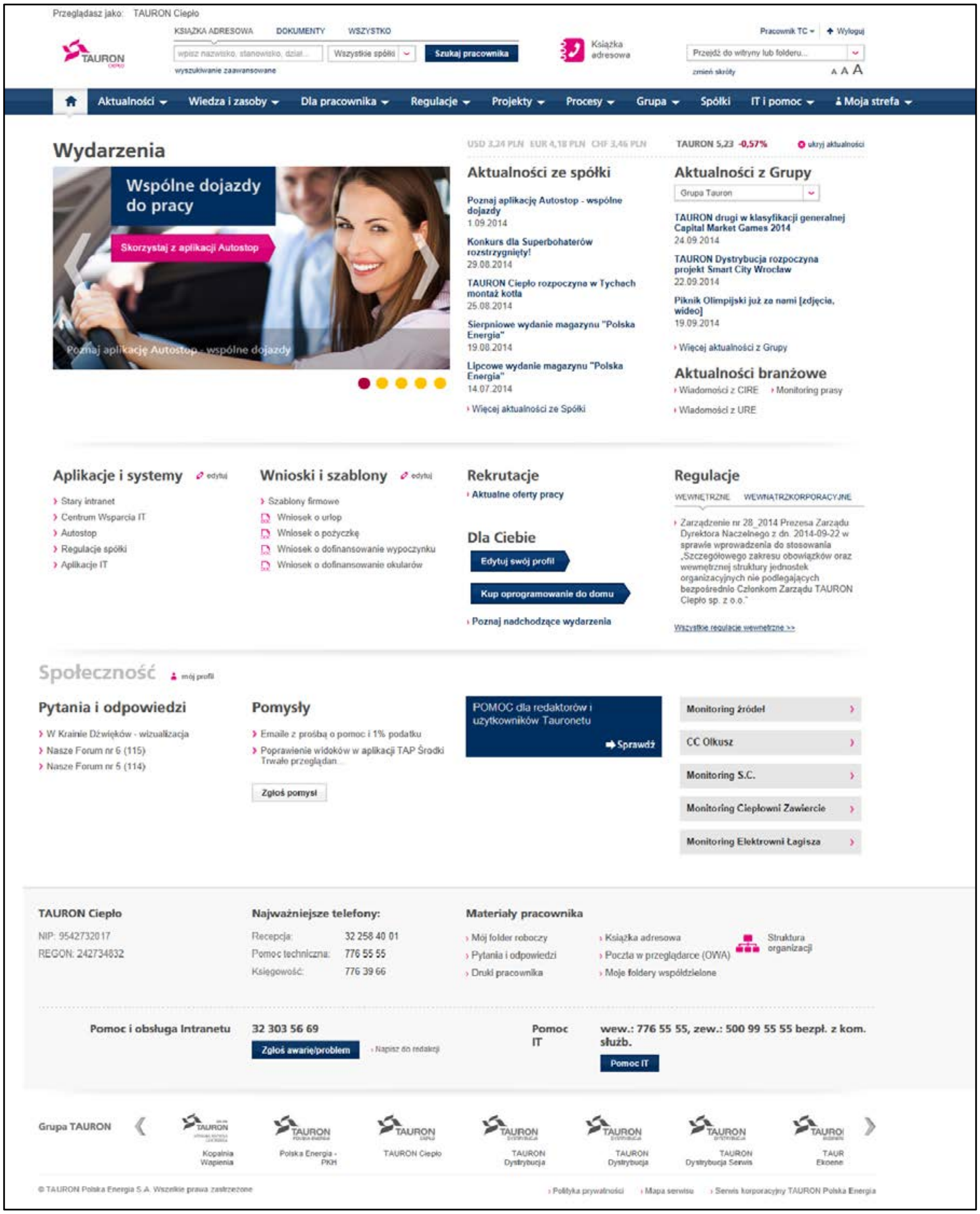
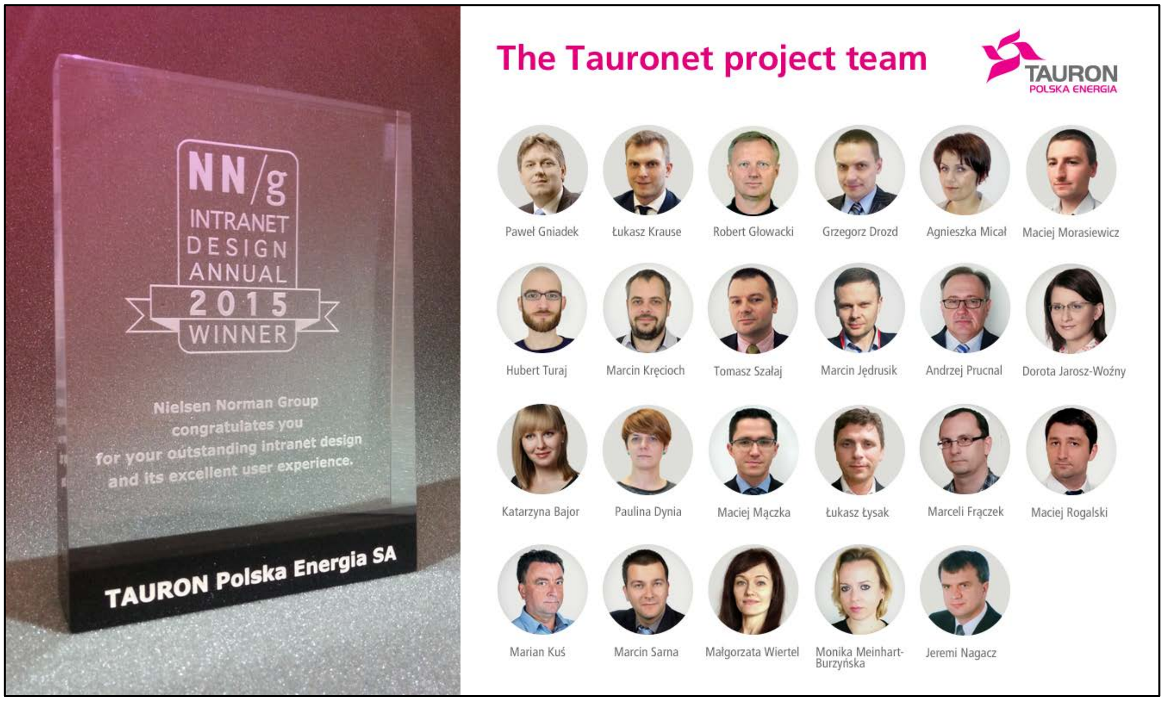


Image 27. TAURON Intranet: Personalized Content Display. This shows the main page view for TAURON Ciepło on the TAURON intranet. This image (and the one previous) illustrates how the design of the main page changes depending on which corporate entity the user chooses.
108_Tauron_14_targeted_content2_main_page_live.png

INTRANET TEAM



TAURON intranet team members: (top row, left to right) Paweł Gniadek, Łukasz Krause, Robert Głowacki, Grzegorz Drozd, Agnieszka Micał, Maciej Morasiewicz; (second row, left to right) Hubert Turaj, Marcin Kręcioch, Tomasz Szałaj, Marcin Jędrusik, Andrzej Prucnal, Dorota Jarosz-Woźny; (third row, left to right) Katarzyna Bajor, Paulina Dynia, Maciej Mączka, Łukasz Łysak, Marceli Frączek, Maciej Rogalski; (bottom row, left to right) Marian Kuś, Marcin Sarna, Małgorzata Wiertel, Monika Meinhart-Burzyńska, and Jeremi Nagacz.

GOVERNANCE

TAURON Polska Energia (the parent entity of the Group) is the business owner of the entire intranet and is responsible for the strategy, guidance and decision-making regarding the development of Tauronet. However, particular business and information areas of Tauronet are managed in a cross-company or shared-service-provider manner. Organizational units and other collaboration repositories are managed by local information owners to help maintain information security and the integrity of companies that are part of TAURON Group.

Each business area in Tauronet maintains its own ownership of intranet content, though the editorial office is a multilevel structure where each company may have local editors to publish content available for their employees only. Some larger units employ up to thousands of people and thus have their own HR departments or other services that can prepare and target content for employees from a particular branch.

The organization leveraged the experience and know-how of all the people involved in the existing local intranets when implementing the new intranet. A new team was created in the shared-service company to administer and manage Tauronet. Also, the teams that worked with the old intranets are now editors or coordinators within their entities but are now all working on Tauronet. This idea to keep the old intranet staff involved in the new platform was both a strategic and tactical move.

“It is very important to have people who were involved in previous intranet solutions be co-authors in the new system,” says Micał. “Not only are their competences needed, but including them will help make their attitude toward the new system much more positive. Imposing a new solution using the top-down method, without taking into consideration their opinions, is not the right way to go.”

Another method the team used to get everyone on the same page and ensure proper functioning of the new system was to create a Group regulation document, “The Principles of Tauronet Operation in TAURON Group.” It was created as a joint effort among the company’s business entities and was adopted by all of the company’s business and legal entities.

The legal owner is TAURON Obsługa Klienta, the Group’s shared service entity. It is responsible for coordinating Tauronet issues, administration and maintenance, and adhering to the business owner’s decisions.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Business owners	• Make strategy and development decisions
Team of Group Editors	• Publish content for the entire Group • Ensure user support and training for publishing local content • Moderate Group content • Coordinate site development in cooperation with the business owner, the Business Group, and the Control Group
Team of Group IT Administrators	• Ensure Tauronet is functioning properly • Perform system maintenance • Provide user support for technological problems • Create new objects within the system • Serve as system administrator
Business Group (the team of intranet coordinators for each entity)	• Make development suggestions to the business owner • Collect and analyze ideas collected from users across each corporate entity
Control Group (Steering Committee)	• Manage site development • Make decisions regarding how to finance development projects • Determine the direction of technology development
Content Owners	• Update their own section information and serve as section administrators. Each section, in each entity has its own content owner.

Figure 4. TAURON Intranet Team Responsibilities

USERS

Tauronet has 16,500 current users who are all employees. A user is a person who has a domain account and access to certain resources on the intranet. The level of authorization granted by the content owner defines the scope of each user's access.

The general user roles are:

- **Reader:** A user who is allowed to read the content. This is a local role for a particular business area. Reader is also a contextual role related to the organization structure, so when an editor in the HR area publishes content targeted to three particular companies in the TAURON Group, only the readers from those companies have access to the information.

- **Editor:** A user who can publish content is an editor. This is a local role for a particular business area (as described above) and a contextual role that limits content targeting options for that editor. An editor can target content to his unit and the dependent units. Specifically a Group level editor may target the content to all companies in the Group and lower level editors can target the content to their companies or branches. Editors can also promote (change targeting) for content authored on the lower level units of their unit.
- **Administrator:** A user who can administer the system and/or can give access rights to the whole system or a part of it. The administrator of the collaboration site manages access and permissions to the particular collaboration site (such as the project site, the program site, etc.).

Specific user roles include:

- Group employee
- Entity employee (one of 14 legal entities)
- Organizational unit employee
- Collaboration site member: A member of the collaboration site (such as a project site, a process site, an organization unit site, etc.) may have access and co-author content (documents, other information) in collaboration sites. The administrator of a particular site can change permissions.
- Board member
- Manager
- Management reporting specialist, and so on

URL AND ACCESS

URL AND ACCESS INFORMATION	
Item	**Status**
URL	• Main URL: tauronet.tauron-pe.pl • The *Cooperation* and *User Zone* modules also have their own URLs, but these, and the main URL, are in the (top) navigation.
Default Status	• The intranet is set as a default homepage in the browser on each user's computer. Employees cannot change this setting.
Remote Access	• Users can access the site remotely by VPN. There are a group of users who use this option.
Shared Workstations	• In some locations there are shared workstations placed near the entrance at the reception desks. Reception personnel, mostly, use these to find people in the address book.

Figure 5. TAURON URL and Access Information

DESIGN PROCESS AND USABILITY WORK

Defining the Information Architecture

The TAURON team applied a user-centered approach to its intranet design and the first hurdle the team faced was to try to understand the current state of the organization. This, however, was not a simple task as TAURON is one of the largest employers in Poland and it has a complex corporate structure. Moreover, some of the subsidiaries already had their own intranet systems adding another level of complexity because those were also overdue for a redesign and despite looking quite shabby, they worked and people were happy with them. Therefore, one of first challenges was not to spoil anything that was important and already worked well.

In an effort to meet users from across the organization, the design team kicked off the analysis phase of the project with workshops and included employees from many different groups and different subsidiaries. The team held 10 workshops over six days. Half of the participants were managers and the group also included some top executives, but the rest of the spots were filled with specialists and frontline employees in an effort to include as many primary users as possible. This proved to be a good mix and a good approach.

"This workshop-based approach worked really well," says Turaj. "Since we [the consultants] came from outside the organization, people were more willing to list their wishes regarding their ideal intranet. We had a chance to talk to about 80 people, which is about 0.5% of the total number of future users. That is why we also conducted a survey among employees and we received the feedback from almost 2,500 respondents."

The team also conducted remote card sorting research with 70 employees.

The results from these activities were very helpful but not really surprising. Generally, the employees had difficulty finding the right information to answer their questions and the second main frustration users encountered was with efficiency — they expected search to be fast.

These types of findings became project priorities and formed the basis of the initial IA diagram.

Interaction and Graphic Design

Another critical component of the design research was 300 clickable wireframes that were created with user input then put through their paces, as the team gathered user feedback during 30+ workshop sessions. This was targeted research. The team wanted to answer some specific questions. "There were some specific elements we designed to reflect organizational needs and we needed to get feedback on these elements," says Turaj.

One of the key problems the team attempted to solve through wireframes was how to visualize the organization. The TAURON organization consists of several thousand structural units such as departments, offices, and groups, so it was crucial for the team to visualize the structure as well as possible in order to design a custom organizational tree.

Another challenge the team tried to solve through the use of wireframes was to refine the system by which users find the right TAURON location. This was a difficult task as the company has 270 locations.

The visual design was the last part of the process. During this phase the team tried to understand which SharePoint elements could be customized.

It took about three months to design the main scope of work before it was passed onto the company's development partner.

The Implementation Phase

An external integrator — IT-Dev Ltd. — prepared the Technical Solution Vision (TSV) and delivered the system. TSV was a document that describes the technical approach to the system specification and the implementation, including system architecture and the description of functionalities based on the system specification.

This implementation process was a critical component of the intranet project and took 12 months, starting with TSV preparation and ending with a fully deployed solution in the operational environment. Initial requirements and design concepts, such as wireframes and visualizations, were verified in terms of their technical feasibility, integrity, reusability, and performance. Some amendments were required to achieve better functional quality factors. At the same time, usability experts had to keep a keen eye on how the user experience was affected by those optimizations.

The most valuable aspect of the TSV was the design of hierarchical content publishing and a targeting pattern, proposed and prepared by IT-Dev. Using this pattern TAURON was able to achieve a unified content targeting experience in various areas such as *News*, HR articles, *Projects*, *Corporate Governance Acts* and *Corporate Reporting*.

The implementation phase was comprised of three stages, as described in the TSV. Each stage in the TSV had designated project milestones that needed to be accomplished:

- **Stage one**: publishing features
- **Stage two:** shared services platforms (HR Platform, Legal Platform, Legal consents, etc.) and Corporate Governance features and sites like Regulations, Management Boards sites, Supervisory Boards sites, and Corporate Reporting
- **Stage three:** collaboration and document management features and sites (Project, Program, Organizational Units sites, etc.)

Each stage presented different types of challenges.

First-stage challenges were mostly related to creating a manageable, usable, and efficient approach to content presentation, in the context of the organizational structure and taking into consideration access issues related to security and targeting. Other tasks such as the master page and page layouts implementations, creating sites and sub-site structure, or making navigation were relatively simple. This stage wasn't complicated from a business owner perspective either, as requirements were generic, not area-specific.

The second stage was much more complicated during the TSV preparation. It turned out that in some business-critical areas the initial requirements changed or were extended and the Solution Vision changed a part of the project scope. For that reason, some of the functional mockups were amended and additional work was ordered to refine them. So the process took a bit longer but the results were great as it forced people to contribute to the decision-making and generate ideas.

During the third stage of the project the Solution Vision preparation went smoothly in generic areas such as collaboration sites. At this stage the team also had to cope with some changes to business requirements.

After the completion of the second stage, a fully functional part of the system was ready for testing. The third area of the intranet (stage three) was prepared at the same time.

Testing

The team combined usability testing with eyetracking techniques to get a better understanding of how the site was being used. In general, users considered the early site consistent, easy to use, and useful. "However," says Turaj, "during the tests we discovered some things that had to be improved." For instance, the system did not include abbreviations for the name of subsidiaries. Employees used these abbreviations extensively but the search engine was not optimized for them.

"Another aspect that we discovered was related to SharePoint issues," he says. "As some solutions in SharePoint were not intuitive for users, we added some key elements like buttons and links to key actions."

The team repeated the usability and eyetracking study three months after launch, and wile the results were better, there were still minor flaws needing eliminated. Overall, the testing was quite effective at rooting out problems. "The iterative-based approach to the user testing turned out to be really efficient and helped us to optimize the system before launching it," says Turaj.

When everything was ready, the system was finally launched across the organization, one subsidiary at a time.

TIMELINE

PROJECT TIMELINE	
Milestone Date	**Milestone Description**
December 2006	• The TAURON Group was established and consolidated core companies. Each used its own (completely different) local intranet.
May 2012	• "Common intranet for the TAURON Group" project launched.
June–September 2012	• Workshops and surveys were held to define user needs and business objectives.
September–November 2012	• Design mockups and system specifications (called "the concept") were prepared.
December 2012	• The development process begins.
January–December 2013	• The Technical Vision Solution (TVS), implementation, and system delivery were prepared in three stages.
June–December 2013	• Usability and functionality testing was conducted.
October 2013	• The document, "Principles of Tauronet Operation in TAURON Group," was implemented, which created a responsibility map of the system, outlining the names of people responsible for certain areas of the system.
October–December 2013	• Performance tests conducted with end users.
January 1, 2014	• Launch!
Overall redesign timeframe: 20 months	

Figure 6. TAURON Project Timeline

CONTENT AND CONTENT CONTRIBUTORS

Content Management System

Tauronet uses the CMS native to SharePoint 2013 for the following reasons:

- It was a new technology, introduced shortly before the team launched the project, so using SharePoint 2013 will ensure a longer product lifecycle than if they had chosen an older solution.
- The organization’s leading company, TAURON Polska Energia, had used SharePoint 2010 in its previous local intranet, so some users were familiar with the technology.
- SharePoint is compatible with other Microsoft products in use at the TAURON Group.
- SharePoint 2013 offered many of the required features out-of-box so there was no additional cost.
- This version of the platform provides concurrent document editing (Word, Excel) that improves collaboration and documentation work.

Content Management

TAURON intranet content management varies depending on type of content and what audience the content is intended for (e.g., entire organization or a specific group or entity). Some examples, include:

- **General content:** General content that concerns all employees, such as news and events, is published by Group editors and must be reviewed by the PR department.
- **Section content:** Each section of each entity has its own editors who are responsible for delivering and publishing the content in their section of the intranet. For example, the HR department delivers the content for its employees in each entity.
- **Local content:** Section editors manage local content. To manage this ever-changing group the team devised responsibility maps that contain data about the people responsible for the content of each section in each entity.

Tight editing controls are in place to ensure a consistent look across the site. For example, the editing control in the publishing module is configured to not let the editor format text arbitrarily. Several page layouts are also available for editors — like an article with or without a picture, or a two-column layout, or three-column, and so forth — as well as styles defined for text elements like headers, links, citations and the like. Neither can the editor change the font size or the font itself.

Supporting Content Contributors

Various entities across the organization provide training and support for content contributors. For example, the team of Group editors organizes one-day courses for section editors to teach them how to use the system and how to publish content correctly. These courses take place as often as needed. The intranet team also organizes Tauronet Open Days where the Group editors travel to different locations to present the intranet and answer questions about using it.

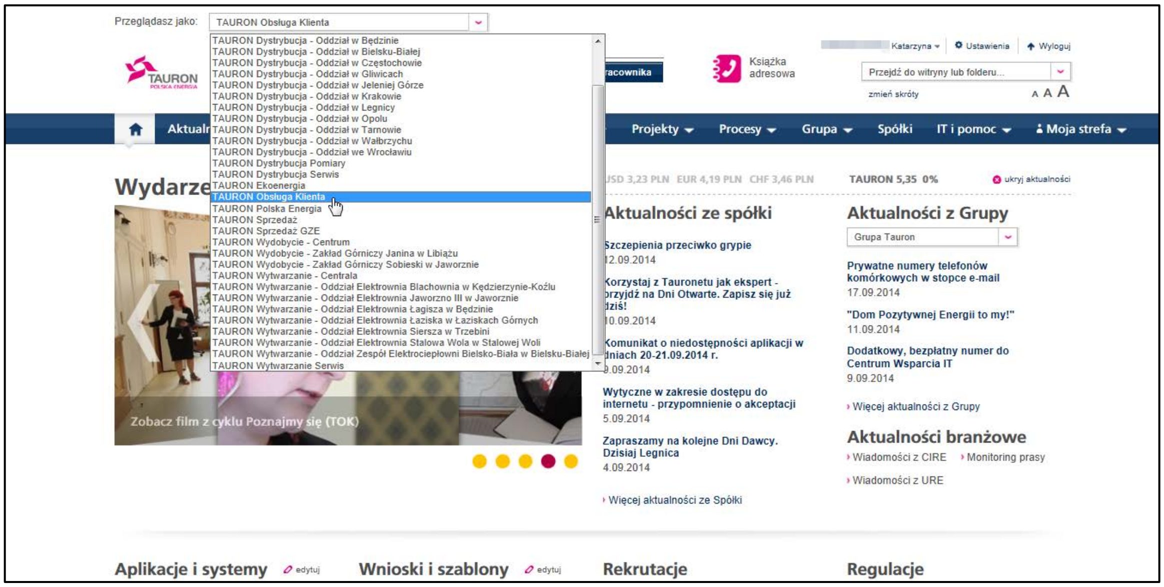


Image 28. TAURON Intranet: Contextual Content Display. This page shows how content on Tauronet can be switched to show how it will be seen in context. The Group Editor (whose view we see here) can switch between all entities. Most of the users have only one entity but some have two or three. It depends on the nature of their work.
109_Tauron_15_group_editors_view_live.png

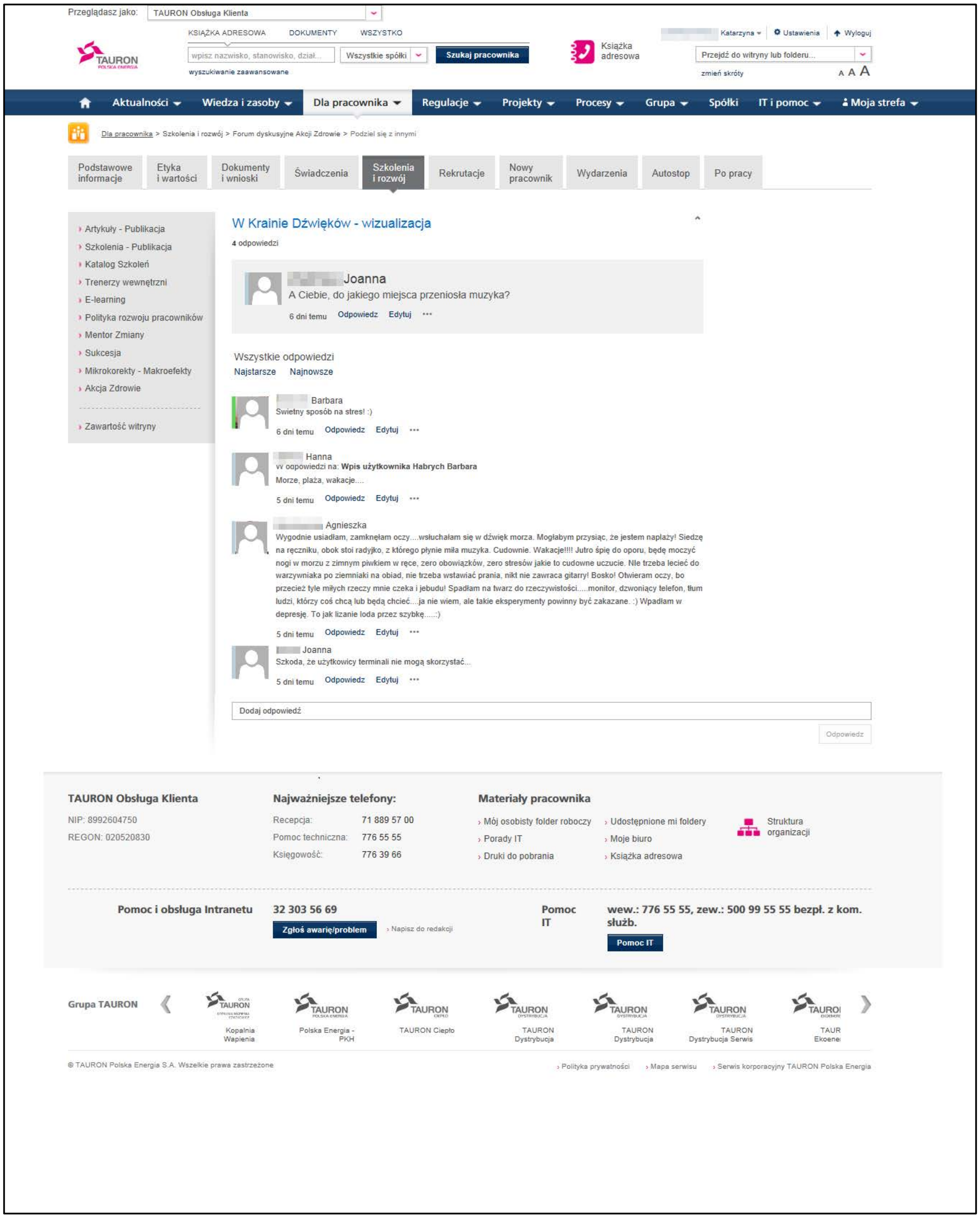


Image 29. TAURON Intranet: Forum. Posts made to Tauronet's forum show the contributor's name, photo (if the person used on in their profile), and availability information (via Lync).
110_Tauron_16_content_social_feature_live.png

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and OS	• Server farm containing six servers (four web front-end and two services) • Microsoft Windows Server 2012 Standard • 24 GB RAM • Intel® Xeon® Processor E5-2680 v2 (25M Cache, 2.80 GHz) (8 processors) • 150 GB Disk space
Bug Tracking / Quality Assurance	• "RAP as a Service" tool
Design Tools	• Microsoft Visual Studio 2012
Site Building Tools	• Microsoft Visual Studio 2012 • IT-Dev SharePoint DSL Toolkit for Visual Studio
Content Management Tools	• Office Web Apps
Search	• SharePoint 2013 Search Service

Figure 7. TAURON Intranet Technology

SEARCH

The search technology used for Tauronet is the default SharePoint Search. SharePoint Search is used in Search Center and also provides the aggregation functionality when content from multiple sites has to be aggregated. For example, the news on the welcome page and the *Recent Project Documents* web part (projects section of the portal) take advantage of this feature.

Search categories (address book and documents) are available from the search box located in the top section of the homepage. On the advanced search page there are more categories, including all, documents, employees, locations, objects, and meeting rooms. The team has also introduced a range of refiners to help narrow the search results. For example, when searching a document, the user can choose the type of file or the entity that it refers to. It is also possible to filter items on lists and in libraries by toggling the filter values above each column.

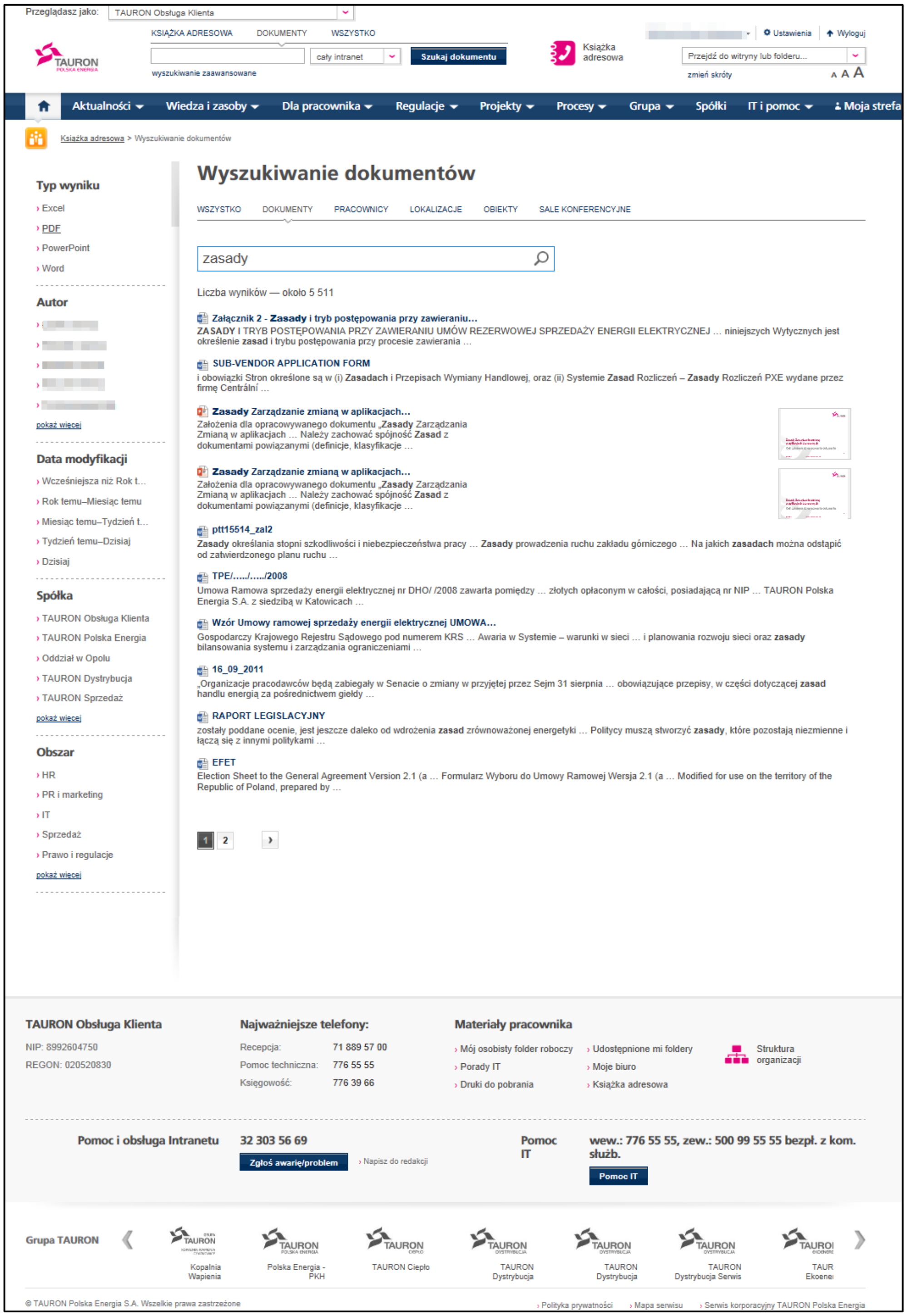


Image 30. TAURON Intranet: Search Results Filtering. Document search results can be refined by choosing author, file type, date of modification, and entity or the branch it concerns. Employees are able to search for co-workers by surname, position, or phone number within the address book. Employees can also use filters to improve their results.
111_Tauron_17_feature_search_live.png

RESULTS AND ROI

The new common TAURON intranet is still a brand new product and employees are still getting familiar with it but so far the response has been positive. Almost all employees have filled in their profiles and over 8,000 people use the intranet every day to find contacts, read company news, download documents, and much more.

"When we meet new people from TAURON who are using Tauronet, we ask for their opinion, and it makes us happy when we hear they are really pleased with the system," says Turaj.

Overall there are two types of results the organization has yielded from the new intranet: financial and non-financial. Financial goals were outlined at the beginning of the project and will be verified a year after launch but the main non-financial results include:

- Good access to up-to-date corporate information across the Group
- Easy access to the HR applications all in one place
- Creation of a common platform that integrates employees from different entities
- A unified graphic design across the organization
- A common governance model

Some usage statistics for the period January through August 2014, include the following:

- 17,846 sites created on the intranet
- Over 2.5 million visits
- Approximately 17,000 visits per day
- Approximately 280,000 downloaded files
- About 340,000 searches

LESSONS LEARNED

An intranet is a major undertaking for an organization and the TAURON team learned a lot of lessons from their project, including a few things they would do differently if they could do it all over again. Turaj shares a few examples of those missed opportunities:

- **Involve more users:** "First of all, we would involve more of the research team in the process. The element that worked really well was an ethnographic study where researchers visiting people at their desks and asking them about their typical everyday tasks: how they looked for contacts, how they deal with their computer, and so on. It was a very valuable experience and by observing people at their desks we learned even more that during the workshops. It was definitely a very good method."

- **Focus on UX more:** "We would also stress the UX perspective even more. Naturally, we did stress it, but we had to compromise from time to time. There are several perspectives in the project: the PM was mostly focused on time and budget, the IT wanted to keep it as simple and conventional as possible so the implementation process would be easy and efficient. And users wanted a lot of things but they were sometimes unaware of the whole process and the context. So it is the designer's responsibility to keep the process user-oriented, even if it means spending more time on the research (as it is truly valuable)."

Other teams can learn from many of TAURON's experiences. Here are just a few examples of lessons the team learned:

- **Focus on quality rather than quantity.** "The most important things on the intranet are contacts and information and documents. Every other feature and element should be considered a bonus. Otherwise, the systems tend to grow and it all becomes slower and more complex, which is one of the most frustrating things for users. Everybody is in a hurry and if the system slows them down, it is really a big problem."
- **The intranet is a reflection of the organization itself. "**In such a big organization, some things are just difficult to control and the company is evolving. Therefore, the intranet should evolve as well and it should adjust to the changing structure, mergers, changes of procedures, and other organizational events. So designing it is more about the rules that will help editors to contact all the employees."
- **Bring in the right experts.** "It was a good idea to involve different agencies responsible for the design and the implementation. It is inevitable that conflicts and discussions will occur in such a situation, although the differences in our approach enabled us to work out good solutions."
- **Assign responsibility.** "It was a good idea to create clear principles around the intranet's function, as well the 'responsibility maps' containing data about people responsible for each section's content. It helped us to administer the intranet efficiently and to keep control over publishing content."
- **Don't forget about load testing.** "It was a good idea to carry out the performance tests, which ensured the new system would work with a large number of users."
- **Allow for a realistic schedule.** "It is extremely important to have a good and realistic schedule. If deadlines are too short for each part of work, it is easy to make mistakes or miss something crucial."
- **Make sure you have internal expertise.** "It is essential to have in-house IT specialists who know the solution that was used to create the intranet well enough. They will analyze the development agency's ideas and give the useful feedback."
- **Rigorous testing pays off.** "Another very important aspect is to have well prepared test environment of the system where developers can freely test new functionalities. The more testing, the better."

- **Innovation comes through understanding your audience. “**It is crucial to know the organization. One thing that we proposed together with users was what we called ‘Hitchhiker.’ As the organization is widespread, a lot of TAURON’s employees commute to work from different places, mostly by car. Therefore, we proposed a carpooling feature and after a few months it proved to be really helpful. Several people a day now share their cars, saving money and reducing impact on the environment.”

dorma+kaba

OVERVIEW

COMPANY

DORMA is part of the newly formed dorma+kaba Group, whose 16,000 employees produce and market door technology systems and allied products around the globe.

In September 2015 DORMA merged with Kaba Holding AG and the new company is now called dorma+kaba, however this case study was written about the DORMAworld Social Intranet prior to the merger, so throughout this case study we refer to the company as DORMA.

Headquarters: Ennepetal, Germany

Company locations: DORMA Group is represented in more than 50 countries and maintains major production plants in Europe, Singapore, Malaysia, China, and North and South America.

Locations where the intranet is used: Employees at all DORMA locations use the DORMAworld Social Intranet.

Annual sales: The DORMA Group generated (according to IFRS consolidated) sales amounting to €,109 million.

THE INTRANET

Users: Essentially all DORMA employees — approximately 7,500 — are accessing the new social intranet. This gives them access to all communication and collaboration information instantly, as well as to an internal social network that lets them connect with and share stories with other DORMA employees around the globe.

Mobile approach: Responsive web design and a native mobile app for iOS, Android, and Windows Phone.

Technology Platform: Office 365, Azure, SharePoint Online, Yammer

TEAM

Leadership: Adrian Gagala, Group IT; Stephanie Bolsinger, Group Communications

Communications: Sabine Fuhrmann, Alexander Wood

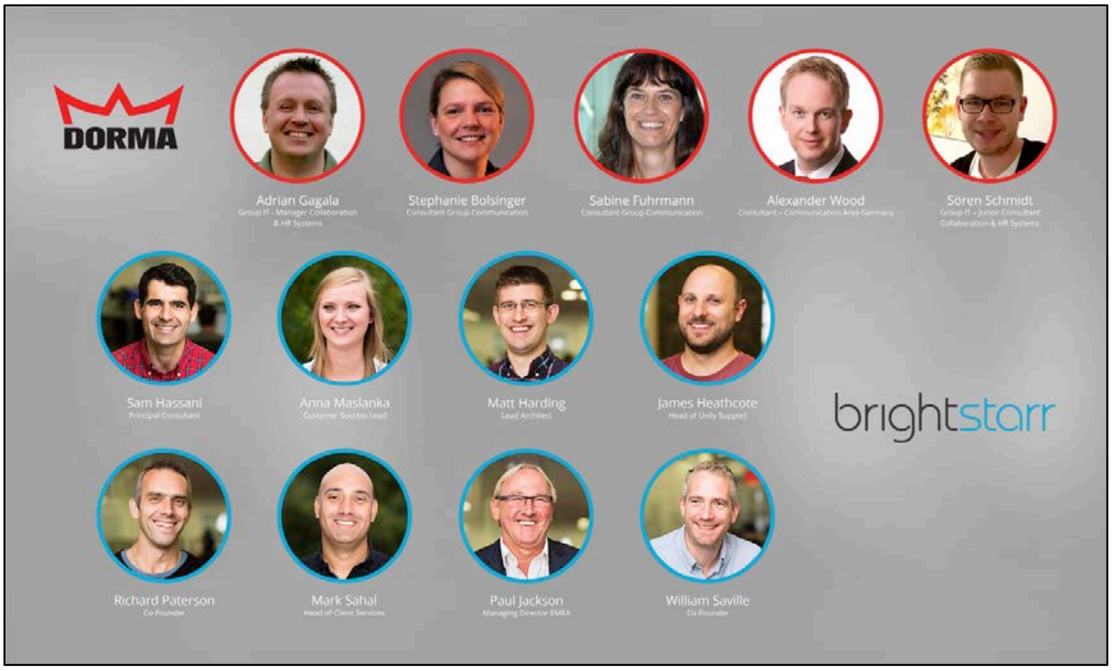
IT: Sören Schmidt, Geoff Stone, Jeff Lo, Markus Braun, Göran Kelch, Tim Bergmann, Dennis Schroeer, Jens Enssen, Bernd Döring, Lara Klein

Communication Heroes NEE: Paul-Olivier Raynaud-Lacroze, Katrina Hazard, Audrey Esmery, Magali di Iorio, Renée Rädler, Matilda Lindblom, Ann Knutson, Christel van Opstal, Nadezhda Yatskova

Branding: Angelika Wesselkamp

Agency: BrightStarr Ltd.

INTRANET TEAM



Team members shown here (left to right, top to bottom) DORMA: Adrian Gagala, Stephanie Bolsinger, Sabine Fuhrmann, Alexander Wood, and Sören Schmidt; BrightStarr: Sam Hassani, Anna Maslanka, Matt Harding, James Heathcote, Richard Paterson, Mark Sahal, Paul Jackson, and William Saville.

HIGHLIGHTS ABOUT THIS WINNER

Using BrightStarr's Unily Intranet as a Service product, the DORMA team transformed the intranet in just 60 days. With two big events looming, the team was tasked with creating a social intranet that supported intuitive access to information, changing the way the company communicated and provided access to innovation. For the project to succeed, DORMA's global audience needed both support and encouragement to collaborate and communicate in new ways on the company's first social intranet.

- **A New Social Intranet:** The new intranet's social element has been a huge success and has changed communication within the organization. It met with rapid acceptance and adoption around the world, starting real conversations and connections among employees. One of the key drivers of the site's success was the CEO, who acts as both promoter and power user, truly leading the company by example.

  In addition, the intranet was developed in advance of two major events: the International Group Conference and the BAU trade fair for architecture, materials, and systems. This proved advantageous to the social intranet, which launched just in time to support the events and offered a perfect platform for disseminating the content they generated. This timing provided the necessary momentum to get content flowing from the start, and the solution's intuitive nature meant that little guidance was needed.

- **Inclusive Design Process:** Even with only 60 days to get the new site up and running, the team wisely recognized that intranet development is often headquarters-centric and thus misses or overlooks the needs of those in other locations or offices. To avoid this, the team included feedback from the North Eastern Europe (NEE) group, which was part of the social intranet project's pilot phase.
- **Communication Heroes:** Many intranets don't connect content creators, let alone form a group for them with shared ideals and an exciting name. DORMA social intranet isn't most intranets, however. Content contributors are part of a unique group called *Communication Heroes*. They share best practices and lessons learned in a Community of Practice team site and serve as SharePoint advocates and change agents in the organization. DORMA's intranet team recognizes the importance of content creators and supports them accordingly, while also seeing their potential as influencers of intranet usage and adoption throughout the organization.

  Being part of a group — particularly one with such an invigorating name — can facilitate a sense of community among content creators, offering them organizational support and recognizing the excellent work they do for the organization as a whole. At DORMA, the team comprises individuals from a variety of backgrounds around the organization, though most of the more than 40 Communication Heroes have a background in HR.

BACKGROUND

A highly visible company-wide event can fuel momentum for an intranet overhaul. That was DORMA's situation in late 2014, as the company's internal International Group Conference and the global trade fair, BAU, were looming. These events are the platform through which DORMA launches new products, and the Global Executive Committee (a key intranet stakeholder) wanted to use them as catalysts for revamping the intranet to positively impact the way the company will innovate into the future.

The result was DORMAworld Social Intranet. This new platform was designed to replace numerous disparate solutions and provide "Access to Innovation," becoming the centerpiece of a new digital era for the organization. The bold mission statement of this new era — "Be informed. Get connected. Get the job done." — is meant to inspire open innovation and collaboration around the world. The social intranet also aims to help DORMA further its efforts in idea generation and innovation within various corporate divisions.

"We wanted to promote communication and the exchange of ideas and wanted to give every employee access to the full scope of available information," says Adrian Gagala, Group IT—Global Applications Manager Collaboration & HR. "In addition, giving all our employees a voice was a really important aspect [of the project]. We wanted to transform our classic intranet from a traditional top-down approach to a place where top-down meets bottom-up communication. The meeting point of those two elements would allow users to feel the vivid pulse of the company instantly, every day."

With only 60 days to complete the project — one that requires a great cultural shift for the company's workforce — the team let one simple principle direct their efforts: *bring order to complexity*.

DESIGN REVIEW

Homepage

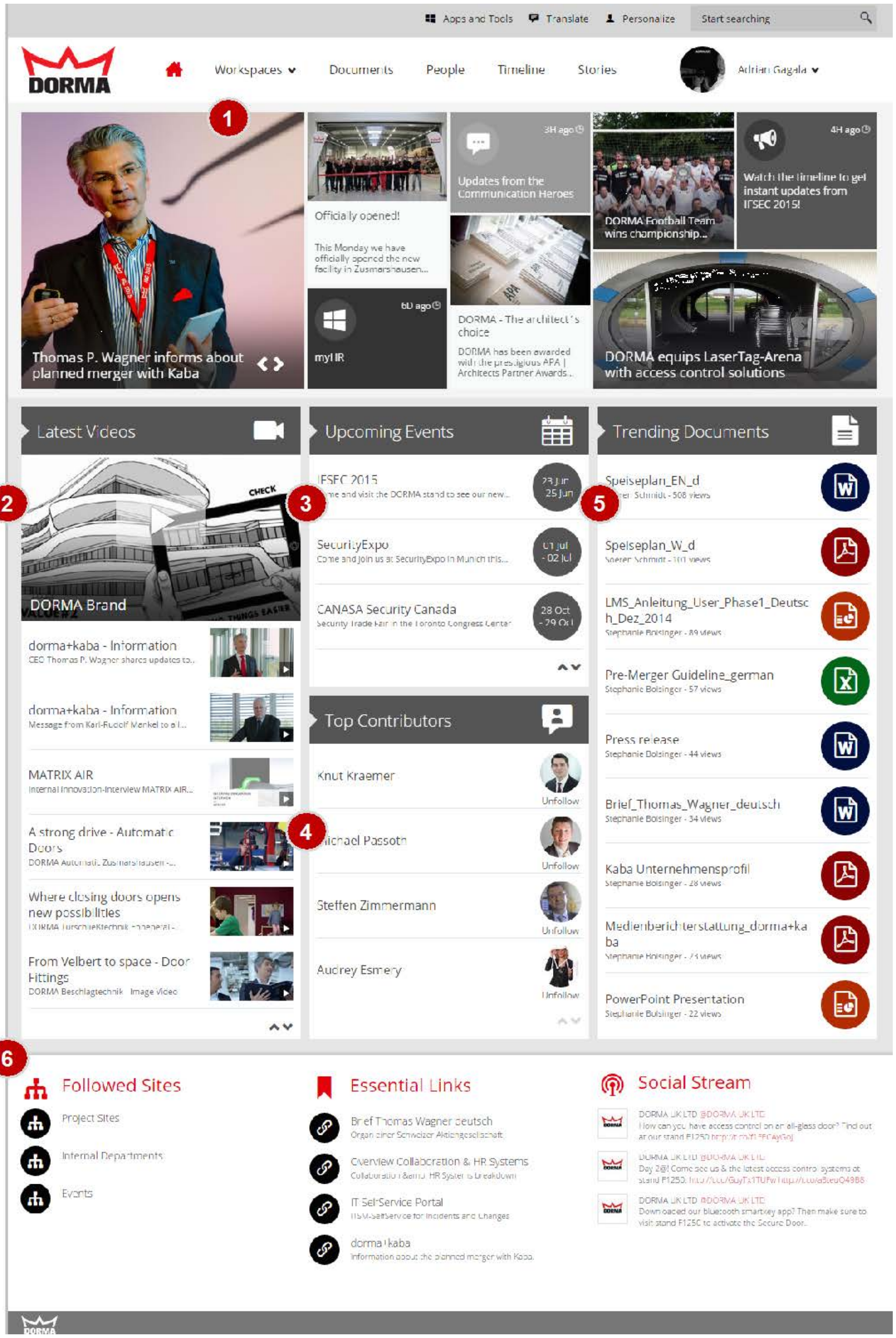


Image 1. DORMA Intranet: Homepage. *51_DORMA_01_Home_Live.png*

Homepage Highlights

1. **Targeted News:** The homepage features a dynamic smart feed of targeted news and insights based on the user's role, location, and personal preferences. This personalization lets users choose tags for functions, topics, location (area and region), and so on. A featured news story appears on the left in a small content carousel, which can be navigated via the arrows in the item's bottom right corner. Each story includes a picture and a headline. Other items at the top of the page include additional news stories and company updates, such as notifications about new and updated content for various areas, including news, HR, and Communication Heroes.
2. **Latest Videos:** Video content is common on the intranet, and the homepage highlights this quick form of communication. The homepage shows the latest videos, along with brief descriptions and representative stills.
3. **Upcoming Events:** The homepage calendar shows event names, along with brief descriptions and dates. Users can page up or down through items via the arrows at the bottom of the section.
4. **Top Contributors:** This area recognizes those who are creating content or commenting the most on the site. This prominent recognition has several purposes. First, it indicates to employees around the world that the organization values intranet contributions. Second, recognition is a simple form of gamification that can motivate others to compete for a top spot, which encourages knowledge sharing and connection building among colleagues. Each contributor is listed by name and photo, with options to use Yammer to *Follow* or *Unfollow* each contributor.
5. **Trending Documents:** This section lists the intranet's most popular documents, which can help employees get a sense of what's new and trending on the site. The Canteen menu is one of the most commonly listed pages.
6. **Footer:** The bottom of the page provides quick access to important information. The footer includes *Followed Sites*, which lists SharePoint subsites that the user is following; *Essential Links*, which has important corporate information; and *Social Stream*, which shows the company's public Twitter feed.

Workspaces

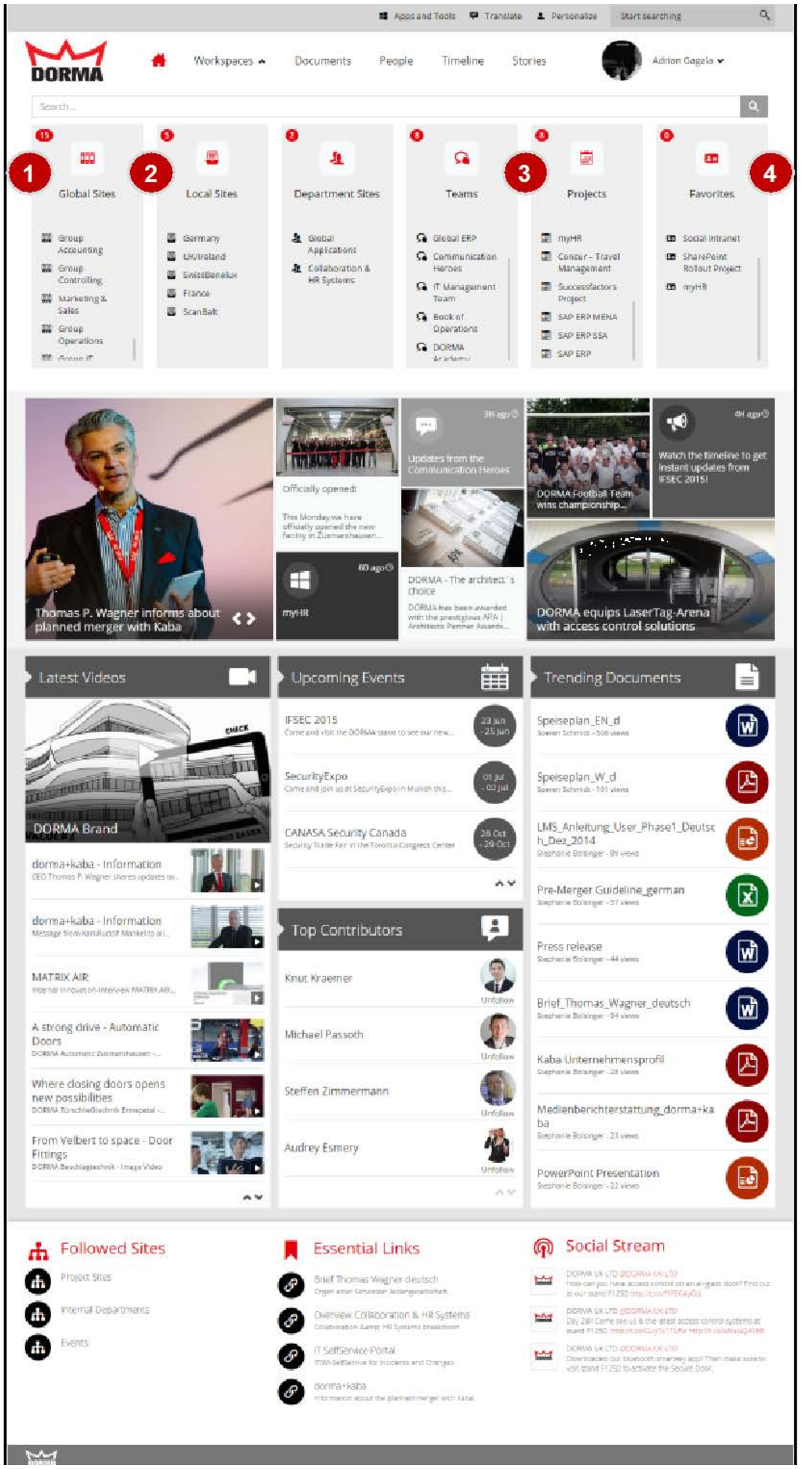


Image 2. DORMA Intranet: *Workspaces*.
52_DORMA_02_Workspaces_Live.png

Workspaces Highlights

1. **SharePoint Content:** *Workspaces* is a dynamic site section that lets users navigate directly to SharePoint content. This gives them quick access to sites they are following, including *Global Sites*, *Local Sites*, *Department Sites*, *Teams*, *Projects*, and *Favorites*. The structure conforms to the company's organizational structure.
2. **Common Links:** *Global* and *Local* sites are visible for all users, giving them quick access to key departments and information specific to different regions or countries.
3. **Personalized Links:** *Department*, *Teams*, and *Projects* vary by user and role. These links lead to collaboration spaces on the site.
4. **Favorites:** The *Favorites* feature lets users add their own set of links to the navigation bar.

Timeline

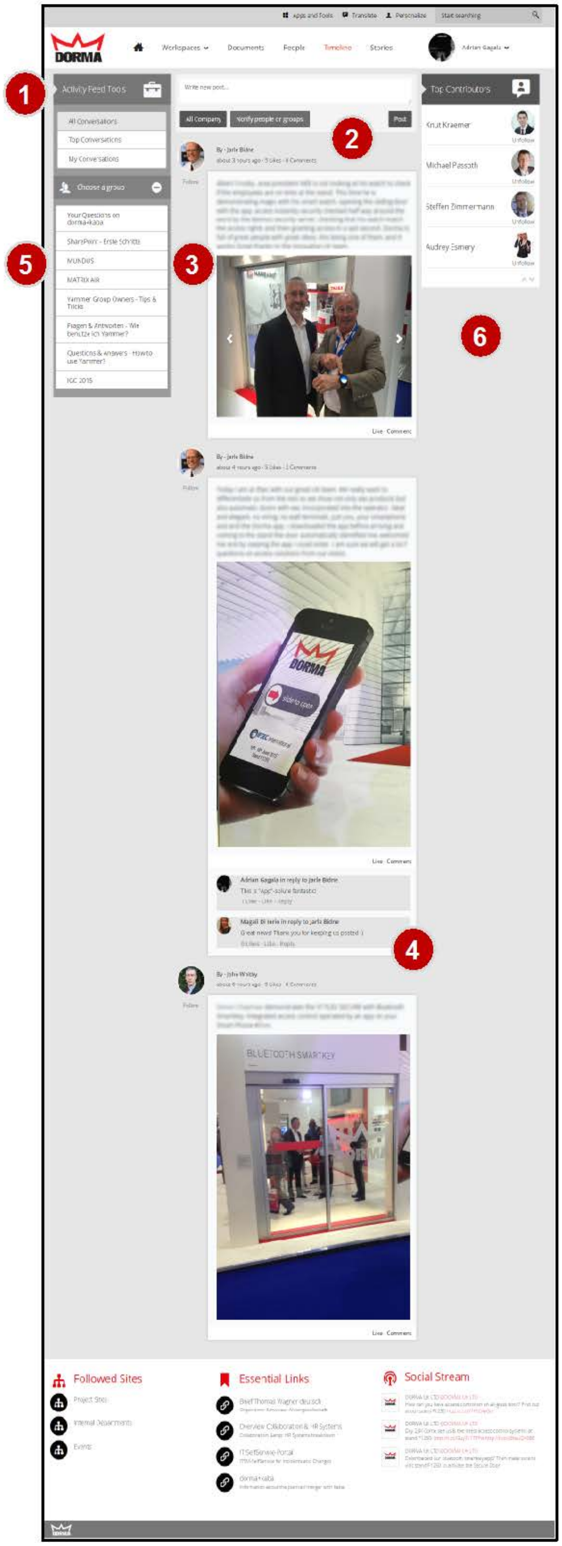


Image 3. DORMA Intranet: *Timeline*.
53_DORMA_03_Timeline_Live.png

Timeline Highlights

1. **Social Wall:** *Timeline* acts as a social wall for users, showing all Yammer feeds and conversations across the intranet. Yammer has been a huge success, with users sharing content from around the world and discussing topics such as new showroom openings, new products, and reports from customer projects. Currently, 65% of users with regular PC access are on Yammer. This social sharing allows colleagues to get to know each other regardless of their office location.
2. **Posting Content:** Users are invited to post at the top of the page, with a simple invitation to "*write new post…*" in an open field. This simple prompt, followed by a *Post* button, makes sharing content simple and easy for even novice users. No intimidating form, rules, or processes — just a simple invitation to share. Clearly labeled buttons let users choose to share with the entire company or with specific people or groups within the organization. The tool also lets employees share pictures and video files directly to the Yammer Network.
3. **Posts:** Posts are listed with the most recent first. The author's picture and name are shown along with a timestamp, showing either the number of hours since content was posted (if it was posted that day) or the number of days since it was posted (if it was posted on a previous day). The number of likes and comments are also listed. At the bottom of each item, users can "like" or comment on the post, offering an easy way to introduce users to posting social content on the site. A "like" is easy to do, and responding to content via a comment can be much simpler than creating content to post. Such options can ease reluctant or unfamiliar users into using social tools.
4. **Commenting:** If comments exist for the item, the user sees the most recent comments, which can be liked or replied to.
5. **Views:** The side of the page lets users select which conversations to view, including everything in the feed, the most recent additions to popular conversations, or only conversations in which they are participating. Users can also view content specific to particular groups.
6. **Contributors:** Top contributors are shown on the side of the page as well, with the option to *Follow* or *Unfollow* them.

Translation

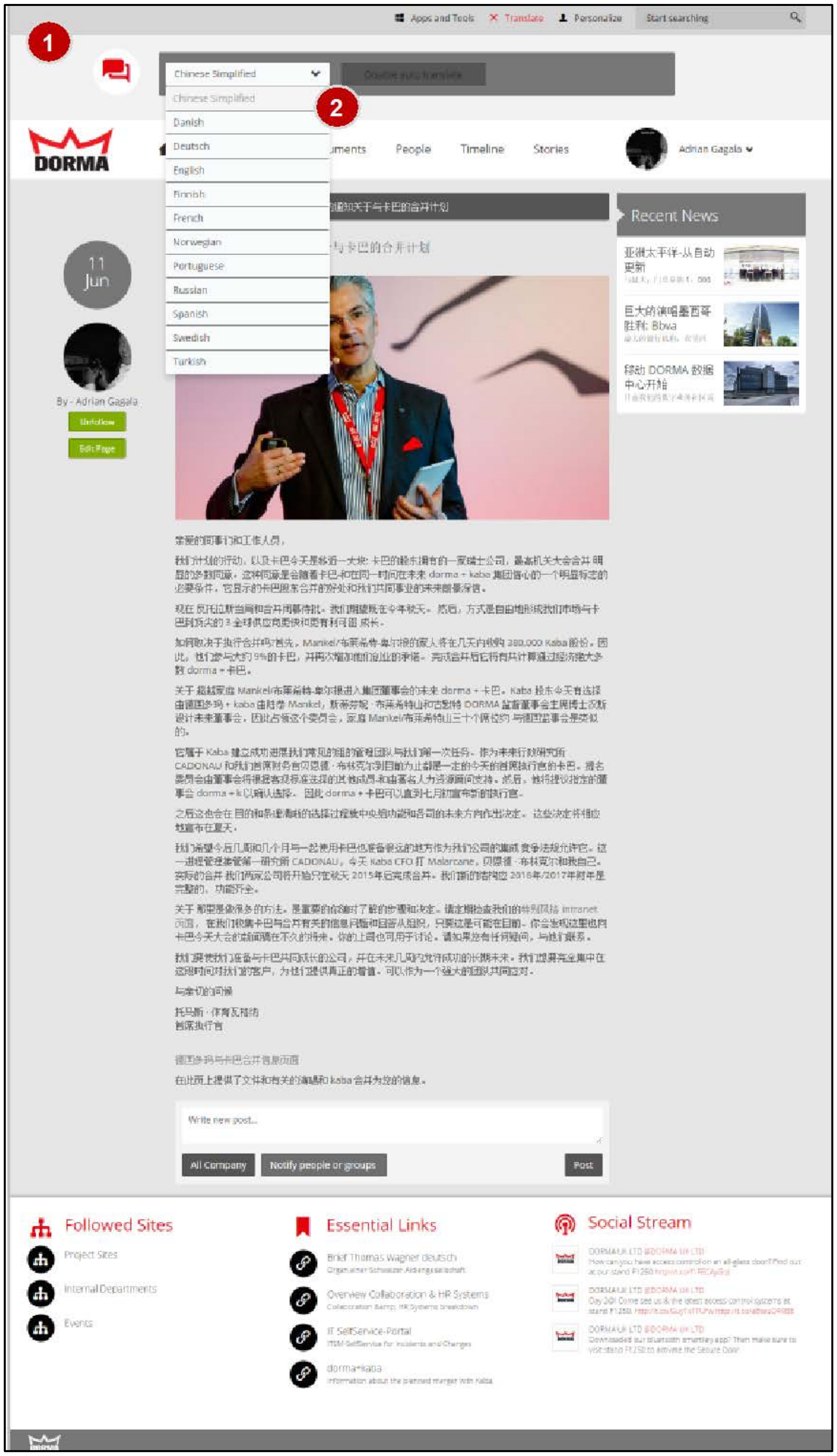


Image 4. DORMA Intranet: Translation.
54_DORMA_04_Translation_Live.png

Translation Highlights

1. **International Audience:** DORMA operates in more than 50 countries, so the intranet's audience is truly international. To support such a diverse audience, essential information — such as HR — is translated into various languages for employees. The social intranet also supports content in English, French, and German, so employees can post in their preferred language.

2. **Automated Translation:** Users have the option of translating other site content via a *Translate* link at the top of the page. When selected, a menu appears offering one-click translations into any of 12 languages: Chinese Simplified, Danish, German, English, Finnish, French, Norwegian, Portuguese, Russian, Spanish, Swedish, and Turkish. Only the article content is changed; the language used for navigation and page functions (such as links to *Post*) is based on user profile preferences.

   Although no automated translation is correct 100% of the time, the tool quickly translates content and is strong enough to give users a general idea of content that might not be available in their preferred language.

Mobile Highlights

1. **Boxy Design:** The boxy design of the intranet lends itself well to responsive design, where the boxes can simply be rearranged in a vertical orientation. The boxes also work well as larger touch targets for users on touchscreen devices.
2. **Hamburger Menu and Search:** Site navigation is accessed via a three-line menu (or *hamburger menu*) that appears in the upper left corner of the site. The search is available via a magnifying glass icon that appears in the upper right corner.
3. **Priority of Content:** Information appears in the same general order as on the site's desktop view, with news followed by videos, events, contributors, and documents. Because each section highlights only a few items, the page does not overwhelm mobile users on small screen devices.
4. **Consistent Content:** Using responsive design, the site delivers the same personalized content, information, and links in both the desktop and mobile views. The team did not edit the experience depending on the device.

Image 5. DORMA Intranet: Mobile Homepage.
55_DORMA_05_MobileHome_Live.png

Search

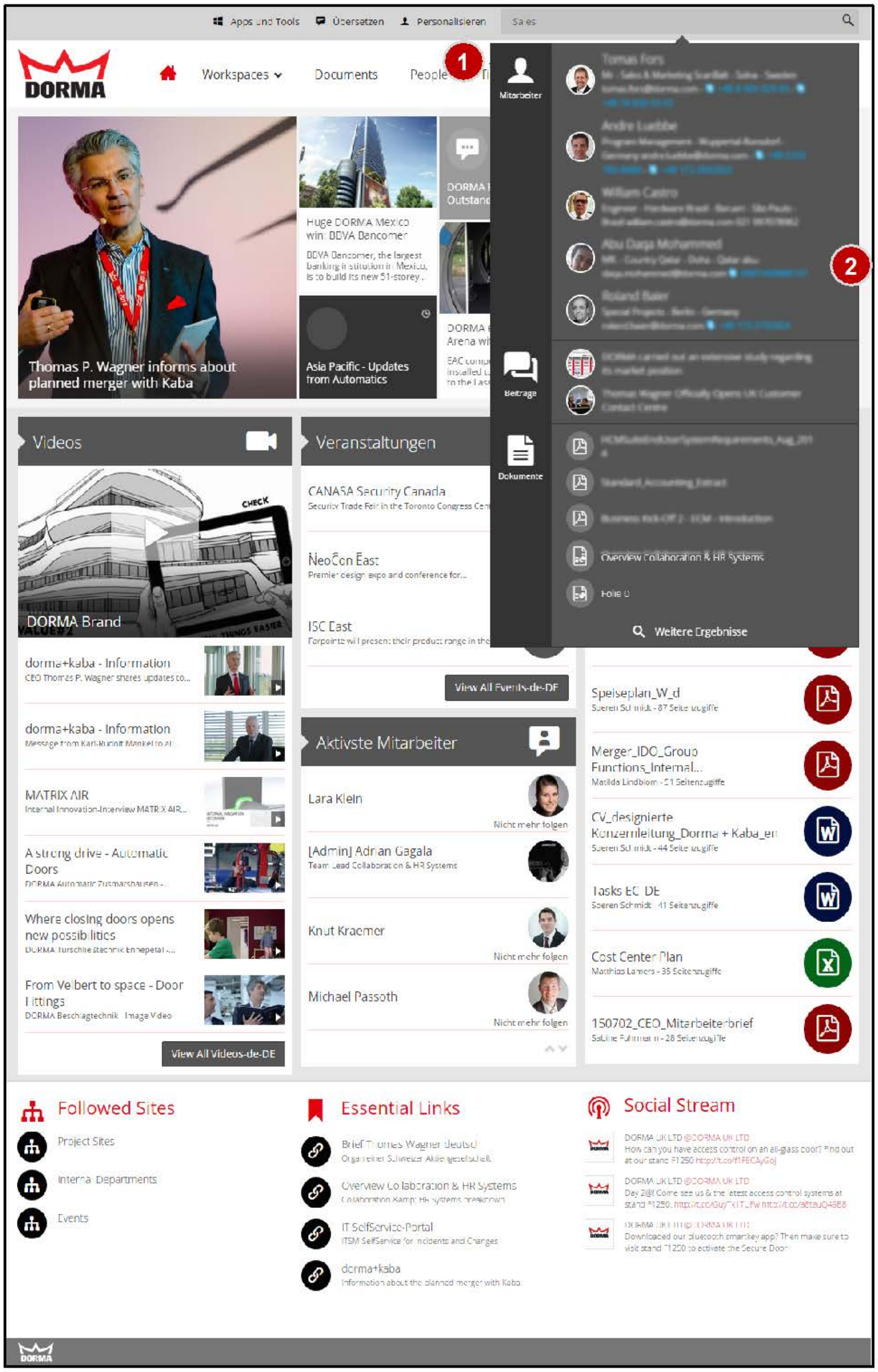


Image 6. DORMA Intranet: Search. *56_DORMA_06_HomeSearch_Live.png*

Search Highlights

1. **Search Box:** The search box appears in the upper right corner of every page of the site.
2. **Predictive Results:** The site uses Office 365/SharePoint for search. The search tool provides predictive results as the user types the query, displaying the top five hits from different categories, including people, blog/news, documents, and SharePoint sites. Each type of result is indicated on the left with a section heading. Results are differentiated with a black line between result types. Profile photographs accompany people results, images accompany social results, and document icons accompany document results.

App Launcher

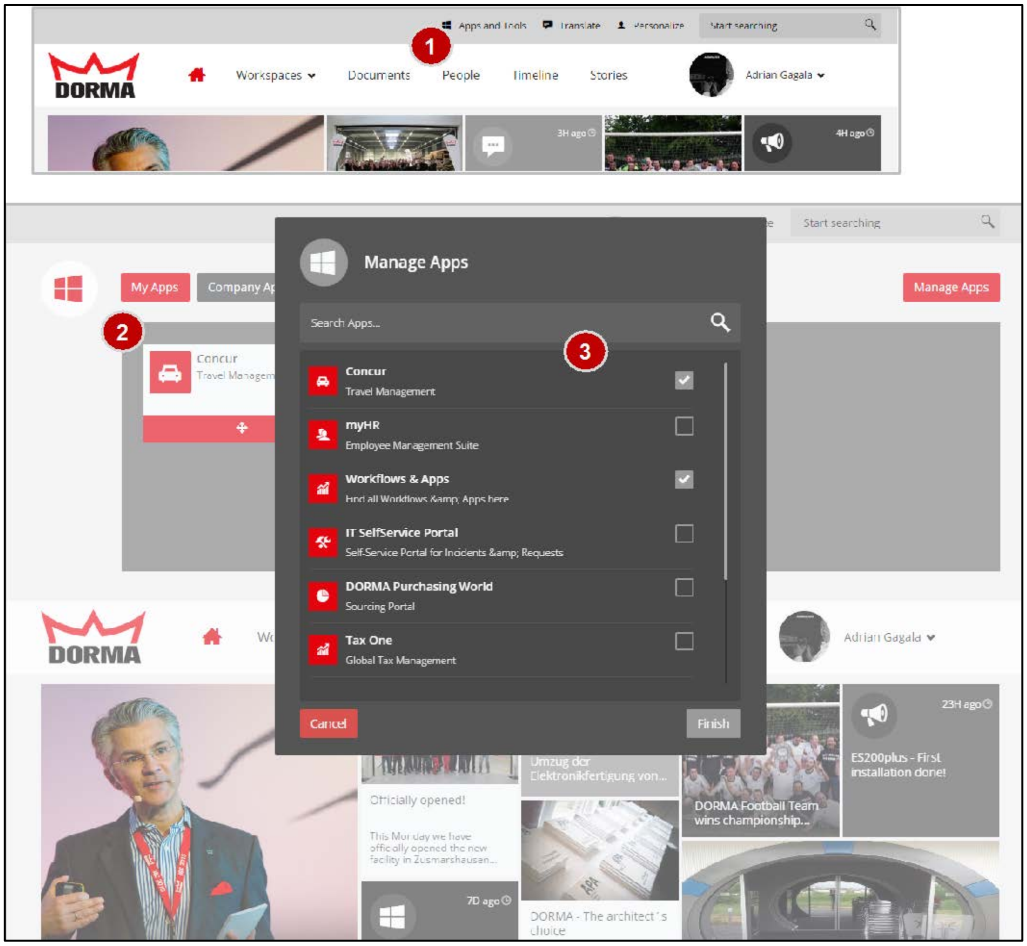


Image 7. DORMA Intranet: App Selection Tool.
57_DORMA_07_Apps_Live.png and 51_DORMA_01_Home_Live.png

App Launcher Highlights

1. **App Launcher:** The *Apps and Tools* link appears in the top bar of every page of the site. This link gives users access to any of 150 apps and workflows available through the site. The team used this approach to make the intranet the single enterprise portal through which all other digital tools are accessed.
2. **Personalized List:** Clicking the link opens a list of apps at the top of the page, divided into *My Apps* and *Company Apps*. Users can drag and drop application shortcuts around the customizable area to rearrange them, or add and remove apps via the *Manage Apps* button.
3. **App Selection:** The list of apps is searchable, so users can easily find the tools they need. Each app is indicated with an icon, app name, and brief description to help users find what they need.

