Bridging the Barriers to Knowledge Management
by Paul M. Dooley

V2 - May 30, 2013

There seems to be increasing interest in Knowledge Management these days. In fact, reports are that Google no longer has an overriding emphasis on simply being the best "search engine" - instead, they have placed increasing emphasis on the importance of Knowledge Management by positioning their latest Enterprise Search product as a key device in tapping into an organization's collective knowledge.

The Costs of Poor Knowledge Management

IT Management is coming to the realization that departments are simply not sharing information as well as they could. There are too many "silos of information" associated with each department - resulting in a lack of shared knowledge, ideas and experience. The result?

- **Re-discovery of knowledge** - when a workaround or solution is not captured and shared effectively, someone else is likely going to have to "re-invent that wheel" to solve the same issue
- **Duplication** of effort - Not sharing a reusable solution means my colleague is going to have to expend the same or more effort to re-create their version of the solution
- **Longer resolution times** - having to reinvent solutions means incident/request average resolution time is higher than it otherwise would be
- **Without effective Knowledge Management,** a support center will experience **more frequent escalations** to higher level support teams (since back-line subject matter experts are not sharing information with the front-line service desk)
- **When solutions take longer to achieve,** and escalations are more frequent, **customer dissatisfaction** tends to be the result
- **All of this leads to higher costs** of IT support operations, which of course IT management is keenly interested in driving down these days

Knowledge Management (KM) to the rescue! A process driven, best-practice KM implementation can in fact address many of these challenges, resulting in huge benefits - to the IT support organization, as well as to customers and users.

The surprise to many is that the concept of effective KM is not new. The **Consortium for Service Innovation** ([www.serviceinnovation.org](http://www.serviceinnovation.org)) pioneered and has been promoting the value of effective Knowledge Management in a "support center" for over two decades. The Knowledge Centered Support
(KCS) model of how to effectively implement and practice Knowledge Management in a support center has been widely adopted by some of the world's leading companies and organizations. Only now, due to global competition, increased pressure on costs, and demand for greater quality of service, more and more organizations are finally realizing the business value of true Knowledge Management.

The latest version of the ITIL framework - ITIL 2011 - underscores this heightened level of importance. It has elevated Knowledge Management to the status of a full-fledged ITIL process. ITIL portrays KM as a process that should be actively shared in across an IT organization, with process owners, managers, and practitioners all contributing knowledge, and benefiting from shared ideas and experiences. A Knowledge Management System (called an "SKMS"), is the collection of integrated databases and repositories that holds this shared knowledge, enabling managers and practitioners across the organization to get the right information at the right time - thereby improving solution re-use and quality, the quality of decision-making, reducing escalations, speeding average resolution time, improving staff utilization, and lowering overall costs of operation.

**Barriers to Implementing Successful Knowledge Management**

So why on earth isn't everyone "doing" effective Knowledge Management? There are several common barriers to the successful adoption and practice of Knowledge Management in an IT support organization:

- **Taking a "tool centric" approach.** Management mistakes Knowledge Management for a tool or system, instead of an organization wide "process". This is all too common a phenomenon, since IT managers and practitioners typically have a implementation/support technology background. Compounding this, vendors want nothing more than to sell lots of knowledge management tools, systems and databases. The problem, as the saying goes, is that "a fool with a tool is still a fool". A Knowledge Management tool will not produce a KM process - that requires a "process approach": defining and documenting the process first, following by selecting appropriate tools and technology.

- **Focusing on a single individual, rather than a "team approach".** To realize effective Knowledge Management throughout an organization, everyone should feel they have a "piece of the action". All IT support managers and practitioners, from the front-line service desk, to executive management, should feel as though they are contributors to, and beneficiaries of, the KM process. When the focus is on only one individual to be the owner, manager and caretaker of all the knowledge, that is a sure-fire recipe for failure.
• **Make it difficult and time-consuming to participate.** When your implementation requires practitioners and managers to take several extra steps to submit an article or solution to the knowledge base, or to retrieve information from it, you are in fact creating "roadblocks" to adoption and usage. Instead, look to remove roadblocks, making the use of the KM system an integral part of the workflow. Rather than designing the user interface to be complicated, requiring the submission of just the right phrase in order to retrieve something useful, keep it simple, user-friendly, fast and effective.

• **Take a tactical and operational approach, ignoring behavioral change.** This concept stems from the well known concept that "if you build it, they will come". The notion being that if you build and deploy a KM system, people with contribute and use it naturally. There should be no need to bother with how you are going to motivate people to contribute to, and use the system. Won't they just change naturally? Fact is, they won't. Implementing Knowledge Management is one of those "big changes" requires a well thought out organizational change plan, to change "the organization" over time as you implement the process.

