

Knowledge Management: What's Now and What's Next

By [Carla O'Dell, Ph.D.](#)

Dr. Carla O'Dell, president of the American Productivity & Quality Center (APQC), has sought best practices and emerging ideas in operational effectiveness for 20 years and dedicated eight of those years to knowledge management (KM). She recently shared some lessons learned in knowledge management, dispelled some KM myths and also addressed some of the emerging issues in the KM arena with CHIPS Magazine .

KM is a proven strategy of using systematic approaches to create an environment where knowledge can be easily shared, and to making the knowledge accessible to the people who need it when action needs to be taken. The creation and flow of knowledge is a dynamic chain of events: create, identify, collect, review and validate, share, and adapt and use. If a link is broken, the chain is ineffective. When the flow is managed well, individual knowledge becomes community knowledge, which then becomes enterprise knowledge. As a result of this collaboration and validation, the enterprise has actionable knowledge.

APQC's Commitment to KM

APQC is a nonprofit organization founded in 1977, supported by 450 member organizations, 27 of which are U.S. government agencies. Led by a Board of Directors, which includes senior executives from private industry, government and education, the staff of nearly 100 is tasked with improving productivity and quality in organizations. Since establishing its focus on productivity in 1977, APQC has expanded its expertise to quality systems, benchmarking, the transfer of best practices, KM, communities of practice (CoP), and education. Simply put: APQC works with organizations to find which practices work best and then shares this information across a broad spectrum.

APQC's focus in KM began in 1993 and has included eight consortia learning studies, with more than 220 firms involved and more than 60 best-practice organizations studied in detail. The center has collaborated with thousands of KM practitioners, helped firms implement KM using best practices, and disseminated key findings through publications and conferences; in-house assessments, certified KM practitioners; and its newly created *CoP Implementation Guide*. Some early KM adopters are Chevron, the World Bank, IBM, Best Buy and Shell.

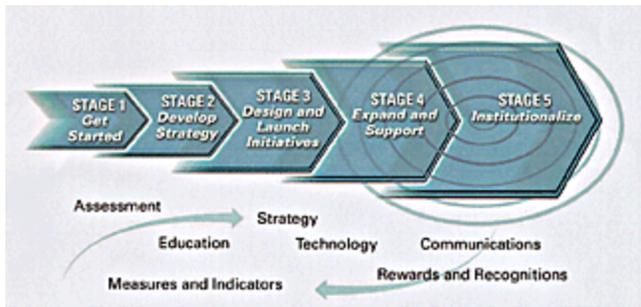
Information Technology versus Knowledge Management

There is a long-standing debate in e-business concerning what is more important, *KM or IT*. Many experts say KM is not about the technology, but the truth is: Every important business process is IT enabled. KM is not *only about* technology, but it is enabled by it. Many will also say that in order to implement KM in your organization, your culture needs to change first, but culture change is a *result* of knowledge sharing, not an antecedent. Design KM around your culture for success.

Progressing with IT and KM in a collaborative fashion results in process enablement. There are organizations like General Electric (GE), for example, that have been able to make a dramatic difference in the speed and quality of responsiveness by providing content, IT, and decision support for its call center staff. If you can handle problems on the telephone, you don't have to send a service technician to the customer's house. Yet, process enablement does not necessarily involve dismantling face-to-face interactions. For example, it is actually cheaper to handle a customer's problem over the phone than it is by e-mail. Telephone service is interactive; you immediately address issues--this is an illustration of the difference between a cure enabled by technology, and the opportunity for dialogue among people, which is closer to KM.

Roadmap

We have found one of the most valuable lessons learned is that there is a proven roadmap to results from KM. There is a way to think about KM and enabling business processes that works. You don't have to make it up as you go, because the early adopter organizations that started three or four years ago learned through their own trial and error. We have been working with and studying more than 200 firms for several years, and we find they move through predictable stages as shown below in Figure 1.



APQC's Road Map to Knowledge Management Results: Stages of Implementation™ occur in five stages:

1. Get started.
2. Develop a strategy.
3. Design and launch an initiative.
4. Expand and support.
5. Institutionalize knowledge management.

