Km Initiatives In The Academia: In Search Of For Km As An Emerging Field

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ABSTRACT

The academic community has since joined the KM bandwagon set in motion by management consultancy firms and information practitioners. A number of members of the academia and researchers have clamored and are still clamoring for individuals and organizations to view KM as an emerging field, to embrace it, and benefit from its numerous advantages. Yet the nature, scope method, and validity aspects of KM remain ill defined. In fact there is no consensus regarding the claim that KM is a new field with its own research base, since much of the terminology and techniques used, such as knowledge mapping, seem to have been borrowed from both IM and librarianship. The discrepancy has ranged from authors who see KM as an emerging discipline, to others who claim that firms and information professionals have been practicing KM-related activities for years, and to those who insists that there is no such thing as KM. In this study, the concept of KM is examined in the Web sites of leading business schools. A few cases were identified through a literature search of ABI Inform and the Internet. Each case was reviewed and details of each area of interest were extracted and recorded. The data were compared and analyzed. Secondly, in addition, to the review of journal publications on KM, a survey of experienced academicians was conducted to understand what KM means to them, and KM initiatives in their faculties, departments, or units. Findings are discussed.

KEY WORDS: Information Management, Knowledge Management, Academia, Librarianship

Definitions:

KM = Knowledge Management
IM = Information Management

INTRODUCTION

There is a real interest and enthusiasm in KM as revealed by the increasing number of publications relating to the topic since 1995 (Mahdjoubi & Harmon, 2001). In addition, the library and information press has suggested for a number of years that it is a burgeoning field of great interest to information professionals, since they possess the necessary skills to work in the field (Abram, 1997; Chase, 1998; Hanczel, 2001; Oxbrow & Abell, 2002). Wilson (2002) found that from 1986 to 1996, there were only a few occurrences in each year, but from 1997 to date, the growth has been exponential. Bouthillier and Shearer (2002) responding to those who dismiss KM as fad warned that such attitude could mean a missed opportunity to understand how knowledge is developed, gained and used in organizations, and ultimately in society. Al-Hawamdeh (2002) asserted that the key drivers of knowledge management are organizational efficiency, maximizing organization's potential, competitive advantage, building a learning organization and managing intellectual capital. These are besides the great savings and huge profits reported by information practitioners, KM consultancy firms and their clients as a result of deploying knowledge management solutions.

However, Ponzi and Koenig (2002) are not impressed by the above claims. They suggested that KM be jettisoned once and for all in favour of unambiguous differentiated language viz Information Management (IM) and Knowledge Sharing (KM) for example. Wilson (2002) calls it the "nonsense of knowledge management" in which he attempted to show why KM is nothing but information management in a new cloak. Ndubisi (2003) sought for the intrinsic meaning of KM with no concrete result. Ndubisi (forthcoming) argued that if KM is not equal to disguised IM, then KM is meaningless, and only but a search and replace marketing. Ndubisi supported his argument with a critical and extensive analysis of KM initiatives of management consultancy firms and information practitioners, which shows that what is being managed is (not knowledge) either information or work practices such as communities of practice (CoP). Yet these efforts have not resolved the issue of whether KM is an emerging field of management or simply a repackaging of IM in order to attract higher premium for the vendors of the terminology. Hence, the reason for turning to the academia for its views since it is the aim of the academic community to subject ideas to critical analysis and to teach it to students.

