

### SPECIAL FEATURE

# **Intranets Mean Business**



Man likes marvelous things; so he invents them, and is astonished.

-Edgar Watson Howe

John Gerstner

lexander Graham Bell undoubtedly was unsure of what he had unleashed on the world when his "harp apparatus" first transmitted to a room down the hall his words: "Mr. Watson, come here." Equally so, the inventors of the Internet (Tim Berners-Lee and company) surely had only a hazy idea of what wild and wonderful things their 1990 "WorldWide Web" conception would spawn.

Who would have thought, for instance, that the Internet would soon beget the *intranet*, a still-puzzling word that did not exist until 1994. Lockheed, Hughes, SAS Institute, Cisco Systems, and Amdahl Corporation are credited with being among the first companies to see the potential of using Internet tools to create secure in-house Web sites to serve their employees. Steven Telleen, then with Amdahl, claims to have coined the term

intranet in the summer of 1994 as a substitute for the toocumbersome Enterprise-Wide Web. The media picked up the term, and it stuck. Today the word is ubiquitous within business. Because intranets run on the same computer hardware and software infrastructure already installed to do other tasks, most companies consider launching an intranet a no-brainer. It is estimated that more than 90 percent of U.S. enterprises-including quite small ones-now have an intranet up and in some stage of evolution.

# More efficient and productive

In a 2001 survey of small and medium-sized enterprises, government, and nonprofits by Modalis, a technology information provider, almost three-quarters of those polled said having an intranet allows their staff to work more efficiently and productively. Seventy-two percent said an intranet improves collaboration and knowledge sharing.

The other major perceived benefits of having an intranet were reduced stress and confusion, improved work quality, better decision making, improved communications with suppliers and customers, speedier production, and reduced costs. "Business has become increasingly chaotic. What's so exciting about the Internet is that it puts a common infrastructure in place that allows the chaos to be brought under control," says Geoffrey Moore, a partner with a Silicon Valley consulting firm, the Chasm Group, in an August 2001 Business Week Online article.

Almost overnight, the fledging intranet industry has become huge. According to Gartner



■ Connecting computers and workers: It is estimated that more than 90 percent of U.S. enterprises have a company-wide intranet up and running.

Group, Forrester, and other technology forecasters, corporations spent nearly \$64 billion on intranet hardware, software, and related services worldwide in 2000. This figure is expected to grow to \$200 billion per year by the end of the decade.

While the media have been buzzing endlessly about e-commerce, e-business, and dot-coms (or more recently "dot-bombs"), intranets have been quietly sending large and powerful tendrils into the farthest reaches of organizations of all sizes. More than

75 percent of all Web servers currently being installed are for intranet purposes, and the market for intranet applications, platforms, and related technology is substantially outstripping that for the public Internet and, indeed, all other information technology areas.

What are organizations getting for their intranet investments? Good intranets deliver a plethora of productivity, starting with the ability to distribute company news to employees instantly and globally. Forms, policies,

product information documents, key metrics, and all the other "stuff" that is needed to run a successful organization are suddenly accessible to anyone, anywhere, at any time.

Even in the earliest phases of their deployment, intranets can provide greater collaboration, innovation, sense of community, speed to market, and customer satisfaction. Though not often placed in this spotlight, intranets are actually at the center of the two most important developments of the "new economy": e-

## **A Surprising Development**

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business and knowledge sharing.

"Today's company is one part of a digital ecosystem brought together by the Internet," says Don Tapscott, author of The Digital Economy and Growing Up Digital. "As the computer changes from being a tool to automate to becoming something much broader, a communications tool, and as this new medium of human communications extends out into the economy and society, we are beginning to fundamentally change the firm as we've known it. This Internet-worked enterprise is a completely different beast than the old industrialage corporation, which was, in turn, completely different from the feudal craft shop of the penultimate agrarian economy."

Since those are pie-in-thesky ideals, when it comes to spending money on an intranet, managers want to be shown the numbers. Most intranet launches are justified on how much money can be saved by distributing electronically information instead of by print. It's rather easy to tally up the costs of printing and mailing all the directories, manuals, policy and training manuals, human resource forms, and marketing materials that could be moved to an internal Web server.

These savings can certainly be significant. Back in 1997, the technology analyst IDC conducted some groundbreaking studies that showed intranet return on investment (ROI) was typically well beyond 1,000 percent. IDC also found that companies recovered the cost of their intranets within 6 to 12 weeks, the highest return of any technology expense.

#### 'Hard' and 'soft dollar' savings

E-PeopleServe, a joint venture of British Telecom and the consulting firm Accenture, estimates that transferring humanresources information to the Web can save companies up to 40 percent. By eliminating paper for travel and expense reporting, Accenture expects to save as much as 93 percent in administration and processing costs.

