



Challenges in Locating Experts

By Ben Mowbray for APQC

Locating the best advice can be difficult, especially for global and nationwide businesses. But as knowledge management (KM) efforts mature, organizations are taking steps to supply their employees with better access to the most important organizational resource: the expertise of their people.

Managing that expertise successfully is sometimes easier said than done. Few things are more cumbersome than cataloging the knowledge and skills accrued by every staff member and then positioning "the right person at the right place at the right time."

In response, learning organizations are developing directories and systems that, in theory, allow an employee facing a specific problem to use mere keystrokes to find the most qualified staff member for advice on an issue, wherever they may be in the world. As corporations continue to grow globally, these systems will become the rule rather than the exception.

In its research, the American Productivity & Quality Center (APQC) has found subject matter expert directories, or expert locator systems, to be a challenging effort, even for early adopters and best-practice KM organizations. Yet examples exist in which companies successfully face common challenges in locating experts.

A Systems Approach

Expert locator systems are a searchable, online Rolodex™ of names, phone numbers, and titles, as well as often complete employee profiles. These profiles can contain professional interests and experience, memberships in professional organizations, published papers, speaking engagements and presentations, discussion groups -- anything that can paint a detailed picture of an employee's skills base. Expert locator systems are a means to establish an electronic round table, which would allow employees to seek the counsel and guidance of co-workers outside of those who happen to sit in the adjacent cubicle. It also streamlines activities such as project team selection, market research, and new product development.

An expert locator system could also be seen as a study of the law of averages from a KM perspective: In a large corporation, it is unlikely that there are any problems for which someone, somewhere in the company, hasn't already figured out an effective solution. The challenge is in finding that person quickly and efficiently. It is a massive task to be sure, but the benefits of having an expert locator system program are clear: organizations can save time and money.

APQC has found three common challenges faced by organizations with expert locator systems.

1. Quality of content -- An expert locator system is only as good as the quality of the information provided. As employees develop new skills, their profiles must be updated, which means that the system requires vigilant attention.
2. Gauging feedback and usage -- To ensure an expert locator system is indeed helpful, organizations are tasked with comparing when a system was used and should have been used and gauging user feedback.
3. Measuring the financial impact -- Possibly the most challenging task is putting the system's benefits into quantifiable terms, which is often a requisite for continued senior management support.

Quality of Content

Determining which skill sets an employee possesses that may serve the organization is the primary reason to establish an expert locator system. If the system, acting on poor information, lists an employee incorrectly as an expert in a certain field, then the rationale for the system has been undermined. The

quality of the information logged in the expert locator system is crucial.

Rockwell Collins Inc., a global aviation electronics and communications systems provider, has approached the content quality issue by making employee input into its "skilled locator system" a part of employees' annual performance review. To date, the company has profiled 92.7 percent of its engineering employees in its system.

Within the profiles, Rockwell Collins employees include additional information, outside of the field they currently work in. An expert can be located "irrespective of what [they] are doing today," said Lynette Freese, a senior program manager at Rockwell Collins. Freese said that employees self-assess against more than 600 technical skills in all areas of engineering in order to identify their entire knowledge base. "We want to know that they have skills from past assignments in the company, as well as skills from previous employment."

The logic is obvious, Freese said. "We want to know where our talent is." And that talent does not always take the form of engineering skills. When a document came into Rockwell Collins in a foreign language, for example, "a translator [was needed] who could deal with the technical aspects. We were able to find one in one hour versus one week," said Freese.

An expert locator system is a tool of convenience; it helps to grease the gears of collaboration, but it is also a massive bookkeeping operation. Employees gain new skills and new insights almost daily, and those new talents must be reflected in their profiles for the system to grow and become more effective. Such a system requires constant updating.

Houston-based Marathon Oil Corporation encourages employees to write descriptions of their skills and a list of their significant projects participation, which are then posted in the corporate People Directory. If the employee wishes to include additional information such as education and past job titles, it must be downloaded from a master database kept by human resources. "This has been an encouraged activity, but not required of our employees," said Sandy Miller, knowledge management/eBusiness coordinator at Marathon Oil. Because of the importance of keeping the profiles current, "automatic reminder notices are sent out if an individual hasn't made any updates in a six-month period," said Miller.