LITERATURE

The distinction between Knowledge Management (KM) and Information Management (IM) is far from being well-articulated in the KM literature and this is compounded by the confusion around the concepts of knowledge and information. Koenig (1997) asserted that there is no consensus regarding the claim that KM is a new field with its own research base, since much of the terminology and techniques used, such as knowledge mapping, seem to have been borrowed from both IM and librarianship. The discrepancy has ranged from authors (e.g. Gourlay 2000; Beckman 1999) who see KM as an emerging discipline, to others, (such as Broadbent 1998; Streatfield & Wilson 1999) who claim that firms and information professionals have been practicing KM-related activities for years, and to those (e.g. Ndubisi 2003; Wilson 2002) who insists that there is no such thing as KM. As Beckman insisted that the expression was coined for the first time in 1986 by Dr.Karl Wiig who wrote one of the first books on the topic, *Knowledge Management Foundations*, published in 1993, Streatfield and Wilson (1999) and Ndubisi (2003) seriously questioned the attempt to manage what people have in their minds arguing that the concept of knowledge is over-simplified in the KM literature.

Although many KM initiatives are documented in the business literature (Davenport & Prusak, 1998), what is actually entailed in these initiatives remains vague and ambiguous because there are many interpretations of knowledge management. And, a recent review by Hlupic et al. (2002) identified 18 different definitions of KM. The KM literature tends to subscribe to fairly inclusive definitions of knowledge and in practice concepts of knowledge and information are often used interchangeably (Kakabadse et al., 2001). One example of these definitions, by Davenport and Prusak (1998, p.5) describes "knowledge (as) a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information". Nonaka and Takeuchi (1995, p.58) argue that "information is a flow of messages, while knowledge is created by that very flow of information anchored in the beliefs and commitments of its holder." These definitions are not very helpful to distinguish information from knowledge. A simple but clearer definition from Ndubisi states: "Knowledge is defined as what is known." Wilson (2002) argues that knowledge involves the mental processes of comprehension, understanding and learning that go in the mind and only in the mind. Everything outside the mind that can be manipulated in any way, can be defined as data, if it consists of simple facts, or as information, if the data are embedded in a context of relevance to the recipient" (Wilson, 2002). Wilson's, shows that knowledge is tacit or tacitly rooted-an assertion first presented by Polanyi, whose earlier works many KM writers struggle to build upon.

Tacit knowledge seems to be the primary concern of KM writers and there have been a great deal of discussion in the literature about its nature. The term originates with Polanyi - a science philosopher, who described it as follows: "tacit knowing achieves comprehension by indwelling, and all knowledge consists of or is rooted in such acts of comprehension" (Polanyi, 1958). Barbiero (n.d.) describe it as knowledge that enters into the production of behaviors and/or the constitution of mental states but is not ordinarily accessible to consciousness. For Polanyi, tacit knowledge cannot be expressed because "we know more than we can tell". Therefore we cannot articulate what we know with words because we are not fully conscious of all the knowledge we possess. It resides and remains in the human mind. Polanyi (1962) illustrates this with the example of a medical student learning how to read X-ray picture by listening to experts reading them. Exposure to empirical material and specialized language combined with the learning of medical knowledge will enable the student to become an expert, but tacit knowledge remains tacit.

Other definitions of tacit knowledge or interpretations of Polanyi's definition have emerged since (see for example, Nonaka & Takeuchi, 1995; Choo 1998a). Nonaka and Takeuchi (1995) defined tacit knowledge as action-based, entrained in practice, and therefore cannot be easily explained or described, but is considered to be the fundamental type of knowledge on which organizational knowledge is built. For Nonaka and Takeuchi, tacit knowledge can be transmitted through social interactions or socialization, and made explicit through externalization-although they agree with the idea that tacit knowledge is somewhat hidden. They described four knowledge conversion processes: socialization, externalization, combination, and internalization. Each process involves converting one form of knowledge (tacit or explicit) to another form of knowledge (tacit or explicit). Although most KM writers cite Polanyi (1962), who drew a distinction between tacit and explicit knowledge, they often overlook a part of his writings emphasizing the personal character of knowledge and knowing. The different perspectives of Polanyi and Nonaka reflects their different backgrounds: Polanyi is a philosopher concerned with individual knowledge while Nonaka

and Takeuchi are organizational theorists interested in how knowledge circulates in organizations.