Beyond these considerable "hard dollar" cost savings, some very compelling "soft dollar" arguments can be made for launching an intranet. It is usually much faster to find something on an intranet than it is to dig through a file cabinet or track someone down by phone. If every employee in a 10,000-person organization (costing the company an average of \$50 per hour) saved just 10 minutes a day finding information, that's \$8,333 per day . . . enough to buy at least one powerful intranet server every day.

And since analysts estimate that 18 percent of corporate printed material becomes outdated within 30 days, the intranet goes a long way toward solving the age-old problem of having critical decisions made (or advice dispensed) based on obsolete information found in an outdated document.

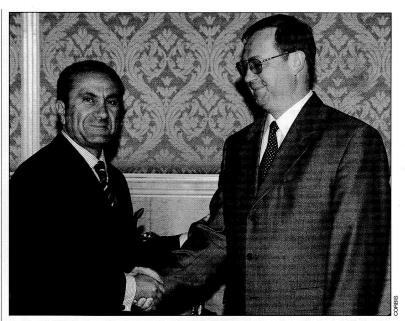
Calculating intranet ROI for an enterprise may still be part art, part science. Nevertheless, plenty of case studies show that the intranet gold rush is on, and companies are striking some rich veins.

Cisco Systems, an intranet pioneer, credits its intranet, Cisco Connection Online, with saving \$90 million a year in lower operating costs, improved productivity, and better information flow. At the same time, Cisco believes its intranet helped cut staff turnover from 12 to 8 percent and allowed the company to painlessly pursue and integrate a steady string of recent acquisitions.

Cisco System's 60,000 employees tap into their internal Web more than 30 times a day, doing such things as filing expense reports, completing online training, gleaning intelligence on competitors, and monitoring sales. There's even a "newhire dashboard" (an on-screen directory of contacts and information for new recruits) and an internal search engine for job vacancies.

## Ford connected through intranet

Ford Motor Company and Delta Airlines made headlines in 2000 by announcing they were offering their employees a free PC and home Internet access. Ford chief executive Jac Nasser said the offer to 300,000 global employees was part of Ford's totally integrated Internet strategy, with the goals of increasing employee communication, collaboration, morale, and productivity.



■ Ford CEO Jac Nasser meets with former Russian Prime Minister Sergei Stepashin: Nasser (left) has offered his 300,000 global employees intranet connection, with the goal of increasing employee communication and productivity.

"We're committed to serving consumers better by understanding how they think and act," said Nasser in announcing the plan. "Having a computer and Internet access in the home will accelerate the development of those skills."

Ford undoubtedly was building on earlier intranet successes. The company has reported that 100 percent of its vehicle teams find 90 percent of the information they need to do their jobs online. And Ford credits its intranet with helping the company cut the time needed to get new models into full production from 36 to 24 months—with significant cost savings.

No longer just for salaried employees, manufacturing com-

panies are also connecting wage employees through their intranets, even if access has to be delivered through kiosks in cafeterias. Mazda North America gets information down to the repair-shop floor, where mechanics access details about a car by its vehicle identification number.

Milwaukee-based Cleaver-Brooks is delivering design information worldwide to boiler rooms, helping 10,000 engineers design better products, faster and more accurately. John Deere uses its intranet, JD Online, to get environmental and safety information to the shop floor, where it is most valuable and critical.

A 1999 study, "The Promise of Intranets" (http://www.iabc.

com/events/intra.htm), produced by the Research Foundation of the International Association of Business Communicators, concluded that the real power of intranets lies not in simply giving employees 24-hour access to key information inside an organization but in fundamentally changing the way employees work, "turning doers into thinkers."

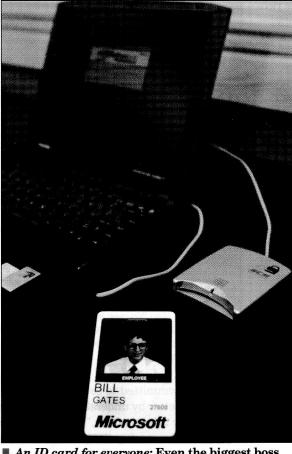
#### **Creating and** sharing knowledge

This notion of creating and sharing knowledge runs deep in fourth- and fifth-generation intranets. Here the vision is to transform the way employees, partners, and even customers share mission-critical information in real time to deliver

greater speed, consistency, and quality of products and services.

So the e words (e-commerce and e-business) are now giving way to the c word: *collaboration*. And intranets are the collaboration medium of choice.

