What is Knowledge Management?

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Welcome to the fourth issue of the *International Journal of Knowledge Management*. In this issue we present an invited paper from Clyde Holsapple and Meenu Singh that begins a discussion on the value of KM to an organization. Three research articles are also presented which explore frameworks for KM to improve productivity, knowledge acquisition and transfer in Egypt, and using KM to foster innovation.

In this issue, I want to tackle an important question: What is Knowledge Management (KM)? I did not address this sooner as I naively thought we knew what KM was. After all, we have a community of researchers and conferences where we meet and it seemed to me that we all knew what we were talking about. However, the last few weeks have made me doubt this assumption.

Recently, I was asked several times to define KM. This would not surprise me except that I expected most of those asking to know what KM was as they were academics and professionals who were at least mildly familiar with our literature. This was followed by the publication of an expert opinion in the *Business Intelligence Journal* that convinced me of the need to discuss this question.

The editors asked three experts (myself included) about integrating KM and data warehouses. I didn’t see the other responses until the issue was released and when I read them I was struck that the three of us had different opinions on what KM was (Corral, Griffin, & Jennex, 2005). One expert described the purpose of KM as disseminating knowledge quickly and KM systems as essentially document management systems. The other expert considered KM as the process of handling unstructured knowledge. My view of KM was one combining technical and organizational initiatives to manage structured and unstructured knowledge to help the organization improve its effectiveness through improved retention and reuse of knowledge. Organizational effectiveness is improved by reusing knowledge to improve decision making. Three experts, three definitions, and I can’t say any of them are wrong.

My personal definition is that KM is the practice of selectively applying knowledge from previous experiences of decision making to current and future decision making activities with the express purpose of improving the organization’s effectiveness. I view a KM system as that system created to facilitate the capture, storage, retrieval, and reuse
of knowledge. My perception of KM and KM systems is that they holistically combine organizational and technical solutions to achieve the goals of knowledge retention and reuse to ultimately improve organizational and individual decision making. This is a Churchman (1979) holistic view of KM that allows KM systems to take whatever form necessary to accomplish these goals. For some organizations this may mean that the KM system is essentially a document management system. However, as a community we don’t want KM perceived as essentially a document management technology. Also, in some organizations, KM may be used to only manage unstructured knowledge. This may meet those organizations’ needs but again I don’t believe the KM community is comfortable accepting that KM only handles unstructured knowledge.

Is the KM community comfortable with my definition of KM? I haven’t asked everyone, but I did ask my editorial review board and this issue’s contributing authors to let me know what they used as personal definitions of KM. Here are the responses I received:

Frada Burstein: Knowledge management is a broad concept that addresses the full range of processes by which an organization deploys knowledge. These involve the acquisition, retention, storage, distribution and use of knowledge in an organization. (Burstein & Linger, 2003)

Elayne Coakes: Knowledge management refers to the systematic organization, planning, scheduling, monitoring, and deployment of people, processes, technology, and environment with appropriate targets and feedback mechanisms, under the control of a public or private sector concern, and undertaken by such a concern to facilitate explicitly and specifically the creation, retention, sharing, identification, acquisition, utilization, and measurement of information and new ideas in order to achieve strategic aims, such as improved competitiveness or improved performance, subject to financial, legal, resource, political, technical, cultural, and societal constraints. (Lehaney, Jack, Clarke & Coakes, 2003)

Andrew Goh: Knowledge management is an area of managerial concern that involves systematic leveraging of data, information, skills, expertise, human capital and various forms of intellectual assets for the purpose of enhancing corporate productivity, organizational effectiveness, business innovation, competence and responsiveness. It embodies an in-depth understanding of multi-disciplinary issues relating to the art and science of managing knowledge, with or without the use of technologies or tools, to harness knowledge assets for advancing human pursuits.

Clyde Holsapple: Knowledge Management — An entity’s systematic and deliberate efforts to expand, cultivate, and apply available knowledge in ways that add value to the entity, in the sense of positive results in accomplishing its objectives or fulfilling its purpose. The entity’s scope may be individual, organizational, Tran organizational, national, etc. (Holsapple & Joshi, 2004).

Karl Kautz: I understand knowledge management broadly as any process or practice of creating, acquiring, capturing, sharing and using knowledge wherever it resides to enhance learning and performance in organizations, however, I agree that the literature published in the field shows a certain preoccupation with information technology (IT) and technical solutions while it reflects a limited view of organizational knowledge. The practice of knowledge management is commonly degraded to implementation of new IT based systems, neglecting important organizational aspects, in particular, human and social issues. In my work I therefore emphasize that IT plays a prominent, but not solemnly deci-
sive role in knowledge management and study the conditions in which knowledge processes can take place, where embedded in the daily activities of people, IT, as just one of several measures, is applied in order to support and facilitate knowledge processes rather than dictating, regulating or even worse obstructing these processes.