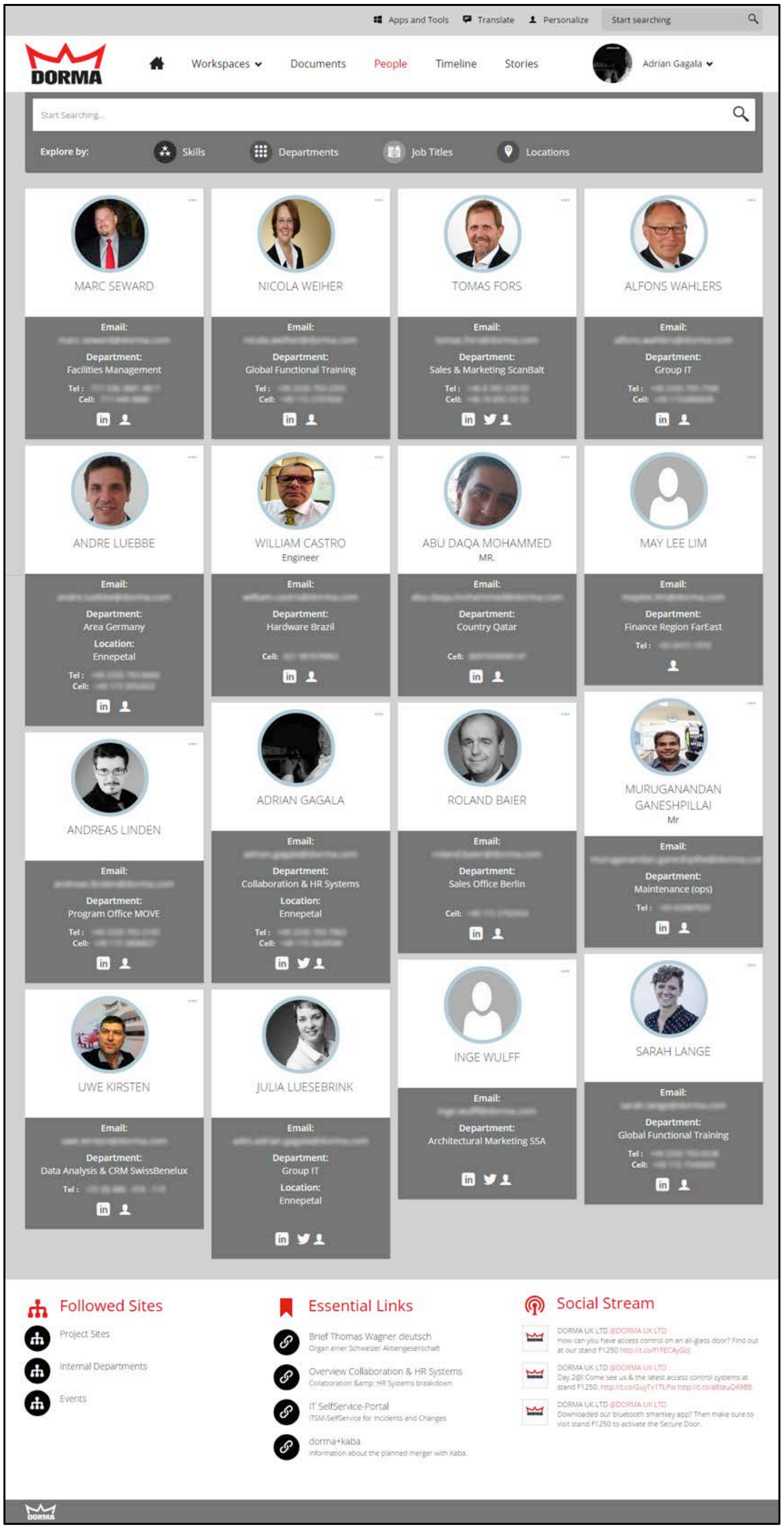


Image 8. DORMA Intranet: *People* Directory. DORMA's *People* directory rolls up all colleagues from across the business and surfaces key contact information immediately on the profile card. *58_DORMA_08_People_Live.png*

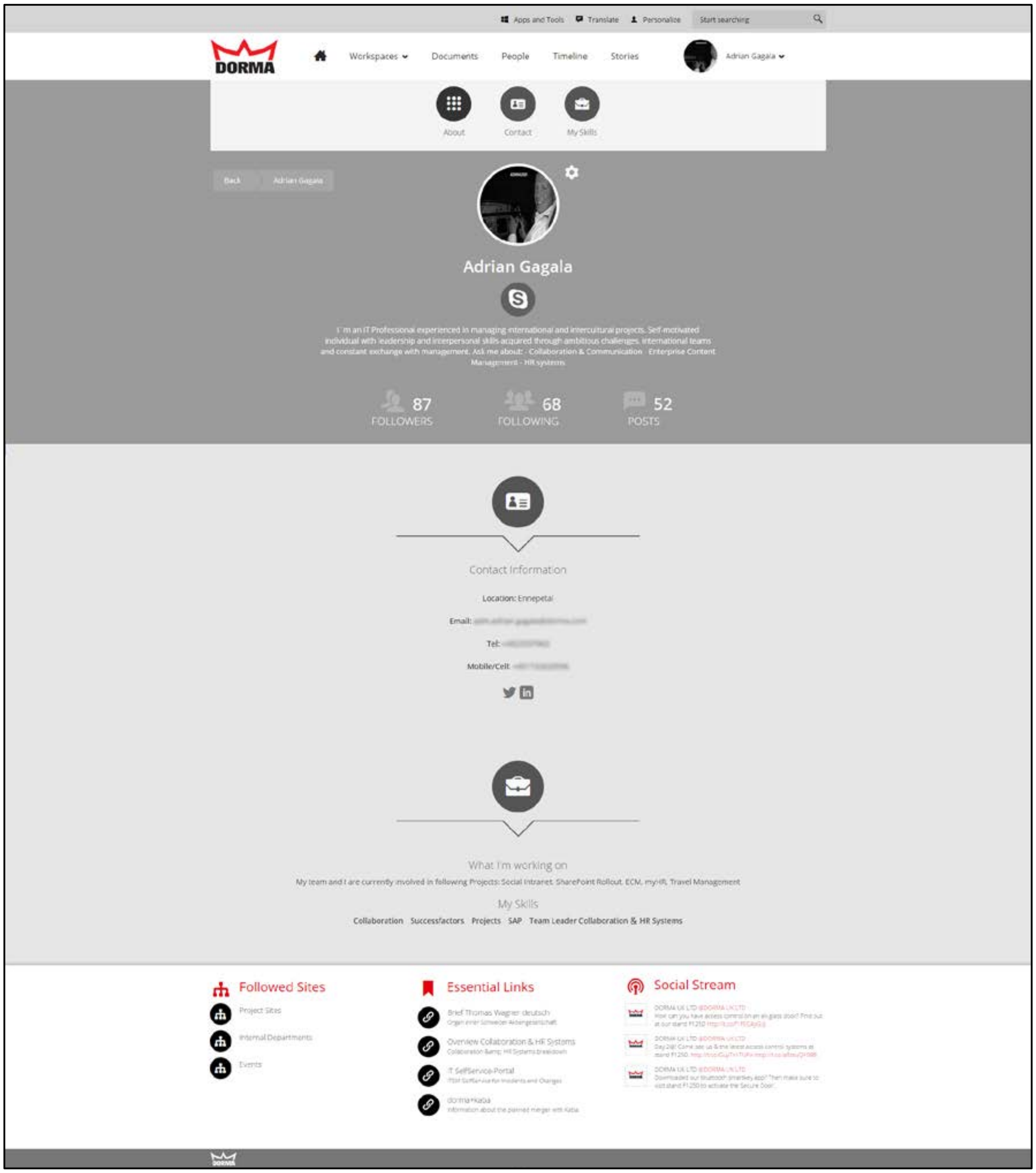


Image 9. DORMA Intranet: Profile Page. On the Unily profile page, users can showcase information about their skills, experience, and current work assignments alongside their contact information; the profile also includes a button for one-click Skype access for business calling.
59_DORMA_09_Profile_Live.png

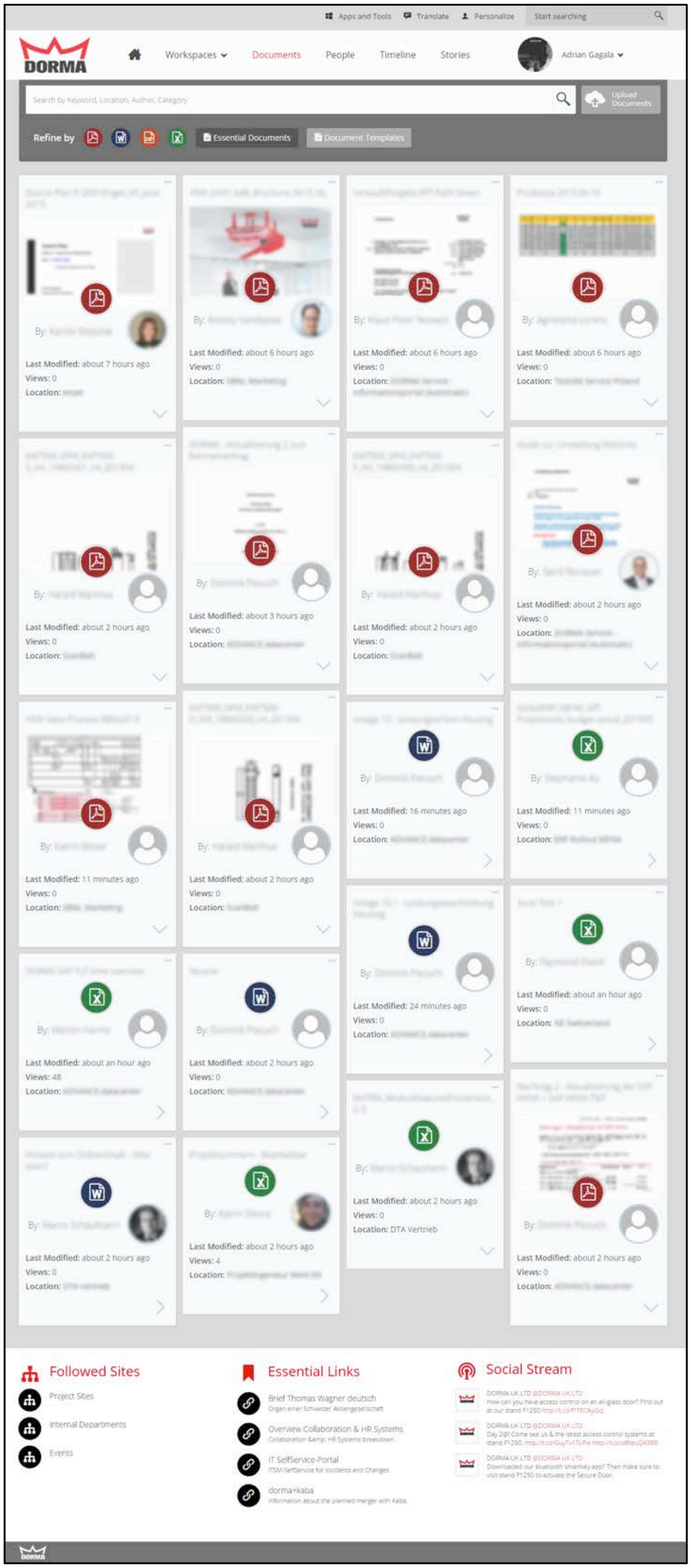


Image 10.
DORMA Intranet: *Documents* Library.
DORMA's *Documents* library shows users content from across intranet areas based on security access rights.
60_DORMA_10_Documents_Live.png

DESIGN PROCESS AND USABILITY WORK

Although the Unily solution is an Intranet as a Service offering, the Unily delivery model allows BrightStarr's consultancy and customer success teams to customize the solution to meet the requirements of each unique client. Thus, once DORMA had selected Unily as its platform of choice, BrightStarr engaged in six core activities to ensure the solution was delivered in the best way possible for DORMA's business:

- **Technical engagement:** The first element of this engagement was to ensure that DORMA's technology environment was correctly setup to deploy the Unily solution. This included establishing the single sign-on functionality (including Yammer) and synchronizing the domain user identities with Office 365.
- **Usability testing:** The team ran usability testing in workshops in an effort to understand the user groups and personas of DORMA's intranet users. Team members set out to understand and analyze things such as usage patterns and common behaviors through user journey mapping, and also sought to understand device usage and other key factors. Headquartered in Germany, DORMA has a unique culture and is also somewhat regulated in line with German workplace legislation; ensuring that technology met certain workplace requirements was thus essential to the project.
- **Content strategy:** At the start of the project, DORMA lacked a significant content strategy. The second phase of BrightStarr's engagement with project leaders and stakeholders was therefore devoted to helping them build a content structure and process that aligned with their organizational goals. This included helping DORMA segment target audiences, identify the purpose of key communication channels, define content types, and outline strategies for driving intranet adoption.

  DORMA had recently embarked on an effort to improve communication across the organization, focusing on improving content quality, increasing contributions and engagement of all employees, and creating a more global and transparent communication environment within the organization. The new communication strategy focused on identifying, training, and supporting Communication Heroes who would be instrumental in developing the new strategy and delivering its core elements. These Communications Heroes would be supported by cutting edge technology and the ability to distribute targeted, on-brand corporate news. To increase engagement, DORMA's users would be able to customize their own news stream and be given a news platform that helped them meet their local language requirements.

  The design of Unily's targeted smart feed, combined with the intuitive design of Unily's CMS system, made all of these options possible.

- **Enterprise Social:** DORMA wanted to introduce a raft of new communication functionality to its new intranet solution by including Yammer enterprise social. DORMA was acutely aware of both external and BrightStarr research on the need for a planned, governed use of social tools to drive intranet success. BrightStarr thus worked closely with DORMA to explore how Yammer could be integrated with Unily; the agency also carried out a social journey planning exercise to define priorities and use cases.

  The planning exercise involved working with end users to identify potential use case scenarios and to highlight the added value of social communication alongside existing collaborative functionality.

- **Branding:** Following the presentation and discussion of Unily's branding capabilities, it was found to meet the vast majority of DORMA's branding requirements. The platform fully supports the application of custom branding.

  BrightStarr's designers produced first-stage designs in line with DORMA's brand guidelines. Following an initial design review, several adjustments were made to ensure that the user experience perfectly reflected the company's external brand presence. These adjustments included adding sharper edges, using the DORMA red in pivotal locations to accentuate feature design, and incorporating specific DORMA icons.

- **Custom Developments:** Unily's development aligns with an understanding that 80% of requested intranet functionality is similar, if not the same, across clients of all sizes in all industries. It is the remaining 20% of functionality that makes each solution unique to the business for which it is being developed. This "80–20 rule" inspired the Unily Intranet as a Service solution; it delivers the 80% rapidly across the cloud, but is also highly customizable and configurable to reach the 100% fit that is so often sought after.

  For DORMA, the 20% customization came through the following elements:

  - Multi-lingual functionality across news content and the wider site
  - The ability to create more dynamic rollups of SharePoint subsites, such as sites that the user is a member of or that the company recommends
  - The ability to create a *My Links* rollup within SharePoint subsites
  - Search functionality within the *Workspaces* drop-down menu
  - Development of unique site templates
  - Additional consultancy around structure, governance, best practices, and adoption

These custom elements were delivered in line with BrightStarr's existing delivery methodology: the *Kinetica process*. This process involves extensive requirements gathering to identify client requirements. For each element of requested functionality, BrightStarr engaged in persona mapping and use case testing to ensure the functionality developed would add maximum value for DORMA.

Certain requirements that DORMA requested were identified as holding significant value for all Unily customers and were added to Unily's customer-led roadmap. This roadmap of new features is a part of Unily's customer success program; the product's evolutionary nature allows BrightStarr's community of Unily clients to guide how the platform grows alongside their businesses, completely free of charge.

For example, BrightStarr recognized the wider value of DORMA's request for a localization framework and multi-lingual translation functionality, so it enhanced the platform accordingly and rolled it out to all of its UNILY customers.

Getting Buy-In

Getting early buy-in from key leaders can be the difference between an intranet project's success and failure. The DORMA team aimed for buy-in from top management right from the start. With the CEO as a promoter and power user of the new intranet, it was quickly accepted throughout the company. Additionally, the team enlisted colleagues from one of DORMA's regions to form a pilot group and provide a decentralized perspective on the project. This helped the team focus on the needs of the company at large rather than just its headquarters.

This early focus on achieving broad input helped set the tone, shifting communication from a top-down approach — that is, talking to employees — to creating conversation among employees. "It's great to see how fast this tool has been accepted by colleagues around the world," says Gagala.

It also helped that the site was launched in tandem with two major company events, immediately supplying the intranet with many curious users.

To support those early users, the team provided video tutorials in English and German, explaining each of the intranet's new functions. At approximately two minutes, these videos are long enough to explain single functions in detail and short enough keep the audience interested. The videos also allow for user commenting. As part of the launch activities, the team placed a direct link to the video tutorials on the homepage.

In addition to video tutorials on the social content, the team also provided social etiquette tips, reminding users about the dos and don'ts of the platform.

WORKING WITH OUTSIDE AGENCIES	
Agency	**Project Role**
BrightStarr A user experience, design, and research consultancy focused on SharePoint Office 365 Azure and Yammer	• Designed and built Unily Intranet as a Service around industry best practices and the very latest Microsoft enterprise technology • Branded, customized, and deployed DORMA's solution and provided consultancy before and during solution deployment • Post-launch, the organization delivers ongoing success consultancy and full technical support, as well as delivering Unily's customer-led roadmap of new features to DORMA's Unily intranet, keeping the platform in line with industry best practices and the latest and greatest feature releases from Office 365

GOVERNANCE

The DORMA Social Intranet is owned by Group Communications, which developed a communication and collaboration strategy along with the IT department. Ongoing development is being done with input from the company's Communication & Collaboration Council, which brings all relevant stakeholders together.

Having a strategic owner on a group level has been critical to the site's success. "When launching a new system that combines a global and local approach, it is extremely important to create clear rules for the usage of this common platform," says Gagala. "We defined a governance classification for both content and technical responsibility within the intranet, giving users a clear understanding of who is in charge of certain elements on homepage-level and within our collaboration spaces (global, local, department, team, and project sites)."

All local entities can use personalization settings to refine information to their specific local needs. Group information is marked with "all company" and is visible to all users, regardless of their personal selections.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Global Executive Committee (GEC)	• Serves as the executive-level champion for the solution. The executive sponsor's primary responsibility is strategic, positioning the solution as a critical mechanism for achieving business value and helping communicate the solution's value at the management levels of the organization.
Business Owner	• Manages the overall design and functional integrity of the solution from a business perspective. The business owner does not have to be an IT expert; however, for intranet solutions, the job function includes responsibility for internal communications.
Communication & Collaboration Council	• Serves as the governance body with ultimate responsibility for meeting the goals of the solution. This council is typically comprised of representatives from each of the major businesses the solution represents, including Corporate Communications, HR, and IT. The council is chaired by the Security Officer and the Collaboration Officer?
Collaboration Officer	• Manages the overall design and functional integrity of the solution from a holistic perspective, including the Office 365 environment, search, and permissions. Works in partnership with the business owner to ensure that best practices are followed and that the appropriate features are applied in individual sites or site collections.
IT	• DORMA established a system to implement roles and responsibilities (6-Box Matrix). The matrix ensures collaboration between Group IT and Area IT. This matrix will be delivered for each subservice of Global Collaboration (basic collaboration, intranet, workflows, and apps).
Communication Heroes	• Support the organization's successful deployment and adoption of the intranet by sharing best practices and lessons learned in a Community of Practice team site. Members serve as SharePoint advocates and change agents.

Site Owner	• Serves as the centralized, primary role for ensuring that content for a particular page or site is properly collected, reviewed, published, and maintained over time. Site owners are likely to need to learn about SharePoint and Office 365, but their primary expertise is business focused.
Site Key User	• Manages the site day-to-day by executing the functions required to ensure that content on the site or page is accurate and relevant. Key Users act as content stewards for their sites.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	• https://dormaworld.mydorma.com
Default Status	• The intranet is set as each user´s homepage on a global level, but users can change the setting on their own devices.
Remote Access	• When users are outside the corporate LAN, they can connect to the intranet through two-factor authentication.

TIMELINE

PROJECT MILESTONES	
Milestone Date	**Milestone Description**
2000	• DORMA's first intranet implemented
2006	• DORMANet Central Europe launched
2012	• DORMAworld launched
September 2014	• Approval to build a social intranet, with a launch date set for January 2015
October 2014	• Project kick-off meeting
December 2014	• Pilot phase
January 2015	• Global launch of DORMA Social Intranet
Overall redesign time frame: 60 days	

CONTENT MANAGEMENT

CONTENT MANAGEMENT	
Contributors	• DORMA created a contributor network called “Communication Heroes.” This network unites all content creators around the globe and is supported by the Group Communication Team. Communication Heroes come from across the organization, including people from HR, IT, operations, and administration functions, and all of them contribute their skills. Currently, most of the 40 heroes have an HR background. All Communication Heroes’ activities are performed in addition to their regular jobs. • Contributors from around the globe provide content in the social feed.
Contribution	• The Communication Heroes meet virtually once a month. Their contributions help make local stories accessible to a global audience. To guarantee a smooth transition from the old to the new environment, the Communication Heroes of the Area NEE (North-Eastern-Europe) were part of the social intranet’s pilot phase and contributed a local entity’s viewpoint to this global approach.
Training	• All Communication Heroes are brought on board through a recorded virtual meeting, which is accessible to all other existing or new program participants. The intranet team also recorded video tutorials to explain all functionalities that Communication Heroes use and to demonstrate how to create content in the system.
Management	• The social intranet approach allows the Communication Heroes to create their own stories based on the Communication Heroes Guidelines. Because there are no approval workflows for news articles, team members can deliver content directly without delays.
Maintaining Quality	• The Communication Heroes Guidelines are a good foundation for helping program participants maintain content quality. In general, each Communication Hero is aware of all published stories and won’t publish anything twice.

Culling Content	• A cleanup was performed during the last launch of the classic DORMAworld intranet. The team decided to migrate over all existing stories from 2011, so that new employees could review all content associated with the company's DORMA2020 strategy program from the beginning. This also gave the team the opportunity to directly highlight the search functionality from day one.

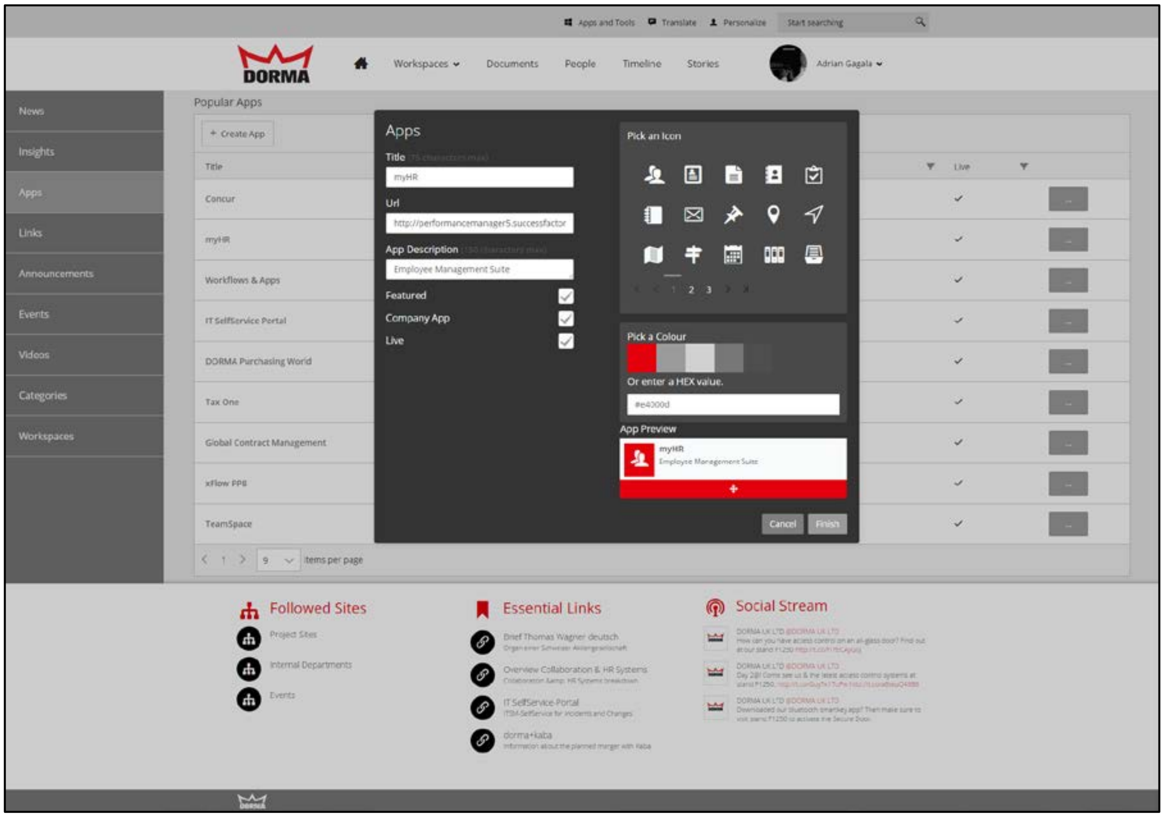


Image 11. DORMA Intranet: CMS Interface With App Creation Tool Open. The unique overlay on top of SharePoint CMS makes creating and managing content quick and easy. The open tool shown here helps users edit or create new apps for the MyApps hub. *61_DORMA_11_CMS_Live.png*

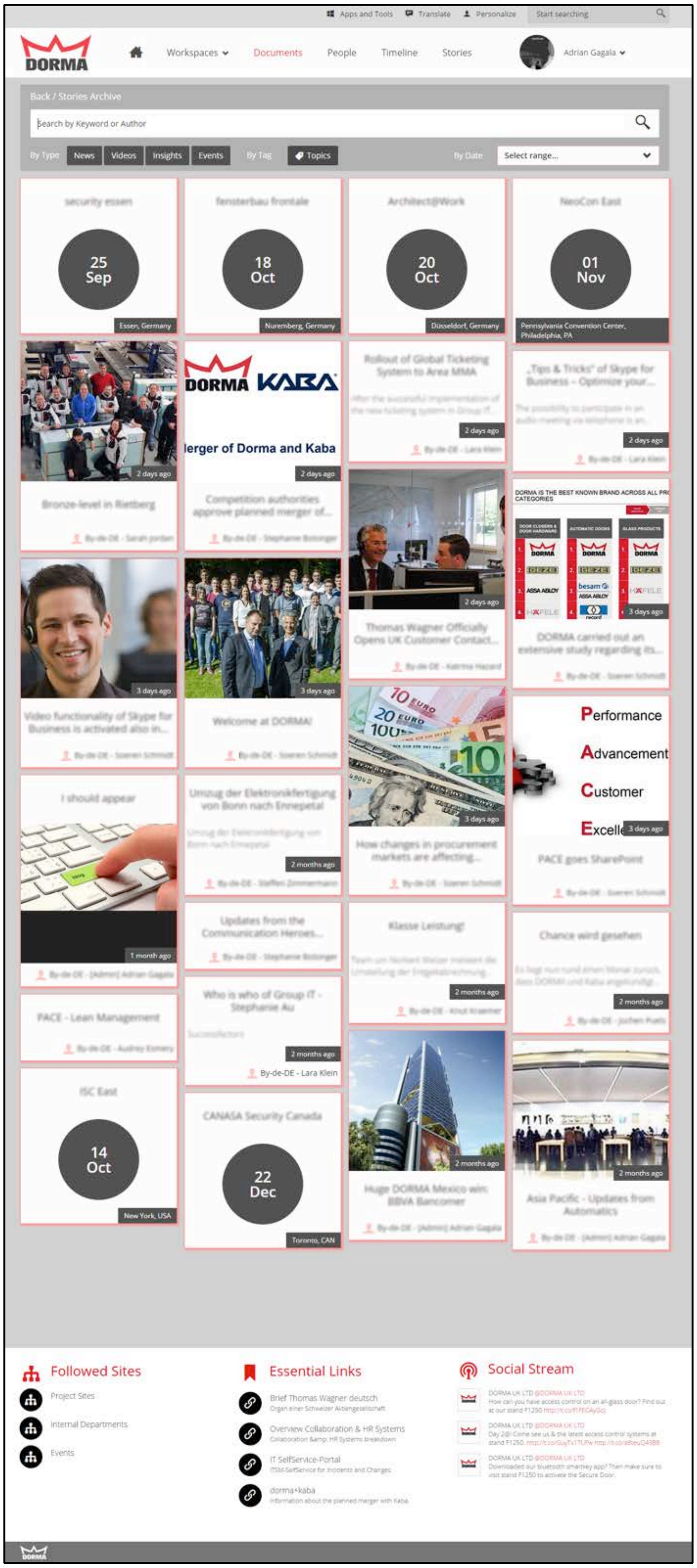


Image 12. DORMA Intranet: Content Archive. If users navigate to the *Stories* tab and then click the *view all* button at the bottom of a content stream, they will navigate to the content archive, which consists of an infinite scroll rollup of all content. *62_DORMA_12_ContentArchive_Live.png*

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and Operating System	• Office 365/SharePoint Online, Azure
Bug Tracking/Quality Assurance	• Team Foundation Server (TFS), Freshdesk
Design Tools	• Photoshop; Illustrator
Site Building Tools	• Visual Studio, SharePoint Designer, Dreamweaver
Content Management Tools	• SharePoint
Search	• SharePoint
Other Functions	• Yammer, OneDrive, Skype for Business, Microsoft Translator

RESULTS AND ROI

The key goal driving implementation of the new social intranet was to broaden the intranet's reach. Metrics from the existing system showed that access rates to news articles were lower than expected, especially for the international audience.

"The team's approach was aimed directly at improving the bandwidth of communication reachability," says Gagala. "And we did. On average, we now have 570% more clicks on news articles per month and participation (in Yammer) of 65% of all users that have access to a PC.

"These are incredible numbers," he says. "That makes us really happy. People started to interact with content directly from day one, and the activity on Yammer is a blast."

Valuable content is now being shared around the world, including information about new showroom openings, new product information, and reports from customer projects. And, most important, conversations are occurring among employees, who are getting to know their colleagues from around the globe.

Unily's native analytics engine tracks metrics for DORMA's intranet, recording everything from the devices used to access the intranet to which country users are from and the time and day of access.

LESSONS LEARNED

A few key lessons from the DORMA team:

- **If you build it, they will come — as long as it contains interesting content.** "Having the social intranet completely open right from the start worked out surprisingly well. Remember, we did not have the chance to deliver classic classroom training to all our employees due to the limited time frame available, which made us realize you have to believe in the power of social. Launching the system directly before two major events provided the secret sauce: interesting content. Having interesting content created the momentum to get the system rolling from the first day."
- **You can't really train social.** "People made use of the social features quite intuitively. Very little guidance was needed."
- **Social is just the tip of the digital workplace iceberg.** "Implementing a social intranet is not a sprint; it is an enduring race with a lot of stages. We strongly believe that this first stage is just the foundation of our digital workplace of the future. Predictions say that business will change within five to 10 years from now. All businesses will need to be highly agile and collaborative; in other words, they will have to be more social. In 2020, Millennials will represent approximately 40% of the workforce. We will see an increased globalization and completely new ways of working. Increasing technology will not mean we work fewer hours; it will mean we stay more connected. There will be 'core teams' working around the globe and information will move incredibly fast. Exciting times! We believe that the social intranet will become our digital companion in the enterprise."

Goldcorp, Inc.

OVERVIEW

COMPANY

Goldcorp is a leading gold producer focused on responsible mining practices with safe, low-cost production throughout the Americas.

Headquarters: Vancouver, British Columbia, Canada

Company locations: Goldcorp has offices in Vancouver, Toronto, Mexico City, Guatemala City, Barbados, and Buenos Aires. The company operates four mines in Canada, two in Mexico, and two in Central and South America.

Locations where people use the intranet: The intranet is used at corporate offices and mine sites around the world.

Annual revenue: $4,37 million in 2015 (USD)

THE INTRANET

Users: Approximately 5,000 users in offices around the globe. Users come from every functional area and department. Not all employees and contractors have access to the intranet, as most of the workforce is in the field and has no network access.

Mobile approach: Responsive web design

Technology platform: SharePoint 2013

TEAM

Design team members:

Goldcorp

Executive sponsors: Charlene Ripley, EVP and General Counsel; Luis Canepari, VP of Information Technology; Christine Marks, Director of Corporate Communications

Intranet team (project): Jose Szücs, Project Manager; Damon Sas, Business Owner, IT; Kathryn Gendall, Business Owner, Communications; Mumtaz Chaudhary, Change Management Lead

Intranet team (ongoing): Paula Grimsmo, Conveyor Manager; Jaime Chica, Business Analyst and Workflow Specialist; Mischa Krawzow, Senior Systems Analyst; Luciano Campana, Support Analyst and Mexico City Team Lead; Enrique Gamboa, Support Analyst; Kathryn Gendall, Manager, Internal Communications; Damon Sas, Director, Enterprise Technology Services

Habanero Consulting Group

Design, development, and support: Chris Radcliffe, Project and Strategy Advisor; Melanie Gabanna, Lead Intranet Consultant and Change Management Support; Toni Albert, Project Manager; Benedict Ng, Lead Interaction Designer; Bradley Smith, Interaction Designer; Cameron Sielski, Business Analyst; Christopher Parsons, Front-End Developer; Dan Beck, Workflow Developer; Daniel Rotenberg, Technical Analyst; David Evanochko, Front-End Developer; David Webb, SharePoint Developer; Elena Rosu, SharePoint Developer; Jan Groenendijk, Lead Workflow Architect; Lara Beaton, Quality Assurance Specialist; Larry Lau, Solution Architect; Mischa Krawzow, Technical Analyst; Oleg Bystrov, Infrastructure Architect; Sal Belal, SharePoint Developer; Stephen Brown, Quality Assurance Specialist; Thomas Laehren, Quality Assurance Specialist; Michael Champion, Project Coordinator; Lori Sokoluk, Project Manager

INTRANET TEAM

Goldcorp team members shown here (in person, left to right): Jaime Chica, Jose Szucs, Kathryn Gendall, Damon Sas, and Paula Grimsmo; (on screen, left to right): Mumtaz Chaudhary, Enrique Gamboa, Luciano Campana, and Mischa Krawzow.

Habanero team members shown here (in person, left to right): Sal Belal, Jan Groenendijk, Melanie Gabanna, Cameron Sielski, Stephen Brown, David Webb, Elena Rosu, Lara Beaton, and Larry Lau; (on screen, left to right): Oleg Bystrov, Chris Radcliffe, Dan Beck, Christopher Parsons, Daniel Rotenberg, Bradley Smith, and Toni Albert.

HIGHLIGHTS ABOUT THIS WINNER

With a focus on responsible mining practices and improving collaboration across departments, the intranet team set out to create a new design to replace the collection of 13 corporate portals, each of which was dedicated to a specific mine site. This new company intranet, Conveyor, succeeded in unifying employees with its detailed information about safety and sustainability; it also successfully consolidated information from multiple sources, making it easy to find and digest. The site supports Goldcorp's 5,000 information employees working above and below ground, in offices and mines alike, throughout Canada and Latin America (LATAM). The site offers helpful applications, thorough news and communication, and polished color tones that gild it in more ways than one.

- **My Goldcorp, a digital workplace hub.** Employees can access tools on the intranet, including tools that are not part of Conveyor or SharePoint. The intranet thus lets employees navigate to all of Goldcorp's available resources.
- **Multi-language.** To best support employees around the world, Conveyor is available in all three languages spoken at the organization: English, French, and Spanish. Users can change the language for the global content, so users working in an English-speaking location can switch to Spanish, for example.

- **Applications, consolidated in one place.** Several workflows were mapped and analyzed, and sometimes linked with other tools. The workflows include smart features, such as the ability to start the work offline and continue it later online. For example, an application for employees who work in a mine can work underground, without an internet connection, then sync content with the intranet once the workers resurface. These applications are consolidated in one area that can be sorted, filtered, and searched, making it easy to find the right application.
- **Simple navigation and page flow.** Conveyor consolidates content into five hubs: *News*, *Safety*, *Sustainability*, *Policies and Procedures*, *My Goldcorp*, and *Departments and Teams*. Menus are clearly labeled and visible, positioned across the top and down the left on desktops (and collapsed on mobile). Pages are laid out in sections, making them easy to scan.
- **Consistent color palette.** A site with consistent page design is more pleasurable for users to navigate. Conveyor uses a simple, consistent color palette throughout, with appropriate gilded touches.
- **Responsive design.** Given the importance of mobile use to many Goldcorp employees, designers took great care to make each page appropriate for and easy to use on desktop, mobile, and tablet devices. The intranet is fully responsive, but designers didn't sacrifice the space used on the desktop so that its design would work for mobile; instead, they made many UI changes to accommodate the different devices.
- **Global and local news.** A wide variety of news — global and local — engages, informs, and entertains employees. Search, topics, and filters help people narrow down the articles to those they are most interested in.
- **Safety.** With safety being of utmost importance at Goldcorp, the intranet team devoted a whole site section to it. The *Safety* section includes key contacts, news, videos, and more, giving employees many options to stay informed about this important topic.

BACKGROUND

Goldcorp wanted to upgrade Conveyor to a newer version of SharePoint and revamp its intranet to meet the following goals:

- **Target communications across geographies.** Many big organizations share common internal communication and collaboration struggles because their employees are spread across large geographic distances. That spread often makes it difficult for employees to feel engaged and connected, as communication can often feel unrelated to their local needs — if it reaches them at all.

  Goldcorp experienced this with its previous intranet. That version of Conveyor was made up of 13 separate portals; this created a great experience at the mine level, but made overarching corporate communications difficult. Key corporate messages from the Goldcorp leadership were not always displayed consistently across the 13 portals. The design team thus had a big opportunity to create an intranet that would provide the same baseline of communications content across Canada and LATAM, as well as give users the ability to target content based on role or geography.

- **Create a unified collaboration experience.** Goldcorp wanted the revamped Conveyor to encourage faster, simpler, and more effective collaboration. It also wanted to decrease the number of team and collaboration sites across the intranet and simplify the 13-portal structure under one global navigation scheme. The goal was to create a single, meaningful experience for all employees. Thus, collaboration capabilities had to support each language group within Goldcorp, especially for the team site directory, intranet content, and the global navigation.

- **Provide a mobile experience to engage employees on the go.** Arguably the biggest incentive for Goldcorp to redesign Conveyor was the fact that the new platform would let the organization create a modern, responsive mobile experience. The existing intranet was available to users through the web browser on their mobile devices, but it was not responsive and was almost impossible to navigate on a mobile device.

  Because Goldcorp operates across the Americas, many users are often travelling or otherwise away from their desks. A responsive portal creates communication efficiencies and reduces the need for people to check the intranet only while in the office.

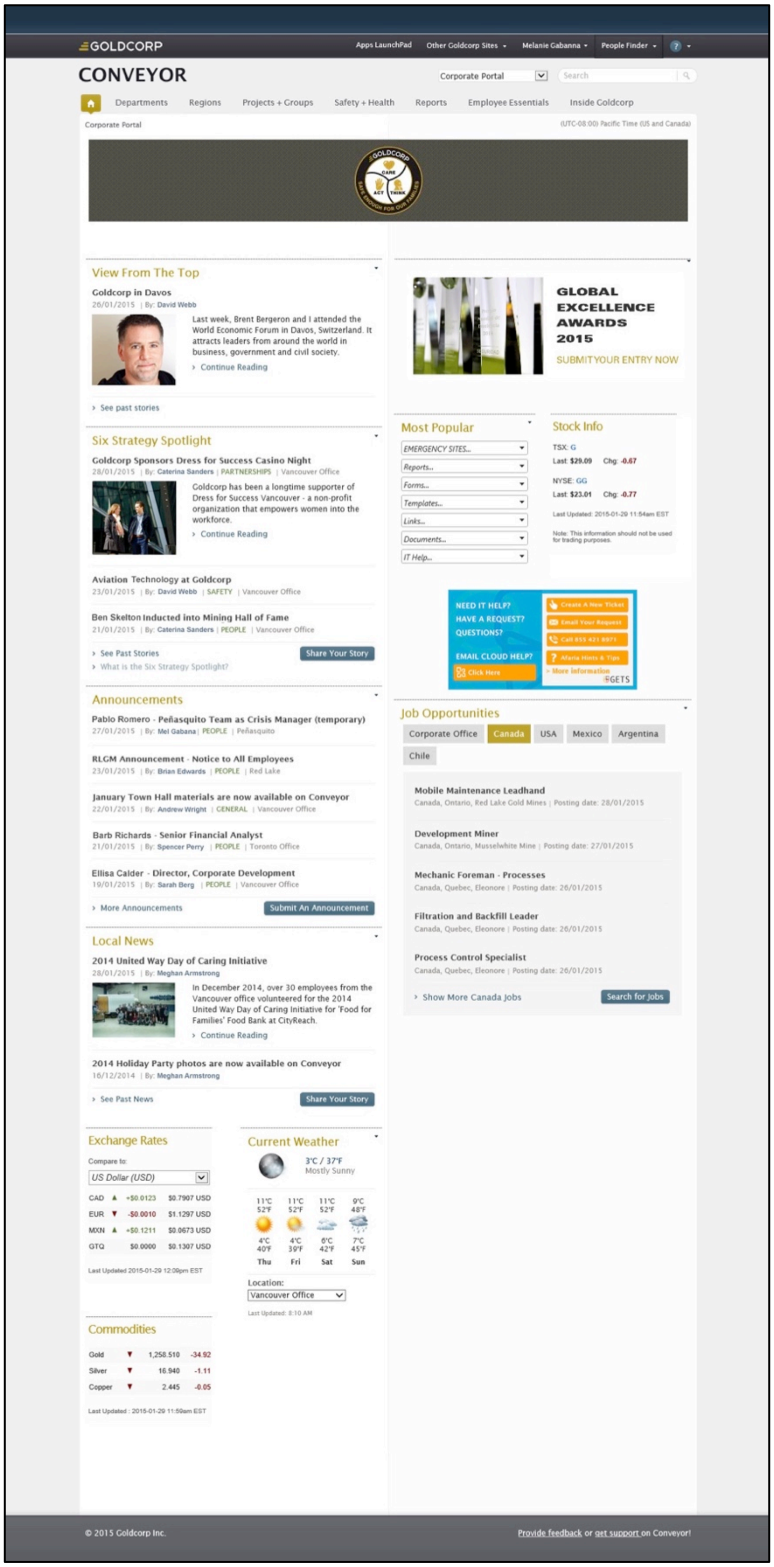
- **Build a new digital workplace in SharePoint 2013.** Like many organizations, Goldcorp had invested in SharePoint many years ago and, over time, a collection of intranets evolved — in Goldcorp's case, one for each of its (at that time) 13 mines. While each intranet shared a common look and feel, each had a unique navigation structure and collaboration approach. This made it difficult for employees to know how to find information across intranets, and it greatly eroded the intranet as an enterprise-wide communication channel. In effect, the intranet offered no single location where Communications could publish news and have confidence that it would surface on each employee's radar. The old intranet also suffered from duplication of information; the same documents — especially policies and procedures — were often stored in various locations and on various portals.

  With the new intranet, Goldcorp hoped for a digital workplace hub that would bring together the disparate systems employees access each day, including SAP, SuccessFactors, Concur, and IT help request. Further, the company's shift to Microsoft Exchange Online for email provided an opportunity to integrate email and calendars with some elements of the portal, providing a more cohesive experience between two integral communications tools. This focus would also address shortcomings in user adoption. The previous solution had several power users across the company, but the average user was not taking full advantage of Conveyor's capabilities. Giving employees a simple "one stop shop" for all the documents, sites, and applications they use regularly will go a long way toward driving long-term adoption and will increase the intranet's value.

- **Standardize and manage permissions across the intranet.** Goldcorp wanted to move permissions for documents and collaboration sites out of IT and into the business units responsible for creating and managing that content. As it was, IT was granting and managing permissions to content it did not own; moving that content to the responsible business units would improve how Goldcorp managed information and, in particular, how it managed access to sensitive information. Goldcorp also wanted to set permissions in a way that let users see which team sites existed, regardless of whether they had read or edit permissions. This would promote information awareness in the organization, manage risk, and reduce the duplication of sites and content.

- **Improve governance.** With the previous intranet, the accountability and governance approach did not enable proactive, business-led enhancements and overall strategic direction. With the new design, Goldcorp wanted to maximize the intranet investment with a governance strategy and team structure that would improve every intranet-related aspect of the organization.

- **Manage enhancements and growth with user feedback.** Prior to this upgrade, it was not clear how requests for additional functionality were surfaced and managed. In the new solution, Goldcorp hoped to create a mechanism to facilitate the generation of new ideas for Conveyor and have a cross-functional governance team address, approve, and communicate intranet changes based on user feedback. This structure would demonstrate that the portal is valuable for any role and that employees can help shape the intranet's direction.
- **Improve key areas.** The intranet upgrade was aimed at several key areas in the portal and in Goldcorp in general, including
    - Internal brand consistency
    - Analytics and measurement for the intranet (the previous solution had no built-in analytics)
    - Awareness of internal communications and intranet content
    - An upgrade of the current video solution within the SharePoint portal (the previous solution was built in 2008 and did not offer high-resolution, downloadable content)



Pictured: Goldcorp Intranet Old Homepage. The previous version of the intranet had no targeted content, and each mine had its own portal instead of being a part of a global intranet. *Goldcorp_01_previous conveyor_before.png*

Challenges

The team faced many challenges in building the new intranet, including the following:

- **Changing the perception of Conveyor.** Conveyor had grown quickly, with no single owner or governance structure. As a result, it was infamous for being slow, difficult to navigate, and impossible to search. One of the project's biggest challenges was to get support and buy-in from across the organization for the idea that revamping Conveyor would add value to the business rather than simply make a dysfunctional system look better. Sharing the prototype early proved useful in convincing many of the skeptics; however, it also created another challenge: as the enthusiasm grew, so did the project's scope.
- **Low adoption in the LATAM region.** Conveyor had been well adopted and utilized in Canada, but among the company's LATAM employees, adoption and utilization were extremely low. The project team spent a lot of time working with leads in this region to promote Conveyor and offer training and workshops in Spanish. The day-to-day operations team is now based in both Vancouver and LATAM and includes team members who are fluent in Spanish. This has made a massive difference to Conveyor's adoption and utilization in LATAM.
- **Managing scope.** With 13 portals and 5,000 users, there was no way to make all the changes users wanted. In the discovery and design phase, representatives from across the business were interviewed, and each had his or her own set of requirements. Creating a solution that addressed the majority of the requirements in a way that ensured on-time and on-budget delivery meant postponing, removing, or re-engineering some requested features to fit the project's scope. As a result, the project team had to consistently communicate and manage business expectations.
- **Training.** During the previous upgrade of SharePoint 2008 to SharePoint 2010, training had been offered post go-live and consisted of weeklong training sessions. These sessions had been poorly attended and were too complex for average users. As a result, during this project's research and design phase, training emerged as a common need. The team's goal was to train as many users as possible on the system before the go-live date and to create shorter, simpler training modules targeted at specific user types. The challenge with this approach was in designing and rolling out the training to users before go-live while still developing the solution. Thus, while many users did receive training prior to go-live, many others did not. Fortunately, because the new site was designed to be more intuitive, many users did not feel the impact of no training prior to go-live and were able to quickly and easily start using Conveyor in its new format.

- **Strengthening Goldcorp's digital workplace.** Another key challenge was creating an intranet that would build a cohesive, integrated digital workplace across the organization. The previous system of 13 separate portals created strong communities at each mine location, but bringing everything — and everyone — together under one intranet would require even more attention toward creating a solution that was meaningful for all employees.

  The goal from the beginning was clear: Unify the global experience and maintain the local focus so the communication and collaboration experience would remain intuitive and relevant. To achieve this, the team improved both the employee experience and the organization's overall digital workplace. This provided a clear structure for decision-making and also set the stage for governance planning as the project matured.

  Paving the way to make this happen meant addressing some tactical considerations, including content targeting, prioritization, multi-lingual content, permissions management, and how to create a UX that would work across different devices. These were resolved within the context of a larger organizational change initiative to reorient Conveyor around Goldcorp's operations, culture, and future.

- **Cross-platform integration.** As mentioned earlier, it was critical that the intranet and its UX be as seamless an experience as possible, across applications and devices. This would go a long way toward achieving the value and adoption necessary to justify the upgrade.

  To accomplish this cross-platform integration, the project team consulted various representatives to understand how to integrate or align their project or solution with the new digital workplace. In many cases, integration into current applications and new solutions occurred seamlessly thanks to the early collaboration and involvement between capable project leads and a design that was born for the My Goldcorp digital workplace dashboard.

- **Content migration.** Given that the intranet project was completed in the context of an upgrade, a considerable amount of content had to be migrated from SharePoint 2010 to SharePoint 2013. Many project challenges related to ensuring both that teams properly audited their content and that content being migrated would show up properly in the new solution. Given the constraints of SharePoint 2007 and 2010 compared to SharePoint 2013, migration was not as simple as originally planned. After considerable investigation and research, the intranet team chose a combination of PowerShell scripts and the Metalogix Content Matrix SharePoint migration tool to accomplish this part of the project.

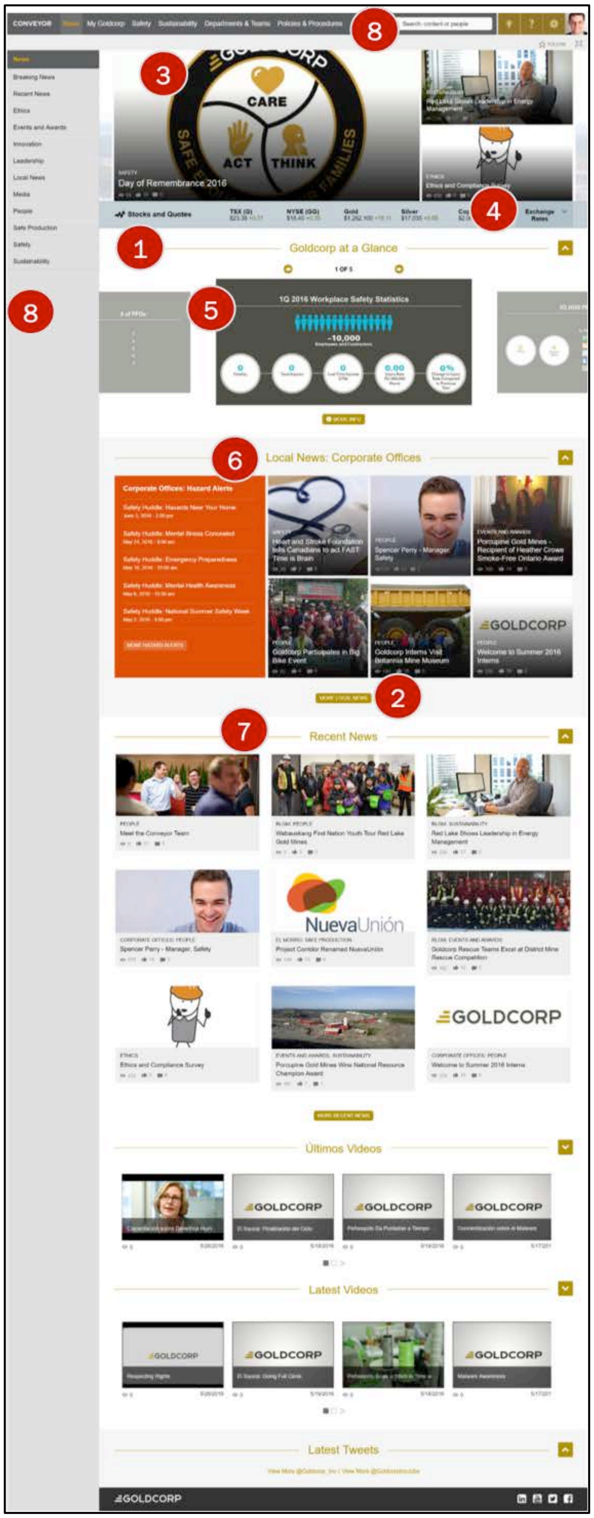
This let the development team use an “attach and reattach” approach when migrating collaboration sites. This proved to be a key innovation, because it preserved critical parts of the sites without affecting how employees would use collaboration sites on the new intranet. For these areas, the team mapped a lot of metadata. This was especially complex given the consolidation of content that had been living across 13 intranets.

The team also wanted to allow the local sites to continue to have flexibility in how they manage their content — such as allowing different metadata fields for procedures and policies for different locations. This increased the complexity of the migration but, in the end, satisfied the local requirements of the mine sites well.

- **Analytics and measurement.** SharePoint 2010 offered limited analytics out-of-the-box, so the previous version of Conveyor was unable to determine key metrics. It was also difficult to demonstrate to executives why the intranet was an important communications tool, because the team could not report on how many people had viewed the articles. This lack of analytics also affected the entire communications and collaboration strategy, making it hard to match enhancements, ideas, and plans to user preferences.

DESIGN REVIEW

Homepage



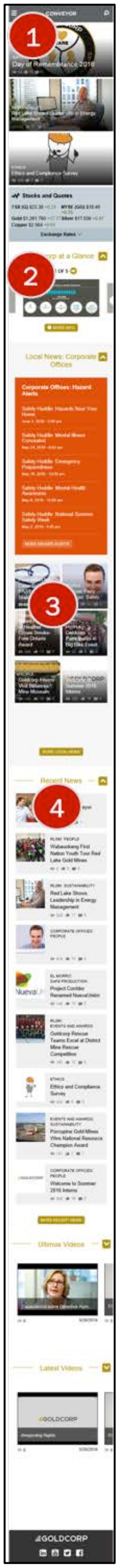
Pictured: Goldcorp Intranet New Homepage. Goldcorp's new intranet homepage includes news, stock information, and the price of gold. *Goldcorp_02_home_live.png*

Homepage Highlights

1. **Clear sections.** The homepage is divided into sections, each of which is visually delineated with backgrounds and headings. The whitespace gives users a breather, making the page seem uncluttered.
2. **Smooth style.** Surely, the color gold had to be used somewhere on this site. Rather than having it dominate in a gaudy way, however, the gold text is used for headings and other accent features that complement the gray backgrounds.
3. **Top section.** The homepage's top section displays anywhere from two to six featured news items. Each includes a topic, title, and image, with social icons at the bottom. This top section is reserved for business-critical content, leadership messages, and content that promotes company culture.
4. **Stock and quotes.** The stock price appears below the main banner, reminding people about the company's performance at a glance, something that is of particular interest to employees with stock options or personal investments. The page also shows the current price of gold and other precious metals, as they are also of interest to employees.
5. ***Goldcorp at a Glance*.** This section displays metrics integral to the business, including the company's relevant quarterly numbers and safety-related statistics. The section is updated quarterly and sometimes more frequently depending on the public release of figures. The visual design uses bleeding to indicate additional information to the right and left. Small forward and backward arrows and text such as "*1 of 5*" also show that information exists beyond the one visible card.
6. **Role dictates local news.** The personalized homepage means that when employees sign in, they see local news about their particular role, whether they are in a mine or an office. For example, employees working at the Red Lake Gold Mine office would see "Local News: Red Lake" on their homepage. Content in this section is news and communication specific to the location, such as local community events and local people news. As with items in the homepage's large top section, each news square includes a topic, headline, and image, with small icons for social features. On the left of this section is a list of *Hazard Alerts,* which help keep all employees aware and safe. All section features make logged-in users feel valued and informed about their location. Local mine sites manage the selection and prioritization of the news that appears on their area's homepage.
7. **Global news.** The *Recent News* section (below the local news) features global news for the whole company. This section helps promote consistent thinking about corporate goals and information. It also supports Corporate Communications' goal to increase the visibility of news and communications throughout the intranet. News is updated daily, as there is a high demand for it from all business areas. The Internal Communications group manages the selection and prioritization of homepage content.
8. **Navigation.** Both the top horizontal navigation links and the left-side navigation are easy to spot. While it can be tempting to collapse the menu on

desktop in a responsive design, displaying navigation is expected there and also helps usability. It advertises the links that are there, without making people click to expose them.

Homepage, Phone



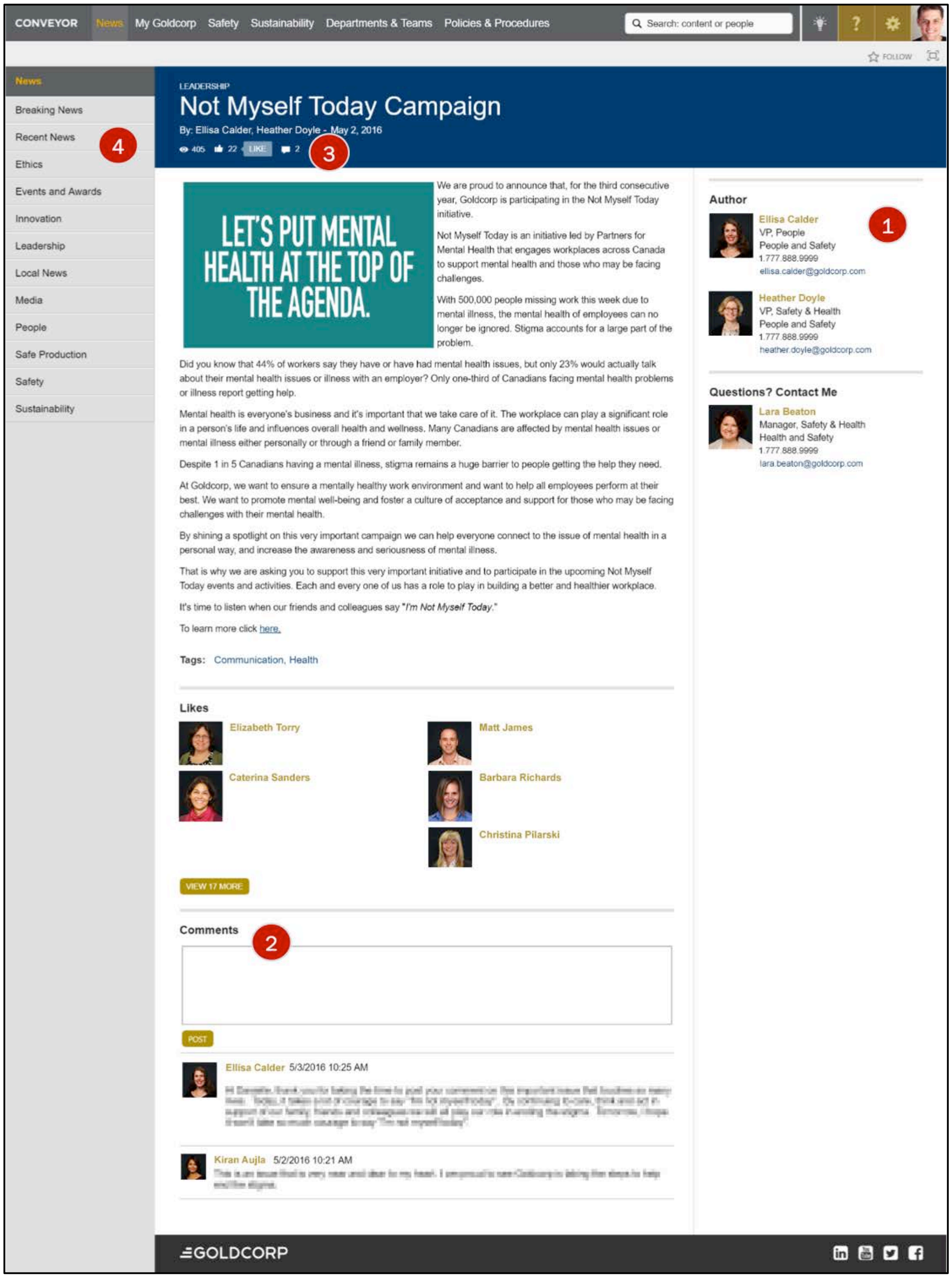
Pictured: Goldcorp Intranet Mobile Homepage. The mobile homepage includes all of same content as the desktop view, but arranged in a way that's easy to handle on a small screen. *Goldcorp_03_homemobile_live.png*

Homepage, Phone Highlights

Although it's laid out differently than the desktop version, employees benefit from being able to read the news on any phone. Because field workers have all different types of devices, the design had to flow to suit different screen sizes.

1. **Top articles still on top:** On desktop, the main section at the top houses three articles. On mobile, these same three articles appear first, but the box is smaller and all three items are arranged vertically to accommodate a phone screen.
2. **Smaller:** Some sections are arranged the same as on desktop, but simply get smaller on a phone.
3. **Shifted:** In some sections, the elements are shifted around for a phone.
4. **Vertical:** Some sections go completely vertical.

News Article

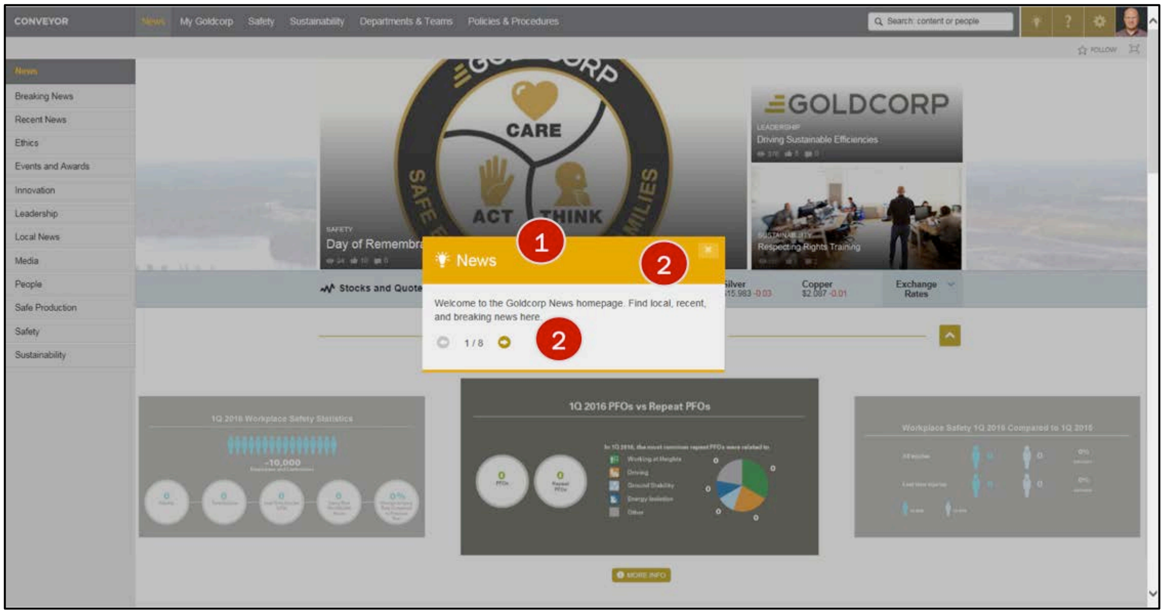


Pictured: Goldcorp Intranet New Articles. News articles include a title, image, social statistics, and the ability to comment.
Goldcorp_04_newsarticle_live.png

News Article Highlights

1. **Author.** It's easy to find and contact an article's author, as the author's name, picture, and contact information appear in the right rail. This ensures that employees know which of their colleagues are writing the news and how to contact them if they are interested in doing so.
2. **Comment.** Another way to participate in the discussion is to like or comment on an article. The interface for this is expected and simple.
3. **Reading statistics.** Employees can get a sense of how popular an article is with other site visitors by scanning the number of views, likes, and comments on the article.
4. **Context menu.** The left-side navigation menu changes depending on which top-level horizontal navigation item is selected. This progressive disclosure keeps users focused in the current section and eliminates clutter.

Training Tool



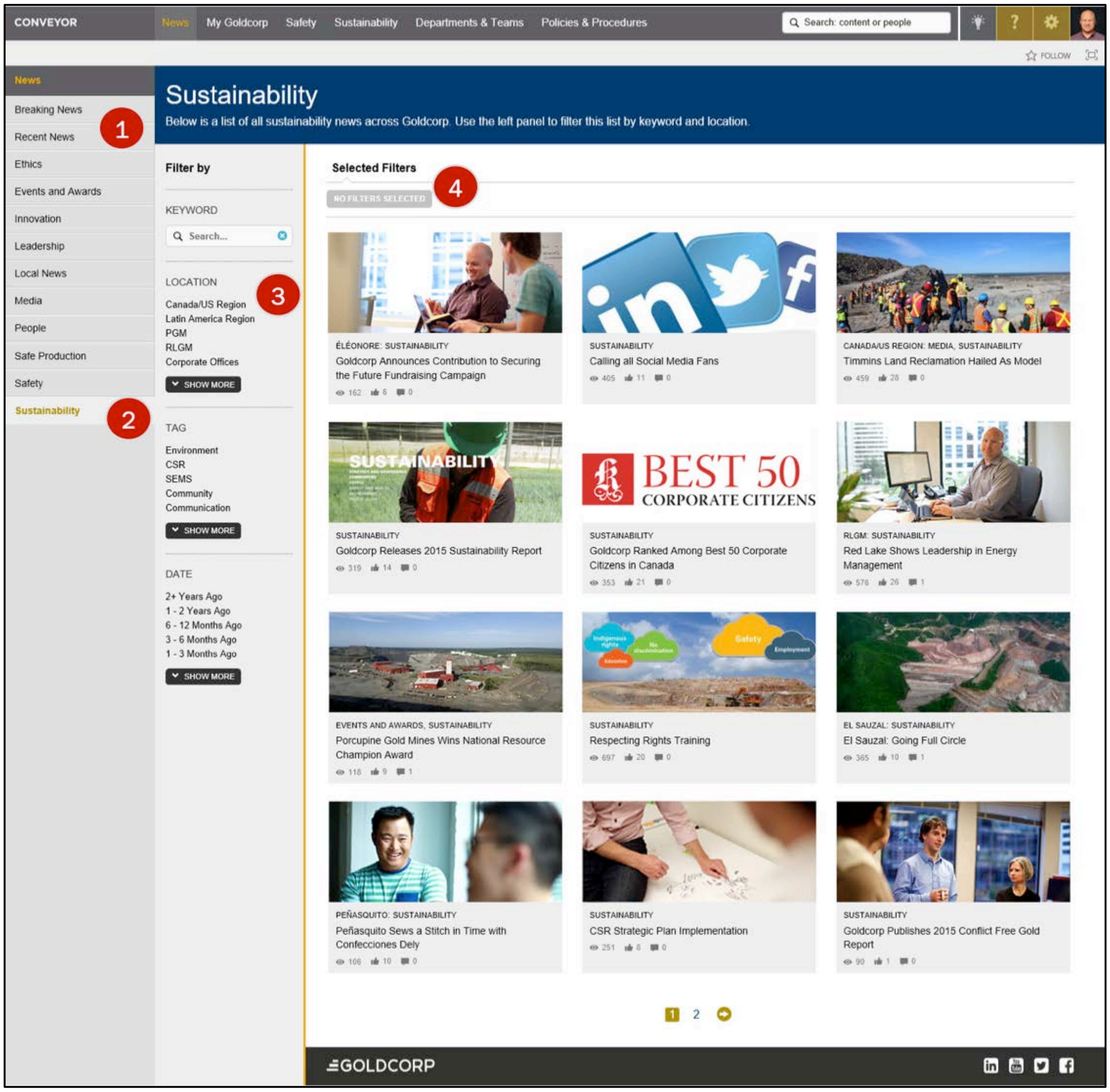
Pictured: Goldcorp Intranet Training Tool. Employees can switch on a simple training tool to get inline tips about the site's sections. *Goldcorp_05_embeddedtraining_live.png*

Training Tool Highlights

In an effort to help employees quickly learn about Conveyor's many helpful areas, the team created a training tool. Users can launch self-guided training exercises to learn about the features and functionality of each intranet area. This both informs employees and increases their confidence as they use the design. It also supports the adoption of key features and reduces the effort required to train employees on how to use the intranet.

1. **Info box.** When the training tool is activated and the user clicks a link to an intranet area, a light box launches describing that area.
2. **Continue.** The user can "x" out of the box, or use the arrows at the bottom to see additional tips. With features such as this, when a tip proves helpful, users will often scroll through more of them.

News Category Page



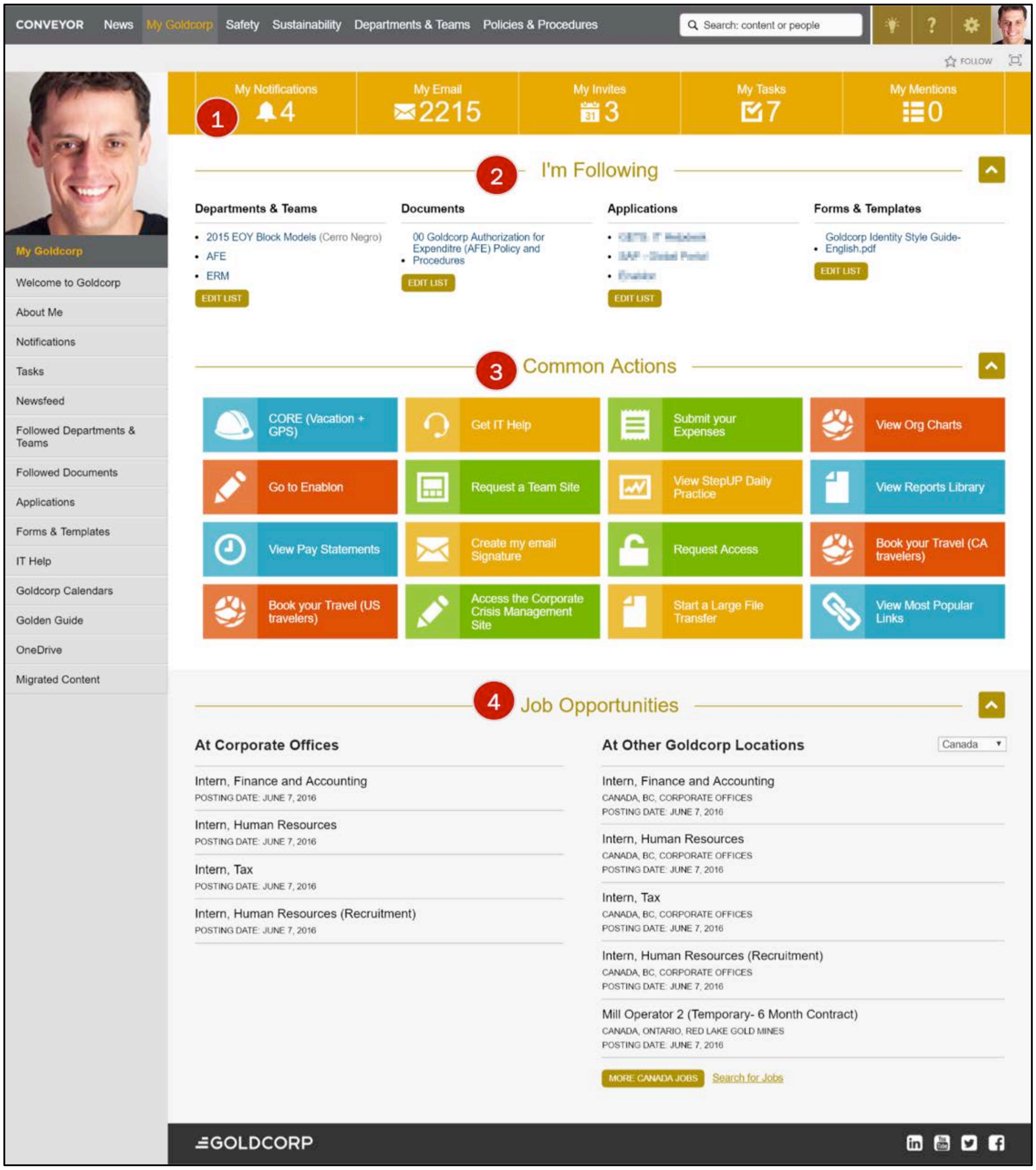
Pictured: Goldcorp Intranet News Categories. Categories help employees easily find the news they are most interested in.
Goldcorp_06_newscategorypage_live.png

News Category Page Highlights

The news on the new intranet balances the local news that users have come to expect from the previous intranet with broader corporate messages (global news). Showcasing local news encourages local teams to share information relevant to their office or mine, which makes the intranet more inclusive and interesting.

1. **Topics.** To organize the vast amount of news, users can first choose a category from the left-side navigation, which includes categories such as *Breaking News*, *Recent News*, and *Ethics*.
2. **Selected category.** Once a category is selected, a light gray box appears around it and the type turns from regular black text to bolded gold text. These visual signposts help users find their way more easily. And, if users are interrupted, they can get back up to speed quickly.
3. **Facets.** Selecting links in the *Filter by* section in the second left-side column lets users drill down to see only the articles they want. They can view articles by publication date, importance, user location, and language.
4. **Selected filters.** Once selected in the filters list, the keyword appears at the top of the page under the *Selected Filters* heading. This reminds users which results are showing, and lets them deselect filters if they so choose.

