Intranet Design Annual

The Best Intranets of 2011

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Executive Summary

The 10 best-designed intranets for 2011 are:

- AMP Limited (Australia), a wealth management company
- Bennett Jones LLP (Canada), one of Canada's largest law firms
- Bouygues Telecom (France), a telecom, mobile, fixed, TV, and Internet communications services company
- Credit Suisse AG (Switzerland), a global financial services company
- Duke Energy (US), an electrical power holding company
- Habitat for Humanity International (US), a non-profit, non-denominational Christian housing ministry
- Heineken International (The Netherlands), a leading brewer and owner and manager of a portfolio of beer brands
- KT (Republic of Korea), an information, communications, and technology company
- Mota-Engil Engenharia e Construção, S.A. (Portugal), a leading construction enterprise
- Verizon Communications (US), a provider of wired and wireless broadband and communications services to US consumers, as well as of global business networking, data, and managed solutions to enterprises worldwide

This year, we have two repeat winners: Credit Suisse won previously in 2002, and Verizon Communications won in 2005. These companies join Walmart (2002, 2010) and Cisco Systems (2001, 2005) as two-time winners. In addition, Deloitte Touche Tohmatsu's Australian member firm's intranet won in 2002, followed by its worldwide intranet in 2009.

(This may sound like a lot of repeats, but this is the 11th Intranet Design Annual and we've had 110 winning slots in all. So, the five companies who've won twice correspond to just 4.5%, making these few companies the elite of the elite.)

This year's winning sites include two specialized sites. Mota-Engil's winning site is its InnovCenter, a site aimed at creating and implementing innovative ideas. Heineken's winning site is its BrandPortal, which is used to share marketing and brand assets worldwide.

This is our most international group of Intranet Design Annual winners yet, with companies from eight different countries, including our first winners from the Republic of Korea and Portugal.

Although European intranets and financial-sector intranets both put in a poor performance last year, Europe has certainly made a strong comeback with 40% of this year's winners; it's also nice to see strong financial-services intranets again.

SMALLER COMPANIES GET BETTER INTRANETS

There have always been small companies among the winners, and this year was no exception, with winners such as Bennett Jones (925 employees).

The average size of this year's winning organizations is 37,900 employees. This is remarkably close to the previous two years' averages of 37,500 (2009) and 39,100

(2010, excluding the outlier Walmart, with its 1.4 million store associates). On average, recent winners have been less than half the size of the winners from 2005–2008, when the average size was 76,250 employees.

Although 37,900 employees is certainly not a small organization, the fact that recent winners are half as big as past winners is a remarkable change. How is it that smaller companies now achieve such excellence in intranet design? Partly, it's a reflection of increased investments in intranets (see the team size discussion below), and partly it's a consequence of better tools for building intranets. The easier it is to make the implementation work, the more resources are left for design and usability. This is especially important in smaller organizations, which were harder pressed to make things work with clunkier technology.

The average size of the winning teams was 14 people this year. (Same as last year.) This is about twice the size of the winning intranet teams 10 years ago, when the winning companies were typically bigger.

One cautionary observation: many winners supplemented their intranet teams with outside resources — such as design firms and consultants — for their redesign projects. While this makes sense, there is a danger in staffing down the intranet after launch. Long-term usability requires ongoing commitment, both for continuous design improvement, and for things such as search quality initiatives, consistency and style guide enforcement, and training new content contributors.

MOBILE INTRANETS

Last year, 30% of winning intranets had a mobile version. This year, 60% of winners had a mobile intranet. Doubling in one year is truly a sign that mobile access is a huge trend right now.

In testing mobile websites on mobile devices, we found that sites with fewer features have much better usability than full-featured websites. This year's winning mobile intranets followed this recommendation, focusing on specific features that were important to employees on the go instead of trying to squeeze the entire intranet onto a tiny screen.

One major difference between mobile intranets and mobile websites is that an intranet team can optimize for the relatively small set of company-issued mobile devices. The result? Substantially more emphasis on Blackberry support for intranets than for websites.

KNOWLEDGE MANAGEMENT

If there's anything that has been overused, abused, and hyped beyond the level of cliché, it's "knowledge management." Thus, it might be better to say that many of this year's winners were strong in "managing knowledge" on their intranets. We already know that social networking is a natural fit within the enterprise, where designers can avoid many of the Internet-wide weaknesses of such tools. This year's winners had particularly compelling solutions in 6 areas:

- **Knowledge sharing**. Offering repositories for case studies, samples, and other existing information can help people with similar problems avoid having to start building their solutions from scratch. Examples range from Habitat for Humanity's fundraising templates to Bennett Jones' Share Your Work widget. Sometimes, knowledge sharing can be as simple as a Q&A tool to connect employees with questions to colleagues with answers.

- **Innovation management**. Companies managed and encouraged innovation by offering users tools for taking ideas and improvements from conception to completion. Indeed, this is the sole purpose of Mota-Engil's winning InnovCenter. Verizon offers a mobile version to capture ideas as they occur, which is often on outside jobs, far from any old-fashioned suggestion box.
- **Comments**. The simplest way to inspire user-contributed intranet content is to let employees comment on existing information, ranging from news stories to knowledge bank resources. Commenting features reduce the fear of the blank screen; systems that force people to create content from scratch every time inhibit user participation.
- **Ratings**. Giving a grade requires even less work than writing a comment, and thus rating systems can further broaden user participation. Sites that use ratings can list top-rated resources first in menus or give them added weight in search listings. Mota-Engil and Verizon offered an even simpler approach by noting how many users had previously accessed a resource (even if they had not rated it). Sometimes, bad content gets substantial use simply because it addressees a key need; on average, however, better stuff gets used more, so a usage count is a reasonable proxy for quality — and has the huge benefit of requiring no extra effort from users.
- **Participation rewards**. We know from research on social features that user participation increases when contributors are visibly rewarded, such as by adding points or badges to their profiles. Many winning intranets did exactly that. Because there's real business value to features like knowledge sharing and innovation management within an enterprise, some intranets went beyond the symbolic value of visible recognition and offered real prizes to employees who gathered sufficient participation points.
- **Customized collections**. The default intranet information architecture (IA) must be based on the average employee's tasks and usage patterns, but can never predict any individual user's information needs with 100% accuracy. To contend with this fact, designers often allowed users to customize content collections.

Employees are the ultimate knowledge resource, and many winning intranets provided features to transform user behavior into manageable knowledge. As noted above, companies took advantage of usage frequencies to create a simple rating system for intranet pages. Another interesting idea is Heineken's search results pages, which list employees who've conducted similar searches — and thus might be working on similar problems. If implemented on Google, such a feature would spark a privacy outcry; within the enterprise, it's just one more way to help employees share knowledge.

Although more in the area of general social features than knowledge management, several winning sites offered features that let employees create and share video content. This builds on the trend we've noticed for several years toward increased use of video on intranets.

CONTINUED TRENDS

Once again, we saw many key findings from previous *Design Annuals* in this year's winning intranets, with the main difference being even better usability as the designers built on lessons from previous winners.

- A wide spectrum of technology solutions: there's no single way to build a great intranet.
- Better-structured intranets based on task-centered IAs, often breaking up a legacy of information silos.
- Reliance on user research methods — including user testing, personas, and card sorting — both for design decisions in general and IA decisions in particular.
- News as a main homepage feature, but with increasing emphasis on the usefulness of news stories.
- Better employee profile pages. In addition to offering information beyond plain contact listings, profiles were typically coupled with a more structured way of finding employees with specific expertise.
- Blogs by both executives and regular employees.
- Emphasis on search and on initiatives to improve search quality (which continues to suffer on many intranets).
- The use of pre-designed page layouts and a CMS to establish and maintain content consistency.
- Training for site managers and people in charge of individual areas, in recognition of that fact that UX quality derives from people and not just technology.
- Content curators assigned to keep specific pages up-to-date.
- Intranet branding, typically with somewhat functional names, such as *BenNet*, *BrandPortal*, *the Hub*, *InnovCenter*, *kate2.0*, *My.Habitat*, *the Portal*, and *Wooby*.

We also noticed that several intranets used design ideas — such as mega-menus and search suggestions — that until recently were considered emerging design patterns on the public Internet. The main difference is that, on intranets, such features can be adapted to the organization's special circumstances. For example, a user who is starting to type out the word "vacation" can be shown "paid leave" as a suggested query if the HR handbook uses that term.

ROI

As in past years, the return on investment from better intranet design seemed strong, but was mainly supported by anecdotal evidence: happy users, extensive use of new features, and fewer calls to support. Of course, when something is used more and yet generates fewer support calls, it's a safe bet to say that usability has improved. It's also reasonable to claim the reduced support costs as a direct monetary gain from the usability efforts. (And remember: support costs include not just the money spent on the call center, but also the cost of users' time, both while they're getting help and while they struggle with the problem before deciding to call.)

There were impressive ROI indicators across this year's winners. On the AMP intranet, for example, use of search increased by 300% after the search feature was improved. Because we know that users are quick to abandon poor search features, this is a strong indication that the new search is better at getting people the

information they need. Although a 300% increase in search use is a huge jump, it's not an unprecedented magnitude of growth in the annals of usability ROI when a team really focuses on improving a key feature.

Decreased use can also be a good ROI indicator. For example, Habitat for Humanity saw a 60% drop in "where do I find…?" questions after launching its improved design. A sure indication that users are getting the content they need more often.

Sometimes ROI is quite indirect. In the case of Bennett Jones, the direct benefits of an improved intranet — with increasingly useful knowledge management — come from helping lawyers better do their job. But indirect benefits accrue in areas as diverse as sales and recruiting: Potential clients want law firms to show evidence of efficient technology use to hold down billable hours, and promising law school graduates ask recruiters about the level of technology support they can expect from a given firm.

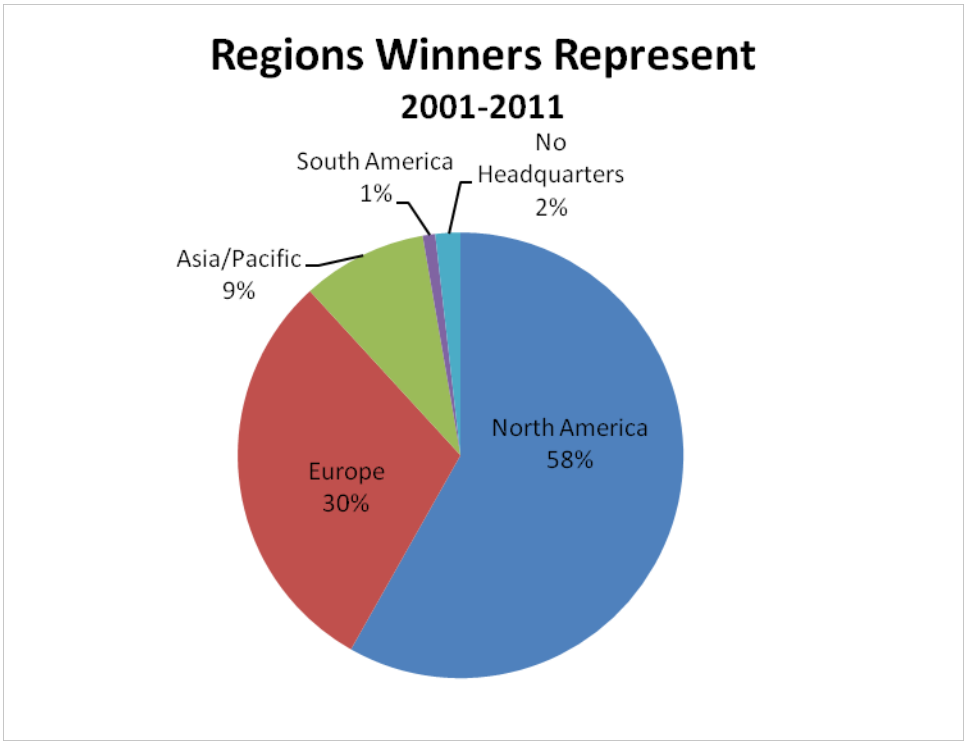
Overview of the Winners

EIGHT COUNTRIES, FOUR CONTINENTS, AND NINE INDUSTRIES

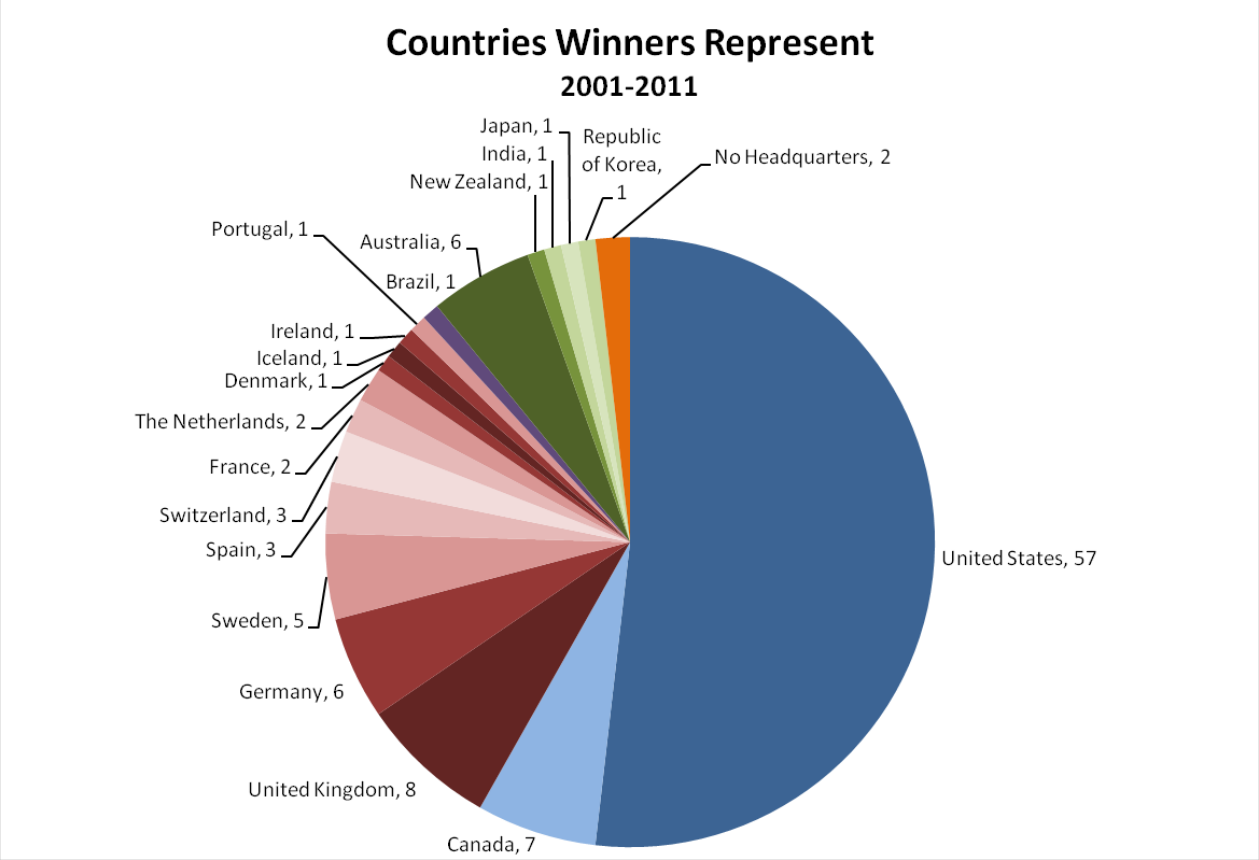
This year, our winners are the most international group to date, with the 10 winning companies serving organizations based in eight different countries. The US had three winners, and each of the following countries had one winner each: Australia, Canada, France, Portugal, The Netherlands, Republic of Korea, and Switzerland.

This marks the seventh time a Canadian company has won, the sixth time an Australian company has won, the third time a Swiss company has won, and the second time French and Dutch companies have won. This year includes our first winners from Portugal and the Republic of Korea.

2011 WINNERS	
COUNTRY	**NUMBER OF WINNERS THIS YEAR**
UNITED STATES	3
AUSTRALIA	1
CANADA	1
FRANCE	1
PORTUGAL	1
THE NETHERLANDS	1
REPUBLIC OF KOREA	1
SWITZERLAND	1



Pictured: Since 2001, 58% of winners (64) have been from North America, with 30% (33) from Europe, 9% (10) from Asia/Pacific, 1% (1) from South America and 2% (2) with no official headquarters.



Pictured: Since 2001, 19 countries have boasted *Design Annual* winners. Two organizations had no headquarters — one was a global network of organizations and the other considered itself to be global and not located in any one country. Countries are organized by region, going clockwise and starting with North America, then Europe, followed by South America, and Asia/Pacific.

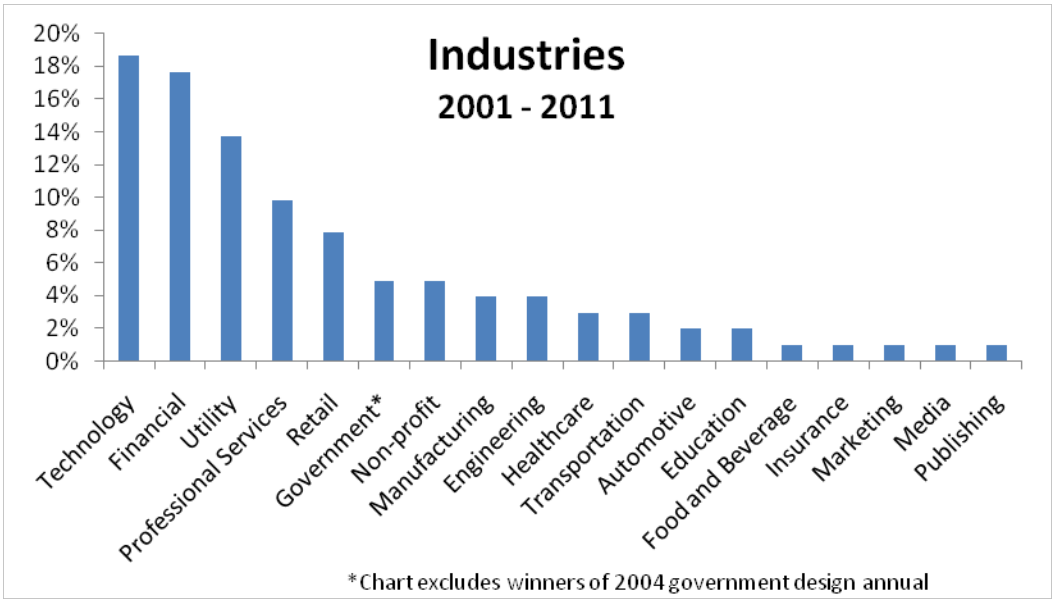
This year's winning companies include four utility companies, with one electrical power holding company and three telecommunications companies. We also have two financial organizations, a professional services company, a non-profit, a construction and engineering company, and a brewer. This is the first year we've had a winner from the food and beverage industry.

This is also the first year since we began the *Design Annual* in 2001 that a technology company hasn't appeared in the top 10. Financial services companies appear in the top 10 for the 10th year in a row. (The 2004 annual focused specifically on government organizations.) This is the fourth year in a row — and seventh year overall — that a professional services firm appears in the top 10 and the second year in a row we've honored a non-profit organization.

This year's winners represent six industries:

- Utility (4)
- Financial (2)
- Engineering (1)
- Food and beverage (1)
- Non-profit (1)
- Professional services (1)

The following chart shows the industries represented by winning intranets since the first annual in 2001. With the inclusion of one non-profit this year, non-profits have now surpassed manufacturing to become the sixth most popular industry represented by *Design Annual* winners.



Pictured: Technology and financial services organizations have produced the most award-winning intranets since 2001. This year's non-profit winner moved the non-profit category ahead of manufacturing. (In 2004, we focused our *Design Annual* on government agencies, so we've excluded those 10 winners from this chart.)

SMALLER WINNING ORGANIZATIONS

Over the years, the average size of winning companies has been 64,000 employees. When we started the *Design Annual* in 2001, smaller companies typically won, and the average company size gradually increased through 2006 (excluding the 2004 government-focused *Design Annual*).

In the past few years, we've seen a return to smaller company sizes. In 2010, however, the average number of users that winning intranets supported was 175,200 due to Walmart's intranet, which supported 1.4 million store associates. Without Walmart, last year's average was 39,100. Each of the last three years featured companies averaging between 35,000 and 40,000 employees.

This year's winners range from Verizon's 230,000 employees to Habitat for Humanity International's 800 employees. Four of this year's winning intranets support fewer

than 5,000 employees.

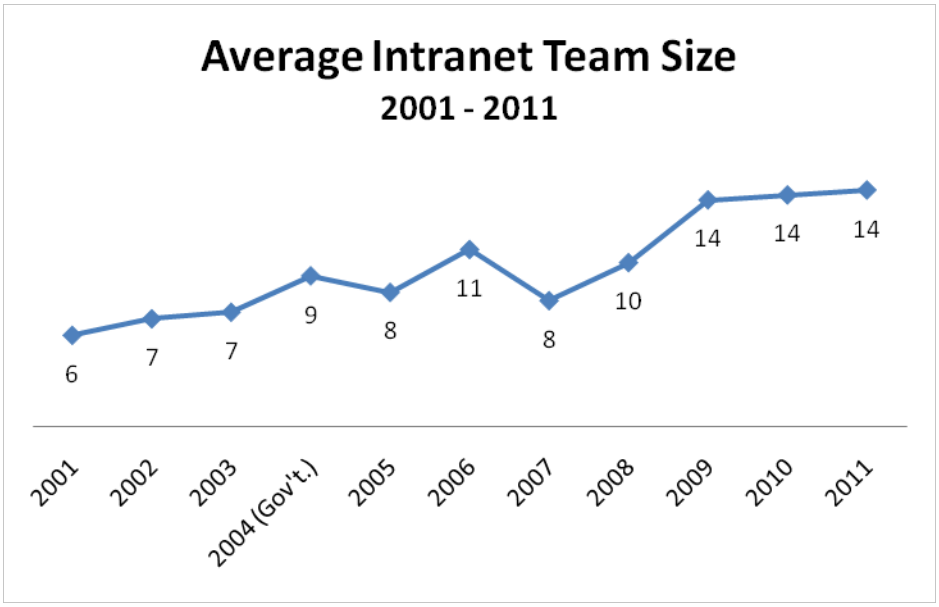


Pictured: The average number of employees that winning intranets support has returned to the company sizes we saw in the *Design Annual*'s early days. 2010's high average was due to Walmart's site, which supported 1.4 million store associates. The average for 2010 excluding Walmart was 39,100 — very close to the averages for both 2009 and 2011.

TEAM SIZE: STEADY AT 14

For the past three years, average team size has held steady at 14 people. Team size has gradually grown over the years, from an average of six in our first *Design Annual* to the current 14. That team size has held steady for the past three years might relate to organization size, as similarly sized companies produce similarly sized intranet teams.

Team sizes this year ranged from 27 for AMP (3,500 employees) and Bennett Jones (925 employees) to seven for Bouygues Telecom (9,000 employees). Total team size includes those working full- and part-time on the site, as well as those working on the intranet from outside the organization, such design firm or external consultancy employees.



Pictured: Intranet team size has held steady for the past three years. (For information about individual team structures, see each profile.)

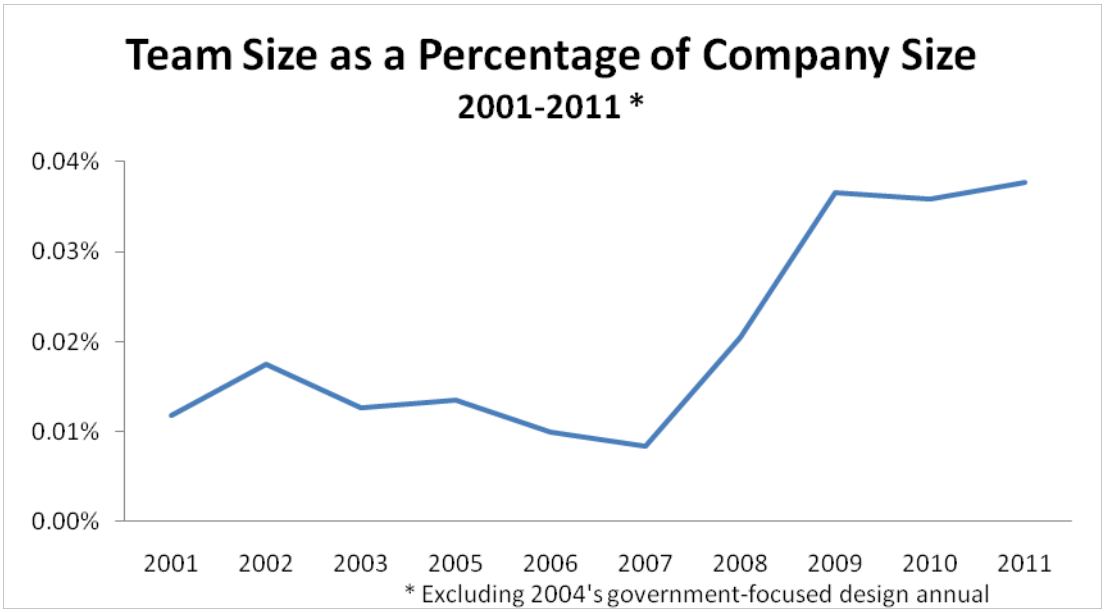
Over the years, we've seen an increase in team size as a percentage of the number of users the intranet supports. However, team size is still tiny compared to company size, this year representing .038% of the company size, up slightly from last year's .036%.

Although it's nice to see more resources being devoted to the intranet, each year's teams have included a growing number of outside resources, such as design firms and consultants, who have added to the team size. This means that team sizes, already rather small, are even smaller after a redesign ends and the maintenance phase begins.

Also, intranet teams are increasingly realizing that the phase after a redesign is much more than maintenance. Several teams this year spoke of the new design as a perpetual beta needing continual improvements. Companies are turning away from thinking of a redesign as a one-time improvement and planning for the longer-term, looking to make improvements as time goes on.

This makes it all the more essential to have a strong and adequately staffed intranet team that can support the site after the redesign projects have finished. Hiring extra resources during redesign makes sense, but intranet teams also need appropriate resources to keep the newly designed site efficient and effective over time.

That said, we are happy to see a general pattern of growth in intranet team size over the years, which reflects an increased emphasis on and awareness of the importance of the intranet to an organization.



Pictured: We calulated intranet team size as a percentage of the number of users the site supports. This year's percentage is an all-time high, though it is still quite a low percentage at 0.038%.

BUILDING THE BEST TEAM: USING INTERNAL AND EXTERNAL RESOURCES

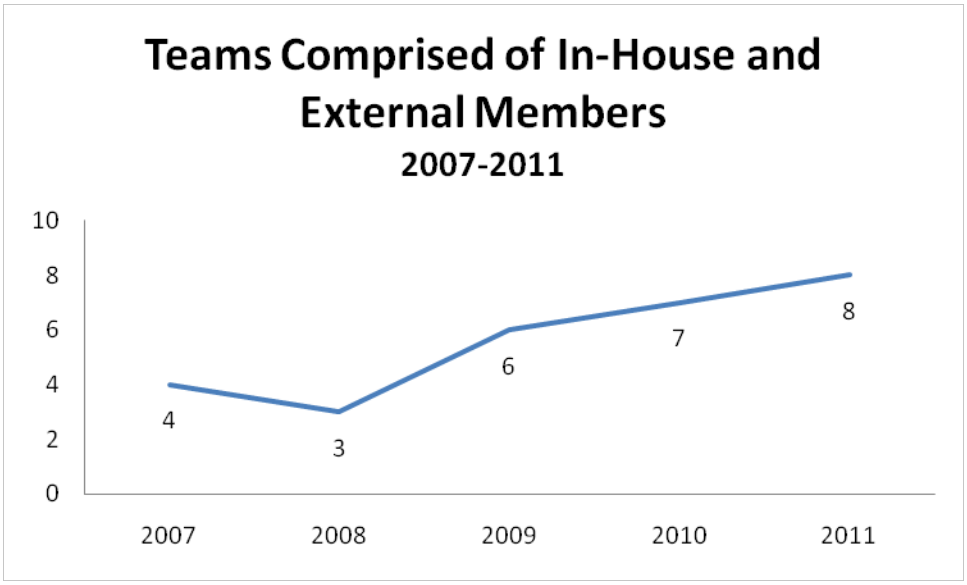
Over the last three years, we've seen an increase in the number of teams that rely on outside resources, whether design firms, software consultants, or other external consultants. This year, eight teams were comprised of in-house and external resources.

Intranet teams continue to recognize their own strengths and weaknesses, supplementing skills with outside expertise as needed. This continuing trend also reflects the importance of intranet design: companies are willing to spend the money to bring in the appropriate resources.

Teams looked to outside help for design and information architecture (IA). They brought in experts in strategy, business analysis, and change management. They sought assistance with prototyping, development, integration, and optimization.

In the *Design Annual*'s early days, third-party agencies often designed the winning intranets without any in-house resources. Now, it's much more common for companies and agencies to work together to create sites. Each brings their own strengths to the site, combining outside expertise and in-house knowledge and skills. Ideally, this results in a site that meets the individual organization's specific needs while leveraging the skill of outside groups.

We've seen an increase in the number of organizations who work with agencies to create winning sites; this year, eight organizations worked with external experts. Four of our winning companies worked with more than one agency: Credit Suisse worked with two, Bennett Jones worked with three, Bouygues Telecom worked with four, and AMP worked with five different outside companies.



Pictured: An increasingly number of intranet teams combine individuals from outside the organization, such as external design firms or outside consultants, with in-house team members. (For more information on individual teams and their collaboration with outside firms, see the individual company profiles.) Eight of this year's 10 winners used outside resources to build their sites. (Prior to 2007, most winning sites were created solely by third-party Web design firms.)

THE 10 WINNERS *IN ALPHABETICAL ORDER*	
AMP Limited (Wealth management; Australia)	Treating employees as customers, the AMP intranet team aimed to "win back" users by revamping the site search and IA and offering a new focus on people.
Bennett Jones LLP (Legal; Canada)	Through strong planning, user research, and smart, thoughtful design, the Bennett Jones intranet team built not just a new intranet, but also a mission-critical knowledge management tool.
Bouygues Telecom (Telecom; France)	Working with four agencies, the four-person Bouygues Telecom intranet team used careful planning and precise documentation to tackle a long-overdue site overhaul. Hard work on 27 simultaneous redesign subprojects resulted in a revitalized portal.
Credit Suisse AG (Financial Services; Switzerland)	The Credit Suisse Corporate Web Team designed their intranet as a platform to put the employee — not the organization — at the center of the intranet. Personalization, customization, sharing, and collaboration all shift the focus to people, helping employees get their work done and find the information they need.
Duke Energy (Utility; US)	The Duke Energy intranet team focused on strong planning and incremental change to transform the site into a useful tool primed to provide information, simplify work, and encourage communication. This feat was all the more impressive because the team members worked with SharePoint without customizing it.
Habitat for Humanity International (Non-profit; US)	By reorganizing site content, breaking down site barriers, and offering useful tools for sharing information, the HFHI team created an authoritative resource to support the needs of 25,000 registered users scattered throughout the world.
Heineken International (Retail; The Netherlands)	Heineken's BrandPortal gives worldwide users quick access to brand assets on a colorful site offering an ever-growing array of collaborative features. Such features — including *Heineken on the Web*, which presents a snapshot of what customers are saying about the brand on Twitter, blogs, and YouTube — take the site beyond the ordinary.
KT (Telecom; Republic of Korea)	Within six months, the KT intranet team turned an information center into a collaborative and dynamic site that lets employees and management connect, communicate, and get their work done. Colleagues can communicate through the site's IP telephony or tools for faxing, emailing, or text messaging and share ideas through personal blogs, microblogging, and forums.
Mota-Engil Engenharia e Construção, S.A. (Engineering; Portugal)	Mota-Engil's *InnovCenter* encourages, guides, and tracks innovative ideas from inception to completion. A powerful tool for innovation, it inspires participation, informs contributors, enables decision-makers, and results in successful innovation projects across the company.
Verizon Communications (Telecom; US)	The addition of *My NetWork*, a suite of collaboration tools, helped transform the Verizon intranet from an information site to a communication and collaboration site. Additional enhancements to news and the homepage make for an engaging site.

Common Themes Among the Winners

From year to year, we see some of the same strengths re-emerge among our winners. As in years past, this year's winners used content personalization and customization to deliver the right information to the right employees. Content reorganization — based on task or content type, rather than organizational structure — also moved intranets in a positive direction.

In addition to these common trends over time, we noted the following trends specific to this year's winners.

MORE MOBILE

Last year, we noted the trend toward mobile intranets, and this year's winners continued that trend. Six of the winning sites had mobile versions of their sites, optimized for the most common company-issued devices. And, like last year's winners, this year's design teams focused on providing content that made sense for mobile workers, rather than recreating the site as a whole.

- AMP optimized the mobile site for company-issued Blackberries and iPhones. The early-stage mobile site currently supports limited functionality, with an emphasis on a style sheet created for fast and efficient experiences.
- Bennett Jones is in the very early stages of mobile experimentation and currently offers limited access to blogs.
- Bouygues Telecom supports Android, iPhone, and WAP; 98% of the telecommunications company's employees having mobile devices with unlimited data plans. The mobile site's content includes a company directory, shuttle bus timetable, and corporate and location information.
- Credit Suisse optimizes for Blackberry and aims its mobile site at middle and senior management. The site provides news, contacts, market news, and an employee directory with organizational chart.
- KT 's mobile site offers content such as news, task management tools, employee search, and incoming email.
- Verizon supports the enterprise-standard Blackberry, but is moving to support Android as well. Content includes news, to-do lists, social content, the employee directory, and an ideas application. The company focused on creating light pages with streamlined interactions for users on the go.

TAKING CUES FROM THE WEB

This year's winning intranet teams were open to inspiration from any source, and frequently turned to the Web for ideas. Verizon looked to popular sites so that its intranet would keep pace with user expectations. Bouygues Telecom also looked to popular sites for design solutions and were inspired by its team's own use of iGoogle and NetVibes.

Unlikely sources also inspired design. Nike and Apple inspired Bennett Jones' accordion menu design. AMP's team looked at hundreds of page elements on news, social media, design, and government websites. KT and Heineken mimicked the best practices of well-known local search engines.

This year's winners also mimicked several other trends on popular sites.

Mega-Menu Navigation

With the depth of content most intranets provide, mega-menu navigation seems to be a solid fit. This year, three of our winners used this menu style to present options to users. AMP, Duke Energy, and Habitat for Humanity all saw the benefits of presenting information in a large menu that allows access to additional content and provides opportunity for more organized options.

Drag and Drop

AMP and Credit Suisse both used drag-and-drop functionality to make it as easy as possible for users to arrange customized content. On AMP's site, users could reorganize their *Shortcuts* list, available on the side of each page. On Credit Suisse, users could use drag and drop to move content modules around the page and to move content within modules.

Predictive Text

AMP, Habitat for Humanity, and Bennett Jones used predictive text to direct users to appropriate search terms and better results. All three offered suggested search terms based on the user's entry, so that users looking for "vacation," for example, would be directed to "paid leave."

Faceted Search

Faceted search, made popular through e-commerce sites, has found a home on the intranet. With so much content to sort through, facets help users narrow options to find the content that best meets their needs. AMP and Heineken offered facets on the side of the search results page to narrow results. Habitat for Humanity used a faceted structure for the full site navigation, letting users pick a category of content and then use facets to whittle down their choices. Bennett Jones used a wealth of information related to its *Knowledge Bank* documents to help busy lawyers find the right precedent among thousands of documents in just a few clicks.

THE PARTICIPATORY INTRANET: SHARING IDEAS AND MAXIMIZING KNOWLEDGE

No longer is the intranet a place to simply receive information. Intranets are interactive, inviting employees to participate and share knowledge. Sites encourage engagement — with the site, with the company, and with each other.

An organization's greatest assets are its employees. This year's winning intranets reflect that. Sites are working to maximize the collective knowledge, ideas, and experience of their workforces. These participatory sites let employees who might be physically located half a world away inspire, answer, challenge, and support one another.

This year's sites go beyond the intranet social networking tools of recent years to give users practical and simple ways to communicate with one another and even change the way work is done at the organization.

Sharing Information

Intranets have long offered document repositories for sharing information and team collaboration areas for getting work done. This year's sites included cross-functional

areas where worldwide or company-wide employees could post documents, share resources, and ask each other questions.

- Bennett Jones' *Knowledge Bank* is the intranet's key feature, providing access to legal documents, research materials, clauses, and resources. The team strives to make knowledge sharing part of each user's normal routine. Given that employees have asked to add a *Share Your Work* widget to the homepage, rather than keeping it only within the *Knowledge Bank*, it seems to be working.
- Habitat for Humanity has encouraged worldwide sharing through its *Samples Database*, where affiliates can upload samples of templates or documents, such as fundraising letter examples. This has been a popular addition to the site, helping scattered affiliates feel tied to one another.
- The *Trade Marketing Platform* on Heineken's site is one of the most popular and active, allowing worldwide employees and associates to share trade marketing inspiration and examples.
- Verizon's *Q&A* and Credit Suisse's *HelpExchange* let employees ask (and answer) questions.

Joining the Discussion

On intranets, information doesn't go one way. This year, commenting on news stories and other resources was popular, as sites increasingly invited employees to add to or provide feedback on site content and to engage with one another.

- AMP lets users comment on news stories. The total number of comments is summarized at the top of the page. Comments are listed beneath the story, with an open text field for users to join the discussion.
- Bennett Jones employees can comment on any resource in the *Knowledge Bank*. This allows them to point out errors, make updates, or make suggestions. Anonymous commenting helps junior staffers feel comfortable amending or correcting senior staff content.
- Duke Energy emphasizes commenting by listing the number of comments next to each headline on the homepage. Discussions spurred by commenting drive users back to the site to keep up on the dialogue.
- Verizon employees can comment on articles; pages on the site promote articles with the latest comments.

What's the Big Idea?

What better source for new ways to improve or advance the company than its employees? Four of this year's winning sites let employees submit ideas for company improvement, advancement, or innovation. The tools went beyond asking for ideas, providing varying frameworks for developing those ideas or presenting the outcome.

- *InnovCenter* is Mota-Engil's innovation management platform, taking ideas from inception to completion through the site. The site goes beyond an idea board, giving employees and management the tools to fully develop, plan, and implement ideas.
- Verizon's *Ideas* tool lets employees make suggestions, vote for or comment on other people's ideas, and see results. A heavily used tool, the mobile version is particularly popular among field employees who can submit ideas on the job.

- KT's *Action for ACTION* tool encourages employees to solve problems, enhance efficiency and share ideas.
- Heineken's *Innovators Community* lets users debate, discuss, give feedback, and inspire one another.

Recognizing Participation

Sites recognize top contributors, sometimes simply listing those who are most active, and sometimes providing points or rewards.

- Employees earn reputation points in Credit Suisse's *HelpExchange*, a tool that lets employees ask and answer fact-based questions. Contributors earn points by posting questions, providing answers, or leaving comments. As users earn points, more and more functions within *HelpExchange* open to them. Highly involved users who earn enough points essentially become moderators, helping to run the tool. Each user's point total is listed next to his or her name.
- Verizon's *My NetWork* pages offer views of content posted by the top contributors in each area.
- A points system rewards employees who are active on Mota-Engil's innovation tool. Point totals are shown next to employees' names and top users are recognized as the company's top innovators. Users can also use points they've earned for prizes.

POWER IN NUMBERS

Ratings, comments, views, actions

Many of this year's winning sites let everyone know what everyone else was doing on the site. Sites relied on the power of the community to help users find what was important, interesting, or inspiring.

Group Input

This year's sites opened up content to feedback, not only allowing users to comment, but also to quickly rate the site's information. Ratings can help employees find the site's most valuable information, as well as help content creators and site owners understand what information is most valuable or interesting. Ratings offer easy, instant feedback from the audience about the information's quality.

- On AMP's intranet, content creators can decide whether to let users rate their content. Each piece of rated content is accompanied by the average rating received and number of votes, and users can click on a star to rate the content themselves.
- On Habitat's site, employees can recommend a resource. Top-rated resources are listed first.
- Verizon's site lets users rate content on a five-star scale. The number of views and overall content rating are summarized at the top of the article. Links to the most-viewed content are offered throughout the site.
- Using Credit Suisse's question and answer board, Verizon's idea board, and Mota-Engil's *InnovCenter* idea tool, employees can vote up or down on an idea or answer. The best questions, answers, or ideas rise to the top.

- On AMP's site, users are invited to tag content via a box at the bottom of each page. This helps improve metadata, resulting in better search results and related resources.

What's Everybody Else Up To?

Intranets are harnessing the power of knowing what users are doing. In addition to listing what users are up to on the site or in their jobs, sites are also harnessing the power or this information and using it in interesting and meaningful ways.

- Each time an individual or a group bookmarks a resource on the Bennett Jones intranet, that person or group is added to a list of *Endorsements* associated with that resource. The assumption is that if someone bookmarks a resource, they find it valuable. Seeing the list of endorsements associated with a resource helps users evaluate its pedigree.
- Heineken's search results page lists other employees who conducted similar searches, letting users know who is working on similar projects. The search results page also lists hot topics in search, giving users a sense of what other people across the company are doing.
- KT's search results pages include the user's personal search history, as well as a list of popular keywords.
- Simply knowing how many people viewed a page can help users assess whether they want to see it. Mota-Engil offers an option to see ideas with the *Most Views*. Verizon notes the number of views at the top of content pages as well as the most popular content in the site's collaborative areas.
- Credit Suisse's user profiles include the user's recent site contributions, which can help further define the user's area of expertise.
- Tag clouds on KT and Verizon show employees what the company as a whole is talking about.
- Microblogging on Heineken, KT, Credit Suisse, Verizon, and Mota-Engil lets employees share their day-to-day work with colleagues.

MAKING CONTENT STRONGER

In most intranet redesign projects, content contribution and maintenance plays a major role. While many teams overhauled the content system during redesigns, some went a step further and reconsidered the needs of and options for their content providers. Companies created new ways to convey information, tying together resources that weren't previously available in one place, and in some cases changing how work was done at the organization.

- Bennett Jones created *BenNet Books*, which allows any employee to assemble *Knowledge Bank* resources into a guide by linking them together through a table of contents.
- *Push Wooby* on Bouygues Telecom's intranet lets users create a dashboard showing essential information from a variety of SharePoint sites. After discovering that users were going to multiple SharePoint sites to check data daily, the team members created *Push Wooby* to let users push content from those sites to a single dashboard view.
- Habitat's intranet allows publishers to create *Collections*, which are a focused group of resources about one topic that might otherwise be scattered across the site.
- Also at Habitat, a new *Communities of Practice* structure brings together experts from worldwide affiliates across five regions. Regions previously

maintained their own content, but now engage across regions to create content. This has helped bring global consistency to the organization's thinking.

MULTIMEDIA TO EDUCATE AND INFORM

Although using video and audio on intranets is nothing new, some of this year's winners had new or innovative ways of employing multimedia to communicate across the organization. Organizations also encouraged employees themselves to create and share video content.

- AMP's team members used video to introduce the new site to employees. They also encourage employees to add their own video content to the site, recommending that such content is less than two minutes in length.
- Bouygues Telecom's *Wooby Motion* tool lets any company employee upload a video, as well as convert the video to the correct format. The tool is popular and used to publicize events, raise employee awareness, and offer training and news. The team used videos — starring employees — to introduce the new site. Teams around the organization are using the tool to promote their own projects.
- Credit Suisse used avatar videos to introduce users to the new site's functionality. In user testing, the designers found that less-experienced users weren't familiar with the drag-and-drop customization tools the new site uses, but once they were demonstrated, the users liked them. The designers therefore developed avatar videos to introduce the new site feature. They also use video and voice recordings to train content providers across the organization.
- Habitat for Humanity recorded training phone calls and put them on the site as podcasts.

AMP Limited

Using the intranet:
AMP is a leading wealth management company operating in Australia and New Zealand, with selective investment management activities in Asia (through AMP Capital Investors) and a growing banking business in Australia.

Headquarters: Circular Quay, Sydney, NSW, Australia

Number of employees the intranet supports:
More than 3,500 employees

Locations where people use the intranet:
Primarily Australia and New Zealand

Design team:
The core team responsible for the design and build was a collaboration of in-house teams from IT and Public Affairs, along with some limited consultancy expertise.

Members:
Intranet Governance Forum: Vernon Meyer, Intranet and Innovation Manager; Rebecca Makila, Internal Communications Manager; Annalie Killian, IT Director; Aneta Beocanin, IT Manager; Joanne Hawkins, Communications Director; Tim Parks, Senior Manager, Internal Communications; Cara Reil, HR Director; and Justin Maughan, Digital Channel and Strategy Manager

Intranet team members: Vernon Meyer, Intranet and Innovation Manager; Rebecca Makila, Internal Communications Manager (Public Affairs); Ivan Prpic, Online Producer; and Jason Lamble, Analyst

IT team members: Andrew Vaughan, John Norman, Chris Fleming, Rob Hudson, Rebecca Lee, Prakash Chaudary, Maniraj Mahendrarajah, Richard Martin, Nikos Gavriniotis, John Perumalla, Yuval Ararat, and Anuradha Satish

Project services: Glenn Tolan, Project Manager, and Vicky Hughes, Change Manager

Intranet site managers (decentralized publishing model): Kerry Maton, Ben Mabon, Belinda Davidson, Robert Wilkins, Naomi Hishon, Bethany Poore, Dorothy Cheng, Anastasia Vaughan, Jane Ewings, Gordana Tesic, Samantha Petti, Katy Sheppard, James Williams, Kimberly Wills, Mike Izzard, Andrew Gorvin-White, Brenda Bray, Michelle James, Linda Branton, Viki Jones, Lauren Overton, and Kiran Rajpal

Hothouse Information Architects: Piero Colli and Barbara Glover

Morgan Creative: Grant Newton and Mario Rogic

Projekta digital production agency: Rhadi Bryant and Nathan Richman

Gruden Interactive Design & Development Agency: Mark Stanton

Andrew Boddy Design: Andrew Boddy

SUMMARY

Treating Employees as Customers

Employees as customers — that's the approach AMP took when starting its intranet redesign. The designers knew that employees were unhappy with the site, which contained siloed, brochure-like pages based on who owned the content. Employees couldn't find the information they needed and, as a result, were turning back to email to share information.

To remedy this, team members took on a major site redesign with a three-pronged focus: search (which they knew was painful), IA (which was based on the organizational structure, making it difficult for employees to find information and get their work done), and people (with an emphasis on profiles, personalization, customization, and content interaction.)

At redesign time, the stars seemed to align. Although employee complaints triggered the need, a review by the Intranet Benchmarking Forum, inspiration about collaboration from an Innovation & Thought Leadership Festival, and a corporate cultural-change program all informed, inspired, and influenced the end result. This helped designers both get stakeholders involved in the redesign, plan for future

growth, and commit to the investment required to make the intranet a core business tool for the long term.

Team members knew that making employees their customers meant listening to them and involving them at every step along the way. They worked closely with employees throughout the organization, doing thorough task analysis and card-sorting exercises to both identify the content users needed and label and name that content effectively. The user research also let the team rely on user data to build the case for intranet changes, giving them data to back up their design decisions.

The team understood they needed to treat the intranet as a product that would be advertised to employees and stakeholders alike. And they knew they had to "win back" employees to the intranet. The site's audience had lost interest based on poor past experiences. The team needed the new intranet site to reflect the company's goals with retail customers: to be easy to do business with, contemporary, brand-aligned, and customer-driven.

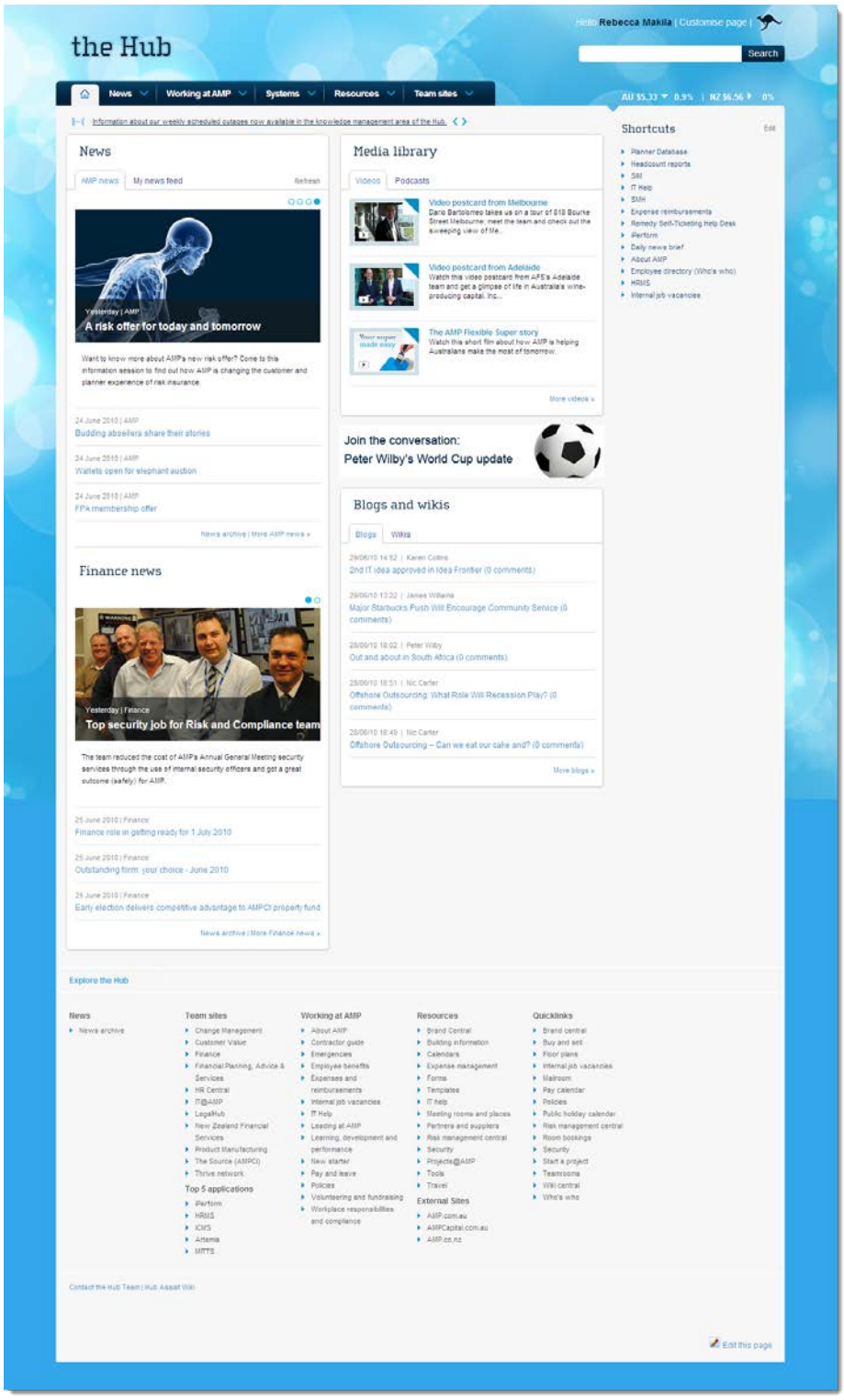
The homepage, as well as the rest of the site, presents location-specific information and links. Mega-menus in the site navigation, as well as footer links, are location-specific, preventing an employee in Australia, for instance, from using a form intended for New Zealand employees. The site provides a single homepage, which is tailored to the user's profile in terms of geographic location and team.

News is the main homepage feature, with company-wide news, employee-selected news feeds, and team news. The site also features, at the top of the page, a one-line area for special announcements relevant to all employees, regardless of location or team. These headlines rotate on a 10-second timer.

Company-wide news includes a rotating area displaying headlines and images for the four most recent news items. News contributors — a group of about 12 people — are encouraged to create engaging headlines and use compelling images to keep the content quality high. Older news items move down to a list of headlines. The team made a conscious decision not to include thumbnail images with older news stories and to focus on the headline itself. Most news is company-wide, as the team is trying to avoid the information silos that made the old intranet difficult to use.

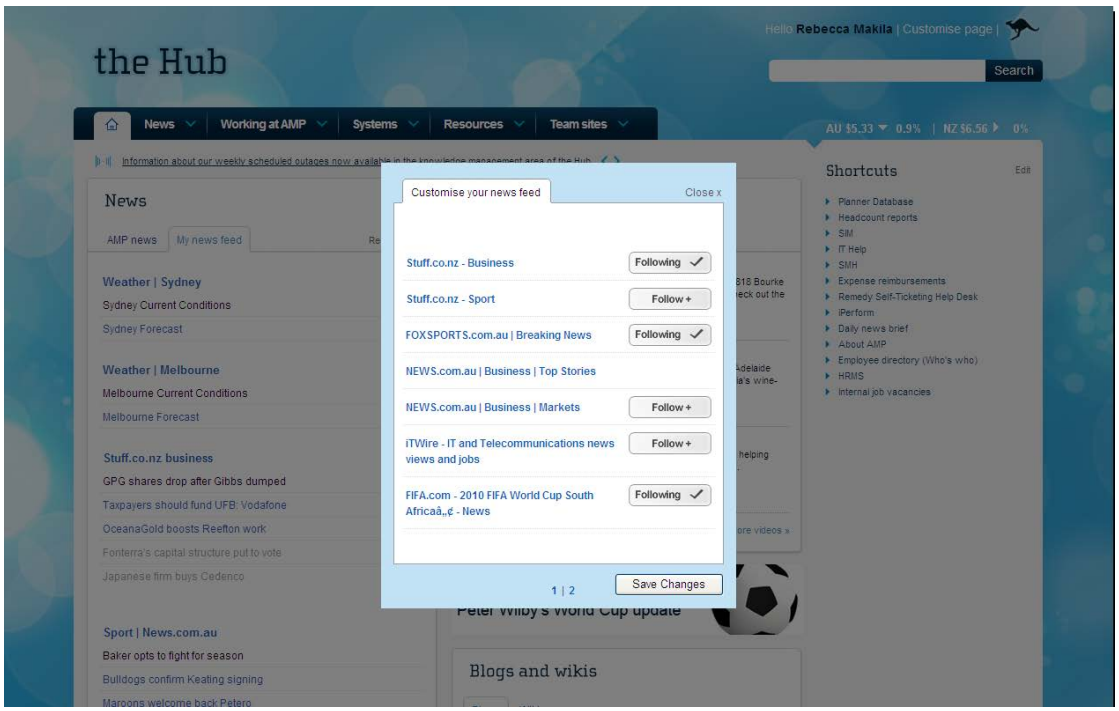
When users click to view more news in any section, additional headlines appear within the homepage.

The homepage includes the *Media Center*, which highlights recent videos and audio podcasts. The new site encourages the use of various media to communicate ideas, and using video was one of the many ways the intranet team introduced the new site to employees. Employees are encouraged to make videos for the site and to keep them under two minutes in length. Videos play in an embedded player, so users can view them directly within the intranet site.



Pictured: The Hub's homepage features company-wide news, team news, and access to personalized news feeds, as well as recent content from the media library, blogs, and wikis.

Users can select their own news feeds from a predetermined list of trusted sites that provide diverse information, including general news, weather, sports, special events, IT news, and market and financial news. To add a feed, a user simply clicks *Follow*.



Pictured: Users can add news from a number of trusted sites by clicking the *Follow* button next to the source.

Defining Site Structure Through User Engagement

Card sorting, wireframes, and prototypes helped the team develop the site structure. They built a working site prototype, which ran alongside the previous site for five months, and used it to test and refine the new design.

The change from organization- to task-based architecture was a huge success for the site. The mega-menus reveal the site structure, which clearly organizes information based on extensive user feedback. A *Learn More About...* option at the end of each menu links users to a page listing all available resources, with context to describe usage or tell users how to get more information.

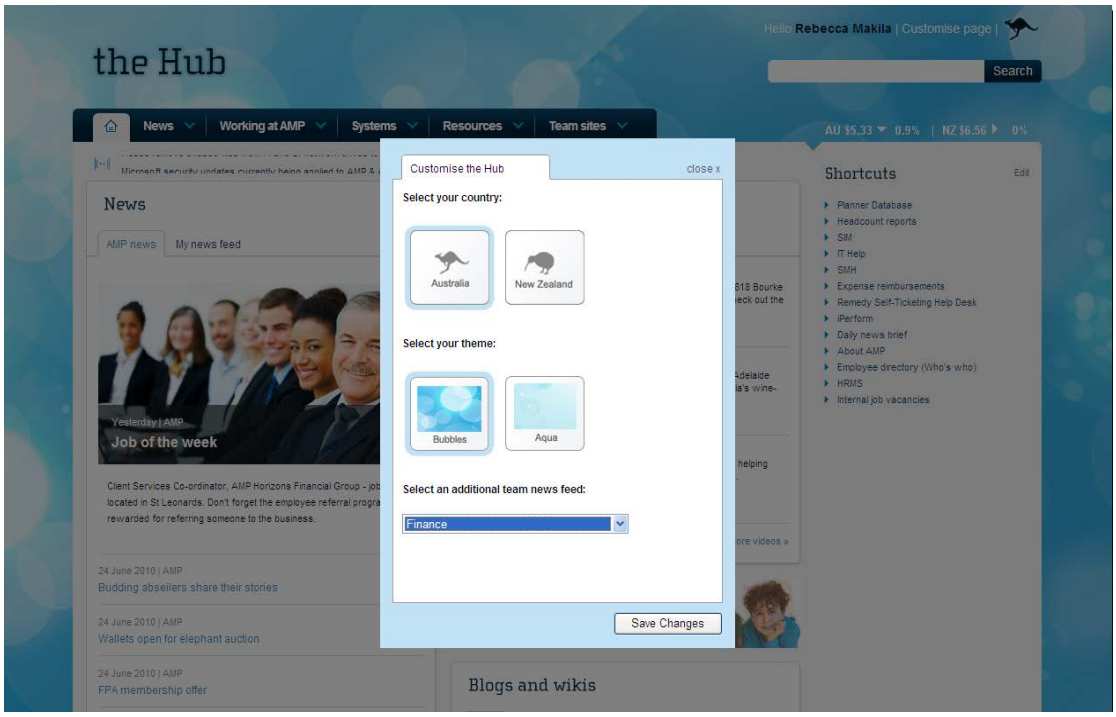
Shortcuts let users edit or add links to systems. The top five systems are listed as the default for all users, but individuals can edit the list. Shortcuts can also be added to any intranet content, external site, or any system. Systems are available via an alphabetical list, or users can bookmark pages via an *Add to Shortcuts* link at the top of each page. Shortcuts can be reorganized dynamically in the user's list via a simple drag-and-drop mechanism, letting users put links in the order they prefer. Shortcuts appear on the right side of every page.



Pictured: A mega-menu, based on extensive user research, exposes the new site structure, which reflects user needs rather than organizational structure. Users can add shortcuts to content, creating a personalized set of navigational links available on the right side of every page.

Team members provided some customization elements, planning to launch a few, watch their uptake, and then decide whether to implement more. Knowing that customization features sometimes fail because users don't want to bother with them (or don't know how they work), the designers integrated customization into the site experience and made it as simple as possible for people to use the features. At launch, users selected three simple identifiers to target content: country, background theme, and a team news feed. These items can be changed at any time.

When any change is made, the site uses modal windows to keep users on the page while presenting options to them. As a result, users don't have to navigate away from content to change a preference.



Pictured: When users first visited the new site, they were asked to select three options: location, theme, and an additional team news feed. These can be changed at any time by clicking *Customise page* in the upper right.

Encouraging Two-Way Communication

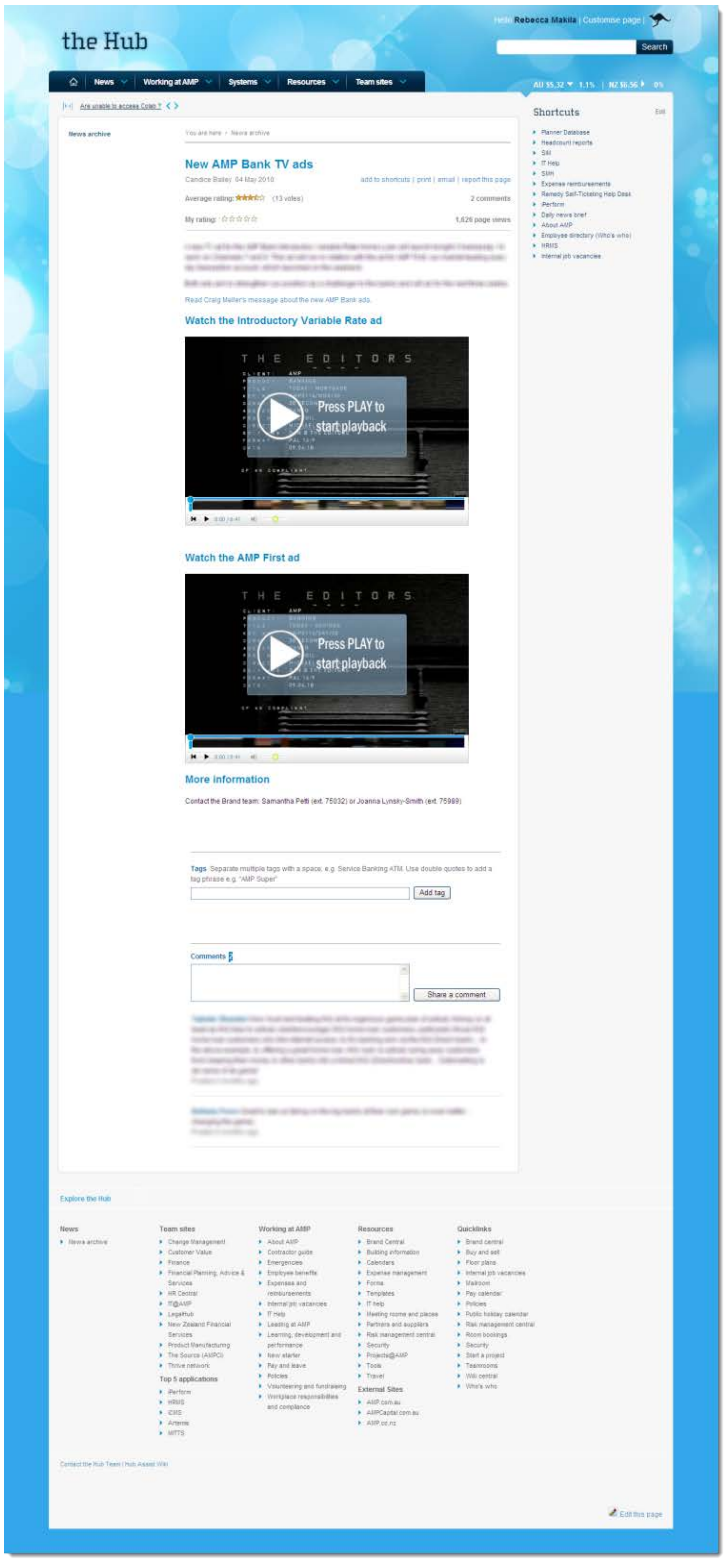
The team wanted the intranet to become a way for the company to engage in two-way communication. As such, they introduced commenting, rating, and tagging.

Content creators can decide if they want users to rate content via an option selected at the time of publishing. When ratings appear, the average rating for the page is shown, together with the number of votes that resulted in that rating. A space for *My Rating* appears below; users simply click on a number of stars to submit the rating for the page. Page view information is shown as well, giving both users and content creators feedback on the page's popularity.

Users can tag the content on any site page via the tag box at the bottom of the page. This helps the search engine by associating user-generated tags with content.

The number of comments on a page is summarized at the top of the page, and any employee can add a comment at the bottom of the page. Previous user comments are listed at the bottom of the page, together with the commenter's name and when it was posted (for example, "Posted 3 days ago").

Throughout the site, the team paid attention to details such as button labels to make every function as clear as possible. For example, pages allowing commenting include a button called *Share A Comment*, rather than *Submit* or *Save*, to indicate that clicking the link will make the comment visible to others.



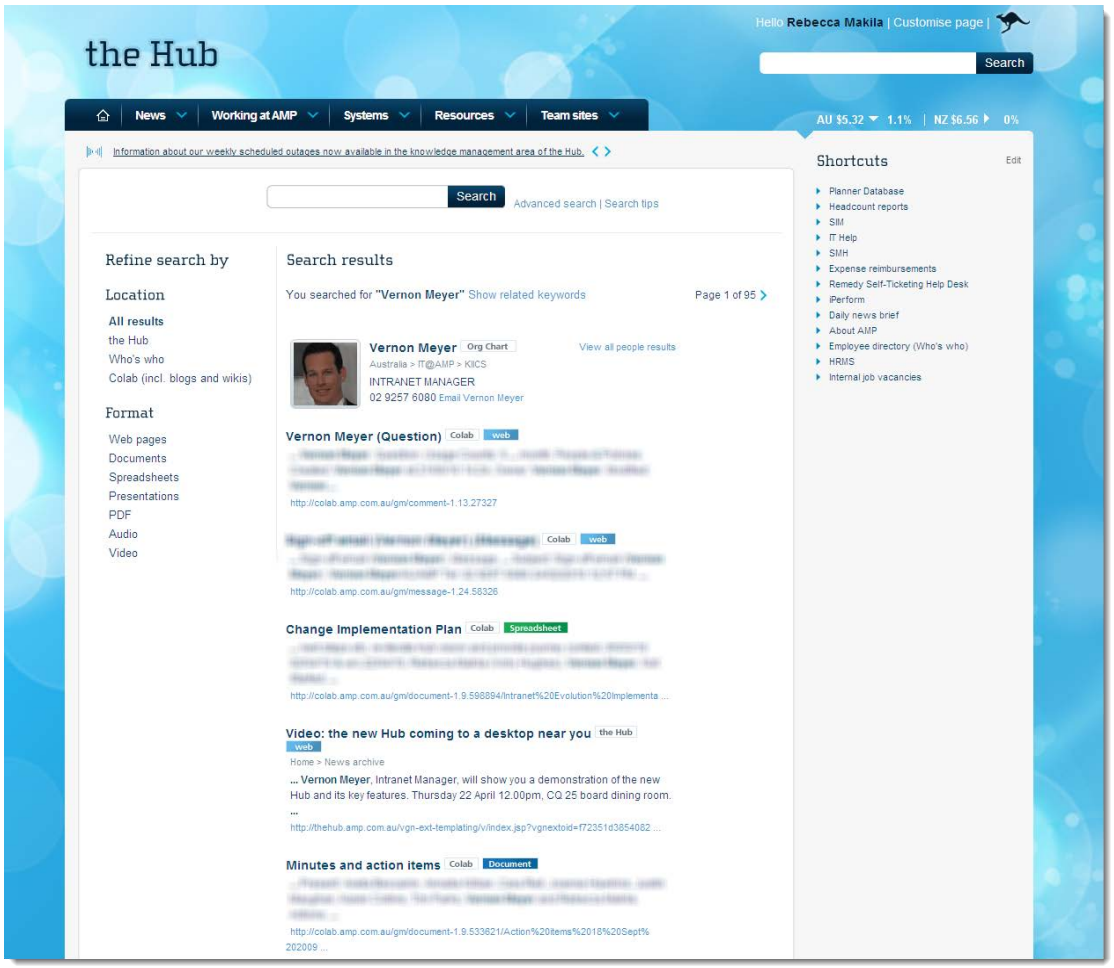
Pictured: Users can interact with the site in several ways, including rating content using a star rating scale, adding tags to help the search engine identify content, and adding comments.

Improving Search

Search was a main area team members needed to improve. They started with a new tool, but also understood the need to improve the content being searched in order to return strong results. They therefore added mandatory metadata fields to the content management system, and let users generate tags for all intranet and knowledge management database content. In addition, team members did keyword matching to expected results. Also, because they knew that employee searches were very popular, they weighted people results so they would appear high in the search results.

User-focused aids — such as predictive text, “did you mean,” the use of tags to execute searches, and filters to refine results — all help employees find the content they need. The biggest win? Users no longer need to visit a particular system to conduct a search. All intranet content is searched from the search box available on each site page.

Users can filter search results, and visual indicators help them scan results. *Colab* content includes anything in the collaboration space, including blogs, wikis, and documents. *The Hub* is any intranet content page, and *Who's Who* is the people directory. The site offers format filters as well, allowing users to see HTML pages, documents, spreadsheets, PDFs, presentation, audio, and video results. Color coding is intended to help users quickly locate formats — using red for PDF, for example, to match Adobe Reader's use of red, or green (as in Microsoft Excel's icon) for spreadsheets.



Pictured: Search results prioritize people matches. Filters for location and format help users narrow results.

User research and early planning clearly paid off in the new site. With a clean and clear design, a strong site structure, and improved search, the site has a lot going for it on the team's quest to win back users.

BACKGROUND

Using Research to Inform Decisions

Research informed the decision to revamp the AMP intranet. Employee feedback and outside-in thinking informed the process of obtaining business investment, while testing informed the decisions made throughout the redesign process.

“Employees told us that they had some major gripes with the intranet,” says Rebecca Makila, Internal Communications. “This included search not working effectively, fragmented team homepages, and difficulty in quickly finding content that was relevant to their jobs.”

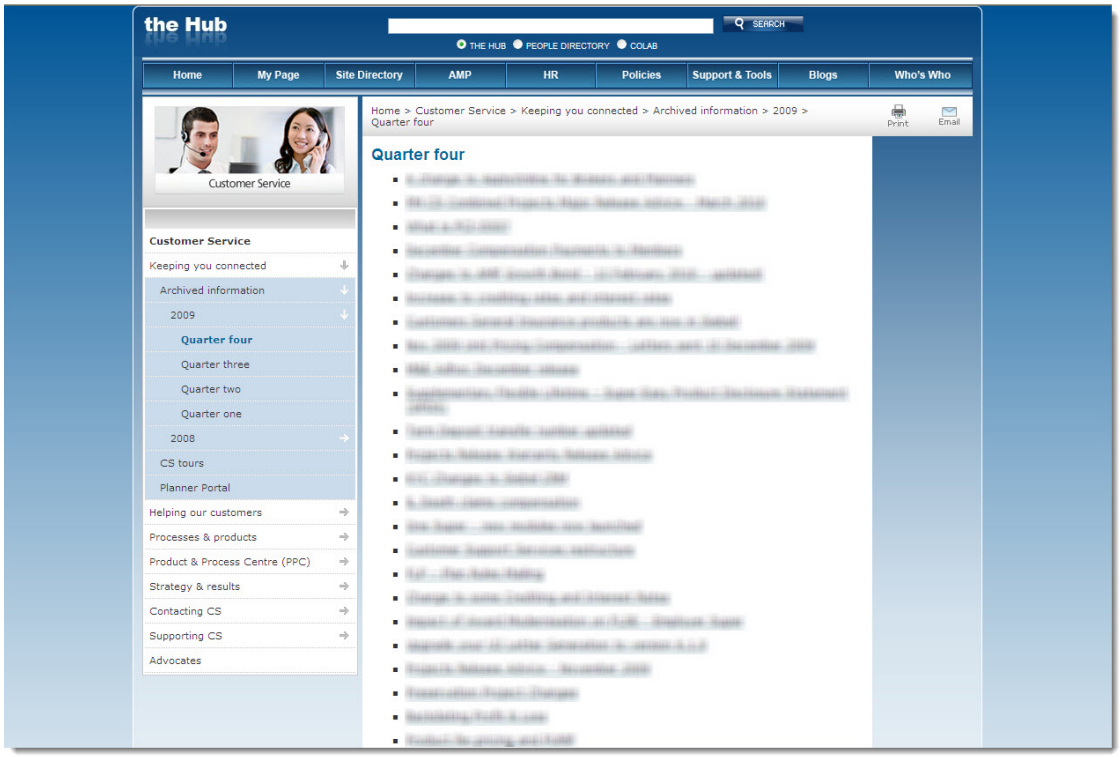
Employees said they struggled to find what they were looking for on the site, which fueled their desire for a reliable search engine. The search shortcoming was not trivial. Without the tools they needed to find the content they were looking for, the

intranet was falling out of favor, and employees were reverting to tried and true (albeit cumbersome) technology: email.

“Managers told us they find it difficult to target content direct to their employees and find it difficult to measure whether it has hit the mark,” says Makila. “In response to this, some teams were moving away from intranet-delivered content back to email.”

The intranet content reflected the structure of the organizational business lines and was duplicated across more than 30 team sites with “brochure-like” information about each of those teams.

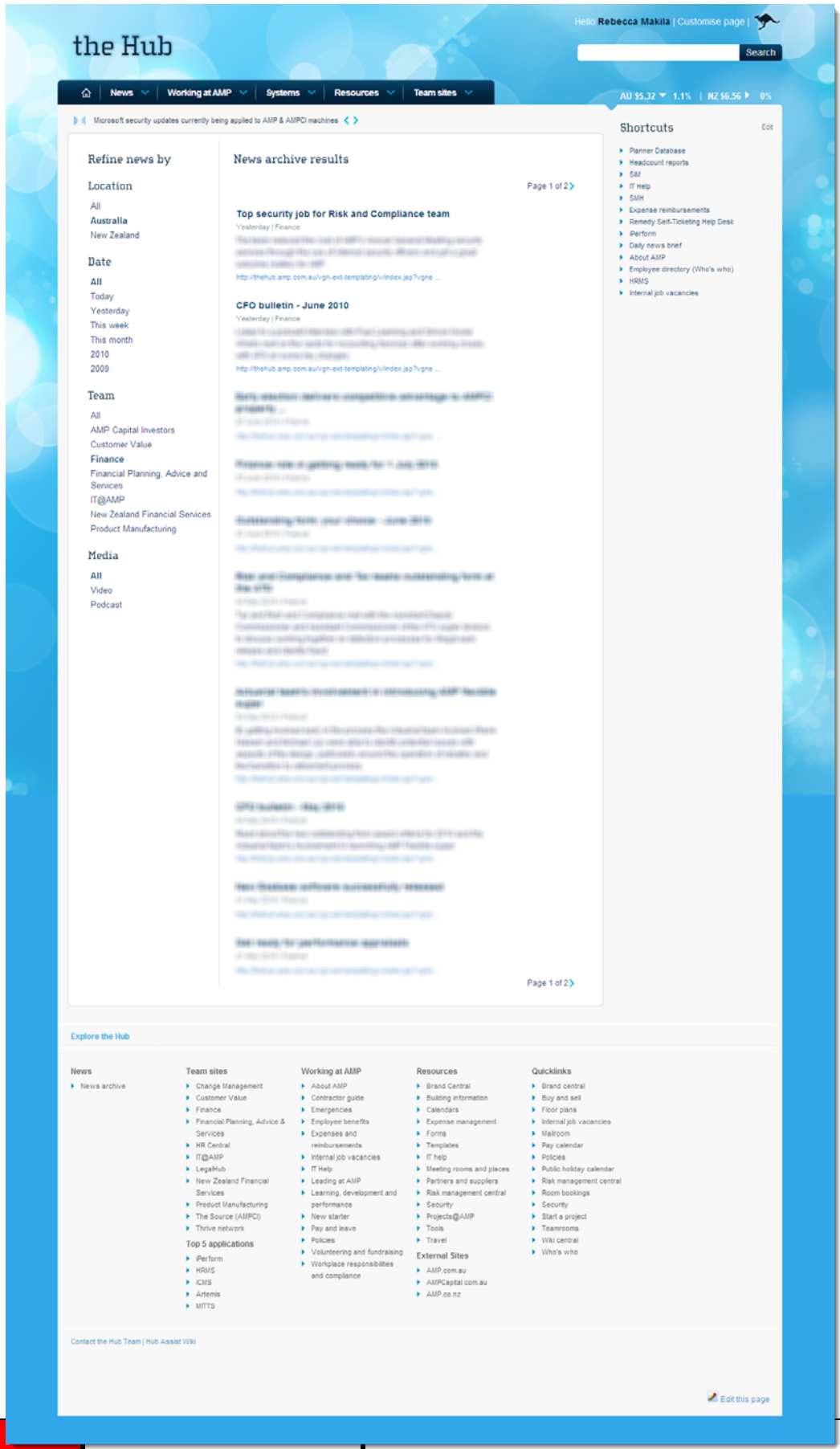
The April 2010 upgrade successfully addressed these issues.



Pictured: The old news archive required employees to know when content was published.



Pictured: The old search was clunky and required employees to know where content was located within the site structure.


the Hub
Hello Rebecca Makila | Customise page |
Search
News
Working at AMP
Systems
Resources
Team sites
AU $5.32 1.1% | NZ $6.56 0%
Microsoft security updates currently being applied to AMP & AMPCI machines
Refine news by
Location
All
Australia
New Zealand
Date
All
Today
Yesterday
This week
This month
2010
2009
Team
All
AMP Capital Investors
Customer Value
Finance
Financial Planning, Advice and Services
IT@AMP
New Zealand Financial Services
Product Manufacturing
Media
All
Video
Podcast
News archive results
Page 1 of 2
Top security job for Risk and Compliance team
Yesterday | Finance
CFO bulletin - June 2010
Yesterday | Finance
Page 1 of 2
Shortcuts
Edit
Planner Database
Headcount reports
SIM
IT Help
SMH
Expense reimbursements
Remedy Self-Ticketing Help Desk
iPerform
Daily news brief
About AMP
Employee directory (Who's who)
HRMS
Internal job vacancies
Explore the Hub
News
News archive
Team sites
Change Management
Customer Value
Finance
Financial Planning, Advice & Services
HR Central
IT@AMP
LegalHub
New Zealand Financial Services
Product Manufacturing
The Source (AMPCI)
Thrive network
Top 5 applications
iPerform
HRMS
ICMS
Artemis
MITTS
Working at AMP
About AMP
Contractor guide
Emergencies
Employee benefits
Expenses and reimbursements
Internal job vacancies
IT Help
Leading at AMP
Learning, development and performance
New starter
Pay and leave
Policies
Volunteering and fundraising
Workplace responsibilities and compliance
Resources
Brand Central
Building information
Calendars
Expense management
Forms
Templates
IT help
Meeting rooms and places
Partners and suppliers
Risk management central
Security
Projects@AMP
Tools
Travel
External Sites
AMP.com.au
AMPCapital.com.au
AMP.co.nz
Quicklinks
Brand central
Buy and sell
Floor plans
Internal job vacancies
Mailroom
Pay calendar
Policies
Public holiday calendar
Risk management central
Room bookings
Security
Start a project
Teamrooms
Wiki central
Who's who
Contact the Hub Team | Hub Assist Wiki
Edit this page

Pictured: The team expanded the site's search filters to include country and the ability to find news by team. Search filters on the left-hand side of the page help employees navigate the news archive and get to the content they're looking for faster.

This initial upgrade was the company's first attempt to move away from an intranet architecture based purely on organizational structure.

"We wanted content that was organized around needs rather than [corporate] structure," says Makila. "Central to our upgrade is our focus on engaging employees as 'customers' of the intranet. We set out to win back their loyalty."

"We wanted the intranet to be all the things we promise our retail customers — easy to do business with, contemporary, aligned to the brand and, above all, customer driven," she says.

And as a result, employees are coming back to the intranet and using it regularly.

The team's research approach informed their understanding of what users really do in their day-to-day jobs, which let the designers build a task-based intranet. But they couldn't have achieved the upgrade without building a successful governance model to support the new intranet and gather organization-wide support.

Context for Change

During the same time period as the redesign, the organization was going through a major cultural transition. The objective was to make employees as efficient as possible as well as to connect them to each other and the outside world and thereby continuously improve their service to AMP customers. The intranet was necessary to support this goal.

"Within this context, it was vital that the online experience of the intranet and all associated systems enable this to happen," says Makila. "For example, part of this alignment was ensuring that the intranet helps employees feel connected with each other and the external marketplace."

"We wanted to help employees perform in their role by making it easy to find the content they need," she says. So, in essence, the intranet needed to:

- help employees do their job efficiently and effectively,
- play a role in communicating messages from leaders to employees, and
- offer forums for employees to communicate with each other and with management.

Other factors also converged leading up to the redesign, including:

- **Technology Platform Upgrade.** The company upgraded its technology platform for both the intranet and the external-facing websites from Vignette version 6 to Vignette 7 during 2007 and 2008. But due to the upgrade's magnitude, cost, and complexity, a redesign at that time was not possible.
- **Intranet Benchmarking Forum.** During this time period, the company joined the Intranet Benchmarking Forum and participated in a formal independent assessment to narrow the future redesign's areas of highest priority.
- **Innovation & Thought Leadership Festival.** The organization hosts an Innovation & Thought leadership festival every two years. This exposure to

external influences helped galvanize appreciation for the intranet's role as a working platform and enabler of seamless collaboration. It also unlocked the much-needed investment to fund the redesign.

INTRANET TEAM



Pictured: The AMP intranet team: (left to right) Annalie Killian, Joanne Hawkins, Vernon Meyer, Rebecca Makila, and Aneta Beocanin.

GOVERNANCE

Evolving Governance to Ensure Success

During the initial project stages, it was important to establish clear goals and objectives and guiding principles to facilitate the intranet evolution project. This is where the company's governance forum played an important role.

"The key to our success was improving the governance model for the intranet," says Vernon Meyer, Intranet and Innovation Manager. "We have injected clear strategic thinking and greater investment into the intranet to commit to a roadmap for its longer term development."

In 2008, the intranet was dropping off the company's roadmap and was not perceived as a key business tool.

"This resulted in a greater reliance on email and no investment for improving the intranet," he says.

To strengthen the governance around the intranet, IT and Public Affairs joined forces to clarify the intranet's role (as a business tool) and sell that role to the business.

"We formed a governance forum with representatives from HR, IT, Public Affairs, business lines, and external AMP site managers," says Meyer. "This group could not have been formed without the buy-in from senior leaders within IT and Public Affairs."

The forum meets monthly and played a major role in endorsing the project approach, gaining support from other senior leaders for the project, and acting as an advisor to

the project team. The forum was also responsible for pulling together funding from across the company to invest in the intranet's development.

Meyer says that, through their governance model, they've established mechanisms to ensure that all future systems:

- are consistent with the intranet online experience,
- ensure seamless authentication, and
- integrate task-related content within the intranet homepage.

Ownership

The Intranet business sponsor is the CIO, and the core team responsible for the intranet is in IT. The team reports to Annalie Killian, Director of Innovation, Collaboration, and Communication, which provides and manages the budget through a pro-rata charge-back model.

However, the intranet's actual design and leadership is an effective and collaborative partnership between IT, the Public Affairs team, and site owners. In addition to this, an intranet governance forum, with representatives from across the organization, was established to set the strategic direction and fund the intranet's upgrade.

"The collaboration and partnership between IT, Public Affairs, and site owners for the redesign was largely responsible for the successful design process and resulting outcome," says Meyer.

This ensures all decisions are made responsibly and with employee interests in mind.

"Where possible," he says, "we make decisions not based on ownership but based on our customer needs, research data, and analytics. This helps to overcome the politics of ownership."

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Intranet Core Team	• Provide governance, program management, coaching, support, and evaluation of site managers • Manage the content and features available across the intranet • Develop and innovate user features • Maintain continuous improvement through user research and site statistics • Train and support site managers
Site Managers	Manage their own sites within the intranet, including: • Promotion • Continuous improvement through user research and site statistics • News content creation and homepage news publishing • Monitoring and adjustments based on user statistics • Content and features available on the country or local site level • Support of local site content contributors
Content Owners	• Update and ensure consistency on their own intranet sections or pages

USERS

Employees across the organization use the intranet. AMP has 3,500 employees spread across Sydney and other major Australian capital cities. The organization also has staff in Auckland and Wellington, New Zealand, and smaller offices in China, India, Japan, the UK, New Zealand, and Singapore.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	• http://thehub.amp.com.au
Default Status	• The intranet is the default homepage for all users
Remote Access	• Provided via VPN

DESIGN PROCESS AND USABILITY WORK

Design Approach

The redesign project was created to place employees and their needs at the heart of the intranet. Using the "employees as customers" approach helped the team focus its efforts on what the employees needed from the intranet. This was very important; as team members began their work, there were many ideas being circulated about what the intranet should offer — and few of the ideas were connected to what employees actually needed.

"Most of all," says Makila, "it was important for the team to use this approach to working with employees in order to be consistent with how we develop (as a business) offers for retail customers. This helped us to clearly communicate the need for improvement and validate the design with the business."

"The benefit of this approach," adds Meyer, "was that we were able to collect data on employee needs and make the correct design decisions throughout the project. We could backup decisions based on this data."

The team drew their design inspiration from a variety of sources. One approach included collecting hundreds of individual page elements from news, social media, design, and corporate websites and experimenting with layouts and designs.

"We did a lot of work around design themes that we considered both contemporary and aligned to the AMP brand," says Meyer.

The resulting design themes — bubbles and aqua — are based on a photographic effect known as Bokeh and were chosen because they resonated with employees during the user testing conducted as part of the redesign.

A third theme, "shuffle," has also been introduced. It is designed to be an event-based, rotating theme and will change over time. For instance, it was used during last summer's FIFA World Cup Games in South Africa.

The themes will be expanded over time to ensure the site offers personalization and freshness for the users.

Methodology

The team emphasized the early planning and scoping stages to avoid any major project issues. Regular team meetings ensured a collaborative approach between all involved, and risks and issues were responsibly identified and mitigated.

Involving the users in the design process was also critical to the team's approach. The team's methodology was determined by the overarching goal of ensuring that employees ("customers") were central to and involved in the design.

Three other factors contributed to the team's strategy:

1. Past intranet experiences
2. Research and best practices (across both intranet and Internet sites)
3. Partnering with organizations who specialized in certain disciplines and could advise the team on the best approach for the project's needs

Although research may have played a part in the project's success, it was the focus on engaging the audience that had the biggest payoff.

"Beyond the design methodology, the communication and influencing process was equally critical to success," says Meyer. "Understanding the various audiences and bringing an online project to life through using a range of highly engaging media worked extremely well."

These included tangibles like large poster boards of the concepts and mock-up designs, face-to-face presentations without technology, 3D physical models and installations, postcards announcing the countdown and instructions for launch day, a working online prototype to test, and entertaining video messages.

The team worked with employees in a series of formal workshops to determine business critical and common tasks and to rebuild the IA, following a methodology that included multiple card-sorting exercises, and wireframe and prototype development.

A prototype of the new intranet was built alongside the existing platform and, over a period of five months, was used to conduct one-on-one user testing across multiple scenarios and to improve the design. Employees from across AMP worked out the menus, layout, and functionality. The new menu is based on their needs and includes simplified crowd-sourced labels.

Uncovering Critical Tasks

Project team members worked with IA consultants (HotHouse) to develop a worksheet to use with groups of employees from across the company. This worksheet helped them uncover the common and business-critical tasks employees carry out in their day-to-day roles.

The information architects ran the initial workshops, and the internal project team led additional workshops across the company throughout 2009.

"The benefit from this approach was that the project team developed a good understanding of what people do in their roles — what the business critical tasks were — and figured out the common tasks across the organization," says Meyer.

Following the task analysis workshops, project team members conducted a number of card-sorting exercises and designed the site maps and wireframes that guided them through the design phase. They also researched best practice for intranets and conducted a review of emerging trends in intranet and Internet design.

Usability Testing

User testing sessions were conducted using a working prototype of the new intranet homepage with multiple individual users and a fresh cross-section of employees.

"The benefit of the prototype," says Meyer, "was that the project team members strengthened our understanding of employee behavior for the new homepage."

He says the prototype also helped the internal IT team to reuse the HTML, CSS, and JavaScript and shorten the development time.

User Personas and Supported Tasks

Personas

The team grouped employee needs and created personas to match the intranet features to these needs. The personas that emerged from these exercises included the following roles, along with their primary task needs:

- **Executive assistant:** These are team coordinators who often set up new team employees, look for information for their managers, download templates and forms, and so on.
- **Graduate/new hire:** These users look for information about AMP, employee benefits, how to set up their workspace, and how to find experts throughout the organization.
- **Project manager:** Start projects, access templates, share project news, and so on.
- **Customer call center team member:** Access up-to-date product information and breaking news alerts.
- **Subject matter experts:** Look for other knowledgeable people and write blog posts.
- **Senior leader:** Communicate with employees, consume news, and access leadership development materials.

Tasks

The key user tasks that emerged from this analysis exercise included:

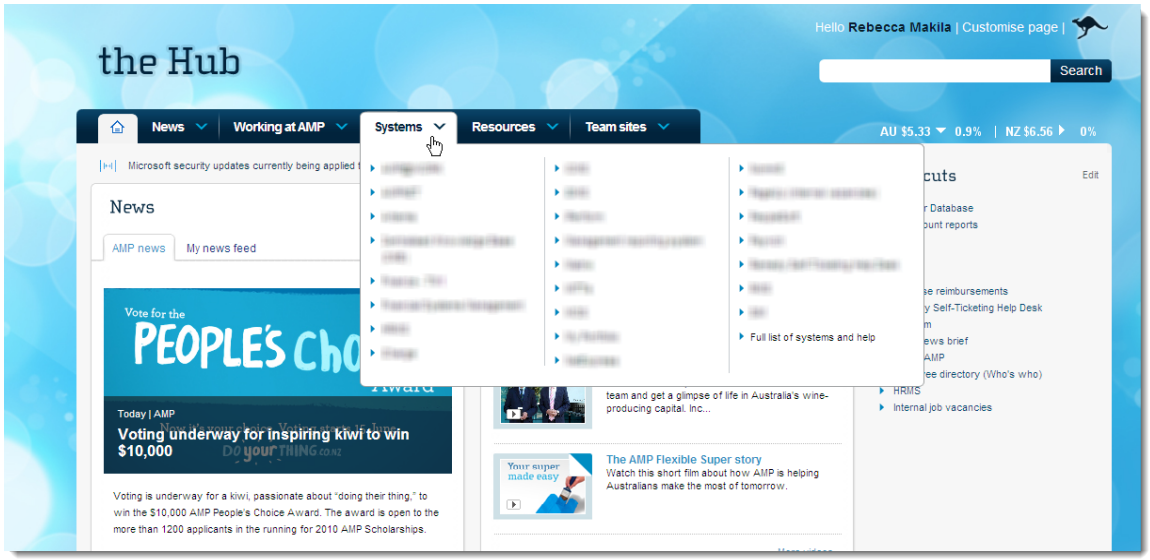
- I want product information (as an employee).
- I am a new hire, and I want to find out about AMP.
- I need to find a policy.
- I want to read past news items related to my team and AMP.
- How do I find out what to do in an evacuation?
- I have a new hire on my team. How do I set the person up?
- I need to access a system (such as submit a leave form, register for online training, submit my AMEX card statement, and so on).
- How do I use iPerform? (AMP's online learning and performance management system, which includes help information.)
- How do I manage corporate card expenses and reimbursements?
- How do I find updated organizational charts?
- I need to share some important team news with specific groups across AMP.
- I want to find the right page when I am searching.
- I want to know what is required of me as an AMP employee and what benefits I receive.

- I want to find a tool (such as a template, form, or manual).
- I want to find information about a person, including contact details and expertise.
- I want to find specific team information.
- I want to find answers to common questions (such as how to set up system access, or find leave information or policy information on working remotely).
- How can I find IT information (for vendors, applications, or projects)?

These exercises helped the team achieve its project goals.

“It was vital that the online experience of the intranet and all associated systems would place our internal customer experience central to the design,” says Makila.

“For example,” she says, “part of this alignment was ensuring that the intranet helps employees feel connected with each other and the external marketplace. We wanted to help employees perform in their role by making it easy to find the content they need. Our intranet needs to help employees perform their job functions more effectively.”



Pictured: The *Systems* mega-menu displays business critical and commonly accessed systems across the organization. Employees determined these elements as part of a card-sorting exercise. All the key systems, resources, policies, and tools are readily available for employees to access under the mega-menus and in the footer. Systems and resources have landing pages that list all systems and resources used in the organization and provide contextual help for employees, such as login and contact assistance. The menus are also location aware.

Drawing on Outside Expertise

The AMP team relied on outside consultants for the project, but only as much as was needed to get the job done. They kept the consultants’ participation to a minimum in order to maximize internal skill-development opportunities and save money.

The following agencies and consultants participated in the AMP project:

- **Hothouse information architects.** The project team worked with HotHouse to develop a user research approach and a worksheet to use with groups of employees from across the company. This worksheet helped uncover the common and business-critical tasks that employees carry out in their day-to-day roles. The AMP team worked with the information architects to run the first few workshops; the internal project team then rolled out additional workshops across the company. This occurred throughout 2009.
- **Morgan Creative.** Morgan Creative developed and hosted the intranet prototype that was used to conduct the user test sessions. The prototype let designers rapidly iterate on any interface changes. It also helped the internal IT team reuse the HTML, CSS, and JavaScript, and shorten the development time. Morgan Creative also developed the mobile prototype.
- **Gruden Design and Development Agency.** The team worked with Gruden to optimize the front-end page load times, specifically relating to image optimization, increased JavaScript compression and the optimal placement of images and JavaScript assets in HTML.
- **Andrew Boddy Design.** Boddy worked closely with the internal design team to supply early design concepts that were brand compliant and used to help company stakeholders visualize the redesign project.
- **Projekta Digital Production Agency.** Projekta assisted with the change communication process and built a 3-D physical model (see photo below) of the intranet for display in the reception area of AMP's Sydney headquarters as part of the launch announcements. They also produced a launch video featuring employees talking about the improvements to the intranet.

TIMELINE

INTRANET TIMELINE	
Milestone Date	**Milestone Description**
2002	• Multiple intranets exist across different geographical locations • Design and editorial guidelines documented
2007-2008	• Large CMS upgrade project (from Vignette 6 to Vignette 7) • Intranet relaunch with new homepage and menu structure
June 2008	• Introduction of formal governance model and strategic roadmap for 2009/10
April 27, 2010	• Hub Evolution project — Phase 1 launch. This was a full intranet redesign, including a comprehensive content audit and restructure to focus the intranet on: o Employee needs o Identity o Location o Usability o Search

CONTENT AND CONTENT CONTRIBUTORS

A System Based on Trust

Content is managed using a decentralized model comprised of site managers within the business who manage team-specific content and news. There are approximately 20 content contributors in this role; all employees can contribute content through blogs, wiki content, comments, tags, or ratings.

The organization relies on an oversight model based on trust rather than moderation.

“There is no formal intranet moderation, as we have clear content policies,” says Meyer. “It is a trust-model.”

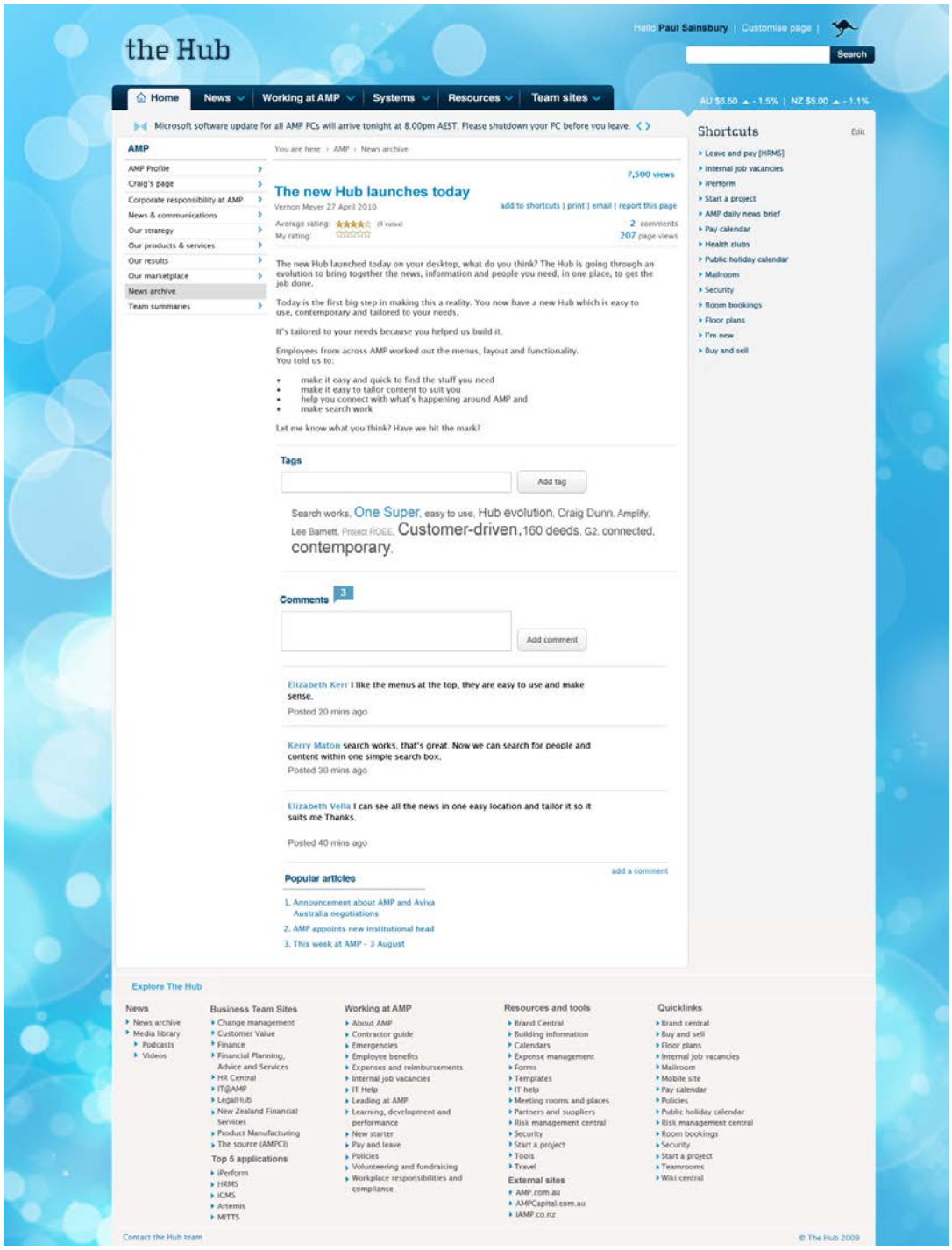
Content publishers from across the business receive training and support from the intranet team.

The Public Affairs and intranet teams informally monitor content to ensure consistency. New site owners sign up for a *Roles and Responsibilities* document to assist with content governance. And all sites are reviewed annually for errors, link errors, and outdated content. New content publishers receive a quick reference guide as part of their training, and they also have access to training videos and an intranet

wiki. These new publishers are also given one-on-one publishing training from the intranet team.

In addition, the team has established the following policies and guidelines that cover intranet content:

- An intranet style guide, which includes guidelines for writing style, formatting, fonts, tables, brand guidelines, and so on
- Landing page style guidelines for team sites
- Four content type templates developed for content publishers



Pictured: A content page example with a tag cloud. The tag cloud contains keyword or phrases that were previously entered. Any employee can tag content. Clicking on a keyword or phrase from the tag cloud displays a listing of all other content pages that share the keyword or phrase. This approach makes it easy for users to find related content across the intranet.

User Feedback as a Guiding Hand

Feedback is as much a governing principal as any other guideline or training mechanism for content publishers. At AMP, employees are the intranet's customers and content publishers receive feedback via the ratings, comments, and traffic their content receives, as well as cross-postings via Yammer and blogs.

"Content contributors are recognized and thanked by the intranet team for high-quality content," says Meyer. "We contact authors to walkthrough any issues with content that is not compliant with our writing guidelines — however, this is very rarely necessary."

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	• Several IBM pSeries LPARS running the AIX O/S
Bug Tracking/Quality Assurance	• A custom-built bug tracking application and performance tests running on IBM Rational tools
Design Tools	• Photoshop • Paper prototypes
Site Building Tools	• Eclipse, Firefox, and Internet Explorer developer extensions
Content Management Tools	• Vignette Content Management and Vignette Collaboration
Search	• Google Search Appliances

MOBILE

AMP intranet content was optimized for mobile consumption. The mobile site was designed as the company's first step toward serving device-specific intranet content to employees. Because the company has a number of staff members who are often away from their desks, this functionality was key in providing a full intranet experience.

"We provided a mobile version of the site because the mobile experience is pervasive and employees asked for device (including mobile) delivery," says Meyer.

The mobile intranet site uses a style sheet, optimized for a fast and efficient mobile experience. But because the organization is still in the early stages of mobile delivery, limited functionality is enabled for mobile access. For example, any Hub article content can be viewed on a mobile device. Article content is offered specifically because it contains news that is relevant to the organization's mobile audience.

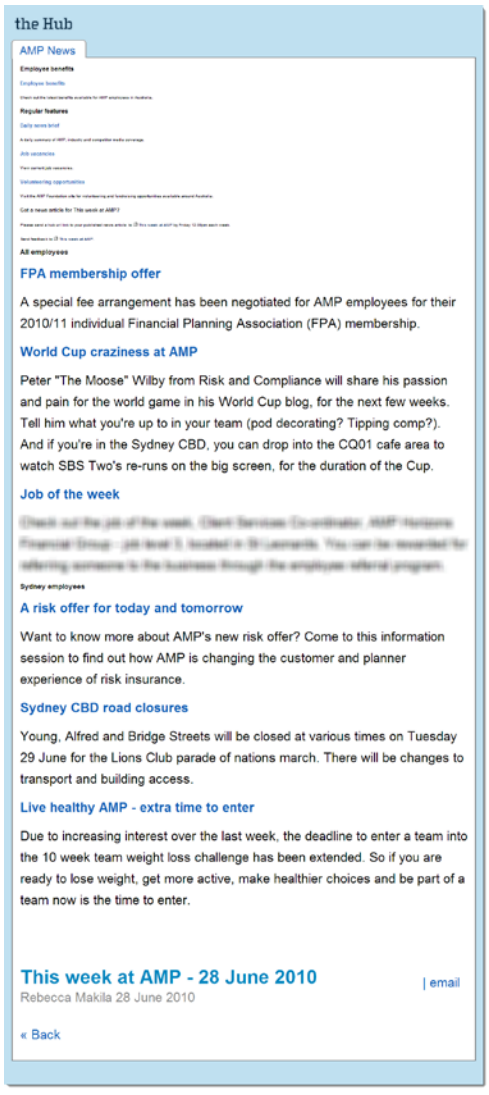
Mobile-Specific Usability

Because mobile devices have unique usability challenges, the team wrote the business requirements and functional specifications to cover all mobile needs and to address platform-specific usability concerns.

For instance, the speed at which mobiles download content was important, as were security settings. The team therefore built a prototype to test the mobile capability for RIM Blackberry mobile devices.

"Presently," says Meyer, "the mobile intranet site is fast as it uses a basic style sheet, is text-based (reusing our intranet code), and does not serve images or JavaScript."

The site has simple navigation options: the logo, which is a link to the homepage, and a *back* link on all article pages.



Pictured: Intranet content is available on AMP mobile devices, which assists staff members who are on the road. The company has a number of staff members who support planner practices and are often away from their desks. The mobile intranet site uses a style sheet optimized for a fast and efficient mobile experience.

SEARCH

Building a Great Search Experience

Effective search is an important component of the overall user experience. The AMP team appreciates that and took great care in designing a great intranet search tool.

“Because search is critical to intranet success, we spent a lot of time defining what our search experience needed to offer,” says Meyer. “We believe that a good quality search solution is the cornerstone of an effective intranet.”

And, prior to the site redesign, this is something that they hadn’t been able to achieve in the AMP intranet for some time.

Choosing a search tool required team members to perform due diligence to ensure they chose a product that met a wide range of criteria.

“It needed to match our requirements,” say Meyer, “but also be fast, scalable, and cost effective. It needed to be supported by a local partner and provided by a vendor that was a good strategic fit with AMP.”

The Google Search Appliance was selected because it met each of those criteria, and because the vendor, Google Australia, assisted as needed to get them up and running.

“Google Australia demonstrated their capability and great technical support by working with us on a successful early prototype,” says Meyer.

Refining Search Results

What every team learns about search is that search is not a set-and-go product. The tool has to “learn” and the team has to refine its functionality over time. To accomplish this task, the AMP team implemented the Google Search Appliance solution in a soft launch before the intranet redesign went live to improve relevancy through the search tool’s self-learning capability. Early (primitive) fine-tuning was done by matching keywords to expected results. Monitoring users helped fine-tune it even further. The team used test cases that measured both search effectiveness (can users find an answer in under 30 seconds?) and search efficiency (was the task completed correctly in the first attempt?). They also took user preferences into account to refine the results.

“Research told us that employee searches were one of the most important search-related tasks, so we weighted people results highly,” he says.

To further improve the search results, the engineers built mandatory metadata fields into the content management system to improve search results and drive the customization of information.

“We have also integrated user-generated tagging on all intranet and knowledge management database content items to improve search and help employees to have a say in key word generation,” says Meyer.

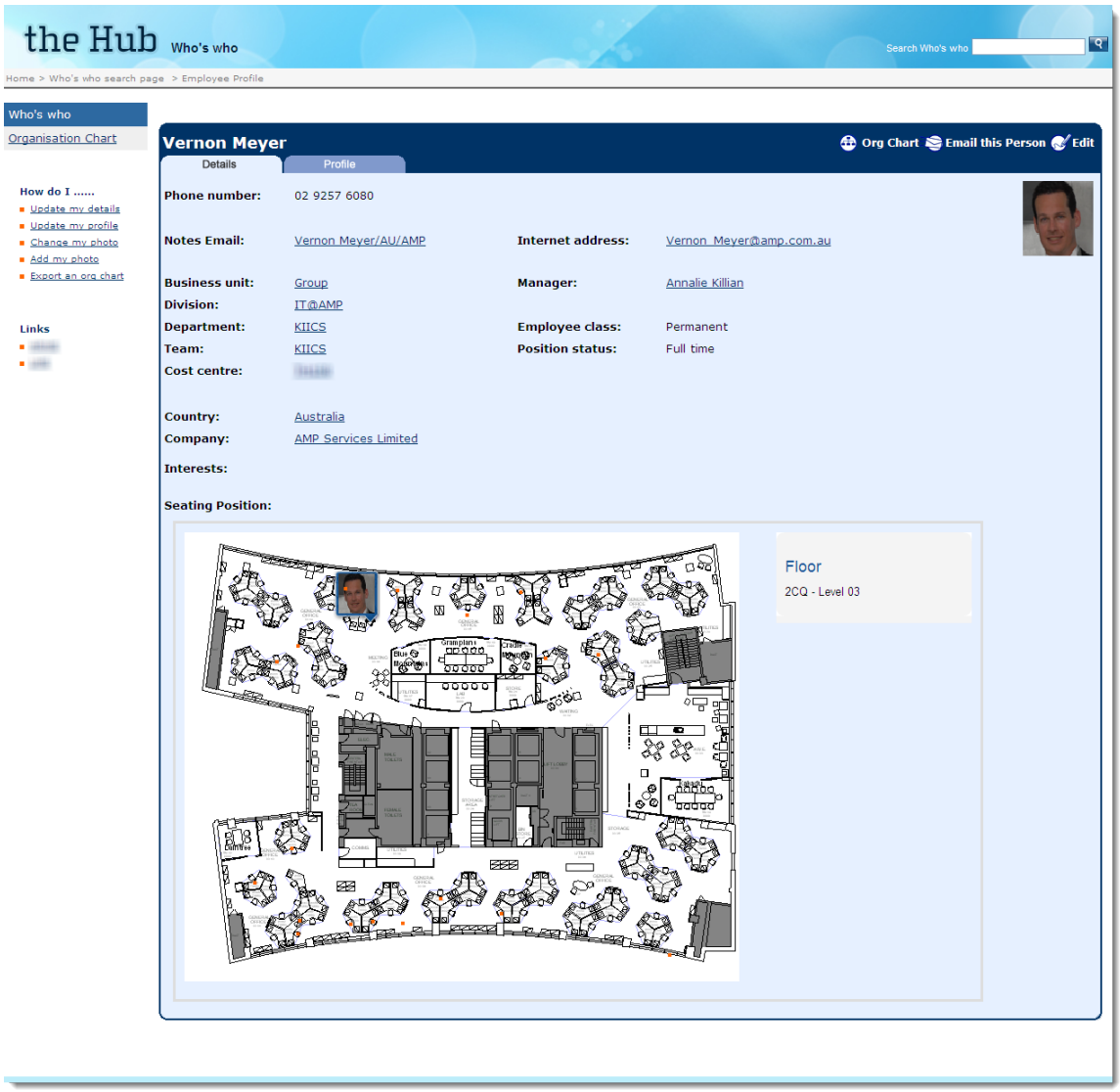
The team built best practice search principles into the search, including:

- Autofocus into the search box on page-load
- Predictive text
- “Did you mean...”

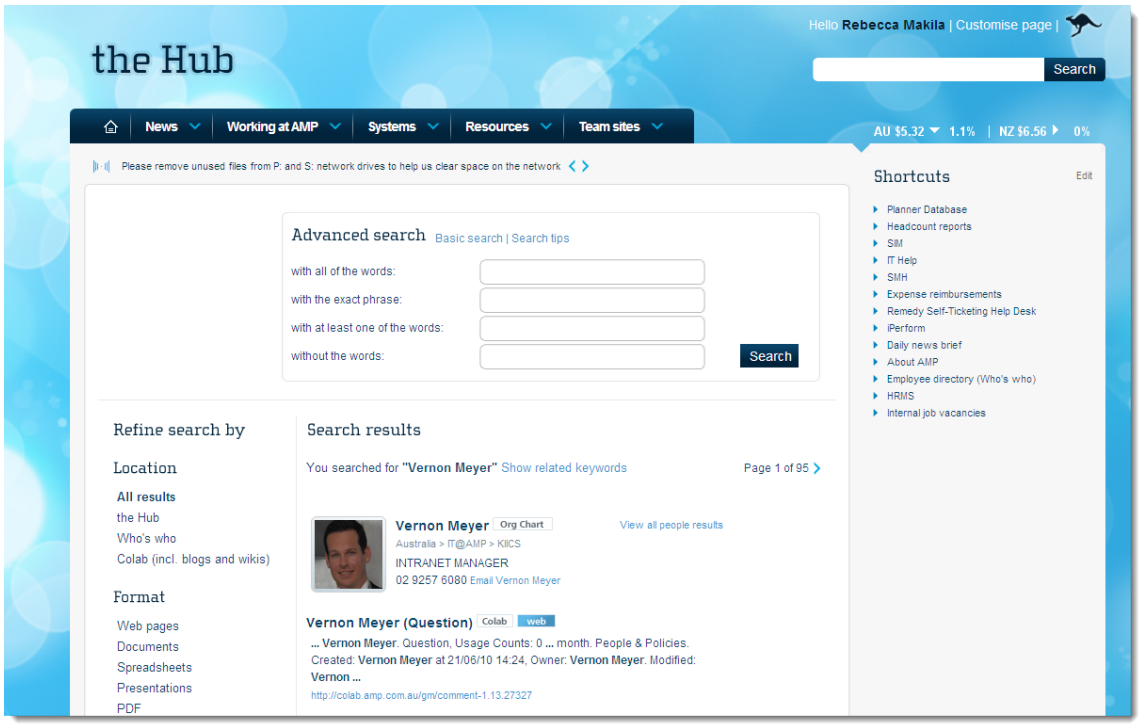
- Tags within intranet pages that users can click to execute a search
- Default filters to further refine search by location, date, format type, and so on.

