The Evolving Concept and Practice of Knowledge Management: Seeking a Common Understanding and Definition

Elizabeth Regan, Morehead State University, USA; E-mail: e.regan@moreheadstate.edu

ABSTRACT
This research traces the roots of knowledge management (KM) to assess how its origins relate to current variation in terminology, concepts, theory, and practice. The objective is to provide a framework for clarifying the relationships among these divergent views and move toward a more common understanding and definition of KM.

INTRODUCTION
The past two decades have witnessed the rapid evolution of knowledge management (KM) as a concept and as an area of study and practice. Some researchers suggest that KM has matured to a level to be recognized as an academic discipline in its own right (Jennex and Croasdell, 2005). However, the literature offers little agreement on a common definition of KM or its foundations and methods. In fact, almost every KM source offers its own unique definition.

The KM umbrella has, in fact, become very broad. It has introduced new concepts such as the knowledge worker, chief knowledge officer, knowledge economy, intellectual capital, and knowledge as a tangible asset. It has also evolved to encompass all or many of the following concepts, depending on the source: work flow, document control and distribution, e-mail, performance support, best practices, organizational learning, organizational memory, collaborative computing, data warehousing, data mining, and knowledge portals. Other sources also include Intranets, Extralnets, e-business, customer relationship management, and business intelligence. All of these, and more, are discussed in various ways by different sources under the knowledge management umbrella.

The idea of the importance of knowledge is not new, of course. Yet as a concept and an organizational process, KM takes on an entirely different meaning, which has gained widespread attention on a global scale. At the same time, however, the concept has lacked unity, and its rapid popularization has made it difficult to sort out the hype from the reality. As often happens when a new concept becomes popular, there has been a rush to rename existing technologies or products to make them more marketable. As a result, systems that have been around for a long time, such as artificial intelligence, expert systems, workflow management, databases, document management systems, and most recently corporate Web portals, now are touted as KM systems.

This study hypothesizes that the lack of consensus around a common definition of KM relates to its divergent roots. The literature reveals that the origins of KM have not been well researched (Bertels, 1996; Sveiby, 2001). The purpose of this research, therefore, is to identify the various disciplines or threads in which KM has roots and to assess how these varying roots relate to the current variation in terminology, perspectives, and recommended approaches to KM. The objective is to provide a framework for clarifying the relationships among these divergent views and move toward a more common understanding and definition. This insight will be critical to defining KM as a discipline and clarifying its foundations, theories, and methods as well as validating its business value.

LITERATURE REVIEW
The literature provides a plethora of definitions for KM (Alavi & Leidner, 2001; Awad & Ghaziri, 2004; Ayerton, 1998; Gates, 1999; Grundstein, 2006; Konda & Steenkamp, 2004; Malhotra, 1999; Sveiby, 2001; Regan, 2007; Regan & O’Connor, 2002). The lack of agreement on a definition is problematic for an emerging discipline that traces its roots back at least two decades. Even the most recent textbooks spend an entire chapter just explaining what KM is and what it is not, and provide an entire page of definitions (Awad & Ghaziri, 2004; Regan & O’Connor, 2002).

Systematic analysis of the literature on knowledge management reveals at least seven distinct roots or disciplines related to the evolution of KM. While these different roots share common concepts, they also reflect sharp differences. The current status of KM appears to represent a convergence of these distinct roots—rather than a progression from any single discipline. The analysis suggests that this convergence of several different disciplines accounts, in large part, for both the disparity of viewpoints and what seems like an explosion of interest.*

A very brief summary of each of these roots follows:

• Best practice transfer. One dominant theme of KM is the systematic transfer of best practices. According to a study conducted by the American Productivity and Quality Center (APQC, 1996), best practice management was the one strategy pursued by 100 percent of the firms implementing KM approaches. The use of benchmarking and best practices gained widespread industry acceptance in the early 1990s (O’Dell & Grayson, 1998). This perspective is represented in the O’Dell and Grayson book (1998), If Only We Knew What We Know, based on APQC’s work with Fortune 500 firms.

• Information and records management (IRM). KM also has roots in document management, both paper and image. Both the Association of Information Management (AIRM) and ARMA, International, the former Association of Records Managers and Administrators, have a huge presence in the KM market. This approach reflects a strategic view of managing and safe guarding information resources from a corporate perspective. It also suggests the origins of the life cycle concept frequently applied to KM. IRM is the approach reflected in the book by Jan Duffy, Harvesting Experience, Reaping the Benefits of Knowledge.

• Organizational learning and organizational memory. The concept of the learning organization is generally associated with Peter Senge, author of The Fifth Discipline. It embodies the notion that organizations as well as individuals can learn from experience, and it emphasizes the need for information sharing and collaboration. Concepts such as organizational intelligence and self-organizing knowledge would fall within this tradition as well (Allee, 1997). Many researchers also consider The Knowledge-creating Company: How Japanese Companies Create the Dynamics of Innovation, by Ikujiro Nonaka and H. Takeuchi (1995) to be a seminal work in the area of organizational learning.

