IS KNOWLEDGE MANAGEMENT JUST ANOTHER FAD?

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Abstract

Knowledge management (KM) is of growing interest in today's business and academics. The increase in the number of books, articles, and conferences reflects that practitioners and academics alike are trying to improve theories and concepts proposed in the field in order to support KM programs better. On the other hand, there are voices criticizing current practices of KM and calling knowledge management just another management fad in the history of business operation. In addition to a review of the literature on knowledge management, this paper aims to identify viewpoints from both sides of the debates about the future of knowledge management.

1. Introduction

'Knowledge is power' is a familiar phrase. The term 'knowledge' here originally refers to an individual's knowledge and implies that individuals should increase their knowledge, so as to increase their power in the society. In recent years, this phrase vividly depicts what knowledge means to organizations.

Whether big or small, every organization thrives to the extent that it achieves its mission statement. As an organization seeks to reach its goal, there will be uncertainties and threats in the environment to impede, or even destroy, the process. For an organization to survive, it is crucial that it have a clear vision of its knowledge assets and how such assets can help it face the challenges of the business environment. Because knowledge is power, knowledge assets of an organization determine the success of its operations. The function of knowledge management (KM) is, as the words suggest, to manage the knowledge assets of an organization.

Knowledge management is not a radically new concept (Ponelis & Fairer-Wessels, 1998). Wiig (1997) reports that from 1986 to 1989, numerous studies appeared in management circle explicitly concerned with how to manage knowledge. They were mainly studies, resulting from corporate efforts and conferences on the topic. As interest grows and information technologies advance, there have been more intensive discussions of knowledge management over the past few years (Boisot, 1998; Grant 1997; Nonaka & Takeuchi, 1995; Stewart, 1997; Teece, 1998; von Krogh & Roos, 1996). Davenport et al. (1998) note that "knowledge" is at the center stage. KM attracts the attention not only of business professionals, but also of scholars and observers from other disciplines (e.g., communication, sociology, information science). However, in spite of the general recognition of the importance of organizational knowledge, there are voices arguing that it is not possible, or that it is very difficult, to manage organizational knowledge. In an attempt to answer the question the title of this paper asks, the paper begins with a literature review of what KM means and does. With the general understanding of KM, two streams of discussions and debates will be presented: those conducted among researchers and practitioners who believe that KM is the only way for organizations to survive in the competitive era, as well as those conducted by scholars and practitioners who argue that the idea of managing organizational knowledge is just a fad and will soon disappear.

2. What is Knowledge Management?

2.1 Origins of KM

To put the current state of KM in context, a brief historical review is helpful. In her review of KM as a management tool, Mårtensson (2000) traces the theoretical origins to KM and notes that the field of KM can be seen as an integral part of the broader concept of "intellectual capital" (Roos et al., 1998). Furthermore, Guthrie (2000) makes the distinction between KM and intellectual capital and states that KM is about the management of the "intellectual capital" controlled by the company. On the other hand, the empirical origins to KM include two fundamental shifts: downsizing and technological development (DiMattia & Oder, 1997).

Also in Mårtensson's review, it is stated that downsizing was the common strategy used during the 1980s to reduce overhead and increase profits. Organizations have realized that, as a result of downsizing, they have lost important knowledge as employees left and took the knowledge that they had accumulated over the years with them (Piggott, 1997). After the great loss of employees' valuable information and expertise, organizations were now determined to protect themselves against a recurrence (DiMattia & Oder, 1997). In other words, it is the recent history that brings knowledge management to center stage.

Organizations are trying to capture employees' knowledge with advanced technology, so that knowledge can be stored and shared easily for future use. Recent developments in information technology (IT) have affected the lives of both people and organizations (Mayo, 1998). The development of technology has accelerated the growth in the interest in KM because new technologies enable better management of knowledge (Lotus, 1995; Ruggles, 1997). In particular, technology has impacted the origins of KM in two ways: through the widening of accessible channels to information (e.g., the Internet), and through the rapid overall technological improvement. The excessive information available makes people feel overwhelmed and the purpose of KM is to cope with the explosion of information and to capitalize on increased knowledge in the workplace (DiMattia & Oder, 1997). The rapid advances in technology further enable global sharing of information without physical limitations and make it possible for organizations to use knowledge more effectively (Mårtensson, 2000, p. 208). As Blake (1998) states, capturing the collective expertise in a database can help organizations to "know what they actually know", and then exploit this knowledge in a systematic way.

