

Collaboration and R&D

- [Judith Lamont](#) of Zentek

By Judith Lamont

A multitude of today's software products have collaborative components, ranging from shared document repositories to supply chain management. Integrated collaborative environments (ICE) offer multiple capabilities such as messaging and virtual meeting places. More and more, businesses recognize the importance of working together efficiently. A key issue in research and development is finding in-house experts to better utilize resident knowledge, much of which is not formally documented. That tacit knowledge is recognized as being a significant part, perhaps even the majority, of a company's intellectual assets. Another rapidly developing area is professional services automation or enterprise service automation, which manages staff and projects and provides a suite of collaboration tools.

[AskMe Corporation](#) developed its AskMe Enterprise software to enable enterprise knowledge sharing. [Procter & Gamble](#), which has developed hundreds of consumer products, integrated AskMe into its Innovation Net portal to facilitate collaboration for product development across different business units. The ability to better access in-house knowledge and avoid duplication will help speed products to market and reduce development costs.

AskMe includes a corporate knowledgebase, dynamic expertise directory and a Q&A feature that delivers inquiries via e-mail. The knowledgebase catalogs information according to a customer-driven taxonomy. AskMe can appear as a separate application or be integrated into other applications or portals. Usually, e-mail is the environment from which inquiries are placed, but AskMe can be integrated into other applications such as PowerPoint, and inquiries can be launched from there. Distributed administration allows leaders of each community of practice to set up rights and permissions for its own group and for those in other parts of the company.

Users set up an initial profile and from there on, AskMe begins to augment the profile with content from answers. In addition, it can bring in information from other sources, such as a human resources database that includes patent information or project experience, as well as from documents. "This provides a richer context for answers than what would be available from the knowledgebase alone," says CEO Udai Shekawat.

Shekawat contrasts the insights obtained through AskMe to those available from traditional applications. "AskMe can show why certain dynamics are occurring. If the software engineering group gets behind on a development project, it's possible to look at a history of questions coming their way," he says. "If the group is responding to a spike in questions from the sales force, it can impact their schedule." A look at the content of the questions also may indicate a need for additional product changes. Shekawat emphasizes that it is important to have a clear understanding of a company's business objectives to be able to measure the success of an AskMe implementation, as well as a thorough knowledge of corporate culture to make it effective.

[Orbital Software](#) has developed a Q&A-based expertise-sharing product geared specifically for R&D-intensive organizations. The newly introduced Organik 3.2 offers enhanced reporting tools and a rapid roll-out kit to facilitate deployment. Robert Nilsson, VP of U.S. marketing for Orbital, explains why it is so important for high-tech corporations to use their resources wisely: "These companies derive 15-30% of their revenues from new products," says Nilsson. "but they spend 7-20% of their time replicating answers for others." If this knowledge can be codified and reused, companies can make a big dent in the amount they are spending for product development.

When Anders Hemre, director of enterprise performance at [Ericsson Research](#) in Canada, came across Orbital Software at the KM World Conference in Dallas in 1999, he was looking for a way to facilitate knowledge sharing. Ericsson Research develops software for communication network infrastructures, and considerable teamwork is required to move products from conception to market. He was intrigued by Organik's dynamic profiling process. "What someone knows is not as important as what they are doing with that knowledge," Hemre states. Therefore Organik's tracking of "knowledge in action" was appealing.

"Experts don't have time to stop working and update their profiles," adds Hemre, "so the system must do that for them in order to be viable." Hemre says the time spent thinking through the system very deliberately was a good investment, and resulted in a solution that fits Ericsson's corporate culture. One change his department made to the standard interface was to remove the rating feature for answers, which he felt would inhibit use. He was also pleased with Organik's emphasis on developing communities of practice.

[Lucent](#), which develops computer networking products, is also planning to implement Organik to support its research communities. Don Slepian, a manager of Knowledge Services at Lucent, cites the importance of capturing expertise embodied in Q&A exchanges. "We are directing our efforts toward building a database of frequently asked questions, identifying experts who are willing to share knowledge, and reusing the expertise that flows through Organik's e-mail exchange," says Slepian. The solution is a way of accessing information that is time-sensitive and may never make its way into formal reports.

