

Design for life

Many corporate intranets have fallen into disuse. But innovative design can make them alluring and productive tools again.

Hype comes and goes. In the late 1990s, intranets topped the wish lists of IT who hoped they would revolutionise the way employees accessed applications and corporate information. Since then, many intranets have failed to live up to the hype, while a wave of other technologies have pushed intranet developments down the priority list. As a result, many have fallen into disuse. But according to usability guru Jakob Nielsen, organisations can take steps to ensure their intranets remain a core part of corporate life.

Nielsen's Nielsen Norman Group has a competition each year to find the best intranets. And he claims the results show a revival of interest. This year the group received many more nominations than in 2001, and most of the designs show that organisations are trying harder to better manage their intranets.

"Typically, most intranets are just a few static HTML pages," explains Charlie Abrahams, European managing director of portal-vendor Plumtree. "At most, they might have a phone list." Intranets need to offer more functions if employees are to use them frequently, says Abrahams.

The key to a good intranet, Nielsen argues, is to focus on employees' roles in the organisation. "If you look at most bad intranets, they're very often a chaotic collection of stuff. To get employees to use the intranet, you need to give them the motivation to go to it every day." Outdated content is a recurring problem, as is lack of coordination between departments, which means users have to learn a new set of rules for each department's section.

But producing an employee-focused intranet that appeals to all staff can be a challenge. A 'killer application', so useful that people will frequently visit the intranet home page, is one mechanism that determines success.

In most companies, says Nielsen, an efficient employee search tool serves as that killer application. A section of a site that provides phone lists, email links, organisational responsibilities, and even photographs and biographies is often the most important tool an intranet can provide. Plumtree's Abrahams says simple administration forms and business tools, such as a travel booking application, can attract users. In some companies, says Nielsen, the most popular tool is a daily lunch menu for the canteen.

Mike Lucas, UK technology manager at software and services provider Compuware, says that one of the most popular parts of his company's intranet is the human resources section, where employees can find out to what benefits they are entitled and what jobs are available within the company. Lucas says that personalisation technology gives employees a sense of belonging. In common with most of the intranets that came top in Nielsen's competition,

Compuware's network uses a portal as the entry point to the intranet. "People won't use a portal just because it's a portal," say Lucas. "It needs to bring value to the employee and push relevant information to them."



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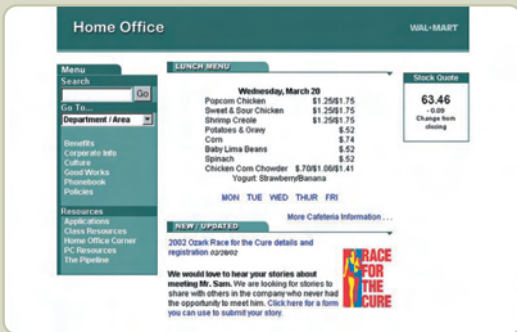
However, finding out what will be useful to employees can be challenging. Feedback from users via links on individual pages can be a source of ideas. "A lot of people on our intranet say 'It would be good if it could do this'," recalls Lucas. "Or 'It would be good if we could access this application'." However,



The top tool

Travel publishing company Lonely Planet had already started to put its documentation online when, in August 2000, the idea emerged for a company-wide electronic system for sharing company news and information.

One key application on the intranet is the contact information pages (left). This combines business needs with whimsy, with important information packaged in an enjoyable design. The top horizontal menu is static and makes navigation predictable and simple. Icons specific to the selected area consistently appear in the upper right corner, making it easy to perform the most common tasks in that area. Unlike some intranet designers, whose default is to organise their menu structure based on the organisational structure, these designers instead structured the menus around tasks and user processes.



Killer applications

In the US alone, 900,000 people use retailing giant Wal-Mart's intranet. Since there are so many employees, each department has its own home page. When employees log on to the intranet, they are taken to the home page for their own department to ensure they get information pertinent to them.

"It's a filtered rather than a restricted view," explains Mark Quinalty, a former analyst who worked on the intranet. "You can see any information you want, but you're guided to view it in a particular way." So someone working in the toy department of a store will have a different start page than someone in the headquarters at Bentonville, Arkansas. That page (left) includes another application that is very popular – the day's canteen menu. Says usability expert Jakob Nielsen, "If you want people to find something, put it on the same page as the lunch menu."



Making work easier

Wal-Mart's intranet also have various tools to help employees with their jobs. The site has reference material for the company's many products (left), and conveys timely and time-sensitive information. By putting the information on the intranet, it is always up to date, always available and there are no printing costs.