The result of Nonaka's view is the notion that tacit knowledge can be captured, codified, and even stored in organizational non-human memory. Hence the cradle and proliferation of entrepreneurships offering knowledge management solutions. Tsoukas and Vladimirou (2000, 4) argue, however, that "tacit knowledge is not something that can be converted into explicit knowledge", as claimed by Nonaka and Takeuchi (1995) and other authors.

The more recent claims that KM is a 'people' process and that knowledge is not simply an object has led to a major shift in emphasis for KM. As more evidence unfold that a lot of what we know cannot be captured, and that explicit knowledge is information, a number KM researchers and practitioners use different terms to distinguish between the types of knowledge of interest to KM. Conklin (1996) uses the terms formal and informal knowledge. He describes formal knowledge as that which is found in books, manuals and documents, and which can be easily shared in training courses, while informal knowledge is described as the knowledge that is applied in the process of creating formal knowledge. Rulke, Zaheer, and Anderson (1998) on the other hand focus on the knowledge of an organization, which they term transactive knowledge (the organization's self-knowledge – knowing what you know) and resource knowledge (knowing who knows what). Similarly Kogut and Zander (1992) differentiated between information and know-how, while Seely Brown and Duguid (1998) made a distinction between know-how (particular ability to put explicit knowledge into practice) and know-what (explicit knowledge which may be shared by several). Leonard and Sensiper (1998) describe knowledge as a continuum, which exists in a spectrum, at one extreme, it is almost completely tacit (i.e. semiconscious and unconscious knowledge held in people's heads and bodies, at the other extreme, knowledge is almost completely explicit or codified, structured and accessible to people other than the individuals originating it. Hildreth et al. (1999) adopted the terms 'hard knowledge' and 'soft knowledge' as working terms to describe the different kinds of knowledge that were being explored in the KM field. They regard hard knowledge as codifiable, while soft knowledge is less quantifiable and cannot be easily captured and stored. Winograd and Fores (1986) describe the latter as 'lost in the unfathomable depths of obviousness.

Almost (if not) all the works in the KM field often site Polanyi (1958; 1962; 1967). It is therefore important to jog the memory that Polanyi proposed a concept of knowledge based on three main theses: (1) true discovery cannot be accounted for by a set of articulated rules or algorithms; (2) knowledge is public but is also to a large extent personal (i.e. it is socially constructed); and (3) the knowledge that underlies explicit knowledge is more fundamental; all knowledge is either tacit or rooted in tacit knowledge. Thus for Polanyi, and many who share his views, tacit or implicit knowledge is that which is known but cannot be told. It is knowledge that cannot be articulated because it has become internalized in the unconscious mind. It represents a level of understanding that cannot be externalized because it is "inaccessible to consciousness". If the above description holds (and many scholars agree it does), and all knowledge is either tacit or rooted in tacit knowledge (Polanyi, 1967), then knowledge management cannot be as simplistic as a number of reports have presented it.

Considering that the concepts of both information and knowledge are unsatisfactorily defined and that the notion that tacit knowledge can be transformed into explicit knowledge is troublesome, some authors have suggested that the expression 'knowledge management' is perhaps misleading. Understanding the KM components from the perspective of the academia will help to address the issue of knowledge manageability as well as unveil the distinction/s (if any) between knowledge management and information management.

METHODOLOGY

The methodology consists of a review of KM initiatives of consultancy firms that provide KM solutions, organizations that claim to have benefited from these solutions, leading business schools and other schools that undertook KM projects (Bouthillier & Shearer 2002). A few cases were identified through a literature search of ABI Inform and the Internet. Each case was reviewed and details of each area of interest were extracted and recorded. The data were compared and analyzed. The list of organizations is not exhaustive nor the case studies an exhaustive examination of the KM activities of each organization.