2.2 Defining Knowledge

According to the literature, defining knowledge is not an easy task. Philosophers have been discussing this issue for several hundred years, and the search for a formal definition continues (Emery, 1997). One approach to the work of defining knowledge is to examine the characteristics of knowledge.

- Knowledge cannot be easily stored (Gopal & Gagnon, 1995). Knowledge resides in people's minds rather than in computers (The Banker, 1997).
- Knowledge is the combination of information, context, and experience; nothing can be knowledge unless it is internalized within a mind (Ponelis & Fairer-Wessels, 1998).
- Knowledge is shared among groups and communities through shared experience and through the transfer of knowledge, both tacitly and explicitly. Thus both individuals and communities come to have a pool of common knowledge (Taylor, 1996).
- Knowledge is a high value form of information that is ready to apply to decisions and actions (Davenport, De Long, & Beer, 1998).

Another approach is to differentiate between tacit and explicit knowledge (e.g., Polyani, 1966; Nonaka & Takeuchi, 1995; Guth, 1996; Tan, 2000). The researchers define the differences as follows:

- Tacit knowledge resides in the human mind and is therefore expressed in behavior and perception (Duffy, 2000). Tacit knowledge itself is hidden and thus cannot be easily represented via electronics (Nonaka & Takeuchi, 1995). Tacit knowledge is in people's minds in the form of insight and intuition (Tan, 2000). Tacit knowledge is the skills and 'know-how' developed through experience and training and it cannot be directly transferred to or shared with another.
- Explicit knowledge can be documented and is public; it is structured, fixed in content, externalized, and conscious (Duffy, 2000). Explicit knowledge is what being captured and shared through information technology. Explicit knowledge is formal, systematic, and explicitly recorded (Tan, 2000). Explicit knowledge can be easily shared through manuals and standard operating procedures.

The literature frequently refers to Nonaka and Takeuchi's (1995) spiral process of knowledge acquisition and creation. These two Japanese scholars describe a process that begins when people share their internal tacit knowledge with others by socializing, whether in digital or analogue forms, and continues as listeners internalize the knowledge and create new knowledge. When the newly-created knowledge is shared again with other people, the process of knowledge creation starts over again. On the other hand, Hibbard (1997) describes this process as innovation.

2.3 Nature of Organizational Knowledge

Different terms are used when referring to organizational knowledge, among which are 'intellectual capital', 'organizational memory', 'institutional memory' (e.g., Tan, 2000), 'knowledge assets', and 'intangible assets'. Organizational knowledge is comprised of corporate knowledge and shared understandings; it also has characteristics similar to individual knowledge. When knowledge moves from the domain of the individual to that of the organization, organizational progress is made (Gore & Gore, 1999). This is especially true when organizational knowledge is formed through patterns of interactions among technologies, techniques, and people (Bhatt, 2001, p. 70). In other words, knowledge may be gained by reading reports or other documents, by retrieving database records or other electronic information, by observing business processes or operations, by performing specific tasks, by participating in collaborative activities, or by a combination of these and other

methods (Saffady, 2000, p. 4). Nonaka (1991) argues that the organization is seen as a living organism and flourishes in redundancy, including the conscious overlapping of company information, business activities and managerial responsibilities (in Ponelis & Fairer-Wessels, 1998, p. 6). In light of Nonaka's viewpoint, knowledge generated by organizations can be used or reused at some other time.

As mentioned earlier, knowledge assets can be seen as the intellectual capital of an organization. Intellectual capital needs to be treated and managed like any financial capital. It is believed that organizational knowledge may be more important than physical and financial assets, such as buildings, machinery, and cash, which are listed in balance sheets and annual reports. This is also reflected in financial markets and affirmed in valuations of an organization's intellectual capital. For instance, when a knowledgeable executive joins or leaves a publicly traded company, its stock price typically rises or falls, which reflects the value of the executive's intellectual capital (Saffady, 2000, p. 6). Huang (1997) identifies the criteria for intellectual capital, discovering that it should:

- Be reusable in a variety of contexts
- Be a unique, innovative concept, approach, or solution applied to a client situation
- Create or enhance a methodology or technique
- Present a comprehensive summary of information.

Examples of intellectual capital may include items such as (Huang, 1997):

- Trademarks, copyright and trade secrets
- Best practices, know-how and heuristic rules
- Architectures, technology and business frameworks
- Project management documents (e.g., proposals, work plans, reports, meeting agendas, presentations, designs, instructional material and process maps).

