

Knowledge Management: Conceptual Perspective and its Application

Nency¹

¹Assistant Professor,
Ganga Institute of Technology & Management,
Kablana, Jhajjar (Delhi NCR)

Knowledge management has become an important success factor for organizations. Knowledge management strives to make the most out of the knowledge that is available to an organization, generating understanding, incrementing awareness and knowledge in the process. Knowledge management is an evolving discipline. While knowledge transfer (an aspect of KM) has always existed in one form or another, formally through apprenticeship, the maintenance of corporate libraries, professional training and mentoring programs, and since the late twentieth century — technologically through knowledge bases, expert systems, and other knowledge repositories. Knowledge management involves a strategic commitment to improve the organization's effectiveness, as well as to improving its opportunity enhancement. The goal of knowledge management as a process is to improve the organization's ability to execute its core processes more efficiently. Knowledge management is the set of proactive activities to support an organization in creating, assimilating, disseminating, and applying its knowledge. Knowledge management is a continuous process to understand the organization's knowledge needs, the location of the knowledge, and how to improve the knowledge. The present paper is completely a conceptual paper and describes the objective, goals, importance and its applications in the real world.

Key words: Knowledge management, Goals & objectives, Knowledge management chain, Knowledge management applications.

II. OBJECTIVES OF THE PAPER

1. To know the concept of the knowledge management.
2. To know the importance of the knowledge management.
3. To know about the chain of knowledge management.
4. To acquaint myself with the applications of knowledge management in real world.

III. GOALS AND OBJECTIVES OF KNOWLEDGE MANAGEMENT

Knowledge management involves a strategic commitment to improve the organization's effectiveness, as well as to improving its opportunity enhancement. The goal of knowledge management as a process is to improve the organization's ability to execute its core processes more efficiently. Davenport et al. (1998) describes four broad objectives of knowledge management systems in practice:

- Create knowledge repository

I. INTRODUCTION

“A little knowledge that acts is worth more than much knowledge that is idle.”

Kahlil Gibran, The Prophet

Knowledge Management (KM) refers to a range of practices and techniques used by organizations to identify, represent and distribute knowledge, know-how, expertise, intellectual capital and other forms of knowledge for leverage, reuse and transfer of knowledge and learning across the organization. It suffices crucial issues on organizational adaptation, survival, and competence threatened by unpredictable environmental change. Generally, it represents the organizational processes that aim synchronous coalition of data and information processing capacity of information technologies, and the ingenious capacity of human beings. In simpler terms, knowledge management strives to make the most out of the knowledge that is available to an organization, generating understanding, incrementing awareness and knowledge in the process. Knowledge management is an evolving discipline. While knowledge transfer (an aspect of KM) has always existed in one form or another, formally through apprenticeship, the maintenance of corporate libraries, professional training and mentoring programs, and — since the late twentieth century — technologically through knowledge bases, expert systems, and other knowledge repositories.

- Improve knowledge assets
- Enhance the knowledge environment
- Manage knowledge as an asset

The key to knowledge management is capturing intellectual assets for the tangible benefits for the organization. As such, imperatives of knowledge management are to:

1. Transform knowledge to add value to the processes and operations of the business leverage knowledge strategic to business to accelerate growth and innovation
2. Use knowledge to provide a competitive advantage for the business.

The aim of knowledge management is to continuously improve an organization's performance through the improvement and sharing of organizational knowledge throughout the organization (i.e., the aim is to ensure the

organization has the right knowledge at the right time and place). Knowledge management is the set of proactive activities to support an organization in creating, assimilating, disseminating, and applying its knowledge. Knowledge management is a continuous process to understand the organization's knowledge needs, the location of the knowledge, and how to improve the knowledge.

IV. WHY KNOWLEDGE MANAGEMENT?

Before we start to explore and understand the details of what knowledge management is, and how to implement knowledge management projects and initiatives, we need to first ask ourselves why we want to consider knowledge management in the first place? The following are the main reasons for the importance of the knowledge management.

- *The Knowledge Economy is the next booming economy in a world of recession:*

In a world that is facing economic recession many are starting to ask 'What is going to be the next booming economy, what are its characteristics and, how will it help us to grow out of recession?' At knowledge-management-online.com we strongly suggest that the next booming economy is already here! It's the rapidly growing global knowledge economy! More individuals, teams, organizations and inter-organizational networks will be restructuring and renewing themselves with the primary purpose of profitably trading their knowledge to add even higher value, predominantly on the World Wide Web. Already we see more enlightened organizations developing and applying the knowledge they have about their industry, customers, partners and stakeholders, as their prime strategic asset, and at the highest point in the value chain. And many are becoming less involved, and more open to profitably outsourcing the other business operations. Around the world we hear automobile companies talking far more about their critical and key knowledge areas of design, knowledge of manufacturing, knowledge of distribution, knowledge of service and support etc as their 'crown jewels' or 'master recipe'. Based on applying this key knowledge they then outsource the other business components. We hear the same from the aerospace industry, the oil and gas industry, the information technology industry, the food and agricultural industry, the healthcare industry, in fact most, if not all, industries. Our knowledge mantra is 'know and apply what you know the best, and link to the best of the rest: Knowledge has become the key strategic asset for the 21st Century and for every organization that values knowledge it must invest in developing the best strategy for identifying, developing and applying the knowledge assets it needs to succeed. Every organization needs to invest in creating and implementing the best knowledge networks, processes, methods, tools and technologies. This will enable them to learn, create new knowledge, and apply the best knowledge much faster. Every individual who wishes to successfully participate in the rapidly growing global knowledge economy must now consider the development of their personal knowledge management competencies as an