Secondly, a field investigation of experienced academicians was conducted to understand their views on the subject. These consist of reputable academicians in their chosen field-from medical science, to social science, to management science, to information and computer science, to engineering, and education. Open ended questions were used in the field study. In some cases the author was around to clarify any issue raised and also to observe any

reactions or gestures over the term knowledge management, which respondents may not have been able to represent in words. In other cases especially with the very busy senior university administrators and officers, the questions were completed in the absence of the researcher. Some of the questions asked include: How would you define the term 'knowledge'? What does knowledge management mean to you? Does your university/faculty/department have any knowledge management initiative/s? (For this question option of Yes/No/Unsure was provided). List the knowledge management initiatives of your university/faculty/department? The open-ended nature of the questions made it possible for the respondents to give an unrestricted view on the subject. Table 1 shows the summarized results of the first 24 responses. The list of responses included here is not exhaustive, but determined by space limitation. In the rest of the cases (not reported) the views are very similar to those of the reported cases.

RESULTS AND DISCUSSION

Results from the Search of Schools

The University of South Africa in Pretoria has a module on knowledge management in its MBA program with the following description:

Although the importance of knowledge has been recognised for many years, knowledge management represents a refocusing of management thought and practice. This course covers communications, sense-making, information management,..The course both uses and critically explores the technologies and media that support knowledge processes, including groupware, interactive CD-ROMs and the World Wide Web (http://www.unisa.ac.za).

Here knowledge management deals with information management, information sharing, and allied technologies.

The University of Cape Town has 'knowledge management' as an elective course in its 2002 MBA syllabus, but neither the description nor the content of the course is shown. However, the electives on offer change annually and a voting system may be used to finalize the elective choices. There is no indication as to whether the course is still on offer.

The MBA program of University of Nigeria has no course (core or elective) on 'knowledge management. Neither does the **University of Lagos** and the **University of Ibadan**. These are some of the prestigious universities in Nigeria.

The University of Texas at Austin's McCombs School of Business has Managing Information as one of the core courses, which is described as follows:
Managing Information requires understanding, designing, and controlling the information processing activities of an organization. This course explores how firms (a) gather, (b) represent, (c) process, and (d) distribute information and knowledge to employees and customers. A sample of the topics covered in the course includes business intelligence; knowledge management; knowledge-worker productivity, data modeling, and group decision support systems(http://www.bus.utexas.edu/dept/msis/mba/core.asp).

This looks like a very quick dip in knowledge management without any clear distinction between it and information management. Another page in the website shows that there is an elective course on 'Information and Knowledge management' with no description.

At the **Robert Smith School of Business of the University of Maryland**, IM-KM confusion exists. The website http://www.rhsmith.umd.edu/pr/smithbusiness/winter2000/cover.htm, has the following information on knowledge management:

Protect knowledge assets. *Employees may carry around in their heads (and on their laptops) critical operational and competitive information. It may be the elusive "tacit" knowledge that individuals develop through their experience on the job. When they leave your organization -- and they will --you don't want this information to walk out the door. Systematically capturing this knowledge is your best insurance policy.*

Identify experts. *Tackling current business challenges and exploring new opportunities often requires assembling a team with the mix of skills appropriate to the task. A good knowledge management system, one that captures not only information -- the "know-what" -- but the source -- the "know-who" -- can help you identify these individuals.*

Make knowledge accessible. *Knowledge management also is about ensuring that employees have the latest information on products and services and the best approaches to usual or unusual problems developed by individuals across the organization. For example, Xerox Corp.'s Eureka system electronically collects and shares solutions from thousands of customer service representatives worldwide.*

What more can be said. Clearly, in this school, knowledge management ensures information access, and knowledge management system captures information. Also the Center for Human Capital, Innovation, and Technology (HCIT) has a KM initiative, which focuses on:

How can I encourage teams in my organization to share vital information? What are the barriers I need to overcome when I introduce knowledge sharing practices in teams? How can I better align our organization's HR practices to better support our teaming strategy?

These are clear cases of use of information and knowledge as synonyms.

