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The KM/Knowledge Services Continuum:
From the Theoretical to the Practical

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Introduction. For nearly fifty years, organizations and institutions have been aware of the work performed by those "knowledge workers" identified by Peter F. Drucker in 1959.[1] For many years, though, while the connection between organizational success and the role of those knowledge workers was more or less recognized, little particular attention was focused on the work of these employees. That state of affairs began to change in the early 1990s and since then, organizational management and information professionals have made specific efforts to incorporate the concept of knowledge management (KM) into the workplace. Indeed, as early 1991 Thomas A. Stewart seemed to pull it all together by calling attention to the organization's intellectual capital, "the sum of everything everybody in your company knows that gives you a competitive edge in the marketplace."[2]

Was that the beginning of KM? Probably not, for the need had been apparent for some time. After the information "glut" of the 1950s, following the enormous growth of scientific and technical information that began during World War II (and which moved quickly into the further focus on scientific and technical information during the Cold War), and following the "information wars" of the 1960s and 1970s, it was a natural next step to attempt to come to some understanding of the role of knowledge in organizational management and mission-specific success.[3] As it turned out, a great many specialists and scholars in different parts of the world were working on the problem of how to manage these enormous amounts of information, so it was not too much of a stretch to try to apply some of these same techniques and solutions to dealing with the knowledge generated as that information was utilized, or to seek new techniques and solutions for applying to the knowledge development and knowledge transfer process. So for some KM historians, the interest in KM as a subject and as a discipline dates to the 1950s.[4]

Whatever the reasons for the growth of KM, people like Drucker and Stewart certainly pointed organizational leaders in the right direction, and the growth of interest in dealing with knowledge—with "managing" knowledge—made a great deal of sense. Indeed, aside from the value to the organization in the accomplishment of the organizational mission, it seemed to be generally assumed that achieving an understanding of the role of knowledge in the workplace would enable better performance. And why not? One does not attempt to organize and manage knowledge simply because knowledge is inherently good, or because acquiring knowledge makes one a better person. Achieving an understanding of knowledge in one's life and being able to deal with knowledge come together to foster an independence of thought, for most people a state to be desired, and unquestionably a state to be desired in the workplace. So it would seem to follow that understanding the role of knowledge in the workplace would permit one to give the subject at hand a level of attention that would produce higher-level results, including better research, better contextual decision-making, and a high level of innovation both in the activities the worker is called upon to perform and in one's performance as an employee.

KM in the workplace. Thus we recognize a connection between knowledge and the workplace. As managers and organizational leaders began to place value on knowledge and the role of knowledge developed within the organization (and of encouraging an organizational culture in which knowledge is shared by all employees at all

levels), it made sense to think about how the organization at large might deal with knowledge. Not surprisingly, by the end of the last decade of the last century KM had become a function for considerable attention in the management of the well-run enterprise, as pointed out by Michael Dempsey. Writing two years ago in *The Financial Times*, Dempsey noted that "the first iteration of knowledge management featured a predictable helping of hype and was embraced by large organizations eager to underline their credentials by appointing a chief knowledge officer to spread the KM gospel. That approach belonged to the late 1990s and today businesses are less voluble about the term KM while more of them practice the ideas that gave rise to it."[5]

Perhaps one of the reasons for that "predictable helping of hype" and our enthusiasm for the ideas that led to the rise of KM was simply that the whole idea of dealing with knowledge and attempting to manage knowledge seemed to be something of a contradiction. Could knowledge even be managed? The question has been asked often, and it is answered most often in the negative. Yet there was something very positive about the idea, and despite the difficulties (intellectually speaking) of defining what we were playing with, it somehow felt "right," like something we should be doing in the workplace. For many SLA members, that struggle with "managing" knowledge was put into focus when one of SLA's members—and one of the acknowledged leaders in knowledge management—was interviewed about the subject in this magazine. Larry Prusak had early on recognized the importance of KM for the management community, and interviewer Jeff De Cagna commented that he had heard that Prusak and Tom Davenport—with whom Prusak had done much of his work—had expressed a wish to "take back" the term "knowledge management."