"Intercompany collaboration is a dominant theme for 2001, the 'c' word of the year . . . the hot new thing," says a report from Technologic Partners, a high-tech publishing and services



■ An ID card for everyone: Even the biggest boss needs a card to log on to his company's computer

firm. "Collaboration is the most important word in business today," adds former Oracle president Ray Lane, now a partner with Kleiner-Perkins. "Collaborative commerce is much bigger than buying and selling. . . . The Internet will be even more momentous as a medium for business-to-business collaboration," said an April 2000 report by Chuck Phillips and Mary Meeker, analysts at Morgan Stanley Dean Witter. Gartner Group expressed the same sentiment, recently saying: "'E' was big. 'C' is bigger." Suddenly every software vendor is jockeying to become a collaborative commerce player.

IBM put intranet collaboration to a grand test during 72 hours in May 2001. "World Jam," as the online event was known, was a global virtual brainstorming experiment that tested the power of an intranet to rapidly capture knowledge and change behavior. The premise behind World Jam was simple. At any point in time, someone inside IBM is dealing with an issue that someone else has already thought about or perhaps solved.

World Jam posed 10 crucial customer and operational issues to IBM's 320,000-employee

global workforce through moderated discussions. Each of the 10 online discussion forums was moderated by IBM management. Employees could move from forum to forum and also dive into smaller, synchronous "breakout jams" with colleagues they invited. They could vote on ideas and even volunteer to try one out—and then report back to the community on how it worked for them.

The result? More than 52,000 employees participated . . . no small feat in itself. Specific outcomes of the event based on voting and feedback mechanisms included "Ten Great Ideas" and a set of "I'll Try It" commitments. According to organizers of the event, IBM emerged from World Jam with a state-of-the-art understanding of how people collaborate on intranets.

"World Jam is teaching us a lot," said Mike Wing, IBM's director of worldwide intranet strategy and programs. "Most obviously, we learned about, and are making generally available, the smarts of IBM'ers across the company in tackling some of our toughest operational challenges. But longer term, we're learning about how people collaborate online. In collaboration with the psychologists and anthropologists of IBM Research's Social Computing Lab, we are exploring the frontiers of what will make e-business tick."

Three corporate needs—exploding traditional organizational "silos," allowing employees to band together in far-flung "communities of interest," and sharing knowledge—are now impelling intranets to morph into "corporate portals." If you've experienced "My Yahoo," you have an idea of the "My Company" portal vision, now being offered by nearly every application vendor in the world.

"The business desktop of the future will come from the Web," according to Plumtree, a leading portal vendor. "It will integrate traditional applications, documents, and Internet services. It will be at the center of a business, simple enough for everybody to use, anywhere."

The portal concept places on one computer screen all the customized information and applications employees need to do their job. Once someone signs on-based on his role, position, and location in the company—he is presented with his unique workspace. Instead of jumping from application to application and site to site, the portal offers an entryway to a wide range of systems and services, a personalized, seamless view of everything needed to do a job effec-Because the portal tively. integrates key Internet and corporate resources, employees gain a much deeper view of the business, and partners and customers are allowed to see key assets of the corporate network and become fully aligned and functioning team members.

Is this intranet nirvana? In the halls of business, you can almost hear the chant: "The portals are coming; the portals are coming."

Meta Group predicts more than 85 percent of businesses will be developing portals by 2003, up from 35 percent today. A mid-2001 poll of *Intranet-Insider.com* members found that 39 percent were already implementing a portal, 17 percent would in the next six months, and 9 percent would within the

next year. Only 8 percent said they had no portal plans.

So it appears that in just seven years the once-ambiguous intranet has matured to become a rising star of the new economy. This will undoubtedly transform the way we work, raising all kinds of interesting possibilities and questions.

Thomas Koulopoulos, president of the Delphi Group, believes one of the most striking ironies of the intranet age may be that the greatest of all organizational assets—the personalized intranet portal—will become a heated intellectual-property battleground. "Individuals who become accustomed to this new technology are bound to realize its incredible value not only to the enterprise but to their own careers, free agency, and perhaps even their legacy. If we truly live in a knowledge-based society in which the factors of production are intellectual, then portals become a matter of personal, not just organizational, wealth."

This could lead to one more thing none of the Internet founding fathers could have anticipated: lawsuits over who owns the personalized intranet portal.

John Gerstner has career experience as an Internet/intranet strategist, writer, photojournalist, magazine editor, video producer, and book author/creative director. His latest project is the Web site www.genuinevalue.com and book Genuine Value: The John Deere Journey, named best coffee-table book of 2001 by the Independent Book Publishers Association.