Expertise location and the learning organization

Jan 1, 2003
Judith Lamont, Ph.D.
This article appears in the issue January 2003 [Volume 12, Issue 1]

By Judith Lamont

As organizations try to make the most of their intellectual capital, awareness is increasing about the importance of connecting to the people with the right knowledge at the right time. Initially focused on targeted business goals such as reducing time for product development, expertise location and management (ELM), also called employee knowledge network solutions, are also well positioned to provide support to organizational learning initiatives. Those include facilitating mentoring programs, identifying knowledge gaps and providing both performance support and follow-up to formal training activities.

A relatively new entrant into the KM space, ELM software products offer a variety of capabilities, sometimes combining them into one solution. Most of them create an initial profile of an individual's expertise based on an analysis of published documents. Some solutions take a Q&A approach that provides responses to specific questions and may also create a knowledgebase that documents those interactions. Finally, some focus on e-mails to capitalize on that ubiquitous but often underutilized source of expertise. The products generally provide the participants with control over the content that is placed into the knowledgebase as well as over the volume of questions that they receive.

One of the appealing aspects of ELM systems relative to other enterprisewide software solutions is that they can be rolled out and operating productively in a relatively short time. Kamoon reports that a pilot project can be deployed in just a few weeks, and a 10,000-seat system within a month or two.

"We first set up profiles," says Yali Harari, Kamoon's CEO, "by analyzing unstructured repositories to find out where the documented expertise resides." Employees then take a look at their profile, and update it or remove topics about which they do not want to serve as experts. Over time, employees can continue modifying their profile directly or can simply submit content that the system analyzes to produce an automated update. Depending on the product options selected, Kamoon Connect can function as a locator that brings up a list of experts or in a Q&A format in which questions can be submitted and answered. In either case, a knowledgebase of interactions can be built that captures previously answered questions (PAQs).

The Young Presidents' Organization (YPO) deployed Kamoon Connect in November to allow its members to share knowledge among YPO's large global network of young business leaders. YPO's mission is to develop better leaders through education and idea exchange. With 17,000 seats deployed to date, YPO will benefit from the ability of Kamoon Connect to match requests to member experts and facilitate interaction among them. Founded in 1950 by Ray Hickock, then a young executive himself, YPO provides support and growth opportunities for those facing the unique challenges, both personal and professional, of early success in business. Networking has always been a key factor in the organization's success, and that component is now being supported by Kamoon Connect to make the most effective use of members' knowledge.

“We view Kamoon as a vital part of our mission,” says George Goldsmith, a YPO board member and chairman of IT and member networking. “It will let our members connect more quickly with their counterparts, accelerating the learning curve on issues that matter.”

Reducing delays in the learning process creates options that are synergistic with formal training. “The organizational value created by knowledge workers may not be able to be codified ahead of time,” points out Lori Wizdo, Kamoon’s VP of business development, “so real-time interaction can be invaluable.” In addition, she does see a potential role for ELMs in formal e-learning programs, particularly in conducting needs assessments and locating subject matter experts.

“We can look at the questions being asked and find out what employees really need to know, rather than just asking them what kind of training they want, or worse, deciding it for them,” she says. Kamoon is also beginning to talk with e-learning companies to key them into the value of ELM in identifying both training needs and sources of expertise. A new partnership between IBM Lotus Software and Kamoon builds on the strengths of the Lotus Discovery Server.

“The core capability of the Discovery Server is centered on detecting affinities of individuals with respect to specific topics in the system,” says Antony Satyadas, knowledge discovery business leader for Lotus. The system can then send an e-mail asking if the individuals want to publish an affinity in their profile. With Lotus’ Sametime, a user can find out if the sought-after expert is online. The system also can map skills against corporate needs to find knowledge gaps. In addition, it can integrate with learning management systems to include an individual’s course information as an input for calculations of a relevancy score. Kamoon contributes the workflow that routes questions to one or more individuals and also the Q&A database that provides a repository for previously answered questions.

AskMe

AskMe developed AskMe Enterprise after extensive testing of the Q&A concept and technology on a public Web site over the past three years. The company’s founders had identified expertise location as a mission-critical issue across many companies, and in the course of its testing, explored many of the cultural and adoption issues related to information sharing.

“We discovered that people use the system in several different ways,” says Dan Wright, VP of professional services at AskMe. Some individuals, for example, were coming to the system every day but neither asking nor answering questions. “We called these people ‘absorbers,’ ” recalls Wright, “because they were learning from the interactions others had had in the past.” This realization led to the addition of new features such as subscriptions to certain areas of content.

As for the responders, incentives for sharing are important. According to research conducted by AskMe, the top-rated reason for responding is recognition, followed by the satisfaction of helping others. Thus, a system that depends on voluntary response from others should, as a best practice, incorporate a form of recognition for contributors. AskMe has analytical capabilities that allow management to track response time and quality, so it can be used to identify knowledge gaps. For example, a sales force responsible for a complex product may submit questions to applications engineers as to whether a certain product configuration is possible. If weeks go by with no response, management can investigate the delay by exploring staffing or training issues.