Prusak's response was direct and to the point. Knowledge management, he said, "is really working with knowledge. You can't manage knowledge, *per se*. It is not a thing that is manageable. You can't manage love or honor or patriotism or piety. It is clearly working with knowledge, but the words got out there and there it is."[6]

Defining KM. So "knowledge management" it is, and at this point in time, many of the concepts associated with KM have become almost commonplace in the management lexicon. How they are put together, though, seems to be very different in different organizations and environments. So much so that attempting to define KM becomes almost fun, and a big part of the fun is the fact that there are so many definitions and approaches to KM. Indeed, it might even be suggested that there are as many definitions of KM as there are people seeking to define KM. It is a situation that leads to a considerable amount of confusion in some circles but, in most cases, confusion often made more palatable (and interesting) as the participants in the discussion realize that *what* they are trying to do makes a great deal of sense. They learn very early on—as they have their discussions—that KM is context specific, and just as no special library is like any other special library, so no organization and its knowledge development and knowledge sharing (KD/KS) framework is going to be like that of any other organization. KM in any organization is going to relate to and seek to address the organization's specific needs. In attempting to define KM in that context-specific formulation, information professionals, knowledge leaders, and others discussing the subject are able to open themselves to a rewarding and often very useful intellectual endeavor.

Approaching a definition for KM begins with the recognition that many words and phrases come up with some frequency: "creating business value," "competitive advantage," "a systematic process," "leveraged decision-making," "collaborative," "integrated," and so forth. Some definitions acknowledge the role of technology, as with "…an effective knowledge management strategy is … a well-balanced mix of technology, cultural change, new systems, and business focus that is perfectly in step with the company's business strategy,"[7] Some definitions identify KM as a process, and others describe the discipline as a methodology for managing intellectual assets (especially unstructured assets) to ensure the creation, capture, organization, access, and use of those assets.

For some knowledge workers (and/or their managers), the goal is to take those unstructured assets and identify how that information can be transitioned from "information" to "knowledge," as Bruce Dearstyne has suggested. Dearstyne, a leader in the records and information management field, defines knowledge management as "cultivating and drawing on tacit knowledge; fostering information sharing; finding new and better ways to make information available; applying knowledge for the strategic advantage of the organization."[8] Other definitions are directly practical. Nigel Oxbrow and Angela Abell, for example, in their presentation for one of SLA's State-of-the-Art Institutes, took such an approach when they put forward their definition of KM: "The ultimate corporate resource has become information—the ultimate competitive advantage is the ability to use it—the sum of the two is knowledge management."[9]

In attempting to define KM, it soon becomes clear that the function of managing knowledge is to ensure that "working knowledge" (as Prusak and Davenport describe it[10]) becomes part of the workplace experience for all workers. Thus the function of working with knowledge is basically what organizations and institutions are attempting to do when KM is talked about, as we seek to put in place a framework for supporting that function. If the organization is to succeed in achieving its organizational mission, using knowledge developed within the organization and shared among organizational stakeholders becomes a critical purpose.