All of these efforts have paid off. Employees no longer need to visit a particular online system to conduct a search because they can easily perform it within the intranet on any page. The improved search has received the most positive comments of any area since the redesign launched.

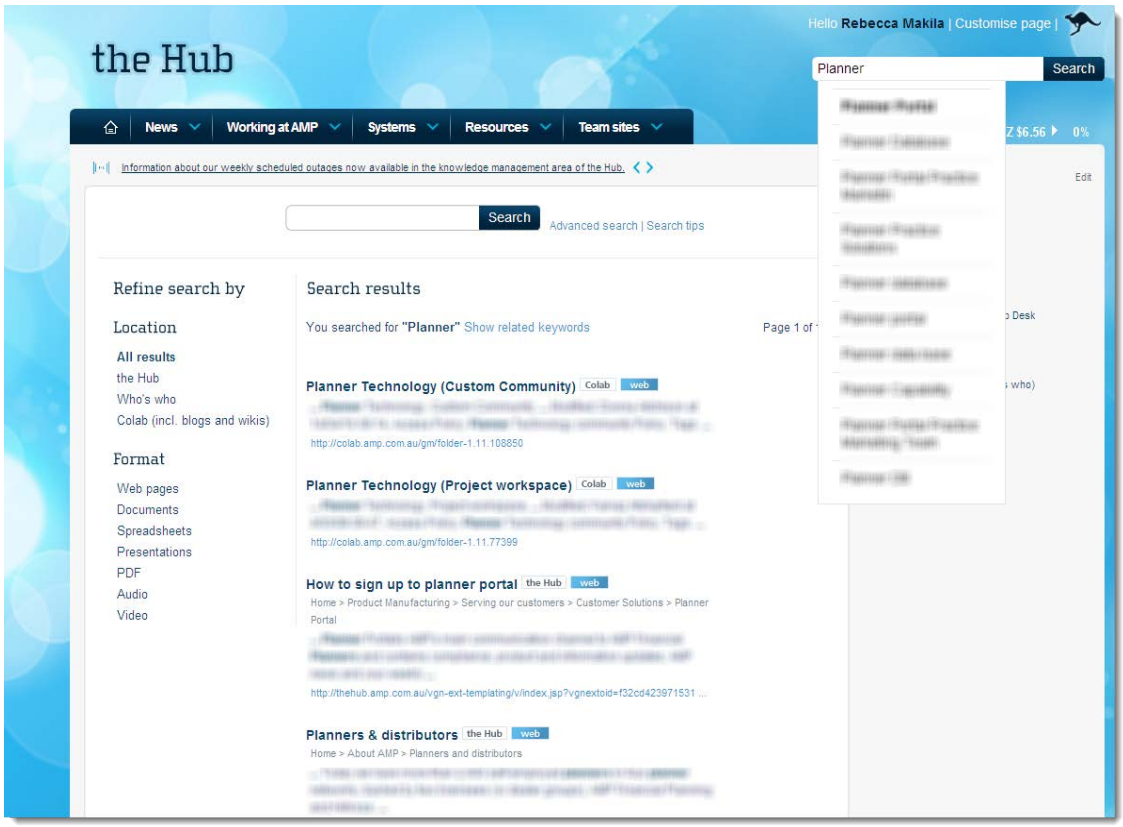
“Employees were pleasantly surprised that it actually worked,” says Meyer. “We picked up on this during our early testing and were attentive in our launch communications to admit to the poor search experience in the past and encourage employees to try the new search solution.”



Pictured: The employee directory includes functionality that lets employees drag and drop their profile picture to any desk location on the floor plan.



Pictured: Employees can conduct an advanced search by applying additional search parameters.



Pictured: The intranet search solution uses auto-complete to save time and minimize spelling errors.

RESULTS AND ROI

Measuring gains resulting from intranet improvements can sometimes be tricky. So teams often choose metrics that show increases in user satisfaction to confirm that a new intranet has hit its mark. That is certainly the case at AMP.

“The project success was measured through employee satisfaction, the number of reported defects, and comprehensive site analytics,” says Meyer. “Employees have indicated that they are returning to the intranet as their collaboration and knowledge management platform.”

Other indicators of the new intranet’s success include:

- Fewer critical intranet issues, such as downtime and errors
- Content is up-to-date and relevant, making it easy to get things done
- Roles and responsibilities for content publishers and site owners are now clear and understood
- Web statistics show increased usage and time spent on the intranet
- The intranet team successfully achieved its project goals and objectives
- The intranet has a respected profile within AMP and remains well positioned for future investment

And perhaps the most marked improvement in the site is how often it’s used.

“We had many individual metrics,” says Meyer, “but the standout was search usage, which jumped 300 percent. This, along with positive employee feedback, showed that employees were getting the results they needed.”

Another key metric for the platform’s success is that while usage has gone up, support calls have gone down. “Although almost all redesign changes were improvements on the past intranet,” says Meyer, “it was surprising that the number of support calls post-launch were reasonable low.”

“It just works, as it should,” he says.

Another testament to the team’s success is illustrated by how often other intranet teams seek them out for advice.

“The intranet team is now regularly asked to contribute the usability viewpoint on the selection of other enterprise business process vendors,” says Meyer.

LESSONS LEARNED

With the success of an intranet project comes some institutional learning — some is simply a result of experience, and some is hard-earned in overcoming obstacles. Members of the AMP team share some lessons learned from their project:

- **Project success starts at the top.** “Form a governance team to assist in getting buy-in from senior management and secure funding early.”
- **Iterate often.** “Use prototypes (even if they are on paper). For a redesign such as ours, we focus on three core areas: search, IA, and people (profiles, personalization, customization, and content interaction).”

- **Communicate early and often.** “Effective engagement and communication is as important as design. It’s about people, not technology.”
- **Give employees choices.** “Compliment functionality with design to ensure employees enjoy visiting the site. Adopt the philosophy about allowing employees choice over their experience, such as tailoring their own newsfeed, or selecting location-specific news or the theme that they enjoy the most.”
- **Treat employees as customers and listen to what they need.** "Understanding your ‘customers’ (your employees), working with them, and balancing their needs with the organizational strategy and culture that your intranet needs to enable is the single most important thing for an intranet designer to focus on and champion.”
- **Don’t compromise on the customer experience.** “Surround yourself with the best you can find to help you execute within the constraints of platform, budget, and time. Don't compromise on the customer experience — it’s penny-wise, pound-foolish in the long-term."

Bennett Jones LLP

Using the intranet:
Bennett Jones LLP is one of Canada's largest law firms and is recognized internationally, with offices in Calgary, Edmonton, Ottawa, Toronto, Dubai, and Beijing. The offices vary significantly in size (from six to almost 500 people) and are geographically dispersed.

Number of employees the intranet supports:
Approximately 925

Company locations:
Calgary, Edmonton, Ottawa, Toronto, Beijing, and Dubai

Locations where people use the intranet:
Alberta and Ontario, Canada; remotely from the US, UK, Europe, Middle East, China, and India

Design team:
The in-house core project team was selected to represent the interests of lawyers (30 practice groups) and staff (14 administrative departments), directed by a small steering committee of very senior managers who met weekly throughout the project. The team had 12 people in all.

Habañero Consulting Group was responsible for user experience and design (look and feel).

V51 Consulting Inc. was responsible for solution architecture and building the intranet (in SharePoint).

RBRO Solutions Inc. was responsible for integration between Interwoven Worksite (DMS) and the intranet.

Members:

In-house:
Adeniyi Adebayo, National Director, IT; Brian Bawden, National Director, KM; Stephen Bowman, Managing Partner, Toronto; Lorene Cowburn, Office Manager, Edmonton; Karyn Highet, Intranet Coordinator; Andrew Lewis, Team Lead, Systems Development; Kindra McNish, Project Manager/Analyst; Shelagh Mikulak, National Director, Information Resources/Libraries; Aldona Oleinikas, KM Coordinator; Duncan Quarrington, KM Lawyer; Jim Smith, Team Lead, Applications; and Siobhan Walsh, Chief Administrative Officer

Habañero:
Kurtis Beard, Interaction Designer; Jonathon Kay, Interaction Designer; Kathleen Moynahan, Senior UI Designer; Benedict Ng, Interaction Designer; Bryanne Philibert, Project Manager; and Ben Skelton, User Experience Lead and Senior Information Architect

V51:
Akiva Bernstein, Business Analyst and Information Architect; Frank Gasparovic, SharePoint Developer; Nicolas Munson, Trainer; Vincent Pollard, CSS Developer; Debbie Rothstein, Project Manager; Matt Stark, Technical Architect and Lead SharePoint Developer; and Jason Viera, Quality Assurance Lead

RBRO:
Gerrick Denton, Systems Consultant, and Howard Russell, Co-CEO, Professional Services

SUMMARY

When the Bennett Jones team set out to redesign the intranet, their goal was to achieve greater efficiency and a better work product for less money. They faced the daunting challenge of wrangling a law firm's knowledge capital and making it simple to find, use, and update for the firm's 925 employees, including more than 400 legal professionals. They also wanted the tool to help build a cohesive culture across the firm's offices. Finally, they wanted to be ahead of the curve in technology use to help attract and retain the best legal talent available.

The team recognized that the site's main emphasis had to be knowledge sharing and management. In this busy law firm, the people with the most expertise had varying technical skills and little time to learn new tools. The designers thus knew they had to make knowledge sharing a routine activity, rather than an extra and complicated task.

User experience was key to the site's success. To that end, they worked with a user experience design company to identify requirements and discover cultural differences among the offices.

The homepage features *News and Announcements*, including *From the desk of* announcements from key senior executives, such as Hugh L. MacKinnon, the firm's

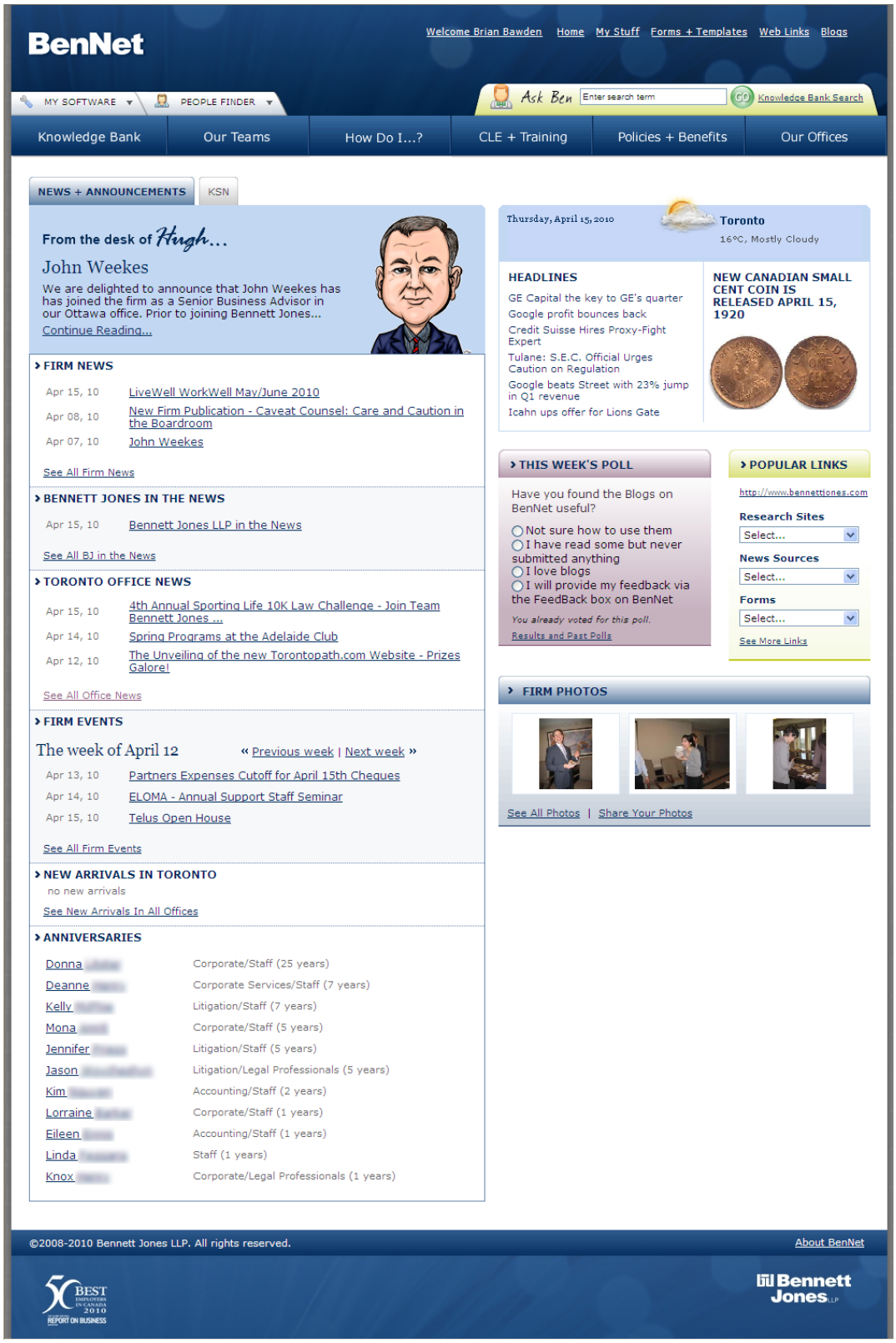
Chairman and CEO. The homepage provides firm news, as well as press mentions. Local news is followed by events around the firm. Employees are celebrated through the *New Arrivals* and *Anniversaries* sections. *Anniversaries* lists the honored employees, their departments, and how long they've worked at the firm.

The side of the page includes news headlines, filtered for relevance through a news aggregator, and a fact of the day, along with a poll and list of popular links. The page also features recent firm photos, and invites users to share their own photographs.

The straightforward homepage nicely summarizes new information and emphasizes the firm's recognition of its employees as great assets.

The page provides clear navigational choices. Additional links appear at the top of the page, allowing users to access tools including a personalized list of links, forms, and templates, Web links, and firm blogs.

The *KSN* tab, next to *News + Announcements*, displays the latest posting from *The Knowledge Sharing News*, the only firm-wide blog in BenNet, as well as a continuously updated listing of content added to *Knowledge Bank* in the last seven days.



Pictured: The homepage emphasizes news and employee information.

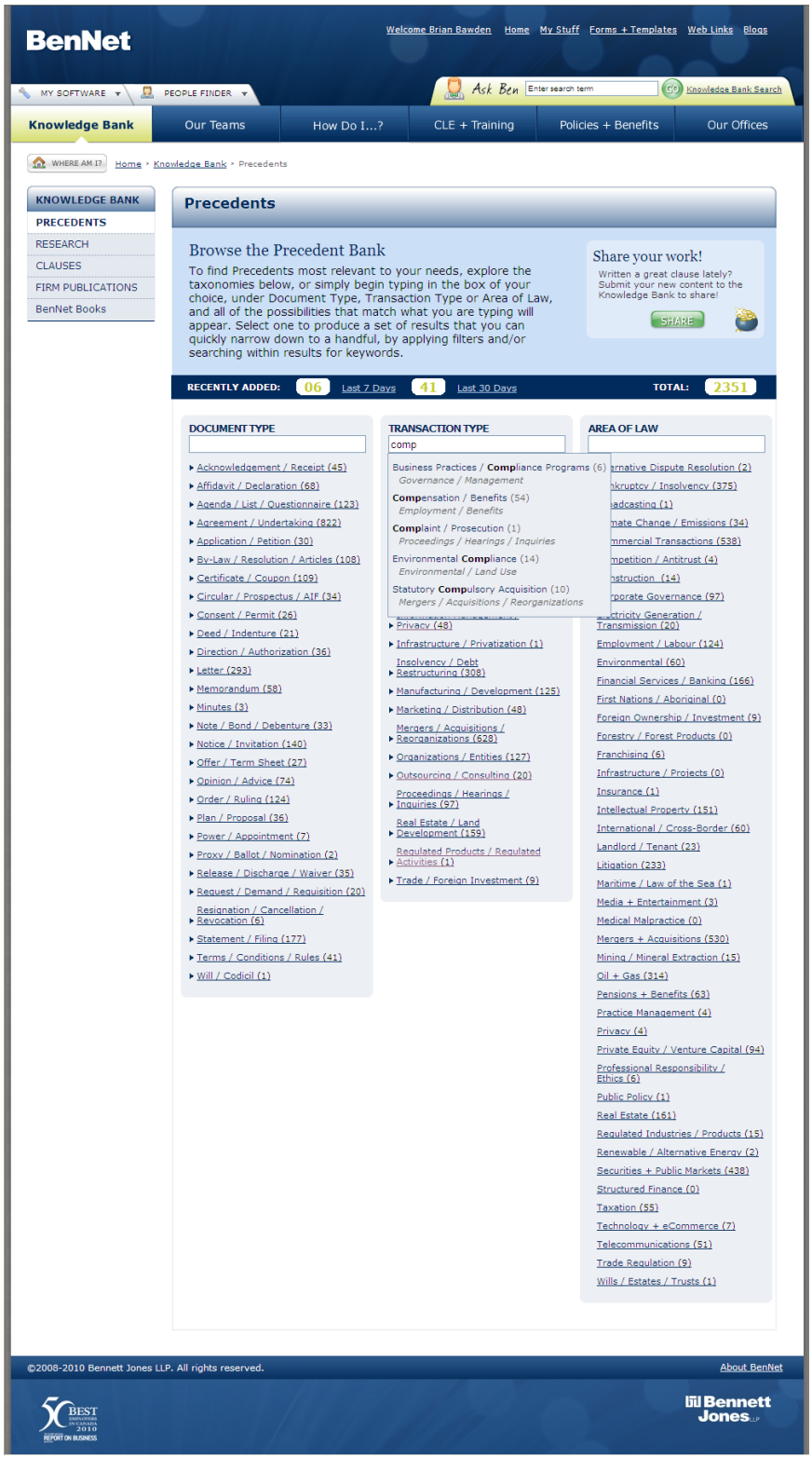
The site had to provide immediate access to essential information related to the day-to-day work of the firm. One key to success was empowering lawyers to find precedents as quickly as possible, on their own. To this end, the site's core is the *Knowledge Bank*, a repository for legal documents, research materials, clauses, and resources. Subject matter experts select the information and classify it by type, transaction, area of law, jurisdiction, and other parameters.

The problem with many document repositories is that, as they grow, they become too difficult to use. Users often must navigate folder structures that make finding the right resources difficult. Bennett Jones' team members realized this, and knew they had to build a powerful and simple tool to ensure that employees could quickly find the right precedents.

They started with AJAX-enabled auto-fill to help guide users in the right direction. With impatient users and more than 650 document types — as well as other robust categories — the designers realized that auto-filling suggestions could help expose category names and simplify user selections.

Users start a *Knowledge Bank* search by entering a search query under *Document Type*, *Transaction Type*, or *Area of Law*. As a user types, matches related to the entry appear. In this way, users don't have to think to look under "statutory compulsory acquisition." Instead, the option appears when users type "comp."

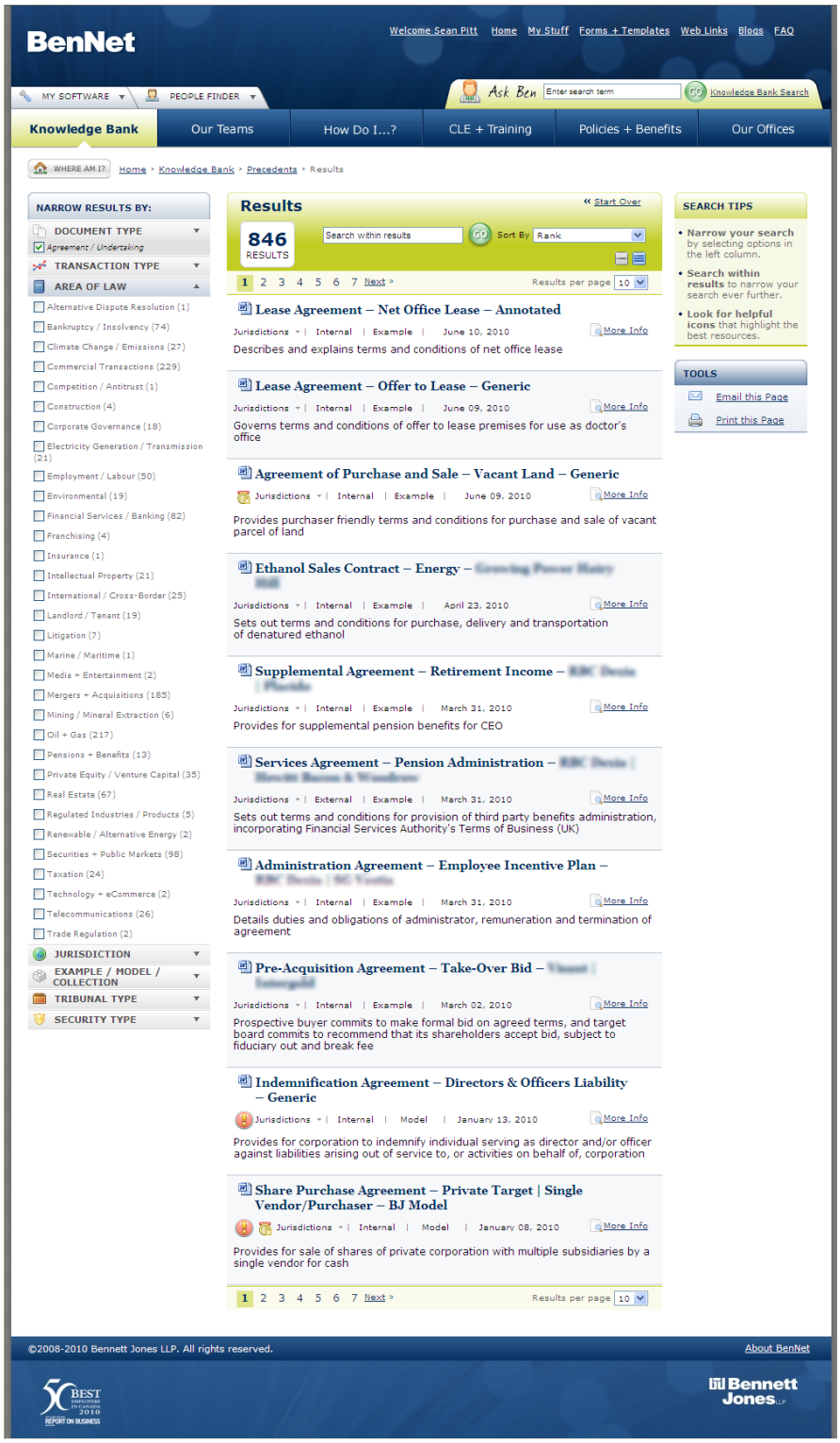
Users can also browse by category. All categories are listed on the page, followed by the number of available resources in each.



Pictured: AJAX-enabled auto-fill helps employees quickly find the category they need from the *Precedents* search page.

Once the site returns initial results, a faceted classification does the rest. Like those often-used on e-commerce sites, the system lets users quickly reduce hundreds of results and locate the right documents in two or three clicks. Although team members worried that users might have trouble navigating the accordion facet structure, they've been surprised by its success. The tool has proven quite powerful — and quite popular as well. Users can also full-text search the results if using facets fails to identify the appropriate resource.

Results are returned as information "snapshots" that summarize key information, including the descriptive document name, file type, classification, date, and summary.



Pictured: Faceted search helps employees quickly find the right documents. An accordion structure on the side of the page lets users filter by information type.

Information pages about each resource provide further detail, including a full description, context, and any warnings associated with use of the document or information. Related documents are shown as well.

Employees can attach a comment to any resource, making it easy to report something as simple as a typographical error or as significant as information about new legislation. The *Add Comment* button attaches the comment to that resource automatically. Knowledge Management (KM) team members review all added comments in case they need to fix a piece of information or respond to a comment.

After some consideration, the team decided to allow anonymous comments. While users are always identified on the back-end, the team lets users publish comments without displaying their names. The team was concerned that more junior employees might be reluctant to comment on an item posted by someone more senior at the firm. Indeed, in practice, the team has seen very good comments by junior people in the firm, which were submitted with the name withheld, so they're happy with their decision.

Another handy piece of information on the page is endorsements. These endorsements arrive via other site tools that let users create personal *My Stuff* pages and let groups create team-specific *Knowledge Bank Favorites* lists.

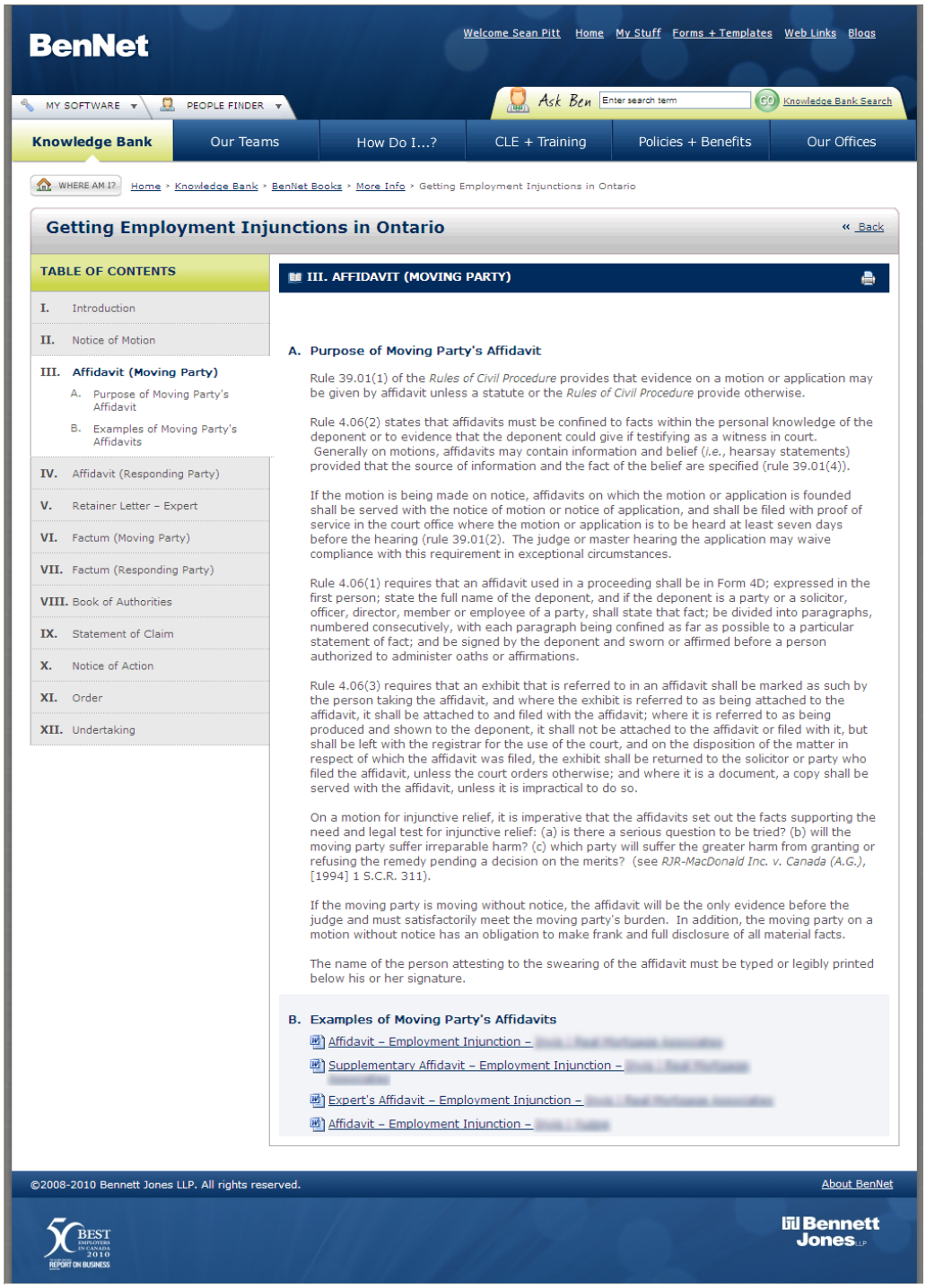
Anytime a group or individual saves a piece of content to their list, the user or group's name is associated with that piece of information. This acts as a "peer endorsement" of the resource, working under the assumption that anyone bookmarking a resource finds that resource valuable. This information is shown with the resource in the *Knowledge Bank*, letting users quickly assess the document's "pedigree" — who wrote it, who submitted it, and who likes it.



Pictured: Information about each resource in the *Knowledge Bank* is accompanied by comments about the resource, as well as a list of endorsements, indicating which individuals or groups in the firm found that resource useful enough to bookmark.

Team members realized that if it were difficult to share or create knowledge, users wouldn't do it. They therefore created tools to make it as simple as possible to add to the firm's *Knowledge Bank*. *BenNet Books*, for example, lets users assemble *Knowledge Bank* information into guides. To do this, they link resources together, like a book, and thus summarize information about complete topics or processes. Any user can assemble a guide, using a table of contents to link the list of resources.

Books are shared with all offices, and anyone can use or contribute to them, or provide suggestions for improvement.



Pictured: BenNet lets employees group related resources and documents together. This lets employees summarize processes and procedures, linking closely related documents to one another in a simple but powerful way.

The impressive attention to detail on the site doesn't end in the *Knowledge Bank*. The rest of the site is equally well considered. Like a traditional intranet, the rest of the site includes information about policies, procedures, and forms. Team members created three main content categories: *Policies*, *How Do I..?*, and *Forms + Templates*. They developed a 12-category system for organizing this information, using the same organizational structure in the three site areas. They've found that users are successful locating the information they need with little or no training in how to use these areas. The structure enables people to find content without having to know what department is responsible for the content. The common structure makes information easy to locate, but also makes it easy to maintain.

The *How Do I..?* section in particular has drawn praise from new hires and long-time employees for both its function and content. Creating these sections had the added benefit of helping the firm centralize and streamline data and processes, which had an end result of cutting down on paper costs.

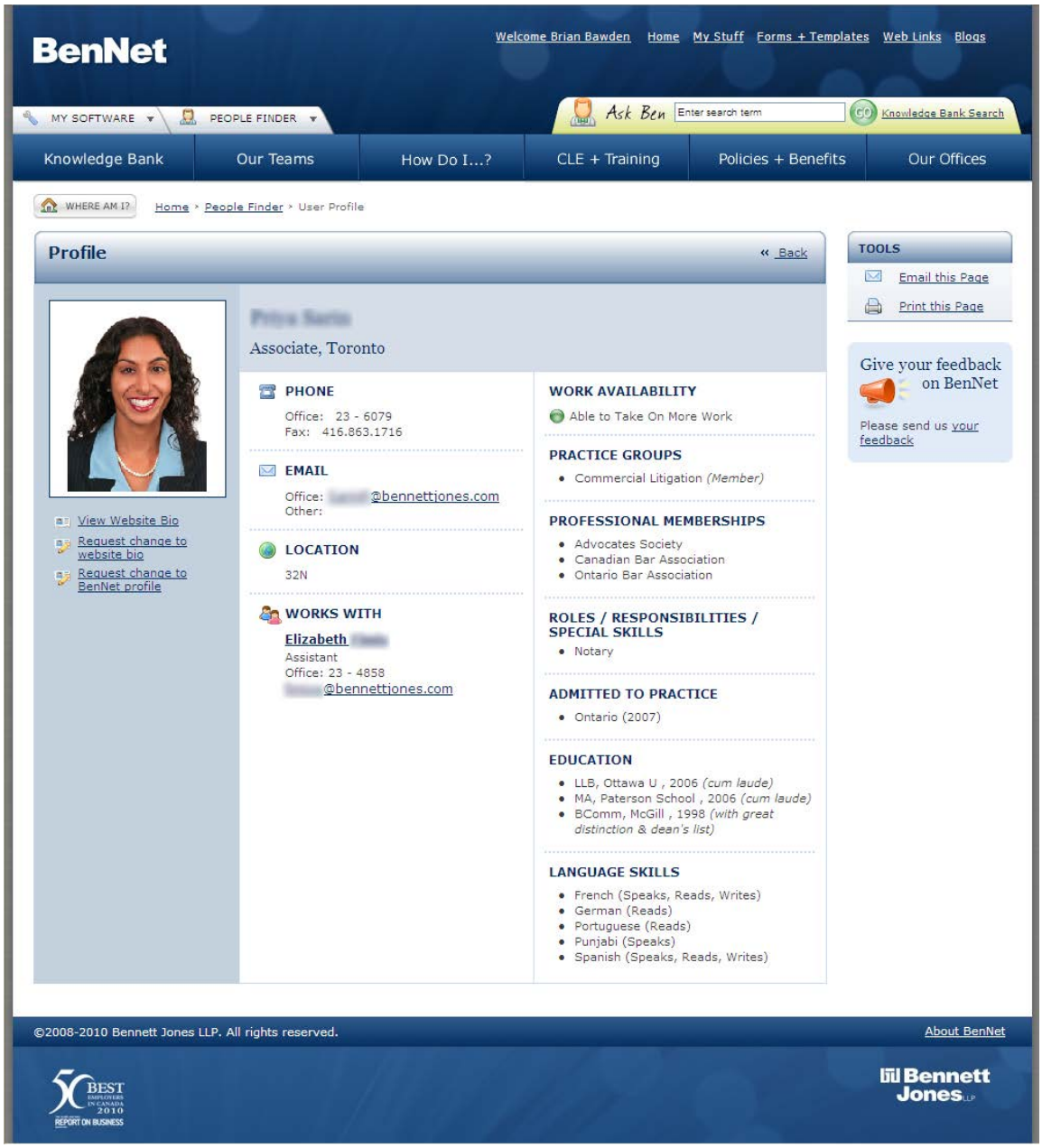


Pictured: The *How Do I..?* section is set up in 12 easy-to-understand categories that let employees find the information they need without having to know what department is responsible for that information.

The team encourages employees to engage with their personal profiles on the site, and has been impressed with the level of participation. In their profiles, employees

can add their own language skills as well as professional associations. The team initially created a list of 50+ languages to choose from, and was impressed to see employees have added more than 40 different languages to their profiles. The team even received feedback from users who were touched to see their own languages included in the selection list, making the team's initial research in compiling a comprehensive language list worthwhile. In addition, the list of professional organizations has expanded from 66 at the time of the initial release to 116 now.

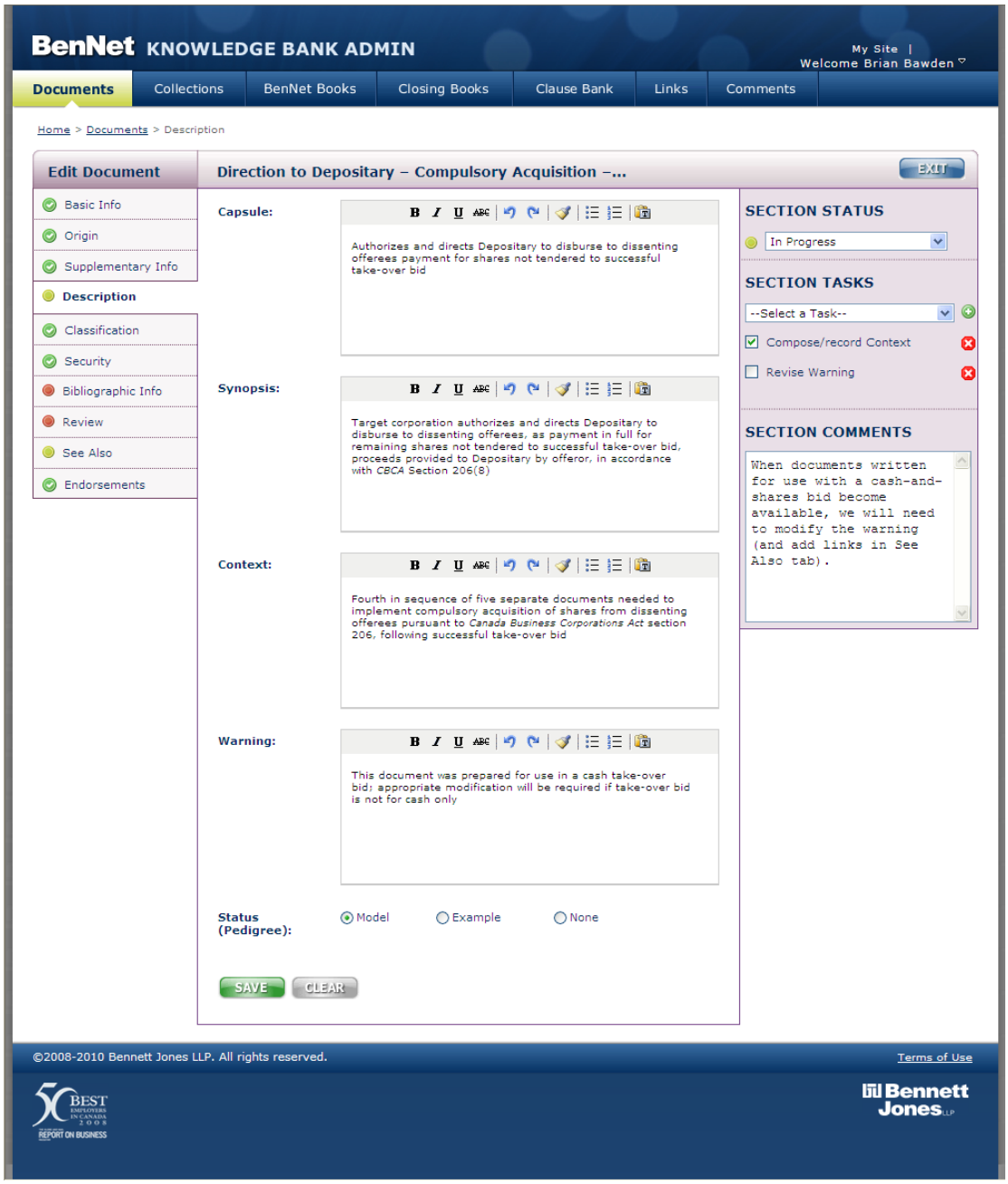
Further, junior lawyers and staff members can use the *PeopleFinder* to declare their availability by setting their status to green (able to take on more work), yellow (limited availability), or red (no spare capacity). This lets partners see who can take on more work. The system defaults to green (available) every Monday, encouraging junior employees to keep their status up to date; otherwise, they might be overwhelmed if they're already fully occupied, or miss out on an opportunity if they have free time. Availability status can be accessed and changed only by the individual (and his or her assistant).



Pictured: *PeopleFinder* is more than an employee directory. Junior lawyers and staff members can set their availability using the tool, and all employees can add language skills and professional memberships to their profile information (and many have).

The team didn't forget the needs of the KM team, which is ultimately responsible for the resources on the site. When the team publishes information from the document management system to the *Knowledge Bank*, a database record is created, which allows the team to add metadata to classify documents according to the established taxonomies. Given the nature of the material, much of the categorization requires someone with a legal background. To this end, the system accommodates records that need multiple administrators.

The administration view's three panels show the *Edit* section on the left, data in the middle, and completion status and a list of tasks and comments on the right. This structure allows administrators to leave comments or tasks for the next administrator directly in the interface.



Pictured: The Knowledge Management team's administration tool allows multiple administrators to work on reviewing or updating information about a single document or resource. Administrators can leave notes or a to-do list of tasks that need to be completed.

The team built — through strong planning, user research, and smart, thoughtful design — not just a new intranet, but also a mission-critical work tool.

BACKGROUND

Bennett Jones built the predecessor to BenNet, the firm's first intranet, in 2000. Although the firm desired robust functionality, it had hit a wall with its current technology platform.

“In the mid-2000s, we found ourselves in a situation where we wanted to add new and more up-to-date functionality to make the intranet more interactive, but were unable to do so because of the limitations of the platform,” says Brian Bawden, National Director, KM. In fact, by about 2005, the licensor of the firm’s existing software stopped supporting the platform. With this as motivation, the firm began seeking alternative solutions.

“At first we directed our attention primarily at prefabricated platforms ("intranet-in-a-box"),” says Bawden. “However, after carefully assessing two such solutions, we decided that we would instead go with a custom solution, designed from the ground up to fit our firm and the way we do things, rather than acquire a prefab platform and try to fit the firm into the software.”

Choosing “build’ over “buy” was especially important for serving the firm’s key revenue producers: attorneys. This approach was much more likely to give them ready access to the resources they need to properly service clients. And perhaps just as important, by designing and coding a custom platform, the firm was assured more control over the platform in the future. By deciding to build their own platform the team would be able to expand and improve the platform incrementally over time with no restrictions on features of functionality.

The platform on which they built the new intranet was based primarily on SharePoint technology, a choice guided by two critical data points.

“Firstly,” says Bawden, “SharePoint is not likely to disappear any time soon, and secondly, as a widely-used Microsoft product, there will be a significant developer community for the foreseeable future.”

The resulting BenNet platform was a far cry from the 10-year-old predecessor it replaced.

TIMELINE

INTRANET TIMELINE	
Milestone Date	**Milestone Description**
Pre-2000	Pandell, the organization’s first intranet implementation
2000–2010	BenNet (1.0)
January 2008	Most recent redesign begins
February 2010	BenNet (2.0) launches simultaneously in all four firm offices

INTRANET TEAM



Pictured: The BenNet team: (top row, left to right) Shelagh Mikulak, Brian Bawden, and Adeniyi Adebayo of Bennett Jones; (row two, left to right) Kathleen Moynahan, Ben Skelton, and Bryanne Philibert of Habañero Consulting; (row three, left to right) Akiva Bernstein and Matt Stark of V51 Consulting; (bottom row, left to right) Gerrick Denton and Howard Russell of RBRO.

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GOVERNANCE

Ownership

Ownership for BenNet lies with the firm's Chief Administrative Officer.

Two regional Intranet Coordinators, each responsible for two of the firm's four offices, manage BenNet's administrative modules on a day-to-day basis.

The KM team manages BenNet's KM modules, including the *Knowledge Bank* and practice group home pages. Each lawyer on the KM Team (currently there are three) has liaison responsibility for specific practice groups.

Bawden says the division of responsibility seems to work well for the firm.

BENNET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Steering Committee	• Provide overall governance and direction • Responsible for future development and enhancement
Change Advisory Team	• Review, assess, and prioritize proposed bug fixes and enhancements • Report to Steering Committee
IT Department	• Provide internal project management • Coordinate with external developers • Oversee deployments of bug fixes and enhancements • In process of assuming greater development role from external developers
Admin Team	• Provide oversight of admin content and admin department pages
Content Owners (Admin)	• Update their sections and ensure consistency • Delegate some updates and changes to other members of the team/department
KM Team	• Provide oversight of KM content and practice group home pages
Practice Group Coordinators	• Work with KM Team to facilitate practice group's use of BenNet functionality
Curators (Practicing lawyers)	• Keep one or more Knowledge Bank resources current

USERS

Everyone in the firm uses BenNet. This includes approximately 925 staff members, of which more than 400 are legal professionals. These users can be divided into the following groups:

- **Legal professionals:** Provide legal services to clients of the firm. Includes lawyers (partners, associates, and counsel), patent and trademark agents, paralegals and law clerks, articling students (graduate lawyers serving what is basically an apprenticeship), and summer students (students who have completed a year or more of their three-year law degree)
- **Managers:** Manage firm's various administrative departments, including Systems, Accounting, HR, and Marketing

- **Assistants:** Provide secretarial and administrative services to legal professionals and managers
- **Support Staff:** Work in the various administrative departments

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
Default Status	BenNet is set as each user's home page. Users can reset their home pages to something else, but the BenNet setting is persistent; when they log in again, the home page reverts to BenNet.
Remote Access	Users can access BenNet remotely using Citrix (secure login). This is an important feature as lawyers and senior managers frequently work from home — especially in the evening and on weekends, and when they travel.

DESIGN PROCESS AND USABILITY WORK

Project Goals

To understand the Bennett Jones intranet's evolution, it's important to understand the overarching goals that guided the project. These included:

- Foster the creation of a cohesive culture across all offices of the firm. This was especially critical because the firm had seen considerable growth, especially in its Toronto office, which had grown from 80 to 350 staff members since 2002.
- Assume a leadership position in technology use in the practice and business of law. This goal was aimed at meeting imperatives that firm leaders felt were most meaningful to its clients: responsiveness in the delivery of truly excellent advice and work product, coupled with greater efficiency and cost-effectiveness.
- Capture and preserve the firm's knowledge capital.
- Attract (and keep) the best and brightest lawyers.
- Compete with other law firms.
- Replace an existing intranet that no longer met the expectations of the firm and its personnel.

A Custom Approach

Prior to the redesign project the firm reviewed at least two off-the-shelf intranets, generically designed for law firms. The team quickly decided to design a custom intranet to fit the organization's specific needs rather than force the firm to fit into a prefabricated intranet product. So, the new BenNet was designed from the ground up to meet the firm's requirements.

It was built in SharePoint 2007 and integrated with several databases (including WorkSite, a third-party document management system). The firm used three outside

developers (described in more detail below) to assist with the effort and split the project into three phases.

“Phase One was ambitious,” says Bawden, “in that we insisted upon including a number of interactive features designed to emphasize knowledge sharing and encourage broad participation from the outset.”

Unfortunately, in law firms — as in other organizations —considerable activity and effort are often expended to aggregate various knowledge resources into repositories, but once that is done, the repositories often lie fallow.

“Knowledge, however, is a wasting asset,” says Bawden. “Without the means to keep those repositories current, they quickly become what one expert has dubbed ‘knowledge landfill.’ Our mantra was that knowledge sharing and use of BenNet needed to become ‘part of the culture, part of the routine’ and those interactive features were an essential part of making that happen.”

With that in mind, the team spent a fair amount of time in requirements gathering.

“Our greatest challenge was controlling the flow of great ideas,” says Bawden, “which can of course lead to ‘scope creep’ and delay of launch. It's always important to remember, as Voltaire said, ‘Perfect is the enemy of good.’”

Partnering with Outside Agencies

The firm partnered with a few outside agencies to augment its internal team’s expertise. Each agency was chosen to fulfill a specific project need and worked closely with the internal Bennett Jones team to ensure adherence to the project vision.

“We recognized the complexity of the project from the outset and each agency had its primary role,” says Bawden. “We started almost simultaneously with V51 and RBRO, and engaged Habañero within a few months of project inception following a search for a top-tier user experience design firm.”

The partner agencies for the project included:

PARTNER AGENCIES / RESPONSIBILITIES	
Agency: Habañero Consulting Group	
Overview	Habañero Consulting provided user experience design (IA, user interface design, usability testing, and related requirements gathering) and intranet governance consulting.
User Experience Consulting	The project followed Habañero's recommended user-centered design process. The internal team liked the fact that there was user involvement throughout the process, and there was close collaboration among the agency, the internal team, and end users throughout the project. "The research was incredibly important as it allowed us to grasp the cultural differences between the different offices, and determine how the intranet could make the lives of people at Bennett Jones easier," says Ben Skelton, Partner and Practice Leader, Websites and eCommerce (Habañero Consulting Group). "I also really enjoyed our four-hour review sessions — we don't often have the opportunity to collaborate with a client so closely on the design, which was a really intense, yet satisfying experience."
Agency: V51 Consulting	
Overview	V51 provided technical consulting and SharePoint development (solution architecture, technical design, development, and quality assurance) and led the requirements gathering, IA, and functional specifications for knowledge management modules (for example, *Knowledge Bank* and practice group home pages).
SharePoint Consulting	V51 Consulting was engaged to define and document the KM module requirements as well as to develop the entire intranet in SharePoint. The internal team spent several months working very closely with V51 to analyze the firm's knowledge management requirements. Following these KM workshops, V51 developed detailed wireframes for all KM modules (more than 300 pages). Habañero Consulting worked closely with V51 by providing heuristic reviews and feedback that went into the final revisions of the KM wireframes. With the exception of one portal section (forms and templates), all of the technical SharePoint development was outsourced to V51.
Agency: RBRO Solutions	
Overview	RBRO Solutions provided integration between the iManage WorkSite Document Management System (DMS) and the portal's *Knowledge Bank* Admin module.
Document	RBRO's role was to work closely with the KM Team and the

Management System (DMS) Integration	Firm's IT group to build a framework that enabled both users and knowledge workers to quickly identify important documents and easily submit them for review and potential publication to BenNet. The RBRO Team worked closely with V51 to develop a Web service synchronization process between the iManage WorkSite DMS and the portal's *Knowledge Bank* Admin module. Key outcomes from this activity included: • **Seamless integrations** into the DMS that let users tag documents for submission. The process enforced the inclusion of the metadata required to make the documents relevant to other consumers. The system also ensured that users submitted only content that they were authorized to submit for inclusion in the portal experience. • **A governing process,** which ensured that ethically controlled documents from the live system were properly secured until vetted and cleaned by KM lawyers. • **A synchronization process** that communicated directly with the BenNet portal. • **Link technology** that let portal users obtain documents directly from the DMS via the portal. This let the firm maintain a usage history for WorkSite-based content via the DMS' core systems.

Usability Activities

With Habañero Consulting's assistance, the internal team conducted several research activities throughout the project. These included:

- **Beta testing of new design.** The intranet was first tested with a group of approximately 90 users in three of the four offices (all of the articling students and selected admin personnel) before it was released to the whole firm.
- **Card sorting.** Card sorts were conducted with various members of the firm to help determine the overall intranet structure. The card-sorting exercise also let the team explore the different content types and functionality that a user might expect to find under each label. Through this process, they were able to test and refine the proposed global navigation labels.

  The intranet team also completed an internal card-sorting exercise to help determine the detailed structure of the *How Do I…?*, *Policies + Benefits*, and *Forms + Templates* modules.
- **Checking server logs or usage stats.** The team conducted a review of available server logs and analyzed usage statistics to inform some of their design decisions.
- **Field studies (visiting and watching people in their workplace).** Team members conducted a series of one-on-one interviews with partners, associates, administrative staff, and articling students across the firm. The

interviews were conducted in Edmonton, Calgary, and Toronto in boardrooms and occasionally in individual offices or workstations.

- **Researching usability or design through books, reports, or other resources.** The team consulted the NN/g *Intranet Design Annual* and other published research to learn about best practices in intranet design. They also relied on the accumulated knowledge of the Habañero team, which specializes in intranet design.
- **Usability testing of design prototypes.** The team conducted usability testing in-person in Toronto; they chose that office because the card-sorting exercises had been done in Calgary.

Features for Work

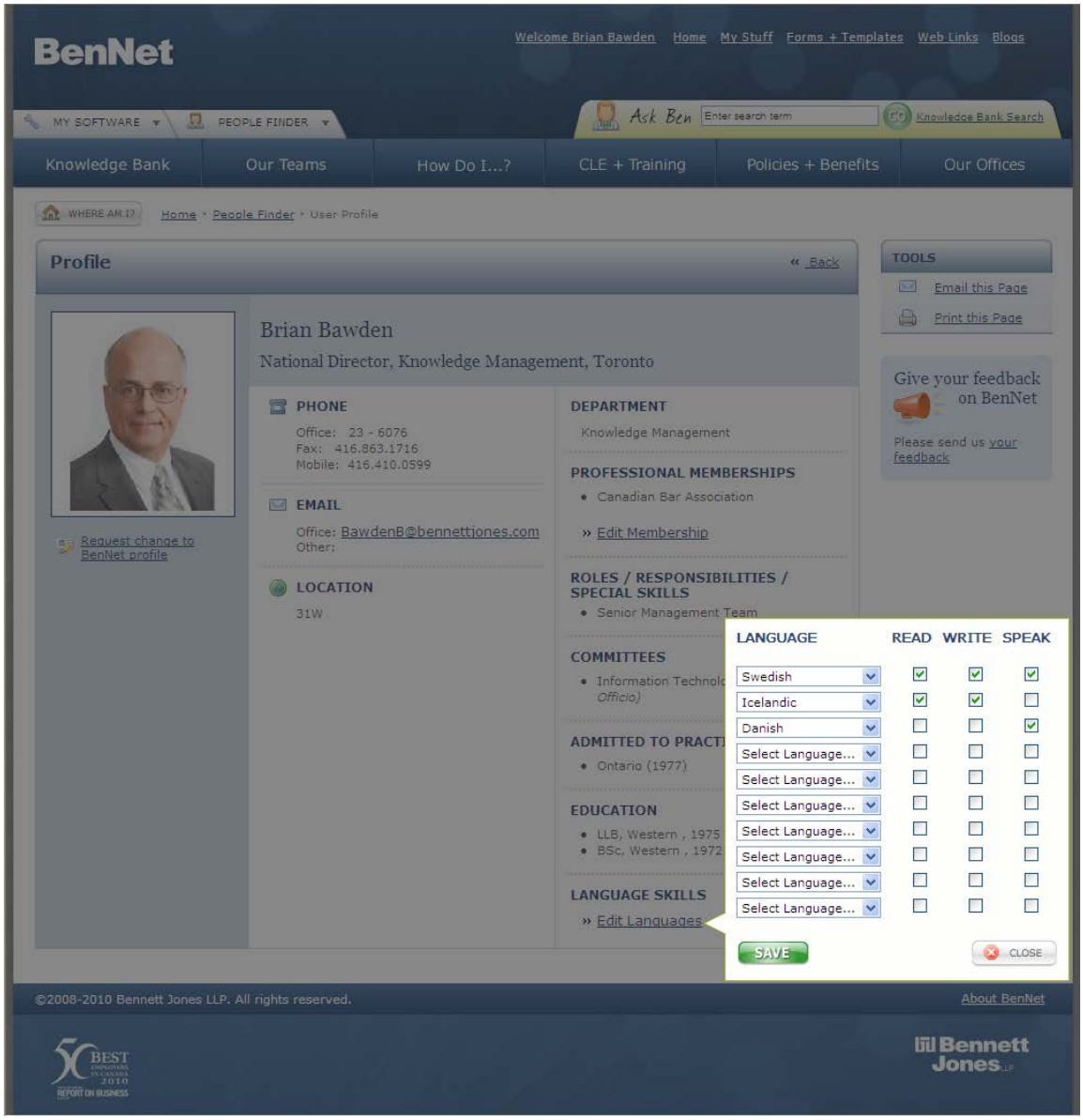
The result of all of this user involvement and research is an array of features that closely match the work habits of the firm's employees. And, perhaps most importantly, the feature set helps employees enhance their interactions with other team members. The examples below illustrate different aspects of that collaborative work environment in action.


BenNet
Welcome Christina
Home
My Stuff
Forms + Templates
Web Links
Blogs
FAQ
MY SOFTWARE
PEOPLE FINDER
Ask Ben
Enter search term
GO
Knowledge Bank Search
Knowledge Bank
Our Teams
How Do I...?
CLE + Training
Policies + Benefits
Our Offices
WHERE AM I?
Home › Our Teams › Practice Groups › International Trade › Blog › Blog Post
Policy Review – Foreign Investment in the Book Industry
« Back
Sep 20, 2010 at 01:15pm
Posted By: Brian
Time EST
Quick recap on where this Policy Review stands:
As you no doubt recall, the Minister of Canadian Heritage and Official Languages issued a discussion paper on July 22, 2010, entitled Investing in the Future of Canadian Books (document here) as a kick-off for a review of the current policy (document here) that has been in place since 1992.
The initial phase solicited the views of stakeholders, referencing a questionnaire included in the discussion paper. The cut-off date for stakeholder submissions was September 18th.
Stakeholder submissions will be posted on the web site (apparently not until October), which will enable the second phase, in which both the general public and stakeholders can comment on submissions. Comments will be accepted until October 31.
According to the web site, "key stakeholders will be invited to take part in roundtables to be held in late 2010, and a ministerial decision on whether, and if so, how, to revise the policy is expected in 2011".
COMMENTS
Milos
Sep 21, 2010 at 11:14am
FYI, we recently assisted a client, , with regard to its submission in connection with this consultation. It is probably worth discussing briefly at a future Competition Group meeting.
Add Your Comment
Your comments will be displayed along with your name.
SUBMIT
TOOLS
Email this Page
Print this Page
Give your feedback on BenNet
Please send us your feedback
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About BenNet
50 BEST EMPLOYERS IN CANADA 2010 REPORT ON BUSINESS
Bennett Jones LLP

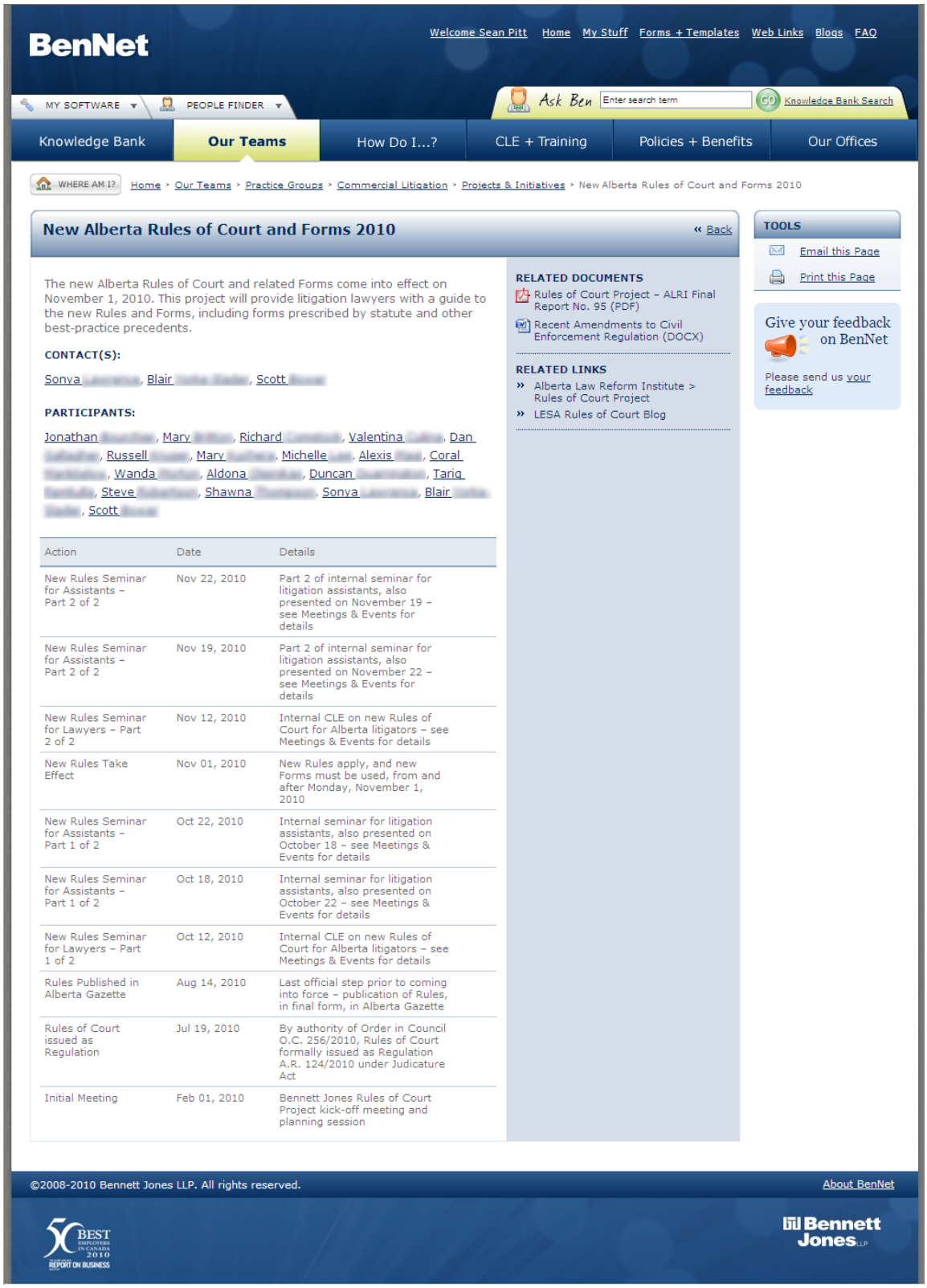
Pictured: Blogging is completely open at the firm. Anyone can start a blog or read and comment on any other. With 45 already in play, the tool has become a primary vehicle for communication and knowledge sharing at the firm. The firm so strongly supports blogging that it encourages users to think of the blog as a substitute for email conversations intended for a large audience or community of practice. In a legal environment such as theirs, the Bennett Jones users engage in blog conversations around important cases or new legislation, disseminate best practices, review new precedents, and so on. It makes sense to put these discussions in blog format as blogs are fully searchable and entries never disappear. To accommodate users who are less technologically inclined, the team also provides simple widgets that let users post blog entries, subscribe to notifications, and cross-post to multiple blogs.



Pictured: The landing page for one of BenNet's 44 team workspaces — in this case, a lawyers' practice group. The left-hand navigation links to information relevant to the team workspace and supports collaboration among teams. This provides a simple means to cross-post meetings and events, projects and initiatives, and blog postings.



Pictured: The *PeopleFinder* feature lets employees easily indicate the languages they read, write, and speak. To date, 40 languages have been declared, making the firm more multicultural than the firm realized prior to having this snapshot. Firm members have even been "genuinely touched" to find their languages on the list, making the team glad they did their homework in compiling the master list, which offers more than 50 languages.


BenNet
Welcome Sean Pitt
Home
My Stuff
Forms + Templates
Web Links
Blogs
FAQ
MY SOFTWARE
PEOPLE FINDER
Ask Ben
Enter search term
Knowledge Bank Search
Knowledge Bank
Our Teams
How Do I...?
CLE + Training
Policies + Benefits
Our Offices
WHERE AM I?
Home › Our Teams › Practice Groups › Commercial Litigation › Projects & Initiatives › New Alberta Rules of Court and Forms 2010
New Alberta Rules of Court and Forms 2010
« Back
The new Alberta Rules of Court and related Forms come into effect on November 1, 2010. This project will provide litigation lawyers with a guide to the new Rules and Forms, including forms prescribed by statute and other best-practice precedents.
CONTACT(S):
Sonya, Blair, Scott
PARTICIPANTS:
Jonathan, Mary, Richard, Valentina, Dan, Russell, Mary, Michelle, Alexis, Coral, Wanda, Aldona, Duncan, Tariq, Steve, Shawna, Sonya, Blair, Scott
Action
Date
Details
New Rules Seminar for Assistants – Part 2 of 2
Nov 22, 2010
Part 2 of internal seminar for litigation assistants, also presented on November 19 – see Meetings & Events for details
New Rules Seminar for Assistants – Part 2 of 2
Nov 19, 2010
Part 2 of internal seminar for litigation assistants, also presented on November 22 – see Meetings & Events for details
New Rules Seminar for Lawyers – Part 2 of 2
Nov 12, 2010
Internal CLE on new Rules of Court for Alberta litigators – see Meetings & Events for details
New Rules Take Effect
Nov 01, 2010
New Rules apply, and new Forms must be used, from and after Monday, November 1, 2010
New Rules Seminar for Assistants – Part 1 of 2
Oct 22, 2010
Internal seminar for litigation assistants, also presented on October 18 – see Meetings & Events for details
New Rules Seminar for Assistants – Part 1 of 2
Oct 18, 2010
Internal seminar for litigation assistants, also presented on October 22 – see Meetings & Events for details
New Rules Seminar for Lawyers – Part 1 of 2
Oct 12, 2010
Internal CLE on new Rules of Court for Alberta litigators – see Meetings & Events for details
Rules Published in Alberta Gazette
Aug 14, 2010
Last official step prior to coming into force – publication of Rules, in final form, in Alberta Gazette
Rules of Court issued as Regulation
Jul 19, 2010
By authority of Order in Council O.C. 256/2010, Rules of Court formally issued as Regulation A.R. 124/2010 under Judicature Act
Initial Meeting
Feb 01, 2010
Bennett Jones Rules of Court Project kick-off meeting and planning session
RELATED DOCUMENTS
Rules of Court Project – ALRI Final Report No. 95 (PDF)
Recent Amendments to Civil Enforcement Regulation (DOCX)
RELATED LINKS
» Alberta Law Reform Institute > Rules of Court Project
» LESA Rules of Court Blog
TOOLS
Email this Page
Print this Page
Give your feedback on BenNet
Please send us your feedback
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About BenNet
50 BEST EMPLOYERS IN CANADA 2010 REPORT ON BUSINESS
Bennett Jones LLP

Pictured: Project details for a significant and impending change of court rules affecting the Firm's Alberta offices. The project was created in the *Projects & Initiatives* section of the Commercial Litigation practice group's homepage and cross-posted to the corresponding section on the homepages of other affected practice groups. Identifying the initiative in this way, for all to see, reassures those affected that the firm will be ready by the time the changes take effect, and allows interested parties to become involved.

BenNet

Welcome Sean Pitt | Home | My Stuff | Forms + Templates | Web Links | Blogs | FAQ

MY SOFTWARE | PEOPLE FINDER | Ask Ben | Enter search term | GO | Knowledge Bank Search

Knowledge Bank | Our Teams | How Do I...? | CLE + Training | Policies + Benefits | Our Offices

WHERE AM I? Home › How Do I... › File + Document Management › Manage conflicts and secrets › Identify a legal or business conflict

HOW DO I...

File + Document Management

- Manage conflicts and secrets
- Open a file
- Deal with documents
- Close a File
- Use Referral Management
- Manage files sent to Storage

Accounting
Technology
Practice Support
Research
After Hours
Meetings
Safety, Security + Health
Office Services
Marketing
Travel
Career + Employment

Identify a legal or business conflict

« Back

There are different types of conflicts to consider before opening a file and accepting the retainer.

NATIONAL

There are different types of conflicts to consider before opening a file and accepting the retainer.

1. Loyalty

A lawyer and the Firm cannot act against the immediate interests of a current client without consent, even where the retainers are unrelated (*R. v. Neil*, Conflict Policy page 2).

Example: Acting on a collection matter against a company for which we have an open, although insignificant, patent file.

2. Confidential Information

A lawyer and the Firm cannot act against the interests of either a current or a former client where the lawyer or the Firm possesses relevant information obtained from a solicitor/client relationship, which could, in the new retainer, be used to the prejudice of the former client (*Martin v. Gray*, Conflicts Policy, page 3).

Examples: Corporate - Having acted for one party in developing a joint venture agreement many years previously, now acting for another party to that agreement with respect to a dispute arising under that agreement.

Litigation - Taking proceedings against an individual where we had, some years previously, acted on estate planning work for the individual such that we knew his assets and liabilities.

3. Business Conflict

A business conflict is one where, there being no loyalty conflict or confidential information conflict, the Firm, for business reasons, may not wish to accept the new retainer.

Examples: Accepting a small retainer which would preclude the Firm from accepting a larger retainer with respect to the same subject matter. This situation arises when the Firm is asked to act for an Independent Committee or a Financial Advisor where a major corporate sale is in process and where existing clients of the Firm may be candidates to acquire the business. Another example is bringing a lawsuit against the president of a corporate client.

For more information on identifying and resolving a business conflict, see Related Links.

Last updated on Monday, Dec. 07, 2009 at 11:49:19 AM

» Top of the Page

RELATED LINKS

- » Conflicts Policy
- » How do I...Identify and resolve a business conflict
- » Conflicts Committee

TOOLS

Email this Page
Print this Page

Questions?

Please contact:



Brad [redacted]
25 - 3194
[redacted]

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About BenNet

50 BEST EMPLOYERS IN CANADA 2010 REPORT ON BUSINESS

Bennett Jones LLP

Pictured: An example of *How Do I…?* content — in this case, how to identify a legal or business conflict. In addition to the explanation in the central panel, a *Related Links* widget in the right-hand panel lets users quickly find related policies and other content. There's also a *Questions* widget that identifies the page's owner, to whom inquiries may be directed.

CONTENT AND CONTENT CONTRIBUTORS

Content management is split into two different processes to accommodate the two types of content housed in BenNet: KM content and administrative content. These content types are not only distinctly different, but are dealt with in distinctly different ways by two different teams.

KM Content and *Knowledge Bank*

"KM content" generally refers to the practice resources that the firm's legal professionals use every day to practice law and service clients. The KM team is responsible for gathering, processing, and publishing this content. Immediate access to the KM is considered mission-critical to the firm.

This content serves the particular needs of the legal professional, whatever those needs might be in the specific instance. And these resources are housed in a system of repositories in BenNet's *Knowledge Bank* module and include:

- **Precedents:** Models or examples of contracts, court documents, and other drafting resources used as starting points to document new transactions or proceedings.
- **Research:** Internal memoranda and other literature that discuss and analyze interesting or difficult points of law.
- **Clauses:** Model language for specific provisions of contracts or other legal documents.
- **Firm Publications**: Updates and alerts sent to clients, as well as articles, papers, and speeches by members of the firm.
- ***BenNet Books*:** Selected *Knowledge Bank* resources, from the *Precedents*, *Research*, *Clauses*, and *Firm Publications* repositories, assembled into a familiar book metaphor with optional added narrative. *Knowledge Bank* also includes direct access to the catalogue for the firm's four library collections of print and electronic resources.

KM Content Management

The primary contributors of *Knowledge Bank* content are the legal professionals themselves. To facilitate the contribution process, a *Share Your Work* widget is prominently displayed in various *Knowledge Bank* locations.

In response to suggestions from users, the team will be adding this widget to the BenNet home page as well. The *Share Your Work* widget creates a workflow that lets users submit content electronically and, at the same time, provides the KM Team with basic but essential information (metadata) about the content being submitted.

Parsing the Contributions

Not every contribution, however, is accepted for publication in *Knowledge Bank*. The *Knowledge Bank* was designed to be a "premium" content collection, meaning that

content is accepted only if a subject matter expert of suitable seniority vouches for it. This helps to ensure quality and consistency of new work product.

"To that end," says Bawden, "we track who submits the content and, before the content is published to the *Knowledge Bank*, a member of the KM team confirms that the submitter is a subject matter expert in regard to the content submitted. If not, the content is routed to a subject matter expert for review prior to publication."

"The process is not as onerous as it sounds," he says. "If a partner in the Employment practice group sends us an employment contract, we publish it to *Knowledge Bank*. If a Tax partner sends us an employment contract, we ask an Employment partner to review it before we publish it."

To acknowledge contributions and provide feedback to content contributors, the KM team advises contributors whether their contribution has been accepted for publication (and if not, why not). For contributions that are accepted, contributors are apprised as to how the document or clause has been described and classified so that they can correct any errors or suggest improvements.

The result is that the KM team must work closely with practice groups and individuals, on an ongoing basis, to generate contributions of premium content and assemble related content into *BenNet Books*.

Contributions that are accepted are copied into a separate WorkSite library that was created for this purpose, and from there are published to *Knowledge Bank* using a specially designed Web service (described below).

According to Bawden, using WorkSite offered many benefits, including that it let them track any circulation restrictions — or *firewalls* — both before and after publication to *Knowledge Bank*. Using WorkSite also let them create the unique *Find the Children* mechanism (described below).

In that separate library, called DMS-KM, default access is read-only. However, because WorkSite is accessible to all personnel, the team was able to institute a "curator" program, granting edit rights to specific documents to individuals who accept responsibility, for a specified period of time, to keep those documents up-to-date.

Due to certain WorkSite limitations, users might not be able to add all of the metadata or use all of the taxonomies selected by the team to classify the documents (type of transaction, jurisdiction, and so on). To address this, they carry out these activities at the SharePoint/*Knowledge Bank* level, using a module that the team developed called *Knowledge Bank Admin.*

DMS-KM and *Knowledge Bank Admin*

One of the firm's partner agencies, RBRO, was tasked with helping the Bennett Jones team develop a framework that would enable the firm's KM lawyers to quickly identify important documents and easily submit them for review and potential publication to BenNet. The RBRO Team worked closely with V51 to develop a Web service synchronization process between the iManage WorkSite DMS and the portal's *Knowledge Bank Admin* module. The key outcomes from this effort included:

- **Seamless integration** with the DMS that lets users tag documents for submission. The process also enforces inclusion of the metadata required to make the documents relevant to other consumers of the information. In

addition, the system ensures users submit only content that they're authorized to submit for inclusion on the portal.

- **A governing process** that ensures that ethically controlled documents are properly secured from the live site until they are vetted and sanitized, if necessary, by the firm's KM lawyers.
- **A synchronization process** that communicates directly with the BenNet portal.
- **Link technology** that lets portal users obtain documents directly from the DMS. With this, the firm can maintain a history of usage of WorkSite-based content via the DMS' core systems.

"The challenge of any great system," says Russell, "is to provide the average user with a simple method of submitting valuable content for the benefit of themselves and others." And this system accomplishes that in spades.

KM lawyers also have a critical function: to identify and label content that others create and augment the mix of valued assets.

"The way in which the DMS was integrated with *Knowledge Bank Admin* met that challenge," says Russell.

Once the DMS was integrated with the *Knowledge Bank Admin*, rolling it out to users was simple. The DMS was already front and center, on each user's desktop. Given their pre-existing comfort level with that aspect of the tool, even less technical users could take part in the knowledge-sharing process right away. This, in turn, led to wider adoption in less time.

"For example," says Bawden, "the success of the Curator program depended on the seamless integration achieved with the DMS."

Outside of the obvious knowledge-sharing benefits of the DMS and *Knowledge Bank* integration, the marriage of the two systems offered the firm other critical, yet ancillary benefits. These included helping the firm identify "children" and facilitating the Curator program. These functions are described below:

- ***Find the Children***

  In the ordinary course of the firm's business, precedents and other *Knowledge Bank* documents are copied and modified to create new documents, and the newly created documents, or *children*, are saved to WorkSite, the Firm's DMS.

  Taking advantage of complete integration between BenNet and the DMS, the *Find the Children* feature can, at any point in time, identify all of the DMS documents that have been created from precedents and other *Knowledge Bank* documents, based on unique codes embedded in each knowledge resource in *Knowledge Bank* resource.

  "This ground-breaking mechanism enables us to not only track actual usage of knowledge resources," says Bawden, "but to learn from it by comparing the children to the parent, and continuously feed improvements back into the system, achieving a critical goal that has long eluded KM practitioners."

- ***See Also***

  Similar to the comment-and-notification mechanism, each *Knowledge Bank* resource has a *See Also* section associated with it. This information is used to record links to related documents, blog postings, CLE programs, and/or other

background material that might be helpful in facilitating the document's proper use.

- **Curators and Periodic Review**

  Significant documents in *Knowledge Bank*, such as model precedents, might be assigned a "curator" who is responsible, for a specified time period, to keep that document up-to-date, taking into account such things as new legislation and court decisions. A curator might be an established expert or a junior lawyer who will develop greater expertise in the particular subject area as a result of being appointed a curator. The curator's identity is displayed with the document so that others know who has that responsibility. The curator will also be notified, along with the KM Team, of any comments posted on that document.

  When the curator or other senior lawyers undertake a review of a *Knowledge Bank* document, the date, reviewer names, and any relevant particulars are then displayed with the document.

Administrative Content

The other content type is referred to as administrative content: useful information about the firm, its offices, policies, programs, procedures (including necessary forms and workflow), benefits, history, news, and so on.

Contribution and management of administrative content is done on the basis of distributed responsibility, and each and every admin page has an owner. On most pages, the owner is identified with contact particulars.

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	**Hardware:** • ESX VSphere 4.0 Enterprise Edition Virtual Server with dedicated Intel Xeon CPU E7440 @ 2.4Ghz (2 processors) • 4 GB of RAM **O/S:** • Windows Server 2008 R2 Standard
Bug Tracking/Quality Assurance	• Bugzilla as the primary system to log both feature requests and bugs
Design Tools	• Adobe Fireworks
Site Building Tools	• MOSS 2007 Enterprise Edition
Content Management Tools	• MOSS 2007 Enterprise Edition • iManage WorkSite DMS (extended by RBRO to push content to SharePoint — see Part I for a description of DMS-KM and its relationship to Knowledge Bank Admin)
Search	• MOSS 2007 Enterprise Search
Other Functions	• At the suggestion of V51, the team used Basecamp, an online project management tool, to foster communication among teams, track issues, and share files

MOBILE

Mobile access is limited for BenNet. And, like many large organizations experimenting with mobile intranet access, Bennett Jones is taking a watch, learn, and implement-in-stages approach.

“For the first phase of BenNet, we made sure that our users could access the blogs and post comments on blog postings from their BlackBerrys,” says Bawden. “But we did not create a mobile version of the site for the first phase. Our plan is to observe how our users are using the site and, based on that information, to add mobile capabilities in a later release for some key mobile scenarios.”

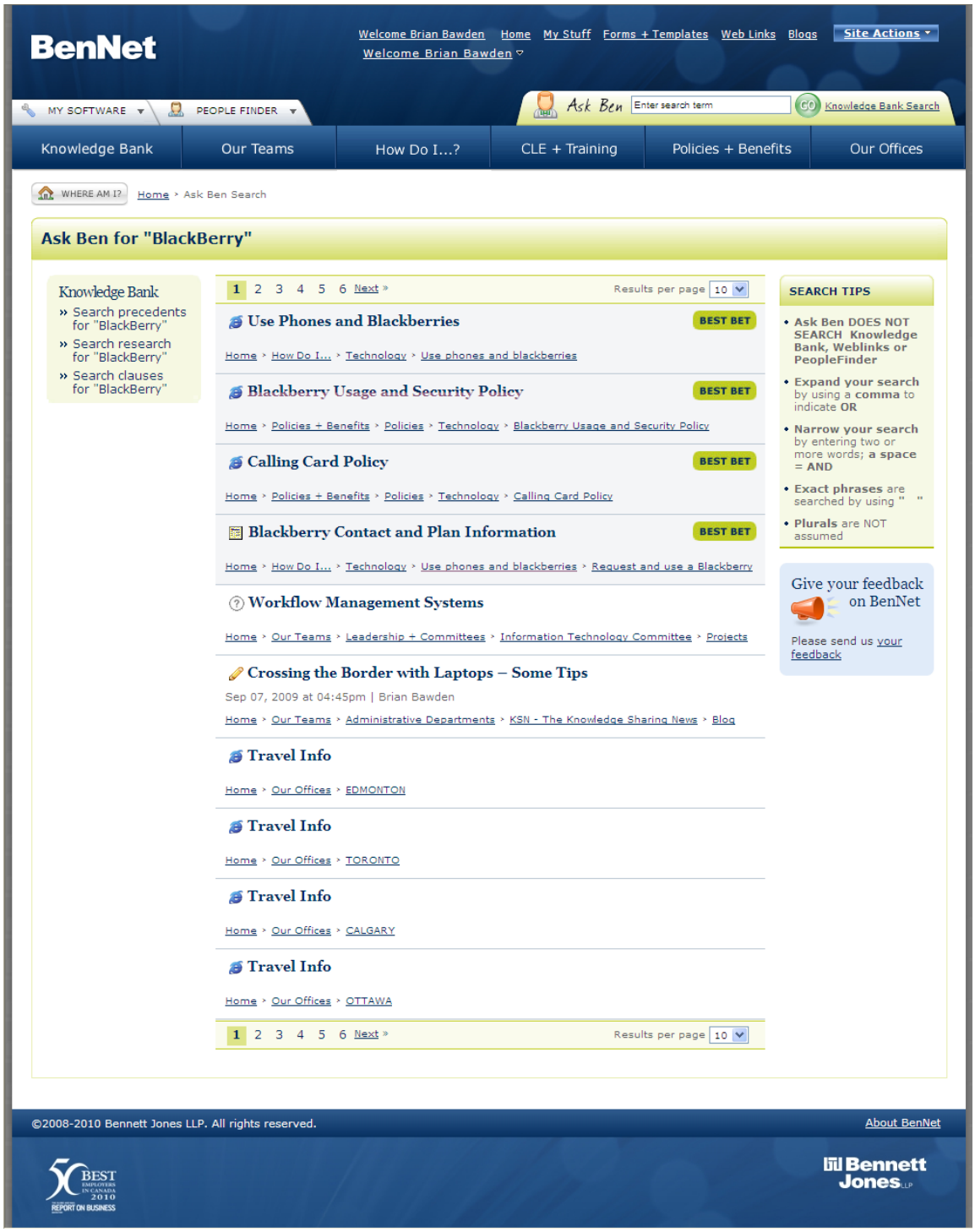
SEARCH

The portal contains several search interfaces, including:

- A general portal search, known as *Ask Ben*, designed to help users find administrative content
- *Knowledge Bank* search tools that help lawyers locate legal knowledge sets
- A *PeopleFinder* search tool

Ask Ben

Ask Ben is configured using MOSS 2007 Enterprise Search. Currently, this is searching content only in SharePoint site collections. The team configured keywords and best bets to promote content that absolutely must be found. For users who still like to find KM content in *Ask Ben*, they provide one-click links to execute those searches in the *Knowledge Bank* search.



Pictured: A search results page, including best bets, of an employee search for the term “Blackberry” using the *Ask Ben* search feature. *Ask Ben* is another example of the user-centric approach to finding intranet information. Search tips are prominently displayed, as are links to *Knowledge Bank* searches for the same topic.

Knowledge Bank Search

Unlike *Ask Ben*, the *Knowledge Bank* search is more customized to the organization's needs.

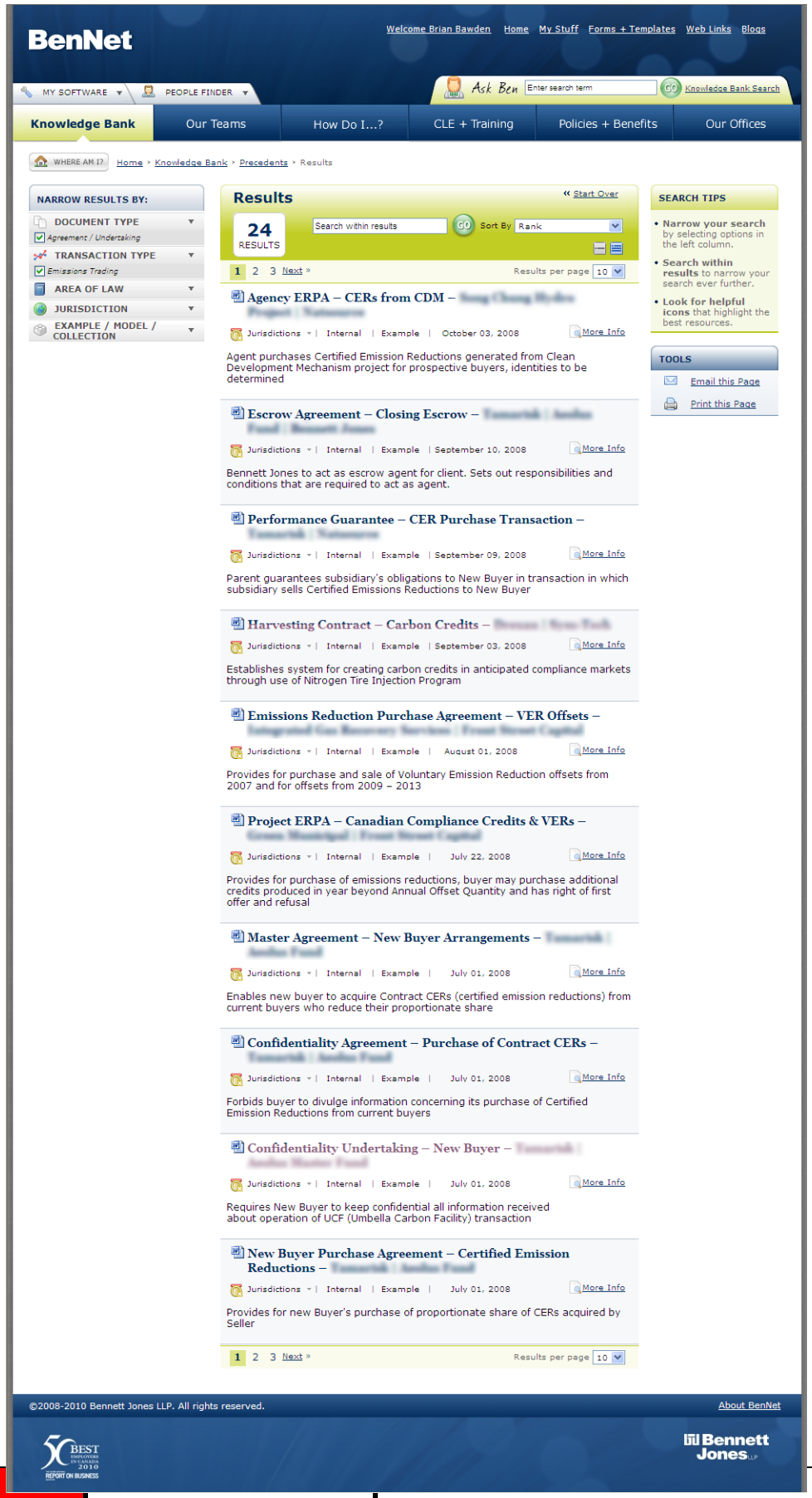
"*Knowledge Bank* search is much less out of the box," says Bawden. "The majority of content in *Knowledge Bank* is stored in document libraries with a fair bit of metadata including hierarchical taxonomies not fully supported by MOSS 2007."

When a user executes a keyword search in *Knowledge Bank*, the search is executed across multiple content types, using different search scopes for each content type and targeting different metadata depending on the type. Results are displayed either by date or relevance or some other criteria depending on the content type. Copies of documents from the enterprise DMS are also stored in SharePoint and indexed for search purposes.

"With *Knowledge Bank*, as indicated, we implemented faceted classification in combination with search," says Bawden. "Interestingly, the most efficient means of finding a precedent is to begin with faceted classification (for example, choose a type of agreement), and apply other filters as applicable, using full text search if needed only as a last resort."

Conversely, the most efficient means of finding an article, memo, or other research item or firm publication is to begin with full text search, using faceted classification only as a last resort. However, this approach is not the most obvious path, and team members know they need to work on this.

"We think we will need to adjust the interface to make this more obvious," he says.


BenNet
Welcome Brian Bawden
Home
My Stuff
Forms + Templates
Web Links
Blogs
MY SOFTWARE
PEOPLE FINDER
Ask Ben
Enter search term
Knowledge Bank Search
Knowledge Bank
Our Teams
How Do I...?
CLE + Training
Policies + Benefits
Our Offices
WHERE AM I?
Home › Knowledge Bank › Precedents › Results
NARROW RESULTS BY:
DOCUMENT TYPE
Agreement / Undertaking
TRANSACTION TYPE
Emissions Trading
AREA OF LAW
JURISDICTION
EXAMPLE / MODEL / COLLECTION
Results
« Start Over
24 RESULTS
Search within results
Sort By Rank
1 2 3 Next »
Results per page 10
Agency ERPA – CERs from CDM –
Jurisdictions | Internal | Example | October 03, 2008
More Info
Agent purchases Certified Emission Reductions generated from Clean Development Mechanism project for prospective buyers, identities to be determined
Escrow Agreement – Closing Escrow –
Jurisdictions | Internal | Example | September 10, 2008
More Info
Bennett Jones to act as escrow agent for client. Sets out responsibilities and conditions that are required to act as agent.
Performance Guarantee – CER Purchase Transaction –
Jurisdictions | Internal | Example | September 09, 2008
More Info
Parent guarantees subsidiary's obligations to New Buyer in transaction in which subsidiary sells Certified Emissions Reductions to New Buyer
Harvesting Contract – Carbon Credits –
Jurisdictions | Internal | Example | September 03, 2008
More Info
Establishes system for creating carbon credits in anticipated compliance markets through use of Nitrogen Tire Injection Program
Emissions Reduction Purchase Agreement – VER Offsets –
Jurisdictions | Internal | Example | August 01, 2008
More Info
Provides for purchase and sale of Voluntary Emission Reduction offsets from 2007 and for offsets from 2009 – 2013
Project ERPA – Canadian Compliance Credits & VERs –
Jurisdictions | Internal | Example | July 22, 2008
More Info
Provides for purchase of emissions reductions, buyer may purchase additional credits produced in year beyond Annual Offset Quantity and has right of first offer and refusal
Master Agreement – New Buyer Arrangements –
Jurisdictions | Internal | Example | July 01, 2008
More Info
Enables new buyer to acquire Contract CERs (certified emission reductions) from current buyers who reduce their proportionate share
Confidentiality Agreement – Purchase of Contract CERs –
Jurisdictions | Internal | Example | July 01, 2008
More Info
Forbids buyer to divulge information concerning its purchase of Certified Emission Reductions from current buyers
Confidentiality Undertaking – New Buyer –
Jurisdictions | Internal | Example | July 01, 2008
More Info
Requires New Buyer to keep confidential all information received about operation of UCF (Umbella Carbon Facility) transaction
New Buyer Purchase Agreement – Certified Emission Reductions –
Jurisdictions | Internal | Example | July 01, 2008
More Info
Provides for new Buyer's purchase of proportionate share of CERs acquired by Seller
1 2 3 Next »
Results per page 10
SEARCH TIPS
Narrow your search by selecting options in the left column.
Search within results to narrow your search ever further.
Look for helpful icons that highlight the best resources.
TOOLS
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About BenNet
Bennett Jones LLP

Pictured: Search results in *Knowledge Bank* can be quickly refined to include only the most relevant results using a filtering control that appears in the left-hand panel. This tool has proven to be both effective and popular, as users generally need to apply only two or three filters to reduce a result set of more than 1,000 to a list of fewer than 10. In this example, the user has applied only two filters from different categories — a document type of "agreement/undertaking" and a transaction type of "emissions trading" — to reduce a long list of documents to a more manageable number, and with this narrowing in place, he can now "search within results" or apply additional filters to reduce the list even further.

PeopleFinder is configured in the same way as *Knowledge Bank* search in that it offers an intuitive, browser-refined interface.

"We anticipate we will incorporate into BenNet a more sophisticated search engine, capable of concept searching and able to apply taxonomies (for example, FAST, Recommind, or Autonomy) in the foreseeable future," says Bawden.

RESULTS AND ROI

The golden rule concerning return on investment (ROI) is: benefit is in the eye of the beholder. And nowhere is that more true than with BenNet. Sometimes intranets return quantifiable results (though not often) and sometimes they result in softer impacts such as increased use or user satisfaction. BenNet falls squarely in the latter.

"Ours is not an intranet that readily lends itself to dollars-and-cents calculations of savings or benefits," says Bawden. "Nevertheless, we believe that we have achieved an enormous return on our investment because BenNet creates a sense of community, disseminates information, and breaks down barriers of time and distance between offices — and because it has clearly been embraced by lawyers and staff alike."

"In that vein, perhaps the most immediate success of the new BenNet has been *PeopleFinder*," he says, "closely followed by *BenNet Books*, the *How Do I…?* module, and blogs." He breaks down how each of these modules has returned value for the firm as follows:

- ***PeopleFinder***

  "We can see that *PeopleFinder* receives an enormous amount of use on a daily basis," says Bawden, "but our awareness of the success of *PeopleFinder* is also, in part, anecdotal."

  The team has received considerable praise for *PeopleFinder*'s effectiveness from personnel in all groups and departments, but most notably from busy partners (who, he says, rarely take time for such things). The tool's effectiveness extends beyond such things as staffing new projects and transactions for clients to helping users get to know their colleagues, especially in other offices.

  "We have also received numerous suggestions for expanding the scope of *PeopleFinder* with additional information, which we take as an indicator of its penetration and success," he says.

One measurable way the firm can gauge the tool's success is by tracking the self-declaration of languages and professional memberships contained in the staff profiles. And that activity has yielded great results.

"Our people have declared proficiency in more than 40 different languages (other than English)," says Bawden. "And we expect that number will increase somewhat — perhaps to as many as 45. For professional memberships, we started with a pick list of 66 professional organizations, which has increased to 116 as a result of requests from users who wished to declare their memberships in organizations that were not initially on the list."

- ***BenNet Books***

  BenNet Books is a big hit at the firm.

  "The introduction of *BenNet Books* has caused considerable excitement amongst the lawyers," says Bawden. "We now have 34 books published and many more in preparation. We expect the pace of creation of *BenNet Books* to quicken, as more people see them and realize the possibilities."

  BenNet Books might be described as a successful marriage of traditional KM material with context and process, with the result that the firm can deliver workplace learning while facilitating creation of work products that are consistently of the highest quality.

  "*BenNet Books* moves us measurably closer to the ultimate goal of knowledge sharing — that 'we all know what we each know,'" he says, adding that "one of the interesting observations about *BenNet Books* is that, instead of the traditional approach of submitting one precedent at a time, contributors are teaming up and assembling and submitting 50 to 100 (or more) precedents at once, so as to populate a complete *BenNet Book*."

- ***How Do I…?***

  The *How Do I…?* module has garnered a great deal of praise from both new hires and "old hands" at the firm. Not only for its functionality, but also for the vast amount of information about processes and procedures it contains.

  "The task-oriented presentation makes people feel that the answers they need are literally at their fingertips," says Bawden. "Numerous suggestions received through the BenNet feedback widget indicate that people are delving into it in detail, and administrative personnel have reported a dramatic decrease in the number of questions they receive by phone or email."

  Another side benefit of the module was derived from the process of developing it. The development process prompted the firm to centralize data and streamline administrative processes across the firm.

  "This resulted in making staff more efficient (and using less paper, which of course benefits the environment)," says Bawden.

- ***Blogging***

  And if *BenNet Books* is a good indication of participation, then participation in blogging is the definitive sign of success in participation.

  "The uptake on blogs has been nothing short of remarkable," says Bawden, "especially for a population that previously was largely unfamiliar with blogging."

One of the blog features lets users, through a simple widget, subscribe to any or all blogs and choose to receive email alerts of blog postings on an immediate, daily, or weekly basis. Prior to the BenNet launch, the team made what turned out to be an important decision: to presubscribe everyone to their respective practice group or departmental blogs to receive daily email alerts of blog postings.

"We felt that if we wanted people to go to the effort of blogging, we needed to provide them with an audience," he says. "And presubscription created that audience."

In more than six months since launch, less than one percent of the firm's personnel have unsubscribed to blog alerts.

Other Measures of Success

Bawden cites some other measures that point to the new BenNet's success. These include:

- Extensive use of the *Share Your Work* widget, producing more content for *Knowledge Bank*, which arrives in a steady stream
- Extensive use of the BenNet feedback widget, yielding a wealth of suggestions for improvements and new features
- Employees' ability to simply start using BenNet, with little or no training (especially the lawyers, who rarely attend training), which is evidenced by minimal Help Desk calls
- Practice groups actively seeking assistance from KM lawyers in using BenNet's features and functionality to develop practice group resources
- More robust response to clients (in particular in context of RFPs), who increasingly want the law firms they engage to show evidence of efficiencies created through the use of technology
- More robust response to our recruiters, who have been increasingly queried by law school graduates about our technology. The same applies to potential lateral hires (that is, established lawyers from other firms), who are looking for a high level of practice support from technological tools

LESSONS LEARNED

As with all intranet project teams, the Bennett Jones team can claim some sweet victories and some painful lessons learned.

"Throughout the course of the BenNet project, we did some things right and some things wrong," says Bawden. "Fortunately for us, the things we did right outnumbered the things we would do differently next time."

Team members learned many lessons, including:

- **Solicit support and involvement from senior management.** "To start with, we cannot overemphasize the benefit of having significant management buy-in and involvement throughout the planning and execution phases of your project. Even the most well-run projects will hit a bump or two in the road (we had our share), and when this occurs you want management on your side, instead of having to spend precious time bringing them up to speed and trying to secure their support."

- **Dedicate an internal project manager.** "The second thing we cannot overemphasize (and one thing we initially failed to appreciate) is the importance of having an internal project manager who can spend all of his/her time focusing on the project. The internal project manager must comprehend an enormous amount of detail and must work closely with any external project managers. This is especially critical for projects such as ours, where we engaged different organizations to help with the user experience design and development."
- **Articulate goals and guiding principles. "**Take time at the outset of the project to write down the goals and guiding principles for your intranet, and review them with senior management. This will help make difficult and/or political decisions easier, and can be extremely helpful when the team is tasked with determining which features to include in the current phase and which features to push off to a future phase."
- **Invest in user experience design.** "Fortunately for us, some key members of the Steering Committee understood the importance of user experience design. Putting a significant amount of effort and resources into user experience design will mitigate risks around user adoption. Put more simply, it's the investment that will help you realize the larger investment. Many people in our organization do not have any desire to use technology for the sake of using technology: they simply want to find the information they are looking for and complete the work they need to do. We put considerable effort into making things visually appealing and simple to use and engaged user experience experts who were charged with this key responsibility. It really worked out well for us, and we would recommend that others make the investment in user experience design."
- **Involve users.** "When designing features and functionality, always look for ways that you can get users more involved and engaged, as part of their normal routine, in the key elements that lead to a robust and healthy intranet. In our case, knowledge sharing is critical to the success of BenNet, so we went out of our way to develop functionality that would, without a lot of effort from our users, support knowledge sharing. Enabling users to attach comments to specific resources, providing a place for users to store their 'stuff,' and blogging are good examples.

  "Usability testing is a great way to improve an intranet, but is also a phenomenal way of obtaining buy-in from key stakeholders in the organization."
- **Be inclusive. "**Identify all of your stakeholders, ideally from the outset, and make them feel heard (which is not the same as trying to please everyone). Reach out for input using techniques such as card sorting and usability testing and communicate regularly. To paraphrase Lao Tse: 'The best leader makes the people think it was their idea.' In addition, treat every member of the team as a peer and encourage junior people to speak up. You will be surprised where some of the best ideas come from."
- **Don't take shortcuts.** "In some instances in the design process, we went directly from requirements to mock-ups (i.e., omitting wireframes). We feel that, in most of those instances, the omission of wireframes actually slowed the process by glossing over important questions (e.g., where is a particular set of data coming from?) that ultimately had to be answered. We would not do this again."

- **Improve business processes.** "Building an intranet, as it turns out, is a great opportunity to improve business processes, and you will identify many things in the course of the project that can undoubtedly be improved. Be very selective — if it's broken and you can fix it, then fix it; if it's broken but it would take too much time or effort to fix, acknowledge it and consider addressing it post-launch; if it works but could be better, ask yourself how important it is to fix. Your goals and guiding principles will be helpful in making some of these challenging decisions."
- **Manage the paper.** "Be prepared for a tsunami of documentation: requirements documents, wireframes, mock-ups, minutes of meetings, etc., and multiple versions of each, from multiple organizations and authors. We did a reasonable job of keeping track of the paper, but it took a lot of effort and next time we would provide our internal project manager with a records clerk, whose primary task would be to capture and organize all of the documentation (including successive versions) in our DMS.

  "We didn't have a dedicated Business Analyst assigned to the project to capture detailed requirements. The wireframes we created had notes attached to them, but it would have been useful to capture detailed requirements at the same time. Towards the end of the user interface design phase we did use a wiki, where we uploaded the mockup and/or wireframe and had the team capture requirements — this worked well, but we should have done it sooner!"
- **Don't skimp on the timeline.** "This project was successful because Bennett Jones was willing to spend so much time working on the project. Clients are often not able to dedicate such a large team and so much time to a project."
- **Include the technical architect along the way.** "The Technical Solution Architect (from V51) was at every user experience design meeting, which was incredibly helpful and resulted in a final intranet that really respected the user experience we tried to create."

And one last thing to keep in mind when undertaking this type of project:

- **It's a lot of work.** "We underestimated the amount of work that was required to complete the project! We underestimated the scope that Bennett Jones would want to include in their initial launch (especially with the size and complexity of the *Knowledge Bank* area). They took on an incredible amount of functionality for the first phase of an intranet."

Bouygues Telecom

Using the intranet:

Created in 1994, Bouygues Telecom (Bouygues Telecom, Mobile, Fixed, TV, and Internet Communications Services) has 10,352,000 mobile customers, 311,000 fixed-line customers, and 9,000 employees. Bouygues Telecom is committed to being "the preferred brand of personal communication services" for both mobile and fixed phone service, as well as TV and Internet.

Bouygues Telecom is the only operator to be awarded the "NF Service Centre de Relation Client" certification from French standards agency AFAQ AFNOR for all of its consumer activities. The company has also been ranked number one in customer relations in the mobile phone sector for the third year running (BearingPoint-TNS Sofres).

Headquarters: Paris, France

Number of employees the intranet supports: 9,000

Company locations: Across the entire organization at approximately 10 sites in France, including Paris, Nantes, Tours, Bordeaux, and Lyon.

Annual sales: €5.368 billion (2009)

Design team:

In-house team:

Guillaume Foltran, Head of Mobility, Portals, and Business Support (IT division); Nicolas Motron, Web Development IT Engineer (IT division); Olivier Sonneville, Intranet Manager (Internal Communication Division); Christophe Coupez, Intranet and Collaborative Tools Team Leader (IT division)

C2S:

Cédric Franklin, Project Manager

Plaza Design:

Frédéric Veldeman, Design Manager

MCNEXT:

Stéphane Cordonnier, CTO

The following individuals also actively participated in this project:

In-house: Sarah Alezrah, Denis Boullen, Sylvain Gibert, Florent Loeffel, Grégory Pons, and Sébastien Terpent

C2S: Yacine Chahrour, Thibaut Moebs, Fadwa Moudnib, Michaël Semo, Sébastien Soria, and Christophe Tiraoui

ALSY: Jérôme Decouenne

SUMMARY

Careful planning and precise documentation were keys to the success of the Bouygues Telecom intranet. Maintaining a healthy working relationship between the internal communication and IT teams and choosing their project targets carefully also contributed to the project's success.

Working with several agencies on different aspects of the site, and juggling many subprojects within the larger site overhaul, the four-person core team needed to be detailed and meticulous when sharing information.

The team undertook the first major redesign of the site, called Wooby, which was launched in 1999. (*Wooby* roughly translates to "who are we," where "woo" stands for "who" and BY is the enterprise's initials.) Wooby had fallen out of use as of 2001 or so, when other groups within the company started putting information online, independent of Wooby. In 2004, the company added a portal layer to Wooby to try to connect Web content throughout the organization.

A turning point came in 2006, when the company introduced SharePoint internally. SharePoint sites increased from 60 to 700 sites in a year; by 2007, there were more than 1,500 SharePoint sites.

The spike in SharePoint sites made Wooby less relevant to employees. It was time for the team to start over, making the site into the powerful information tool it is today. The team wanted to both keep Wooby separate from the growing network of SharePoint sites and to integrate it seamlessly.

The team approached the project thoughtfully, reviewing all Wooby-related concepts and content. They looked to users to tell them what worked, what didn't, and what they'd like to see on the new site. The team learned how people were using the site and effectively discovered what wasn't working by conducting more than 100 in-person, individual site audits with users. The result of the audits? The idea that *success lay in simplicity*.

Team members educated themselves by running surveys and talking to the teams involved with other successful intranet sites. In the spirit of simplicity, they rejected any idea that was too difficult to explain. They looked to the Internet for inspiration or information and were particularly inspired by popular tools such as NetVibes and iGoogle.

Armed with information, the designers' next challenge was understanding the SharePoint's constraints and possibilities. Although the intranet is built on .NET, it was designed to interact with SharePoint content and use the SharePoint search engine. Team members built technical prototypes to ensure everything was possible before spending any time designing. This included tackling technical challenges and ensuring the visual design would work. They later created a functional prototype to show management and to use for early user testing.

Team members used the tools at hand to manage the intranet redesign. They utilized SharePoint and wikis to run the project, which included 27 subprojects. All work was done simultaneously, so coordination and attention to detail were essential.

On top of this, the team worked with three different outside agencies and received guidance from Microsoft Professional Services. The team leaned on each outside partner organization for expertise to make the intranet the best possible. Working with many different teams, there was a strong focus on detailed, accurate, and descriptive functional specifications. A 350-page specification document was accompanied by PowerPoint storyboards, illustrating screen formats, layouts, and click streams. With such a big project, many moving parts, and many players, the team recognized the need to accommodate the agencies. Knowing that each agency's time was as valuable as their own, they willingly traveled to agency teams, as needed, to save time and keep them focused on the work at hand.

The Wooby homepage is the same for all users. The team decided that the homepage would offer the same information to everyone, regardless of role. Other site areas provide information based on role and allow content customization. The homepage is reserved for corporate news and information; it features company news, press releases, location-specific news, stock information, news from a popular technology blog (Giiks.com), and technology watch news from offices in the US and Japan.

Another noteworthy Wooby element is the site navigation. The team decided that Wooby's breadth of content was too large for the site navigation to encompass. It thus made only key content areas available through navigation, with additional information available only via search.

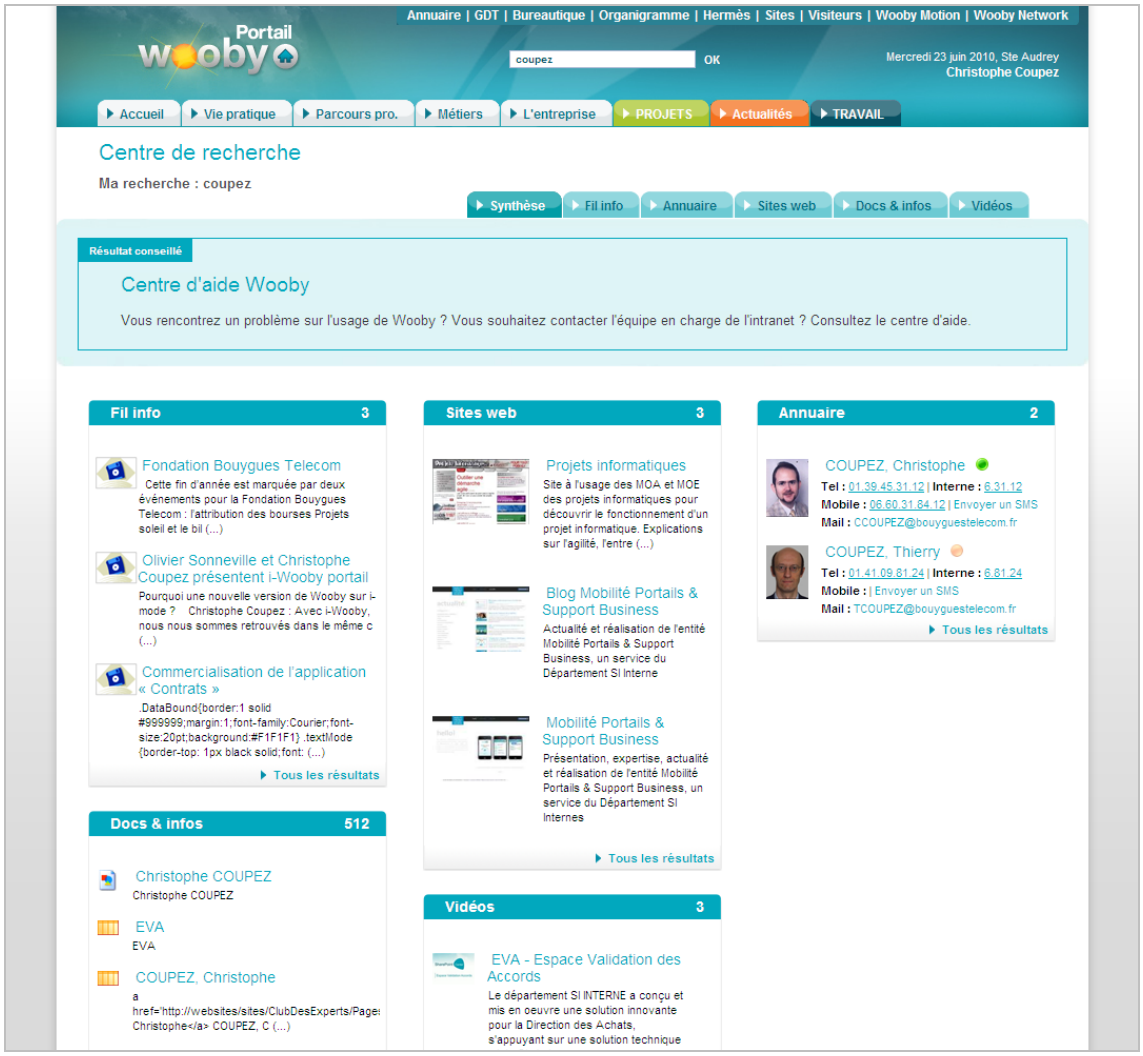


Pictured: The Wooby homepage focuses on corporate information, including recent headlines, press releases, press mentions, and stock information.

Search was a key concern for the team. With so much information, the team knew that some Wooby content would be most easily available through search. The existing search wasn't working well. However, instead of blaming the search technology, the team sought to improve the information properties of the information being searched. Team members also had to deal with access issues, ensuring that users had access only to information they were allowed to see.

A two-year study identified several hundred keywords and expressions used in 90 percent of site searches. Team members used this knowledge to build recommended results, which appear above the main results area. They've also enhanced the information the site is indexing, which in turn returns better results.