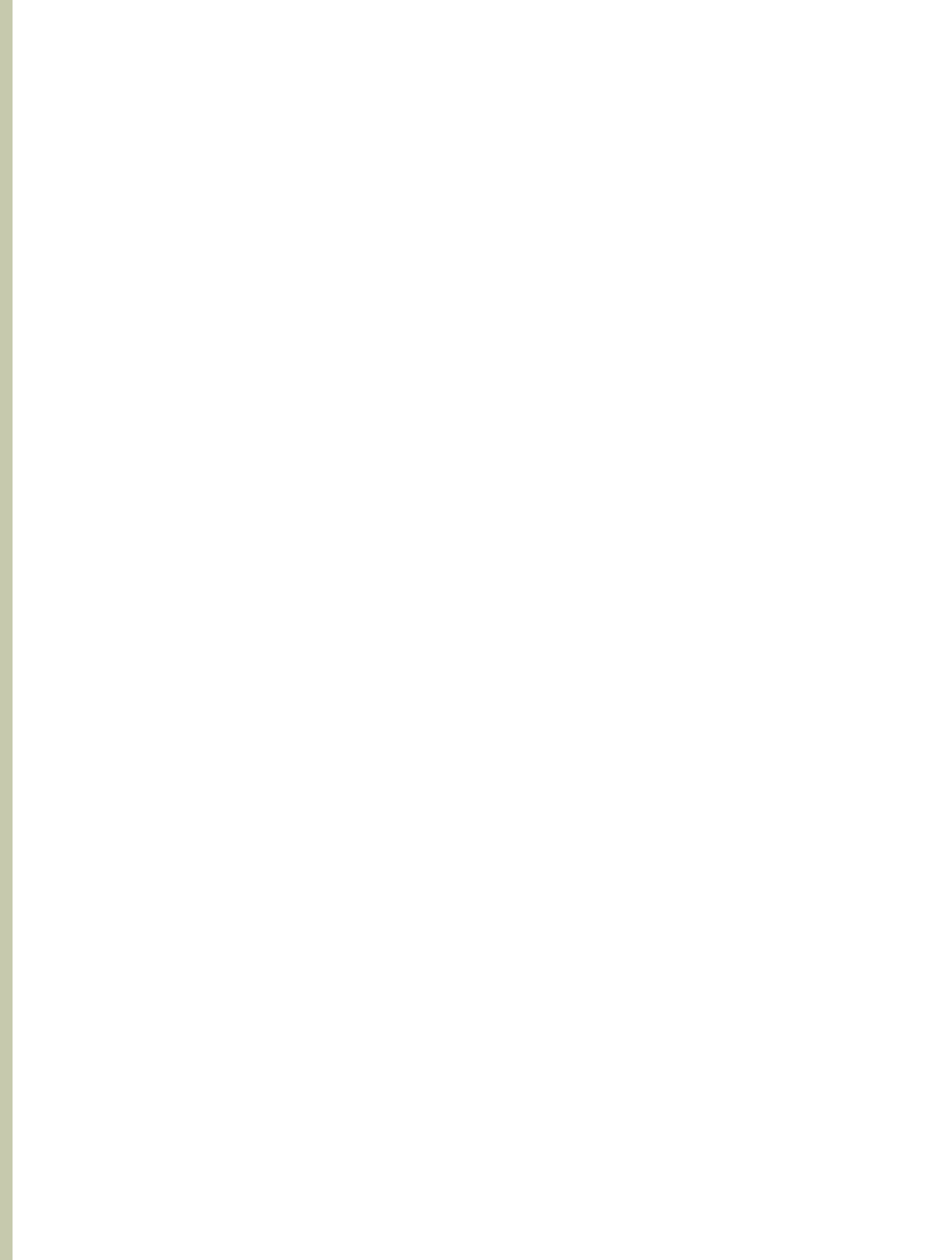
The company spent a great deal of time making the interface as easy to use as possible. "Ninety-nine percent of our associates don't sit in front of a computer on a daily basis; they have to be able to get on, get the information they want, and get off quickly," says project analyst Mark Quinalty. The designers conducted usability testing on a dummy site with about 500 people, chosen to represent a variety of job roles, user experience levels and locations. The team observed them as they attempted a series of tasks the site.



