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KM moves beyond the organization: the opportunity for librarians

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ABSTRACT

KM is no ordinary management fad – first, it has legs, it is not fading away, and second it clearly is relevant to and overlaps greatly with librarianship. Despite the obvious overlap with librarianship, our field has done comparatively poorly on capitalizing on that overlap. The KM movement has gone through a number of stages, and it is now moving into a stage of recognizing the importance of and incorporating information and knowledge external to the parent organization. Such information and knowledge has always been the province of the librarian, and this development presents obvious and important opportunities for the field of librarianship, particularly in the area of the organization's KM system design.

KM MOVES BEYOND THE ORGANIZATION: THE OPPORTUNITY FOR LIBRARIANS

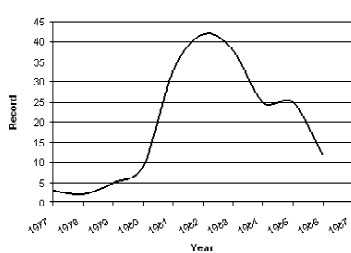
Introduction

KM is of great importance to librarianship, most obviously of course because of the clear overlap with librarianship. Second, KM is important because of its long term impact; unlike most management enthusiasms it is not a fad; it is not going away.

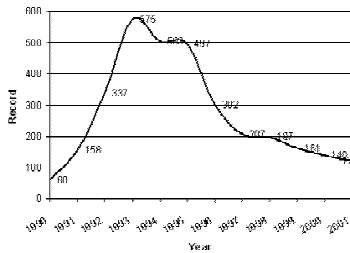
Despite the obvious overlap with librarianship, our field has done comparatively poorly on capitalizing on that overlap. The KM movement has gone through a number of stages, and it is now moving into a stage of recognizing the importance of and incorporating information and knowledge external to the parent organization. Such information and knowledge has always been the province of the librarian, and this development presents obvious opportunities for the field of librarianship.

KM is here to stay

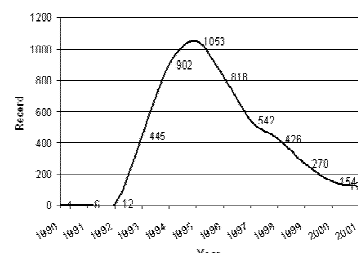
First however, let's dispose of the concern that KM is just another management fad that will soon wither away. Bibliometrically analyzed, KM is clearly not a fad. Ponzi and Koenig (2002), building on previous work by Abrahamson (1996) and Abrahamson and Fairchild (1999), showed that KM was behaving unlike other management "fads". Previous management fads (as measured by the number of articles in the business literature on the topic) showed a consistent pattern of boom and bust over a roughly 10 year cycle, with 5 years of explosive logarithmic growth followed by 5 or 6 years of almost equally dramatic decline. Below are the graphs for "Quality Circles", "Total Quality Management", and "Business Process Reengineering".



The Lifecycle of Quality Circles, 1977-1986
(Source: Abrahamson 1996)