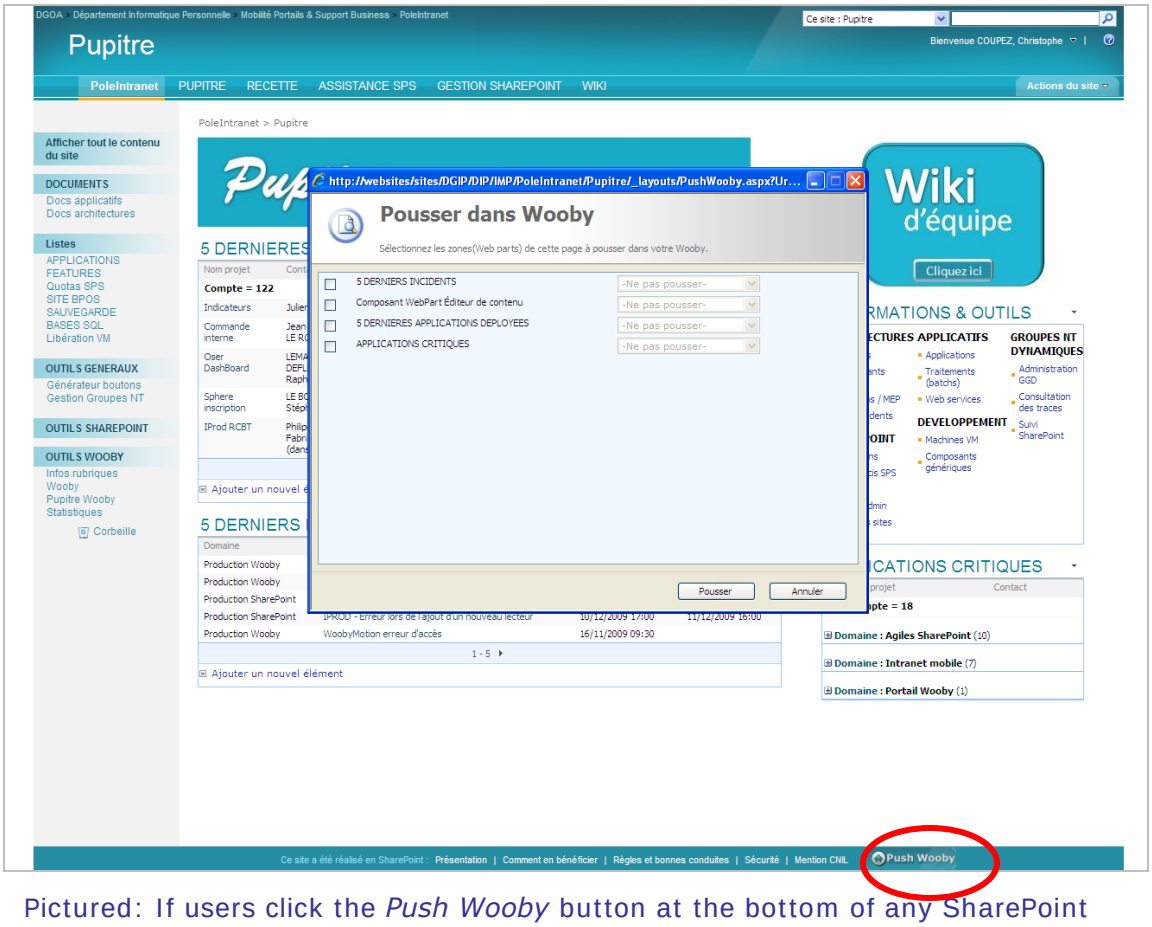
Search encompasses more than 3,000 SharePoint sites and their content, articles from the in-house Web magazine, videos, directory pages, and intranet and Internet sites suggested by employees. A summary page shows the results, including the top results for each content type.



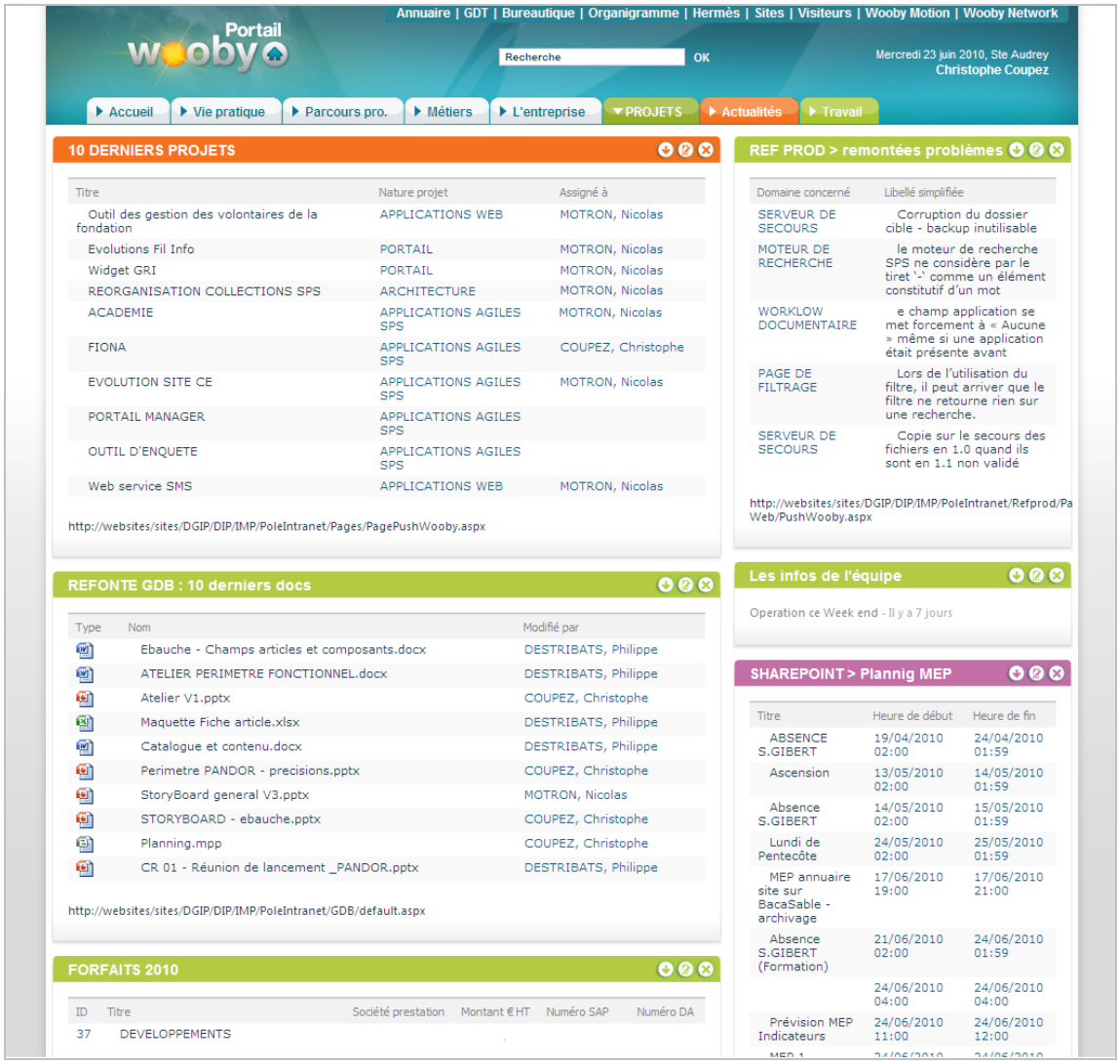
Pictured: Search results are divided by type. Users can click into any category to see more results of that type.

A major enhancement to the site is *Push Wooby*, which gives users a view of the many SharePoint sites that they can access daily through a single Wooby view. In talking to users, team members learned that many viewed 10 or more SharePoint sites daily as part of their work. Prior to the redesign, users had to open and retrieve content from each site individually.

Push Wooby lets users build a centralized dashboard of information. A *Push Wooby* button appears at the bottom of each SharePoint page. The button opens a window, *Push to Wooby*, which displays all webparts that users can push to the dashboard view. Users check the items they want to display; those items are then displayed as HTML, retaining the original format. Information refreshes as SharePoint pages are updated.

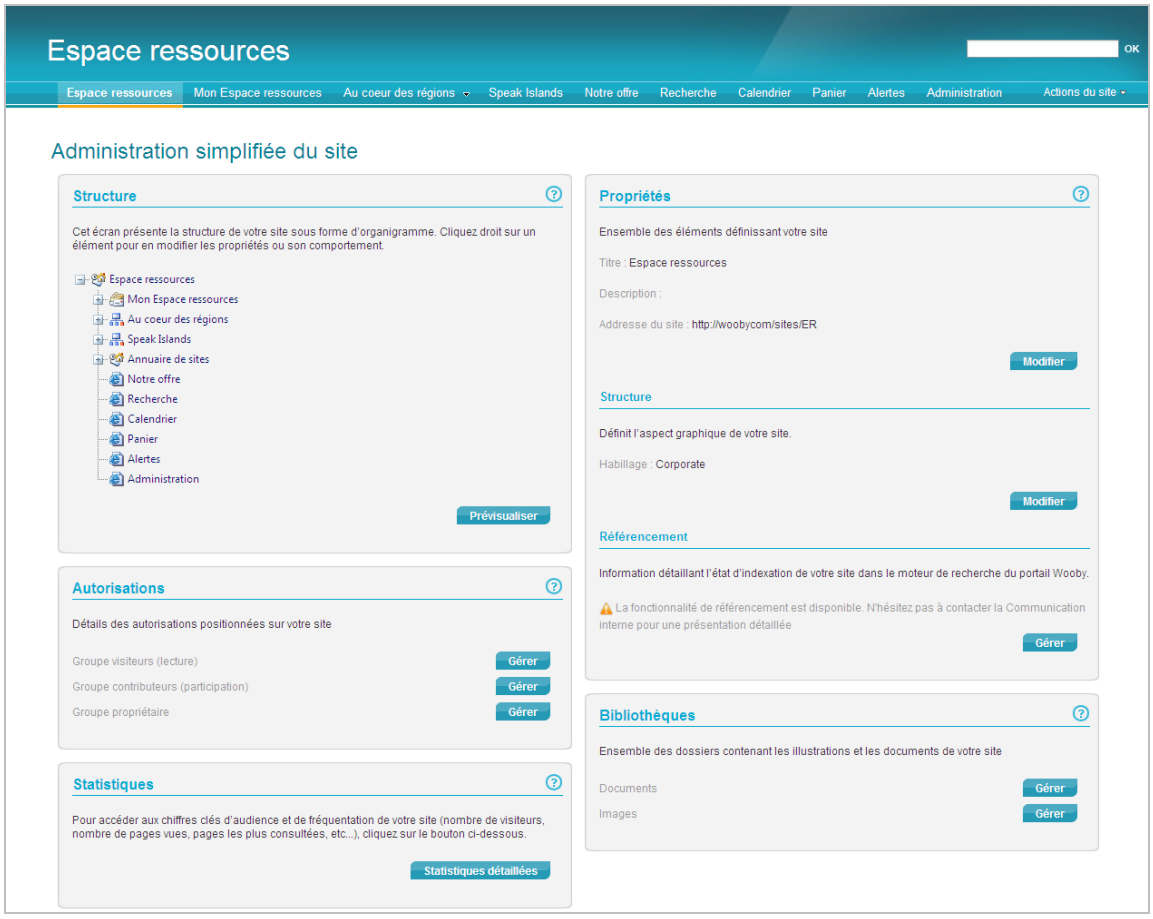


Pictured: If users click the *Push Wooby* button at the bottom of any SharePoint page (circled in red, above), they can select from a list of webparts on the page which can be added to a Wooby content dashboard.



Pictured: *Push Wooby* pages list the content users have selected, using the same format as the original SharePoint pages.

The team wanted to make it as easy as possible for contributors to post content to the site. The previous homegrown content management system was functional, but too limited to meet user expectations. However, the SharePoint system's complexity required extensive training of contributors. As a solution, the intranet team built an administrative page with all the relevant SharePoint functionalities of a given site. This vastly simplified working with the tool. The team trained 120 webmasters in two-and-a-half hour sessions, and the webmasters handled content migration to the new system over a six-month period.



Pictured: Keeping simplicity in mind, the team created an administrative page to simplify SharePoint's many options for site managers.

The *Wooby Motion* tool lets anyone in the company upload a video. It can even be used to code the video in the correct format. Videos are increasingly popular ways to publicize events, raise employee awareness, and offer training and news. For instance, to support use of the new intranet site, the team created videos with employees explaining the new project. Members of teams throughout the organization have also begun creating their own short videos to promote various projects. Users can comment on videos or recommend them to others.

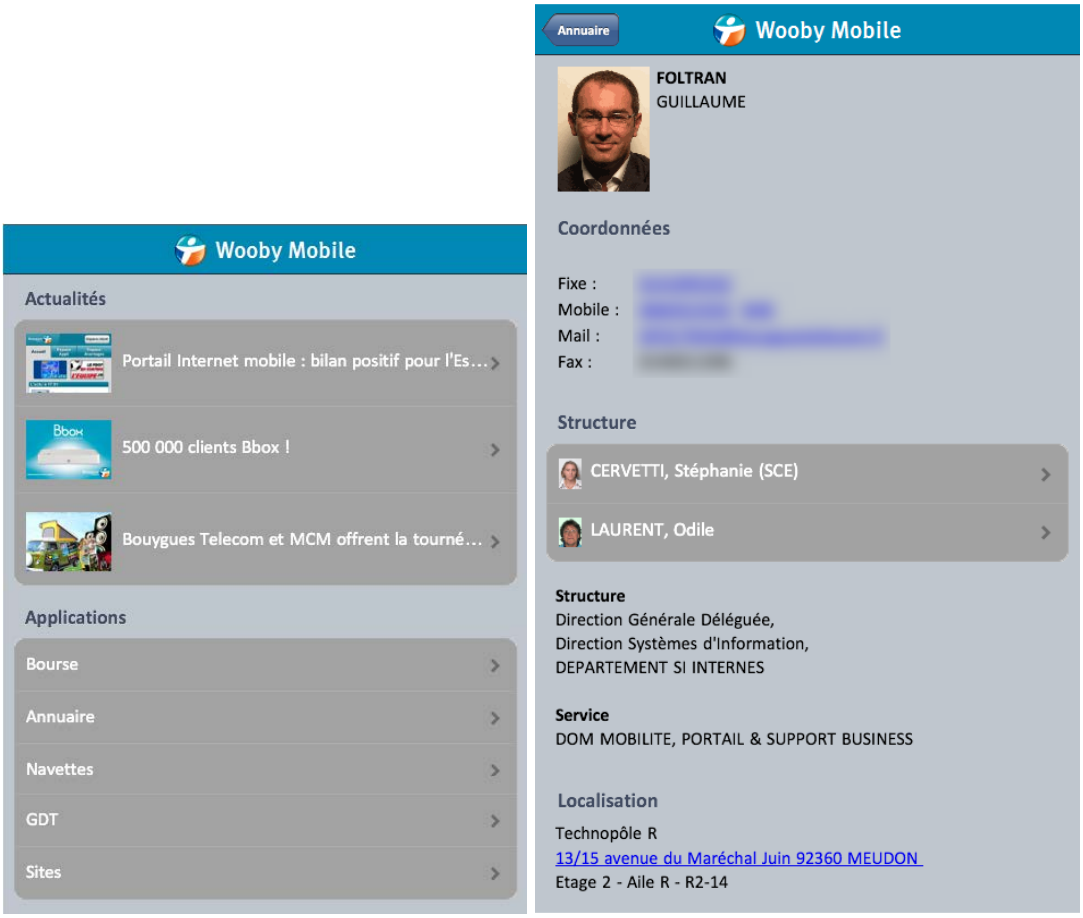


Pictured: *Wooby Motion* lets users share videos and has been an increasingly popular way to communicate information across the company.



Pictured: One way team members introduced the new site to employees was through introductory videos, where employees explained new site features such as *Push Wooby*.

Wooby Mobile is the site's mobile version, running WebApp (to support Android and iPhone) and WAP. Mobile is a key part of the intranet, as 98% of employees have mobile phones and unlimited data plans to encourage use. The team focused on those tools that are most valuable to users on the move, including the company directory, shuttle bus timetable, corporate information, and location information. Further, a handful of employees also have mobile access to applications specific to their job functions.



Pictured: The mobile site offers access to only those tools that make sense for employees away from their desks, such as the employee directory.

The Wooby site success comes from its strong foundation. The team, though small, managed to create an impressive portal providing access in quick and simple ways. From defining goals and hiring the right partners, to testing before building and looking to users for answers, team members worked effectively and efficiently to bring 27 different subprojects together into one solid site experience.

BACKGROUND

Some intranets are a culmination of dramatic upheavals, while others simply evolve over time, along with the organization and its information needs. For Bouygues Telecom, the organization was early to the party with a simple company intranet, delivering basic information to employees in HTML pages as far back as 1999.

Twelve years in intranet development is a lifetime, and tracing the company's evolution shows the trajectory many companies take from simple intranet to portal and beyond.

The following chart traces the milestones leading to the company's most recent redesign project.

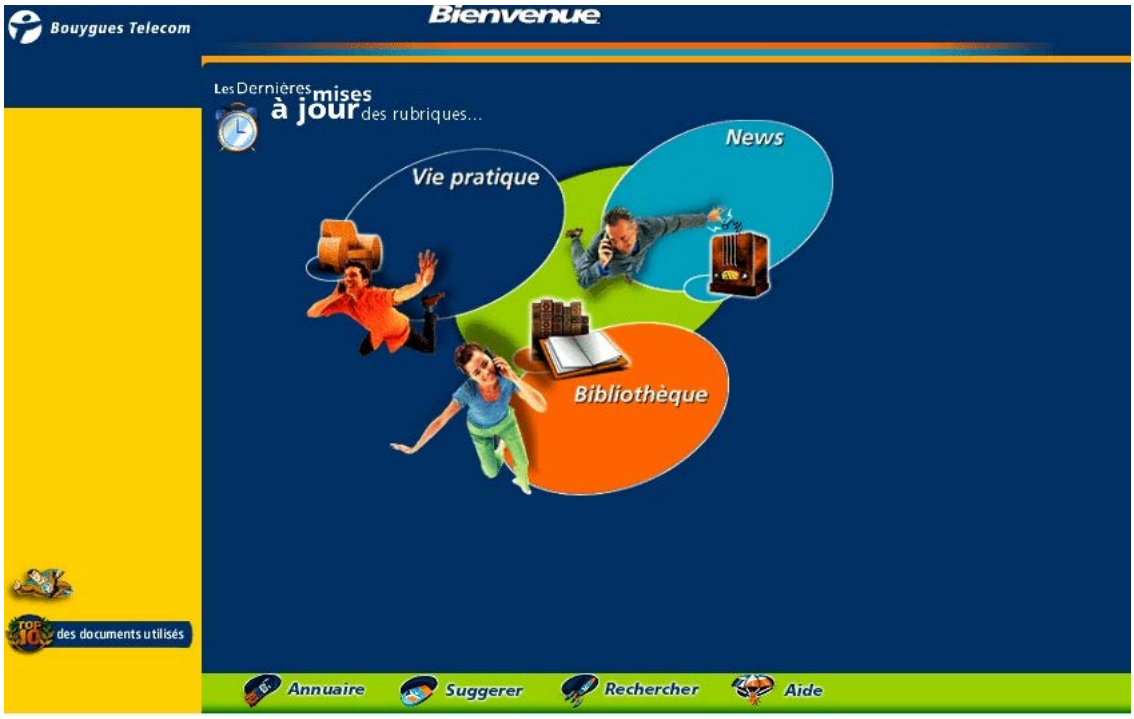
TIMELINE

WOOBY TIMELINE	
Milestone Date	**Milestone Description**
1999	**First Intranet** Bouygues Telecom unveils first version of Wooby, the company's intranet. This simple site featured a few HTML information pages (updated using FrontPage), a search area and a user assistance feature. This early intranet was comprised entirely of HTML sites, each with its own look and feel. Whenever a new site was created, a new IT project had to be started with a developer, graphic designer, and project manager.
2000	**Site Enhancements** Early site enhancements included a richer browsing menu (customizable by the site's webmaster), and new communications services (developed using ASP).
2001	**Content Management System Added to Intranet** In 2001, intranet team members developed a custom CMS tool for the site that was very easy to use. Any person with access to Wooby could, in just a few clicks, create and manage his or her own information site, without help from specialized IT teams. This tool had the capacity to create approximately 100 information sites and was in use until the 2010 Wooby redesign.
2002	**First SharePoint Implementation** In 2002, the company's IT Department released a very early version of SharePoint on an experimental basis. This first version of SharePoint (SharePoint 2001) was intended to manage documents in Web mode using Electronic Document Management (EDM). Only about a dozen departments used it; it was not met with much success.
2003	**First Mobile Intranet** In 2003, at the request of the Internal Communications Department (owner of Wooby), IT project management teams were deployed to develop the first technical components of what would become i-Wooby, the Bouygues Telecom mobile Intranet. The first mobile applications gave employees access to an enterprise directory and to several applications that were potentially useful to mobile users. Over the years, the catalog of mobile applications has grown and includes mobile access to many key tasks, including to manage paid holidays, validate holiday requests, and access schedules for shuttles between Bouygues Telecom sites, as well as specific applications for network technicians in charge of site maintenance and so on.

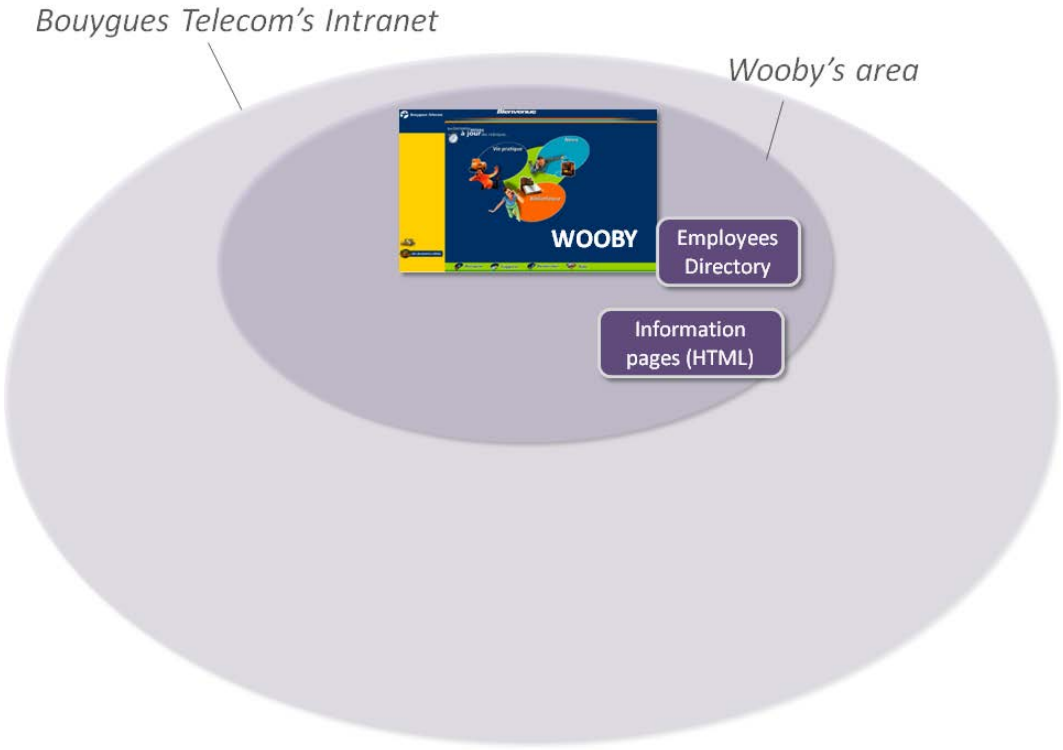
2004	**First Portal** In response to a sharp increase in Web content being generated inside the enterprise, the Wooby Team added a "portal" layer to the site. This included: • **Content syndication functionality:** Despite its simplicity, this new feature was delivered through "portlets" selected from a catalog and proved very useful. This functionality was a precursor to what is now known as widgets. • **Browsing engine:** The site's webmaster can use a browsing engine, which is several levels deep, to add more links to the enterprise's main Web applications (through a process called "parameterization"). • **Search engine:** A search engine, built on the SharePoint 2003 search engine, was employed to help users search for information across select SharePoint 2001 sites.
2004	**A Rise in Web-Based Applications** At this time, Web-based services were being made available to employees across the enterprise, including: • a "classified ads" service; • a Web tool to manage paid holidays let employees send in holiday requests to their managers for validation; and • an expenses-management Web tool that let employees easily submit work expenses online. These were just a few of the many services imagined, designed, and developed by departments across the enterprise while Wooby, the center of the Bouygues Telecom intranet, still had links only to the main content.
2006	**Widespread SharePoint Adoption** Won over by its functionalities, more and more teams opted to adopt SharePoint (2003) in 2006, when the number of Bouygues Telecom SharePoint sites increased from 60 to more than 700.
2007	**MOSS 2007** In 2007, the SharePoint 2003 sites were migrated to the MOSS 2007 version. This new version featured richer functionalities, and won the approval of even more users across the enterprise. Although the MOSS publishing functionalities were more popular than the Wooby CMS, they were somewhat complicated to use. Despite this, some webmasters migrated their Wooby CMS sites to SharePoint. In tandem with the migration, there was a complete reorganization of processes concerning the way SharePoint was used and accessed in the organization and more SharePoint support was made available.

	With more than 1,500 SharePoint sites in use, the intranet's center of gravity had definitively shifted, leaving Wooby increasingly isolated.
2008	By 2008, the Wooby portal had become isolated within the overall Bouygues Telecom intranet and could no longer fulfill its role as a gateway to the intranet's abundant resources. Many challenges had developed over time, including: • Browsing menus no longer provided adequate navigation • Centralized site management (via webmaster) was no longer an adequate management model • The technologies had aged to a point where they no longer served the platform. For example, the portal technology could not "mesh" with the surrounding SharePoint environments that had developed • Portal search was so limited (to only the Wooby "areas") that it was no longer a useful tool in helping users find information • The proliferation of content and tools across the intranet sites (intended to make things easier for employees) had actually started to make things more difficult With these challenges as a backdrop, the Wooby team embarked on a redesign effort with a clear objective: reposition Wooby as the preferred portal entrance to all enterprise Web content.

Bouygues Telecom Intranet: A Step Back in Time



Pictured: 1999: The very first Wooby version.

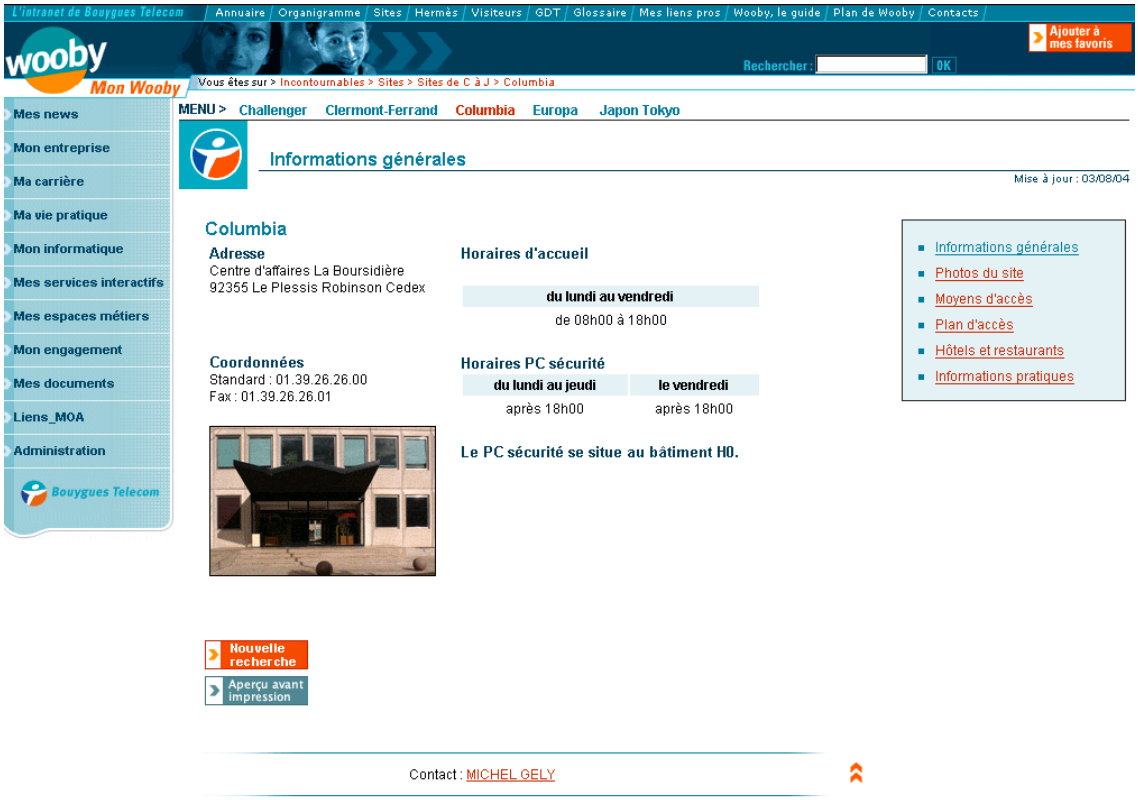


Pictured: The Bouygues Telecom Intranet in 1999.

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To buy a copy, download from: http://www.nngroup.com/reports/intranet/2011



Pictured: Wooby in 2000, updated a few months after initial launch.



Pictured: An information page created with the first Wooby CMS in 2001.



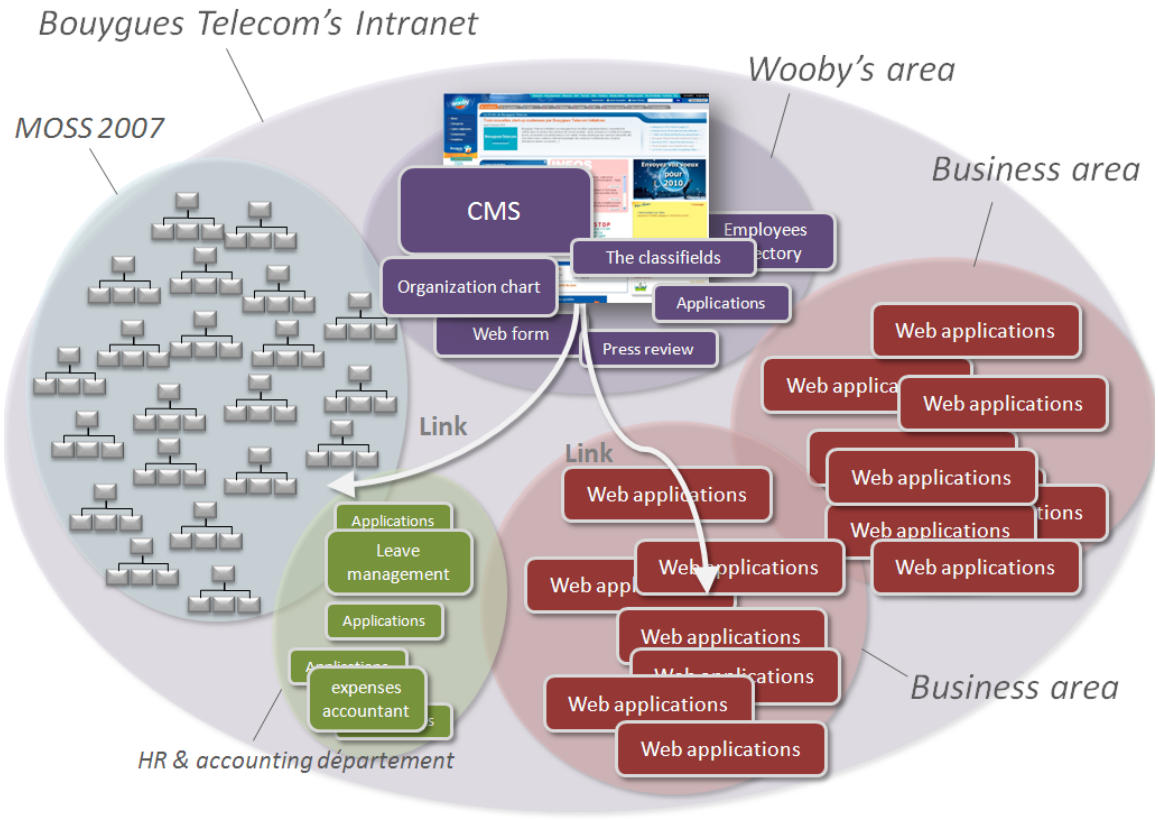
Pictured: Wooby homepage in 2001.



Pictured: In 2004, the mobile i-mode intranet went live.



Pictured: The 2004 Wooby homepage included portlets.



Pictured: The Bouygues Telecom intranet in 2008.

INTRANET TEAM



Pictured: (left to right) Guillaume Foltran, Nicolas Motron, Olivier Sonneville, and Christophe Coupez.



Pictured: An introduction to the portal's four main functionalities, as explained by Bouygues Telecom employees. These movies are used to present the new version of the intranet to users.

GOVERNANCE

Ownership

The Internal Communications Department is the intranet's owner and reports to the HR Department. The Internal Communications Department, in liaison with the IT Department, has several tasks, including: defining portal strategy and associated tools; defining the specifications for upgrades; making budgetary decisions; and so on.

The Internal Communications Department delegated editorial responsibility across the organization, drawing on a network of 70 people in various Bouygues Telecom departments. These individuals are responsible for publishing to the various sites available from the portal. The publishers use the Wooby COM solution (the CMS developed specifically for the Wooby Project) as their publishing tool.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Internal Communications Department	• Intranet governance • Define the portal's general editorial line • Define portal direction and make budgetary decisions • Publish corporate information • Coordinate and manage advertising and special feature areas • Create contributor network • Provide support to contributors (level 1) and to users (level 2) • Monitor content
Webmasters	• Manage editorial content • Update site and manage promotion • Control confidentiality (permissions and pages)
IT Department	• Design the IT solutions to be deployed to meet customer requirements, in "soft" acceptance mode • Advise and make proposals to internal customers for all enterprise-related Web subjects • Steer and execute software developments internally (internal applications, for example) • Maintain the SharePoint infrastructure, offering expertise for all SharePoint subjects, updating the SharePoint Center, and providing user support • Ensure smooth operation of the application layer • Supervise the technical architecture

USERS

Anyone who can connect to the enterprise network can use the Wooby intranet, whether they are a Bouygues Telecom employee or an agency working on contract within the enterprise.

Even though all users can access the intranet and its myriad functionalities, individual users have specific access rights. Consequently, some sites and some data are shown/hidden to given users depending on their permissions.

User access rights are based on group membership or on user-provided information — such as location, structure, function, and so on — which the team collects through enterprise directory listings.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	http://Wooby
Default Status	The intranet starts up automatically every time the Windows session is opened. Users can't change this parameter, which has been the procedure since 1999.
Remote Access	Wooby, the desktop version, can be accessed remotely over a VPN connection. In fact, about 20 percent of the company's users access the intranet in this manner, or through Wi-Fi or a 3G mobile phone card. The company has groups of users who are generally away from their desks (for example, sales staff), as well as people who are outside the office for short periods and need to connect remotely. There's also a Wooby version for mobile devices running WebApp (Android and iPhone) or WAP.
Shared Workstations	Wooby can be used from shared desktop PCs, which are usually located in meeting rooms. In this case, users enter their password and login ID. The standard interface then displays, offering users all the personal rights and site access they typically have on the portal. Although this option is available, there is a general movement away from shared desktop PCs at the company. More often now, people have their own laptops, which are easy to carry and usable everywhere thanks to the company's widely available Wi-Fi connections.

DESIGN PROCESS AND USABILITY WORK

The decision to completely redesign the Wooby portal opened a "field of possibilities" in terms of the enterprise intranet, says Guillaume Foltran, head of mobility, portals, and business support (IT division).

"The overarching goal was for this new portal to henceforth to be considered a veritable cornerstone the company's intranet," he says. "And that decision paved the way for the migration to Enterprise 2.0 tools."

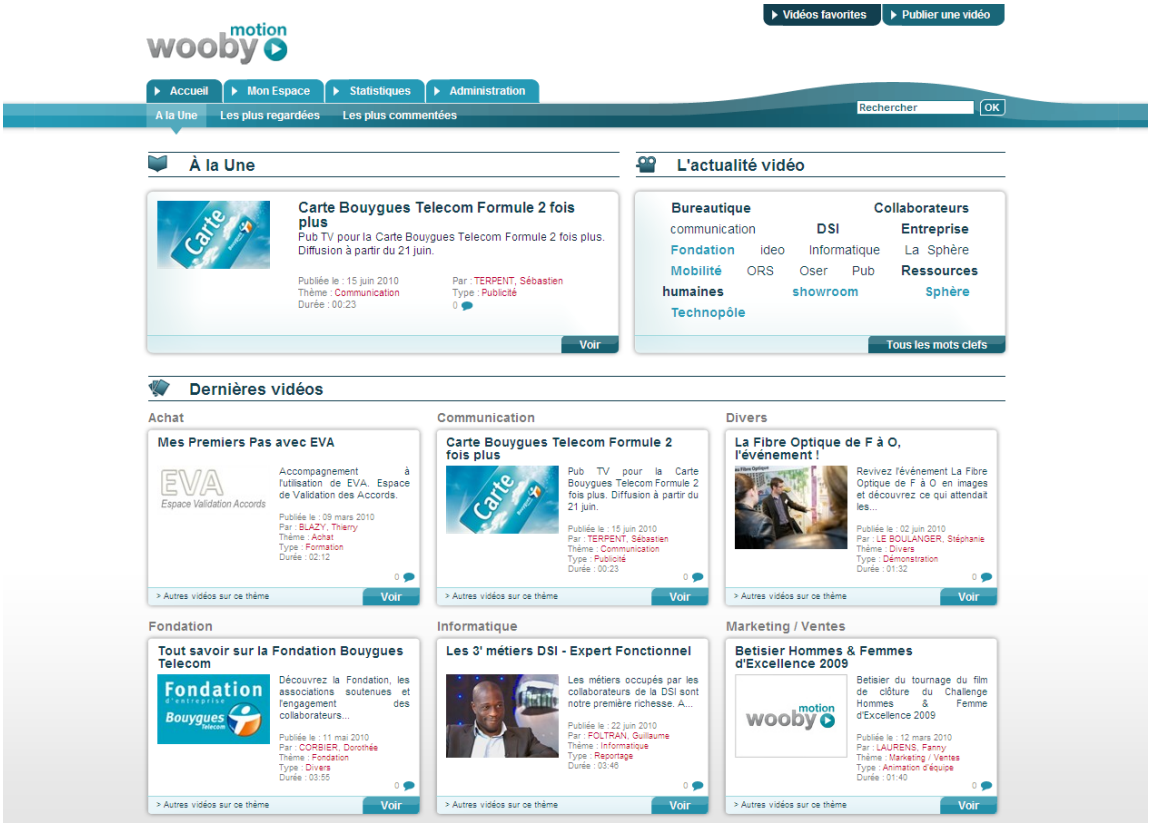
A thorough redesign strategy was constructed, with several components serving to complement the site's centerpiece, the portal.



Pictured: The intranet redesign strategy.

REDESIGN TIMELINE	
Milestone Date	**Milestone Description**
March 2009	**Project Kick-Off** Redesign begins with *Wooby Motion*, a new collaborative video publishing tool open to all enterprise employees. This tool, the first version of the Wooby "brand," gives a genuine identity to components used as part of this strategy, including the Wooby portal, *Wooby Motion*, *Wooby Network*, Wooby Mobile, and others to come.
April 2009	**Graphic Themes** Work continues on the project; SharePoint users are given new graphic themes that let them change their SharePoint intranet sites to the "colors" of the future Wooby portal (if they choose). This was the first concrete, visible step toward the marriage between the SharePoint and the Wooby worlds.
May 2009	**First Department Portal Launched** The first department portal redesign launched (Wooby SI, the IT Division portal) with new graphic theme.
June 2009	**Wooby COM (CMS)** Wooby COM delivered to 70 communications site webmasters, who had previously been using the Wooby 2001 CMS.
October 2009	**Beta Portal** The cornerstone of the complete strategy, the portal is delivered as a beta version to 250 users.
February 2010	**Portal Extended** The portal is extended to the entire enterprise.
May 2010	***Wooby Network*** *Wooby Network*, the Bouygues Telecom professional social network tool goes online (beta version). This version is still evolving. The next step will be convergence between the Wooby portal and *Wooby Network*.
July 2010	**SharePoint Center** A new version of the SharePoint user assistance site (SharePoint Center) goes online, with a design similar to Wooby. This site also features a selection of information channels and educational content.
September 2010	**Wooby Mobile** The new version of Wooby Mobile (previously known

	as i-Wooby) is released.



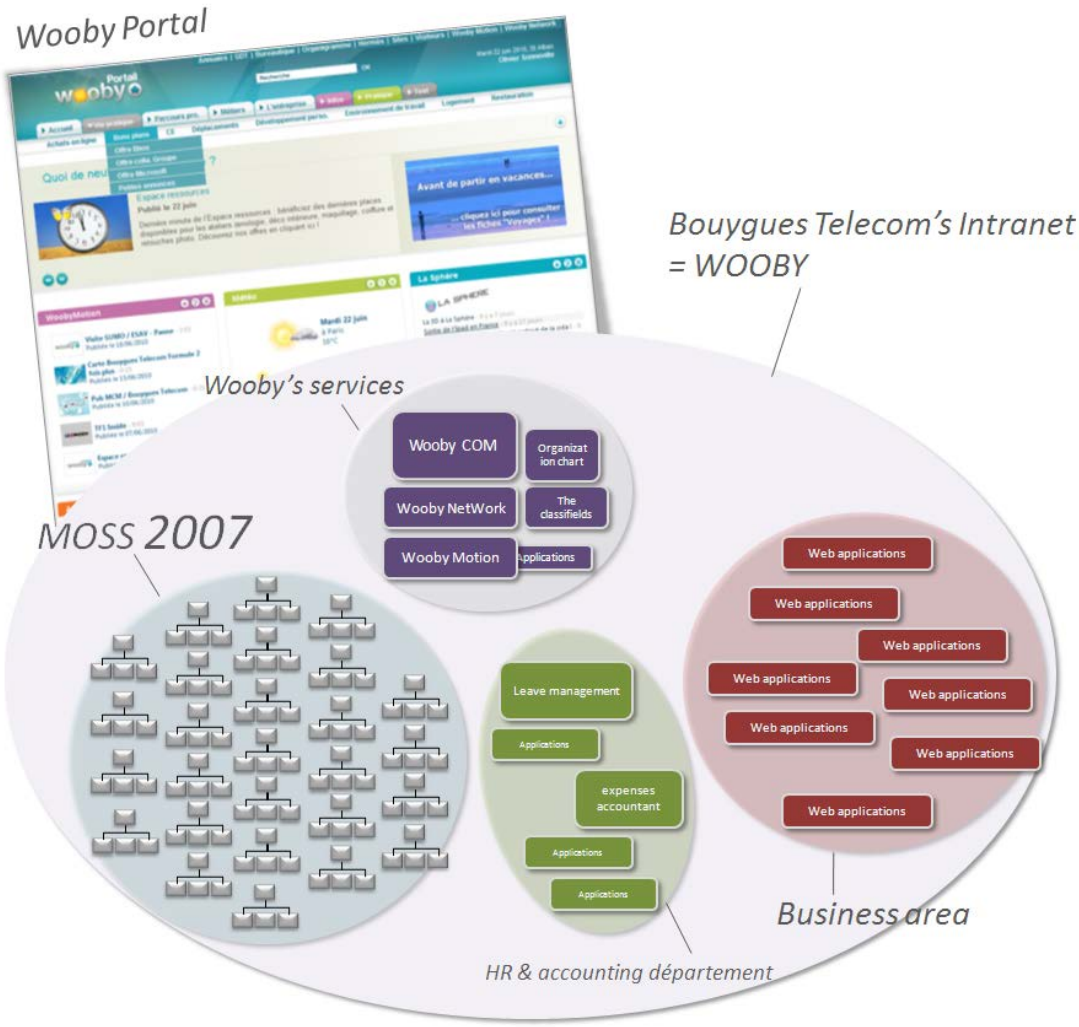
Pictured: The *Wooby Motion* homepage.

Project Goals

Once the Wooby team established its redesign vision — to reposition Wooby as the preferred portal entrance to all enterprise Web content — its mandate was to find ways to make this possible.

Team members identified six goals and created a tailored approach to address each challenge. The six goals were:

- Broaden the “Wooby area” to enterprise content
- Simplify access to information
- Boost user efficiency
- Make the intranet more open
- Encourage collaboration
- Encourage user-selected “bespoke” consumption

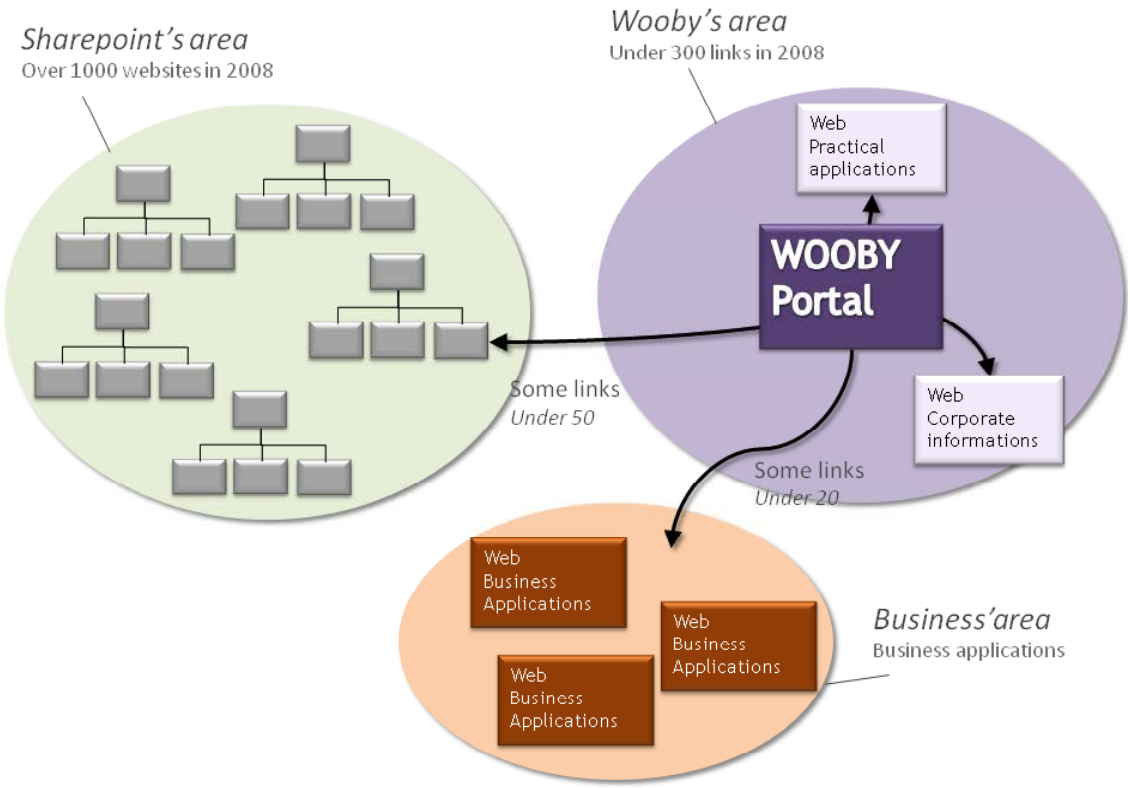


Pictured: The Bouygues Telecom intranet in 2010.

The chart below outlines the approach the team used to address each goal and the proposed functionalities:

TURNING THE DESIGN GOALS INTO ACTION	
Goal	**Approach / Action**
Broaden the "Wooby area" to enterprise content	**Approach:** The team wanted the new Wooby portal to encompass all of the potentially relevant enterprise Web content for users and expand the sphere of activity to the entire enterprise. **Action:** A two-pronged approach: • **Technological:** "Mesh" environments that were technologically different and unable to communicate with each other. • **Functional:** Identify functionalities that easily let portal users access, or aggregate, content originating in different sources.
Simplify access to information	**Approach:** Essentially, expanding the Wooby area meant offering access to much more data, with no apparent limit. The goal, therefore, was to reinvent browsing within the company's content. **Action:** Use drop-down menus to consolidate the quantity of the available first-level content. Focus on search engine functionalities, both in terms of searching and filtering results, as well as — and this was new — in terms of search engine parameter management.
Boost user efficiency	**Approach:** The purpose of each of the enterprise's Web tools is to make things easier for employees and enhance their overall efficacy. In real terms, however, the rapid increase in Web tools poses a real difficulty; between team collaboration sites, management sites, project sites, and Web tools to manage everyday affairs, employees must cope with more and more information, which has to be accessed and processed each day. **Action:** Find simple, pragmatic solutions to help users optimize information access — with, for example, content-aggregation solutions using widgets, such as *Push Wooby*.
Make the Intranet more open	**Approach:** Open the portal to other information sources, both internal and external (Internet). Up to the most recent redesign, the Wooby "area" was centered on information with a direct or indirect relationship to Wooby. Specifically, it didn't include any information originating from any other internal or external sources. **Action:** Bring RSS streams into the portal from internal sources, as well as from the Internet, but also

	through the *Push Wooby* functionality.
Encourage collaboration	**Approach:** Identify possible levers to enhance collaboration within the enterprise, and stimulate individual contributions from each user. **Action:** The team considered a number of possibilities here, including: • Viral marketing techniques such as "send to a friend" • Continuous user enrichment of the search engine • Integrating new collaborative components, such as *Wooby Motion* and *Wooby Network*
Encourage user-selected "bespoke" consumption	**Approach:** The specificity of each business and of each individual user, combined with the increasing quantity of information, makes it impossible to "force" a single, shared view on all users regarding how information should be accessed. **Action:** Find relevant and simple customization options such as widgets.



Pictured: The Wooby Area, before the redesign project.

Deciding Which Actions to Take

Well before the project's redesign phase, the four main project participants spent time on the Internet gathering intelligence to get a better idea of recent developments in intranet design. The team identified useful tools commonly deployed on the Internet, noted their strengths and weaknesses, and then assessed their potential for use within the enterprise.

A wide spectrum of information-gathering activity informed the Wooby team's decisions regarding which redesign actions to undertake. These included:

- **Audits.** The project owner talked with more than 100 people, one by one, as they sat at their computers with the portal open and operational. The purpose of these audits was to understand, concretely, how people were using the current Wooby, and to identify areas of difficultly and gauge user expectations.

  "Meeting actual portal users when using the portal gave us a lot of information," says Olivier Sonneville, Intranet Manager (internal communication division). "We realized that functionalities which seem obvious to 'experts' like us are not necessarily obvious to all. We came away from these audits convinced that the route to success lay in simplicity."
- **Surveys.** Two surveys were conducted (in 2007 and 2008) to study user practices and gain a clear idea of user requirements. These studies were complemented by a statistical audit of the portal.

- **Meetings.** All team members, in both Project Ownership and Project Management, met with the intranet managers of other major companies to discuss their own intranet solutions and share best practices.

  With whiteboards as the only facilitation tool, each participant had an opportunity to submit his or her ideas, guided by the just one golden rule: Any idea that was difficult to explain was rejected as too complex. Priority was given to ease of use.

  At the same time, users were consulted during various project phases to measure the extent to which the functionalities being defined were comprehensible to them and aligned with their requirements.

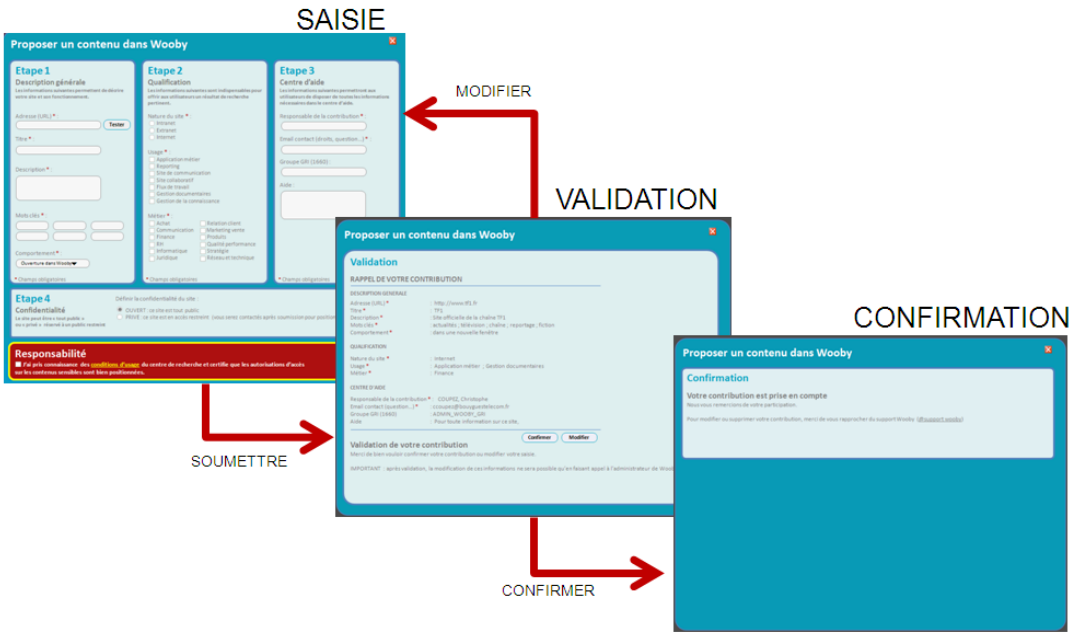
  On several occasions, the company's in-house user experience specialists contributed to these meetings.
- **Research.** Internet research provided the team with many potentially interesting ideas, including the Newsgator solution chosen for the *Wooby Network*.
- **Inspiration.** Wooby team members noticed that at home, they all used either Netvibes or i-Google, with each person preferring one or the other for certain specific reasons. The functionalities available on both tools had a strong influence on the design work for the Wooby solution.
- **Experience.** The main project participants had been working on the enterprise intranet for almost nine years; as each version was launched, team members naturally learned from their successes and mistakes. Analyzing the lessons from each release's mistakes helped the team attempt to fix those mistakes as they evolved from one version to the next. Much of the recent redesign's functionality is a result of internal expertise and several years of experience repeatedly redesigning the site.



Pictured: The Wooby functional prototype.

CONFIRMATION

Après soumission de la proposition, deux écrans se succèdent, avec possibilité de revenir sur l'écran de saisie en mode modification.



Pictured: An early storyboard produced as part of the design process.

Working with Outside Agencies

Bouygues Telecom, like most large companies, relied on outside help to accomplish its intranet redesign goals.

"Generally, we handle all our projects internally," says Coupez, "from design to development to deployment."

But for the Wooby project, the team had insufficient resources to manage the entire project, so they called upon the services of several outside agencies.

"This saw us launching a call to tender once the project specifications had been finalized," says Coupez. "In this way, tender respondents had sufficiently accurate documents describing the project. We assessed the quality of agencies using a number of highly suggestive but important criteria."

Coupez noted several attributes that they used to evaluate potential vendors:

- The human and professional qualities of the project manager in charge of development
- Proven technical competency of the agency's personnel
- An agency's ability to mobilize resources if required
- Specialized expertise of an agency's CTO in being capable of answering technical questions

What they found out through this thorough evaluation process is that the best choice is not always the most obvious one. And people make all the difference.

"The market leaders are not always the best choice," says Coupez. "Likewise, the most expensive are not necessarily the best. It always boils down to a question of people."

The following companies participated in the Wooby redesign effort:

C2S

C2S, a French software company, was entrusted with the most important technical aspects of the Wooby portal redesign subproject. C2S has been one of Bouygues Telecom's closest partners for several years, working on nearly all of the company's SharePoint projects.

C2S's responsibilities for the Wooby project included:

- **Wooby Front Office:** Development of the complete Wooby Front Office included: homepage, content-syndication system, customization functionalities, and so on. This custom application was developed using .NET technology.
- **Wooby Search Engine:** Development of the complete Wooby search engine, drawing from the agency's expertise in SharePoint technology.
- ***Wooby Push*:** Development of much of the Wooby functionality, which, for example, lets SharePoint users send content or alerts directly to their portal in a single click. This task required in-depth knowledge of both the Wooby-specific aspect and the SharePoint environment.

Plaza Design

Plaza Design, a French company specializing in computer graphics for the Web, handled graphics-related subprojects, both for the overall Wooby redesign and for several additional components (such as *Wooby Motion*):

- **Wooby graphic structure:** Creation of the new Wooby graphic design standard, including the widgets' general look and feel and all pages within the application.
- **Collaborative SharePoint graphic themes:** Creation of new graphic themes for SharePoint to achieve (on Wooby) a common look shared by the SharePoint collaborative sites.
- **SharePoint Publishing graphic themes:** Creation of new graphic themes for the new CMS tool, which draws on SharePoint and its publishing function.
- ***Wooby Motion*:** Creation of a graphic design standard for the video sharing and sending application.
- ***Wooby Network*:** Creation of the graphic design standard for the *Wooby Network* collaborative tool, which draws on the Newsgator solution.
- **SharePoint Center:** Creation of the graphic design standard for the SharePoint Center and the accompanying support site.

MCNEXT

MCNEXT, a French software company, handled technical implementation of the Wooby CMS redesign work (Wooby COM), which uses the SharePoint technology. MCNEXT's work included:

- **Technical design:** Designing the functionalities described in the internal project team's specifications.
- **Development:** Writing the software code required to completely develop the functions described in the project specifications.
- **Acceptance:** Conducting unit tests and tests with the customers up to the project production phase.
- **Production startup:** Providing support to the internal team to get the tool up and running.

Microsoft Consulting Services

The entire redesign project used only Microsoft technologies, including operating systems, databases, languages (.NET), and software applications (SharePoint). The Wooby Project featured a number of significant constraints that required the team to seek assistance from Microsoft Consulting services. Bringing in resources from the software manufacturer directly seemed like a safe bet for the team to ensure there were no "surprises."

The project constraints included:

- **Integration of innovative functionalities:** Neither *Wooby Push* nor the Wooby search functionalities are native SharePoint features. This posed several real difficulties.
- **"Meshing" Wooby into the platform.** The decision not to integrate the portal into SharePoint presented several advantages, but also posed risks in terms of ensuring communication between the environments.

At each step of the functional specification phase, and even during the technical design phase, the team looked to the software publisher for validation and advice.

"Our objective was to have a validation 'buffer,'" says Christophe Coupez, Intranet and Collaborative Tools team leader (IT division). "Calling on the original software manufacturer to validate our general orientations was a kind of insurance — and a policy that we continued for the rest of the project so as to minimize the potential for unpleasant surprises."

"Naturally, there is no such thing as zero risk," he says. "But calling on the services of a highly skilled Microsoft consultant highlighted potential difficulties and provided us with solutions right from the project's initial phases."

Microsoft Consulting Services was called in for their professional advice and auditing expertise with regard to the project's functional and technical aspects, including validating functionalities, validating technical design, and providing technical support.

Facing Challenges

One striking aspect of the Bouygues intranet's 2010 version is that it has been completely redesigned and the team has added some new and very innovative features. Prior to this project, the successive portal redesigns included changes to only a few of the site's major components. But in 2010, the company undertook a radical redesign effort.

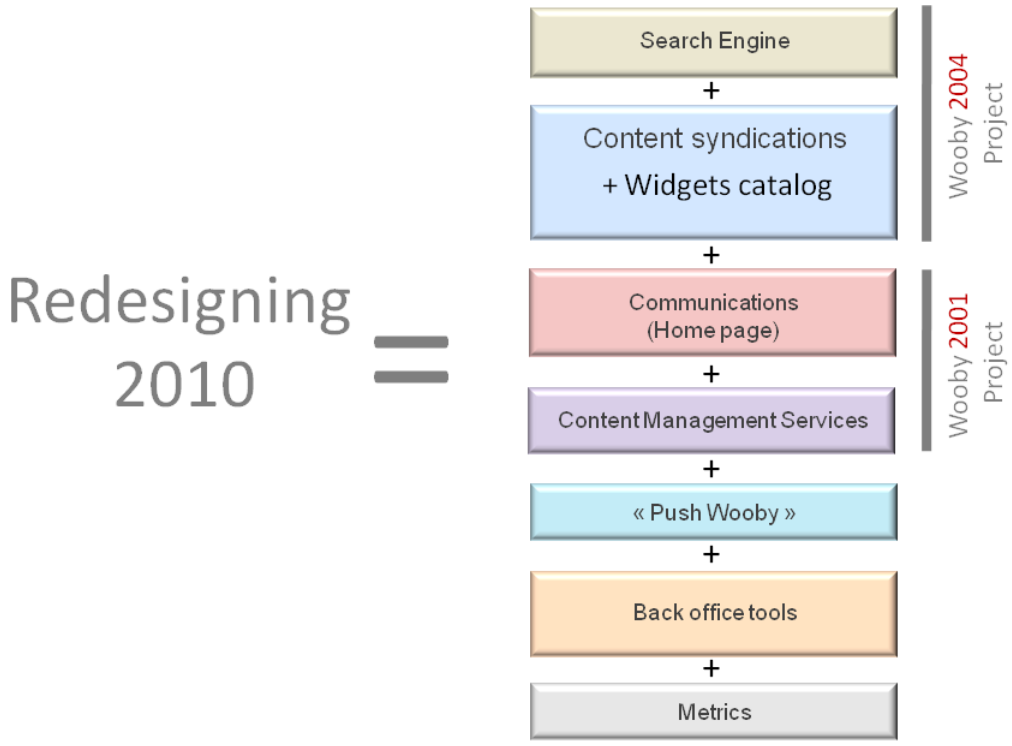
"We went back to the drawing board for the 2010 version, reviewing all Wooby portal concepts, including more 'conceptual' considerations having to do with Wooby's very

identity, including editorial line, management rules, graphics signature, and so on," says Sonneville.

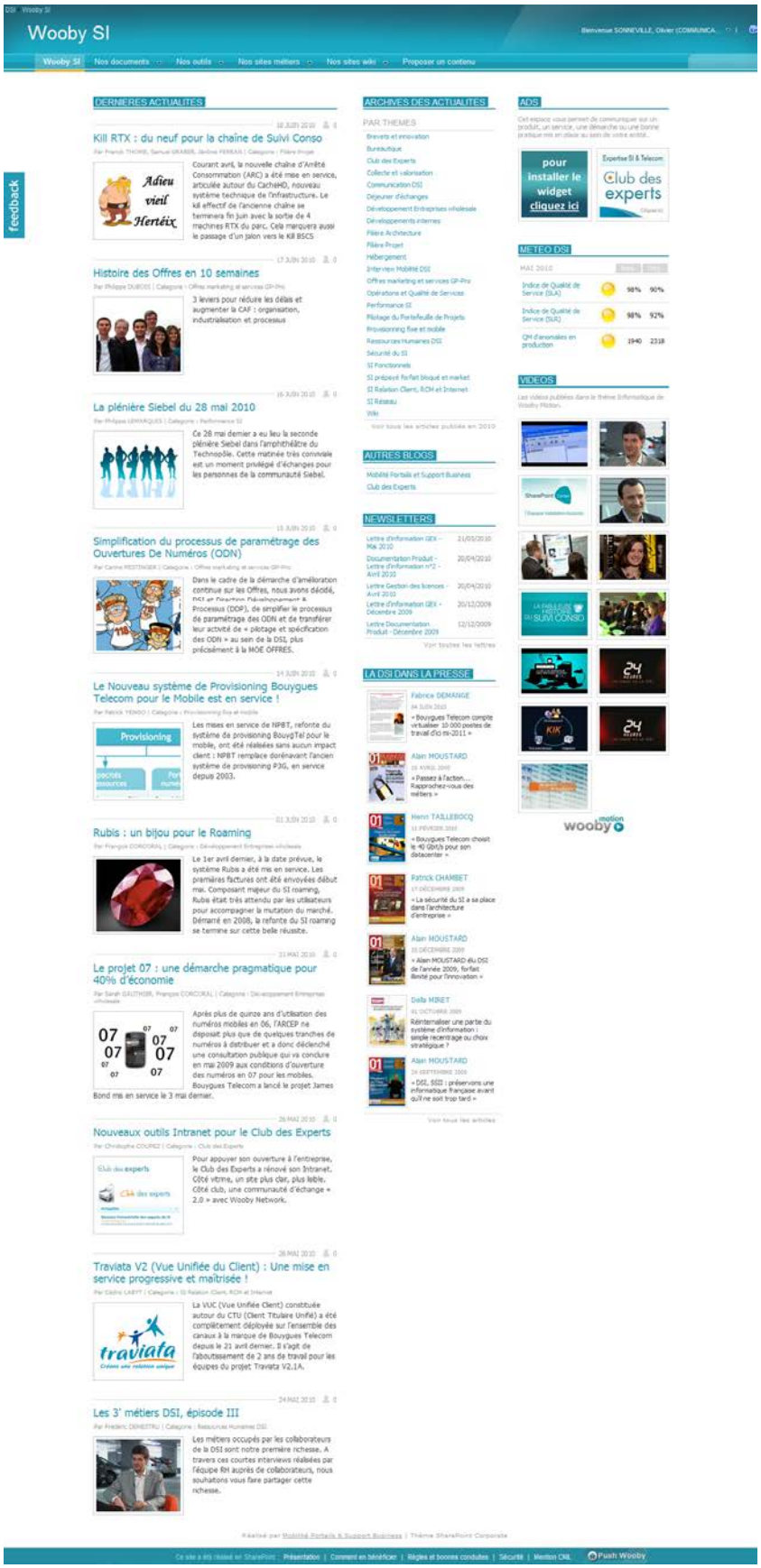
"We then imagined and designed new Wooby uses in the broadest sense," he says, adding that this included "the homepage, back-office parameterization functionalities, completely new CMS solution — practically a return to drawing board!"

With all that change comes challenges. The major challenges the team faced included:

1. **Run simultaneous projects.** The project's main challenge was to complete a significant number of subprojects simultaneously, without negatively affecting the daily operation of the existing intranet. In addition, the only (human) resources available were the three people who had been working on the portal since its early days.
2. **Solve technology issues.** The second challenge was to settle, once and for all, technological issues and concerns regarding the feasibility of particularly innovative functionalities. "A wide range of technological issues had to be resolved, especially as regards SharePoint, both for us and for our technical partners," says Sonneville. "Here, the goal was to make sure, right from the design phase, that the functionalities we wanted to implement were doable and reliable."
3. **Build modules.** The third challenge was to implement all other components in the redesign strategy, including *Wooby Motion*, *Wooby Network*, Wooby Mobile, and the SharePoint Center. This effort was a challenge because each module was a major project in itself.



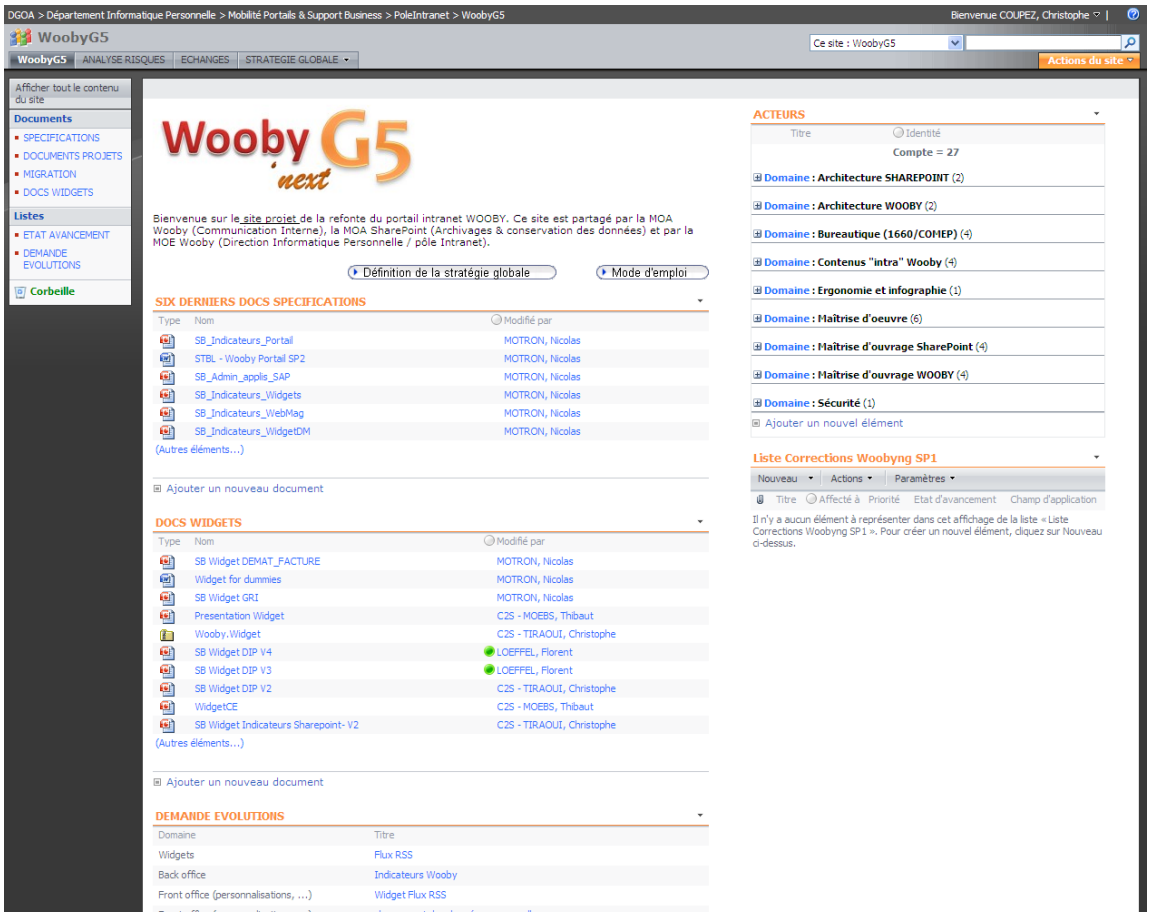
Pictured: The components of the 2010 Wooby portal redesign project.


Wooby SI
Wooby SI
Nos documents
Nos outils
Nos sites métiers
Nos sites wiki
Proposer un contenu
feedback
DERNIERES ACTUALITES
Kill RTX : du neuf pour la chaîne de Suivi Conso
Courant avril, la nouvelle chaîne d'Arrêté Consommation (ARC) a été mise en service, articulée autour du CacheHD, nouveau système technique de l'infrastructure. Le kil effectif de l'ancienne chaîne se terminera fin juin avec la sortie de 4 machines RTX du parc. Cela marquera aussi le passage d'un jalon vers le Kil BSCS
Histoire des Offres en 10 semaines
3 leviers pour réduire les délais et augmenter la CAF : organisation, industrialisation et processus
La plénière Siebel du 28 mai 2010
Ce 28 mai dernier a eu lieu la seconde plénière Siebel dans l'amphithéâtre du Technopôle. Cette matinée très conviviale est un moment privilégié d'échanges pour les personnes de la communauté Siebel.
Simplification du processus de paramétrage des Ouvertures De Numéros (ODN)
Dans le cadre de la démarche d'amélioration continue sur les Offres, nous avons décidé, not en Direction Développement & Processus (DDP), de simplifier le processus de paramétrage des ODN et de transférer leur activité de « pilotage et spécification des ODN » au sein de la DSI, plus précisément à la MOE OFFRES.
Le Nouveau système de Provisioning Bouygues Telecom pour le Mobile est en service !
Les mises en service de NPBT, refonte du système de provisioning BouygTel pour le mobile, ont été réalisées sans aucun impact client : NPBT remplace dorénavant l'ancien système de provisioning P3G, en service depuis 2003.
Rubis : un bijou pour le Roaming
Le 1er avril dernier, à la date prévue, le système Rubis a été mis en service. Les premières factures ont été envoyées début mai. Composant majeur du SI roaming, Rubis était très attendu par les utilisateurs pour accompagner la mutation du marché. Démarré en 2008, la refonte du SI roaming se termine sur cette belle réussite.
Le projet 07 : une démarche pragmatique pour 40% d'économie
Après plus de quinze ans d'utilisation des numéros mobiles en 06, l'ARCEP ne disposait plus que de quelques tranches de numéros à distribuer et a donc déclenché une consultation publique qui va conduire en mai 2009 aux conditions d'ouverture des numéros en 07 pour les mobiles. Bouygues Telecom a lancé le projet James Bond mis en service le 3 mai dernier.
Nouveaux outils Intranet pour le Club des Experts
Pour appuyer son ouverture à l'entreprise, le Club des Experts a rénové son Intranet. Côté vitrine, un site plus clair, plus lisible. Côté club, une communauté d'échange « 2.0 » avec Wooby Network.
Traviata V2 (Vue Unifiée du Client) : Une mise en service progressive et maîtrisée !
La VUC (Vue Unifiée Client) constituée autour du CTU (Client Titulaire Unifié) a été complètement déployée sur l'ensemble des canaux à la marque de Bouygues Telecom depuis le 21 avril dernier. Il s'agit de l'aboutissement de 2 ans de travail pour les équipes du projet Traviata V2.1A.
Les 3' métiers DSI, épisode III
Les métiers occupés par les collaborateurs de la DSI sont notre première richesse. A travers ces courtes interviews réalisées par l'équipe RH auprès de collaborateurs, nous souhaitons vous faire partager cette richesse.
ARCHIVES DES ACTUALITES
PAR THEMES
Brevets et innovation
Bureautique
Club des Experts
Collecte et valorisation
Communication DSI
Déjeuner d'échanges
Développement Entreprises wholesale
Développements internes
Filère Architecture
Filère Projet
Hébergement
Interview Mobilité DSI
Offres marketing et services GP-Pro
Opérations et Qualité de Services
Performance SI
Pilotage du Portefeuille de Projets
Provisionning fixe et mobile
Ressources Humaines DSI
Sécurité du SI
SI Fonctionnels
SI prépayé forfait bloqué et market
SI Relation Client, RCM et Internet
SI Réseau
Wiki
Voir tous les articles publiés en 2010
AUTRES BLOGS
Mobilité Portails et Support Business
Club des Experts
NEWSLETTERS
Lettre d'information QEX - Mai 2010 21/05/2010
Documentation Produit - Lettre d'information n°2 - Avril 2010 20/04/2010
Lettre Gestion des licences - Avril 2010 20/04/2010
Lettre d'information QEX - Décembre 2009 20/12/2009
Lettre Documentation Produit - Décembre 2009 12/12/2009
Voir toutes les lettres
LA DSI DANS LA PRESSE
Fabrice DEMANGE
« Bouygues Telecom compte virtualiser 10 000 postes de travail d'ici mi-2011 »
Alain MOUSTARD
« Passez à l'action... Rapprochez-vous des métiers »
Henri TAILLEBOCQ
« Bouygues Telecom choisit le 40 Gbit/s pour son datacenter »
Patrick CHAMBET
« La sécurité du SI a sa place dans l'architecture d'entreprise »
Alain MOUSTARD
« Alain MOUSTARD élu DSI de l'année 2009, forfait illimité pour l'innovation »
Odile MIRET
Réinternaliser une partie du système d'information : simple recentrage ou choix stratégique ?
Alain MOUSTARD
« DSI, SSII : préservons une informatique française avant qu'il ne soit trop tard »
Voir tous les articles
ADS
pour installer le widget cliquez ici
Expertise SI & Telecom
Club des experts
METEO DSI
MAI 2010
Indice de Qualité de Service (SLA) 98% 90%
Indice de Qualité de Service (SLR) 98% 92%
QM d'anomalies en production 1940 2318
VIDEOS
wooby motion
Réalisé par Mobilité Portails & Support Business | Thème SharePoint Corporate
Ce site a été réalisé en SharePoint - Présentation | Comment en bénéficier | Règles et bonnes conduites | Sécurité | Mention CNIL
Push Wooby

Pictured: An IT division's department-level homepage.



Pictured: The widget catalog.



Pictured: The homepage for the Wooby project site. The team used a project wiki to keep communication and collaboration open across project teams.

CONTENT AND CONTENT CONTRIBUTORS

Improving the System

Prior to the redesign, the previous CMS tool had been in place since 2001. It had been designed and developed by the company's internal teams. The tool was both easy-to-use and facilitated a general democratization with regard to creating and administering websites. Almost 90 sites were using it.

By 2009, however, its functionalities couldn't keep up with what was happening on the Internet or the other intranet sites across the organization.

The decision as made to replace this tool by leveraging the powers of the SharePoint infrastructure already in place inside the enterprise. In doing so, the team added several functionalities (using Telerik Objects), developed administration tools — which were much easier to use than those originally in place — and created a number of data entry templates.

Wooby COM CMS

Wooby COM, the Wooby portal's CMS solution, is based on SharePoint. The solution is aimed at enterprise organizations with content requirements based primarily on content pages (text and images).

Intended as a compromise between the 2001 CMS Wooby and the SharePoint "publishing" functionality, Wooby COM was developed to take advantage of the strengths of both:

- The 2001 CMS Wooby was easy to use and understand, but its functionalities and "render" had become obsolete.
- SharePoint (publishing) delivers much more functional richness, and much more "modern" render, but it's not so easy to learn and users have to be trained.

The team's solution was to use SharePoint, to take advantage of its functional richness and render, but make it easier to use. To accomplish this, it added a simplified administration page to the SharePoint CMS tool's menus. This page brings together, on a single screen, all of the SharePoint functionalities that are normally dispersed over several screens (some of which aren't very accessible).

And, to facilitate management of pages and page structures, the team added a module to this simplified page. This module can be used to move a page inside the site structure, simply by using drag and drop.

"The main idea was to centralize, on one single page, all the SharePoint administration functionalities of a given site," says Sonneville. "In this way, users no longer needed to be SharePoint experts to create a site with the new CMS."

Once the new CMS solution was built, the company provided training for the 120 enterprise webmasters, and all existing sites were manually migrated over a period of six months. The migration was handled by the webmasters themselves.

Today, the webmasters are happy with the new tool. Sonneville says they consider it extremely stable and easier to use than the previous version, but with far more functionalities.

With this new tool, administrators can assign specific roles, including:

- **Webmasters.** Although there are only three Wooby webmasters, the new tool lets them access all of the back-office functionalities used for portal parameterization.
- **Information Site Webmasters.** The company's 70 information site (Wooby COM) webmasters administer the Communication Intranet Sites.
- **Collaboration Site (SharePoint) Webmasters.** These administrators can modify site content (approximately 2,500 of them can publish this content in the Wooby shared engine).
- **All Users.** All users can contribute to the site, either by suggesting content for the search engine or by publishing information to a *Wooby Network* community.



Pictured: A Wooby COM site page.

TECHNOLOGY

The intranet covers a fairly broad technical perimeter. Some components use the native SharePoint technology or SharePoint with additional developments, while other elements use specific .NET developments.

The Wooby portal's previous version was written in ASP. The team felt that it was essential that the portal be migrated to a modern language that was easier to maintain.

In 2007, they migrated from SharePoint 2003 to 2007.

The portal was developed entirely in .NET.

The team opted for a custom application for the portal (as opposed to using SharePoint) because they didn't want to be constrained by any limits imposed by an off-the-shelf tool. "We wanted to construct the portal under conditions of complete liberty," says Sonneville. "Moreover, our requirements were very different from those of the SharePoint native operation, and customizing SharePoint to get exactly what we wanted would, in the final analysis, have been the more complicated option."

The following table outlines the specifics of the technology used to support the Wooby portal:

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	There are two infrastructures: an application infrastructure for specific software developments, and a SharePoint infrastructure. • The **application infrastructure** hosts the Wooby portal as well as custom .NET applications. This infrastructure consists of a redundant three-server NLB cluster running on Windows Server 2008 X64 and IIS 7, and an SQL Server 2005 database. The machine itself is an HP Blade Center, Bi-Quad Core Xeon E5405 2GHz with 4GB RAM. • The **SharePoint infrastructure** consists of a cluster of virtual servers: two virtual machines (VMs) dedicated to Web/Query/Forms in NLB, as well as one VM dedicated to Index/Excel. Currently, the team uses the MOSS 2007 version of SharePoint. • **Both infrastructures** use an SQL infrastructure consisting of Windows 2008 Servers under an MSCS cluster; they also use virtual machines for the preproduction and development environments. A technical team in charge of maintenance supervises the production environments.
Bug Tracking/Quality Assurance	Bug tracking is handled through a system integrated with the search engine that signals dead or erroneous links during website searches by means of a miniweb form used to troubleshoot as much as possible. On the portal, the team created a generic email where users can report errors to intranet supervisors. The supervisors track requests in a SharePoint list to make sure that they are logged and addressed by the technical teams.
Site Building Tools	The Bouygues tech teams develop in .NET (C# in the vast majority of cases), with Framework 3.5 and Visual Studio 2008. For the portal, they also used Code Fluent to generate the data access layer in C#. Software components available from Telerik were used for all advanced usability functionalities (drag-and-drop, text editor, advanced data-input field, and so on).
Content Management Tools	The Wooby COM CMS solution is based on the SharePoint native solution's CMS functionality. This functionality was improved through a custom .NET development, using Telerik software components.
Search	Wooby's search is based on the SharePoint 2007 search

	engine. The team customized the original engine to meet their specific search requirements. Specifically, they developed “security trimmers,” as well as an analysis rule-generation engine. Thanks to these specific developments, they were able to respect the desired security and publishing conditions by filtering results just before displaying them. A clear majority of developments associated with the search engines are hosted on the SharePoint platform. Only the results pages are hosted on the Wooby infrastructure.
Mobile	Wooby’s mobile version is based on a custom .NET development. This is partially based on the jquery mobile framework (Webkit touch compatible), which means that it fully leverages the power of CSS3. This mobile intranet version is therefore entirely compatible with the most recent generation of smart phones, including iPhone and Android. Moreover, an http module can be used to redirect incompatible phone users to a more basic version of Wooby Mobile.

MOBILE

A mobile version of Wooby has been available since 2005 (i-Wooby) in WAP format. The new version, known simply as “Wooby Mobile” was released in July 2010 and supports features available on the most recent generation of smart phones (such as Android and iPhone), which means Wooby Mobile supports touch screen browsing, format and “application” usability, images and video, and so on. It’s currently available in WEBapp version and will be available in APP version by the end of 2010. Although the WEBapp version supported only full Web pages, the new APP version will support native mobile “apps.”

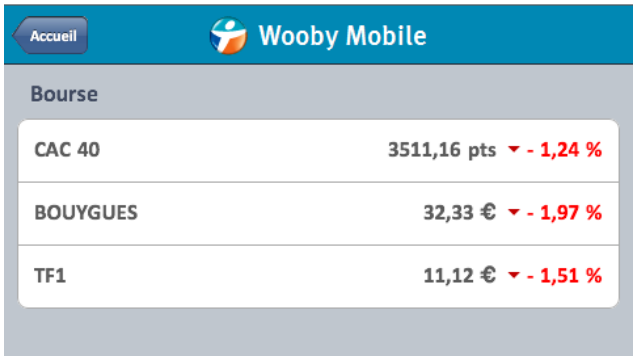
The mobile intranet features only services that have been determined useful for employees on the go. These include the directory, shuttle bus timetable, corporate information, and Bouygues Telecom locations.

At Bouygues Telecom, 98% of employees have a mobile phone, and can therefore take advantage of Wooby Mobile. Moreover, employees are given an unlimited data plan to encourage use of Wooby Mobile when they’re working out of the office.

All employees can access a shared set of services, but people in some roles (network controllers and sales staff) have access to applications specifically dedicated to their activities. For example, network technicians supporting non-mobile telephone relay antennas use mobile applications returning real-time information from the business-sector information systems that they can use to carry out technical support.



Pictured: An intranet article on the mobile interface.



Pictured: Looking at the Bouygues Group Stock quotes from the mobile interface.

SEARCH

The search engine behind the previous Wooby version used the SharePoint Moss 2007 engine and the efficacy level was extremely low. Users were not at all satisfied. Therefore, search has become the backbone of the new Wooby.

“And the reason is simple,” says Sonneville. “Faced with the never-ending increase in the volume of accessible data, a good quality search engine is the only way to retrieve good quality information.”

In the old system, the team realized that the data on which searches were based were not at all suitable to run efficient searches. There were no tags to enrich the information and no particular parameters to guide users to the information they needed.

“We decided to remedy this in Wooby 2010 by intensive customization work to expand the search engine's perimeter, increase its relevancy, and use selective additional safety rules,” says Sonneville, adding that the search engine’s “golden rule” was that users see only what they’re entitled to access.

And this turned out to be one of the most complex issues of the entire project.

Fixing the search parameterization was a project that included a semantic research study, which lasted two years. During the study, team members identified several hundred keywords or expressions that had been used in approximately 90 percent of searches. Simultaneously, they added several additional essential functionalities to the search engine: sponsored links, filters, results summary page, and so on.

“We also made up for a serious shortcoming in the previous version by generalizing the use of tags in order to enrich the context of elements indexed by the search engine,” says Sonneville. “The relevancy of tags, combined with additional functionalities such as the sponsored links, significantly enhances the relevancy of the search engine results.”

And the diversity of content types meant that the team had to create an array of response categories, grouping responses by general themes within a results page.

“Whenever a search engine does not return the expected results,” says Coupez, “the instinctive reflex is to blame the engine itself, even though simply enriching the information properties can lead to a significant improvement in results.”

The search engine still uses SharePoint 2007 (as did the previous version), but thanks to the various functional, technical and semantic improvements, Sonneville says the general level of user satisfaction has increased considerably.

Recommending Intranet and Internet Sites

With the new search, users can recommend relevant intranet or Internet sites for inclusion in the search engine. To this end, a *Recommend a site* link displays at the foot of the Wooby page.

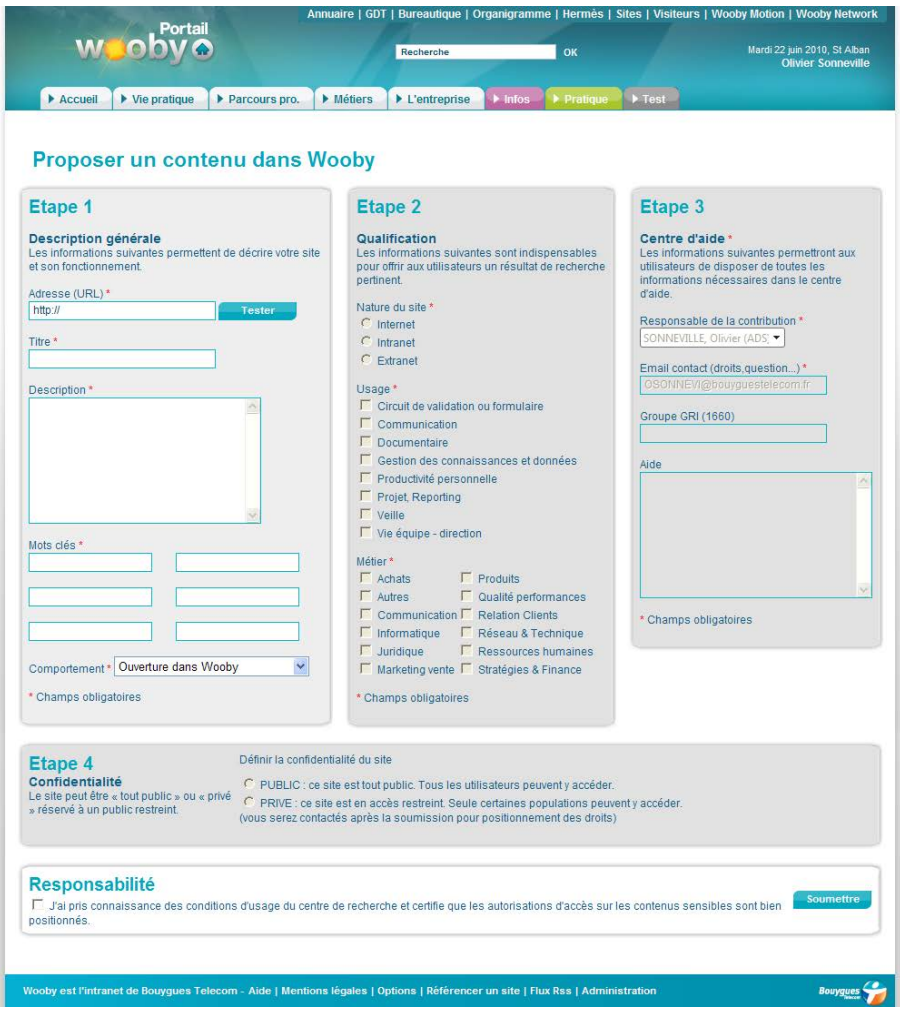
Clicking this link returns a form, to be completed by the user. The information gathered includes the content properties, which the search engine will reference.

“This properties innovation plays an important role in increasing the relevancy of the information returned by the search engine,” says Nicolas Motron, Web development IT Engineer (IT division). “By validating, the user confirms that he has read and agrees with the *Good Conduct Charter* for this functionality. The entered data is saved.”

It is important to note that user recommendations are not validated prior to publishing. It’s up to the individual user to assess the recommended site’s relevancy, necessity, appropriateness, and so on. That said, the Wooby webmaster could carry out post-publishing checks.

Overnight, a processing operation inserts the site URL (as well as its properties) into the Wooby search engine; the engine does not index the site content, rather, a robot

recovers the image of the home page corresponding to the entered URL. This image displays as a thumbnail in the results page.



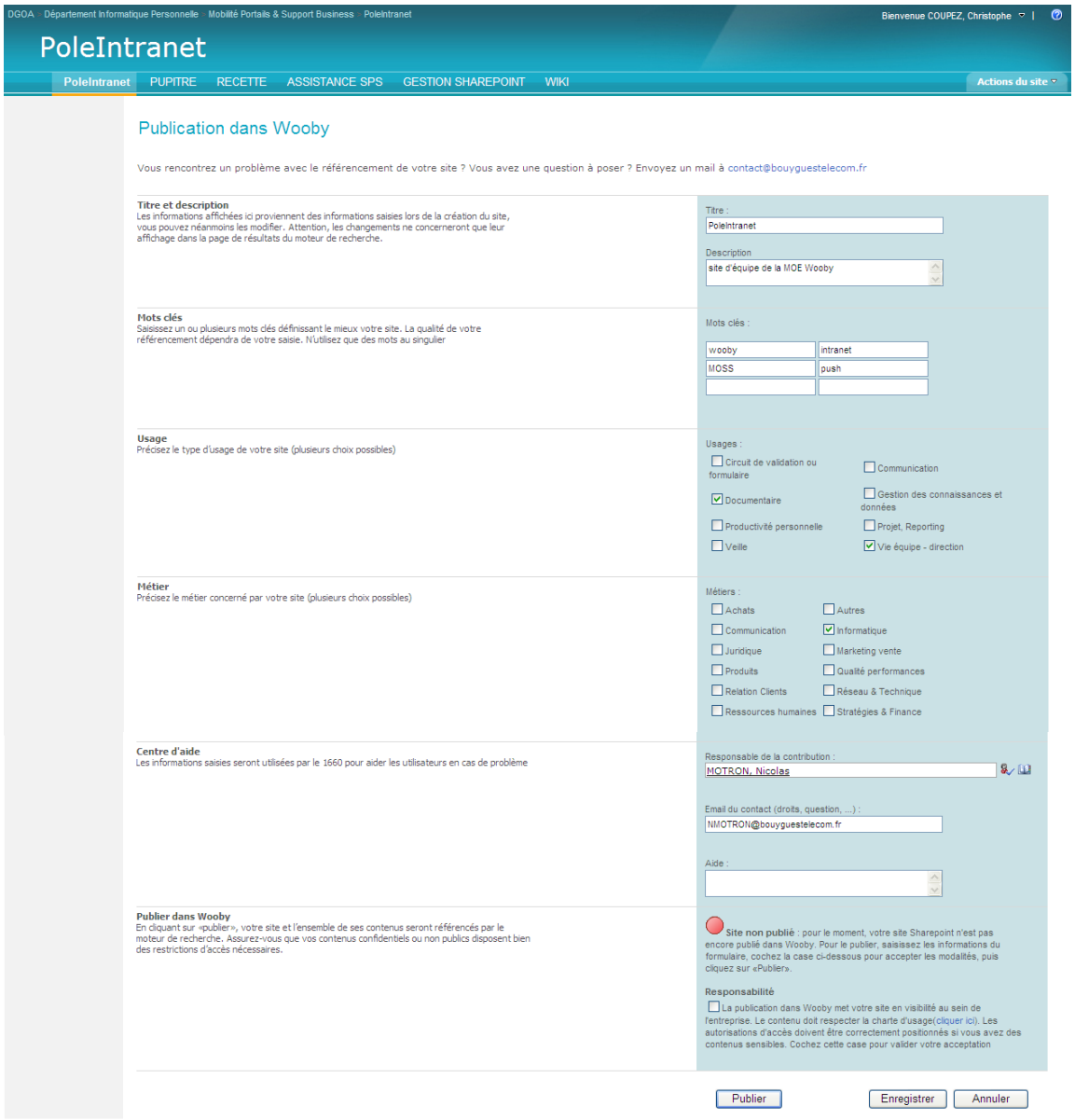
Pictured: The form used to recommend a site for inclusion in the search engine.

Recommending a SharePoint Site

Although the underlying idea is the same, recommending a SharePoint site for inclusion in a search engine is based on completely different rules.

First, submitting a SharePoint site involves indexing the URL of the site homepage, as well as its content, while respecting the site parameterization (security and so on). For this reason, only the SharePoint site's administrators can submit their own site through the SharePoint site's administration page).

As with the previous case, the submission entails entering properties that specifically describe the site, with one major difference: this form is the same as a SharePoint form, integrated with the standard administration module of the SharePoint site.



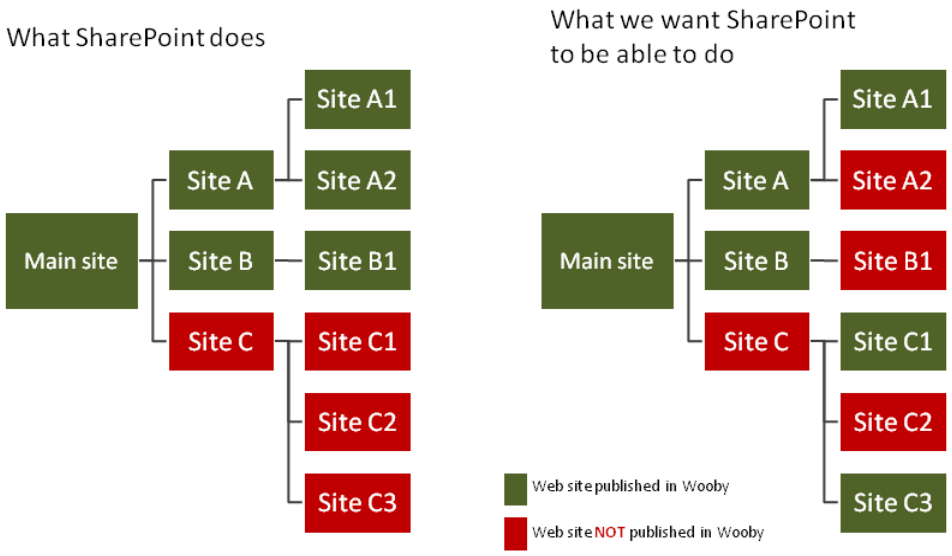
Pictured: The form used to submit a SharePoint site to the search engine.

Indexing

Results indexing — and, above all, display — caused some tough feasibility problems for the company's partner agencies. On the surface, it seems like a simple issue, but Microsoft Consulting and C2S spent many hours trying to address the indexing issues.

To understand the challenge, one must understand how SharePoint indexing works. The strict rule is that only sites published by an administrator can return the results of a search. Initial tests proved that whenever SharePoint indexes a site, it automatically indexes all the subsites.

This native feature posed a problem. Collections of host sites are spread over several levels, and publishing a parent site should not necessarily result in the automatic publishing of child sites.



Pictured: A comparison between native search operation and desired operation within SharePoint.

To resolve this problem, a security-trimmer-based solution was developed and added to the results display page. This made it possible to handle content publishing for each individual site.

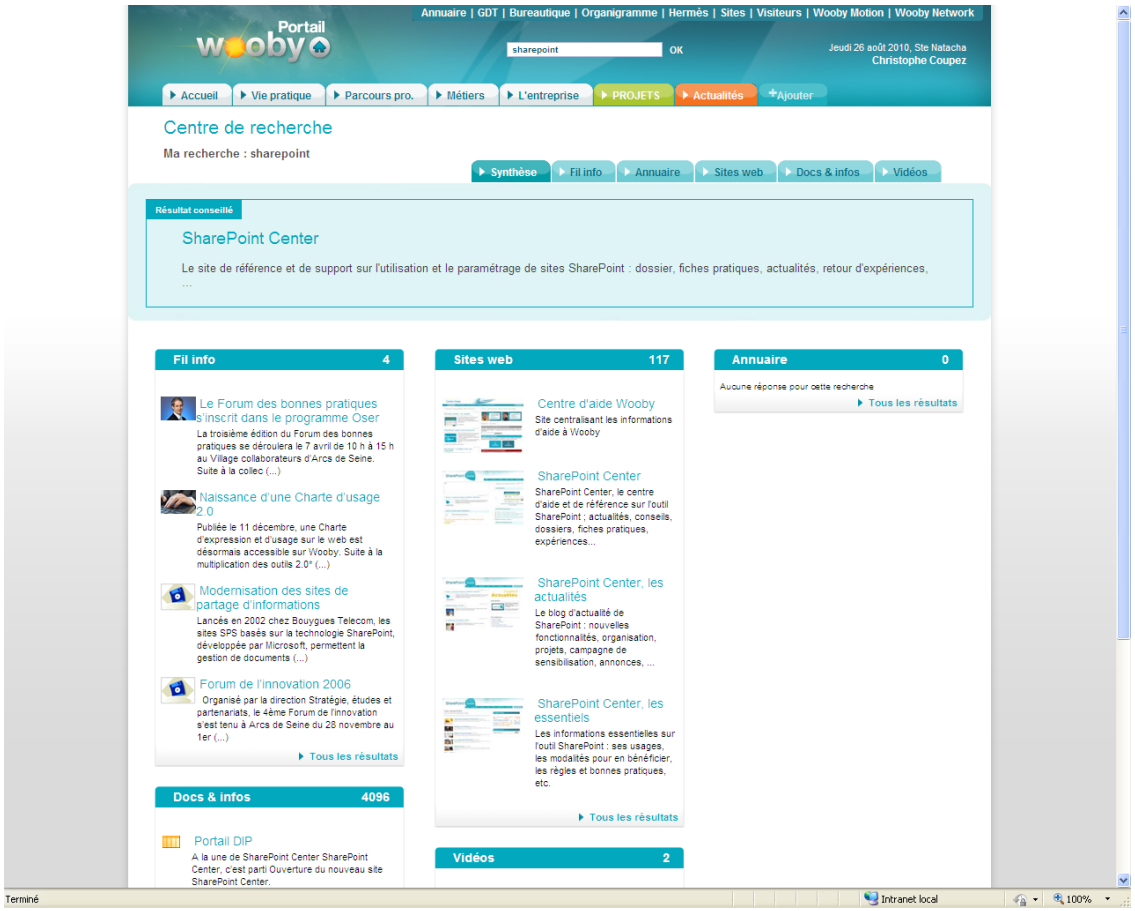
“This apparently innocuous point was actually one of the most challenging issues we had to face up to on this project,” says Motron. “It monopolized a number of experts to check if our requirements were feasible or not. Our upstream proof of concept turned out to be an extremely good idea.”

Recommended Results

Just like Google, the Wooby search engine can generate sponsored links, referred to on Wooby as “recommended results.”

Following a semantic study of words entered during the past two years, the Wooby webmaster created a list of the most popular keywords, and then used a parameterization module to associate the most relevant content to these words.

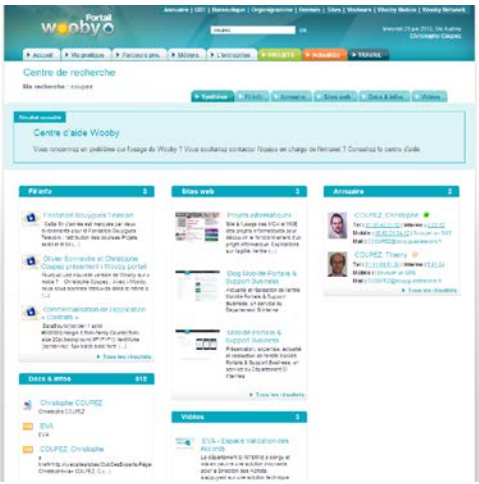
The “recommended results” display prominently, above the results area.

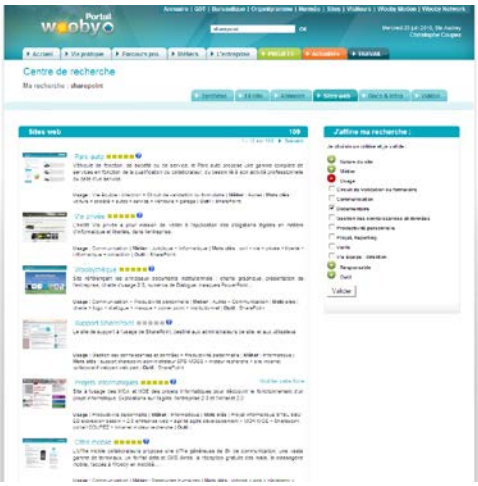


Pictured: Displaying a “recommended results” link on the search results page.

Displaying Results

The search results displayed can be of several types: “File info” (news stream), Web sites (SharePoint or others), directories, videos, documents, and so on. After launching a search, the results display in a page grouped by type. Users can then ask to see all results for a given type and fine-tune their search by entering more specific criteria.





Pictured: Typical search results pages.



Pictured: The homepage of a help center on the Wooby portal.

RESULTS AND ROI

"A Remarkable Project"

Sonneville says he considers the Wooby redesign a "remarkable project."

"In the final analysis, what makes Wooby a remarkable project is an accumulation of specific aspects to yield an entirely unique project," he says.

As a demonstration of his point, he lists some of the things the redesigned portal provides the organization:

- An engaging human adventure, with flexible and reliable collaboration among all project participants, the Project Owner, the Project Managers (three people), as well as several external agencies
- A global, broad strategy of which the portal redesign (a major subproject) is just one component (albeit the cornerstone)
- A movement toward "Enterprise 2.0" made possible by the new portal, which includes participative and contributed functionalities and deploys Web 2.0 services (*Wooby Network*)
- A project spawned from a natural and rapid evolution of Web uses within enterprises, in just a few short years, completely upending an apparently stable order

- A technological buttressing with a collaborative tool that is now part and parcel of employee work methods
- Resolutely innovative and new functionalities, the fruits of research in optimizing employee efficacy — without compromising a systematic striving for simplicity in all functionalities deployed
- A project with major implications and a high profile, as seen by both customers and management
- A major project in terms of the number of subprojects to be implemented simultaneously
- And, nevertheless, a small in-house design and steering team (four main in-house participants)

Measuring Success Through User Engagement

One of the measures Bouygues Telecom uses to gauge the site's success is the engagement of site users through customization and widget installs.

"At the current time, we have statistical indicators returning a plethora of information (success of customization, widget downloading rate, site consultation, etc.)," says Sonneville, "and can report that 30,500 Widgets have been installed by 9,000 users."

Another key measure is user satisfaction. And, with Wooby, search is one area where the team has seen huge increases in user satisfaction.

"The level of satisfaction expressed by employees as regards our search engine is very encouraging," says Sonneville. "Users soon took to the new browsing configuration, and there was very little negative feedback as regards this aspect."

Content suppliers and webmasters are also very satisfied with their new CMS, and took to the new-look Wooby faster than expected.

But, as one would expect, nothing is perfect. "There has been some disappointments as well," says Sonneville. "Mainly with regard to the social and collaborative functionalities. Not many people have left comments or made recommendations."

The level of syndication remains low, as does the quantity of RSS streams. Likewise, a feature of the search engine that lets users suggest search terms hasn't really caught on yet.

"Inside the enterprise, users have been understandably reserved and don't always dare to leave behind a comment or submit a contribution," says Sonneville. "We need to make this less daunting to help people overcome their hesitations. We need to make sure that contributors feel their input is appreciated."

To remedy some of these slow starts, the organization has launched an awareness campaign to help familiarize users with these participatory features.

ROI

Improvements in employee efficacy will be the key measure of return on investment for the Wooby project. "The possibilities offered by RSS streams, SharePoint syndication (*Push Wooby*), business sector and Widgets, personal areas, and the relevancy of the search engine are all factors which save users time with respect to the previous version," says Sonneville. "Even though these functionalities were designed to be simple to use, it is true that users do need to invest a little time at the beginning to make the most of them."

The company's webmasters will benefit from new functionalities featured in the simplified CMS, as well as opportunities made available by search engine listing and new communications areas to boost their visibility. And, to date, most webmasters have seen their audience count increase.

Currently, the portal is used by 9,000 people, and generates an average traffic of 2.5 million page views each month. In total, 60 major sites can be accessed directly from the main browsing area. The search engine itself references almost 300 sites and applications, 1,000 corporate articles, 300 videos, thousands of documents hosted in SharePoint collaborative areas, and 9,000 employee sheets.

LESSONS LEARNED

Sonneville considers the Wooby project overwhelmingly successful. "This project has been successful right from the beginning and up to the current date," he says. "A number of factors contributed to this success." He outlines some of these factors as follows:

- **General management support.** "Solid support from General Management was essential for the project. As part of Wooby, General Management, Human Resources, and the Computer and Technology Departments supported the new version. The project team met with them on several occasions to discuss overall orientations chosen and report on project progress."
- **Solidarity and synergy within the teams.** "The project team must share the same desire to succeed and the same goals. It is essential that the relationship between Project Ownership and Project Management be positive for the project to run smoothly. Bringing the team together in the same office premises reinforced the links between team members, increased productivity (working time, travel time, etc.), and reduced the decision-making circuits to increase reactivity. Trust and reciprocal listening are essential features."
- **Availability.** "It was important that this project be the main preoccupation of the team during the project period; in other words, avoid parallel projects and simultaneous assignments. One hundred percent availability was essential."
- **Design and proof of concepts.** "Design is a key step; it moves the project in the right or wrong direction. Technical validations done during this step meant that there were no nasty surprises during the development phase."

Credit Suisse AG

Using the intranet:
Credit Suisse is a leading global financial services company, offering clients financial advice in all aspects of investment banking, private banking, and asset management.

Credit Suisse pursues a client-focused integrated bank strategy, focusing on complex client needs and value-adding businesses, leveraging the global expertise of its three divisions: Private Banking, Investment Banking, and Asset Management.

Headquarters: Zurich, Switzerland

Number of employees the intranet supports:
49,200 from approximately 100 different countries

Company locations: Credit Suisse is active in more than 50 countries

Locations where people use the intranet:
Employees in most of the company's locations use the intranet

Annual net income: $6.7 billion (year ended June 30, 2009)

Design team:
In-house, 10 people formed the core team. Noise AG developed the visual design. Stimmt AG consulted on the IA strategy.

Members:
In-house: Jamal Sadick, Head Corporate Design and Corporate Web; Christian Sebregondi, Head Interactive Media Services; Stefan Büchi, Head Corporate Web; Andreas Zogg, Head Web Identity; Gerhard Schauer and Barbara Müry, Web Strategy Managers; Lukas Müller, Linda Buschke, and Aidan Bonel, Key Account Managers; Isabel Herzog and Mark S. Hirst, Web Identity; Andrea Bargetzi, Intranet Program and Project Manager; and Christopher Schmidt, Peter Landolt, and Oliver Staubli, Project Managers

Noise AG: Patrik Giacobbo, Creative Director

Stimmt AG: Lukas Karrer, Intranet Strategy Consultant

SUMMARY

Content customization was a key element of Credit Suisse's latest tweak to the corporate intranet. The current design is a milestone in a long-term intranet strategy dating back to 2007. The team based its changes on in-depth user and stakeholder research, including field visits, user tests, workshops, and brainstorming sessions.

In their research, team members were surprised to hear employees say that they wanted customization features so they would have more control over the content they saw. Users wanted to see content that was relevant to them and the work they did.

This can often be done via personalization, but content personalization can be tricky in an enterprise with 49,200 employees. So, the team implemented a combination of push and pull content. The team enabled broad personalization by creating 46 communities of users defined through a matrix of the user's division and location (for example: Investment Banking — Asia Pacific). User's default content is delivered based on membership in those communities.

In addition, special communities allow membership across the main communities. Users are assigned to those communities based on 25 particular attributes that they can set in their personal profiles (such as location, grade, preferred language, and skills). These special communities provide a foundation for cross-community targeted content.

So, content is now pushed to users based on their broad identity. But to enable users to get content even more specific to their needs, the homepage lets users customize content as well as its placement on the page. Users can customize content to reflect specific roles and tasks and can add, move, or remove boxes.