At **Harvard Business School,** 'knowledge management' is one of the discussion topics in the course "General Management: Processes and Action." Although there is no detail description given, below are some of the information in the course overview:

General Management Processes and Action (GMPA) focuses on the organizational processes through which general managers of both small and large enterprises formulate, implement, and change business policies, plans, and initiatives. ... These processes include strategic planning, new business development, group decision-making, resource allocation, and knowledge management (http://www.hbs.edu/mba/admin/acs/1556.html).

It is not quite clear, from the above overview, what the knowledge management here entails and how knowledge is/going to be managed.

The **University of Illinois at Chicago** in a colloquial presentation entitled "knowledge management in non-collocated environments", reports:

In a domain of project management, types of knowledge can be characterized as "knowledge in projects", "knowledge about projects", and "knowledge from projects". The use of information technology in the realm of knowledge management has been approached from two main angles: codification and personalization. In the codification strategy, individual knowledge is amalgamated, put in cohesive context, and made centrally available via access to databases and data warehouses to members of the organization.

Only information can be codified, knowledge which people carry in their heads cannot be codified. Hence here is another attempt to

manage information in the name of knowledge management.

AT the **Wharton School of Business at the University of Pennsylvania**, knowledge management does not feature in the MBA program. However, there is a page in the site that feature an article entitled 'The Knowledge Edge' which reports that:

Knowledge management has evolved out of information management. The increase in computerization since the 1970s has made it easier to capture data such as records of transactions, dates when employees are hired or terminated, names and addresses of customers or prospects, and so on. Also, as more companies have introduced sophisticated databases to store and analyze data, increasingly large numbers of people are better able to share information. (Peter Drucker describes information as "data endowed with relevance and purpose.") Knowledge, however, is more abstract than either data or information. It consists not just of simple analysis, but of crucial insights that combine information with context. Knowledge, in short, is the most precious kind of information (http://knowledge.wharton.upenn.edu/results.cfm) .

Above is a clear description of information management capabilities; the abstract and tacit nature of knowledge makes it difficult to manage.

At the **Said Business School at Oxford University**, there appear to be no course in 'knowledge management' in its MBA and EMBA programs. However, there is a site that holds articles on knowledge management presented in a series of conference on 'knowledge-intensive firms' organized by the school, among which is 'Truth About Knowledge Management' which runs:

Why has knowledge management become such a hot topic in the last few years? ... The first reason, she says, is that the relative performance of capital and labour-intensive industries has continued to decline within developed economies while the importance of information-intensive industries has increased. The second reason is that rapid advances in information technology have created incentives for organisations to identify the sources of knowledge within their organizations and develop systematic ways to identify and disseminate that knowledge more widely among their employees.

At this stage, one need not make any comment. There is no clearer way to say that knowledge management

is disguised information management at best. And if universities as centers of research excellence struggle with the information-knowledge management distinction, it is better to keep the latter term until at least its ontology and epistemology is clearly defined.

The **Case Business School, City University, London**; the **Manchester Business School**; the **Warwick University Business School**; and the **London Business School** have no course on 'knowledge management' in their MBA syllabus, although some have a course on information management.

The University of Tokyo (http://www.is.s.u-tokyo.ac.jp/labs.html). At the University of Tokyo's Department of Information Science, is the Takagi/Nakai Laboratory**,** which focuses on Genome Information Processing, which involves:

Knowledge Discovery from Genome Databases, Biological Sequence Analysis, Deductive Object-Oriented Database Systems, Logic Programming

The International Institute of Information Technology (IIIT) formerly, the Indian Institute of Information Technology has two courses in KM. The first, 'Web Data and Knowledge Management' has the following objectives and contents:

The objective of this course is to study the concepts and related research issues in building web-based information systems. The material is drawn from the research papers and books in the fields of data mining, information retrieval, search engines and e-commerse systems. The content include: Introduction to Web based information systems; Overview of data mining approaches; Introduction to information retrieval and text mining approaches; Algorithms to mine the Web data: search engine algorithms; Knowledge (community) extraction algorithms; Recommendation Systems for e-commerce; Security mechanisms; Wireless access to the Web; Web proxy caching and pre-fetching; Query and server log analysis; and User profile analysis (http:gdit.iiit.net/wdkm/home.html).