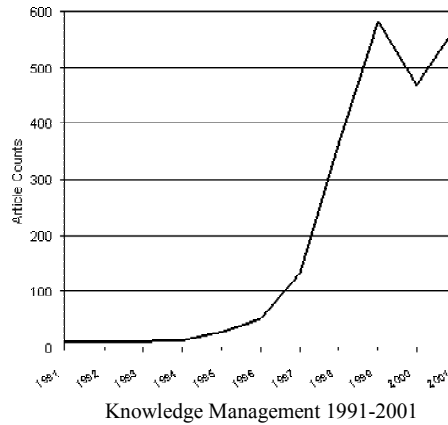


Total Quality Management, 1990-2001

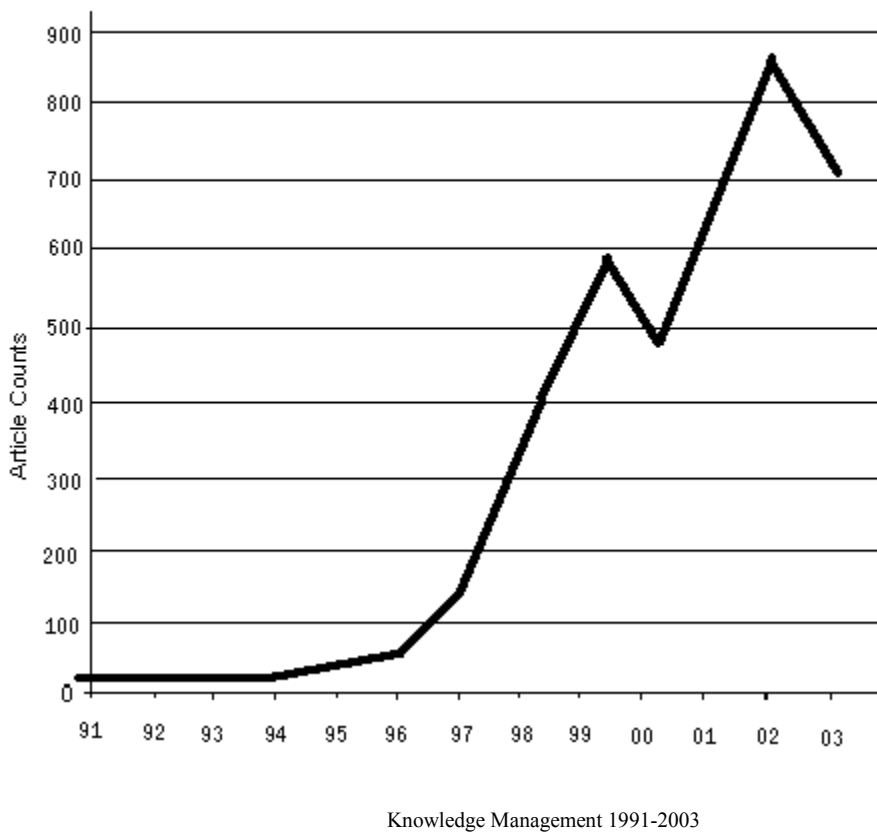


Business Process Reengineering, 1990-2001

In 2002, the pattern for KM looked quite different. KM started off the same way, with five years of dramatic exponential growth, but then it didn't commence that dramatic decline.



Ponzi and Koenig concluded that at the very least KM was an unusually broad shouldered fad, or more likely that it had real staying power and the potential to become a “significant and permanent part of management’s tool box”.



Adding two more years of data makes that conclusion even more robust. KM is simply not a fad. This conclusion is further buttressed by the fact that Davenport and Prusak in their recent book What’s the Big Idea? (2003) which focused on how to separate the wheat from the chaff of the various highly touted management ideas and fads, used KM as their prime example of a management idea that had permanent value and was not a fad.

Now to return to our theme, the development of KM to a new stage:

FOUR STAGES OF KNOWLEDGE MANAGEMENT

To date, there have been three clearly observable stages of KM development. It is useful to review them briefly. Note that new stages don't replace earlier stages; they merely add an emphasis to aspects of KM that though there all along, were inadequately recognized previously.

THE THREE STAGES OF KM

STAGE I “by the Internet out of Intellectual Capital”

Information Technology

Intellectual Capital

The Internet (including intranets, extranets, etc.)

Key Phrases: “*best practices*”, later replaced by the more politic “*lessons learned*”

STAGE II Human and cultural dimensions, the HR, Human Relations ,stage

Communities of Practice

Organizational Culture

The Learning Organization (Senge), and

Tacit Knowledge (Nonaka) incorporated into KM

Key Phrase: “*communities of practice*”

Stage III Content and Retrievability

Structuring content and assigning descriptors (index terms)

Key Phrases: *content management* and *taxonomies*

Stage One

The initial stage of KM was driven primarily by IT, information technology. That first stage has been described in an equestrian metaphor as “by the internet out of intellectual capital”. Organizations, particularly the large international consulting organizations, realized that their stock in trade was information and knowledge, that often the left hand as it were had no idea what the right hand knew, and if they could share that knowledge - then they could avoid reinventing the wheel, underbid their competitors, and make more profit. When the internet emerged, they realized that the intranet flavor of the internet was a god given tool to accomplish that knowledge coordination and sharing. The first stage of KM was about how to deploy that new technology to accomplish those goals.

Those large international consulting organizations, then realized quickly that many of their customers shared exactly the same problems, and that the expertise they were building for themselves could also be a product, an expertise, that they could purvey to those customers. A new product needs a name and a theme or rationale. The name for their new product was Knowledge Management, and the theme / rationale justifying it was *intellectual capital*, a theme

which coincidentally had emerged as a hot topic in the business literature only a couple of years earlier, and which provided a wonderful rationale for the importance of KM. The first stage might be described as the “If only Texas Instruments knew what Texas Instruments knew.” stage, to revisit a much quoted aphorism. The hallmark phrase of Stage 1 was first “*best practices*”, to be replaced by the more politic “*lessons learned*”.