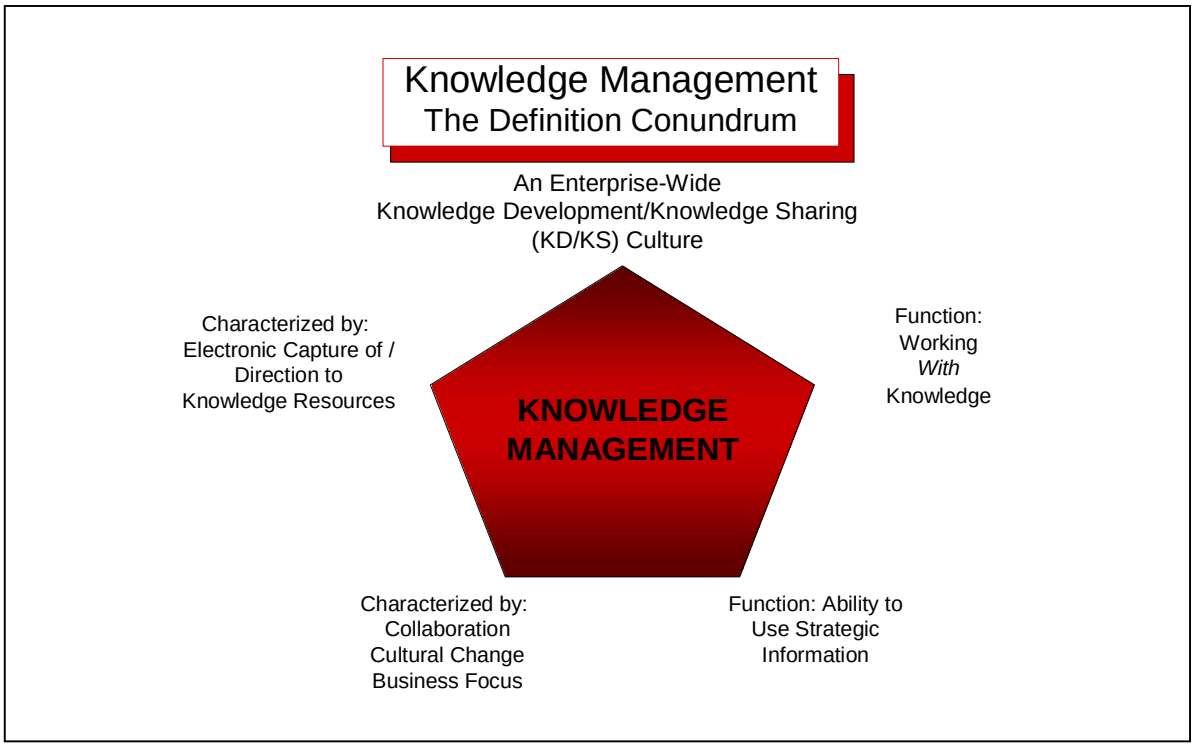

Fig. 1

Problems with definitions. Still, there are problems with the many and various definitions applied to KM (no matter how much fun it is intellectually to pursue the discussion—the fun cannot alter the fact that in the workplace the discussion *must* focus on the anticipated KM role in on the successful achievement of the organizational mission). For one thing, many of the definitions are not, by and large, particularly practical (despite Oxbrow and Abell's early thrust in this direction). It is not unusual for knowledge workers and their managers to experience some difficulty moving from their pleasant intellectual discussions about KM to identifying exactly how the discipline can be used in their particular workplace. They want to move to KM, and they know it is the *right* thing to do, to get their arms around the great wealth of knowledge that is captured within the organization, but making the move does not happen easily.

There are several reasons why this is the case. One constraint comes into play when the discussion turns to the ambiguities built into the definitions. People begin to ask questions like, "Is KM ready for our organization and culture?" or, put another way, "Are we ready for KM?" In many environments, the very term "knowledge" is a little off-putting, leading some workers (and, indeed, some in supervisory or management positions) to wonder if moving into KM is appropriate, since they seem to have the idea that attention to and discussions about "knowledge" are too "academic," or too "intellectual," and not "down-to-earth" enough with respect to the work of the organization. These arguments are quickly refuted when the discussion moves on to include examples about the costs of wrong information, or of knowledge *not* shared, or of failing to meet a compliance regulation because a particular knowledge-transfer procedure had not been developed.

Discussions about defining KM also get a little sticky when bad examples are put forward (usually, sadly, by workers with limited or pre-conceived ideas about knowledge or the advantages of knowledge development

and knowledge sharing in the workplace). Typically based on poorly defined or ill-conceived KM experiences that have not been successful and often the result of a misplaced or misapplied technology focus to the subject at hand, these kinds of failures can sour executives and organizational sponsors, resulting in a larger reticence about KM that prevents innovation and intellectual stretching the next time a KM opportunity comes along. And when there is interest in moving to a KM solution, many knowledge workers and information professionals soon find themselves bogged down in discussions about databases, new tools, technological barriers (or gateways) and the like. By the time they get back to thinking about their users' perspectives and the "bigger-picture" organizational needs that got them to thinking about KM in the first place, the idea of putting KM to work for their organization has become a monumental task.