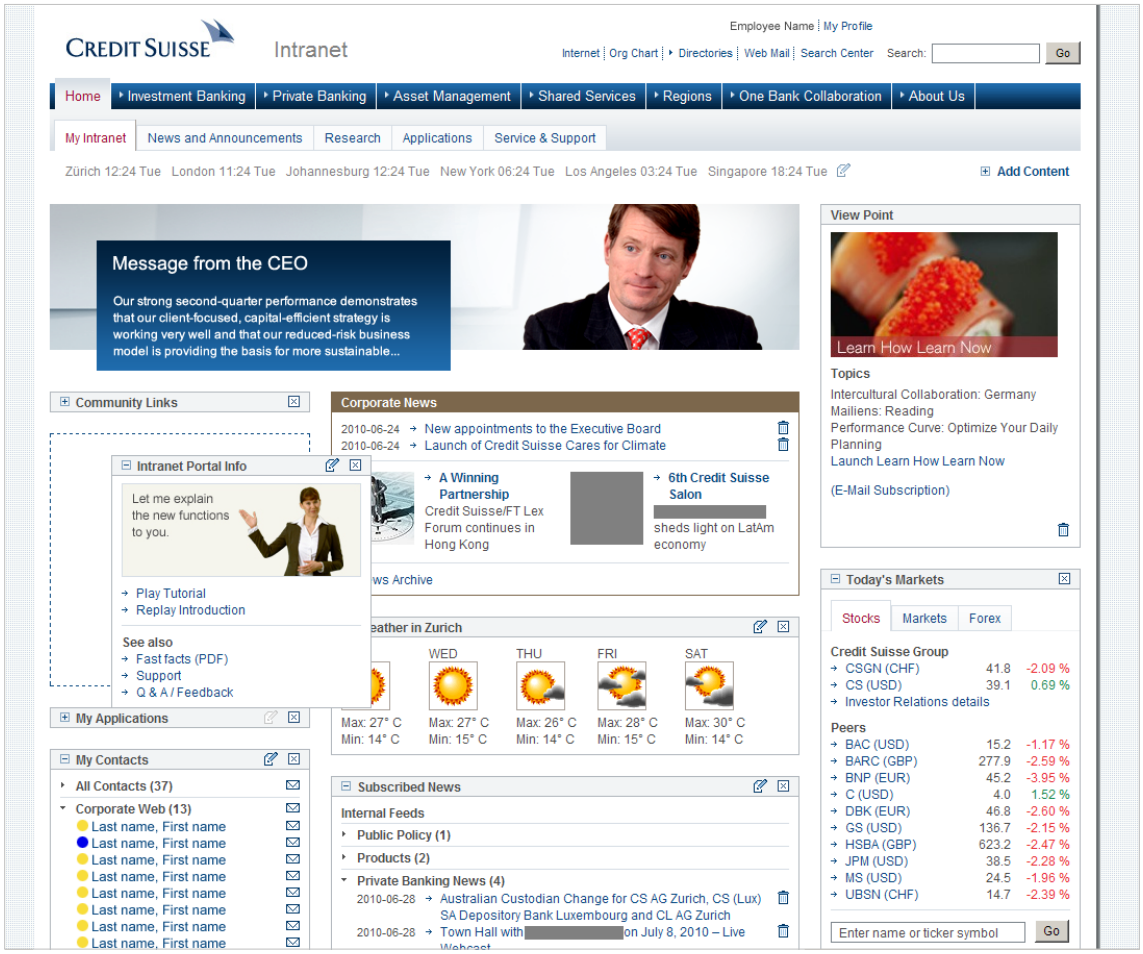
Users can move or edit any content areas except the main news area (featuring a message from the CEO in the screenshot below) and corporate news. News is added by more than 200 employees in the organization in a decentralized publishing model and can be targeted to communities and special communities as well, according to such employee attributes as division, rank, and region.

Users can expand or collapse sections using the plus and minus icons, or remove them completely. They can also edit the content within a module. In addition, users can remove individual items within a content box by clicking on the trashcan icon that appears next to some items.

Customization doesn't stop there, but extends to the additional option to customize the world clocks featured at the top of the page. With many employees doing business internationally and across time zones, the site includes the option to customize the locations and time zones displayed on the site.

The team worked hard on a design to accomodate users customizing and organizing content without overwhelming the page. They created a neutral design that would make any grouping of content as visually pleasing as possible.

One of the key elements of customization on the site is the drag-and-drop functionality, which lets users move content modules and order content within modules, as appropriate.



Pictured: The Credit Suisse intranet homepage lets users add and remove content, as well as move or reorganize it, with drag-and-drop functionality.

The team implemented drag-and-drop functionality to make it easy for users to customize content, which is one of the key factors in encouraging users to take advantage of customization tools. However, they found in testing that expert users naturally discovered the drag-and-drop function, but novice users did not realize the site's customization potential. In testing, however, novice users were successful and even liked the functionality when it was introduced.

In response to this, the team decided upon launch to provide video avatars to introduce users to the new portal, as well as its new, key customization functionality. The videos encouraged users to actively design their intranet experience. The avatar videos were well received. The team also provided intranet help pages with FAQs, support site access, and further information on the new portal.



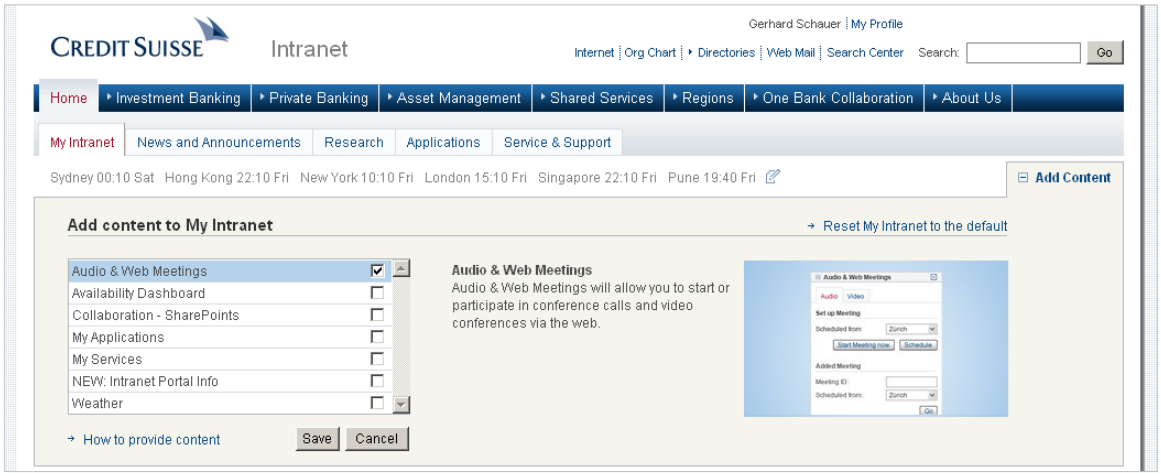
Pictured: Video avatars introduced new site functionality, such as content customization and the drag-and-drop function, when the site launched.

To add content to the page, users go to a content store via the *Add Content* link in the top right corner of the page. This content catalog presents a list of items that can

be added. When a user selects an item, a brief description of the item and a thumbnail sample of content appear.

Some content options let users see personalized information through the site. Users can see *My Enrollments* for training information, *My Contacts*, or *My Tasks*, for example, or can created customizable lists of applications and services.

The content boxes are produced and delivered by many different business units and are offered to defined user groups. Business units have to fund content boxes on their own, inspiring quality content and thoughtful additions.



Pictured: Users select content from the content store, which offers information from many different business units as well as productivity, navigation, and scheduling tools.

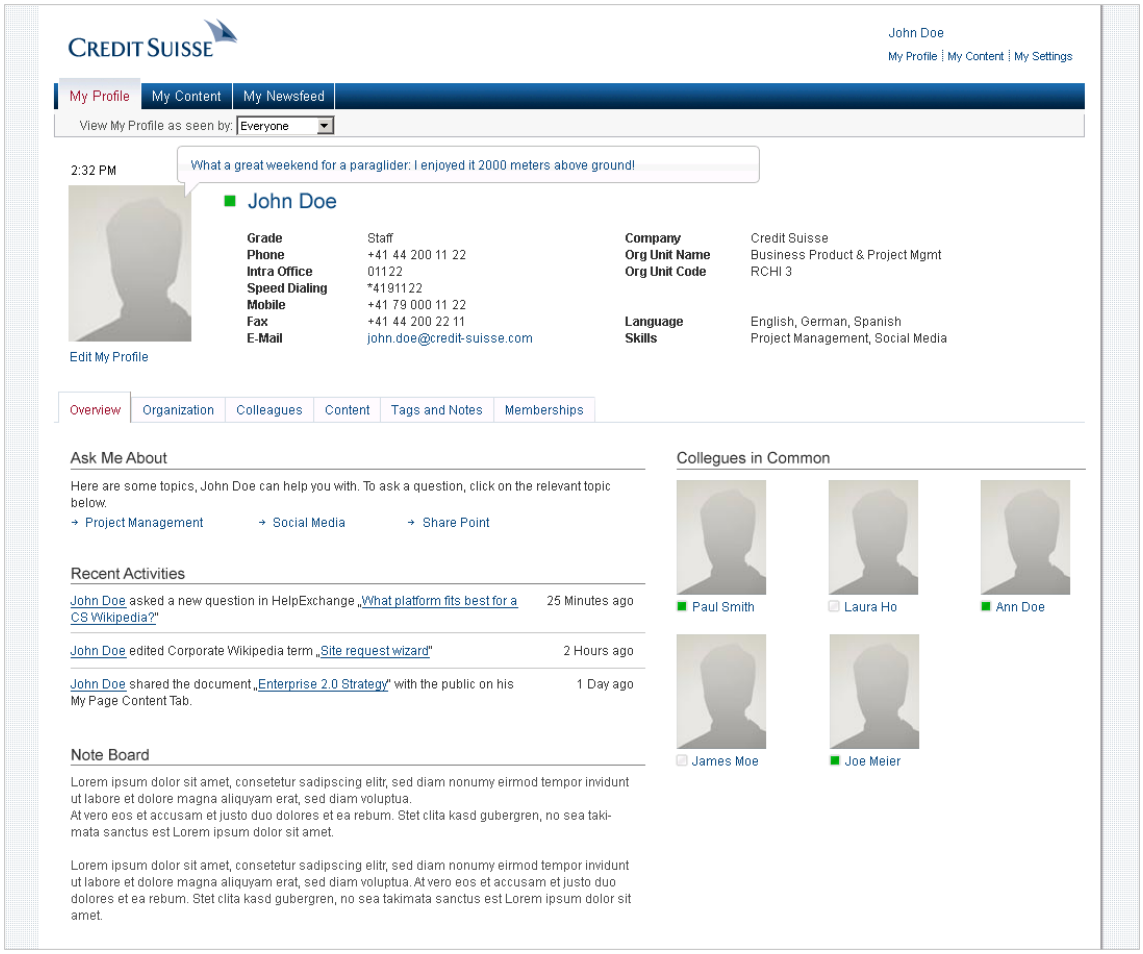
The intranet is intended as a platform for users to share work, skills, interests, and opinions with colleagues, teams, or groups. The redesign aimed to emphasize the employee, rather than content.

The employee directory is the main tool allowing users to share information across the organization, providing a foundation for the new employee-centered approach. Special community memberships, which help to personalize content on the user's homepage, are based on attributes set in the user's profile, or *MyPage*.

MyPage acts as a central location for social media activities and ad-hoc sharing. The page enables knowledge exchange by giving users a way to distribute knowledge in a controlled way. It is intended as a platform for users to share work, skills, interests, and opinions with colleagues, teams, or groups. *MyPage* is in a pilot phase and will be rolled out globally in 2011.

Users can add their own areas of expertise in their profile's *Ask Me About* section. Here, users can add skills that go beyond those learned in on-boarding, education, or training. This information is used within the site for expert searches, and it is the user's responsibility to self-promote correctly.

The user's page also summarizes recent activity on the site, such as posting a question, editing a wiki, or sharing a document. A microblogging feature allows users to update their colleagues. The *Colleagues in Common* area of the page shows users connections between themselves and the person whose profile they're viewing.



Pictured: Employees can use *MyPage* to update and inform colleagues by microblogging or by updating *Ask Me About* expertise information. The page also summarizes the employee's recent intranet activity and, of course, provides contact information.

HelpExchange is a new addition to the site that also encourages collaboration and knowledge sharing. Still in pilot phase (and not yet approved for global roll-out), this site area allows any employee to post any factual question. Any other employee can answer that question, allowing fact-based knowledge exchange across the organization.

The system is self-regulating, meaning that the employees are in charge. *HelpExchange* is run by all employees and regulated by a set of rules intended to improve the quality of answers. For instance, questions can't be subjective, argumentative, or require extended discussion. *HelpExchange* is a question-and-answer board, not a discussion forum. Further, questions cannot include client or business information or breach legal or compliance policies.

Any employee can post a question. The system is self-regulated through the use of reputation points. Reputation is a rough measurement of how much the employee has proven his or her trustworthiness through actions on the site. Reputation is earned through convincing others that you know what you're talking about by contributing questions, answers, or comments.

Employees can also vote for good questions or helpful answers. Each vote earns the author 10 reputation points. Employees vote down off-topic or incorrect answers, subtracting two reputation points. An employee can earn up to 200 reputation points a day, but no more.

Each time a question or answer is voted up, the person who asked the question receives 10 reputation points. Asking or answering a question does not require any reputation points. Reputation points are a measure of how much the *HelpExchange* community trusts a user.

Users earn the right to further participate in the *HelpExchange* when they accumulate reputation points. Users need 15 points to vote an item up, and 15 to flag content as offensive. Leaving comments requires 50 points, and voting down requires 100. At 250, they can vote to close or reopen a question or create a new tag. At 500 points, they can retag questions, and at 2,000, they can edit other people's posts. At 3,000 points, they can vote to close or reopen any questions, and it requires 10,000 points to delete closed questions or access moderation tools.

Once users reach the highest levels, they are essentially moderators. This allows the community to run the *HelpExchange*.

The tool has proven to have great value to IT development teams and shared services teams, who regularly check to see if their expertise is needed in the organization. For example, the Web team will check for opportunities to post guidelines as answers to design-related questions from colleagues.

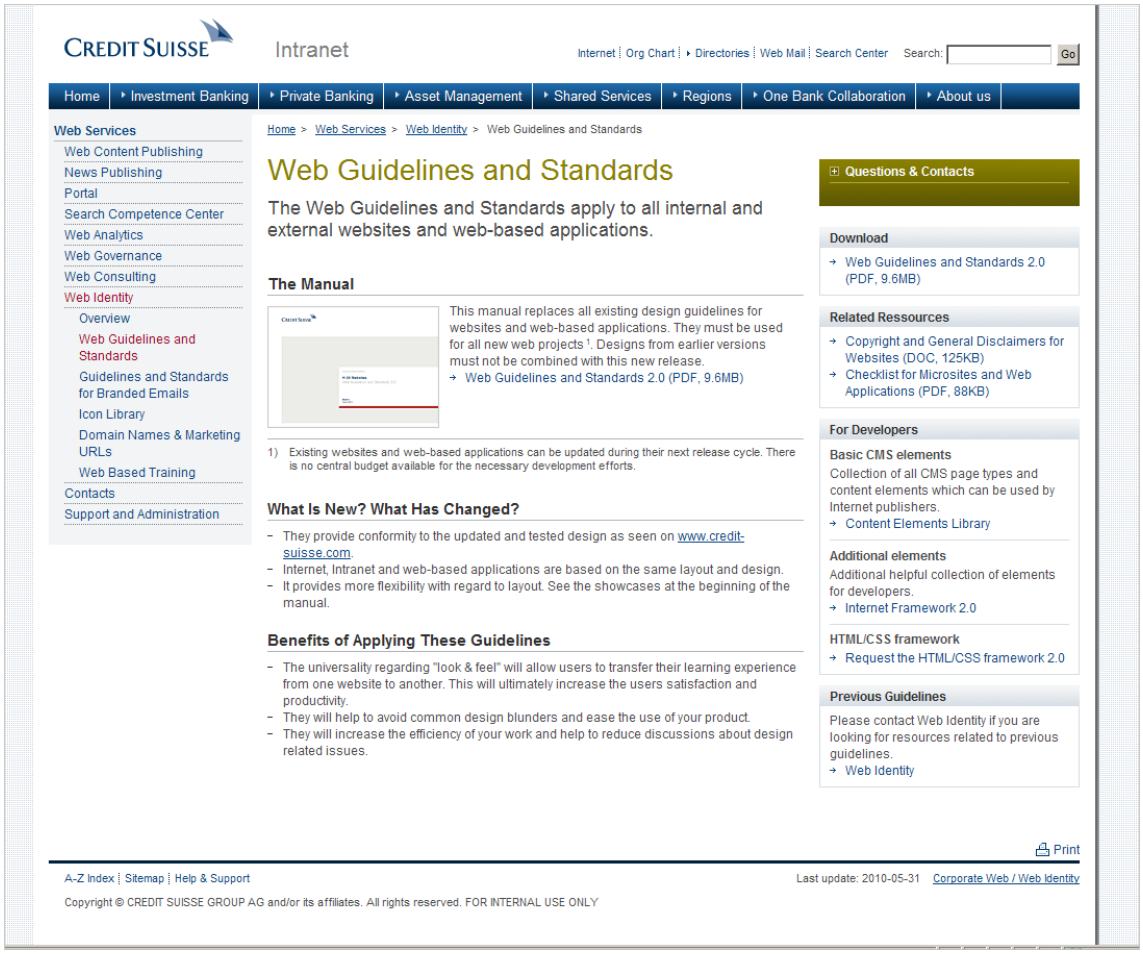
The team considers the initial pilot to be a success, noting that more than 95% of questions have an answer that another user has voted up, meaning they found the answer to be relevant and useful.



Pictured: *HelpExchange* allows users to post questions and answer other users' inquiries. Reputation points help the system self-regulate, providing more access and functions to users who have proven themselves trustworthy by providing reliable content.

Despite the different technical systems employed on the intranet homepage, *MyPage,* and *HelpExchange*, a consistent experience has been established throughout the intranet. This has much to do with the content management and WYSIWYG editing tools, which let decentralized content contributors create pages, and the presence of good support and Web guidelines applied across the various technical systems.

These support tools include Web-based learning tools for content creators, featuring video and voice recordings, a comprehensive guidelines manual, one-page quickguides, and an up-to-date FAQ. The support mechanisms combine to make the user interfaces feel integrated and "one," and ensure the different systems are used in a consistent manner.



Pictured: The site has a clean and consistent design, helped by the site's content management tools and clear information for content publishers.

Personalization, customization, and collaboration all work together on Credit Suisse's intranet to meet user needs and build relationships.

Background

Back in 2007 when the Credit Suisse team members first started assessing the communications and technology challenges the company was facing, they identified many key issues that would drive their approach to intranet development. These issues included:

- Employees had to interact with an increasing range of applications, information and people
- It was difficult to access specific information and applications relevant to employees' work
- There was no enterprise-wide content taxonomy, which hindered the creation of an easy to understand information retrieval and distribution system
- The company had not established a business value-oriented measurement system

- Employees had to visit many different technology platforms, each with its own user interface
- Data silos and system- and organization-centric content hindered knowledge exchange and collaboration across business units
- Employees were regularly by-passing the news portal as the entry point to the intranet
- The proliferation of new tools and opportunities (both internally and on the Web, such as Web 2.0 tools) required the team to focus on the "right" things to meet the business goals, instead of trying to adopt every new tool and technology that was fashionable or available
- With no strategic foundation in place, many systems with similar features and functions had accumulated across the organization without clear business purposes

The first step toward remedying these issues was to create an overarching strategy that could serve as a guiding force in the team's activities.

"To improve the situation, it was decided to mandate our team with the development of a new intranet strategy," says Gerhard Schauer, Web Strategy Manager.

As a first step, a detailed analysis was done, revealing the following strategic key gaps, identified as threats to the strategy:

- 20% of threats are governance related
- 14% of threats are relevancy related
- 10% of threats are info silo related
- 9% of threats are content organization related
- 8% of threats are missing feature related

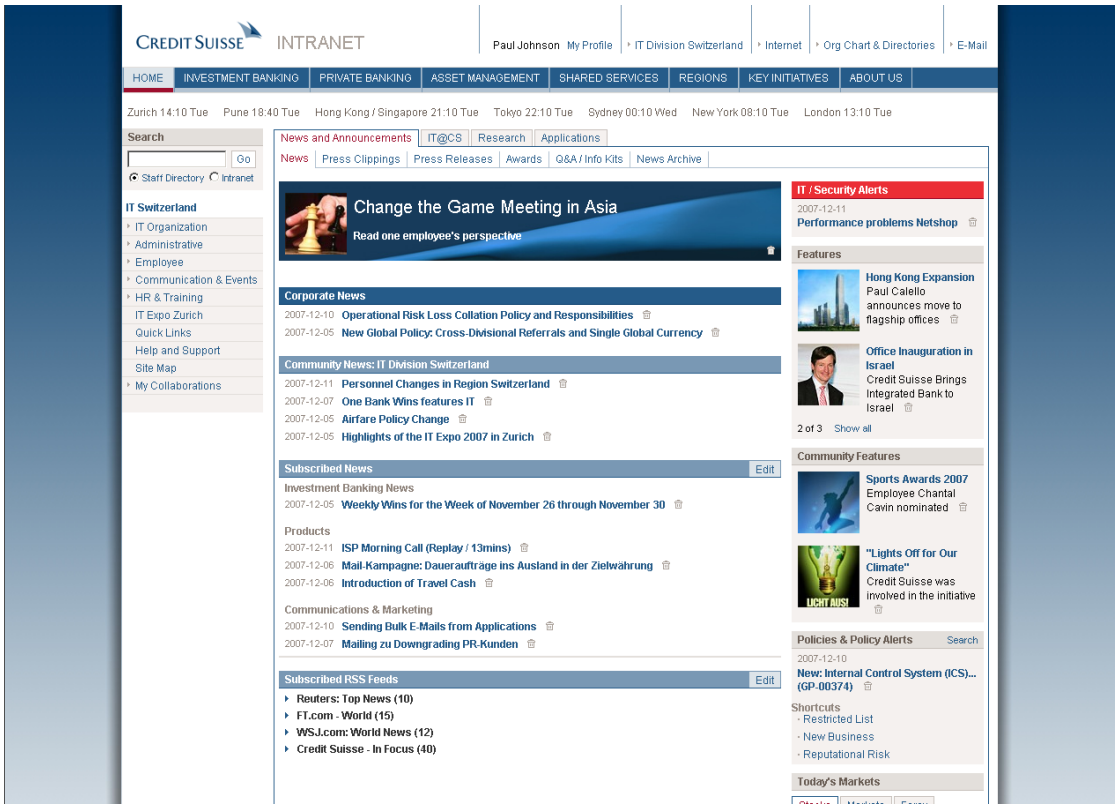
Therefore, they decided that the new intranet strategy should aim toward an integrated user experience with a centrally managed and news-driven communications approach, as well as across work-process-related content and services. Also, the intranet strategy should consider the following available intranet-based services:

- One-to-many messaging, especially the news distribution system
- One-to-one messaging services, such as email, voicemail, and instant messaging
- Directory services, including org charts and service directories
- Collaboration and knowledge-exchange services
- Webcast and video content services
- Support information and application-based information driven by core processes

To ensure a successful strategy development and acceptance of that strategy, the intranet team involved a broad stakeholder community in a comprehensive strategy-development process. The first set of workshops conducted with the group involved more than 50 key stakeholders. During these sessions, they defined the following key elements comprising the new strategy:

- **User needs** must be properly balanced with **business needs**.

- **The balance** between decentralized user control and centralized editorial control should be differentiated across three dimensions:
    - Access
    - Structure
    - Content
- **Governance processes** should define clear rules and controls. They must be transparent to message receivers (users) and message senders (providers).
- **Access**: Users should have considerable control around the content and services configuration of their new intranet.
- **Structure**: A well-defined and governed user guidance must be in place to enable that configuration process.
- **Content and services**: User-generated content is a reality to be considered; generally, work groups acknowledge that essential corporate and personal content and services must reside within an integrated intranet.



Pictured: A screen from the old intranet.

INTRANET TEAM



Pictured: The Credit Suisse intranet core team: (back row, left to right) Gerhard Schauer, Andrea Bargetzi, Oliver Staubli, Christopher Schmidt, and Stefan Büchi; (middle row, left to right) Christian Sebregondi, Peter Landolt, Andreas Zogg, and Isabel Herzog; (front row, left to right) Lukas Müller, Barbara Müry Erni, Mark Stefan Hirst, and Jamal Sadick; (inset, top to bottom) Linda Buschke and Aidan Bonel.

GOVERNANCE

Ownership

The Credit Suisse intranet portal is owned by Corporate Communications. To ensure strategic involvement from across the bank, a cross-divisional Web Governance Board determines the intranet's strategic direction.

"It is in the interest of several stakeholders internally to further advance the intranet and offer a state of the art platform to the end user in terms of content and local content structure," says Stefan Büchi. "Historically, the biggest stakeholder is Corporate Communications."

Channel ownership, solution ownership, and content ownership are split between teams. Content ownership is completely decentralized.

Team members in the roles of key account manager (KAM), Web strategy manager, and Web identity manager are in Corporate Communications. Project managers are part of Interactive Media Services, which rolls up to Corporate Finance. And seven members of the core team belong to the Corporate Communications department.

"With the introduction of the Web Governance Board, other stakeholders are now able to impact the strategy directly," says Büchi. "The goal is to evolve today's Intranet from a targeted communication channel into a company-wide collaboration environment."

"The shared ownership setup improved senior management's awareness," he says. "This had a positive impact on the project, since many different teams were engaged. On the other hand, the broad involvement resulted in a slower process, and more development time and costs. However, the consensus is that these additional costs ensure improved integration into existing IT landscape, as well as a higher quality, scalable, and maintainable infrastructure."

WEB GOVERNANCE MANDATE

The role of the Credit Suisse Web Governance Board is to act as a central body to develop and monitor the strategic direction of Credit Suisse's global Web presence across regions and divisions. The board is chaired by Corporate Communications, whose representative also chairs the Web Governance Board and is responsible to drive decisions.

The board's mandate is to serve the following functions:

- **Determine the future direction** of the Internet and intranet
- Determine and **regulate development** and technology standards
- Determine and **maintain content presentation** standards and overarching IA
- **Sponsor and prioritize** the corporate Internet and intranet project portfolio
- **Review progress** of key Internet and intranet initiatives and manage risks
- **Communicate decisions** to main stakeholders
- **Represent the Web Governance Board** in project steering boards
- **Coordinate and conciliate** between interests of involved parties
- **Identify and leverage synergies** across the corporate Web

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Corporate Design and Corporate Web	• Define comprehensive Web strategy, guidelines, and governance within Credit Suisse globally according to needs of external and internal clients • Define strategic roadmaps • Chair the global "Web Governance Board" and take primary responsibility for stakeholder management
Interactive Media Services	• Convert the strategy into business concepts • Manage the various projects that result from the strategic roadmaps • Act as the Business Sponsor of Web projects • Manage operational maintenance of Web applications
Community Managers	• Define the default content box setup for their own community • Consult the business in the usage of shared content features, such as allowing the news publishing system to reach any possible employee group; allowing the subsite system to represent units, project team sites, and small teams; and allow usage of services and applications directory • Define and publish *Community Links* based on the community's needs • Establish a community feedback system to ensure optimal content delivery
Content Owners	• Ensure that their content boxes, subsites, or team sites are up-to-date and consistent • Delegate some part of the updates or changes to other members of the team/department
Employees	• Customize their intranet according to their information needs • Manage their visibility on the intranet to ensure that they're reachable if their expertise is needed • Contribute and own content, and handle questions and answers about their content

USERS

All 49,200 Credit Suisse employees have access to news, policies, the employee directory, and self-service applications.

"The design of the intranet is primarily focused on our persona 'Daniel,'" says Schauer, "who is a process worker who spends about six percent of his time on the intranet."

"Through the use of the intranet, we expect that job profiles of Relationship Managers and other process workers will shift towards a knowledge worker profile," he says. "In IT and back office (*Shared Services*) area, we see a large majority of knowledge worker job profiles. This is why we have chosen the knowledge worker profile as another target group."

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	https://csintra.net/
Default Status	The intranet is set as each user's homepage and they cannot change that default setting. User are automatically recognized and logged into the portal via Public Key Infrastructure (PKI). The user's name is displayed in the intranet header area with a link to their personal profile page where users can change portal and content settings. The main content boxes displayed are defined based on the main community a user belongs to.
Remote Access	There are two ways to connect to the intranet via the corporate LAN: • A remote access solution that lets different users with company laptops access the corporate LAN. • myDesk, a Credit Suisse remote access solution designed to provide approved Credit Suisse employees' access to the Credit Suisse network via a non-Credit Suisse PC.

DESIGN PROCESS AND USABILITY WORK

Deciding What to Change

The project described here is one important implementation milestone in a long-term intranet strategy. This new intranet strategy was developed in 2007–2008.

Often, one of the challenges for an intranet redesign is deciding which parts to change. Because no project can address every shortcoming, it is often up the teams

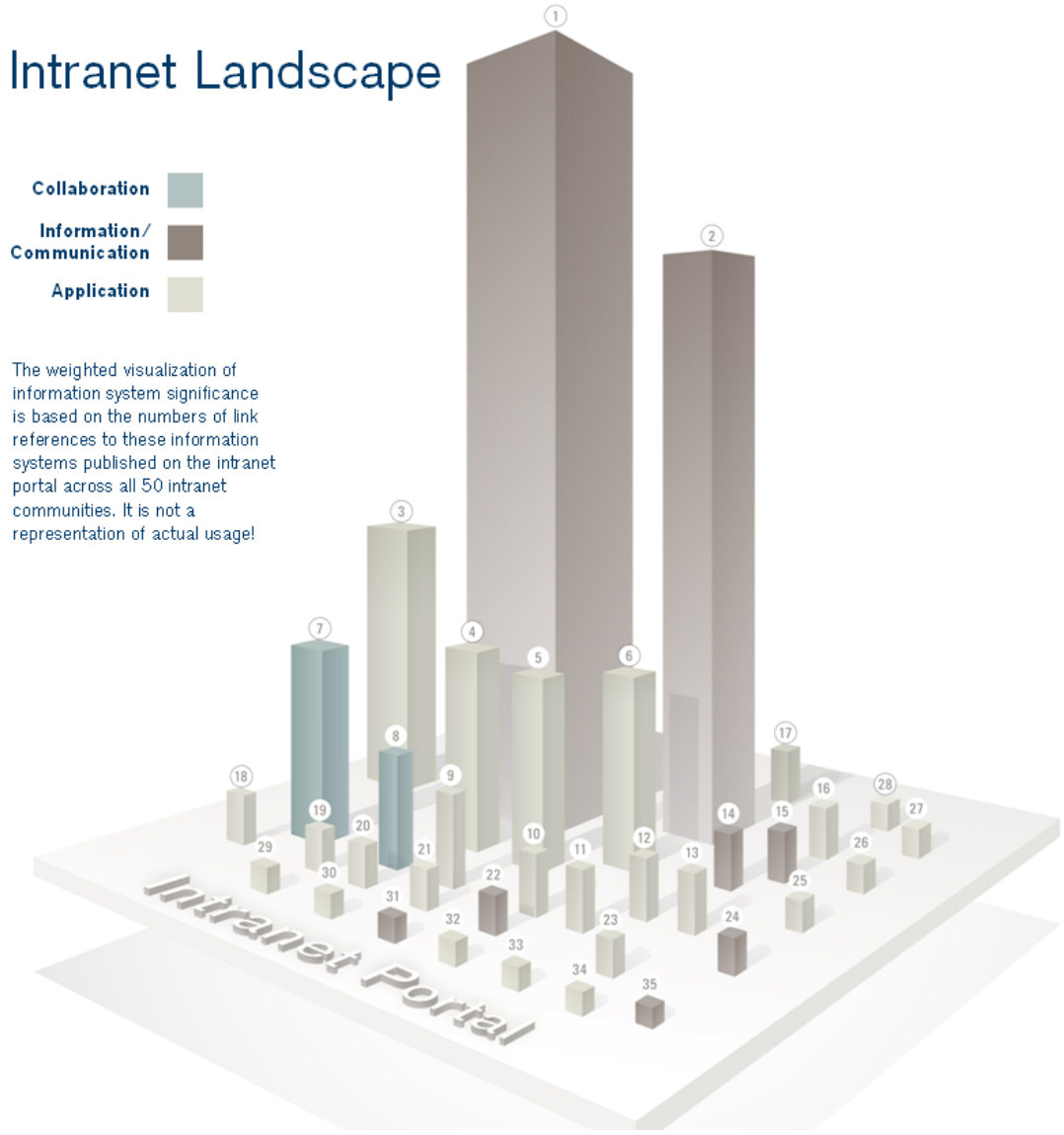
to devise methods to determine which intranet pieces require the most immediate attention and how to "fix" those components.

The Credit Suisse team conducted an in-depth strategy analysis on the existing intranet.

"Once the scope of the strategy development was clear (corporate-wide), we knew that we needed to carefully plan for a broad stakeholder involvement to be successful," says Schauer. "We chose to go for an explicit strategy development approach, which sought to evolve the new intranet strategy in collaboration with about 50 key stakeholders."

The strategic analysis consisted of four activities: "voice of customer" (VoC), "voice of business" (VoB), current intranet analysis, and best-practice analysis. These activities consisted of several steps each:

- **VoC:**
  - 21 half-day user observations
  - Third-party benchmarking survey (conducted in 2006 and 2008)
  - User and publisher behavior analytics of the old portal
  - "Concept Car" workshop to brainstorm solutions for the defined vision and goals
- **VoB:**
  - 21 key stakeholder interviews investigating the perception of current gaps and possible future options
  - Future Intranet Workshop to define vision and mission conducted with more than 40 key stakeholders
  - Workshops to define strategic direction and goals, and discuss options
  - Ongoing input from the organization's internal Web KAMs on various conceptual and strategic questions and decisions
  - Web Governance Board's review and approval of the new strategy and main concepts
- **Trend analysis:** Review of other intranets (bilateral exchanges with other large, multinational intranet teams) and participation in intranet interest groups
- **Current intranet:** Review the old intranet's structure to determine the importance of available intranet systems to the community



Picture: The intranet landscape map evaluated the significance of Web-based, internal information systems made available via the old intranet portal. The map helped the team define the new portal's initial information offering.

TIMELINE

INTRANET TIMELINE	
Milestone Date	**Milestone Description**
1997	First corporate intranet launched
1998	First news portal launched
2000–2001	First redesign
2004–2006	Second redesign
Late 2007	Beginning of strategy phase
July 2008	Roll-out of new intranet search center, providing guided navigation across multiple content areas
March 2009	Beginning of project phase for new portal
March 2010	Pilot roll-out to 2,000 IT employees
September 2010	Final roll-out to all employees

Challenges

The biggest challenge the Credit Suisse team had to tackle was the technical architecture — that is, how to make a modern design work in a highly customized and security-trimmed Internet Explorer (IE6) browser, and how to fit business requirements into an out-of-the-box portal with the inherent limitations this implies.

To accomplish this, the team had to think carefully about the project's goals, which were outlined as follows:

Strategic Goals

- Increase communication reach
- Establish reliable measurement of information system ROI
- Achieve efficient information and news distribution and targeting
- Leverage collective intelligence to improve information retrieval, organization, and lifecycle management
- Facilitate cultural change and move employees from passive consumption to active participation and sharing
- Introduce Web 2.0 principles as a foundation for self-regulated intranet processes

PROJECT-LEVEL GOALS FOR THE INTRANET REDESIGN	
Project Area	**Goals**
Credit Suisse Portal	• Standardize how users can aggregate and access content and applications • Establish one trusted "advertising and distribution" system for content and application promotion • Leverage user profile data for more personalized content and service targeting
Search Center	• Leverage usage, meta information, and user roles to improve search ranking • Allow users to find relevant content by browsing multiple navigation paths • Leverage collective content usage to improve individual access to relevant content
Content Management	• Let users/readers always know who is "talking" to them • Greatly reduce outdated content and broken links • Simplify content management to enable editors of all levels to handle the process
Collaboration	• Enable instant sharing of any information resources within virtual teams • Increase efficiency in virtual meeting organization and decrease need for physical meetings • Improve meeting experience
Social Media	• Ensure experts and peers are easy to find • Let employees become contributors, sharing their knowledge/information with a firm-wide audience • Engage employees in opinion sharing and critical thinking



Pictured: The site's hybrid navigation concept with blue organizational navigation and tabbed topical navigation. This model gives users access to content via topics and search, but also enables organizational ownership of content.

Working with Agencies

Credit Suisse employed agencies both to get an outside view of the project and to get expertise to augment the internal team's capabilities. The agencies worked in close collaboration with the core team, with some of the time spent in collaborative work sessions. This close relationship with the agency teams and the Credit Suisse team meant communication could flow easily between them.

"This way, immediate feedback was possible whenever the designers did have questions, and we were able to challenge their designs regularly," says Andreas Zogg, Head Web Identity.

And, by using a design agency that had worked on the company's public website, the intranet benefited from the agency's institutional knowledge of the company's design priorities.

"We used the same creative design agency for intranet and Internet design to ensure the intranet design solutions are inline with the corporate online design," Zogg says.

The following agencies were involved in the redesign project:

- **Noise AG** was responsible for the visual design work. Although the Credit Suisse corporate design standards were applied to the intranet design, Noise AG also developed many new design elements to meet best practice standards.
- **Stimmt AG** served as intranet strategy consultant during the strategic analysis and discovery phase. They conducted the user observations and "Concept Car" workshop. They also delivered first drafts of the IA, along with wireframe prototypes.

Usability Activities

The intranet team conducted a series of usability-related activities during the redesign. They selected these research methods based on findings from the project's initial analysis phase.

The mix of activities was also somewhat dictated by the project's needs. The project was aimed at changing the site's interactive behavior and design (but not the structure), so the team wanted at least two or three usability lab iterations. This was especially important because users explicitly asked for more customization choices — and particularly wanted to be able to move or remove content they didn't need. This finding was somewhat surprising to the team.

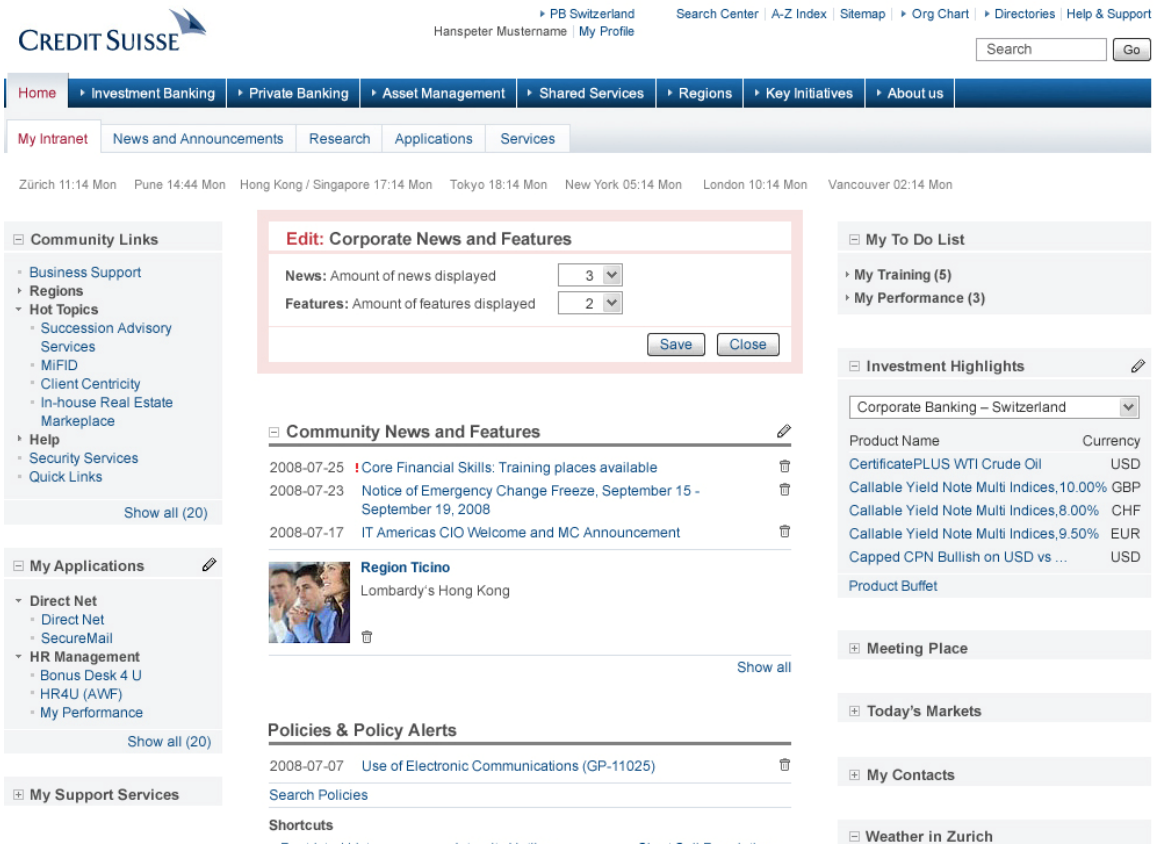
"The opinion within our team was that employees would not want customization features," says Isabel Herzog, Web Identity. "The IA was perceived as okay."

So, in order to properly design for this customization functionality, the team delivered approximately eight design iterations.

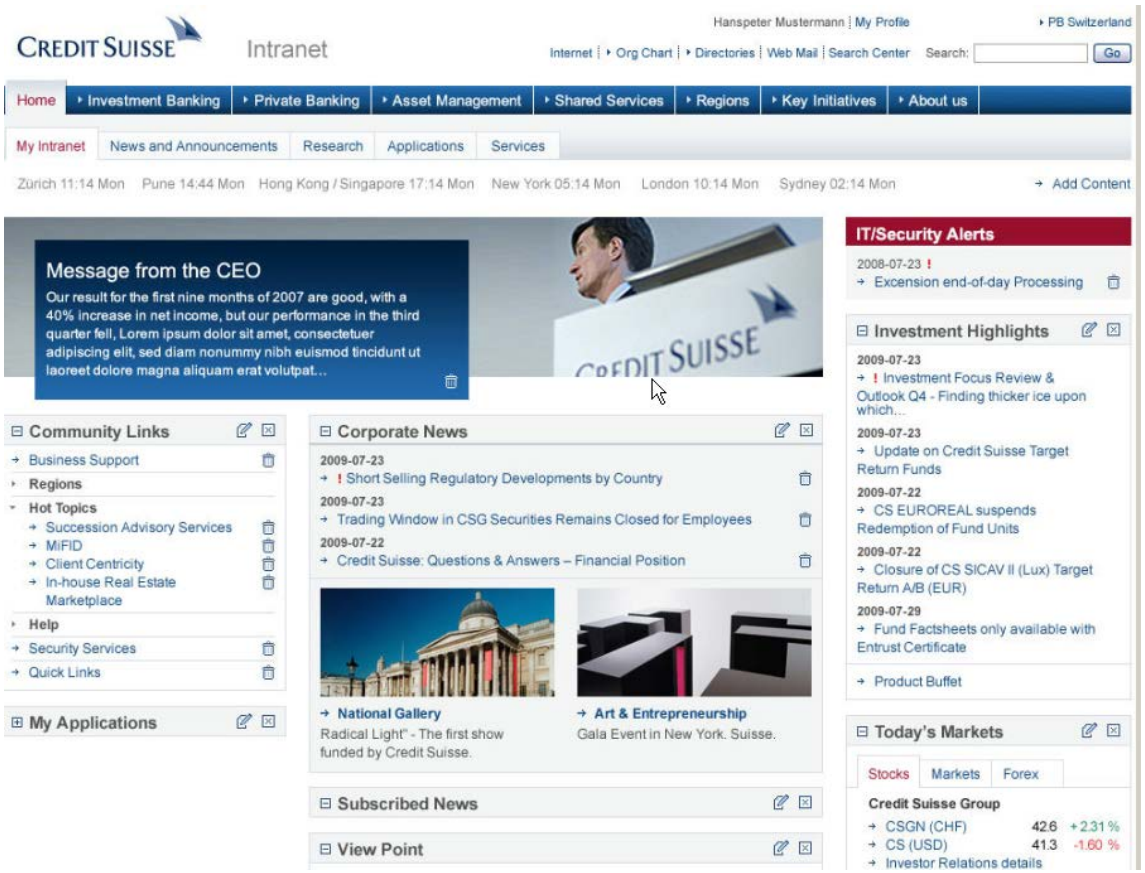
"We did this to come up with a design that supported the customization to its full extent, but still allowed us to set some visual hierarchy," says Isabel Herzog. "We tried out different grids and different organizational and meta information navigation systems."

The design process made clear that the design solution should encourage users to play around with the content boxes.

"Users should have the freedom of arranging their content," says Herzog. "The design has to support the customization features. A neutral design of the content boxes supports this idea best. This would allow any grouping of content boxes without visual interference."



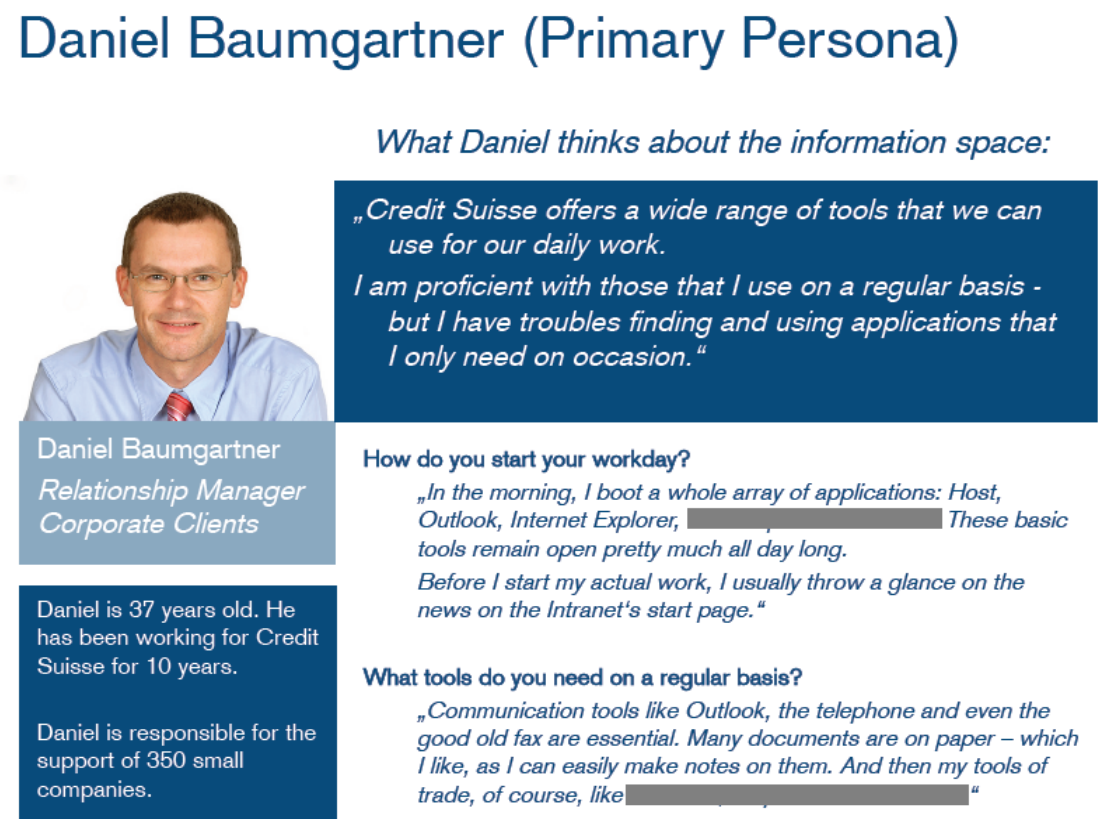
Pictured: This screen shows one of two intermediary steps in the new portal's design evolution. The design evolved from this to design to the one shown in the screen below.



Pictured: An intermediary step in the design process.

To achieve the required usability level, the team conducted a variety of research methods throughout the project, including:

- **Card sorting:** Card-sorting exercises were conducted to facilitate the high-level clustering of content areas. Card sorting was also used successfully for the services directory.
- **Checking server logs or usage stats:** Log files from the old portal were analyzed so that the team could better understand current usage during the "current situation" analysis at the beginning of the strategy phase.
- **Field studies:** The team conducted a field observation with 21 employees for a half day each. During these sessions, employees were observed in activities related to information retrieval and consumption behavior on the intranet. Personas were developed from the results of these observation sessions.

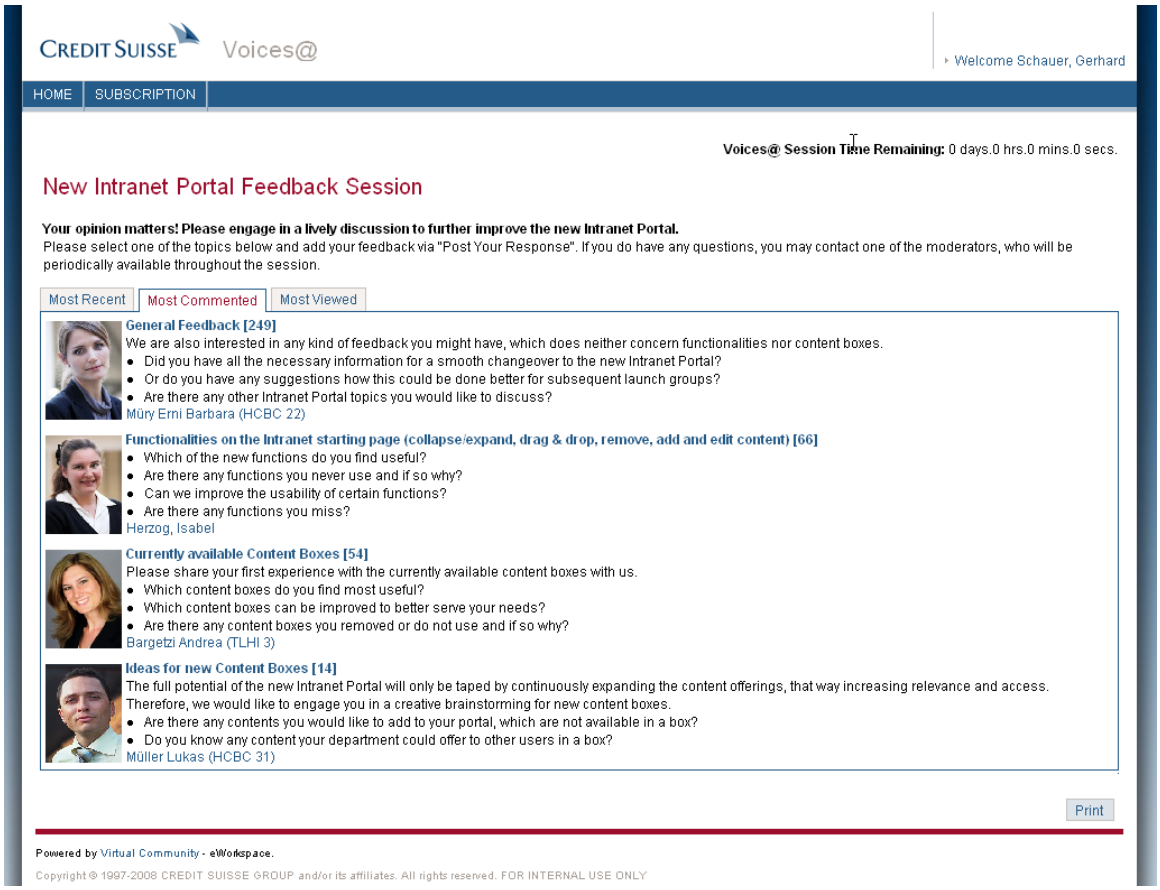


Picture: User-centered development during the strategy phase helped the team focus on real needs. This screen shows the primary persona that was developed to support the project.

- **Expert reviews:** The company's internal Customer Experience Team supported the intranet team in conducting the usability testing sessions and gave them expert reviews for each major design/development step.
- **Meeting with other companies' intranet teams:** The Credit Suisse intranet team leveraged the experience of other large companies implementing similar intranet strategies on the same technical platforms. During these exchanges, the Credit Suisse learned one important thing, according to Schauer: "Don't allow content to be published for free on the portal, as this will lead to an inflation of content, making it impossible for employees to efficiently aggregate content. Ensuring that the right amount of content items are provided in the content store is crucial for the success of this model."
- **Surveys**: On a quarterly basis, the company participates in the *Intranet Satisfaction Survey* in collaboration with the University of Basel. (More information on this survey can be found at http://www.intranetsatisfaction.com.)
- **Usability testing of design prototypes:** Two usability tests were conducted. The first one was based on design mockups and was conducted with five participants. The second usability test was conducted using a semi-functional prototype that had the final design's look and feel. Tests were also conducted in New York, Zurich, and Hong Kong with 28 users. The goal was to understand how users perceived the visual appearance, content relevancy,

content amount and structure, usability and usefulness of customization functions, and overall findability of content.

- **Viewing other companies' intranets:** Credit Suisse team members participate in several different national and international intranet interest and knowledge-exchange groups. Through this participation, they have had the opportunity to see many other intranet portals and speak with the teams behind these projects.



Pictured: One of the open, moderated discussion forums. This particular forum let users collect feedback and get instant answers during a one-week session about the new intranet portal.

Learning from the Results

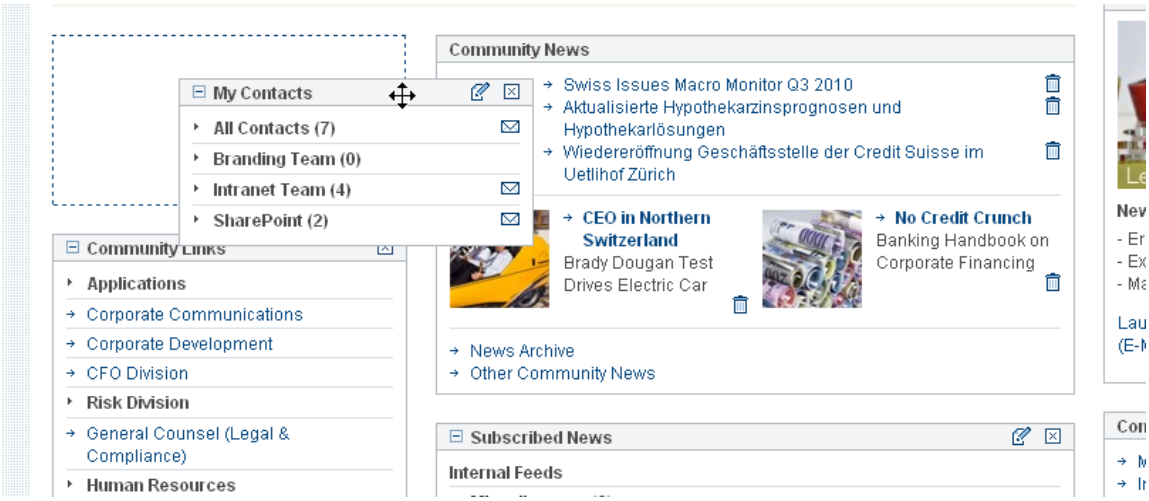
A couple of things became clear through testing. First, there was a fundamental gap between a power user group and a novice user group.

"Power users instantly started arranging the intranet, since they were likely familiar with the drag-and-drop functionality from external sites," says Herzog.

Novice users required "a lot" of time (up to five minutes) to see the customization possibilities, and Herzog says some would not have found them at all without subtle intervention of the tester.

"Once they realized that they are allowed to arrange their intranet on their own, they where all very fascinated about this and started to optimize the layout and content according to their needs," she says.

"The key learning for us was to ensure we would flatten the learning curve for novice users. We then decided to achieve this with two avatars explaining the key customization features to all employees receiving the new portal," said Barbara Müry, Web Strategy Manager.



Pictured: Drag and drop is one of the site's most powerful features, letting users easily and intuitively reorder information on the screen.

From the card-sorting exercises, the team learned that that they wouldn't be able to improve user satisfaction dramatically (for most users) simply through the high-level IA.

"By changing the high-level IA, we would even risk that users would not be able to make informed customization decisions," says Schauer, "as they would have to first learn what the new arranged content areas and content items actually mean. This would be a major risk for the whole redesign."

Instead, the team felt it could accomplish its goals much better by allowing employees to customize the portal based on their likes and dislikes.
And, through user observation sessions, the team saw consistent patterns across the observed process workers, leading them to conclude that they'd only need to accommodate one persona to develop an access strategy for the site.

"Process workers do not need application integration to the intranet," says Schauer, adding that process workers know three information worlds:

1. **The world of processes working, where they're highly professional expert users.** They can manage up to eight open tools in parallel. They know where to find information instantly, as long as it's stored within their core systems. They have issues in working efficiently due to lack of data integration among their core tools. However, data and process integration is outside the scope of the intranet redesign mandate.
2. **The world of making decisions to move processes ahead.** This is where employees require additional information, including information about the market, policies they need to comply with, and where to find expert support.
3. **The world of seldom-used support processes.**

"For worlds two and three, employees are dependent on good information access, retrieval, and memorization support," he says. "They spend six percent of their

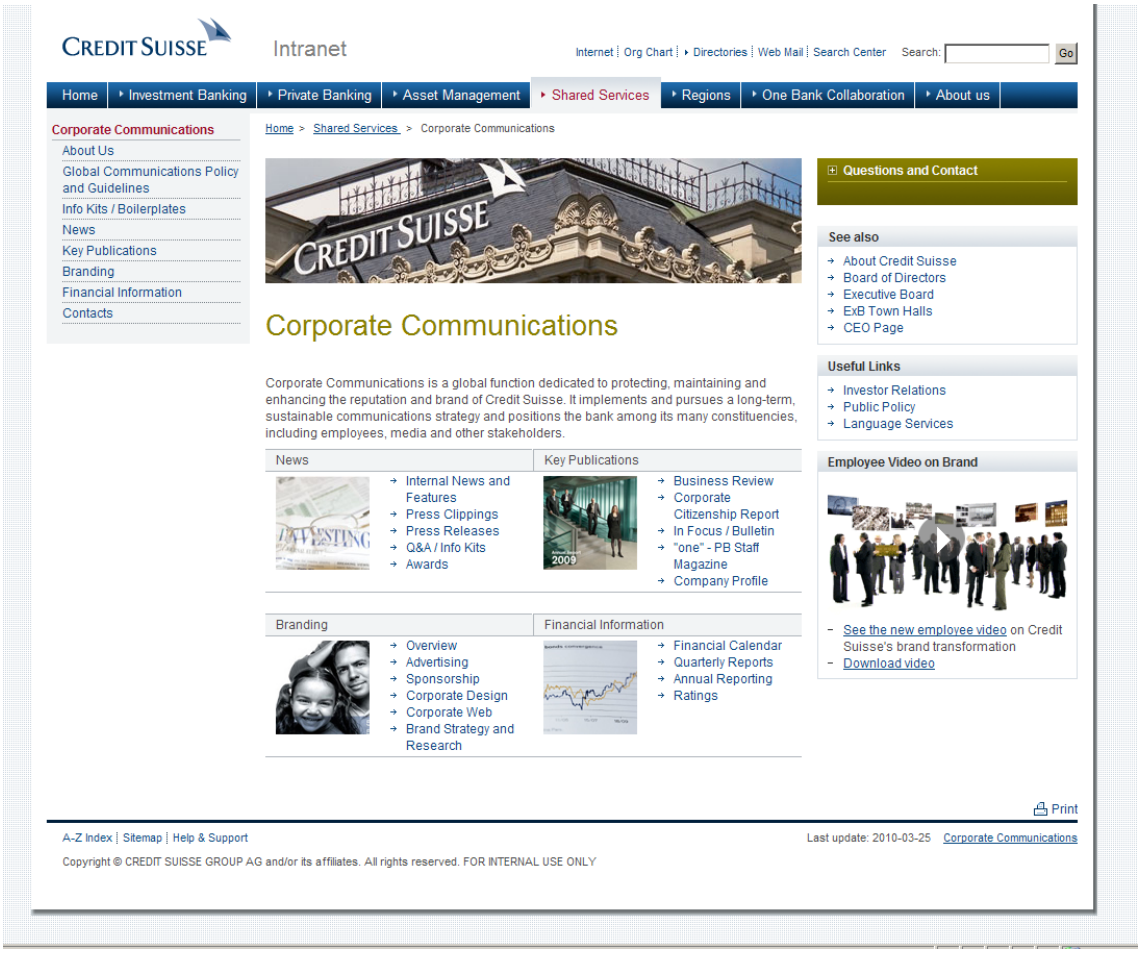
time in worlds two and three — but that six percent of the time is important to be able to work efficiently in their core working processes."

CONTENT AND CONTENT CONTRIBUTORS

Content Management

Three content manage systems govern the intranet content. Andrea Bargetzi, Intranet Program and Project Manager, explains these systems and what they control:

- **Interwoven TeamSite** for official team or department subsites. This system allows high-level control of the corporate design. The WYSIWYG editor controls many design rules. The system is very scalable and robust from a technical viewpoint and allows high-level control of site states (an audit requirement). There are more than 600 active publishers on the Interwoven system.
- **SharePoint** for collaborative project, meeting, or knowledge group team sites. Ease of setup and office integration was the main criteria in choosing SharePoint for this purpose. More than 10,000 users contribute content via SharePoint.
- **News publishing system** (internal, custom application) for the distributing official news to any target group within the bank. This custom system allows any granularity of rule-based targeting according to any attribute in an employee's *MyPage* profile, including division, region, rank, and so on. More than 200 users produce content through the news publishing system.



Pictured: An example of a department-level page, where large business units provide detailed information about business function strategies and processes, along with process-related information.

Decentralized Authoring

Credit Suisse has a completely decentralized content publishing model in place. There are three content systems available for employees to chose from depending on their business needs. The company's three KAMs can setup rights for any employee within the bank. These managers also provide strategic guidance for website publishers during the site setup process. The KAMs consult with publishers on how to set up their sites, conceptually, and how to ensure they can be found. The KAMs also coordinate the accurate organizational and topical placement of new subsites.

No central team reviews the content these users publish.

"The publishing process enforces a "four eye" principle for content published to subsites on Interwoven," says Lukas Müller, KAM. "This process means at least two different employees have to approve content before it can go-live. A staging environment is provided, which allows quality control and approvals before publishing to the live site."

Ensuring compliance is built right into the content publishing systems. The Interwoven and news publishing systems provide templates that ensure design

compliance with the company's corporate design guidelines and standards; the SharePoint system has also been adapted to the corporate design.

Supporting Content Publishers

Training for content contributors is provided through a variety of distributed Web-based learning tools, which help them learn how to properly use the system. These include: video and voice recordings, a comprehensive guidelines manual, single page quickguides, and an up-to-date FAQ. This approach of providing self-service learning tools provides a cost-effective alternative to centralized training. And to further support the site's content publishers, a specific focus of the redesign effort was to improve the WYSIWYG editor's usability.

The system addresses "dead content" and "dead links" through an automated monitoring system that spiders all the intranet pages for broken links, SEO, and accessibility rules, and generates reports about these issues.

"Additionally," says Müller, "the KAMs advise content owners about the ecosystem of the intranet sites, and their relation to the search results."

Each page also shows a content owner, which makes it much easier for users to reach the responsible teams as needed.

TECHNOLOGY

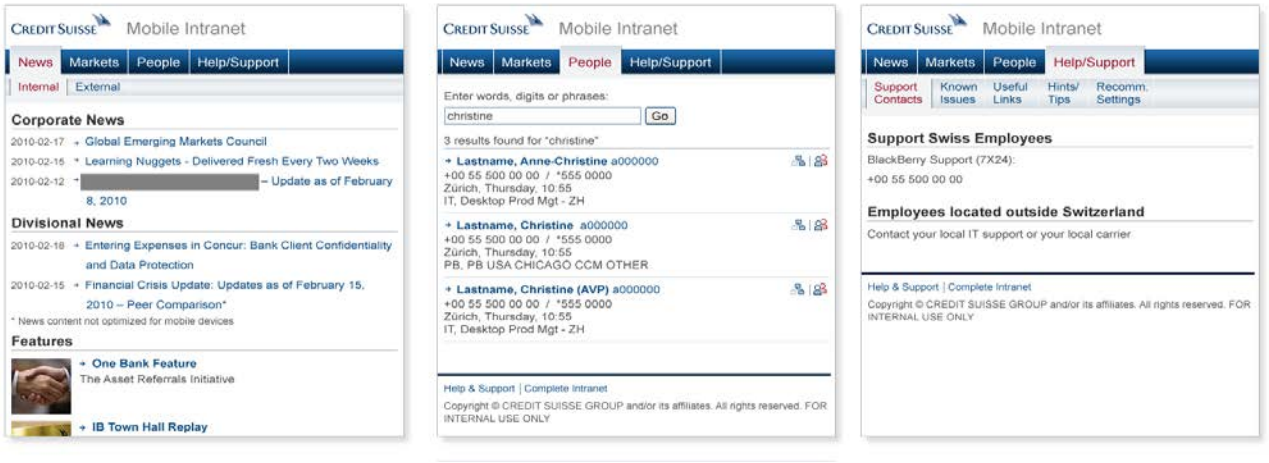
TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	• BEA WebLogic plus Oracle stack
Bug Tracking/Quality Assurance	• Quality Center
Design Tools	• Adobe PhotoShop for visual design
Content Management Tools	• Interwoven TeamSite • Xopus Editor • SharePoint • In-house custom news publishing system
Search	• Google • Endeca
Other Technology	• BEA portal server for the new portal

MOBILE

Mobile access to the intranet is provided through a version optimized for the Blackberry model used by Credit Suisse employees. Providing access to this group of users was not a nice-to-have feature, it was, says Peter Landolt, "necessary to ensure acceptance by this target group." This group is comprised of middle and senior management throughout the company.

The intranet features available on Blackberry include:

- News (internal and external)
- Support contacts
- Market news (including stocks, Forex, and markets)
- Employee directory with organization chart (which was included because of an explicit request from senior management)



Pictured: Mobile intranet screens on a Blackberry device. These pages are targeted at senior management.

SEARCH

Although search functionality wasn't re-evaluated during this redesign project, there is currently a separate, ongoing project underway to evaluate the best platform for the company's needs.

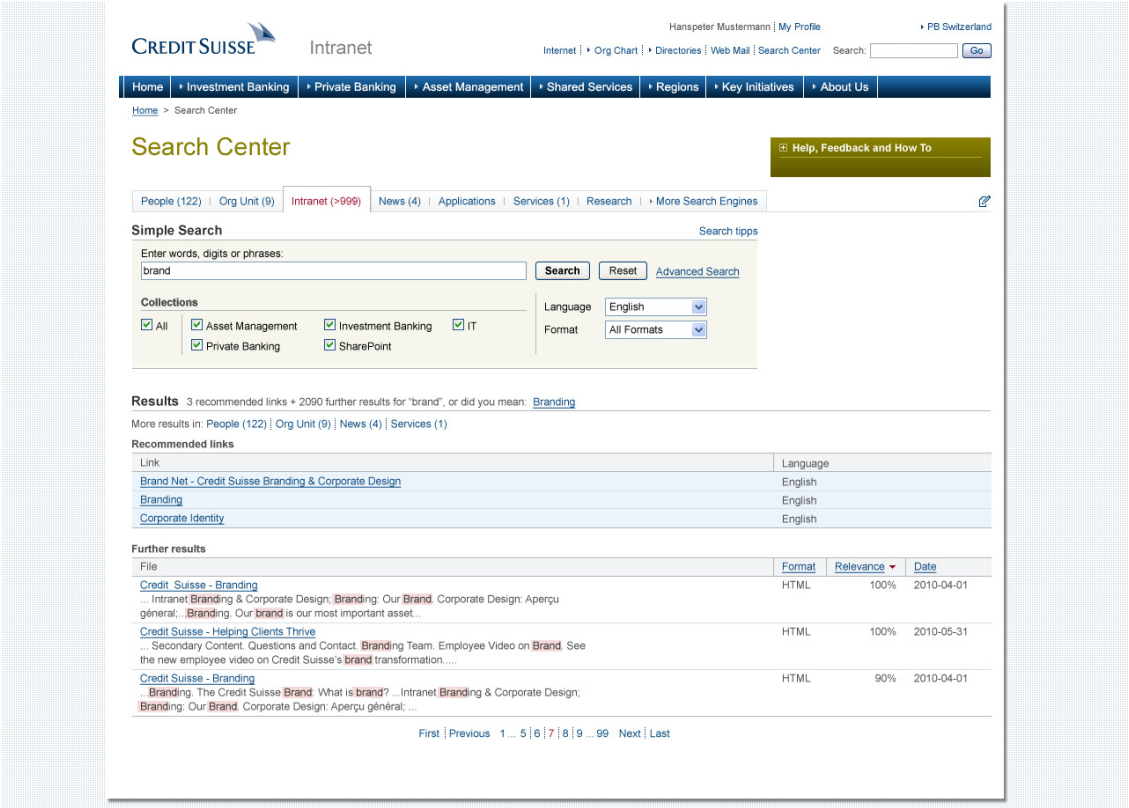
Search works by combining the platform's most important search engines into a single place. Each search area has its own tab and the entire search contains a total of nine tabs (search areas).

After entering a search term, users get search results in their predefined default tab, but a search query is automatically executed for all available tabs. Each tab shows the number of search results found in that specific tab. Users can directly access a specific tab and refine the listed search results by different categories (such as date, unit, and relevance) on most topical search tabs.

The default search results view is customizable by users. They can select which search category areas are most important to them and where to position each area within the center tab navigation.

The first tab is the default tab. All search queries from the quick search box go there by default. The labels are the main search areas in the intranet search. Collections are the sub areas of a specific search area. Recommended links are manually maintained via an administrative tool.

"The main idea," says Schmidt, "is to promote specific topics more prominent in the search results — the same concept as ad words on google.com."



Pictured: The Credit Suisse intranet search combines the most important search engines in one place, letting users go to one central place to search across multiple information stores.

RESULTS AND ROI

Measuring an intranet project's success or impact is often a case of choosing a measurement strategy related to qualitative measures. That was the case for Credit Suisse, which wasn't trying to achieve hard numbers in terms of infrastructure savings or affect the business process directly, but rather was trying to move the needle in terms of user satisfaction.

"Hard ROI numbers are unfortunately not possible to count, as we did not change the business process directly," says Schauer. "We also did not aim to achieve infrastructure savings. The measurement of our goals is only possible through qualitative research."

So, one way of providing some measurement was to gauge user satisfaction with the intranet overall as well as with new features. To do this, the team conducted quarterly surveys.

"The results provide important input regarding short- to mid-term project and program management," says Müry. "On a bi-yearly basis, we conduct an extensive benchmarking survey including our key competitors. This benchmark provides valuable information to optimize our strategic direction. For the time being, we do not have any results available yet."

Users who participated in the beta launch provided feedback via the public discussion boards, without any prompting from the intranet team.

"We believe this is a success," says Müry. "We received twice as much positive general comments than negative comments with respect to the user's satisfaction."

The good will of the users is not the only testament to the success of the redesign efforts. Feedback from members of the company's top management has been very positive.

LESSONS LEARNED

Credit Suisse team members share some lessons learned from the project:

- **Trust users with choices.** "There is no reason to fear that users will move 'must know' content away from the top positions in the layout, even if they are given flexibility to arrange content blocks themselves. They will choose to keep corporate and community in balance." (Bargetzi)
- **Seek broad stakeholder involvement.** "Stakeholder involvement is key to being successful with a portal that should be rolled-out for all employees. Also important is a well-defined escalation path to the senior management with decision makers sitting in the senior management supporting the basic strategic direction." (Büchi)
- **Involve IT in the strategy.** "IT involvement in the strategy has proven very helpful. This way, it was possible to ensure IT enough time to align their strategies, and business was able to get feedback about feasibility of conceptual ideas early in the process, before IT specifications have been written." (Schauer)
- **Estimate resources carefully.** "Ensure enough time and resources are planned for design work. A project plan with four weeks implementation time and four day's design time will not work. Design work takes as much time as development work and must be done before IT specification starts." (Zogg)
- **Use a cocktail of usability methods.** "The combination of different usability methods and the involvement of a couple of outside agencies and various internal units to provide an outside view to the project have proven very efficient in coming up with a well accepted solution." (Herzog)

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.

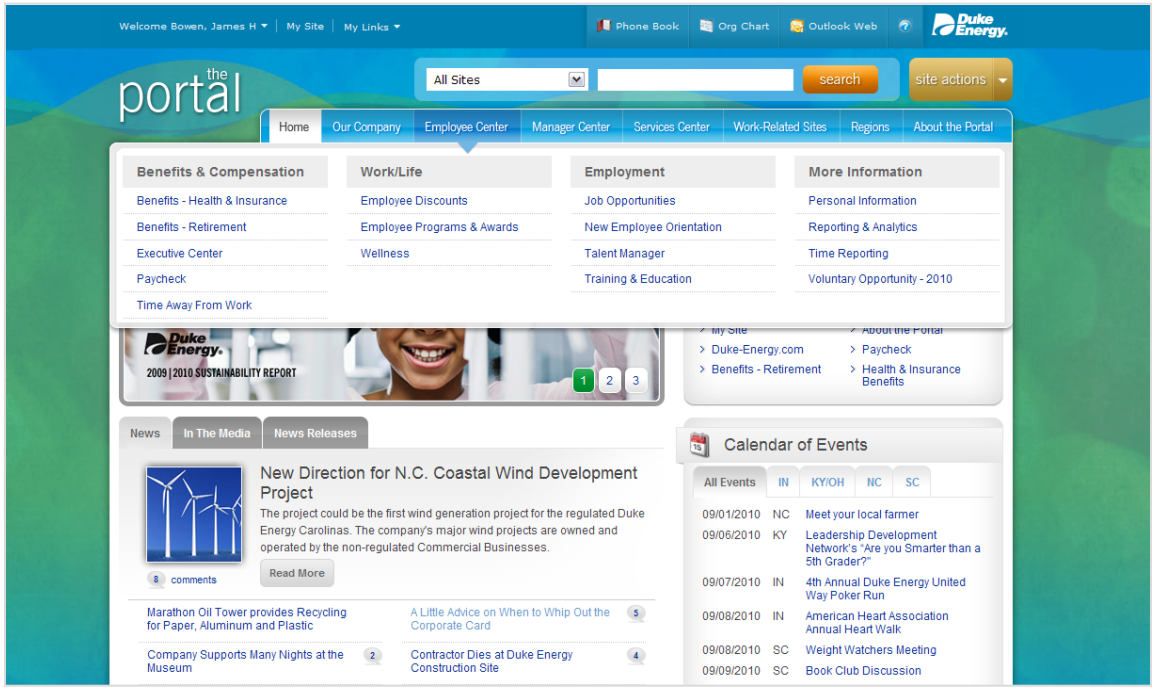


Pictured: The intranet homepage highlights new and relevant information and reflects the company's emphasis on involvement and community.

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

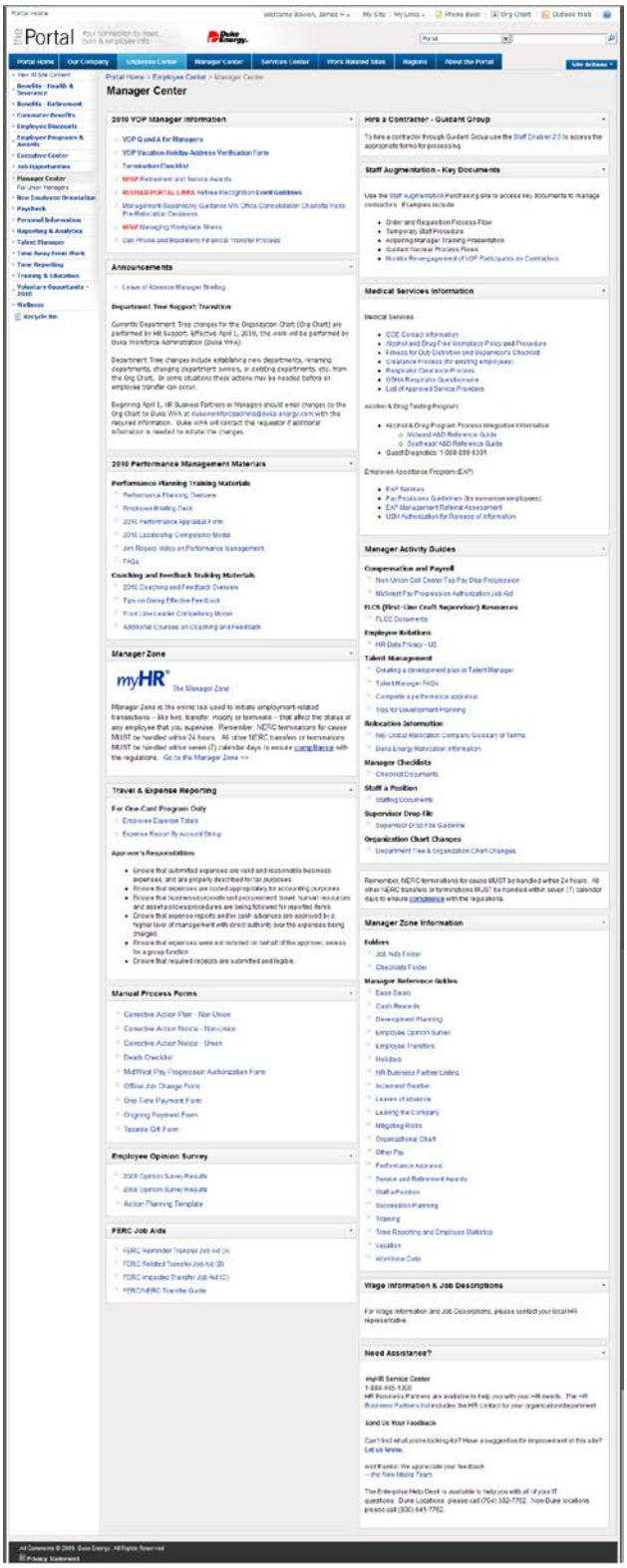
found that users stared at the menus without being able to locate the appropriate navigational option. Some menus had grown so long that they were unable to fit within a viewable screen.

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.

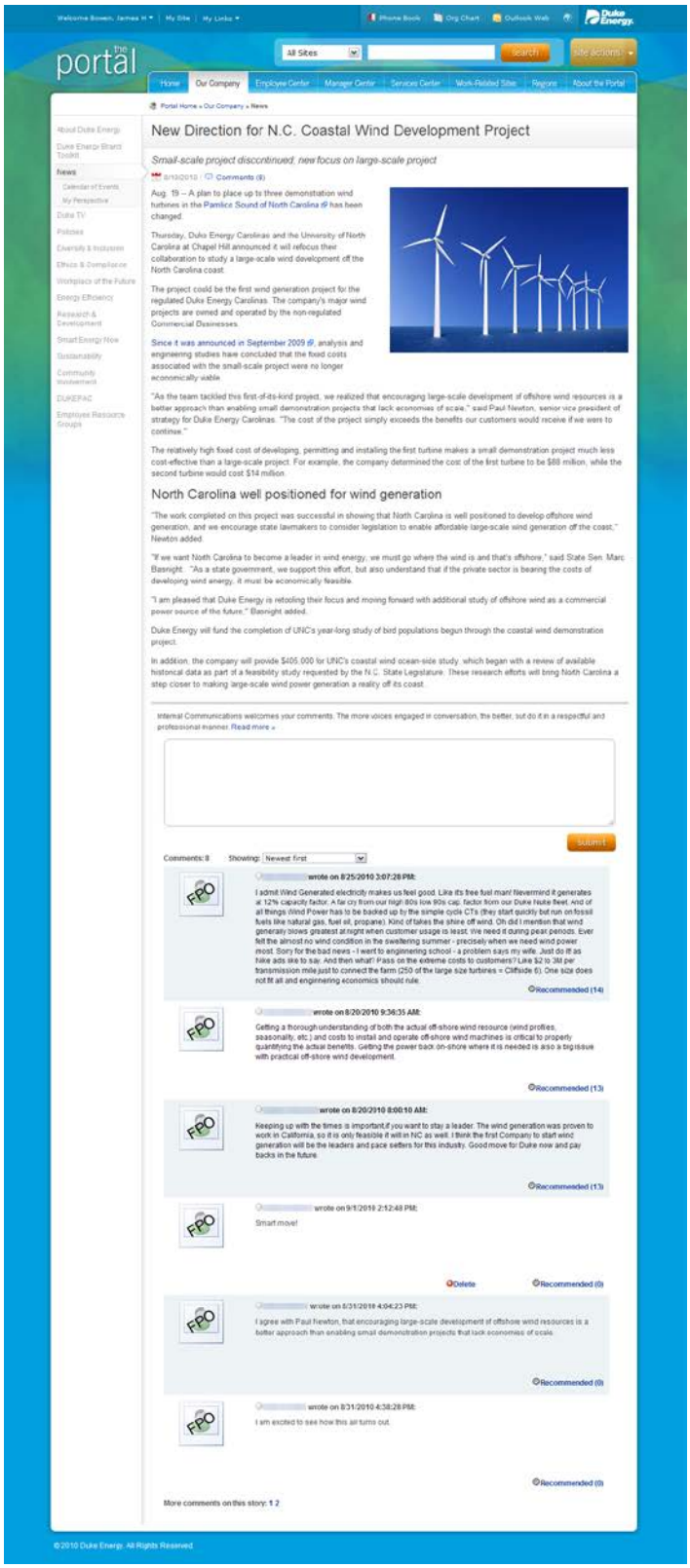


Pictured: The new *Manager Center* groups content by type and offers a clear name and brief explanation for each option.

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."

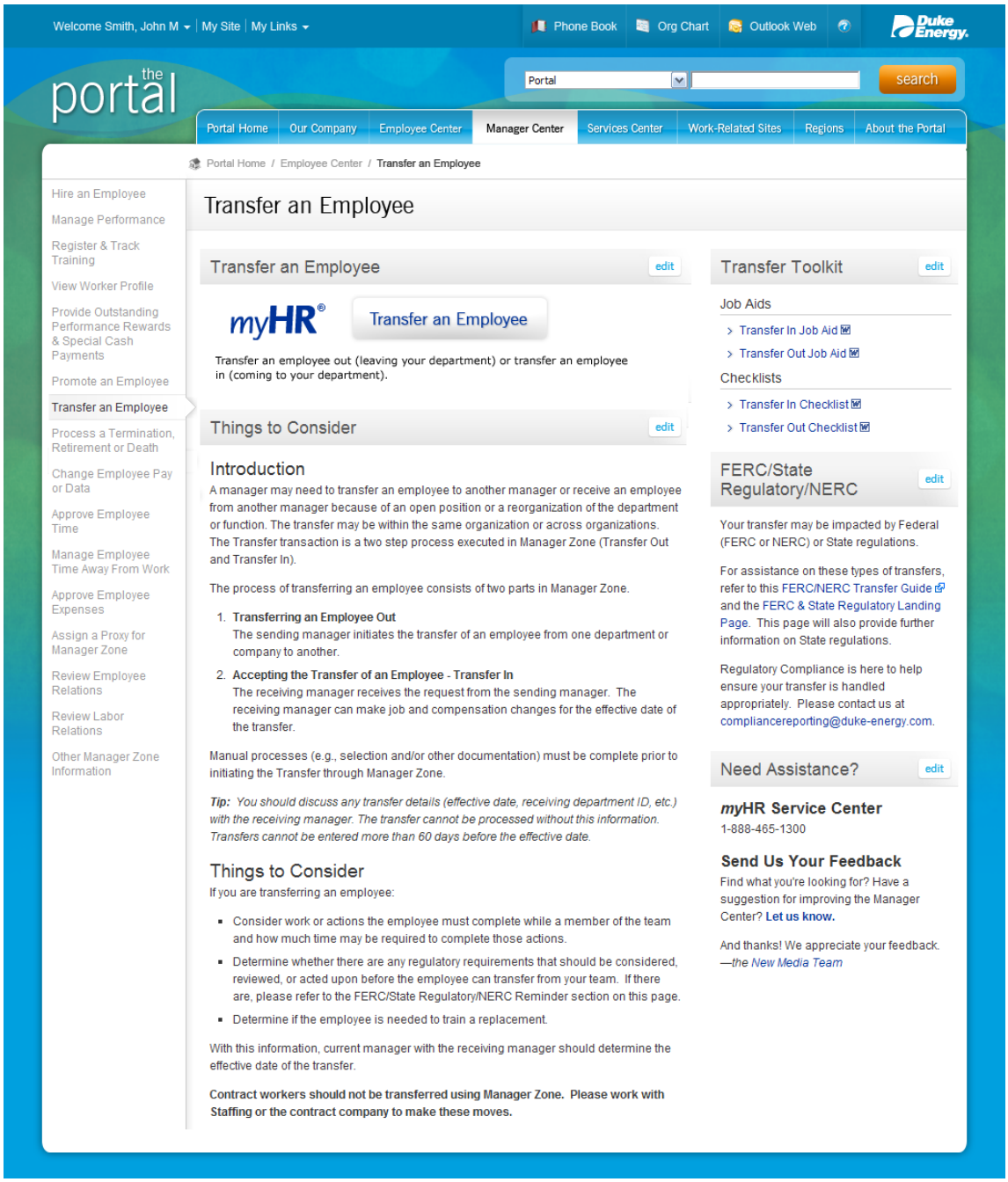
Comments appear beneath the article, with the most recent comment listed first. Each comment is attributed to the author, with an image and name as well as the date and time the information was posted. Users can also recommend comments; the most popular or interesting comments become the most highly 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.



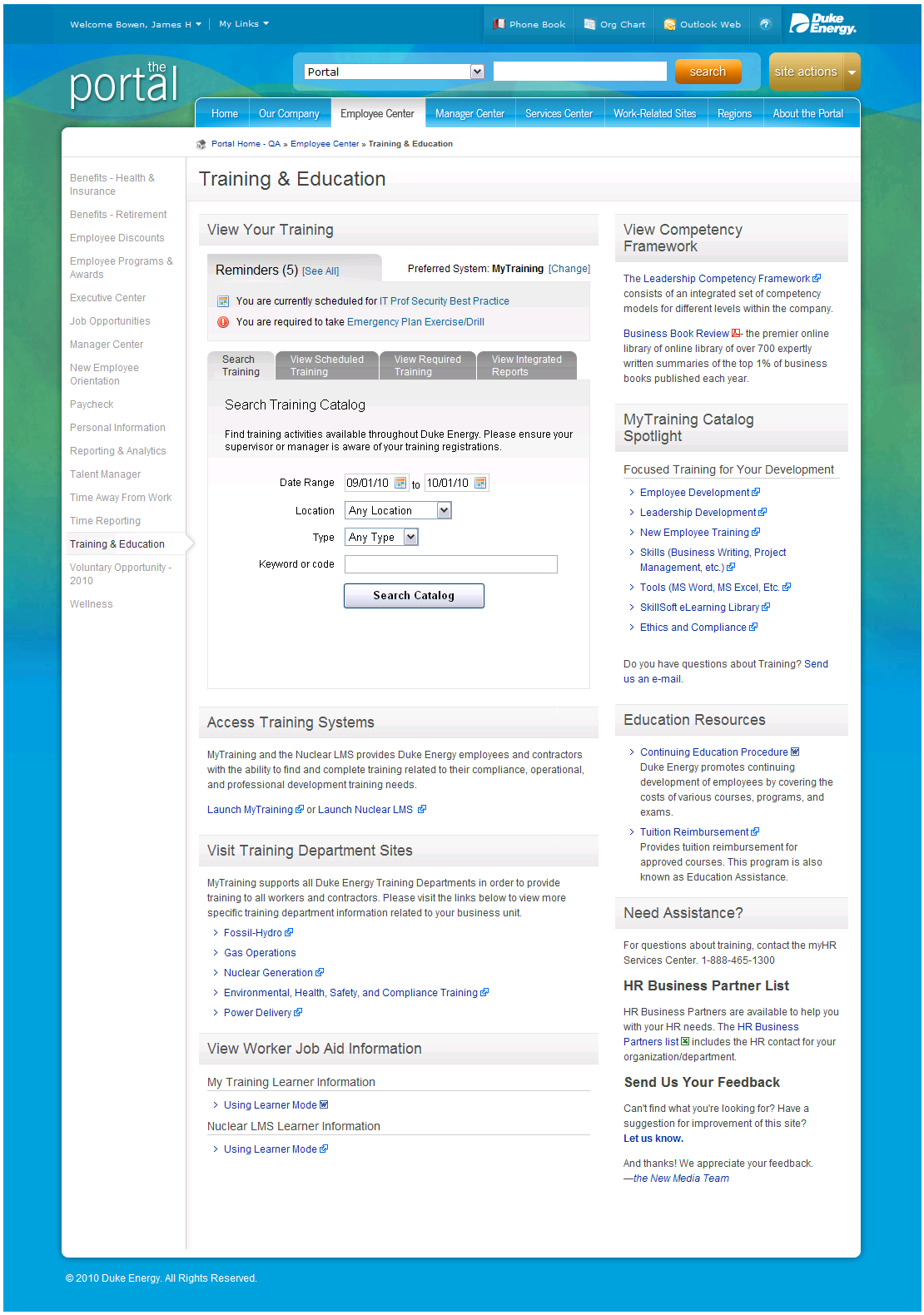
Pictured: Employees can add comments beneath news stories. By default, comments are displayed with the most recent addition first.

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.

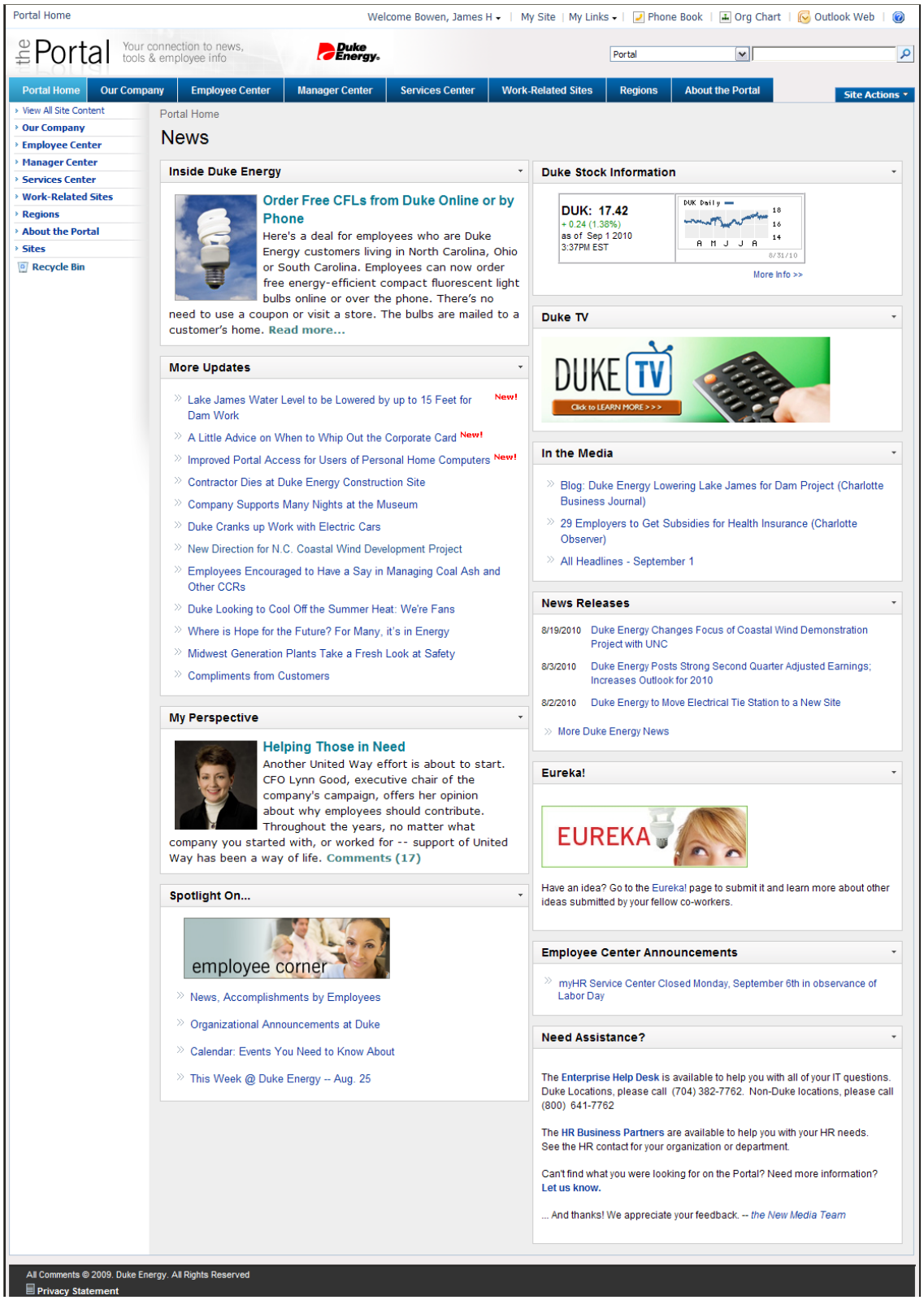
“Although one of our goals in moving The Portal to SharePoint in 2009 was to broaden and distribute our content management model, we discovered through our redesign project that the platform’s flexibility creates an environment that really necessitates a more formal and cross-functional governance model 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.

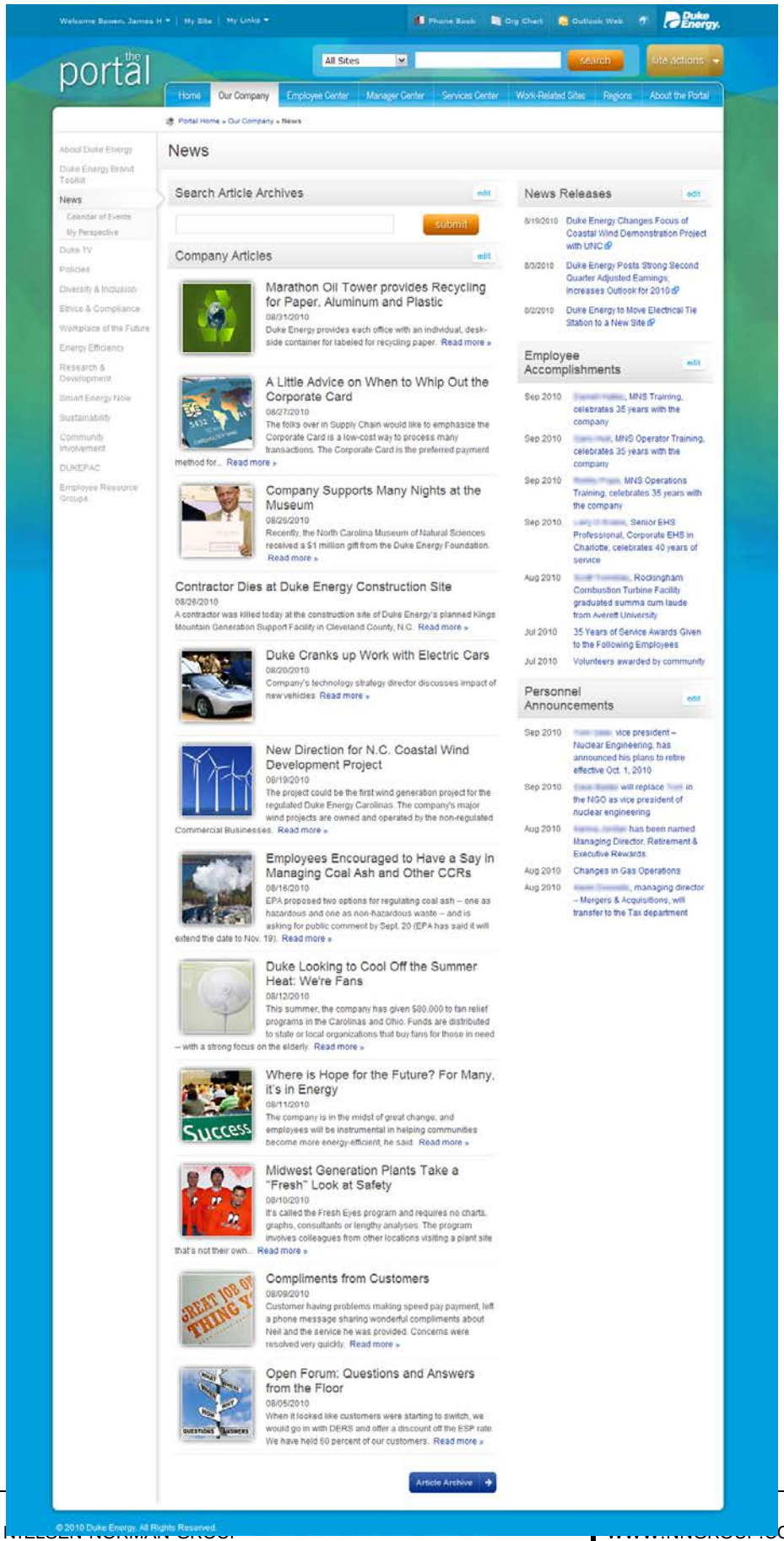
The company's international employees use the portal for company news and other information, but they also have their own local intranets with links to their benefits information and tools.

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 [redacted], MNS Training, celebrates 35 years with the company
Sep 2010 [redacted], MNS Operator Training, celebrates 35 years with the company
Sep 2010 [redacted], MNS Operations Training, celebrates 35 years with the company
Sep 2010 [redacted], Senior EHS Professional, Corporate EHS in Charlotte, celebrates 40 years of service
Aug 2010 [redacted], 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 [redacted] vice president – Nuclear Engineering, has announced his plans to retire effective Oct. 1, 2010
Sep 2010 [redacted] will replace [redacted] in the NGO as vice president of nuclear engineering
Aug 2010 [redacted] has been named Managing Director, Retirement & Executive Rewards
Aug 2010 Changes in Gas Operations
Aug 2010 [redacted], 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,"

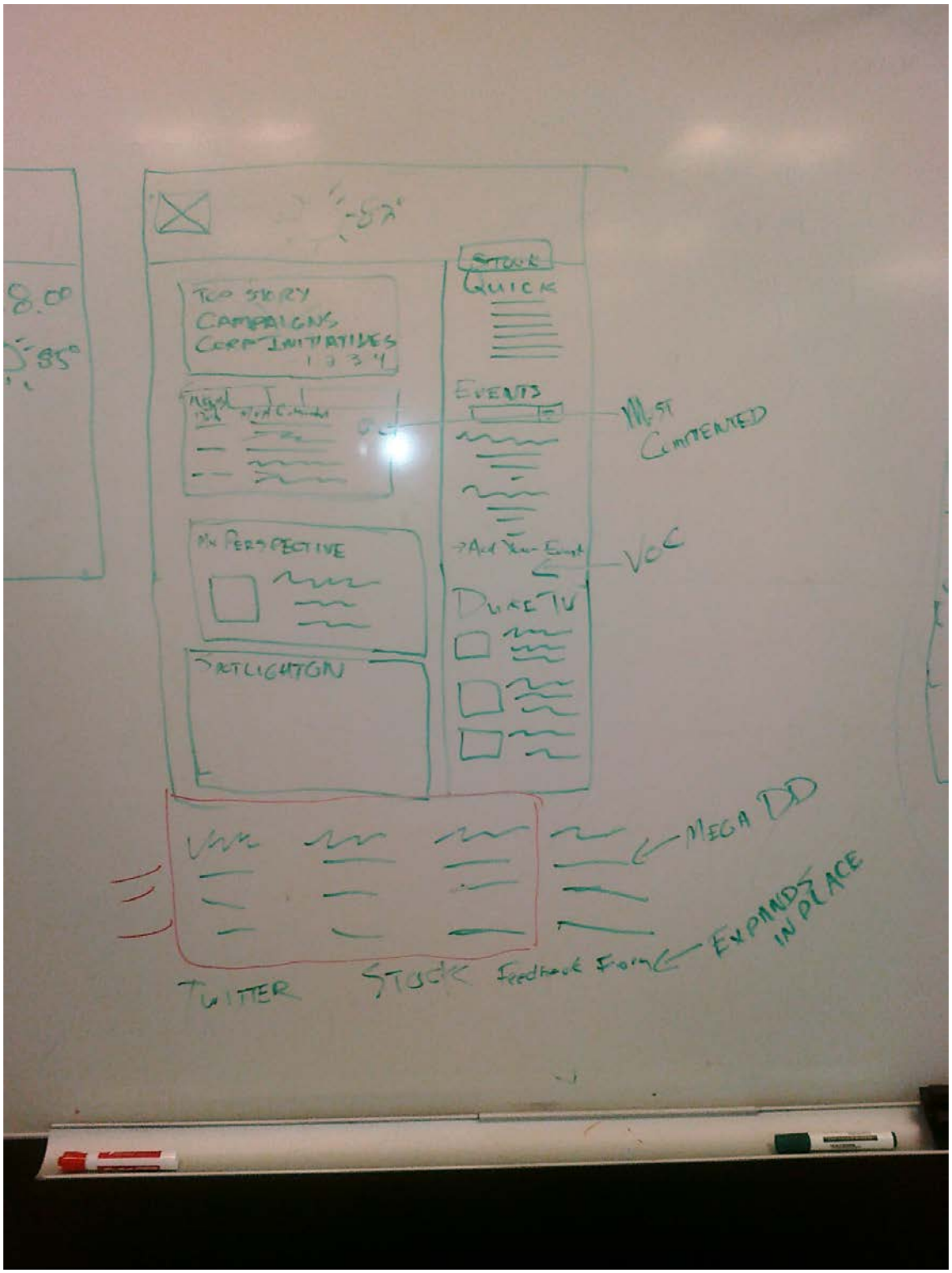
  In addition to research reports, the team reached out directly to other intranet teams, to learn from their best practices.

  "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.

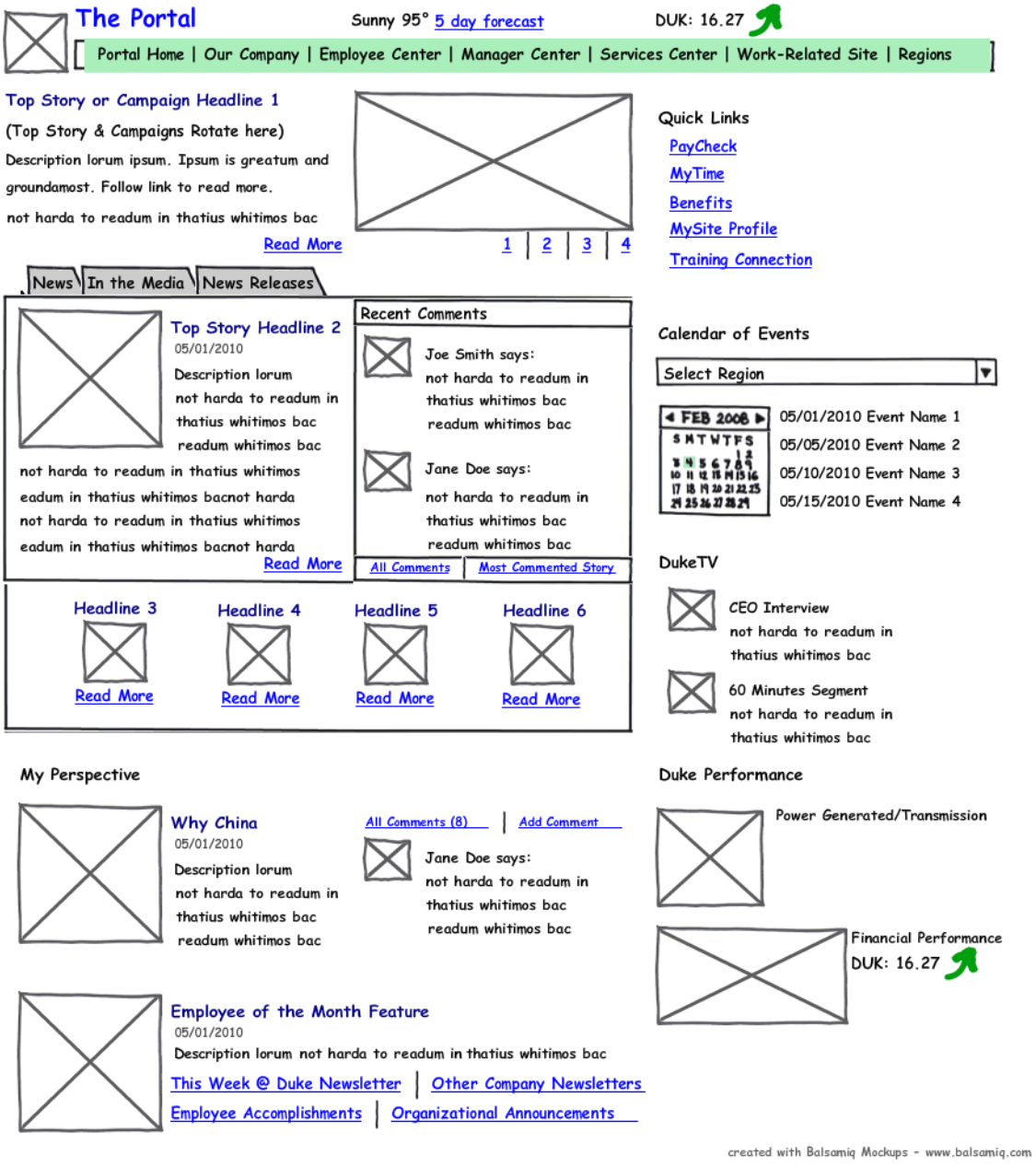
- **Web analytics:** For Web analytics, the team implemented Cardiolog with MOSS in 2009.

  "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.


QUICK
EVENTS
MEGA DD
EXPANDS IN PLACE
TWITTER
STOCK

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*

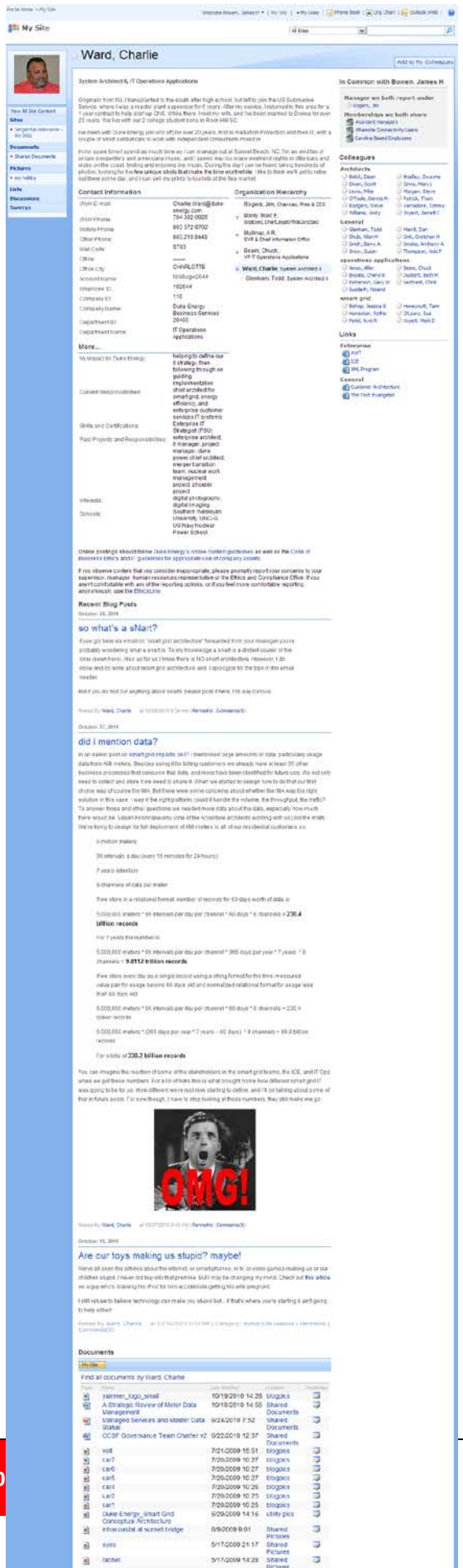
In May 2009, all employees and contractors were given profile pages. These pages were constructed by pulling together badge photos (which users could change), information contained in the company's HR system (work location, phone number, and organizational information), and some editable fields that 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
Colleagues
In Common with Bowen, James H
Links
Recent Blog Posts
so what's a sNart?
did i mention data?
OMG!
Are our toys making us stupid? maybe!
Documents

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

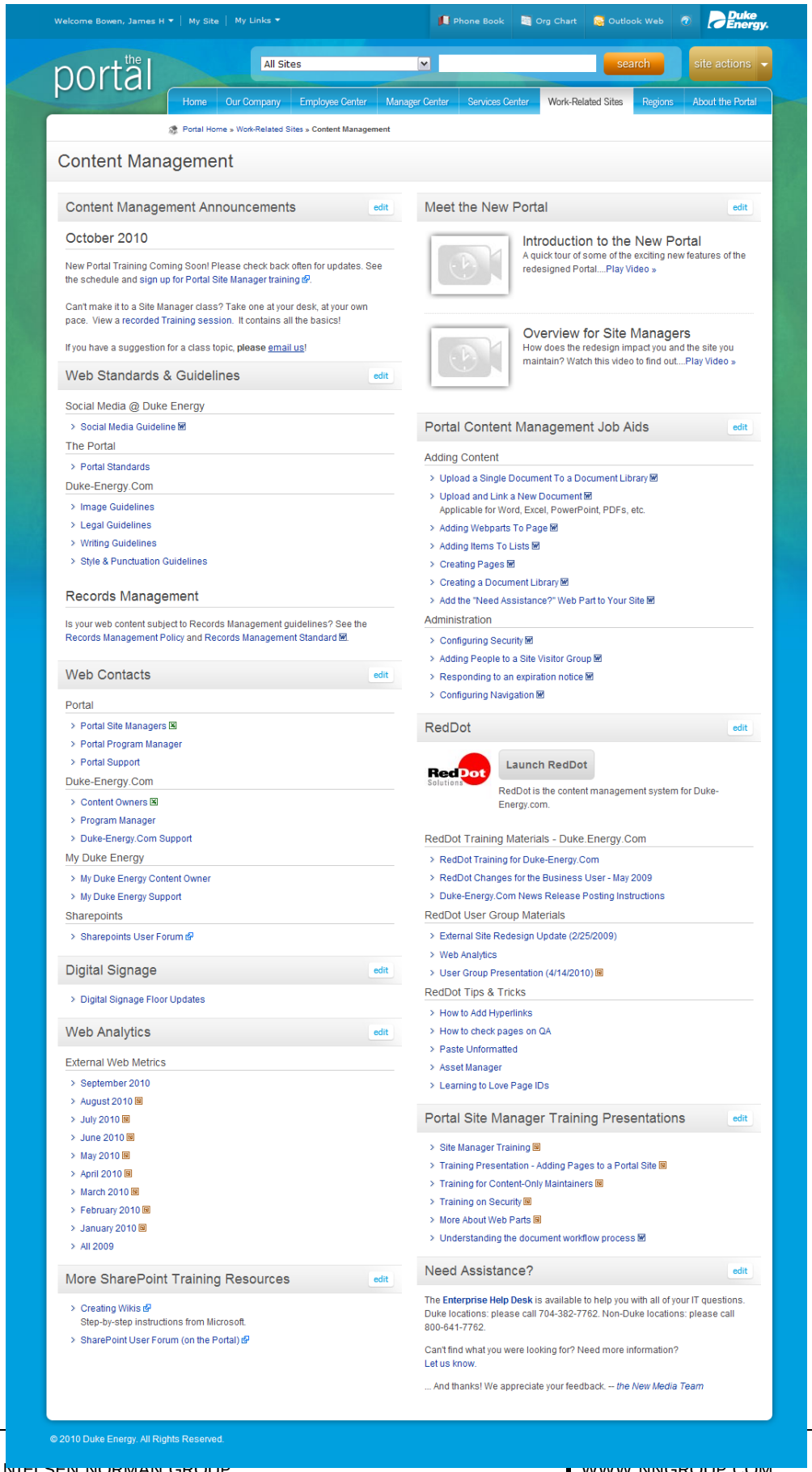
In addition to formal training, a small team of Subject Matter Experts (SMEs) within New Media offers support by responding to customer emails and help desk tickets (or phone calls).