As its name suggests, [Tacit Knowledge Systems](#) accesses tacit corporate knowledge. Its KnowledgeMail 2.0 mines the information contained in employee's regular e-mails, often cited as an underutilized source of corporate knowledge. KnowledgeMail automatically creates profiles based on employees' current activities as represented in e-mail messages. Each individual has the option of authorizing whether a particular e-mail will be included in the public profile on an "opt in" basis. Inquiries are sent through KnowledgeMail and directed to recipients based on the system's knowledge of employees' profiles. The sender also can specify recipients, but will not be aware of those recipients selected automatically by KnowledgeMail. That feature offers recipients privacy in the event they do not want to respond to a particular inquiry. Tacit's system can be integrated with portals such as Plumtree (plumtree.com) to access content other than e-mail, or linked directly to document repositories such as PCDocs. It also integrates with Lotus Development's (lotus.com) K-station and Lotus Notes.

Users of KnowledgeMail have been rewarded by significant savings. Andrew Dunning, director of marketing at Tacit, describes a pharmaceutical company that implemented KnowledgeMail. The company had recently gone through a merger and wanted to find out if anyone in the newly acquired organization had expertise in setting up a lab to work on a particular substance. "They found a group overseas that was doing very similar work," says Dunning. "The system paid for itself through this single event by avoiding duplication of effort." In another situation, a company estimated it would need 12 months to develop and build a specialized radio antenna. Using KnowledgeMail, the project team found another group that had built an almost identical antenna, and saved months of work.

When a product development effort is underway, time is money. The sooner the product reaches market, the sooner revenues begin to flow. Nowhere is that effect more apparent than in the pharmaceutical industry, where a "blockbuster" drug from a large company can bring in \$1 million to \$10 million per day. The Business Engine Network (BEN) from [Business Engine](#) is a leader in the newly emerging field of professional services automation. A client-server product for more than five years, The BEN is now browser-based, making it ideal for geographically dispersed or virtual corporations. It integrates the management of projects, portfolio priorities, employees, schedules and financial resources.

[Pharmacia](#), a large pharmaceutical company, is using The BEN to manage clinical trials to expedite the drug testing process. Clinical trials are conducted with external vendors, so collaboration posed challenges. In addition to providing a collaborative project management environment that encompasses budgets and deliverables, The BEN provides a shared repository for all project-related documents.

At the Brea Design Group at Ericsson (a different division of Ericsson than that previously mentioned in this article), Peter Nannis, head of the Project Office, was responsible for finance, total project management and operation development; he also oversaw the implementation of The BEN. He emphasizes the importance of viewing project management, finance and resource management within a single system. Often, project managers are tasked with completing projects on schedule but do not determine the resources that are available.

"If project managers don't have control over their development resources, they can't be held responsible for project outcomes," maintains Nannis. The BEN allows project managers to assess development efforts against allocated funds and human resources, giving resource managers and project managers the same version of "the truth" for resource planning. Upper management has an "executive portal dashboard" that provides a top-level view along with red flags that indicate trouble spots.

George Van Ness, president and COO of Business Engine, makes a convincing argument that success lies not only in completing project work, but also in selecting the right projects in the first place--and, perhaps more difficult,

terminating projects that are not performing up to standards. "Low priority projects get started and they don't get stopped," says Van Ness. He maintains that a company can trim 10% to 15% of its expenses by eliminating such projects. Equally important, The BEN allows organizations to identify high-performing efforts. Either way, the project management process becomes transparent--problems and successes can both be clearly seen.

"The BEN allows quantification of productivity in R&D and other activities that had not been thought of as measurable," Van Ness continues. "In addition, employees are provided with a consistent framework in which to perform their tasks and evaluate progress."

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Collaboration in KMWorld: selected articles from 2001

"KM and Web help power global collaboration," Kim Ann Zimmermann, January 2001.

"A closer look at KM's role in collaboration." Kim Ann Zimmermann, March 2001.

"Streamlining the decision cycle through collaborative decision management," white paper, Randy Frid and Randall Eckel, May 2001.

"Meshing the gears of business through collaboration: current state of the art," Arthur Gingrande/Bernard Chester, July/August 2001.

"Enterprise collaboration: the big payoff," white paper, Jim Pflaging, September 2001.

"Knowledge management and collaboration," white paper, Michael Loria, July/August 2001.

"Find the expert," Judith Lamont, September 2001.

"From the ICE Age to contextual collaboration," Robert Mahowald and Mark Levitt, October 2001.