My Goldcorp



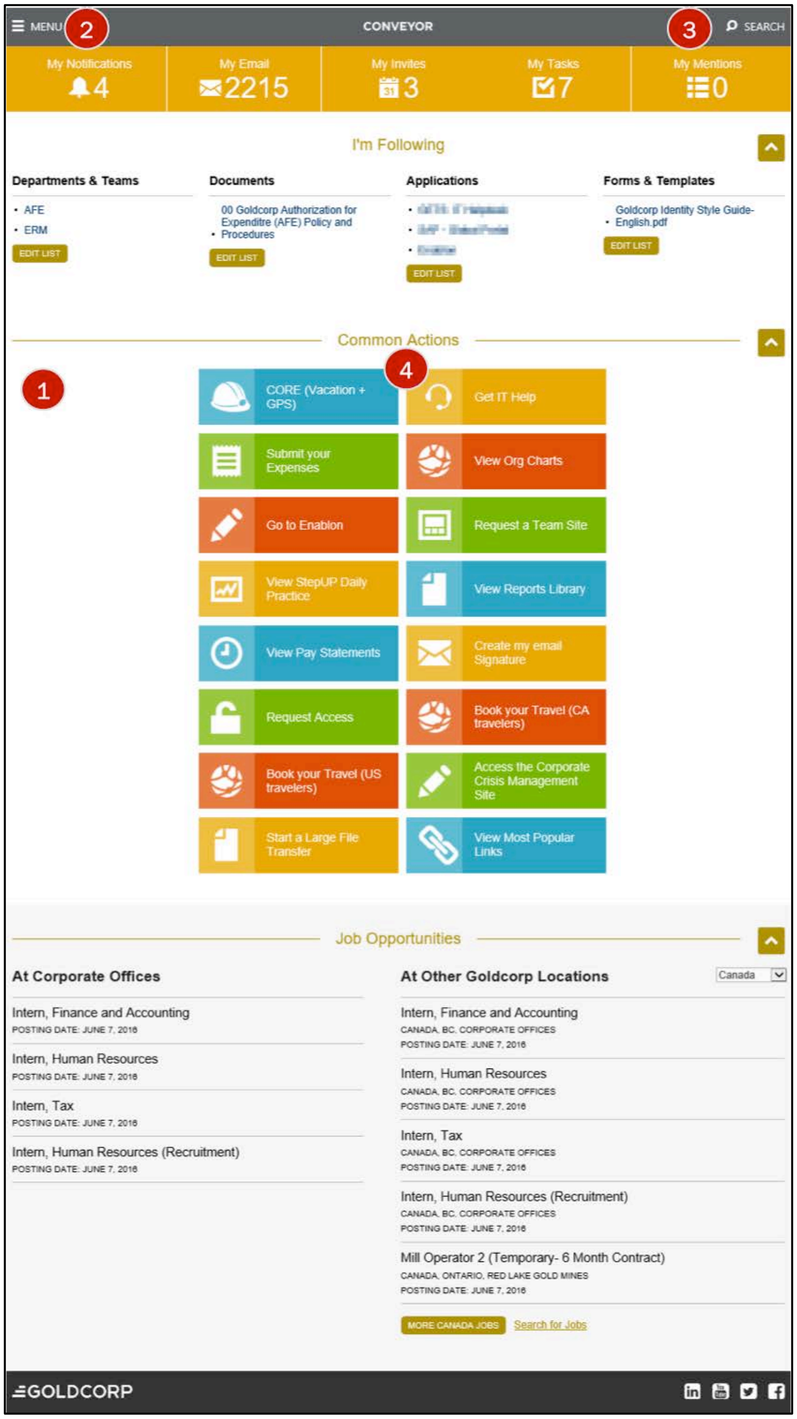
Pictured: Goldcorp Intranet *My Goldcorp*. *My Goldcorp* includes notifications and email, plus many other features targeted to the logged-in user. *Goldcorp_07_MyGoldcorp_live.png*

My Goldcorp Highlights

The *My Goldcorp* hub helps employees find whatever they need to get work done, inside or outside of the intranet.

1. **Notifications.** This page acts as a dashboard for many users, letting them easily and quickly see many of their workflows all in one place, rather than having to scour the intranet for them. The alert bar appears as a yellow banner across the top of the page and includes *My Notifications*, *My Email*, *My Invites*, and *My Tasks*.
2. **Bookmarks.** The *I'm Following* section toward the top of the page consolidates documents, applications, forms, workflows, templates, and team sites selected by the user. This helps employees be productive, organized, and in complete control.
3. **Applications.** The *Common Actions* section displays a broad collection of applications that employees use every day, including timesheets, expense tracking, vacation requests, and IT support. The terminology — such as *Get IT Help* and *Book your travel* — is easy to understand and task-based, rather than branded or bogged down in other confusing nomenclature. The applications are not part of the intranet or SharePoint, which makes these links tremendously helpful: they consolidate everything so it's easy to find.
4. ***Job Opportunities*.** The HR department encourages employees to look for job opportunities within Goldcorp so the company can retain and grow good employees. Thus, internal job openings take up a significant part of the page. The section shows jobs based on the user's location on the left and jobs at other offices on the right. Employees can also use the search link at the bottom or use the drop-down to sort by country.

My Goldcorp, Tablet



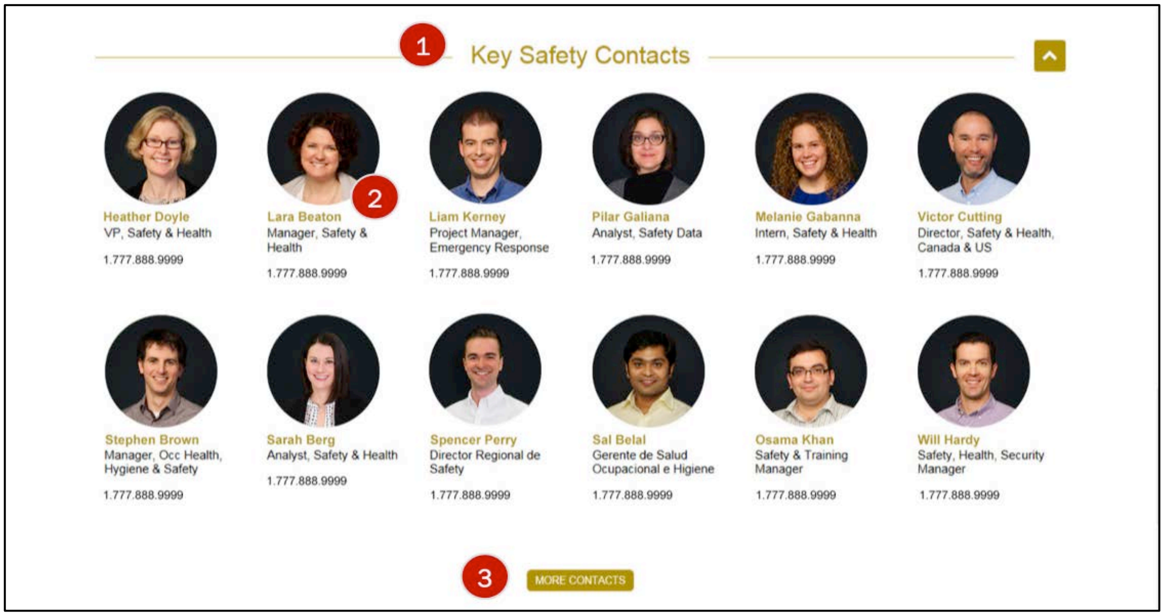
Pictured: Goldcorp Intranet Tablet Version. The tablet version of *My Goldcorp* adjusts the page to adapt to the smaller screen real estate. *Goldcorp_08_tabletMyGoldcorp_live.png*

My Goldcorp, Tablet Highlights

To make the best use of the device and its real estate, some elements are collapsed or moved for viewing on the small screen. The changes include the following:

1. **User's picture removed:** To save space, the logged-in user's picture does not appear on the tablet site.
2. **Menu collapsed:** The global, horizontal navigation is collapsed in a hamburger menu to save on screen real estate.
3. **Search collapsed:** The search field is collapsed to a magnifying glass.
4. **Rearranged columns:** *Common Actions* appears as two longer columns rather than the wider, shorter desktop version.

Key Contacts



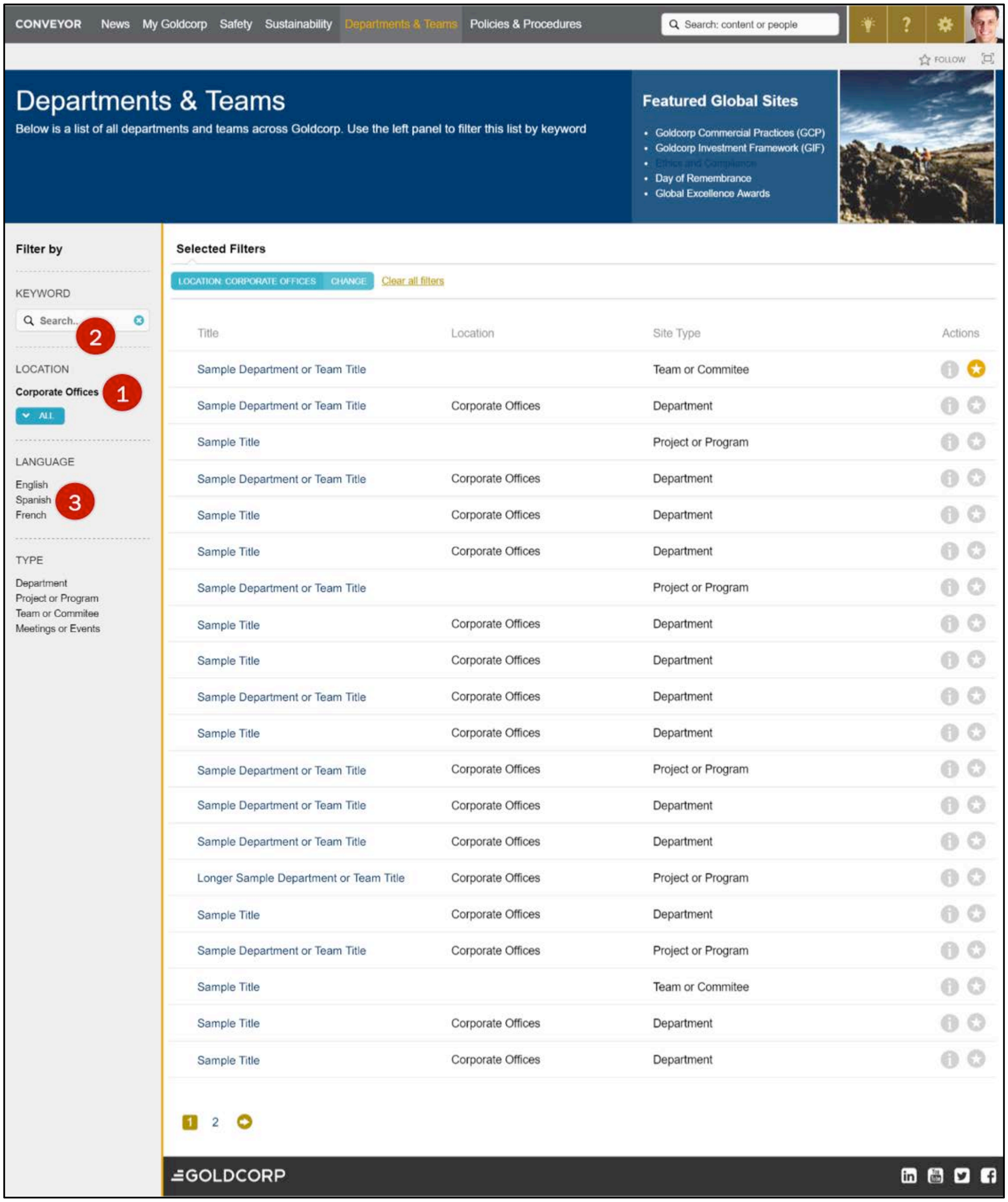
Pictured: Goldcorp Intranet Key Contacts. This page gives employees suggestions for people to contact about various safety topics. *Goldcorp_09_keycontacts_live.png*

Key Contacts Highlights

Throughout the intranet, a key contacts panel shows leaders in the organization that employees can contact to learn more about a specific area of Goldcorp's business. This ensures a focus on people and also ensures that employees know whom to approach with questions.

1. **Topic.** The topic of expertise is listed at the top; this reinforces the user's location and the general skillset/topic being explored.
2. **Information about each contact.** A photo, job title, and phone number suggests the individual's area of expertise and also communicates to users that it's okay to contact the person. This information can inspire impromptu working relationships.
3. ***More Contacts*.** This button, visible at the bottom of the page, offers users additional contacts; this way, the same few people will not always be the ones contacted.

Departments and Teams



Pictured: Goldcorp Intranet Directory Page. This directory page helps employees find and navigate to the team sites they need. *Goldcorp_10_departmentsandteams_live.png*

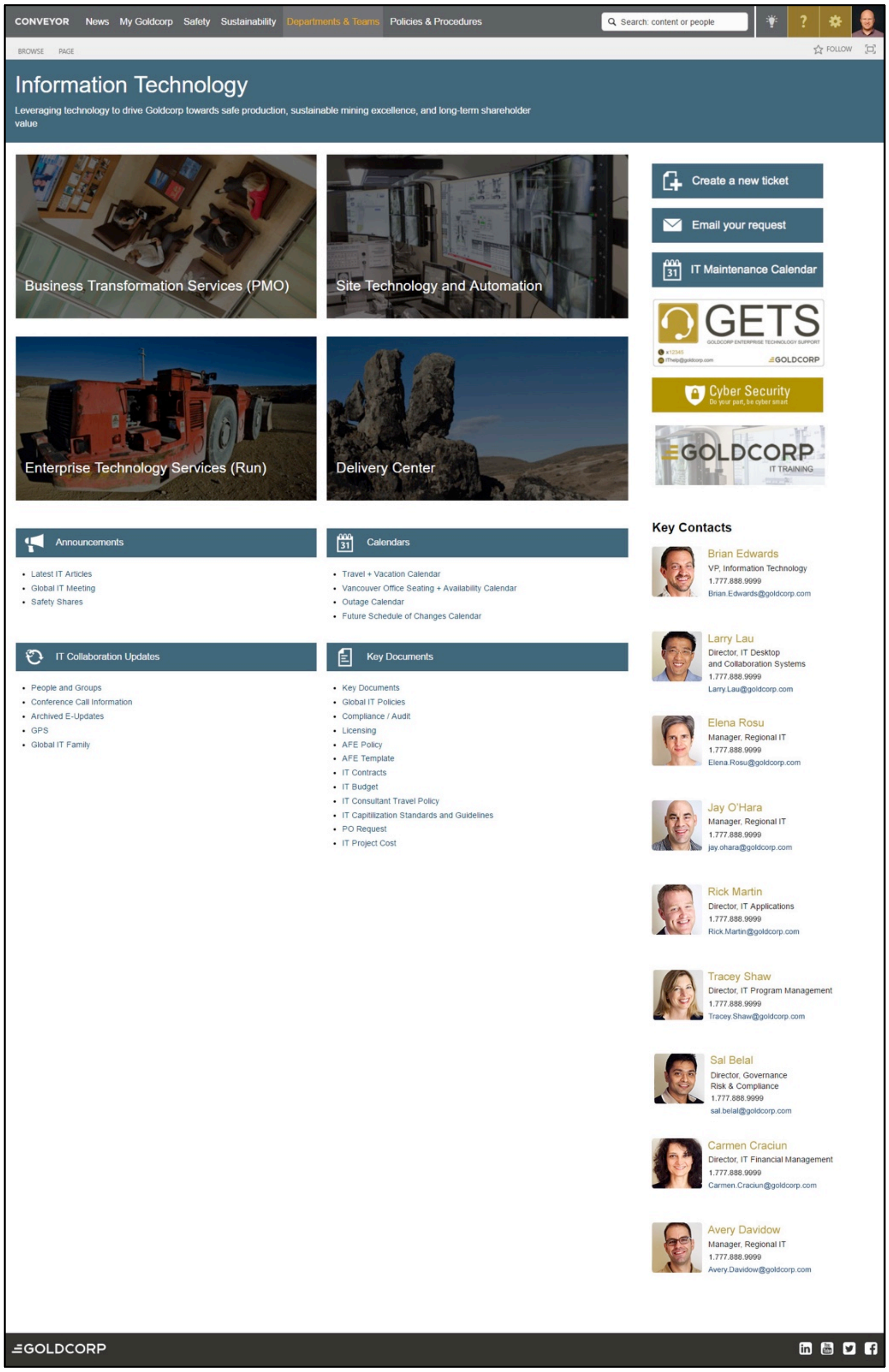
Departments & Teams Highlights

The *Departments & Teams* page acts as a directory for the thousands of team sites across the organization. Knowing the different workgroups and collaboration spaces at an organization helps employees not only appreciate the many resources available, but can also help them be more effective at their jobs. Part of being successful is knowing which teams exist and what they do. Finding the right information and accessing people at the right time is invaluable. Prior to this new design, employees found sorting through the organizational directory cumbersome and time consuming.

1. **Preset filters.** Filters related to the user's location and role are selected by default. This expedites users' search by honing in on related sites and displaying fewer results by default. This is important, as many team sites are irrelevant to employees outside of a specific department or location. However, the directory is also flexible: employees can easily deselect any of the filters to expand their search to all Goldcorp locations.

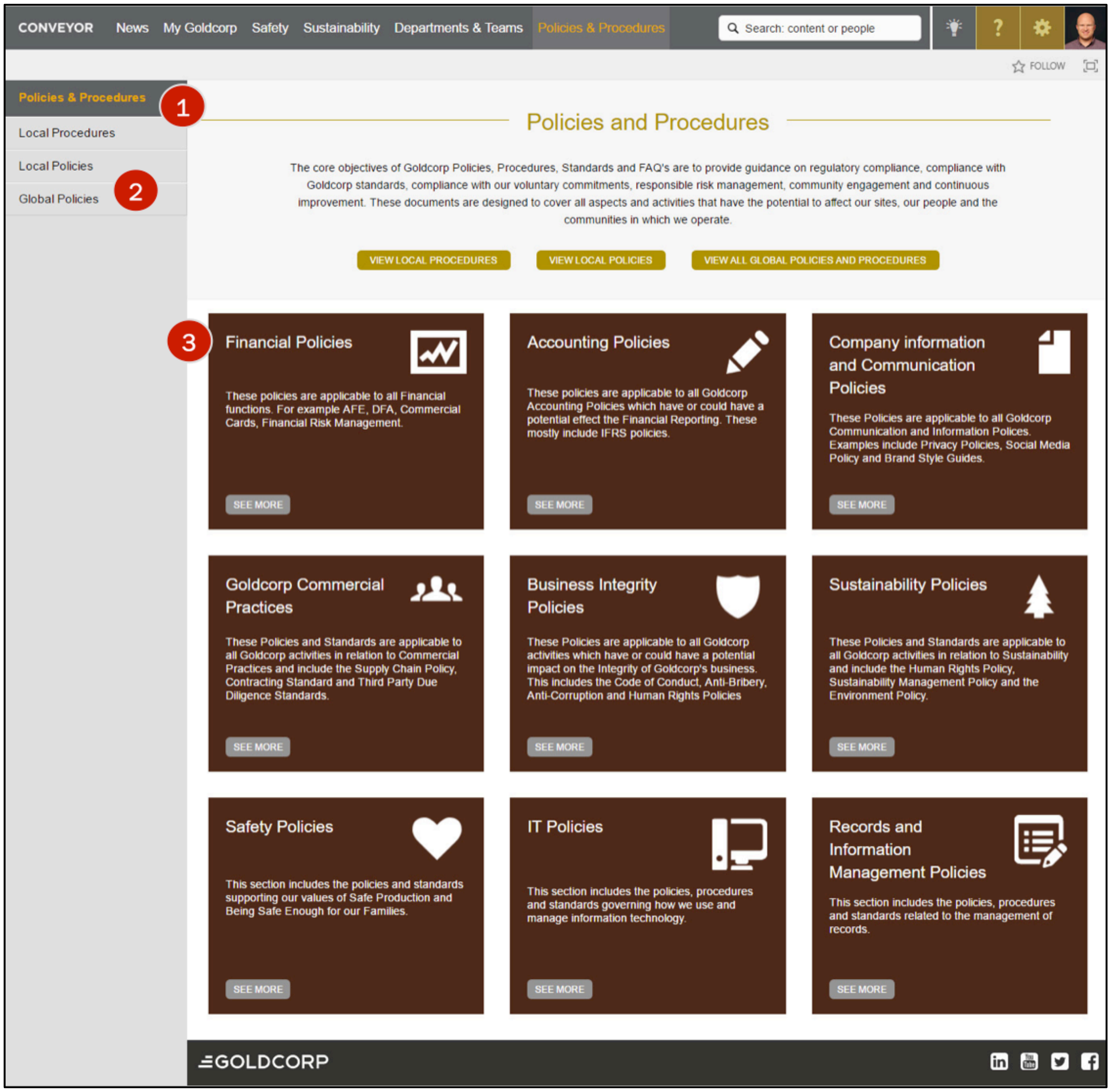
2. **Keyword.** Users can search for any keywords, such as those related to a topic or team space. The search field provides flexibility and control when users have a good idea of what they are looking for.

3. **Language filters.** Users can choose to view team sites in any of the three languages spoken at Goldcorp (Spanish, English, and French).



Pictured: Goldcorp Intranet Team Sites. Team sites are the backbone of collaboration within Goldcorp. The intranet's team site design has been customized to emphasize projects and people, helping employees quickly find documents or enter requests. *Goldcorp_11_teamsite_live.png*

Policies & Procedures Category

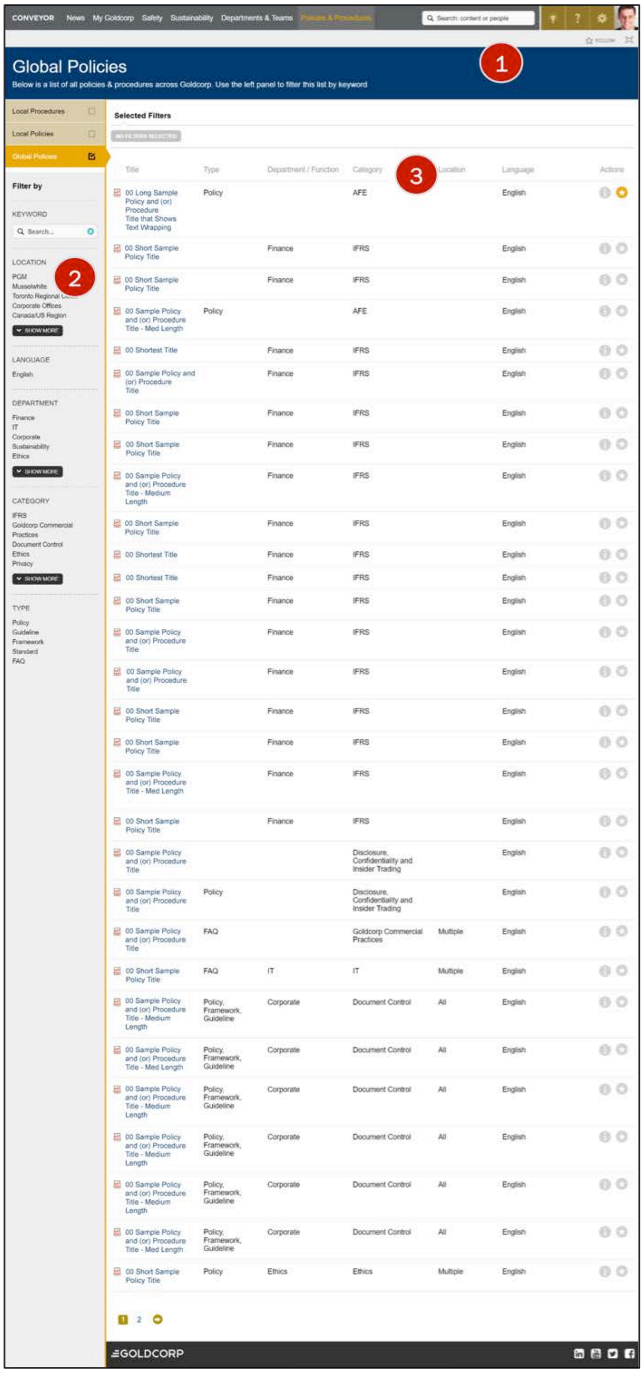


Pictured: Goldcorp Intranet *Policies & Procedures*. Filters and search expedite the act of finding policies and procedures on the intranet. *Goldcorp_12_policiespage_live.png*

Policies & Procedures Category Highlights

1. **Default filters.** Preset filters, such as local content, are selected by default. This helps users navigate to sites or documents they're most likely to need.
2. **Filters.** Multi-lingual capabilities and permission indicators let users quickly find what they need.
3. **Legible headings.** Each dark brown box includes a legible white heading, which helps users scan the page quickly.

Policies & Procedures

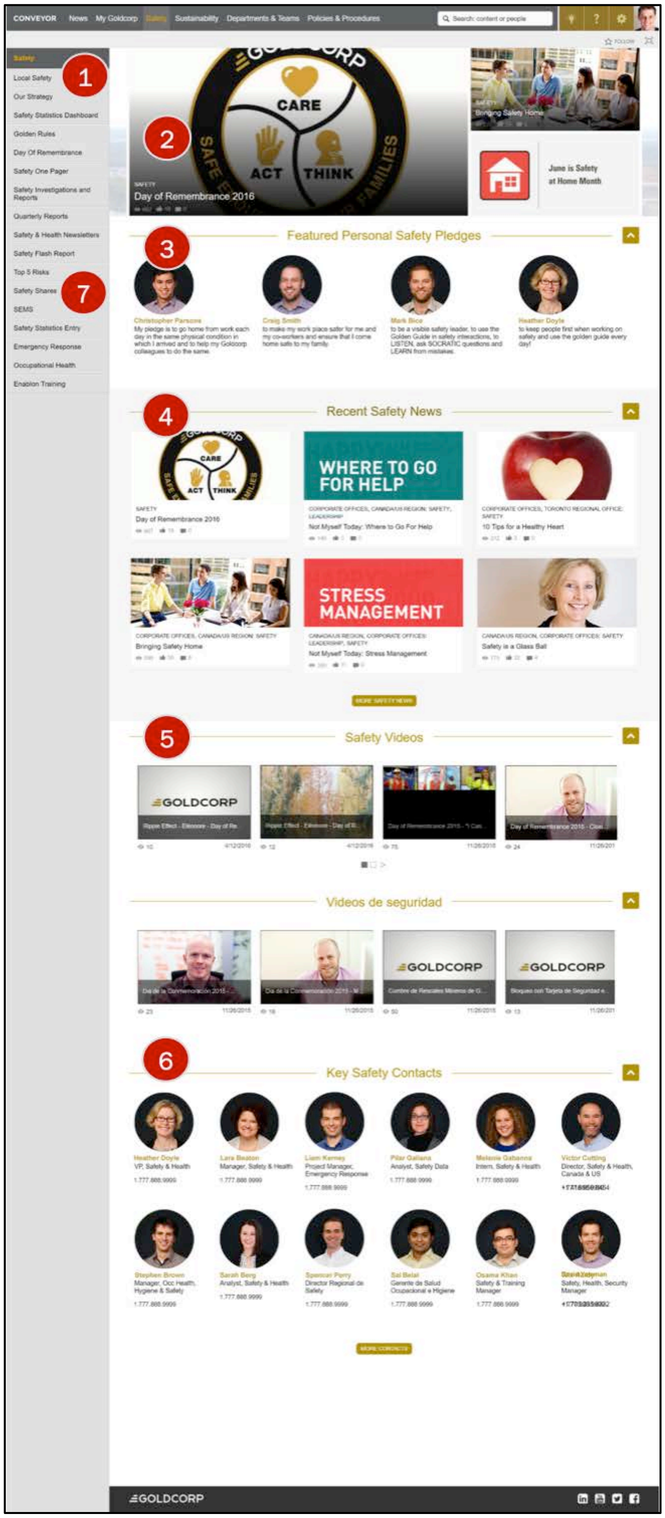


Pictured: Goldcorp Intranet *Policies & Procedures*. Some elements are presented differently on desktop (left) and phone (right) to ensure the best UX for each device. *Goldcorp_13a_policiesandprocedures_live.png* and *Goldcorp_13b_mobilepoliciesandprocedures_live.png*

Policies & Procedures Highlights

1. **Page summary.** A short summary describes the page for users. It appears at the top of the screen on both desktop and mobile.
2. **Filters.** The filters are exposed on desktop, but collapsed on mobile. Although it would be nice to show filters on mobile, doing so would clutter the small screen.
3. **Columns.** The desktop view displays seven columns of content by default, while the phone UI displays only two. This tradeoff was necessary to accommodate the small screen, and the designers didn't want to limit the space used on the desktop just to make the site responsive.

Safety

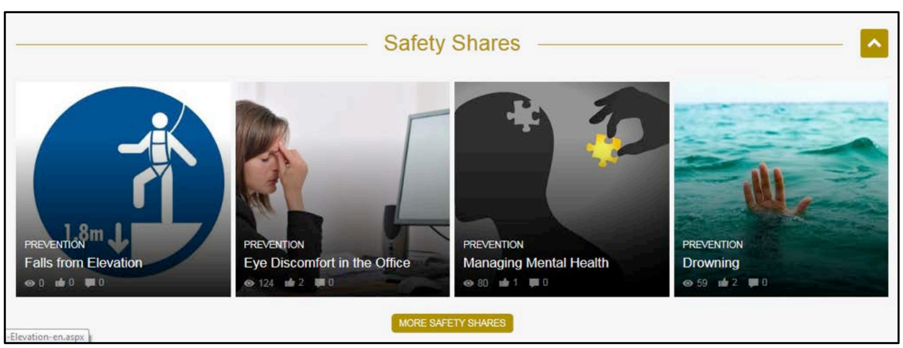


Pictured: Goldcorp Intranet *Safety*. Various stories about safety inform employees and convey the organization's commitment to this cause. *Goldcorp_14_safety_live.png*

***Safety* Highlights**

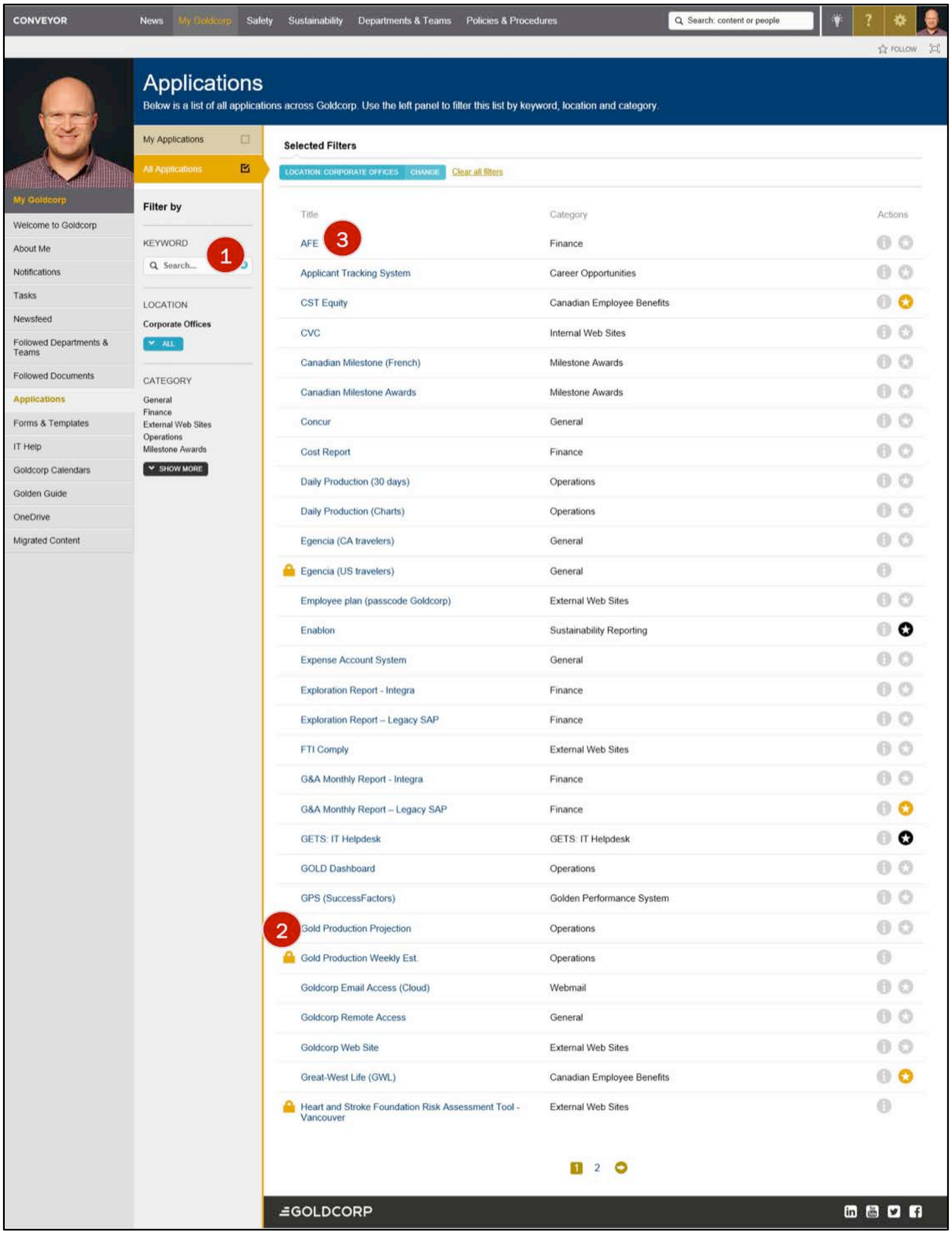
This page is dedicated to safety, a key priority at Goldcorp. The page makes it easy for employees to share safety information between mines and offices. All Goldcorp users can access this page, and it displays the same content for everyone.

1. ***Local Safety*.** This link in the left navigation leads to the user's local safety site based on location settings. (Once there, users can easily navigate to other local safety sites.)
2. ***Safety Spotlight*.** The global safety team uses this area to display news articles related to safety and other information related to specific campaigns and initiatives, such as the publication of a new *Golden Guide*. This top position is always on the page, whether viewing on desktop or phone.
3. ***Featured Personal Safety Pledges*.** To demonstrate how serious they are about safety, employees make safety pledges and enter them on their My Site. The safety team determines which pledges will appear in this section.
4. ***Recent Safety News*.** This section sniffs the *News* page for articles tagged with "safety" and automatically consolidates the latest ones in *Recent Safety News.* This is much easier than searching or trolling all news. Clear titles and related images make the safety articles seem interesting and more clickable.
5. ***Safety Videos*.** As with *Recent Safety News* section, the latest safety-related videos appear here.
6. ***Key Safety Contacts*.** Trained safety experts are noted so all employees know where to turn with ideas or questions. *More Contacts* leads to a comprehensive list, including local safety managers.
7. ***Safety Shares*.** At Goldcorp, every meeting begins with a "safety share" — an observation about a safety incident or new safety-related information. The person running the meeting might offer his or her own share or use the intranet's *Safety Shares* area to get ideas for what to share (see below).



This *Safety Shares* web part is activated when a user clicks on "Safety Shares" in the screen shown above.

Applications



Pictured: Goldcorp Intranet Applications. The team researched user workflows to make sure helpful applications were easy to find and access on this page. *Goldcorp_15_applications_live.png*

Applications Highlights

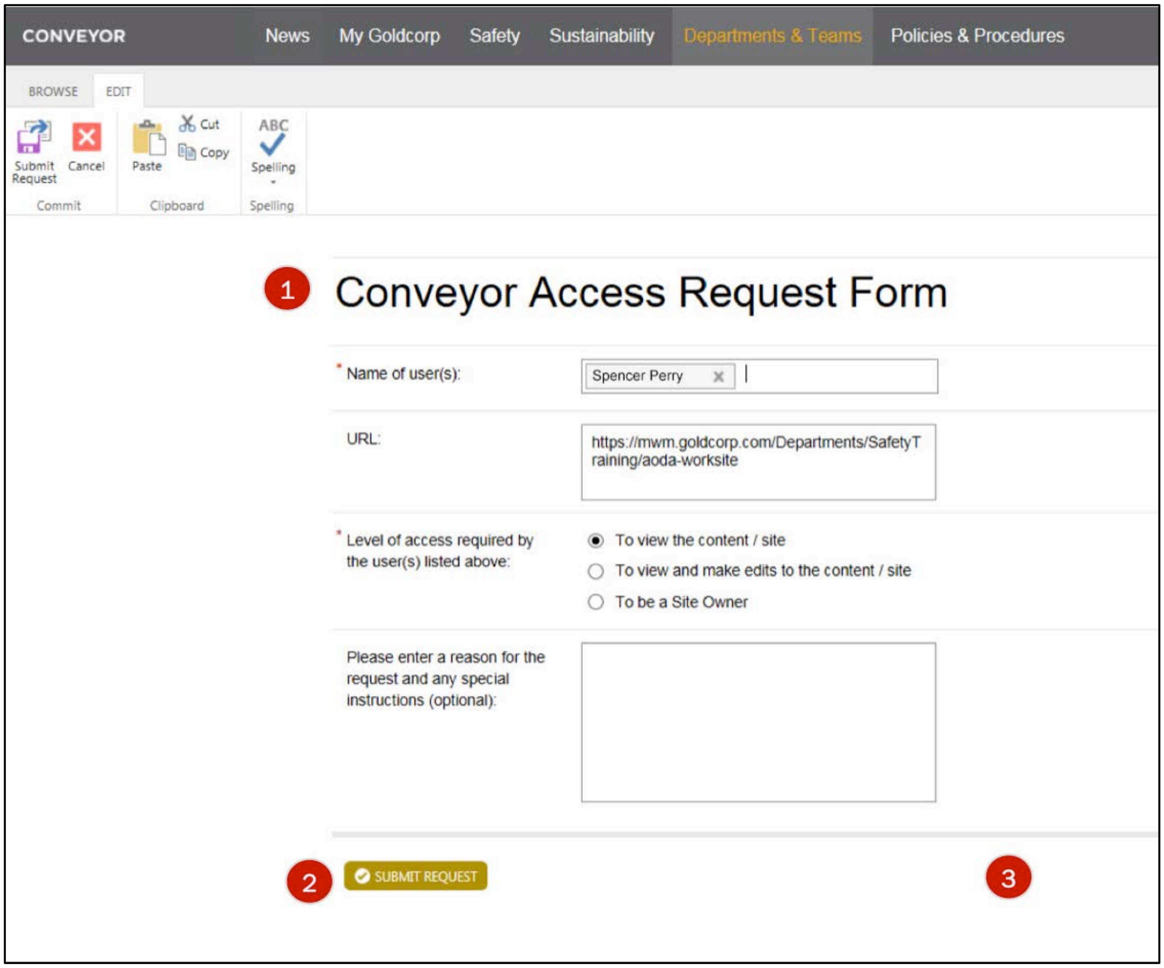
Many applications are available on or via the intranet. The *Applications* section consolidates these to make them easy to find and access.

1. **Filters and search.** These tools make it easy to filter through all of the applications.
2. **Access.** A lock icon indicates which sites the user has permission to access.
3. **Application for Expenditure Workflows (AFE):** Employees can request budget for costs above preset limits. The new process clearly outlines where the request will go and who to contact with questions, and ensures emails don't get lost in inboxes.

   Mine site workflows**.** These workflows include several individual business processes that rely on local employees to complete. Users can capture information and start processes on tablets or smartphones, whether online or not. If working offline, the application syncs to Wi-Fi as soon as the mobile device is on the internet again.

   Enhancement request workflow**.** To ensure that Conveyor remains one of Goldcorp's key collaboration and communication tools and continues to support business needs, users can submit requests for enhancements. The requests are then reviewed, scoped, and developed. This system also lets similar solutions be used across mine sites, letting those sites benefit from the enhancements.

Access Request Form



Pictured: Goldcorp Intranet *Access Request Form*. A lock icon next to an item in a list means that the logged-in employee does not have access to that item, but can request access using this form.
Goldcorp_16_accestrequestform_live.png

Access Request Form Highlights

Rather than locking employees out of a site and offering no further help, the intranet lets employees contact the site owner (via a form) by clicking the *Request Access* link on *My Goldcorp*. The business units, not IT, manage their own permissions. This enables control over the site by its administrator, who can grant individual employees permission to access and participate.

1. **Form title.** The visible title affirms to users that they are on the expected page.
2. **Clear call to action.** The *Submit Request* button is visible and offers an understandable call to action.
3. **Brief form.** The form is short and easy to see in a small space, and the left-aligned labels and fields make it easy to scan.

DESIGN PROCESS AND USABILITY WORK

The project consisted of the following core phases: discovery and design, implementation, migration, testing, and rollout. These phases followed a planning and approval process that included engagement from senior and C-level executives, mine general managers, and other key organizational stakeholders.

Discovery Phase

- **Heuristic overview and past survey data.** Habanero and Goldcorp's history and strong working relationship allowed for a smooth transition from supporting the current Conveyor to engaging in design and visioning exercises for the new intranet. There was considerable overlap between the team that had supported Conveyor for years and the design team for the new intranet; this gave team members a good head start going into the discovery phase.

  Team members conducted heuristic reviews so they could formally identify some of the existing intranet's UX issues. Surveys and usage data from previous Conveyor initiatives also had a big influence on developing the design principles and on the research that went into creating the UX. Ultimately, decisions had to be based on the established goals of integrating a network of intranets, improving communication and collaboration, and strengthening Goldcorp's existing digital workplace landscape.

- **Interviews.** The team's business analyst, interaction designer, and other members of Goldcorp's project team joined forces to conduct 54 interviews with company executives and other representatives across functions and regions. These interviews included stakeholders from IT, HR, corporate affairs, strategy, operations, and communications. The team also spent time talking with mine general managers and end users to better understand how the existing intranet was working for them. These interviews also served as the starting point for change management activities, as they were the first communication touch point about the redesign.

  The interviews unearthed 10 key themes to guide the project: communications, system integration and reporting, a unified UX, security and permissions, collaboration, training and adoption, mobility and reach, videos, main content areas, and search and people finder.

  Early concepts and wireframes were used in some of the interviews to communicate a vision for the new Conveyor and garner initial feedback on it. The team used this as a design exercise and started iterating those wireframes throughout the interview period.

- **Design principles.** The Habanero and Goldcorp teams also created design principles to guide the solution's development. These principles follow here:

DESIGN PRINCIPLES	
Design Principle	**How It Was Applied on the New Intranet**
Simplify and standardize	The 13 previous corporate portals were merged into one UX, meaning that all users see the same IA organized into five key hubs: *News*, *My Goldcorp*, *Safety*, *Sustainability*, *Policies & Procedures*, and *Departments & Teams*.
Design localized, targeted experiences for end users	Conveyor does not have a traditional homepage. Instead, users see their local mine site news, alongside the global corporate news. Location is also a pre-set filter whenever a user searches for content.
Prioritize key content	Intranet stakeholders can highlight key content for users to see in the *News*, *Safety*, and *Sustainability* sections, as well as elsewhere on the intranet.
Move toward transparency	Conveyor now has a *Goldcorp at a Glance* panel that showcases relevant company metrics. All team site names are visible to users, and users can request access to sites if they lack permissions. Business units, rather than corporate IT, are now accountable for granting these permissions.
Provide in-the-moment training	With one click, users can see self-guided training for common intranet tasks in specific portal areas.
Represent Goldcorp's priorities and values	The intranet's new structure demonstrates Goldcorp's commitment to people, safety, and sustainability — including in top-line items in the navigation bar dedicated to these areas. The portal's governance committee keeps the company vision and business priorities in mind when reviewing future enhancements and current performance.
Keep the focus on people	Employee information and pictures appear throughout the portal next to news articles and other content to show who the SMEs are for specific organizational areas. The *My Goldcorp* hub is designed with the individual in mind, allowing users to customize their followed sites, documents, forms, and applications.

Design Phase:

- **Wireframes and mock-ups.** Once design team members had a stronger sense of direction for the new Conveyor, they created wireframes and mock-ups to iterate various approaches within that direction and communicate the new IA and design. Workshops were conducted with individuals who owned intranet areas. For example, to better understand how to design the news experience, the team met with the Internal Communications group to learn how the upgraded solution could better support them. The team conducted card-sorting exercises with these participants in an attempt to sort current news content and reorganize it into potential new structures and IAs. It was through these activities that the team landed on the new structure for news and communications for all of Conveyor: categories, tags, roll-ups, feature banners, and so on.
- **Prototyping.** A prototype was created to demonstrate how the intranet would look and function for end users. This was essential to demonstrating the portal's responsive nature and an important tool both in increasing stakeholder engagement and communicating the big changes that the upgrade would bring. Executives were able to see what the team was proposing, which helped set the stage for change management activities.

  The prototype also served as the foundation for usability testing. The team conducted 14 tests across 10 locations, including with eight people who were initially interviewed about the previous solution. The main theme that emerged from this testing was how professional and organized the intranet felt. It also highlighted the benefits of personalized content inside a more centralized structure, and conveyed an understanding of how users felt about the coming changes. The designs and prototype were updated based on this feedback, proving that end-user testing is an invaluable part of any intranet engagement.
- **Workshops and governance.** Governance and change management work for the intranet was initiated in the design phase and continued throughout the project. The goal was to get out in front of any roadblocks and ensure that Conveyor would continue to thrive post-launch. A content security framework was also established around this time, which helped support the permissions management decisions that later became such an integral part of the project.

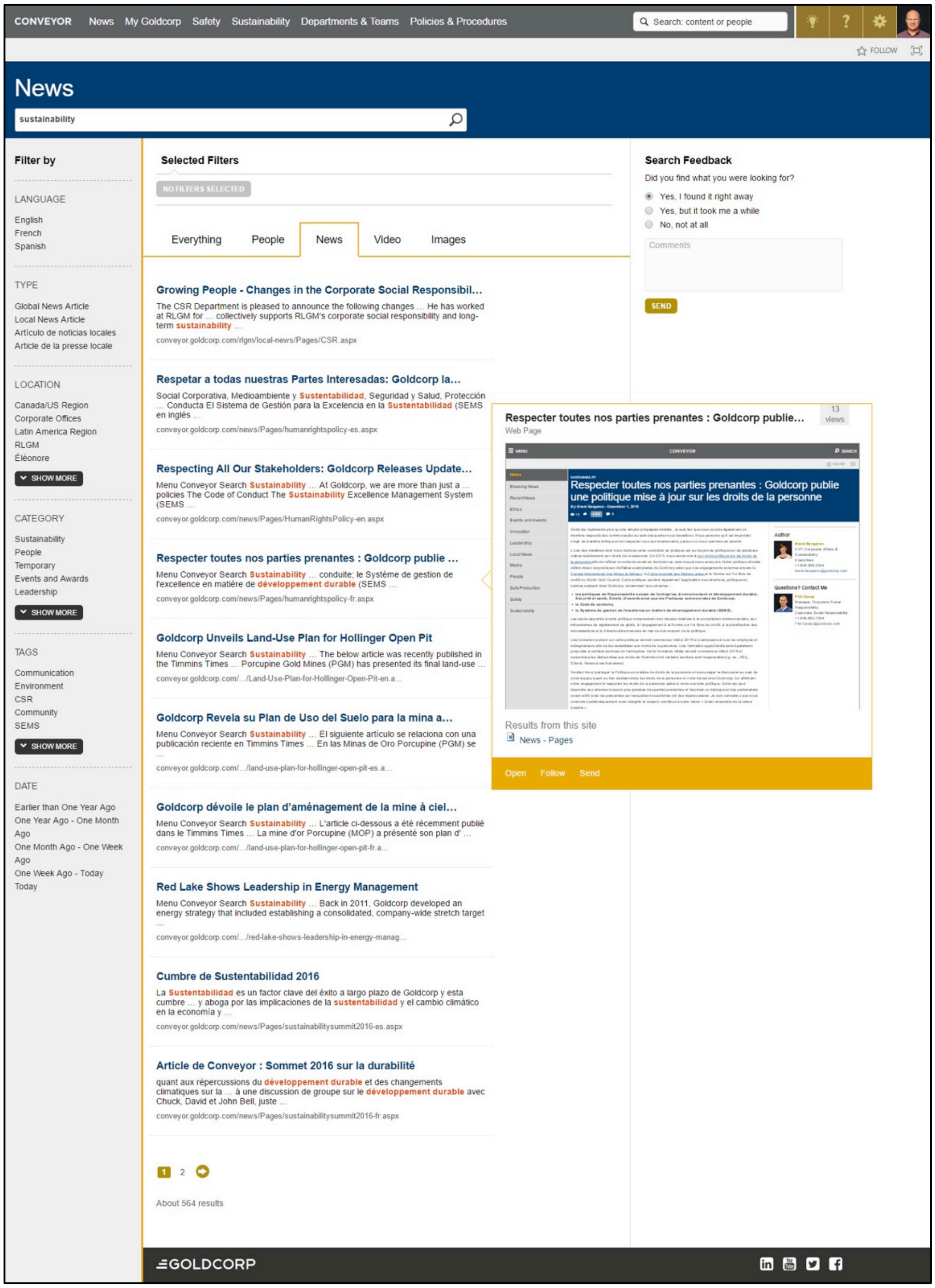
Implementation Phase

The intranet implementation phase began in April 2015 and completed at the end of August 2015. This was followed by a month of stabilization and two weeks of user acceptance testing, followed by go-live. The development work was done with a core team of 10 on the Habanero side, with additional support and execution provided by Goldcorp as needed.

The development team conducted 10 two-week sprints. Detailed planning happened prior to each sprint to ensure tasks were achievable and resources were appropriately allocated to the project. At the end of a sprint, the remaining and completed tasks were identified and, if necessary, marked for completion in the next sprint. Each sprint ended with a walkthrough for quality assurance testers, and testing was an ongoing part of implementation. Everything was tracked in Microsoft Team Foundation Server and the team used a Kanban board to visualize progress.

Other implementation achievements included creating search results in three languages, auto-tagging certain fields to simplify the UX, and improving SharePoint's out-of-the-box parent-child hierarchy in metadata. The result is that search terms and search results encompass all three languages. (For example, a search term in Spanish pulls up translated English and French content.) Users can also navigate filters and content based on automatic location tagging, meaning that employees can find Canadian mine content by either searching within Canada or another location. Previously, users were unable to refine data at the country level or to access data tagged at the location level when searching.

The team also developed important integrations in the *My Goldcorp* hub during the implementation stage. One key area was the integration with Microsoft Exchange Online and Office 365 to surface email and calendar notifications in the alerts bar.



Pictured: Goldcorp Intranet Search Results Filtering. When employees search for content on the Goldcorp intranet they can navigate to a list of news articles related to their query. This provides greater awareness of corporate news items related to specific subject areas.
Goldcorp_17_searchresultsnews_live.png

Testing Phase

The team developed test cases for all features and mapped them to functional and nonfunctional requirements. Quality assurance testing was carried out during development, along with the sprint model described earlier. Bugs were logged and fixed as sprints allowed. The team conducted full regression testing during stabilization to ensure that no bug fixes caused other issues in the solution. Given the sheer amount of collaboration content on the project, including team sites let the team identify high-priority collaboration content to rigorously test.

IA Design

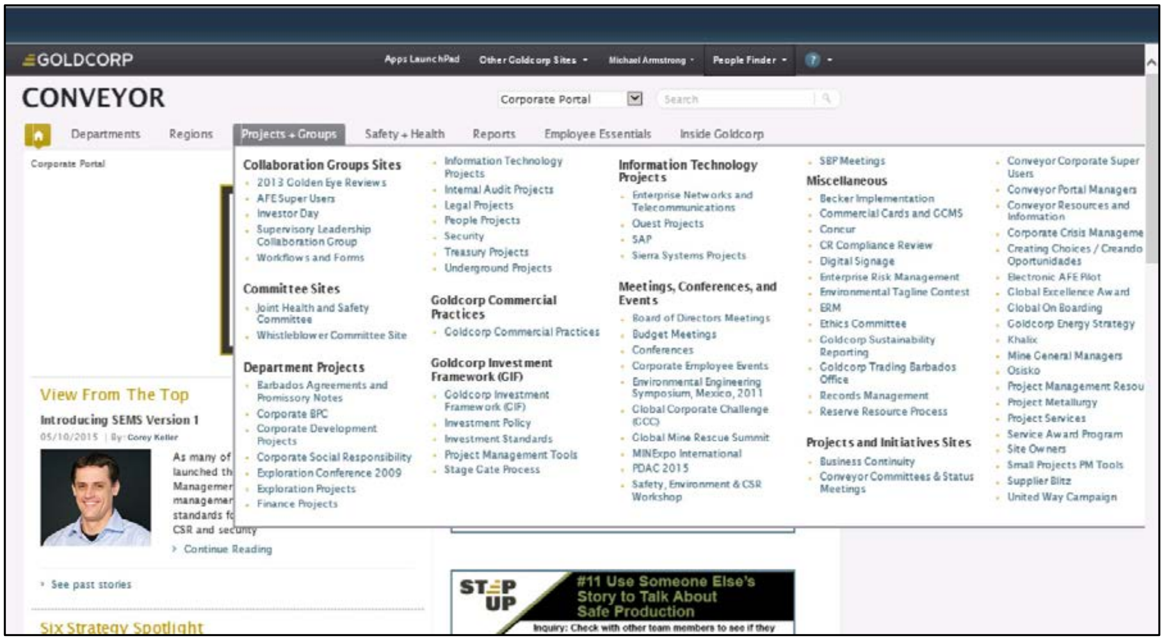
The new IA and navigation system gracefully organizes the core global and local information essential for employees. Simplifying the IA was a daunting task during the project, but it resulted in a smoother UX for everyone, regardless of location or language.

Instead of massive fly-out menus that differed from mine portal to mine portal, the upgraded intranet divides content into five hubs: *News*, *My Goldcorp*, *Safety*, *Sustainability*, *Departments & Teams*, and *Policies & Procedures*. Weaving localization into different content areas to create a seamless experience was a key outcome of this approach, as opposed to having large menus with dozens of options — many of which would be irrelevant to significant numbers of employees.

The team focused on streamlining and targeting the new intranet's IA. When users drill down to each section, content is prioritized and targeted based on their location. Users can also see other, nonlocal content, but it's not the first thing they see. This approach preserves the intranet's local feel, while also promoting transparency and information sharing across the organization.

Employees can easily find relevant content throughout the site thanks to faceted search and associated metadata. On the news-focused homepage, articles are surfaced based on language or location and through tagged categories of news metadata. A person's language and location are detected based on their Active Directory profile.

When searching for content elsewhere on the intranet — including team sites and *Policies & Procedures* — preset filters are applied based on the employee's location to reduce the time spent searching for information. This was essential as users were accustomed to seeing local content first, and the design team wanted to ensure the move to the new intranet would be seamless.



Pictured: Goldcorp Intranet Old Intranet Fly-Out Menus. An example of how large and cumbersome fly-out menus had become in the previous Goldcorp intranet. *Goldcorp_18_flyoutmenus_before.png*

Adoption and Buy-In

The team took an active approach to ensure that employees would not only use the new site, but also welcome it. Team activities included the following:

- **Have change management and training resources travel to remote sites before and after launch.** As they approached go-live, Goldcorp and Habanero intranet SMEs conducted workshops to train Conveyor leads on various parts of the portal. While many users were familiar with the old solution, the changes and capabilities in the revamped intranet were so significant that it was necessary to retrain employees to ensure they understood the new portal's power. Utilizing the Conveyor leads to deliver training was a key driver of early success; the training was delivered in person and on-site rather than via remote methods such as videoconference, so that it would be most effective. Local change leads and intranet leads also helped drive user adoption in the crucial post-launch period.
- **Execute a phased migration and controlled content clean up.** The biggest challenge during the project's final stretch was migration. Given the amount of consolidation occurring and the changes to the navigation and content structure, the team had to leverage a combination of methods and tools to migrate content. A big effort was required to clarify which content to keep and which could be archived. Decisions around content were further complicated as Goldcorp had only recently embarked on an information management project and therefore had no policies or guidelines to rely on when archiving and/or deleting content.

- **Use prototyping as a method for buy-in, Agile design, and mobile development.** Developing a fully responsive, clickable HTML prototype was instrumental in generating excitement and buy-in for the new intranet. It was easy to show everyone in the organization how the upgraded Conveyor would function relative to the old solution, and users could see how a responsive intranet would make it easier to consume content on the go. It also made usability testing easier, because people were able to use a solution that was almost identical to a production-version intranet, which made the data more accurate when refinements and iterations were created for further review. The team advises: "All organizations looking to build a complex, enterprise-wide intranet with diverse stakeholders and requirements should consider investing in this kind of prototype!"
- **Establish a governance structure in advance.** To ensure the long-term sustainability of Conveyor, Goldcorp established an operational committee to promote ownership across the business. This committee meets quarterly to discuss future enhancements, review analytics, and discuss the intranet roadmap. Participants include stakeholders from IT and Corporate Communications, as well as the portal's executive sponsor and support team. IT and Corporate Communications drive enhancements; they meet weekly to review Conveyor-related requests and suggestions from other Goldcorp areas.
- **Perform a highly managed rollout.** Before launching the upgraded Conveyor, the new solution's cornerstone — the permissions management model — was brought to the old solution. This ensured the organization had an understanding of what type of shift was coming prior to the intranet's go-live date. The team wanted to socialize and educate end users on the change in permissions management outside the intranet upgrade context so it would not be missed in the excitement of having a new employee portal. This decision also gave everyone on the intranet team a head start to manage the change and get employees used to the new methodology before the new architecture and design appeared in the upgraded Conveyor. Ultimately, rolling out the new permissions management model was a major success as the team had buy-in and adoption of this new security approach ahead of the new intranet's launch.

  Gendall explains: "We took a big-bang approach to cut-over and go-live because of the business continuity requirements for the dozens of processes relying on Nintex workflows and forms. Over a four-day period, the team worked to bring the new intranet to life. Conveyor was only out of commission for one business day."

  Given this effort, the go-live process went on without a hitch and went live on the day that was decided on when the project was initiated.

  Support employees were on deck at each location's go-live time (that is, the start of business in each time zone). This elevated support continued for 24 hours. Local leads had resources made available to them to help end users and team members use the upgraded solution.

- **Train.** Training started two months before go-live. A train-the-trainer approach helped manage the number of users who would need training on the upgraded solution. A preproduction environment, which was a full replica of Conveyor's production version, was set up for this purpose. Training was focused on local leads — power users at each location not typically in IT, but adept at technical and nontechnical aspects of Conveyor.

  The trainer traveled with key project sponsors and a change management lead from Goldcorp to two locations in Ontario (Thunder Bay and Timmins) and to Mexico City to conduct training for Canadian and LATAM users, respectively. These sessions covered each level of training (described below) and were crucial to equipping local intranet leads with the tools and confidence they needed to conduct end-user training at mine sites. The team also set up a training portal in the previous intranet to prepare for the imminent go-live.

  Following is a list of role-specific Conveyor training performed prior to go-live:

ROLE-SPECIFIC TRAINING PERFORMED PRIOR TO GO-LIVE	
Conveyor 101	This one-hour training course helps users discover the basics of the new Conveyor and get an introduction to the new design and features. They learn how to set up and customize their *My Goldcorp* profile, and find out where to go for further help and support.
Conveyor for Site Owners	This half-hour course provides an introduction to the Site Owner role and its responsibilities within the new Conveyor. Users learn how to manage requests for access to their department or team site, how to govern content within department or team sites, and how to leverage Conveyor's new capabilities (such as the access management form and the permissions reporting tool).
Conveyor for Site Coordinators	This is the most advanced course offered; it is aimed at employees who do day-to-day management of department and team sites in Conveyor. This four-hour course covers how to request a new department or team site, how to manage content using libraries, lists, metadata, and web parts.
Content Publisher Training	This course for content publishers focuses on publishing in the new Conveyor as well as features available in SharePoint 2013. The course includes guidelines for best practices for content creation and a Goldcorp style guide refresher. The course also covers publishing features new to Conveyor, including rollup and feature images, likes, comments, news categories, keyword tags, dynamic feature rollups, and local news promotion to global news. The course also discusses roles and responsibilities, content authoring and publishing processes, and content guidelines and new requirements.

WORKING WITH OUTSIDE AGENCIES	
Agency	**Project Role**
Habanero Consulting Group Provides strategy, design, implementation, and support services	• Design, research, and discovery • Development and migration • Testing • Rollout, intranet strategy consulting, coaching, change management, and training • Habanero also built and supported the previous edition of Conveyor (see timeline)

GOVERNANCE

Background

The project was structured as a business initiative with partners across the company's People, Safety, Communications, Legal, and IT departments. Also, a steering committee was formed and periodically briefed the executive leadership team. This helped elevate awareness of the initiative and provide the necessary leadership and sponsorship.

To ensure the long-term sustainability of Conveyor, Goldcorp established an operational joint committee to promote ownership across the business. This committee meets quarterly to discuss future enhancements, review analytics, and discuss the intranet roadmap. Participants include stakeholders from IT and Corporate Communications as well as the portal's executive sponsor and support team. IT and Corporate Communications drive enhancements and meet weekly to review intranet-related requests and suggestions from other organizational areas.

This governance structure is especially important in managing future enhancements. Any user can submit an idea for an enhancement or future feature; this helps the governance team build improvements that are targeted at solving challenges and adding additional value to everyone.

Day-to-Day Support

The Operational Committee has proven to be a critical resource for supporting the day-to-day team and helping it make strategic decisions about Conveyor that will impact the entire organization. "For example," says Kathryn Gendall, Internal Communications Manager, "the day-to-day team recently received requests from mine site leads for administrator-level privileges to be restored. The team presented the committee with several options, and the committee was able to select the best option with the lowest risk. Previously, decisions like these were left to IT or the site to decide without the benefit of executive support and insight."

Enhancements

Prior to this governance approach, requests for improvements were initiated at the mine-site level. This meant that, while individual locations might build great apps, workflows, and additional functionality, those innovations were not easily shared with the rest of the organization. “It also created a high chance of duplicate development costs because of the lack of oversight,” says Gendall.

Enhancements are now centrally reviewed and approved, ensuring that everyone at Goldcorp benefits from intranet improvements. This has reduced the cost and time spent managing improvements from mine to mine and eliminated the risk of duplicate developments. It’s an integral part of supporting the intranet’s future through a clear governance and ownership approach.

To bring this to life, the team leveraged Nintex workflows within the SharePoint intranet. This lets it collect and manage requests in a simple, standardized way. Nintex also powers many of Conveyor’s underlying business processes, including the site request and permissions management functions.

Permissions

Gendall says the new permissions model has gone a long way toward ensuring that the revamped intranet is set up for lasting success. Designated business owners grant requests to access team sites and documents, putting the accountability for security onto the business, as opposed to centralizing security in IT. “While the initial post-launch period was overwhelming, in terms of permissions requests,” she says, “there have been no major complaints or issues in this area since that time. Business groups have reported more trust in Conveyor since this enhancement.”

Permissions are particularly important for governance because they ensure that the right users can access the right content at the appropriate time.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Executive Sponsor	• Endorse the vision and provide an executive voice • Support and guide the team to make business decisions
Operational Committee	• Own the portal vision and objectives • Prioritize and manage the program • Provide strategic planning and prioritize projects and initiatives • Own the portal roadmap
Communications Oversight	• Provide an operational function (shared with IT) • Oversee branding, content governance, publishing processes, and any communications-related functions
IT Oversight	• Oversee the portal's operational function (in partnership with Communications) • Own collaboration-related portal functions • Oversee other IT roles and responsibilities, service-level objectives, and policies and procedures related to IT management • Oversee the day-to-day Conveyor support team
Local Conveyor Leads	• Promote Conveyor at the site level • Resolve simple queries and conduct introductory training • Filter and coordinate enhancements for their mine site
Systems and Support Analysts	• Address Tier 2 queries and issues about Conveyor, including resolving workflow queries and issues and requests for changes to existing sites (the general IT Helpdesk resolves Tier 1 queries) • Create and design new team sites and workflows • Scope new business processes in Conveyor • Report on permissions and analytics
Conveyor Manager	• Manage support team

	• Oversee all reporting on Conveyor • Prioritize enhancement requests • Manage Conveyor budget • Drive adoption across Goldcorp
Content Publishers	• Publish news content for *Recent News* and *Local News*
Site Owners	• Act as business owner for the site • Approve or deny permissions • Decide who can and cannot see information

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	https://conveyor.goldcorp.com
Default Status	The intranet is the homepage on all Goldcorp computers.
Remote Access	Users can access Conveyor offsite through VPN.
Shared Workstations or Kiosks	Some mine employees access Conveyor through workstations or kiosks.

TIMELINE

PROJECT MILESTONES	
Milestone Date	**Milestone Description**
2007	• First company intranet, Conveyor, is born
March 2012	• Upgrade to SharePoint 2010 completed; light redesign
March 2012–Sept 2014	• Ongoing maintenance, support, and evolution of Conveyor, including additional apps, workflows, and enhancements
Sept 2014	• Official 2013 redesign project kick-off
Sept 2014–March 2015	• Research and design phase, including prototype and usability testing • Change management and business readiness assessment begin
April–June 2015	• Implementation: development, migration, video, and workflows
July–November 2015	• Stabilization, UAT, training, content authoring, and change management
November 9th, 2015	• New Conveyor officially live in SharePoint 2013
Overall redesign timeframe: 14 months	

CONTENT AND CONTENT CONTRIBUTORS

CONTENT DEVELOPMENT AND OVERSIGHT	
Contributors	On Conveyor, content can be divided into two categories: • **Communication content** is generated by three contributors from the Corporate Communications group and by approximately eight communication leads at the sites. • The number of **collaboration content** contributors depends on the group and/or function. These contributors are managed through permissions from site owners, which exist for every department across all of the sites. Departments might each have several content contributors.
Training	• Every site takes a different approach to training. Some sites offer regular training, while others offer training when there are sufficient training requests. At the head office, training for new hires is often conducted during their first few weeks at Goldcorp. • Training is conducted in IT training rooms at some of the sites or via WebEx.
Maintaining Quality	The Information Management Excellence Project launched part way through the redesign project and is focused on creating content management guidelines, best practices, and policies for all Goldcorp content stored on Conveyor. The intranet will be one of three CMSs at the company, along with email and local drives. The plan is to integrate the information management software with Conveyor, then develop processes and guidelines for content management.

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and Operating System	• Windows Server 2012 • SharePoint Server 2013
Bug Tracking / Quality Assurance	• Team Foundation Server (used for QA during the project) • Microsoft Test Manager • HP Quality Center (used after go-live)
Design Tools	• Sketch for visual design • HTML and CSS for prototype development
Site Building Tools	• Microsoft Visual Studio
Content Management Tools	• SharePoint 2013
Search	• SharePoint 2013
Other Functions	• Qumu (enterprise video) • Nintex (workflows) • Office 365 and Exchange Online (notifications in *My Goldcorp*) • Metalogix Content Matrix (content migration) • WebTrends (intranet analytics) • Single sign-on integration with Enablon, SuccessFactors, and Office 365 Exchange Online (Exchange Online information also appears in the *My Goldcorp* notifications bar)

ROI

Tracking Success with Analytics

SharePoint 2010 offered limited analytics out-of-the-box, so the previous version of Conveyor was unable to determine key metrics. It was also difficult to demonstrate to executives why the intranet was an important communications tool, because no readership statistics were available. This lack of analytics affected the entire communications and collaboration strategy, because it was hard to match enhancements, ideas, and plans to user preferences.

Conveyor now has a robust analytics tool that’s built for an enterprise intranet. Executives can measure the return on time spent crafting company-wide intranet communications; stakeholders can review the entire portal’s analytics; and end users can look at the number of comments, likes, and views to find the most popular articles. Including analytics has resulted in renewed confidence, interest, and support for Conveyor across all levels and locations within the organization.

Key Metrics

The Goldcorp team has several simple metrics that show initial ROI in the period shortly after going live, from November 2015 to February 2016. These metrics include the following:

- The increase in daily active users showed that 164% more people were connecting to corporate communications each day.
- Page views were up 26% since launch, suggesting that people were reading more content each time they used Conveyor.
- Top news releases were receiving open rates of 60% or more, which equates to more than 3,000 people.
- According to site directory traffic, 300–400 users were collaborating each day.
- The site logged approximately 3,000 unique visits per day — roughly 50% of Goldcorp's office workers.
- Daily average user duration was 44 minutes.

In addition to these measurable successes, the new intranet has achieved many less tangible, but just as important, improvements. The new design has made the system more user friendly, and adding an ownership structure means that Goldcorp now has a dedicated team to support all users in both English and Spanish (the two most common languages). This, coupled with the network of Conveyor leads who drive adoption at mine sites and offices has created increased trust in the system and awareness of what it makes possible.

Communication Improvements

Prior to the upgrade, it was very difficult to measure user engagement with intranet content. The Communications team was producing a lot of content, but had no way to measure which content users responded to or to showcase the large volume of content in a consistent manner. With no analytics, it was also difficult for the Communications team to make fact-based decisions regarding content planning and direction. Most of the feedback the team relied on was subjective and qualitative rather than quantitative. In contrast, the new intranet lets the team measure what's working (or not) and respond appropriately.

Following are some of the ways the team tracks how intranet content is being consumed and what it means for the organization:

- **Requests for enhancements.** Every month, a call with the Conveyor leads lets them share improvements and new enhancements and answer questions. This consistent communication with site representatives has helped the company grow adoption, especially in its LATAM region. Prior to the upgrade, the vast majority of enhancement requests came from Canada. Now 36% of those requests come from LATAM sites.

- **Views, comments, and likes.** Every article Conveyor publishes now shows the number of views, likes, and comments. These features have made a remarkable difference; employees now perceive Conveyor as a communication tool and better engage in what's happening at Goldcorp.
    - **Likes.** The Communications team can easily see which content appeals to users, then use this information to make content more engaging. The like functionality is an easy engagement tool and has become especially popular; one article — a farewell message from long-time CEO Chuck Jeannes — receiving 82 likes within a few hours of posting.
    - **Views.** Users' ability to see how many views an article has earned has massively impacted the perception of Conveyor as a key communication tool. Prior to the upgrade, business units were hesitant to use Conveyor to communicate as they were convinced that no one was reading it.

      The number of views also lets the Communications team analyze which content gains the most views and where additional effort is needed to improve engagement. Goldcorp Communications stakeholders can also determine whether key strategic messages are being read — and, if not, can work with mine general managers to ensure that the messaging is reaching employees through other channels.
- **Requests for publication.** Now that the views are visible to everyone, requests for Conveyor articles have increased, and Conveyor has become a standard line item for all business unit and project communication plans. Executives have also been keen to create and engage with portal content because the article statistics show the response from the rest of the organization. Before these features were implemented, the general sense was that intranet news was important, but it was hard to say exactly how many employees would actually see the content.

  Requests to publish articles has not diminished since the launch, and the number of articles published in the first five months of 2016 has grown compared to the same period in 2015, despite a smaller Communications team. The volume of articles published on Conveyor continues to climb. Between January and May 2015, approximately 350 articles were published on the portal; for the same period in 2016, almost 400 stories were shared through this channel. April 2016 was the best month since go-live for readership of Conveyor articles in terms of average views per article, total views, and number of articles published.
- **Language-specific content.** This type of content has also risen. In comparing the January — May 2015 time period with January — May 2016, French-language articles are up from 100 to 125, Spanish articles from 125 to 140, and English articles from approximately 140 to 150, respectively.