The second is 'Content and Knowledge Management' which covers:
Overview of engineering knowledge-based system, overview of IT technologies and knowledge sharing, managing the adoption of knowledge management techniques, knowledge management systems-architecture and design issues; digital rights management; analyzing unstructured content, confluence of data and content rich media analysis; analyzing structured data,... (http:gdit.iiit.net/cakm/right.html).

Difficulties of definition and distinction seem to exist above. Knowledge management is equated, essentially, with information systems.

The Indian Institute of Management Calcutta (IIMC) has a course on 'Knowledge Based Systems Design' as a part of the computer Science and Engineering stream. Contents include:
Knowledge representation; knowledge engineering; Logic and resolution; Semantic net; Parallel implementation of semantic nets; Architecture of knowledge based system design; rule based systems; frame based systems; Search techniques; control strategies; Software/H/W support for knowledge based systems; Expert system shells; Inference machines; AND/OR parallelism; Case studies (http://www.cse.iitd.ernet.in/).

Under the stream of Management of Information Systems and Database Management Systems, is a module on Management Centre for Human Values which contents include:
Exploring tacit learning focusing on intuitive acquisition of knowledge of the conduct and action suitable to creative endeavors (not its management-emphasis mine) (http://www.iimcal.ac.in/programs/courseindex.asp).

Similar difficulties of definition and distinction between knowledge management and information management system in the IIMC also exist in **National University of Singapore (NUS). At NUS** (http://www.comp.nus.edu.sg/graduateprog/modules.htm), Knowledge Systems and Management in Organisations is a subject offered as part of the Master of Computing stream and described as follows:

Students will learn a broad and in-depth understanding of knowledge management, arguably one of the most interesting and powerful IT concepts. ....

Database Management System is another course offered in the same stream and covers:

...The third part covers object-database systems that are useful extension of relational database to deal with complex data types. The last part covers database technologies required for modern decision support systems, including data warehousing, data mining and knowledge discovery and on-line analytical processing.

Under the Advanced Topics in Data Mining, course explanation includes:

...The process of knowledge discovery involves pre-processing the data, mining or discovering patterns from the data, and post-processing the discovered patterns.

From the website of the **Multimedia University Malaysia's** faculty of Business and Law, it appears it has a knowledge management unit, but nothing else is said about the objectives, KM projects or KM initiatives of the unit. All the sites related to KM is either inaccessible or contains no information on KM activities, projects or initiatives.

On the home ground, the **Universiti Malaysia Sabah's** MBA program has no course in knowledge management. However, a few publications on the topic are available that have questioned the idea of knowledge manageability.

From the above review of business schools and information systems schools in Universities in Africa, America, Europe, and Asia, there is still a dearth of evidence of a clear KM curriculum, initiative, project and/or activity. What is often listed as KM initiatives, curriculum, and projects turn out to be in the domain of information management, information resource, information sharing, etc. The use of knowledge management nomenclature for information management is simply because of the difficulty in managing knowledge (what is known - which is often tacit or tacitly rooted). This is also a plausible explanation why the ontology and epistemology of knowledge management is still ill-defined.

Results of Field Investigation of Academicians
The results of the field survey of academicians are summarized in Table 1.