At Honeywell, the Six Sigma process improvement methodology is an integral part of the corporate culture and is embedded in workflow at every level. Part of the job of senior Six Sigma staff (called Black Belts) is to mentor to levels below. Honeywell deployed AskMe across its Six Sigma organization to help transfer knowledge from the most experienced staff to those in training. For example, in the Six Sigma groups, Green Belts in the program can ask questions of the higher level Black Belts to help solve business problems. The answers address immediate needs, but also capture the knowledge for future reference.

“A strength of the system,” says Drew Grimm, knowledge lead and digital activist at Honeywell, “is that multiple answers may come back, which opens up a diverse range of information to the knowledge seeker.” He believes that much of the value comes from the complementary nature of the expertise.

One measure of success that Honeywell has chosen is the degree to which answers in the system cut across boundaries, whether geographical, business unit or organizational level.

“When that happens,” points out Grimm, “the organization as a whole is learning, and we begin to leverage information throughout the enterprise.” AskMe is designed to serve as a knowledge network and is deployed as part of Honeywell’s overall knowledge management strategy that also includes document management and other collaboration tools. It is effectively accessing tacit knowledge that might otherwise be underutilized, and codifying it so it can be shared.

Sopheon

Ericsson Research Canada, which develops software for communication network infrastructures, uses Organik software from Sopheon (sopheon.com) to seek out and share expertise. In the highly competitive telecommunications industry, being able to find and disseminate knowledge quickly throughout the enterprise is critical to the ongoing learning process. (Sopheon acquired Organik when it purchased Orbital Software in January 2002.) When the system was implemented at Ericsson Research several years ago, it mirrored the natural communities that had formed within the organization.

“These communities, which may number a dozen or so individuals locally,” says Anders Hemre, director of enterprise performance and CKO at Ericsson Research, “access four to five times as many others globally through Organik.”

Based on a Q&A format, Organik provides answers to questions and then stores the answers in a repository for future reference. Some groups now consider the stored information as an integral part of product development, the three components being the product itself, technical documentation and the knowledgebase that explains why certain decisions were made and how problems were solved. Documenting those processes is a way of sharing lessons learned for future projects. In addition, the insights contained in the knowledgebase also can provide guidance to employees in the growing area of technical services, an expanding business for Ericsson Research.

Hemre sees additional potential for Organik-based knowledge networking as a follow-up to training.

“Our business case for the system focused on its ability to expedite product development, but we always recognized its ability to serve as an extension to formal training,” Hemre says. That potential may prove particularly useful in the near future; Ericsson Research conducted a large-scale training effort in Java programming and open systems design this year in order to respond to changing market demands. Learners who run into snags on the job may find that peer-to-peer contact as well as accessing established experts both offer solutions. More broadly, the concept of knowledge networking is now being taken up by Ericsson University, which will facilitate such efforts in the company and develop curricula on knowledge management. The expertise location technology in place at Ericsson has the potential to leverage those and other learning organization activities that the university initiates.

Sopheon is unusual in offering its expertise location software as a module within a broader knowledge management solution. Accolade, its product development suite, includes other tools such as process modeling and portfolio management software, along with a knowledge network component that provides access to research specialists and other sources of decision support.

“We focus on highly technical areas where knowledge is complex,” says Iain King, senior solutions consultant at Sopheon. “There is a real need in R&D-intensive organizations to connect the right people to a particular problem, but often, integrating these connections directly into the work is difficult.” Accolade provides an environment for managing knowledge-intensive work processes.

Tacit

Tacit Knowledge Systems set its sights on the content streams, particularly e-mail, as they move through an enterprise. Its KnowledgeMail software is designed learn about people automatically and in detail through analysis of e-mails as well as document repositories and Lotus Notes databases. Search results include experts and links to content. Users of the system can learn from each other through communities that cross organizational boundaries.

“In a typical deployment,” says Andrew Dunning, director of marketing at Tacit, “individuals working on large projects find out that they have not been talking with all the right people.” A Tacit search for phrases or keywords identifies those individuals. With Tacit’s Expertise Assessment API, managers can get a view of the expertise that resides in the organization, and identify knowledge gaps.

John Old, who was director of information management at Texaco (Texaco.com), conducted a pilot program using KnowledgeMail among a group that included the Texaco Fellows, who served as mentors to about 50 employees. Each Fellow guided a learning group that was interested in a certain topic such as telecommunications or finance. One goal of the project was to ensure a well-managed transfer of expertise among the individuals. KnowledgeMail was used as a way to broaden each individual’s network within the company. As a result of that experience, one learning group participant developed a knowledge management position paper that ultimately defined Texaco’s KM strategy.

Organizational structure, maintains Old, is not enough to ensure the right connections.

“On one occasion we met with a partner company to discuss wireless technologies,” recalls Old, “and we used the system in real time to find individuals with a relevant background.” The person who

showed up at the top of the list happened to be in the room because of his interest in the topic, but he was not a member of the wireless team.

“Another one of our initiatives was to use KnowledgeMail to build a community around the subject area of training that employees received,” Old adds. “Typically, trainees go back to their jobs and are disconnected from the training. Our plan was to build learning communities around the formal training and trainees’ subsequent work experiences.” Although not implemented at this point, the plan highlights the potential synergy between expertise location and training initiatives.

Judith Lamont is a research analyst with Zentek Corp., e-mail jlamont@sprintmail.com.