- **Demand for content.** In the first half of 2016, approximately 50 more articles were published across the intranet than in the same period in 2015. Further, the number of average views per article topped 300 for the first time in April 2016. Demand for content has been increasing; business units and mine sites now routinely ask Communications for help in creating news articles to push out to the rest of the organization. The ability to quantify views of news articles means that the Communications team can strategically plan content to maximize reach and impact. This insight has already informed Goldcorp's communication strategy.
- **Video.** Video is another key outcome of the new solution, and the team is especially proud of the results they've seen early on.
  - **Quality improvements.** Videos are uploaded at a better quality than the previous solution and can be played full screen.
  - **Increasing reach.** To date, the most-viewed video has been seen 2,813 times in English, 1,893 times in Spanish, and 204 times in French. Based on word of mouth feedback, Goldcorp's Communications team knows that these videos were often played to crews that don't have access to Conveyor, increasing the reach even further than originally expected. This would not have been possible with the previous video solution. A mobile-friendly intranet is especially important on this front, as mine employees with access to Conveyor can share content with other employees via a tablet or smartphone.
- **System performance.** The redesign project has also resulted in improved system performance:
  - **Page load improvement.** Although pages are rich and vibrant, the average page load speed is up to 60% faster than the previous version.
  - **Bandwidth increase.** The new Conveyor's connectivity has improved up to 200% over the previous version.
  - **More resilient system.** The system is less likely to crash in the event of a server issue.
  - **Better load spread.** The system is now smart enough to spread load among servers based on demand; before, Conveyor was hard-coded to one server, resulting in slower performance.

Tracking Success through Feedback

The following feedback was received from various executives and stakeholders:

> "The new Conveyor provides us with the perfect opportunity to improve the way in which we communicate the great work we are doing across the business. I look forward to being able to catch up on what is happening at all of our sites, both quickly and easily." — *Brent Bergeron, Executive Vice President, Corporate Affairs and Sustainability*

"I am looking forward to working on the new and improved Conveyor. I encourage every one of you to use this tool effectively to improve our communication and knowledge sharing within the company." — *George Burns, EVP, Chief Operating Officer*

"I find the new look and feel far more intuitive and much easier to navigate. The redesign makes it far easier to find, access, and share information across the company, which will make Conveyor our key communication and collaboration tool going forward." — *Russell Ball, EVP, Corporate Development & Capital Projects*

"The new Conveyor is all about enhancing our information platform to allow friendly navigation. The upgrade will make our life easier in many ways, including easily storing, finding, and sharing key information; keeping us updated for upcoming activities; managing feedback from regions and operations; getting in contact with key players. It will definitely allow every Goldcorp employee to know how we are continuously improving our organization." — *Nora Lozano, Director Sustainability*

"Safety is fundamental to how we do work at Goldcorp, and the new *Safety* page on Conveyor reflects this. I look forward to having a cleaner and simpler way to share our Safety and Health programs, activities, and tools so that everyone has access and can contribute to Goldcorp being safe enough for our families." — *Ann Masse, VP Safety and Health*

"As a new member of the Musselwhite team, I am excited to be part of the new Conveyor launch. Having only experienced a few weeks in the 'old' Conveyor, I can tell the new system has a lot more user-friendly interface, and I believe it is going to be a powerful tool for team collaboration." — *Louise Imhoff, Administrative Assistant, Musselwhite Mine*

"I find the new Conveyor is more appealing because of the one-stop *My Goldcorp* workspace, the ability to bring everything I need to one site. Some of the other features I will probably use often is 'change order' on the *Quick Launch* for reordering of the left navigation and the drag features that will allow me to transfer and share documents with a single click." — *Habiba Essak, Graduate Industrial Hygienist, Musselwhite Mine*

"I really like the addition of the *My Notifications* feature on the *My Goldcorp* page. The clean design allows you to see your workflows at a glance. This new feature will make team collaboration and the approval processes more efficient and effective." — *Kevin O' Reilly, Senior Analyst, Toronto Office*

"As a site coordinator, I was thrilled to hear about the Conveyor upgrade. The new intuitive design of the homepage allows the user to navigate the site with ease. One of my favorite features is having the ability to access Conveyor on my smart phone; now I can modify and review items while I am on the go. In addition to this, I can customize the *My Goldcorp* page by adding links to my frequently used documents — now everything is just a click away." — *Mary Bracht, HR Coordinator, Toronto Office*

LESSONS LEARNED

Goldcorp team members discuss lessons learned from the redesign project:

- **Content inventories will simplify content migrations.** "If you're moving thousands of documents, team sites, and other collaboration or publishing content, make sure you have a detailed content inventory that captures the name of the item, its location in the previous intranet, and its destination in the new solution. This, plus other variables unique to your portal and content, will ensure nothing is lost during a migration and everyone on the intranet team understands what's done and what's left to do in this important part of an upgrade project.

  "Detailed content inventories are also critical if you're moving content to a new information architecture, as was done in this project. Ensure your team and business stakeholders understand how the new information architecture and navigation experience will affect end users. This reduces the chance of someone being surprised or unable to find important information during testing or go-live." (Melanie Gabanna)

- **Run QA tests on migrated content.** "It may sound obvious, but once you've run some initial tests of your content migration approach, it is important to run quality assurance tests and user acceptance tests of the new migrated content. To the migration team, it may look like everything moved across properly, but with a more rigorous testing approach with content owners, you may find that lists are missing, web parts weren't migrated, etc." (Toni Albert)

- **Migration tools are not a silver bullet.** "It's important to remember that migration tools are not a silver bullet. From the tools we used and looked at during the engagement, we realized each SharePoint migration tool has strengths and weaknesses. Custom scripts are necessary in certain cases, so be prepared to step in and do this work when a tool cannot perform to your specifications or needs." (Chris Radcliffe)

- **Invest in training.** "Our investment in training materials, courses, and overall structure was key to the success of this upgrade. The local lead model created a key link between the intranet project team and end users. A train-the-trainer approach with local leads and other key users prior to go-live meant that each location had a representative who was ready to train colleagues on the upgraded intranet. Goldcorp and Habanero also created courses that are reusable for each part of the intranet, depending on a user's role (site owner, content publisher, etc.). The Conveyor 101 course created during this intranet project continues to be a vital tool when onboarding new employees or giving users a refresher course." (Mumtaz Chaudhary)

- **Establish ownership and governance.** "A key feature of Conveyor's increased reach and adoption in 2016 has been as a result of a clear governance structure that identifies ownership for the platform. Both IT and Corporate Communications are aware of their roles to support and grow Conveyor and so are held accountable at the Operational Committee meetings to report on the adoption of the intranet. Ensuring an intranet has key executive and operational support after go-live is key to growing adoption and usage of the solution, as has been the case in our organization." (Damon Sas)
- **An intranet is the heart of your digital workplace.** "Intranets should be home base for all of the tools employees need throughout their day. You have to look at the landscape and see how you can integrate, fully or lightly, with the rest of the applications or web services users need. Without this broad view and understanding of how your intranet fits into the rest of your digital workplace, you're potentially furthering confusion or silos in your organization." (Damon Sas)

  "In *My Goldcorp*, we created this sort of hub for the other digital tools employees use every day. With the right coaching around what tool to use when, and how to make sense of the integration points, we're able to encourage people to spend most of their intranet time within the personalized hub." (Jose Szücs)
- **Consider your homepage experience.** "A lot of intranet homepages resemble the walled-garden approach that was popular in consumer-facing web applications in 1990s and early 2000s. Think about how you can modernize that experience for users and bring more of an external-facing feel to your intranet. At Goldcorp, we decided to focus on news and rich media — including photos and video — to create an intranet homepage that tells our organization's story as opposed to acting like a sitemap for the entire intranet. The key to executing this is organizing content authors and a pipeline of content that supports a news-first homepage, but with the right team approach this is doable and provides a ton of value for everyone in the organization." (Ben Ng)
- **Build a flexible navigation.** "As we moved from a distributed, 13-portal structure to one global intranet, the navigation was a major focus for the team. We chose five general buckets with the ability to drill down to related content, and eliminated fly out menus that often distract from page content and create a more dated experience. Content targeting can ensure people aren't overwhelmed by landing pages, plus coaching users to use search or personalized bookmarks, like on the *My Goldcorp* page, to save frequently used content." (Ben Ng)
- **Get your team aligned as early as possible.** "One of the key decisions before, during, and after the project was the time spent getting stakeholders across Goldcorp aligned around the intranet. Conveyor was seen as a global foundation for communications and collaboration, and having this understanding made it easier to address concerns, make decisions, and build toward a cohesive vision." (Mumtaz Chaudhary)

- **Test early and often.** "Get users in front of the solution as early and often as you can. When you're making a big change to the way an intranet looks and functions, you have to show people how the shift will benefit them and improve the way they use the solution. We did this with the navigation, showing how localization and a more streamlined experience makes it easier to find what you're looking for — as opposed to remembering complex paths and sifting through massive fly-out menus." (Melanie Gabanna)

Maple Leaf Foods (2018)

OVERVIEW

COMPANY

Maple Leaf Foods is a leading consumer protein company making high-quality, innovative food products sold internationally.

Headquarters: Mississauga, Ontario, Canada

Company locations: Multiple operations across Canada, US, Japan, and South Korea.

Locations where people use the intranet: All sites (offices, operations, and distribution centers)

Annual revenue: $3.3 billion CAD in 2016

THE INTRANET

Users: Approximately 3,400 of the 11,000 employees have access to the intranet through their assigned Office 365 credentials; the rest of the employees are primarily hourly workers who are not assigned individual system identities.

Mobile approach: Responsive web design

Technology platform: SharePoint O365 Online

TEAM

The core team of nine, comprised of UX and developer resources, was complemented with a small executive sponsor group and functional group site owners.

IS User Experience: Stephanie Godin-de Vries, Director UX; Andrew Geddes, Specialist UX; Neelima Chembil Palat, Analyst UX; Radley Dioso, UI/UX Design Consultant; Valentina Dick, Change Lead; Melanie Groves, Sr. Analyst UX; Andrew Chiang, Specialist UX

IS Development: Oleg Grin, Specialist Web Developer; Andy Hao, Specialist Web Developer

Business Site Owners: Jennifer Fernandez, Director Communications; Monique Marozzo, Communications Coordinator; Linda Vickers, Director Compensation & HR Services

Executive Sponsors: Scott Bonikowsky, VP Communications & Public Affairs; Ian Henry, Sr. VP People; Marie-Claude Vezina, VP IS Digital Innovation; Andreas Liris, Chief Information Officer

Also, a combination of consultant design and development resources was engaged for key phases.

INTRANET TEAM

Team members shown here (top row, left to right): Andrew Geddes, Stephanie DeVries, Valentina Dick, and Radley Dioso; (second row, left to right): Neelima Palat, Melanie Groves, Oleg Grin, and Andy Hao; (third row, left to right): Andrew Chiang and Linda Vickers. Missing from photo: Jennifer Fernandez and Monique Marozzo.

HIGHLIGHTS ABOUT THIS WINNER

With a goal of supporting communication, collaboration, and productivity, the Maple Leaf Foods intranet team set out to create a site that would support the company's digital strategy of finding "New Ways of Working," transforming its approach to communication while also having an appealing look and feel.

The new intranet, myMLF, supports approximately 3,000 of the approximately 11,000 people at Maple Leaf Foods; most of the people without access are hourly employees. The site is built on Office 365 and is fully responsive, acting as a digital hub connecting people with the information and tools they need to get things done.

- **Customization.** The team wanted a bold, visually driven design for the site, and it takes pride in the compliments it received for its efforts. Team members wanted an intranet that looked like a website, rather than an intranet. The site is therefore image-heavy to support visual storytelling, with special guidelines given on selecting photos that will not slow the page down. Creating a non-SharePoint-y look and feel was a bit of a challenge, as it required skills that were not available in-house. A designer and developer worked together to determine the right approach for the look and feel.

- **Content.** The organization moved from a structure in which a few people created content centrally to a more open structure that lets employees submit content in a review and approval process. The team assigned ownership for site content and informed content owners about the intranet content strategy. It supports the content team with short "Writing for the Web" videos, guidelines, and access to online training on Microsoft tools. In contrast to the previous site, authors and subject matter experts are now featured on their pieces.
- **Cloud-based.** The move to Office 365 meant that the company could eliminate physical servers and shared drives. Another draw of using Office 365 was that it would be always up-to-date, with no need for update management. Unlike with standard web design, customization within SharePoint's framework was carefully managed to allow these dynamic updates and minimize manual interventions.
- **Yammer integration.** Yammer is integrated throughout the site to encourage social collaboration, engagement, and overall participation. The tool launched with a "30-days of Yammer" campaign intended to increase awareness of, comfort with, and participation in the tool. Another campaign, called "Thumbs Up Thursday," encouraged employees to share praise and recognition through Yammer. Adoption has been slowly and steadily increasing in terms of engagement with content and the variety of employees posting. Yammer is integrated into every article on the site, as well as featured on the homepage.

BACKGROUND

The starting point for the company's most recent redesign was to meet a digital strategy goal of creating a modern workplace that facilitates new ways of working through information storing, sharing, and collaboration. After a successful implementation of Microsoft O365 tools (Office, OneDrive, Outlook, Skype, and Yammer), the use of O365 SharePoint to relaunch the intranet was the next major stage of the company's O365 roadmap.

Goals

The overarching goal of the new Maple Leaf Foods intranet, myMLF, was to provide an integrated, highly featured, leading-edge-designed intranet presence that is both easy to manage and simple to interact with. The new intranet was to be the hub for Maple Leaf Foods and all of its divisions. Marie-Claude Vézina, VP of IS Digital Innovation, summed up the new intranet's goals succinctly when she said, "It needs to be simple, mobile, social, and be the digital hub to connect people with the information and the tools they need to get things done."

To achieve this, the project team needed to:

- Redesign the intranet to be more user-centric and intuitive, provide clearer navigation and standard templates, and improve information-finding
- Simplify site management to support the creation and on-going maintenance of content

- Introduce new online tools for automation and to help track business processes, with the ultimate goal of realizing productivity gains
- Establish governance — that is, standards and policies for the application's use
- Discontinue the use of shared drives for group collaboration purposes

Challenges

The Maple Leaf team faced many significant challenges throughout the project:

- **Content challenges.** From the start, the team knew that much of the old intranet's content was stale and lacked clear ownership; the task of defining and assigning ownership for various content spaces was therefore arduous. At the same time, the team was trying to help site owners and content contributors understand the shift in the company's intranet content strategy. Taking the time to bring the content owners on board with the new approach was critical, because the team needed their active participation. The content needed thoughtful editing, reorganizing, and archiving — and sometimes just deleting — but each such decision required content owners and contributors to participate.
- **SharePoint challenges.** Surprisingly, content was not the most significant challenge the team faced; it struggled daily with the challenge of integrating the design vision with SharePoint limitations on development and functionality.
- **Other challenges:**
    - **Limited usage analytics.** Tracking features had not been activated when the old site was originally launched, so the team had limited usage analytics and thus lacked access to rich data on actual user behavior. As a result, it had to expend more effort interviewing site owners and visitors to ensure the new design aligned to core needs.
    - **Design independent of platform.** The new design plans were created independent of the platform they would be running on: O365 SharePoint Online. Additional design adjustments were constantly being made late in the development phase to adjust for SharePoint factors, so the team paused to conduct a deep-dive review and realign the site owner on the functionality that would be delivered.
    - **Team restructuring.** Mid-project, the team had to restructure to address skill and delivery gaps impacting the critical path. This forced the team to tighten its scope for release timing of sections and features and site functionality.
    - **Skill gap.** Having a mobile responsive site required an advanced UI/front-end developer skill set, which was a gap for the in-house development team. As a result, it had to include consultant resources throughout the project until a new recruit could fill this gap.

SharePoint — But Not Cookie Cutter SharePoint

First and foremost, the new MLF intranet stands out because it was custom-built on top of O365 SharePoint Online, yet presents as a consumer-grade website. Companies typically deploy SharePoint sites in an out-of-the-box fashion, but because the Maple Leaf team wanted to go with a bold, visually driven design with extensive storytelling capability, investment in front-end customization efforts was essential. When it came to the design, the team did not want something that would be purely functional and a bore to look at and interact with; it wanted to engage users.

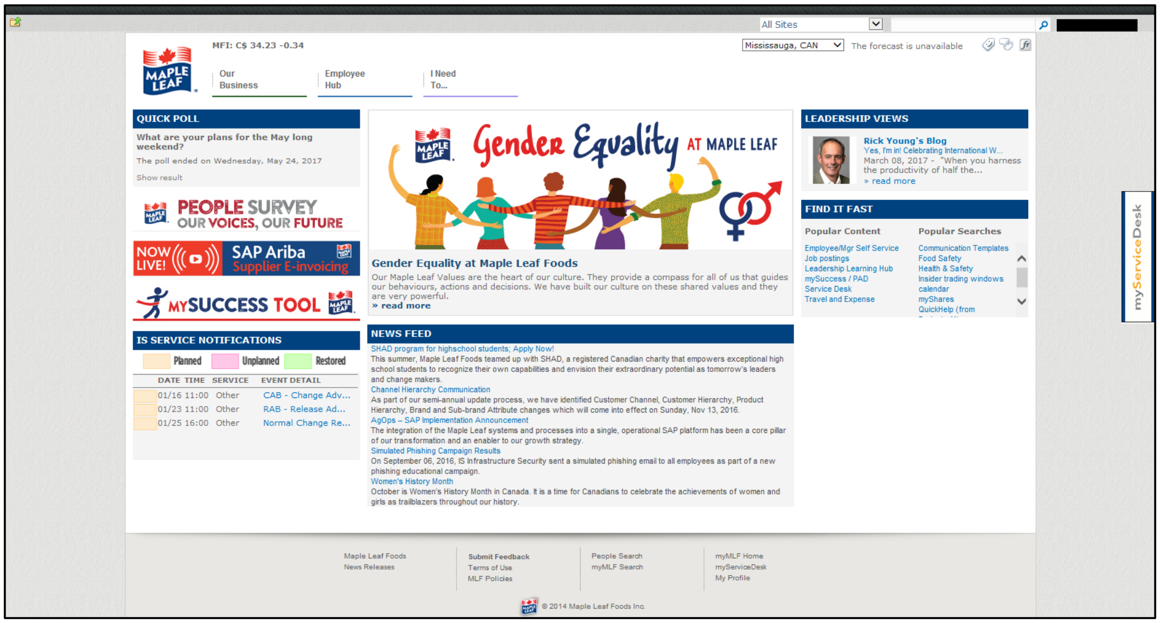
This approach has its plusses and minuses for the Maple Leaf team:

Positives:

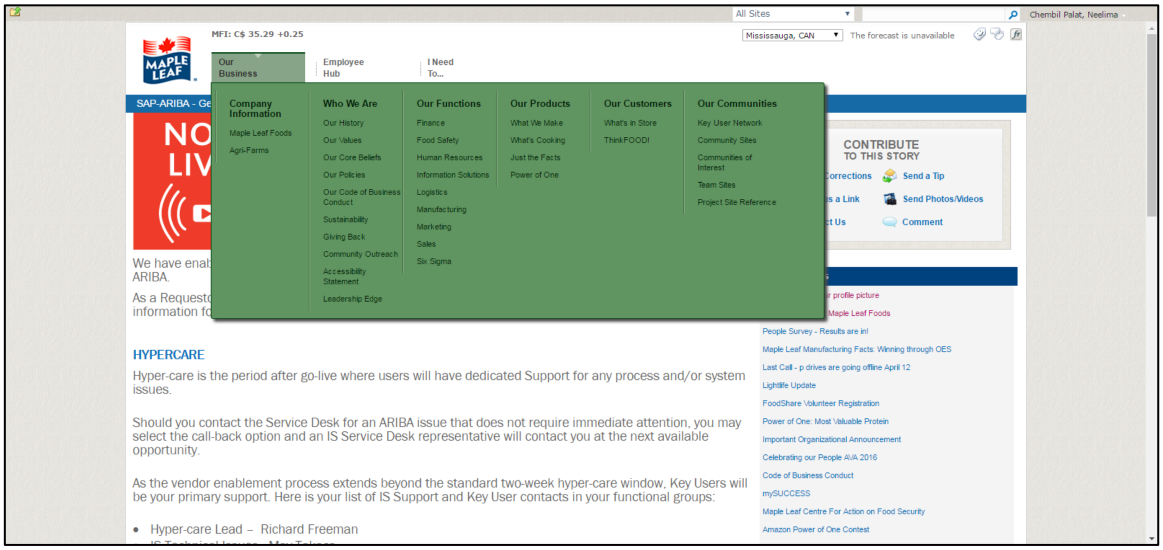
- Ability to provide a consumer-grade, intuitive, and modern UI running on the integrated SharePoint platform on the back-end
- Visually impactful content presentation, enabled by SharePoint CSOM (client-side object model) and other UI coding that will require minimal maintenance when future SharePoint changes are rolled out
- Given the front-end coding overlay, the site has an optimal mobile-responsive nature
- SharePoint Online is a component of the Microsoft's Office 365 tools, which are already used extensively across the organization

Negatives:

- Longer development cycle for the initial build to create the master page and multiple template variations; once those resources were established, speed of creation hastened
- Additional developer skill set required for the build, as both front-end/UI developers and SharePoint back-end developers are needed to produce the target results; initially augmented the team with a contractor resource until recruitment completed
- Customizations may require periodic maintenance when Microsoft pushes global SharePoint changes



Pictured: Maple Leaf Foods Intranet Old Homepage. This is the unresponsive landing page of the old Maple Leaf Foods intranet. The navigation is a megamenu with a large list of links, some of which were not grouped in any logical order. This page contained outdated content in quick poll, leadership views, newsfeed, and the carousel. The search feature was not functional; the right results would not display when searching a keyword.



Pictured: Maple Leaf Foods Intranet Old Navigation. The first myMLF's main navigation was a megamenu split into three main categories: *Our Business*, *Employee Hub*, and *I Need To*. Content was very hard to find and illegible under these megamenus, which prevented employees from finding information and getting to their work easily. It was especially difficult for new employees to get to their team sites and find the information they needed because the IA that did not group content in a logical way.

DESIGN REVIEW

Pictured: Maple Leaf Foods Intranet Homepage. The cleanly designed homepage offers access to feature stories, breaking news, tools, and conversations.

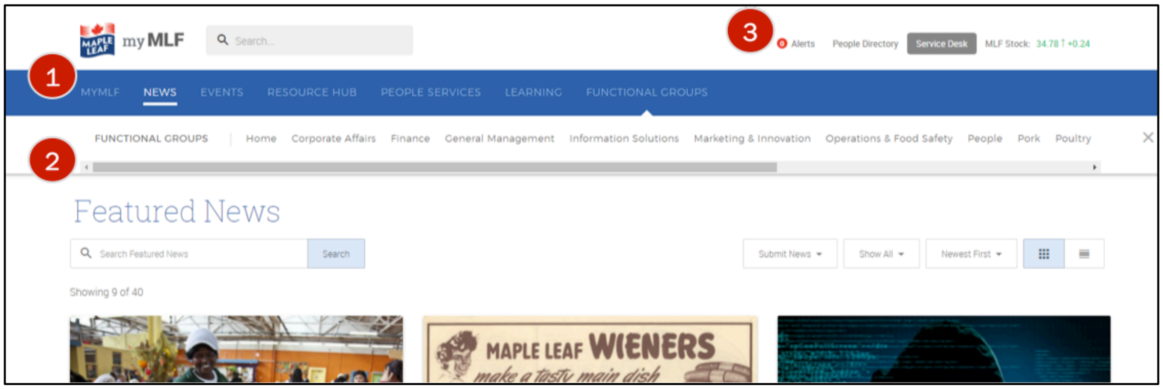
Homepage Highlights

1. **Look and feel.** The team wanted the site to look modern and not have a standard intranet feel to it. It used a flat design, colorful and engaging images, and a consistent use of colors to create a very clean design that looks modern and engaging.
2. **News.** One primary feature story is highlighted, with a large image and an overlay that includes the type of story (in this case, a feature story), headline, category of content, and the number of comments and likes the story has received. A secondary story is featured alongside the first and a third appears at the bottom of the page.
3. ***Join In*.** A prompt to *Join In* appears at the bottom of news items, together with the user's picture, to encourage social participation on the site. Clicking the prompt opens a light box where users can like, comment on, or interact with previous comments.
4. ***Trending Now*.** This area features site content that is popular and generating conversation. Each item is listed with an image, category, and the date it was posted.
5. ***Join the Conversation*.** This section showcases a running feed of activity that is based on the individual's group permissions in Yammer. Users can tab between an *All Activity* view and a *Featured Posts* view, and can navigate directly to Yammer by clicking on an item or the *Go To Yammer* button at the bottom. This helps instantly connect employees to the conversations going on around the organization. The *Featured Posts* tool lets users reshare a post within a group to call attention to it. This gives the user community a role in curating worthwhile content.
6. ***News Feed*.** The *News Feed* offers additional content to users, featuring headlines and dates with a link to *More News*.
7. **Quick poll.** The poll feature engages employees by asking them to express opinions and provide feedback. Clicking on the poll opens a lightbox that lets users vote and see results.
8. **Video.** The site features video content, and it highlights two recent videos on the homepage. Videos are shown with a thumbnail image and a *Play* button. The length of the video is shown, along with the title and the date and time it was posted.
9. **Feedback.** As the team was doing research on creating the new site, it saw that employees had a wealth of valuable feedback about the site, its features, and its functions. To encourage this feedback to continue, the team added a *Feedback Form* link at the bottom of the page, together with a prompt to submit suggestions to the team.
10. **Footer.** The page footer provides quick access to key corporate and external resources, such as the *Core Strategies* information about the company's goals for the following year. This information is particularly valuable for new employees trying to understand more about the company. Other key areas such as *Locations* and *Careers* are listed as well. The footer includes direct access to *Team Spaces* and external

sites, and also offers links to the company’s presence on various social networks.

11. ***Workspace*.** The *Workspace* tab is persistent throughout the site, and provides users with quick access to productivity tools and customized links.

Navigation

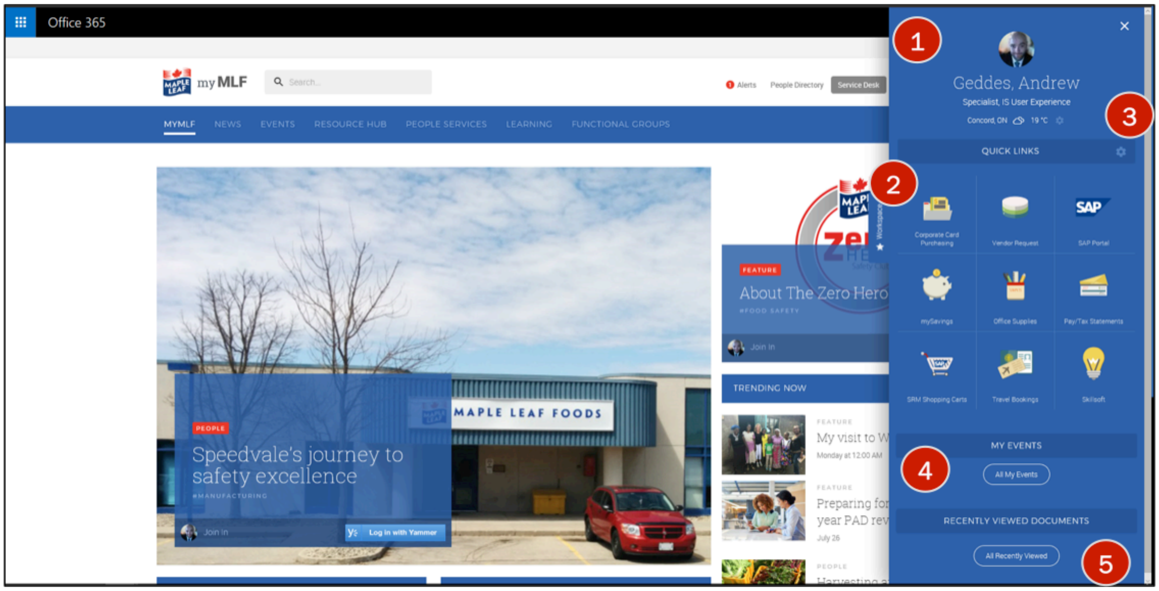


Pictured: Maple Leaf Foods Intranet Navigation. The main site navigation appears in the blue bar at the top of the page, with secondary navigation appearing in a unique scrolling bar beneath it.

Navigation Highlights

1. **Categories.** The site's navigational categories are *MyMLF*, *News*, *Events*, *Resource Hub*, *People Services*, *Learning*, and *Functional Groups*. The users' current location is indicated with an underline in the main site navigation.
2. **Secondary navigation.** In *Functional Groups*, users can navigate via a secondary navigational menu that appears below the *Functional Groups* heading. In this example, the user is in the *News* section, but has clicked on *Functional Groups* to navigate to a new site section. The groups are listed in a white bar beneath the main navigation. In the few cases where the screen is too narrow to fit all of the secondary options, the user can scroll to see additional options, indicated by the scroll bar. The user can also close the secondary menu via the X on the side of it.
3. **Utility navigation.** At the top of the page, a set of utility links provides necessary employee information and support in a consistent, easy-to-locate spot. There, users can access *Alerts*, *People Directory*, and *Service Desk* (via text, email, or phone), and see the current stock price. Site administrators use *Alerts* to send out important messages, such as information about outages or submission deadlines. The number here indicates the number of active alerts. At times, essential alerts appear in a red banner at the top of the page; users can dismiss the banner after reading. Clicking on any alert opens an article page with more information.

Workspace

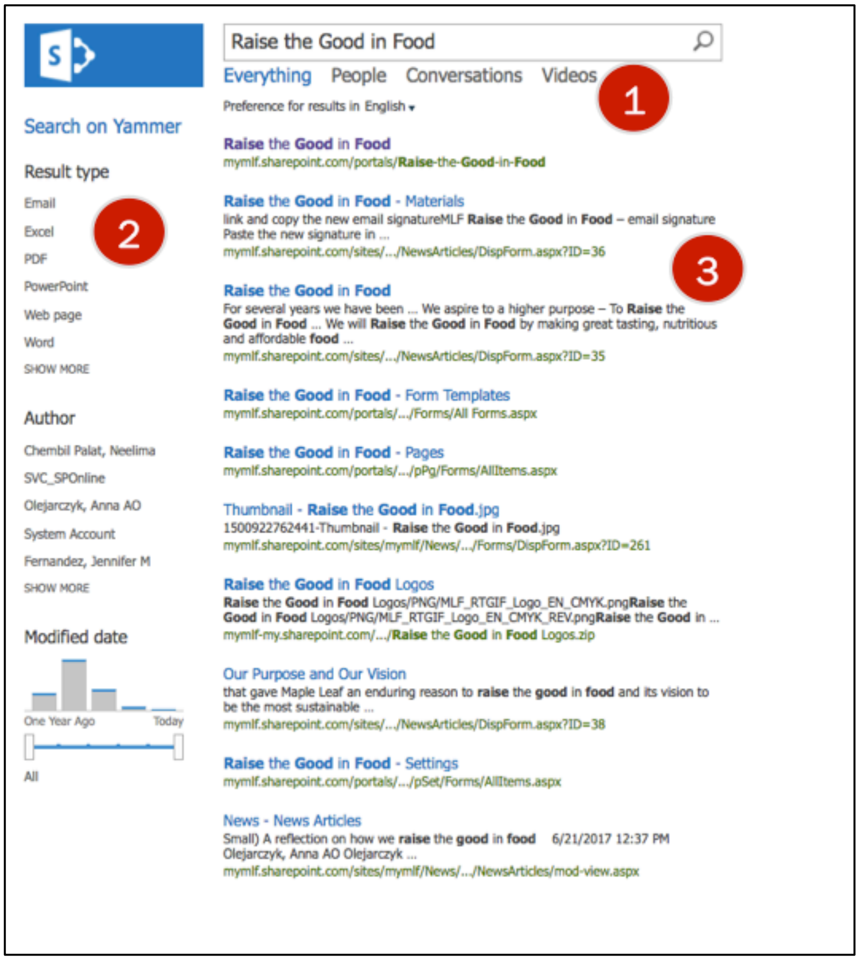


Pictured: Maple Leaf Foods Intranet Workspace. The *Workspace* is available across the site through a persistent tab in the page's right margin. *Workspace* provides quick access to tools and links that employees need for daily work.

Workspace Highlights

1. **User details.** The *Workspace* tab opens with the employee's photo, title, location, and weather information at the top.
2. ***Quick Links*.** These links to productivity applications and tools commonly used across the organization include SAP, pay stubs, and travel information.
3. **Customization.** The gear icon next to the weather information lets employees select an office location, which updates the weather forecast accordingly. Users can have 6–12 quick links in their *Workspace* tab, and can customize this list of tools by clicking the gear icon next to the *Quick Links* heading. Doing so opens a light box, where users can search by keyword or choose from a list of 30 popular links. This was a feature that grew out of user research at the beginning of the project. The team found that many employees were bookmarking favorites to keep track of and locate helpful information again, so it built this functionality as a persistently available site feature. Tools accessed through *Quick Links* use single sign-on for users whenever possible.
4. ***My Events*.** Personalized content is listed, showing events the user had registered for. Users can click on the event to see more details, such as location and time.
5. ***Recently Viewed Documents*.** This selection of documents gives users quick access to information they have recently viewed.

Search

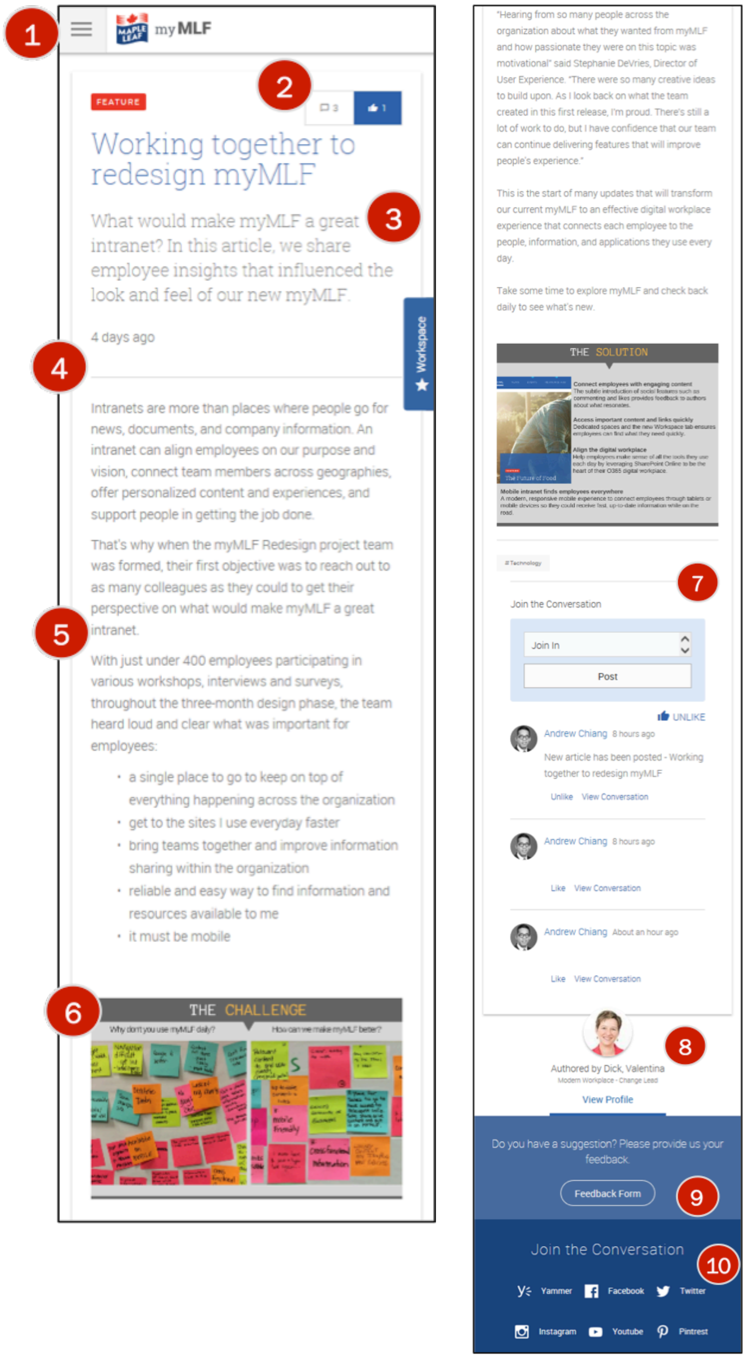


Pictured: Maple Leaf Foods Intranet Search. The search function uses SharePoint Enterprise Search. *92_MapleLeafFoods_06_myMLF_Search_live.png*

Search Highlights

1. **Filtering.** Search results can be refined by *Everything*, *People*, *Conversations* (Yammer), or *Videos*. The search results list everything by default, with the available filters listed at the top of the page.
2. **Narrowing results.** Users can further narrow results via options on the left side of the search results. They can refine by *type*, *author*, or *date*.
3. **Results.** Results include instances of the search query on that page of content. Users can also hover over a result, which opens a properties light box that can include a document preview. Search results are enhanced with the use of best bets and suggested sites.

Mobile

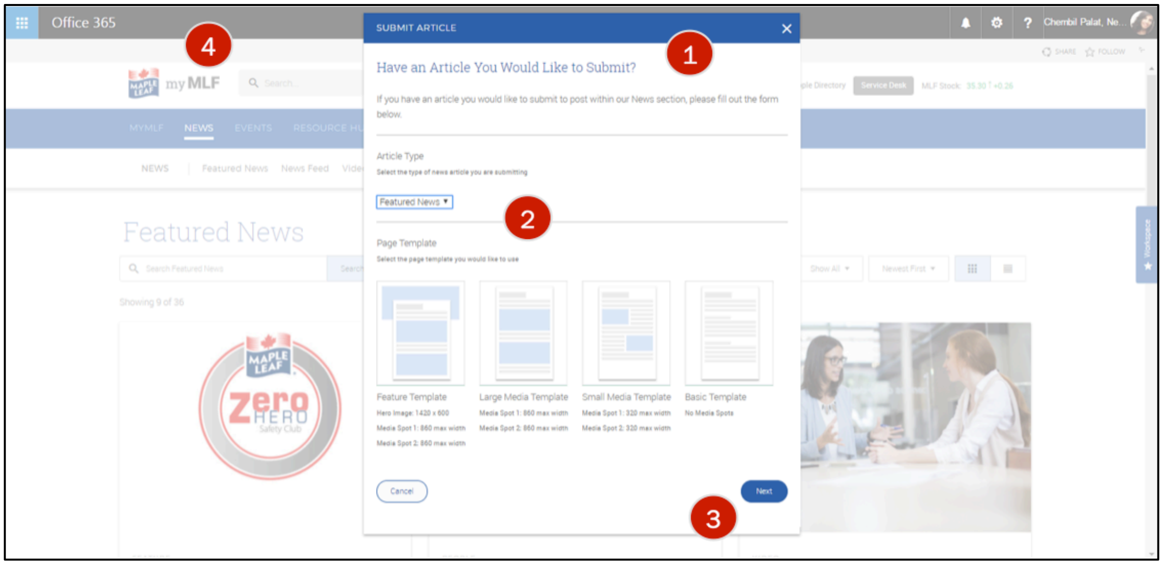


Pictured: Maple Leaf Foods Intranet Mobile View. The fully responsive site works across different device types.

Mobile Highlights

1. **Hamburger menu.** Navigation is available via the hamburger menu in the upper left corner of the screen.
2. **Comments and likes.** The number of comments and likes on a story appears at the top of the story, making it easy to find on a long, scrolling mobile page.
3. **Headlines and subheads.** Clear headings and subheadings tell users what the page is about.
4. **Dates.** News stories are dated. Recent stories show the number of days ago they were posted, helping users know how recent the information is.
5. **Writing style.** The team focused on creating content that was easy to read online on both large desktops and small mobile screens. Short paragraphs, simple language, and bulleted lists make content easier to scan.
6. **Graphics.** Graphics and images can be added to news stories.
7. **Commenting.** Stories allow commenting and liking so employees can interact with site content.
8. **Author.** Author information appears at the bottom of the page, together with a picture of the author and his or her title. Users can click through to view the author's profile.
9. **Feedback.** Each page includes a link to a feedback form at the bottom, asking users for suggestions.
10. **Social.** Links to internal and external social sites are listed at the bottom of the page.

Submit Article



Pictured: Maple Leaf Foods Intranet Submit Article. The previous intranet did not let employees post content. The new site lets users submit news stories for review by the Communications Team.

Submit Article Highlights

1. **User-generated content.** For the first time, employees can submit news stories for review and inclusion on the site via a site form.
2. **Process.** Users can select a type of news and template, then add content and relevant media (such as photos or video), and tag the content before submitting.
3. **Templates.** The site offers a variety of templates to fit different news styles and needs. Each template is shown in a small mock up to give users a quick example of what each includes.
4. **Desktop only.** The team decided to offer the option to submit content only on the site's desktop view, after deciding that mobile users were unlikely to go through the submission process on a small screen and a small keyboard.

DESIGN PROCESS AND USABILITY WORK

Approach

Many years had passed since the intranet had undergone any substantial changes, and challenges included finding content, inconsistent and infrequent content postings, and the growing adoption of O365 tools such as OneDrive. There was also considerable interest in providing input into the redesign. As a result, redesign was a team job, and that team incorporated a variety of perspectives to strengthen its output. Principles from both classic design and human factors were brought together to build out the recommendations.

The main activities in the company's redesign approach included the following:

- **Conduct external research to determine best-in-class intranet practices, including:**
  - Study Nielsen Norman Group's *Intranet Design Annual 2016*
  - Attend Ragan Communications' Intranet Best Practices Seminar in New York, as well as various webinars
- **Assess the current state of intranet functionality and content**
  - **Map all elements of the current landing page** (from-to mapping)
  - **Inventory current state of sites**; identify site owners and identify content to be archived
  - **Assess content** to determine content for migration
  - **Assess service desk call logs** over the past year and speak with support resources to understand the nature of SharePoint-related incidents and support tickets to reduce the administrative burden and better manage content
  - **Survey existing site owners** to associate the active sites with a functional group to organize resource links; with 200+ sites, it took persistency to group the sites, confirm site owners, and assign ownership where it had lapsed.
- **Design Build:**
  - **Review user persona interview findings** previously conducted with 50+ employees

    - **Conduct a series of three one-day thinking workshops** with a cross section of employees from various levels and functional groups to generate concept ideas and overall needs based on a previously vetted problem statement. The actual outputs from initial sessions, however, were either too high-level, which did not help the team identify specific design elements to suit needs, or too narrowly focused on specific feature details; neither output was much benefit in driving a conclusive direction for the site's composition or features. When additional co-create activities were added to the workshop agenda, the team began obtaining more insights into what people wanted in terms of organization and interactions. The sessions were lively, and people left positively anticipating the new site's release.
    - **Conduct interviews** with site owners to understand their site objectives and how these fit into the proposed design
    - **Conduct card-sorting** exercise via an open online survey extended to everyone with intranet access. These results helped the team understand how people logically organized the individual components into subgroups and the language they would use to name a category.
    - **Co-create workshops** with site owners to determine site components, functionality, and prioritization
    - **Conduct site usability testing** with individual users by sharing high-fidelity InVision mock-ups to validate design prior to build activities. Creating wireframes and high-fidelity mock-ups were invaluable in helping the design team gain sign-off on design requirements and usability testing to validate the proposed design. Usability testing focused on site visitors' ability to navigate the landing page to ensure quick discovery of topics of interest.
- **Development Build (sprints):**
    - Initial release of the landing page, including some interim pages with links to content on old sites until migration activities are complete
    - Order of development priority is typically the landing space and the major web parts supporting content creation; this lets site owners/content contributors familiarize themselves with the new process and begin content loading activities as early as possible.

Information Architecture

A common complaint with the old intranet was that content was poorly organized and hard to find. With more navigation areas and cleaner categories, the new intranet's content is closer to the surface and accessible through several navigation tools:

- Utility navigation
- Main navigation (two layers)
- Workspace tab
- Footer navigation

Maintaining these navigation areas in the master page lets site visitors dig deep into one category or jump quickly to another. A clean subnavigation overlay ensures that menu options are easy to read and select. Once mobile views are engaged, navigation switches to the hamburger-style access point to optimize presentation space for content.

In those few areas where the number of options within a category did not present on one line, a sideways scrolling technique was applied.

Throughout the design process, the team sought a balance between finding unique heading descriptions and using terminology shared by site users. Some compromises were made to adopt simple, everyday terminology that resonated with users. Feedback on this simplicity and familiarity of everyday terminology has been positive.

Establishing IA is not a quick exercise, and it is a major success factor for users' ability to reach their desired content. This team found it helpful to seek as much input as possible from actual users, as well as to have someone accountable for selecting the final details. It was also helpful to try separating people from what they currently had so that they could think more broadly about what they needed or could use.

Adoption and Buy-in

Converting to SharePoint Online had been identified as one of the stages of the release roadmap for Office 365 tools, so the redesign effort had good visibility overall. The old intranet was rather dated and difficult to manage, so integrating it with a new design was a natural fit for the company at this point in time. Both the current site owners and Information Solutions were prepared to engage in the myMLF redesign project.

While adoption is never guaranteed, the Maple Leaf team found that having a user-centric design and mobile accessibility were two big benefits that drew people's attention to the intranet.

WORKING WITH OUTSIDE AGENCIES	
Agency	**Project Role**
IBM Canada, Interactive Experience & Global Business Services	• Conduct external research and use best practices to create the design recommendation for the new myMLF intranet • Augment development and unit testing services with the off-shore development scrum team that provided the packages to be integrated

GOVERNANCE

The UX team within the Information Solutions (IS) function is accountable for the O365 SharePoint Online application. It facilitates business requirements gathering and sets development priorities.

The Communications & Public Affairs team is accountable for the overall design and content of the intranet landing page. Subsite management is delegated to the respective functional groups or topic specialists, while Communications & Public Affairs provides guidelines, coaching, and support to the various groups creating myMLF content.

Given the degree of change that goes along with a new intranet's release, the team has instituted more frequent regular touch points between the two groups so they can be more responsive to issues or needs as they arise. Having a small group of people accountable for landing page decisions is beneficial, since it is the launching point to areas that other functional groups manage; however, stakeholder management is also important to ensure that everyone's needs are met while maintaining consistency across the intranet.

Because Communications & Public Affairs focuses on driving content needs, the IS team is free to focus on delivering features and functionality that will continue to build the intranet's value.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
IS User Experience	• Software application owner; ensure system runs optimally • Establish O365 SharePoint Online governance and standards • Provide training resources for O365 SharePoint Online • Gather business requirements and design solutions, including permissions structure • Manage feature release schedule • Coach site administrators
IS Web Developers	• Establish guidelines and standards for the intranet development approach; customize selectively to ensure a robust solution • Conduct build and test activities for release • Handle ongoing technical support requests
Sponsor Team	• Make executive decisions and oversee scope and quality
Site Administrators	• Approve site design and feature enablement • Manage site permissions • Create and/or approve site content • Communicate with and train site-specific content creators • Maintain third-party connections to their sites • Ensure knowledge transfer during site admin transitions
Content Contributors	• Create site content in alignment with standards • Maintain site content

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	https://mymlf.sharepoint.com/sites/mymlf
Default Status	• myMLF is programmed as the default homepage on the standard browsers (IE and Edge); users cannot change this setting.
Remote Access	• The site can be accessed from any internet browser by the URL; as for any Office 365 tools, users must enter their O365 organizational account authorization. • People on the go now have convenient access to the intranet from their mobile phones/tablets and can stay on top of news and events through a responsive content presentation. • Field sales reps spend most of their days on the road visiting customer store locations; they work primarily on iPads. Remote access has made it possible for them to access the intranet from their tablets with a WI-FI connection rather than having to launch the site from a VPN connection from a corporate laptop when not in the office.

TIMELINE

PROJECT MILESTONES	
Item	**Status**
Unknown Launch Date	• Company intranet runs on OpenText for a significant time period before and after Oracle acquisition
Early 2011	• Major intranet build: SharePoint 2010 platform • Company's collaboration platform becomes SharePoint
Early 2014	• Upgrade/migration of non-intranet sites to SharePoint 2013
Mid-2014	• Major landing page redesign in SharePoint 2010
July 2015	• Launch of Yammer, MLF's corporate social tool
July 2015	• Limited release of SharePoint Online for specific use cases
September 2016	• Freeze of legacy intranet for SharePoint Online Project
October 2016–May 2017	• Redesign of myMLF SharePoint Online
May 2017	• Launch of the new design O365 SharePoint Online
Overall redesign timeframe: 8 months (October 2016–May 2017)	

CONTENT AND CONTENT CONTRIBUTORS

Following is a breakdown of how the Maple Leaf staff handles each component of content management.

Contribution

The company's newly launched intranet helps the organization share key news and information in a dynamic, timely, and relevant way, while also enabling information sharing and workflows on a level previously unavailable.

The intranet editorial committee is led by Communications & Public Affairs and comprised of volunteers from various functional groups. This committee will discuss and plan upcoming feature topics to ensure that a robust content pipeline flows from a variety of sources. The intranet team is also taking strategic steps to ensure that content contributions come from a wider variety of sources than in the past. These steps include:

- **Convert broadcast email to intranet content.** Broadcast emails are prime conversion targets, so the intranet team is reaching out to these authors to see how their content can be leveraged to become more robust and searchable as part of the intranet, rather than having messages lost in the abyss of people's inboxes or recycle bins.
- **Open news posting to the entire organization.** To increase accessibility of posting content, the news features on the main landing page are designed so that anyone in the organization can submit a piece. The draft is viewable only to the creator and site administrators until it is approved for publication. The posting process incorporates the option of manually selecting the author or subject matter expert associated with the content. This handy feature means that, if needed, authors can delegate the task of submitting an article.

Contributors

- **Site owners — new sections.** Identifying site owners is done in the early planning stages for each release of a new intranet section. Ideally, at least two people are assigned as site owners to minimize the disruption should an individual not being available or transition to another role. Site owner responsibilities are typically a small portion of the individual's job function. In most cases, this is a delegated assignment.
- **Site owners — landing page.** For the intranet landing page, the Communications & Public Affairs team (three people) act as site owners. The team is accountable for approving all content published to the main page.
- **Site owners — *People Services*.** Because the intranet conveys company culture and fosters employee engagement, HR is involved in content management and owns the content in the highly requested *People Services* subsites.

Training

The *Resource Hub* contains a document collection that contributors can reference at any time. The team recommends that those new to contributing intranet content watch short videos or review the instructional guides before securing additional coaching on their specific contribution. These comprehensive guides cover the following:

- **How to Post on myMLF.** This user guide covers the basic posting steps.
- **Word document templates for news.** These templates let contributors draft their materials in a way that will be easy to copy and paste when they choose to upload them.
- **Graphic job aid.** This guide offers the technical details for posting images, along with watch-outs and suggested free resources to secure or format images.
- **Writing for the web checklist.** This helps authors get ready to post items to myMLF.

- **Writing for the web FAQs.** These further explain how to write based on feedback from users.
- **Writing for the web videos.** These three short videos (less than seven minutes long each) show the whys and hows of posting news on the intranet:
    - **"It's Different":** Basic style change implications, including mobile.
    - **"Newsworthy Content":** How to create connections between the message, the audience, and the vehicle.
    - **"How to Post News":** a visual guide to the posting process.

In addition to custom materials built for the intranet, people can access self-directed online learning through BrainStorm QuickHelp (www.quickhelp.com). On this site, users can view short instructional videos, watch webinars, or read step-by-step instructional quick start guides on a variety of Microsoft tools, including SharePoint Online and Yammer.

Content Management

The Communications & Public Affairs team is responsible for managing the landing page content, but any site owner or functional group on the IS team can take the opportunity to educate users on the process and provide support resources.

Quality

- **Publishing queue with review.** Publishing news articles is an open process on the new intranet, and content integrity is maintained through an online publishing process. Once the online submission has been marked for review, site administrators are notified by email. Once they review the article, they can make changes directly or contact the author to request that they make the required changes.
- **Content expiration.** If a new article is not set to be published at the time a live article is set to expire the system will continue to extend the last published piece, by default, so that there are no errors on the landing page.
- **Proper graphics.** The use of proper graphic images is critical, as large file sizes can affect page load times and incorrect dimensions may negatively alter the page layout, such as creating a tile view that is not uniform. The team can also check how the article with images will appear prior to publishing. This lets them modify it if needed. However, the team has found that spending time educating users on the appropriate use of graphics and correct sizing is a better approach. Also, developing a job aid for users that provides the technical details of image use is a must.
- **Built-in feedback mechanisms.** The master page design ensures that site users can provide feedback from any intranet page. Their messages are added to a SharePoint list, which site administrators subscribe to for email alerts. The site administrator reviews all messages and takes appropriate action.

- **Yammer integration.** Yammer integration within each article gives site visitors an unrestricted option to directly share their opinion and feedback on posted content. Others can like or comment on these messages.

CONTENT GUIDELINES EXAMPLE

Writing for the Web: Video Series Checklist

Use this checklist to validate your written and visual content for myMLF or your team's intranet page before you publish:

Readability

- ✓ *Content can be scanned in F-pattern (web view)*
- ✓ *Content can be scanned in sideways mountain (mobile view)*

Content

- ✓ *Words are simple*
- ✓ *Words are few*
- ✓ *Sentences are few*
- ✓ *Important content is covered first, inverted pyramid*
- ✓ *Message has a call to action that is clear for your audience*
- ✓ *Content has been proofread and approvals (as necessary) have been obtained*

Visuals

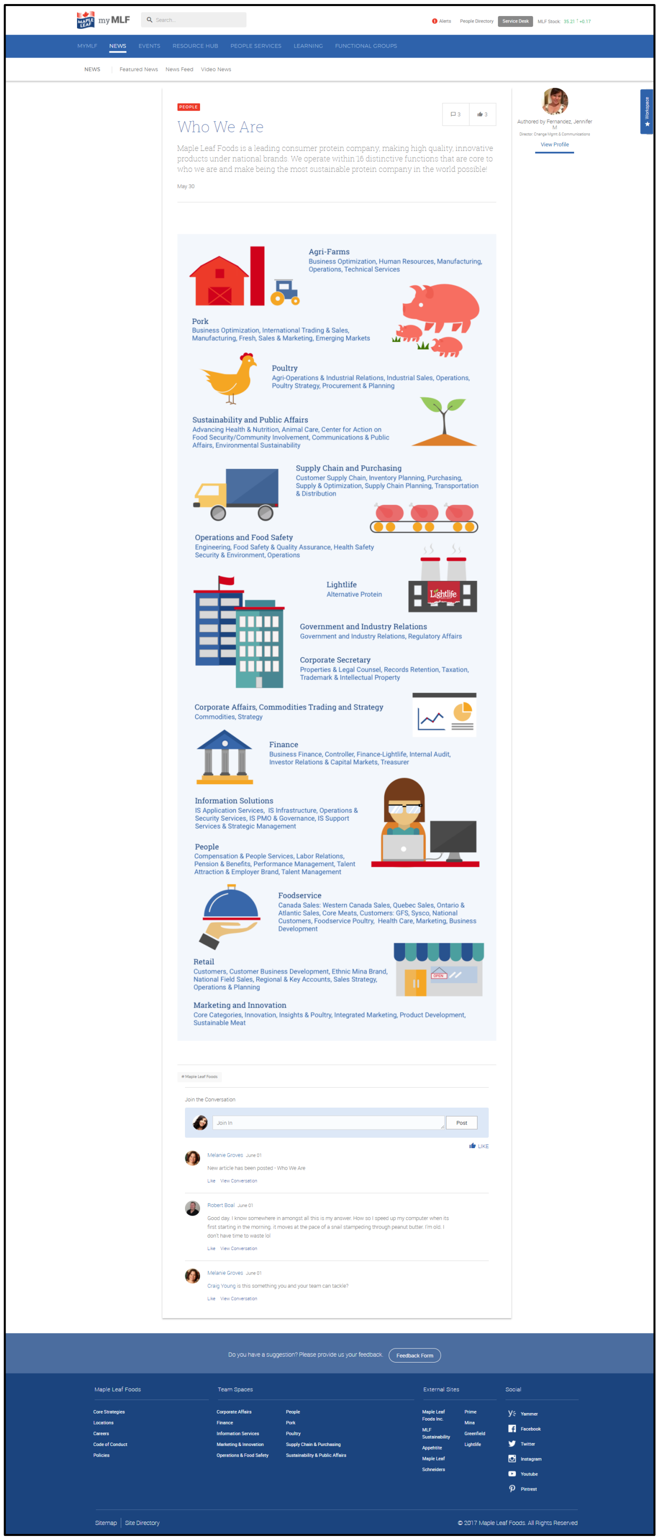
- ✓ *Bulleted list contains 7 or less bullets*
- ✓ *Hyperlinked items tell where the hyperlink takes you, not vague 'click here'*
- ✓ *Images are clear and relevant and within size specifications*
- ✓ *Videos are relevant and short*
- ✓ *White space balances the words*
- ✓ *Bold and italics are used for emphasis (sparingly)*

Culling Content

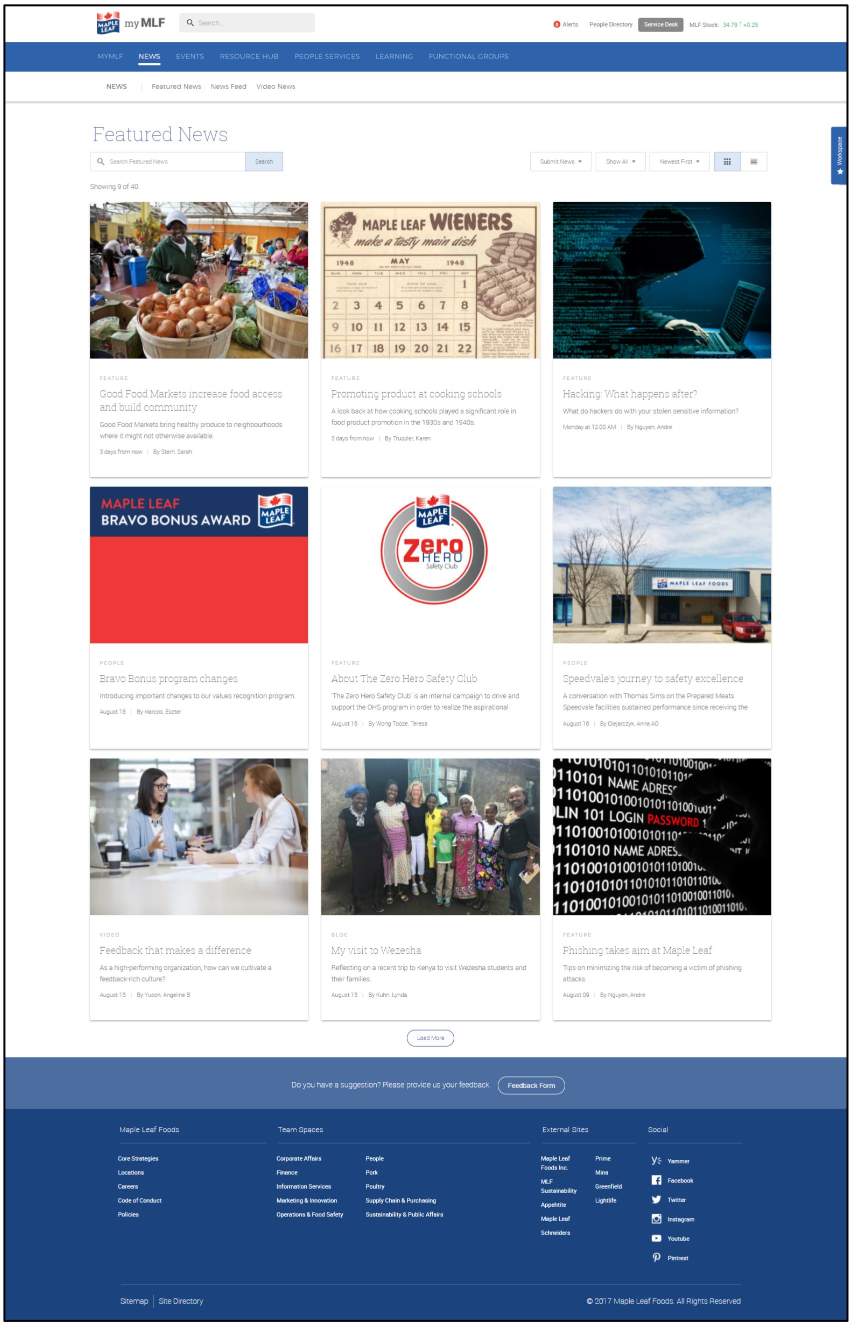
Throughout the migration process, site owners were encouraged to create new content rather than import old/stale content. The team discovered, however, that people innately want to retain access to content during transition periods, even as the new content is launched; giving them this access helped increase their willingness to purge.

Site owners are asked to conduct annual inspections of their site to ensure the content quality is relevant, accurate, and up-to-date.

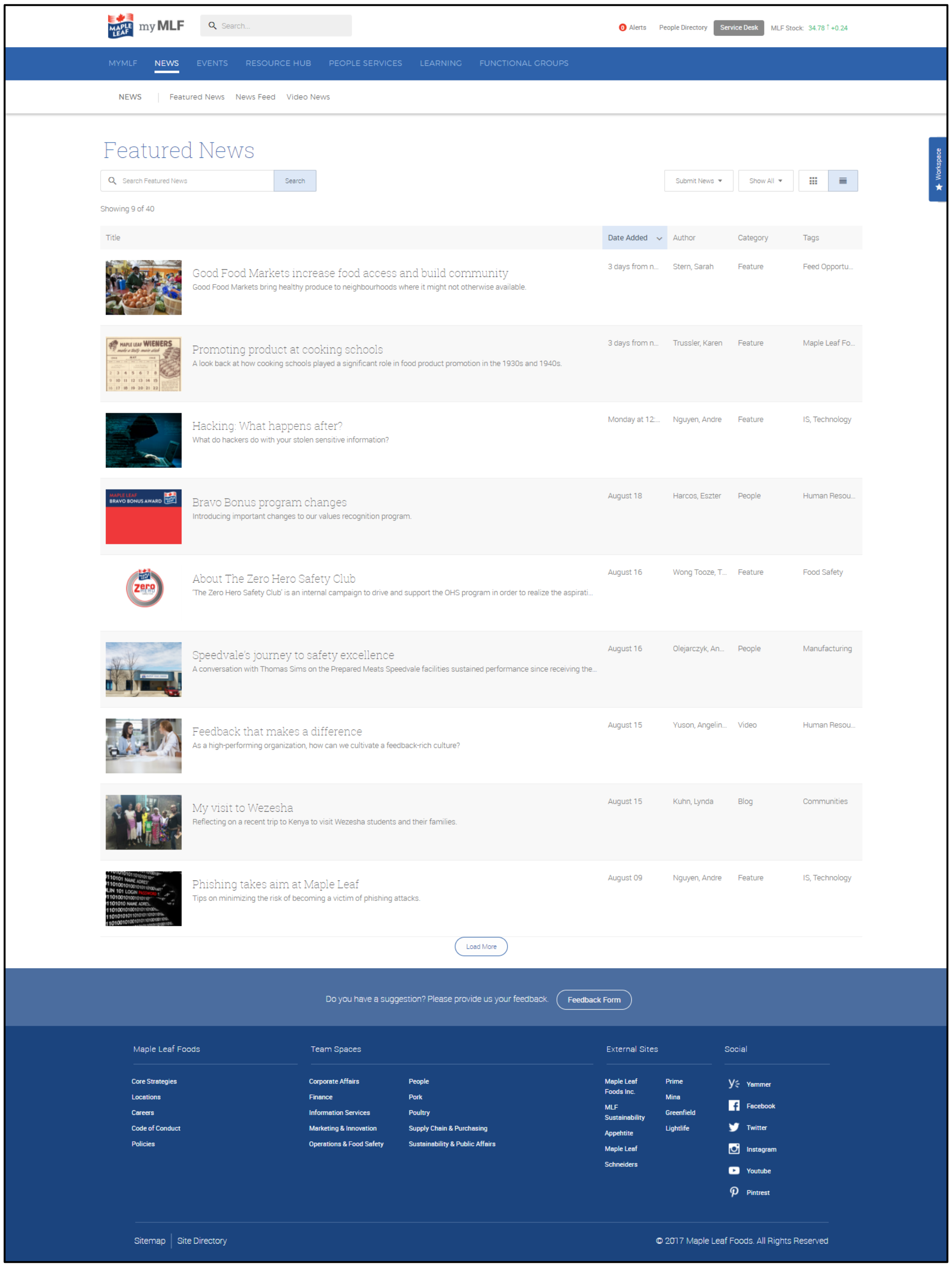
Data lifecycle was a key element that team members discussed when they outlined the new site's requirements, so they made accommodations for presenting content in a succinct but comprehensive way. For example, lists are presented with a select number of items, along with the option to select "view more." List content is typically presented for up to one year.



Pictured: Maple Leaf Foods Intranet Who We Are Page. The *Who We Are* page, under the *People Directory*, is the redesigned version of the old *Our History* page. It displays an infographic outlining myMLF's different business areas, the departments and teams that fall under each area, and how they work together, giving employees a better understanding of how MLF functions.

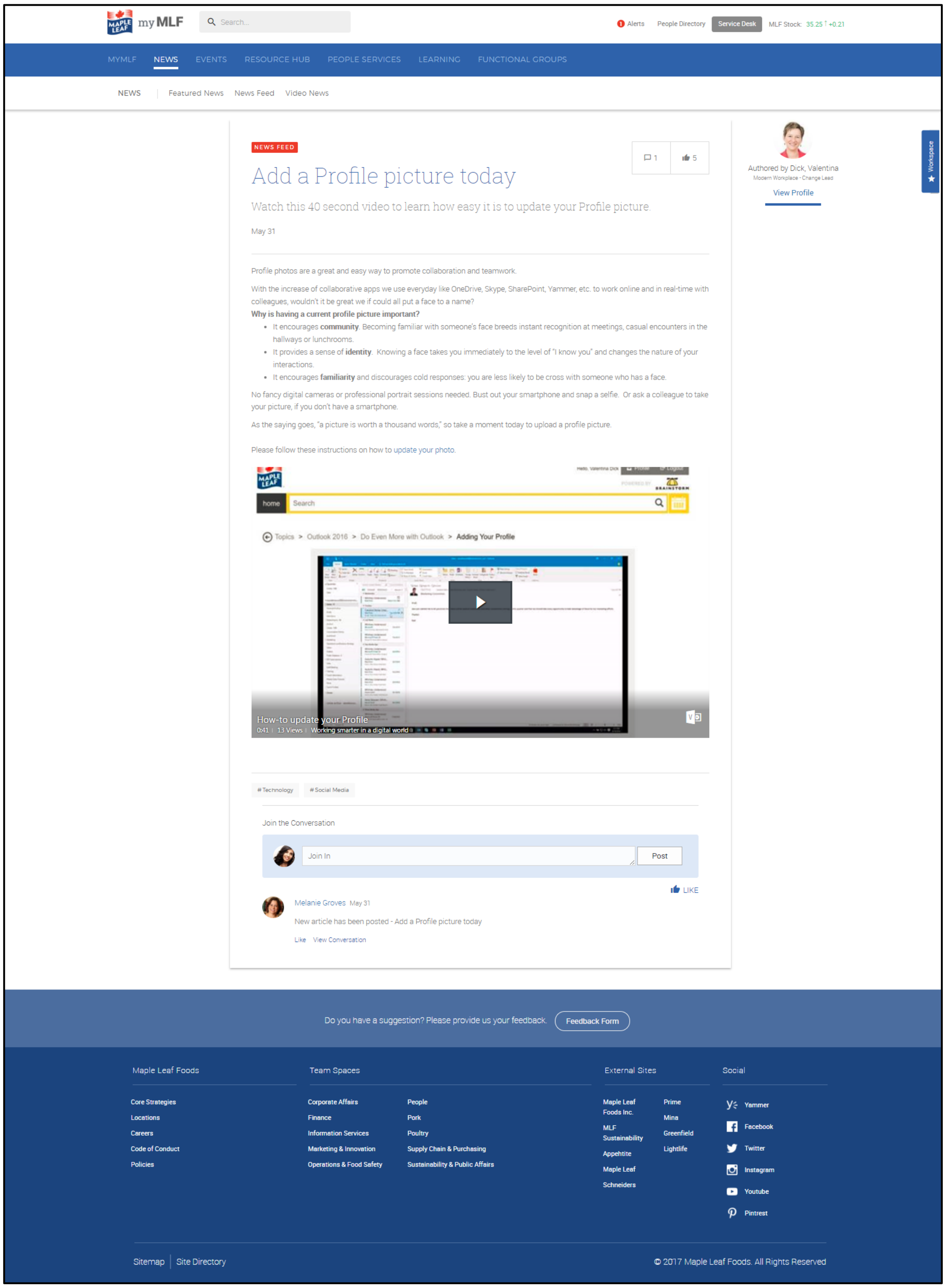


Pictured: Maple Leaf Foods Intranet Featured News Homepage. The *Featured News* homepage (desktop view) lists all the featured stories MLF has published to date in tile view. Like the *Newsfeed Landing* page, each tile displays the article title, category, author, and date, and users can filter articles by date. This page draws attention to the most important stories the company has published, allowing employees to celebrate its successes and stay informed of any important changes.



Pictured: Maple Leaf Foods Intranet Featured News Homepage List View. This is the *Featured News* homepage in list view, which shows additional metadata (under the *Tags* column) that employees can use to filter articles. Employees can also submit their own articles to be reviewed and published using the *Submit News* button above the list.

Pictured: Maple Leaf Foods Intranet Featured News Article. The *Featured News* article is one of five article templates made to showcase the most important stories MLF wants to tell. Using Yammer social features, employees can like or comment on the article. If employees need to know more, they can always contact the author of the article by clicking *View Profile* on the right side of the article. Every article is tagged under a specific category (seen above the title) to make it easier to find.



Pictured: Maple Leaf Foods Intranet Video News Article. The *Video News* article is one of the five templates made to publish video content. In this example text is organized and formatted so employees can easily read information relevant to changing their profile picture before they watch the tutorial.

TECHNOLOGY

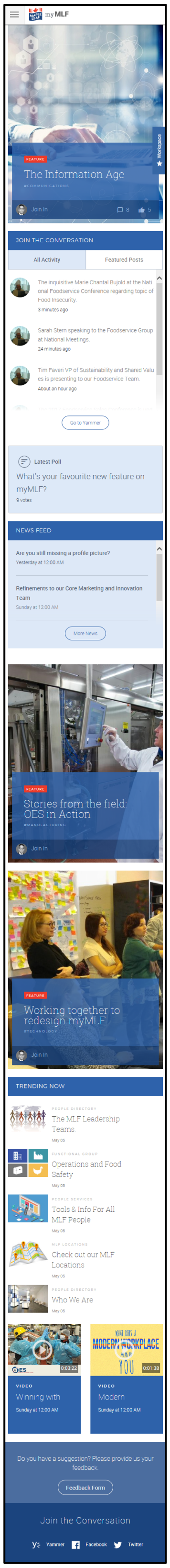
TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and Operating System	• O365 SharePoint Online
Bug Tracking/Quality Assurance	• Visual Studio Team Server
Design Tools	• InVision, Photoshop, Sketch
Site Building Tools	• SharePoint Designer • Visual Studio Team Server (coding & deploying)
Content Management Tools	• O365 SharePoint Online • Visual Studio Team Server (code & functionality repository)
Search	• O365 SharePoint Online Search Center
Other Functions	• Optimal Sort Survey Tool (card sorting)

Mobile

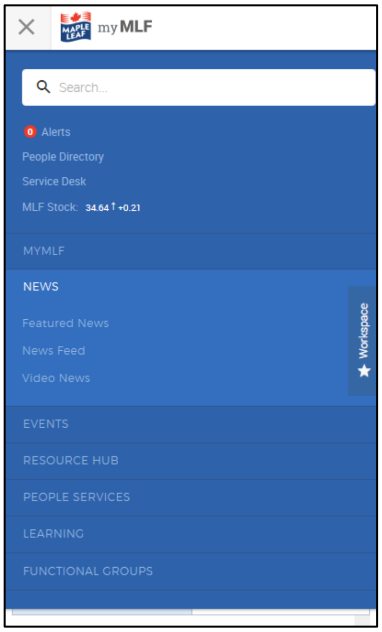
By building the new myMLF in SharePoint Online, Maple Leaf has given its users the ability to access the site and its resources from anywhere without the need for VPN. To view myMLF, users simply log in to their Office 365 accounts. Knowing users would not be tied to their laptops when accessing the site, myMLF was built to be responsive. On day one, the new intranet was easily accessible from smart phones and tablets, giving Maple Leaf employees the freedom to do their work anywhere with an internet connection.