The first step in getting started is to find support in the organization. Successful KM organizations are able, at Stage 2 to develop a strategy aligned with its overall objectives. The number one lesson in Stage 2 is to pick pilots that are important to the organization's success. APQC suggests you focus on the important practices of the organization and find those processes that won't be as easy to enable--because their knowledge needs may not be simple, but the results will be powerful--and you'll be making a difference from the beginning. This is vital to garner support and maintain momentum. Everything takes marketing and nothing sells like success. An example of a well-developed, aligned strategy is Best Buy's Guiding Principles. They are: (1) KM equates to a learning organization, (2) KM must be ridiculously easy to use, (3) If it doesn't help people do their jobs--don't do it, (4) the KM goal is profitability and reducing time to market, (5) KM is not a Web site--technology is an enabler, (6) KM should result in a customer-centric organization. In Stage 3, designing and launching KM initiatives, a guiding principle is to carry out at least three pilots. We find that one pilot initiative will be fabulously successful, one will be at least pretty good, and one will be defeated by external events and never come to fruition.

Many organizations we have worked with are in Stage 4, expansion, which presents more difficult challenges. In 4, you want to: develop an expansion strategy, develop content management systems, create appropriate roles, and align rewards and performance evaluations. In Stage 5, you should integrate KM and e-initiatives into the business model and allow KM to blur into the fabric of how the organization works. Don't declare victory too soon--you must continuously monitor and measure results.

IT Enablement

For knowledge to be easily shared, it is very helpful to have a common IT platform across the entire organization, at least for e-mail. The fewer technologies and applications you have to manage, the less your problem is making the transition across them. You can spend more time connecting people and addressing their culture and process issues. IT enablement cannot have any dead ends. When somebody doesn't get the answer they need, there has to be a help desk and a human being to turn to. What we've learned is that you've got to connect people to experts, so that when someone has a problem, someone in the organization can answer the question out of the employees' wealth of knowledge.

Communities of Practice

Considered the engine of knowledge creation and use, CoPs are the new way of working. In a CoP, people who are in different functions in an organization can span organizational boundaries, and share information and knowledge because they have common needs and can help each other solve problems. They also provide a legitimate channel in the organization for that knowledge to flow. They provide a means to strengthen the social fabric of a knowledge centric organization (KCO). Through communities, an organization can manage information and content, by creating an environment where knowledge and experience can be easily shared. Consequently, the people with knowledge are linked to those who need it. CoPs are also the lever for KM expansion in the organization.

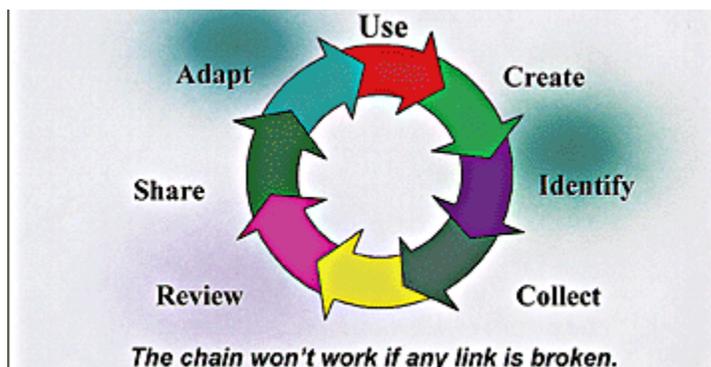
Content Management Systems

High-quality content is critical to success. Content is the raw material of knowledge, but more is not necessarily better. An organization must conduct a content audit, prune ruthlessly, and allow authors to own the content. People support what they help create--*everybody thinks their own baby is beautiful*. Yet, not all information is worth capturing, cataloging, and making available to people. In fact, probably 80 percent of the data that an organization maintains is not useful. APQC finds that the

organizations that have been successful in enabling knowledge sharing did so by getting knowledge content cleaned up. An important tip here is that people performing the work know what content is important, what's valid, what's useful, and what ought to be shared.

Dramatic Results

Focus on realistic ways to harness, access and transfer knowledge to others. Knowledge sharing, if done correctly, can dramatically increase your ability to respond. To illustrate this, I'll give you some examples of success stories we found at Schlumberger. Schlumberger improved its service delivery, deployment/support of new technology, and work force motivation by creating a centralized, knowledge-based community of experts and field engineers. It then gave the community access to information and to each other when a question or problem arose. As a result of their community, the company has savings of \$150 million in 2001. It has also reduced its cycle time to resolve technical queries by 95 percent, and reduced its time to update engineering modifications by 75 percent. This experience taught Schlumberger the importance to devote sufficient human resources to ensure knowledge initiatives ease an employees' daily workload and to motivate and recognize desired behavior. The synergy of KM in action is shown below in Figure 2.