Matthew H. S. Kuofie: Knowledge management is a system of processes that are used to capture, organize and store specific knowledge; and that knowledge is any documented or undocumented information that is acquired through various means, including learning. KM allows for access and application of the stored knowledge for its intended purpose(s). Of course, KM allows for the update of knowledge based on new knowledge or knowledge gained through the application of knowledge. One benefit of KM is knowledge sharing. Ward and Aurum (2004) defines knowledge as “understanding or gained experience.”

Ronald Maier: Knowledge management is defined as the management function responsible for regular selection, implementation and evaluation of knowledge strategies that aim at creating an environment to support work with knowledge internal and external to the organization in order to improve organizational performance. The implementation of knowledge strategies comprises all person-oriented, product-oriented, organizational and technological instruments suitable to improve the organization-wide level of competencies, education and ability to learn.

Mark Nissen: A one-line definition of KM — leveraging knowledge for competitive advantage.

Dick Stenmark: My working definition of KM is not very formal but I like to think of KM as any organizational effort aimed at helping individuals make better use of their knowledge.

Additionally, Alavi and Leidner (2001) in their seminal work concluded that knowledge management involves distinct but interdependent processes of knowledge creation, knowledge storage and retrieval, knowledge transfer, and knowledge application. At any point in time, an organization and its members can be involved in multiple knowledge management process chains. As such, knowledge management is not a monolithic but a dynamic and continuous organizational phenomenon. Furthermore, the complexity, resource requirements, and underlying tools and approaches of knowledge management processes vary based on the type, scope, and characteristics of knowledge management processes.

It is obvious that the board and contributing authors of this journal do not totally agree on what KM is (note that Dorothy Leidner is also a member of the board). However, reviewing these definitions suggests there are some ideas that appear to have consensus. KM is a process, it isn’t just a technology, and knowledge use has to have a benefit, usually an increase in organizational effectiveness or productivity. Most of us agree with a more holistic approach to KM. Anne Massey and her co-authors discuss a holistic framework for KM in this issue. I believe we are approaching consensus, at least within the KM research community, that KM is an encompassing process for identifying, capturing, and reusing knowledge that requires many organizational facets; such as knowledge workers, management, organizational culture, work processes, organizational strategy, and IT systems; to work together if KM is to succeed in an organization.

My definition of KM is not that generic — it is actually quite focused. This is because
I have an engineering and practitioner background and have always been action and results oriented. I propose that KM is an action discipline; we need knowledge to be applied for KM to have an impact. We also need measurable impacts from knowledge reuse for KM to be successful. Decision making is something we can measure and judge. Organizations can tell if they are making the same decisions over and over and if they are using past knowledge to make these decisions quicker and better. Also, decision making is the ultimate application of knowledge. My definition provides this direction in a fairly succinct sentence and is a good working definition of KM. However, I also agree it isn’t the only good definition.

In conclusion it appears we need another call for research, this time focusing on what is KM. To this end we are holding a workshop at the 2006 Hawaii International Conference on System Sciences that is focused on reaching consensus definitions in KM. We will publish the results of this workshop with the hope of establishing community consensus. Until then I propose that the below definition is as good as any for a solid working definition of KM:

KM is the practice of selectively applying knowledge from previous experiences of decision making to current and future decision making activities with the express purpose of improving the organization’s effectiveness.

REFERENCES


Murray E. Jennex is an assistant professor at San Diego State University and president of the Foundation for Knowledge Management (LLC). Dr. Jennex specializes in knowledge management, system analysis & design, IS security, and organizational effectiveness; and is editor-in-chief of the International Journal of Knowledge Management. He has managed projects in applied engineering and business and information systems development and implementation. His industrial and consulting experience includes nuclear generation, electrical utilities, communications, health services, and governmental agencies. Dr. Jennex is the author of numerous publications on knowledge management, end user computing, international information systems, organizational memory systems, and software outsourcing. He holds a BA in chemistry and physics from William Jewell College, an MBA and MS in software engineering from the National University, and an MS in telecommunications management and a PhD in information systems from Claremont Graduate University. Dr. Jennex is also a registered professional mechanical engineer in the state of California.