The mobile view is essentially the same as the desktop version of myMLF, with navigation elements changing to a hamburger menu and other elements repositioning for the mobile view. The option to submit news was removed given the task's complexity and impracticality over a mobile device.

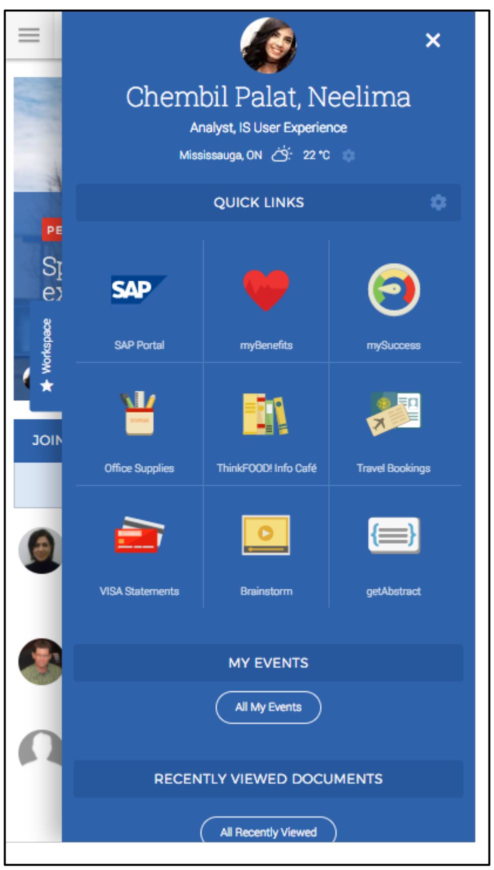
The mobile design was optimized for standard browsers (Internet Explorer 11 and Edge), with additional testing conducted on popular browsers such as Chrome and Safari. iOS was the next priority given the use of corporate-owned iPads by groups in sales and operations, coupled with the general popularity of iPhones. The latest Android OS was the final testing platform.



Pictured: Maple Leaf Foods Intranet Mobile Homepage. This is the myMLF intranet's mobile landing page. This scrollable, fully responsive page gives employees easy access to their work and company-wide communications on any mobile device while they are on the go. Many MLF employees and teams use tablets to access their work and important communications and, for the first time, myMLF is fully responsive, which lets these employees stay connected and get to their work faster on any device.



Pictured: Maple Leaf Foods Intranet Mobile Navigation. This is the main navigation on the mobile landing page, accessed by clicking the hamburger symbol on the top left of the screen. The menu reveals a search bar that employees can use to find content on the intranet; as they scroll down and click on each category, it expands to reveal the subpages.



Pictured: Maple Leaf Foods Workspace Tab Mobile View. Clicking on the *Workspace* tab on the right side of the mobile screen lets employees get to their favorite and frequently used tools and content. It also offers quick access to upcoming events they've registered for. This tab exists everywhere across the intranet so employees can access their work with one click.

Yammer

Yammer engagement is notable on the Maple Leaf intranet. As of July 2017, total Yammer membership had reached 1,863, with monthly engagement averaging 515–729 users over the previous six months. On average, 2,000 messages were posted per month across the 163 groups.

Because the Yammer O365 tool had been in widespread use across the organization for more than two years and integrates with SharePoint, it was the default choice to create a stronger social presence within the intranet. When Yammer was initially launched, the organization held a "30-days of Yammer" campaign to raise awareness and increase user comfort with the tool. The sales teams are heavy users, having incorporated it into their daily call-cycle processes so they can collaborate with peers across the country.

Yammer is integrated into the intranet landing page to encourage two-way dialogue about intranet content. Each feature news article web part presents with a *Join the Conversation* banner displaying the number of comments and likes for the article. Clicking anywhere on this banner triggers a pop-up light box that lets viewers like, comment on, or interact with someone else's reply to the article.

Join the Conversation also shows a running feed of Yammer posting activity, based on the individual's group permissions. *Featured Posts* lets users reshare a post within this group to bring attention to the discussed topic.

In the first two months after the intranet launched, there was some like/comment activity on each article, but numbers were relatively low. Engagement and the variety of people engaging have been increasing weekly, however, as new and varied content is published. Users typically comment on and share personal experiences with the subject, provide praise, or ask clarifying questions.

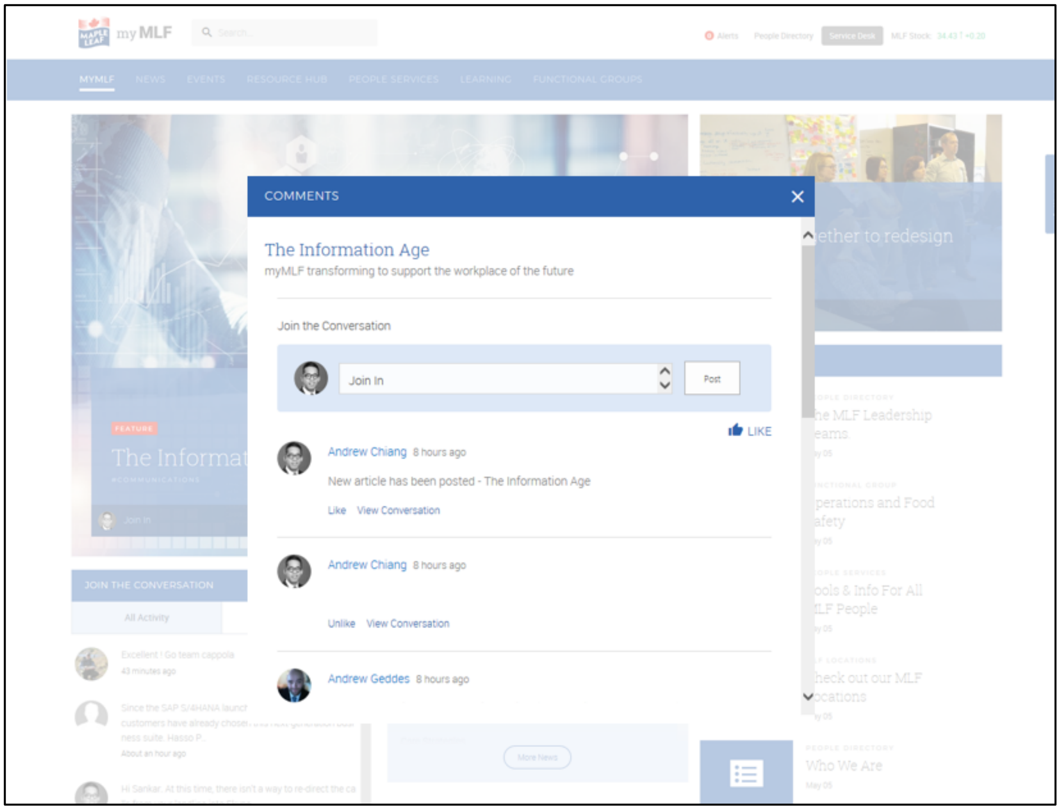
Some of the popular and beneficial ways Yammer is leveraged at Maple Leaf Foods include:

- Snap a picture and share
- Ask questions to a peer group (Excel is one of the most popular groups; people voluntarily provide tips or help those in need with coaching/troubleshooting support)
- Praise and recognition (including the "Thumbs Up Thursday" campaign)
- A dynamic FAQ, which is visible to others who may not have thought to ask a particular question
- Quick and informal sharing of information and resources, which is easy to add through a link to an external or internal source

A Yammer 101 group provides orientation on using Yammer for new members or those who would like a refresher.

The Maple Leaf team has a word of caution regarding Yammer set-up and use: limit the number of Yammer callbacks to minimize the risk of users locking themselves out of the system, which results in an incorrect display of comment/like counts and temporarily suspends interactivity. MLF's initial intranet design had Yammer integration on all three feature and two video news zones on the landing page, but after performance testing the team decided to restrict Yammer to feature news only.

The other news zones have the Yammer integration embedded within the specific article template, but not on the landing page.



Pictured: Maple Leaf Foods Intranet Yammer Integration. Every article on myMLF has integrated Yammer features that let employees like or comment on an article right from the landing page by clicking on the social icons or the *Join In* button. These social features, which weren't as prominent in myMLF version 1, now let employees contribute to stories and start important discussions that can change how work is done at MLF.

ROI

myMLF is still relatively new, and team members are still getting familiar with it. So far, however, response to it has been exceptionally positive. Financial gain was not a primary driver of this initiative, but it is expected to drive positive productivity gains. For the project team, success meant that employees could now:

- Rely on myMLF to stay informed of what's happening at MLF and feel proud to be working there
- Feel connected to other employees and engage in open conversations to find the information they need to get work done
- Quickly navigate to or find information they need to get work done and, where possible, use automated workflows

The team also monitors a core set of metrics each month to track uptake and engagement. These metrics include:

- Number of visitors
- Number of sessions
- Session duration
- Page views (unique and total)
- Time on page
- Site speed (performance monitoring)

Success Equals Quality Engagement

Beyond kind words about the new myMLF from employees across the enterprise, the proof is really in the pudding. Prior to launching the new intranet, engagement with the site was purely transactional. Employees landed on the site because it was the default homepage. They spent little time reading the content or digging into the site's deeper layers; average time spent on the homepage was less than 30 seconds. That is, the average user loaded the page, found a bookmarked site, and navigating away almost immediately.

Since the new myMLF's launch, users have changed how they engage with the intranet. They spend their time on it more productively, contribute to two-way conversations, and participate in content in totally new ways:

- **Time well spent.** Since the new myMLF launched, the average time spent on the site 's homepage has skyrocketed to more than three minutes on average, or 10 times more time than on the previous homepage. As users have become familiar with the new myMLF, session time on the homepage has decreased, which indicates that they are quickly learning how to navigate the new site and require less time to find what they are looking for. Overall time on site/page, however, has steadily increased, and is a signal that users are finding the site's content relevant and engaging. This extra time on the site is attributable to the richer content, attractive format, and an image-heavy layout, as well as the multiple points of interaction including the Yammer integration and regular polls.
- **Contributing to the conversation.** The Yammer integration has dramatically increased content consumption. Prior to the new myMLF's launch, the average number of reads for a Yammer post was 600. Now that Yammer posts are featured on the intranet homepage, the number of reads has nearly tripled to 1,600. Active engagement goes beyond simple consumption though; the numbers of likes and posts have both markedly increased since the new site went into production. Likes are up over 400%, while posts are up 100%. Thus, users are not simply consuming more content because it is readily available on the homepage, but they are also taking part in the conversation more often by liking posts and creating their own.

- **Active participation in content.** Finally, myMLF is also about fostering employee engagement. In the past, intranet content creation was executed by a few individuals, posting through offline processes. Now, with the new myMLF, anyone can submit news or events through a user-friendly online publishing process that triggers a final inspection review with site owners prior to posting. Further, authors and subject matter experts are clearly featured on their pieces. The few individuals who previously created content can now share the workload of posting content and can shift to more of an advisor role as proficiency develops. This means a richer content experience in several ways:
    - **Content diversity.** The direct submission process encourages a greater diversity of content contributors; news articles can be submitted by anyone and are published upon approval by the site administrators (the Communications team).
    - **An expanded group of participants.** The use of Microsoft's O365 SharePoint Online offers accessibility points to the intranet for people working outside of the office. This new mobile accessibility, through an internet connection and the secure O365 login, are ideal for the field sales reps who are on the road daily with iPads.
    - **More efficient content access.** Building out the well-organized content in the new intranet and the growing adoption of SharePoint Online will let the company stop issuing new shared drives for file collaboration.

LESSONS LEARNED

Maple Leaf team members share some of the lessons they learned through this redesign project:

- **Determine up front how decisions will be made.** "Establish a process that fosters objective decision making for design elements. Set expectations up front on the inputs and how decisions will be reached to minimize the chance of selection being driven by personal preference over what the site user is receptive to."
    - Document any norms, such as: the solution must be mobile responsive
    - Agree that the default option will be to defer to a specialist's recommendation based on industry best practices
    - Allow time to share a select number of alternative options directly with site users to secure their feedback through qualitative or quantitative means
    - Once style or behavior norms are established, communicate them up front and have an escalation process to deal with deviations.

- **Designate a consistent tech lead.** "Integrating the efforts of two development scrum teams can be difficult if they have not aligned on standards. This will create undue rework, so you need to designate a consistent lead to review the up-front development plans and conduct code reviews to shorten learning cycles."
- **Content and technology go hand in hand.** "Do not assume site owners or content contributors have a clear understanding of their communication strategy or needs. In order for the intranet to be successful, support for content building must go hand in hand with the technical aspects of managing content. Helping site owners articulate their communication needs leads to a clearer understanding of their functionality requirements and priorities. The success of the site is a combination of the functionality and content, and a weakness in one of these overshadows the other."
- **Set a realistic rather than optimistic schedule.** "It is extremely important to have a good and realistic schedule. You have to have enough time built in your plan to design, build, validate, and test. If your deadlines are too short, you'll make mistakes or, even worse, sacrifice functionality."
- **Start small and work your way up.** "Start with the simple features and work your way up to the more complicated ones."
- **Find a champion before you begin.** "You need an intranet champion — someone who knows the user base, their pain points, and where the most value add will be."

Best Practices

- **Socialize your designs all along the way.** "Make time to socialize your design concepts and ideas throughout the process. There were several great ideas generated during our design thinking workshops right through our high-fidelity mock-ups that we incorporated before going into development. This also helped to create excitement and buzz for our initiative."
- **Be user-focused.** "Make sure the site is geared toward the user. We learned users will be more interested in coming back to the intranet if the information is helpful and the tools aid their productivity."
- **Establish standards for coding practices up front.** "Set up-front standards and guidelines for coding practices so that the team can deliver material that is easy to integrate. Having the main principles captured in documentation is key to empowering new resources that may be on-boarded throughout the project."
- **Codify the style guide and share it widely.** "Document and share the design style guide so that integrity is maintained as the site continues to evolve."
- **Make the first release count.** "Consider a release cycle in which the fundamentals are delivered in v1.0 followed by additional feature releases in short cycle periods."

- **Help users transition.** "Help people make the transition. No matter how good your communication plan is, be prepared for the first couple of days when users can't find what they're looking for. Having a dedicated team to respond to inquiries has some perks, such as being able to solve their problem on the spot, point out some new timesaving features for them to explore, quickly resolve bugs or make fixes to address high-value content that's been missed. Trust me, you will miss something."

3M (2019)

OVERVIEW

COMPANY

3M is a global science company that never stops inventing. Using 46 technology platforms, the company's integrated team of scientists and researchers works with customers to create breakthroughs. 3Ms inventions have improved daily life for hundreds of millions of people all over the world. With $32 billion in sales, its 91,000 employees connect with customers all around the world. Scientists, researchers, and marketers work across countries and across subjects to solve challenges big and small.

Headquarters: St. Paul, Minnesota, US

Company locations: 3M operates in 70 countries.

Locations where people use the intranet: All 3M locations

Annual revenue: $32 billion in nearly 200 countries

THE INTRANET

Users: 91,000 employees and 30,000 contract workers have access to 3M Go

Mobile approach: Responsive web design

Technology platform: SharePoint Online

TEAM

In-house:

3M Leadership:

Krysta Neisen (Digital Workplace)
Laura Opsahl (Communications)
Steve Yetter (IT)
Tracy Kodluboy (IT)

3M Team Members:

Laurie Workman (Digital Workplace)
Meghan Keating (Digital Workplace)
Tonya Gale (Digital Workplace)
Silvia Stahn (Digital Workplace)
Paul Raimondo (Digital Workplace)
Jennifer Besadny (Digital Workplace)
Max Blair (Digital Workplace)
Mike Lynch (IT)

Outsourced:

DMI: global research and initial concept
Rightpoint: design and usability
Shinebox: launch campaign materials

INTRANET TEAM

Team members shown here (back row, left to right): Meghan Keating, Paul Raimondo, Silvia Stahn, Jennifer Besadny; (front row, left to right): Laurie Workman, Laura Opsahl, Krysta Neisen, Tracy Kodluboy. Not pictured: Tonya Gale, Max Blair, Steve Yetter, Mike Lynch.

HIGHLIGHTS ABOUT THIS WINNER

3M Go, 3M's intranet, is a modern digital workplace hub that connects 91,000 employees and 30,000 contract workers in 70 countries with 15 different primary languages. A beautiful design, targeted content based on user preferences, saved tools, and help that helps are a few of the traits that help make 3M Go users such go-getters.

Findings from exhaustive research with more than 4,500 employees acted as a beacon for the intranet design team as it worked to banish multiple disconnected systems with significant usability issues and replace them with one centralized, personalized, and customizable hub that gives employees quick access to everything they need.

- **Inspiring visual design:** The unassuming visual look employs flat 2.0 elements, legible and attractive text, anchoring visual grids, obvious page hierarchy, whimsical icons, and splashes of color (corporate 3M red, of course) in the just the right places.

- **Toolbar:** A toolbar with custom favorites and tools appears on every intranet page and makes it possible for employees to immediately access the tools and information they need to do their jobs effectively.
- **Preferences:** 3M Go's *Preferences* reside somewhere between traditional personalization and customization features. As users select their preferences, content is targeted to them accordingly, ensuring that they see the type of content pertinent to them. Preferences are highly flexible, and employees may change them at any time; the effects of such changes are instant.
- **Fetching methods for employee profile updates:** The site creatively entices employees to update their employee profiles. The more information in these profiles, the more coworkers can learn about one another and locate the person they need. The UI makes the editing process obvious, while a progress chart aims to ignite employees' spirit to achieve.
- **Intranet education:** A monthly email newsletter and weekly homepage tip card educate employees about 3M Go and set them up for success.
- **Assistance and tours:** Peppered throughout the forms and elsewhere, concise messages explain and reassure employees, without overwhelming them. These just-in-time information tidbits are powerful teaching instruments. In addition, UI tours explain various sections of 3M Go so users can learn about, locate, and use important features.
- **Submit news form:** The UI for the form to submit news is so straightforward that it requires no training whatsoever. Further, fields and labels help communicators assign thorough and appropriate metadata to ensure that their stories are findable.
- **Consistent page layout:** Templates are flexible enough to be used in multiple places. The result is a cohesive looking and acting interface that makes it easy for employees to quickly acclimate on any page.
- **Formatting text for the web:** Text-heavy pages are pleasantly palatable because of the deft deployment of several web writing techniques: content chunking, obvious headings and subheadings, bullets, and bolding important words.

BACKGROUND

In 2015, the 3M Communications team pitched 3M executives, asking for funding to build a brand-new global digital workplace from the ground up, instead of simply migrating all existing intranet content to 3M's new SharePoint Online platform. The Communications team saw an opportunity to create a modern, global digital workplace that would transform the way 3Mers communicate, collaborate, and work.

The business case the team made was simple:

- Replace 3M Source, a burning platform with serious usability issues, which was the primary intranet for 76% of 3M's workforce.

- Deliver cost savings by retiring an additional 25+ off-platform country intranets.
- Increase global communication and collaboration by providing a single platform for all employees, created based on research and feedback from employees globally.
- Increase productivity for employees, communicators, and site/content owners.
- Maximize 3M’s investment in Office 365 (O365) and SharePoint Online.

The team received the funding, and the journey began.

The next two years were spent on the most challenging yet rewarding project the team had ever completed. 3M is a complex, global matrixed organization made up of 91,000 employees, 30,000 contingent workers, 5 business groups, and 32 functions spanning 70 countries and 15 primary languages. In addition to 3M’s organizational complexity, the team faced other challenges, including a lack of clear ownership for the 3M Source legacy intranet, more than 25 other country intranets to replace, and decentralized communications with more than 300 site and content owners and 200 communicators globally.

3M Source was a usability nightmare—a link farm with virtually no search capabilities, no central navigation, and different designs and layouts on almost every site due to a complete lack of governance and content strategy. In addition, 3M Source required technical resources to update content.

The Communications team, which previously owned only the company’s HR sites, took full ownership of the new platform, created a dedicated Digital Workplace team, established a strong partnership with IT, and started planning for the project of a lifetime.

The team had in-house expertise in project management, content strategy, and communications. It also leveraged three external agencies to provide research, design, and launch materials: DMI conducted the global research and initial concept, Rightpoint completed design and usability activities, and Shinebox created the launch campaign materials.

To design the new platform to meet the needs of 3Mers globally, the team spent three months on extensive research with employees, site and content owners, and communicators around the world. This research consisted of one-on-one and group interview sessions, focus groups, workshops, a digital workplace survey, a communications survey, and benchmarking with more than 15 companies.

Based on these research activities, the team identified and delivered on the key features that were most important to the organization and its employees:

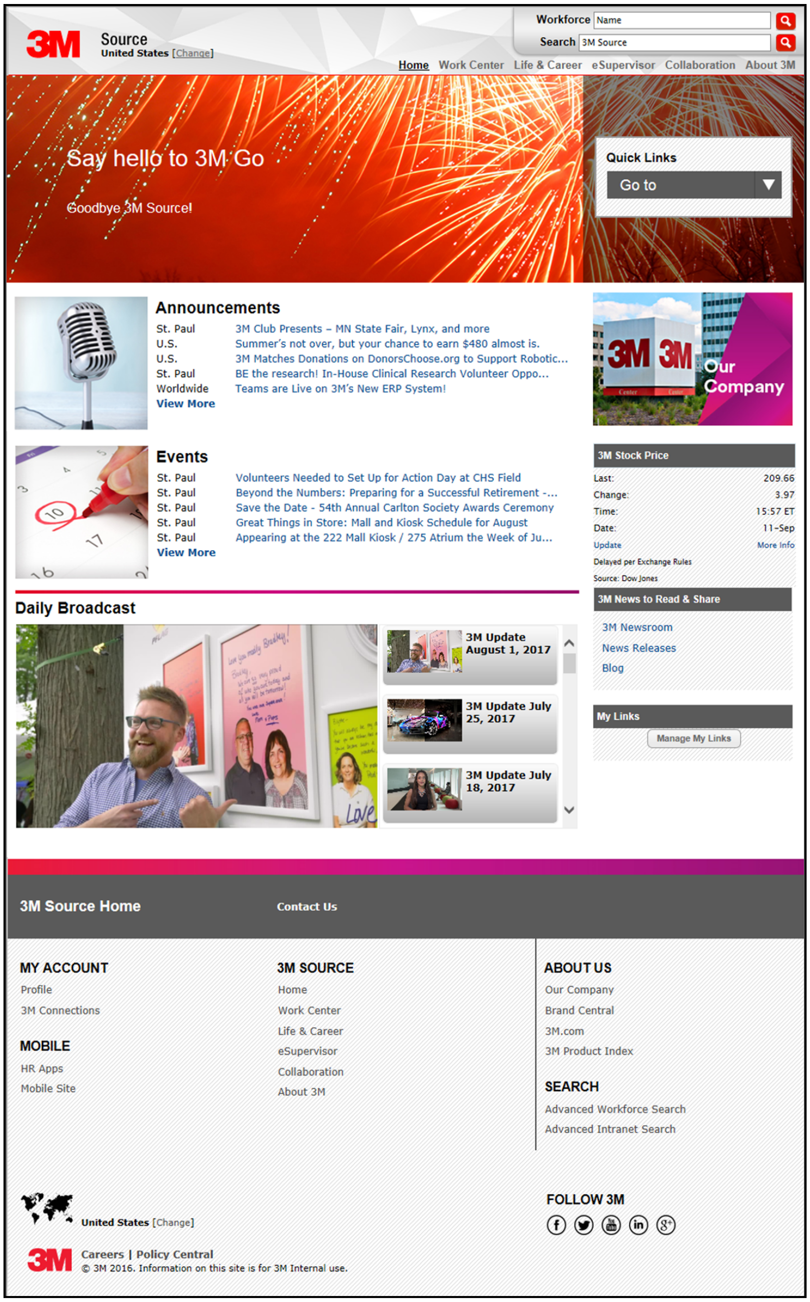
- **Consistent design and intuitive navigation:** With a branded, simple, and clean design, and a consistent layout for all 3M Go sites, users can navigate effectively throughout the platform.
- **Personalization:** All sites and content displayed throughout the platform are relevant to users based on their selected preferences for language, location, and organization.

- **Centralized news and events:** All of the news and events displayed on the 3M Go homepage are based on the user preferences. This eliminates the need for users to go to multiple disconnected systems and sites to find company, location-specific, and organization news.
- **Quick-access toolbar:** A customizable omnipresent toolbar section provides quick and easy access to *Favorites*, *Tools* (systems/applications), *Collaboration Sites*, and *Preferences*.
- **Search functionality:** Robust search functionality allows users to search for everything in one place… all people, content, sites, tools, news, and events. Search refiners and filters help users narrow their searches and find what they are looking for. All content on 3M Go is tagged with consistent metadata to enhance search functionality.
- **Search feedback:** To continuously improve search and ensure that employees find what they need, a question at the bottom of the search page—*Did you find what you were looking for?*—lets users provide feedback.
- **Mobile access:** Built on SharePoint Online with responsive design, 3M Go is accessible from any iOS device (3M does not support Android).
- **Easy content management:** Hundreds of site owners, content owners, and communicators globally can easily create and maintain their own content, without a developer's help. Approver workflow, easy step-by-step training, and centralized support and site administration help this distributed content management model succeed.

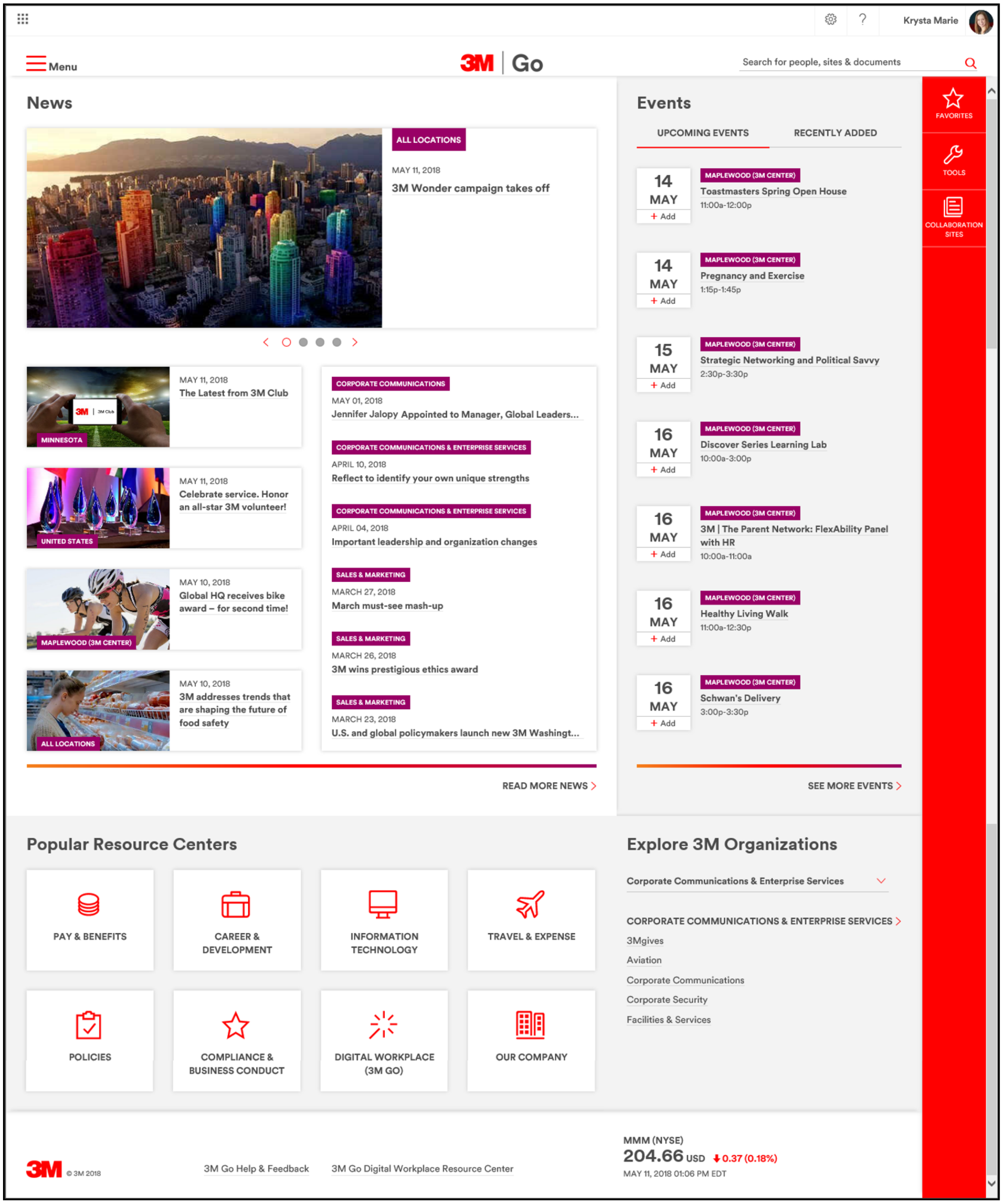
As a part of the strategy, the management team decided that, instead of migrating content to a new system, the team would evaluate and rebuild all pages to ensure that content was accurate, up-to-date, and relevant. This allowed them to tag all content with accurate metadata, which let content display based on user preferences and also enhanced search capabilities.

After two years of research, design, development, and content creation, 3M Go was launched globally in August 2017.

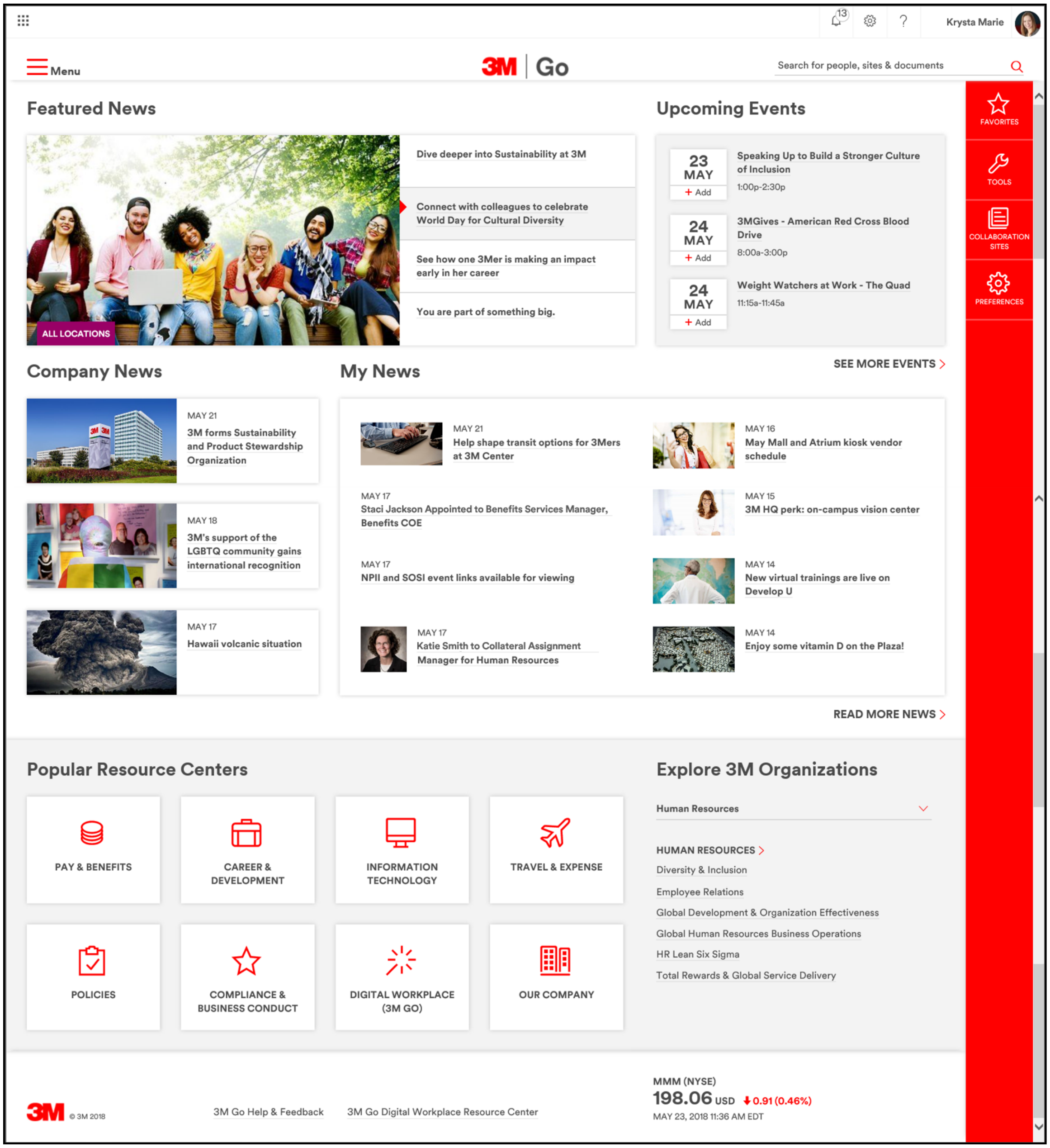
The dedicated team had transformed the employee experience from one of having to access multiple disconnected systems with significant usability issues to using a centralized, personalized, and customizable place that gave them quick access to everything they need for day-to-day work.



Pictured: The Previous 3M Intranet. 3M Source was the company's primary intranet prior to 3M Go. It underwent a facelift in Q1 2015 to apply the 3M brand look and feel to the homepage. 3M Source was a usability nightmare; it was a link farm with virtually no search capabilities, no central navigation, and a different design and layout on almost every site due to a complete lack of governance and content strategy. In addition, updating the content on 3M Source required technical resources.



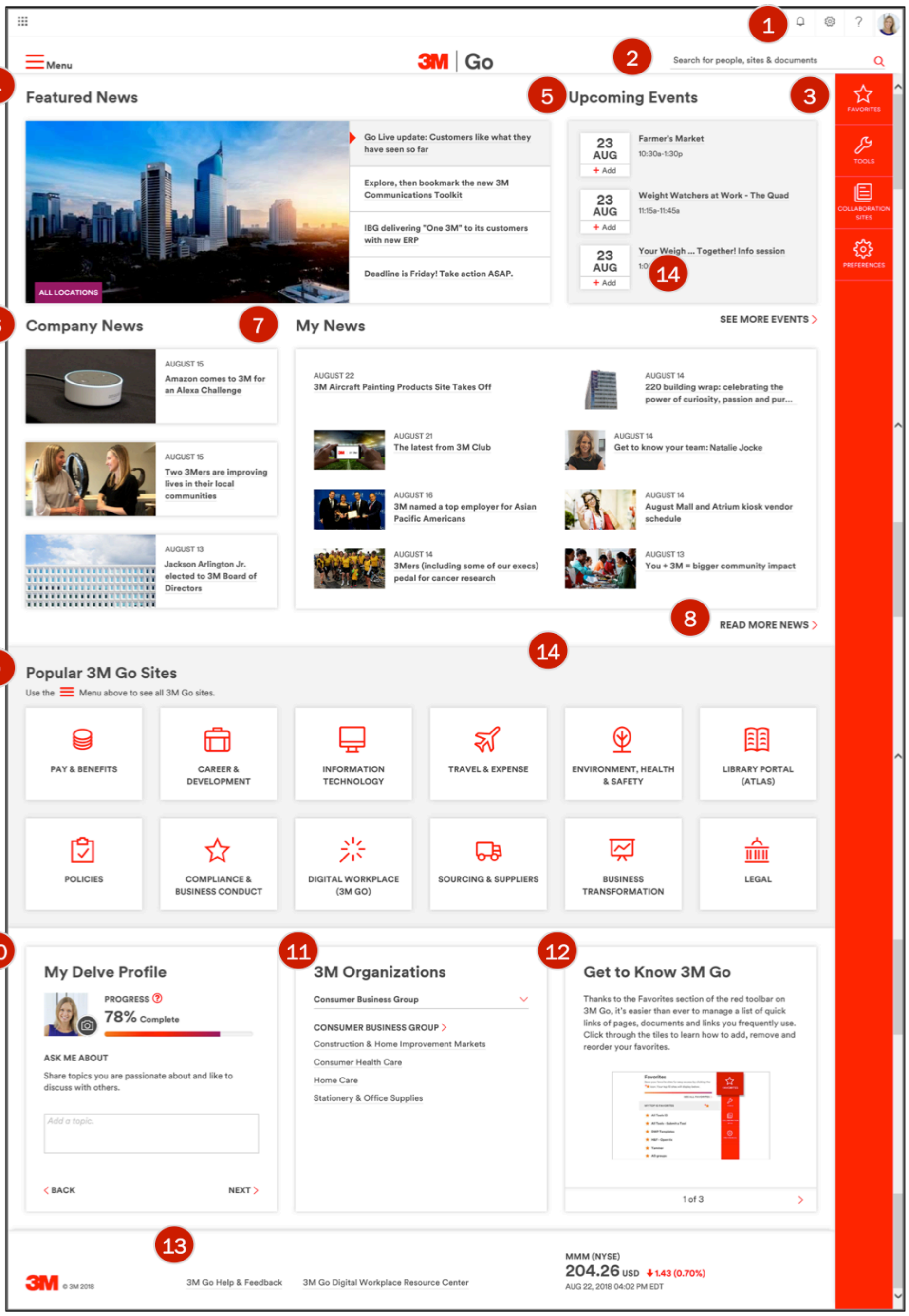
Pictured: Intranet Homepage (Version 1) at Launch. This version combined global news with the user's country news in the left column below the featured carousel; the right column contained targeted organization and function news. The homepage also had a very large *Events* section that users felt was overly crowded with content.



Pictured: Intranet Homepage (Version 2). This version of the 3M Go homepage shows an updated news and events layout. The *Popular Resource Centers* web part provides quick access to the Corporate Resource Center sites that are most frequently used in each user's country. *Explore 3M Organizations* defaults to users' preferred organization, but they can easily select other organizations.

DESIGN REVIEW

Homepage



Pictured: 3M's New Intranet Homepage. The new 3M Go homepage offers various types of news, tool, and events, and a lovely visual design.

Homepage, Highlights

What a fresh, simple look for such an intellectual intranet. 3M Go offers a mix of different types of news that keeps employees well informed about topics they need and want to know about. The homepage information displays based on the logged-in user's preferences for organization, location, and language.

1. **Utility (O365) navigation:** The icons in the far upper right are available on each page of 3M Go and link to alerts, settings, help, and the user's profile information.
2. **Search:** Employees can search for information, tools, sites, coworkers, and documents using the search field in the upper right.
3. **Toolbar:** The ever-present red toolbar on the right gives employees quick access to their favorites, tools, collaboration sites, and preferences.
4. **Top news:** The *Featured News* section takes the top spot on the homepage and cycles through four top news headlines and related photos.
5. **Events:** Showing upcoming events on the homepage is a successful way to entice employees to get involved. At a glance, employees can see events that are happening each day. The *Upcoming Events* section in the upper right displays calendar icons with the event dates. A small *Add* button below each date allows employees to add events to their Outlook calendar. The event's name and time displays to the right of the calendar icon.
6. **3M Company news:** Internal 3M news appears in the homepage's *Company News* section. Each item includes the headline, an image, and the date—just enough to wet an employee's appetite for information.
7. **Targeted news:** The news displayed in the *My News section* is based on the options the user chose in the *Preferences* section.
8. **More news:** If the headlines on the homepage don't suffice, not to worry; the *Read More News* link leads to a page with additional news based on the user's preferences.
9. **Popular resources:** Getting to commonly used resources must be quick and easy. The *Popular 3M Go Sites* section makes it so by displaying large buttons that lead to a dozen most-used areas based on the logged-in user's country. If employees are looking for something beyond the 12 most popular sites, a prompt at the top of the section directs them to a menu at the top of the page that lists additional areas.
10. **Adding user profile information:** A robust employee directory includes not only information from HR and IT databases, but also content that employees provide about themselves to further enrich the directory. Gamification and an abundantly simple design that is positioned to remind people to update their profiles are all creative tactics that coax people to add more details to their profile. The *Progress* barometer shows the percentage of the profile they have

completed, which can be very motivating to employees and gamifies the task. Further, asking specific questions and offering users an answer field right in the card on the homepage makes updating information so simple that there is almost no excuse for not doing so. Finally, having this option on the homepage reminds people to do it, boosting ease-of-use up a notch.

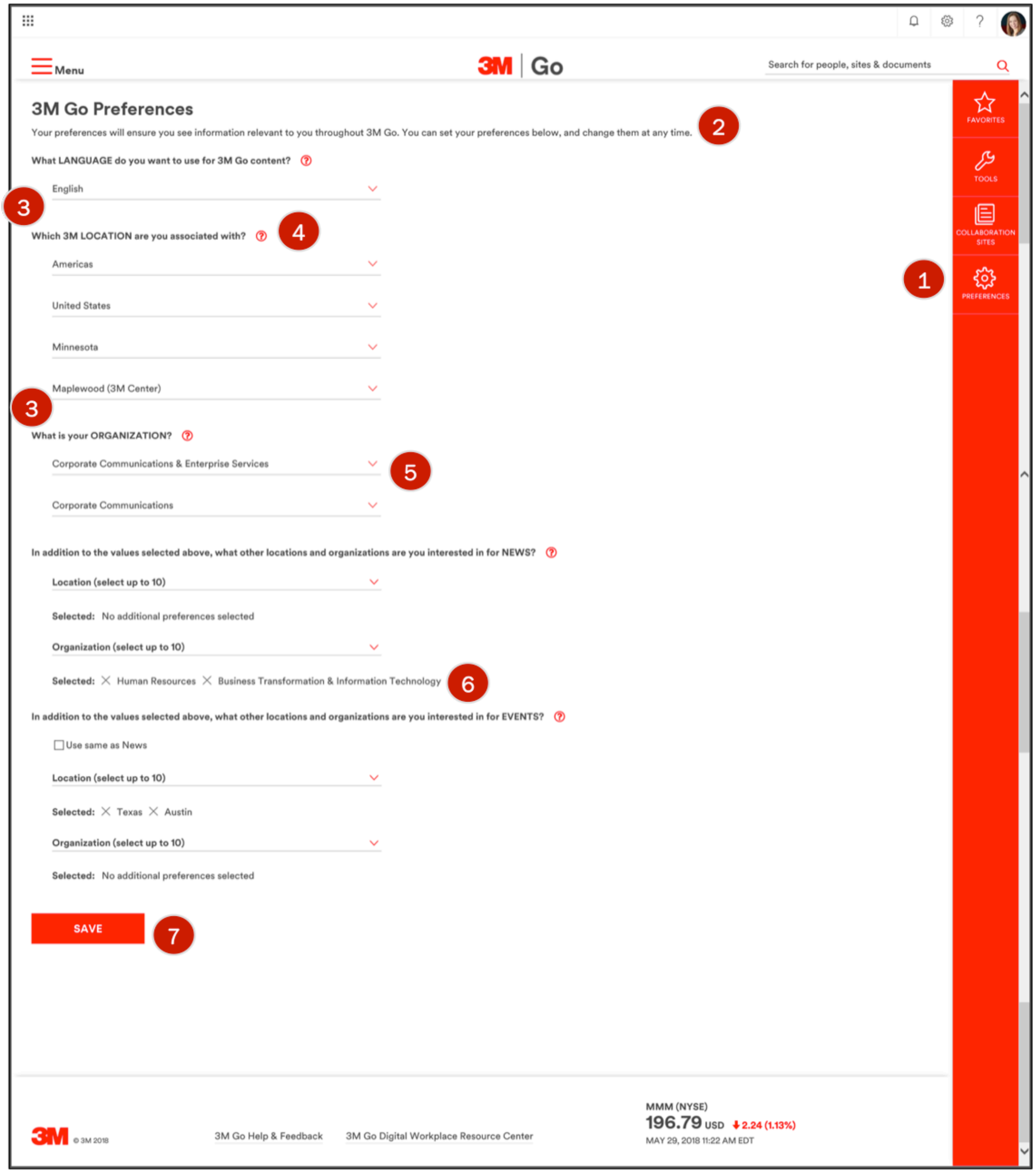
11. **Organizations:** 3M includes 5 business groups and 32 functions—in other words, many corporate teams and resources to be aware of and understand. The *3M Organizations* card on the homepage gives employees a jumpstart on exploring their company by displaying the list of links for all 3M organizations, with the logged-in user's organization selected by default.

12. **Intranet tips:** The team sends a monthly newsletter to employees about how to best use 3M Go. The team's research showed, however, that employees thirsted for even more 3M Go knowledge, and key themes and questions often arise in help and feedback tickets. Armed with this information, the team creates targeted content for both the newsletter and *Get to Know 3M Go* card, offering tips to educate users on a specific "topic of the week." The User Experience & Analytics team is responsible for keeping this content fresh and relevant.

13. **Footer:** A small page footer offers a few key links to intranet help and feedback, a resource center, and the stock price and direction (up or down).

14. **Visual design:** A subtle grey background appears behind the *Events* and *Popular 3M Go Sites* sections. Although barely visible, this touch helps separate the sections on the page without having to use a thick colored line around sections, bold color for each section, or an obvious zebra-stripe effect.

Update Preferences



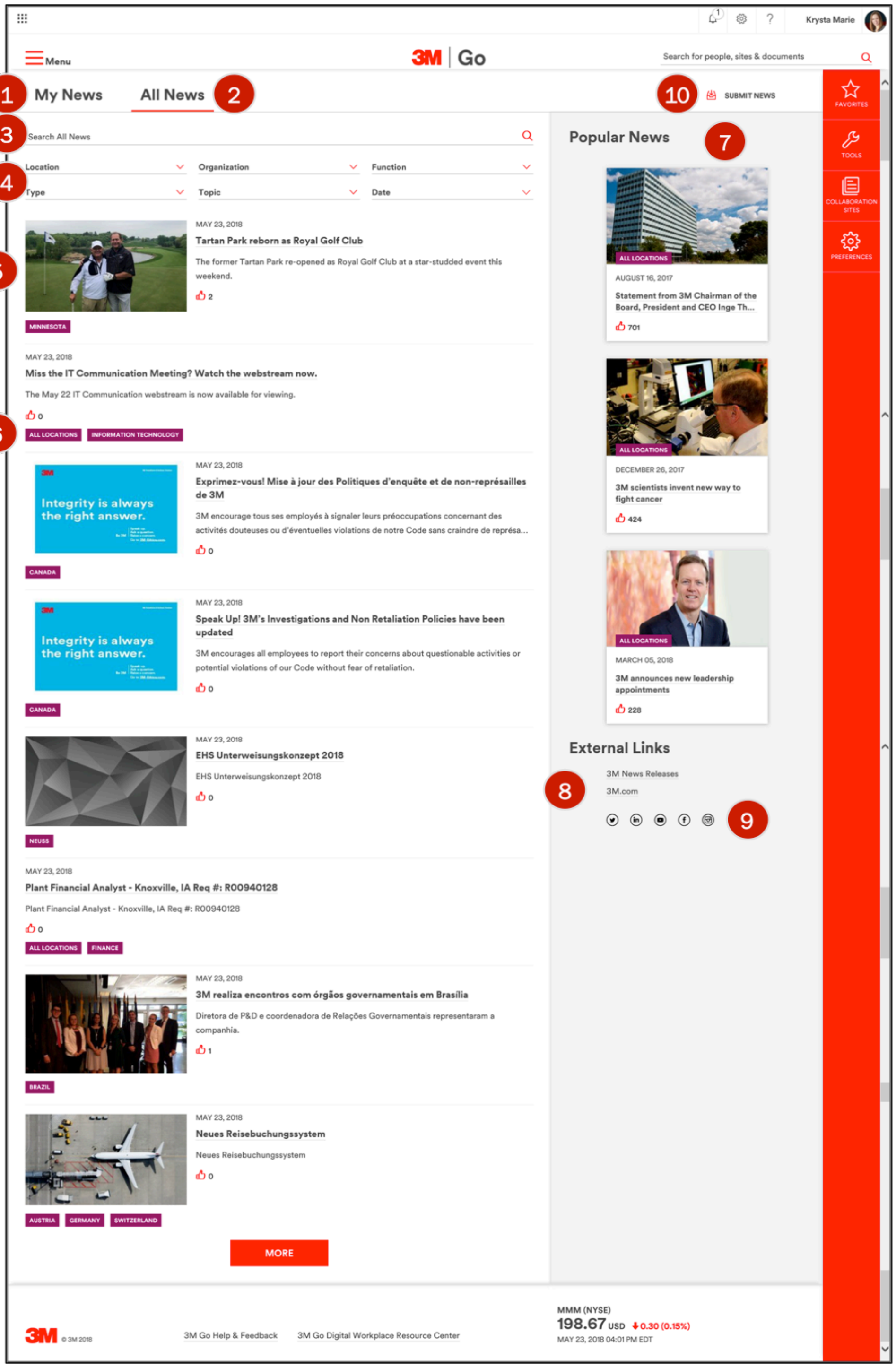
Pictured: 3M Intranet Update Preferences. On the *3M Go Preferences* page, employees choose their primary language, location, and organization—all of which govern the content they will see on the intranet.

Update Preferences, Highlights

On 3M Go, user preferences are significant because they drive much of the content that users receive, including news, events, and the default language. Designers ensured that users would tend to their preferences by asking them to fill out a form the first time they log in to 3M Go; all of the form's fields are required, except for department.

1. **Access to preferences:** Users can change their preferences at any time. The gear icon in the red toolbar on the right, available on every 3M Go page, leads to the *3M Go Preferences* page.
2. **Description:** Two short sentences at the top of the page describe the implications of choosing preferences. Information bits such as this, which are peppered throughout the design, help employees learn about the system and how it can help them in their everyday work.
3. **Clear field labels:** Each question in the form is easy to understand. Words pertaining to the question's main subject appear in all capital letters, making these information-bearing words very visible.
4. **Field help:** The question mark icons that appear by each question offer assistance.
5. **Lists:** To make it extra easy for users to select their preferences—as well as remind or teach them about the available preferences—designers used drop-down lists as the field mechanism.
6. **Multi-select:** For some items, such as location, users can select multiple responses. The selected items appear by a *Selected* prompt. This design avoids the common problem of users not seeing all the selections in a multi-select list. Users can easily remove a selection by clicking the small *x* icon to the left of its name.
7. **Save:** The red *Save* button is positioned at the bottom of the form, as expected. The color stands out against the white page background and, combined with the understandable action verb, it creates a clear call to action. The word *Save* also implies that the changes will occur immediately, as opposed to *Submit*, which could imply that the changes require approval and may entail a time lag before taking effect.

News



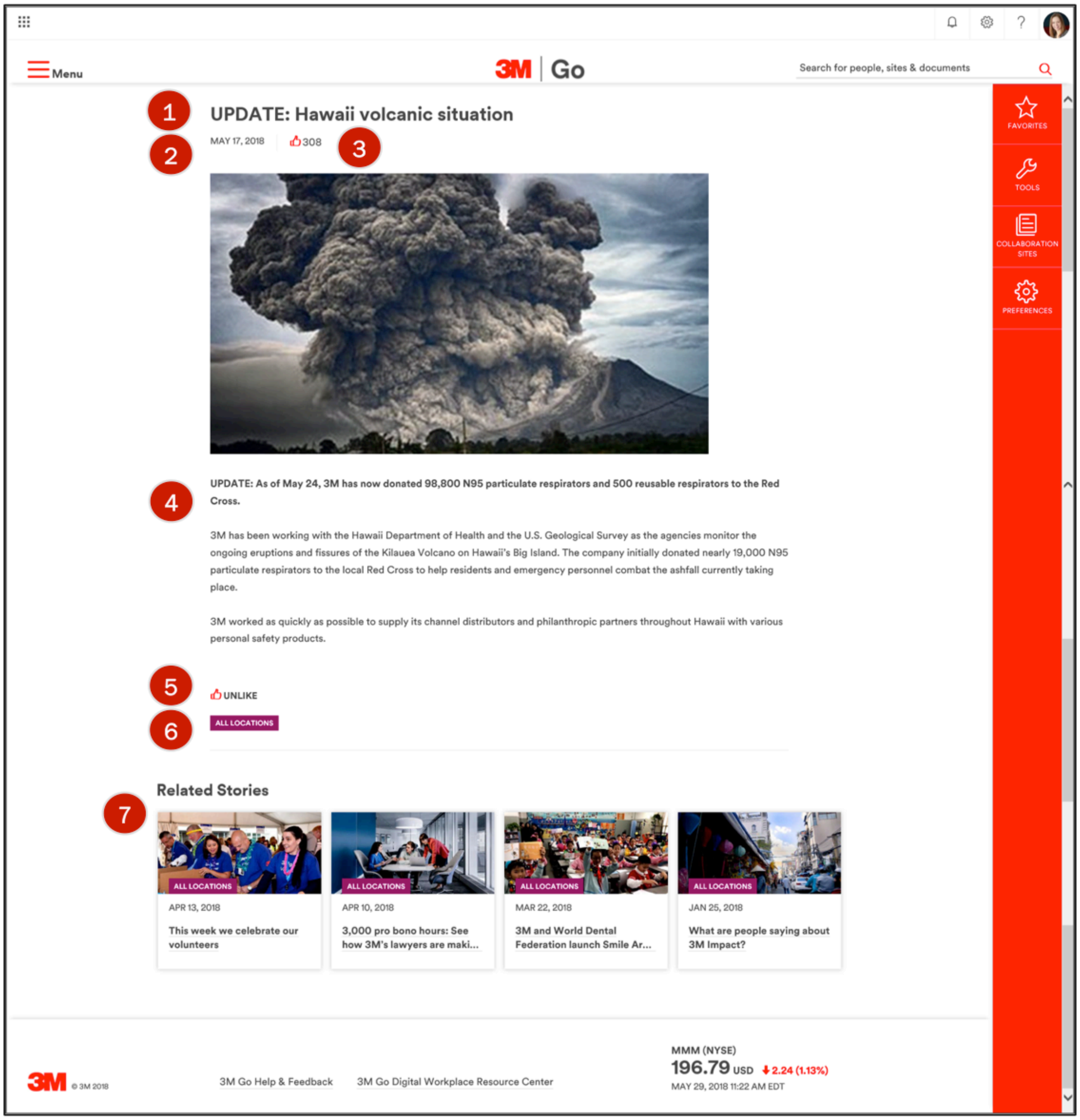
Pictured: 3M Intranet News. News is divided into two sections: news related to the user (*My News*) and *All News*.

News, Highlights

3M Go’s news section offers all news in a central place. Local news is currently targeted to 38 different countries, reaching many of the 91,000 employees and 30,000 contract workers. Since the new design was introduced, the news on 3M Go is being read 400% more each day than it was on the previous 3M Source intranet.

1. **User-centered news:** The *My News* tab at the top of the page displays news related to the logged-in user based on that user’s selected 3M Go preferences.
2. **All news:** Employees are not limited to seeing news directed only toward them. The *All News* tab lets users explore and search for all stories from all countries in all languages. Translation is no small task, as 3M recognizes 15 primary languages: English, Spanish, Portuguese, French, German, Dutch, Italian, Swedish, Russian, Polish, Korean, Thai, Simplified Chinese, Japanese, and Traditional Chinese.
3. **Search field:** The *Search all news* field allows users to type in queries.
4. **Filters:** Filters at the top of the page allow users to see items related only to areas they chose, based on *Location, Type, Organization,* and more.
5. **News story information:** Each news story appears with the headline, date (written in an international format), related image, short summary, and how many likes it has garnered.
6. **Facets:** The magenta rectangles below each news item are a helpful feature. These facets list metadata—such as location and organization—tagged to each article.
7. **Popular:** Three of the most popular trending news items are showcased in the right rail under the unmistakable label: *Popular News.* This feature gives employees an immediate sense of what’s important to their coworkers.
8. **External news:** The *External Links* section leads to press releases and the public-facing website. These links make it easy for employees to see what their organization is presenting to customers and the public.
9. **Social:** At the bottom of the right rail, social icons for Twitter, LinkedIn, YouTube, Facebook, and Instagram lead to the 3M channels. This makes it quick and easy for employees to find out what the company and its followers are saying.
10. **Submit news:** Communicators can quickly initiate a new news story via the *Submit News* link at the top.

News Story



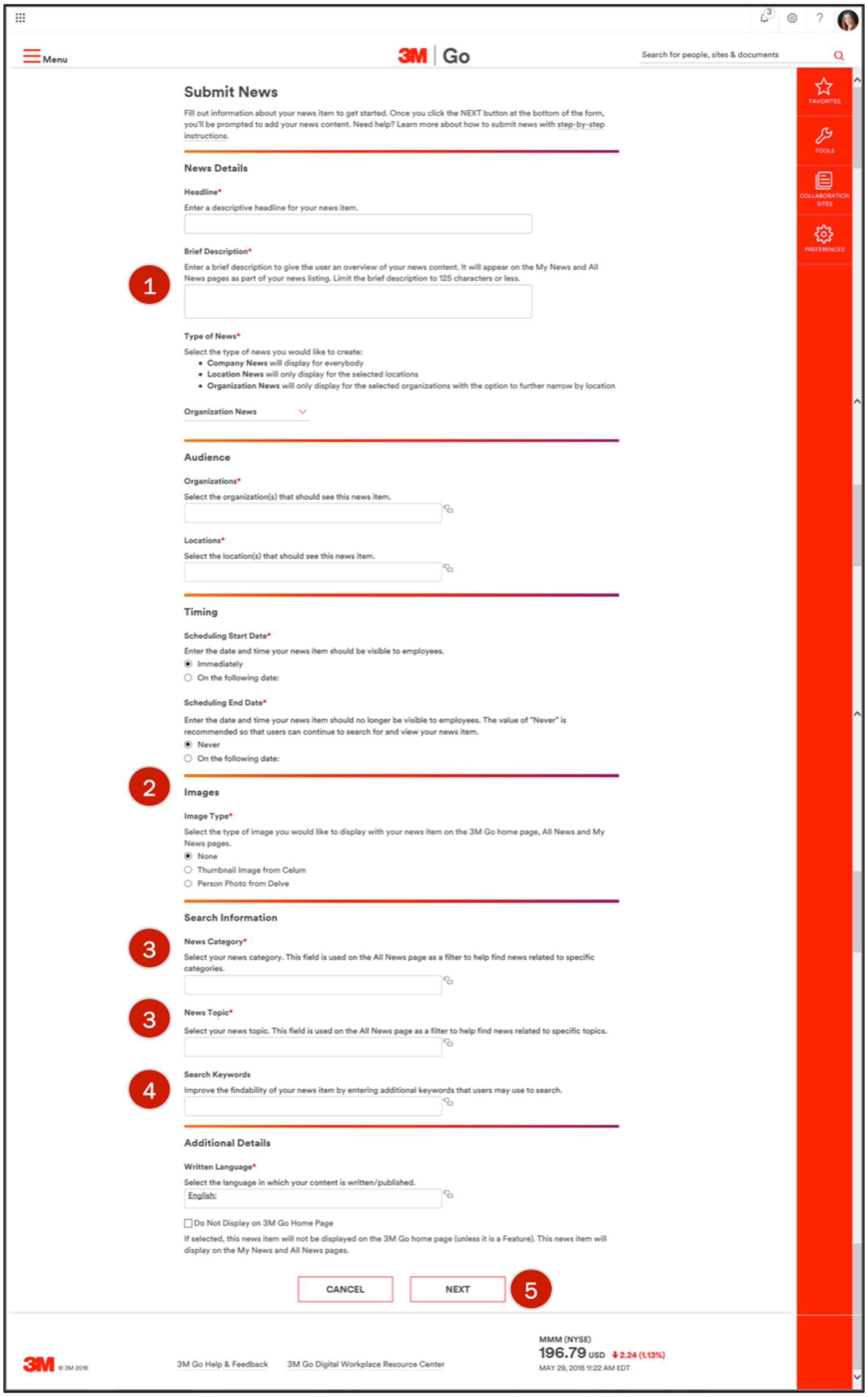
Pictured: 3M Intranet News Story. News stories include text, an image or a video, related stories, and the option to "like" the story.

News Story, Highlights

Each news story on 3M Go uses a consistent format, as well as optional elements such as an image or video (at the top) or links within the story.

1. **Title:** The story title is highly visible at the top of the page in large bold letters.
2. **Date:** The date the story was published appears at the top in an international format, with the month spelled out and a four-digit year.
3. **Likes:** Putting the number of "likes" at the top of the page gives employees an immediate sense of a story's popularity.
4. **Image:** Authors have the option to add an image or video to support the story.
5. **Story:** The news itself appears in the center of the page.
6. **Like:** After reading the story, users have the option to like (or unlike) it; this icon appears after the text.
7. **Facets:** The facets the author selected for the story appear at the end of the page.
8. **Related stories:** Four news items targeted to the same audience and related to the article appear at the end of the page in the *Related Stories* section. This is a good position for these items, as people who read the story to the end are likely to look there for more information.

Submit News



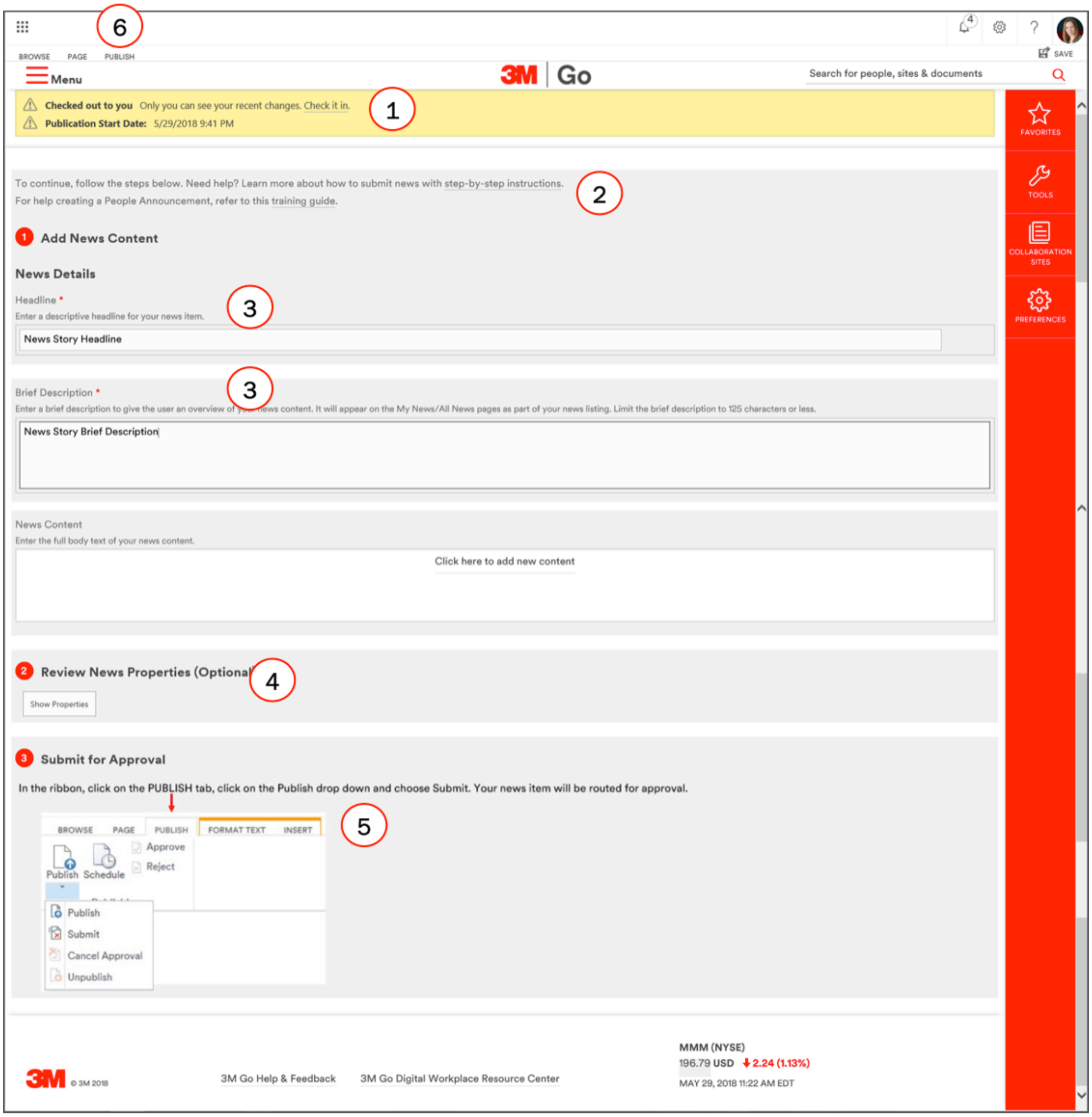
Pictured: 3M Intranet *Submit News*. Content writers can create news items with such ease on 3M Go.

Submit News, Highlights

The *Submit News* form for authors is so simple that it requires no CMS training, but a link for help is available at the top, just in case. The *Submit News* form is readily available in multiple places, including the *My News* page, the *All News* page, and the *Communications Resource Center*. The form's simplicity and findability are likely behind the 513% increase in news stories published on 3M Go compared to the previous 3M Source intranet.

1. **News description:** Field labels are very descriptive and communicate to writers the ramifications of their selections. For example, the *Brief Description* field label doesn't end with those two words, though technically they would suffice. Below the label, the system offers more pertinent information: *Enter a brief description to give the user an overview of your news content. It will appear on the* My News *and* All News *pages as part of your news listing. Limit the brief description to 125 characters or less.*
2. **Images:** The *Images* section allows users to choose no image or upload an image from another system.
3. **Topic and category:** Authors must choose a topic and category for the story, which makes it more likely that interested users will find it.
4. **Keywords:** Authors are urged to add keywords with the prompt: *Improve the findability of your news item by entering additional keywords.*
5. **Next step:** The *Next* button leads to a second form where authors can add the news story content.

Submit News Form



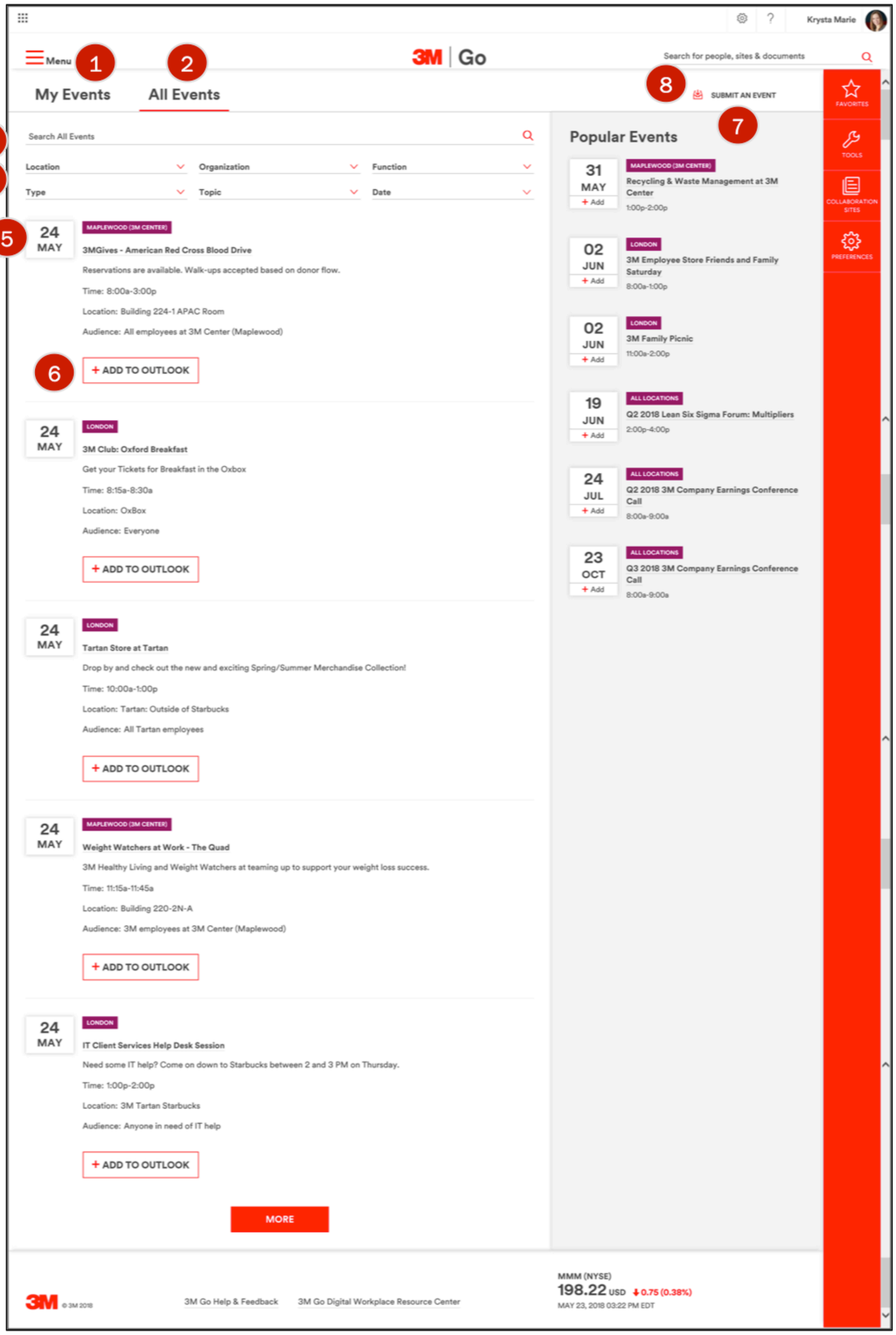
Pictured: 3M Intranet *Submit News* Form. The form to add a news story is easy to use, even without training.

Submit News Form, Highlights

The form to add news content leads authors through the process of posting news. The form's design eliminates the need for training and requires minimal support, resulting in considerable time and cost savings. Also, the form's simplicity has given rise to the creation of many more news items. On average, 13 news stories are published each day on 3M Go compared to an average of 2 stories per day on 3M Source.

1. **Content management:** A yellow section at the top of the form includes information about the news item's status, including the person currently interacting with the document and the document's planned go-live date.
2. **Help:** If users need more information, they can click links to *step-by-step instructions* and a *training guide* at the top of the form.
3. **Edit:** The story title and description are carried forward from the previous form but appear in fields so that users can edit them if they desire.
4. **Review:** Users can review and edit the topic selections they made in the previous form.
5. **Publish:** Short instructions and a helpful screenshot inform users to use the *Publish* tab in the ribbon at the top of the form to submit the story. Once the form is submitted, it is routed for approval via workflow.