Stage Two

The second stage of KM can be described simply as adding the recognition of the importance of the human and cultural dimensions. The second stage might be described as the “If you build it they will come is a fallacy” stage - the recognition that “If you build it they will come.” is a recipe that can easily lead to quick and embarrassing failure if human factors are not sufficiently taken into account. As this recognition unfolded, two major themes from the business literature were brought into the KM fold. The first was Senge’s work on the learning organization (Senge, Peter M. 1990 [The Fifth Discipline: The Art and Practice of the Learning Organization](#). New York, Doubleday/Currency, 1990). The second was Nonaka’s (1995) work on tacit knowledge and how to discover and cultivate it (Nonaka, Ikujiro & Takeuchi, Hirotaka 1995 [The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation](#), New York, Oxford University Press, 1995). Both were not only about the human factors of KM implementation and use; they were also about knowledge creation as well as knowledge sharing and communication. The hallmark phrase of Stage 2 was “*communities of practice*”.

Stage Three

The third stage was the awareness of the importance of content, and in particular an awareness of the importance of the retrievability and therefore of the importance of the arrangement, description, and structure of that content. Since a good alternate description for the second stage of KM is the “it’s no good if they don’t use it” stage, then in that vein, perhaps the best description for the new third stage is the “it’s no good if they can’t find it” stage, or perhaps “it’s no good if they try to use it but can’t find it”. Another bellwether is that TFPL’s report of their October 2001 CKO (Chief Knowledge Officer) Summit reported that for the first time taxonomies emerged as a topic, and it emerged full blown as a major topic (TFPL, 2001 [Knowledge Strategies – Corporate Strategies](#) [TFPL’s 4th International CKO Summit]. London, TFPL, 2001; see also www.tfpl.org). Below is the graphic with which TFPL summarized the results of that summit. Note that the largest boldest word is **Taxonomy**. The hallmark phrases emerging for the third stage are *content management* (or enterprise content management) and *taxonomies*.

The Missed Opportunity

The unfortunate aspect of stage three is that to a very large degree it represents a major missed opportunity for librarianship. The KM community has been trying to reinvent the domain of taxonomy, precisely what librarians have long known, studied, and developed as classification. Despite some work pointing out the obvious contribution of librarianship (Koenig & Srikantiah

2002), the KM community unfortunately remained largely unaware of that pool of expertise, in fact for the most part quite unaware that there were plenty of taxonomic, i.e. classification specialists out there, and the KM community for the most part looked entirely in the wrong direction. Taxonomies are perceived by the KM community as emanating from natural scientists, not from librarians and information scientists. To be sure, meaning #2 in Webster for Taxonomy is “classification, especially the orderly classification of plants and animals”, but **meaning #1** in Webster’s is “**the study of the general principles of classification**”, that is, librarianship and information science. The KM community it appears didn’t read the dictionary. If business professionals and KM staff could visualize what they have in mind when they talk about taxonomies, and only a few could adequately do that, what would constitute that picture is something very similar to MESH, the carefully structured compendium of MEDical Subject Headings compiled by the National Library of Medicine. But there is precious little awareness that taxonomies and classificatory structures like MESH are the natural domain of librarians/information scientists.

Now, Stage Four

Now however a fourth stage of KM can be seen to be emerging – this stage is the awareness of the importance of information and knowledge external to the organization. The inclusion of information and knowledge external to the organization is not new to KM, one need only think of the World Bank and the high visibility of their KM program and their very deliberate development of communities of practice specifically designed to encompass experts external to the bank, to make that point. That being said however, the overwhelming emphasis of KM to date has been to mobilize and make accessible the organization’s information and knowledge. Perhaps the most basic mantra of KM has been the “if only Texas Instruments knew what Texas Instruments knew” refrain, the classic metaphoric example of what KM is all about, making an organization’s knowledge more useable and more productive.

KM’s traditional emphasis upon just an organization’s internal knowledge can be best illustrated by quoting two of the most frequently quoted and used definitions of KM:

(Ruggles, 1998)

Knowledge management is a newly emerging interdisciplinary business model dealing with all aspects of knowledge within the context of the firm, including knowledge creation, codification, sharing, learning, and innovation. Some aspects of this process are facilitated with information technologies, but knowledge management is to a greater degree, about organizational culture and practices.

(underlining added)

Gartner Group, 1998)

A discipline that promotes an integrated approach to identifying, capturing, evaluating, retrieving, and sharing all of an enterprise’s information assets. These assets may include databases, documents, policies, procedures, and previously uncaptured expertise and experience in individual workers.