• **Don't bother with monitoring or measuring.** This barrier stems from the one above, namely that merely having a KM system drives adoption and increasing usage. So why should there be any need for monitoring and reporting the usage of the system, in order to determine who is contributing, who is using, and to what extent? The reality is that if you don't measure it, you can't manage it. And you can't improve it over time. Knowledge Management, like any other process, deserves a set of metrics and KPIs, along with regular reporting to stakeholders on its performance and value delivery.

**The Solution: Employ a "Service-Lifecycle" Approach**

*First, view Knowledge Management it as an organization wide process, requiring a "service lifecycle" approach to implementation.* Implementing Knowledge Management is best accomplished by viewing it as a **process**, not a "tool or system". It uses a tool and/or systems to capture, store, and effectively share knowledge. Use the guidelines documented in ITIL 2011, facilitated by the KCS model, to guide the design, development, deployment, and operation of a KM process - along with supporting systems and tools (a "Service Knowledge Management System" or SKMS).

• **Start with a Service Strategy:** establish your compelling vision for transforming your organization to a "knowledge centered" service
provider, along with a supporting mission, goals and objectives.

- Develop a total approach with **Service Design**: design your Knowledge Management process, along with supporting systems, tools, metrics and other elements, and produce a "master plan' for Knowledge Management

- Implement KM using a **Service Transition** approach: using your "master plan" as input, begin work at implementing the various components over time - people, process and supporting technology (it will take all three, plus organizational change)

- Embed it within your **Service Operation** processes. Make knowledge capture and re-use an integral part of every process - for example, during the monitoring of events; while resolving an incident; and when trouble-shooting a problem. The idea is to either access and put captured knowledge to work, or capture knowledge while "in the workflow".

- Keep it going with **Continual Improvement**. Having designed metrics and reporting for your KM process, make the monitoring and reporting on KM performance part of your monthly IT management meetings. Assess performance to goal, and look for ways to improve the KM process, people aspects, and supporting tools and systems.

**Your Plan: to "Build it In" to the DNA of Your Organization**

**Start with a Service Strategy**

- **Establish a compelling vision that all embrace, and that this is going to require organizational change.** Realize that the implementation of successful Knowledge Management is going to impact the way people work - and that means "organizational change". People are going to have to change the way they work in order to capture knowledge at its source, as a "by-product" of their work effort. Yes, the implementation of KM will streamline processes, provide tools, and remove "roadblocks" to capturing and submitting a knowledge article - but driving and coordinating all of these tactical and operation changes should be a **strategic initiative** to institute an organizational change to adopt knowledge management. This means ...

  - Engaging high level executive management to **visibly support** the launch of your KM initiative initially, and periodically to report on its progress.

  - A **compelling vision**, communicated initially and on an on-going basis, for how Knowledge Management can benefit everyone. The vision must speak to, and resonate with all audiences - support staff, management, users and customers.

What steps can you take? Consider incorporating the words "knowledge centered" into your vision/mission statement. If you have a set of core principles, consider adding "sharing knowledge" as one of your core values. Communicate the vision initially and on an on-going basis during implementation.
Establishing the "right people" on a cross-functional implementation team, to direct and guide the implementation of Knowledge Management, and ensure organization-wide "buy-in" and participation in the roll-out and adoption.

The utilization of an organizational change model to guide and facilitate the change over time, such as "Kotter’s Eight Principles" of organizational change.

- Realize Knowledge Management is a process, not a system - it "uses a system". The second step to success is to realize that implementing Knowledge Management is to treat it not as a tool or system, but as a process. You might choose to use a "Wiki" to stored shared information, or a database, or a collection of repositories - but without a well designed "process" that is embedded in the way people do their work, your tools and databases will soon go unused, and rapidly fall out of date. Like any process, a KM process needs an owner, and manager - someone to be accountable for the quality of the process, and someone to oversee and manage daily activities. It needs to be measured and assessed for performance. It must be documented, including how activities are an integral part of daily operating procedures. The enabling resources and capabilities - the people, with KM systems and tools, must be well defined. It must also have clear inputs and outputs, and deliver value to all stakeholders - customers, users, management and support staff.