Events



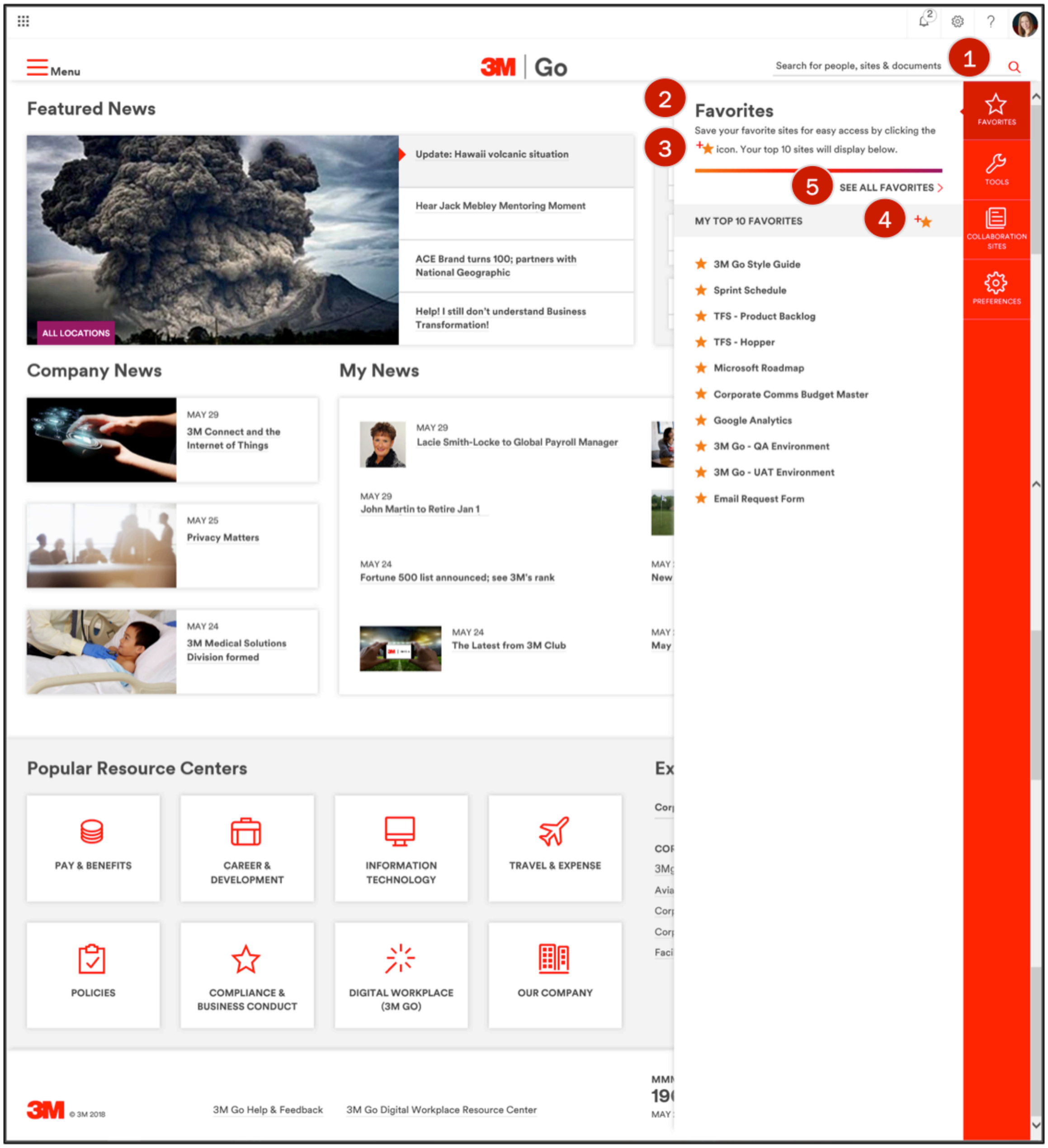
Pictured: 3M Intranet Events. Employees can search and filter events, or see only events based on their preferences.

Events, Highlights

The layout for the intranet's events page is very much like that of the news page in that it offers two tabs: one for personalized events and one for all events. Employees can search events, use filters to refine a list of events, and view popular events. Events are accessed via the *See more events* link on the homepage.

1. **User-centered events:** The *My Events* page displays events based on the logged-in user's preferences.
2. **All events:** The *All Events* section lets employees explore and search for all events from all countries in all languages.
3. **Search field:** The *Search all events* field lets users type in a query related to the event they want.
4. **Filters:** Filters at the top of the page let users view events related only to areas they choose, based on *Location, Type, Organization,* and more.
5. **Event information:** Each event appears with the building location, event name, information about reservations or tickets, specific room location, and audience. Each bit of information offers more insight into the event to help employees decide if they would like to attend.
6. **Add to calendar:** A very helpful feature is the *Add to Outlook* calendar button, which appears below the event.
7. **Popular:** Six of the most popular events are showcased in the right rail under the label: *Popular Events.* This lets employees directly sense the pulse of their coworkers.
8. **Submit event:** Employees can quickly create a new event via the *Submit an Event* link at the top of the page.

Toolbar, *Favorites*



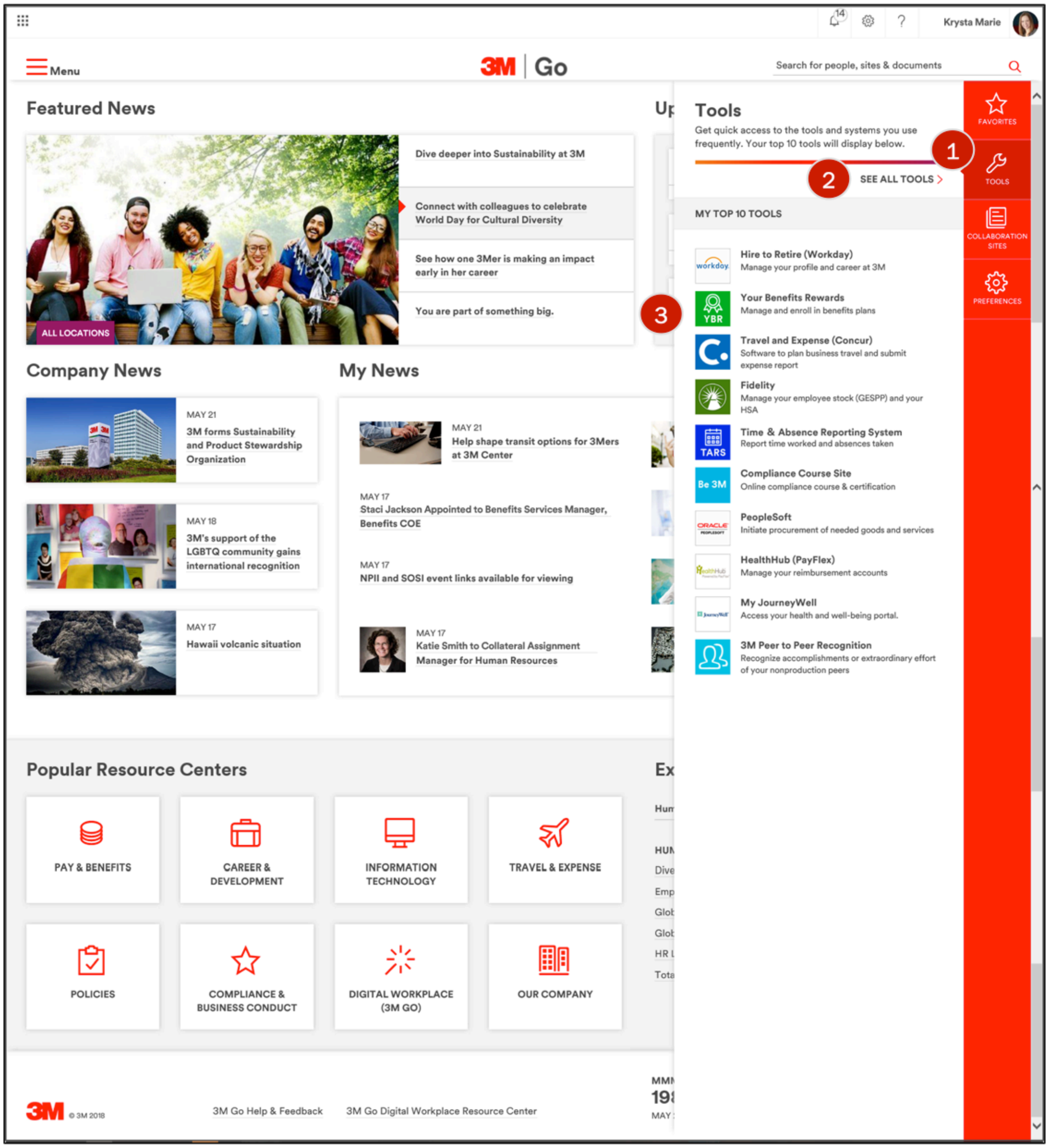
Pictured: 3M Intranet Toolbar, *Favorites*. The right-side toolbar makes the user's favorites quickly accessible.

Favorites, Highlights

Just one click of the mouse opens the world of user-selected favorite sites.

1. **Toolbar:** The always-present red toolbar that runs the length of the right side of pages includes icons for *Favorites, Tools, Collaboration Sites,* and *Preferences.* This pervasive design element makes it easy for employees to access the things they need no matter where they are on 3M Go.
2. **Favorites list:** Clicking the *Favorites* icon in the toolbar opens the *My Top 10 Favorites* panel with the user's top 10 sites, documents, or pages (any URL).
3. **Tip:** A tip at the top of the panel tells users how to create a favorite.
4. **Add:** Users can save a favorite by clicking the star and plus sign icon; this prompts them to name the favorite and add a URL. They can also add favorites on the *All Favorites* page.
5. **All:** Employees are not limited to seeing only their top 10 favorites. Clicking the *See All Favorites* link shows more favorites, and lets users drag and drop to reorder, delete, and add sites.

Toolbar, *Tools*



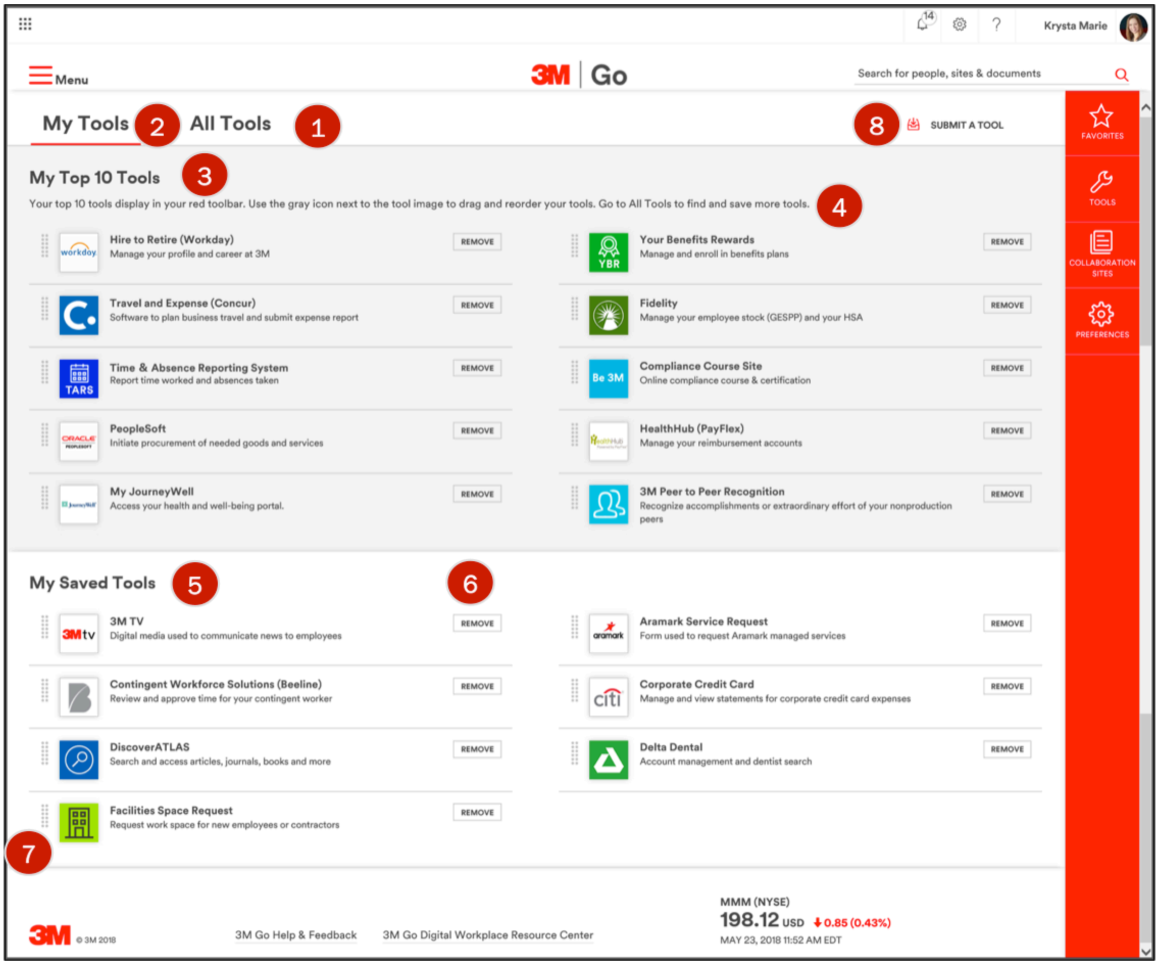
Pictured: 3M Intranet *Tools*. The list of tools saved by the user appears when the *Tools* icon is clicked.

Tools, Highlights

All toolbar sections offer a consistent layout and experience.

1. **Toolbar:** Selecting the *Tools* icon in the toolbar opens a panel with the top 10 picks of all the tools saved by the user.
2. **All:** The user can see more tools by clicking the *See All Tools* link.
3. **List:** Each tool in the list includes the tool’s name and a helpful description of what it can be used for. An icon appears with each tool, which helps users easily recognize them.

Toolbar, *My Tools*

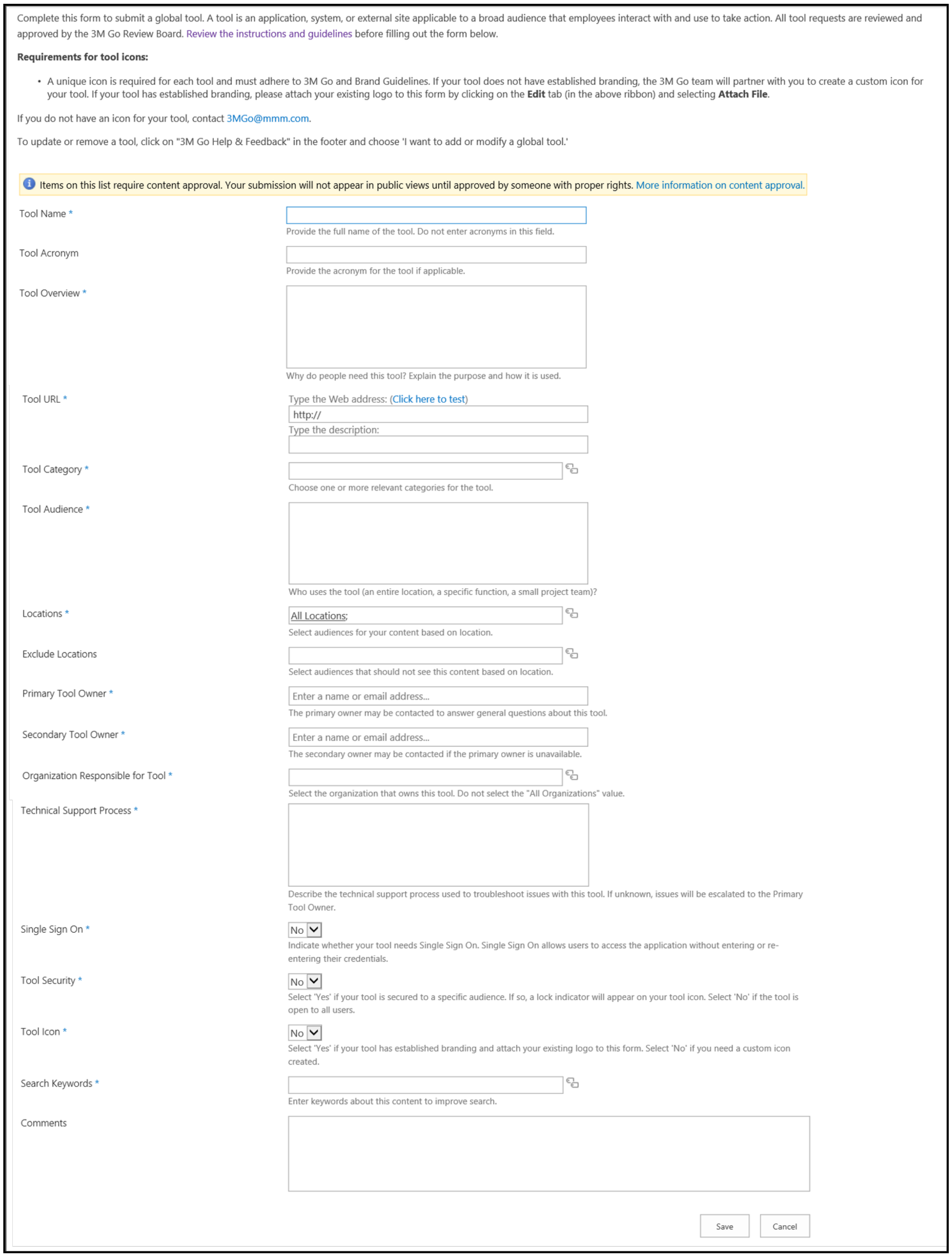


Pictured: 3M Intranet *My Tools*. The *My Tools* page shows the user's saved tools.

My Tools, Highlights

After clicking the *Tools* icon in the toolbar and then the *See All Tools* link in the panel, a page of tools is displayed.

1. **Tabs:** The two tabs at the top are *My Tools* and *All Tools.*
2. ***My Tools*:** The default tab is *My Tools*, which displays the user's saved tools. The red underline indicates selection, and repeating the term *My* in the page subtitles helps connect the tab name with the page content.
3. **Top tools:** The user's designated top 10 tools appear in the top section of the page labeled *My Top 10 Tools*.
4. **Tip:** Under the *My Top 10 Tools* headline is another example of helpful inline text. This text tells users that the top tools appear in the tools panel, how to reorder the tools, and how to find more tools.
5. **Saved tools:** All tools the user has saved appear in the bottom section of the page under *My Saved Tools*.
6. **Delete:** To the right of each tool is a *Remove* button so users can clean up any tools they no longer need.
7. **Tool order:** Users can use the grey "handle" icon to change the order of the tools by dragging and dropping.
8. **Adding a tool:** Users who use an application that is not offered on 3M Go can add the tool by choosing the *Submit a Tool* link at the top of the page. This opens a form with a series of questions about the tool, what it is used for, who owns it, etc. The *Submit a Tool* link is an easy and handy way to add tools, and it increases the likelihood that all tools used in the 3M digital workplace will be added to the intranet. The tools submissions are sent to the Digital Workplace team for governance review and approval.



Complete this form to submit a global tool. A tool is an application, system, or external site applicable to a broad audience that employees interact with and use to take action. All tool requests are reviewed and approved by the 3M Go Review Board. Review the instructions and guidelines before filling out the form below.

Requirements for tool icons:

- A unique icon is required for each tool and must adhere to 3M Go and Brand Guidelines. If your tool does not have established branding, the 3M Go team will partner with you to create a custom icon for your tool. If your tool has established branding, please attach your existing logo to this form by clicking on the **Edit** tab (in the above ribbon) and selecting **Attach File**.

If you do not have an icon for your tool, contact 3MGo@mmm.com.

To update or remove a tool, click on "3M Go Help & Feedback" in the footer and choose 'I want to add or modify a global tool.'

Items on this list require content approval. Your submission will not appear in public views until approved by someone with proper rights. More information on content approval.

Tool Name *
Provide the full name of the tool. Do not enter acronyms in this field.

Tool Acronym
Provide the acronym for the tool if applicable.

Tool Overview *
Why do people need this tool? Explain the purpose and how it is used.

Tool URL *
Type the Web address: (Click here to test)
http://
Type the description:

Tool Category *
Choose one or more relevant categories for the tool.

Tool Audience *
Who uses the tool (an entire location, a specific function, a small project team)?

Locations *
All Locations;
Select audiences for your content based on location.

Exclude Locations
Select audiences that should not see this content based on location.

Primary Tool Owner *
Enter a name or email address...
The primary owner may be contacted to answer general questions about this tool.

Secondary Tool Owner *
Enter a name or email address...
The secondary owner may be contacted if the primary owner is unavailable.

Organization Responsible for Tool *
Select the organization that owns this tool. Do not select the "All Organizations" value.

Technical Support Process *
Describe the technical support process used to troubleshoot issues with this tool. If unknown, issues will be escalated to the Primary Tool Owner.

Single Sign On *
No
Indicate whether your tool needs Single Sign On. Single Sign On allows users to access the application without entering or re-entering their credentials.

Tool Security *
No
Select 'Yes' if your tool is secured to a specific audience. If so, a lock indicator will appear on your tool icon. Select 'No' if the tool is open to all users.

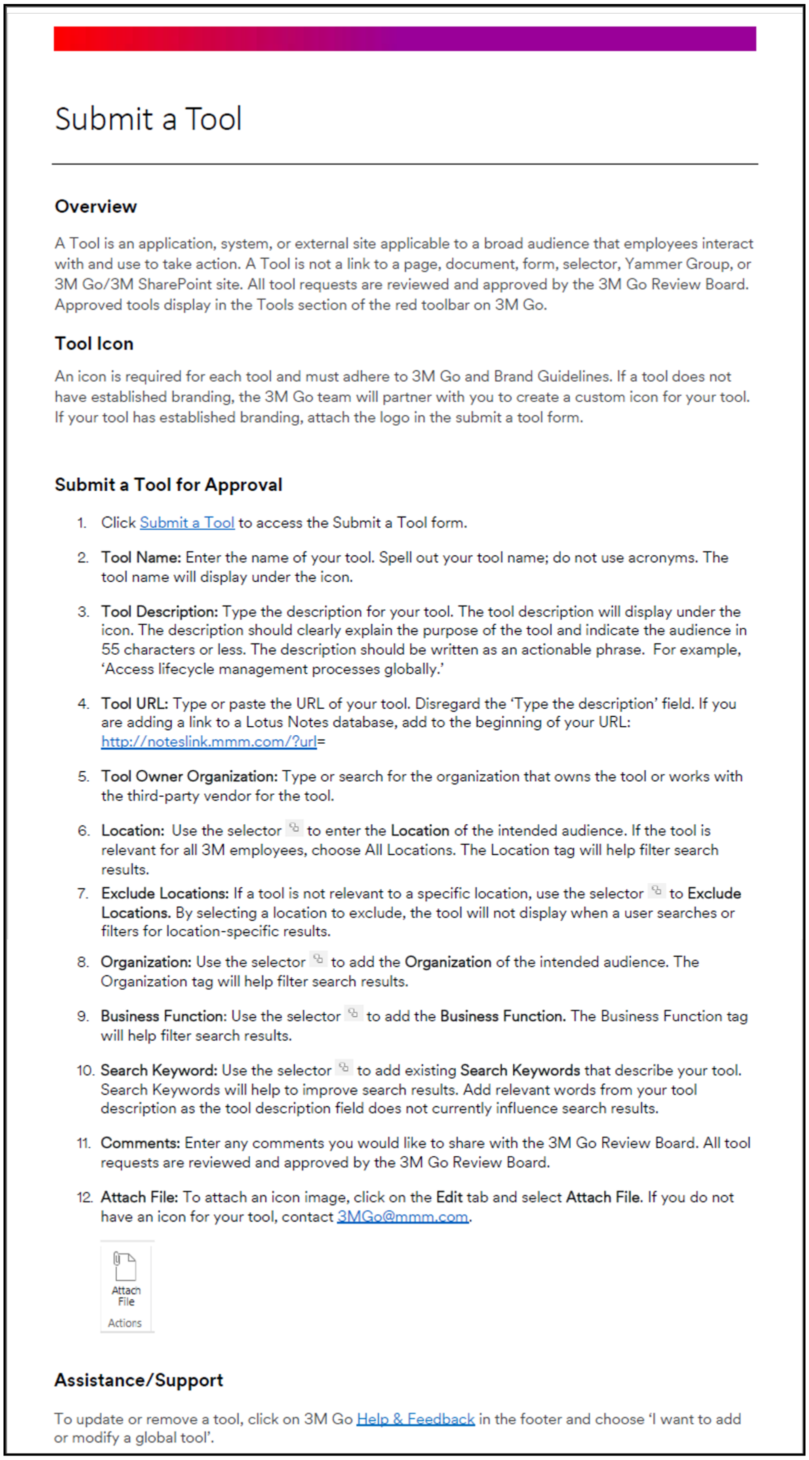
Tool Icon *
No
Select 'Yes' if your tool has established branding and attach your existing logo to this form. Select 'No' if you need a custom icon created.

Search Keywords *
Enter keywords about this content to improve search.

Comments

Save Cancel

Pictured: 3M Intranet *Submit a Tool* Form. Tool owners can easily submit a request to have a tool added to the intranet via the *Submit a Tool* link. This link takes users to an intuitive and comprehensive form. Once submitted, the content strategy team evaluates the request and determines whether or not the tool meets the criteria for tools offered on the intranet.



Submit a Tool

Overview

A Tool is an application, system, or external site applicable to a broad audience that employees interact with and use to take action. A Tool is not a link to a page, document, form, selector, Yammer Group, or 3M Go/3M SharePoint site. All tool requests are reviewed and approved by the 3M Go Review Board. Approved tools display in the Tools section of the red toolbar on 3M Go.

Tool Icon

An icon is required for each tool and must adhere to 3M Go and Brand Guidelines. If a tool does not have established branding, the 3M Go team will partner with you to create a custom icon for your tool. If your tool has established branding, attach the logo in the submit a tool form.

Submit a Tool for Approval

1. Click Submit a Tool to access the Submit a Tool form.
2. **Tool Name:** Enter the name of your tool. Spell out your tool name; do not use acronyms. The tool name will display under the icon.
3. **Tool Description:** Type the description for your tool. The tool description will display under the icon. The description should clearly explain the purpose of the tool and indicate the audience in 55 characters or less. The description should be written as an actionable phrase. For example, 'Access lifecycle management processes globally.'
4. **Tool URL:** Type or paste the URL of your tool. Disregard the 'Type the description' field. If you are adding a link to a Lotus Notes database, add to the beginning of your URL: http://noteslink.mmm.com/?url=
5. **Tool Owner Organization:** Type or search for the organization that owns the tool or works with the third-party vendor for the tool.
6. **Location:** Use the selector to enter the **Location** of the intended audience. If the tool is relevant for all 3M employees, choose All Locations. The Location tag will help filter search results.
7. **Exclude Locations:** If a tool is not relevant to a specific location, use the selector to **Exclude Locations.** By selecting a location to exclude, the tool will not display when a user searches or filters for location-specific results.
8. **Organization:** Use the selector to add the **Organization** of the intended audience. The Organization tag will help filter search results.
9. **Business Function:** Use the selector to add the **Business Function.** The Business Function tag will help filter search results.
10. **Search Keyword:** Use the selector to add existing **Search Keywords** that describe your tool. Search Keywords will help to improve search results. Add relevant words from your tool description as the tool description field does not currently influence search results.
11. **Comments:** Enter any comments you would like to share with the 3M Go Review Board. All tool requests are reviewed and approved by the 3M Go Review Board.
12. **Attach File:** To attach an icon image, click on the **Edit** tab and select **Attach File.** If you do not have an icon for your tool, contact 3MGo@mmm.com.

Attach File

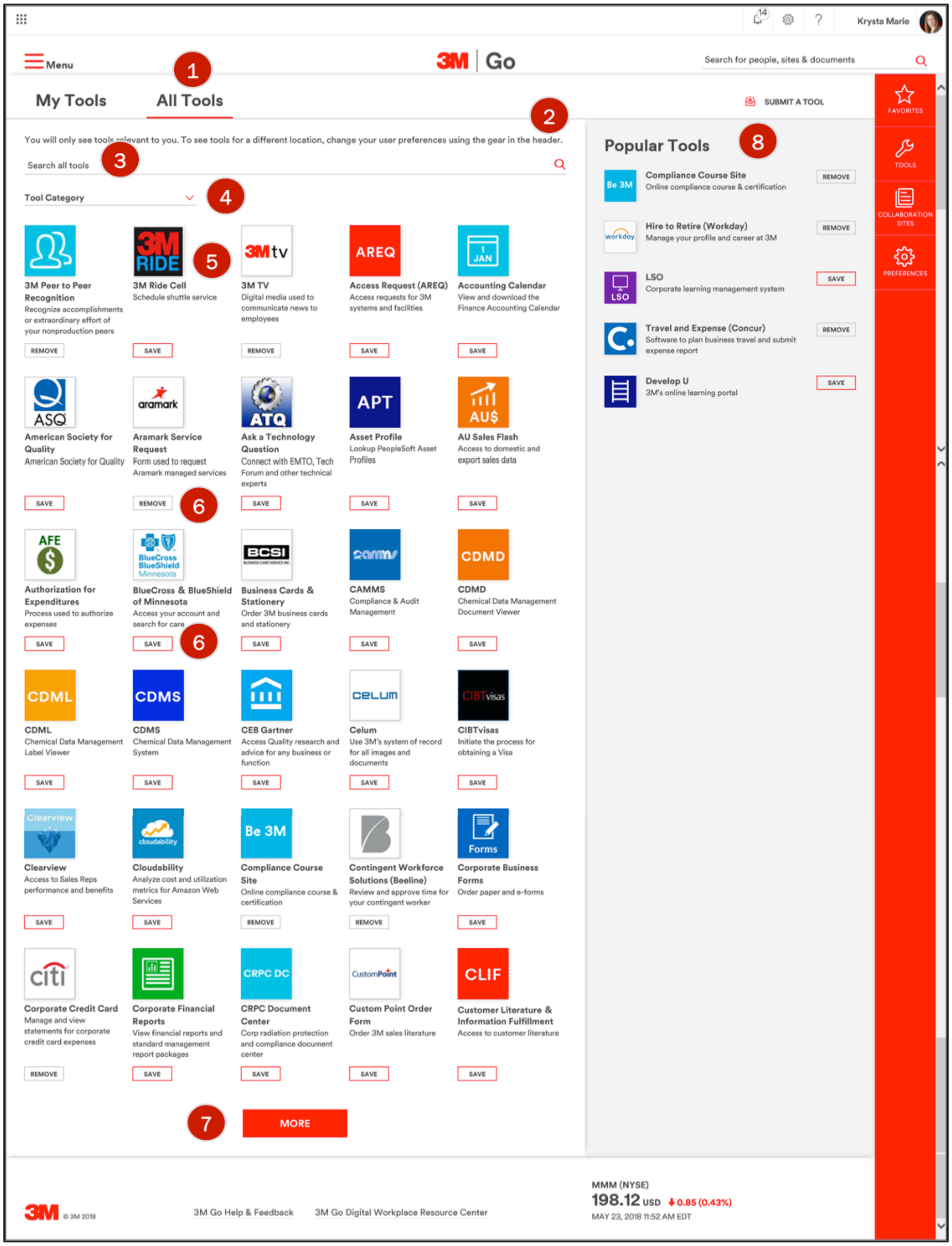
Actions

Assistance/Support

To update or remove a tool, click on 3M Go Help & Feedback in the footer and choose 'I want to add or modify a global tool'.

Pictured: 3M Intranet *Submit a Tool* Form Help. This shows the step-by-step instructions provided for completing the *Submit a Tool* form.

Toolbar, *All Tools*



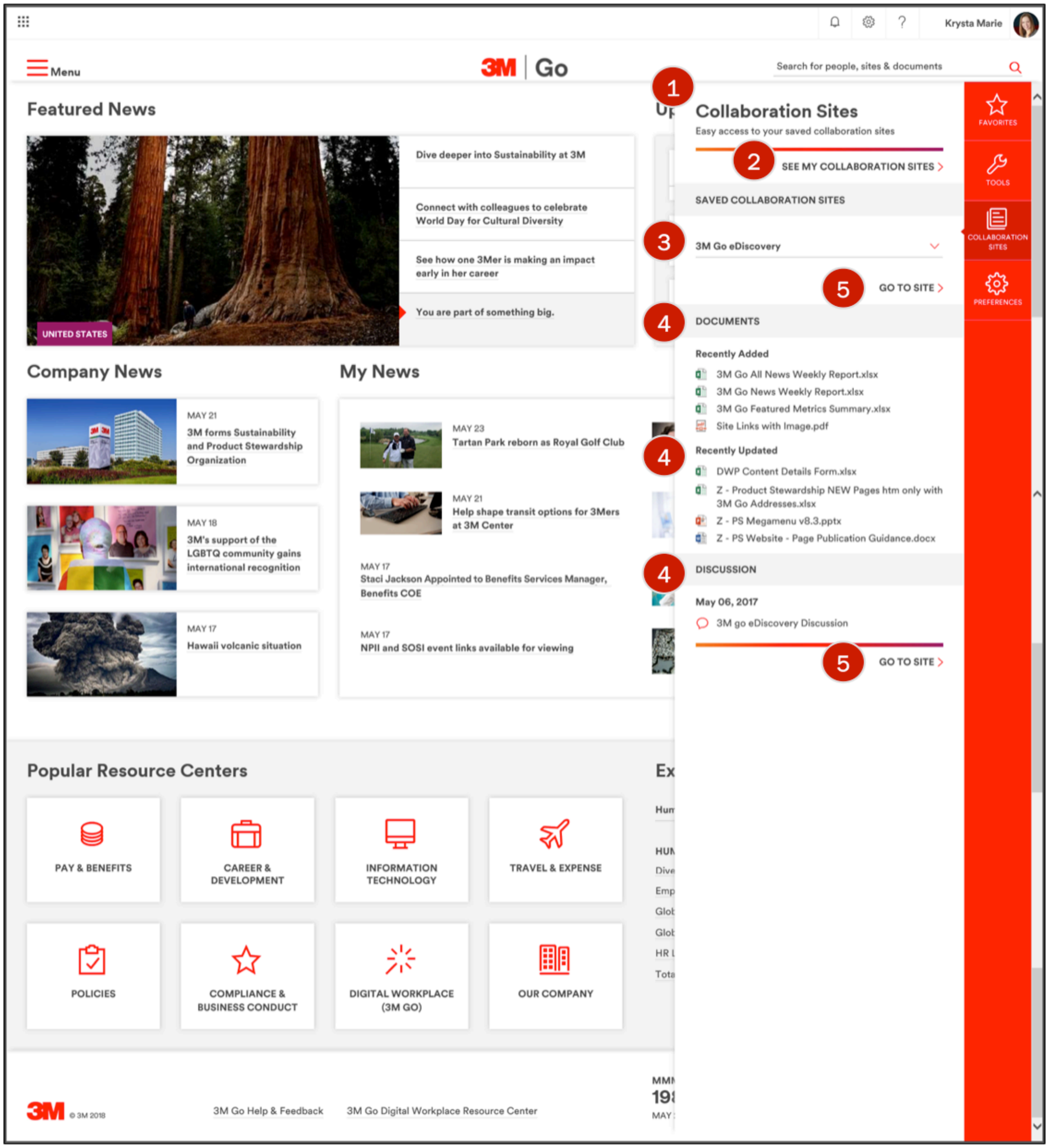
Pictured: 3M Intranet *All Tools*. Users can search for tools and save them on the 3M Go intranet.

All Tools, Highlights

Clicking the *All Tools* tab at the top opens a page that displays the many tools relevant to the logged-in user.

1. **All tools:** The *All Tools* tab label indicates that users are no longer looking at their own saved tools, but rather at all available tools at the designated location.
2. **Tip:** Another short tip at the top of the page offers a teaching moment. It tells users that they are seeing only tools assigned to their selected location, and that they can change locations to see more tools.
3. **Search:** Users can use the search field to search by the tool name.
4. **Category:** Users can sort the tools based on various categories.
5. **Tools:** Each tool on the page has a name, description, and icon.
6. **Save or remove:** Below each tool is a button that toggles between two labels: *Save* and *Remove.* Tools that the user has already saved display the option to *Remove*, and tools that have not yet been saved display the option to *Save*. Using one button for the two controls is an elegant, efficient, and space-saving solution.
7. **More:** A large red *More* button leads to more tools.
8. **Popular tools:** The right rail shows the five most popular tools; this helps make users aware of the tools that their colleagues value.

Toolbar, Collaboration Panel



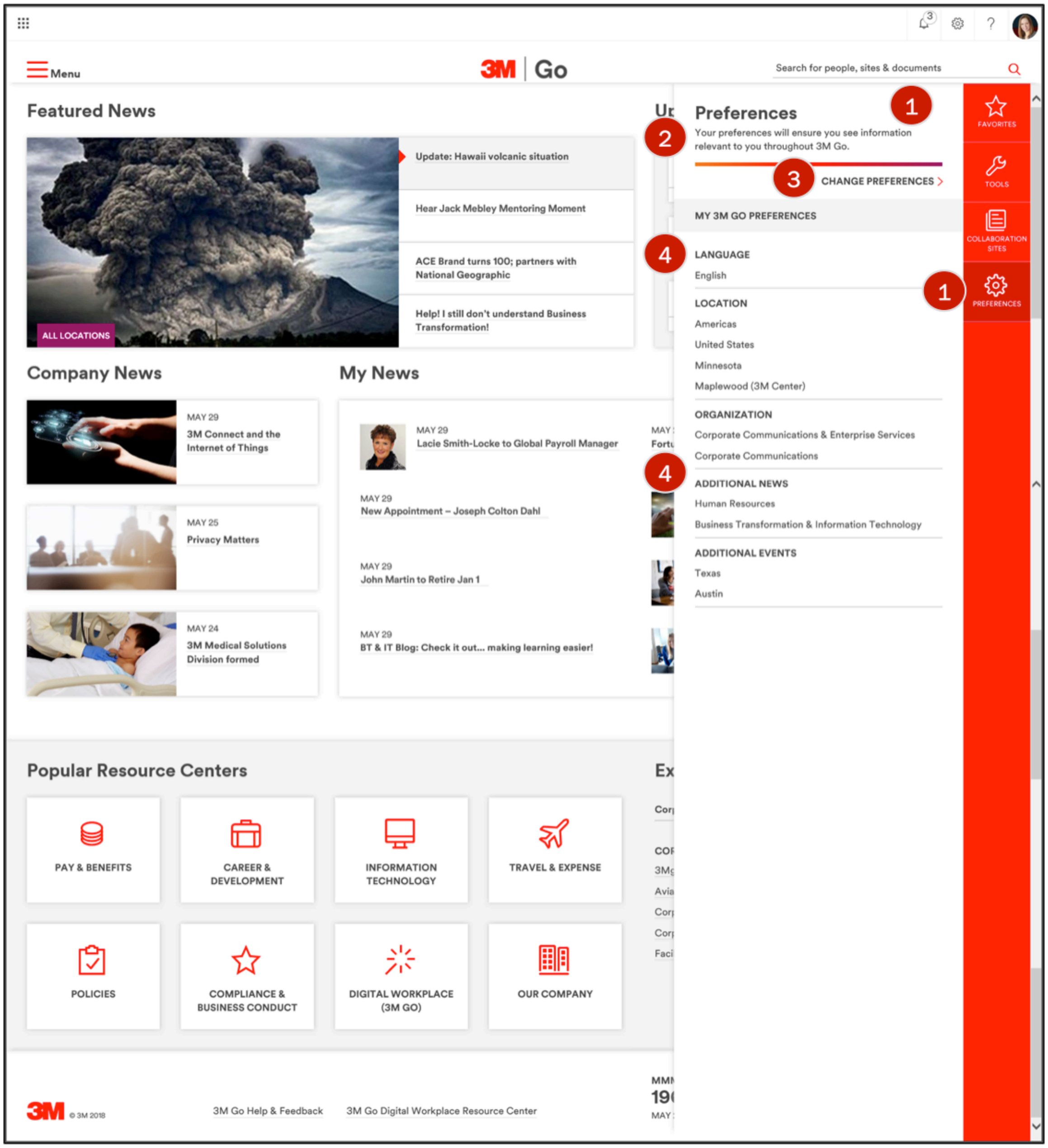
Pictured: 3M Intranet Toolbar Collaboration Panel. Users can access their team and project sites via the *Collaboration Sites* icon in the toolbar on the right.

Collaboration Sites, Highlights

The third icon on the toolbar is *Collaboration Sites,* which leads to 3M's SharePoint collaboration (team and project) sites*.*

1. **Accessing sites:** Clicking the *Collaboration Sites* icon in the toolbar opens a panel.
2. **Sites link:** The *See My Collaboration Sites* link opens a list of the user's saved sites.
3. **Drop-down menu of sites:** A drop-down menu offers a list of the user's saved sites.
4. **Site updates:** Clicking a site displays recently added documents, recently updated documents, and recent discussions (if any). It's remarkable that this information appears right in the panel, without users having to visit the collaborating sites to see the recent updates.
5. **Go to site:** The *Go to Site* links (repeated at the bottom of the panel) offer flexibility for users who want to dive in and go to the collaboration space.

Toolbar, *Preferences*



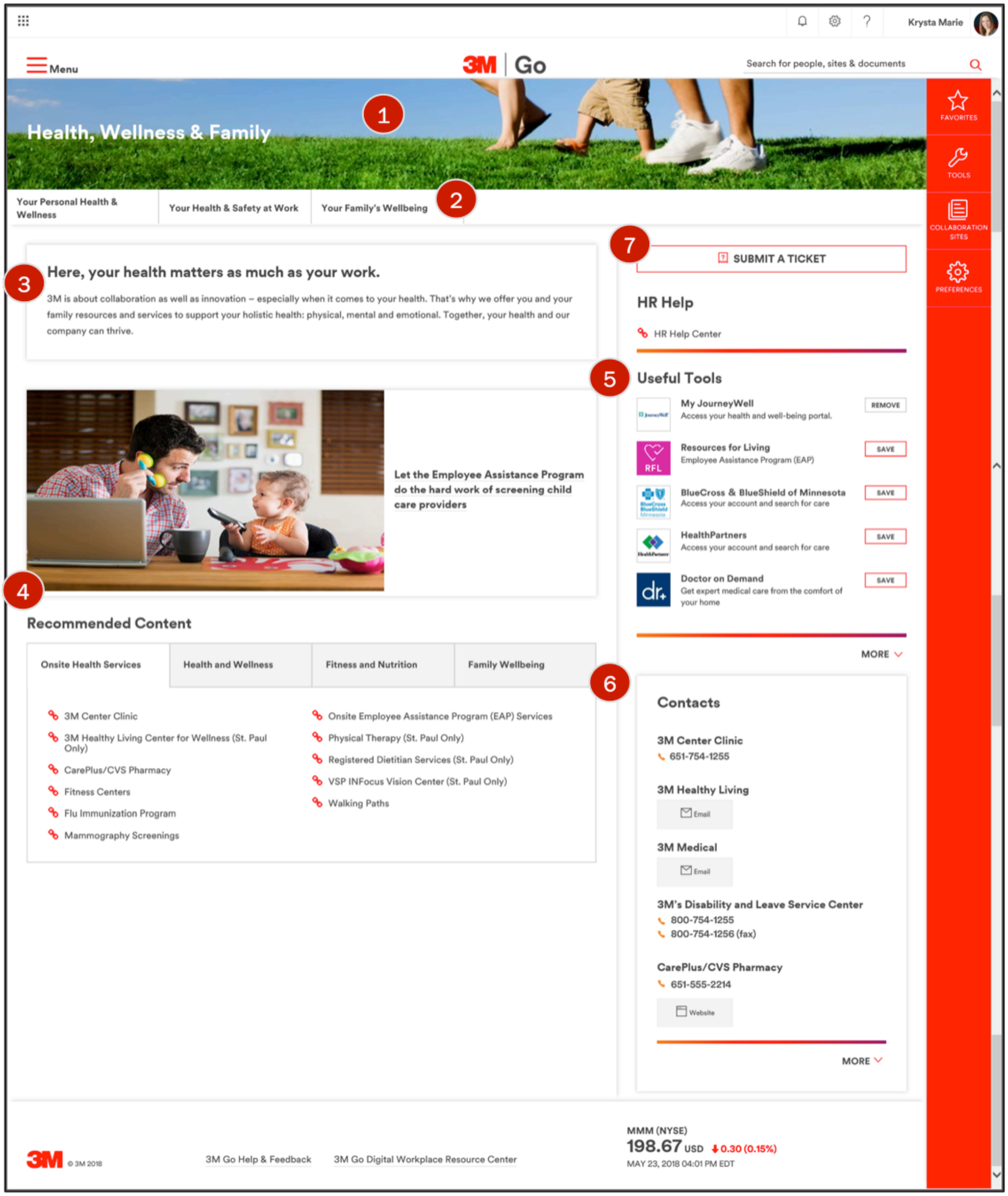
Pictured: 3M Intranet Toolbar *Preferences*. Users can review and edit their 3M Go preferences in the *Preferences* panel.

Preferences, Highlights

3M Go makes it quick and easy for users to review and edit the selections they have made.

1. **Preferences:** Clicking the *Preferences* gear icon in the toolbar opens the *Preferences* panel.
2. **Tip:** Another informative tip reminds users that their customization choices made here resonate throughout their 3M Go experience.
3. **Edit:** Users can edit their preferences by clicking the *Change Preferences* link. Changes take place immediately after the user saves the preferences.
4. **Current selections:** It's easy to review current preference selections in the *Preferences* panel. Each subheading is in bold capital letters that are larger than the selected items, which appear in title case without the bolding. These visual attributes make the text easy to scan.

Corporate Resource Center Site, Homepage



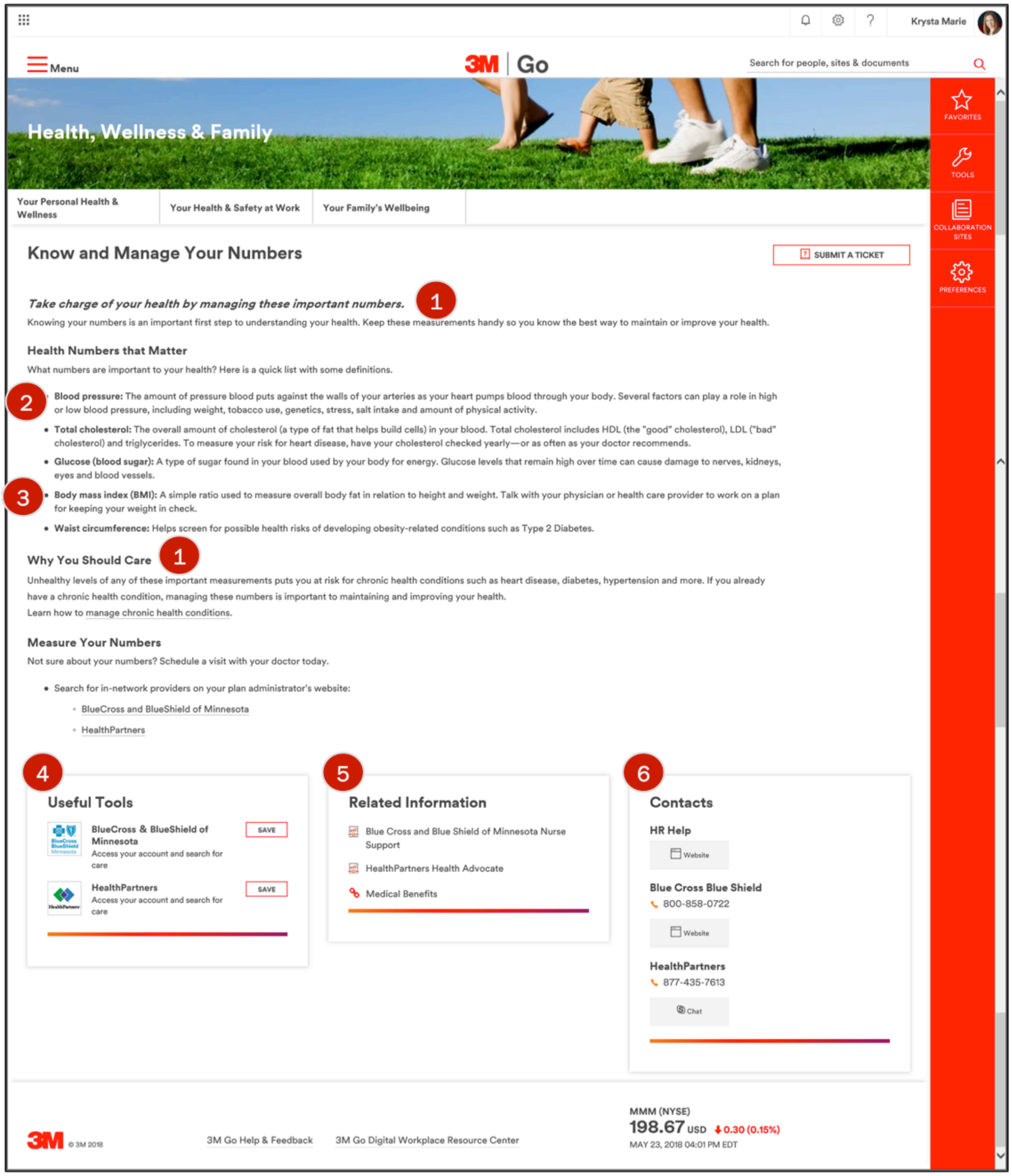
Pictured: 3M Intranet Corporate Resource Center. The *Health, Wellness & Family* section is part of the Corporate Resource Center on the 3M Go intranet.

Corporate Resource Center Site Homepage, Highlights

The *Health, Wellness & Family* section, a part of the HR section, is one example of a 3M Go Corporate Resource Center section page. These types of pages offer consistent design and functionality that is used throughout the platform. The most important information is accessible from the section’s main page.

1. **Banner:** The banner at the top of the page displays the section title and a related image.
2. **Menu:** Interior pages are accessible from the horizontal navigation that appears below the banner image.
3. **Summary:** A short passage describing the section gives employees a head start in understanding the information before they dig into the details.
4. **Content:** The *Recommended Content* section includes tabs that divide the offered information into meaningful sections: *Onsite Health Services, Health and Wellness, Fitness and Nutrition,* and *Family Wellbeing.*
5. **Tools:** The *Useful Tools* section in the right rail offers a list of related tools along with a button to *Save* (or *Remove,* if the tool was already saved). This lets users easily save relevant tools to their easily accessible toolbar.
6. **Contacts:** The *Contacts* section in the right rail provides key resources, email, and telephone numbers.
7. **Ticket:** When the *Submit a Ticket* button is clicked in this context, it submits a ticket to the HR Help group. A similar button appears on other sites as well, including IT (where it submits a ticket to IT Help) and *Travel* (where it submits a ticket to the Travel center). Text for these buttons is customizable.

Corporate Resource Center Site, Interior Page



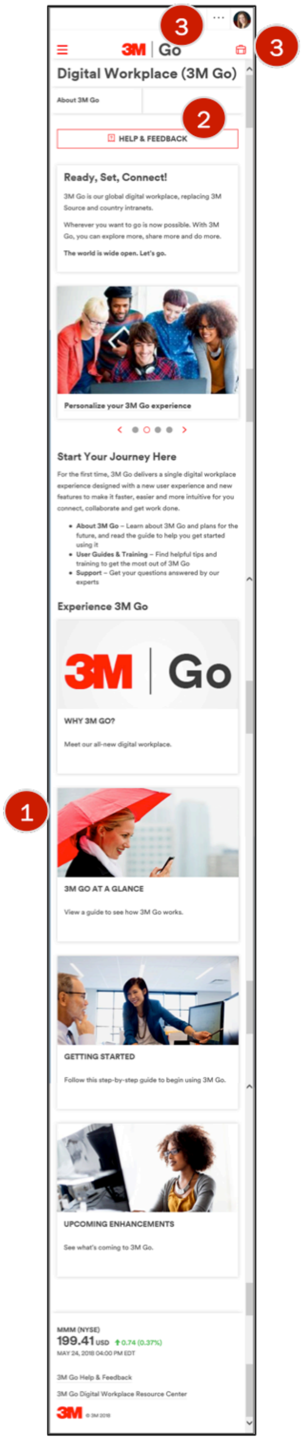
Pictured: 3M Intranet Health & Wellness Section. A page offers detailed health information in the *Health, Wellness & Family* section of 3M Go.

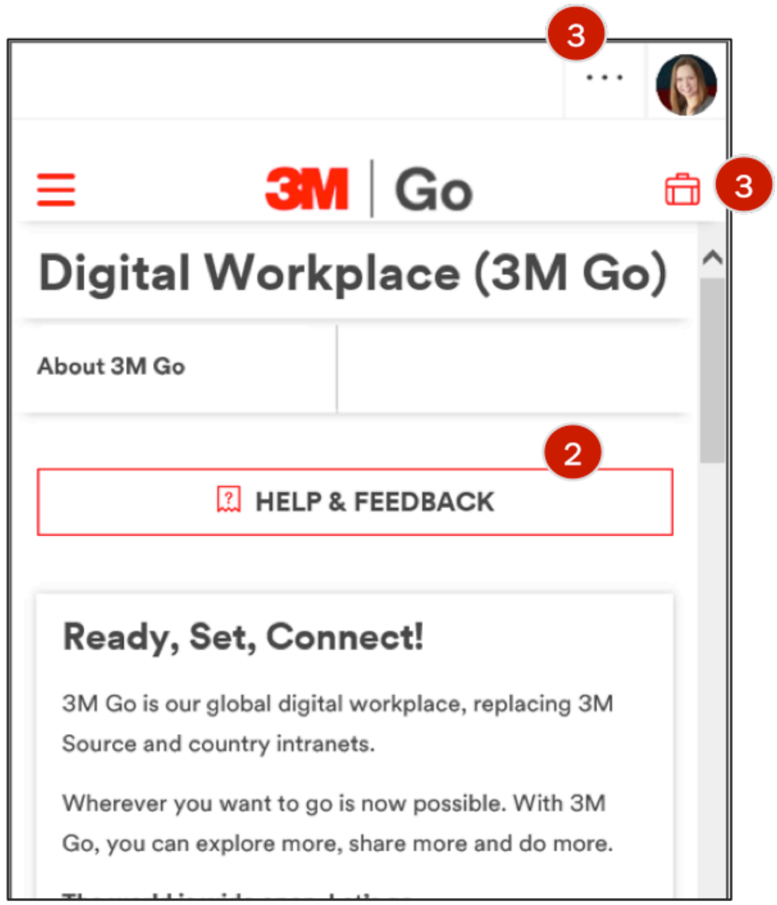
Interior Page, Highlights

Consistent elements on 3M Go's interior pages offer a cohesive feel to the interaction, and the text is well formatted for the web.

1. **Hierarchy:** Text size, spacing, and bolding gives subheadings more visual weight than normal text.
2. **Bold:** Using bolding for important, information-bearing words is an effective method for drawing the eye to those words, enabling employees to accumulate pertinent content as they scan the page.
3. **Bullets:** Using bullets is a smart way to chunk content and make it easily digestible.
4. **Tools:** Related tools appear in the *Useful Tools* card at the bottom of the page. Users can click the *Save* button to save them to their tools set in the quick links toolbar.
5. **Related:** The *Related Information* card offers links to other content the reader might be interested in.
6. **Contacts:** Websites, email, phone, and chat options to help users with various health topics appear in the *Contact* card in the lower right of the page.

Corporate Resource Center Site, 3M Go Mobile





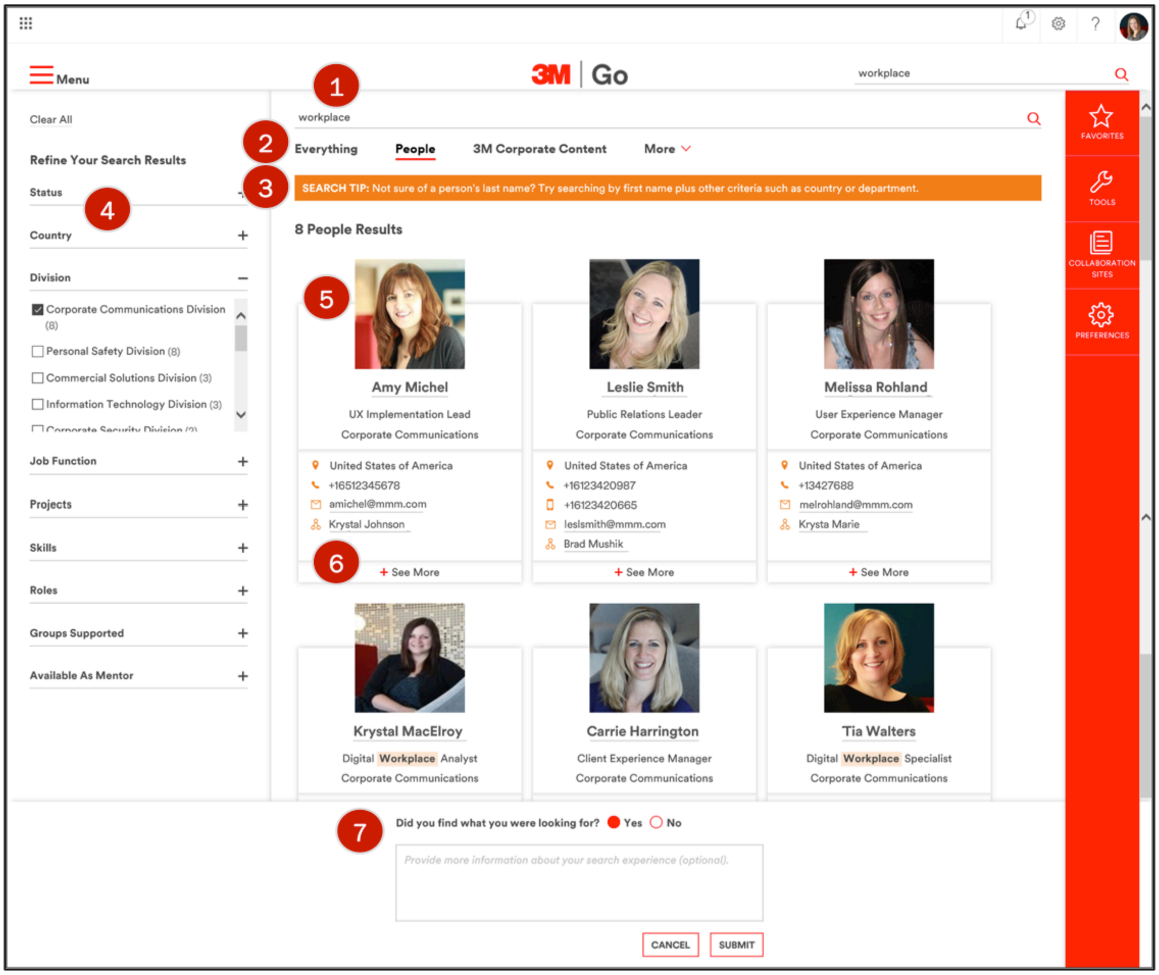
Pictured: 3M Intranet Mobile Corporate Resource Center Site. 3M Go is responsive, and users can access the site on any device.

3M Go Mobile, Highlights

The *Digital Workplace (3M Go)* resource center provides user guides and training, and offers access to 3M Go support resources. Because the entire platform is responsive, all 3M Go sites are accessible on any device. The page layout on mobile takes the best advantage of the small screen real estate.

1. **Column drop:** Elements in the right rail drop to the lower sections of the page to make items legible and prevent clutter on the screen.
2. **Wide buttons:** The *Help & Feedback* button is small and appears in the upper right on desktop; on mobile, it takes a top spot and spans the width of the screen to ensure that the button is visible and tappable.
3. **Collapse:** Alerts, settings, and help are collapsed under an ellipse icon to save space. The toolbar collapses under a suitcase icon.

People Search



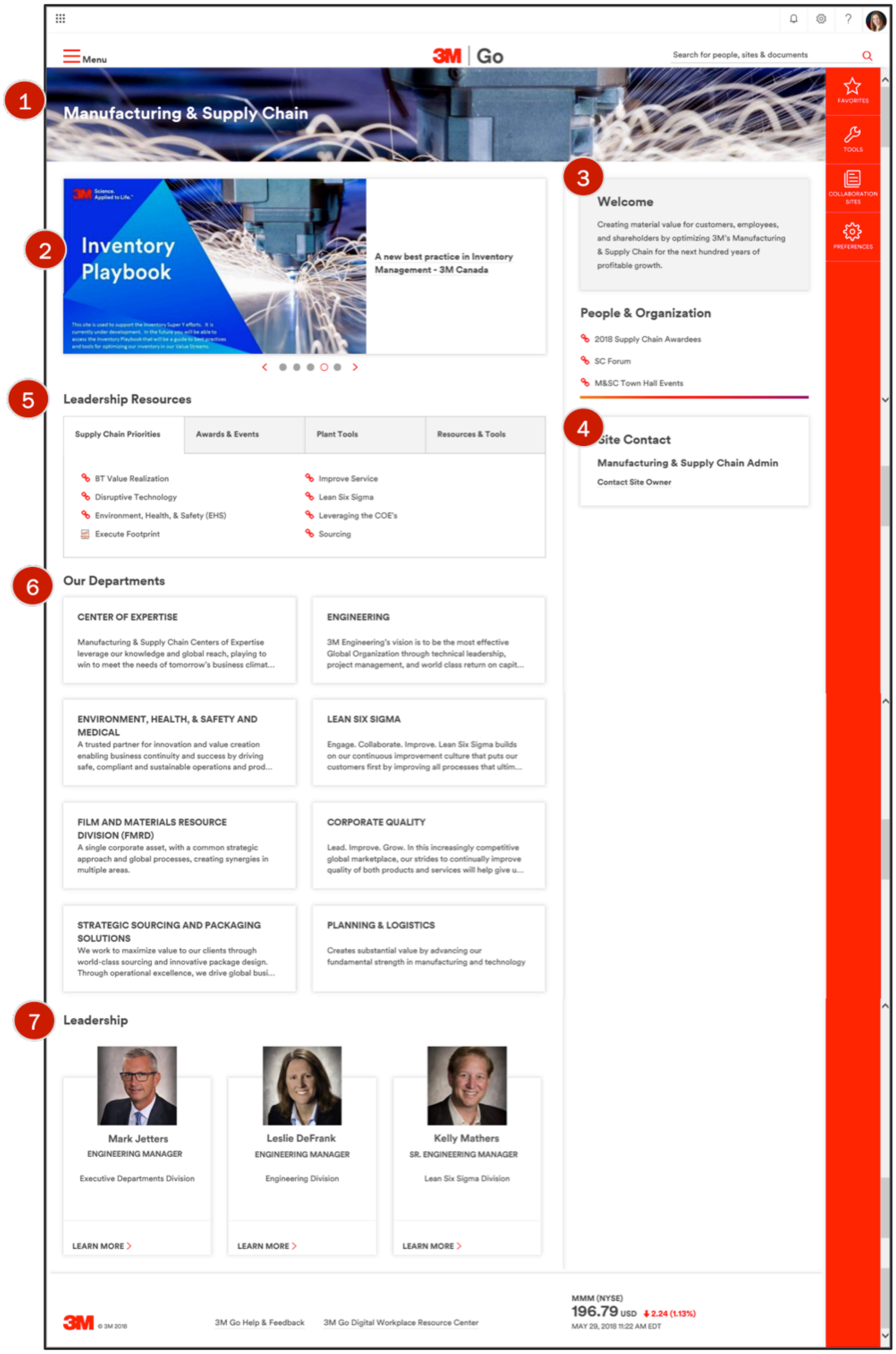
Pictured: 3M Intranet People Search. People search offers various capabilities to search and refine results.

People Search, Highlights

People search offers plenty of details about employees right on the search engine results page (SERP). Users can give feedback about search results; the intranet team uses that information to continually improve the search function's accuracy.

1. **Query:** Employees can find coworkers by searching on names or other terms. The query remains in the search field to remind users of what they searched for, which is especially helpful if they need to construct a new query.
2. **Search result type tabs:** The SERP shows all results under the *Everything* tab, and people results under the *People* tab. Splitting people search out in its own tab makes it easier for users to find their colleagues.
3. **Tip:** An orange box offers a tip that tells users that they can search by first name, country, or department. This is a pleasant way to help them learn about intranet functionality.
4. **Refine:** Filters and facets appear on the left side and let users refine the results.
5. **People results:** Each result displays the employee's photo, name, title, department, land and mobile phone numbers, email address, and manager.
6. **More:** The *See More* link displays more information in place, while clicking the employee's name or photo leads to that person's Delve profile.
7. **Search feedback:** The question *Did you find what you were looking for?* collects feedback about search results. Selecting either the *Yes* or *No* radio button displays a field where users can share comments.

Corporate Organization Site (Within 3M)



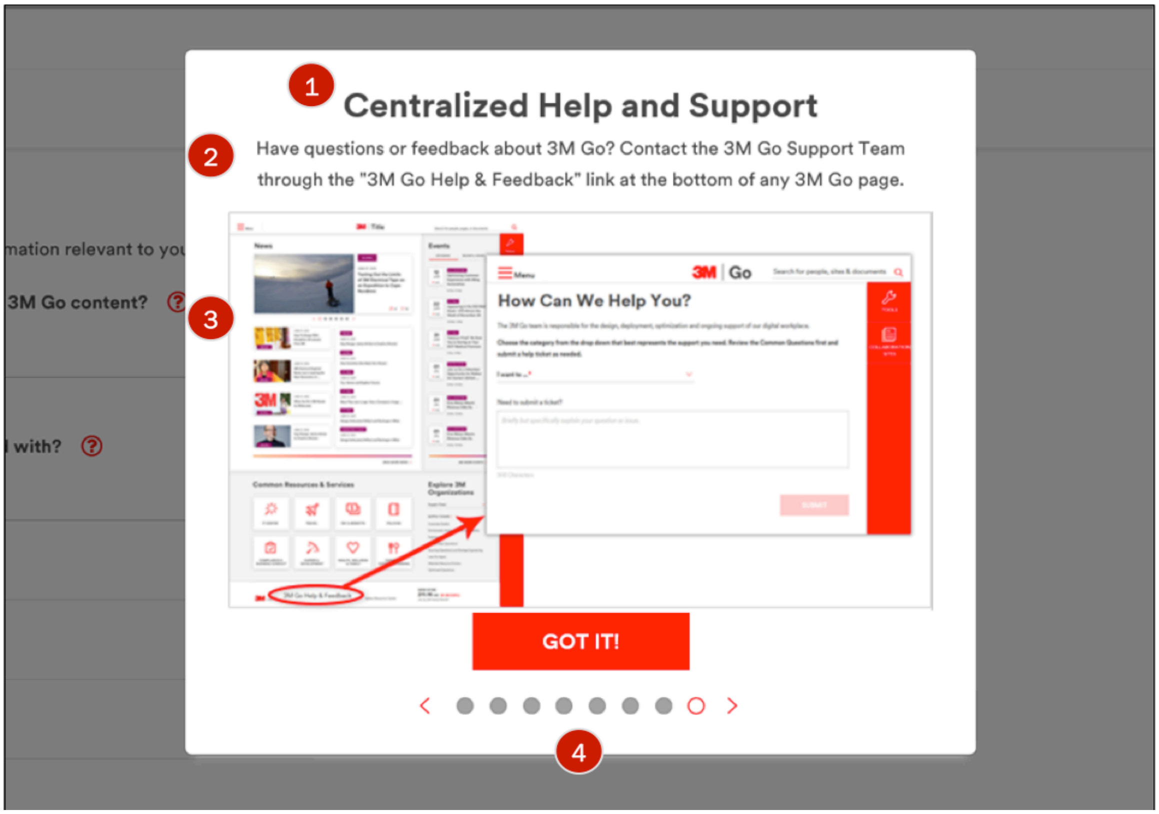
Pictured: 3M Intranet *Manufacturing & Supply Chain* Section. The *Manufacturing & Supply Chain* section provides information about that unit and its resources.

Corporate Organization Site, Highlights

All corporate organization sites on 3M Go provide information about the organization (within 3M), along with its key resources and leadership. These corporate sections all feature a consistent design; some page elements are optional to best meet each section owner's goals. The site's *Manufacturing & Supply Chain* section shown above is an example of a corporate section.

1. **Header:** The page header includes the organization name and a related image.
2. **Carousel of key points:** A few key points and related images appear in a carousel at the top of the page.
3. **Welcome:** A short *Welcome* message in the right rail explains what the organization does.
4. **Contact:** A link to the site owner's contact information lets employees get in touch if they have issues with the content.
5. **Resources:** Links to key *Leadership Resources* appear in a four-tabbed section.
6. **Departments:** Each department within the organization is listed in *Our Departments*, along with a summary of its mission. This is a great way to familiarize employees with the organization's structure.
7. **Leaders:** The *Leadership* section includes the name, title, division, and a photo of division leaders. This helps new employees get familiar with the leadership team members.

Tour



Pictured: 3M Intranet Tour. A helpful tour through 3M Go features can help users get started with the new system.

Tour, Highlights

Users new to 3M Go get helpful training by taking the site tour.

1. **Topic:** A large headline summarizes the intranet feature being described.
2. **Description:** Below the title is a concise explanation of the feature. Having words and visuals on the same page supports different ways of learning.
3. **Screenshots:** Screenshots, zoomed-in images, and annotations help users identify the UI element that the tour is referencing.
4. **Progress:** Dots and arrows at the bottom of the lightbox display progress and allow users to go backward and forward.

DESIGN PROCESS AND USABILITY WORK

Research Phase

The initial three-month research phase consisted of one-on-one and group interview sessions, focus groups, workshops, a digital workplace survey, a communications survey, and benchmarking with more than 15 companies. This phase provided clear insights for the team to use as a jumping off point for its work.

This research helped the team more clearly understand the existing 3M Source intranet's gaps:

- Most users felt that 3M Source was **disorganized and difficult to navigate**. They relied on search to find content, but had little confidence in the relevance of the search tool's output.
- Users often published content where they were most comfortable—not necessarily where it made the most sense. When it came to knowledge sharing, there were **no rules and standards**.
- 3M Source was not considered a communication platform. Although users felt that **too much communication happened via email**, there wasn't a better way to reach their desired audiences. Further, despite the high volume of email, **employees were not getting all of the communications they wanted and needed**.
- Users felt that the site had too many tools and it was not always clear how the tools should be used. As a result, it was **difficult to keep track of sites and tools** they needed for daily work.
- Users relied on personal connections to find important contacts, which made life difficult for new employees. Not surprisingly, ***Workforce Directory*** **(people search) was one of the most valuable tools on 3M Source**.

More than 4,500 employees and communicators globally participated and provided feedback. They were clear about which features and functionality that they felt were essential for a new platform to make their day-to-day work more productive. Representative comments include:

- *Allow me to stay connected through personalized news, events, and content that are relevant to me.*
- *Make it easy to find the information I need through consistent design, dependable search, and intuitive navigation.*
- *Give me quick access to the tools (applications and systems) that I use on a regular basis, on all devices.*
- *Provide me with a robust people search so that I can find people based on criteria other than name.*
- *Deliver a solution where I can save my SharePoint collaboration sites centrally instead of having to bookmark them in my browser.*

Design Phase

Based on the global research results, sketches were created to illustrate the intended UX. After several rounds of revisions, the team landed on a vision and concept for the new digital workplace. From there, it detailed the needed functionality and created annotated wireframes. Each concept was meticulously evaluated through multiple rounds of feedback and usability sessions with employees globally to ensure the new intranet would meet user needs.

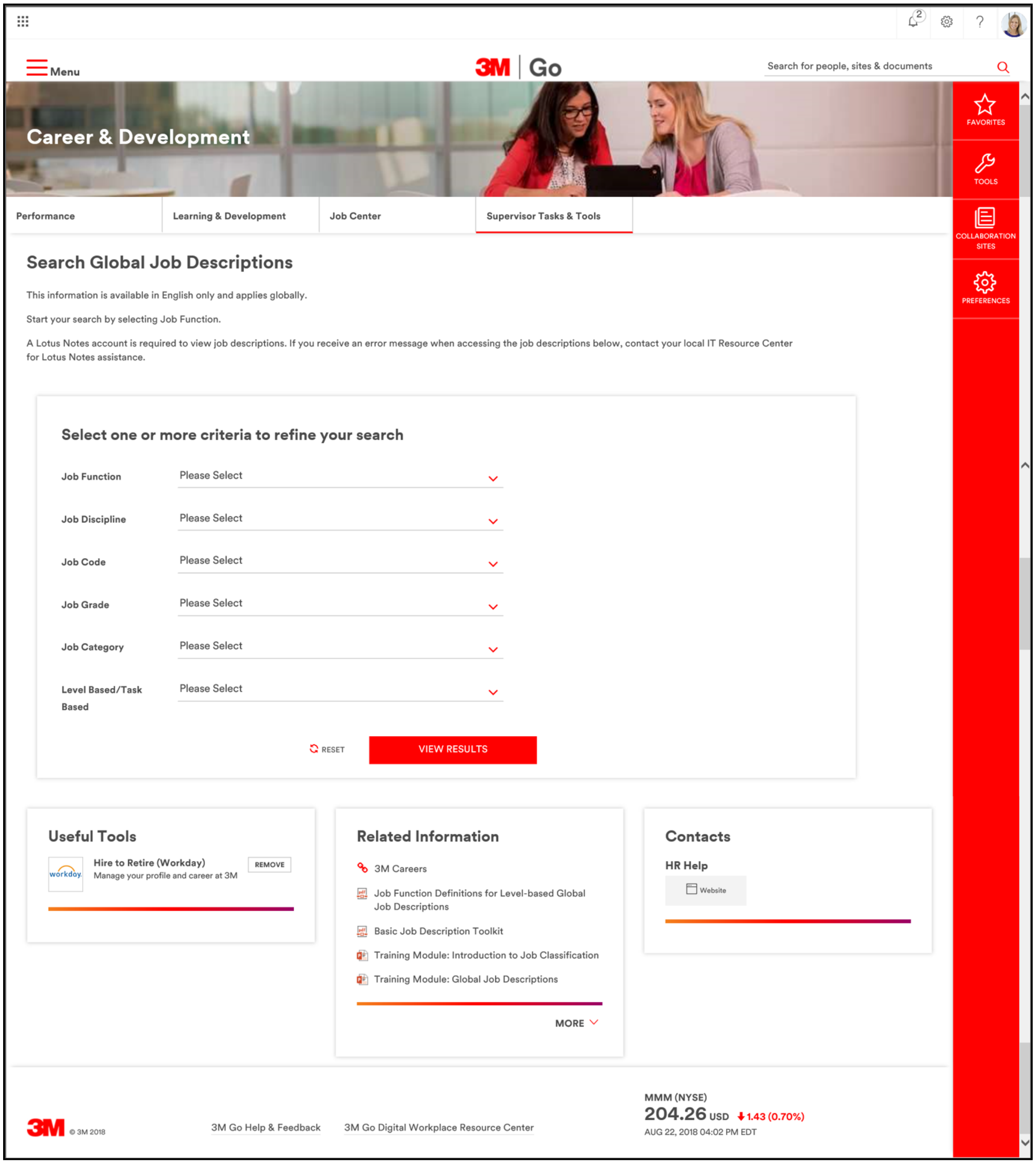
Once the team determined the functionality and web parts, it created design comps. The design approach reflected a simple, clean, and modern visual design for the new platform, and leveraged the 3M brand guidelines using a complementary color palette. The team documented the use of colors, fonts, and spacing for all design elements in a detailed style guide.