2.4 Defining Knowledge Management

According to practitioners in the industry, although KM is an emerging discipline, there is as yet no agreed-upon standard industry definition (Ives, Torrey, & Gordon, 1998, p. 273). Furthermore, the potential uses, features, and benefits of the current incarnation of KM are still being defined (Ives, Torrey, & Gordon, 1998, p. 269).

Davenport et al. (1998) define four categories of objectives based on their review of the projects they have examined. They find that the objectives of KM are to create knowledge repositories, improve knowledge access, enhance the knowledge environment, and manage knowledge as an asset. King (1999) believes that the "core" of KM should involve "the acquisition, explication, and communication of mission-specific professional expertise in a manner that is focused and relevant to an organizational participant who receives the communication" (p. 70). To operationalize his definition, King further describes the essence of KM as the ability to capture and share focused and relevant knowledge in a timely fashion. In other words, an individual will be able to acquire his/her mission-specific knowledge at an appropriate time without incurring large search costs. King also draws a boundary for mission-specific knowledge. For example, general information such as industry sales trends is not considered as an element of KM. Instead, only knowledge and information that has a direct impact on the professional expertise of the mission of the business is appropriately considered to be an element of the core of KM (p. 70).

Bhatt (2001) defines KM as a process of knowledge creation, validation, presentation, distribution, and application (p. 71). Knowledge creation refers to the ability of an organization to develop novel and useful ideas and solutions (Marakas, 1999, p. 40). Knowledge validation refers to the degree to which a firm can "reflect on knowledge and evaluates [the] effectiveness of the existing organizational environment" (Bhatt, 2001). Knowledge presentation refers to the ways knowledge is displayed to the members of organizations. Knowledge distribution means the sharing of knowledge, and knowledge application means the deployment of knowledge in a company's products, processes, and services.

Tan (2000) suggests that for most people knowledge is usually gained from experience. While it will be time-consuming and costly to do, the most efficient way for employees to gain knowledge is to learn from others. Lessons learned by one person can be captured and shared by the practices of KM. Therefore, Tan defines KM as the process of systematically and actively managing and leveraging the stores of knowledge in an organization. To a certain degree, KM is similar to an inventory control in an organization, so that employees can know where the knowledge is and how to find it when needed.

In the learning organization context, knowledge management can be seen as the management of what has been acquired through organizational learning (Ponelis & Fairer-Wessels, 1998, p. 5). For example, by comparing the practices of gas compression in its various fields, a Chevron team learned that it could save $20 million a year by adopting the best practices in the field (Bhatt, 2001). Also, it is noted that with the implementation of Lotus Notes and making a central group to capture and distribute information throughout the organization, Price Waterhouse significantly improved its documentation process (APQC, 1999).

A number of authors have stressed the benefits of KM as a quality strategy (Wiig, 1999; Lim, Ahmed, & Zairi, 1999). These include the fact that organizations can build an increasing competence to provide improved services and products; also,

an organization will be able to develop a broadening capability to create and deliver new products to new markets. On the other hand, organizations should experience faster organizational and personal learning by "better capture, retention, and use of innovations, new knowledge, and knowledge from others and from external sources" (Wiig, 1999, p. 160); there should be less loss of knowledge through personnel attrition; and more knowledge workers will have effective access to relevant expertise in organizations. KM benefits operation areas by providing employees access to better knowledge, so that they can apply needed knowledge in a timely fashion, which will lower operating costs by limiting the number of operational errors, speeding up the work, etc. (p. 161). Empirical data also showed that KM programs do bring financial value to companies. A Management Review survey found that 78% of the respondents said KM has augmented customer satisfaction levels, 60% said it has improved employee satisfaction, and 59% said it has led to product or service innovations. Moreover, 60% of companies with effective programs said that intangible assets are reflected in their market value (Wah, 1999).