“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
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
© 2010 Duke Energy. All Rights Reserved.

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.

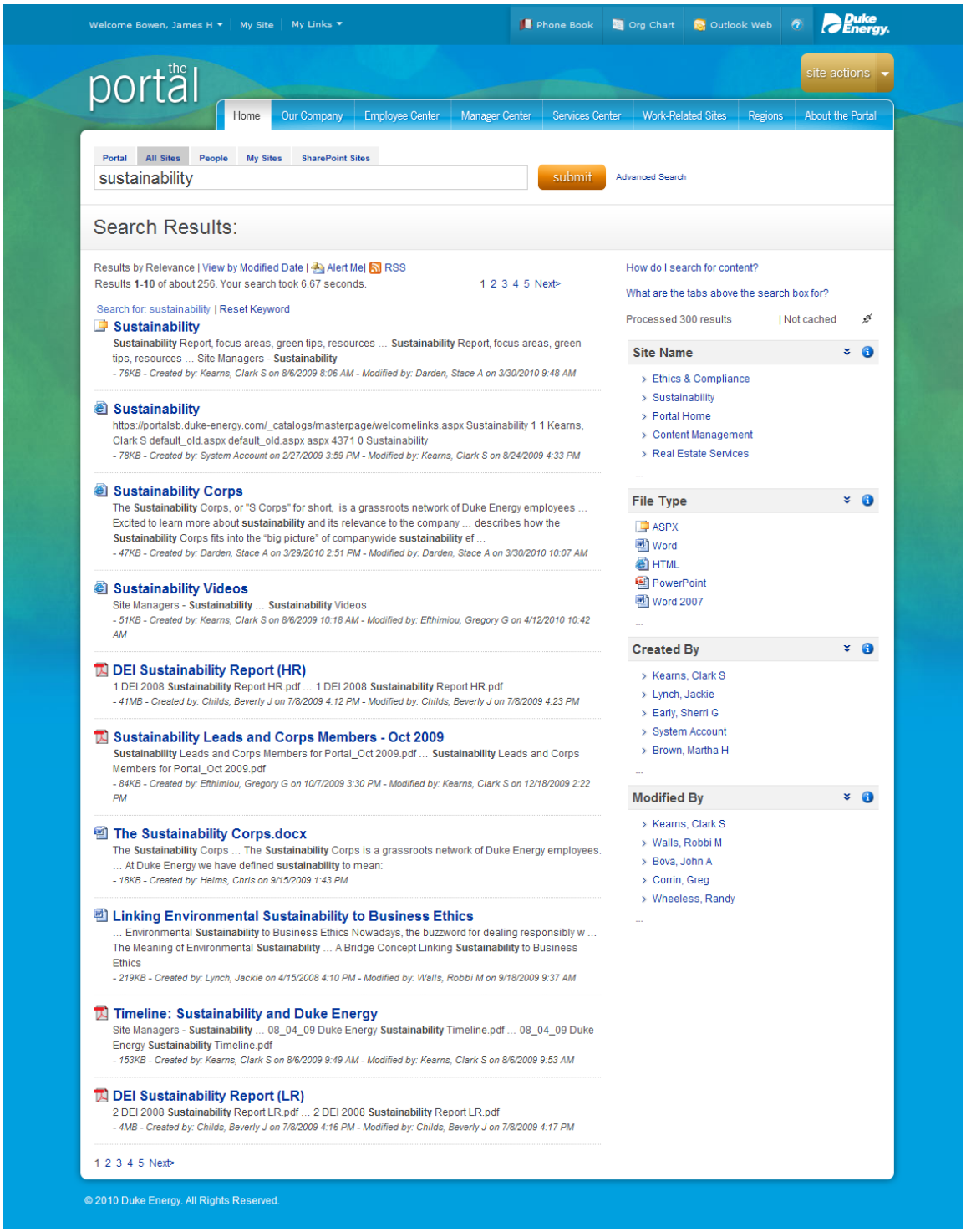
On the search results page, users can refine their searches by a limited number of facets including site name, file type, created by, or modified by. They can further expand the results by selecting *all sites*, which brings in results from The Portal and all of the SharePoint team sites that they can 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."

Habitat for Humanity International (HFHI)

Using the intranet/extranet:
Habitat For Humanity International (HFHI) is a non-profit, non-denominational Christian housing ministry. Habitat welcomes all people, regardless of race, religion, ethnicity, or any other difference, to build simple, decent, affordable houses with those who lack adequate shelter.

Habitat employs over 800 people worldwide and serves over 2,000 affiliates in more than 80 countries.

Headquarters: Habitat For Humanity International is headquartered in Americus, Georgia

Number of employees the intranet/extranet supports: More than 800 staff worldwide and currently over 25,000 registered users of affiliated organizations (which include affiliates, national offices, state support organizations, ReStores, Campus Chapters, and more)

Company locations: Habitat operates in nearly 90 countries

Locations where people use the intranet:
Users accessing the intranet and extranet are located throughout the world

Annual Sales: N/A

Design team: My.Habitat 2.0 was developed via collaboration between the Communications, IT, and Organizational Learning Divisions of HFHI and AW Systems, Inc., a technology consultancy based in New York City

Members:

HFHI Staff: Drew Hancock, Senior Webmaster; Bob Norris, Master Librarian; Lisa Reitz, Senior Director Learning and Knowledge Systems; Jane Lee, Interactive Web Designer

AW Systems: Allan Wellenstein, President and Chief Information Architect; Doug Green, Senior Account Manager; Brian Jenkins and Seth Lopez, Technical Leads; Greg Bautier, User Interface Design

SUMMARY

Combining an intranet and extranet into a single, comprehensive knowledge source, the Habitat for Humanity International (HFHI) intranet team faced and overcame many common intranet demons. Goals for the redesign included making content easier to find without having to know who owns the content, establishing content ownership to avoid duplication and inconsistency, ensuring the site addressed needs of groups both in the US and around the world, and making the site the authoritative information resource.

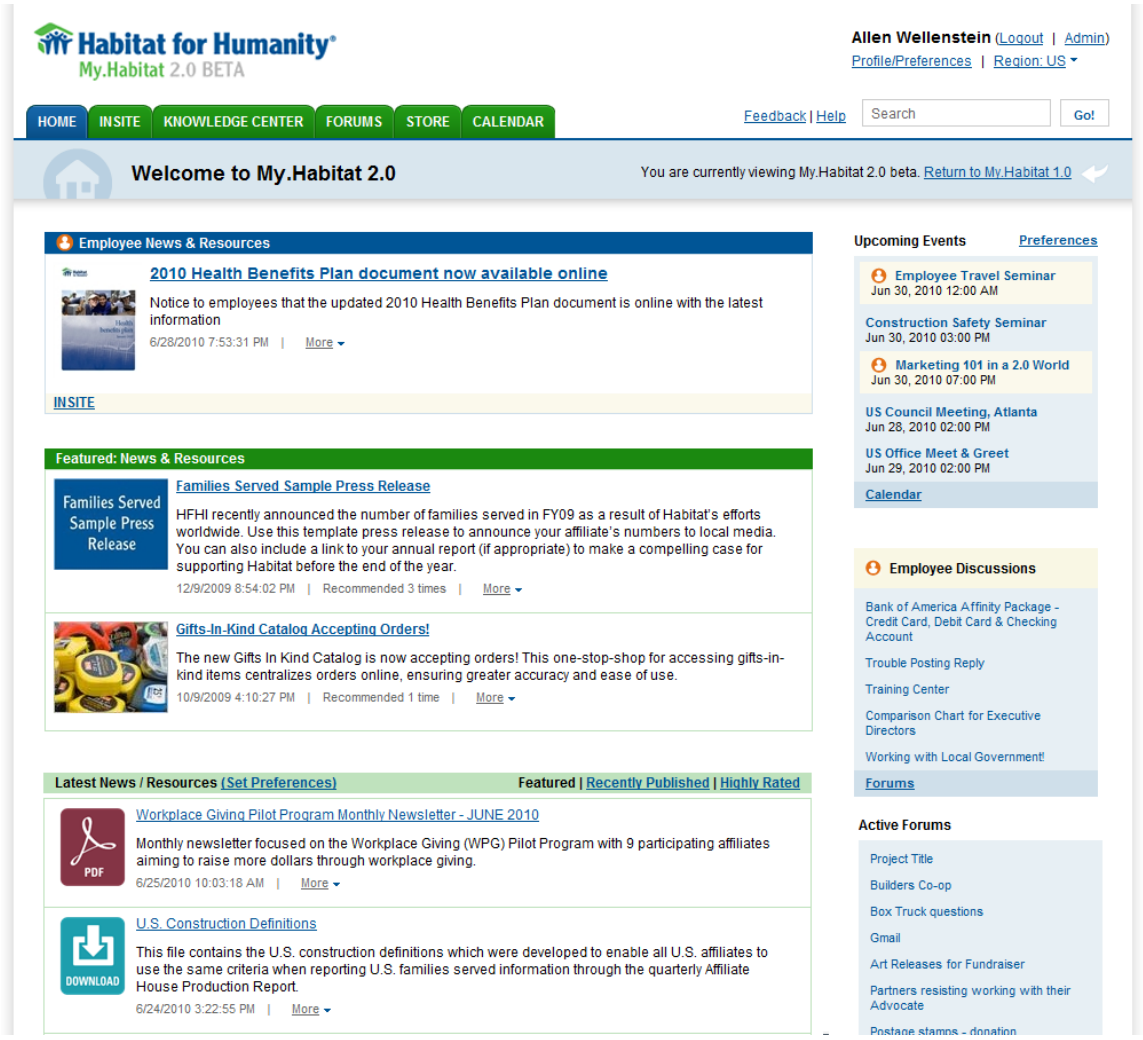
The team overhauled the publishing structure to ensure high-quality content that is easy to locate and displayed according to users' regions and language options. The site has a variety of audiences, from HFHI's 800 employees in five regional offices and field offices around the world, to the staff and volunteers of affiliated organizations, including affiliates, state support organizations, national offices, ReStores, Campus Chapters, and more, accounting for 25,000 registered users.

The newly designed site, My.Habitat (MH) 2.0, is a single location where users can access and share knowledge, resources, and tools. Officially in beta until January 2011, the site includes a link to the previous version to ease users' transition to the new design.

A core improvement to the site is targeted content. The site's content is now targeted to users based on regional area and language, which users can set for themselves. Users thus see only content that pertains to them, and international audiences are no longer flooded with US-centric information.

The new site combines the old intranet and extranet into one. This solves the problem of duplicate content across the sites. All content that pertains only to employees appears within the *InSite* tab, which is visible only to employees. *Employee News and Resources*, as well as employee-only upcoming events and discussion forum topics, also appear only for employees.

The homepage presents critical content. *News and Resources* are regionally relevant. Events, discussions, and forums keep users up-to-date and aware of what the organization is talking about and working on.

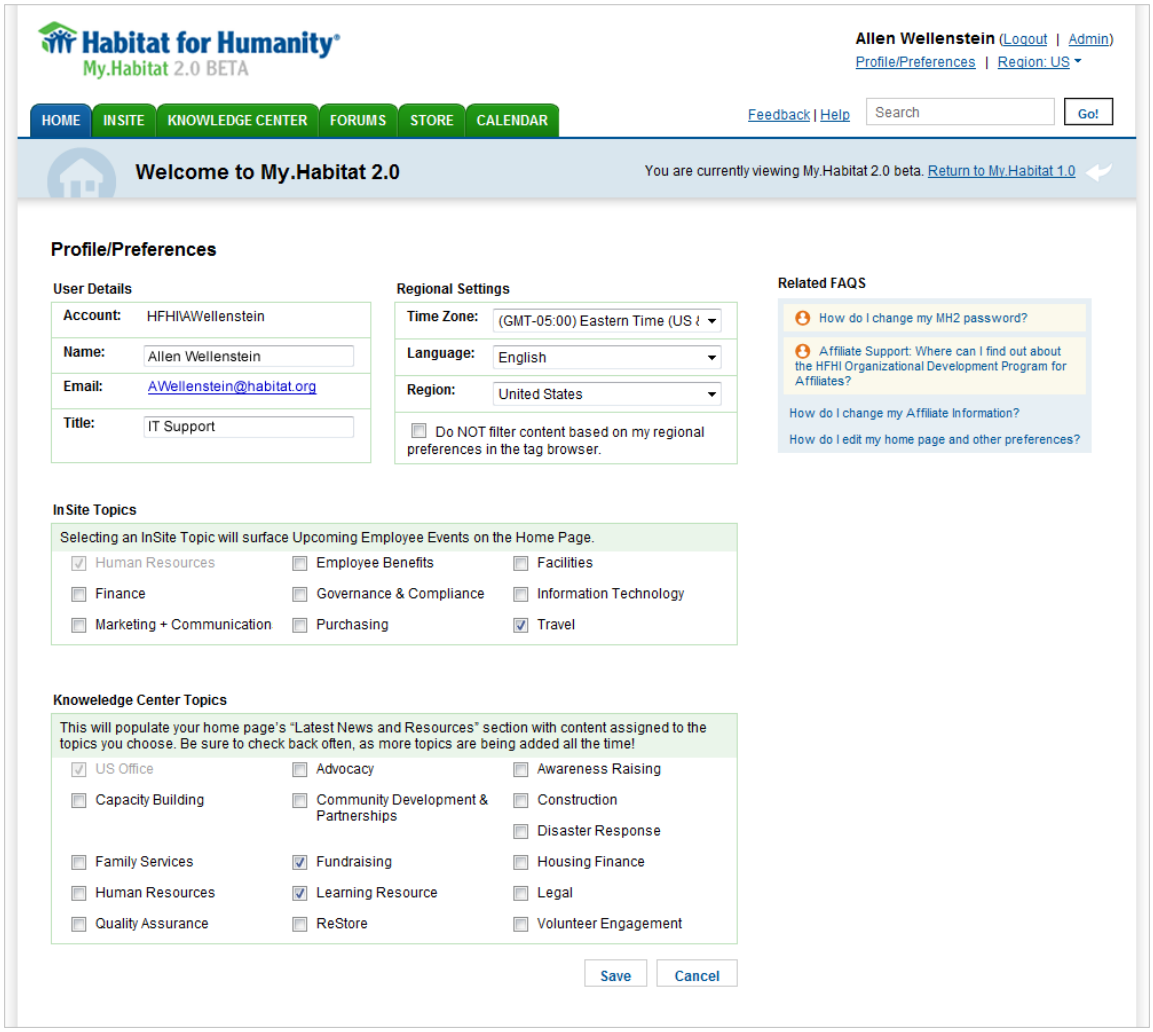


Pictured: The homepage provides news and resources for users, all targeted to the user's region.

Users manage preferences via a link at the top of each page of the site. The site currently supports English and Spanish content, but is configured to allow the addition of more languages as needed in the future.

Users can set their time zone and region, as well as selecting topics of interest. Employees can select *InSite* topics, which affects which employee events the user sees on the homepage and in the master calendar. All users can select *Knowledge Center* topics, which affects the homepage's *Latest News and Resources* section. This

allows users to see only the site updates that are most relevant to their own role and needs. Grayed out categories are those that users are required to keep. However, users will see content in those categories only if it's regionally relevant. All site content is tagged for regional relevance, so the site can direct the right content to the appropriate audience.



Pictured: Users can set their own preferences to see only the content that is most relevant to them.

One of the most significant changes to the site is the way information is organized. Previously, all content was organized based on ownership of information, so users had to know who developed a piece of content in order to locate it. This led to some crucial content being hidden deep in the recesses of unfamiliar departments. This problem stemmed in part from an out-of-the-box SharePoint implementation.

The redesigned site organizes by content, rather than organizational structure. This is possible due to Habitat's agency, AW Systems (AWS), which developed a Content Slammer tool that separates content ownership and management from how that content is browsed by end users.

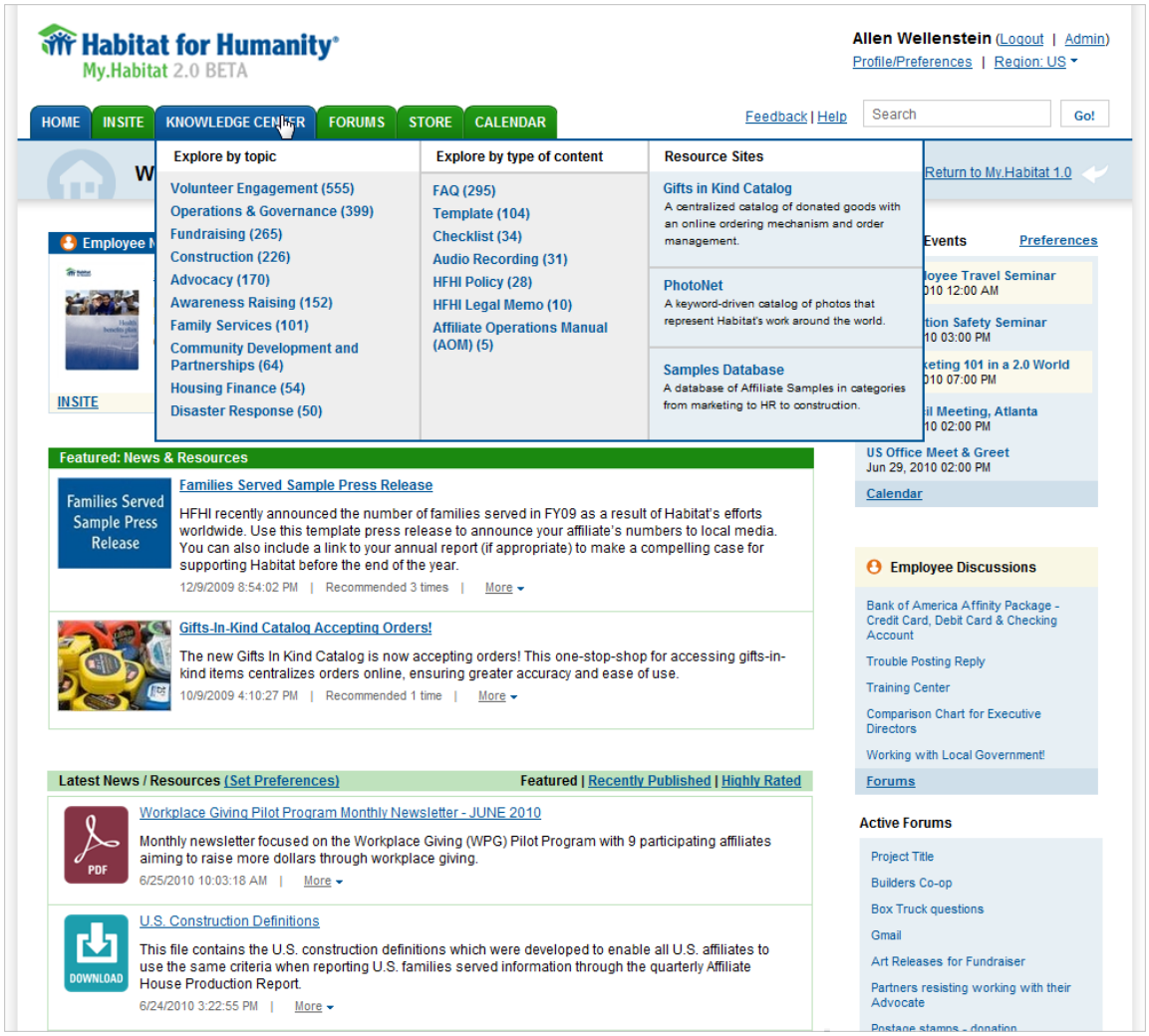
Now, users can browse by topic or content type. Options are displayed in mega-menu navigation. The mega-menu structure lets designers present topic and type options side by side. Each topic or type of content is accompanied by a number indicating the number of resources available to the user. All content on the site is tagged for these categories and types, with topic managers curating each topic.

Resource sites lead users to specialized tools available within the site's framework, such as *PhotoNet*, a photography database, and *Samples Database*, which offers templates and examples from worldwide affiliates.

The shift from an organization-based structure to a content-based structure has stretched beyond the intranet; it has also enabled cross-region collaboration on site content and resources.

HFHI is divided into five global regions, each with an office to support that region's affiliated organizations. In the past, each region maintained its own resources.

With MyHabitat 2.0, the team took the opportunity to consolidate information and combine resources across regions. The team created a *Communities of Practice* structure to bring together global teams of topic managers and site contributors to build global resources. The new site supports this cross-regional work, which has helped bring global consistency in the organization's thinking, a shift in culture, and unification of common program activities and strategies.



Pictured: Shifting to a content-based rather than an organization-based system supports cross-regional teams and shared information across regions.

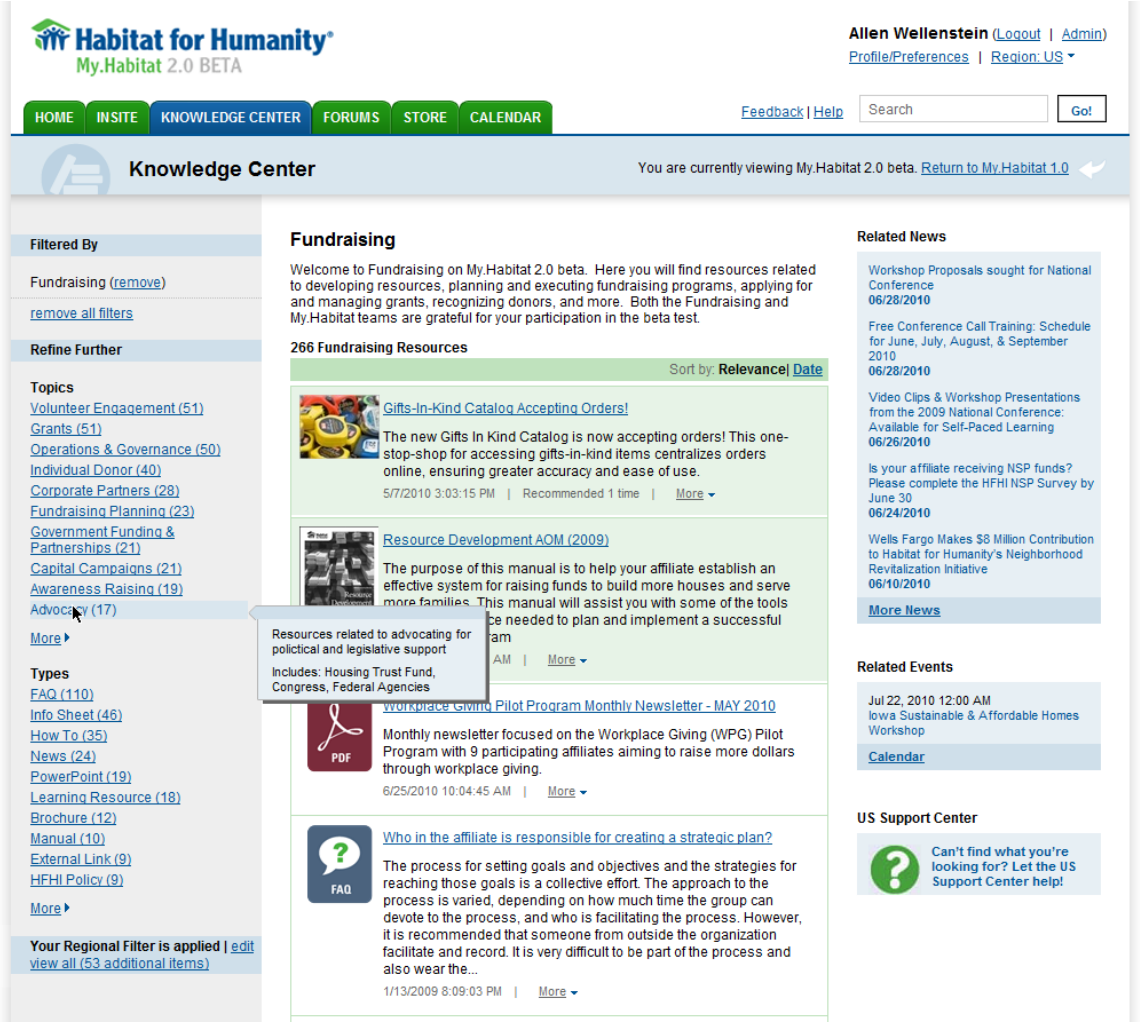
The site structure is based on the tagging of resources and content. Navigation relies on these tags, helping to narrow users' view of content until they find the information they need. Within the *Knowledge Center*, tag browsing appears on the left. Users can select a topic or type to refine results. The number listed indicates the number of items in that category. If a user hovers the mouse over a subcategory, a tool tip appears offering further explanation and information.

The information displayed is based on the user's regional preference, as it is throughout the site. If they prefer, users can remove those preference filters using a helpful feature on the page. A blue bar at the end of the tag list tells users when a regional filter is applied, and provides a link to *View All*. This area also lists the number of additional resources available if the regional filter is removed.

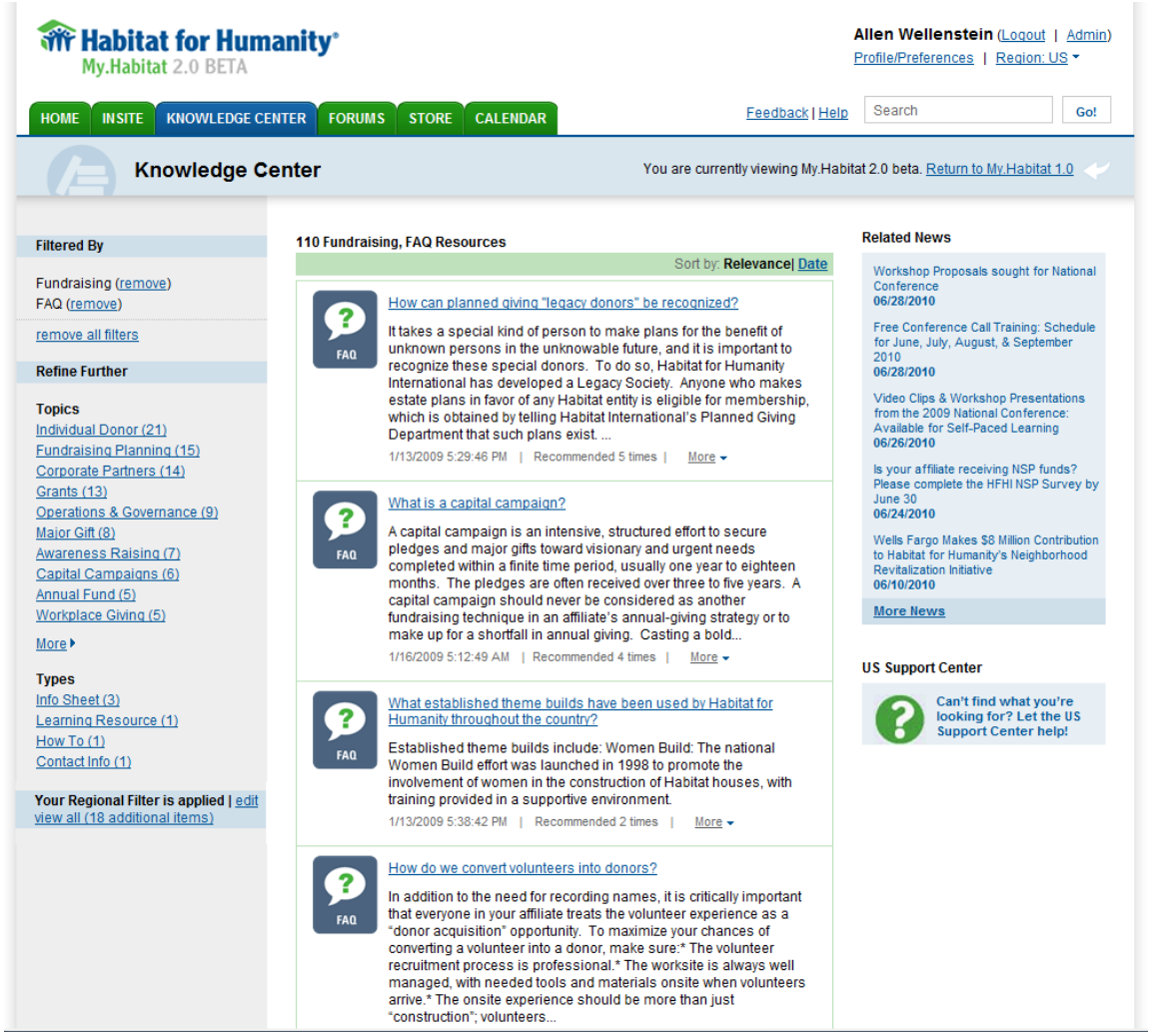
Resource types include documents, manuals, links, and podcasts, among others. Podcasts are typically recordings of training conference calls. Placing them in the *Knowledge Center* lets users browse by topic and locate them alongside other content.

The body of the page includes introductory text, followed by a list of all resources, starting with featured resources (indicated in green). The topic manager selects these featured resources. The rest of the resources are listed based on user recommendations or popularity. Users can also list resources by date, with the most recent additions shown first.

The right side of the page displays news and events related to the displayed content.



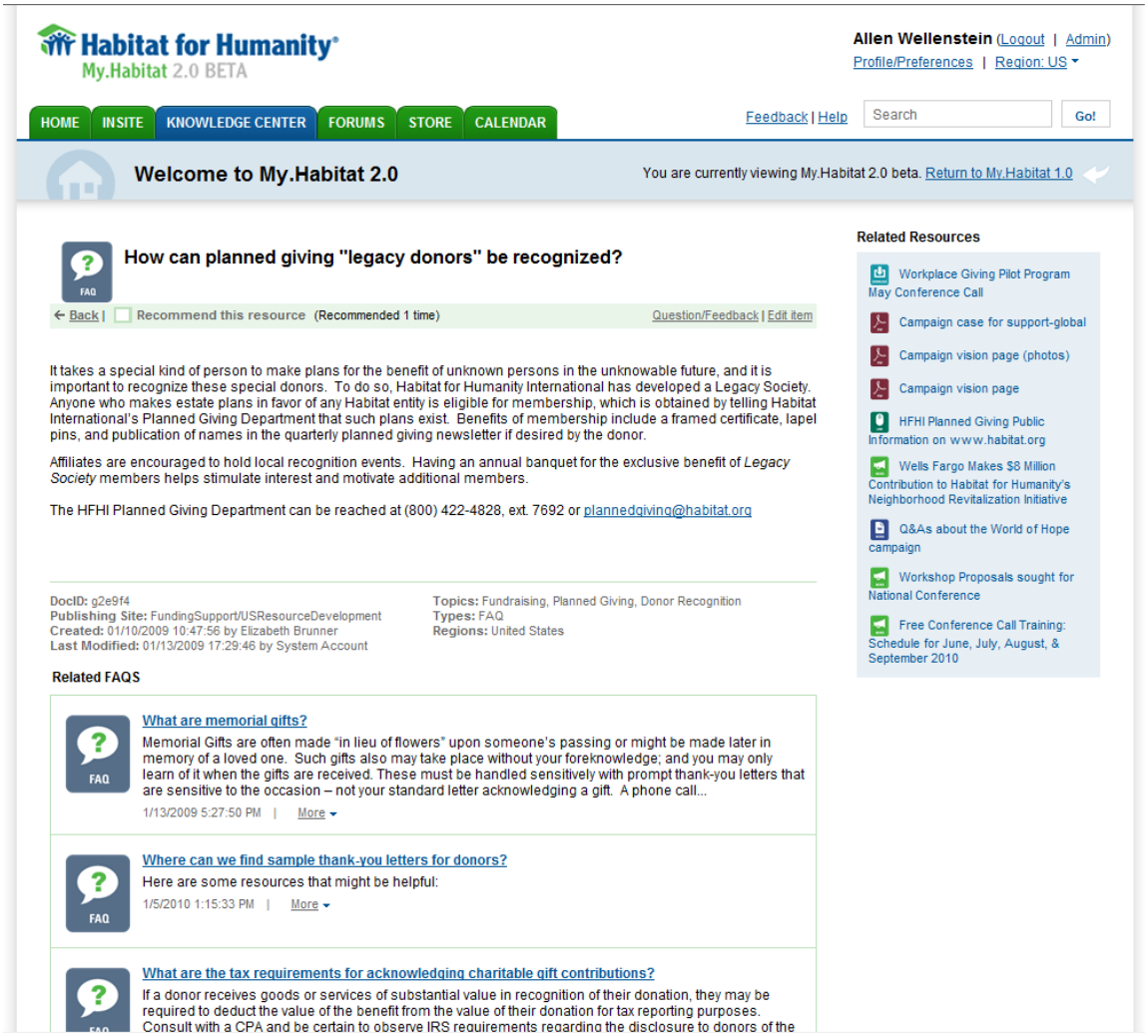
Pictured: Content appears in a faceted or tag-based structure, letting users make selections to filter results until they find the required resource.



Pictured: The site's *Knowledge Center* tag browser with a second tag applied, in this case the tag "FAQ." The tag browser lets users drill down further. The numbers in parenthesis show users how many resources exist for each topic so they always know what to expect.

Users can recommend a resource if they find content on the site useful. A simple *Recommend This Resource* link appears at the top of the page, next to the number of times it has already been recommended. This information is used to order the information shown on category pages, helping put the most popular or useful content first.

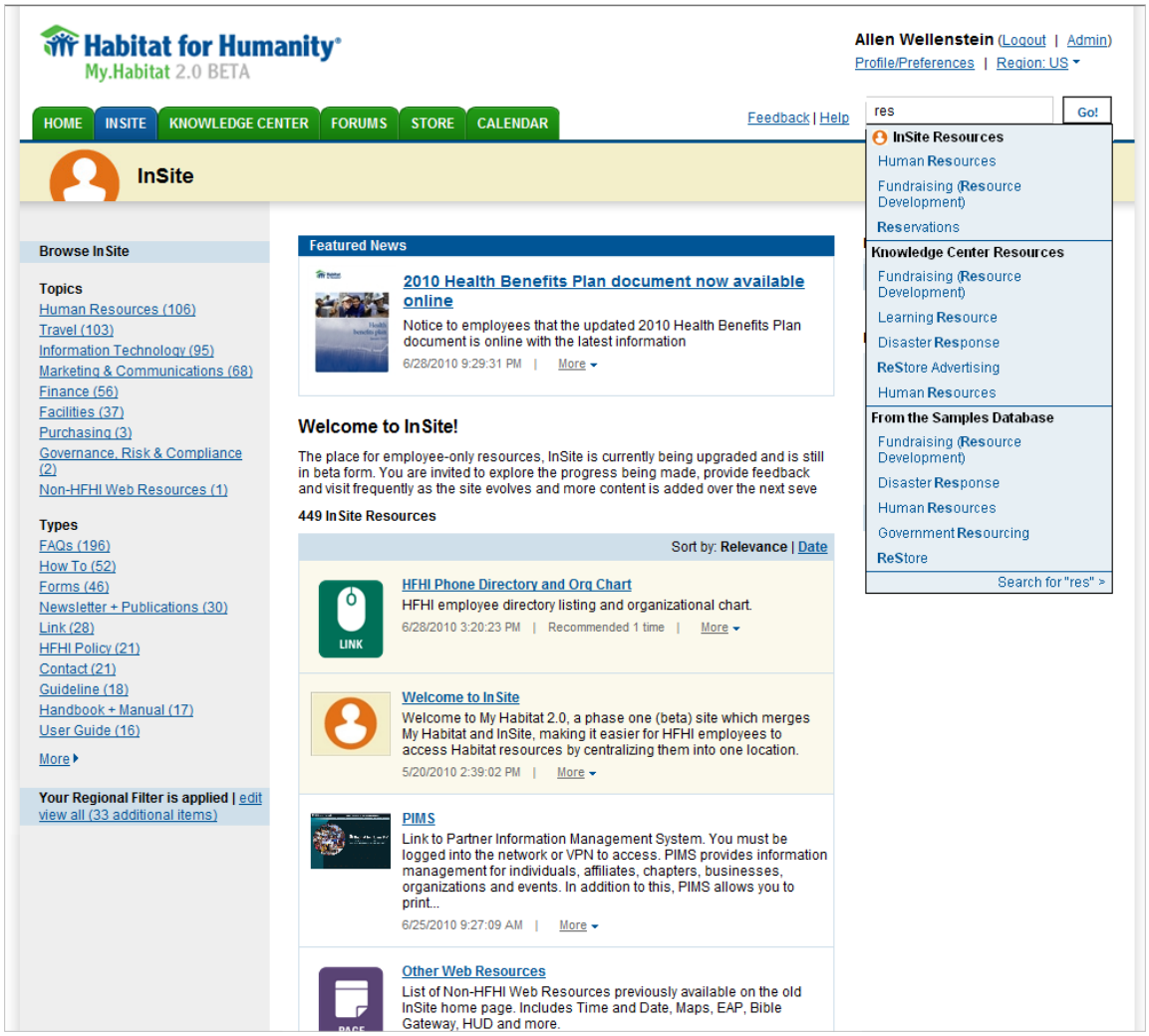
Each content page also features a *Question/Feedback* link, encouraging active feedback about the site. Beneath the content, metadata is shown with the date the content was created and modified, and who made changes. Tags, including topics, types, and regions, are also listed. Beneath this summary, related content is listed. This list is based on the tags for the content that appears on the page.



Pictured: Users can recommend a resource by clicking a link at the top of the content area. This lets the site prioritize content based on recommendations.

Curated search helps users locate information. The site uses SharePoint's search tools, but the intranet team has added what they call a *curated search* on top of the tool. When a user starts typing a search query, the site suggests related terms based on the most popular topics across the site. These related terms are set up by the operations team.

The tool recognizes synonyms, helping users locate content under related headings. The team monitors searches, and if they find a search resulted in no good destination, they add one.

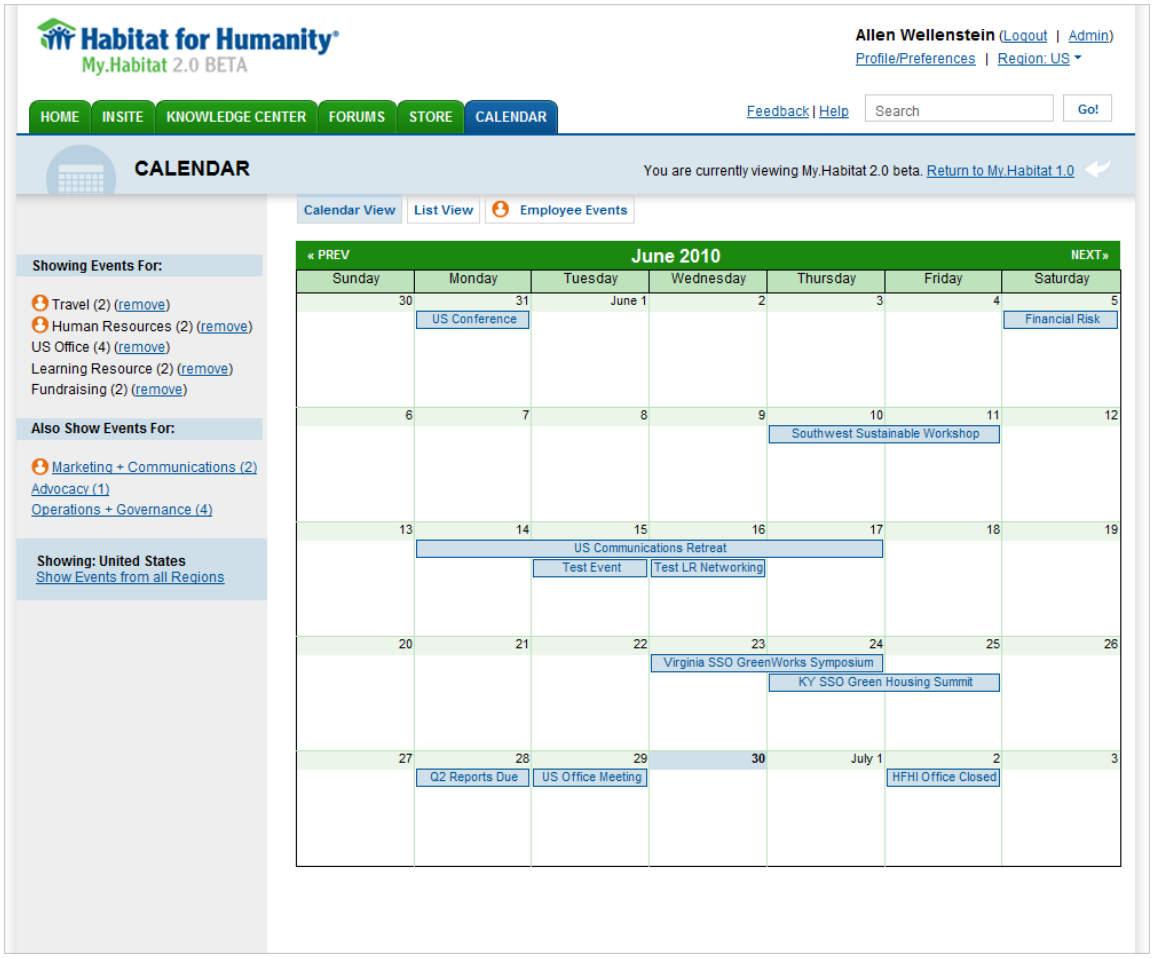


Pictured: A *curated search* suggests terms related to what the user is typing. This lets users select from suggestions, which return relevant results.

A master *Calendar* is a new addition to the site. As with site content, events were also listed based on departments or groups, but there was no central calendar for knowing what was going on around the organization. Now, the master *Calendar* shows all events in a single view, which has proven very helpful for planning.

Events are shown based on the user's region and topic preferences, but users can remove these constraints when viewing the calendar. The left side of the page lists the types of events currently shown. Users can remove any of these types, or show additional event types (listed in a second area on the left). They can also remove the regional filter to see events across all regions.

The *List View* and *Employee Events* tabs allow affiliate and employee-only events to be viewed by topic using the tag browser. Users can view both upcoming and past events in this way.

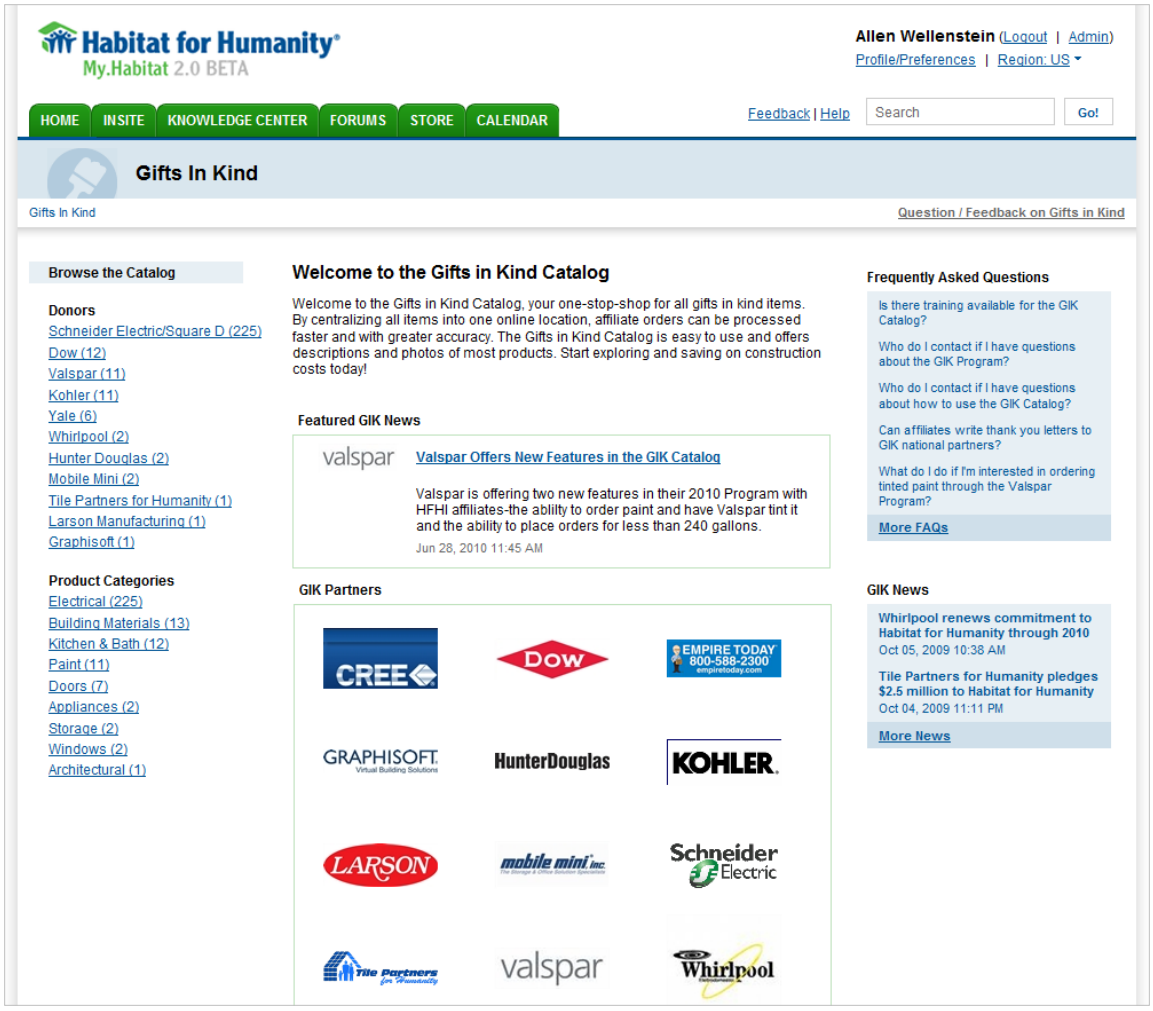


Pictured: The master *Calendar* shows all events, based on user preferences.

The site houses many applications. A main goal of the site was to have a central portal where all resources and tools could live, which required that the site architecture support the integration of applications.

One of these applications is the *Gifts in Kind Catalog*. This area offers a way for affiliates to "shop" for donated materials. Users can browse the catalog for (mostly free) materials and place orders.

The system integrates with donors' back office systems, providing detailed reporting, and financial and donation reconciliation. The site also integrates and presents several other applications as part of the site, including a *Build Brand Store* where affiliates can order business cards and letterhead, and *Project Based Funding*, which is a database of approved international projects in need of funding.



Pictured: The *Gifts In Kind Catalog* lets users shop for building materials donated to HFHI.

Informative, reliable content is key on the site. One area of particular importance is the site's *Affiliate Operations Manuals* (AOMs). These manuals provide operational guidance for affiliates on topics such as construction, family services, and financial policies and procedures. An AOM is intended as an online reference to solve pressing, real-world problems.

Putting an AOM together is a group effort. A team of experts led by a project manager develops the content, which is then reviewed by legal as well as the AOM's sponsor and publishing group owner. Creative Services edits and formats the document, while the MH Librarian makes the PDF version with internal navigation and links to related resources.

Users can open the entire manual online, download a copy for local use, or navigate directly to a specific section. These documents are among the most commonly used content on the site. Affiliate Support Center employees not only use the information to answer affiliate questions, but also show constituents how to use the materials themselves.

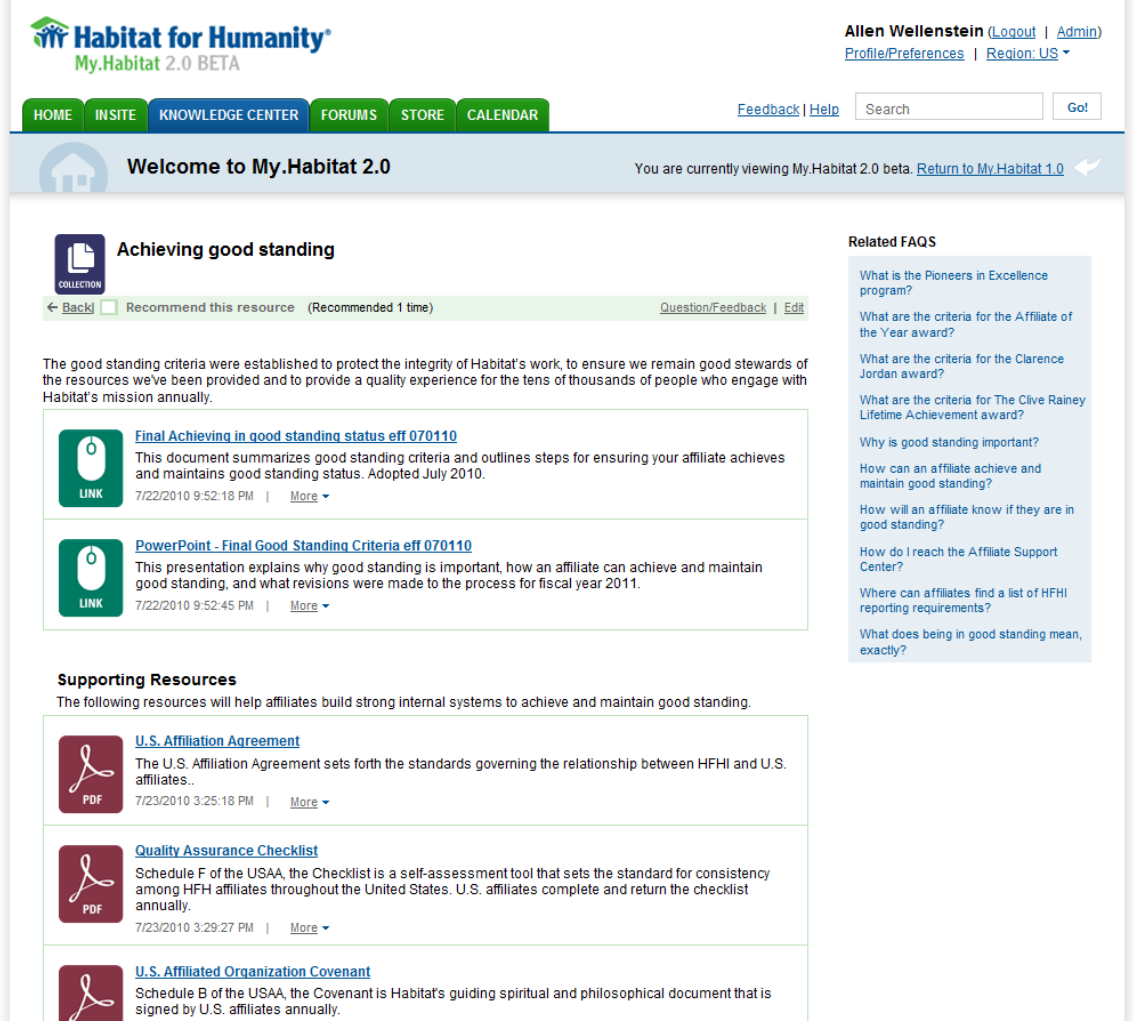
The materials were previously distributed in print, which made them difficult and expensive to revise and redistribute. Although the idea of online manuals was initially met with resistance, the benefit of having immediate access to the most up-to-date information — and the ease of updating information in a digital format — outweighed any concerns.



Pictured: *Affiliate Operations Manuals*, which used to be distributed in print format, are now available online.

Collections are another content type that has excited Habitat's publishers. The collections feature lets publishers create a focused group of resources assembled from throughout the site. For example, a marketing expert can compile a collection to help an affiliate publicize a fundraising event. *Collections* can include content in any form, so they can include templates, graphics, real-world examples, or even be tied to a discussion group.

Publishers are taking this tool beyond what the developers envisioned for it — in a good way. Publishers are creating knowledge bases on topics, which can then be featured in the *Knowledge Center* as a single resource.



Pictured: A collection is a content type that lets publishers group related information together as one resource.

Publishers contribute from all around the organization and all over the globe, which helps the site offer diverse and valuable information. The team offers many resources to help publishers, but found that most publishers add content in bursts, rather than consistently. As a result, people forget how to publish content and how to create strong metadata. They also forget best practices and time-saving techniques. And a lag between bouts of publishing can create issues related to employee turnover.

Realizing this, the team has tried to provide specific training as needed, with reusable training resources. Rather than focusing on lengthy explanations, the team tries to focus on information that is of most immediate use, providing instructions for routine tasks and using tools like annotated screenshots. The team emphasizes best — and worst — practices.

Although the team would ideally like to fully explain the nuances of content and metadata creation, they understand that part-time publishers who aren't constantly uploading content will be unlikely to retain or appreciate such knowledge. So, team

members do their best to help on a case-by-case basis, offering their expertise to aid publishers.

That said, team members appreciate that this problem stems from the fact that their publishers are subject matter experts with many other responsibilities. The publishers' busy schedules and attention to detail are what makes them highly valued contributors to the site, but also what makes continual training necessary.

By fixing the site structure, breaking down site barriers, cleaning up site content, and providing tools and information for users' daily needs, the HFHI intranet team has created a site that truly supports the global organization.

BACKGROUND

MH 2.0's goal is to provide a single location where HFHI employees and the employees/volunteers of affiliates worldwide can access and share the knowledge, resources, and tools they need in their mission of eliminating poverty housing.

The key to keeping the HFHI intranet fresh and useful is the organization's commitment to continual improvement.

"Even the first version of My.Habitat had a robust feedback mechanism, so we could hear from our users what they liked and what they didn't," says Drew Hancock, HFHI Senior Webmaster. "We also participate in many regional, national, and international Habitat conferences, setting up booths where affiliates and staff can come by and share their thoughts, feedback, and suggestions."

The intranet team regularly surveys users, and a steering committee made up of representatives from the various departments, regions, and user groups across the organization channels feedback from the site's constituents back to the design/operations team.

So, when it was time to design MH 2.0, the team had lots of feedback and suggestions to inform its redesign effort.

Project goals for the redesign project included:

- **Simplify presentation of the organizational structure** to help users find the content they need to perform their job functions, regardless of who owns a particular piece of content.
- **Establish clear ownership** of each site resource to reduce duplication, ensure accuracy, and improve resource timeliness.
- **Make the site as useful** to the organization's international constituents as it is to its US audience.
- **Create a one-stop-shop for sharing HFHI knowledge and tools** so that users (particularly employees) are no longer confused as to where to find authoritative information.

Evolving Over Time

HFHI's original extranet, PartnerNet was built to serve as a single destination for information sharing among the organization's global affiliates. It was essentially just a collection of subsites broken down by program, department, and initiative. But with PartnerNet as a launching point, the organization was propelled to develop its first intranet, called *InSite*.

Although both sites were welcome additions to the organization's knowledge network, it wasn't long before both grew "out of control and difficult to use," according to Hancock. He identifies three main reasons for the sites' eventual demise:

- The navigation schemes couldn't expand to accommodate growth over time
- Just about anyone in the organization could publish content
- The organization lacked an effective governance model to control the content quality

My.Habitat (1.0)

In 2007, a rebranded and redesigned PartnerNet was launched as MH (1.0). This new site, a precursor to the organization's current intranet, was built on SharePoint 2007. And, although the site was very well received, user feedback revealed it had one major shortcoming: the navigation was organized according to content ownership. This paradigm didn't serve the users well.

"This made it confusing to know where to find something," says Allan Wellenstein, President and Chief Information Architect of AWS, the company that partnered with HFHI to build this early version of MH.

MH 1.0 was only HFHI's extranet. HFHI had a separate intranet, InSite, which was the default home page for all employees.

"Content published for affiliates, however, was typically also relevant to employees and was therefore often (but not always) posted to both sites," says Hancock, adding, however, that it was not always updated in both places, "causing confusion as to where employees should go for the latest and greatest."

Solving the Navigation Problem

HFHI's enterprise architecture group had done a study on content management and collaboration platforms and had settled on SharePoint as a platform for MH 1.0. The group's decision was based on its feature set, cost, and integration with tools already in use. For the initial rollout, SharePoint was used pretty much out-of-the-box, which meant that the team encountered a common problem: the site navigation was aligned to content ownership, rather than use.

"One of the common issues you see with SharePoint sites, particularly in intranets, is an organizational structure aligned primarily — sometimes exclusively — with the organization's org chart," says Wellenstein.

SharePoint uses the site/subsite structure both as a way to build navigation and as a mechanism for creating security boundaries.

"As a result, content is often grouped more by who owns it rather than how someone might think to look for it," he says. "This was one of the main reasons we developed Content Slammer: to explicitly separate the ownership and management of content from how it's browsed by end users."

Rather than adhere to the content ownership model, the company looked for a solution that would allow content created and owned by different groups within HFHI to be browsed by topic or content type.

The solution, developed by AWS for another SharePoint client, was to create a SharePoint extension in which SharePoint content could be pushed to a SQL server. This allowed the mapping of complex relationships in SharePoint to SQL and thus enabled more logical browsing for users.

The tool, *SharePoint List Association Manager* (SLAM), let developers grab content published from the various MH sites and organize it in various ways to suit their needs. "In other words," says Wellenstein, "we could continue using SharePoint to allow different groups within the organization to manage their content — something SharePoint does extremely well — but we could grab that data and aggregate and display it in a way that would be more user-centric.

"The big breakthrough here was explicitly separating the tasks of managing content from how that content is browsed."

Separating Content Ownership from Browsing Options

Although SharePoint remains the site's CMS, MH 2.0 separates content ownership from how the content is browsed. Each department or program has a "publishing site" where they publish their FAQs, downloads, events, podcasts, and so on, and tag them by topic and type of content. Users then browse content based on topic or content type rather than needing to find the SharePoint site where that content lives.

Content in MH 2.0 is also tagged with language and regional relevance. Users set their regional and language preferences and see only relevant content as they browse the site. In this way, the organization has helped address an issue brought forth by its international users: that content was too US-centric.

With this, designers have seen much greater adoption of MH outside of the US.

Testing the New Navigation Scheme

The team phased in the new navigation scheme by conducting an initial trial. In January of 2009, in time for a national affiliate conference, the team launched *Knowledge Center*, a new MH tab that let users browse key resources across the organization by topic or content type, regardless of which group published them. And the users loved it.

"My favorite example to illustrate the power of the *Knowledge Center*'s new navigation approach is a resource describing HFHI's official policy regarding having minors volunteer on a Habitat build," says Wellenstein. "In My.Habitat 1.0, users might look to find that under the *US legal* site, the *Volunteer Management* site, the *Youth Programs* site, or the *US Construction* site."

Where they would actually find that document depended on which group had published it.

"In order to have it appear in all of those sites, it would have to be duplicated — which would make management a nightmare," he says.

In the new *Knowledge Center*, users could easily find the policy regardless of which topic tag they used; the result has been enthusiastic support for the new scheme.

"The feedback we got on the *Knowledge Center* was great, so we decided to extend the concept to the entire site," says Hancock. "Thus, the plan for My.Habitat 2.0 was born."

Consolidating Resources

Building on the initial trial, the concept was then applied to other parts of the site to ease the findability of key content across the site.

In addition to applying the Content Slammer approach to the entire site — rather than just to the key resources for each topic (as in the *Knowledge Center*), the team added a profile system. This lets users set their topic preferences, as well as regional and language preferences, so that they see the content they most care about on their home page and, as they browse the site, they see only relevant content based on their region.

In addition to improving information findability, MH 2.0 delivers a true portal architecture that houses, in one place, all the resources and tools available for employees and affiliates. These include a discussion forum, an organization-wide calendar, a system for ordering customized letterhead/marketing materials, a shopping cart for ordering donated building materials, a database of affiliate samples/templates, a searchable photo library, an international volunteer trip scheduling system, and more.



Pictured: The intranet in its 1.0 version. A major usability issue with this version was URLs; because of the native structure of SharePoint URLs, it was very difficult to reliably point someone to a particular resource within the intranet.

TIMELINE

HFHI INTRANET TIMELINE	
Milestone Date	**Milestone Description**
July 2000	Launched PartnerNet, the first version of the organization's extranet using Stellent Content Management System
July 2002	Developed InSite, the organization's first internal staff-only intranet
March 2006	Work begins on PartnerNet redesign
April 2007	Organization launches beta PartnerNet (later renamed My.Habitat 1.0), which was redesign on SharePoint 2007
January 2009	*Knowledge Center* tab launches on top of MH 1.0 to let users browse key resources across the organization by topic or content type, regardless of which group published it
June, 2009	Work begins on MH 2.0 redesign
September, 2009	MH 2.0 launches to the organization (Beta)
Through January 2011	MH 2.0 remains in beta

INTRANET TEAM



Pictured: The HFHI intranet team: (top, left to right) Lisa Reitz, Drew Hancock, and Allan Wellenstein (AW Systems); (bottom, left to right) Doug Green (AW Systems), Connie Steward and Jill Claflin. Not Pictured: Bob Norris.

GOVERNANCE

Ownership

MH 2.0 benefits from sponsorship by several senior stakeholders across the organization, rather than a single department owner.

The shared sponsorship model serves the site well. Sponsors have a strong incentive to ensure that MH investments are tied directly to strategic goals in the organization's five-year plan.

"While a shared approach may sound less ideal than having a clear-cut owner," says Hancock, "this interest-based sponsorship model has been a key determinant in sustaining funding during an extended period of constrained budgets."

"The HFHI Board of Directors maintains vigilant oversight on expenditures and requires that they be explicitly tied to strategic goals; hence sponsors have a strong incentive to ensure that MH 2.0 investments pass that test," says Hancock.

"Another positive aspect of shared ownership is derived from the process of priority-setting and decision-making," he says. "Sponsors have two avenues to advocate for enhancements: A) Persuade the MH Steering Committee to prioritize their

improvement out of existing funds, or B) Use discretionary funding to underwrite a special project."

While this approach works, Hancock admits it is anything but efficient.

"The MH Steering Committee invokes an advocacy approach for priority setting that pits desired enhancements in a competition for scarce resources," he says. "This typically results in a detailed, comparative analysis of feasibility and return on investment (ROI) that informs effective decisions."

This process is challenging when difficult trade-offs must be made, but it fosters a sense of ownership among those who engage in the discussions. In a very real sense, even those whose desired enhancements aren't chosen feel that they've contributed. Moreover, the option always exists for an advocate to locate funding for a special project, so being turned down is not as climatic as it might otherwise be.

"One can count on lively debate from many perspectives, with strong opinions being aired," says Hancock. "Nevertheless, the lack of efficiency is certainly worth the price in that the successful advocate must articulate a compelling argument in the face of ardent critique to prevail."

Personnel from three departments — IT, Communications, and Learning and Organizational Development — provide day-to-day operational support. These departments coordinate both the operational budget and operational activities, including administration, infrastructure, quality control, and training.

INTRANET TEAM RESPONSIBILITIES	
Role / Members	**Responsibilities**
MH sponsors include: • Communications • Learning and Organizational Development • HR • US and Canada • Global Programs • International	• Establish and control top-level topic tags • Establish guiding principles • Assign roles and responsibilities for publishing content • Secure funding
MH Steering Committee members include: • Technology Subcommittee • Content Subcommittee • Users Subcommittee	• Shape strategy • Approve design requirements • Make recommendations for investments (budgets) • Facilitate advisory groups (three groups) • Monitor results (statistics) and suggest changes **Technology subcommittee:** focuses on architecture, functionality, and reliability **Content subcommittee:** reviews feedback and recommendations for content development and usability of the tools for contributors **Users subcommittee** focuses on appropriateness of published content, gaps in content, and ease of use
MH Operations Team includes: • Communications • Learning and Organizational Development • IT • Developers	• Serve as technical and design lead for MH • Serve as technology liaison for MH Operations Team • Serve as primary contact for InSite publishing • Serve as primary contact for Knowledge Center publishing • Establish standards for organizing Knowledge Center content • Resolve conflicts among Publishing Group Owners (PGOs) • Schedule and train Knowledge Center PGOs and topic managers
MH Publishing Team	**MH Publishing Team:**

includes: • Publishing Group Owners • Topic Managers • Forum Moderators • Site Contributors	• **PGOs** have the overall responsibility for maintaining content within their topic area. • **Topic Managers** contribute content; these subject matter experts share their specialized knowledge on selected topics. • **Forum Moderators** create a professional tone for the forum, review new threads and posts, and post comments as warranted. • **Site Contributors** are key-boarders who assist topic managers in publishing content

USERS

MH 2.0, HFHI's combination intranet/extranet, has approximately 25,000 registered users. And its user base is varied. More than 800 employees use the platform from five regional offices and from field offices around the world. Staff and volunteers of associated organizations including affiliates, state support organizations, national offices, ReStores, Campus Chapters, and more, also use the site. The goal is to have the site available to everyone across the organization regardless of role.

"We need to be sure that a volunteer at a small affiliate who needs, say, fundraising 101 content can find that, while the full-time construction manager at a larger affiliate can find the more advanced green building techniques for which she is looking," says Hancock.

Some of the users include:

- **HFHI employee administrative users,** who use the site primarily for basic HR/benefits/directory/community purposes.
- **HFHI subject matter experts,** who help further the Habitat mission and provide support to the staff and volunteers of affiliated organizations around the word.
- **Affiliate/National Office staff and volunteers,** who run the full gamut. Some affiliated organizations are tiny and have no full-time employees, while others are themselves somewhat large organizations with 50 or more employees.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	http://my.habitat.org
Default Status	Each staff member's computer is set with http://my.habitat.org as the homepage when the computer is issued, but they are free to change that if they wish.
Remote Access	MH is accessible both through the LAN and remotely through active directory logins for internal staff and through forms-based authentication for external (non-HFHI staff) users. The intranet-only portion of the content is accessible only with active directory logins.

DESIGN AND USABILITY

The Agency as Collaborative Partner

HFHI partnered with AWS for both the first version of MH and the 2.0 redesign. This partnership was a strong collaboration between the internal HFHI team and AWS. In the discovery/ideation/design phase, AWS partnered with representatives of the Communications and the Learning and Organizational Learning departments and then developed the site under the technical oversight of the Habitat IT department.

While the site's requirements analysis and design were very much team efforts, development was mostly outsourced to AWS.

"Solution Design": Defining Scope Through Consensus

Both projects started with a known budget and timeline and a list of very loosely defined goals the organization wanted to accomplish. AWS led a formal needs assessment/scoping exercise, called the "Solution Design" process, and it was through this process that the two teams agreed on the formal scope of work.

The Solution Design process involved key stakeholders across the organization, both internal and external, in a series of brainstorming sessions, focus groups, and design sessions where the groups prioritized goals and explored various approaches.

According to Hancock, they systematically defined and prioritized the goals and objectives, and "explored different approaches and iteratively and collaboratively defined what we would build. During that process, the design team evolved wireframes, which we shared with a larger group to get feedback."

The wireframes served as paper prototypes so the teams could elicit feedback about what worked and what didn't early on in the design process. This process was very efficient at surfacing issues and finding solutions; by the time the Solution Design document was delivered (AW System's first formal deliverable), there was already broad consensus/agreement within the organization on the approach.

Learning Through User Testing

The team employed formal usability testing prior to launching the *Knowledge Center* upgrade to MH 1.0. Remote usability screen-share test sessions were conducted with users in affiliate offices.

"They [the users] were assigned tasks to complete, and we had them think out loud as they thought about where to click to find the answers," says Wellenstein. "One interesting thing we learned was that users were not looking on the right-most call-out column where we featured related FAQs. Even if the question we asked them to find the answer to was almost verbatim the question shown on the right, users were still exploring the center column of the page, looking for the answer."

As a result of the user testing, they integrated the FAQs directly into the *Knowledge Center* responses area.

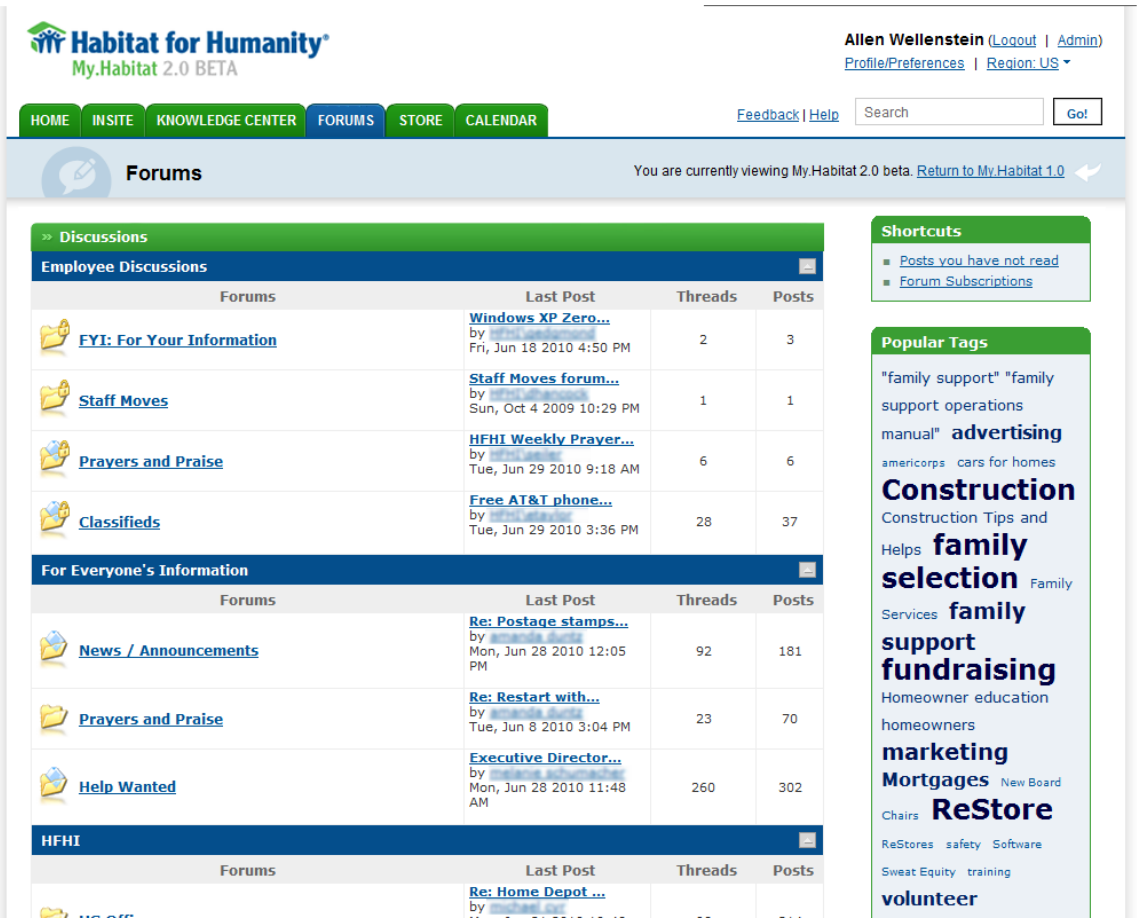
A similar study was conducted before the organization launched an online ordering system. "We were able to avoid user confusion by placing simple instructions in a few key areas," he says.

"Every time we do these simple usability studies, even though we aren't doing formal testing in a usability lab, I'm always struck by how much we learn."

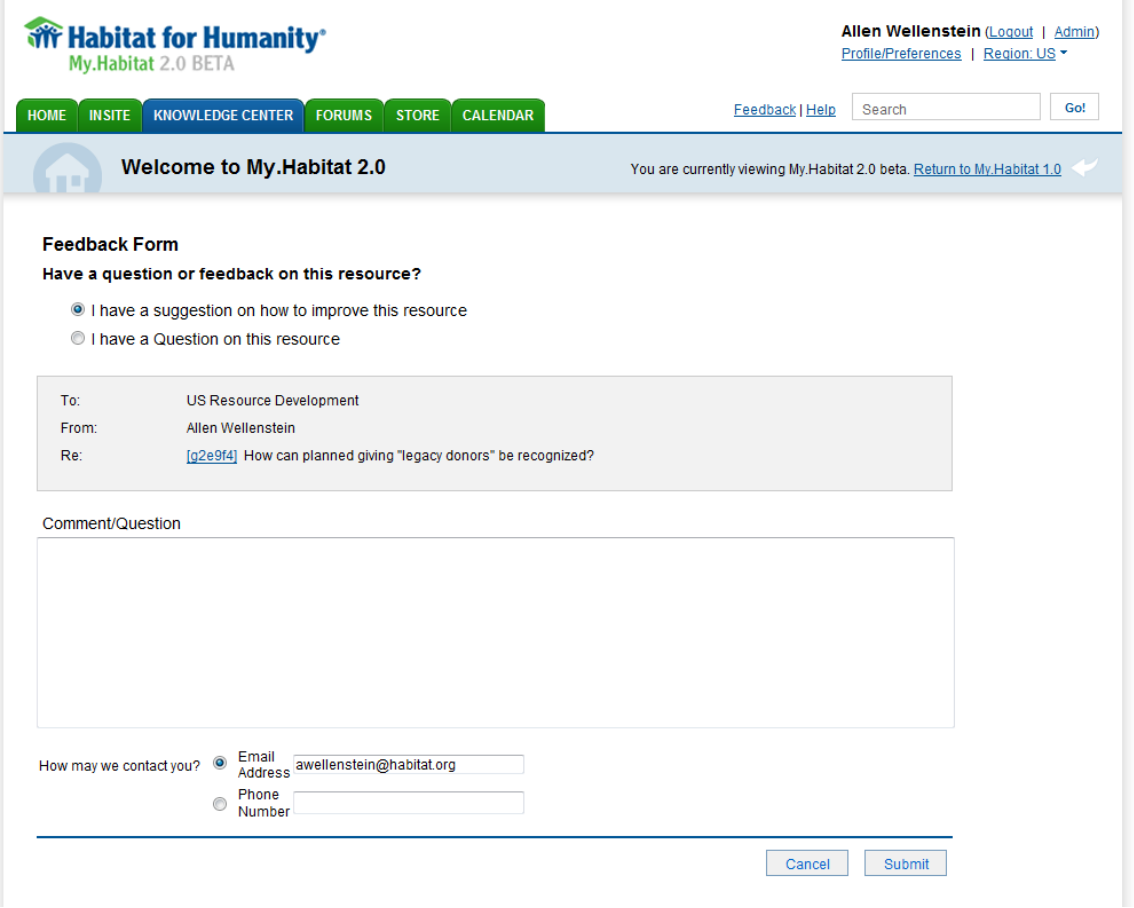
Gathering Feedback

Because both the HFHI and AWS teams are committed to maintaining a continual improvement cycle, they've employed ongoing user feedback mechanisms to keep an active user dialogue open even now that the redesign is live. Feedback mechanisms include discussion forums, a site-based feedback management system, and having team members staff conference booths to encourage face-to-face dialogue.

These efforts help team members collect feedback on an ongoing basis. By refining and prioritizing that feedback, they're able to execute on iterative site enhancements.



Pictured: MH has a fully featured discussion forum to keep the dialogue open with site users. It has open forums, employee-only forums, and specialized forums exclusive to specific audiences, such as affiliate executive directors, national office directors, and so on.



Pictured: HFHI team members employ a strategy of continuous quality improvement, actively solicit feedback, and regularly push updates that address user input. To that end, they've included a feedback link as part of the global navigation. In addition, every single system resource has a question/feedback link. Questions are automatically routed to a centralized support center and feedback is routed to the group that published the particular resource. In the example shown here, the feedback is being routed to the US Resource Development team.

CONTENT AND CONTENT MANAGEMENT

Establishing Responsibility

The sponsors of the MH 2.0 project established guiding principles, roles, and responsibilities for publishing content. These are codified in the MH 2.0 *Publishers' Guide* and conveyed during one-on-one training and support sessions. According to Master Librarian Bob Norris, two key objectives drive the publishing process:

- **Establish ownership** for each resource
- **Manage user expectations** regarding the nature of the resources, such as clearly differentiation between formal policy, recommended best practices, and exemplars contributed from affiliated organizations

Publishers

The first key feature of MH publishing is that it's open to all comers.

"Literally, anyone with the requisite expertise (and necessary permissions) can contribute to content development through our collaborative processes," says Hancock. "There are prescribed resource development processes, editing and review cycles, approval for publishing, and lifecycle maintenance. These processes are differentiated depending on the type of resource — for instance, a legal advisory has a different level of oversight than an informational brief."

There are four formal publishing roles; close to 100 people are assigned to these roles, which entail explicit publishing permissions. Each role/person has both a topical and regional scope. In addition, the site technology segregates content into three distinct knowledge bases:

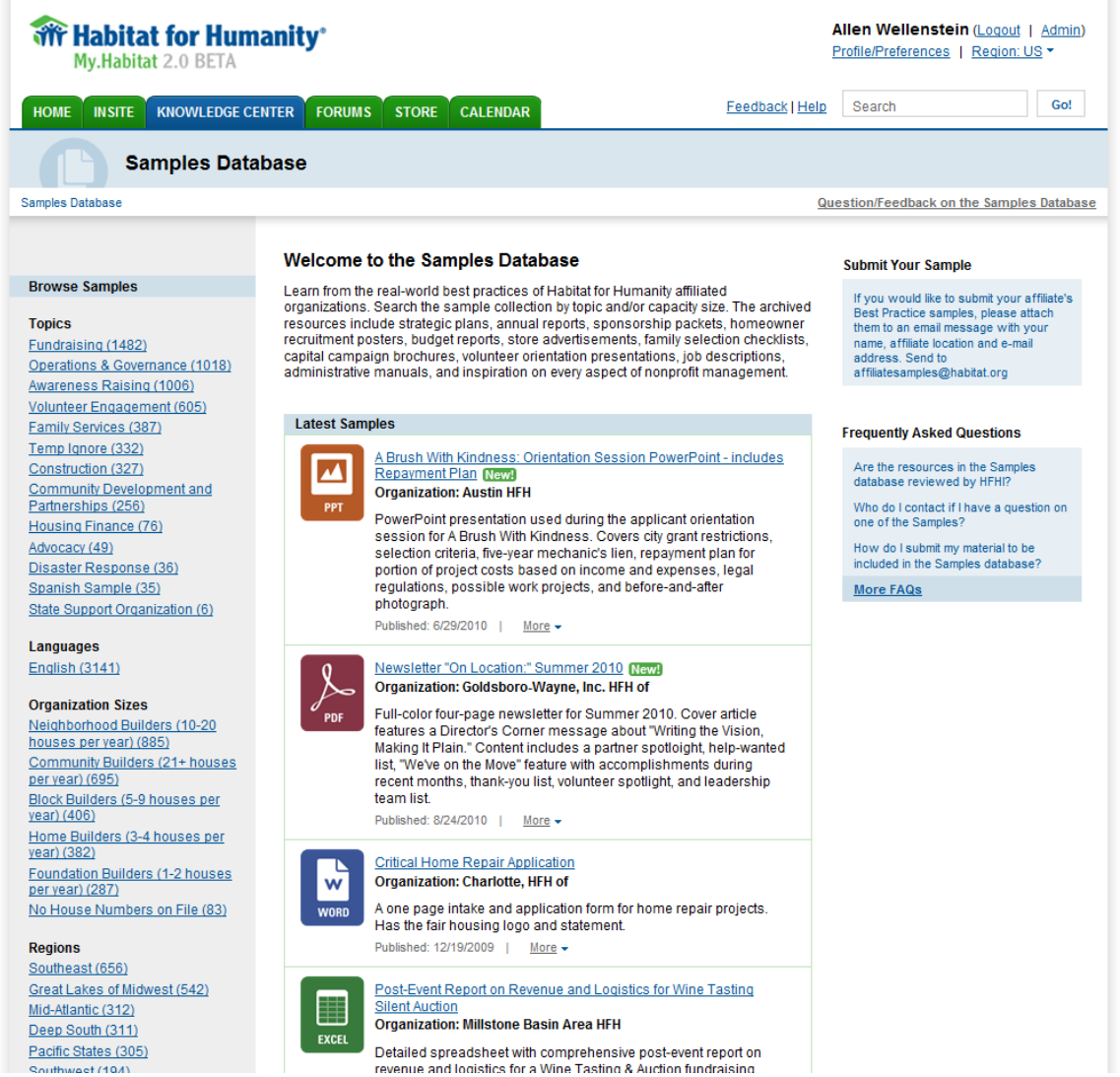
1. **InSite** contains employee content, such as the HFHI travel policy
2. ***Knowledge Center*** contains vetted content, such as the *Affiliate Operations Manual for Construction*

The publishing process for *Knowledge Center* and InSite relies on a human network of publishers, each of whom is formally designated, trained, and supported.

3. ***Samples* knowledge base:** This knowledgebase contains content contributed by affiliated organizations, such as a real-world donor solicitation letter

   The *Samples* knowledge base content-collection process is purposefully inclusive to encourage contributions. "Exemplars are solicited from affiliated organizations and contributions acknowledged with appreciation," says Lisa Reitz, Senior Director Learning and Knowledge Systems. "However, to ensure quality, users cannot self-publish." Topical experts review each contribution, and those that the reviewers feel do not satisfy minimum quality standards are culled.

   "Samples resources are extremely popular," she says. "And user surveys indicate that users are pleased with their availability and usefulness."



Pictured: The front page of the *Samples* knowledge base. This knowledge base contains content contributed by affiliated organizations, such as a real-world donor solicitation letter.

Publishing Roles

Content ownership is established by classifying resources into one of 20 categories, each of which is managed by a Publishing Group Owner (PGO). Each category has multiple topics and a regional scope. Along with ownership comes the responsibility for maintenance.

For formally published resources, such as operations manuals, the editorial workflow is managed by the organization's Communications Department and professional editors edit the content. For less formal resources, editing is coordinated at the department level.

What follows is a breakdown of some of the site's publishing roles:

> **PGOs:** The PGO has significant authority and responsibility to establish publishing policy and provide guidance regarding priorities, vetting, and

approval for the topics under their purview. PGOs are typically senior directors (one level below VP).

Topic Managers: At their discretion, PGOs can designate topic managers to assume authority similar to their own. For example, the Construction PGO has designated a Topic Manager for Sustainable Building (Green) practices. Topic managers are usually company directors.

Site Contributors: Site contributors assist PGOs and topic managers with data entry tasks. Site contributors are usually specialists.

Forum Moderators: Forum moderators monitor and facilitate online discussions. Forum moderators are usually managers.

All four roles — PGO, topic manager, site contributor, and forum moderator — are duties formally designated in each person's job plan and training is required before permissions are granted. Personnel are selected for these roles based on their topical expertise and attention to detail.

Open Feedback

Any user can provide feedback on any resource via MH's form-based feedback system. When this happens, the PGO receives an email notification and takes action on the feedback via the MH *Feedback Manager*. This action might include responding directly to the comment or assigning it to a topic manager. The *Feedback Manager* tracks feedback activities and logs responses.

Although the *Feedback Manager* was created to elicit feedback from users on their experience using MH, a secondary use was discovered that has significantly enhanced publisher collaboration. Publishers who are perusing MH and decide that they'd like something changed about a resource they don't own — such as a change in metadata — simply make the request on the spot using the feedback link, which in turn sends an email notification to the appropriate PGO and the MH Operations Team.

"This convenience has led to publishers spending more time browsing MH in that they can accomplish a great deal without having to log in to the administrative interface," says Norris, "And this, in turn, has resulted in an increase in the quality of the resources and their associated metadata."

Another helpful use of the *Feedback* system occurs when a user complains about not being able to find something.

"It can be very difficult for those of us who work with My.Habitat daily to perceive navigational challenges," he says. "When a user vents frustration, not only can we respond directly and help solve the problem, but we are spurred to analyze what led to the problem and correct it.

"In so doing, we have converted many a user from being frustrated to being an advocate, some of whom go on to enthusiastically contribute their time to help us improve the system."

In addition to gathering feedback through site mechanisms, the organization conducts an annual survey to solicit opinions about MH and key resources. This information is conveyed back to site contributors.

Ensuring Quality

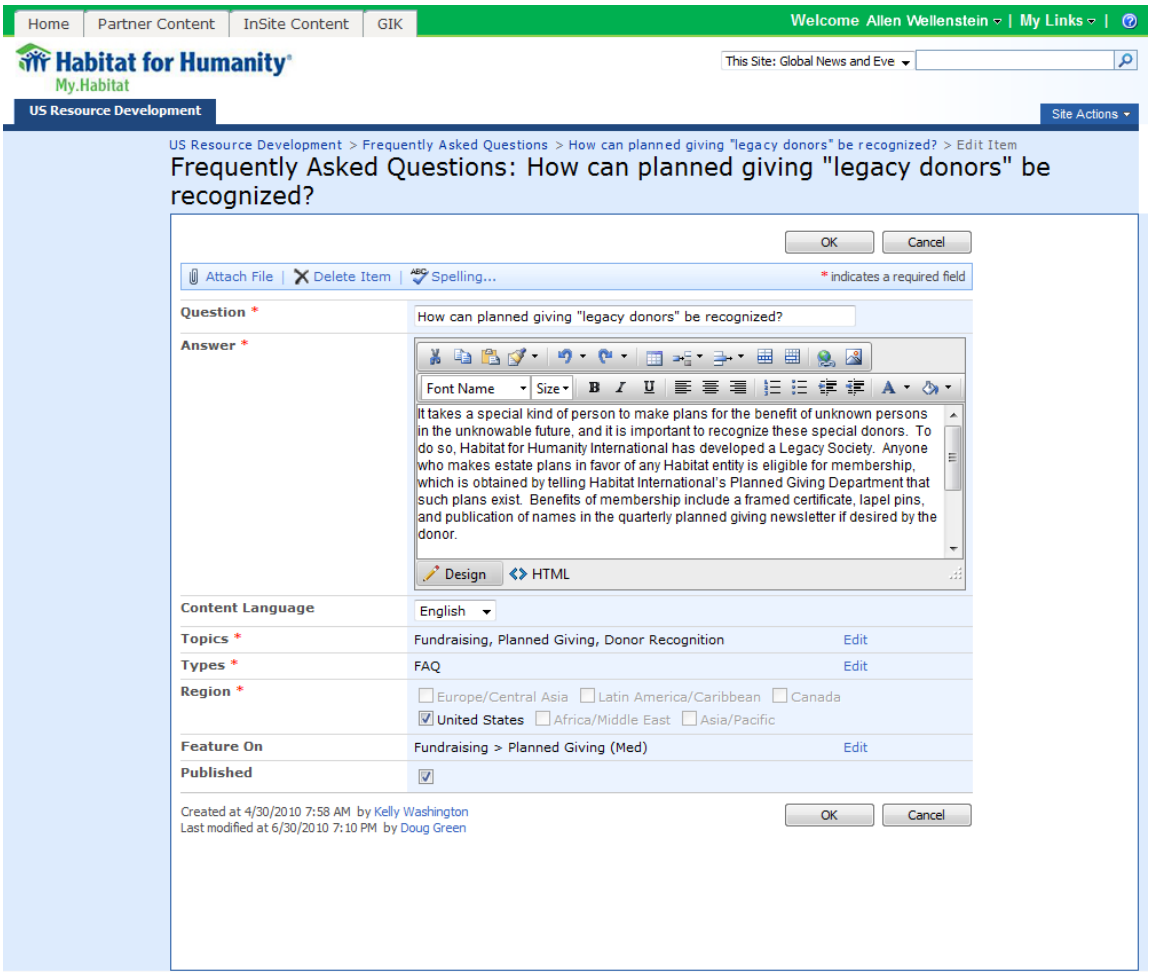
The Communications Department prescribes style guides for various types of site resources, and publishers typically use templates for their content.

The MH 2.0 Operations Team shares best practices via computer-based training (using Microsoft Live Meeting), the *MH Publishers' Guide,* and the MH publishers' SharePoint-based team site. Training is always contextualized to a publisher's own content, and training is a prerequisite for permissioning. Follow-up support sessions are scheduled to help the publisher apply new knowledge to solve real-world problems. On-demand support is also available.

Formal publications are reviewed often. For less formal publications, the PGOs are responsible for assuring that any resource published under their purview meet the guiding principles set by senior leadership and for providing explicit guidance about their criteria to those who have permission to publish.

Post-publication, anyone can surface a potential problem such as a typo, broken link, or out-of-date reference via the MH *Feedback* system.

The Affiliate Support Center collects and conveys US and Canadian user feedback on MH resources. And PGOs monitor resources tagged with their topics for compliance with their guidance. The Communications Department oversees news releases and monitors style-guide-compliance of published resources.



Pictured: An example editing interface for an FAQ. *Content Language* sets the language of this resource. The *Edit* link next to *Topics* and *Types* opens a modal allowing the editor to select all applicable tags (the type tag is often set by default based on content type). The region check boxes are used to set the content's regional scope. Publishing sites are usually regional in nature (for example, "US Construction"), so the regional scope is usually set automatically. In this image, most regions are disabled. Administrators must have specific permission to publish to regions other than their own. The *Feature On* selection allows the content to be featured, if the admin user has the rights, in specific areas around the site (such as the MH homepage) or with specific topics. The FAQ shown here will be shown first when users navigate to the *Planned Giving* tag under *Fundraising*.

Collaborating with Team Sites

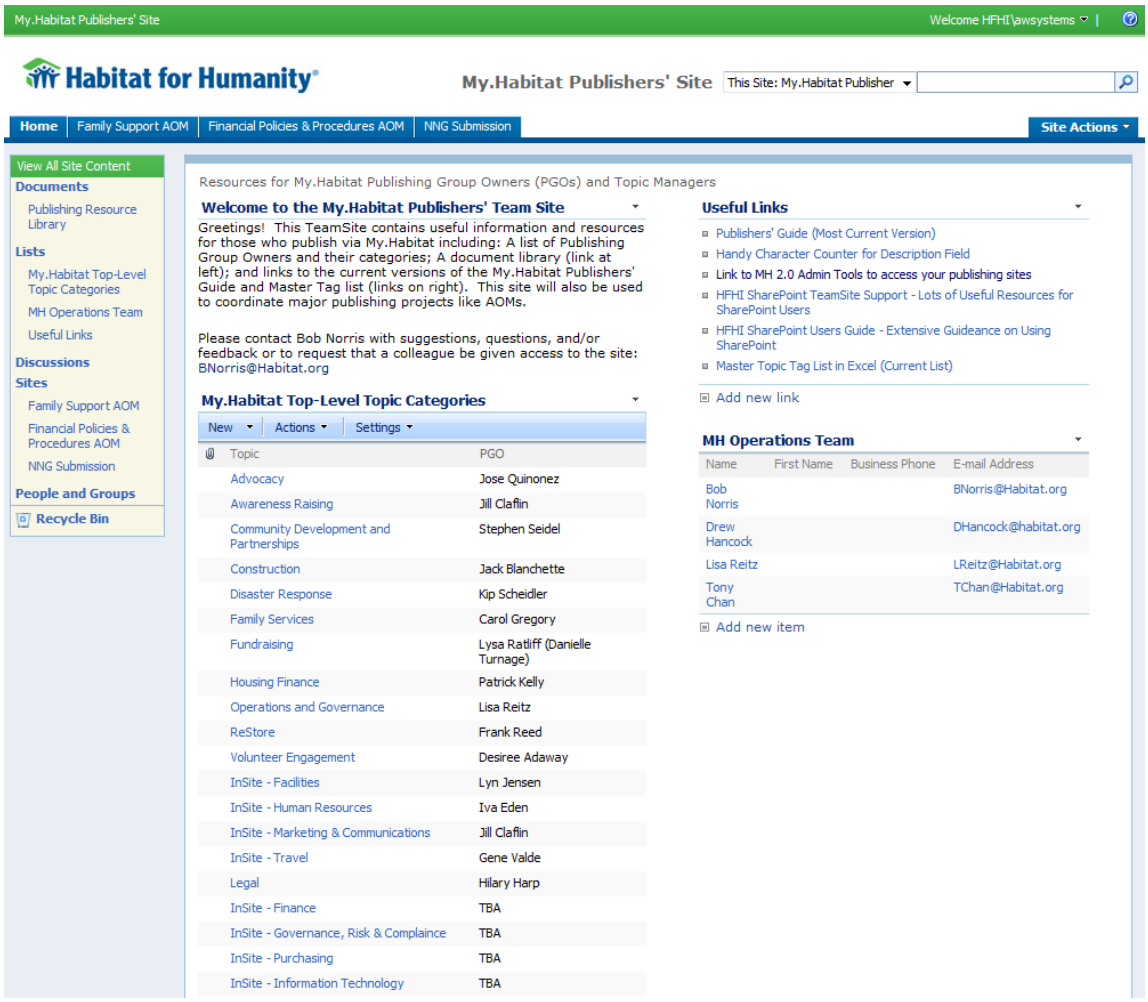
MH uses SharePoint's team sites to facilitate group collaboration. The MH Operations Team, for example, maintains a team site to support users in the four publisher roles: PGO, topic manager, site contributor, and forum moderator. This site is where publishers find the current version of the topic tag list, the MH *Publishers' Guide*, a list of PGOs and their categories, along with other useful resources. An example page is shown below.

The MH Operations Team can communicate with select publishers by group, using the site's notification feature. And per the Digital Publishing Process, project subsites are created on the publishers' team site to foster collaboration in creating, revising, or updating major site resources. Using SharePoint's version control and permissioning, a working copy of the document is maintained and backed-up.

"This mitigates the problems that arise during collaborative writing projects when versioning is left uncontrolled," says Hancock. "It is also quite helpful to collaborators to be able to access their files from a browser."

Once a resource has completed the editing and formatting phases, it's typically engineered for publication with internal navigation links and links to ancillary resources. A proof version is reviewed and tested online by stakeholders before it is approved by the PGO for publishing on MH.

When publishing is imminent, the Communications Department develops a communications plan for notifying constituents and the Affiliate Support Call Center is briefed. Feedback from users is elicited and captured via the Call Center and MH's *Feedback Manager*. Miscellaneous items are tracked via a document maintained on the project subsite. Source files are archived and a review date is calendared.



Pictured: An example of a team site area.

Solving Problems

The HFHI team faced many challenges in taking on this redesign project. But, in every case, they also found a reasonable solution to address the challenges. What follows is a breakdown of the major challenges and how the HFHI team chose to address them:

- **Challenge: Lack of Funding**

  HFHI did not have the discretionary funds to invest in the rapid deployment of a costly enterprise knowledge management solution. Nor did HFHI have the capacity to hire or reassign staff to full-time roles to support a quality control program.

  Solution: *Institute a multi-year, phased approach for technology development*. The MH Steering Committee established priorities, which were funded annually as budget permitted; some especially motivated departments funded special projects out of their discretionary funds. For staffing, existing personnel were nominated as candidates for publishing roles and those selected were assigned the role as a collateral duty. A small operations team was established to support publishers.

- **Challenge: Cross-Department and Regional Topic Stakeholders**

  In many cases, a given topic has stakeholders in more than one department, each of whom has a vital interest in what is published.

  "This is particularly challenging when policy is involved," says Hancock. "For example, a policy related to minors working on a construction site has ramifications that concern the interests of Legal, Construction, and Volunteer Management, as well as the five area offices — each of which may have regionally specific requirements."

  Previous iterations of MH were heavily US-centric, and senior leaders were determined to internationalize MH 2.0.

  Solution: *Establish top-level content categories and the PGO role*. Senior leaders defined the categories with an international perspective and PGOs were given global authority. To ensure inclusiveness, PGOs are encouraged to select topic managers from other departments and regions. Issues of concern are deconflicted by the Operations and Governance PGO who hosts regular meetings.

- **Challenge: Oversight**

Complicating the ownership picture at HFHI is the need for rigorous oversight on certain topics by entities such as Internal Control, Risk Prevention and Response Unit, Legal, and one or more VPs. However, it was recognized that establishing a rigid quality control process that applied to all topics alike would inhibit publication of helpful resources.

Solution: *Establish a formal digital publishing process*. The process applies to key resources, such as manuals and polices, and restricts the use of select tags, such as *HFHI Policy* and *Legal Advisory*. This process defines the guidelines, participants, and steps for assessing requirements, designing the resource, collaborating, reviewing, engineering, publishing, controlling quality, and ensuring maintenance. SharePoint-based team sites and Microsoft LiveMeeting technologies support these efforts. The MH Operations Team coordinates the process.

- **Challenge: Content Maintenance**

  Once published, a resource must be maintained. Although the sites' guiding principles dictate that content must be maintained, actually doing this can be difficult.

  Solution: *Include formal steps for archiving source material, tracking feedback and/or errata, and conducting calendared reviews in the digital publishing process*. These activities are supported by the MH Librarian; for example, source files are archived with SharePoint version control and limited permissions. For resources created and published less formally, the onus is on the PGO to manage the content.

  "Hence, the fundamental concept of our quality control program is that the decision to publish a resource equates to owning that resource, and ownership begets the responsibility to manage it," says Hancock. "Recognition of this burden of ownership is key to effective quality control. It also helps mitigate lengthy disagreements over ownership."

- **Challenge: Supporting Part-Time Publishers**

  While PGOs hold the ultimate responsibility for all content published in their topic area. In practice, the management of that content often falls to a more distributed team of people, some of whom are invested only as part-time content contributors.

  "Conceptually, PGOs are ultimately responsible for anything published on InSite or via the *Knowledge Center* that addresses a topic under their purview," says Norris. "In practice, the PGOs have flexibility in how they choose to manage their categories."

  At one extreme is the PGO who oversees every publishing decision and closely monitors any item labeled with one of his or her topics. At the other extreme is the PGO who delegates almost all decision-making to topic managers. Most PGOs select several topics for self-management and assign others to topic managers. Such disparity poses a challenge for the organization.

"In our experience, publishing activity tends to happen in bursts rather than as a sustained effort," says Reitz. "These bursts are typically associated with departmentally supported events, and publishing markedly subsides as workload spikes. From a support perspective, this results in some inefficiency."

Although the management team conducts a requirements assessment and helps the PGO craft a publishing strategy and train personnel, often this must all be repeated after a publishing resource steps back into the publishing cycle after a workload-induced delay.

So, while the publishers are trained, the gaps between training and execution often mean that they:

1. Forget how to use some of the publishing tools
2. Lose their grasp on nuanced aspects of describing and labeling resources (meta-data)
3. Forget best practices and labor-saving techniques

Personnel turnover is also problematic, especially at the topic-manager-level.

Solution: *A three-pronged approach*. Given HFHI's unique situation, the following three-part approach seems to work best:

1. **Provide specific training.** To some extent, the solution to this problem is the creation of a curriculum supported by reusable training resources. To that end, the team has standardized the orientation and created instructions for routine tasks, such as annotating screen shots. However, the nature of content organization and creating useful meta-data is complex and can be highly resource-specific. Therefore, it's important to account for both the audience and the subject matter; for example, the jargon and utility of construction-related resources is much different than what's useful to an accountant. The organization must also tend to a wide spectrum of user expertise and familiarity with our programs.
2. **Establish best practices.** "Of course, we identify and promote best practices," says Norris. "For example, spelling out acronyms in a meta-data field so that the search index contains both the acronym and the full term. We also tactfully point out practices that are likely to lead to problems."
3. **Meet unique needs individually.** "It strikes me that though there are best (and less than good) practices that can be shared across topics — there are many topic-specific elements that require tailored support and problem solving," says Norris. "As a result, much of our effort is focused on helping publishers meet the unique needs of a select audience, and these solutions are often not broadly applicable."

"If we were dealing with personnel dedicated to these tasks on a full-time basis, this distinction would not be as constrictive," says Hancock. "But when the publisher is working part-time — often less than 20 percent — there is significant pressure to limit the scope of what we teach to that which is most immediately useful to the tasks at hand."

TECHNOLOGY BEHIND MY.HABITAT	
Category	**Technology Used**
Web Server Hardware and O/S	• Dell PowerEdge servers with Windows 2003
Bug Tracking/Quality Assurance	• SharePoint
Design Tools	• Visio for wireframing • Photoshop for design
Site Building Tools	• Microsoft Visual Studio
Content Management Tools	• Microsoft SharePoint 2007 with the AWS Content Slammer
Search	• SharePoint search

SEARCH

Curated Search

MH relies on the standard search provided through SharePoint. On top of that, HFHI added a custom layer to provide "curated search," which lets users jump directly to known, curated topic pages via auto-complete functionality. This was done to accommodate different search behaviors among users.

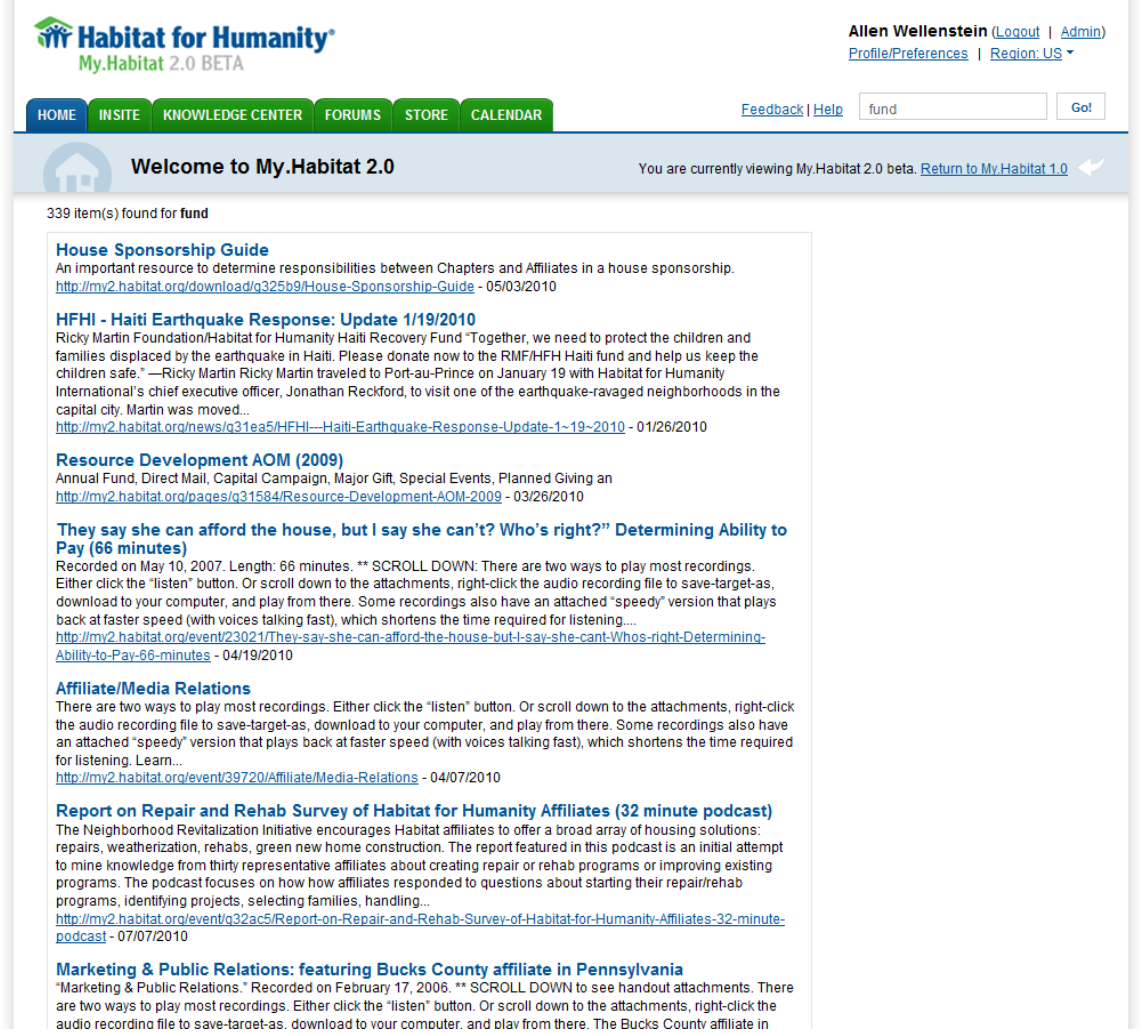
"Users tend to break down into two types," says Wellenstein, "those who use the navigation to find things and those who go right to search."

With curated search, even users who jump right to search get directed to the most relevant, authoritative, and helpful content.

The team maintains the integrity of search results through vigilance.

"We regularly review search logs to make sure that common terms people are searching for are represented in the curated search results with useful, authoritative results," he says. "We can set synonyms, so if someone is typing 'green construction' they get directed to the 'sustainable building' topic in our *Knowledge Center*."

"For terms that are not represented by topic or type tags in our taxonomy — say a particular program name — we can create search pages that return when users enter that name showing the information and links they are most likely looking for."



Pictured: An example of a search results page.

MEASURING SUCCESS

Often, the best way to figure out if you've succeeded is to look at what your goals were when you started. For HFHI's redesign project, the following table provides an at-at-glance view of the project's goals and outcomes:

GOAL VS. OUTCOME	
Goal	**Outcome**
Improve ease of use and access for users	• Approximately 60 percent drop in "where do I find...?" questions. • The updated user profile and preferences has provided much easier user profile management, thus decreasing significantly support requests for things such as email address and password changes.

Highlight the HFHI recommended/vetted approach so that affiliates can quickly find key information	• Improvements to the affiliate Samples Database in the US and increasingly in regions across the globe. • Improvements in integrated learning and knowledge-sharing strategies, such as the Affiliate Support Center accessing information to respond to call center questions, conference calls reinforcing use of affiliate samples, and workshop training sessions. • Regional preference options that make finding locally relevant information easier and faster. • Affiliate Operations Manuals and other resources that provide Habitat's recommended approach and link users to multiple external sites/resources that are essential for their work.
Enhance the ability to report on usage, satisfaction, and other key indicators	• InSite updates are now more timely.
Increase the number of tools and resources available worldwide	• More content is now offered that doesn't depend on one person traveling across the globe. For example, face-to-face training isn't required to increase knowledge sharing. • Engagement of nearly 150 people in HFHI with shared accountability for high-quality content.
Use reliable processes to ensure that information can be updated as fast as conditions, regulations, and other things that impact our work	• Reduction of the "hassle factor" for users in posting and finding information, including better content organization.
Build commitment for achieving and maintaining high-quality solutions through engagement of a cross-functional team of sponsors, publishers, and content contributors	• The ability to use multiple indicators to measure factors such as usage and satisfaction so that the team can easily adapt its approach and continue to meet and exceed user expectations.

Quality vs. Quantity

Reducing the amount of content on a site seems like an unusual measure of success, but for HFHI it was.

"Decreased content, believe it or not, is a significant measure of success for us," says Hancock. "The initial extranet and intranet were described as 'Grandma's Attic.' There was a lot of useful information within, but incredibly difficult to find due to such a large amount of outdated and abstract content surrounding it."

"Once we got a handle on the publishing and created quality control processes, we saw a significant decrease in content, which in our case was a really good thing. The useful information surfaced much quicker for the user and therefore increased the success of the user's visit."

LESSONS LEARNED AND BEST PRACTICES

HFHI team members outline some of the best practices they learned along the way:

- **The management of content and the consumption of content are two completely different concepts.** "Much of the content was organized for viewing in a way that matched the structure of the organizational chart. Although it was easy to identify who owned the content, it wasn't always so simple for the user to find the content without in-depth knowledge of our departmental responsibilities. MH 2.0 separates the ownership of content from how it's browsed. SharePoint is still used as the CMS — each department or program has a 'publishing site' where they publish their news, FAQs, downloads, events, podcasts, etc., and tag them by topic and type of content. Users then browse content based on topic or content type rather than needing to find the SharePoint site where that content lives." (Wellenstein)
- **Separate the content navigation from the ownership.** "Try to resist the temptation to organize the navigation based on the organizational chart. Organize via topics and types of content that the general end user will be familiar with right out of the gate." (Norris)

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.