'essential life skill' for the 21st Century. It has been said many times, 'knowledge will radically and fundamentally transform economies'. One thing is absolutely certain in this rapidly changing world.

- *The best knowledge will always be in demand:*

In, say, fifty years time you can be certain of one thing. Leaders of economies, industries and organizations will always be very interested in finding new and better ways to create and apply knowledge.

- *Effective Knowledge Management is a timeless and changeless principle:*

The strategies, methods and tools of knowledge management will undoubtedly change, but the timeless principles will, of course, remain unchanged. And to survive and succeed in the new global knowledge economy, we must become far more effective and more productive. We must always strive for the best relations and highest quality. To do that, the successful organizations and individuals will not allow themselves to keep 're-inventing the wheel' or 'repeating the same mistakes. This is so costly and, we suggest that good leaders will simply not tolerate, nor be able to afford, such cost inefficiencies caused by knowledge gaps and bad knowledge flows. Would the global financial crisis have been prevented or minimized with far more effective global knowledge management? Finally, those individuals and organizations that can best sense, become quickly alerted to, find, organize, and apply knowledge, with a much faster response time, will simply leave the competition far behind. All of this can only be achieved through good knowledge leadership that understands the unchanging timeless principles for knowledge, that transforms individuals and organisations to become far more responsive and effective players in a growing knowledge economy.

- *Knowledge Management is for everyone.*

Global and/or Planetary Knowledge Management is becoming a reality today.

It is our belief that the knowledge economy is rapidly becoming the largest and most successful and sustainable economy in the world.

V. THE KNOWLEDGE CHAIN

Fundamental to the practical definition of knowledge management is the concept of the knowledge chain. The knowledge chain was first recognized by Koulopoulos, Toms and Spinello in doing research for their book *Corporate Instinct*. There are four links in the knowledge chain that determine the uniqueness and longevity of any organization.

These four links are:

- Internal Awareness;
- Internal Responsiveness;
- External Responsiveness; And
- *External Awareness.*

The knowledge chain (K-chain) is a series of interactions that constitute an organization's cycle of innovation. Knowledge management creates permeability between the four cells of the K-chain and accelerates the speed of innovation. The ability to quickly traverse through the four cells of the knowledge chain is the essence of the benefit of knowledge management.

- *Internal awareness*

In its simplest terms, internal awareness is the ability of an organization to quickly assess its inventory of skills and core competency. It is the awareness of past history in terms of talent, know-how, interaction, process performance, and communities of practice. Strong emphasis on functional organization structures, which often permeate traditional companies, inhibits the development of internal awareness. Organizations with a rigid functional structure most often define their core competency as their products and services, not their skills. Strong internal awareness is built on an ongoing challenge of what is done and a focus on what is possible.

- *Internal responsiveness*

Internal responsiveness is the ability to exploit internal awareness. An organization may be well aware of its strengths and market demand, but if it is not able to adequately effect change within itself quickly enough to meet market requirements, its competencies are virtually moot. In a study conducted by Delphi Group of 350 respondents, 30 percent indicated that they had greater external awareness than internal responsiveness. In other words, these organizations felt that

“we are better at understanding the market than we are at rallying and coordinating our own resources in response.”

No wonder 50 percent of respondents to the same survey indicated that a good idea had more chance of resulting in a new startup or ending up at a competitor before their own organization acted on it. Internal responsiveness considers how quickly competencies can

be translated into actions to bring a product to market or respond to a customer need. There's no point in responding quickly, though, if it's too late. Reengineering, for example, is often little more than overcompensation for a company's inability to respond to a series of small market shifts over an extended period of time. It must be stressed that successful KM is the coordinated

ability to exercise internal responsiveness based on what is known via continuous awareness (both external and internal) and perception through all levels and functional areas.

- *External responsiveness*

Simply put, external responsiveness is the ability to best meet the requirements of the market. When all is said and done, an organization's ability to better satisfy this cell in the knowledge chain than its competitors will determine its success or failure. External responsiveness is measured by the ability to effectively respond to opportunities and threats outside of the organization in a timely manner. This is the essence of competitive advantage – a level of

responsiveness to environmental conditions that is significantly faster than that of its competitors.