3. The Importance of Knowledge Management: KM Will Stay, Because…

Several writers have addressed the issue of whether KM is just another management fad (e.g., Wiig, 1997; Coles, 1999; Rowley, 1999; Lev, 2000; Blake, 2000, etc.). An examination of the literature reveals that there are a number of reasons for believing that KM is far from being a fad. Three major reasons make KM promoters believe that it will stay and have a great impact on organizations. First, advanced technologies have made things possible. In particular, for many researchers in KM, recent technologies have brought KM from a theoretical level to a practical level, where previous theories can be not only talked about but also be tested in actual practice. It is believed that knowledge should be retained as much as possible, whether explicit or tacit, and information technology plays an important role as an enabler for that to happen. Second, it is widely recognized that the 21st century we live in is a knowledge economy. Companies that do not value and manage their organizational knowledge will soon lose their competitiveness in the global marketplace. Therefore, KM is not just another fad that will disappear soon; instead, only KM can ensure that companies remains competitive. Lastly, and most importantly, research studies reveal that a high percentage of companies surveyed recognized the importance of KM and how they can be benefit from it. Interviews with chief executives revealed the same enthusiasm toward KM. In addition, numerous cases around the world have illustrated the significance of knowledge management and have proposed KM models that have been working in the real world. Companies in North America, Europe, Asia, Australia, etc. have been able to demonstrate how they achieved the desired efficacy of KM. The following sections discuss in greater detail these major reasons why KM will stay.

3.1 Advanced Technology

In reviewing the history of knowledge management, Ives, Torrey and Gordon (1998) find that there is little difference between the purpose of modern KM and that of the racks of clay tablets used in ancient Mesopotamian cities (p. 272). In other words, the essence of KM remains the same (Ives, Torrey, & Gordon, 1998; Tan, 2000); it is the enormous volume and both the ease and speed of retrieval which have changed over the centuries, and of course there has been a total transformation of the workplace. Technologies help bring the right information to the user instantaneously, wherever the person is located. Two modern electronic technologies enable this automated process: computer databases and networking technologies. Computer databases can store enormous amounts of information, while networking technologies accelerate the movement of information (Ives, Torrey, & Gordon, 1998). Pieces of information can be transferred within an office on an intranet and then to the outside world around the globe via the Internet.

The first efforts to enable this transfer included Electronic Data Interchange (EDI) and electronic mail. Later, new and more sophisticated software systems were developed leading to what became known as a collaborative system or 'groupware', such as Lotus Notes. With these new technologies, knowledge capture and refinement capabilities through electronic dialogues are greatly increased. According to Ives, Torrey, and Gordon (1998), who work in Anderson Consulting, the technologies that underlie Knowledge Management Systems usually consist of an electronic network, which supports groupware, web technologies, or some combination with electronic mail. Basically, there are two types of groupware tools: synchronous tools and asynchronous tools. Synchronous tools may include calendar and scheduling tools, electronic meeting systems, electronic whiteboards or data conferencing, and chat tools. They allow two or more people to work together simultaneously, regardless of their physical presence. Asynchronous tools also enhance the collaboration between colleagues at different times and in different ways. Examples of such tools are e-mail, knowledge repositories, group writing, document editing tools, and workflow tools (p. 273). Tan (2000) also states that explicit knowledge existing in the form of documents and the use of intranet technologies is the key method in making these documents, both hardcopy and softcopy, readily available. These examples illustrate that information technologies play a major role in realizing KM practices in terms of supporting KM technically as well as improving communication channels. It should be noted that in the thinking of many researchers and practitioners, IT is not the absolute core of KM; but frankly, it will be very difficult to carry out a KM program efficiently without IT.

3.2 Gaining Global Competitiveness in the Knowledge Economy

A survey conducted by the Journal of Knowledge Management reveals that 92% of the responding executives indicated that they worked in knowledge intensive organizations (Chase, 1997). For many years it has also been recognized by futurists, economists, and academics that the world is moving towards a global "knowledge economy" (Chase, 1997, p. 38). Many researchers described that the world is in its transition from a post-industrial to a knowledge-based economy (e.g., Drucker, 1993; Sveiby, 1997). As the economic is changing and reshaping, so is the entire business world (McKern, 1996).

A number of authors have articulated that one sure source of sustainable competitive advantage is knowledge (e.g., Tan, 2000). Drucker (1993) argues that in the modern economy, knowledge is the most important resource, even more important than labor, capital and land. Toffler (1990) stresses that the role of knowledge is the source of growth for economies. Quinn (1992) also shares the view of knowledge as a prime resource in the 21st century economy. He suggests that knowledge is the new power base of the modern corporation and the value of most products and services depend heavily on how "knowledge-based intangibles" (e.g., technological know-how, product design, understanding of the customer, personal creativity, etc.) can be developed. A Management Review survey conducted in 1998 confirmed that confidence in KM is a strategy that will offer a competitive edge in the future. Also, 79% of the respondents believed that KM is vital to their companies' future success. Buckley & Carter (1999) emphasize that in the current explosion of interest in KM there is a strong linkage between the process of managing an organization's knowledge assets and the global competitiveness of the organization. The competitive business environment drives organizations to think of innovative ways, in particular with the use of information technology, to gain competitive advantage and thus create more knowledge.