Perhaps, as KM definitions seem elusive and/or problematic, there is another way of thinking about KM and resolving the conundrum (fig. 1). Perhaps KM is not, in and of itself, a *product* or *thing*. Perhaps KM is, as one of the present authors has suggested, more of a management *practice*:

> KM is used to help a company manage explicit, tacit, and cultural information in ways that enable the company to reuse the information and for creating new knowledge. More than anything else, knowledge management is an established atmosphere or environment, a *culture* if you will, in which *the development and sharing of knowledge*—at all levels within the company and including all levels of knowledge—is accepted as the essential element for the achievement of the corporate mission.[11]

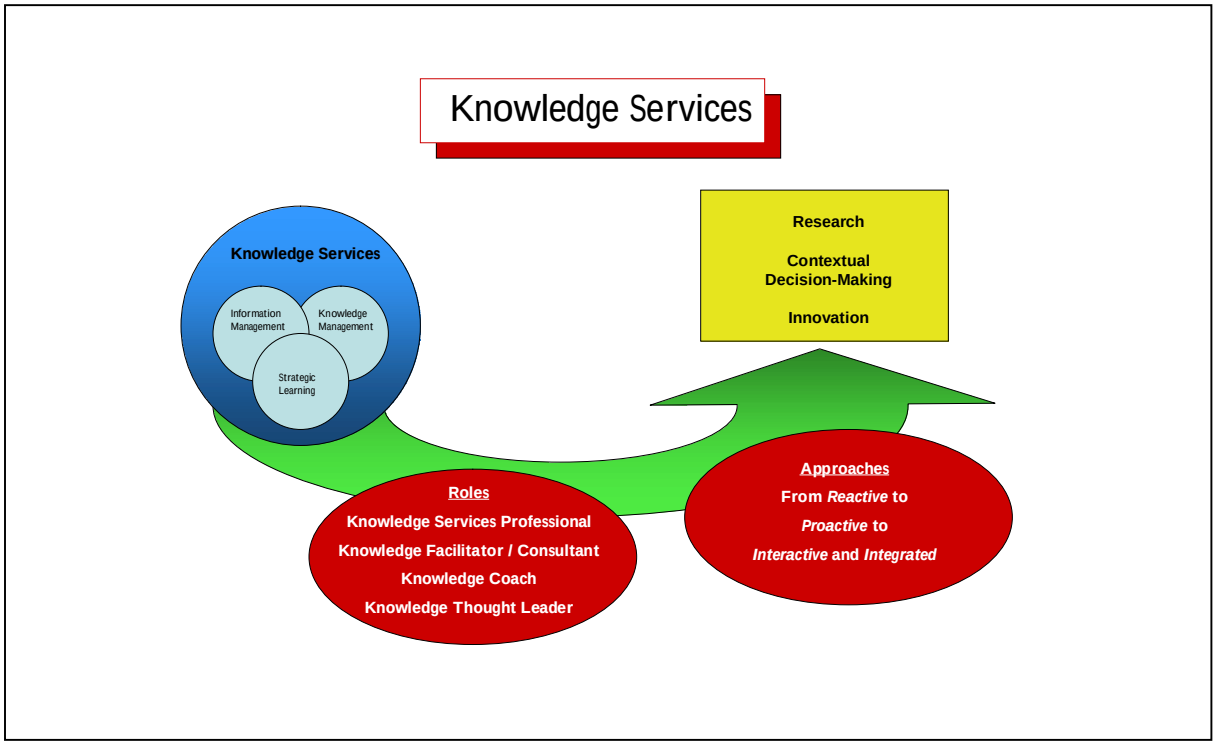

Fig. 2

Knowledge Services. The solution, for many information professionals, is to combine KM with what is already being utilized and identified as productive, using a framework that has been refined during the last decade or so. On a daily basis, most knowledge workers deal with information management and strategic learning, both important disciplines and management tools in every well-run organization. When organizational management and information professionals put them together with KM and devise methodologies for converging information management, KM, and strategic learning, the organization moves into the realm of knowledge services, the management and service delivery framework that seems to be the very solution these knowledge workers (and their employing organizations) require. As a management and service delivery framework, knowledge services

enables organizations to put the theoretical and not always clearly defined KM to work, moving to the practical side of KM and in doing so, enabling research, contextual decision-making, and innovation and leading to a knowledge culture for the larger enterprise (fig. 2).