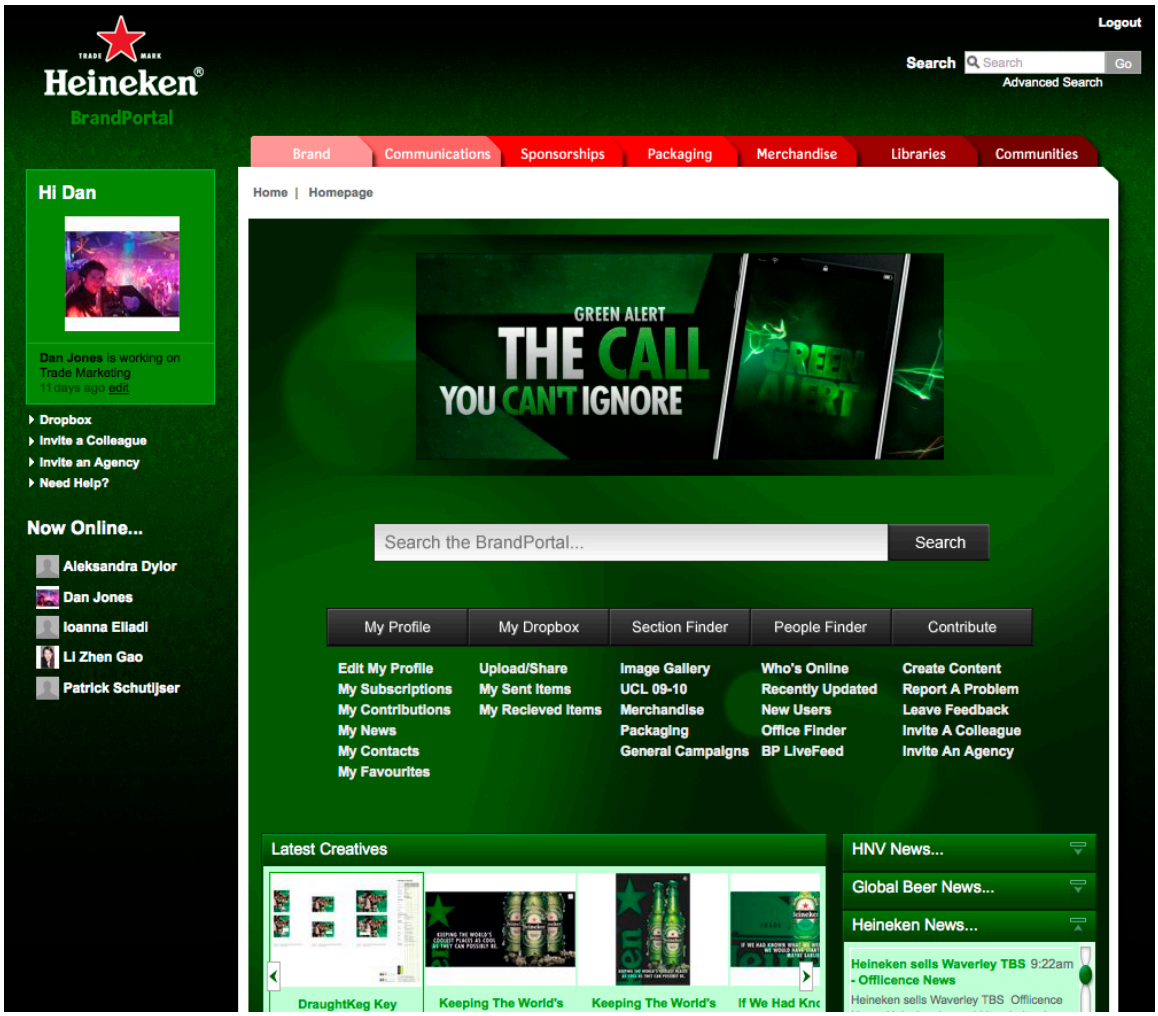
A second goal of the site is to promote communication and collaboration, from top-down and bottom-up. To this end, the site began offering community areas for collaboration and idea sharing in 2009.

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.

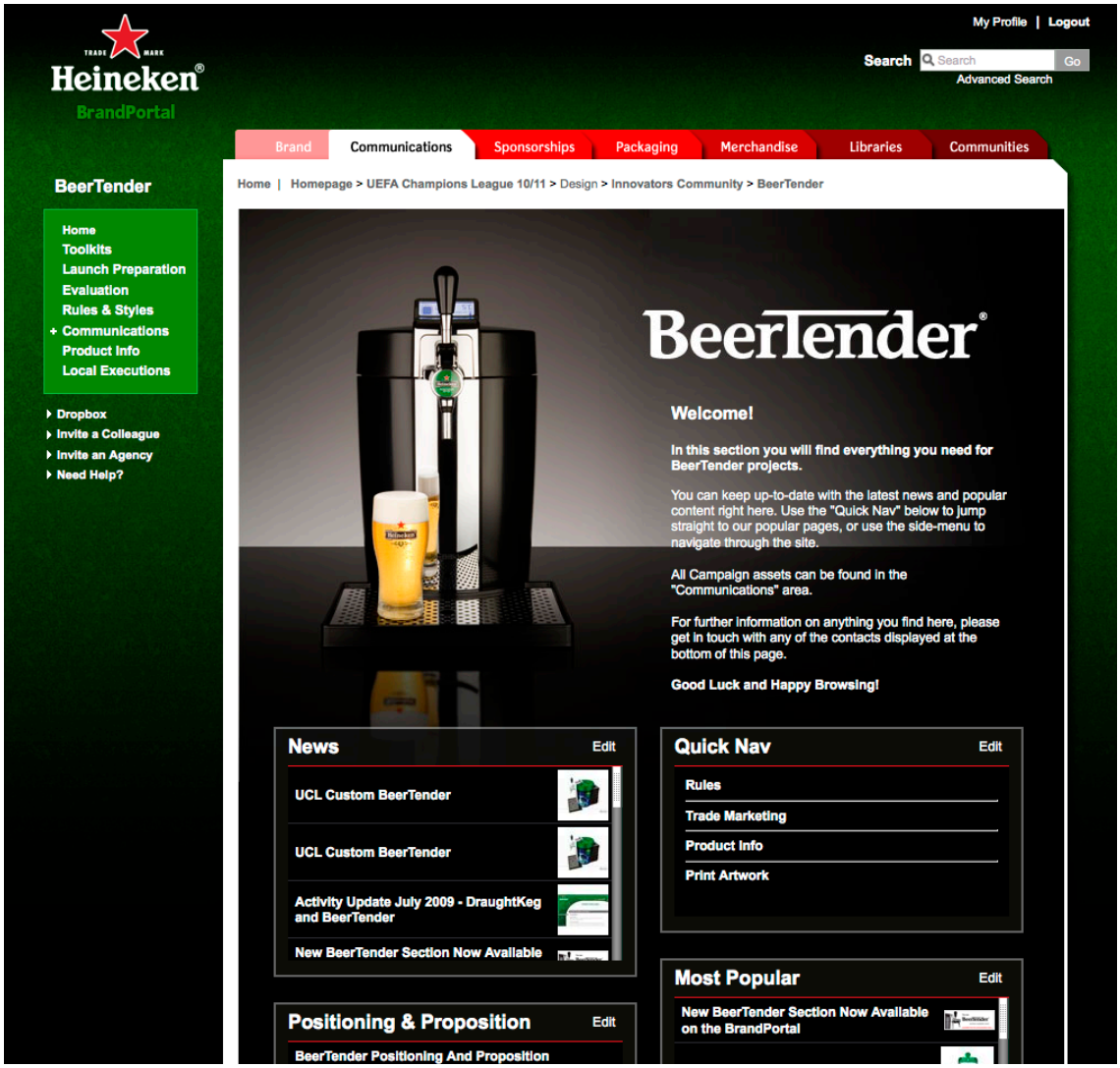
The homepage also reflects the new focus on community and sharing, listing who is currently using the intranet.

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.



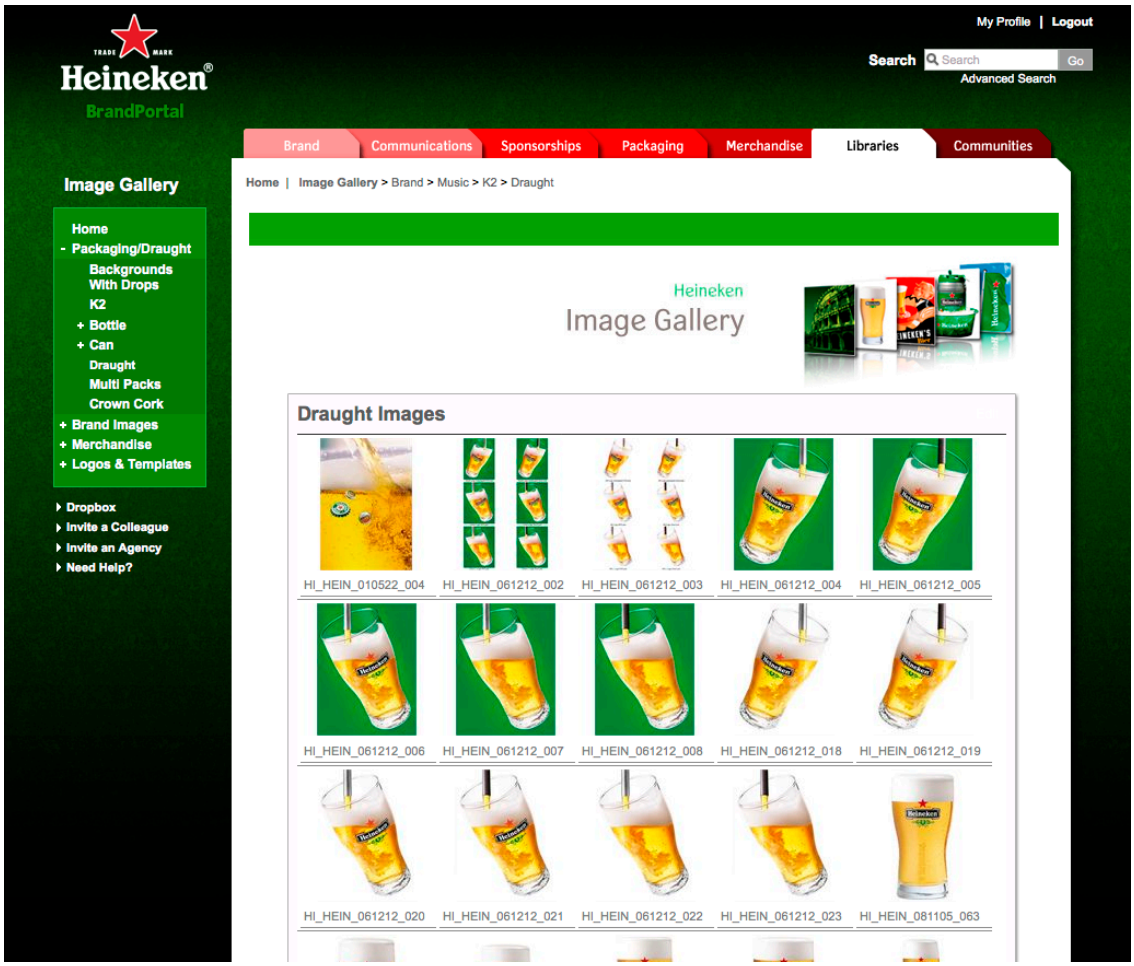
Pictured: The BrandPortal homepage focuses on the site's two key goals: finding assets and building community. A search box is the primary element on the page, along with navigational quick links. Users currently online are listed on the side of the page.

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.



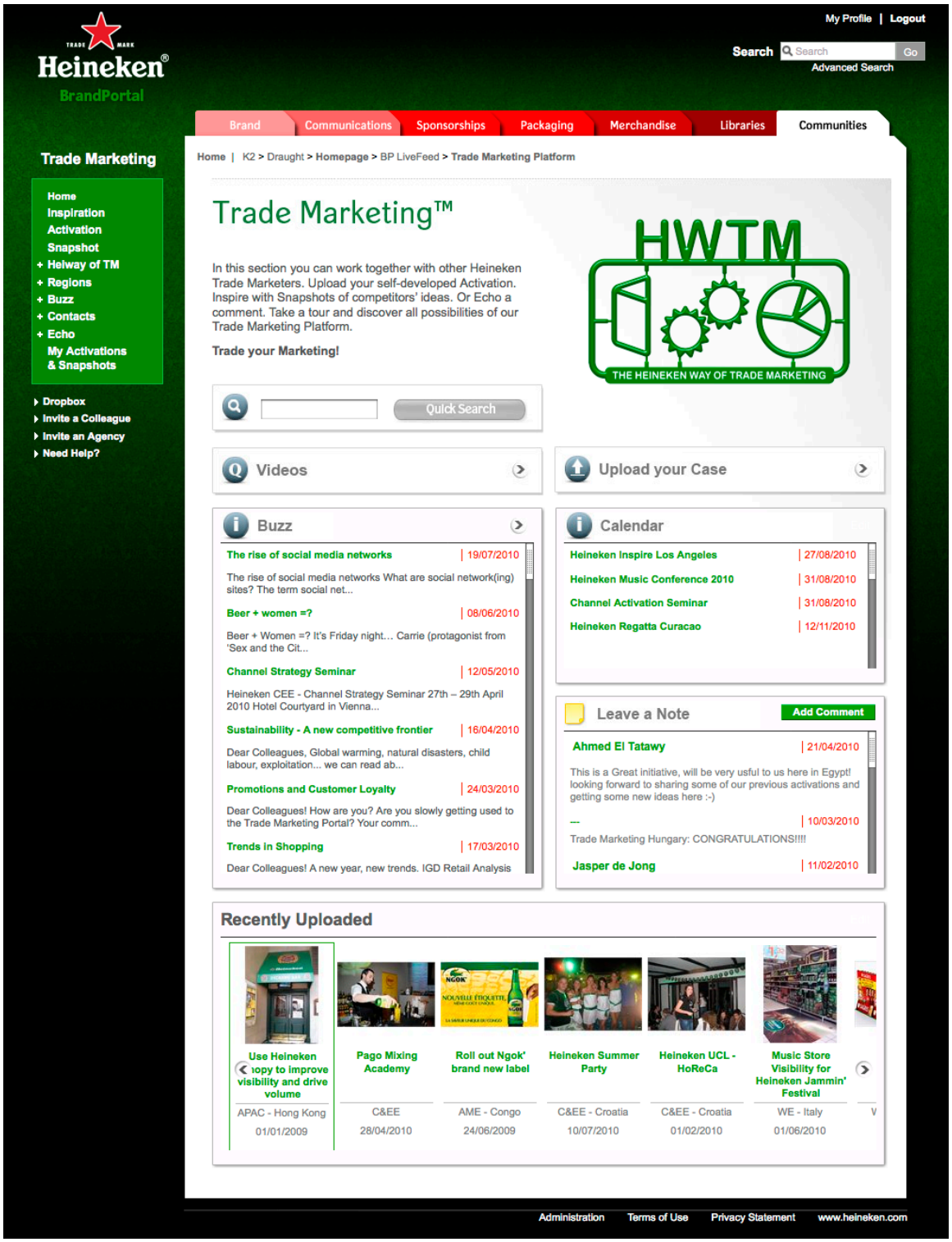
Pictured: The *Image Gallery* collects images from each campaign, as well as images used across campaigns, giving users an alternate way to find assets in a central location.

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.

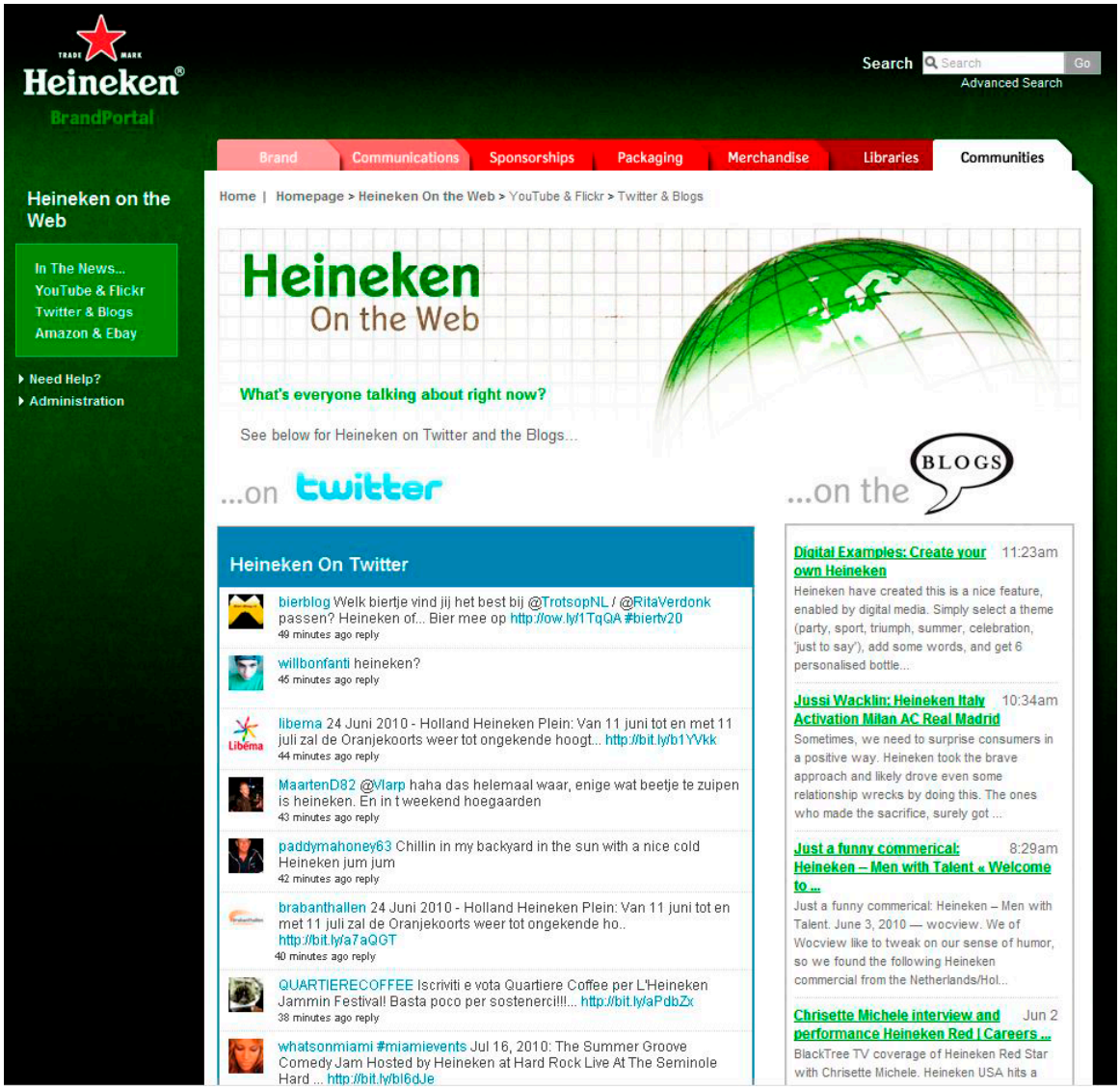


Pictured: The *Trade Marketing Platform* lets worldwide users share ideas and inspiration; it's one of the most popular areas on the site.

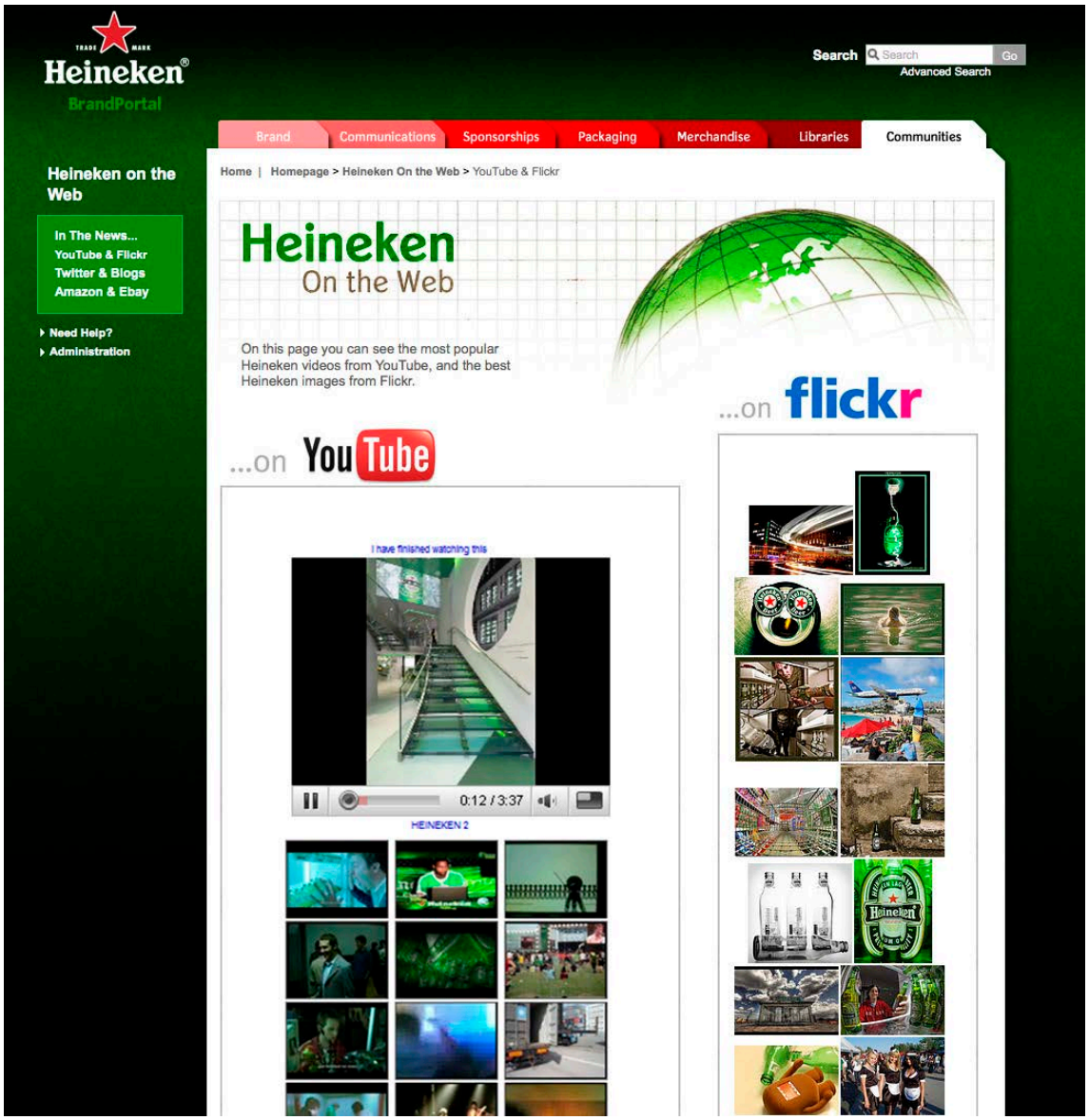
The team brought the Internet onto the intranet by creating *Heineken on the Web*, a section of the site devoted to seeing and hearing what the public is saying about the

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.

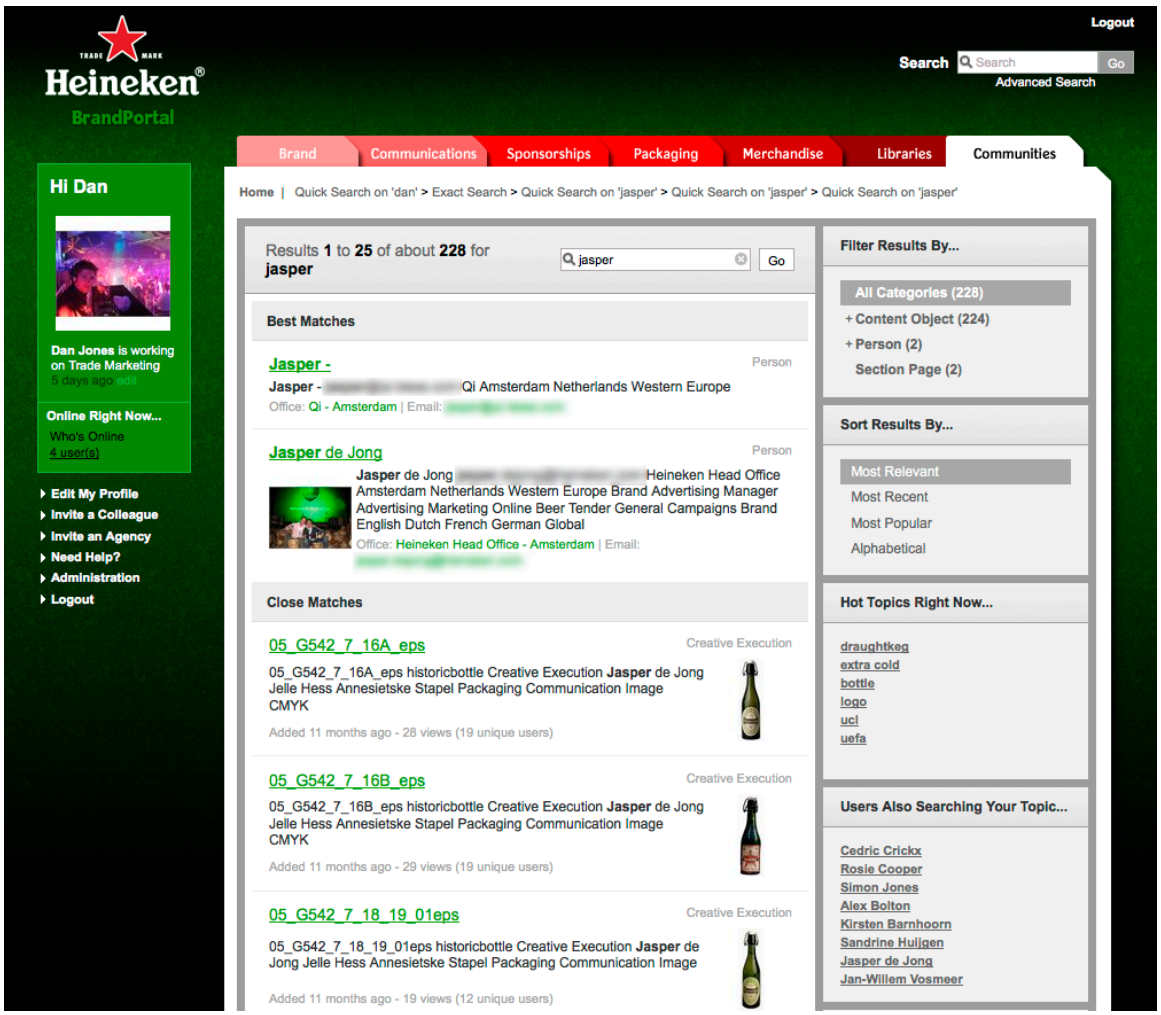


Pictured: Heineken-related videos posted on YouTube and images posted on Flickr also appear on the site, giving users a sense of how the brand is being portrayed.

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.

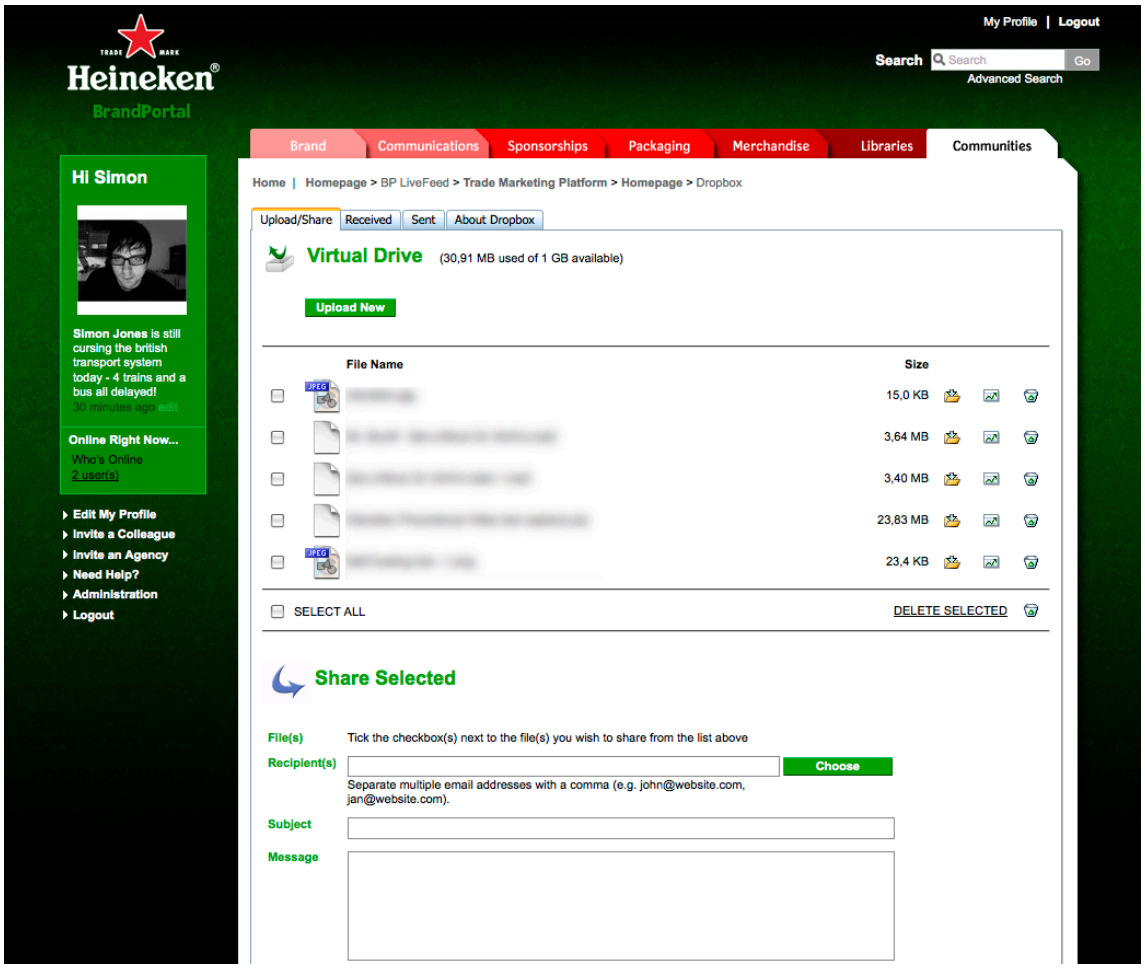


Pictured: The team revamped the search based on survey complaints from users. Now, results are no longer separated by type; *Best Matches* and *Close Matches* are highlighted; and filters and community aspects are listed down the right side of the page.

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:

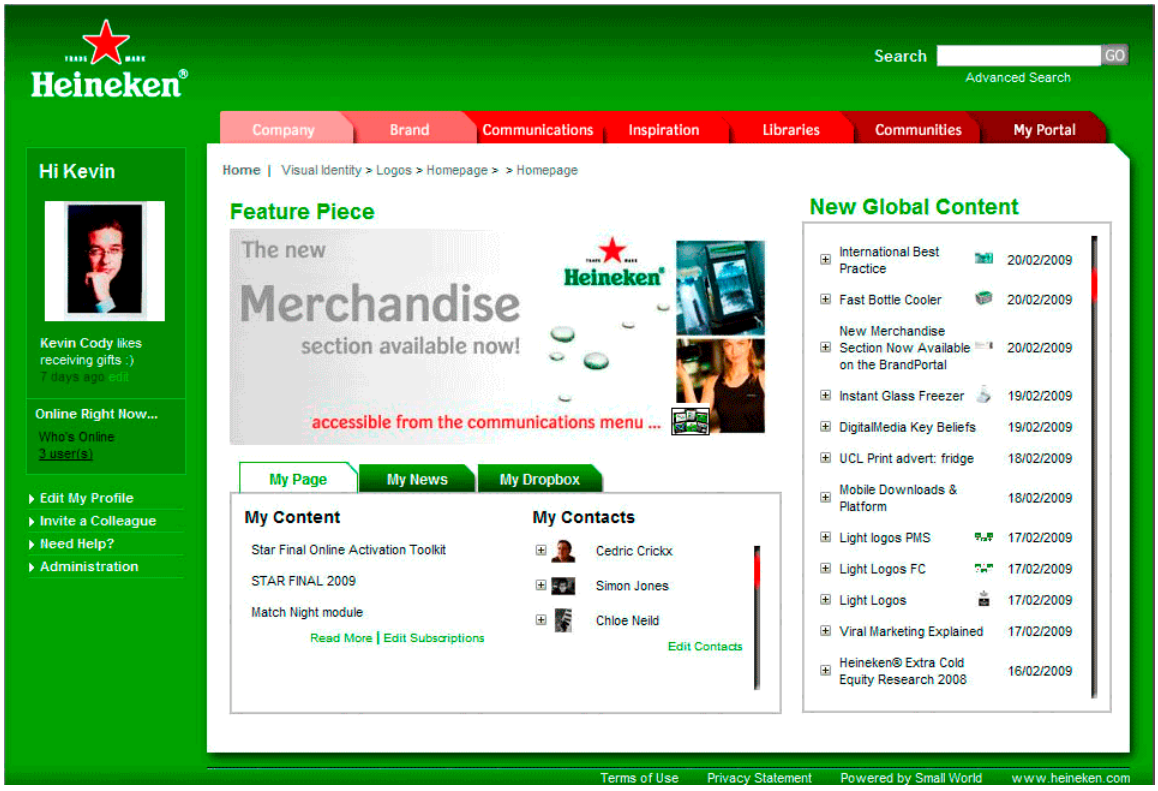
- Promote a single brand message worldwide to increase efficiency

- Improve communication from the top down and bottom up

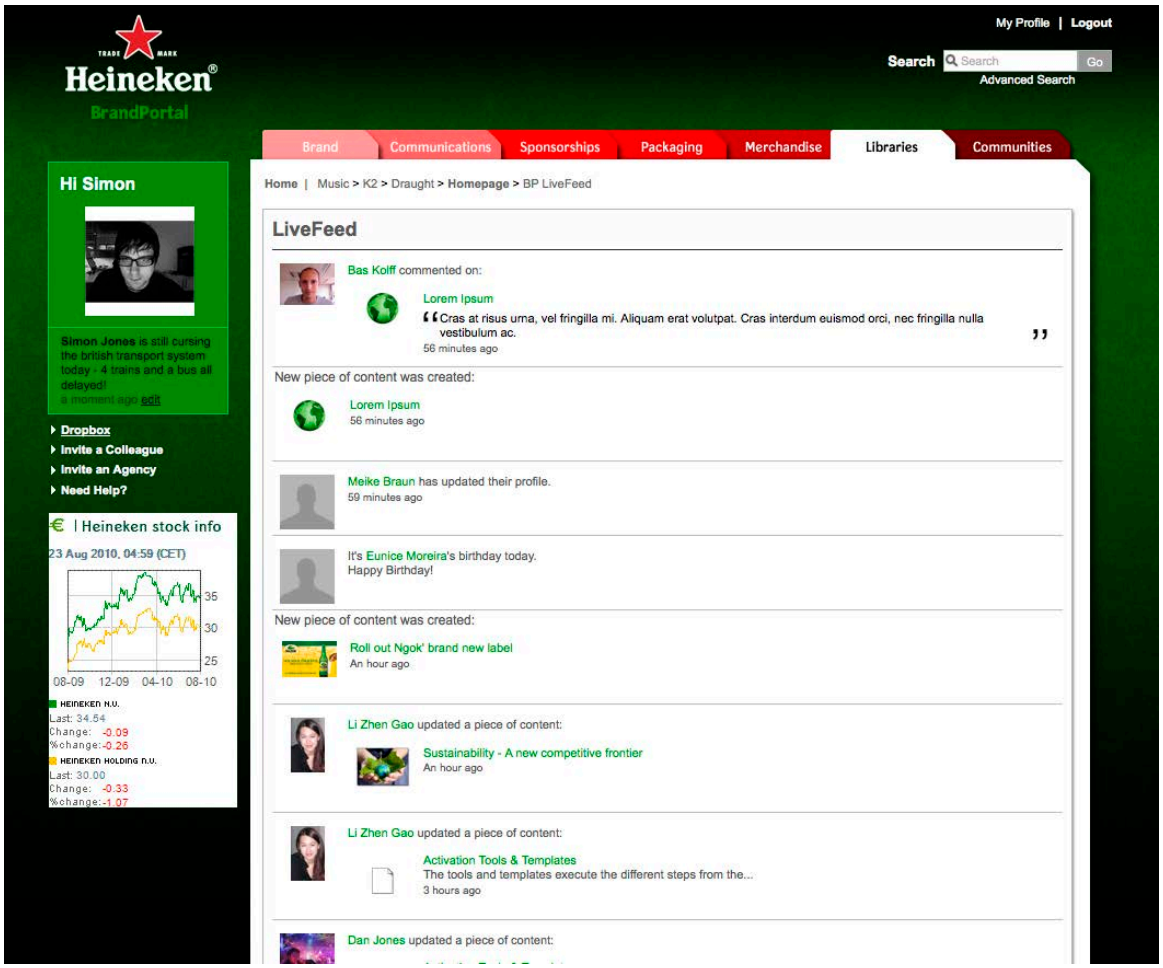
The BrandPortal has become a central place for managers to distribute new campaign artwork and guidelines, best practices, news, and communications. And that centralized approach to distribution has had a dramatic impact on the company's efficiency.

"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.

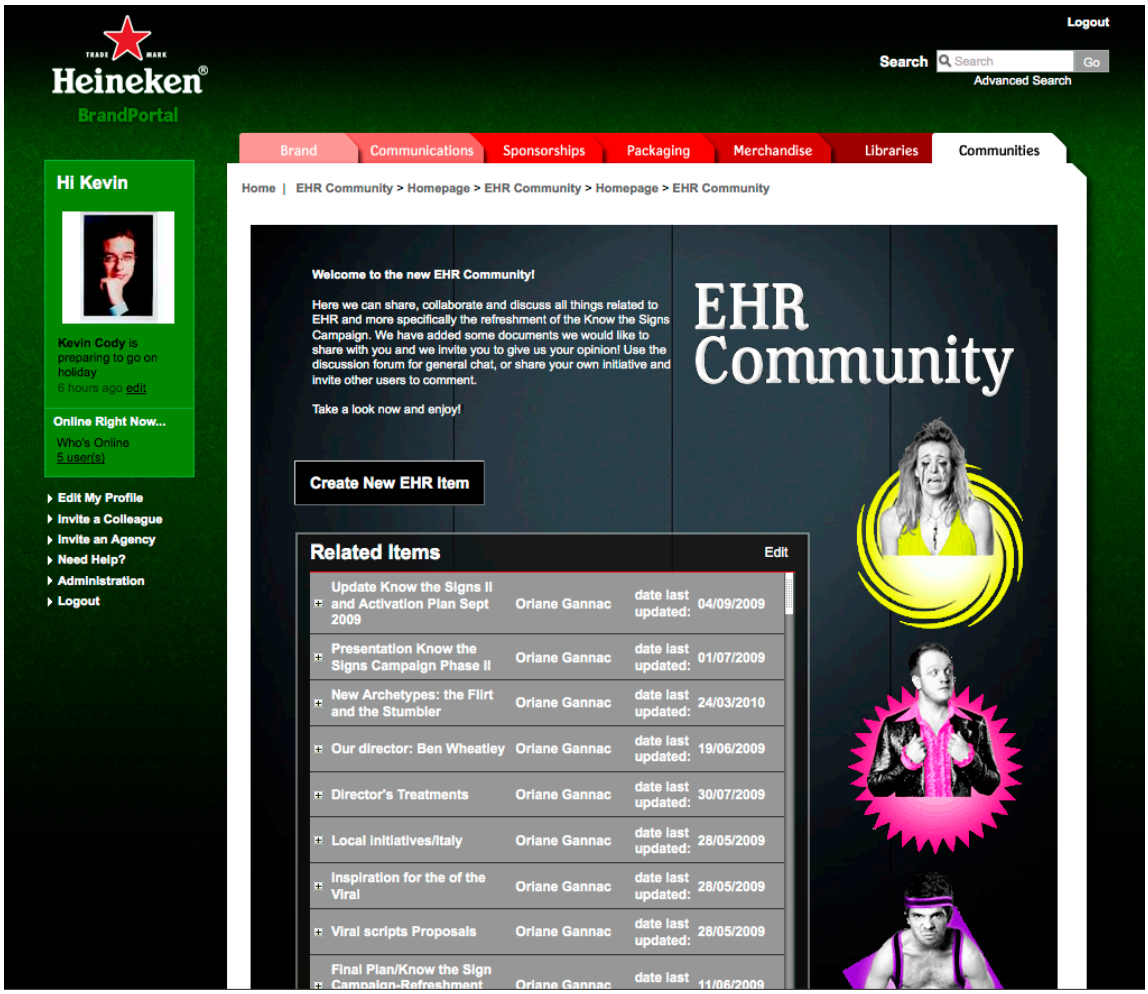
Shortly after the success of the first collaborative community, *Enjoy Heineken Responsibly,* which launched in the spring of 2009, the more sophisticated *Innovators Community* was launched. And that was followed by a series of new communities.

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.

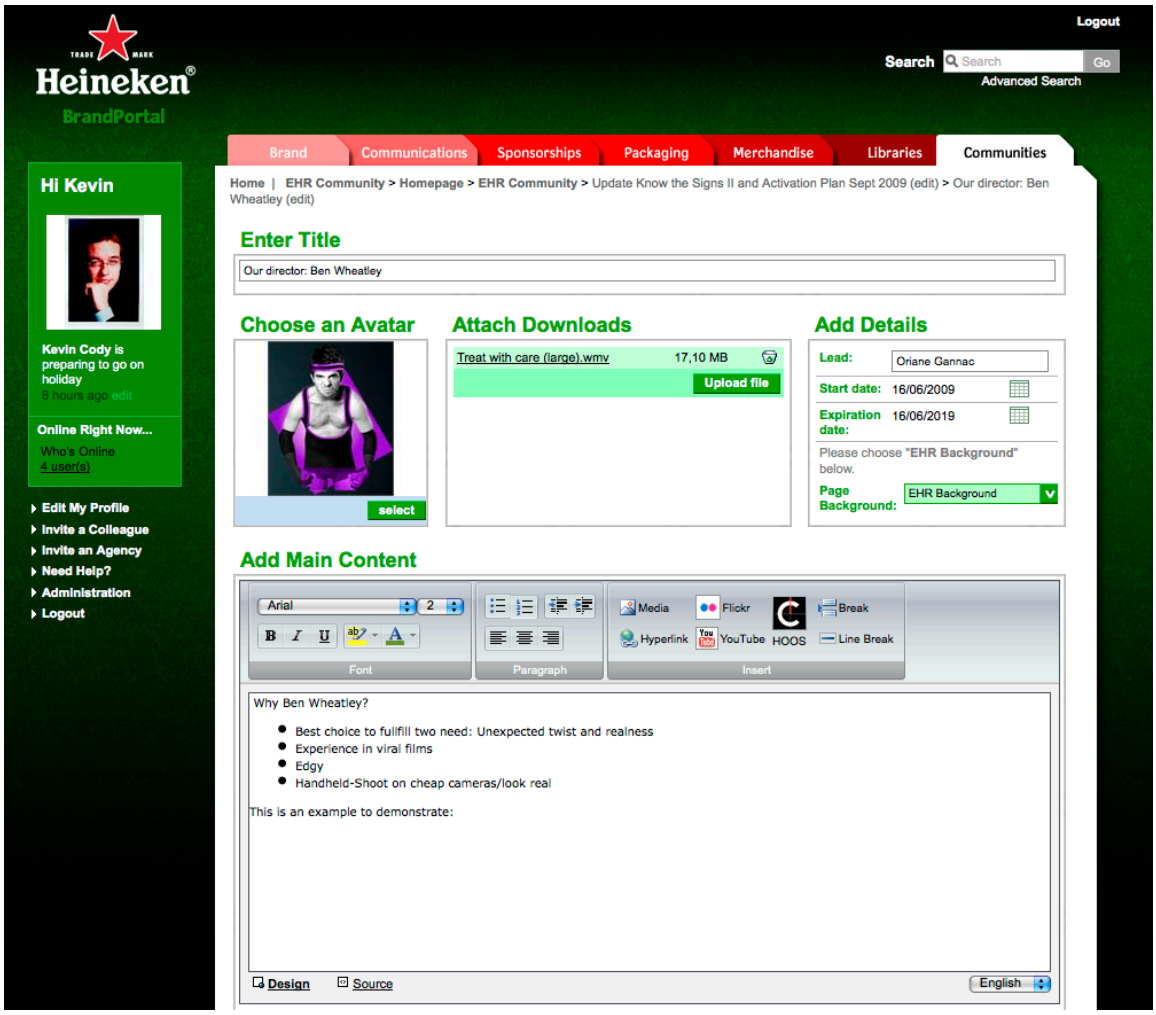
The final go-ahead to proceed with an idea is given by one of the innovation managers using the online infrastructure provided by the *Innovators Community*.

With the success of these early communities, it didn't take long before other communities of interest appeared.

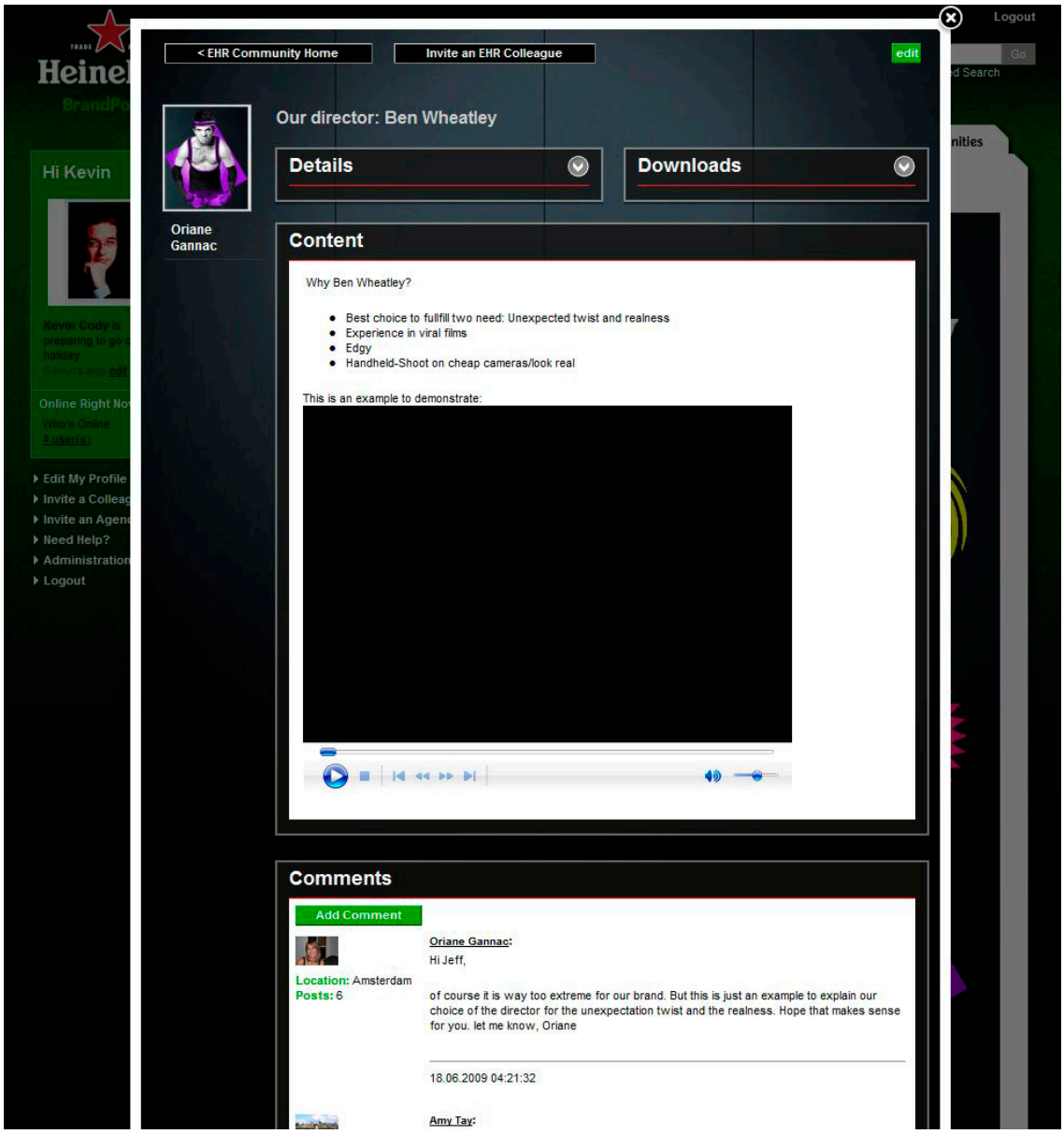
"Word traveled quickly," says Cody. "And now, 12 months after the launch of the *Innovators Community*, we have a trade marketing platform, a locally developed merchandise community, and several regional collaboration communities.



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.



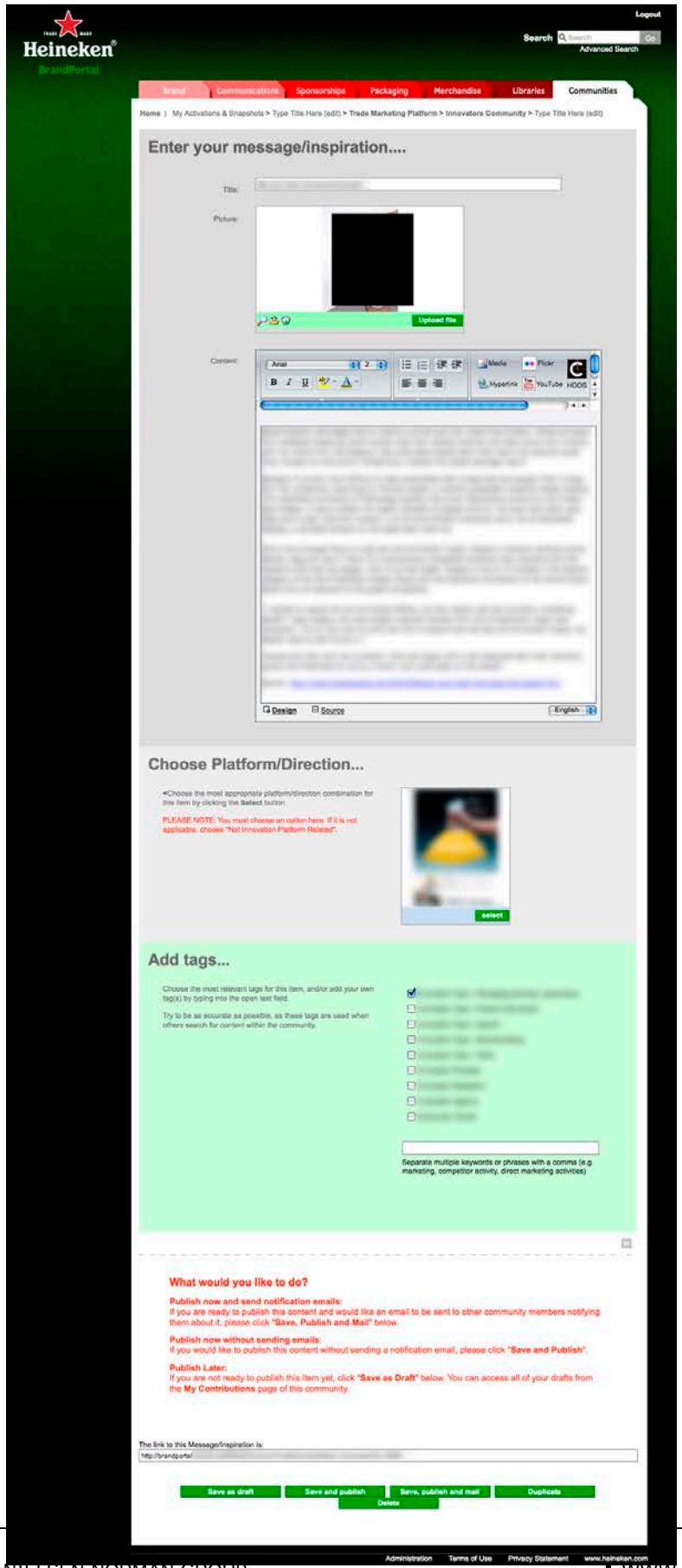
Pictured: To encourage collaboration, it was important to keep the content posting template as simple as possible. This screen shows the EHR input form, where an element of fun was included: users can choose their own “know the signs” avatar.



Pictured: The EHR content view. Users are encouraged to comment directly on discussion postings.


Logout
Heineken
BrandPortal
Search
Search
Go
Advanced Search
Brand
Communications
Sponsorships
Packaging
Merchandise
Libraries
Communities
Innovators Community
Home
My Profile
My Contributions
Shared Contributions
Innovation Process
Community Members
About/Help
Hi Dan
Dan Jones is working on Trade Marketing
5 days ago edit
Invite An Innovator
Home | Music > Merchandise > Innovators Community > Americas Community > Innovators Community
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
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 Innovation Dire...
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
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.


Heineken
BrandPortal
Logout
Search
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:
Upload file
Content:
Media
Flickr
Hyperlink
YouTube
HDDS
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.

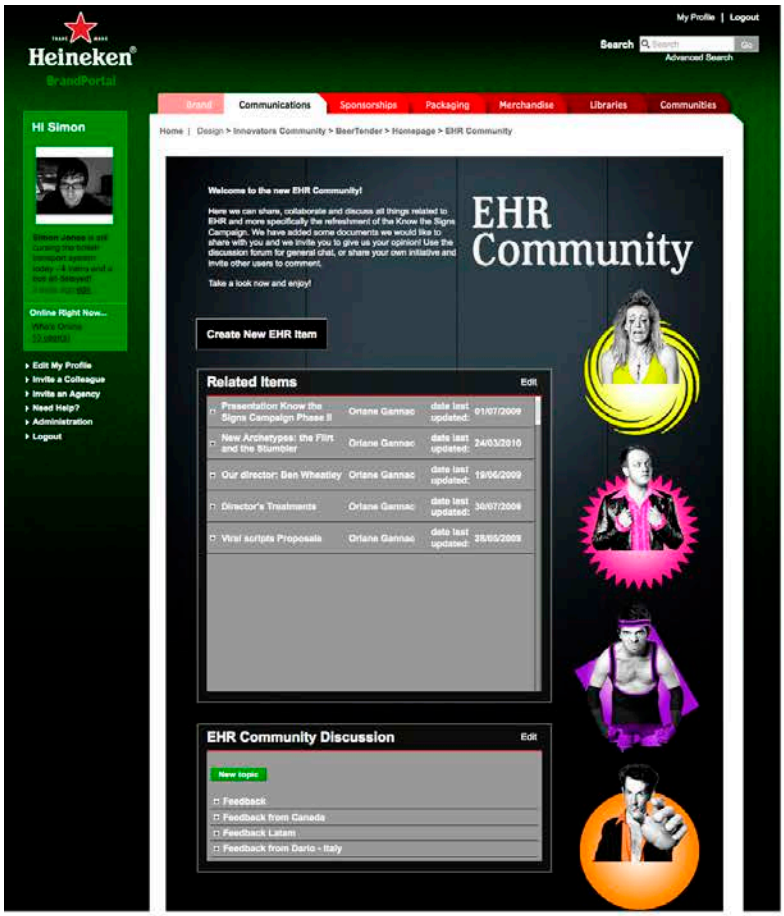
The company's agency partner, SmallWorlders, jointly manages the site with Heineken and administers the aspects of the BrandPortal relating to section creation, content population, site administration, and technical updates.

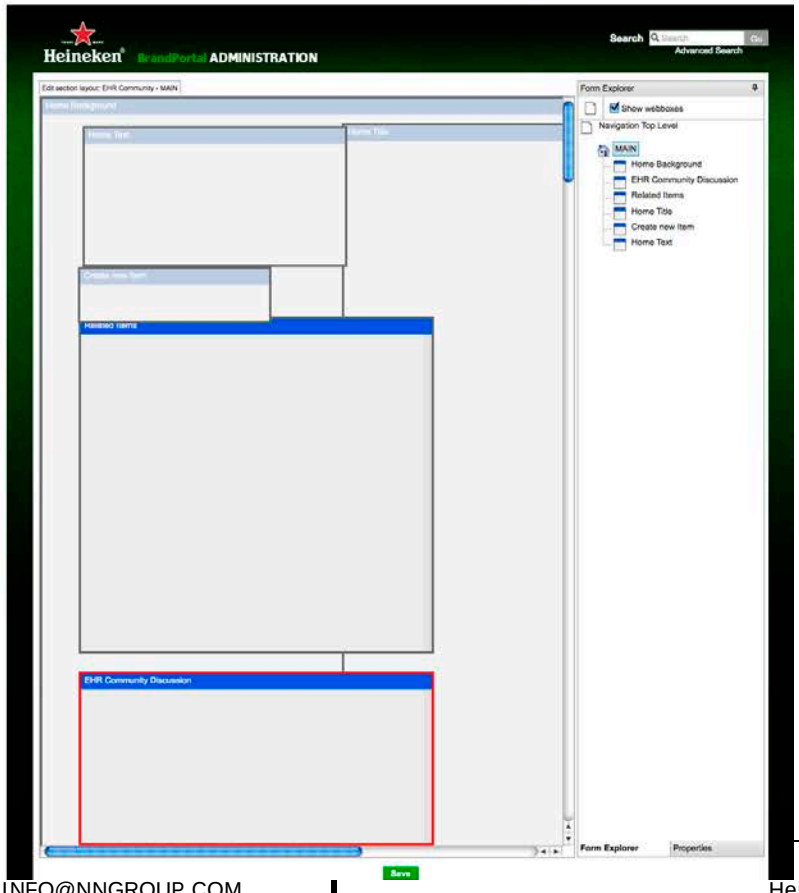
SmallWorlders content owners and department heads within Group Commerce typically have one-to-one contact with SmallWorlders to coordinate updates, maintenance, and new section builds.

"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
BrandPortal
My Profile | Logout
Search
Advanced Search
Brand
Communications
Sponsorships
Packaging
Merchandise
Libraries
Communities
Home | Design > Innovators Community > BeerTender > Homepage > EHR Community
Hi Simon
Online Right Now...
Edit My Profile
Invite a Colleague
Invite an Agency
Need Help?
Administration
Logout
Welcome to the new EHR Community!
Here we can share, collaborate and discuss all things related to EHR and more specifically the refreshment of the Know the Signs Campaign. We have added some documents we would like to share with you and we invite you to give us your opinion! Use the discussion forum for general chat, or share your own initiative and invite other users to comment.
Take a look now and enjoy!
EHR Community
Create New EHR Item
Related Items
Edit
Presentation Know the Signs Campaign Phase II
Orlane Gannac
date last updated:
01/07/2009
New Archetypes: the Flirt and the Stumbler
24/03/2010
Our director: Ben Wheatley
19/06/2009
Director's Treatments
30/07/2009
Viral scripts Proposals
28/05/2009
EHR Community Discussion
New topic
Feedback
Feedback from Canada
Feedback Latam
Feedback from Dario - Italy


Heineken
BrandPortal ADMINISTRATION
Search
Advanced Search
Edit section layout: EHR Community - MAIN
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

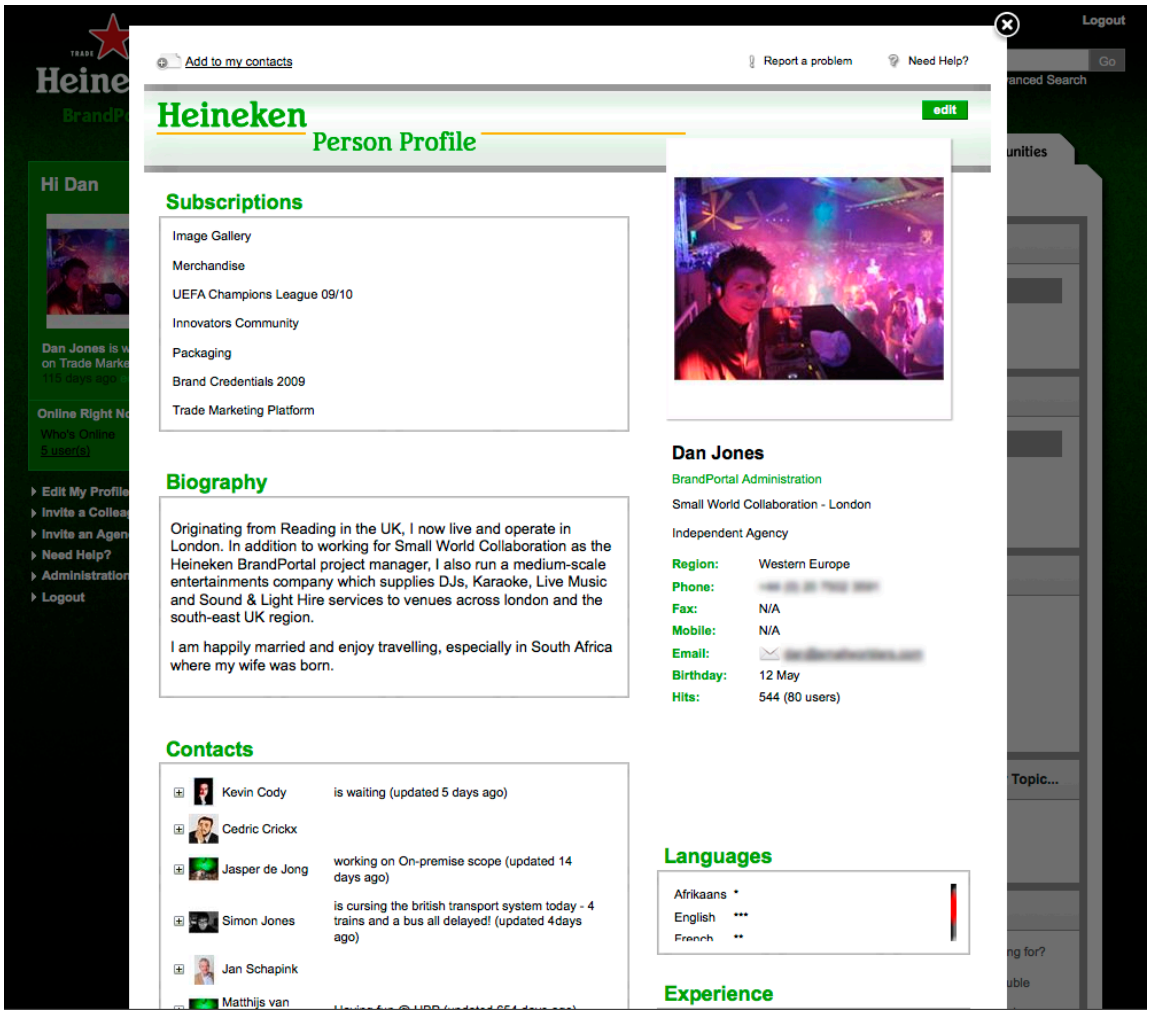
Pictured: It's easy to experiment with sections using the drag-and-drop interface. If a section design doesn't work, the team can quickly and easily update it, sometimes within minutes.

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.

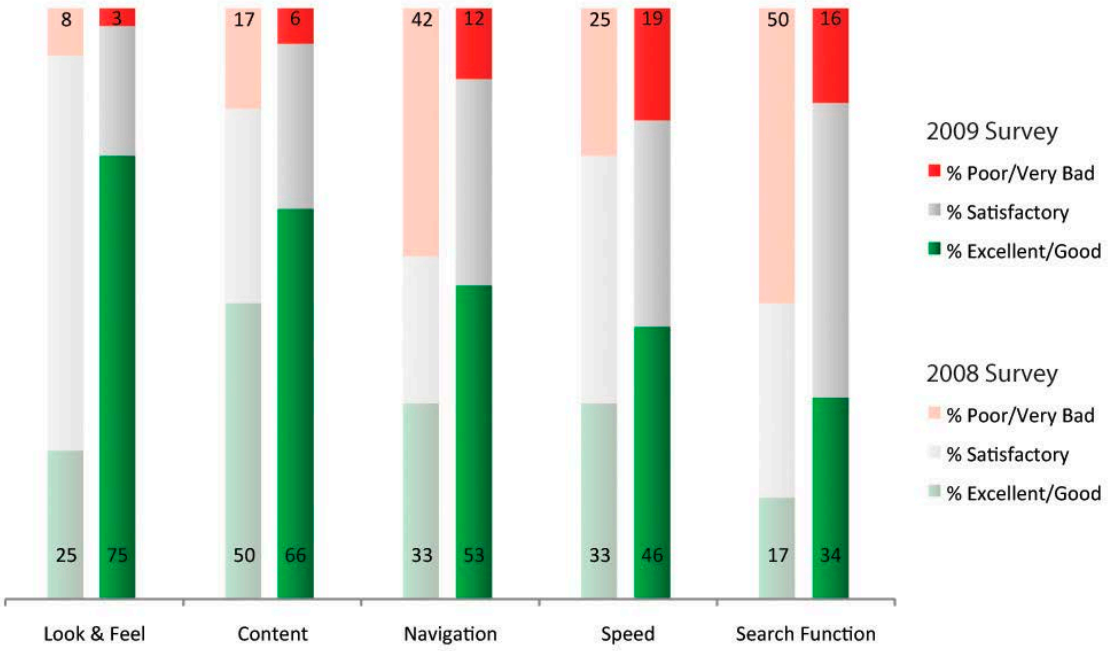
“We have successfully compiled what was once a disparate collection of asset systems into one site, with a single login and search for all of Heineken’s brand and campaign assets,” says Van Iterson. “As a result, we’re more efficient and the single source ensures a single brand message worldwide.”

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.

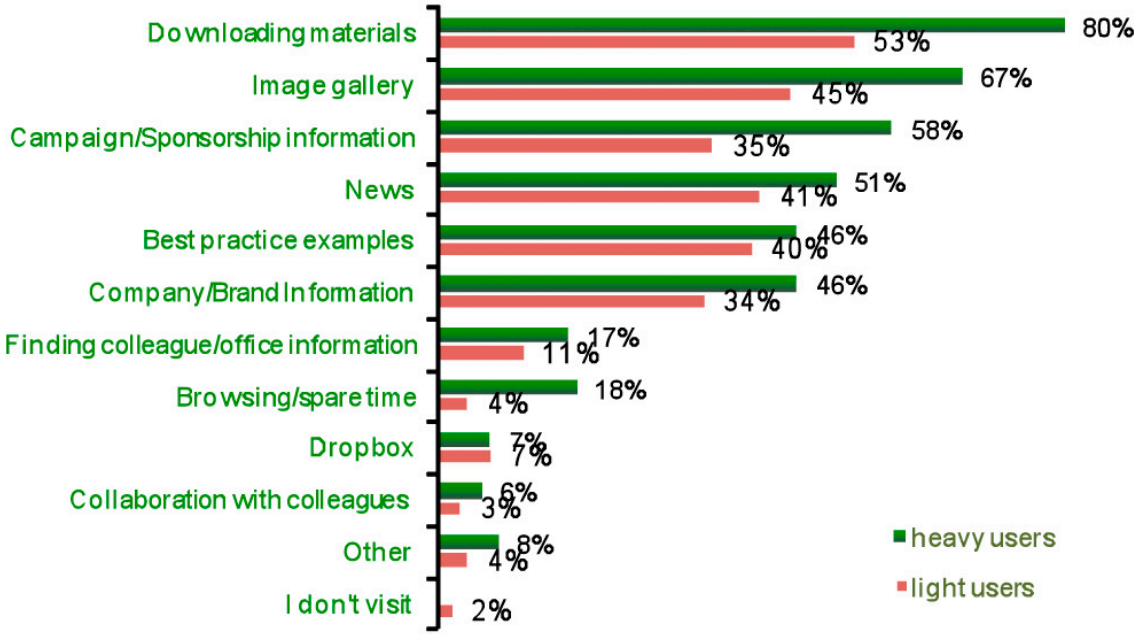
"While this was good news at the time," says Jones, "we could also see that search and speed still underperformed compared to the other categories. Since the survey [was conducted] we have improved on both of these and expect them to score higher when a new survey is carried out."

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)

KT

Using the intranet:
KT is the Republic of Korea's largest information and communication technology company. It employs 37,000 people and serves 20 million customers every year.

Headquarters: Seongnam City, Gyeonggi Province, Republic of Korea

Number of employees the intranet supports: 37,000

Company locations: KT operates in seven countries including Russia, Mongolia, Uzbekistan, and Vietnam

Locations where people use the intranet: Russia, Mongolia, Uzbekistan, and Vietnam

Annual sales: $13.2 billion (December 31, 2009)

Design team:
Seven in-house people formed the core team, with 15 additional people from Samsung SDS.

Members:

In-house: Soon-Ku Woo, Seung-Jin Kim, Geun-Young Han, Seung-Heon Lee, and Chan-Ho Jung

In-house leadership: Han-Suk Kim, In-soo Shin, Young Kim, Jong-Ho Noh, Ho-jae Lee, and Young-Pyo Cho

Samsung SDS: Hong-Gi Kim, Gyeong-Hyuk An, Jeong-Hoon Park, Dong-Heun Hwang, Sea-Young Jung, Ji-Hong Bea, and Ho-Jin Kwang

SUMMARY

In the space of only six months, the KT intranet team turned an information-based site into a collaborative workspace, encouraging communication and idea sharing. More than a standard data resource, kate2.0 acts as a communication hub among workers, and includes personal workspaces and collaboration tools.

Through talking to users, team members found that most employees were using the previous site only to check email. However, employees wanted rich features on the site, like those they were accustomed to using on the Web. Although surveys helped the team get started, its members found that talking directly to users was essential to understanding their needs. In addition to analyzing the business processes of business units, the team interviewed and surveyed managers and employees.

The team considers the site to be in beta, recognizing the need for it to change and adapt over time.

The homepage reflects the emphasis on work and collaboration. Personalized work tools let users see *My Tasks* and *My Schedule* in the upper left of the page. This information is integrated with Outlook as well as with legacy systems, making this a central place to see information about all outstanding business activities.

The homepage offers practical links, presented efficiently. The *SmartSearch* appears at the top of each page, allowing employees to find site content as well as colleagues' contact information. The middle of the page features company, business unit, and subsidiary news. *Services* provides links to business-related tools.

The page promotes interaction and involvement, with a section dedicated to *Action for ACTION*. This area encourages employees to solve problems, enhance efficiency, and share ideas. A tag cloud shows users the topics that are currently popular in community cafés and employees' personal *kateBlogs*.

The *Hello olleh* company blog focuses on vision, management values, business philosophy, business-related cultural changes, and objectives. But it's not your standard top-down corporate blog. All users are invited to post in the blog as well as to comment, opening the blog to joint use by all employees.

(The *Hello olleh* blog name is based on the company slogan: *olleh*, or hello written backwards. The slogan emphasizes KT plans to provide innovative services and thinking; in Korean, it also means that the future is approaching. The word has further meaning in the Jeju dialect of Korean, referring to an open pathway or, in this case, a communicative business. It also relates to Ole, a Spanish expression used to express feelings of joy.)

Users can personalize the homepage by moving any business-unit related information, but enterprise information cannot be moved.

The team wanted the design to align with corporate branding, so it used black and red throughout. However, team members didn't want the portal to look like a giant grid, so they minimized the use of heavy black lines and used a white background and shades of grey to keep the design clean.



Pictured: The homepage incorporates business tools such as a calendar, to-do list, and links to processes, as well as information, through news and the enterprise blog. Community and collaboration are encouraged through links to cafés and *kateBlogs*. ("CIC" stands for "Company in Company," one of the company's seven iependent sub-organizations, which has several content areas as noted.)

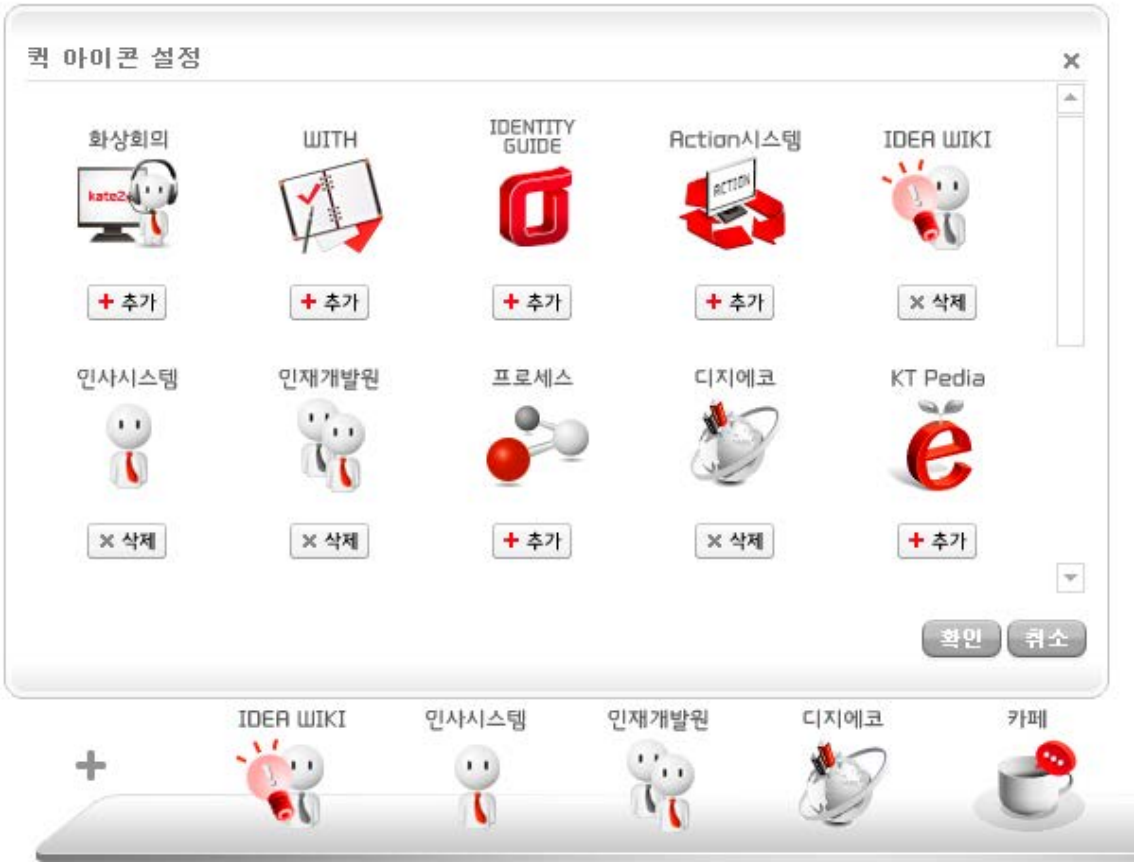
Icons are used throughout the site. Although team members tried to make them as intuitive as possible, they also rely on users' repetitive visits to make the icons clear. The team hopes regular use will help employees quickly learn that the icons provide access to a variety of tools and content.

Within portlet content areas, the plus icon (which turns red when users mouse over it) indicates that users can see more. The question mark icon (which turns yellow) leads to help content. The grey wheel (which turns a darker grey) indicates settings.

The upper right of the page includes another set of icons, leading to popular site areas. The lightning symbol leads to *Quick Write*, which lets users send SMS/MSS, email, or fax; the person represents *My Cafés* (groups the user belongs to); the smiley face represents the user's personal *kateBlog*; the star indicates a personalized list of favorites; and the wheel, as in other site areas, indicates settings.

The bottom of homepage includes *Quick Icons*, which can be added or deleted through *Settings*. These icons link to kate2.0's basic services and tools. Users can add or delete an icon by clicking the plus sign, or can right click to delete an icon.

Heavy use of icons lets the team provide quick access to a lot of content. It remains to be seen how the users adapt to these icons and learn to understand them.



Pictured: The *Quick Icon* area at the bottom of the page displays users' preferred links. Clicking the plus sign on the left exposes options for this area (shown above it in the screenshot). Users can click a plus to add a link or an X to remove a link.

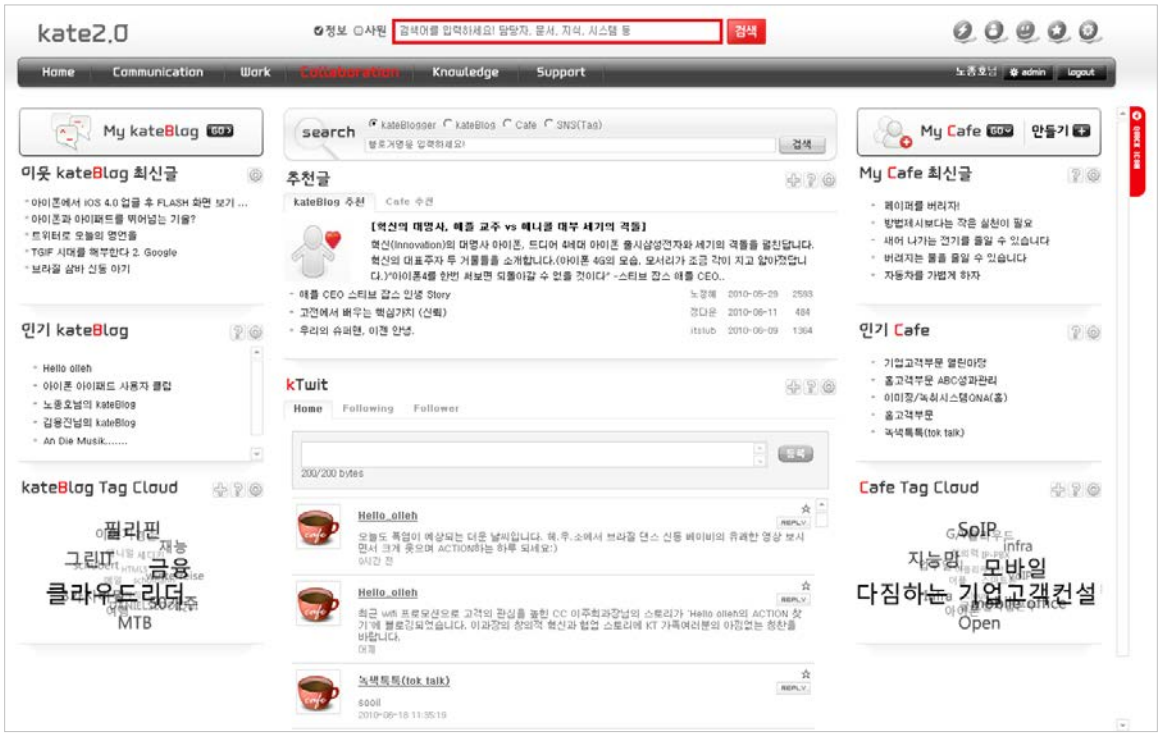
Collaboration was a key goal of the redesign, so designers added an entire site section devoted to collaborative tools. Cafés allow users to set up groups where they can collaborate, share knowledge, and discuss work. These areas can be used to manage project progress or aggregate data.

Every user has a personal blog on the site, called a *kateBlog*, where they can share opinions about work. All employees are invited to post to the company blog, but all have their own personal blogs as well.

kTwit is the company's internal microblogging tool. Employees can communicate with one another by following their colleagues. *kTwit* is also used within cafés so members can communicate with one another or with the café manager.

The main *Collaboration* page acts as a dashboard for the latest information in each area, listing recent *kateBlog* posts, *kTwit* messages, and café activity.

The site's *Collaboration* area has its own dedicated search to help users find relevant information. This content is also available via the full site search. Tag clouds give users quick access to popular topics in blogs or community areas.



Pictured: The site offers many collaborative and interactive areas, including personal *kateBlogs*, *kTwit* microblogging, and cafés, which are areas where teams or groups can share ideas and communicate.

The site provides a wealth of tools to encourage communication as well as collaboration. The online presence tool lets users know who is available online, which is helpful when users want to call or send an instant message, email, fax, or text message through the site.

Employees can find one another's contact information via the site's search or by clicking on the user's name anywhere on the site, including their blog or *kTwit* posts. Each profile contains the expected contact information, but also indicates the user's online presence. A green dot indicates the user is online and that it is possible to contact the user now (red dot = in a meeting; white dot = out of office). From this page, users can email or text a colleague or even see the employee's location on a map, using Open API.



Pictured: Employee profile pages show the user's online presence and relevant information, such as basic contact information, a photograph, and ways to contact the employee via SMS, email, or fax.



Pictured: Clicking on *MAP* in the employee profile brings up a map showing where the employee's office is located.

Employees can send faxes through the site. Faxes can have attachments, but the attachments must be converted to TIF format first. This has caused problems on the site, and the team is working on developing a "preview fax" function to help users catch the mistake.



Pictured: Users can send faxes directly through the site, though they must first convert any attachments to TIF file format.

The SMS/MMS service is the most popular function on kate2.0. The interface's visual design was inspired by the iPhone, which is a key product marketed by KT. Users can send individual messages, or can select a department or workgroup as the recipient, allowing easy one-to-many communication.



Pictured: Employees can send SMS or MMS messages to colleagues directly through the site.

Employees can also make phone calls through the site using an IP-based calling tool. This allows employees to call any KT executive or employee from any page of kate2.0.



Pictured: Employees can call colleagues and executives via the site, on an IP-based calling tool.

As with many intranets, search was a major concern in the redesign. Employees had lost faith in the site's search tools. The team therefore looked to popular Web search tools for inspiration, following their design lead and hoping the familiar interface would aid users. The team runs surveys about user satisfaction to continually improve results.

The tool searches almost all systems used within the company and, as such, keeps results divided by type. This can be confusing to users who don't necessarily care where the content they need is found. However, the site does provide a consolidated view of all result types initially, highlighting the top matches in each search category.

Recommended results appear first, in an effort to quickly direct users to the information they need. Should these links not provide the desired information, additional results are listed by type: *Business Manager* results search the company's database of internal specialists; *Training* results are next, followed by results from the company's knowledge management system. *News* results come from the company's internal broadcasting network as well as selected major external news sites. Users can click to view the full results in any category.

The right side of the page offers additional ways to find information. The column lists *Recommended Keywords* and *Popular Keywords*, assuming that users often look for similar content. The page also tracks the user's personal search history, which can be instrumental in helping users relocate useful content they'd previously found through search. *Past Search Results* are also listed, showing users what they previously searched for and providing the links to those results. Finally, a link to the *User Satisfaction Survey* gives users an easy way to provide feedback about their search experience.



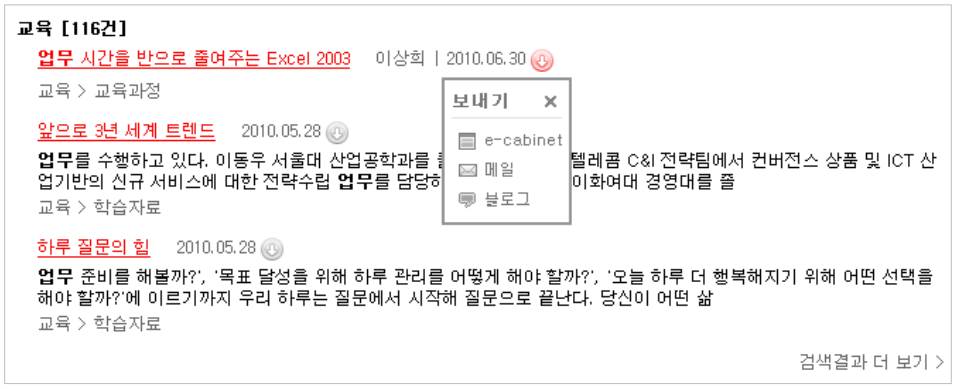
Pictured: The search results for "work," listed by type. Recommended results appear first, followed by the top results in each category.

Within search results, users can preview any result that has an attachment without having to open that result. Users can move the mouse over the attachment's icon and see a preview of content directly on the search results page. This is an added shortcut to let users judge whether a search result meets their needs.



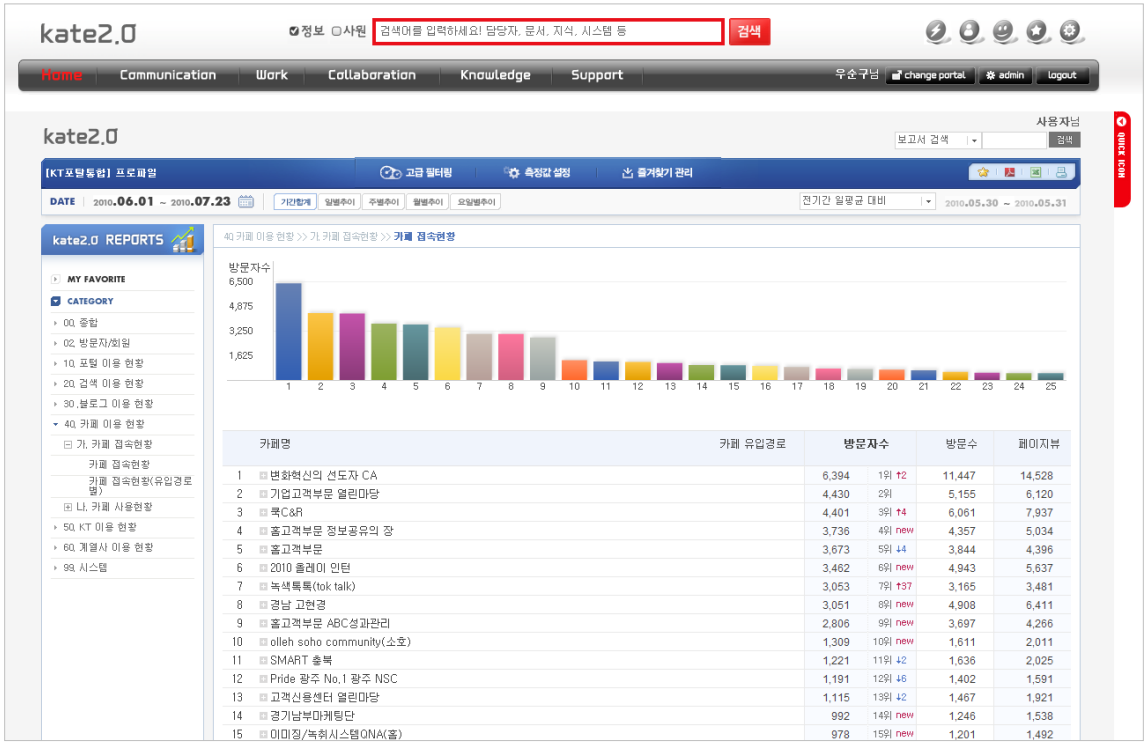
Pictured: Moving the mouse over an attachment icon lets users see a preview of the attachment without leaving the search results page.

Users can send their search results to their own blog, to their email, or to an e-cabinet (an online storage area). Mousing over the arrow icon next to each result displays the sending options.



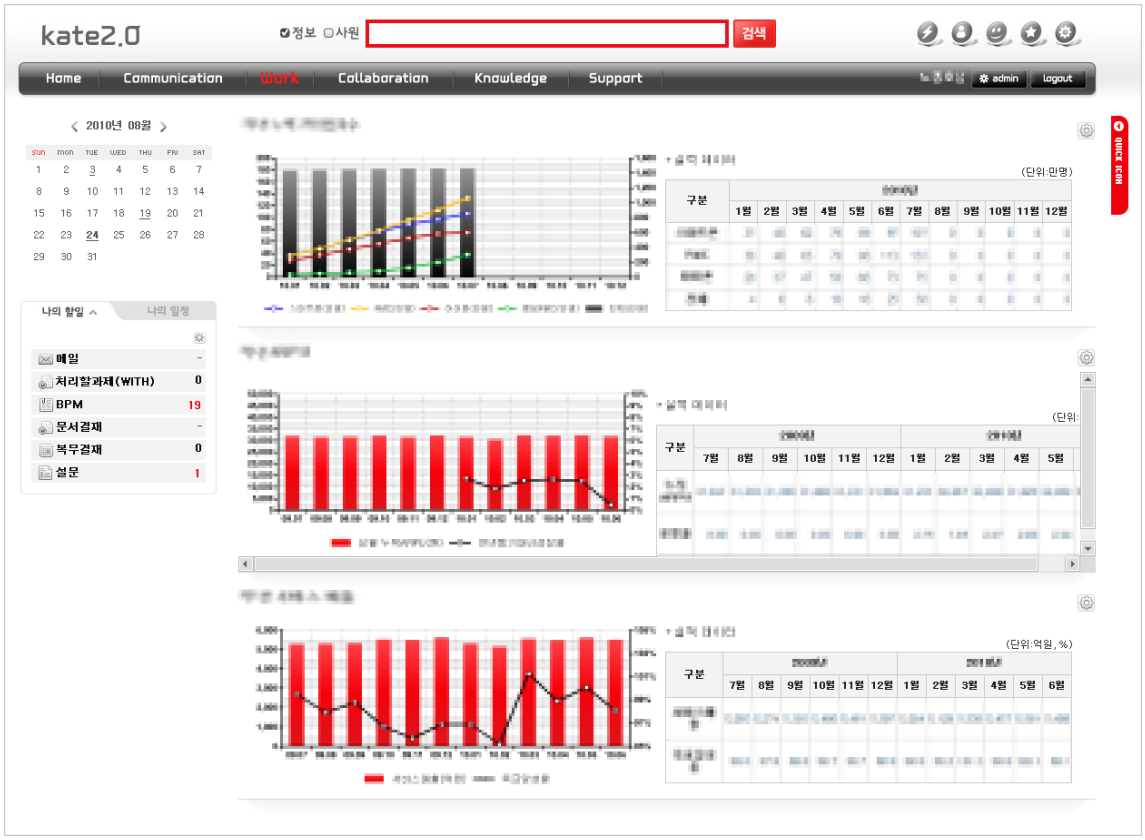
Pictured: Users can save or send search results by clicking the arrow icon next to the result.

Content on the site goes beyond standard corporate information. The team integrated a number of systems into the site framework, allowing users to see data through kate2.0 rather than having to go to an entirely different system. For instance, usage statistics are available on the intranet itself. Team members can see which cafés are driving the most traffic, showing high-level engagement in these collaborative areas.



Pictured: On kate2.0, users can view data, such as usage statistics for the site's café areas.

Data is also integrated in *Work* sections, which are specific to the user's business unit, with a calendar, email, business process information, and links to systems. Different work areas include impressive amounts of data, such as the *Work* screen for the Personal Customer Division. The page shows performance data in dashboard form.



Pictured: Data from outside systems is integrated into the site's *Work* areas, providing dashboard views of various data sources.

In a mere six months, the team took a site that made it difficult to find information and turned it into a collaborative and dynamic site allowing employees and management to connect, communicate, and get their work done.

BACKGROUND

Merging Companies and Fostering Collaboration

When two organizations merge, communication becomes paramount to the success of the newly formed entity. So, when fixed-line service provider KT merged with its mobile subsidiary KTF on June 1, 2009, the event triggered the need to have a single integrated intranet to replace existing intranets in place at both companies. But the project's goal went beyond merely just ensuring the physical integration of the two companies. The team used this as an opportunity to turn the intranet into an Enterprise 2.0 environment with enhanced tools for collaborative communication and community.

“We sought to reinvent our company as a whole into a more upgraded ‘Enterprise 2.0’ company through open innovation,” says Jong-Ho Noh, Deputy Director. “And, to realize this goal, we aimed to build the communication infrastructure required for close, collaborative communication.”

The executives and staff needed a single gateway in which to conduct their daily work. But perhaps most importantly, the two merged companies needed a common community to share ideas and create synergy.

“The basic concept we had in mind was to make sure the development of the portal site was a joint project pursued together with the users,” says Noh.

Keeping true to their mission, the team conducted interviews with each business unit, which they refer to as a CIC (Company-in-Company) to help identify the portal-related requirements. The KT organization is made up of seven sub-organizations based on business areas. The organization refers to these units as CIC and each is an independent unit. By conducting interviews across these units, the team was able to collect information from across the organization.

They also held workshops during each stage of the development process.

And, to compliment what they were hearing from users, the team conducted usage analysis on the site content.

“Most importantly,” says Noh, “we analyzed the usage pattern per content type and had the results reflected in the development of the content for our site. And if there were any differences in opinion between departments or a major decision was required on a particular matter, the Innovative Working Style Task Force would deliberate over the matter and have it sorted out.”

This task force, formed specifically for the portal project, is in charge of all portal development and is thus where team members can turn in cases such as this to sort out conflicts and competing priorities.



Pictured: The homepage of kate1.0, the KT intranet prior to the redesign project.

Toward a More Collaborative Enterprise

Although the previous KT intranet, kate1.0, featured a wealth of information assets, some glaring problems led to low usage. A siloed information security system, for example, created a barrier between business units and prevented users from searching from a unified content structure.

There was a lingering need for a unified information security system and there was a lot of overlapping content across the site. KT and KTF's separate systems caused duplicate tools. This complicated environment led to low usage, even though the platform was rich with information and functionality.

Despite these and other challenges, the kate2.0 project physically integrated two portals successfully and also established a personal working space for employee collaboration.

The project's final goal — to provide a useful and user-friendly workplace available to employees within six months — was easily realized.

The resulting portal is a kate2.0 intranet that is the communication hub among workers, providing personal workspace and collaboration tools. And this was in line with what users wanted.

"The emphasis [of the project]," says Noh, "was to meet the employees' needs."

Understanding User Needs

In order to achieve its goals, the project team drew from a huge trove of research. To start with, the team had six years of usage data from kate1.0 to draw from. This information, along with online surveys, focus group interviews, best practices benchmarking, and analyses of Web logs helped the team identify areas in need of improvement, and helped categorize content and establish a workflow for efficient content management.

Eternal Beta

No organization is static; no intranet should be either. The team realized early on that in order to meet user needs, the platform would have to continue to be responsive and adaptive as the work environment changed over time. During the initial planning stages, it was decided that kate2.0 should always be evolving.

"We agreed that the project should always be in a beta state with room for further improvements at all times, to ensure continued advancements of kate2.0," says Noh. "In other words, we were aware that kate2.0 would not only act as bridge, but as a stepping stone to its future expanded form."

Facing Challenges

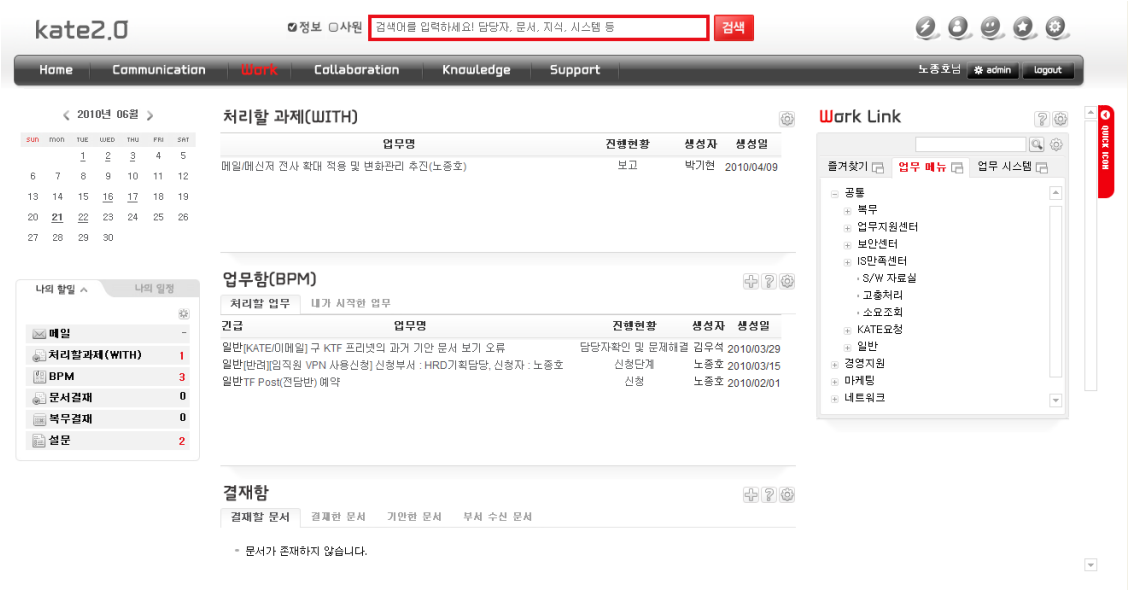
Like many teams, the KT team had to maintain a fixed launch date while accommodating a growing list of requirements. Budget constraints forced the team to curtail the feature list as they went along.

Another challenge they faced concerned decision-making. The team had developed an arrangement by which key decisions were made through the company's Innovative Working Style Task Force, yet they found it was still quite difficult to reach an agreement when faced with differing opinions.

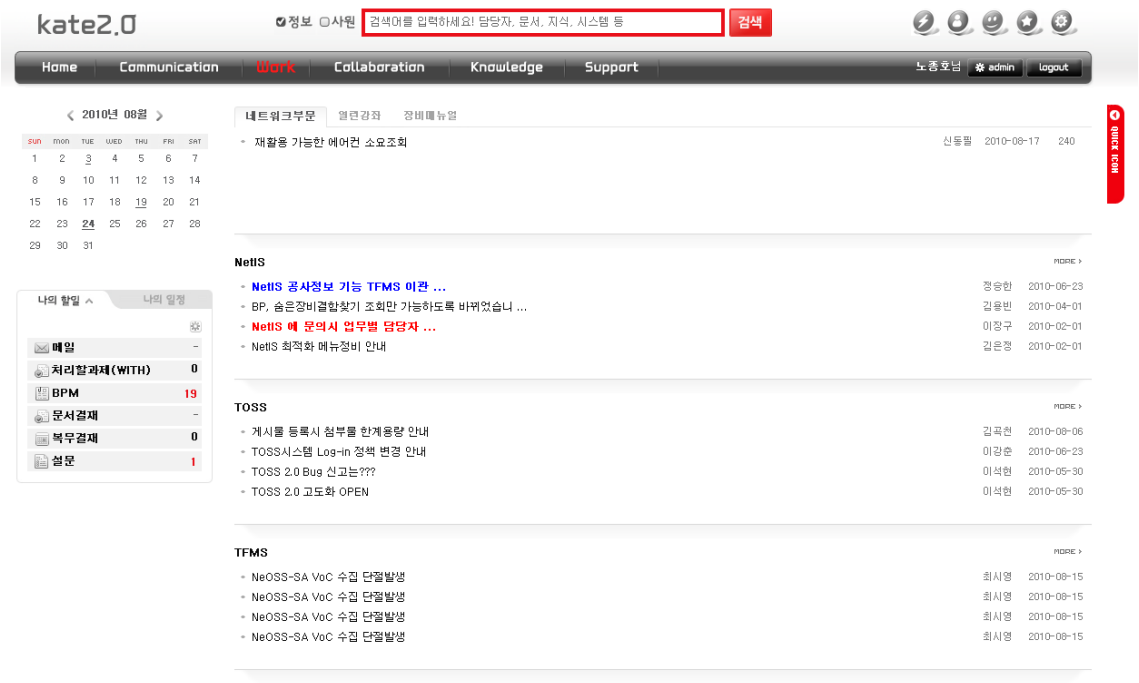
Yet, despite these challenges, the team pulled together to adapt to the changing circumstances and still emerged with a great portal for the organization.

“Our team members were able to overcome such challenges with perseverance and persuasiveness, enabling us to proceed with the project,” says Noh.

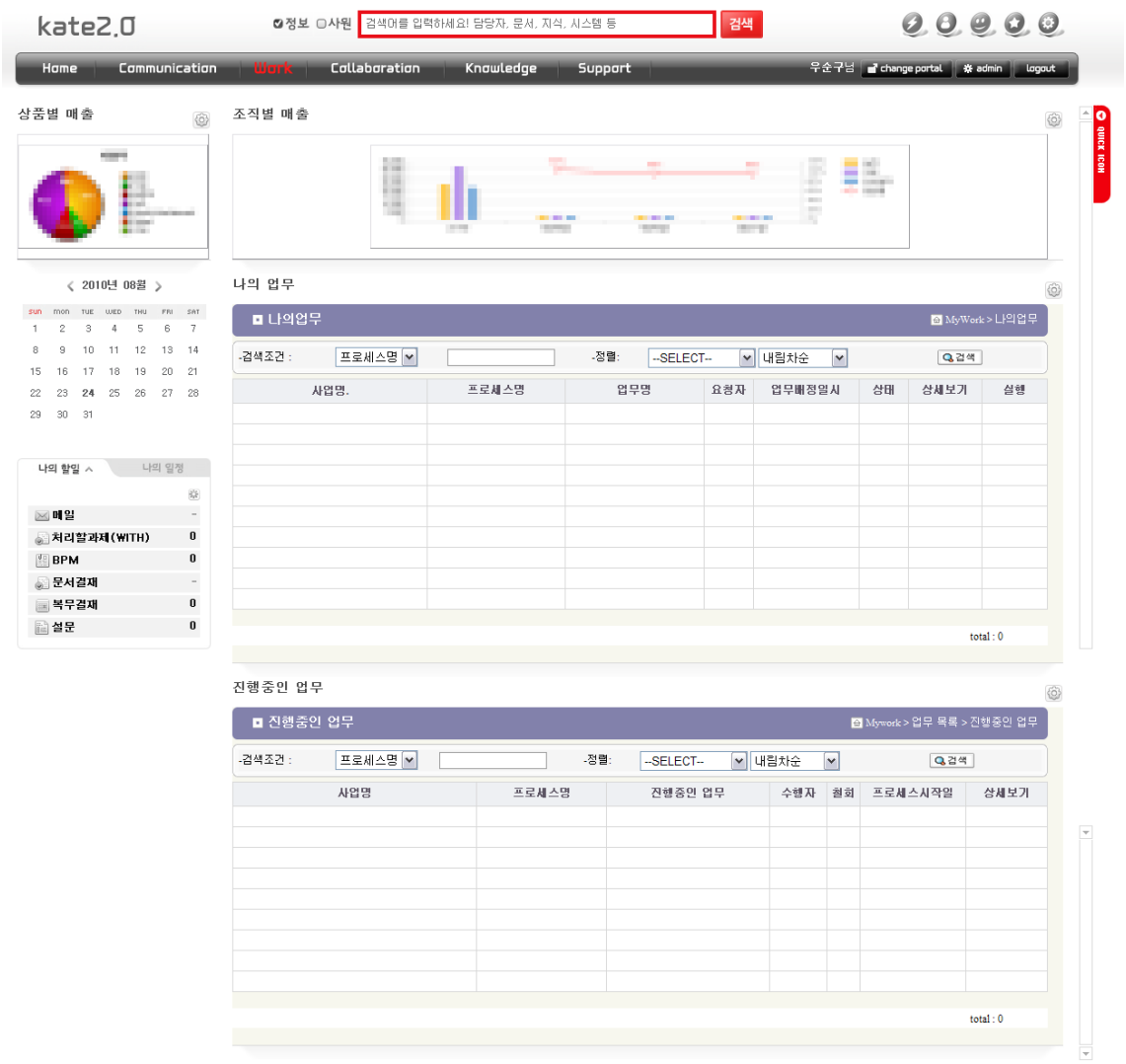
The screenshots below show some of the features that resulted from the kate2.0 project. These features were intended to meet user needs and address the shortcomings of the previous intranets.



Pictured: The *Work* page serves as a hub for users and includes *To-Do Tasks*, *e-Approval*, *BPM*, and *Work Link* portlets. Employees use these elements to access overall business information. The left-hand side includes *To-Do Tasks* and *My Schedule*, which are key features of the page. The screen also shows the *WITH Tasks* (Way of Innovative Task Management for High Performance), *Task Box*, *Approval Box* (in the middle), and (on the right side) the system menu and system links provided by work type.



Pictured: *Work* pages of business units, or CICs, help users in different divisions view their work-life in a customized manner. This is the CIC *Work* main page set for the Network Division. On the left-hand side, there is a section that shows the division's various announcements and major tasks as defined by the network management system, all of which were designed to be as convenient as possible for users.



Pictured: The main *Work* screen displayed for the Corporate Customer Division. On the upper left-hand side, a product sales chart is displayed; on the upper right-hand side, each organization's sales performance is displayed in a dashboard format. This screen also shows the My Tasks and Work in Progress tables, which let users check on their work status.



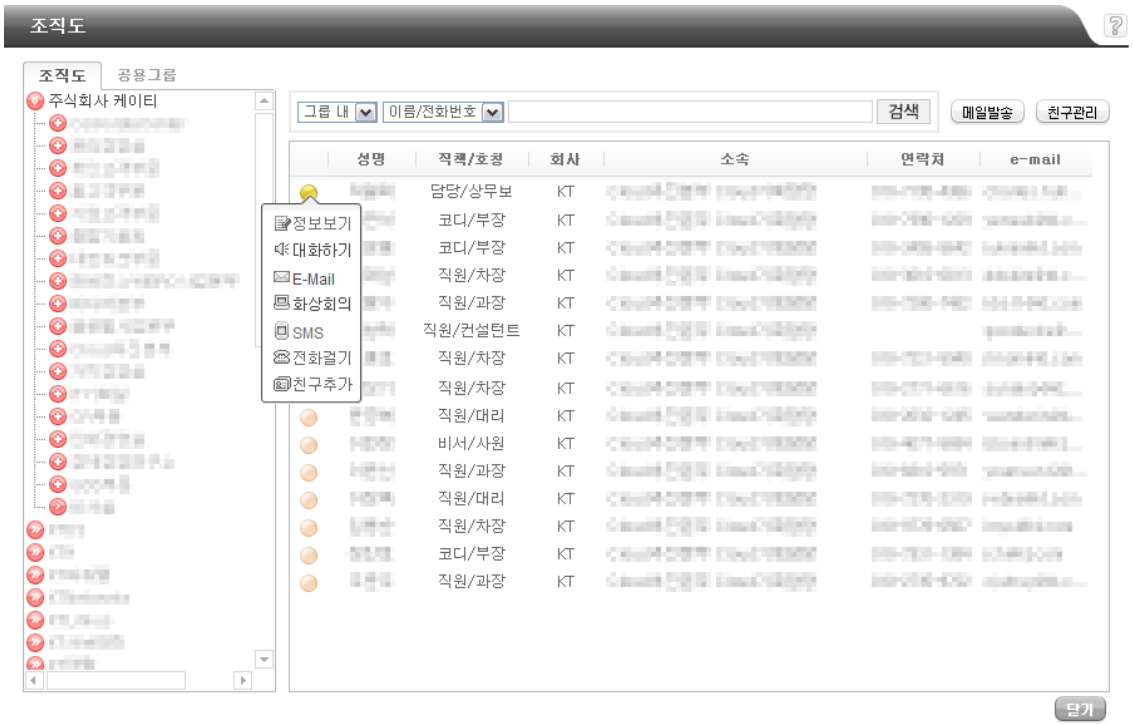
Pictured: The *Kate Café* provides a virtual space for corporate-wide collaboration.



Pictured: This screen shows the café settings page. Standardized templates are provided, but users can personalize the design. They can re-arrange the portlets and change the background any way they want.



Pictured: The *Hello olleh* corporate blog, which serves as a vehicle to convey the corporate vision to employees ("olleh" is "hello" spelled backwards).



Pictured: Users can determine a coworker's presence (online) through this feature, which is part of the OC (Office Communicator) functionality. When a coworker is online, users can right click to contact that person directly through this interface.



Pictured: The site's user *Favorites* page lets users add or modify items in their *Favorites* list. Users can select from a list of links to create personalized shortcuts.

TIMELINE

INTRANET PROJECT TIMELINE	
Milestone Date	**Milestone Description**
2009	
October/November	• Pre-consulting (proof of concept)
December	• SI contract Samsung SDS
2010	
January	• User requirement analysis
January–March	• Consulting (best practice analysis, TO-BE model, roadmap, change management)
February	• System design, graphic design, and prototype of graphic design 1.4 • Project start
March–April	• System development: kate2.0, café, *kateBlog* • Smart search connected with portal and other systems
May	• System testing: quality, performance, coding standard
May 10–28	• Beta period
May 31	• Launch date
June	• Stabilization period
July–December	• Set-up content classification and distribution system, provide mobile access
2011	
January–June	• Establish enterprise content management and distribution platform

INTRANET TEAM



Pictured: The KT intranet team: (left to right) Dong-Won Hwang, Seung-Jin Kim, Soon-Ku Woo, Seung-Heon Lee, Geun-Young Han, Jong-Ho Noh, and Chan-Ho Jung.

GOVERNANCE

Ownership

Within the organization, a team was formed to take charge of the intranet project. That team, the Innovative Working Style Task Force, was in charge of the development of the intranet portal, while the day-to-day operations of the platform are handled by KT's IT Planning Office.

With the intranet under its purview, the IT Office's responsibilities now include the following oversight functions:

- Establish operational policies
- Acquire investment budget
- Monitor use and user feedback
- Produce ongoing development requirements

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Innovative Working Style Task Force (Steering Committee)	This decision-making body is made up of a team of people from across the company's business units and across functional areas. Its responsibilities include: • Establish the program vision and strategy • Drive the alignment of the strategic direction for the kate2.0 initiatives across business units • Ensure that the program adequately addresses regulatory requirements • Oversee progress of the kate2.0 business analysts and make recommendations for changes where required • Approve the business analysts' recommended actions in a timely manner for all major risks, issues, and change requests • Act as champions for the kate2.0 program's implementation within the respective business units and across the enterprise
Business Analyst	Business analysts develop business-driven implementation plans and execute on the plans required to implement the roadmap. This work includes the following: • Create and manage a roadmap for kate2.0 initiatives based on the business requirements determined by the Innovative Working Style Task Force's vision and strategy • Define, rationalize, and recommend kate2.0 initiatives to achieve program objectives • Communicate and coordinate the activities of kate2.0 initiatives with CICs regarding business units and organizational functions • Approve requests for kate2.0's new functionality • Define and recommend alignment of enterprise architecture initiatives and standards • Define and recommend alignment for all kate2.0 initiatives with all stakeholders and raise any alignment issues to the task force
Project Manager	Project 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. In addition, they: • Identify, track, manage, and resolve project issues • Proactively disseminate project information to all stakeholders • Identify, manage, and mitigate project risk • Ensure that the solution is of acceptable quality • Proactively manage scope to ensure that only what was agreed to is delivered, unless changes are approved through scope management • Define and collect metrics to give a sense for how the project is progressing and whether the deliverables produced are acceptable • Manage the overall schedule to ensure work is assigned and completed on time and within budget

Program Manager	• The program manger is responsible for ongoing execution of the kate2.0 program and is considered the operational leader of the entire kate2.0 initiative. This person's mission is to integrate successfully across the enterprise, and also to: • Provide effective leadership of the overall kate2.0 program implementation • Establish success factors, business measurements, and milestones for the kate2.0 program • Resolve matters that adversely impact the kate2.0 program • Manage kate2.0 program resources • Manage coordination, scoping, planning, reporting, and execution of the approved program charter • Select and manage vendors • Develop and deliver an effective change- and incident-management program • Manage program communications
Web Designer	• The Web designer is responsible for ensuring that the website is visually pleasing and easy to use, and is also tasked with the following responsibilities: • Support the vast array of kate2.0's assets by continuing to re-organize and structure content according to evolving user needs • Define and manage KT's intranet design guidelines • Coordinate with the Innovative Working Style Task Force regarding design decisions • Manage the design plan, scope, and timeline

USERS

The KT's 37,000 employees, working locally and abroad, use the intranet for a wide range of daily tasks. The main user groups include those in field sales, marketing, and network/IT, as well as the headquarters staff. These users rely on the site for employee self-service functions (such as accounting and approvals), email, and news services, and other functions.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	http://kate.kt.com
Default Status	kate2.0 provides a personalization function (*Home* → *Add Page*) that lets users create and arrange their own pages. In addition, users can easily set their homepage by simply adjusting the Web browser setting.
Remote Access	All KT employees can access the site from outside through the Virtual Private Network (VPN). They need only to go to the URL (http://vpn.kt.com) and log on to the site.