The widespread view among management gurus is that knowledge is of central importance to an organization. Well-known writers of KM suggested there is little doubt with regards to the importance of KM and that organizations need KM. According to Hibbard (1997) and Watson (1998), KM can streamline inefficiencies and create millions in sales and product development (DeTienne & Jackson, 2001). Therefore, the question is not whether KM is important; rather, it is a question of how to achieve the desired goals of KM. The following sections review selected KM cases and research studies that illustrate KM practices in real life.

3.3 KM in Practice

Research has reflected organizations' perception of KM. A 1997 survey of 200 U.S. corporations revealed that over 80 percent of respondents have KM initiatives in place or under development. A survey by Ernst and Young revealed that 94% of the respondents admit that they could better use the knowledge in their companies through more effective management, 40% have KM systems up and running or under development, and 25% have plans to develop KM strategies in the next year (Hibbard, 1997, p. 2; Evans, 1997, p. 2). Furthermore, the survey showed that several organizations have appointed a Chief Knowledge Officer (CKO) to create and promote knowledge-oriented cultures and programs (Saffady, 2000, p. 8). A study by the Delphi Consulting Group Inc., including 36 vendors and over 650 evaluators and users of KM solutions, found that 28% of companies were using some form of KM, and a further 70% anticipated using it within the next four years (Rowley, 1999; Hibbard & Carrillo, 1998).

Early adopters of KM, such as Buckman Laboratories, the Canadian Imperial Bank of Commerce, Dow Chemical, Hewlett-Packard, Monsanto, Shell Oil, Skandia Insurance, and Steelcase, etc., praised KM initiatives and thus promoted growth of KM interests and imitators. Buckley & Carter (1999) report that in their study, managers expressed great interest in other companies' efforts in KM. It is clear that processes that are successful in one company may not work in another company; however, managers are interested in learning other companies' approaches and experiences in implementing KM despite the differences among the types of companies. The following examples illustrate how KM works in different types of organizations.

It is reported that KM had its start in the Big Six Consulting firms (Platt, p. 407). For consulting firms, knowledge is the principal product. Price Waterhouse built a networked global information system that can collect, analyze, and store data from its worldwide staff. Tan (2000) reports that KM benefits the company so that its consultants can collaborate, consultants with desired experience of any assignment (as a form of tacit knowledge) can be quickly identified, and the formalization of institutional memory can be facilitated. At Ernst & Young, the firm's KM initiative has actively engaged in experience sharing, in which consultants leverage what others learn and apply that knowledge to the problems of other clients (Wah, 1999). According to the Director of Ernst &Young's Center for Business Knowledge, over the six years that KM has been in place, knowledge sharing has been the unsung hero of much of the firm's improved business performance. For example, from 1993 to 1998, the firm grew more than 300% in revenues. Among other explanations, at least a portion of the increased productivity can be attributed to KM, said the Director (Wah, 1999).

At Xerox Corp., knowledge management is composed of 90% of social process and 10% infrastructure. The company launched Eureka, a "social tactical system" in 1996, which links 25,000 field service representatives. With laptops, the Internet, and a common documentation method, Eureka facilities lateral communication. Tips on how to fix machines are

constantly contributed and updated by the field service representatives. The process of using Eureka for lateral communication resulted in 5% savings on both parts and labor. Generally, service representatives access Eureka for more than 5,000 tips a month and new tips are generated at the rate of about one per 1,000 service calls (Wah, 1999).

British Petroleum (BP), an oil and gas company, is one of the most advanced practitioners of knowledge management in the world. BP's KM practice started in 1994 as an informal program and has resulted in significant business improvements. By sharing knowledge among project engineers in Europe, a joint venture with Bovis saved BP $74 million. This knowledge is being leveraged later on a global scale in the new markets of Venezuela and Japan. It is estimated that the company's ongoing KM efforts will add another $400 million in value to sustainable projects (Wah, 1999).

The Word Bank, an example of a non-profit organization, has benefited from knowledge sharing as well. Experts around the world are connected through "community of practice" within the bank. The World Bank experts in Argentina and Jordan helped contribute to the new technology for Pakistan's deteriorating highway systems without taking months to visit the country and write up reports, which is how the bank did it in the past. The task manager attributed the ability to quickly gather global experience and apply it to Pakistan's need to the links among virtual communities (Wah, 1999).