It is a natural connection, this linking of information management, KM, and strategic learning. Indeed, they are, in effect, already connected in the minds of most information professionals and knowledge workers. It is they who understand information management because they deal with it all the time. In doing so, they become established (or *should* be established) as the organization's greatest asset when it comes to organizing and managing information. These employees are strategic learning specialists, too, for information professionals and knowledge workers long ago learned that strategic learning is something else they do all they time. They understand that "strategic learning" is really nothing more than a fancy designation for any learning activity through which any employee becomes better qualified to do his or her job. It can be as sophisticated as leave time for pursuing an advanced degree in a subject that will strengthen workplace performance, or as uncomplicated as working with the colleague in the next cubicle to learn how to tweak an application to make it more relevant to one's work. Just as they understand information management, knowledge workers understand strategic learning because it has always been part of their work. In embracing knowledge services, in converging information management and strategic learning with KM (however defined), information professionals and other knowledge workers become empowered to perform at a higher level. Bringing that enhanced performance into a workplace ambiance that acknowledges and supports knowledge development and knowledge sharing (KD/KS), we have the beginnings of a knowledge culture for the larger organization.

How does this happen? What role does the information professional/knowledge worker play in establishing this knowledge culture, and what are the specifics of using knowledge services as the methodology? As we move from the theoretical of KM to the practical of knowledge services, a first example might look at the much-described embedded information specialist approach, a KD/KS technique which in the early days of knowledge services was called "insourcing." First identified as a specific technique in the pharmaceutical and mass entertainment (read "theme parks") industries, insourcing happens when a specific product development team or other working group brings a member of the information staff on the team. The embedded information professional is identified as and performs as a regular member of the team, working as the team's information/knowledge/strategic learning specialist. He or she works with all team members and at all levels to ensure that they are using the best applications for managing the information they need to use, that they understand how to share that information, and—as strategic learning comes into the picture—not only sharing the information but working with fellow team members as the information transitions into practical, useful, and tangible knowledge for the success of the team in completing its work.

Another example takes us to the other end of the knowledge services spectrum, to a large multi-national organization that has, through a variety of iterations, evolved from the rather unsophisticated but well-meaning (and well-funded) organization it was sixty years ago, when it was created to support development programs wherever they were needed. As it happens, much of the organization's present work continues to require many of the same approaches that were required throughout the organization's history. For this organization, it has been clearly established that without a combined framework for managing information and knowledge related to prior projects (without, for example, a single entry point for similar projects completed over the years), and without a commitment to strategic learning to ensure that prior knowledge is available, the organization is facing an unwieldy and awkward future. Whether that prior knowledge is structured knowledge (*i.e.*, captured in published documents, project reports, organizational archives, and the like) or unstructured knowledge (*i.e.*, informal documents, digitized files, correspondence, the memories of people who worked on the projects, and the like), it is an important organizational asset and it needs to be available for the future. In this situation, the convergence of the three elements of knowledge services—working together as an over-arching management methodology and service delivery framework—enables the organization to provide a single methodology that will, in fact, enable the company to avoid that difficult future and continue its good work with developing societies.

In a third example, we have a very different organization, a medium-sized biotech firm that has taken advantage of a structural re-organization to create an operational function that combines the corporate library, a knowledge sharing applications group, a strategic learning group, and a function devoted to the creation of custom graphics and video production. While still new, this combined function is finding opportunities for integrated approaches, with "integrated" in this case having two distinct aspects. First, the combined efforts of

the library's expertise with external information and its very good customer approach were put together with the organization's knowledge-sharing technology expertise. Then, in a second integration, that combined activity was further matched up with knowledge delivery expertise in the learning and graphics production groups. Together, this integration activity results in a comprehensive and high quality application for the customer. Additionally, there are even more benefits, for in this case the integration approach has been structured to connect this knowledge-sharing expertise with the business processes of the client group, resulting in the design of a knowledge-sharing system for process development that involves recommendations for changes in the actual workflow of individuals. Thanks to sponsorship from management, to ensure that the changes were actually undertaken and not simply talked about, the inherent synergies of the combination of functions—integrated together in a package that provides high-value realization and quality—ensures adoption with the customer.