(underlining added)

The mind set up until now of focusing only on the firm's or the organization's or the enterprise's information and knowledge assets could hardly be clearer. Note that while Ruggles is an individual author, the Gartner Group is a major consulting firm, and their definition is in effect a description of the product, KM consulting, that they are offering, and in this their product description they are limiting KM to "an enterprise's information assets".

This narrow emphasis of KM is now broadening. The phenomenon is observable in the papers and topics discussed in two key arenas, the annual KMWorld Conference and in the annual Conference Board Conference on Knowledge Management and Organizational Learning.

Several threads have converged to drive this new emphasis:

- The extension of Intranet based KM systems to Extranet based systems.

The first and most obvious application of Internet technology was to make an "intranet" of it, to use the Internet as a access controlled network for the company. A next logical step was to use the same access control mechanisms to build an "extranet" so that persons outside the organization, vendors, suppliers, dealers, major customers, etc could be included. This has proceeded much more slowly however, as security, particularly for for-profit corporations is a major concern. How do you know that your competitor is not posing as a vendor of your products, or has not acquired a vendor of your products precisely so as to have access to some of your information? It was precisely this lack of a need to be concerned about competitive information that allowed the World Bank to so quickly move into extranet based communities of practice. However as security techniques have improved, the willingness of corporations to extend communities of practice onto extranets so as to incorporate the knowledge of "outsiders" has correspondingly increased.

- Concern about the knowledge about to be lost as post war baby-boomers are beginning to hit retirement age.

Corporations are beginning to realize that KM, in the form of communities of practice, is a wonderful tool to address this issue. If retirees are encouraged to remain as active members of one or more communities of practice, then their knowledge is not lost, and the retiree may well be able to contribute valuable knowledge – "back when we introduced the model 812, we had similar teething problems, and the solution turned out to be that ...". The organization has also gained, at minimal cost, important good will among their retirees and among the local communities where those retirees live. Caterpillar Inc. is an organization that has been particularly pro-active in this use of KM.

- A repeat of the same broadening phenomenon that occurred with MIS, Management Information Systems.

After MIS, Management Information Systems, were introduced in the 1970s, there came a rebound of disillusionment with the field of MIS. Much of that disillusionment was a function of the fact that what the MIS system contained was typically only the organization's raw and partially aggregated transaction information, purchases, production data, sales, etc., useful data and information to be sure, but not the information constituting the bulk of what an executive typically needed for those decisions near the top of the managerial decision making pyramid. For those decisions, what was typically needed was external contextual

data, not the transactional data in the typical MIS system. This realization drove an awareness of the importance of external information, and it also drove a partial rebranding of MIS, relaunched as DSS, Decision Support Systems, a terminology designed to avoid overselling those transactional data based systems and to avoid implying that they had all the data or information that an executive needed. That same awareness is gradually developing in the KM world, the awareness that much of the key information needed for critical decisions lies outside the corporation or organization, and that the ideal KM system should provide appropriate links to the world outside the organization.

The result is a greatly increased emphasis upon external information. It should also be noted that another emphasis emerging simultaneously is that of the importance of situating information and knowledge in context. This is in fact another facet of the same evolution, the awareness that the importance, the usability, and the value of information is a function of how it relates to other information. New knowledge derives from the combination of information, either the juxtaposition of existing information, or the addition of new information to existing information. If I have seen further than others, it is because I have stood on the shoulders of giants

External information of course has always been the librarian's domain.

The result is potentially a great opportunity for the field of librarianship. In comparison to the largely missed opportunities of stage III, it will be much harder for the KM community to be unaware that external information has always been the librarian's domain. The countervailing danger is that the corporate community will perceive the Google phenomenon to have largely made everyone their own librarian, that in the world of online information, access to external information is so easy that the KM user community can largely ignore the traditional library.

The consequence of these developments, is that the library community must actively promote itself in the knowledge management community, particularly in the corporate world. We can take advantage of this opportunity only if we take the initiative to involve ourselves in the planning and implementation of KM systems. Particularly in this increasingly internationalized world, where basic library services can, and increasingly are being outsourced, it is in the design of information systems, particularly KM systems, where librarians can add the greatest value. In a world where the user will increasingly do their own searching, it is in the design, in the structuring, and in the updating and maintenance of systems where the librarians' knowledge of what external information is available and how best to structure it, and how to design and build the organizations' portals that will most effectively guide the user to the best sources of external information, that should be the librarians greatest contribution.

The bottom line: Librarians can use this increased recognition of the importance of external information as their entry card to this important and strategic role of KM system design.

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