A number of KM case studies in European organizations are recorded in Knowledge Management: Best Practice in Europe. It is worth mentioning this pioneer in reporting intellectual capital— the Swedish insurance company Skandia. Skandia was the first to publish a report on its intellectual capital called "Visualizing Intellectual Capital in Skandia" as a supplement to its 1994 annual financial report (Heisig, Vorbeck, &, Niebuhr, 2001, p. 61). The chapter describes how the company managed to "visualize" and "quantify" its intellectual capital. Also, the authors provide detailed discussion of how Skandia categorized and measured the components of intellectual capital (pp. 62-72).

4. The Challenges of Knowledge Management: KM Will Go Away, Because...

Recognizing the problems and challenges of realizing KM, there are issues that concern KM critics. Fundamentally, even for people who believe that KM is just another fad agree with the idea that knowledge is an important asset to a company and that intellectual capital should be valued and protected. However, they doubt if knowledge can really be managed and criticize that current KM practices are actually not performing the job properly, i.e., a lot of KM programs are failing to capture, share, and distribute the right knowledge to the right person at the right time. Even though KM critics are not opposed to the why of practicing KM, given the diverse emphasis and approaches of current KM theories and projects, the how concerns them. KM critics argue that KM approaches are too diversified to work, so for those who did not make the right choice among the different emphasis and approaches, their KM programs will eventually die. Also, KM gurus are promoting a culture of knowledge sharing within organizations. Critics argue that while the idea is attractive, it is a very difficult and a challenging task to encourage people to share their knowledge. Another concern of critics is that presently most KM programs focus mainly on information technologies to capture explicit knowledge into the database and deploy network technologies to share and distribute such knowledge, but the core essence of organizational knowledge is tacit knowledge, which cannot be easily captured, codified, and shared. In our focus on technology rather than people, we routinely neglect to cultivate access to the source of tacit knowledge—people's minds. This worries KM critics. I will explore these issues and concerns further below.

4.1 A Variety of Foci and Approaches

There is a great variation in terms of the focus of KM found in the literature. These variations partially contribute to KM critics' argument about KM being a fad. As Wiig (1997) states, "The Knowledge management focus varies considerably depending upon which societal or enterprise level is involved" (p. 12). Heisig and Vorbeck (2001) found in their Benchmarking Survey of the German top 1000 and European top 200 companies that "most companies start with knowledge management initiatives within the business areas they consider to be their core competence" (Heisig, 2001, p. 23).

Alternatively, the companies directed the appropriate business area in which they thought knowledge management should be initiated. In other words, there is no "canned", or formal, model and approach for KM practitioners to follow. Some observers equate KM with the development of computer databases, data warehouses, and other automated information systems. Some KM experts consider human resources' viewpoint and equate KM with managing employees' experiences and expertise. Other professionals who have educational background tend to emphasize the effectiveness of KM on organizational learning. Their belief is that promoting organizational learning can maximize employees' talent and knowledge. For instance, Argyris (1992) argues, "the more effective organizations are at learning, the more likely they will be at being innovative". Still other professionals, who are interested in interpersonal dynamics, promote knowledge sharing through collaboration among employees (e.g., Lang, 2001). Critics argue that such variations in KM approaches give the field wide boundaries that are difficult to define (Saffady, 2000).

Chase (1997) also notes that while organizations recognize the importance of creating, managing and transferring knowledge, so far they have been unable to translate this need into organizational strategies (p. 48). In the same article, Chase describes that the 'best practice' organizations are experiencing great difficulty in translating KM theory into practice.

4.2 A Cultural of Knowledge Sharing

As Nonaka and Takeuchi (1995) emphasize, to direct individual knowledge for the organizational purpose, organizations should develop and nurture an environment of knowledge sharing among its members. However, changing the corporate culture is extremely challenging (Tan, 2000). The key challenge of knowledge sharing is to encourage people to reveal tacit knowledge that they may have acquired the hard way or through painful learning experience. Theoretically, to share knowledge is not a natural thing for most people to do.

According to Ernst & Young, 56% of executives believe that changing people's behavior is one of the critical implementation problems in KM (Glasser, 1998). An international survey also reported that "only 6% of the respondents reported that their organizations currently were 'very efficient' at leveraging knowledge to improve performance" (Chase, 1997, p. 48). Research conducted by Delphi indicated that cultural issues are the largest obstacles to implementing successful KM strategies (Hibbard & Carrillo, 1998; DeTienne & Jackson, 2001). McDermott (1999) states explicitly that the "difficulty in most knowledge management effort lies in changing organizational culture and people's work habits".