Table 1: Field Results

Cases	Respondents' Field	What K & KM means to me	Have KM initiative?	What are the KM initiatives
1	**Education**	**K**: Organized information. **KM:** Management of organized information.	Yes	R&D activities; Organizing of conferences; Training; Teaching.
2	"	**K**: An information **KM:** Managing knowledge needed to be an effective leader.	No	Staff development; Leadership; Boss-subordinate interaction.
3	"	**K:** What you know. **KM:** How you plan, organize, lead, and control what you know	Unsure	Resource centre; Seminar/Workshop; etc.
4	**Medical Sciences**	**K**: Information, the world's data bank, scientific & technological breakthrough…. **KM:** Essentially how we manage information…..	Unsure	Managing the workers in the development unit Managing the University's entire assets
5	"	**K**: new information-academic or non-academic **KM:** Promoting new skills and courses that will enhance knowledge and skills	Unsure	-
6	"	**K:** Ability to use information in decision-making **KM:** Manipulation or storage of data for future use to the best of ones ability	Yes	Student's records-personal and academic Expert check list Storage and use of research data
7	**Psychology**	**K**: Any information that is worth knowing and enlightening.	Yes	Human development; Counselling; Social work; Industrial organization

		KM: To seek, classify, store and retrieve this body of information called knowledge		
8	"	K: 'that which is known'. KM: Presumably some kind of systematic manipulation of the construct	Unsure	N/A
9	**Sociology/ Anthropology/ Ethnomusicology**	K: Knowing, understanding, having organized and inter-related information KM: Organizing and disseminating knowledge.	Yes	Disseminating Knowledge (Publications; Conference/Seminars); Research, etc.
10	"	K: All information that could be utilized for the betterment of human life & environment KM: Devising the system of imparting knowledge to the users effectively	Yes	Research; Publication; Seminar; ect.
11	"	K: Information, experience; & understanding of mankind about himself & environment. KM: Acquisition, analysis categorization, conservation, and dissemination of information, experiences, and understanding about mankind and the environment.	Yes	Establishment of resource holdings (Resource room); Research; publication; Conferences; etc.
12	"	K: Sum total of mankind's experience and information … KM: Process of organizing and disseminating knowledge.	Yes	Research; Publications; Organizing and attending seminars.
13	**Computer Science & Engineering**	K: What human being learn about what is useful in life. KM: Organization of various documents containing useful information ….	Yes	Ordering subjects gradually; Research supervision.
14	"	K: A commodity that is translatable into useful activity for individual or national benefits. KM: Internal-classifying, memory, analysis, hearing, speaking. External-Filing, papers, books, database, ….	Yes	Papers; Research; Seminars; etc.
15	"	K: Accumulation of man's experience both empirical and ethereal. KM: Structured organization of the above	Cannot answer this ambiguous question	Cannot answer this ambiguous question

16	"	K: Information that we can use and apply for specific purpose. KM: Managing the information to gain the benefit.	Unsure	-
17	"	K: Receiving, organizing and assimilating useful information ……. KM: Recalling relevant appropriate knowledge from the storage area and applying it for the situation.	Yes	Equipping the laboratories; Preparing M.Sc. coursework; ect.
18	"	K: Truth about nature learned by mankind through the course of time. KM: How to generate, share, and use the assets of knowledge among employees	Yes	Conducting AI group meeting; Acoustic group meeting.
19	**Management Science**	K: Basically encompasses all forms of learning experience. KM: How you file your data, categorizing your memory or information …..	Unsure	_
20	"	K: Something valuable with respect to know how; Information; assured belief… KM: Controlling your valuable people and resources; motivating employees to maximize their potential and capabilities.	No	_
21	"	K: Acquiring something of interest. KM: Means by which knowledge is acquired and enhanced.	Unsure	Use of computer technology; Use of various pedagogy; Training.
22	"	K: Things that we know about-anything really. KM: How to structure those things that you know into useful things i.e. of use.	No	I don't think there is any.
23	"	K: A set of facts and information available for personal advancement in the society. KM: Proper planning & organizing – Cataloguing; transferring; propagating of knowledge among individuals in organisations	Yes	Archiving all paper & other knowledge output by staff; Training; Listing of research areas, etc.
24	"	K: Something valuable which provides continuous	Yes	Creating resource centre; Continuous training and development programs, etc.

		learning and skills for one to be more competent in their undertakings. KM: How you organize and transfer the knowledge.		