The information employees really want

Washington Mutual is a financial services company that serves consumers and small to mid-sized businesses in the US. Its 'Leadership Rewards' intranet site serves the important purposes of reminding executives of their total compensation and enabling them to project their future wealth as employees. Continued awareness of this information could lead to increased retention and has already led to a large reduction in support calls to the human resources department.

Calling in all the data to calculate the compensation packages is a difficult task though. Carolyn Harper, project manager at design company Towers Perrin which designed the intranet says, "Strong project management is critical. Building, organising, and managing a large intranet site is a fairly complex task. Don't underestimate the time it takes to coordinate the data from the various sources."



Intranet advice from an expert

THE winners of usability advice company Nielsen Norman Group's competition to find the Top Intranets of 2002 stood out for a number of reasons. Below, Jakob Nielsen, the principal of the group, outlines some of the common elements that impressed the design judges:

- Customisation: "In some intranets we have studied, customised designs were really only done as a workaround to fragmented designs on huge intranets. When a company couldn't get their act together and create one cohesive design, portals and customisation features came to the rescue. In the winning intranets, however, customisation is used the way it should be – to push the right information to individuals or to let them pull the information they want."
- Single sign-on: "Several winning sites integrate many work functions on the intranet. Although various organisational units typically control the different applications and procedures, users don't have to know this.

Offering single sign-on prevents users from having to log-in to each area separately."

- Limited use of graphics: "These winning intranets use graphics minimally, and to add to content, not detract from it. In lieu of useless stock art, the designers created elegant pages, using creative layout, colours, and fonts."
- International focus: "With tightening schedules and wallets, it is easy to consider the most typical and easily accessible users and just design for them. It takes more time and effort to learn about users around the world and design for them all. These noteworthy intranets support international users with added features and careful translation and localisation. And, in the best cases, the content and even parts of the design change for different locations."
- Templates based on predetermined styles: "While not all intranets have a huge style guide or standards, some of the most consistent designs use templates based on tested, proven designs."



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intranet and roll out a consistent design across all divisions. Great intranet usability and employee productivity requires more work than just adding water to some portal software," he says.

But even though the overall project can take two years,

organisations should approach building their intranet in increments, advises Nielsen. "Some companies have been burned before by 'big bang' development projects that took forever to create," he explains. For the largest intranets, it would be impossible to convert to a new design this way – US telecommunications company BellSouth has 3 million pages on its intranet, for instance. Instead, it is possible to gradually release templates, portals, search engines, personalisation features and other components on an individual basis. The central design team can convert individual departments to the new design, one at a time, and show a progressive, increasing return on investment.

Implementing the changes and keeping content up to date is as much a business process issue as it is a job for the IT department. Plumtree's Abrahams says, "Any project that is IT-led will fail. The project has to start with a business case and have senior level sponsorship, typically from the marketing or communications department. And you have to get content involvement from users."

Making a member of each department responsible for regularly updating, intranet is vital, says Nielsen. Someone from the central design department should meet every department head to explain the significance of the intranet and to get feedback on what they want from it.

In short, if a company is to get the best productivity gains from and support for its intranet, it must both provide value and be easy to use. And even if these criteria are met, it will only succeed by getting support from all levels of the organisation. [i](#)

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Nielsen warns that feedback can be biased by one or two people with strong opinions. Having a usability professional sit next to someone as they use the intranet, observing how they interact with it, can be informative. Unfortunately, an intranet may be too large for this to be feasible for every page, so user feedback may be the only answer.

Clickstream analysis of web logs to discover which users are visiting which parts of the site and how they get there can be useful. But whatever information this unearths, says Nielsen, companies should avoid a complete redesign except in the most dire situations. "Even if it's hard to use," he says, "employees will have become used to where everything is and how to use it."

Search engines are a crucial consideration because they can affect employee productivity greatly. Users need to be able to find information quickly, so a good

search engine is vital. Also, search engine logs show what employees have been looking for on the intranet and, in conjunction with the web logs, whether they found it. If the search engine is not returning good results, it can be tuned or replaced. "Most intranet search engines are miserable, which is a shame because it's a tool people rely on a lot," reflects Nielsen. "But you can use the results of searches to improve the site as well as the engine. If you know what tools people look for a lot, you can put them on the front page."

Establishing what employees need, redesigning the intranet to meet those needs, then getting them to use it, can be a long and expensive process, however. Nielsen says it can take two years, although this can be shorter if the intranet was designed well to begin with. "For a big company, it's a big project to redesign an

C O N T A C T

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