A similar statement is found in Angus et al (1998) that "knowledge management implementation requires a shift in philosophy for most organizations- not only in how people work, but more importantly in how they behave and interact with each other" (Angus, Patel, & Harty, 1998). In Bhatt's view, the essence of KM is to change corporate culture and business procedures in order to make sharing of information possible (2001, p. 73). It is one of the critical tasks of KM to coordinate different sources of knowledge through information exchange and sharing. Only by changing organizational culture, can an organization gradually change the pattern of interaction among people, technologies, and techniques (Bhatt, 2001).

4.3 The People Aspect

Deploying technology to organize and deliver knowledge will remain important, because consulting firms like Anderson Consulting or IBM Consulting could not have the global reach without technology (Lang, 2001, p. 44). Similarly, without video-conferencing networks, global enterprises could not have solved problems with dispersed branches and offices around the world. However, Lang (2001) stresses that IT does not equal to KM. Other researchers specifically assert that laptops, desktops, local area networks (LAN) and wide area networks (WAN) do not capture, share, and transfer the intangible knowledge (Lim, Ahmed, & Zairi, 1999). She argues that most existing KM projects are too info-centric (p. 48). Further, she points out that what is happening now with many firms trying to store corporate knowledge on huge database servers is similar to the French encyclopedists' error in thinking that all human knowledge could be put into one big book. The difference is that these electronic repositories of knowledge are like some giant hyperlinked encyclopedia. Besides, many current KM efforts are focusing on new IT applications, while paying less attention to tacit knowledge, which is held in people's minds, often unarticulated, and is not easy to codify (p. 49).

Instead, Lang argues that KM efforts should recognize that "business and economic forces are increasingly disrupting the social nature of the workplace where tacit knowledge lives and thrives" and must focus more on enhancing interpersonal interaction and social relationships within which tacit knowledge can be expressed and shared. Also, since formalized representations of employee skills and work processes may not adequately express the true nature of what is actually experienced, corporate knowledge must be encoded, archived, and recovered in relation to actual contextualized activities in the social world as Lang (2001) suggests. To achieve this, IT should ensure that sufficient context is captured to accompany entries in the database. But with this approach, critics believed that even as contexts get richer, encoded knowledge may still be misinterpreted or ignored (Shum, 1997, p. 3; Lang, 2001, p. 49).

It is a well-accepted notion that technology is necessary for the orderly storage, retrieval, and sharing of knowledge. However, "[p]eople are the primary source of knowledge and technology the secondary" (Ponelis & Fairer-Wessels, 1998, p. 6). Studies show that ITs alone cannot change fundamental mental processes; they can only reinforce existing norms and folkways of sharing information or insights, and building on each other's ideas (Lynne & Marcus, 1997; Alvesson, 1993). Bhatt stressed that IT, at best, can be used to turn data into information, yet it is only through people that information can be interpreted and turned into knowledge (2001, p. 73). Elevating IT as a magic bullet may de-emphasize what matters the most, i.e., people working for organizations (Strassmann, 1997).

5. Is Knowledge Management just Another Management Fad? A Discussion

A similar question was asked by Rowley (1999): "Is knowledge management just another new management fad […]? Or, is knowledge management a useful metaphor or a new discipline that supports organizations in the environment facing them at the beginning of the twenty-first century?" (p. 416). Without giving an answer, she raised more questions at the end and noted that there will be no simple answers for those questions asked. Even with many questions unanswered, she concluded that there is no doubt that organizations need to develop the strategy in order to survive in a knowledge-based, global marketplace (Rowley, 1999, p. 419). In addition, Karl-Erik Sveiby, the founding father of the concept of "knowledge organizations" stated, "knowledge management is not about yet another operational efficiency fad. It is about the strategy of

the company" (Wah, 1999). Further, studies showed that, as the understanding of KM gradually increases, fewer and fewer companies consider KM to be a passing trend. KPMG knowledge management study conducted in early 1998 revealed that only 2% of respondents considered KM to be a fad, compared to almost 33% in a similar survey done in 1997 (Wah, 1999). It is clear that both theorists and practitioners in the field are trying to answer some tough questions in hopes of improving existing KM practices.