Pictured: The portal login screen can display an array of business announcements, information on fun events, and product promotion information. When there are several content items to display, the content automatically rotates to display different messages each time a user logs in.

DESIGN PROCESS AND USABILITY WORK

Mandate: Create Efficiencies

One of the redesign's goals was to regain user confidence. To do this, the new portal had to prove to users that the intranet would add value to their business lives.

"During the planning phase of the project, we sought to abandon complicated ways of doing things and make efficient changes in the ways daily work was being done," says Noh. "And provide services users will come back to."

The team achieved this goal by aligning the site features and functionalities to the users' needs. The team engaged in a process of finding out what would be valuable

by analyzing the business processes of CICs and interviewing and surveying managers and employees.

“The Innovative Working Style Task Force was tasked with this mission to achieve a successful migration to the new intranet portal (kate2.0) environment,” says Noh. “We also performed benchmark studies of global best practices to come up with a service that addresses the users’ needs and the company’s strategy.”

On the technical side, the team tried to provide relevant services, keeping in mind each business unit’s business model. The team focused on communication throughout the project, sharing corporate strategy with subsidiaries.

“We also agreed to take into account the specific challenges of various user groups,” says Noh, including those based overseas, who might have sub-par network connections or outdated PCs. The goal, he says, was to “provide usable and intuitive services, and make the services customizable” for all users.

The project phases played out as follows, with the major activities identified for each phase:

PROJECT MILESTONES BY PHASE	
Item	**Status**
Phase I **Foundational Research** **(Q4 2009)**	• Online survey of all employees • Secondary research, including focus group interviews and an opinion leader survey • Onsite benchmarking visits to companies including British Telecom, Samsung, Dongbu Steel, and AMD • In-person conversations with the HR and benefits teams • Conversations and questionnaires with the intranet owners and users • Conversations with corporate stakeholders • Conversations with technical teams • Web analytics analysis
Phase II **Analysis and Design Phase** **(Q1 2010)**	Activities during this phase were modeled on the "KTDS OSSP Development Method" and included the following activities: • **User requirements analysis:** User requirement analysis conducted by Business Process Innovation Task Force, CIC Change Leaders, IT Planning, System Administrators • **System design:** Design of functions, user interfaces, databases, and other systems based on user requirements • **Quality assessment:** Functional, performance, and coding standards testing performed by the Quality Assurance Team • **Assessment of Web vulnerabilities:** Web vulnerability tests performed by the IT Security Team
Phase III **Beta Launch** **(Q2 2010)**	The site was launched as a beta system to all company employees; the beta launch included the following activities: • In-person usability sessions with employees (in Korea) • Online survey of all 37,000 employees • Analysis of Omniture metrics • Analysis of site feedback
Phase IV	During this phase, the team promoted employee participation through various events (such as

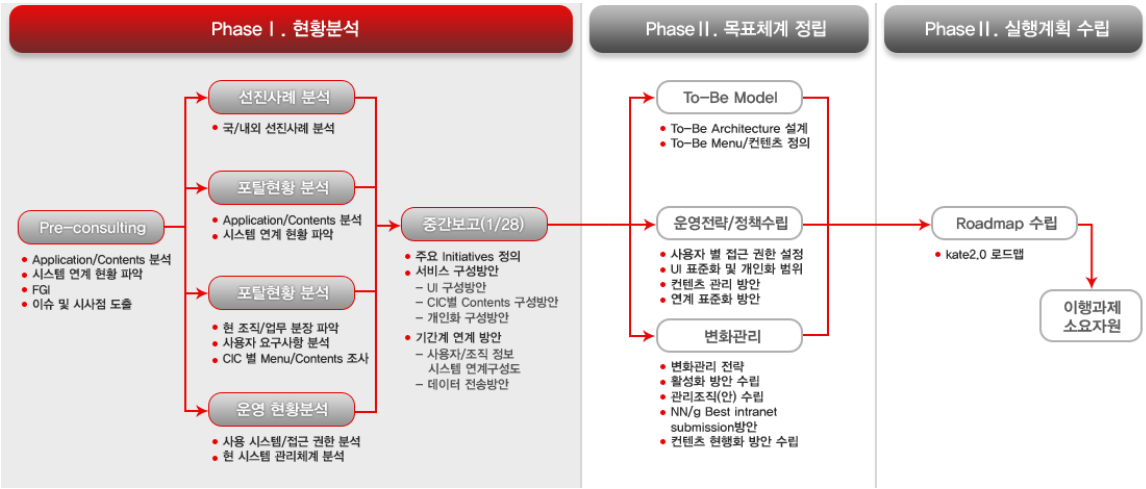
System Feedback (Q2 2010)	recommendation, bug-tracking, and so on) to raise the level of awareness and encourage employee contributions.

The overarching project goal was to change the employees' working style/method though an enhanced and integrated intranet. To achieve this, the mandate seemed clear: talk with the users.

"While the employee surveys were quite helpful," says Noh, "it was the key focus group interviews that played a major role in the defining of the kate2.0's role and establishment of the roadmap."

One surprising result to come out of the teams' research was that the users were struggling to find what they wanted.

"Based on the survey and focus group interviews, we found out that the employees were experiencing difficulties in finding the data and links they wanted from among the vast data provided online," says Noh, "Thus, we decided to strengthen the portal's search function by designing it in a way that makes it more convenient for users to find the link or data they need."



Pictured: The design stages of kate2.0 development. During Phase I, the team conducted best practice studies, focus group interviews, and analyses of applications and site content.

Working with Agencies

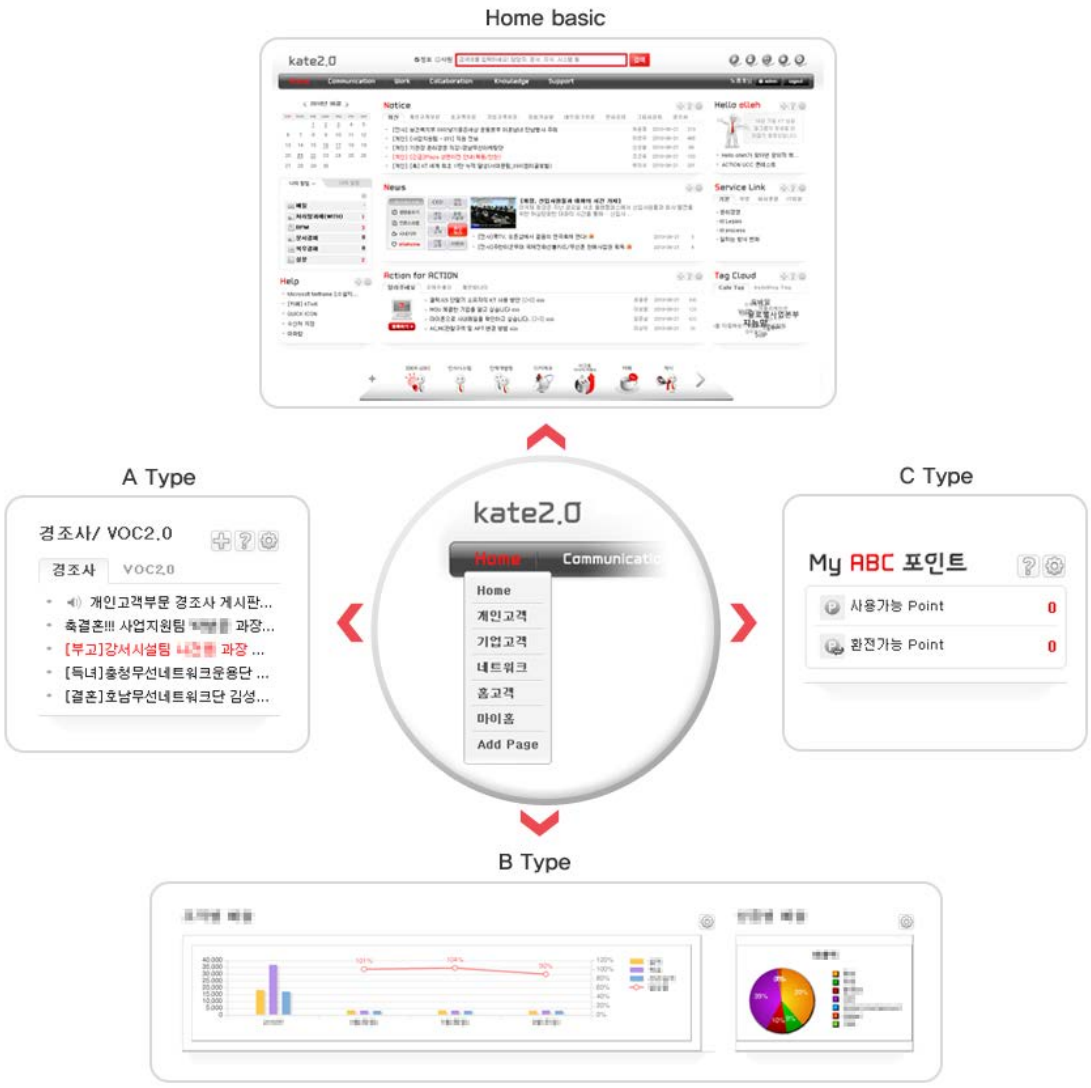
Samsung SDS, KT's agency partner and designer of kate1.0, was involved from the very beginning of the project. Including the agency in early project planning was essential to the project's success.

"We had it arranged this way, so that they could be aware of what the ultimate goal was and to facilitate the consensus-achieving process," says Noh.

"The reason we decided to work with them again was because we valued their high-quality solutions and felt they had a good understanding of our existing system," he says. "These attributes assured us that Samsung SDS would provide us with the system we wanted by the desired deadline."

The agency's role included a business analysis that assessed the state-of-the-state of the existing portal. During that exercise, they looked at the usage history, conducted surveys and interviews, and evaluated jobs/roles that the portal supported. The agency also conducted a survey of intranet best practices with global companies such as BT, GE, and AMD.

After the launch of kate2.0, the consultants created a change management plan for KT; the plan included defining operation management methods, performance metrics, a benchmark for an ideal user-satisfaction level, service lifecycle metrics, proactive business methods, and so on. Based on the deliverables produced by the consultants, KT and Samsung SDS jointly carried out the analysis, design, and development of the intranet portal system.



Pictured: The main page of the portal displays differently depending on the user's business unit.

CONTENT AND CONTENT CONTRIBUTORS

Addressing a Need

Content management was an important consideration for the success of the kate2.0 project. A key problem with the previous system was that users found that content was not up-to-date and did not reflect business changes as they occurred. The system also lacked functionality to effectively support business collaboration.

"In light of such needs, we set out to manage the lifecycle of the content so that we may be able to identify the content that was not used frequently and arrange the content so that it could be applied to the changes across the site," says Noh.

Managing Content Types

The portal is home to basically two types of content. One type is content developed and managed by the department that owns it. The other type is the content that is developed and managed by the user, using the wiki function (*Wiki Help*).

Department managers are responsible for reviewing content for their specific areas. Those administrators can also publish/modify/delete that content. In addition, they can manage user-generated postings as needed.

Users are divided into several groups, according to their access-control level and work characteristics (division, occupational group, and so on). Each group is given customized content based on work characteristics. This custom content includes business unit information, a custom-tailored menu, contents alert, and work status.

In the past, content had not been effectively classified or attributed with metadata; in the new system, the team tried to standardize all content by applying attributes. Kate2.0 uses standardized categories for subject, media, format, and different types of business unit data within each unit. As a result, users can now find and use standardized content across the platform. The screens below show some of the content groupings and how the content is managed throughout the platform.

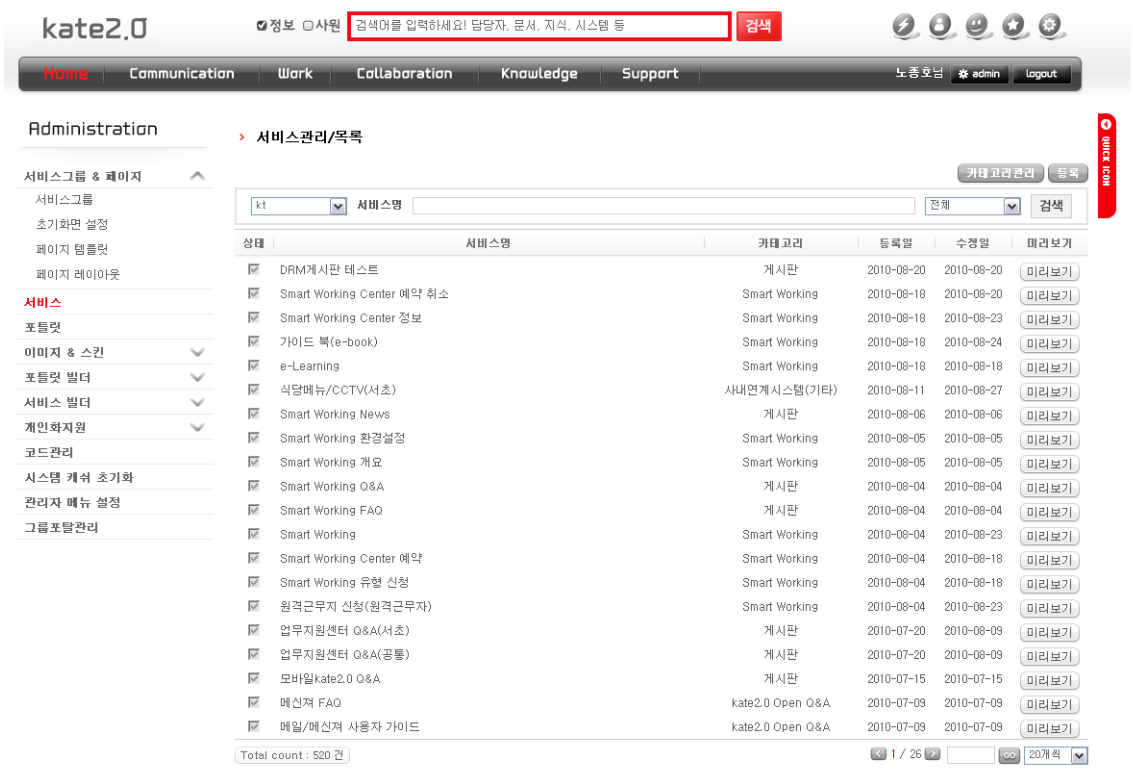
Setting Standards

As the new portal was launched, the team established an operations policy. The managing departments monitor and manage the content with these operation standards as a guide.

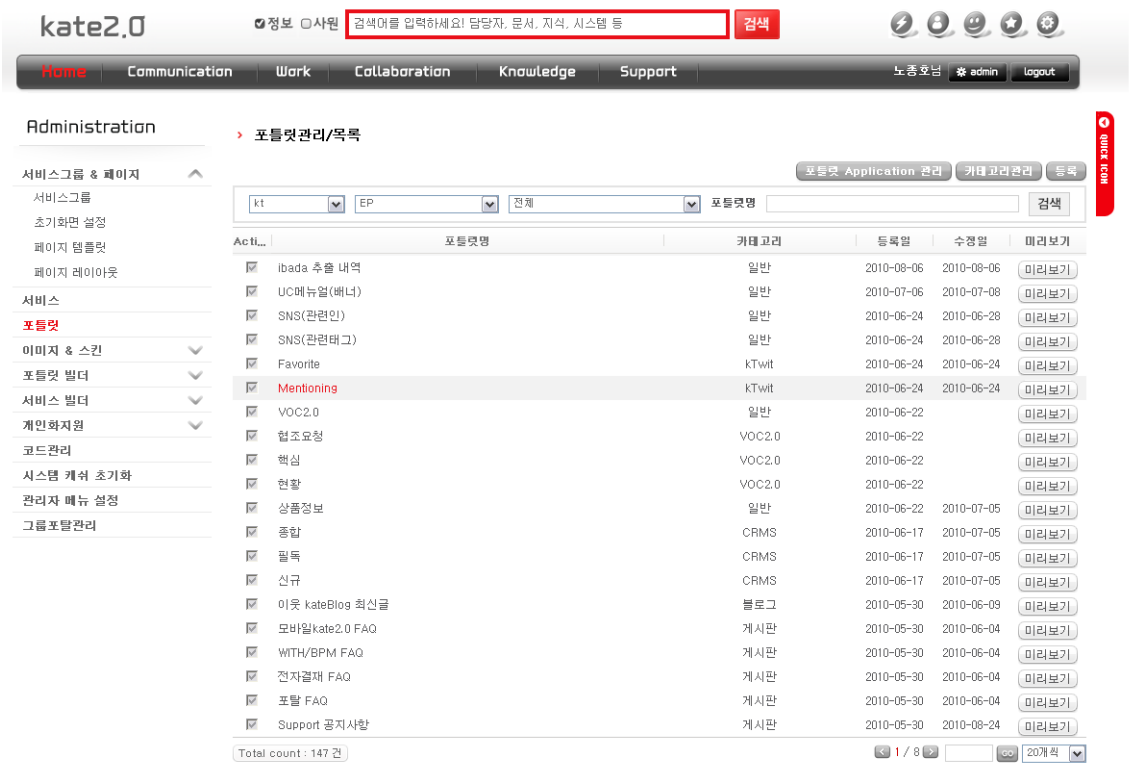
"If there is any content deemed as being inappropriate material or any content developed in a format found to be incompatible," says Noh, "we have an email or message sent to the user who published the content, requesting him/her to make the necessary adjustments."

The managing departments evaluate the portal's key content and assign mileage points to users who publish the content. Feedback is provided to the users through a reply to the originally posted content or through the management evaluations.

In addition to the operations policy, individual departments provide offline training to publishers. And the portal itself is a source of guidance, with posting instructions located in its *Help* section.



Pictured: The list of various service groups supported on kate2.0. By clicking *Service Groups & Pages → Service Group* in the menu on the left-hand side of the page, users can easily manage the content provided on the site.



Pictured: The content provided in portlets. By using the portlets displayed in the menu on the left-hand side, the content can be managed throughout its lifecycle.



Pictured: Users can manage and refine postings on the bulletin board by clicking on the *Consolidated Postings → Postings Management*.

TECHNOLOGY

TECHNOLOGY		
Category	**Product**	**Main Function**
kate2.0	• ACUBE Kate2.0 V5.0	• Enterprise kate2.0 Solution
Café	• ACUBE TeamRoom V1.0	• Collaboration solution
SNS	• ACUBE SNS V1.1	• Tag-based human network solution
Reporting	• ACUBE Reporting V6.0 • (REQUBE)	• Reporting solution
Blog	• e-BlogMate V3.0	• Blog solution
Wiki Editor	• e-WikiMate V1.0	• Wiki editor
Search	• DOCRUZER V3	• Integrated search solution
Outside Information Search	• SyndiPlus V1.0	• Web crawler solution
Web Editor	• ActiveSquare V7.0	• Web editor
	• CrossEditor V1.5	• Web editor supports cross browsing
Weblog Analysis	• WiseLog V5.0	• Weblog solution

MOBILE

Mobile kate2.0 services enable users to access kate2.0 anywhere, anytime through mobile devices. The service is provided to all KT executives and employees. It lets users access work-related information and process-related tasks. It was no easy feat to implement this service, as 63 linked systems had to be re-engineered.

Mobile device services will be upgraded along with kate2.0 services to maintain interoperability as mobile technology evolves.

Serving Specific Functions

Mobile kate2.0 includes access to portal functions such as: the main menu, enterprise notices, task management, employee search, approvals inbox, and email.

Anytime an intranet is optimized for the mobile experience, decisions must be made about what to support and what to leave out.

User surveys and specialist groups with the organization uncovered the common and frequently used services. After the first pass at refining the feature set, this list was further refined before being included in the final specification.

Some features, such as KT executive/employee search function, CIC (business unit) announcements search function, approvals, BPM, Way of Innovative Task management for High performance (WITH), Q&A Board (wiki system), KT share price, Mobile CRM, e-learning system, help, and setting adjustments are all provided on the mobile intranet.

According to Seung-Heon Lee, Assistant Manager, the team applied the following standards to select the mobile services:

- Any simple yet critical service that could not otherwise be processed due to location or device-related constraints
- Services that could bring about innovative changes in work practices if the mobile office were to be implemented
- Services that required improvements in communications

“We studied the usage rate of the former kate intranet portal and conducted surveys to see what the commonly required services are,” says Lee. “Through the help of a specialist group, we selected the services to be provided on kate2.0 by identifying what services require mobility and determining which areas require business innovation the most.”

The Technology of the Mobile Experience

Mobile kate2.0 is a hybrid application that combines both native and Web methods to maximize convenience for users. Thus, the native method was applied to the work that was either relatively simply or unlikely to change (such as settings for employee search, approvals, Q&A, corporate stock info, and login), while the Web method was applied to content that required continuous change or was under the management of another team, but required maintenance services through the portal team for mobile (for example, BPM, WITH, and Mobile CRM), whose existing system was Web-based. For these instances, the tech team had a custom mobile site designed and embedded in the application.

“We applied this hybrid method in order to make it convenient for users to use the services and to help the administrators achieve maximum efficiency in their maintenance work,” says Lee.

Getting Through the Firewall

Being an intranet system, kate2.0 has a firewall that prohibits direct access via mobile devices. To be able to access kate2.0 via mobile devices, the Mobile Kate2.0 must be installed on each user’s mobile device. To access the portal, users must first go through various verification stages (ID/password verification, application PIN verification, user’s phone number verification, and so on).

Device Support

Mobile Kate2.0 is optimized for the following devices: iPhone 3G, iPhone 4, Windows Mobile (SPH-M8400 and SPH-M7200), and Android OS 2.2 (Nexus One). The platform supports 2G CDMA and 3G CWDMA networks and Wi-Fi; 4G (Wi-max) support is planned for a future release.

The first stage of optimization was performed on the smart phones used by KT executives/employees.

“We plan to gradually expand the scope to include more smart phones serviced by KT,” says Lee. In addition, the Mobile Kate service is already provided for the feature phone users. As such, the majority of users have access to the kate2.0 mobile office service.

The screens below show different aspects of the kate2.0 mobile access functions.



Pictured: The Mobile Kate main screen. Here, users see the various main category icons for linked services.



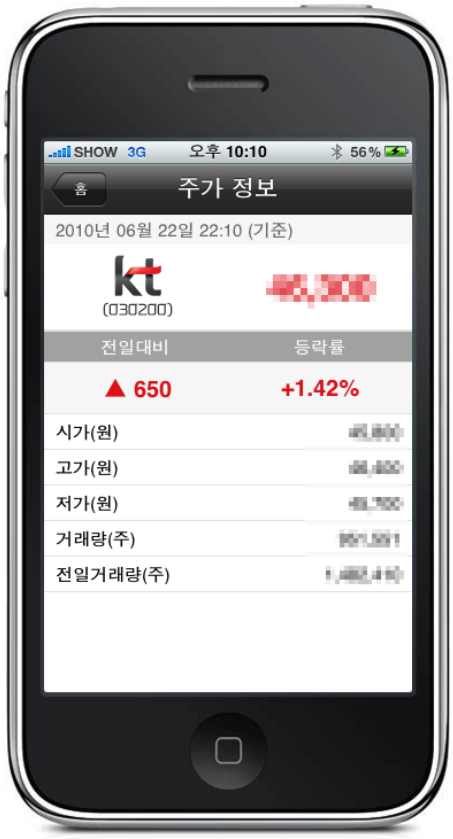
Pictured: The overview of selected e-Approval items.



Pictured: If the user clicks on the *View Original Text* button in the approval list items' summary screen, the original text of the original approval displays in PDF format.



Pictured: The employee profile detail page. Data such as office number, mobile number, and email address are displayed, with direct links to services such as placing a call or sending email or SMS text messages.



Pictured: The KT share price information is provided in real time and displayed using up and down indicators on Mobile Kate.



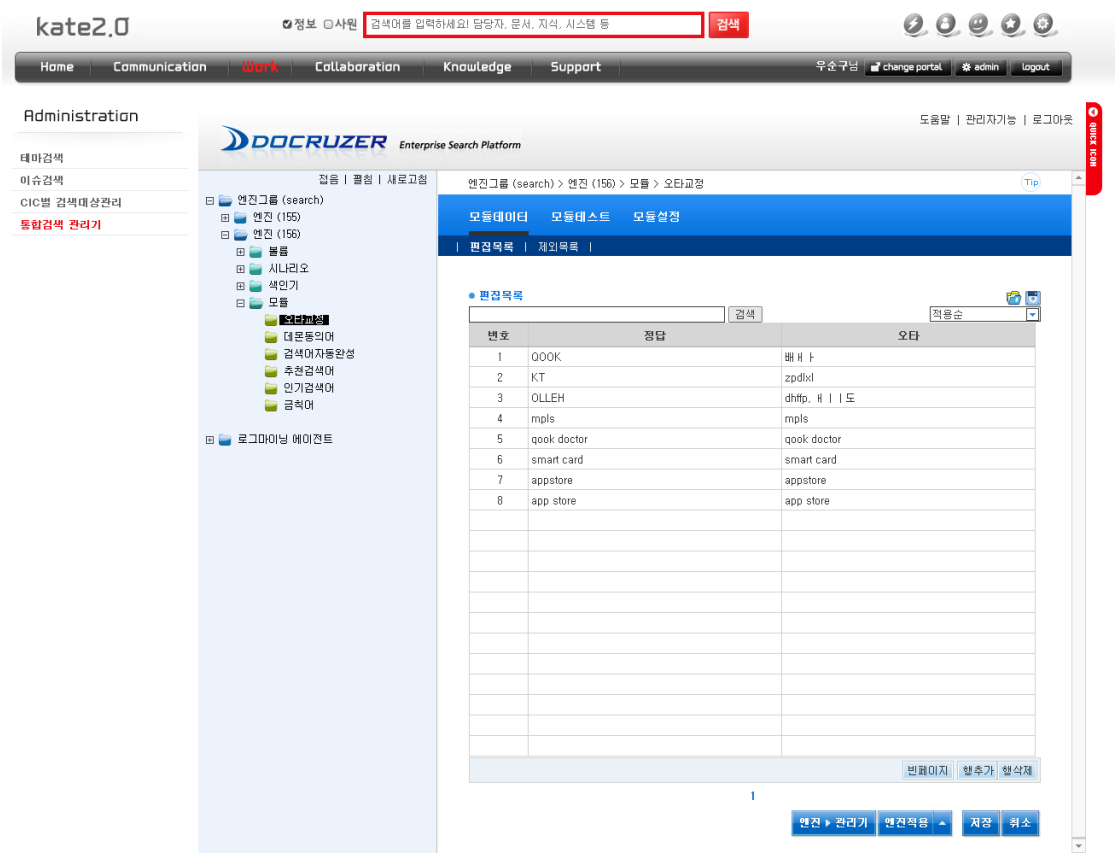
Pictured: The WITH interface (WITH stands for “Way of Innovative Task management for High performance”).

SEARCH

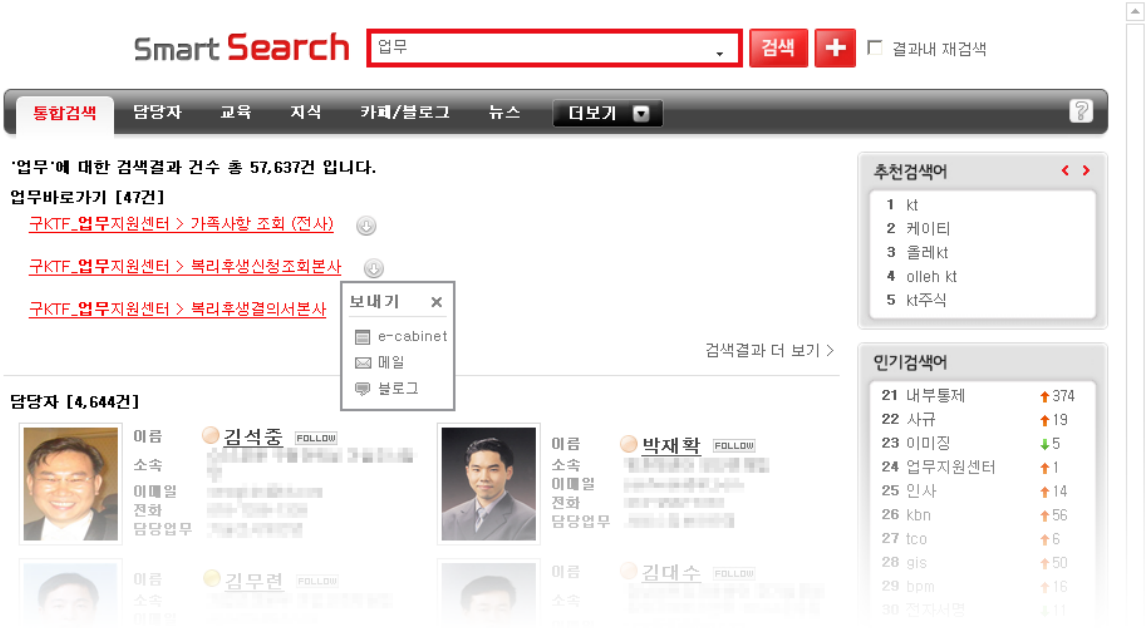
The kate2.0 platform features *Smart Search* and gives users the power to find useful information easily and quickly. The team relied on best practices established by well-known Web search engines to not only meet user requirements for functionality but also to increase user satisfaction by providing a familiar interface.

Not content to just create effective search, the team continues to monitor search results and make required enhancements to enhance its functionality over time.

The screens below show various aspects of the portal’s search functions.



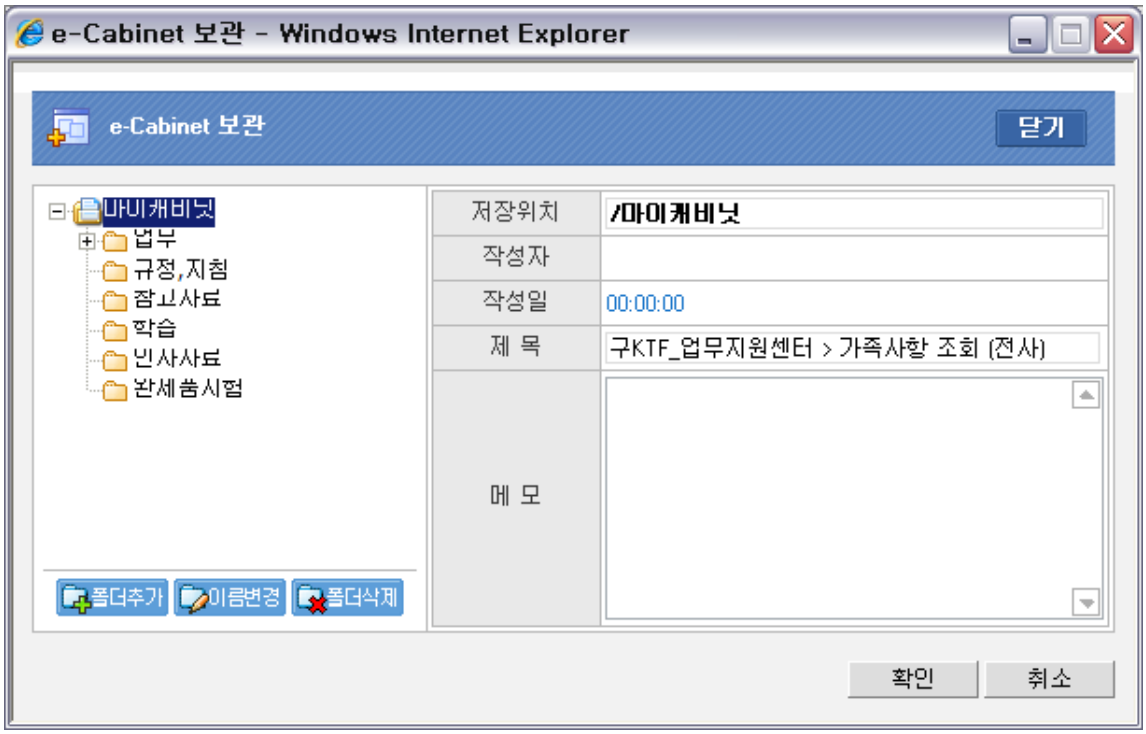
Pictured: This screen shows how administrators manage the *Smart Search* function. On the screen's right-hand side is a tool for correcting misspellings, finding synonyms, and recommending keywords.



Pictured: Clippings from a search result can be uploaded to a blog or emailed.



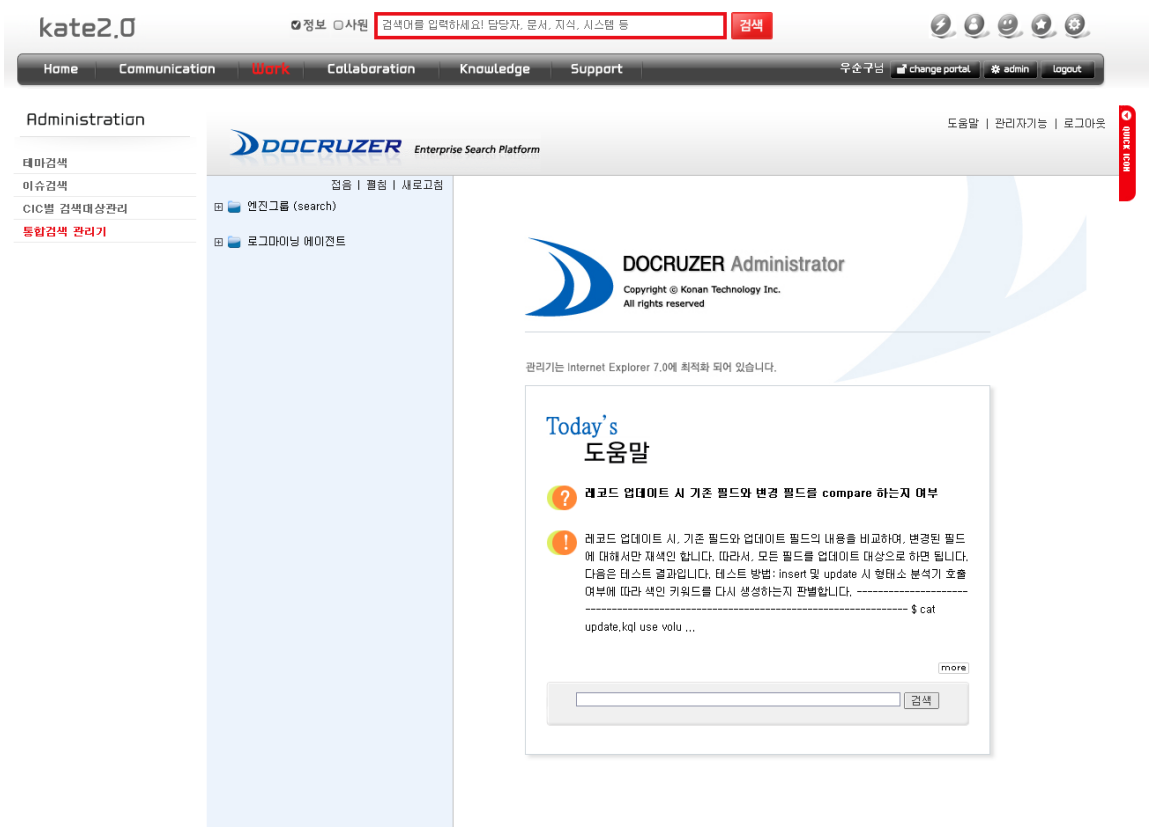
Pictured: Within *Smart Search*, users can click *Go To Task* to immediately access three tasks: *Point of Contact,* to contact a person; *Send To,* to collect clippings of search results; and *Search issues and themes*, to search for important issues and events.



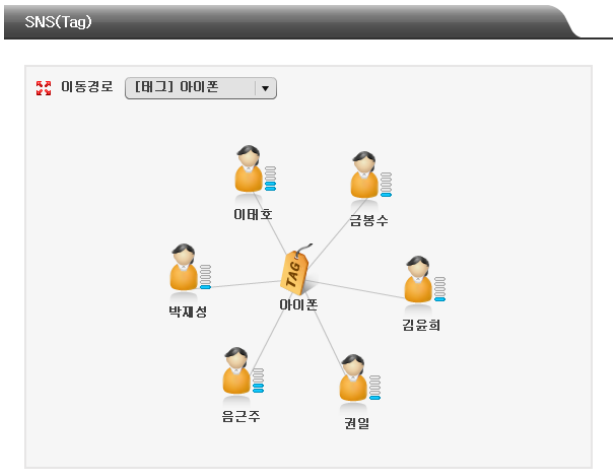
Pictured: Search results can be added to the *e-Cabinet*, an online storage compartment.



Pictured: From within the search results, users can obtain specialized information about the company's business managers.



Pictured: The search admin screen, where users can manage various search options.



Pictured: The *Social Network Search* service shows employee relationships.

Help

Help is sometimes considered a complimentary function to search. Usually the *Help* function in systems provides all the information in a single file or a menu, but in the case of kate.20's *Help* service, it's set so that users can access the information immediately, from wherever they are, and apply it to their work right away. The *Help*

corner is a wiki website so not only can users benefit from the advice contained therein, they can also contribute information based on their experiences.

“At first, the users were not familiar with using this kind of service and there were hardships because the users frequently used the function as more of a Q&A corner, rather than using it for its original purpose,” says Noh. “However, we intentionally stood aside to allow the users time to get used to the feature.

“We tried to promote their understanding of how it works by sending out messages on what the original purpose of this function was.”

Although the level of participation from the users is still not at the level the team would like, they plan to continuously improve the function, so that it can become a solidly established part of the system.”

The screens below show various components of the *Help* system.



Pictured: The *Help* function’s main screen. The image shows several sections, including *Recent Updates* (on the left) and popular searches (on the right). At the very top, users can click the *가* icon (which stands for the Korean alphabet), *A*, or *1*, to display search results in alphabetical order.



Pictured: The search page provided for the corporate system manual.



Pictured: Users can modify or add comments to *Help* information (displayed at the top of the screen) in the box at the bottom of the screen.

RESULTS AND ROI

Measuring success is somewhat dependent on what a team chooses to measure. In the case of the KT team, they have a built-in benchmark because they have portal traffic measures from the previous platform, kate1.0, to compare against the redesigned kate2.0 portal. But another interesting way to look at project results is through the number and kind of services the portal offers.

USER ACCESS MEASURES			
Measure	**kate1.0** (May 2010)	**kate2.0** (June 1 — 25, 2010)	**Difference**
Access Count	689,667	759,197	69,530
User Access Count	332,504	360,071	27,567

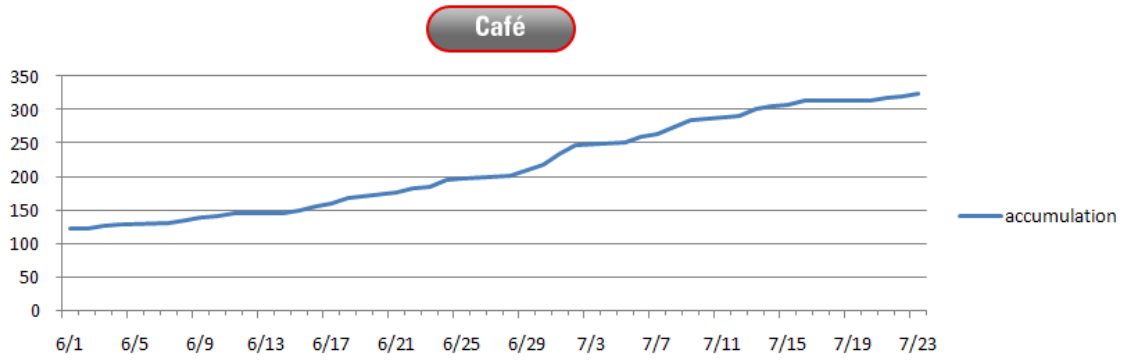
Pictured: Services on kate2.0 have decreased, but site usage on the new portal has slightly increased.

PORTAL SERVICES MEASURES**					
Measure	**Previous Portals**		**Subtotal**	**kate2.0**	**Difference**
	kate1.0 (May 2010)	**Freenet***			
Service	1,601	1,272	2,873	504	-2,369
Portlet	1,652	349	2,001	138	-1,863
Board	1,456	198	1,654	50	-1,604
Linked System	91	--	91	154	+63
** Measured October 22, 2009 (kate1.0) — June 21, 2010 (kate2.0)					
* Freenet was KTF's portal					

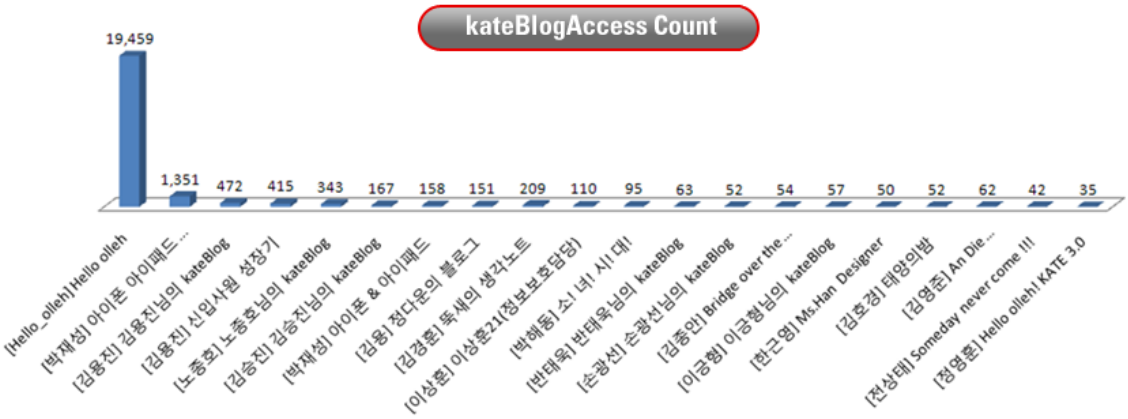
Pictured: The number of portal services has decreased dramatically due to streamlining; in this case, less is more.

"This seems to imply a change in a new direction of business processes," says Noh, "and the effect of eliminating unnecessary services."

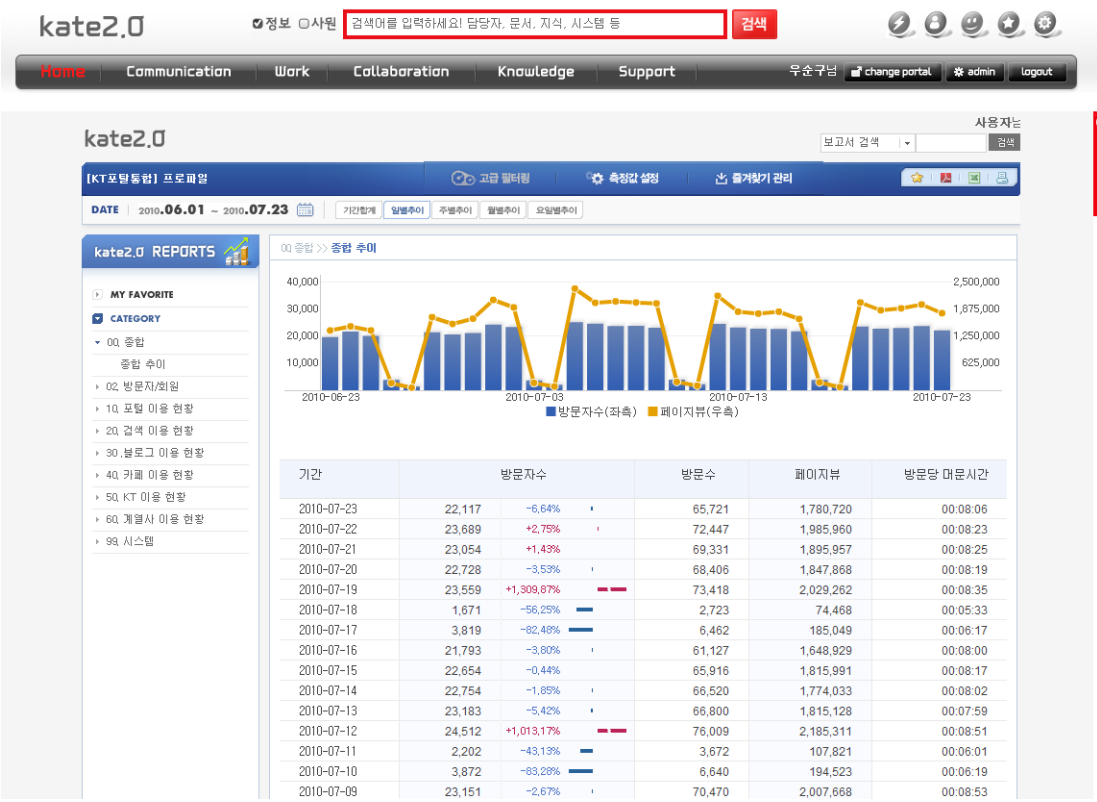
New services will be added in the future to provide more high-quality content. The goal, however, will be to increase user engagement — not simply to have *more* services. A number of measures point to positive gains through the new platform. Among those are the following:



Pictured: Café creation chart. Since the new system was launched on May 31, 2010, new cafés continue to be created and used. Within just one month of the new platform launching, the number of newly created cafés surpassed the number of cafés migrated over from the existing system.



Pictured: Blog subscribers. The number of blog subscribers rose greatly right after the blogs were first implemented, to a point of saturation. So, while the number of newly created blogs has noticeably decreased, the number of postings continues to be maintained at a relatively normal level. They're not increasing significantly, says Noh, because many users tend to read what others write, rather than post writing themselves.



Pictured: The accumulated data on the number of visitors and the number of visits made during a certain period. The menu on the left-hand side: *Overall Reports → Overall Trends*, shows data for the time period, number of visitors, number of visits, page view data, duration per visit, and graph charts on the screen's right-hand side.



Pictured: The user environment and the number of simultaneously logged in users. In the menu on the left, clicking *System* → *Summary* loads data into the right-hand side of the screen. This data can include measures such as the most widely used browser and OS, the number of simultaneous logged in users, and the extension information for popular applications.

LESSONS LEARNED AND BEST PRACTICES

Following are some lessons learned from the kate2.0 project:

- **The intranet isn't an IT-driven initiative.** "Because kate2.0 provides communications and collaboration services to all the business areas across the company, Corporate Communications has become the champion for the majority of the intranet's functionality. And, for KT, it has been an effective partnership, with IT suggesting new ways of using the technology and enabling the company's communicators through tools that support their communications-related workflows."
- **Content management is a critical function.** "Never underestimate the importance of content management. And, like search, it is really never 'done.' It's one thing to establish an effective system, but that system must evolve over time and the team should always strive to increase quality."
- **Search is never done.** "The quality of search engine is critical for users. So, response time, accuracy, and customized sorting must be maintained over time."
- **Mobile access is critical.** "The mobile platform will be the best delivery for quick approvals, email checks, and the like."

- **The portal must stay in sync with legacy systems.** "Because the intranet portal must cooperate with and change along with the company's other legacy systems, the roadmap for both must be aligned and managed under IT."
- **Include everyone who needs to be involved.** "Participation from all parties, who provided valuable help and input, was essential."
- **Test and verify with users.** "Ensure tools are tested and verified through a phased rollout by your employees. Introducing and validating new technologies and user experience gradually can pay dividends in terms of user acceptance and adoption."

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*).

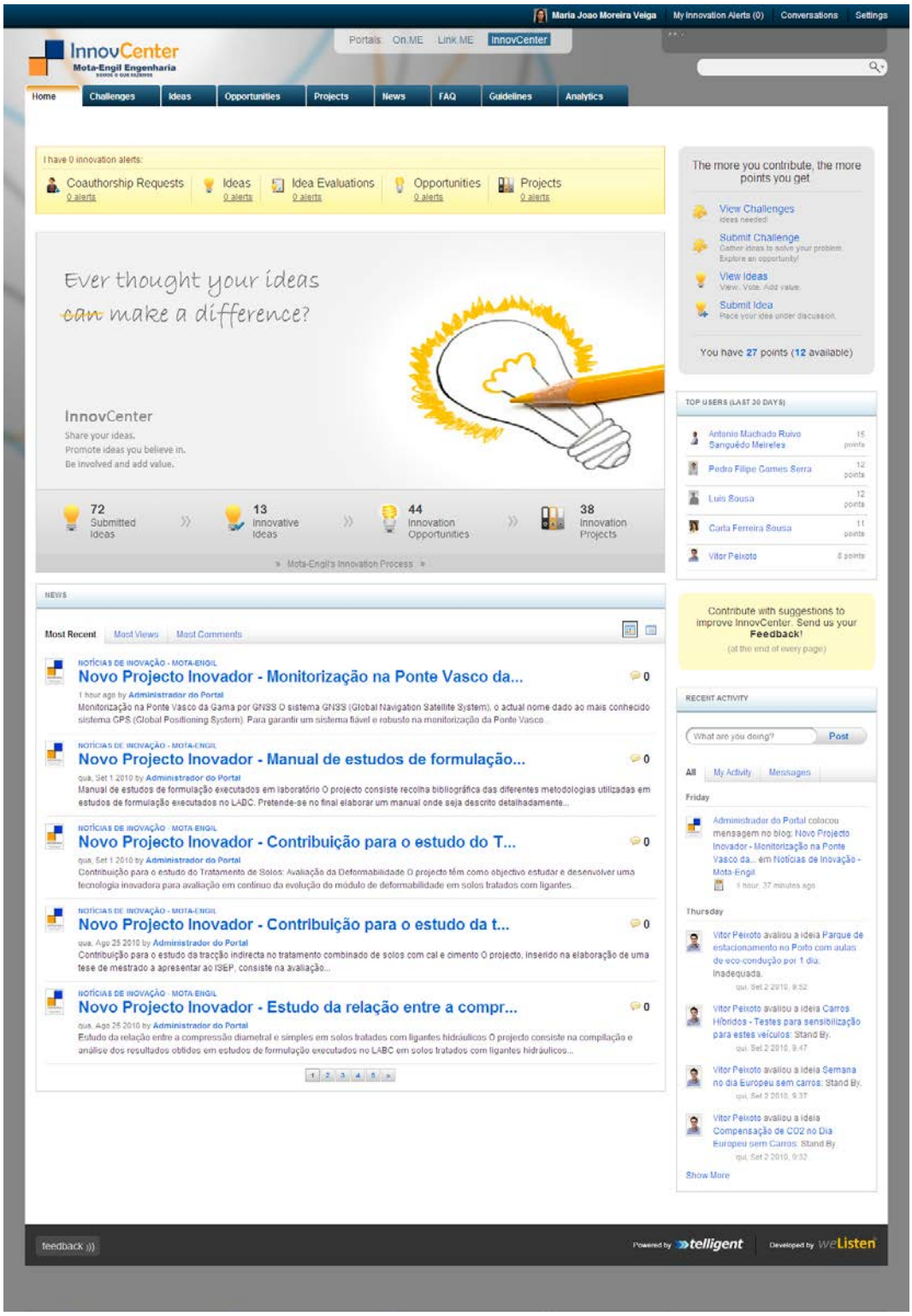
The site's homepage introduces new users to the tool and its goal, and keeps users up-to-date on innovation progress within the company. This emphasis on always showing numbers — the number of ideas, number of implemented projects, number of views, number of votes — pervades the site. Feedback is everywhere. 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.

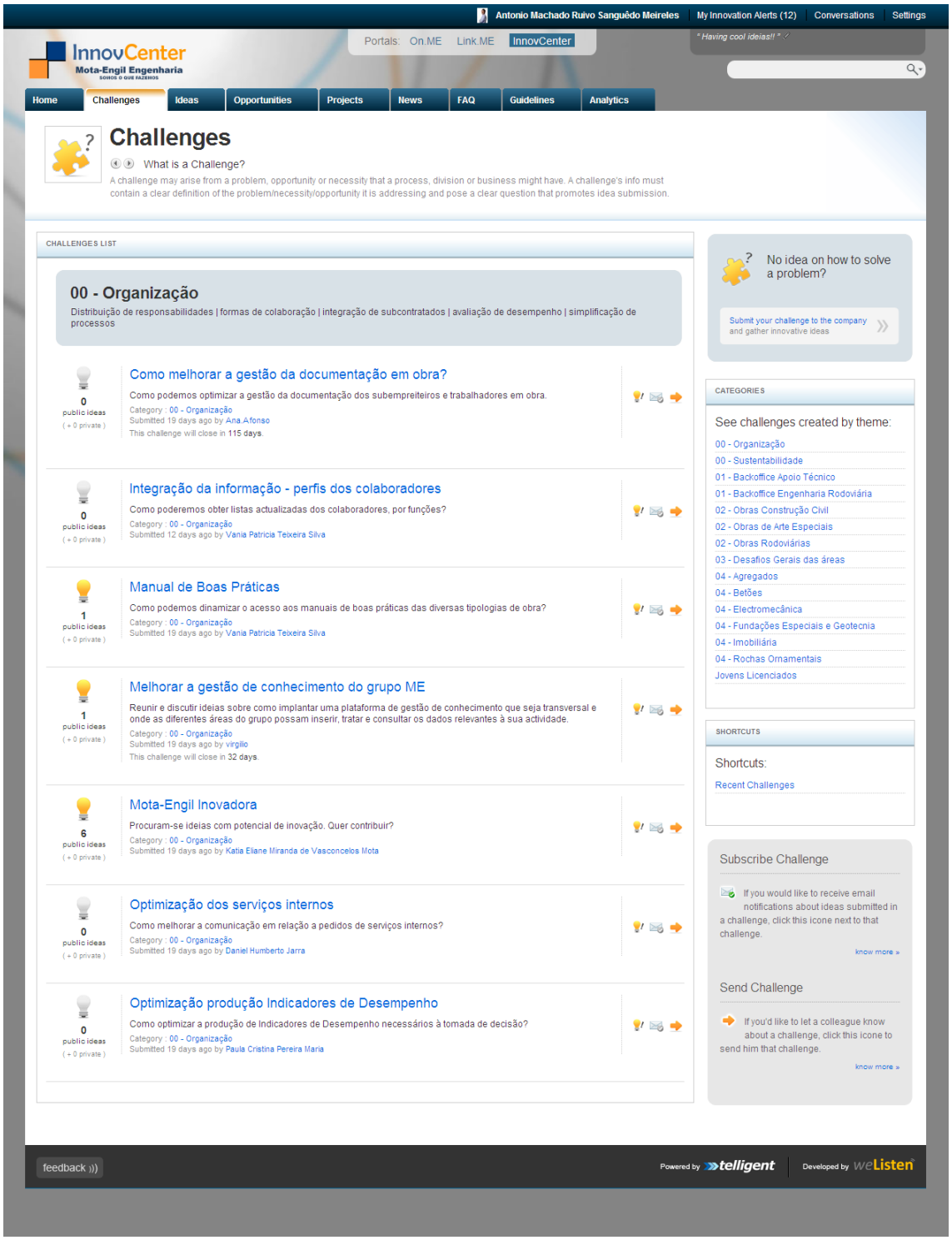
The team found through initial research that part of the problem with the existing innovation system was that there was no framework in which to innovate: users had to come up with ideas out of the blue. And, even though those independent ideas were also welcome, people usually come up with ideas when 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.

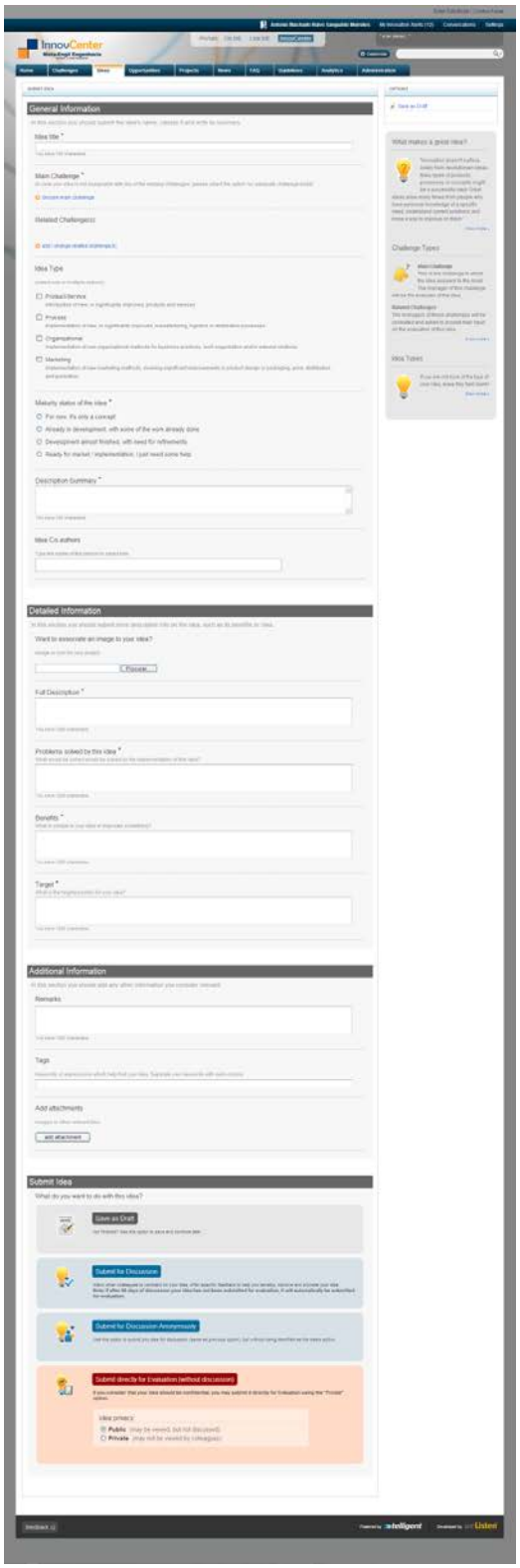
Every step in the process is guided. To involve all employees in the innovation process, regardless of their role, background, or experience, the site must be

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.



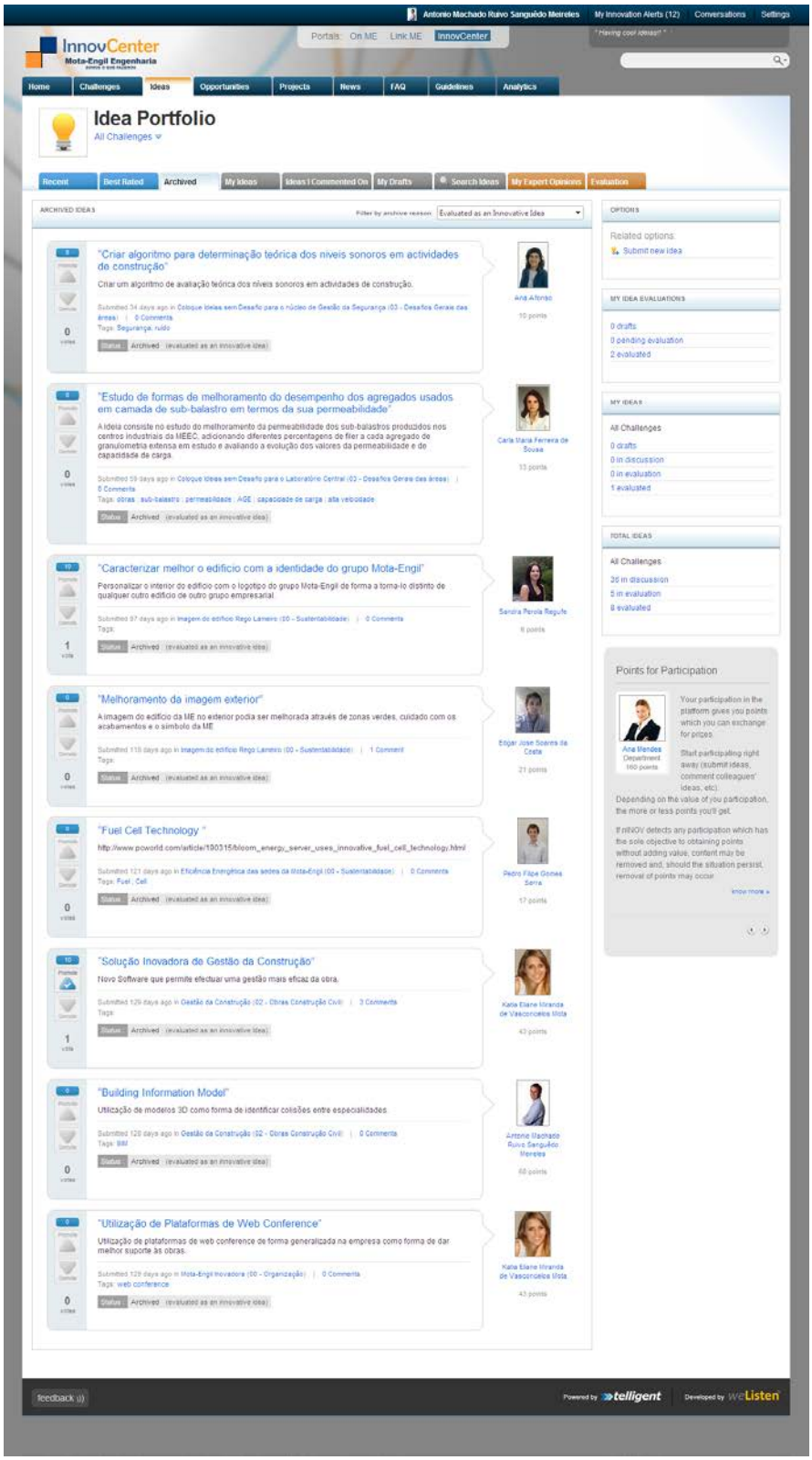
Pictured: The *Idea* submission form guides users through the submission process but also helps them formulate their ideas by asking specific questions, such as about the idea's benefits and target market.

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.

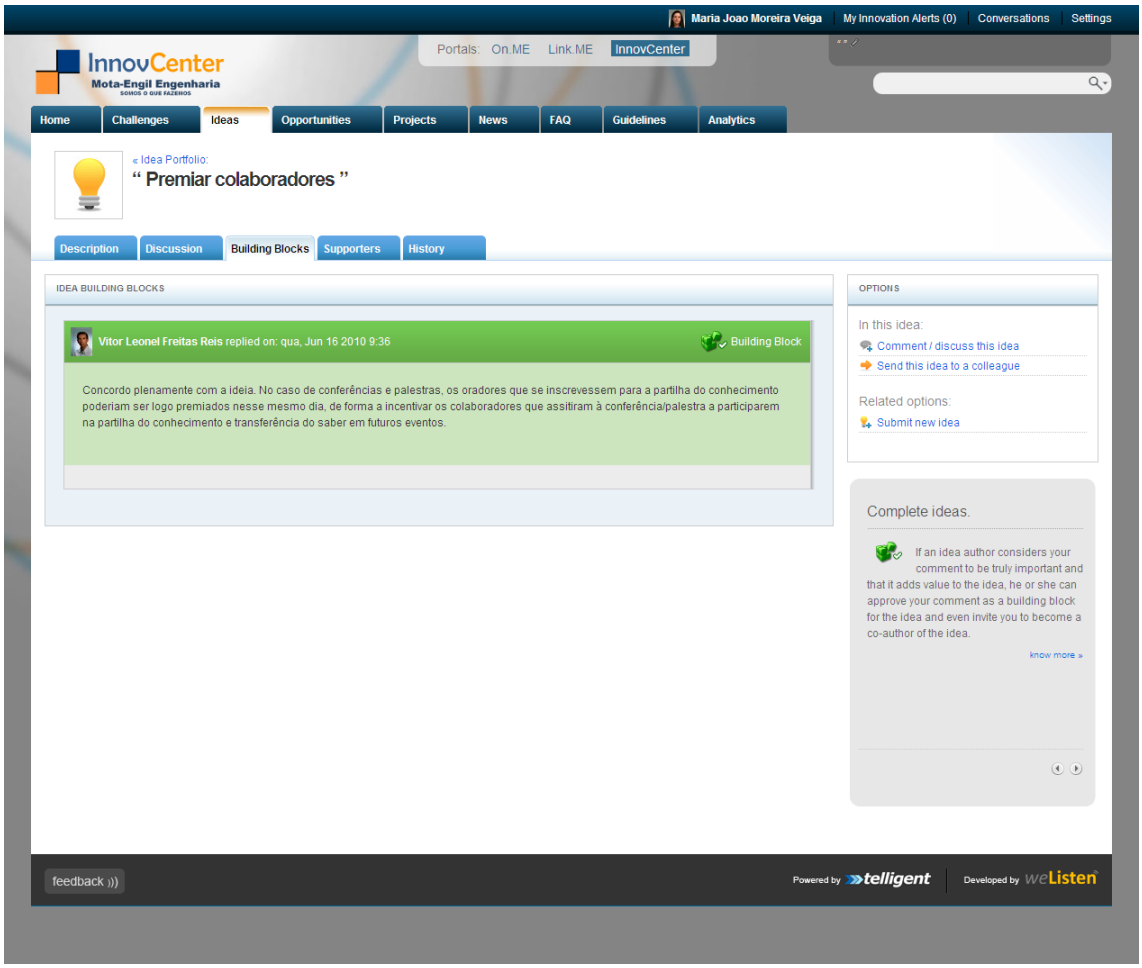
On the side of the *Idea Portfolio* page, users can see their own ideas, their idea evaluations (for managers only), and the current number of overall active ideas.

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.

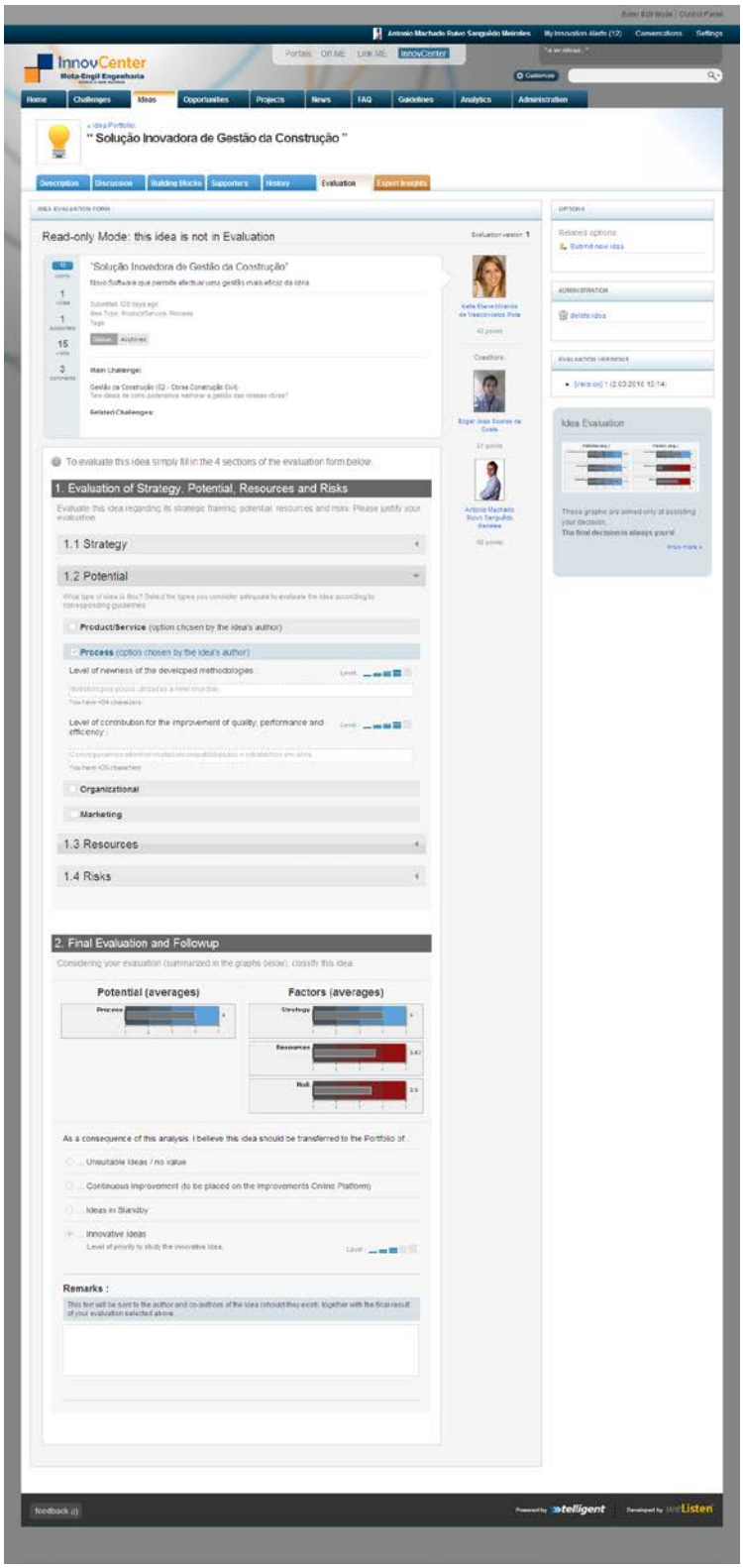


Pictured: Idea authors can designate a valuable comment on their idea as a *Building Block*, identifying the comment as a quality contribution. Authors can also add *Building Block* authors as co-authors to an idea, encouraging collaboration.

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.



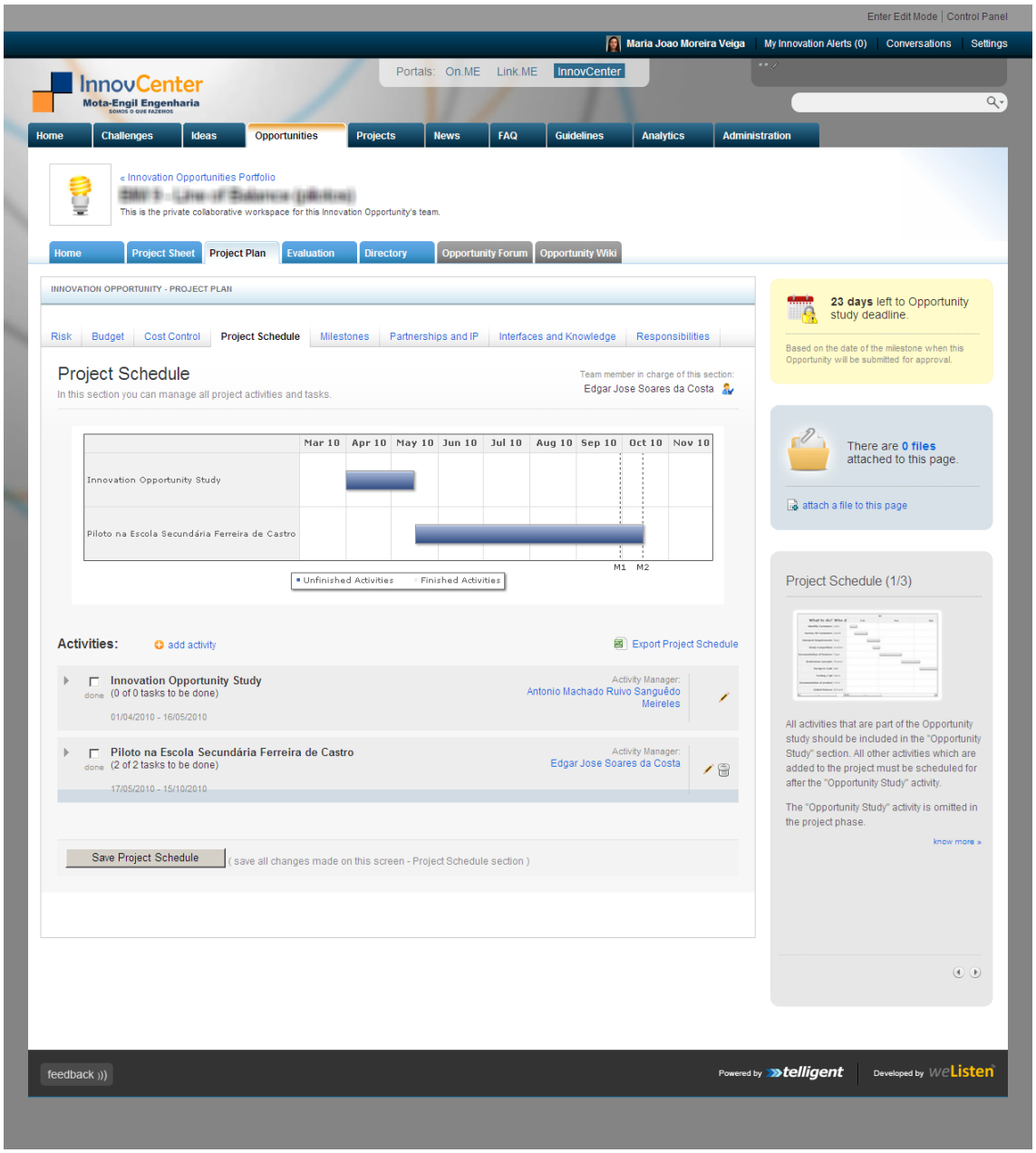
Pictured: The *Idea Evaluation* tool provides a framework for employees to review an idea's quality by asking a series of questions and showing a visual representation of the idea's strength.

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.

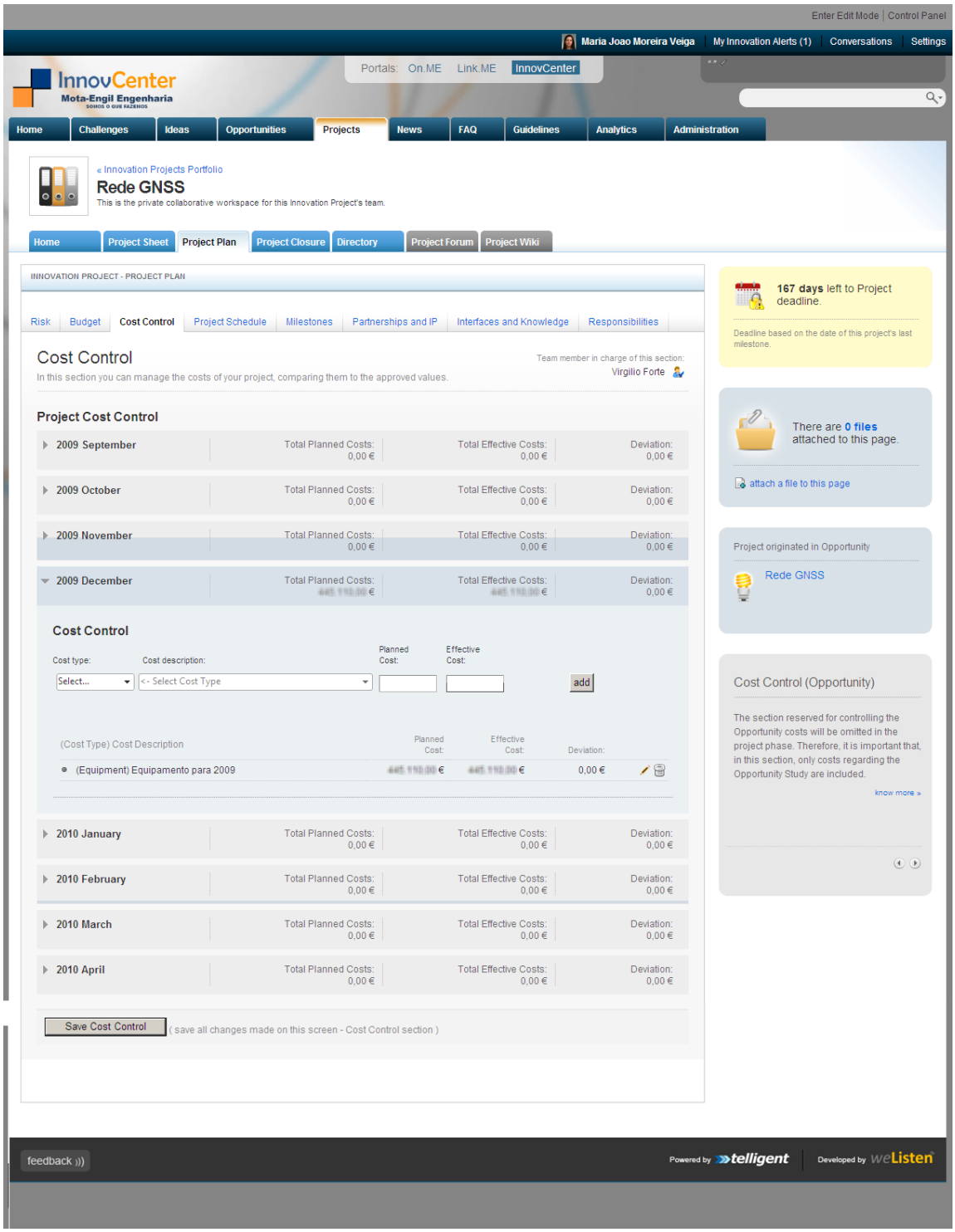
The tool must be flexible to accommodate many different project types. Project management is essential. The site allows team members to create a project schedule, creating project activities and subdividing those into tasks, which are then associated with people and start and end dates. Tasks can be 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.

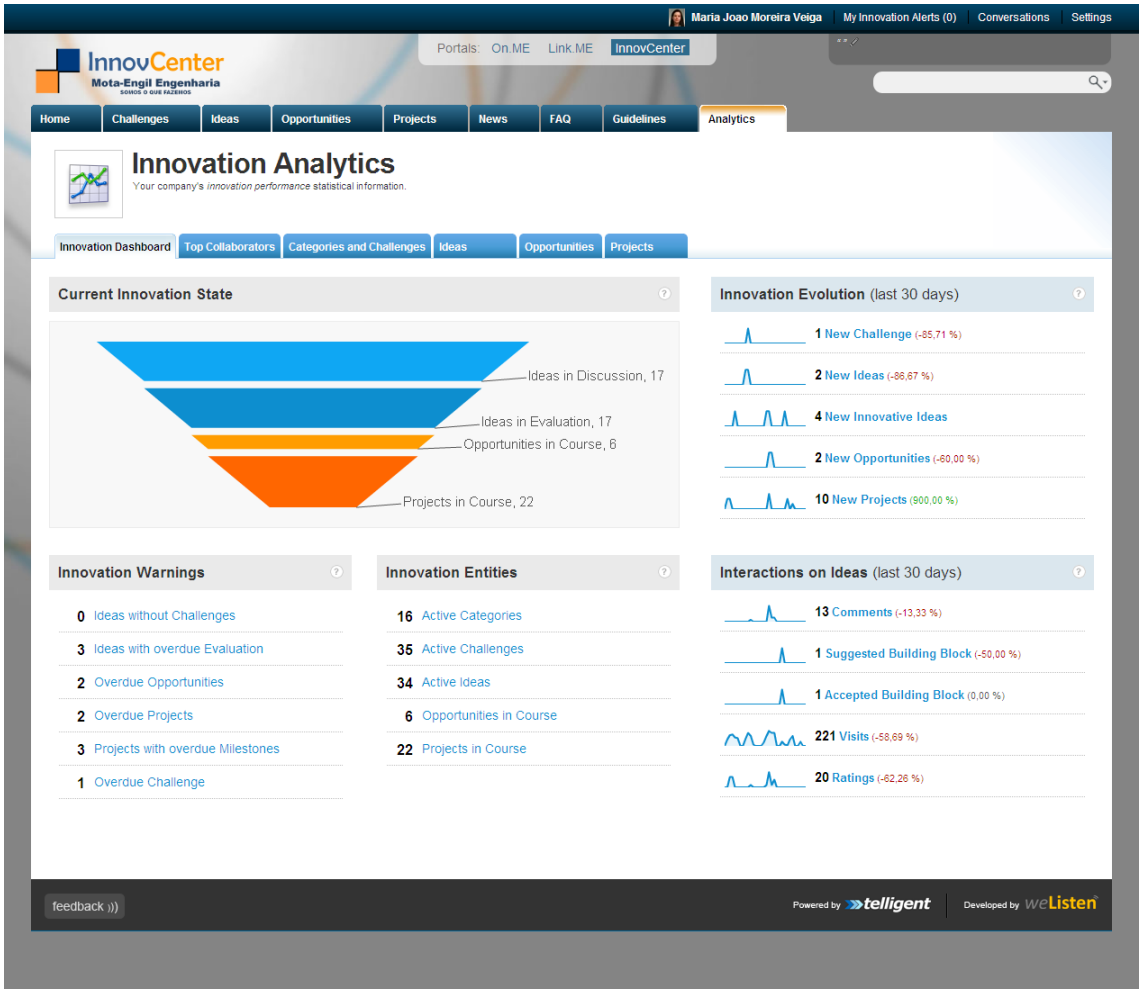
For example, teams can track the project's budget. For every cost, members select the budget where it belongs and enter the planned and effective cost for that item. This tracks the remaining budget and total effective costs to show if a budget is slipping and draw attention to that fact sooner rather 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.

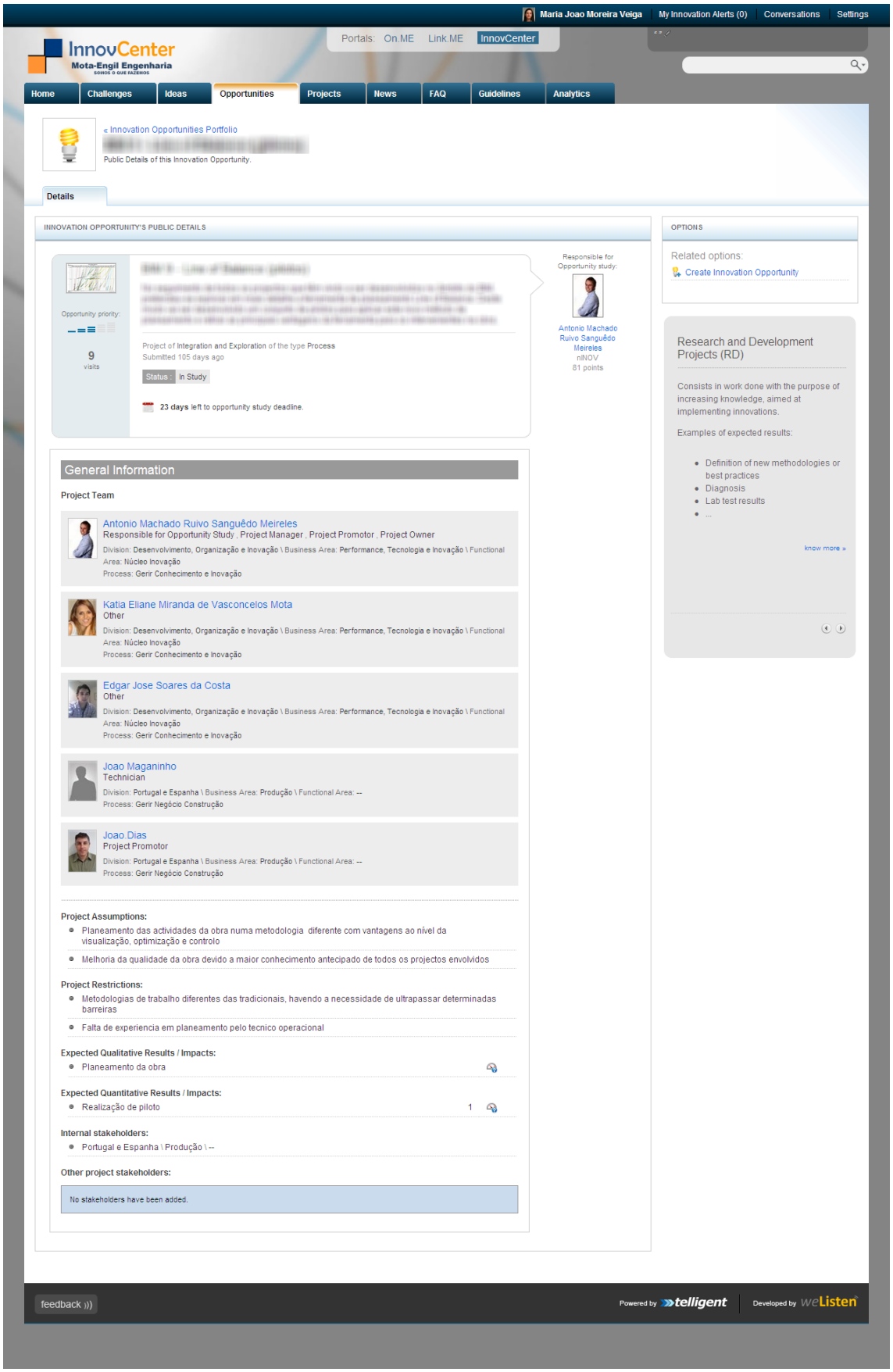
In the current system, users can suggest a challenge, which is then posted by the Innovation department. Anyone can submit a challenge and once submitted, other users can contribute ideas for resolving the challenge.

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.

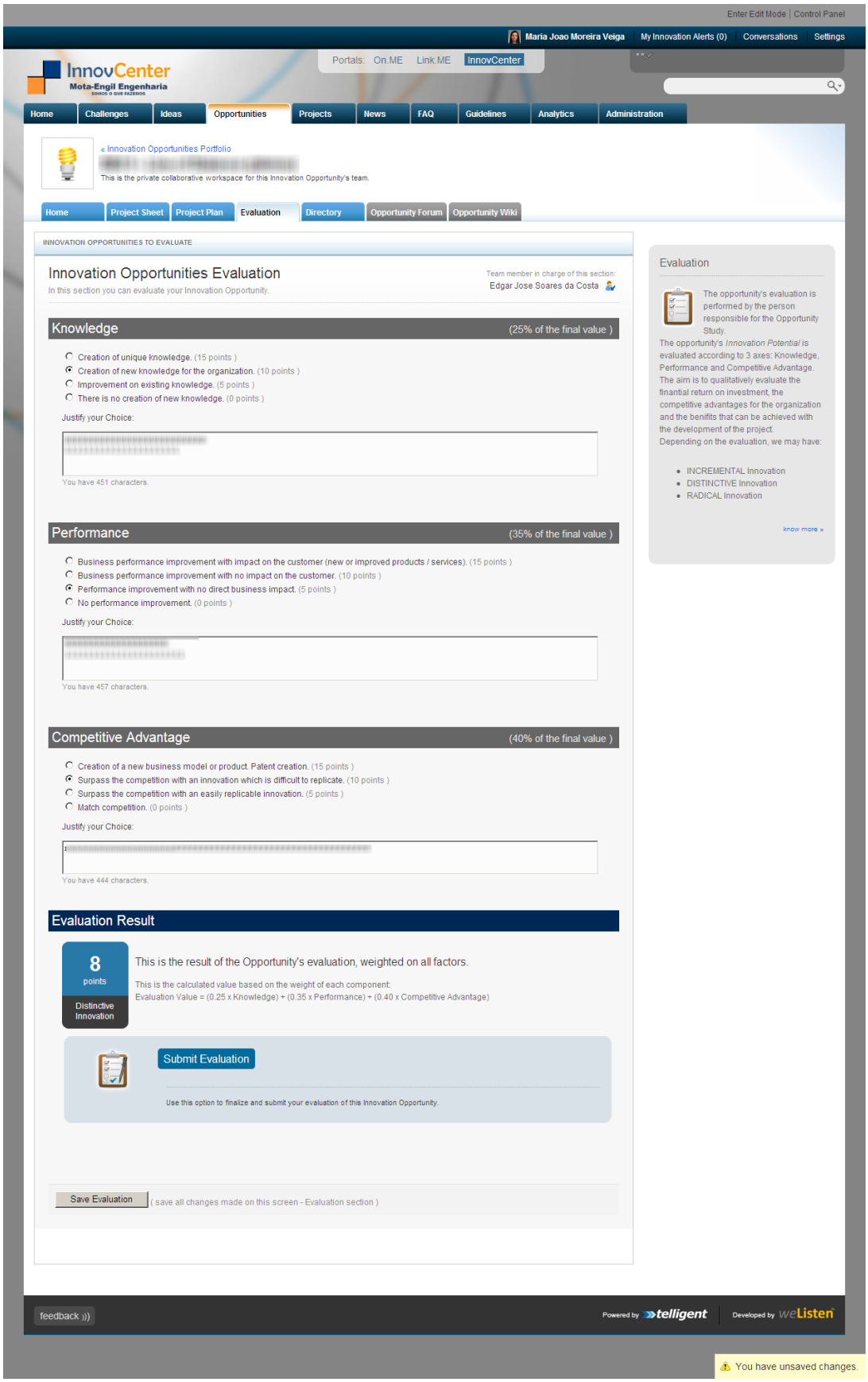
The company's Innovation department moderates challenge submissions. This oversight is somewhat administrative: to ensure that the challenge is unique — that is, not a rehash of a previously submitted challenge — and to refine the challenge before posting.

"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
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 »
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
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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.
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 »
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Developed by WeListen
You have unsaved changes.

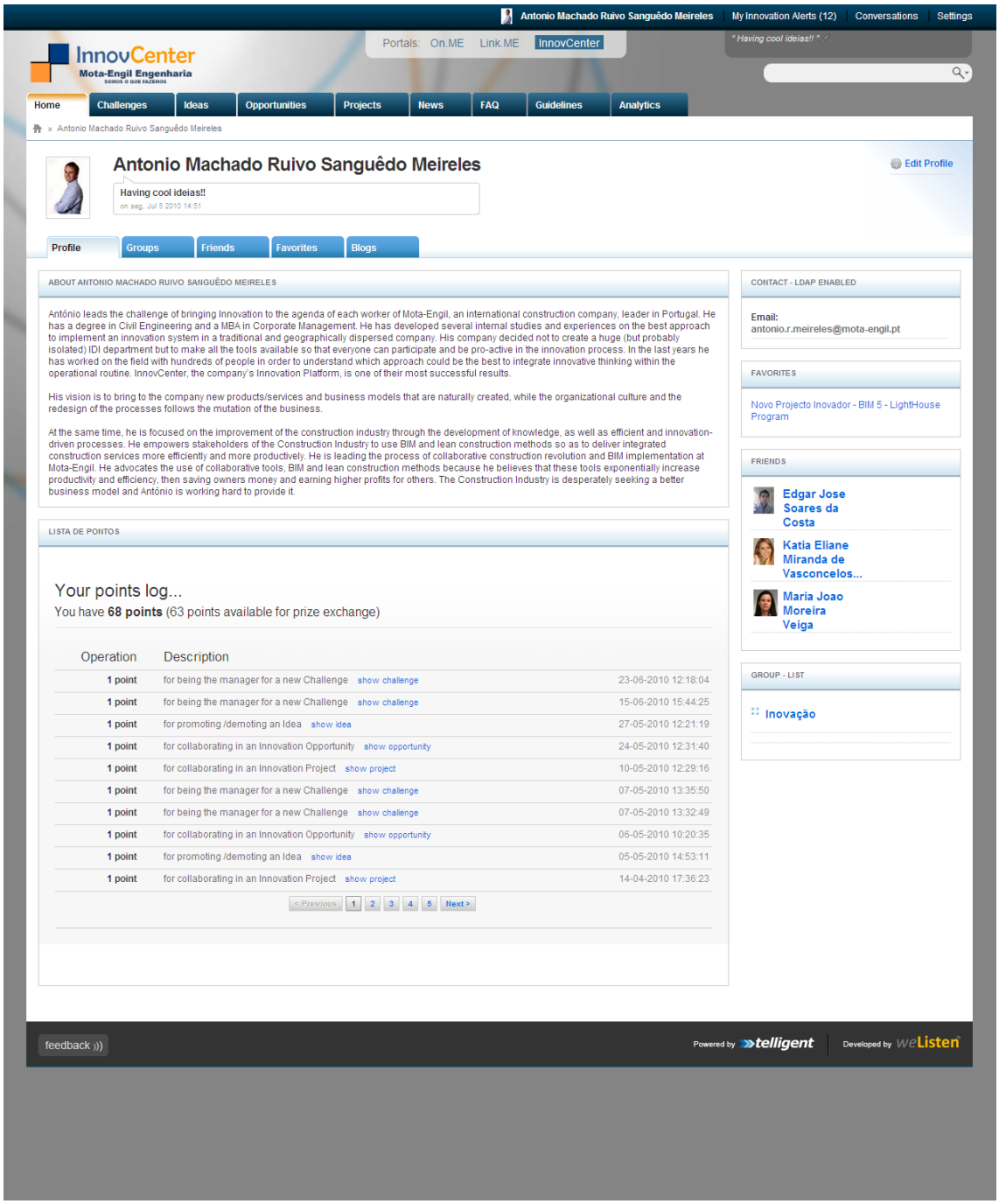
Pictured: Before the opportunity can be submitted for company-wide evaluation, team members must themselves evaluate the opportunity. The evaluation is divided into three groups, each corresponding to a different percentage of the total innovation score: *Knowledge* (25%), where the team can assess if 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.

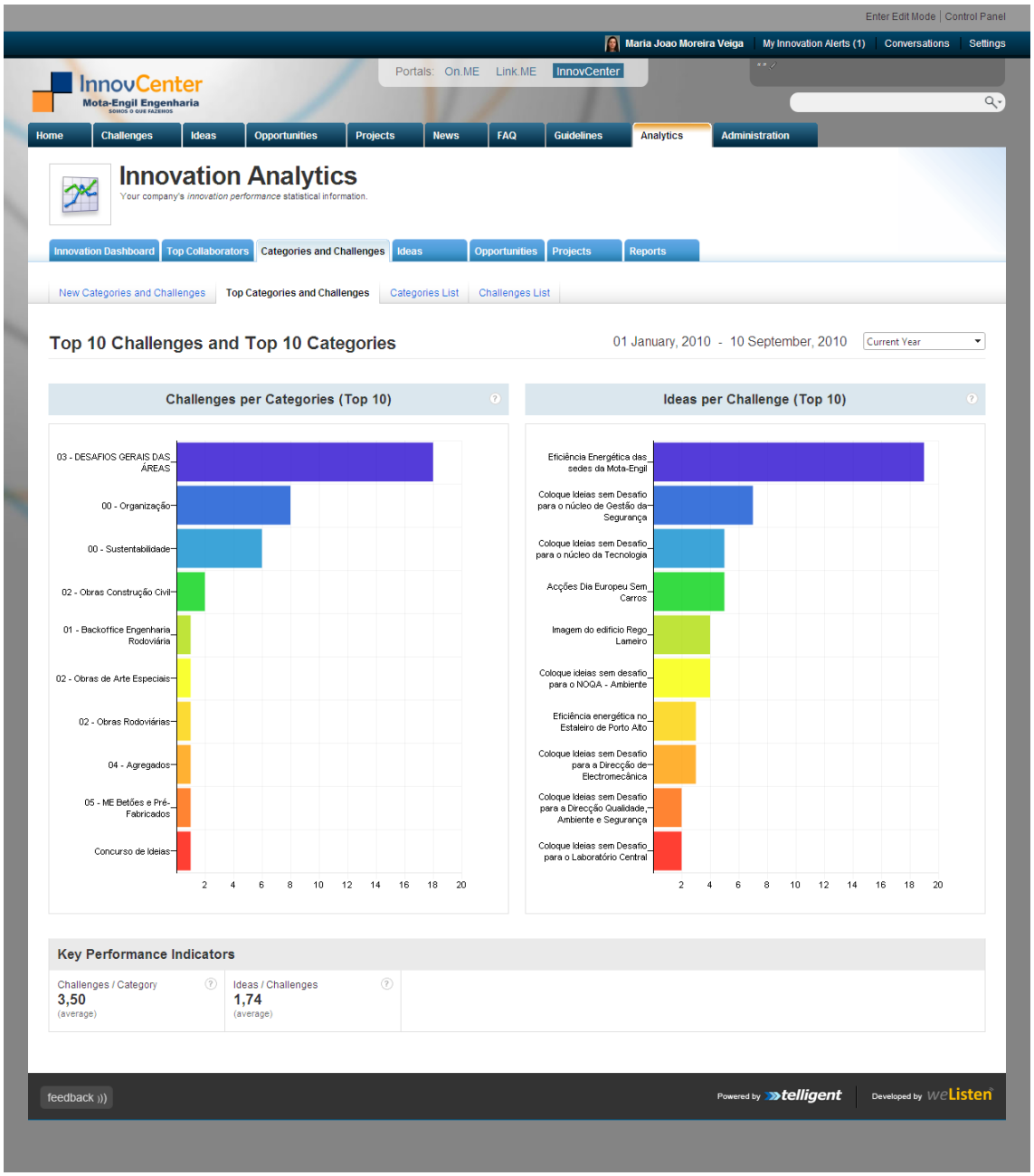


Pictured: The user profiles today. In the near future, this information will also include past projects, certifications, competencies, topics of interest, and expertise.

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.

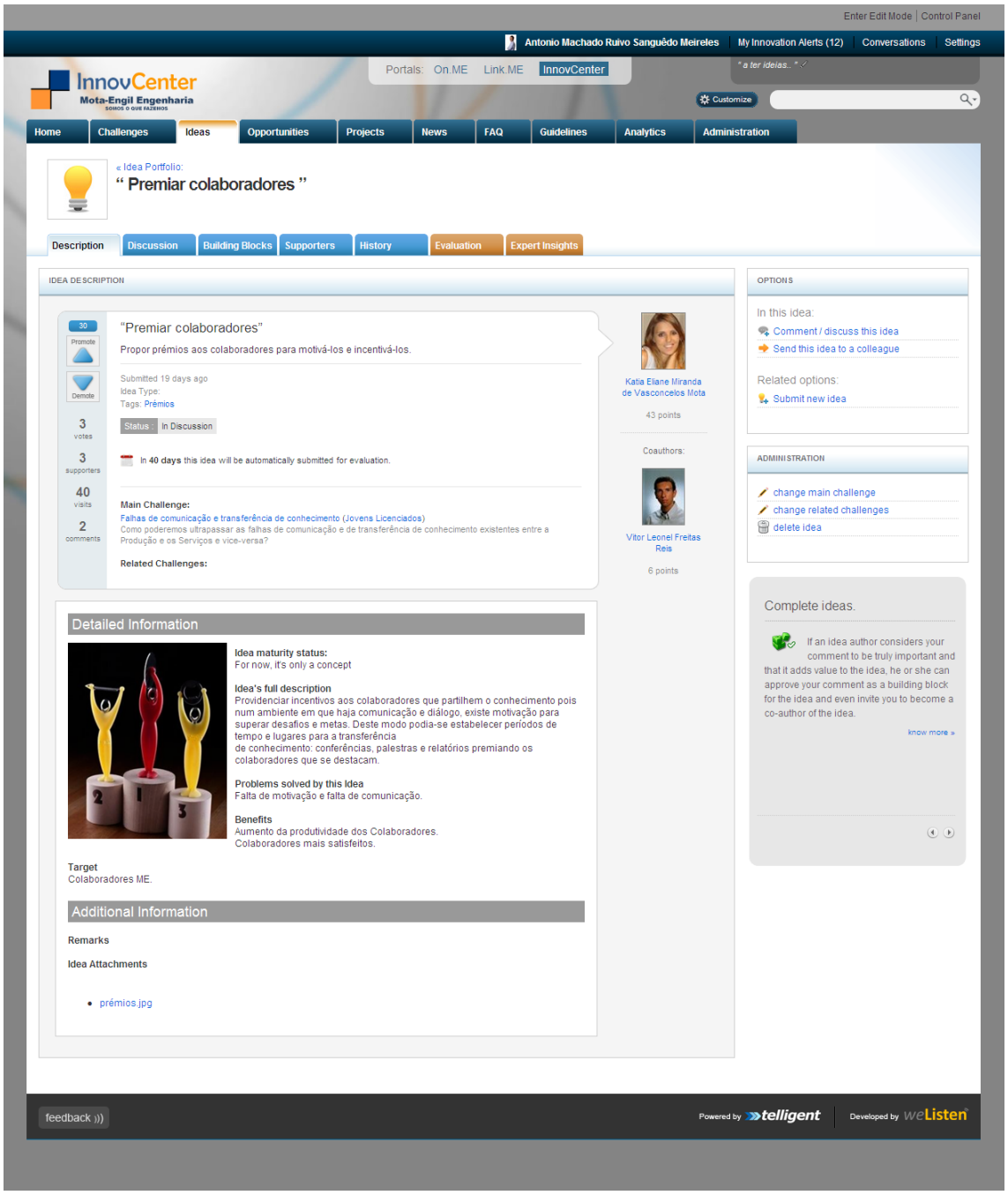
The Idea

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.

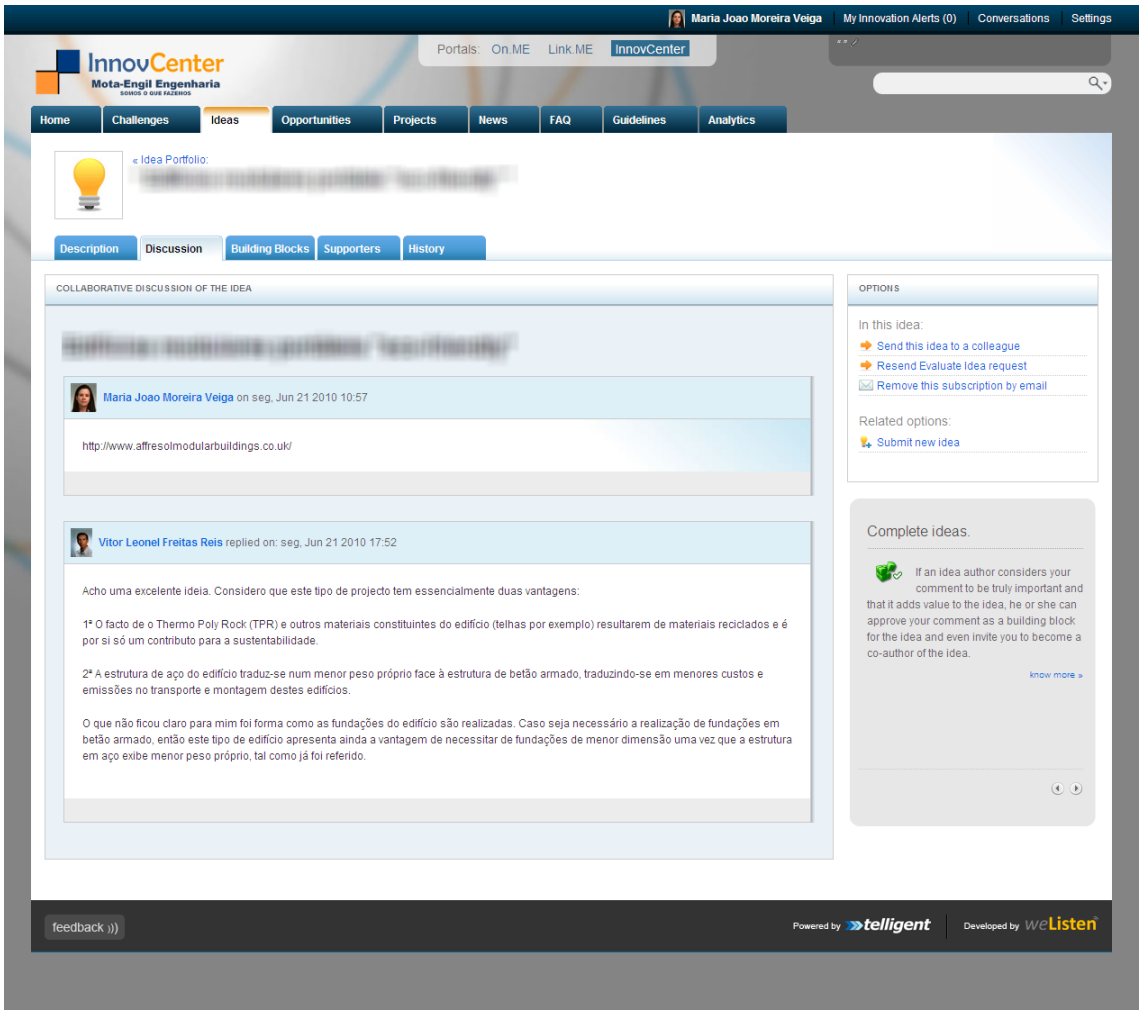
The team analyzes key indicators to find out more about what's happening with the idea. These might include: How many ideas are collective (have co-authors)? How many ideas are anonymous? How many ideas are private? How many interactions have been happening around the idea?

By analyzing these indicators, team members can keep a close watch on the health of the company's innovation cycle.

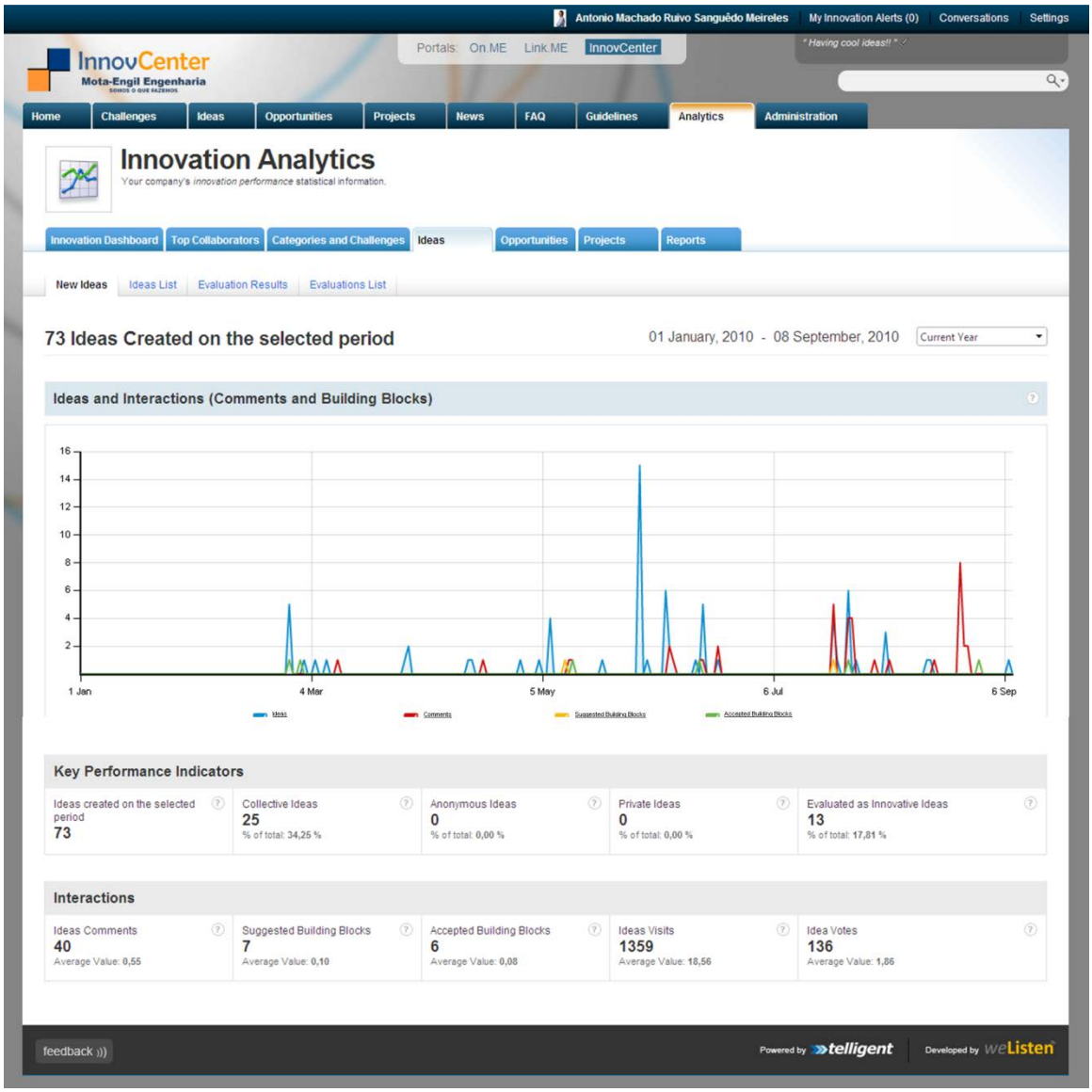
The screens below show different aspects of the idea interface.



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).



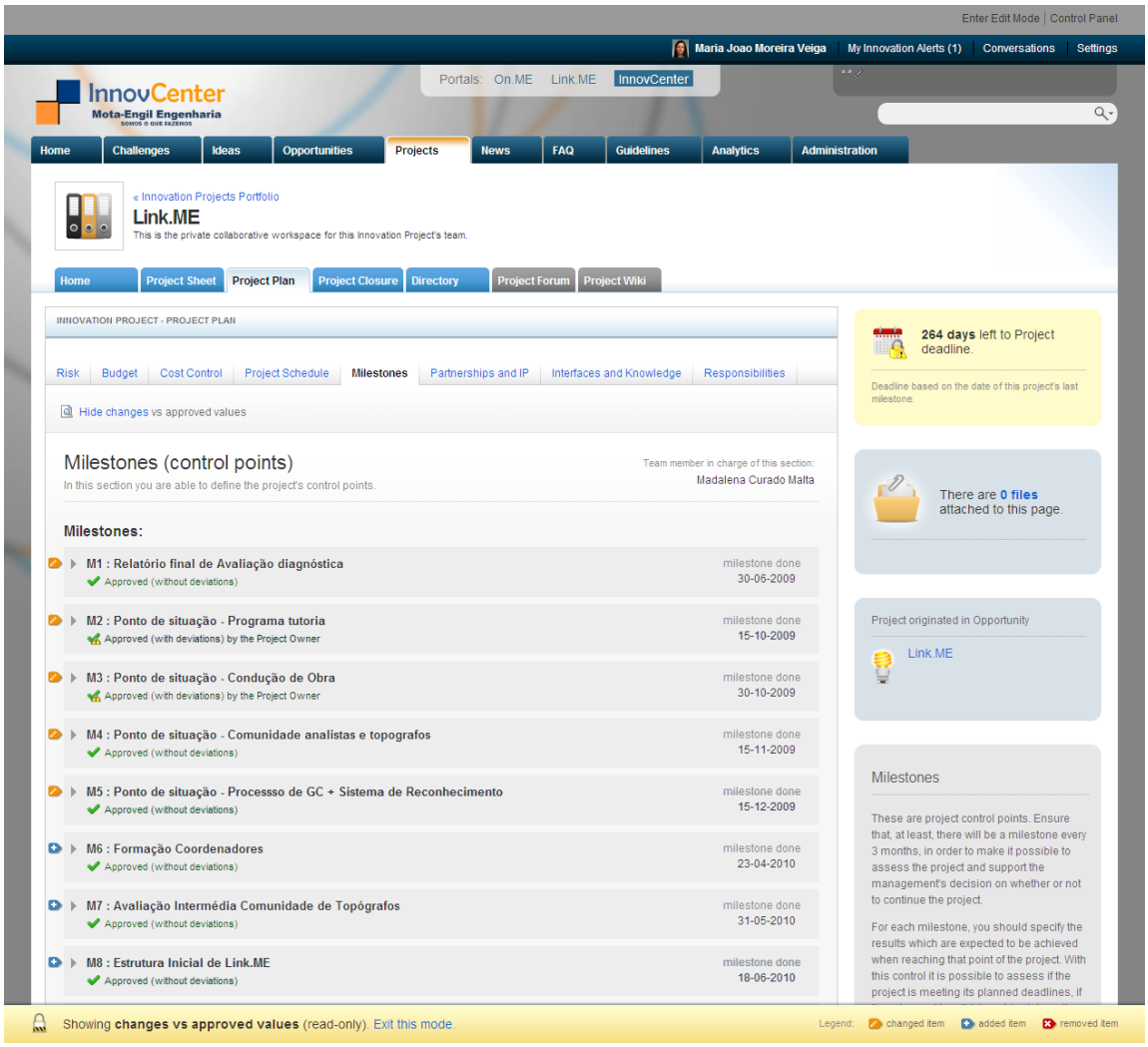
Pictured: This screen shows where the community discusses an idea, with the goal of improving and completing it.