Note: K = knowledge   KM = knowledge management

It is clear from Table 1 that information management is what is done in knowledge management nomenclature. All the definitions and initiatives of KM are about information, information resource, and information sharing. None really managed knowledge (tacit), which all KM literature claims to be the thrust of KM and KM solutions. To think that all knowledge is either tacit or tacitly rooted (Polanyi, 1967), it is expected that KM initiatives and solutions should be about tacit knowledge. Unfortunately, what is dealt with is information management.

Some of the claims of the various domains of knowledge management such as, knowledge representations, knowledge mapping, and knowledge sharing are equally questionable. For example knowledge representations in the form of discoveries, inventions, etc are more often accidental than through a process of managed knowledge. From the travel of Venetian Marco Polo through Asia and Middle East in 1270, to the exploration of the West African coast by Henry the Navigator in 1430, the discovery of the Niger by Mungo Park, the discovery of the Sea route to India by Vasco da Gama, the discovery of the New World by Christopher Columbus in 1492, to the invention of electric light in 1878 by Thomas Edison, etc., its been a trial and error (eureka) affair rather than a managed process per se. Therefore the underpinning of discoveries and inventions as knowledge representation aspect of KM is shaky. Moreover, knowledge mapping-finding 'who know what' and linking knowledge repository to need areas in the organization is nothing other than keeping a directory of members of the organization and making available their contact and expertise information to those who need them. The exchange of ideas that is dubbed knowledge sharing can be better described as information sharing, since it is only that explicit aspect of knowledge (i.e. information) that can be shared, while the bulk of the knowledge remains tacit.

The disturbing aspect of the findings from the academia is that a vast body of pedagogical materials, research reports, seminar and conference presentations from this sector have contributed to the KM hype. Yet many use knowledge management as synonym for information management, or have knowledge management initiatives that handle information, or are confused between the terms. Why would academicians whose aim is to subject ideas to critical evaluation be sold to an idea that they are at best confused about? The question raises a very important future research direction.

CONCLUSION

The unavoidable conclusion of this analysis of the idea of knowledge management is that it is untenable. The nature, scope, method, and validity aspects of knowledge management are still so ill-defined and poorly understood that KM cannot be an emergent discipline. KM is, unfortunately, strongly connected in most literature with the productivity of intangible assets, yet this paper through a critical analysis of KM initiatives and responses from the academia finds that what is managed is information. KM is therefore an untenable notion because what we know simply cannot be captured or managed, thus the term knowledge management at best is inappropriate.

Data and information may be managed, as well as information resources, but knowledge (i.e. what is known) can never be managed, even by the individual knower who is imperfectly sure of what she/he knows. Often one is not sure of what she/he knows until such knowledge is required to accomplish a task. As Wilson (2002) put it, much of what we have learnt is apparently forgotten, but can emerge unexpectedly when needed, or even when not needed. Hence, we seem to have very little control over "what we know, not to mention organizations with different kinds of people, knowing, and knowledge having control over what their members know. Knowledge simply cannot be managed.

This analysis has very important significance to academicians and academic researchers. The KM hype has been fired by academicians many of whom, without any critical analysis joined the KM bandwagon set in place by management consultants and information practitioners as a way to elongate the product lifecycle of information management. For the two groups, repackaging IM into KM will attract higher premium (and it did) to their advantage, but for the academic community whose aim is to subject ideas to critical analysis and to teach it to students, it is unfortunate. No wonder Beckman (1989) lamented that university worldwide has changed from 'temple' to the 'factory'.

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Note: All the Web sites were visited between 28th April – 2nd May, 2003. To discuss this paper, e-mail at: olynel@hotmail.com.