- *External awareness*

External awareness is the mirror image of internal awareness. It is the organization's ability to understand how the market perceives the value associated with its products and services, to understand who are its customers, what those customers want, who are their competitors, competencies of competitors, market trends, competitive actions, government regulations, and any other relevant market forces that exist outside the organization itself. When coupled with internal awareness, external awareness may lead to entirely new markets. External awareness is one of the cornerstones of the Internet, where new business models are sprouting up at an unprecedented pace. The velocity of the Internet provides an incredible opportunity to act upon the market's reaction to new products. However, new models for capturing market responses are just as critical. For example, Amazon.com's ability to capture buying trends of many book buyers and then use these to suggest books with similar themes and authors is the very essence of external awareness coupled with external responsiveness. A body of knowledge (customer buying habits) is productized and offered as a value-add, differentiating the online bookstore from its brick and mortar counterpart.

VI. KNOWLEDGE MANAGEMENT APPLICATIONS

The four key applications of knowledge management are based on a model that regards knowledge management's primary role as the sharing of knowledge throughout the organization in a way that each individual or group understands the knowledge with sufficient depth and in sufficient context as to apply it effectively in decision making and innovation.

These four applications of knowledge management are:

- Intermediation;
- Externalization;
- Internalization; and
- Cognition.

These applications are affected across all bodies of knowledge, ranging from the explicit to the tacit. Each application has a particular focus, but is in turn best realized through integration with the other applications.

- *Intermediation*

Intermediation is the connection between knowledge and people. Intermediation refers to the brokerage function of bringing together those who seek a certain piece of knowledge with those who are able to provide that piece of knowledge. It is a fundamental step in internal and external responsiveness. Its role is to “match” a knowledge seeker with the optimal personal source(s) of knowledge for that seeker. Two types of intermediation are common, asynchronous and synchronous. Asynchronous intermediation occurs when externalization and internalization do not occur simultaneously. In this case, an external knowledge repository stores the knowledge while

it is in transit. Knowledge is captured in the knowledge base, often before a specific need for that knowledge elsewhere in the organization has arisen. When a knowledge seeker requires that knowledge, the knowledgebase can be searched and the relevant knowledge extracted. This approach is typically best suited to explicit knowledge. Synchronous intermediation occurs when externalization and internalization occur simultaneously. Knowledge is not stored while being transferred. Knowledge provider and knowledge seeker engage indirect communication. The challenge is to match knowledge provider with knowledge seekers intuitively and in a timely manner. This approach is far more common in tacit knowledge transfer.

- *Externalization*

Externalization is the connection of knowledge to knowledge. It refers to the process of capturing knowledge in an external repository and organizing the knowledge according to some classification frame work or ontology. A map or structure of the knowledge collection is provided as a facilitator to knowledge discovery. It is focused on bringing order to internal and external awareness. Far too many organizations focus their efforts on how to get knowledge out of their knowledge management systems and too few, if any, focus on getting knowledge into the system. A knowledge management system, like an ecosystem, cannot be constantly depleted of its resource without constant replenishment. There are two fundamental components to externalization: the capture and storage of the knowledge in a suitable repository, and the classification or organization of the knowledge. Capture and storage can take the form of a database, a document, or a videotape. The repository for this knowledge should be appropriate for the kind of knowledge being dealt with. For example, highly numerate data may best be stored in a structured database, while visual knowledge may best be captured using videotape.

Classification or organization of the knowledge is the more difficult of the two functions. It relies on the knowledge possessed by the knowledge provider to shape the classification of the information into the most usable form. The aim here is to make the knowledge digestible to the knowledge seeker in the most efficient way possible.

- *Internalization*

Internalization is the connection of knowledge to query. It is the extraction of knowledge from an externalized repository, and filtering it to provide personal relevance to the knowledge seeker. Closely tied to an externalized knowledge base, internalization reshapes the knowledge base specifically to address the focal point of the query issuer.

- *Cognition*

Cognition is the linking of knowledge to process. It is the process of making or mapping decisions based on available knowledge. Cognition is the application of knowledge that has been exchanged through the preceding three functions. It is a highly proactive form of internal and external

responsiveness. In its simplest form, cognition is achieved by applying experience to determine the most suitable outcome to an unprecedented event, opportunity or challenge.

VII. CONCLUSION

In conclusion we can say that Knowledge management is more about action than being. Knowledge management deals with the unanticipated stimuli and creative unplanned reactions. Knowledge Management programs are typically claimed to be tied to specific organizational objectives and are intended to lead to the achievement of specific targeted results such as improved performance, competitive advantage, or higher levels of innovation. Organizations should undertake knowledge management programs. In doing so, they would gain competitive advantage that comes with improved or faster learning and new knowledge creation. KM programs may lead to greater innovation, better customer experiences, consistency in good practices and knowledge access across a global organization, as well as many other benefits. Knowledge management involves a strategic commitment to improving the organization's effectiveness, as well as to improving its opportunity enhancement. The goal of knowledge management as a process is to improve the organization's ability to execute its core processes more efficiently.

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