Knowledge Management: A Cautionary Tale

The web still provides the best way yet to leverage your company's knowledge. If we do get a recovery soon, your company had better have its act together.

by Christian Sarkar

"The problem with knowledge, is that, unlike information, it typically doesn't reside on paper. Instead, it lives inside people's heads."

Ask people what knowledge management is and you might get 20 different answers. The bloom is off the knowledge management rose, as Thomas Davenport might say.

Knowledge management represents a natural evolution in the use of computers for business applications. In the beginning (circa 1970), there was only data - tons of it, arrayed in mind-numbing columns of numbers on mountains of paper. In those days, the computing division of any company was typically called the data processing department.

Later, the old paradigm of data processing was transformed into something called information systems (IS), recognizing that computers could handle complex information as well as numbers.

Today, at the next step in the evolutionary process, companies know that knowledge itself is an asset. More than just information, it represents the combined expertise of the entire organization, including the shared experience and know-how that make a company unique and give it a competitive edge in the market. The problem with knowledge, however, is that, unlike information, it typically doesn't reside on paper. Instead, it lives inside people's heads.

Two thing lead me two believe that we are about to see the return of "knowledge management": 1) the trend toward corporate downsizing and cost cutting (companies do sometimes throw out the baby with the bath-water when they inadvertently let good people go) and 2) when we do see a uplift in the economy, we'll see a corresponding rise in hiring in the industry (unless we see the proverbial jobless recovery).

All of a sudden, many organizations will find that most of their knowledge assets are walking out the door as their in-house experts head toward retirement or are lured away by competitors. The best way to retain that knowledge is to capture it, transfer it more fluidly between employees and institutionalize it so that it takes on a life of its own. And the scary thing is that you should be doing this now.

Back to the Intranet

The problem with capturing, transferring and institutionalizing knowledge is that there just haven't been many easy ways to do it in the past - until the Intranet came along, that is.

Even then, most companies got it wrong the first time around, building static monuments to their departments and organizational grous, rather than buzzing, communities of practice or collaborative workflow tools. With a combination of hypertext, online publishing, document repositories, blogs, e-mail links, discussion groups, search engines, collaborative applications and conferencing - all deployed across a wide area network - intranets seem tailor-made for
Lessons Learned: Stories from those who got it right the first time

A handful of companies mastered knowledge management in the 1990s. A great example is given by a former CIO at British Petroleum, one of the most avid corporate practitioners of knowledge management in the world. The CIO was trying to explain the usefulness of the intranet to a member of upper management, who gamely posed the question: "OK, suppose lightning hit an oil refinery and caused an explosion. How would I know what to do and how to prevent it?" At that point, the CIO somewhat cautiously turned to the intranet and said, "Well, let's see..."

Typing the words "lightning" into a search field, he came up with a dozen reports from locations around the globe on past incidents of lightning strikes at oil refineries, including one report where the refinery manager had painstakingly researched the problem and developed solutions. With such a knowledge base easily available, it no longer becomes necessary to reinvent the wheel everyday.

As an example of its extensive use of the intranet for knowledge management applications, BP held a company-wide conference to discuss problems and solutions for the future. Teams were invited to make presentations which were, in turn, made available to all employees via the intranet. Problems were discussed and feedback requested. The notes, discussions and follow-ups were all made available online. The outcome of the conference showed how far "networked-learning" had come: winning recommendations were made by a team of employees from a rig in the middle of the North Sea, which had spent a night discussing key issues and submitted its solutions online.

The Virtual Teamwork (VT) Project at BP Exploration shows how a network of people can share knowledge interactively. At BP, work teams have access to VT workstations equipped with videoconferencing, shared chalkboards, multimedia e-mail, groupware and a web browser to allow for fast-paced collaboration. Team members are assisted by knowledge-coaches that teach them how to maximize the use of their knowledge sharing tools.

An example of the VT in action was highlighted in the media recently. An equipment failure halted operations on a North Sea drilling ship. The ship's engineers took the broken hardware in front of the VT station and called up an Aberdeen-based drilling equipment expert via satellite. The expert visually gave the part a once over, diagnosed the problem and "walked" the ship's engineers through the repairs. In the old BP, the work stoppage would have lasted several days- either the ship would return to port for repairs, or an expert would shuttle over by helicopter. In the new knowledge-based BP, the halt in operations lasted only a few hours.

 Plenty of other history lessons abound. PeopleSoft had to keep its workforce and their computers up at all hours. They gave employees direct access to product know-how and company knowledge by deploying a self-service help desk. Aptly named Eureka! the service used a Case-Based Reasoning (CBR) knowledge management software and was deployed through the company's intranet. PeopleSoft employees found answers to their own questions any time of the day or night, without having to talk to another living being. Within six months of deploying Eureka! PeopleSoft saved $150,000.

Ask yourself- has your company institutionalized the way you do business, or do you rely on a handful of experts (superstars) to see you through? Chevron Corp., a leading proponent of the "best practices" methodology of knowledge management, also realized dramatic cost savings and important performance improvements through its "best practices transfer" initiatives.

The company's commitment to seeking and sharing knowledge was embodied in a program entitled "The Chevron Way," a set of strategic statements that sets the tone for company initiatives. The Chevron Way was a commitment to learn "faster and better than competitors through benchmarking, sharing and implementing best practices, learning from experience and continual individual learning and personal growth."

The foundation for knowledge sharing at Chevron was an innovative best practices database, a system that allowed employees to exchange questions and post insights using key words and categories. Chevron promoted knowledge sharing by tracking and measuring the impact of best practices.
Portal-Mania

Another way to look at knowledge management is to realize that much of a company's knowledge traditionally has been scattered among a wide range of computer-based repositories - mainframe, client-server and standalone databases - as well as a wide array of other informal information sources, including company newsletters, memos, reports and other traditional office documents stored in word processing files.

Until the intranet came along, there was no way to link all of these resources together and make them easily searchable by employees. Now, many companies are using the web browser not only as a front-end to the mainframe world of legacy data, but also to the vast horde of office documents, reports and manuals sitting on hard drives and network file servers - all of which should (by now) be online.

To provide maximum value, the intranet should not be limited to some subset of a company's total information inventory - it should be a portal tying together all sorts of corporate knowledge, from bedrock mainframe data to previously intangible experience stories, through an interactive mix of online documents, conferencing, discussion groups and interactive web applications.

So are you ready? You heard it here first- knowledge management is coming back, and this time it will include all your employees- and your customers, your partners, and suppliers!

Christian Sarkar is Editor-in-Chief of agilebrain.com. You can view more of his work at his personal site at onewwworld.com.

© 2000 agilebrain.com. All Rights Reserved.