Throughout the design process, the team identified foundational elements to personalize and customize the UX:

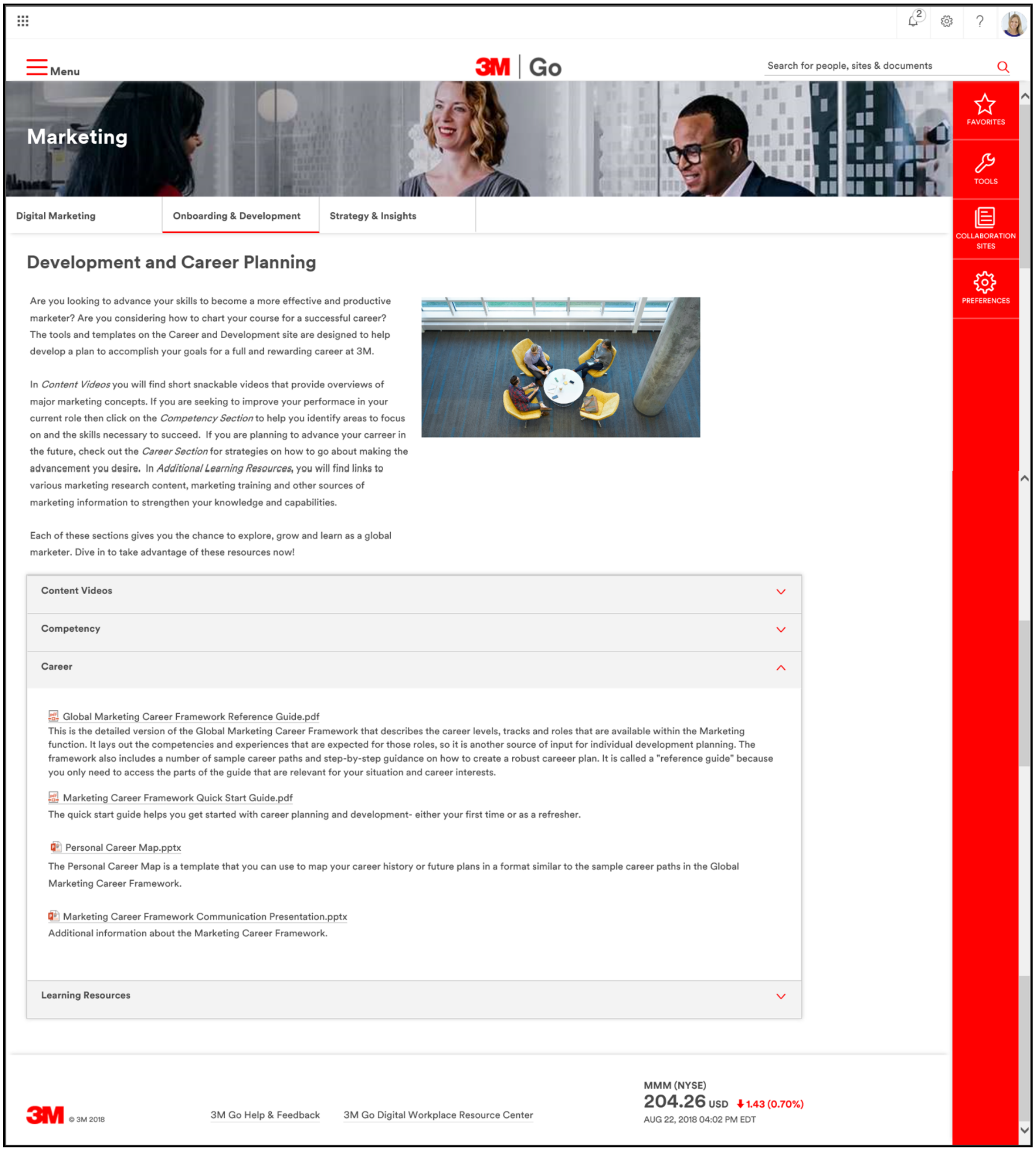
- An ever-present, quick-access toolbar would let users easily access and customize their favorites, tools, collaboration sites, and preferences.
- Using a content-targeting approach, the system would display only relevant content to users by matching content metadata to user-chosen preferences for location, language, and organization.
- News and events content would be centrally located on the homepage and be displayed based on user preferences.
- Delve was established as the employee profile for the new platform. The tool already contained information from HR (via a daily feed), and also provided additional fields that users could complete to further enhance people search functionality.
- The site needed a single search experience for people, sites, and content. Knowing the importance of the search feature, the team opted to customize the search query to display only relevant content based on the user's language and location preferences.

While the design focus was strongly based on the employee experience, the team also wanted a positive experience for content owners, content editors, and communicators. Because the previous platform had required technical resources to update content, it was extremely important to the team to give users a simple, intuitive way to create and maintain content on the new site.

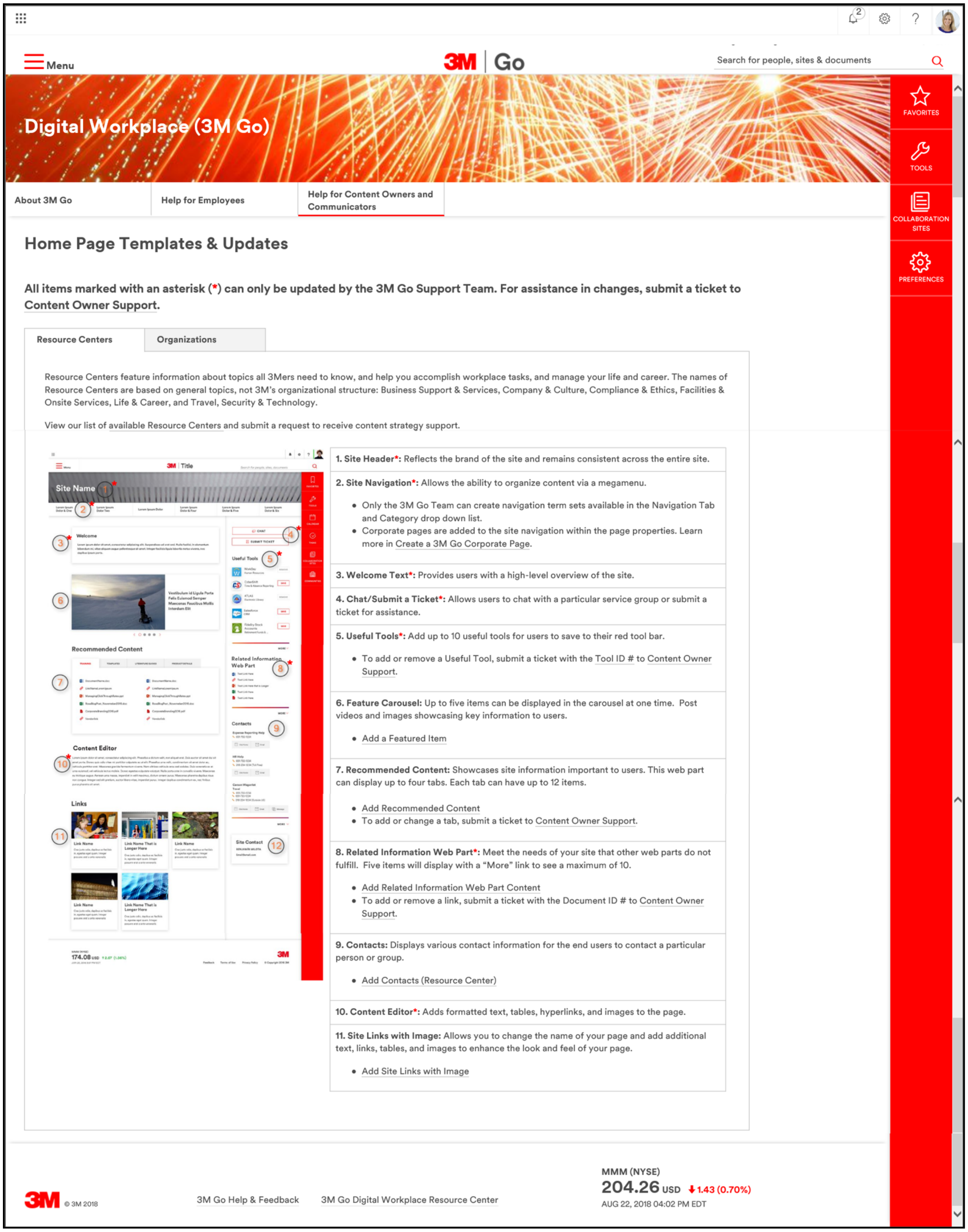
To create content on the new platform, content owners can simply choose the layout for their page from a set of nine custom templates, then add content, provide metadata, and save it. To create news and events, communicators can submit their own stories by filling out a simple form, adding content, and routing the story for approval via workflow.



Pictured: 3M Intranet Interior Page Selector Layout. One of the interior page layouts is a selector tool that helps users easily find content or information based on specific criteria.



Pictured: 3M Intranet Interior Page Accordion Layout. The accordion layout lets page creators group content together into sections. Users can then simply click on a section to expand it.



Pictured: 3M Intranet Interior Page Tab Layout. The tab layout allows page creators to break up a large amount of content into categories within tabs.

Soft Launch

Two weeks prior to the official go-live, the team conducted a soft launch with a group of approximately 7,600 employees in select 3M organizations—including HR and IT—whose jobs ranged from administrative assistants to global communicators and site owners. The purpose of the soft launch was to stress test the environment for performance and identify any showstopper issues prior to the official global launch. This also helped with initial adoption and buy-in, because these early users created excitement for the launch.

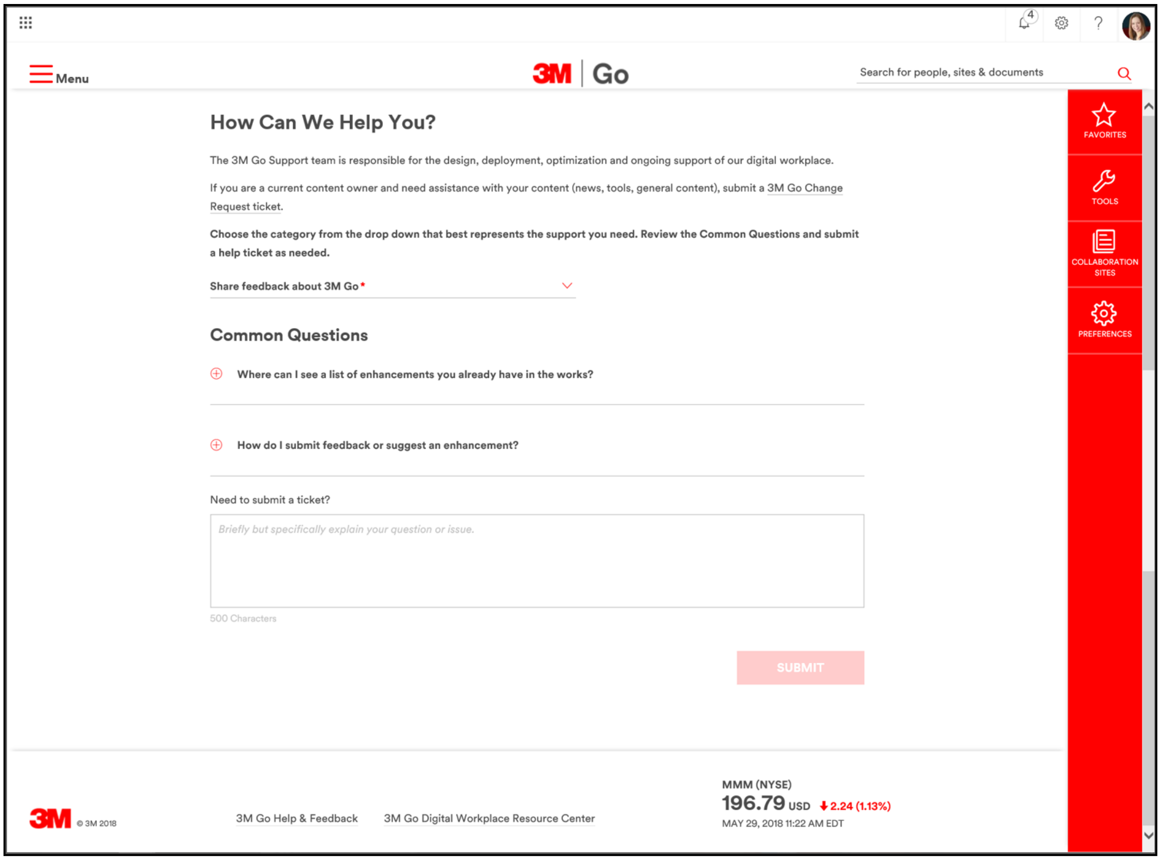
During the two-week soft launch, 5,100 unique users participated (more than 67% of the group), resulting in 10,000 sessions and 68,000 page views. Only minimal issues were identified and only 200 tickets reported, but the icing on the cake was the glowing feedback the team received, such as: *"The site is overall very well organized and easy to navigate. I had several things to look up this morning, and I was able to find everything I needed about 5x faster than when using 3M Source!"* and *"It looks awesome from my mobile phone!"*

Post-Launch Activities

After launch, the team started a monthly 3M Go email newsletter with updates and tips & tricks, which continues to be sent to all 3M employees globally. The team also created a new *Get to Know 3M Go* web part on the homepage, which highlights tips and tricks related to a new topic each week.

Perhaps most important—and most effective for increased adoption—is the fact that the intranet team listens to its users. The team asks for and responds to continuous feedback through channels such as help and feedback tickets, surveys, polls, and group feedback sessions. In addition, team members actively engage employees in usability sessions to ensure that they are still making the right changes. A global network of volunteers provides ongoing feedback and input on upcoming enhancements and the intranet roadmap. Team members publish news stories to let employees know "we heard you" and share the continuous enhancements that they are making to 3M Go.

As of the one-year anniversary of 3M Go (August 8, 2018), the team had pushed out more than 140 enhancements. On the one-year anniversary, it also hosted an anniversary party of sorts—a small event where team members handed out branded 3M Go cookies and flyers that featured "top things you need to know." They also encouraged employees to provide feedback on enhancements that they would like to see made in year two.



Pictured: 3M Intranet *Help & Feedback* Page. The *Help & Feedback* page is accessible from the footer at all times. Here, users can find answers to common questions (displayed based on the drop-down category selection), as well as submit help tickets directly to the Digital Workplace team.

Information Architecture

To provide a framework and structure for the new platform, sites were separated into three types: Core, Corporate, and Collaboration.

- **Core sites** include the homepage and supporting pages for search, news, events, and the quick-access toolbar.
- **Corporate sites** consist of official 3M organization sites (based on 3M's corporate organizational structure) and topic-based Resource Center sites for general information and resources. Corporate sites are accessible from the menu in the header and from custom web parts on the homepage. Tree jack studies and usability sessions helped the team determine the organization of corporate sites within the menu. The Digital Workplace team governs both Core and Corporate sites.
- **Collaboration sites** (self-service SharePoint team sites) are accessible from the quick-access toolbar so that users can customize which sites to save. Collaboration site templates and the process to request a new site was already owned by the IT organization.

ADOPTION AND BUY-IN

Launch Campaign

The launch campaign was multipronged, using a variety of techniques to reach out to employees internationally and highlight new intranet features and how those features would serve employees. The launch campaign continued for months before go-live, with an in-person roadshow presented to nearly every department and division within 3M to build awareness and knowledge about the new platform. The materials created for the campaign were engaging and compelling. The team also encouraged site owners to promote 3M Go and help make people aware of where to find their site content on the new platform.

Launch campaign events included:

- **Naming contest:** The launch campaign started with a naming contest that received more than 1,500 unique ideas from employees around the world. After narrowing the options, the team vetted the choices with legal and presented a poll to employees so they could choose their favorite from the short list. 3M Go was the clear winner.
- **Roadshow:** The roadshow was a presentation given to employees at Town Hall events (which include all employees within a department or division) or other communication meetings. The Communications team showed a short video to generate excitement for the new experience, and then gave a PowerPoint presentation. During these events, the team described the research approach and findings and discussed how 3M Go would address these top employee needs. Each presentation was customized to the audience (either a business or staff group organization) to show how the new site would benefit them specifically, and also to give credit to their content owners where appropriate. The video and presentation deck were also provided to global partners for use locally.
- **Themed digital boards:** Digital boards and banners were displayed across the 3M campus to highlight key intranet features such as search, navigation, access to collaboration tools and content, multiple languages, and mobile capabilities.
- **Desk drop:** A week before go-live, all employees at the 3M Global Headquarters location received a desk drop—a printed handout on thick card stock—in addition to a global prelaunch email introducing 3M Go.
- **Launch day email:** On launch day, all employees globally received an email letting them know that 3M Go was ready and available. Digital Workplace team members, dubbed “3M Go Pros” dressed in 3M Go t-shirts and were stationed at hubs around the 3M Global Headquarters campus to hand out branded giveaways such as laptop stickers and USB car chargers, as well as to offer one-on-one support and answer questions.

All launch campaign materials were also provided to international site and content owners to promote 3M Go within the country locations. Several countries conducted similar activities for launch, and one country went even further, creating and distributing 3M Go mouse pads.

- **Intro tour:** To help further educate employees about 3M Go functionality, the team created an Intro Tour that was displayed when users accessed the site for the first time via single sign-on. Also, news stories on the 3M Go homepage and information in the 3M Go Resource Center site introduced new functionality to users.

The launch campaign was well designed to provide engaging and compelling materials. Taking the time to invest in awareness and change management efforts prior to launch helped to educate employees and make the launch a huge success.

Working with Outside Agencies

With in-house expertise in project management, content strategy, and communications, the internal team leveraged several different agencies for research, design, and launch materials for the new global digital workplace: DMI conducted global research and initial concept, Rightpoint completed the design and usability activities, and Shinebox created the launch campaign materials.

The primary project partner for design was Rightpoint, a digital experience agency headquartered in Chicago, Illinois. Collaboration with its group of UX, design, and technical experts helped the internal project team refine its initial concept and bring it to life.

WORKING WITH OUTSIDE AGENCIES

Agency	Project Role
DMI	• Conducted global research and initial concept
Rightpoint	• Handled design and usability
Shinebox	• Created launch campaign materials

GOVERNANCE

Ownership

The 3M (Corporate) Communications team owns the global intranet, which has had a positive effect on platform health. The Communications team has all of the resources it needs to lead the business side, and it maintains a strong partnership and governance board with IT for platform capabilities and development activities to improve the intranet going forward.

Establishing Governance

During the design phase, a Digital Workplace Governance Review Board was established both to ensure that business and IT were aligned on key decisions and to create a positive and consistent UX. The HR Communications team owned the UX, but IT owned the platform, so it was important that they work closely together.

Together these teams defined and documented the purpose and scope of the Governance Review Board and also the roles and responsibilities of its members. The board makes strategic decisions about the UX, standards, types of sites (Core, Corporate, and Collaboration), security and access levels, IA, the use of Microsoft technology, and much more. And the board continues to be extremely effective in ensuring that the business and IT organizations stay aligned and connected.

The board meets on a monthly basis, or more often as needed. It is a cross-functional board, with representation from various areas of IT and Corporate Communications. Each of the eight team members (three in Communications and five in IT), play a specific role as follows:

- **Digital Workplace Manager** (Corporate Communications): manages the Digital Workplace team and is responsible for leading the Governance Review Board, determining its agenda, facilitating meetings, providing detailed meeting notes, and following up on action items.
- **Content Strategy and Support Manager** (Corporate Communications): represents site and content owners and escalates site-level governance decisions as needed.
- **User Experience & Analytics Manager** (Corporate Communications): represents the global employee audience and presents updates on upcoming 3M Go priorities and enhancements.
- **IT Applications IT Manager:** responsible for technical resources and mobile access of 3M Go and helps to break down barriers and communicate with IT executive sponsors as needed.
- **Digital Workplace IT Manager:** directly manages the 3M Go technical team and is responsible for bringing technical-, system-, and interface-related items to the team, as well as for providing addition to updates regarding technical resources.
- **IT Collaboration Manager**: owns the O365 platform and is responsible for strategic decisions about use of O365 tools and functionality; also provides details and updates regarding IT projects underway that may impact 3M Go.
- **IT Architect:** provides technical expertise regarding O365 and SharePoint platform, provides possible solutions to technical or platform-level issues, and serves as a connection to the Microsoft team.
- **IT Specialist:** an O365 expert who provides Microsoft roadmap updates and information about upcoming O365 features and functionality.

3M INTRANET RESPONSIBILITIES	
Role	**Responsibilities**
Digital Workplace Solutions Team	• Manage intranet strategy and roadmap, UX, design, site- and platform-level governance, content strategy, metrics and analytics, site administration, training, communication, and education to increase employee adoption • Provide help and support for employees, site owners, content editors, and communicators • Manage design and business requirements for enhancements, and oversees 3M Go global deployment (adding local country content to 3M Go and eliminating off-platform intranets)
IT Area Leads	• Identify country resources for 3M Go global adoption and deployment project • Report progress to management and keep project team on track
Communicators	• Publish country-specific news and events (global and US news and events are managed and approved centrally, while communicators are located in each country)
Site Owners	• Act as the primary point of contact for content owners on organization sites (the Digital Workplace team owns Resource Center sites) • Identify content that belongs on their organization site • Ensure that the site remains up-to-date and that content is relevant to users
Content Owners	• Publish content and ensure that it remains up-to-date
Content Editors	• Make updates on behalf of content owners as needed (most content owners update their content themselves)

Run-State Governance

The post-launch run-state intranet business team consists of the following full-time 3M employees. This list does not include site owners, content owners/editors, communicators, or any contract workers or managed services resources.

RUN-STATE INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Digital Workplace Manager	• Provides management and leadership for Digital Workplace Solutions team, which consists of global intranet and email management • Develops strategy and roadmap for 3M internal communications channels and technology • Provides resources, support, and funding model for digital communication solutions • Leads governance and change review boards for 3M Go • Manages 3M Go global adoption/deployment program • Works with Microsoft for strategy and roadmap
UX & Analytics Manager	• Leads 3M Go UX & Analytics team • Partners with IT Manager to implement enhancements to 3M Go • Conducts 3M Go usability activities and collects feedback • Determines UX for ongoing changes • Provides business requirements and design for enhancements • Leads ongoing communication and adoption tactics, including overseeing monthly 3M Go newsletter communications to employees globally • Provides metrics and analytics as needed
UX Implementation Lead	• Leads prioritization sessions for enhancements and bugs with business leads • Works with technical team for business and technical requirements and provides clarifications as needed • Acts as product-owner proxy

	• Conducts user acceptance testing
Content Strategy & Support Manager	• Leads Support and Content Strategy team • Manages site-level governance • Provides support, communications, and updates to communicators, site owners, and content owners • Leads content strategy activities; guides content owners as needed • Ensures that team provides thorough training materials to employees, communicators, site owners, and content owners
Content Strategist	• Provides content strategy expertise for organizing content on 3M Go sites • Supports communicators, site owners, and content owners • Provides employee support (help and feedback tickets) as time allows • Completes site administration activities (web part configuration) as needed • Assists countries in mapping local content from previous intranet systems to 3M Go
Support Analyst	• Supports employees by responding to help and feedback, and *Did you find what you were looking for?* search feedback questions • Analyzes responses to the feedback and questions to determine key themes • Partners with other Digital Workplace teams to determine communications and training opportunities and provide feedback into the prioritization of enhancements and bugs • Updates and creates new training materials as needed
Global Adoption Project Lead	• Leads the deployment of 3M Go globally • Provides project management expertise • Leads countries, one by one, through a detailed deployment process to evaluate 3M Go functionality, add content to 3M Go, and launch

	• Provides training to country communicators and content owners
IT Manager	• Serves as Scrum master and manager of development resources

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	**Full URL:** https://skydrive3m.sharepoint.com/sites/Go/Pages/Home.aspx **Short URL:** go.3M.com/home
Default Status	3M Go is each user's homepage. Users can override this setting, and the site is not bookmarked in users' browsers.
Remote Access	The intranet can be accessed from home with VPN access or from any mobile device with Intune device management.
Kiosks	Plant employees, who are not typically at computers during the day, access the site via centrally located kiosks.

TIMELINE

The Global Digital Workplace project officially started at the end of July 2015. The project took two years to complete from start to finish, ending with a soft launch in July 2017 and an official global go-live on August 8, 2017. Overall, the team spent three months on research, 10 months on design, 17 months on development, 18 months on content evaluation and cleanup, and 10 months on site/content build, with many phases and activities happening simultaneously.

PROJECT MILESTONES	
Milestone Date	**Milestone Description**
July 2015	• Started project to create a new global digital workplace for 3M
July–Sept 2015	• Conducted global research with employees and communicators
October 2015–February 2016	• Designed and determined functionality for Corporate (organization and resource center) sites • Established custom location and language logic • Engaged site and content owners
March–December 2016	• Developed and tested Corporate sites
May–September 2016	• Designed and determined functionality for Core sites (home page, news, events, toolbar, search)
September 2016–June 2017	• Built and configured Corporate sites • Created Corporate site content on new platform
January–July 2017	• Developed and tested Core sites
March–July 2017	• Built and configured Core sites • Created Core site content (such as news and events) on new platform
July 2017	• Soft launch
August 2017	• Official go-live of 3M Go

Overall redesign timeframe: 2 years

CONTENT AND CONTENT CONTRIBUTORS

A Commitment to Quality

Concurrent with the research and design phases, the team engaged hundreds of site and content owners to evaluate and cleanup existing content and prepare to rebuild on the new platform.

A dedicated 3M content strategy team worked with 300 content owners to determine which sites needed to be created and how the content would be organized. The content strategy team's purpose was to ensure that clients (content owners) understood how their content fit in the broader 3M Go structure, as well as to train clients on content creation and maintenance. The team consisted of a supervisor and eight contract workers: four content strategists and four content editors (for non-HR content; a separate team handled HR content). The team for non-HR content leveraged metrics, mock-ups, and card-sorting activities along with continuous user feedback to design the Corporate sites' layout and organization approach.

Content owners self-identified based on their need to publish content they own on the new platform. Because the previous intranet site had a cumbersome structure and was difficult to use, content owners had a vested interest in a newly redesigned digital workplace and were engaged throughout the process. The team held monthly content-owner meetings to capture feedback and provide project updates; such meetings were in addition to the many individual working sessions aimed at helping the design team understand the content structure, conduct content strategy activities, and train owners on how to create content. Updating 3M Go is a small part of most content owners' overall responsibilities; therefore, it's critical to offer an easy-to-use platform, as well as ongoing support and training as needed.

The team put significant effort into creating nearly 150 visual step-by-step guides and training documents for employees, site administrators, site owners, content owners/editors, and communicators. Although the team held many in-person and video demonstrations of functionality, it relied heavily on self-service guides to help the thousands of site users globally.

Content Governance

The content strategy team drives content management governance, which ensures that all content has an identified owner to keep it updated. To reinforce this commitment, prior to go-live, content that lacked an identified owner was not moved into the new platform. Also, the team established an automated 18-month review cycle to delete any content that had not been updated in 24 months. The content strategy team owns all employee-facing sites and is thus the key decision maker on the sites' content and look and feel. This helps eliminate duplicated content and provides a better experience for end users.

As a result of the various content management activities, 3M Go launched with an estimated 7,000 pages across 138 corporate sites; this was a significant reduction from the previous intranet, which had more than 16,000 pages and 250-plus sites, many of which were outdated and irrelevant.

Maintaining Quality Long-Term

While all of these activities were crucial to a successful launch, the content management processes did not stop at launch. Post-launch, the team implemented an annual audit process to ensure that content is on the correct sites, tools still work, content owners are still relevant, and all corporate sites still provide a good UX.

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and Operating System	• O365 SharePoint Online
Bug Tracking/Quality Assurance	• Team Foundation Server for bug tracking • Test Manager for test plans • Selenium for test script automation
Design Tools	• SharePoint Designer • Photoshop and PowerPoint
Site Building Tools	• Patterns and Practices management shell to create site collections/sites • SharePoint Framework for client-side web part development
Content Management Tools	• No tools; content is managed using SharePoint custom web parts
Search	• No tools; the default out-of-the box web parts, query rules, and result sources are used for search
Other Functions	• CSOM PowerShell Script to get Term store information • Stock API to get the latest stock number • JQuery Text Editor for edit options in the JQuery Text area • SharePoint-hosted app for the selector tool • Budicons, Font Awesome, and Bootstrap for UI development • Git for code source control • JQuery Touch Swipe Plugin to allow swiping on tablets and mobile devices • Moment Time Zone Plugin to adjust the time zone based on user location

Technology Evaluation

The new platform’s primary driver was to provide a means for content owners and editors to maintain their own content—which was not possible on the previous intranet platform. In addition, team members conducted an evaluation to identify the best long-term technology solution that was the most cost-effective and sustainable.

They chose O365 for several reasons:

- It let them leverage existing O365 technology.
- It provided cloud-based service, so the company didn't have to buy, maintain, and support servers.
- Its improved search function allows incorporation of 3M Go and collaboration content.
- It offers easy access to other O365 applications.

Replacing Obsolete Technology

3M Go replaced 3M Source, which was built on the obsolete (and no longer supported) EWCD platform. One month after 3M Go went Live, 3M Source was harvested.

SEARCH

Tools

3M Go uses out-of-the-box O365 search as a starting point (branded with the 3M Go look and feel), taking advantage of the platform's people and content search.

For filtering, the team used the refiners provided for people and content search, with the people refiners based on SharePoint user profile fields in Delve, and the content refiners based on the metadata associated with the content.

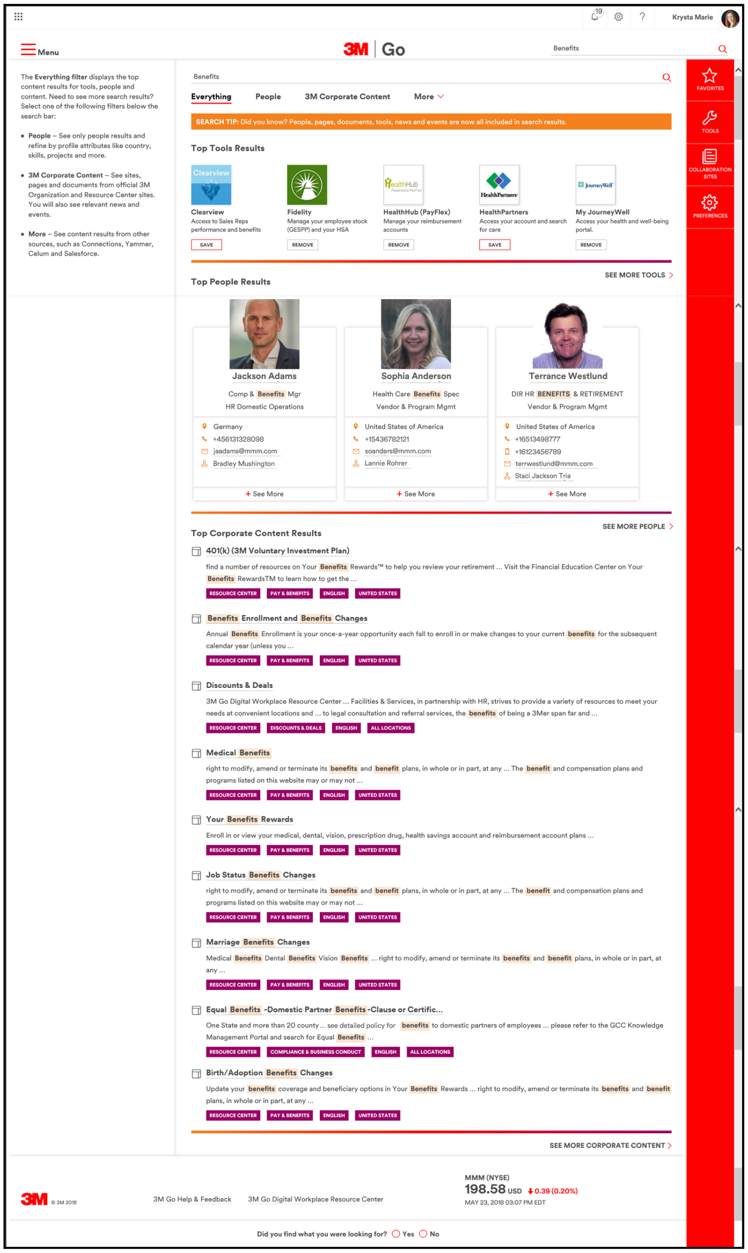
Establishing and Maintaining Relevancy

The intranet team demonstrates its commitment to keeping search results relevant based on feedback, metrics, and usability testing. When users perform a search, they are asked if they found what they were searching for. Based on this data, the team works with content owners to add new content, tag existing content, and adjust verbiage, as needed.

To ensure relevant search results, the team uses both manual and technology tools. Also, the search crawler tracks how many people choose results and how often items are updated. Popularity and frequent content updates increase result relevancy.

Also, 3M Go search benefits from the experienced development team members behind it and the adjustments they continue to learn about and evaluate with the goal of improving search functionality on an ongoing basis.

The team also continues to enhance the search interface (which is largely custom) and conduct usability sessions with employees to gather feedback.



Pictured: 3M Intranet Search Center *Everything* Filter. The *Everything* filter displays search results for tools, people, sites, pages, documents, news, and events all in a single spot. Collaboration content was also included at launch, but concerns about data security caused the team to temporarily remove this functionality. The *Did you find what you were looking for?* question is ever-present and always visible at the bottom of the screen (even when users scroll).

ROI

3M Go has provided several key benefits to 3M and its employees globally, including:

- **Increased productivity** as employees find information quickly and easily with a single point of entry for all 3M systems, applications, and tools; enhanced search functionality; consistent design and navigation; and mobile access on iOS devices.
- **More informed and engaged employees** due to centralized and appealing news content.
- **Increased global communication,** including the ability for communicators to publish content themselves and target their desired audiences based on location and/or organization.
- **Greater data consistency and knowledge sharing.** This is achieved through increased visibility into business processes and information globally on a single platform, as well as through the elimination of duplicated content on disconnected systems.
- **Better understanding of 3M.** All 3M organizations are represented on 3M Go (following the *3M Corporate Organizational Guide*).
- **Higher global connectivity and collaboration,** including the ability to easily find people who have a similar role, skills, or interests through a robust people search that works even with partial information.
- **Increased speed** of content updates and **eliminated reliance** on technical resources.
- **Reduced cost, maintenance, and support** for local country intranets and communications platforms.

The impact of these benefits is further defined across the following categorized improvements.

MEASUREABLE IMPACTS OF 3M GO	
Category	**Measure of Impact**
Business Problems Solved	• Productivity increases when employees have a single platform for all day-to-day work information rather than having to navigate to multiple disconnected systems. • With 3M Go, site and content owners can update their content directly and no longer need to rely on technical resources. On 3M Source, updating content required 112 nondedicated (partial) and 4 dedicated technical resources. Because 3M Go does not require these resources, it saves on costs and allows technical resources to be reallocated to other work. • Using 3M Go, Communicators can now publish their own news, as well as target news and events to a specific audience (country, organization, or a combination of the two). These capabilities allow for a more streamlined process for communicators, saving time and reducing email volume. • The number of news stories published in a six-month timeframe increased 513% from 3M Source to 3M Go. On average, 13 news stories are published each day on 3M Go (targeted to varying audiences) compared to an average of 2 stories per day on 3M Source. In addition, news is read 400% more each day on 3M Go than it was on 3M Source. • All 3M organizations have a Corporate site, increasing the visibility of 3M's organizational structure, purpose, leadership, and initiatives. This increases employee understanding of 3M and helps people feel more connected and engaged.
Strategic Benefits	• A single global platform for all of 3M is cost and resource efficient. • 3M Go ensures the security of 3M's confidential information. • The intranet maximizes 3M's investment in O365/SharePoint Online.

Cost Savings	By the end of 2019, 3M Go will replace more than 25 local country intranet and communications platforms, saving on maintenance and support costs.
Usability Benefits	• Consistent design elements and navigation for all sites throughout the platform allow users to easily find the information they need. • The new intranet reduced the number of sites by 45%, from 250-plus sites on 3M Source to 138 on 3M Go. The new site combined content on similar topics on a single site, providing a more intuitive experience and making related content easier to find. • The amount of overall content was reduced by 56% from approximately 16,000 pages on 3M Source to 7,000 pages on 3M Go. This reduction resulted from content cleanup efforts to rewrite, consolidate, and eliminate unnecessary or out-of-date content. • In a post-launch satisfaction survey, the team asked employees: “Which three things do you find the most valuable about 3M Go?” In response, the team received 819 comments citing the following features: tools (38%) 3M Go content (20%), news (19%), and people search (19%). Other key mentions included the site’s centralization and visual design.

Time Savings	• Enhanced search functionality allows users to find people and content quickly and easily. With 3M Go, users can search for people based on name, organization, skills, interests, and more! Further, because all content is tagged, it is easy to refine search results. • Prior to 3M Go, users went to dozens of different platforms and relied heavily on internet browser bookmarks to find sites and tools. 3M Go provides one central location for all employees globally to access content, communications, tools, and sites. • Users no longer need to visit multiple sites for news because it's now centralized on their personalized homepage. • Site and content owners save time by updating their content directly, which requires 5–10 minutes; on the previous site, they had to wait up to two days for their request to be completed by technical resources.
Adoption and Usage	• Only 19 countries have local content on 3M Go, yet it has been accessed by more than 75% of the workforce since launch—that is, 91,700 unique users in 67 countries. Usage is high, with an average of more than 1.7 million sessions and 3.6 million page views per month. On an average day, 3M Go has 30,000–40,000 users, more than 80,000 sessions, and 168,000 page views. • Over a six-month period, overall page views on 3M Go were down by 48% compared to 3M Source, yet the total number of sessions during that period were up more than 50%. This could indicate that people are able to find the content they need faster on 3M Go and thus require fewer clicks.

Before and After Comparison	• **Before (3M Source):** Poor UX, link farm, inconsistent site design and navigation, outdated content, no ownership, no governance, reliance on technical resources for updating content, "archaic" (according to employees), extremely poor search functionality, no ability to publish country-based news or events, not considered a place to go for news. • **After (3M Go):** clean, simple, and modern design; consistent site layouts and navigation throughout the platform; up-to-date, accurate content; robust search functionality; ability to target content (including news and events) to a specific audience based on location or organization; personalized, customizable, and easy-to-update content; news noted in post-launch survey as a top feature.
Other Evidence of Impact	3M Go lets 3M eliminate other systems and platforms beyond communications and intranet systems. For example: • In an April 2018 email, the Product Application Support Manager stated: *"After further review, investigation, and diligence, we made the decision to no longer pay for support of the* [name removed] *software. This is from a direct result that 3M Go has improved to a point, not only from a contact/people perspective, but beneficial from an overall search capability as well. As such, we are able to save ~$5,800/year thanks to the Go teams hard work!"*

LESSONS LEARNED AND BEST PRACTICES

3M team members have learned many lessons during the 3M Go project, yet the keys to their successful creation and delivery of a new global digital workplace can be boiled down to strong project management and leadership; a clear vision and strategy; a dedicated and passionate team; a solid partnership between the HR, IT, and communications teams; newly established governance and processes; and, most important, a focus on UX supported by research and data.

Other lessons learned include:

- **Plan in advance to secure collaboration content.** "Ensure leadership and that employees understand the impact of surfacing SharePoint collaboration content in Delve and search prior to launch. We had to turn off the Delve API (which allowed for content discovery in Delve) and remove collaboration content from 3M Go search. A training initiative was kicked off by IT to educate users on how to secure content and SharePoint collaboration sites properly. Just this week, a year after launch, we received approval to turn these features back on."
- **Pay attention to page load times early in the development process.** "Make sure custom code is as efficient as possible."
- **Agile newbies need support.** "Make sure the development team has the proper experience and support if starting Agile for the first time."

Best Practices

For other teams embarking on a similar intranet journey, the team offers the following advice:

- **Don't skimp on research.** "Take time to do thorough research. Having clear data to anchor to will keep you focused on what matters most."
- **Keep the focus on the users.** "End-user focus makes all the difference. Get continuous feedback when determining design and functionality."
- **Successful change management is possible, but it takes work.** "It's very hard to change some users' habits, but don't be afraid to push the envelope! Invest in an effective launch campaign and continue with an awareness and adoption campaign after launch."
- **Help people envision a new solution.** Use visuals and "day in the life" examples when you can, stepping people through what they can expect with the experience."
- **Be flexible with roles and organization planning.** "Members of our team played different roles in various phases of the project. Expect to re-evaluate and adjust roles after launch for a more effective run-state."

Messer Construction Co. (2019)

OVERVIEW

COMPANY

Messer Construction Co. is an employee-owned company that specializes in managing, developing, and performing complex commercial construction and delivering value to clients through quality construction experiences. Since 1932, Messer's track record of success can be traced to past and present architectural icons and institutions located across the Midwest and Southeast. With a sustained commitment to excellence and doing the right thing, it builds its projects safely, on-time, on-budget, and with the utmost craftsmanship, innovation, and care.

Headquarters: Cincinnati, Ohio, US

Company locations: Messer Construction Co. has 10 offices throughout the Midwest and Southeast.

Locations where people use the intranet: Employees at all of Messer's 10 regional offices, construction jobsites, and Corporate Support offices use the intranet.

Annual revenue: $1.12 Billion

THE INTRANET

Users: Approximately 800 employees; the company has 1,200 employees total, but the majority of them do not have an O365 account, though they can sign-in at a shared workstation. Messer employees use the MyMesser intranet to access the information and resources they need to do their jobs, understand the company and business, and engage with other employees. They also use the intranet to access their personalized professional development and benefits platforms.

Mobile approach: Responsive web design

Technology platform: O365 SharePoint Online

TEAM

Design team: A team of four designed the UI and front end. The UX and design team was responsible for the IA, content strategy, UI design, and SharePoint theming. A software development team, consisting of four developers, completed the SharePoint and front-end development.

Leadership: Bethany Smith, Messer Marketing & Corporate Communication Vice President; John Carder, Messer Vice President, Information Technology & CIO.

Design (Creative Services): Michelle Hendrickson, Cardinal UX Practice Manager; Stephanie King, UI Designer; Adam Keller, UI Developer; David Brun, Messer Graphic Designer.

Development: Matt Tallman, Modern Workplace Practice Manager; James Grizzle, SharePoint Architect; Zac Brumbaugh, SharePoint Developer; Susan Critzer, SharePoint Developer; Kim Schaff, Messer SharePoint Admin.

Project services: Katie Cozad, Cardinal Project Management; Blake Porter, Business Analyst; Nan Hatch, Business Analyst; Scott Grothaus, Messer PMO Director.

Content strategists: Jessie Folmar, Messer Senior Public Relations Manager; Jackiedra Wilson, Messer Senior Marketing Manager; Nick Apanius, Messer Operations; Andy Burg, Messer Operations.

INTRANET TEAM

Team members shown here (back row, left to right): Adam Keller, James Grizzle, David Brun, Matthew Tallman; (middle row, left to right): Zac Brumbaugh, Kim Schaff, Scott GrotHaus (tablet), Jessie Folmar, Jackiedra Wilson, Michelle Hendrickson, Susan Critzer, Blake Porter, Andy Burg (tablet); (front row, left to right): Katie Cozad, John Carder (tablet), Bethany Smith, Nick Apanius (tablet).

HIGHLIGHTS ABOUT THIS WINNER

At Messer Construction Co., in-house designers and developers merged harmoniously with the agency they hired. As a team, they meticulously researched the users, their tasks, and their needs—and together they created MyMesser, a highly supportive solution for employees in the field or in the office.

- **Celebrating employees:** Messer Construction Co. fosters a culture of celebrating its employees and recognizing them. Executive promotions, new employees, and work anniversaries are all prominently showcased on the homepage.
- **Project information:** Descriptions, teams, photos, and live video feeds are just some of the ways employees stay abreast of all the construction projects the company is involved with. Consistently sharing this information with everyone ensures that all employees feel that they are part of the team. It also helps them get excited about the work the company produces and find new and creative ways to support the business.

- **Skilled trade workers section:** In-depth user research revealed the necessity for skilled trade workers—also known as the *Craftforce* at Messer—to have immediate access to checklists and resources while working in the field. A special section of MyMesser consolidates much of what they need in one place, and is usable on mobile devices; this is critical because, unlike business-side employees, Craftforce employees primarily access MyMesser on smart phones. This is an example of how the team thoroughly investigated its employees' needs, defined the challenge, and then created a design solution that not only supports the core business tasks, but also aligns with company values.
- **Communication:** News, short videos from leaders, and project information are all used to help keep employees informed, interested, and invested.
- **Work and life balance:** The intranet makes it easy for employees to see health benefits, discounts, time off, and more.
- **Team volunteerism:** Employees are encouraged to volunteer and improve the community around them. Their plans and efforts are shared on MyMesser in places such as the events calendar and *Community Report*.
- **Mobile:** The site is responsive, and more than 75% of its users access MyMesser on smart phones or tablets. Stakeholder involvement contributed to decisions about which content should appear on mobile and how. More importantly, user research—including task prioritization exercises—helped the team determine which features should take precedence over others, and whether to remove some features completely or just from one channel. Also, the mobile design accounts for key factors such as screen size, page load time, and data plan usage.
- **UX research infrastructure:** The team concentrated its user research in the most impactful activities, such as discovery interviews and meetings, focus groups, interviews, surveys, card sorting, and creating and using personas. Choosing the right research method at the right time helped the team make confident, thoughtful design decisions.
- **Departments and regions sections:** Site areas aimed at supporting different departments and regions have a consistent design, which helps employees more easily glean the same types of information no matter which group or location they are attempting to learn about.
- **Breadcrumbs:** Breadcrumb trails are an oldie, but they're still a good feature. They help users stay anchored, discover more about the available site sections, and more easily navigate up a level in the site structure.

BACKGROUND

Goals

Messer wanted to design and implement a responsive, best-in-class employee portal that would strengthen the company's online presence with users—especially those disconnected from the office buildings. The design team also wanted to improve the UX and increase adoption. The new portal design was aimed at meeting all of these goals.

The new site is vastly different than the last two iterations of the company's intranet, which were glorified message boards. Those sites had navigation that wasn't intuitive; ineffective search functions; and zero optimization for mobile. The new site supports both the business and the Craftforceteams. These two groups had different site needs; through discovery sessions and IA workshops, the intranet team was able to design one solution that effectively supported the needs of both.

Challenges

The team faced two primary challenges in designing a new portal to replace a failing intranet:

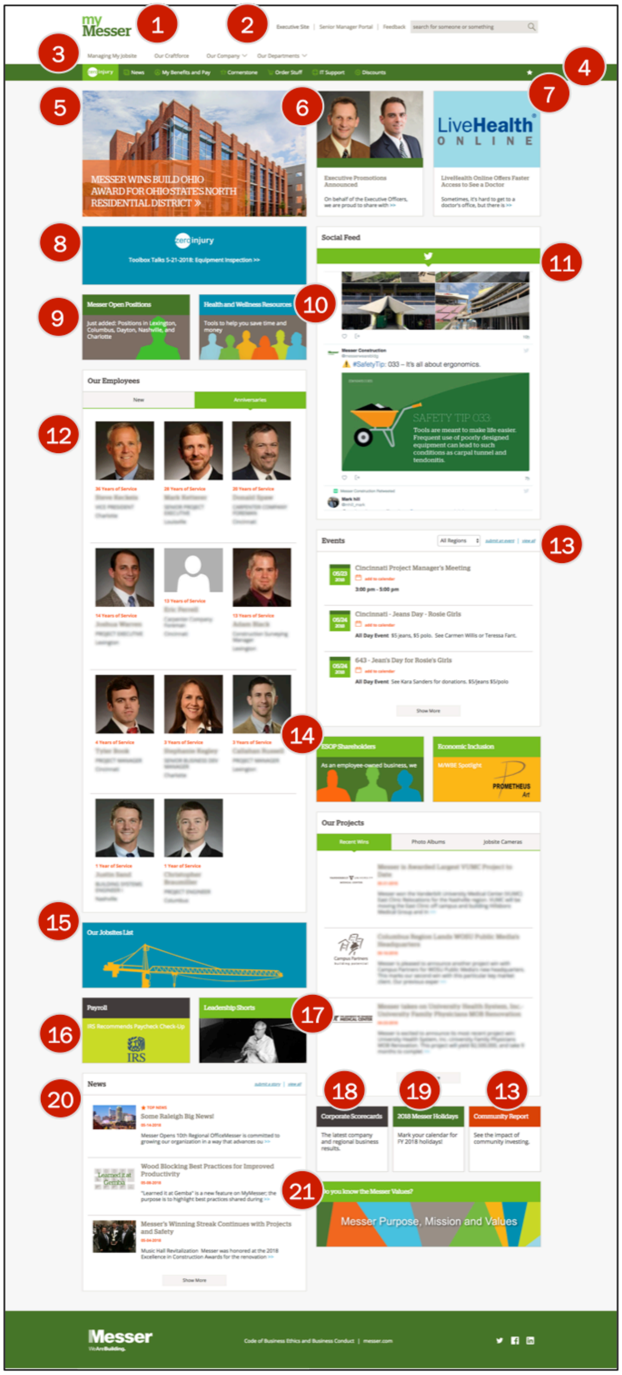
- **Diverse workforce:** The design team knew that the biggest challenge was going to be the company's diverse workforce and the way people used (or didn't use) the company's legacy intranet.
- **Overcoming a bad reputation:** Because its business is distributed, Messer has many regional offices, which results in a lot of content that needs continual distribution. The legacy intranet had earned a bad reputation with users because it lacked both content strategy and content governance. As a result, users could not find what they were looking for—and what they could find wasn't always the one source of truth.

Approach

The project originated in both the marketing and IT departments equally, and there was some urgency to get it rolling. The Messer marketing team kicked off the project with a discovery roadshow and analytics overview to help determine user needs before bringing in its agency partner. That partner, Cardinal Solutions, was able to take the initial discovery work and meet with stakeholders to create a solution vision. Once the vision was in place, the project continued with a discovery phase followed by design and roadmapping for the future phase of development.

DESIGN REVIEW

Homepage



Pictured: Messer Construction Co. Intranet Homepage. The MyMesser homepage is a portal to important content that employees need to help them do their jobs.

Homepage, Highlights

On this homepage, users can find everything from news to employee promotions and new hires. It also features information on work projects and how to stay safe on the job. It is chock-full of information, yet not overwhelming. The consistent style, diversity in content types, chunking and headings, and whitespace between sections makes the page scannable and manageable. And, all in one place, Messer employees can find much of what they need to stay informed and feel like they are part of the company team.

1. **Logo:** The *MyMesser* logo appears in the upper left of all pages. Given that there are other portals at the organization, this logo helps employees stay grounded when they are using MyMesser.
2. **Utility navigation and search:** Utility navigation and search are located to the right of the logo, and subtle links to the *Executive Site* and the *Senior Manager's Portal* appear at the top of pages. These sites are important enough to warrant this prominent page real estate, but the small light grey links ensure that they won't distract those employees who don't have access to or don't use those sites. Likewise, the *Feedback* link is there for those who want it, but it's not in the way for those who don't. The search field is flexible and always available. It beckons users to type a topic or a name.
3. **Global navigation:** Grey links on a white background comprise the site's global navigation. Extensive user research, including card-sorting research studies, helped the team confidently create this narrow menu structure with only four first-level choices: *Managing My jobsite, Our Craftforce, Our Company,* and *Our Departments.* The star icon on the right leads to favorites, so users can easily access their saved pages.
4. **Popular links:** User research not only informed the global navigation, it also helped dictate which site areas are most important to employees and which are the most accessed. The *Quicklinks* section, which appears in green just below the global navigation, showcases some of the most-needed parts of MyMesser. Only the seven most important items are awarded space in the green action bar, so users can easily find the key commands without being overwhelmed by too many choices. Only design discipline—grounded in good user research—gives teams the confidence to make bold decisions such as this.
5. **Key news story:** An important recent news item is allocated the homepage's first, leftmost content block. A related photo accompanies the headline, which acts as a link to the full story.
6. **Executive promotions:** It is in Messer Construction Co.'s culture to celebrate executive promotions. These are announced on the homepage, with executive photos, to humanize the stories.
7. **Online doctor visits:** eVisits with doctors are becoming more and more common. To allow employees the most flexibility possible, as well as access just-in-time medical care, Messer Construction Co. offers eVisits as part of its health benefits. These are advertised on the

homepage in a prominent spot that also displays new benefits, events, articles, and so on.

8. **Zero injury:** Construction can be a dangerous business. Understanding this, Messer emphasizes the health and safety of its employees in the field, and everywhere else. The homepage's *zeroinjury* section advertises weekly mini-newsletters to promote hazard awareness and help employees stay safe and healthy.

9. **Job openings:** Understanding that retaining employees and encouraging upward and lateral movement within is healthy for both employees and organizations, Messer advertises open positions on the homepage. The *Messer Open Positions* block lists the locations of the newest open positions.

10. **Work life balance:** Messer strives to ensure that employees are content outside of work also, as it makes for a happier human and a better employee. The homepage's *Health and Wellness* section leads to a site section that helps make employees' life a little easier.

11. **Social:** A large *Social Feed* section displays Messer's Twitter feed (@messerwearebldg), which is the most active social platform for Messer. Displaying it on the intranet's homepage helps employees stay up-to-date on what clients and partners are saying about the company.

12. **Employees:** The *Our Employees* section uses about a fifth of the entire homepage, demonstrating the importance of celebrating individuals. The *New* tab displays new hires, so fellow employees can see which roles have been filled and get to know the people who filled them. The *Anniversaries* tab shows photos, names, and job titles of employees having a Messer work anniversary. It's fun for employees to see and congratulate their coworkers—whether they are new coworkers or those who have worked at the company for more than 30 years.

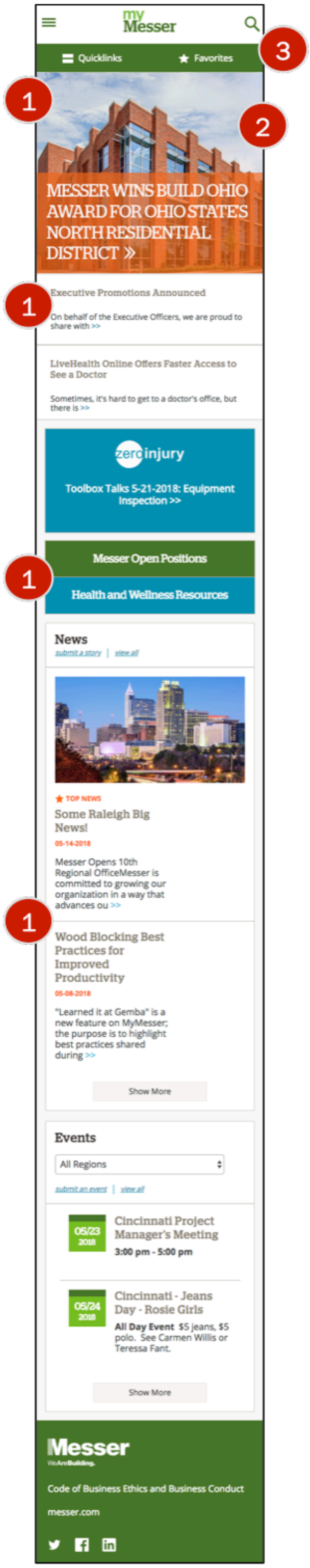
13. **Volunteerism:** The *Events* calendar lets employees share information about events they plan to volunteer for. Further, the *Community Report* section leads to information about how Messer and its employees have worked to improve the community around them.

14. **Shareholders:** The *ESOP Shareholders* section reminds employees that Messer is an employee-owned business, and leads to information about their shares and the company's performance, along with four short videos that explain how the ESOP works and how it benefits employees in the long run.

15. **Projects:** Construction projects are the core of the business. Whether employees work on the job sites or in the home office, they want to see the work the company is producing. The homepage's *Our Projects* section displays news about recently won projects (*Recent Wins* tab), a gallery of images from the jobs (*Photo Album* tab), and live video feeds from the current job sites (*Jobsite Camera*). The *Our Jobsites List* section, which appears on the left of the homepage, links to all the job sites, current and completed. This is another way for employees to

learn about the details of the core work, to see what their colleagues do, and to find new ways to support the business.

16. **Payroll:** Employees use the easily accessible *Payroll* area to fill out their timecards.
17. **Leader messages:** *Leadership Shorts* links to video messages about all levels of leadership, from Craftforce to executives. This is one more way that managers include all employees on their corporate journey.
18. **Corporate performance reports:** The *Corporate Scorecards* section links to reports about how the company is doing compared to its competitors.
19. **Holidays:** Another part of work/life balance includes time away from work. Employees can see a list of holidays for the current year on the homepage so they can plan ahead for both work and play.
20. **News:** A few of the top news items appear on the left near the bottom of the page. A title, date, clip of the article, and related image make the list easy to digest.
21. **Mission:** To remind (or teach) employees about the company mission, purpose, and values, a link to these appear toward the end of the homepage.



Homepage, Mobile

Pictured: Messer Construction Co. Intranet Homepage Mobile View. Content and navigation is optimized for mobile on the MyMesser intranet.

Homepage, Mobile Highlights

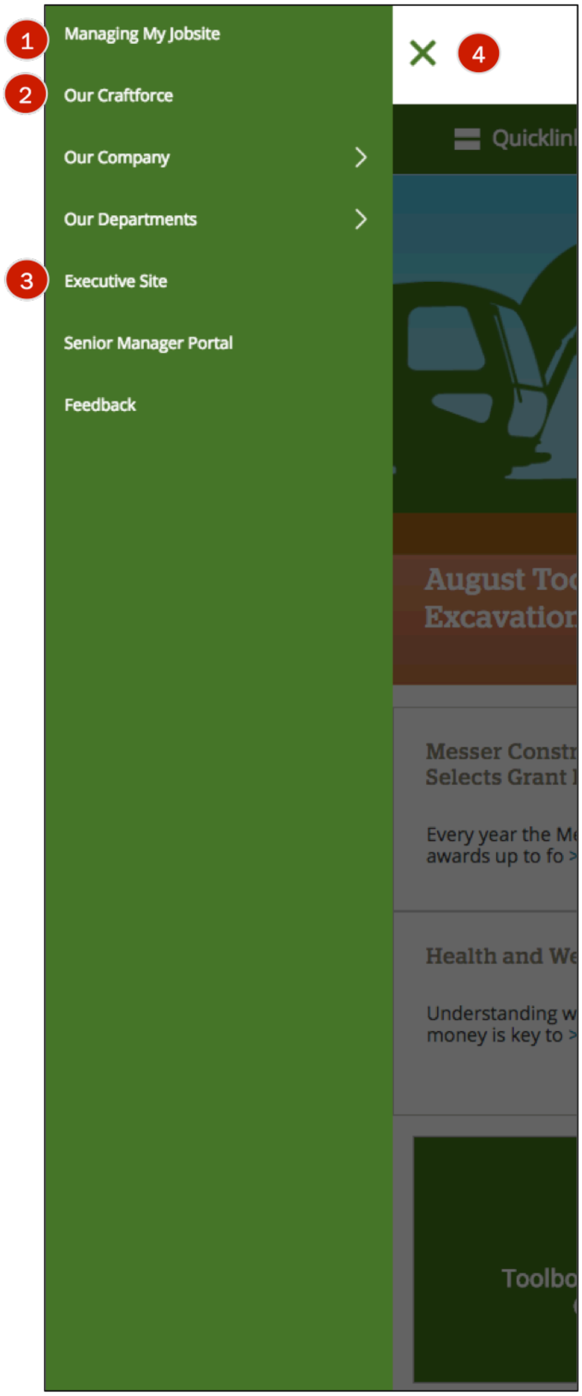
When researching with users for the MyMesser redesign, it was obvious early on that everyone—from the support team in the back office to individuals on the jobsite—wanted mobile capabilities. In particular, field workers who need access to processes and safety documents would benefit from access on their mobile devices. The new site is responsive, though a few sections are not available on mobile. The team determined which content and features should be on mobile and the order and way in which they should appear. These topics were discussed during several phases, including discovery, content migration, and content strategy priority sessions.

1. **Images shrunk or removed:** On mobile, several images that appear on desktop are either excluded or made smaller to accommodate the mobile screen size, ensure fast page load time, and be mindful of employee data usage. The main news item appears at the top of the screen, in a high-priority position than on desktop. But the related image is smaller, and the headline banner spans the entire image on mobile. Unnecessary images—including purely aesthetic ones, such as the colored silhouettes in the *Messer Open* Positions and *Health and Wellness Resources* graphics—don't appear on mobile, but the consistent green and blue colors make the sections recognizable. Likewise, photos are not included in the *Executive Promotions* section and with some news items.

2. **Priority:** The high-priority features appear toward the top of the mobile screen. Some content, such as new employee and anniversary announcements, were omitted from mobile. Similarly, the Twitter feed does not display on mobile since it has its own app.

3. **Navigation:** The global navigation, quicklinks, and search are all collapsed under icons to make the most of the screen real estate.

Navigation, Mobile

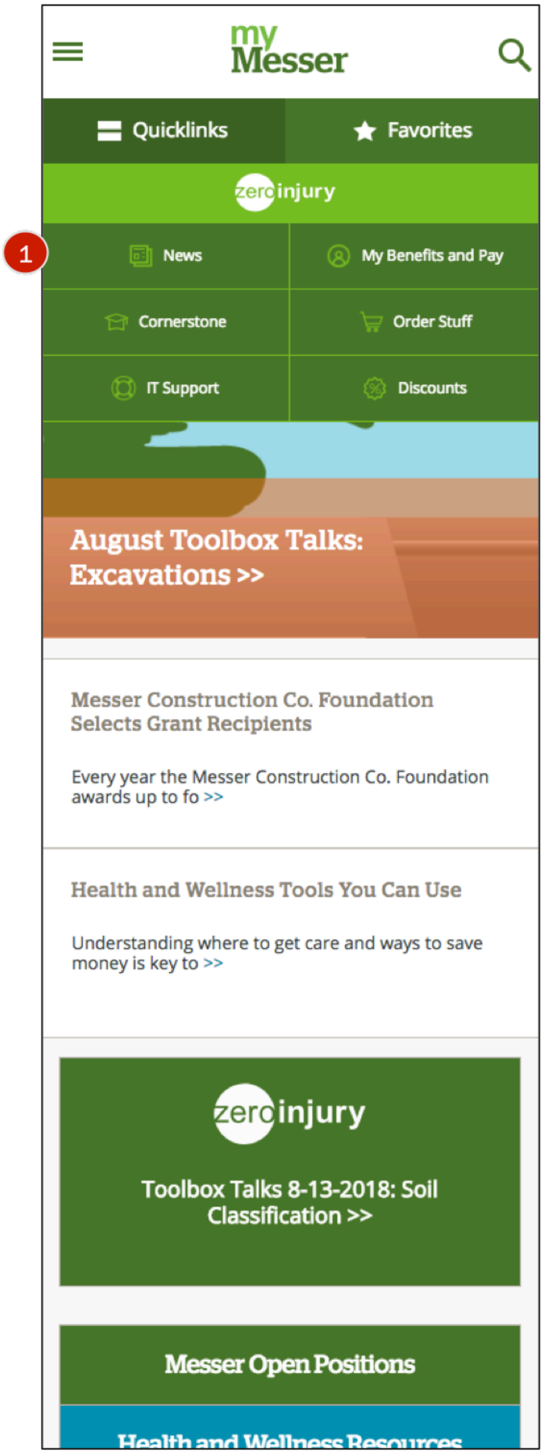


Pictured: Messer Construction Co. Intranet Mobile Navigation. The expanded hamburger menu includes links from the global navigation and utility navigation.

Navigation, Mobile Highlights

The global and utility navigation links are combined under the hamburger menu in the MyMesser mobile view.

1. **Pillars:** When users tap the hamburger icon to open the menu, the first link is *Managing My Jobsite*. This leads to a page with Messer's four operational pillars.
2. **Global navigation:** The links in the desktop site's global navigation are the first set of links in the expanded hamburger menu on mobile.
3. **Utility navigation:** The links in the desktop's utility navigation are the last set of links in the expanded hamburger menu on mobile. Users with access can go to the *Executive Site* and the *Senior Manager Portal.*
4. **Close:** Closing a large menu on mobile can sometimes turn into a guessing game or a round of whack-a-mole. Here, the large green *x* makes closing this menu simple.



Quicklinks, Mobile

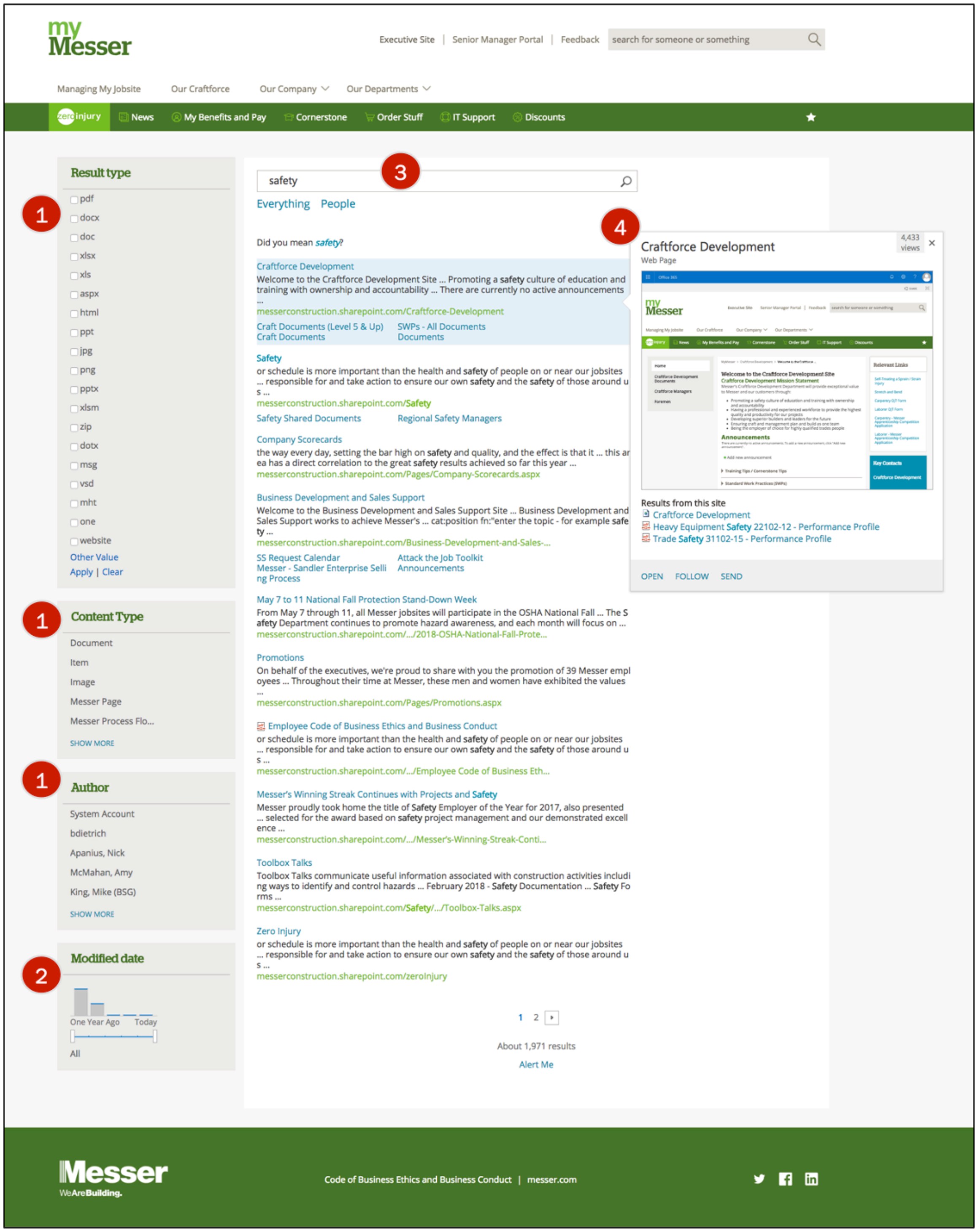
Pictured: Messer Construction Co. Intranet Mobile *Quicklinks*. Users can expand the *Quicklinks* menu to reveal buttons on mobile.

Quicklinks, Mobile Highlights

Links in the desktop's *Quicklinks* area appear as buttons on mobile.

1. **Buttons:** The links in the expanded *Quicklinks* menu are large and easy to tap. The white text is highly contrasted against the green button color, making it readable.

SERP



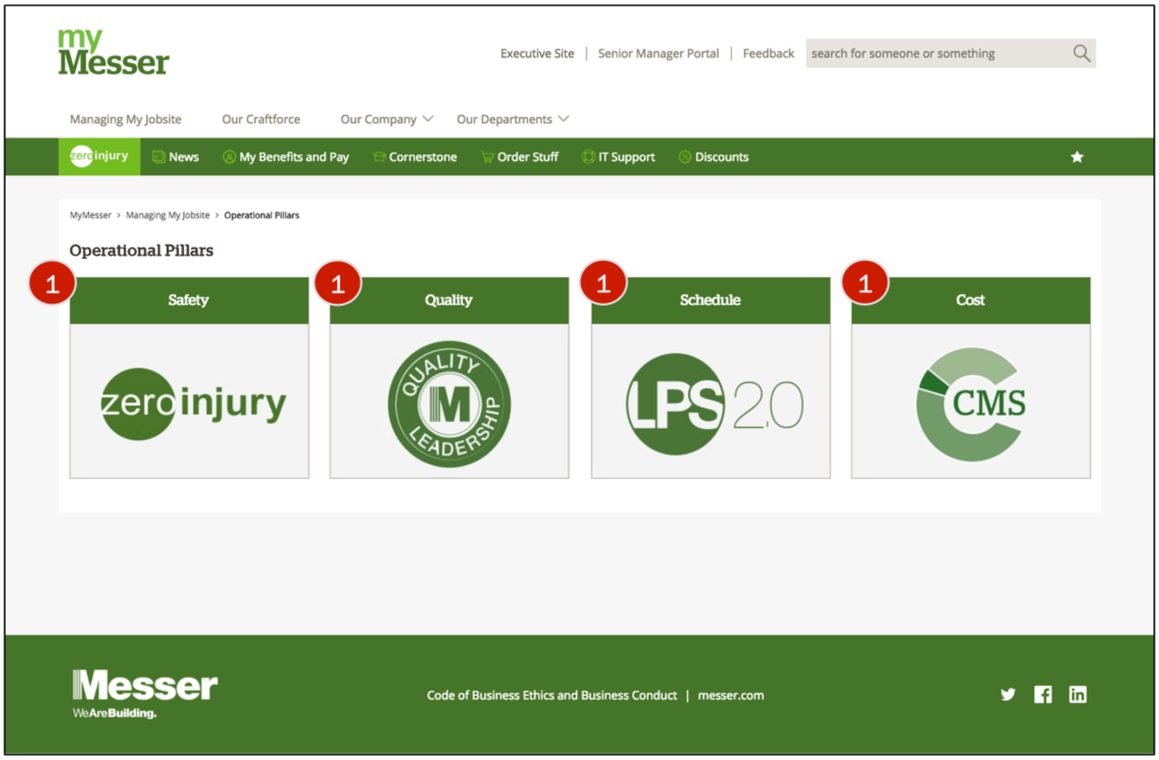
Pictured: Messer Construction Co. Intranet SERP. Filters help employees control their search results.