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

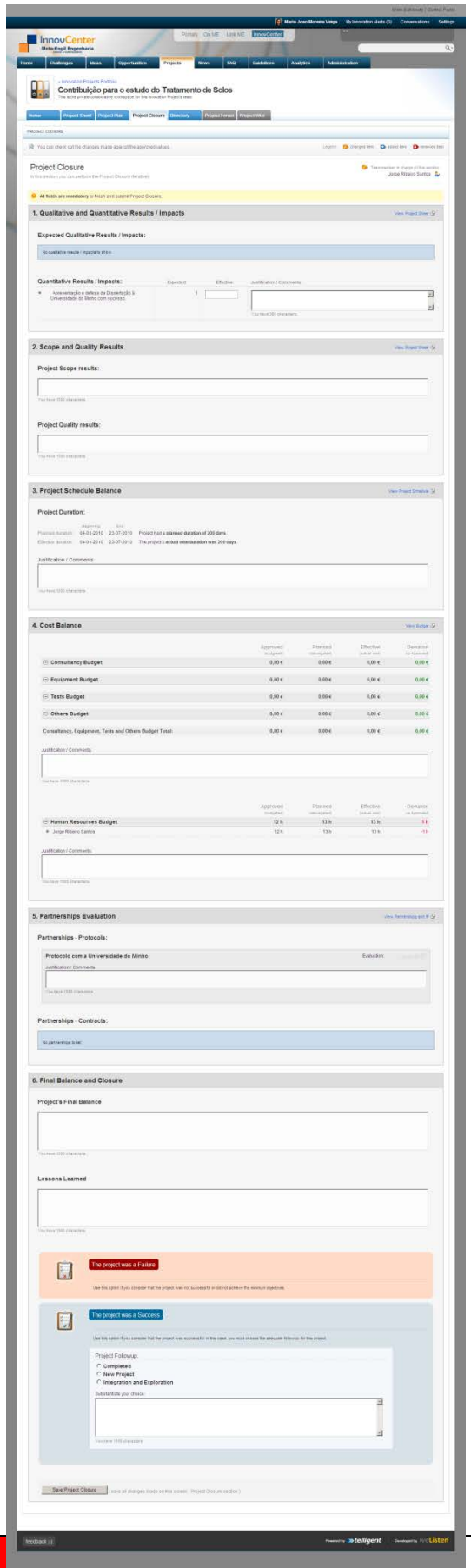
information). And an open-text field is available where users can contribute thoughts on the results.

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:
4. Cost Balance
Consultancy Budget
Equipment Budget
Tests Budget
Others Budget
Human Resources Budget
5. Partnerships Evaluation
Partnerships - Protocols:
Protocolo com a Universidade do Minho
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
Save Project Closure

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.

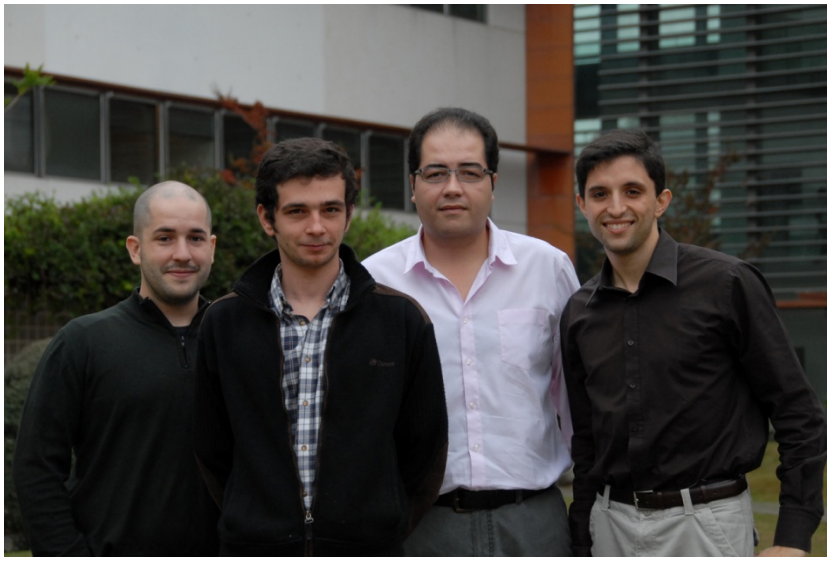
TIMELINE

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.

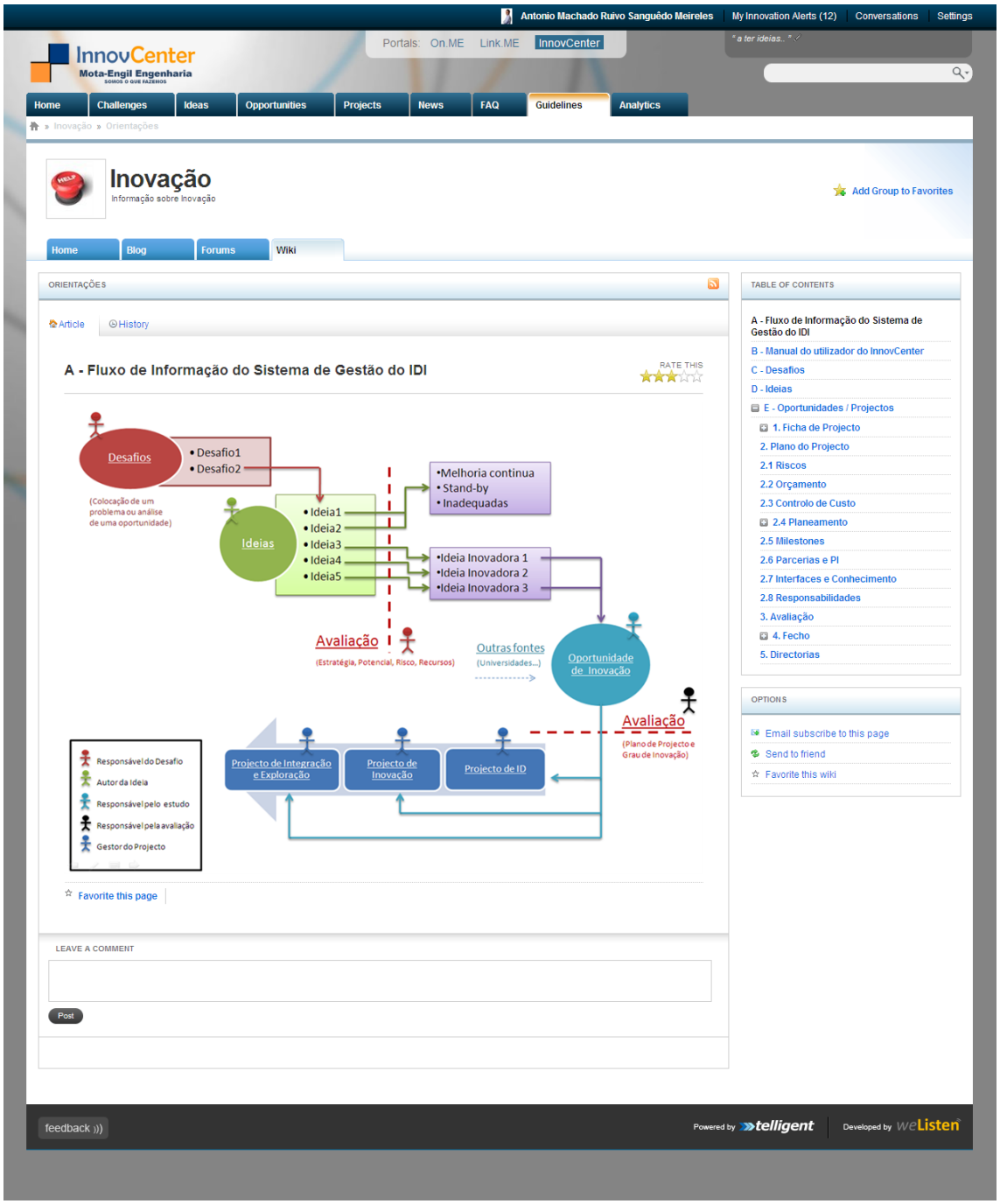
"One of our main aims is to ensure that our innovation management process is transparent and well understood by our company's collaborators," says Meireles. "It is constituted by different sections, where the different concepts that compose our innovation process are explained (such as challenges, ideas, 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

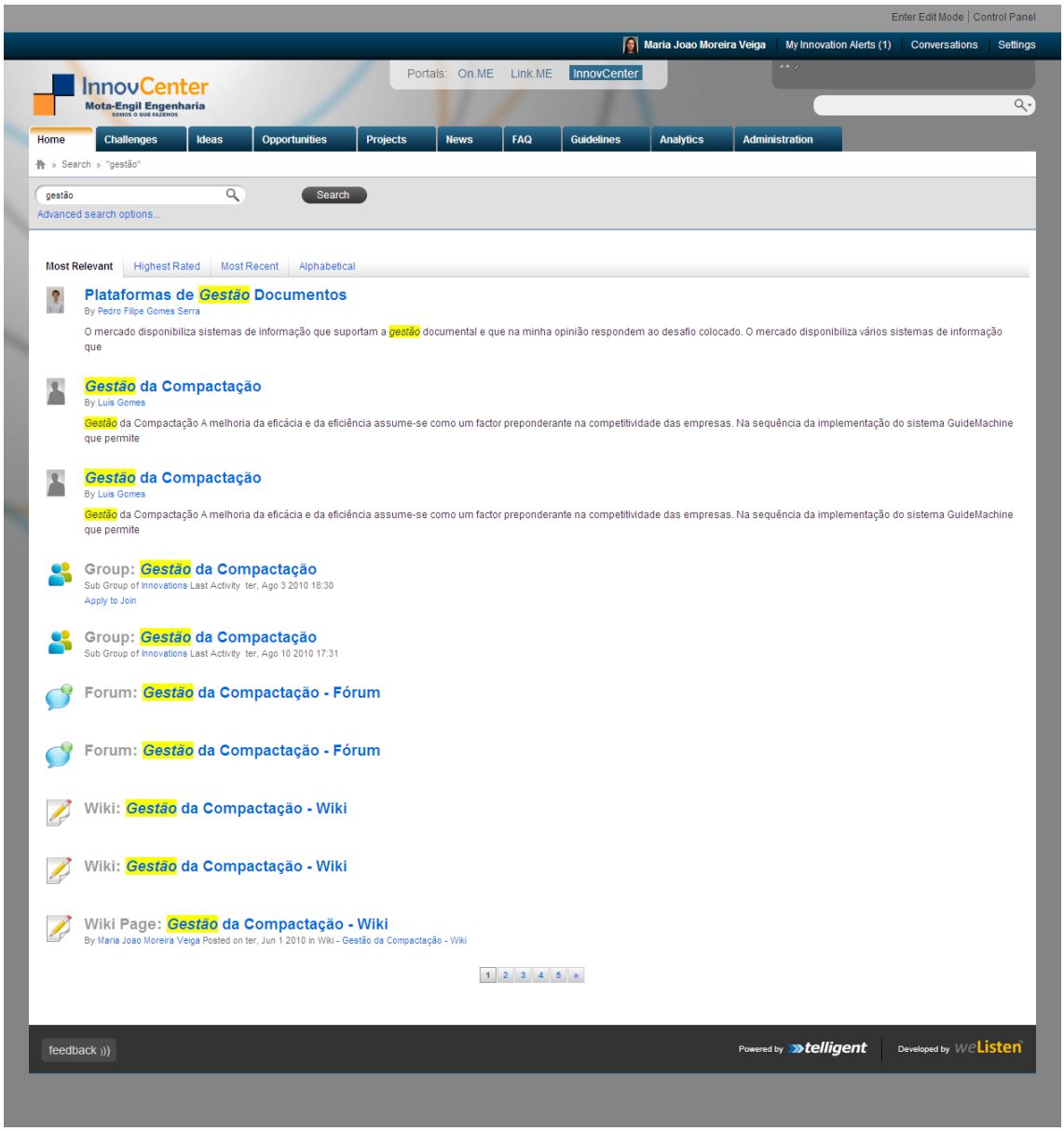
InnovCenter was built on Telligent Enterprise content management system, which uses Solr as its search tool, therefore that is the search tool in place on the platform. It is used out-of-the-box and integrated with the platform's major components, including communities, people, forums, wikis, blogs, 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.

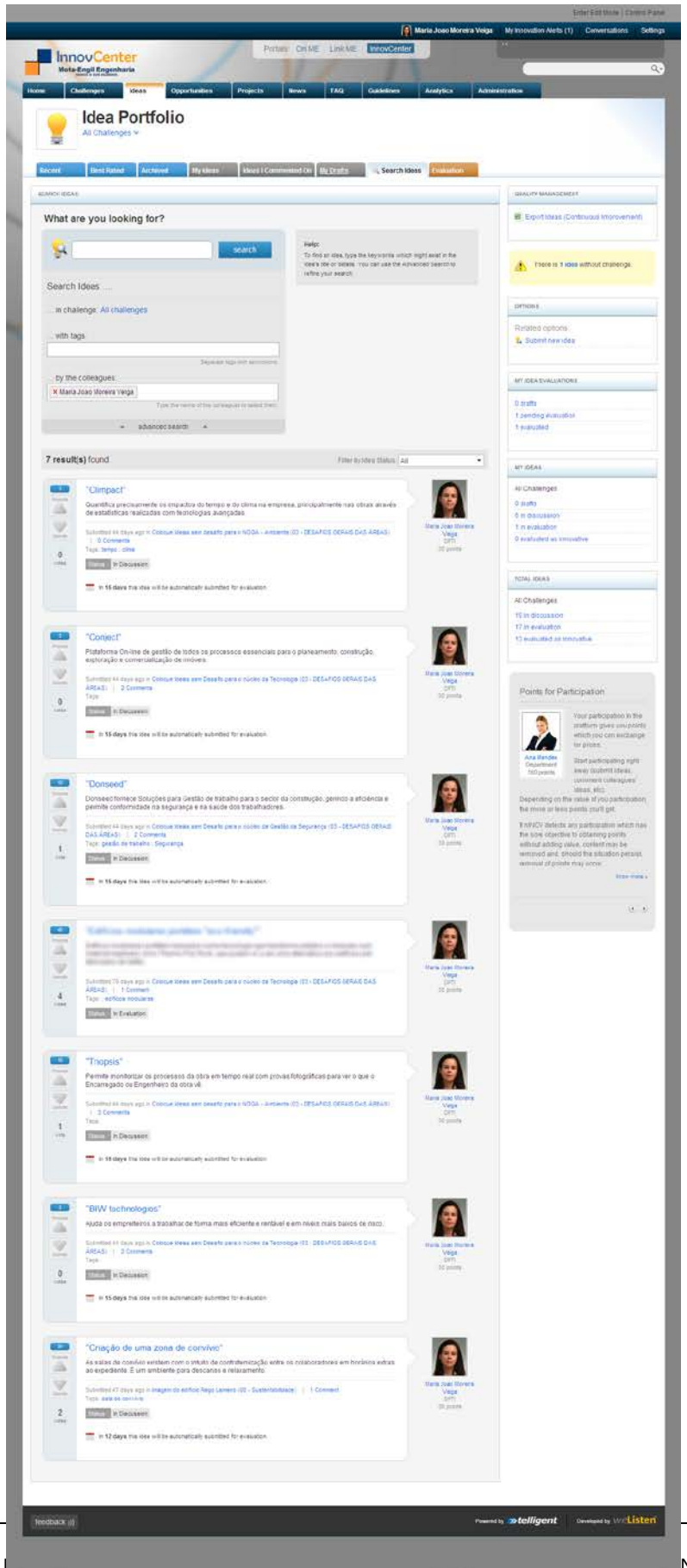
"Using our comprehensive search, when the user is submitting a new idea, we match the entered text against existing ideas and show ideas whose similarity is over a certain threshold," says Meireles. "In that case, the submitting user is invited to reconsider their submission and instead take a look at 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
Idea Portfolio
What are you looking for?
search
"Climpact"
"Conject"
"Donseed"
"Triopsis"
"BIW technologies"
"Criação de uma zona de convívio"
Points for Participation

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."

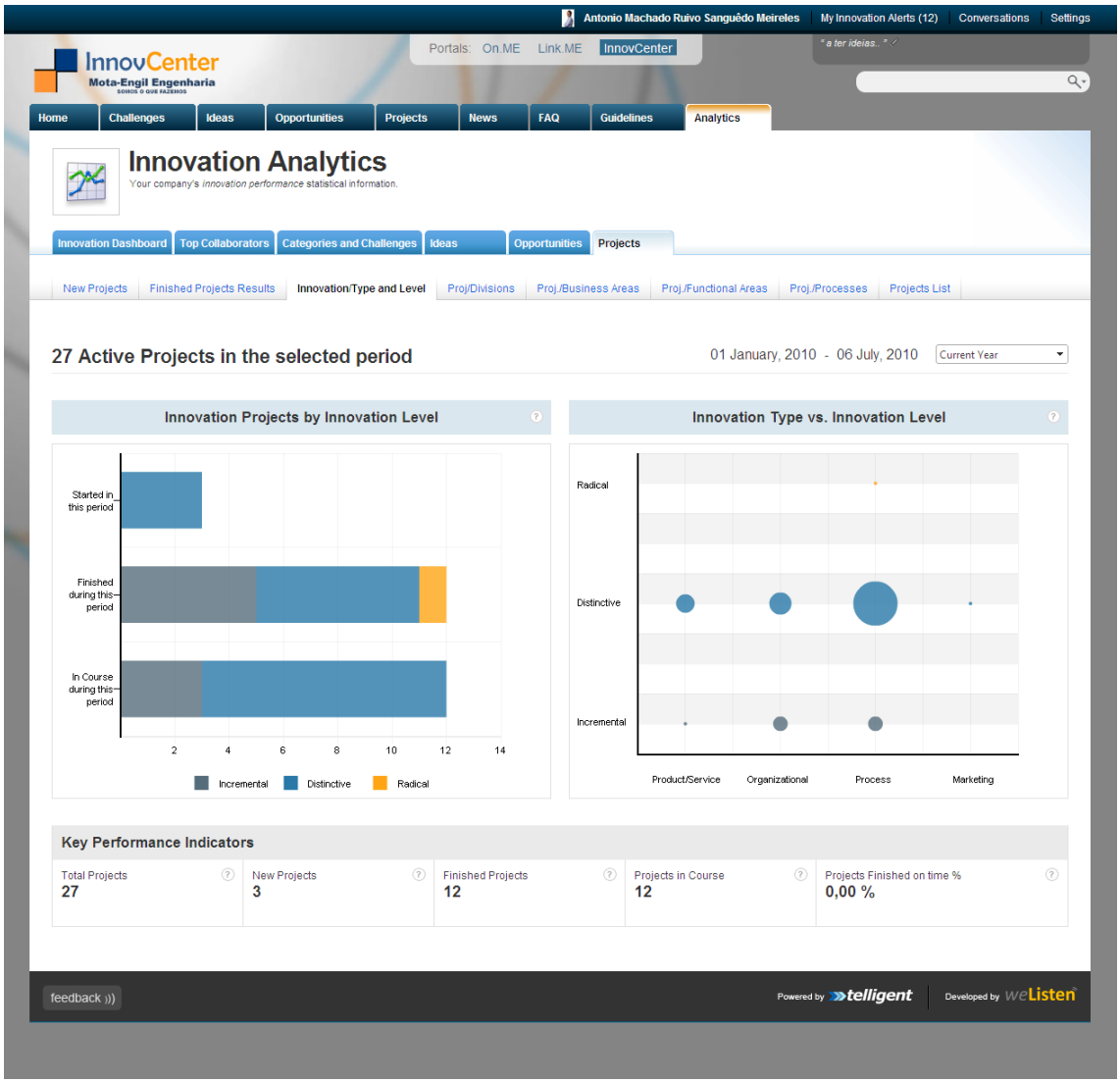
With *InnovCenter*, every director can now see all the projects that are being studied and developed across the organization, and specifically have an area that highlights all the ideas that have been generated.

"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.



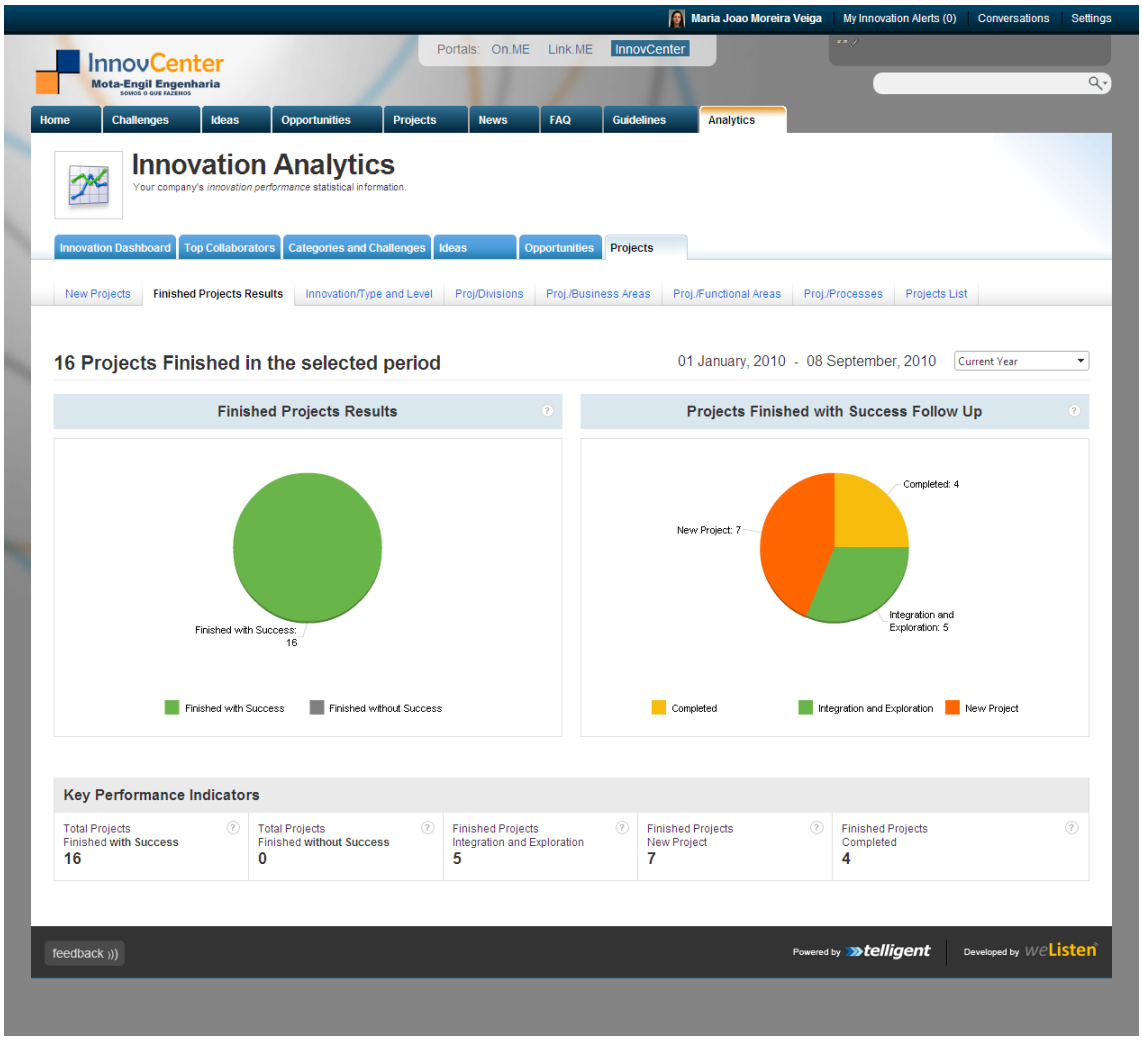
Pictured: Because *InnovCenter* has been available only since May 2010, it's premature to quantify its impact on company revenues. Thus, the team currently defines success in terms of usage: number of submitted ideas; number of innovative ideas; number of innovation opportunities; number of innovation 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.”

Verizon Communications

Using the intranet:
Verizon Communications Inc., headquartered in New York, is a global leader in delivering broadband and other wireless and wireline communications services to mass market, business, government, and wholesale customers. Verizon Wireless operates America's most reliable wireless network, serving more than 93 million customers nationwide. Verizon also provides converged communications, information, and entertainment services over America's most advanced fiber-optic network, and delivers innovative, seamless business solutions to customers around the world. A Dow 30 company, Verizon employs a diverse workforce of more than 195,000 and last year generated consolidated revenues of more than $107 billion.

Headquarters: New York, NY

Number of employees the intranet supports:
More than 195,000

Company locations: Operates in the US and 159 other countries

Locations where people use the intranet:
In the US and more than 159 other countries

Annual sales: $107.8 billion (2009)

Design team:

In-house: Zouhair Sebati, Executive Director of Verizon Intranet and Internet; Miguel Quiroga, Director Intranet and IT Governance; Gus Attar Intranet Application Manger; Donna Itzoe, Director of Employee Communications; Rajaraman Vadiynathaswami, Intranet Offshore Delivery Manager; Srinivasan Nagarajan, Offshore Delivery Manager; Ullas Chadaga, Collaboration and Search Application Manager; Avneesh Bhatnagar, Collaboration Development; Lolly Chessie, Design and IA Manager; Rachel Knickmeyer, Information Architect; Alan Masters, Content Writer and Christian Groves, Program Manager; and intranet groups in Tampa, Florida; Dallas, Texas; Chennai, India; Hyderbad, India; Boston, Massachusetts; Colorado Springs, Colorado; Maryland, Virginia; and Basking Ridge, New Jersey

SUMMARY

Building tools to support collaboration across a global enterprise of more than 195,000 employees is quite an undertaking. Verizon's intranet team focused on the enterprise homepage and a new suite of collaboration tools to connect employees to one another and enhance the users' online experience.

With the last site redesign in 2005, it was time for a change. The improved intranet had to focus on tools to help employees do their work and connect with one another. The team focused on the employee directory, collaboration features, and social features to encourage employee participation, such as through wikis, commenting on stories, and submitting ideas for improving the company.

With those goals in mind, the team worked to create the best possible processes for reaching its objectives. Different elements of the redesign involved different business units, stakeholders, and histories. This necessitated that the team be flexible, using different approaches for creating each new design.

For *My NetWork*, a new collaboration space on the site, team members conducted solid user research and employed an iterative design, learning and refining as they built. They experimented with the design with select users in the company, making changes, improvements, and tweaks. They decided that, rather than doing a broad survey of the company's needs, they would build a tool for a small group of users and see how it was used, where it succeeded, and where it failed, striving to make the easiest, most useful collaborative area for employees.

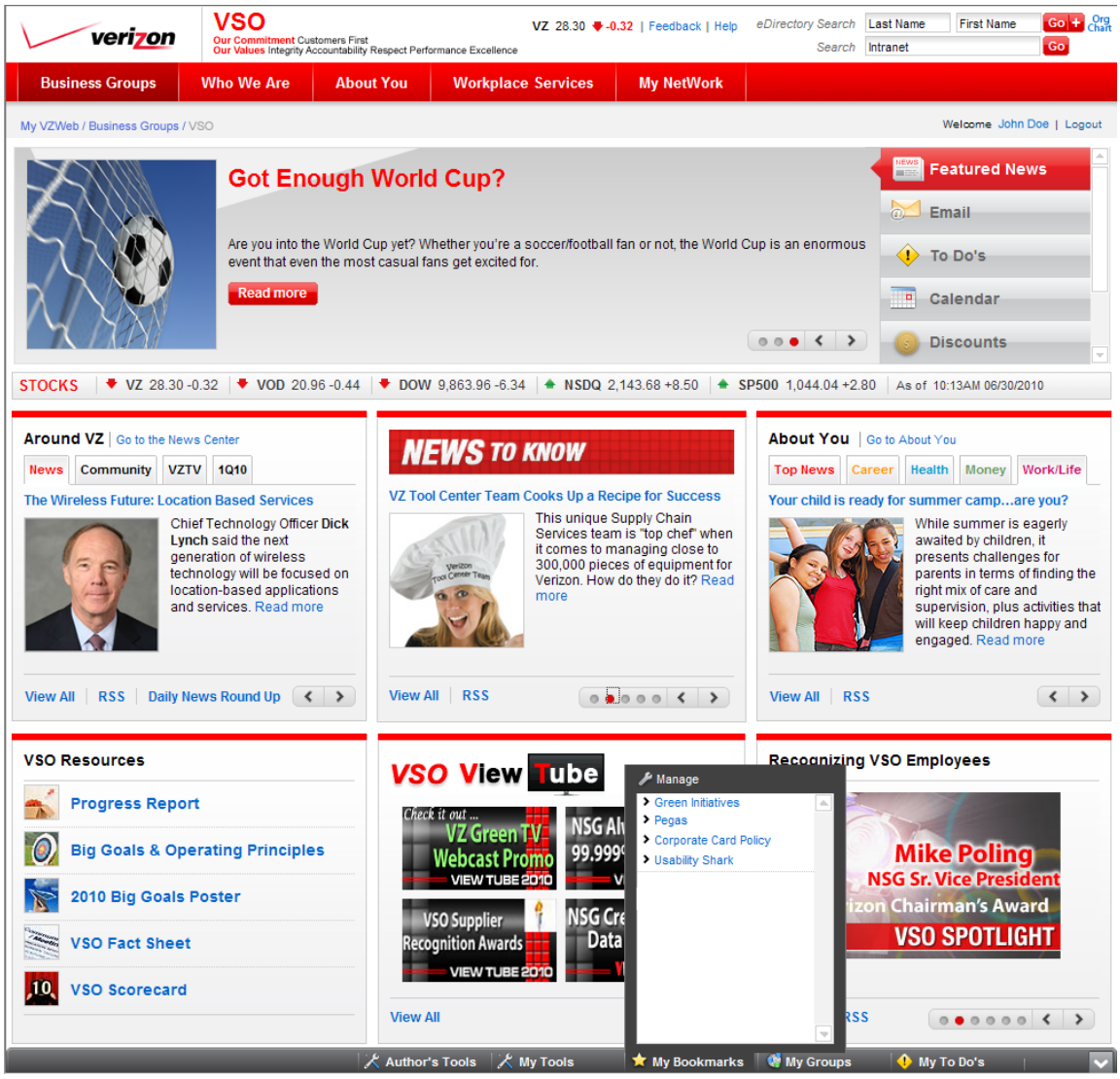
For other areas, such as the enterprise homepage, team members worked with numerous stakeholders to define requirements and create ideas. For ideas, they looked to other large-scale enterprise intranets, as well as to successful websites.

The new enterprise homepage focuses on news and productivity. The page features general corporate news as well as personalized news from the company's business units. *News* offers company-wide information about news release announcements and events, while *Around VZ* offers corporate information such as local/national community outreach programs, videos, and quarterly financial results.

Some sections are specific to business units, such as *VSO News to Know*, which is information for Verizon Services Operations unit employees. *Recognizing VSO Employees* acknowledges employees who do exceptional work or have received special recognition awards. *View Tube* offers business-unit-specific video content. *About You* rounds out the news sections, with information from HR.

Productivity features on the page include the blade toolbar, which appears at the bottom of all intranet pages. The intent of the toolbar is to give users quick access to certain tools. *Author Tools* appear for content authors only, providing editing tools for the current page. *My Tools* is a list of links relevant to the user's organization and job function. *My Bookmarks* lets users create a personal list of shortcuts. *My Groups* offers users access to all collaborative groups they're associated with, and *My To Dos* includes information such as reminders about benefits enrollment and performance reviews. However, the team has found that many users didn't immediately notice the blade toolbar.

The homepage integrates email and the user's calendar and to-do list. This idea came from stakeholders, who wanted to encourage intranet use as well as extend the amount of time users spent on the homepage, in hopes of them seeing corporate and line-of-business information. The features makes sense for users at Verizon who do not have a dedicated PC for email (such as service installation and repair technicians in the field) allowing them to easily check email and view their calendar from anywhere.

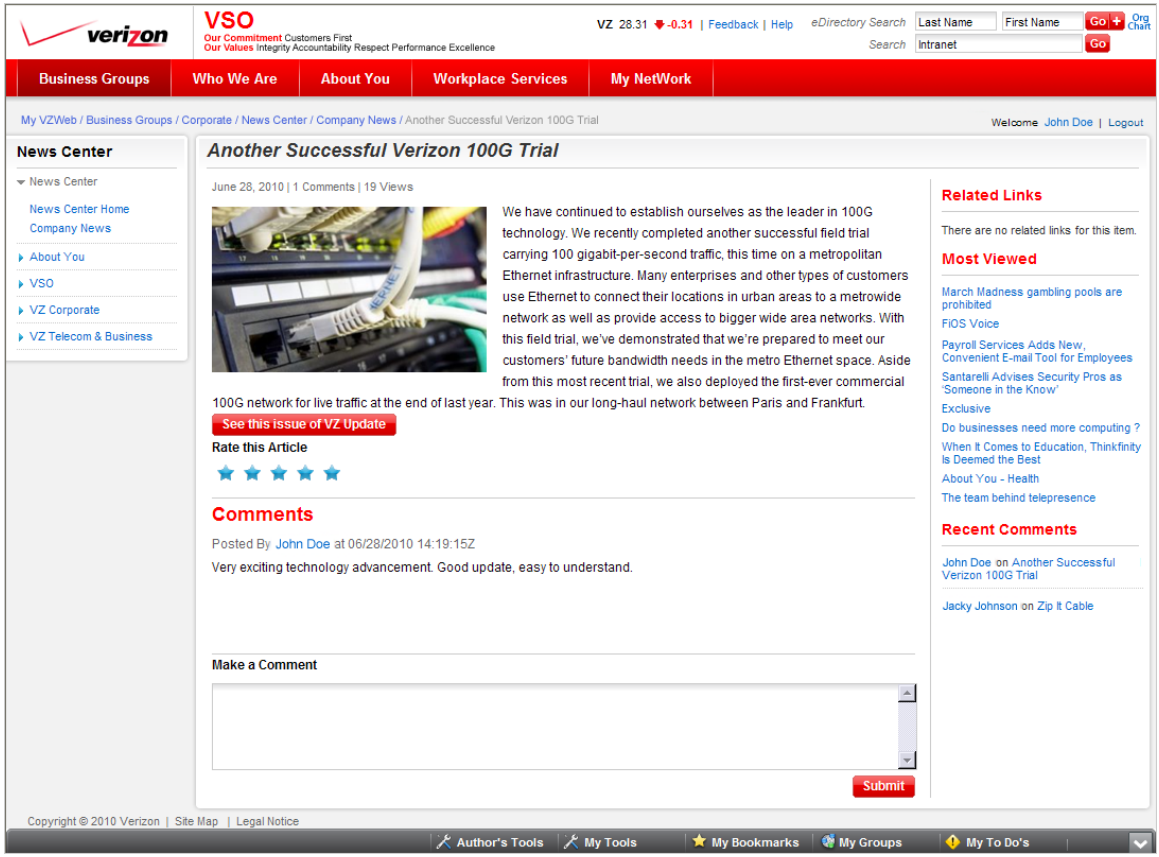


Pictured: The homepage features news, information, and productivity tools, with some sections focused on the user's business unit. Users can view their email inbox or calendar through the top pane of the page using the links on the right side.

Given the homepage's focus on news and an overall goal of collaboration, letting users comment on news stories was a natural fit for the site. Users can add a comment on any news story, as well as rate it on a five-star scale. Comments are listed beneath the article, together with the commenter's name (which links to profile information) and the date and time the comment was posted. Users are invited to comment in a blank comment box at the bottom of the page. They can also select a star rating for the article by clicking on a star.

Each article lists the number of comments as well as the number of views at the top of the page. This data is used to provide feedback to content contributors about successful stories, but also to populate the *Most Viewed* links on the side of the page. This also gives users feedback on which content other employees are viewing.

News pages promote additional browsing by including a left-hand column with related links, popular stories, and the latest comments on stories. This provides users a variety of ways to locate or discover additional news that's relevant to them.



Pictured: Comments and views are totaled at the top of news pages, and users can read comments or add their own on the article page.

The other major enhancement to the site is the addition of *My NetWork*, a suite of collaboration and communication tools. This area's tools allow and encourage communication throughout the organization.

With such a large organization, it's crucial for the communication tools to focus on the employees who are most closely related to the user. The user's *NetWork* thus consists of colleagues from his or her own group or from categories —such as Management Employees — based on the user's role.

Users can ask a question of colleagues at the top of the page by filling out a simple form. Alternatively, they can also use a *VZ Talk* update (microblogging status update) to pose the question or start a wiki article (authors can start the article creation process right on the dashboard page).

Users can select a category, add optional tags, and enter a question of up to 255 characters, with room for additional text if needed. Users can share questions with everyone, with their own *NetWork*, or with specific groups.

The *Dashboard* shows users recent activity on the site from colleagues in their department, across the organization, or in their group. Updates include information such as answering or asking a question or editing or posting content, such as Wiki

articles. A tag cloud shows users which topics are currently popular based on *NetWork* activity.

The popular *Groups* section lets employees create private or public workspaces to share documents, participate in discussions, assign tasks, or manage team calendars. The recent activity view shows users new members of their groups as well as recent activity within them.

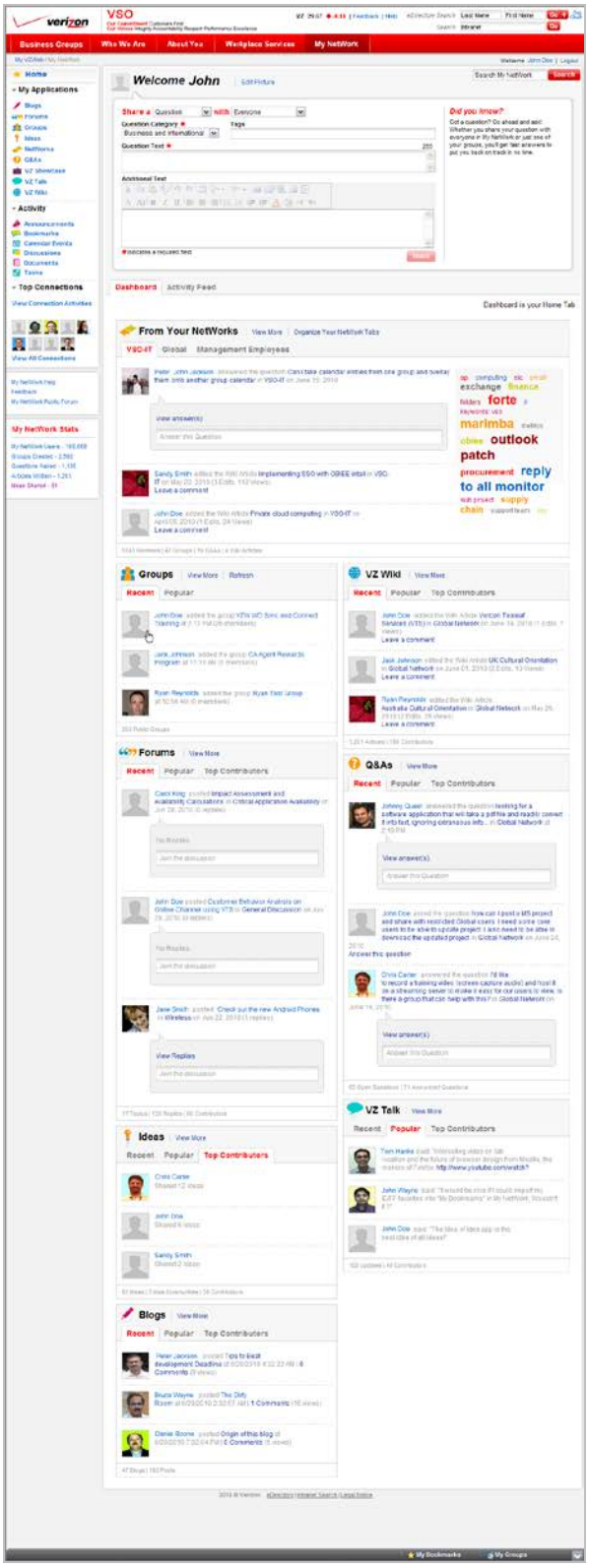
The *VZ Wiki* is a knowledge base that anyone can edit. More than 1,000 articles cover information ranging from policies to concepts. Forums allow users to discuss products, services, internal tools, or initiatives, as well as get advice about using Verizon tools.

The *Ideas* tool allows employees to submit thoughts on improving Verizon and lets community leaders solicit and manage ideas. In the *Q&A* section, employees can ask experts questions, following the *Yahoo! Answers* model. This has proven to be an invaluable tool for new employees.

VZ Showcase is Verizon IT's internal application store; it links to internal applications and let users find appropriate technology solutions. *VZ Talk* is an internal, secure, and enterprise-focused microblogging tool. Through it, users can update their status, share critical news or announcements, ask for advice, and follow colleagues.

Users also can interact on the *Dashboard* page itself. Questions are posted with a space to add an answer. Comments in forums let users enter a reply directly on the page.

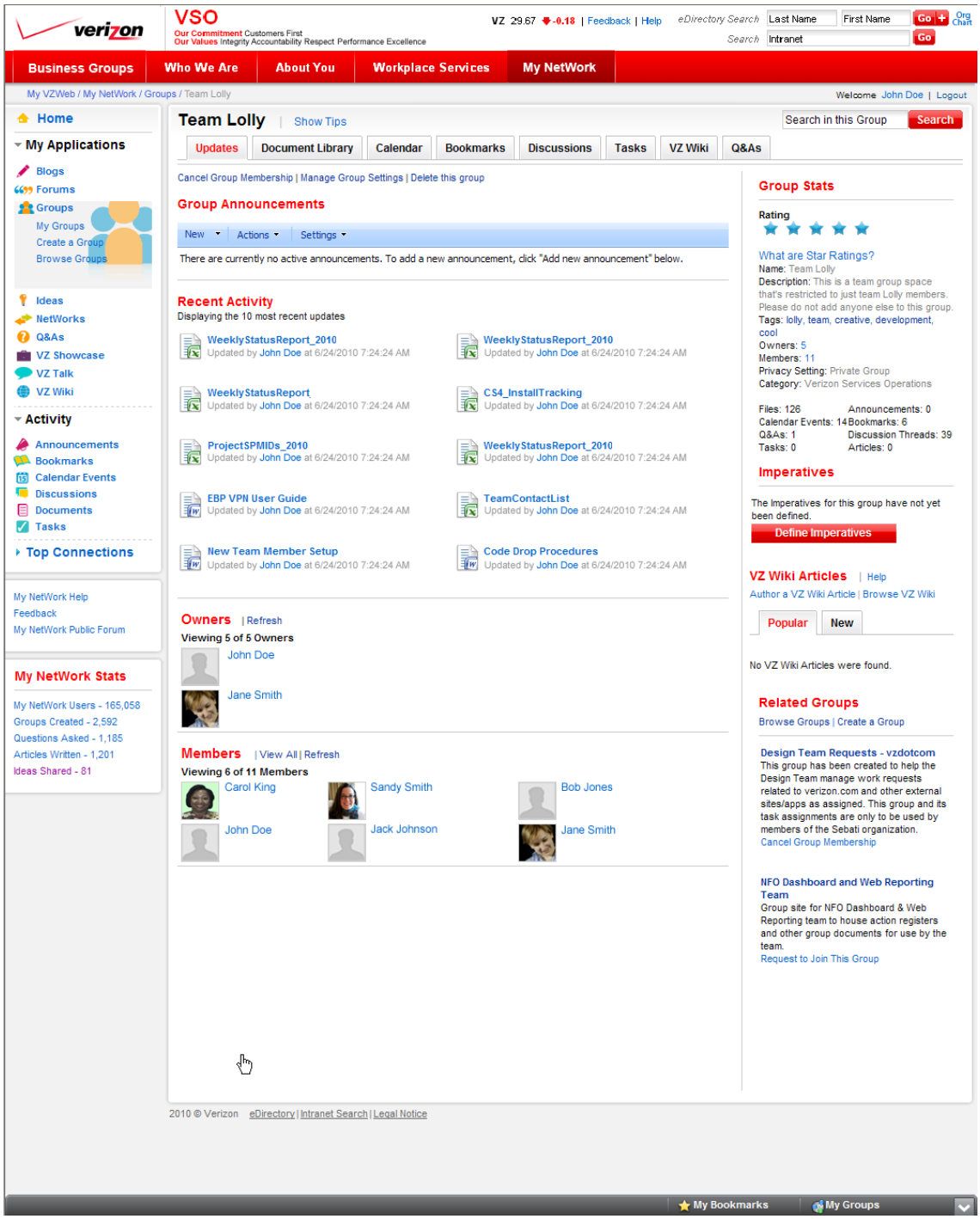
In most areas, users can view either the most recent or most popular activity. *Top Contributors* are noted where appropriate, both recognizing employees for their involvement and subtly encouraging others to participate. The page and all of the tools available here emphasize people and communication. A user photo, if available, accompanies each posting and the user's name links to his or her profile.



Pictured: The *My NetWork Dashboard* provides a consolidated view of all recent or popular activity across various collaboration tools.

Of all the new collaboration tools, *My Groups* has proven the most popular, allowing employees to set up workspaces and manage members who can access those spaces. Employees have set up 2,800 active groups. The groups let employees share and manage files, create calendars, share bookmarks, create forums, populate task lists, and create group-based wikis and *Q&As*. The spaces are built on SharePoint and can integrate with user's desktop MS Office applications, allowing them, for example, to integrate a group task list into Outlook. The areas also include document libraries, which have changed the way documents are shared at Verizon.

Document libraries have been so successful because, in essence, they fundamentally simplified the process of creating shared network space. Teams and working groups across Verizon can now nimbly create and manage shared network drives and collaborate on documents. Previously, teams had to rely on email or FTP shares and organizationally limited network shares, without any of *My NetWork*'s collaboration, tracking, and versioning functionality. Additionally, these document libraries are integrated into Windows Explorer, allowing users to drag-and-drop documents, save directly into the libraries, and interact with the functionality without using a browser or opening the *My NetWork* site.



Pictured: *Group Pages* allow online collaboration and document sharing for teams.

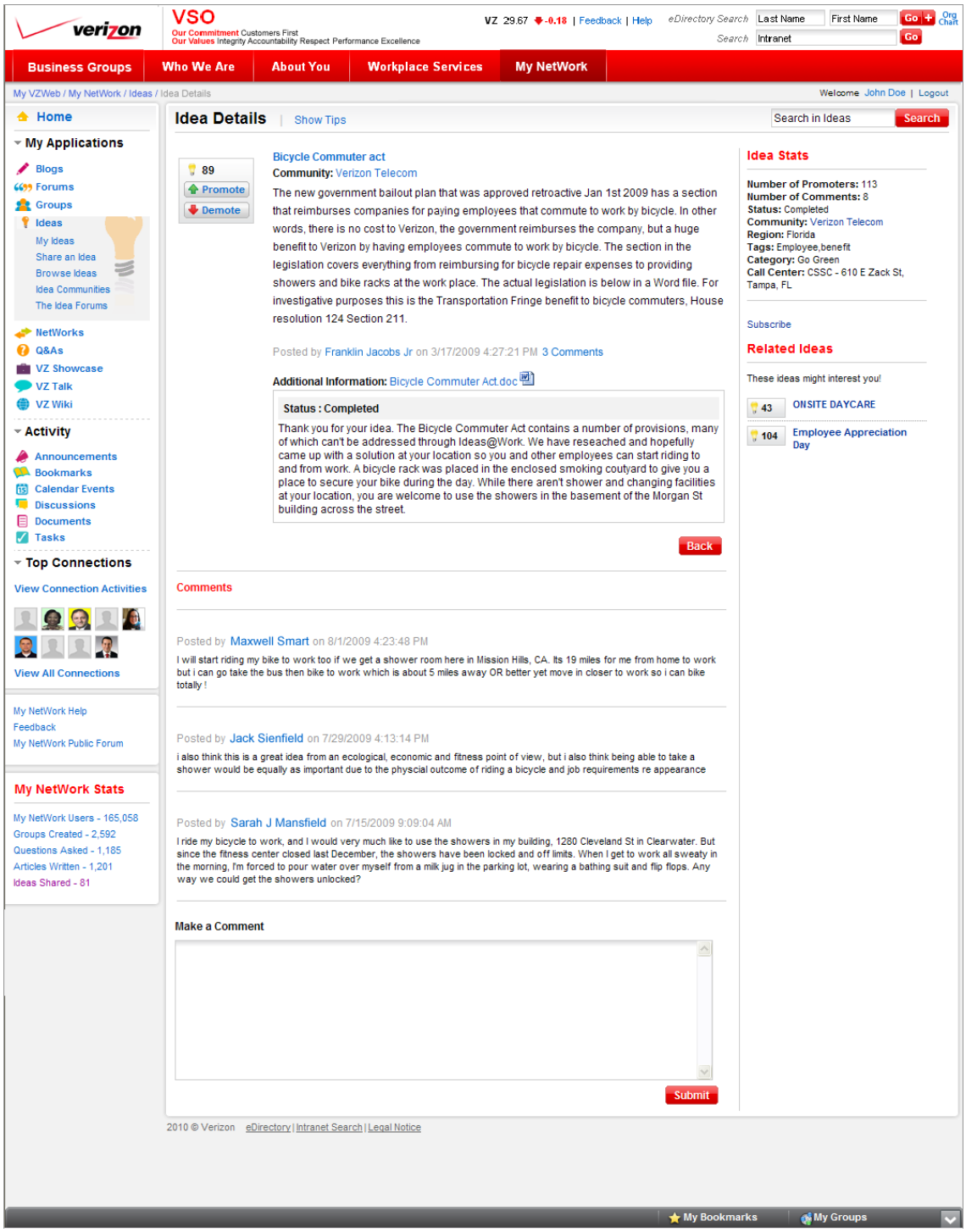
The *Ideas* application, another new addition, has also been a success. The tool lets employees submit ideas for improvement within the organization. Employees use it heavily and the mobile version, which allows fast access to the tool, is particularly popular among field employees who have ideas for improvement.

Employees can submit an idea for improvement or vote on other people's ideas. Employees can also comment on submitted ideas, which encourages other employees to chime in. Users can promote or demote an idea by voting for or against it. The number of votes, or total score, is listed next to a light bulb on the *Ideas* page.

Key information about the idea is posted on the side of the page in *Idea Stats*, where users can see the number of promoters and number of comments, as well as the idea's status. Each idea is posted with the idea's author and the date and time it was added.

Submitted ideas go through an established process, leading all the way to final implementation in some cases. Idea pages are updated to indicate the idea's outcome; the example below shows an idea for which the status was changed to *Completed* and an update was posted.

Related ideas on the side of the page give users a way to navigate to other ideas they might have interest in or opinions about. The idea's title is listed together with its current score.



Pictured: The *Ideas* section lets employees suggest improvements or vote on other employees' suggestions.

With many of Verizon's workforce away from a dedicated PC, remote access to the site is essential. Employees can access the site from work, remotely, and on mobile phones.

The site has always been available for Blackberry users, since Blackberry has been the enterprise standard. The team is now moving to support Android phones as well.

The mobile site offers access to important content, such as news and to-do lists. The team focused on those tools of most use to a mobile audience. Users can also quickly access content from their *NetWork*, including *Q&A*, blogs, and group updates. The most popular tools offered are the employee directory and the *Ideas* application.

The team built the mobile site with speed in mind. Pages are light, with streamlined interactions.



Pictured: The mobile site was built with speed and efficiency in mind, with quick-loading pages, focused offerings, and clear navigation.

Reaching its goal of inspiring collaboration and involvement, the Verizon team had many successes, from the *Ideas* tool, to popular *Groups* pages, to encouraging discussion around news stories. The enhancement of existing areas, such as news, and the addition of new areas, such as *My NetWork*, have taken the site in the right direction.

BACKGROUND

The Verizon team wanted to maximize the impact of communications and increase collaboration across the company. So, the primary driver of the intranet project was to improve the site's user experience to meet those goals.

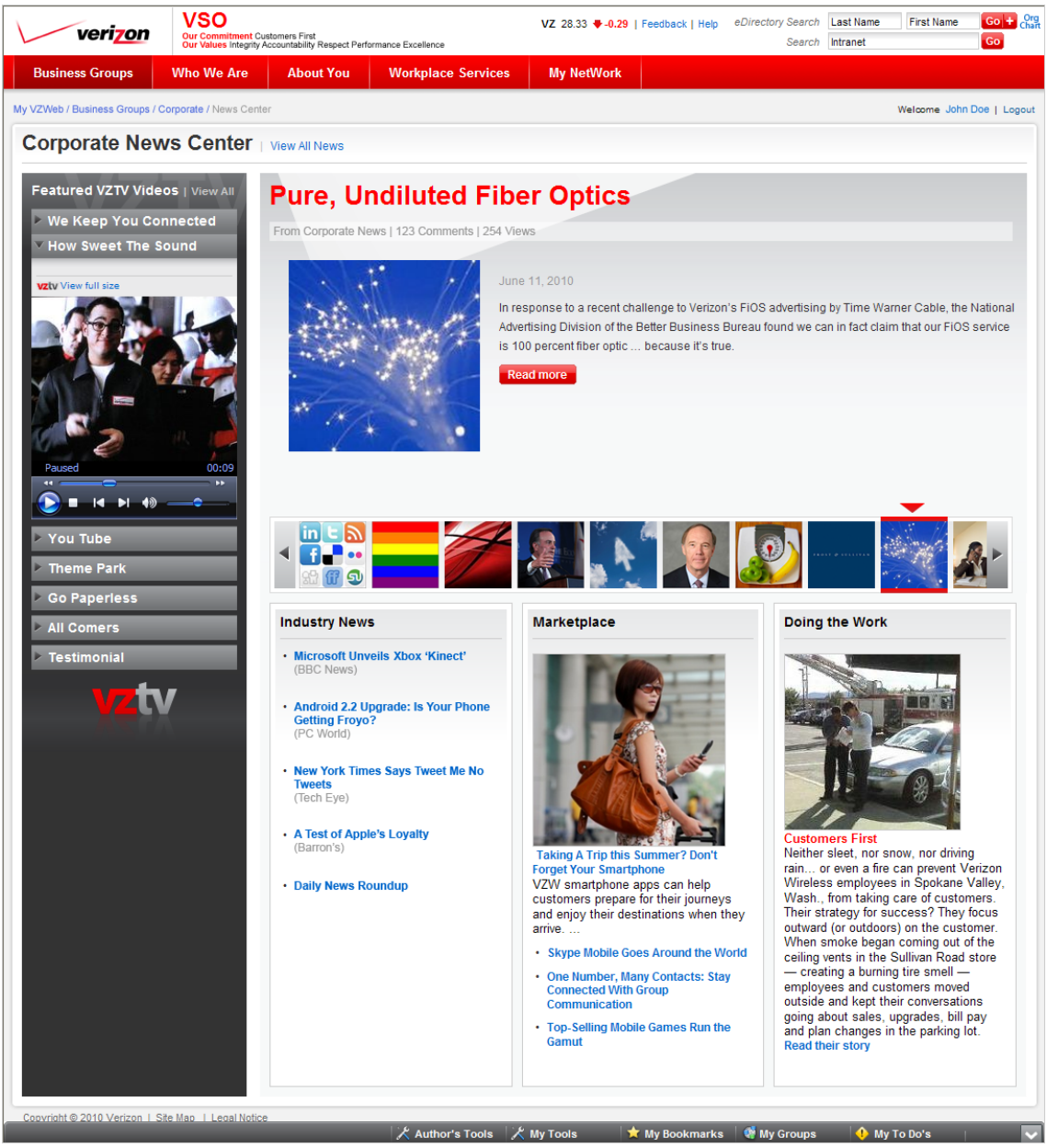
"The direction from senior management was to truly cut across all organizational siloes and 'network' the employee population which is effectively spread out across the US and 159 other countries," says Zouhair Sebati, IT Executive Director. "We leveraged the existing intranet experience and started incorporating more and more integrated collaboration functionality. We also took advantage of a major event — the formation of a shared services organization, chartered with improving operations across every aspect of the company."

The Verizon intranet had not had a major site redesign since 2005, so many of the features and functionality offered by newer technologies (including collaboration, two-way communication, and other functionality) required the team to revisit the overall site infrastructure.

The approach for the redesign was to built upon the strong structural foundation of the existing IA and add the types of Web 2.0 functionality that had become more familiar to employees through their use of the Internet. The team looked to social media sites such as Facebook and Twitter, but with an eye toward a very specific business purpose.

“Basic business problems such as finding resources in a different business unit with the right expertise across the enterprise were real-world challenges,” says Miguel Quiroga, Director, Intranet and IT Governance Systems. “And the intranet needed to evolve to address them.”

Team members took the approach of focusing on specific areas that they could address over multiple iterations, including an employee directory redesign, enterprise collaboration features, and eventual integration of Web 2.0 features directly into the core intranet (including wikis, commenting, and ideation).



Pictured: *News Center* is a central hub for company news. A critical portion of this is *VZTV*, a service that aggregates video content from numerous sources across the company and brings them together in an easy-to-navigate website. On the *News Center* page, this content is brought to the top in a dynamic and entertaining design meant to engage employees more actively with company news. Videos can be watched directly from this page without having to navigate away from the news hub.

TIMELINE

REDESIGN PROJECT TIMELINE	
Milestone Date	**Milestone Description**
2000	First Verizon intranet
January–October 2004	Redesigned eWeb (v.1)
October 2007	VSO 2.0 Collaboration Launch: First pilot of collaboration functionality on the intranet
June–November 2008	Redesigned eWeb (v.2)
July–September 2008	*My NetWork* Collaboration: Launch of enterprise collaboration suite
November 2008–January 2009	Enterprise homepage planning for expansion of Web 2.0 features throughout the intranet
March 2010	Launch of new design
May 2010	*My NetWork* dashboard redesign
September 2010	Enhanced enterprise homepage release and further upgrades, including fully integrated email and expanded rollout

GOVERNANCE

Ownership

The Verizon intranet team is located in the Shared Services Information Technology team. The intranet is "owned" by the IT team and the content community. The content community leverages the site for daily work functions. This group is comprised of Employee Communications, HR, Finance, Supply Chain, and Operations teams.

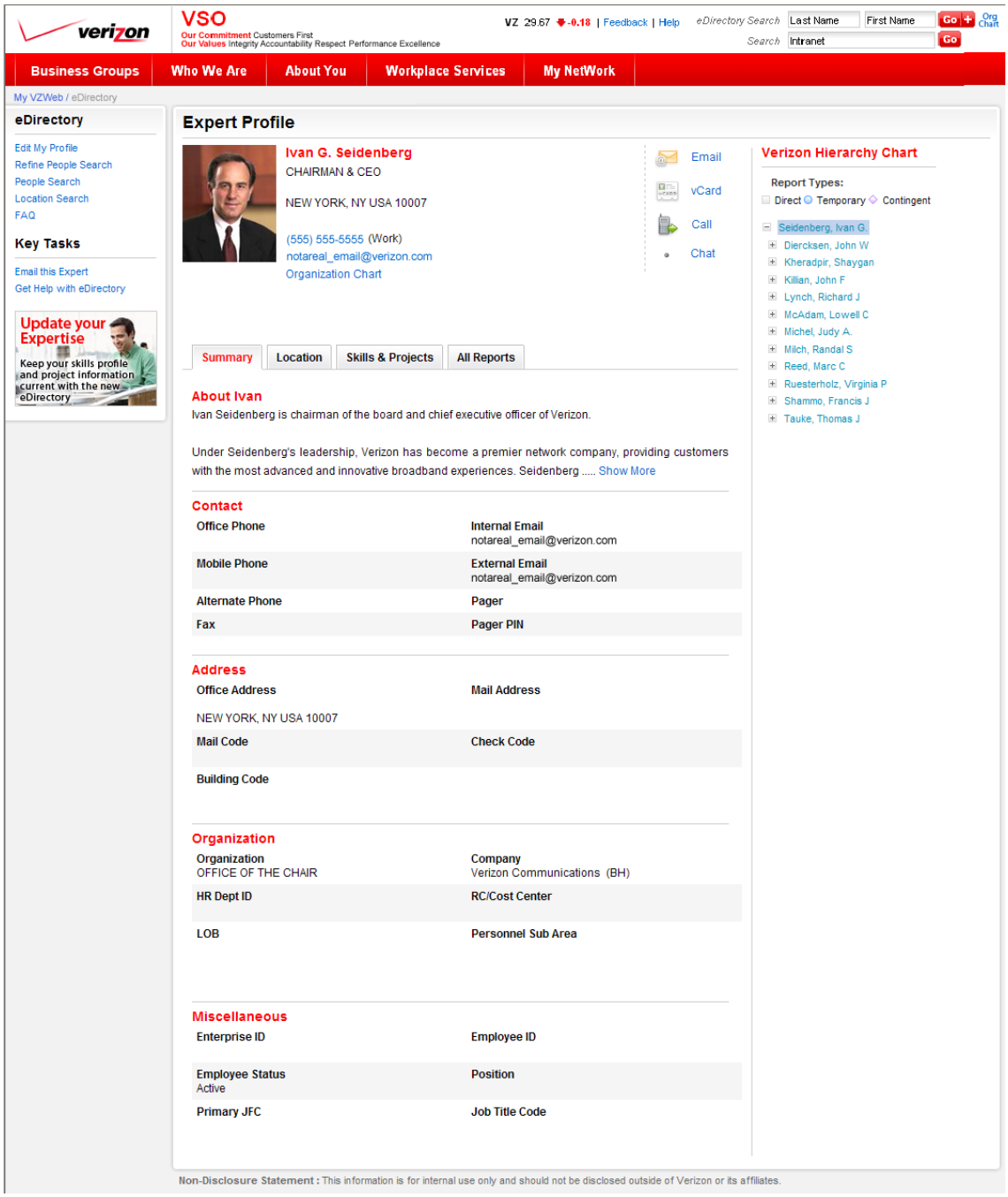
Although this ownership structure is very positive overall, it's not without challenges. "Due to the enterprise nature of the site, the team and site are often being pulled in different and at times complimentary and at times competing directions," says Quiroga. "However, this positive tension helped to create a better end result, which addresses a wide breadth of business needs."

He cites the need for constant communication and focused program management to help ease these challenges.

INTRANET TEAM RESPONSIBILITIES	
Role	**Responsibilities**
Corporate Employee Communications	• Responsible for the content and featured news available across the enterprise • Interface with Line-of-Business (LOB) Employee Communications to identify LOB-specific content to highlight across all LOBs
LOB Employee Communications	• Publish articles and customized communications programs catered to their own LOB and its employees
Corporate HR Communications	• Responsible for content and communications programs relating to HR initiatives
LOB "Web Leads"	• Create Web content for their individual LOB organizations to allow for greater focus on teams and individuals
***My NetWork* Members**	• Establish groups for their projects, teams, or the entire organization, and allow for quick access to documents and knowledge-based content
IT (Development, Test, Design, IA)	• Establish templates and authoring guidelines to maintain consistency across content created by many different users • "Train-the-Trainer" — provides training and expertise to content authors • Custom design support • Software and IA, design, development, and testing

USERS

The intranet is available to and used by employees across the enterprise. Roles and job functions for the end-user community range from field technicians to business operations. Because Verizon's intranet is accessible by all employees, it is essential that the platform is accessible from users' work locations, remotely, and from their mobile devices. The team has made sure that all of these access points are served.



Pictured: One of the most critical things employees use the intranet for is locating experts. The new *eDirectory* page makes this easier by allowing employees to enter their biography and skill sets. This information is then used in searches, so expertise is more easily found. The biography also gives employees the opportunity to more freely express themselves and their value to the company.

URL AND ACCESS

ACCESS INFORMATION	
Item	**Status**
URL	http://myvzweb.verizon.com
Default Status	The intranet is set as each user's default homepage and only select groups are allowed to change this setting. The intranet is bookmarked as each user's default homepage.
Remote Access	The site can be accessed remotely only for certain HR functions via a secure authentication method. Users regularly use this access.
Shared Workstations	Some users access the site via shared workstations. These users are typically located in facilities that are either dealing directly with customers or are operations facilities with limited computer facilities.

DESIGN PROCESS AND USABILITY WORK

Project Goals

There were a series of specific goals, including:

- **Improve collaboration.** To maximize knowledge management and the ability to share expert data across the enterprise, an enterprise collaboration suite was essential to success. Prior to the intranet updates, there were many silos of collaboration functionality to provide document sharing, blogging, wiki entries, and general team collaboration.
- **Enable more efficient access to content.** Although content was already available online, the team discovered that there were several areas that would help improve productivity, such as search and more targeted content personalization.
- **Make the intranet integral to daily operational activity.** The business community wanted to ensure that employee communications and messaging were tightly integrated, while still ensuring that each user's core work functions were front and center in their intranet experience. This included everything from skills integration with the employee directory to targeting email and calendar features combined with critical corporate and business unit news.

Challenges

Every intranet team faces challenges when undertaking a redesign effort. For the Verizon team, they had to overcome a technical challenge. Many of the primary software vendors of choice were unable to provide the fully integrated collaboration suite that was needed. So, the team was forced to extend the existing platforms in order to provide the necessary support.

"This required bringing very strong resources on board, which were very difficult to find on the open market," says Quiroga.

From a functional perspective, the primary challenge was the ongoing fine-tuning that was occurring in the business.

"The overall customer needs were changing rapidly and organizations were coming to grips with the possibilities provided by functionality such as social media, while still wrestling with the ongoing day-to-day operational efforts that HR and employee communications work through every day," says Gus Attar, Intranet Application Manager.

This meant that prioritizing the requirements was a critical challenge, particularly across the various business units and functions. Even critical functions such as collapsing business unit functionality posed tough prioritization challenges for the team.

"As time passed, we were able to implement more coordinated requirements and project management activities, which helped to streamline development work efforts," he says.

Deciding What to Change

The team prioritized the work through a variety of methods:

- **Overall business drivers.** The business community had many specific requests around productivity, improved messaging, and more streamlined authentication steps.
- **Usage statistics.** The team analyzed the metrics data to see which site areas were most leveraged and during which periods of the day. This allowed the team to develop a software architecture to incorporate both volume and access controls to improve usability.
- **User interviews.** The team performed user interviews about existing features as well as potential new functionality around Web 2.0 functions that had been requested via user feedback on the existing intranet.

Defining a Process

The Verizon team's design process is very traditional. They begin with basic IA, move through graphic design and HTML, and then the front-end development is implemented by the developers. And, depending on any given project, user testing and stakeholder reviews can happen at any point along the way.

"In the case of *My NetWork,* we completed a mix of reviews at the IA stage and again after launch," says Quiroga.

The team decided when to do the reviews on a feature-by-feature basis. More strategic implementations included earlier user review sessions, while minor modifications and new features are released and tested on the live site.

The project's homepage and other intranet pages required a more defined stakeholder review process. Every page included iterations with key stakeholders in both the IA and graphic design phases to verify that all requirements were met.

What follows is how that process played out with two of the platform's main features.

My NetWork

Beginning in 2008, Verizon began exploring the core concepts that would eventually evolve into the current version of the *My NetWork* collaboration space. Early versions of group functionality were released as a beta experiment, which validated the approach and confirmed that this would be a successful grounding for *My NetWork*.

Throughout the project, iterative design has been the key to evolving the collaboration space. Since its initial release, *My NetWork* has engaged in a continual iterative design and implementation.

"The approach of experimenting live with select users allows our team to identify what features/functionality will be effective in the enterprise," says Lolly Chessie, Design and IA Manager. "This in part helps position *My NetWork* as a platform for cutting edge/experimental techniques, and incorporates our user community into the design process."

Chessie says that the user feedback process has been critical to *My NetWork*'s iterative implementation process. A feedback form in the header provides the ability for users to:

- Make suggestions on how Verizon could improve the site or tweak usability
- Ask questions related to the site or its usage
- Relate details about problems they are encountering
- Provide praise for the site or a particular functionality
- Report offensive or inappropriate content

In addition to the feedback process, usage stats and page views are monitored to identify the most utilized applications in *My NetWork*. These measurements have successfully identified underutilization on the application's *Dashboard* (landing page) and other collaborative tools.

"With focus on in-depth interviews with a sampling of users, we realized we could obtain more substantial feedback than by trying a survey-based approach," she says. "The feedback and interview sessions allowed for focus on two approaches, starting as paper sketches and evolving into Adobe Illustrator compositions to finalize the key design elements. The designs were, in general, based on research collected from comparing Internet sites with similar functionality as well as heuristics from a variety of design resources."

The final *Dashboard* design was chosen based on the realization that some users were unaware of certain features and applications. Callouts are now used when introducing new applications or concepts, to help drive usage and encourage users to take the functionality for a test drive.

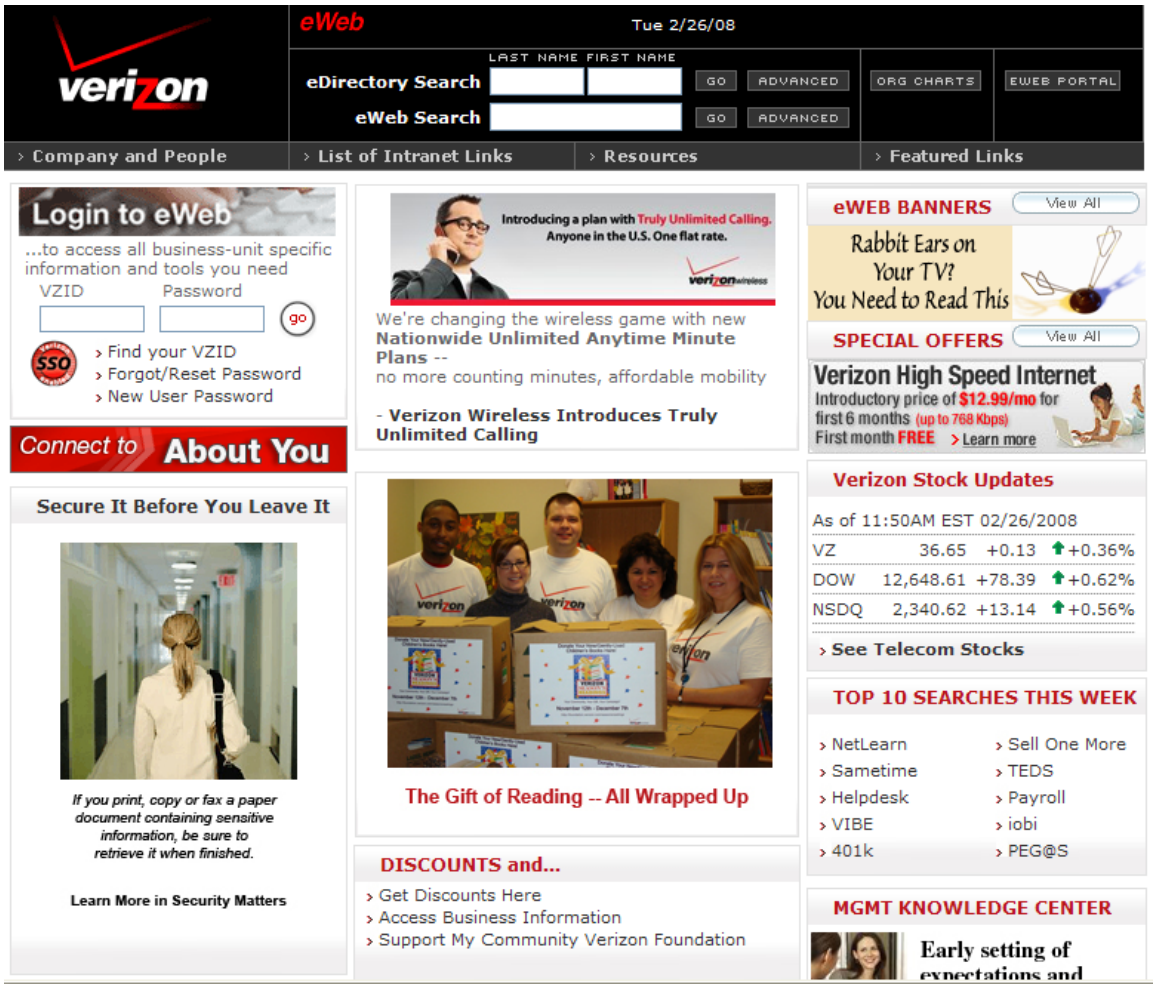
Enterprise Homepage

The planning effort to redesign the core intranet (homepage and news sections) began in 2009. The intranet team partnered with key stakeholders from each organization to align to a common goal: Create a cohesive user experience across the disparate groups within Verizon.

"As part of the design process, we performed multiple iterations starting at the sketch level and gradually progressing up to higher-fidelity designs as agreement was reached," says Chessie. "We evaluated best-in-class intranets to better inform our design, paying particular attention to large, enterprise-scale organizations. We also looked to successful sites on the Internet, as we wanted our users to feel as if

their intranet was as cutting-edge and up-to-date as the places they frequented while at home."

Once the design had been fully approved, a pilot program was initiated to validate the selected approach. The team is currently in the process of conducting surveys with pilot participants to confirm their assumptions about, among other things, the inclusion of email on the homepage and the increased access to other business groups. In addition to the survey, they are using a similar approach to *My NetWork,* with a feedback link included on every page that lets users submit their thoughts and ideas.



Pictured: The previous Verizon intranet design was fronted by an unauthenticated homepage with a collection of news stories that was generally unorganized and poorly laid out. The company worked with various teams to design a more user-friendly landing page and one that would more immediately bring employees closer to the tasks that they're most concerned with. Thus, the new homepage has desktop authentication, negating the need for a sign in, and brings users immediately into personalized news and functionality. The navigation scheme has also been made more consistent and ubiquitous.

Comparing Approaches

The Verizon team recognized that no two projects are identical when it comes to accommodating the varying stakeholder concerns; it also knew that the company had limited tolerance for experimentation. Team members recognized this challenge early on and proceeded accordingly.

"We have found that it is necessary to adjust processes based on the stakeholders of a particular site area and the goals thereof," says Chessie. "It is notable that we utilized two relatively different approaches to *My NetWork* and the core intranet. *My NetWork*, a standalone collaboration site with no organizational owner to speak of, allows the freedom to be more agile, and try new things, to iterate and experiment on this platform. The intranet redesign was approached more cautiously, as the needs of each organization and each stakeholder required consideration."

Verizon's intranet is multifaceted enough that in some cases, such as on *My NetWork*, a live beta approach has proven relatively solid. And yet, Chessie says, that same process would not be appropriate when redesigning the intranet homepage where the bulk of the team's time was spent iterating on a design and verifying requirements with specific organizational stakeholders.

CONTENT AND CONTENT CONTRIBUTORS

Retiring an Obsolete System

As the existing content management platform reached end of life, Verizon evaluated many enterprise-class content management systems to identify a scalable system that could support an organization of its size, while offering the flexibility to cater to specific use cases with additional customization. The result of this evaluation process led Verizon to leverage Oracle UCM as its enterprise content management solution.

For group-based collaboration, Windows SharePoint Services was selected as the underlying platform to support *My NetWork*.

Content Contributors

The enterprise homepage supports many content contributors across Verizon's various lines of business (LOB). The enterprise homepage has approximately 50–75 content authors responsible for employee and corporate publications. The *My NetWork* platform is available to more than 165,000 employees who have the ability to create and publish content instantly.

Each business unit has its own set of authors, who report to a communications organization responsible for governance around the overall business message for that particular LOB. Because authoring in this platform is decentralized, Verizon's focus was to ensure the kind of consistency normally found with centrally produced content.

Additionally, Verizon's collaboration platform, *My NetWork*, was established as an enterprise-wide application enabling all Verizon employees to develop and create content. All of *My NetWork*'s 165,000-plus members can contribute documents, knowledge-based articles, and even personal insights on their colleagues' work through open discussion forums.

Reviewers

Enterprise homepage content is reviewed for legal and general compliance before contributors begin the authoring process. Select contributors can publish their

content directly to production without approval, but most content is governed by custom workflows, requiring pre-approval.

My NetWork content is all user-generated and user-managed, and requires no editorial workflow.

Standards and Guidelines

Verizon establishes corporate guidelines and templates that content contributors must use to ensure consistency across sites within the intranet. The company's style guide is continuously evolving.

"We are constantly introducing cutting-edge Web design elements to give our sites the same look, feel, and functionality our employees see on the Internet," says Quiroga.

Contribution areas are controlled by CSS and authors follow design and content standards as established by key stakeholders in each project.

My NetWork also provides common framework elements for all user-generated content. These templates generally allow basic formatting tasks, but most users tend to focus on their content and don't attempt to redesign the look of their text.

Verizon provides an in-house *Online Editorial Style Guide* to content creators that provides grammatical and language standards to assist content authors in writing corporate-approved content.

Providing Feedback

Providing feedback to content contributors over time is really just as important as training them in the first place. At Verizon, contributors receive several forms of feedback over the course of their content's lifespan. As soon as a piece of content, such as a news article, becomes available, readers can submit comments that will appear on the article's page.

"These comments provide a great feedback loop because contributors are encouraged to reply to comments and questions and provide additional information or clarification," says Quiroga. "This new intranet design represented the first time employees company-wide had the ability to participate in commenting, and thus engage in a dialog with content contributors."

Readers can also rate each content item, giving it from 1-5 stars. These star ratings, while less direct than user comments, let users relate their satisfaction with the content or, on the other hand, communicate dissatisfaction without necessarily providing specifics.

Lastly, each content item includes user-viewable usage metrics in the form of view-count. Users and contributors can both quickly see how many times users have viewed an item. This can help authors determine, without the need for metrics (which are somewhat difficult to obtain), what types of content, images, writing styles, and so on seem to bring in the most readers. In feedback terms, usage metrics are an instant barometer of perceived quality or value.

Training Content Contributors

For *My NetWork* pilot users, the Verizon team provided detailed training classes covering each *My NetWork* application, collaboration basics, and the dynamics of group and NetWork relationships.

My NetWork also features online tutorials covering all functionality, again separated by application. These tutorials provide step-by-step walkthroughs on all major use cases as well as less common functions that are likely relevant only to power users. *My NetWork* also offers a full audio/video tutorial (built using Adobe Captivate) that can substitute for a basic training class.

My NetWork users/contributors share a support forum specifically targeted toward technical issues, bugs, and basic questions. Site administrators monitor the support forum and provide information when a simple answer is sufficient, or otherwise contact the forum contributor directly if more serious technical support is required.

For the enterprise homepage, Verizon provides full training for each contributor, as well as a detailed user guide containing information relevant to the contributor's responsibilities.

TECHNOLOGY

TECHNOLOGY	
Category	**Technology Used**
Web Server Hardware and O/S	• **Web servers:** VMware virtual machines using Windows Server 2003 Enterprise 64-bit. • **Database servers:** HP Blade using Windows Server 2003 Enterprise 64-bit or Oracle 11g
Bug Tracking/Quality Assurance	• A list on My NetWork for development and test, and CMIS for Production
Design Tools	• **IA:** Adobe Illustrator • **Design:** Adobe Photoshop
Site Building Tools	• Visual Studio 2005 • SharePoint Designer 2007
Content Management Tools	• Oracle UCM
Search	• Visual SourceSafe for Configuration Management

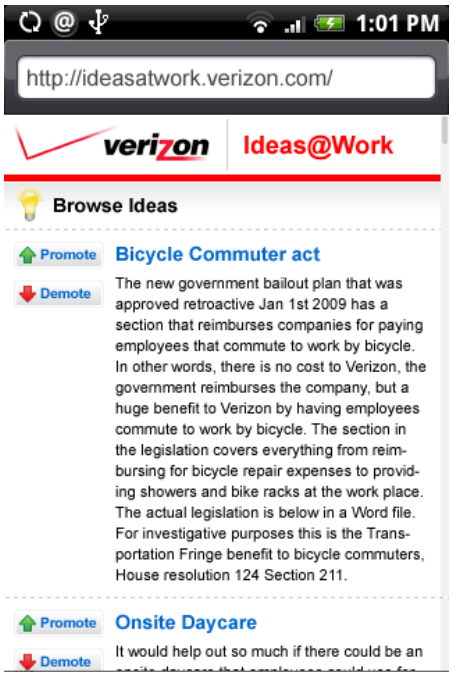
MOBILE

Verizon's intranet has always been accessible via its employees' BlackBerry devices. Mobile designs are currently optimized for BlackBerry devices, as they are considered Verizon's enterprise standard. The two most heavily utilized mobile applications are the mobile versions of *eDirectory* and *Ideas*.

The team built custom Web pages for the company's mobile users to streamline the interfaces and make light pages for fast loading. This approach will be altered somewhat as they move toward Android development.

"Before creating the mobile interfaces, we conducted extensive research into best practices for mobile design, which highlighted the importance of fast-loading pages," says Quiroga. "The primary goal is to minimize time for users to access content and to allow navigate with ease. Link and content reduction allows for faster loading pages, while including consistent navigational elements lessens the learning curve."

With the company's current focus on Android-enabled devices, the design team is working to extend the intranet's accessibility to these handsets as well.



Pictured: The *My NetWork Ideas* application lets users submit and vote on ideas to improve the company. The team has made a special effort to make this particular functionality available to employees who are always on the move by implementing a blackberry-optimized interface. Users can submit ideas on the fly, and browse and vote on ideas as well.

SEARCH

For the enterprise homepage, which acts as the gateway to Verizon's intranet, Verizon chose Google.

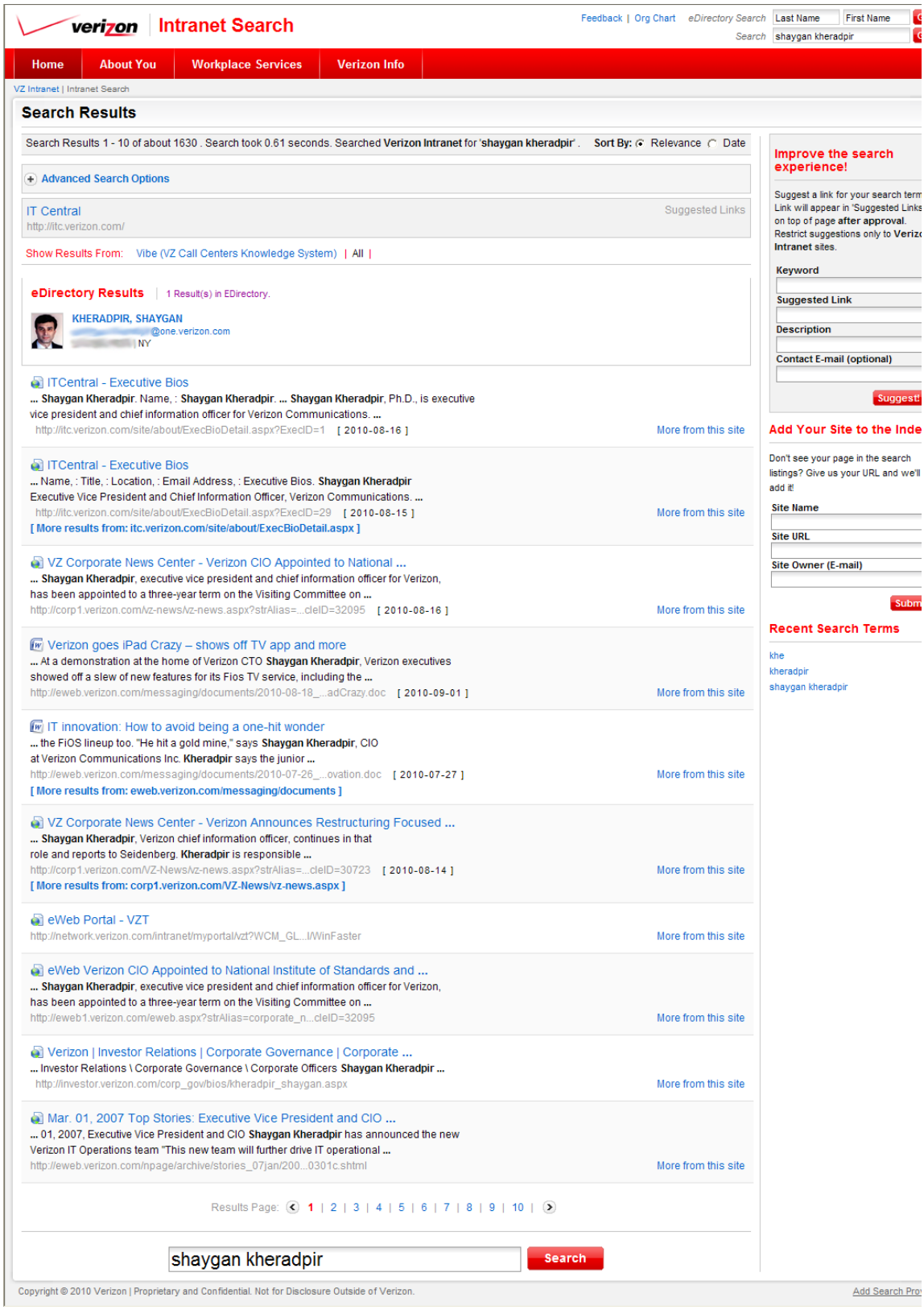
"The Google Search Appliance met all of our needs and demonstrably improved search relevance and functionality instantly upon activation," says Ullas Chadaga, Collaboration and Search Application Manager.

In addition to relevant content and documents, Google's OneBox functions let Verizon provide dynamic, detailed *eDirectory* information directly in search results. Analyzing the search logs allows the development team to refine the search result information.

My NetWork uses SharePoint search because *My Network* is built on the SharePoint platform.

“The built-in search feature is well-positioned to provide faceted and relevant results with little need for configuration or additional support,” says Chadaga.

My NetWork also utilizes the Google Search Appliance to present relevant intranet search results alongside SharePoint’s collaboration index.


verizon
Intranet Search
Feedback | Org Chart
eDirectory Search
Last Name
First Name
Search
shaygan kheradpir
Home
About You
Workplace Services
Verizon Info
VZ Intranet | Intranet Search
Search Results
Search Results 1 - 10 of about 1630 . Search took 0.61 seconds. Searched Verizon Intranet for 'shaygan kheradpir' .
Sort By: Relevance Date
Advanced Search Options
IT Central
http://itc.verizon.com/
Suggested Links
Show Results From: Vibe (VZ Call Centers Knowledge System) | All |
eDirectory Results
1 Result(s) in EDirectory.
KHERADPIR, SHAYGAN
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... Shaygan Kheradpir. Name, : Shaygan Kheradpir. ... Shaygan Kheradpir, Ph.D., is executive vice president and chief information officer for Verizon Communications. ...
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VZ Corporate News Center - Verizon CIO Appointed to National ...
... Shaygan Kheradpir, executive vice president and chief information officer for Verizon, has been appointed to a three-year term on the Visiting Committee on ...
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VZ Corporate News Center - Verizon Announces Restructuring Focused ...
... Shaygan Kheradpir, Verizon chief information officer, continues in that role and reports to Seidenberg. Kheradpir is responsible ...
http://corp1.verizon.com/VZ-News/vz-news.aspx?strAlias=...cleID=30723 [2010-08-14]
More from this site
[More results from: corp1.verizon.com/VZ-News/vz-news.aspx]
eWeb Portal - VZT
http://network.verizon.com/intranet/myportal/vzt?WCM_GL...l/WinFaster
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eWeb Verizon CIO Appointed to National Institute of Standards and ...
... Shaygan Kheradpir, executive vice president and chief information officer for Verizon, has been appointed to a three-year term on the Visiting Committee on ...
http://eweb1.verizon.com/eweb.aspx?strAlias=corporate_n...cleID=32095
More from this site
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Link will appear in 'Suggested Links
on top of page after approval.
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Keyword
Suggested Link
Description
Contact E-mail (optional)
Suggest!
Add Your Site to the Inde
Don't see your page in the search listings? Give us your URL and we'll add it!
Site Name
Site URL
Site Owner (E-mail)
Subm
Recent Search Terms
khe
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Add Search Pro

Pictured: The enterprise homepage search results come from several critical applications and content stores, and filtering capabilities allow users to drill down to results from specific applications or sites. If a user searches for an employee, the relevant data is displayed dynamically in the search results for fast information retrieval. If users can't find an expected result for a given search string, they can submit a suggested link or even suggest a new site/application to be added to the search index.

RESULTS AND ROI

Measuring Success Through Usage

Like many intranet teams, the Verizon team determines the platform's success somewhat based on usage statistics and general user feedback.

"Particularly on *My NetWork*, we can quickly determine how well a particular tool is doing based on the number of people participating," says Quiroga. "For example, the greatest success on *My NetWork* is the group functionality. Today, we have over 2,800 active groups, a number that has grown significantly since we launched our first beta of *My NetWork*."

On the news pages, they track how often stories are read and can now also track comments on those stories.

"We are already seeing more and more users taking advantage of this functionality and openly participating on the intranet," he says. "We view this as a significant success in terms of proving the utility of the new features, as well as proving that users are consuming news stories with regularity."

The team has also received positive feedback about the new homepage and the inclusion of email and calendar functionality in that space. Quiroga says users also like the blade toolbar and the ease with which they can access groups and tools from anywhere on the site.

Validating Success with User Feedback

In addition to measuring usage, the team conducts periodic surveys to gauge user satisfaction.

"In the case of *My NetWork*, usage statistics and user feedback have shown that our new design of the *Dashboard* has been well received by the user community," says Quiroga. "While the usage statistics show more hits on this page, the most rewarding feedback is in the free-form responses, where users have expressed just how much they appreciated the new design and how much easier it has been for them to find what they need."

For the intranet itself, the team also utilized usage statistics, user feedback, and surveys to validate the design's success.

"We can tell when stories are getting more views and more activity and this is a clear sign of success," says Quiroga. "Additionally, we are starting to see more feedback come through the site's feedback form."

So far, the team has received overwhelming feedback about the inclusion of email and calendar on the homepage, as well as the blade toolbar and its integration with *My NetWork*.

Success by the Numbers

As a further indication of the project's success, the team has measured a few concrete numbers thus far. On *My NetWork*, the company has seen the following traffic increases this year, demonstrating the continuing success of the team's redesign efforts:

- A 162 percent year-over-year increase in the number of collaboration groups from 2009 to 2010.
- A year-over-year traffic increase of 172 percent on *My NetWork* (total traffic eclipsed 2009 numbers by the third week of May 2010).

LESSONS LEARNED

Some learned project wisdom from the Verizon intranet team:

- **Program and project management needs to be enterprise scale.** "Bringing everyone to the table and getting alignment is critical to ensure that the program goes smoothly. This process must be ongoing and should always seek to direct new queries through the business-as-usual process."
- **Go through lots of small iterations.** "Make sure and implement as many different ideas in a short window, don't go for big releases because you need the ongoing user feedback and learning by the core team to ensure success."
- **Engage the user community.** "Make sure you engage your users in your design, but also in the ongoing evolution of your site. The site is only as good as your end users' support."

Recommendations for the Intranet Design Process

The case studies of this year's winners can help you design a better intranet. And design examples from each can inspire new ideas and projects. Through the years, we've seen certain process-related steps in intranet redesign projects that go a long way toward improving intranet usability. Based on 10 years of *Design Annual*s and our own experiences testing intranets, we offer here a few of the most important recommendations for designing a usable intranet. Note that these recommendations change very little from year to year.

WATCH PEOPLE WORK

Intranet designers benefit from knowing who the end users are. They're the people you pass in the hallways, the employees sitting next to you in the cafeteria, and the staff members who park next to you in the garage. Use these interactions to your advantage and ask your colleagues if you can watch how they work. See how they're using and not using the intranet, and where design opportunities exist for making the intranet a more useful part of their day-to-day jobs.

CONDUCT USABILITY EVALUATIONS

Remember that you don't need a complete, finished design to garner useful usability feedback. In fact, it's better to get early feedback on incomplete designs. Just test with prototypes and paper mockups. Or, if you want to introduce design elements similar to those you see on a particular website, use that website to test the features. You can watch people using any current system, even if it's not an intranet, to determine which features are well designed.

Many of this year's winners conducted card sorts, ran user tests, and observed employees in their day-to-day jobs. Even the busiest development teams, or those with the craziest deadlines, should take time to watch people attempt basic tasks using the design. It doesn't take long to do a quick test. We encourage design teams to get a group of designers and developers together—even for just 20 minutes—to review a site's design, and then to identify, discuss, and agree on the top usability issues.

UNDERSTAND THE TECHNOLOGY

Two of this year's winners made special efforts to ensure that the tools they were using could support the designs they wanted to create. They wanted to find out early what the tools could do, what they couldn't do, and what the team could do about it. Rather than simply designing a site that matched an out-of-the-box implementation, the teams took the time to understand the tool inside and out, and work with the tool to meet the organization's needs.

Some teams have the time and expertise to understand the technology themselves. Other teams rely on outside experts to help with technology issues. Some companies can customize from the get-go, while others need to stick to what's offered. Knowing the technology and any challenges upfront can help minimize unexpected glitches down the road.

PERSONALIZE AFTER YOU CREATE THE INFRASTRUCTURE

Personalizing the intranet can help people find what they want and expedite work. Hiding things users don't need can also have positive effects by eliminating clutter

and overload. However, personalizing is about more than designing the interface; it also involves designing systems for collecting and tracking timely information about users. This process typically involves HR and other departments and sometimes many databases as well. In short, it can be a lot of work.

We suggest that all intranets ultimately strive to give each user an effective, personal experience. But don't get ahead of yourself and try to do this before the backend infrastructure is in place.

HELP CONTENT CONTRIBUTORS SUCCEED

The most well-received intranets are those with fresh information that people need and want. One way to keep information updated and interesting is to provide methods for employees to add and edit information. Letting users—or designated content providers—contribute content gives them a stake in the intranet's success. Such efforts invariably produce compounded returns: fostering excellent content providers results in better content, which leads to an intranet with more varied and useful information, which drives more employees to visit the intranet more often, and thus ensures that the intranet remains a business-critical tool.

CONSIDER ACCESSIBILITY

Many companies employ—or will at some point hire—people who use assistive technology. Yet many of the intranets submitted for consideration posed accessibility problems for users with low vision, no vision, or motor-skill challenges. The chief accessibility offenders: using too many graphics, tiny text, poor contrast, limited space between links and text, and small targets.

MEASURE ROI

Most intranet redesigns make obvious strides, fostering great usability improvements and no doubt creating productivity and efficiency gains for their companies. Yet it can be difficult to formally, or informally, measure ROI on intranets. Measurements can be tricky due to tight schedules and the way organizations allocate money. For example, the money to design and maintain the intranet might be allocated to the vice president of IT, while productivity gains are found in the HR or corporate communications department.

A simple measurement of ROI is time on task. Measure the time users require to accomplish a task, both before and after a redesign. Take this decreased task time and factor the resulting financial savings across your organization. Then, make the gains known to the different departments involved and at higher levels as well, so that even the most upper-level managers understand the importance of well-designed internal systems.

Consider other ways to measure ROI on the intranet as well. Does moving information online result in savings on printing costs? Does automating a process free up time for the department that previously handled that task? Does providing essential tools and information to employees save them time compared to finding the same information for themselves? Do collaboration tools or stories about individual projects and employees result in new work sold, new solutions found, or new collaborations across the organization?

Intranets Not Selected: Common Issues

With every *Design Annual*, there are several sites we wish could make the top 10, but that just miss the cut. We see a lot of excellent designs, reflecting the level of attention, care, and planning the intranet teams put into creating them.

However, each year we also see a fair number of sites that don't go above and beyond, and still others that miss the mark completely with poor design, confusing structures, or poor content. Although we never name or show examples from intranet's that didn't make the top 10, the following are some of the problems we saw across submissions that are not among the winners and not included in this report.

SIMPLE SITES

There were many excellent entries from smaller organizations or from companies with less complex information available on their intranets. Their intranets were nicely designed for their own companies and own uses, but they did not go above and beyond standard design or they were very strong designs, and often a huge step forward compared to the previous intranet designs, but they were not outstanding designs that might inspire other organizations.

Many sites did an excellent job in helping employees easily find policies or download forms, but offered little else. Today's intranets need to do much more to truly become a mission-critical workplace tool.

Other sites had clean designs or strong structures, but were straight out-of-the-box implementations of intranet products. Again, these designs failed to challenge what was possible or expected.

DATED OR POOR VISUAL DESIGN

Many sites had dated designs, or a complete lack of design. Stock images filled pages and content was accompanied by images that offered no additional content or had no bearing on the topic being discussed. Font size and styles varied and pages were filled with headings and links in multiple colors. White space looked accidental rather than helpful to the design, and page widths changed with each screen.

The *Design Annual* is not a beauty contest, but even the most well-organized content suffers when poorly designed. Visual design plays a key part in the user's experience on the site.

LACK OF NAVIGATIONAL CUES

Many of this year's entries failed to provide consistent feedback — if they provided feedback at all — about where users were located in the site. When users cannot orient themselves, it’s incredibly difficult for them to understand and use the site's navigational structure. So, when users search to find content, they won’t be able to easily move up or down a level to find related information if they don’t understand the site structure. They also won’t know how to relocate information if they have no idea where and how they found it to begin with.

CLUTTERED PAGES

Determining how information is structured helps users locate what they need. We saw many sites that seemed to consist only of lists of links, or links to documents, but provided little content to give the links context. Such cluttered pages become overwhelming, as it's nearly impossible to understand the purpose of such a page at a glance, and even more difficult to locate information of interest.

Selection Criteria and Process

The Nielsen Norman Group intranet design and usability competition seeks to recognize the best examples of intranets that are easy to use and meet users' needs. In May 2010, we posted the call for submissions on http://www.useit.com, http://www.nngroup.com, through Twitter, and in several intranet-related online forums. Companies and organizations were invited to submit screenshots, descriptions of the intranet design and how it works, notes about the design process and usability methods employed, detailed information about users and the intranet's goals.

In response, we received submissions from organizations big and small, from a number of different countries, and across many industries. To judge the entries, pick our winners, and complete this report, we followed a four-step process:

1) Initial design reviews and numeric rankings
2) Follow-up questions with the top submissions (as necessary)
3) Thorough design reviews on the top entries to choose the top 10
4) Follow-up interviews with the top 10.

Each step is detailed below.

INITIAL DESIGN REVIEWS AND NUMERIC RANKINGS

Based on the initial submission information, the three judges (see *About the Authors*) conducted simple design reviews and whittled down the entries to the tier-one submissions. In addition to written commentary, we rated each site numerically. We based these ratings on criteria typically viewed as key to intranet usability, including some criteria that emerged from submissions and trends in our previous contests. We rated the following criteria in each submission on a 0–3 scale (with 3 being the best rating):

Navigation:

- Main navigation on every page
- Consistent/easy navigation
- Consistent style across the intranet
- No horizontal scrolling
- Minimal vertical scrolling

Design:

- Pleasing aesthetics
- Engaging homepage design
- Good contrast between text and background
- Easy-to-read text
- Easy-to-read links
- Good use of graphics
- The right amount of text
- The right number of links

- Clean design

Search:

- Consistently available search
- Relationship to employee search
- Good search design (ideally, a simple open field at the top of pages)

Personalization and News Delivery:

- Personalization/catering to different offices or cultures
- Organization-related news
- Information about internal groups

Content:

- Well-written text
- Employee directory or directory search
- Content posting and editing capabilities
- Meeting business needs

Overall:

- Simple forms
- Support for the main corporate functions
- Encapsulation of the organization's spirit
- Use of innovative, fun, or original features
- Accessibility features
- Originality or something special

FOLLOW-UP QUESTIONS WITH TOP TIER (WHEN NECESSARY)

In addition to completing the design reviews, we took a look at all the information the organizations submitted. We considered target users, their tasks, and how well the site's applications might help them complete these tasks. We did not conduct usability evaluations with users. We do believe such studies are the best way to reveal what works and what doesn't work about designs. And we've completed some large-scale usability research studies accordingly.[1]

After our reviews, we asked follow up questions as necessary, for clarification or if a submission seemed incomplete.

THOROUGH DESIGN REVIEW

Based on the initial scores and notes about the intranet submissions, we narrowed our candidates down to the top 25 and dove in again. We conducted more thorough

[1] *Intranet Usability Guidelines*, a report series covering intranet usability with findings from user testing of a large number of intranets, are available for purchase at http://www.nngroup.com/reports/intranet/guidelines/.

design reviews of those sites, with the goal of narrowing the field down to the 10 best intranets.

FOLLOW-UP INTERVIEWS WITH TOP 10

After selecting the winners, we contacted the teams and asked them to answer a series of follow-up questions about the site, their team, and their process. We asked for detailed information about design decisions, research and usability evaluation methods used, challenges faced, and lessons learned. We asked for some general information from all our winners, as well as detailed questions about specific aspects of each winning design.

Some of the general questions we asked each team included:

- How did the intranet start?
- How many people comprise the intranet staff?
- How is the intranet governed?
- What are the goals of the intranet or redesign project?
- Where will the site go from here?
- What were your project's main usability methods?
- What makes your intranet unique?

About the Authors

Amy Schade is a Director at Nielsen Norman Group. She has led research and co-authored NN/g reports on the usability of intranets, email newsletters, and site maps. She co-authored NN/g's *2010 Intranet Design Annual*, as well as a report on intranet information architecture. She conducted many of the user sessions with people with low vision for the NN/g accessibility report and with older Web users for NN/g's report on usability for senior citizens.

Schade works with clients large and small in industries including e-commerce, music, publishing, banking, government, telecommunications, non-profit, and education, including extensive work on corporate intranets. She has conducted worldwide user research, including longitudinal studies, remote studies, and eyetracking research, running studies in the United States, Canada, Europe, Asia, and Australia. She regularly presents tutorials on user testing, intranet usability, writing for the Web, and email newsletters.

Before joining NN/g, Schade worked as an information architect at arc e-Consultancy. She previously held a variety of positions in advertising and Web production. She holds a master's degree from the Interactive Telecommunications Program at New York University and a BA in Communications from the University of Pennsylvania.

Patty Caya (www.pattycaya.com) is a multi-platform journalist, editor, and award-winning digital media producer. In her business writing, she specializes in topics relating to usability, social media, and the business and technology of the Internet. For over a decade, she has split her time between journalism projects and digital strategy consulting. She has consulted for many of Boston's top interactive agencies, leading Web and intranet development projects as well as usability testing, research, and design initiatives. Her client roster spans a wide range of industries and includes leading national brands alongside mission-driven non-profits. She has a BFA from New York University's Tisch School of the Arts and has pursued advanced coursework in the User Experience Program at Bentley College.

Dr. Jakob Nielsen (www.useit.com) is a principal of Nielsen Norman Group. He is the founder of the "discount usability engineering" movement, which emphasizes fast and efficient methods for improving the quality of user interfaces. Nielsen, noted as "the world's leading expert on Web usability" by *U.S. News and World Report* and "the next best thing to a true time machine" by *USA Today*, is the author of the best-selling book *Designing Web Usability: The Practice of Simplicity* (1999), which has sold more than a quarter of a million copies in 22 languages. His other books include *Hypertext and Hypermedia* (1990), *Usability Engineering* (1993), *Usability Inspection Methods* (1994), *International User Interfaces* (1996), *Homepage Usability: 50 Websites Deconstructed* (2001), *Prioritizing Web Usability* (2006), and *Eyetracking Web Usability* (2009). Nielsen's Alertbox column on Web usability has been published on the Internet since 1995 and currently has about 200,000 readers. From 1994 to 1998, Nielsen was a Sun Microsystems Distinguished Engineer. His previous affiliations include Bell Communications Research, the Technical University of Denmark, and the IBM User Interface Institute. He holds 79 US patents, mainly on ways of making the Internet easier to use.

Acknowledgments

Thank you to the designers and organizations associated with the 10 intranets in this report. We appreciate them for submitting their work, cooperating in interviews, reviewing the report, and mostly for their intranet designs.

A special thank you to all of the organizations who entered their intranets in our competition.

Finally, thanks to Keri Schreiner for copyediting this report and to Susan Pernice for her assistance throughout the process.

Submit Your Intranet for the 2014 Design Annual

Got a good intranet? Large or small, you could win next year's NN/g *Intranet Design Annual* contest.

- It's **free** to enter.
- Organizations that **don't win are never disclosed** in any reports or presentations.
- **Your intranet might be great**, or might be better than you think!

We'll begin accepting submissions around June 2013. Please check this web page for the exact deadline and submission guidelines:

http://www.nngroup.com/reports

Eligible designs include anything that runs inside a company and is not accessible on the public Web, such as:

- Company-wide intranets
- Department-specific intranets
- Solutions to internal communications problems using intranet technologies
- Internal Web-based applications
- Extranets

Good luck!

NN/g

Evidence-Based User Experience Research, Training, and Consulting

Since 1998 Nielsen Norman Group has been a leading voice in the user experience field.

- Conducting groundbreaking research
- Evaluating interfaces of all shapes and sizes
- Guiding critical design decisions to improve the bottom line

We practice what we preach

We don't just talk about the importance of testing with real users, on real tasks, in real life business situations: we do it. Every week, somewhere around the globe, NN/g team members are conducting research that informs the three pillars of our business: training, consulting and research. In that work we have:

- Tested over 2,000 different interfaces
- Observed more than 4,000 users—in person—in 18 countries and on 5 continents
- Analyzed thousands of hours of recorded user observations sessions
- Conducted countless diary studies, focus groups and remote user tests

Our collective experience will save you time… and money

Making technology easier to use is no longer a nice-to-have. Useful, usable products make money. And our expertise can help your team achieve their design goals quicker and easier than going it alone. Choosing NN/g means you benefit directly from our:

- Finely tuned methodology: We have an arsenal of proven tools at our disposal and know how and where to apply each one, taking the guesswork out of how to achieve the optimal design solution to meet your business goals.
- Comprehensive body of knowledge: We've taken the results of our decades of research and testing and distilled it down into actionable guidelines, best practices and proven methodologies. Our research library, containing over 50 published reports, X books and an email newsletter archive dating back to 1995 is unrivaled.
- Practical approach: Our approach is 100% practical, useful and actionable. Whether you attend one of our Usability Week events or invite us to consult at your place of business, the training you will receive can be put into action immediately so that you can see the results.

Our people are the best in the business

At NN/g there is no “B Team”. When we dispatch consultants to work with you and your team, or when you attend a Usability Week course, you are learning directly from some of the best-educated and most experienced minds in the business.

- Our principals are considered pioneers in the fields of user research and interface design.
- Our researchers and consultants tackle the most recent and relevant topics in usability, from evergreen challenges such as information architecture and intranet usability to emerging trends in social media and mobile usability.

Stay Informed

Jakob Nielsen’s Alertbox Newsletter

Summaries of our latest research and insights published twice per month.

To subscribe: http://www.nngroup.com/articles/subscribe

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TRAINING

Usability Week Events

Usability Week training events are offered in the U.S., Canada, the U.K., Europe, Asia and Australia.

Each week-long event features full-day, immersive training courses where attendees learn practical skills directly from experienced practitioners so they can solve complex UI problems and create better interface designs.



Over 40 courses offered in these categories:

- Agile
- Applications
- Content Strategy
- Credibility & Persuasion
- Email
- Information Architecture
- Interaction Design
- Intranets
- Mobile & Tablet
- Non-Profit Websites
- Prototyping
- Social UX
- User Testing
- Visual Design
- Web Usability
- Writing for the Web

Available courses and upcoming locations: www.nngroup.com/training

In-house Training

Many of our courses can be taught at your location and customized to fit your unique offerings, methods and resources.

In-house training is ideal for:

- Large teams that want to spread user experience perspective throughout the group
- Teams working on large projects that need to kick start the creative process and head in the right direction

In-house training information: www.nngroup.com/consulting

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Evidence-Based User Experience Research, Training, and Consulting

REPORTS

NN/g has published over 60 reports that detail thousands of evidence-based design guidelines derived from our independent research studies of websites, intranets, application, and mobile interfaces.



Over 60 reports addressing these topics:

- Agile
- Applications
- Audience Types (e.g., children, college students, seniors, the disabled)
- B2B Websites
- Corporate Websites
- Ecommerce
- Email
- Information Architecture
- Intranets
- Mobile & Tablet
- Non-Profit Websites
- User Testing
- Social UX
- Strategy
- Web Usability

Shop for reports here: www.nngroup.com/reports

CONSULTING

The same experts who conduct our research and teach Usability Week training courses are available for custom consulting including:

- **Evaluating your website, application, intranet or mobile interface** (average cost $38,000 USD)
- **Usability testing** (average cost $35,000 USD)
- **Strategic planning** (average cost $12,000 USD)
- **On-site training with your team** (average cost $9,000 USD per day)

Consulting details: www.nngroup.com/consulting