APQC has found that it is important to strongly encourage or even require employees to both create and update profiles. Once the system is adequately populated, employees will turn to it as a valuable resource. In turn, employees will eventually recognize the benefits of using the system and updating their profiles. This is the case at Marathon Oil, where employees do not appear to need much encouragement. "Our expert profile system is the most used component of our intranet," said Miller. "Usage is automatically tracked. For example, during January 2003, there were nearly 10,000 searches within the profile system."

User Feedback

Like Marathon Oil, many companies are attempting to gauge user feedback and measure usage. These efforts determine the effectiveness of the system, as well as its weaknesses.

APQC has found a number of effective ways to gauge user feedback, including point-of-use surveys, e-mails soliciting input from management, and a system link to a user feedback form. Pennsylvania-based Air Products and Chemicals Inc. uses a survey to measure the derivative value of its expert locator system. News alerts are sent to employees based on their profiles in the expert locator system. The survey measures the value of the company's news alert service. "The survey is, in effect, trying to measure the value of a work process that is totally dependent on and integrated with the expert locator," said Alan Earnshaw, a business value manager at Air Products and Chemicals.

Earnshaw said that the survey includes multiple choice questions that gauge the value of the system, with the choices "good opportunity," "of some value," and "of no value." Depending on the answer, Earnshaw may follow up with the survey respondent for additional feedback.

Earnshaw found that unless employee concerns were immediately addressed by the expert locator system, employees were less likely to provide even the raw data necessary to measure the efficiency of the system. Earnshaw referenced psychology in describing this problem: "A behavior when not rewarded properly stops being used." In this situation, keeping track of and responding to feedback is in and of itself a task to be reckoned with.

As with the quality of system content, gauging user feedback and measuring usage poses a circular challenge. It must be useful for many employees to use the system, and many employees must use the system for it to be useful. Therefore, APQC has found it to be critical to aggressively solicit feedback from the time the system is available. If that feedback is quickly incorporated, usage numbers tend to increase. In turn, higher usage numbers will help to ensure the continued support of senior management and substantiate an extended implementation.

Financial Impact

An expert locator system is not like a production line. Lacking a measurable, physical asset, there is no way to quantify its exact dollar value. Yet, an expert locator system enables conversations and collaboration, and in that respect, it has implied value.

Air Products and Chemicals has decided not to pursue this measure for now. "We have not been able to figure out a way to quantify the value, any kind of financial value," said Earnshaw. "The expert locator itself does not provide inherent value. The real value comes when you meet somebody and collaborate with them in some way. It is hard for people to think back and say 'How did I meet Phyllis? Or how did I meet Janice?'"

The central issue in quantifying the value of an expert locator system is identifying the point in the collaboration process where money is made. Earnshaw said, "If great things happen from [collaboration], is that the result of the expert locator system, or is it the result of our collaboration processes, or is it the result of our idea management processes? Where do we draw the line and say here is the financial value that we can directly attribute to this particular system?"

Regardless of the challenges, senior management often requires a fiscal return on investment to be seen. APQC has found few cases in which the value of an expert locator system is quantified. There are even fewer examples of organizations that hold these measures up to a great deal of scrutiny.

Some organizations are instead working with senior management to dispel the need for financial measures of expert locator systems. This involves additional resources to educate decision makers and may be difficult. Conversely, some organizations have already quantified the return for their overall knowledge management efforts. By presenting an expert locator system as a requisite of successful tacit knowledge management, the cost of the system is wrapped up into the larger initiative. With either approach, usage measures may be adequate measures of the system's effectiveness. APQC is currently conducting research to further explore the financial impact of expert locator systems.

Finding Best Practices

The upcoming benchmarking study "Measuring the Impact of Knowledge Management" -- APQC's 11th KM consortium effort -- will examine how best-practice organizations measure KM initiatives, link KM to organizational measurement frameworks, identify measurement systems, and develop measurement approaches appropriate to a stage of implementation. This will include a look at expert locator systems, along with content management, communities of practice, and facilitated transfer processes. To find out more about this project, please click [here](#) or call John Crager at 713-685-4628.

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