SERP, Highlights

SharePoint Enterprise search coupled with custom search filtering and refinement features make searching on MyMesser a powerful experience.

1. **Filters:** User can select any, all, or none of the checkboxes in the left section of the SERP, which includes choices for *Result type*, *Content type*, and *Author*. They can also choose to see everything (the default view) or click the *People* link under the search field to see only people related to the search query.
2. **Date:** To choose results within a date range, employees can use the slider feature.
3. **Query:** The SERP shows the search term, reminding users of their query and making it easy to adjust it if need be.
4. **Hover:** Hovering over a result displays a mini-version of the page that the link leads to. Beyond the results itself—with the title, description, type, and source—this mini view of the page not only helps employees decide if the result is the one they want, but it can also give users answers without their needing to leave the SERP. There's great potential for users to find what they want quickly using this SERP.

Pillars



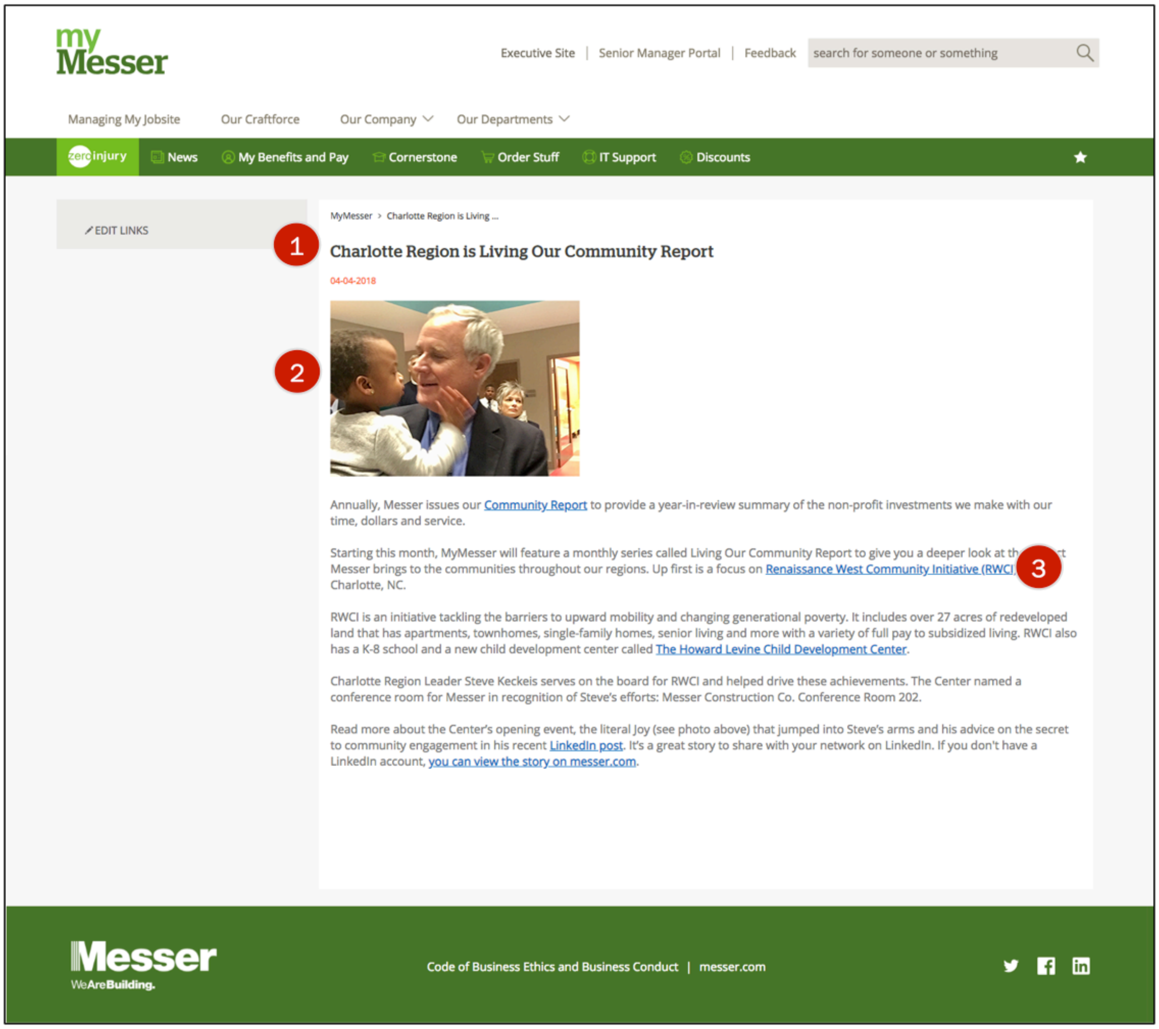
Pictured: Messer Construction Co. Intranet Pillars. This page acts as a great reminder of the company's *Operational Pillars* and provides easy access to information about each.

Pillars, Highlights

The *Managing My jobsite* menu link leads to a page of the company's four operational pillars.

1. **Sections:** The four sections on this page link to tips on *Safety, Quality, Schedules,* and *Cost.* Safety and quality are the highest priorities at Messer, so they appear first on this page.

News

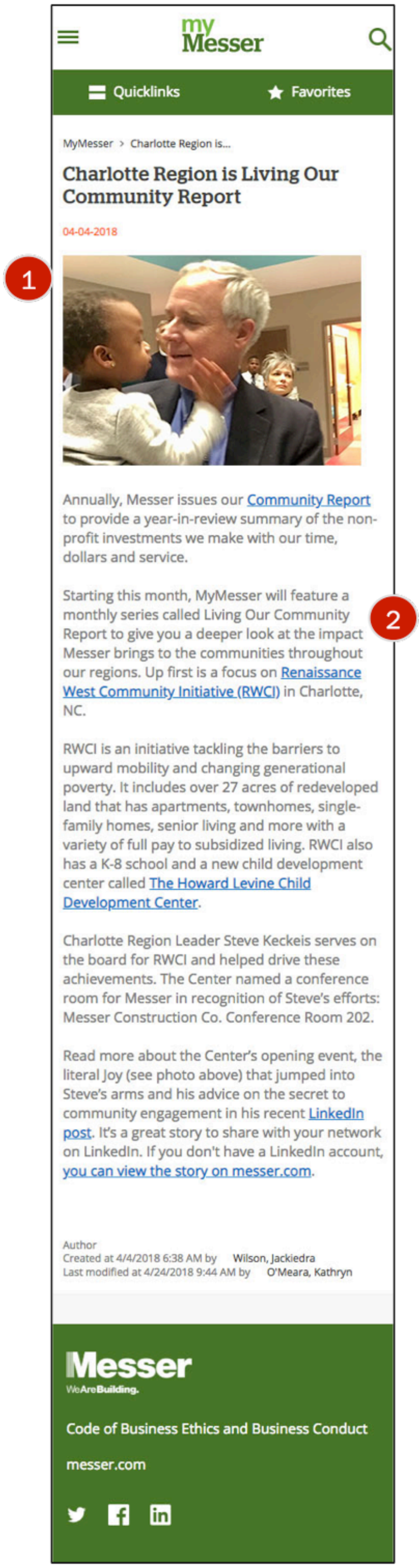


Pictured: Messer Construction Co. Intranet *News*. Inline links in news articles help users find related content.

News, Highlights

News is very popular on MyMesser. Employees are encouraged to suggest news topics, which helps ensure the content interesting and speaks to a wide audience. *News* page views are also boosted by a biweekly newsletter, *In case you missed it*. This includes the news articles, announcements, and social media headlines posted within the past two weeks. The newsletter includes only a few sentences, rather than the full article, but a link to the news story drives readers directly to the article page on MyMesser.

1. **Headline:** The article title is large, clear, and appears at the top of the page.
2. **Photo:** A related image adds a human angle (or some other depth) to the story.
3. **Links:** The blue underlined in-line links are information-bearing words. The style makes them easy to pick out when scanning. The link content helps users decide whether or not they want to click.



News, Mobile

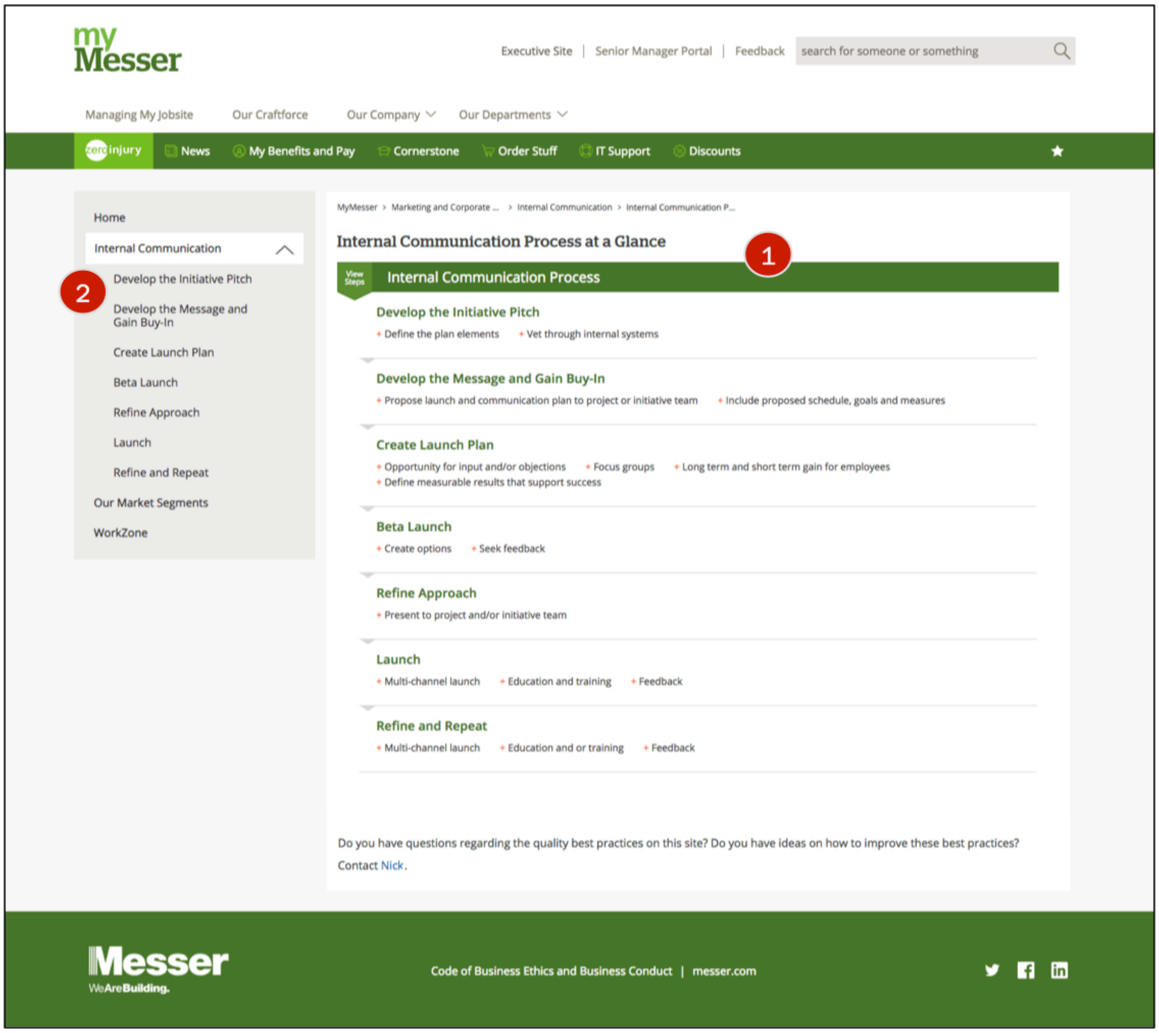
Pictured: Messer Construction Co. Intranet Mobile *News*. Narrow columns of text in articles are easy to read on mobile devices.

Mobile *News* Highlights

The article layout is slightly different on mobile.

1. **Photo:** The photo is resized and smaller on mobile.
2. **Narrow Column:** The narrow column width makes the article text easy to read.

Process



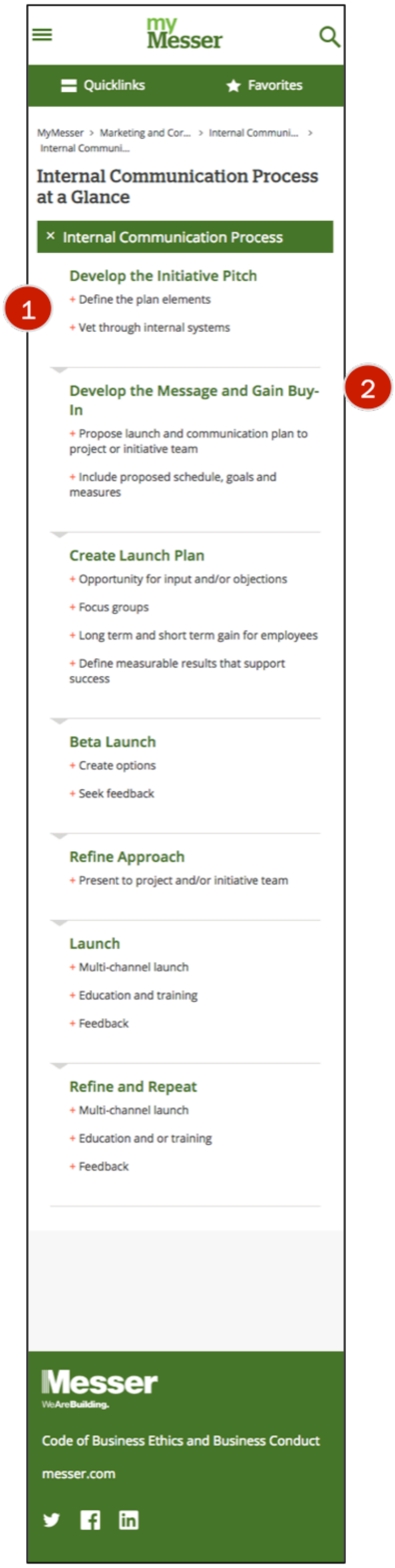
Pictured: Messer Construction Co. Intranet Process Areas. Process areas show an overview of the steps and then provide a menu so users can read the details of each step in the process.

Process, Highlights

Documenting processes at organizations ensures that any employee who needs to know how to do something can find the correct, most recent steps. Process documents increase confidence among employees and consistency across their work. They also help employees cover for each other when someone is out of the office. Finally, they give an overview to employees who might not need the details, but who could benefit from knowing the basic steps involved in getting a task done.

MyMesser includes process documents to make them easily accessible to everyone. The *Internal Communications Process* is one example.

1. **Overview:** Before getting into the nitty gritty, users are offered a page that includes an overview of the process steps. Each step has a title and a few related details.
2. **Menu of steps:** The links in the grey box on the left side of the page display each step as a link. When clicked, the links open the page with the details of the associated step in the process.



Process, Mobile

Pictured: Messer Construction Co. Intranet Mobile Process Overview. On mobile, the overview shows the steps and a few details, and is arranged vertically to fit the screen.

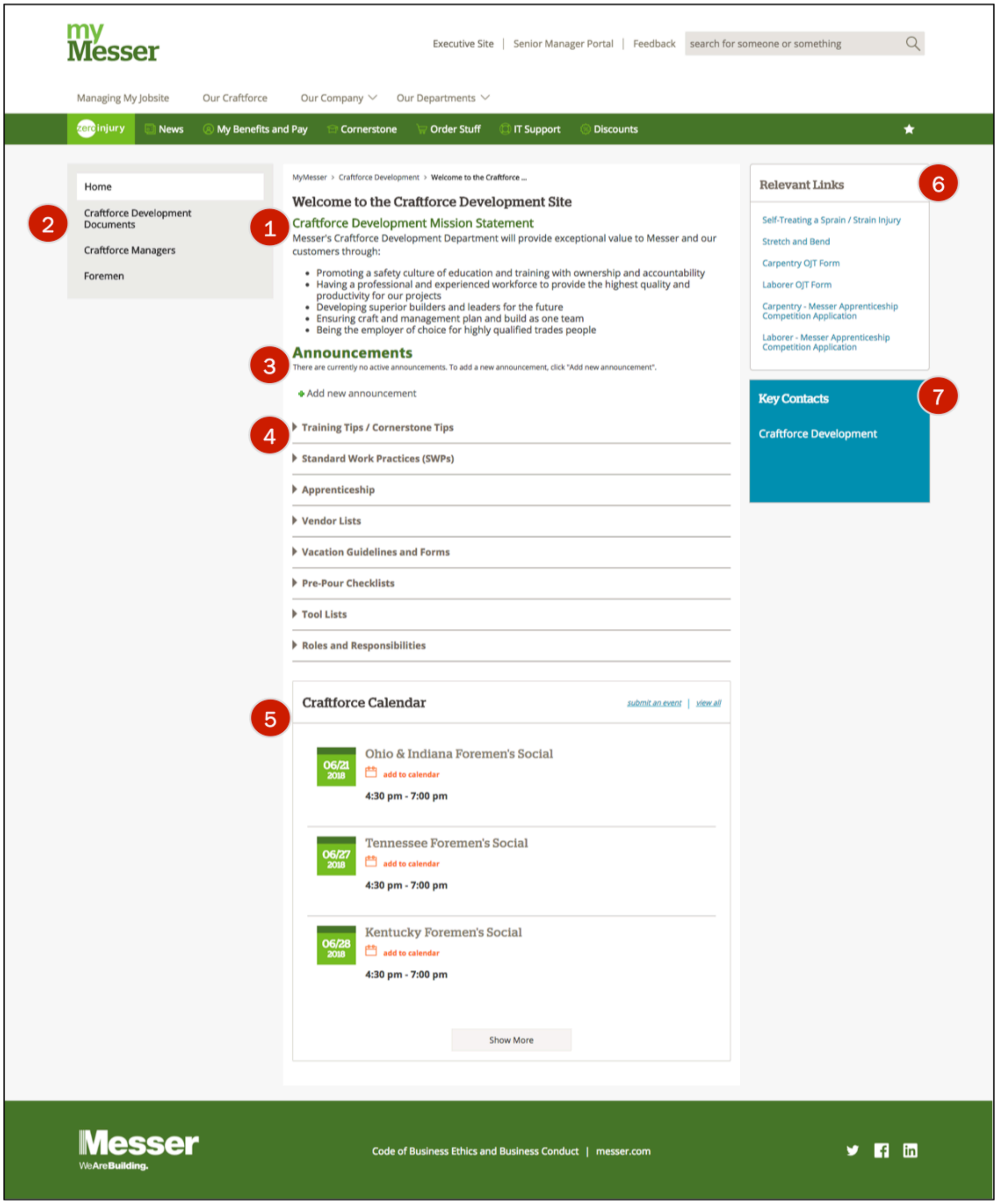
Process, Mobile Highlights

As on the desktop, the mobile screen shows an overview of the process, but the left-side menu was removed due to screen space constraints.

1. Steps: Steps and details are easy to read, with dark text on a white background and concise language.

2. Link: The green step name is a link that leads to the details page for that step.

Craftforce Development

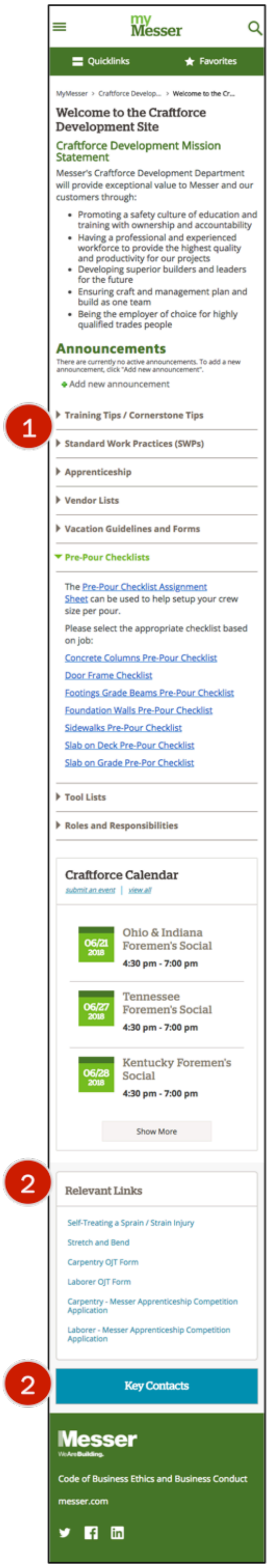


Pictured: Messer Construction Co. Intranet *Craftforce Development*. The company's skilled trade employees, known as the *Craftforce*, have their own special section on MyMesser where they can access pertinent resources and contacts.

Craftforce Development, **Highlights**

While Messer's Craftforce employees can take advantage of much of the information on MyMesser, they especially benefit from the distinct section created for them and related to their work tasks.

1. **Mission:** Employees are reminded of the Messer values, including safety, professionalism, and building craft superiority. The subheading is green and easy to scan to, while bulleted text makes the individual points digestible.
2. **Menu:** The links in the grey menu area on the left lead to development documents and information for managers and foremen.
3. **Announcements:** Users can add announcements of benefit to the Craftforce. This is a great way for craftspeople to keep one another apprised of new developments.
4. **Tips and forms:** The core checklists and resources appear in this section. Here, the Craftforce can find almost any process information in a few clicks.
5. **Calendar:** The calendar lists current events, the date, and the time. Clicking an item leads to the details page. Employees can submit events or view the list of all events.
6. **Additional links:** Other important links that are not part of the core checklists appear in the *Relevant Links* section in the upper right of the page. Here, Craftforce employees can learn about everything from treating their own injuries to upcoming apprenticeship competitions.
7. **Contacts:** The *Key Contacts* section in the right rail leads to that names and contact information of people who can help Craftforce employees with internal processes, working with clients, or emergencies.



Craftforce Development, Mobile

Pictured: Messer Construction Co. Intranet *Craftforce Development* Mobile View. Craftforce employees work in the field, and they can use their mobile devices to access pertinent resources and contacts.

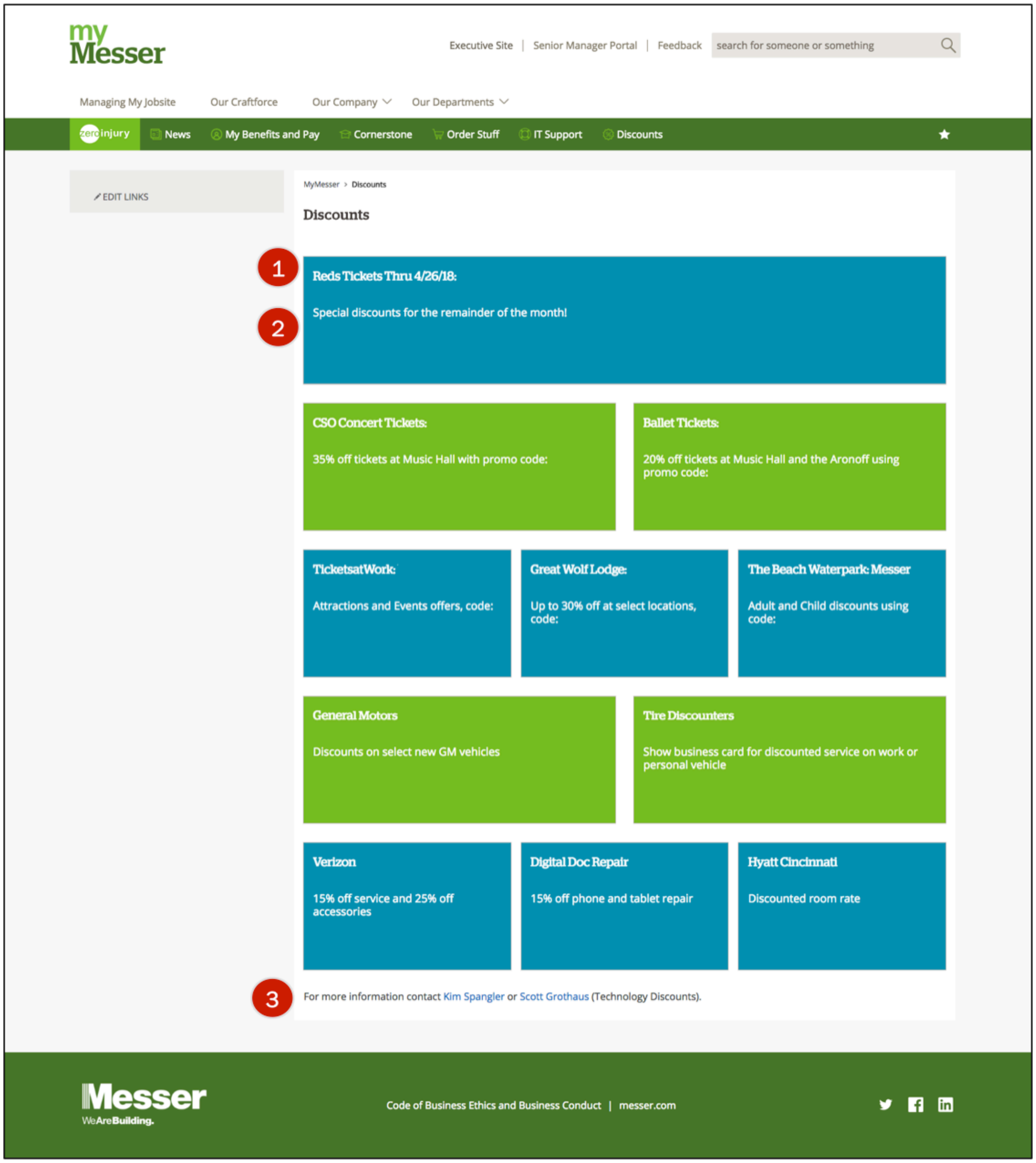
Craftforce Development, Mobile Highlights

It's especially important for Craftforce employees to have access to their MyMesser section via mobile devices.

1. Tips and forms: Having processes and forms available on mobile is key for these employees, as they work on job sites. Sections are large and easily tappable. The selected section's title changes from black to green, and the links appear below. Document links are blue and underlined—the most traditional and recognizable signifiers.

2. Priority: Except for the left-side menu, all the same elements appear on mobile as appear on desktop. The right rail does a column drop on mobile, as seen here in the *Relevant Links* and *Key Contacts* sections.

Discounts

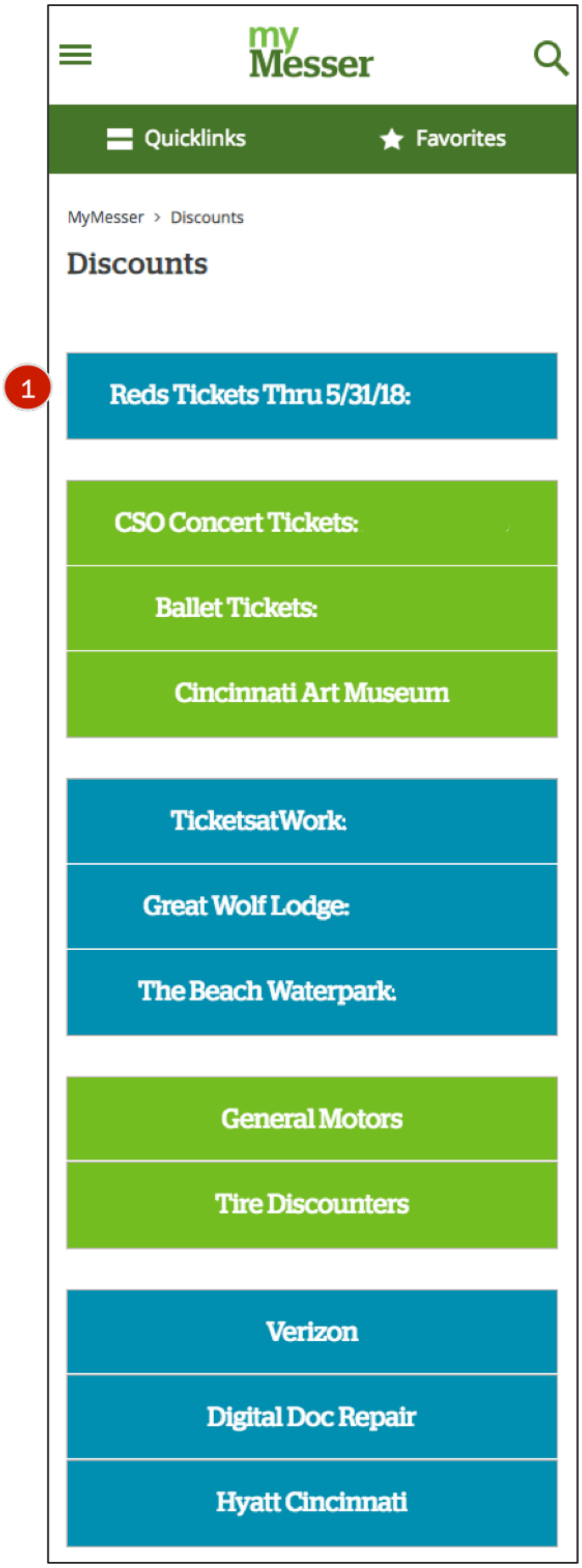


Pictured: Messer Construction Co. Intranet *Discounts*. Discounts are an unexpected employee benefit accessible on MyMesser.

Discounts, Highlights

Discounts from various companies are a fun, money-saving benefit for employees, with reductions on everything from ballet tickets to automobiles.

1. **Item:** The items employees can buy at a discounted rate each appear in a colored card, with the name of the item at the top.
2. **Description:** The amount of the discount (or whatever information is known) appears in the card below the title.
3. **Contact:** Key contact names appear as links at the bottom of the page in case employees need help with the discounts.



Discounts, Mobile

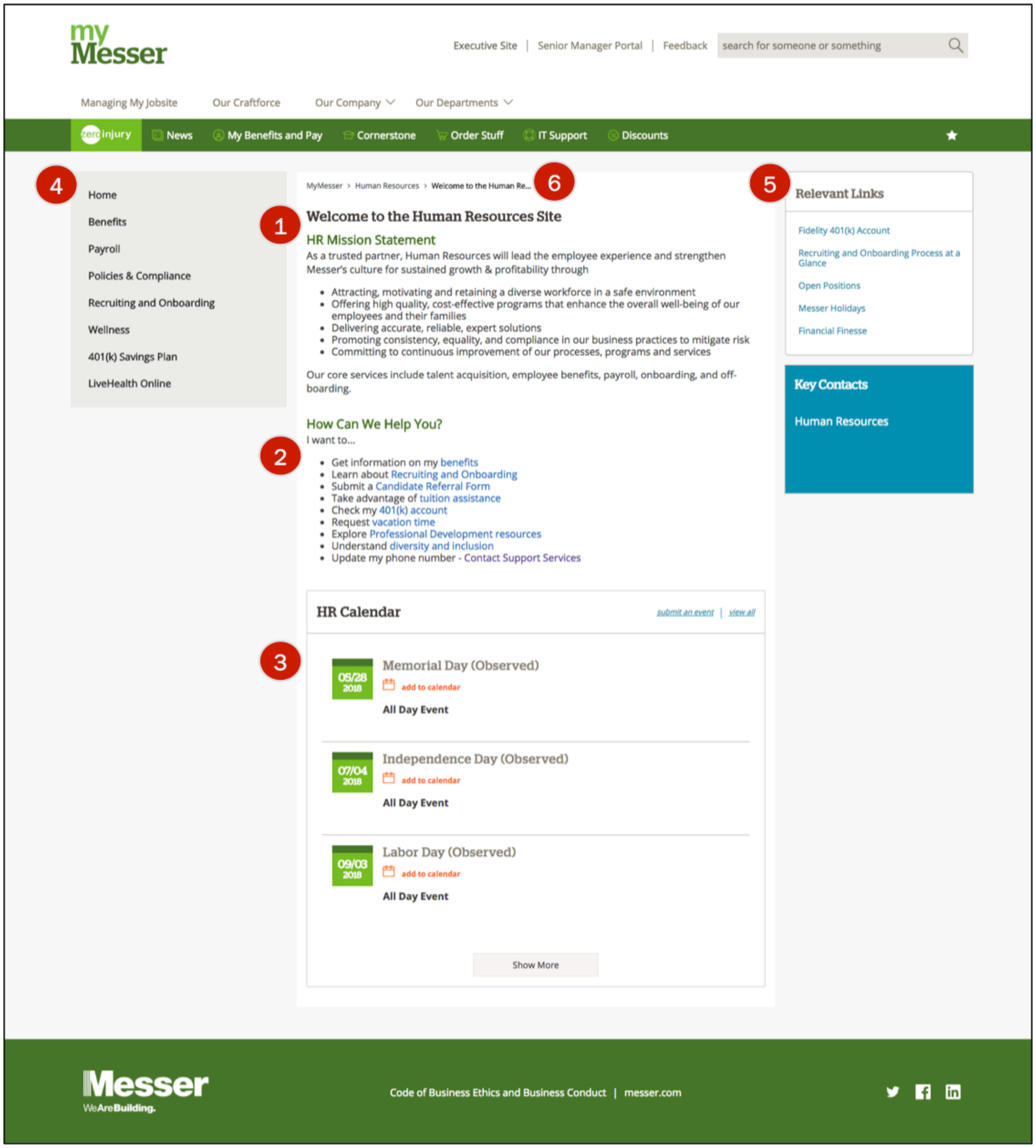
Pictured: Messer Construction Co. Intranet *Discounts* Mobile. Employees can view available discounts using their mobile devices.

Discounts, Mobile Highlights

Discounts are also available on mobile, which is very convenient for employees when they are out shopping or shopping from home.

1. Discounted items: The items with discount offers are listed in colored buttons on mobile. The description is not shown due to space constraints.

Human Resources



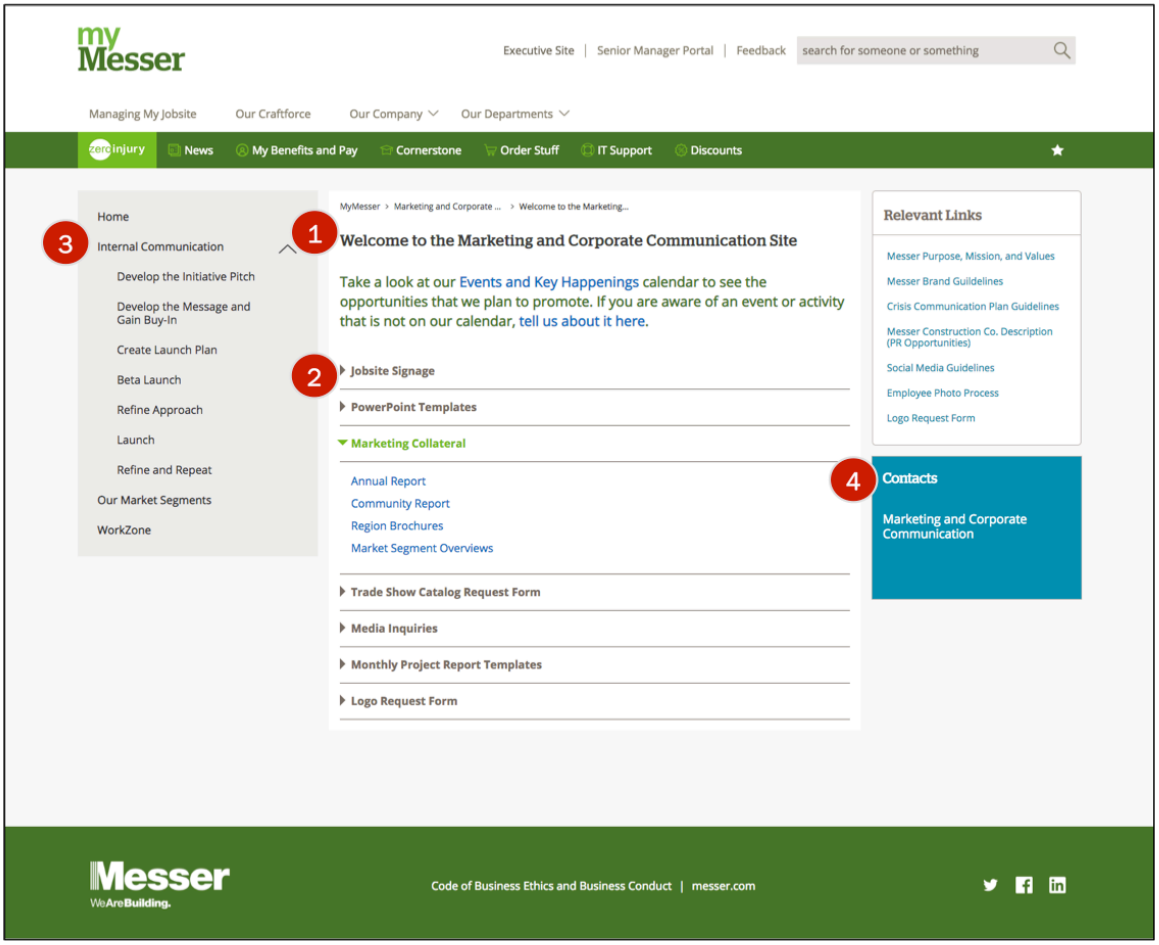
Pictured: Messer Construction Co. Intranet Human Resources. The HR section of MyMesser consolidates information about benefits and much more.

Human Resources, Highlights

Benefits and policies are a staple for most intranets, and MyMesser is no different in that respect. The site boasts a robust HR section. The section's structure follows that of all department pages, which helps users easily locate the same type of information on all department pages.

1. **Mission:** HR's role—including its mission—appears at the top of the HR section page, informing (or reminding) employees what the HR team can do to help them.
2. **Top HR tasks:** Common issues that employees need answers about are listed in the center of the page. Among the links are those related to recruiting, vacation, and benefits to help users serve themselves.
3. **Calendar:** Holidays, which are part of employee benefits, appear in the calendar section at the bottom of the page.
4. **Menu:** The left-side menu links call out the HR area's sections.
5. **Related Links:** The *Related Links* section in the right rail leads to more information; it is one more way the site helps users discover content they might want to explore.
6. **Breadcrumbs:** Aside from the homepage, every page of MyMesser includes breadcrumbs to indicate where the selected page lives in the site structure.

Marketing

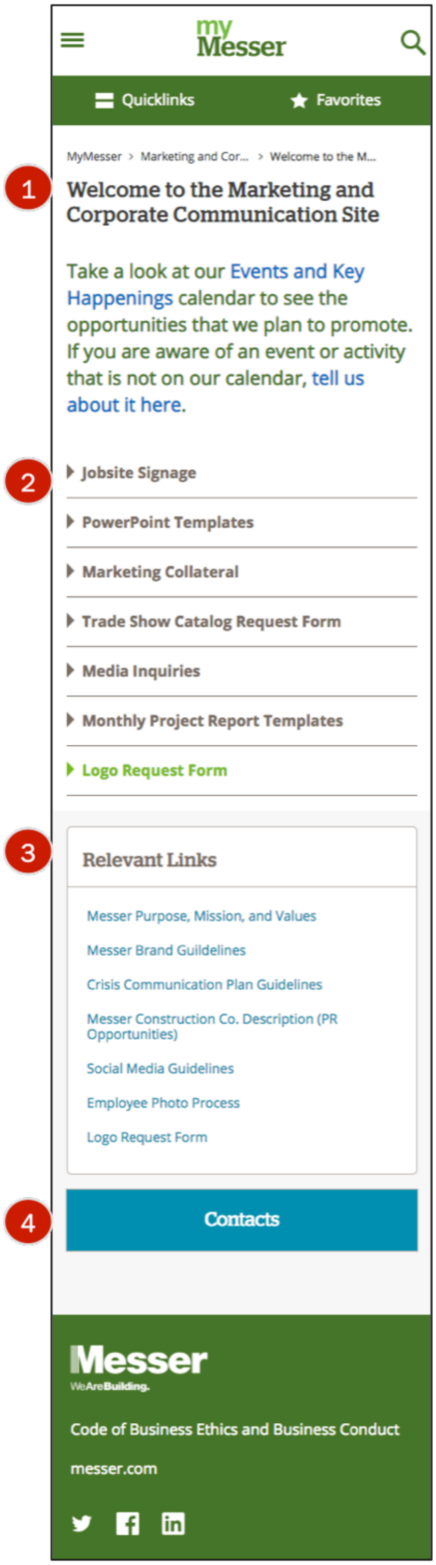


Pictured: Messer Construction Co. Intranet Marketing Department Page. The marketing department's section of MyMesser provides templates, forms, and other resources for and provided by marketing.

Marketing, Highlights

Like the HR department's main page, the main *Marketing and Corporate Communications* page has an introduction, top areas, and relevant links.

1. **Welcome:** A short statement about the department, complete with inline links to more information, gives a concise department overview.
2. **Links:** More important links are offered as an expandable list, collapsed by default. Each top-level item exposes links to related pages.
3. **Menu:** Task-based menu links appear on the left.
4. **Contacts:** A *Contacts* section at the bottom of the right rail leads to a page about Marketing Department professionals.



Marketing, Mobile

Pictured: Messer Construction Co. Intranet Marketing Department Page Mobile View. The marketing department's section of MyMesser offers the same items on mobile (marketing templates, forms, and resources) as on desktop.

Marketing, Mobile Highlights

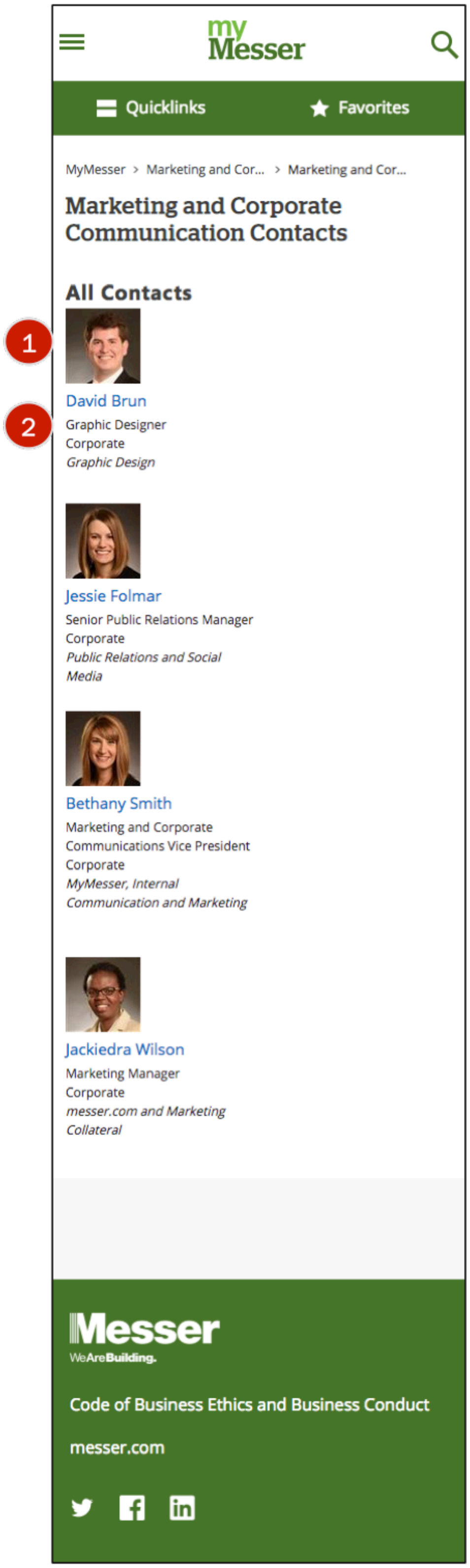
Like the HR department's main page, the marketing main page displays an introduction, top areas, and relevant links.

1. Welcome: A short statement about the department is easy to consume on mobile.

2. Links: Important links are offered as a list and are easy to read and tap. The links include information and resources for the marketing team, as well as marketing materials for employees in other departments. For example, managers working onsite who need to order signs can do so through *Jobsite Signage*.

3. Priority: *Relevant Links* drop from the right rail on desktop to below the top tasks links on mobile.

4. Contacts: A *Contacts* button leads to a page of key contacts for the department.



Department Contacts, Mobile

Pictured: Messer Construction Co. Intranet Department Contacts—Mobile View. Each department lists its key people and contact information.

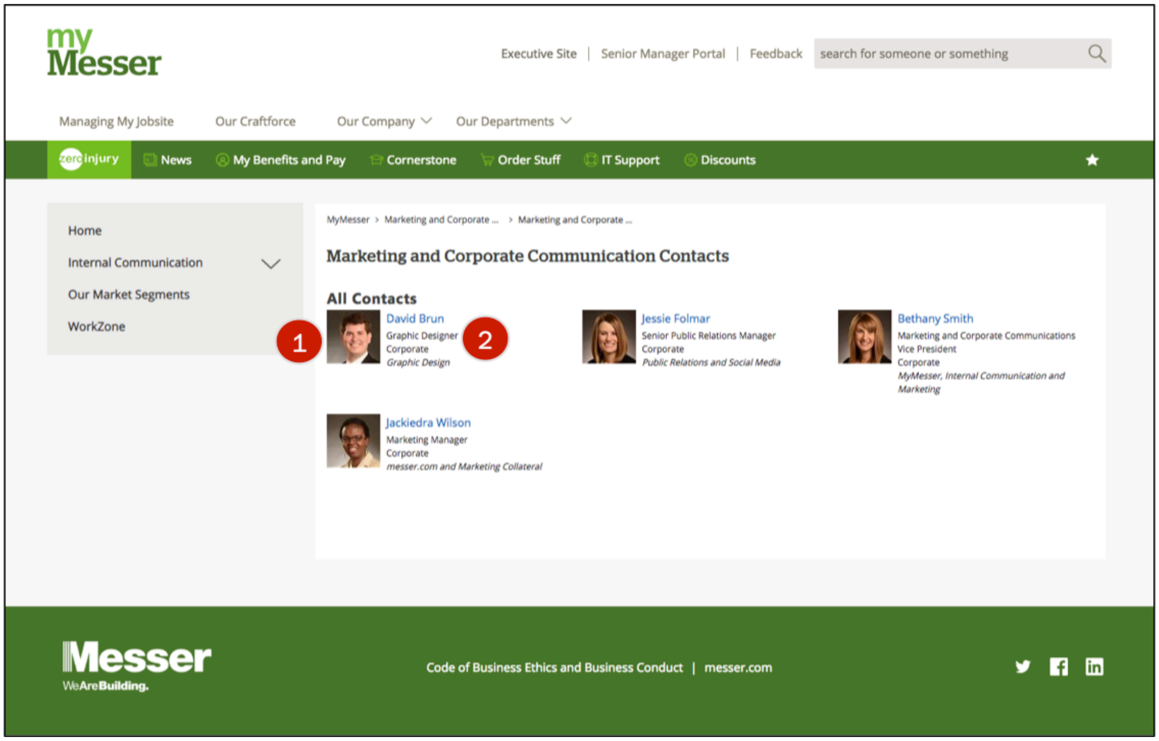
Department Contacts, Mobile Highlights

Clicking the *Contacts* button opens a page listing that department's key contacts.

1. Photo: A photo of each person helps employees put a name to the face, and vice versa.

2. Information: The *Contacts* area includes a photo, name, job title, and department for each person. The name link leads to the person's O365 profile page.

Department Contacts



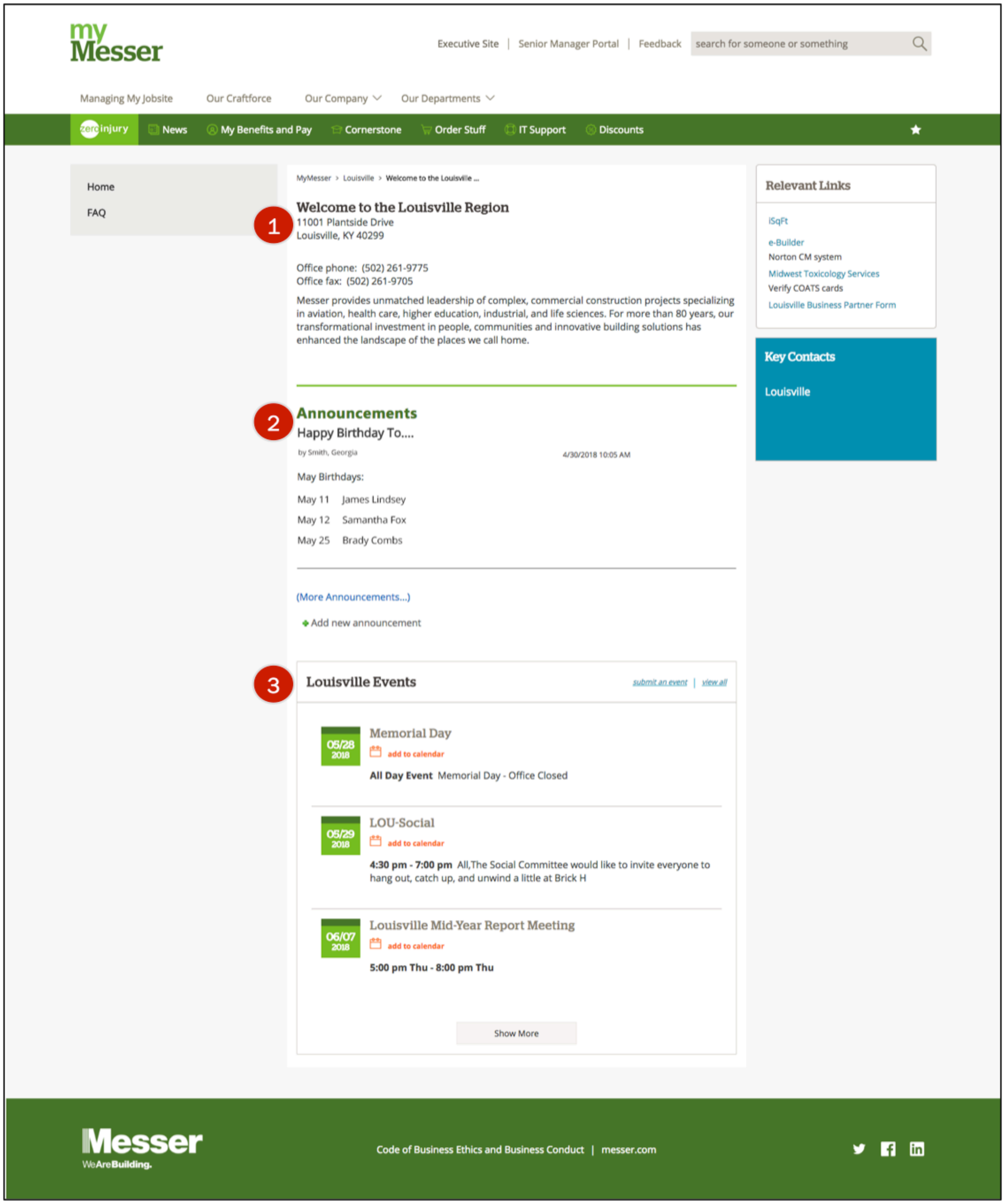
Pictured: Messer Construction Co. Intranet Department Contacts. On desktop, the contacts are listed horizontally.

Department Contacts, Highlights

Contact pages viewed on desktop use horizontal space on the page.

1. **Photo:** A photo of each person helps employees put a name to the face, and vice versa.
2. **Information:** The contacts area includes each person's photo, name, job title, and department. The name link leads to the person's O365 profile page.

Region

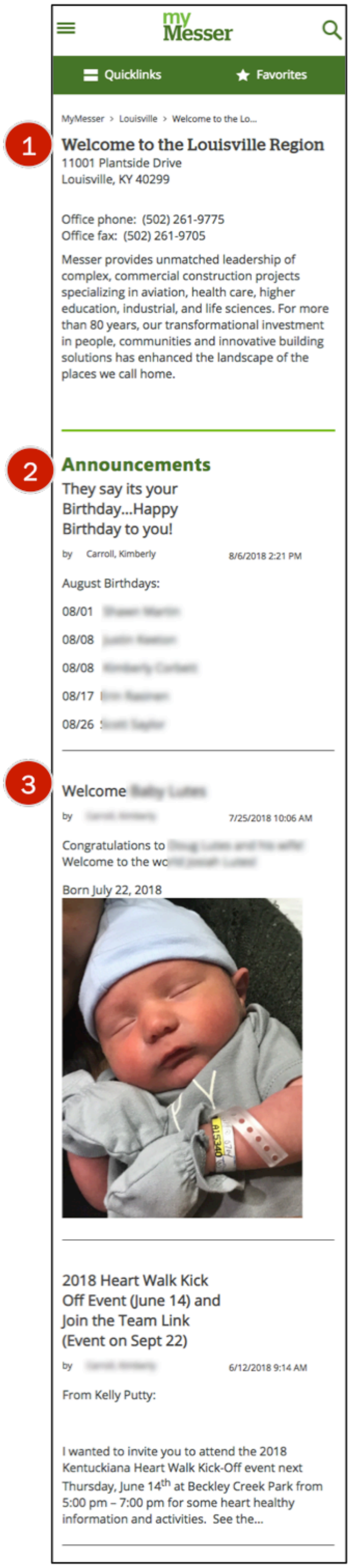


Pictured: Messer Construction Co. Intranet Region Sections. Sections for different regions focus on location-specific events and people.

Region, Highlights

Anyone visiting a different Messer location can go to that region's section of MyMesser for a glimpse into its current events and administrative information. Regional pages follow a layout similar to that of the department pages.

1. **Welcome:** The top section provides the address, phone and fax numbers, and a key sentiment for the region.
2. **Announcements:** Birthdays and other important events for employees at the location are listed for all to see. This is a nice team-building feature.
3. **Events:** Events are listed to bring together the employees from the location. This is a great way to entice employees to participate in events together and bond with one another.



Region, Mobile

Pictured: Messer Construction Co. Intranet Regions Sections—Mobile View. Sections for different regions are accessible on mobile.

Region, Mobile Highlights

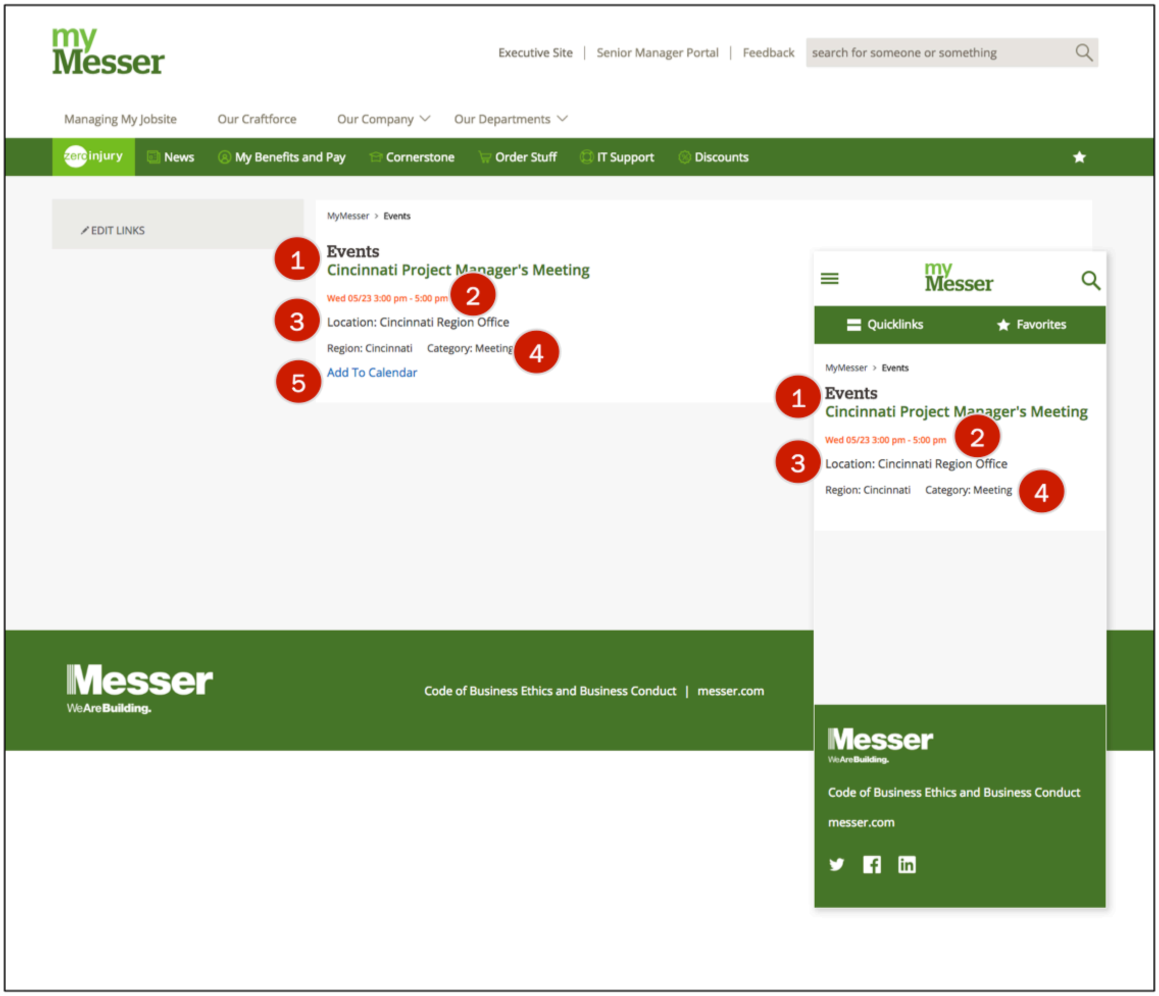
Travelers to other locations are grateful for the mobile access.

1. Welcome: The top section provides the address, along with phone and fax numbers.

2. Announcements: Birthdays and other important events are showcased.

3. Events: Volunteer events get employees involved in helping the local community. Pertinent info is easy to locate on mobile. Even babies born to employees are announced here, complete with baby photos.

Events



Pictured: Messer Construction Co. Intranet *Events*. Users can easily add events to their personal calendars.

Events, Highlights

Messer encourages employees to spend time together. The events listed on MyMesser help employees find different happenings that they might want to attend. Each event has a page that lists its details, and all of the following are included on both desktop and mobile, except for the final item.

1. **Title:** The event name is listed first.
2. **Time:** The day of the week, date, and time of the event are listed next in red text.
3. **Location:** The location for the event appears in black text.
4. **Category:** For users who search for events by event type, the *Category* assignment may help; it can also help users interested in an event get an idea of what type of event it is.
5. **Add to Calendar:** On desktop, users can click the *Add to Calendar* link at the bottom of the page to add the event to their personal calendar.

DESIGN PROCESS AND USABILITY WORK

UX Discovery

The design team held a four-week discovery phase in which it conducted UX research and analysis that helped it decide on both the site design and its content; it also helped the team determine a comprehensive set of requirements derived from the needs of both users and stakeholders.

This research fed into the ultimate project goal: to help users find what they are looking for more easily. Discovery activities also helped promote transparency and create buy-in, which ultimately resulted in a high adoption rate for the new, more user-centric intranet.

Research Methods

This initial project phase comprised several research activities, including:

- **Creating a vision:** Cardinal Solutions, the company's agency partner, met with stakeholders to create a *Solution Vision* document. During this session, they discussed the challenges with the legacy intranet and identified specific success criteria for the new site. The *Solution Vision* was referenced throughout the project and served as a tool that the team could return to again and again to keep project goals at the fore as they moved through the design and build phases that followed.
- **Stakeholder focus groups:** The team used conversation-style meetings to help identify usability and UX objectives and rather than focusing on current features or functionality specifically. The main goal of the discussions was to try to understand the culture, business process challenges, and expected project ROI.
- **User interviews:** User interviews were focused on helping the team learn how end users interacted with the legacy intranet, including trying to identify key tasks, motivations, and pain points. The information gleaned from these interviews provided the team with neutral, user-centric data that it used to inform feature preferences, IA, and design decisions throughout the project. This process also paved the way for improved user adoption and helped the intranet fulfill end-user expectations specifically expressed during the interview sessions.
- **User survey:** Surveys are a great way to gain wide exposure for a project with users across a company. The survey the Messer team used focused on the current portal and the systems that users interact with every day. The survey also let Cardinal Solutions reach out to a larger number of users than it had access to in the user interviews.

- **Card sorting:** Card sorts were used to help evaluate the existing IA's efficacy, as well as to discover specific information that would help the team build a user-friendly, scalable IA for the new intranet. Participants organized physical cards, sorting main, sub, and tertiary topics into categories that they felt would provide an optimal navigation experience. For users who could not participate in person, the team used Optimal Workshop, an online card-sort tool. The results of these sessions translated directly to a site map that illustrated the new intranet's eventual link and page structure.
- **Task prioritization session:** The team also used a collaborative activity to help identify and rank which individual features should take precedence over others. During this activity, each landing page task/feature set was systematically sorted by participants based on perceived usage and the level of importance users ascribed to it. These results provided a roadmap for improving the content hierarchy, as well as the hierarchy of application features, which were collected and delivered using a Task Priority Grid. This provided guidance for the layout and design phase deliverables to come.

Deliverables

Based on the insights gained through the various research activities, the team created a series of deliverables that illustrated project direction, including:

- **Findings:** The team delivered an interview findings report to all stakeholders so they could review the themes that had emerged from the workshops and comment on the proposed IA and content strategy recommendations.
- **Personas:** Personas were created from the information gathered during the user interview sessions. These personas provided (and continue to provide) a deeper understanding of end users, including their desired tasks and frustrations, and offer suggestions for improvement. These personas were used during the redesign, and they will also be used to inform future design decisions as the team continues to make changes and updates to the intranet going forward.
- **Site map:** Based on the card-sort results, Cardinal created a proposed site map, which served as the foundation for the redesigned site and improved IA.
- **Task Priority Diagram:** A Task Priority Diagram was created based on the results of the task priority exercise. It demonstrates how end users prioritize their day-to-day tasks based on frequency and value. These results help define which pieces of the UI should take precedence over others, and pointed to the individual features that should be removed. The diagram was particularly helpful in informing decisions about homepage design and also contributed to decision-making on the overall responsive design approach.
- **Landing page wireframe:** Using the collective discovery results, a new, low-fidelity blueprint was created to help the team visualize the new and improved UI components and where they would be best placed in specific page areas.

- **Design mockups:** Building on the approved wireframe, the team built a conceptual visual design mockup to showcase the design aesthetic (look and feel). Guided by usability and accessibility best practices, this visual design demonstrated how the Messer brand would be applied and extended to the landing page. Cardinal created a few homepage examples, as well as a collage of specific, consistent design elements that will eventually be part of the new design's pattern library.

Adoption and Buy-In

To gain organizational buy-in for the new site, the team recruited department and region office liaisons to contribute to focus group sessions held during the project kick-off phase. Information gathered from these sessions influenced the site structure, UX, and design throughout the entire project lifecycle. And, as the project neared the launch date, those same participants were brought back in so they could participate again, this time in user testing and design review sessions.

After the new site launched, the team conducted online training sessions and, even today, it continues to have regular check-in meetings with the liaisons to ensure continued adoption and answer questions as they arise.

As these continued efforts show, the team considers buy-in not a one-and-done exercise; it is committed to the intranet's continued growth and success as a comprehensive company tool.

Working with Outside Agencies

The Messer team worked with Cardinal Solutions Group throughout the entire lifecycle of the intranet-redesign project. The agency's participation is outlined in the table that follows:

CARDINAL SOLUTIONS GROUP	
Role	**Responsibilities**
SharePoint Architect	• Guided all development-related tasks and managed overall direction and health of those activities • Executed stakeholder interviews and discovery sessions to gain insight on business needs and requirements • Developed and guided vision for the overall solution • Architected technical solution • Supported SharePoint-related development and infrastructure activities
SharePoint Developer	• Developed custom functionality and implemented branding under direction of the SharePoint Architect, utilizing Microsoft best practices for SharePoint development • Developed SharePoint page layouts and web parts • Developed SharePoint apps
Business Analyst	• Documented technical requirements • Participated in all stakeholder and requirements sessions • Assisted architect in eliciting and understanding the business needs

Project Manager	• Managed all aspects of project lifecycle delivery, from initiation through close-out and transition • Drove strategic decisions and discussions relating to project priorities • Proactively worked through project issues to mitigate risk • Managed change control process • Managed project schedule and deliverables as outlined in each phase • Led requirements and scope discussions • Reported on project health throughout project • Created and executed change management, training, and communication plans
UX Architect	• Guided the overall effort for all design-related activities • Led stakeholder interviews and focus groups with users to help the team refine the design and content hierarchy • Worked with the UX designer to set a design direction and reviews visual designs
UI Designer	• Worked with the SharePoint designer to design the UI while upholding the brand standard • Applied creative, innovative techniques to help solve problems and craft an engaging interface • Prepared visual assets and developer specifications
Front-End Developer	• Programmed the UI and unique page templates using best-in-class HTML and CSS • Ensured browser compatibility and delivered code to SharePoint developers for back-end integration

GOVERNANCE

Ownership

Intranet ownership is split between the Marketing and Corporate Communications (M&CC) and the IT departments.

This shared ownership model has impacted the site in a positive way. M&CC can schedule stories, share best practices with departments and regions for their dedicated content sections, and use analytics to track and continuously improve visitor engagement. IT works behind the scenes to ensure access and content accuracy and reliability. And these teams work together on overall site governance.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
MyMesser Core Team	• Manage homepage content strategy and messaging
MyMesser Governance Committee	• Clearly define roles and groups for content ownership and publishing
Department Admins	• Manage self-service content for employees and WorkZone usage and adoption
Region Admins	• Manage self-service content and event listings for regional pages and WorkZone usage and adoption

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	The URL for both the desktop and mobile experience is: www.MesserConstruction.sharepoint.com
Default Status	MyMesser is automatically shown to any Messer employee who logs on with a company device.
Remote Access	The site can be accessed via any web browser (desktop or mobile) with the user’s Messer ID and password.
Shared Workstations	iPads and shared workstations are available in many company jobsite trailers and in regional offices to accommodate traveling and Craftforce employees. Every user is assigned a login.

TIMELINE

PROJECT MILESTONES	
Milestone Date	**Milestone Description**
May–June 2017	• Design and planning
August–October 2017	• Development
October 2017	• User acceptance testing
November 2017	• Training
December 2017	• Launch

Overall redesign timeframe: 5 Months

CONTENT AND CONTENT CONTRIBUTORS

CONTENT DEVELOPMENT AND OVERSIGHT	
Contributors	• The M&CC team meets regularly with the department and region admin leads to identify story opportunities to feature on the homepage. The intranet team writes the content and the SMEs approve it. • Page admin leads and department members manage the content that lives on department pages. • Specific pages devoted to the construction industry's operational best practices are overseen and updated by two of the company's executives.
Contribution	• MyMesser includes a *Submit a Story* option as well as a *Feedback* button to encourage employees to contribute information or insights that can then be shared with the entire company.
Training	• All admins, including department and region admins, received training prior to launch; post-launch, the team holds routine check-in meetings to answer questions and share best practices.
Content Management	• The M&CC team maintains an editorial content calendar to help identify communication opportunities and needs. Admins for pages beyond the homepage are responsible to ensure that their content is useful, informative, accurate, and up-to-date so that users will trust it and continue to want to read it.
Maintaining Quality	• Because the site was designed to optimize UX and make it easy for people to find the information they need and collaborate with others, department pages all have the same look and feel. The team reviews analytics regularly so that it can monitor where people are going and what they are searching for and make changes as needed. The site also invites users to provide feedback via a link on the homepage.

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and Operating System	• O365, SharePoint Online
Bug Tracking/Quality Assurance	• Visual Studio Online (VSO)
Design Tools	• InVision • Sketch • Adobe Creative Suite • Optimal Workshop • Pattern Lab
Site Building Tools	• Visual Studio • PowerShell
Content Management Tools	• Layer2
Search	• SharePoint Enterprise Search
Other Functions	• Citrix NetScaler, XenServer

ROI

The success criteria for the new Messer intranet were defined as:

- Improve accessibility and mobility
- Provide better usability
- Improve information finding through search
- Provide in-demand content at the right place and the right time
- Make the intranet the definitive source of truth for the company
- Provide document security

Messer is committed to connecting its employees and driving transparency across all company locations. It rejects the "if you build it they will come" ethos and instead takes an analytical approach to monitoring performance, gauging content traction, and making continuous improvements to the new platform.

Messer continues to work with Cardinal Solutions through a managed service agreement to make continual improvements; for example, it takes the following measures to gauge ongoing performance and user satisfaction:

- **Measure page views**: The team continues to measure page views so it can understand where users are spending their time on the site and which news stories are generating the most clicks.

- **Monitor engagement:** It's important to monitor engagement of the company's Craftforce employees versus its traditional office staff to ensure the intranet is meeting the needs of both audiences and track whether they're gaining or losing users over time. For example, in June 2018, the intranet had 200 more page views than average each day for the first time since relaunching the site. The increase is attributed to a new biweekly *In case you missed it* email blast that is sent to employees; it provides a round-up of news articles, content, and social media headlines posted on the intranet within the previous two weeks. This email also drives employees to MyMesser to read important company announcements. In the past, the CEO would have emailed this company information to all employees. Now, the CEO still emails employees, but instead of including the full message in the email, readers receive two- to three-sentence messages that direct them to *read more* via a hyperlink to the story page on MyMesser that contains the full announcement.

LESSONS LEARNED

Messer Construction Co., like many companies, chose to work closely with an agency partner throughout its intranet-redesign project. Although that partnership's success shows in the pages of its new intranet design, such good outcomes can make a hard job look deceptively easy. However, it's not always easy to choose a great agency—and it's even harder to make the collaboration work smoothly. Messer scored high on both these points, and its team has lessons to share with other companies considering this type of approach:

- **Choose agency partners with care.** "We learned early on that having a partner that simply understood SharePoint was not enough. We needed a partner that could help us as an organization connect with our users to understand their perspective on what a new employee portal could do to help them stay better informed and do their jobs more efficiently and effectively. Cardinal brought a unique combination of user experience skills along with deep technical expertise that allowed us to understand the needs and wants of our employees, and then determine the best technical approach to deliver what they needed. Starting with user experience activities such as focus groups, stakeholder interviews, card sorts, and task priority exercises provided our employees the opportunity for their voices to be heard, while also aligning what the business stakeholders hoped to accomplish with the new portal."

- **UX acumen is just as important as technical expertise.** "Much like the lesson learned above, we would recommend engaging a partner like Cardinal Solutions that not only understands the technical aspects of architecting an employee portal but also has the requisite user experience capabilities to truly drive out what employees need and want. The discovery and planning activities that Cardinal led at the project's inception truly established a foundation for our future employee portal because it incorporated the voice of the end user. The IA, content strategy, key web parts, etc. were established through a highly collaborative process with both end users and stakeholders. The approach Cardinal utilized ensured that we would build a new experience that our employees would need and want to use while also satisfying the goals and expectations of the business sponsors."

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.

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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.

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Anna held UX roles on both client-side product teams and in digital agencies of various sizes. She understands the challenges that user experience professionals face in both contexts. This familiarity helps her bring a well-rounded approach to her projects and instruction. She creates experiences that meet user and business needs while balancing technical pragmatism. Anna has a Bachelor of Journalism degree with an emphasis in Strategic Communication from the University of Missouri, Columbia. She is also a certified Professional Scrum Master.

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