Indeed there are different approaches to KM. Some may succeed and some may fail during the trials. Davenport (1999) believes that any time a new management concept appears in organizations, it frequently begins as "a somewhat separate entity from the mainstream of business". He also stresses that this separateness is necessary to demonstrate to organizational members that "the concept is truly new and different from the activities pursed in the past" (p. 2-1). In other words, the unintegrated phenomenon in the early phase of KM initiatives is a natural process. On the other hand, it is also healthy and natural for different communities and professionals to come to the same field and take different perspectives to tackle a problem. These professionals with different backgrounds contribute to different aspects of KM with their own specialties, which in turn enriches the theoretical foundation as well as practical cases in KM. This not only generates new understandings and knowledge of KM, but also broadens KM practitioners' perspectives. As different organizations may have different KM objectives (as stated above), different focus or approach should not impede the implementation of KM; instead, they provide executives more choices as to what can best serve each organization's purpose. In brief, while there is no "silver bullet" for managing and sharing knowledge (Allee, 1997), the most effective strategies include "filtering knowledge, strengthening corporate philosophy, and facilitating effective communication" (DeTienne & Jackson, 2001).

Several factors challenge the implementation of KM. Still, it is generally believed that the inevitable utility of KM is beyond question. Looking from a different perspective, these challenging issues simply indicate areas that KM practitioners need to pay much attention to. For instance, when considering the issue of capturing tacit knowledge, managers may find it difficult, but it is not undoable. Tacit knowledge can be converted into explicit knowledge, as Tan (2000) suggests, by setting up procedures to capture knowledge derived from experience (such as in executing a project) or from solutions to problems reported by customers. In this regard, people and technology can and should work hand in hand to achieve the optimal result in converting tacit knowledge into explicit knowledge. Similarly, it should be recognized that technology alone is no sufficient as a mechanism of sharing knowledge; instead, technology will serve to support the sharing of knowledge (DeTienne & Jackson, 2001). When carrying out KM programs, executives should be careful of the balance and the interaction between IT and people, and thus should be aware of IT's strengths as well as limitations, integrating the best of IT to capture, store, and distribute information quickly. They should also acknowledge the role 'people' play in KM as well; after all, it is people who can interpret information and turn that into knowledge. On the other hand, an environment that encourages knowledge sharing is essential. Research shows that such an environment of sharing can be built by both expectations and incentives. For instance, Buckman Labs made knowledge sharing a top criterion in employee promotion (Buckman, 1998). Verifone Corporation has an explicit top-down expectation in their knowledge-sharing practices (Trussler, 1998). If upper-level management fails in proactively structuring such an environment, the destiny of KM within a corporation will be to become the fad its critics claim it is.

In an article entitled "What future knowledge management users may expect", Wiig (1999), the Chairman of Knowledge Research Institute in Texas, predicts a number of developments in coming years: that KM will become more people-centric; that incentives will be used to promote innovation, effective knowledge sharing, learning, and the application of the best knowledge in all work situations; that comprehensive approaches to create and conduct broad KM practices will become the norm; that KM will be supported by new developments in artificial intelligence (AI) (e.g., intelligent agents, natural language processing, knowledge representation and ontologies); and that IT will continue to bring considerable change to many KM procedures (p. 158-159, 160). To conclude, there is still much room for improvement in KM. Organizations can start with a focused, small division to try out KM and adjust its movement along the way. Organizations can create a knowledge-sharing environment and gain a competitive edge by carefully examining the "why" of knowledge management and taking a practical approach to the "how" (DeTinne & Jackson, 2001).

6. Concluding Remarks

Peter Drucker (1989) once stated that "knowledge has become the real capital of a developed economy". His idea did not achieve general acceptance until 11 years later. Fad or not, great notions survive through stages. Only time tells whether something can go through challenges at different stages and become one of the "must-haves" in business management. However, by examining the key issues and concerns, organizations can gain proper understandings and expectations of KM. Unrealistic expectations will be costly to companies. There is no doubt that KM has its importance in most organizations, but still, each organization is unique and should choose a practical KM approach. It is essential that the organizations carefully manage their knowledge assets and reuse them to achieve greater progress. This paper discusses two sides of the arguments concerning whether or not KM is just another fad, revealing both the importance and challenges of KM. At the current stage, the conclusion of this study is that even though much still needs to be done, empirical evidence has proved that KM is a

promising and important area. As Wiig (1999) concludes, in spite of all present challenges and limitations, KM is already very useful.

References

References available upon request from Shu-Yi Chen.