Obviously these examples have a theme: in the larger scheme of things in each parent organization, there was a sense that there was a need to "do something" about knowledge transfer, that knowledge development and knowledge sharing—that KD/KS acronym we use so often—as an operational function was not performing at its best. Looking at the larger KM framework and bringing in the various definitions and points of view that have come to be associated with KM offered concerned stakeholders a "big-ideas" framework, a way of thinking about and discussing the larger issues in which the problem might reside and selecting those that seemed to have strongest potential for each organization's situation. If nothing else, it offered a way to begin thinking about the issue: there is a KD/KS problem and we need to fix it.

As various discussions among the several stakeholders were initiated, and with everyone understanding that the solution would of necessity be context-specific, the intellectual explorations began to unfold. In most cases, the discussions would have suggested a number of practical, "real-world" ideas, goals, objectives, solutions (even, perhaps, a few desiderata—"wouldn't it be nice if we could…?"). As these were winnowed down, and as resource allocation, staff time, and other enablers and/or barriers were identified, it would have become clear that there were solutions that could be pursued, solutions which would involve attention to how information, knowledge, and strategic learning are converged and how, in that convergence, practical and workable solutions could be sought.

Making the Change. On the printed page or computer screen, these situations look nice, and the apparent ease of transition from idealized and theoretical KM to the practical, day-to-day workings in each situation appeal to the tidy and methodical perspective that many of us bring to our work. But there is a different side to the story, and it must be given attention.

Organizational change is hard. While it is often not too difficult to articulate a new strategy or a re-structuring, or to demonstrate the potential value of a desired result (as described earlier in those references to the pleasant intellectual discussions that take place), bringing any change into an organization is going to be difficult. Hopefully concepts and ideas like those described in articles like this are helpful, but even when they are, we are forced to wrestle with dealing with change management and change implementation in our specific organizational environments. What is hard—indeed, the hardest part—is getting the larger organization to understand the value of the change and to then accept the change as it becomes part of the organizational effort. As we speak about so often—almost unendingly—people and organizations just naturally seem to resist change. Nevertheless, if information professionals and knowledge workers truly desire to participate in the process of moving the organization to a knowledge culture, and indeed, to lead the process (which they should do), there are some steps we can take:[12]

1. Define the change. If we are not sufficiently clear and precise about what will be required (not just the desired end result but the activities that will be needed to achieve that result), it will be far too easy to resist or passively avoid any desired change. In terms of moving to the beginnings of a knowledge culture, to establishing a KD/KS framework for the knowledge transfer process in your organization, let the concepts and specific roles described here provide you with talking points, a basis for articulating the specific changes you desire to the people who can help you initiate change. This leads to….
2. Find your sponsor. Before you begin, ensure that you can establish strong sponsorship for whatever change will be required. Despite the verbiage that supports "grass roots" ideas and discussions about "demonstrating feasibility," there is a strong need for an advocate or champion (or several) to take a

stand. Additionally, that person or group of people is going to be required to move from simply championing the change ("that's a good idea") to actual participation ("what you're proposing will impact my work—I'll support it, I'll tell people how this helps me and the company, and I'll reinforce the change"). Usually there is a point in the change process where people's behaviors and decisions need to be influenced on a substantial scale. That can't happen unless there is leadership buy-in and a commitment to buy-in that is expressed in the words and actions of enterprise leaders.

3. Create alliances and change agents. The organizational shift to a knowledge culture is initially the result of an alliance (or in many cases a group of alliances). Utilize the various elements of the many definitions of KM that fit your situation and work to establish a KD/KS environment with knowledge services as your management methodology and service delivery focus tool. Then integrate those alliances. Start with like-minded functional leaders and thought leaders in your organization and join with them, with all of you working as change agents and identifying areas where you and they share concerns related to the full range of information/ knowledge/strategic learning interests. Look for areas where knowledge sharing is needed but is not taking place or not working well, and engage with these colleagues to come up with integrated solutions. The end result will benefit all units, thus realizing an enterprise-wide holistic solution.