Tactical Steps to Designing and Implementing Knowledge Management

- Establish a guiding KM team, but give everyone a "piece of the action". Set-up a cross-functional team to lead and guide your implementation through design, development, deployment and on-going support, but pay particular attention to how you can make "knowledge management" a part of everyone’s job. When support staff, team leads, manager and executives all find it necessary to extract from, and contribute to, the Knowledge Management system, the process - and the system - becomes embedded in the life of the organization. That is the end-goal.

- Revise your service operations Standard Operating Procedures (SOPs), such as Incident Management, Request Fulfillment, and Problem Management, to embed searching and contributing to the KM system. In this way, searching and contributing to your KM system does not become added steps, but is an integral part of the in-line mainstream workflow process. No extra steps required. Roadblocks removed.

- Revise your job descriptions and appraisal process so that contributing to the KM system is required by operations personnel, such as service desk staff, and other IT support groups. For example, support staff might be required to "Contribute three KM articles/solutions per quarter". Periodic appraisals would reinforce the importance of participation.

- Build it into your reward and recognition program. Make the contribution to KM, and its use, an integral part of reward and recognition. For example, no awards for outstanding performance should
be given where the team member failed to meet their contribution requirement for the quarter.

- **Integrate your KM systems and tools so they are simple, fast and effective.** Google sets the bar when it comes to search, and your KM process should follow industry-leading examples. The search engine should allow for "natural language" search, as well as search by phrase/keywords. The search engine - along with support databases - should be fully indexed to enable quick results sorted in relevance order. Attention should be paid to supporting structured as well as unstructured data in databases and linked repositories.

Supporting systems and tools should support **KM embedded in the workflow**, so that a submission is a "by-product" of the work effort. For example, during Incident Management a search should be automatically invoked after classifying the incident. Extra steps or navigation should not be required. A match report should return the most likely solutions/workarounds at the top of the list. If no solution is applicable, and the analyst ends up devising and documenting a new solution, submitting to the KM process should be just a few keystrokes.

- **Include an embedded QA sub-process to expedite solution review and processing.** Once the submission has been made, direct these electronic records to an appropriate Subject Matter Expert (SME) for that area of knowledge. These might be technical or application management specialists in back-line support groups. SME's should have as a daily responsibility the review, editing and approval of submitted KM articles, so these can be incorporated into the SKMS in a timely fashion. This also ensures that knowledge added is accurate, complete, and published only to the proper audiences (for example, "internal use only", or "user-ready").

**Keep it Growing and Maturing with Continual Improvement**

- **Establish a set of metrics and KPIs to measure, monitor and report on the adoption and success of your KM process.** People pay attention to things that are measured and reported, and as we have said, "you can't manage it if you can't measure it". Establish a core set of metrics on KM, each with a realistic target, and make the reporting on KM part of your monthly management IT "scorecard". This will raise the visibility of KM in everyone's eyes, and also enable you to assess the growth, impact and value of KM. Sample metrics might include:

  - Number of articles added - per day, week, month - evidence of the overall growth of the knowledge base (increasing)
  - KB contributions and solution re-use by support team member - showing who is contributing, how much (increasing)
- Number and percentage of solutions re-used, indicating which solutions/articles are popular, vs. those that are not (increasing)
- Solution re-use by team member (minimal percentage of contributions should be reused on a regular basis).
- Number and percentage of incidents resolved where a knowledge article was instrumental in resolution/fulfillment - evidence that the KB is providing solutions (increasing)
- User satisfaction level, as measured through an on-going pop-up survey during the close of the KB search - should show a high level of user satisfaction (target 4 out of 5 or 80%)

- Seek feedback via periodic surveys. Ask support staff as a part of periodic employee satisfaction surveys how your KM process and systems can be improved. Do the same with your customers during periodic customer surveys. Analyze the feedback, and incorporate improvements.

How Do You Know You've Arrived?

Implementing an effective KM process will take leadership, time, and a lot of effort. Procedures and systems will be updated, skills sharpened, and organization change will be accomplished. Your culture will be transformed over time. In the end, the pay-off will be substantial. Average resolution time will be reduced. Employee productivity will increase, along with support staff satisfaction. Customer and user satisfaction will increase due to accurate and reliable solutions being more readily available, either directly from the serviced desk, or a SKMS equipped self-service system. Management will be able to make higher quality decisions due to the right information being available when they need it.

How do you know you've arrived? When someone asks your IT support staff, and they simply say "Oh yes - we have Knowledge Management. It's just the way we work".

Paul M. Dooley
ITIL Service Manager, ITIL Expert
Certified HDI, Global Knowledge Instructor
Optimal Connections, LLC
P: +1 (949) 305-3544 E: pmdooley@optimalconnections.com W: www.optimalconnections.com