KM Roles

There are three roles critical to a KM system. Knowledge stewards collect, analyze, and organize knowledge held by individuals within the organization. Knowledge facilitators establish connections between individuals in order to share knowledge. CoP leaders set the direction and climate for knowledge sharing in their communities and ensure that the organization and the members are all benefiting from the exchange. In addition to these primary roles, a good knowledge management strategy always has a steering committee. They're the senior executives that pull together the strategy and focus, fund the initiatives, and provide authorization for people to be assigned to support the effort. Furthermore, a KM central support group is critical, whether it consists of 500 people or five people. It is important for this group to articulate their role in facilitating the capability and results manifested in the business unit. The role of the central support group is to help make these business results possible.

You must devote sufficient human resources to ensure that sharing actually happens--this is where creating the KM facilitator roles comes into play. You cannot add these KM responsibilities to people's daily workloads--your employees are already in information overload. Managing knowledge is labor-intensive, especially in the early stages--you must create these KM roles in your organization--and then if you want people to use information, put it where they trip over it.

One big mistake an organization can make is to declare victory, by assuming that KM is institutionalized, and dismantle the central support group. Although some organizations might be prepared to do that in a couple of years, no one company is there yet. Of course, you're going to have to let these business units take ownership of their own KM efforts. And I think that's an exciting thing--just don't declare victory and disband your central group, or you'll lose the ability to leverage KM techniques and learning across the organization. There needs to be some common processes and principles and tools, and the central group can help make that happen.

Limitations to Sharing

There are some limitations to successful knowledge management. The primary limitation for the work force is time. In the past, most people believed that employees impeded the success of knowledge sharing because they were reluctant to share what they knew with others in the organizations. We found this is not true. People do not hoard knowledge, but they do hoard their time and energy for those high-payoff, high-value activities. If you don't make KM high value and high payoff, they are not going to spend time doing it. Behavior that is rewarded gets repeated--people want to be valued for what they know. Other limitations to success are access issues, social relationships, context (situation and consequences), inadequate IT solutions, and an employee's capacity to absorb new and overwhelming amounts of information. A key to facilitating an

employee's ability to assimilate information is *to provide knowledge at teachable moments*. Best Buy found that, "When the sales associate is standing in front of a customer with a question is when they are most curious and open to learning."

Emerging Issues

One trend we're seeing is the intersection of KM and e-learning. More organizations are beginning to see the need to connect people to best practices, knowledge, and expertise. Users don't care if you call it a course, a knowledge-sharing community, or a best practices database, but they do care about not having to go to too many places to get it. They want to learn from people and, sometimes, get information online. Regardless of the medium, the work force wants information in a just-in-time format, delivered in context so that they know how to use it. APQC has embraced this approach within its training offerings to its members. We have a connected learning approach. Whereas some information is online, other information can only be dispensed in an interactive simulation laboratory with other people. So we have created a process that merges all those different media and technology. E-learning and process enablement provide a viable cost justification for IT investments in KM as well.

Halliburton found an unexpected occurrence when they posted courses online. When employees were captive audiences in a classroom setting, courses had high completion rates, but online participants would drop out before course completion. Interviewers discovered that online participants weren't interested in taking the full course. Typically, they just wanted to find out what they needed to know to work that day. This is not a bad thing--employees empowered to manage their time, absorb enough information to complete the task at hand and prioritize their workload. I think the nature of the way teaching online is currently offered is going to change from traditional learning methods. People are finding ways to adapt learning to their needs and preferences.

A looming issue for many organizations is employee attrition, especially in the Department of Defense (DoD), where a large number of retirements are anticipated in the next five years. What does an organization do when knowledge walks out the door? But it's not just retirement or attrition; every time someone leaves a project and moves on to the next one, the really deep knowledge goes with them. This could result in decreased productivity, costly mistakes, and steep learning curves. How do we retain access to that knowledge over time? The approaches developed in KM, such as CoPs, best practices databases and lessons learned can help prevent *organizational amnesia*. Capture the intellectual capital of your employees--build a solid business case for KM.

Organizations are beginning to integrate KM and e-initiatives into the business model, and achieving dramatic results.

At Buckman Laboratories, the Chief Executive Officer (CEO) is also the Knowledge Sharing Champion. Company policy is clear: This is the way we will do business. The CEO frequently sends memoranda to employees reminding them of the need to share.

*Dear Associate,
You haven't been sharing knowledge. How can we help you?
All the best,
Bob*