4. Finally, be wary of quick fixes and reactive responses. When there is an established desire for improvements in the knowledge transfer process within the organization, leading, perhaps, to the beginnings of a knowledge culture, many of the players (including sponsors) naturally start to look for mere tools or techniques. What you will hear is "Ah, hah! Now we are ready for KM/knowledge services. Find me the best software application and let's make this happen!" Be careful. It's not just about software.

Keep in mind that at this juncture in the KM/knowledge services process you will be required to reiterate that culture shifts require new ways of doing work and new ways of relating to colleagues, and in addition to strong reinforcement from sponsors, you will require a variety of approaches and tools. Understand clearly that you will need a comprehensive approach that involves the spectrum of KD/KS solutions and the integration of appropriate functions and approaches. With such an approach, you can position yourself to ensure higher value realization and smoother change management, resulting in real, sustainable change for the larger organization. This is the hard work of KM and knowledge services. Putting knowledge management to work and using knowledge services to enable your practical solution is hard. But it can also be said that putting KM and knowledge services in action is the most rewarding part of the entire effort.

The Knowledge Nexus. We conclude with a cautious prediction about knowledge transfer in the future, envisaging an organizational structure for knowledge transfer that is successful in aiding the organization in achieving its organizational mission. This knowledge transfer process will occur in an organizational environment that of necessity will be established as a knowledge culture.

We also predict that in this environment the role of special librarians, information professionals, and other knowledge workers and their services to the organization will be one of knowledge leadership, based on their knowledge expertise and their willingness to assume a knowledge leadership role for the larger organization, that of managing the organization's KM/knowledge services function. However that function is currently structured or otherwise implemented in the organization, it will be strengthened if it is shaped to serve as a centralized function, a knowledge "nexus" or a knowledge "hub" for the larger enterprise.

Today's knowledge workers are the professionals who are best qualified to manage this function. Ideally, this operational function will assume formal responsibility for all information, knowledge, and strategic learning development, management and delivery for the larger enterprise. This centralized "nexus" function will be, indeed, a function. It will probably not be a space or a "place" (unless as an operational function it has responsibility for maintaining a collection of artifacts such as books, bound journals, and the like, but that is another story). In our ideal scenario, the knowledge nexus—the KM/knowledge services delivery function—plays a comprehensive and holistic role for the entire organization and makes a tangible and measurable contribution to mission-critical success. Even in complex organizations, or in organizations that cannot support such a commanding role for a knowledge-focused operational function, the power of such an integrating and visionary philosophy can effectively move traditional "reactive" service delivery (and even "proactive" service) to higher levels of organizational impact. It is a strategic approach that not only allows the natural synergies

among the service functions that are the elements of knowledge services (information management, knowledge management, and strategic learning) to succeed. Indeed, with this approach there is the added opportunity of taking on a more interactive and integrated function within the larger enterprise and (perhaps more important) an integration opportunity with the business processes of the larger enterprise. In fact, the more of this latter integration there is, the more progress the enterprise can make towards building that knowledge culture to which so many organizations aspire. It is a scenario that today's information professionals and knowledge workers can envision for themselves and, with considerable enthusiasm, work toward achieving.

For knowledge workers, the future looks bright. As organizational leadership and management come to understand the relationship between quality in knowledge transfer and organizational success, the combination of KM and knowledge services—as an operational function—becomes of value. Those who are best prepared to take on the role of knowledge thought leader, knowledge consultant, knowledge coach, and similarly designated jobs are out there working in the field today. These knowledge managers, knowledge services professionals, information professionals, records and information management professionals, archivists, and the many other knowledge workers in this profession are positioned to play a critical role as their organizations move forward toward success. By embracing the practical side of knowledge management, putting knowledge management to work through the effective and profitable convergence of information management, knowledge management, and strategic learning for their parent organizations, they ensure that their organizations succeed and in the process, they succeed as well.

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[12] The techniques offered here are standard human change management principles. Interested readers are referred to Conley, Chip. *How great companies get their mojo from Maslow.* Wiley, 2007, which relates Maslow's hierarchy of need to change management, a connection with particular resonance as information professionals and other knowledge workers seek to prepare themselves for their profession's future role in society.