• Electronic performance support systems (EPSS). One of the early precursors of KM is electronic performance support, the concept of just-in-time delivery of online reference, training, and help. During the 1980’s hundreds of firms focused on creating online performance support and computer based training using new computer authoring and reference systems. Another related concept was Information Mapping, a process for analyzing, organizing, and presenting information for reference, which originated for paper documents and was then adapted for electronic presentation. The EPSS approach is described in books such as Designing Electronic Performance Support Systems by Gloria J. Gery and Designing and Writing Online Documentation by William K. Horton. Another widely recognized pioneer in this area is Dr. Ruth Clark, author
The emergence of KM as a discipline began in the 1980s as a result of the growing importance of technology and information in the business world. The 1990s saw the development of KM as a field of study, with a focus on the management of knowledge as a corporate asset. By the 2000s, KM had become a mature field, with a variety of approaches and methodologies being used by organizations to manage knowledge. The evolution of KM can be seen as a convergence of different disciplines, rather than a progression from a single discipline.

<table>
<thead>
<tr>
<th>1980's</th>
<th>1990's</th>
<th>2000's</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best Practice Transfer</td>
<td>Knowledge Management</td>
<td>2nd Generation Knowledge Management</td>
</tr>
<tr>
<td>Electronic Performance Support Systems</td>
<td>Organizational Learning / Organizational Memory</td>
<td>Common Themes</td>
</tr>
<tr>
<td>Organizational Learning / Organizational Memory</td>
<td>Technical (Database / Data Warehousing)</td>
<td>Common Principles</td>
</tr>
<tr>
<td>Technical (Database / Data Warehousing)</td>
<td>Information Economics</td>
<td>Integrated Research</td>
</tr>
<tr>
<td>Information Economics</td>
<td>Internet / Portals</td>
<td>Aligned with evolving business concepts.</td>
</tr>
</tbody>
</table>

Figure 1. Evolution of KM: A convergence NOT a progression from a single discipline (Source: Regan, 2007)
The research provides little evidence of a shared awareness among the communities of practice and research associated with each of these threads or traditions (Jennex & Crossdell, 2005). This silo effect is evident from the apparent lack of cross-referencing of research and practice in the literature of these different traditions. This silo effect suggests that the current state of KM represents a convergence of these different traditions with little integration of theories or methods. Although common themes have emerged around the concept of knowledge management, wide disparities continue to exist in theory, terminology, and practice. Thus, as suggested by Figure 1, the current status of KM as a concept, represents a convergence of multiple disciplines and approaches, which has not yet truly coalesced into a discipline in its own right. Konda and Steenkamp (2004, p.1383) also argue the need for an integrated KM framework that comprehends all the perspectives of knowledge to present a holistic approach. They propose an Integrated Knowledge Management Framework (IKMF) based on five perspectives: strategy, organizational entity, knowledge process, knowledge asset, and information technology. They suggest that, “No treatise on KM is complete unless it addresses all the issues arising out of a comprehensive view of entire KM domain” (Konda & Steenkamp, 2004, p.1384).

CONCLUSIONS AND FUTURE RESEARCH

This research focuses on the variety of traditions from which KM has its roots to assess how they relate to the current variation in terminology, perspectives, definitions, and recommended approaches to KM. Current evidence shows little shared awareness among these different traditions. This research suggests a need to work toward development of a holistic KM model that recognizes the entire spectrum of research and practice. Future research also is needed to validate common themes and practices among these separate traditions. If researchers continue to work in their own silos, KM will continue to be characterized by a general lack of agreement and congruence. More importantly, the opportunities for richness and insight of a more holistic, multi-disciplinary perspective will be missed. To be viable, it would seem that any movement toward establishing KM as a discipline must be inclusive and recognize the full range of research and practice.

REFERENCES


ENDNOTE

* see especially Regan (2007) for a sampling of KM definitions representative of the 7 different KM roots.
Related Content

GPU Based Modified HYPR Technique: A Promising Method for Low Dose Imaging
[www.irma-international.org/article/gpu-based-modified-hypr-technique/133532/](www.irma-international.org/article/gpu-based-modified-hypr-technique/133532/)

Green Supply Chain Integration in Automotive Industry
[www.irma-international.org/chapter/green-supply-chain-integration-in-automotive-industry/112954/](www.irma-international.org/chapter/green-supply-chain-integration-in-automotive-industry/112954/)

Modeling Rumors in Twitter: An Overview
[www.irma-international.org/article/modeling-rumors-in-twitter/163103/](www.irma-international.org/article/modeling-rumors-in-twitter/163103/)

Accident Causation Factor Analysis of Traffic Accidents using Rough Relational Analysis

Factors Affecting the Utilization of Products and Services in University Libraries