



KNOWLEDGE MANAGEMENT – A CONCEPTUAL FRAME WORK

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Phase-III: Theme Based Paper

ABSTRACT

• Knowledge is power and a powerful weapon in this information age. We can't just think to be unaware of our world. Simply, because to survive better in the environment you must be aware of the tangible as well as intangible aspects of the world around you. The scientific world of today's space era, where we are not just focusing on the planet we are living in, but trying to explore more and more horizons by means of launching our space shuttles for discovering new planets where life can be found. It is always good to manage what we have in our reach first then to go for more. Management of knowledge is a multidisciplinary field where we have to cater for the need of understanding the different aspects of knowledge, characteristics and types of knowledge and their application areas to be studied and understood first.

KEYWORDS

- Knowledge Management
- Information
- Management
- Knowledge
- People
- Value
- Data
- Storage

Introduction

The focus of the management is taken in both perspectives that is short term as well as long term. The role of management is to form a strategic approach to set visions, mission, objectives and then to make arrangements to achieve objectives and visions and mission.

Management is not concerned only for the internal activities of the organization but it goes beyond such internal processes also like industry and the general environment. The main focus is on issues related to environmental studies and industry study, assessment of current and future competitors, estimation of core competencies, strategic control and the effective allocation of organizational resources.

There are two approaches for management in general that are Industrial Organization Approach and another is Sociological Approach.

- The Industrial Organization Approach: This approach is based on economic theory which deals with issues like competitive rivalry, resource allocation, economies of scale. This approach to management assumes rationality, self interested behavior, profit maximization.
- The Sociological Approach: This approach deals primarily with human interactions. It assumes rationality, satisfying behavior, profit sub-optimality.

Management theories can also be divided into two sets. One is the set that concentrates mainly on efficiency and another is the set that concentrates mainly on effectiveness. Efficiency is about doing things the right way. It involves eliminating waste and optimizing processes. Effectiveness is about doing the right things.

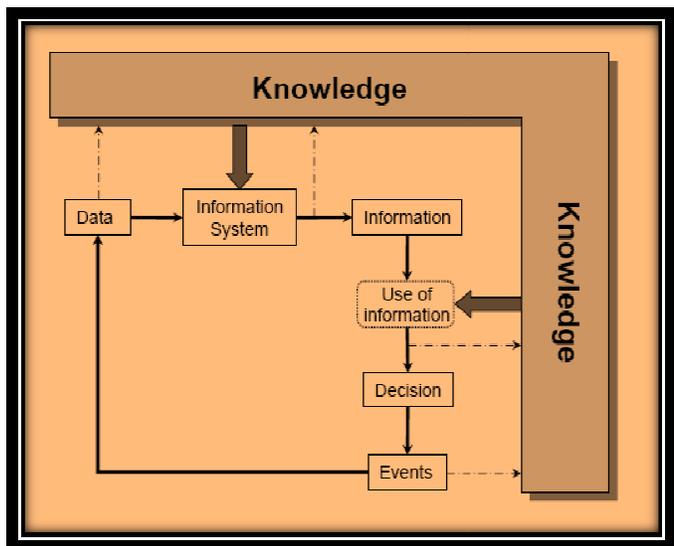
A good management style is a blend of both efficiency and effectiveness. There is no point in acting efficiently if what you are doing will not have the desired effect.

Knowledge Management – Meaning and Definitions

Knowledge is defined by the Oxford English Dictionary as (i) expertise, and skills acquired by a person through experience or education; the theoretical or practical understanding of a subject, (ii) what is known in a particular field or in total; facts and information or (iii) awareness or familiarity gained by experience of a fact or situation. Philosophical debates in general start with Plato's formulation of knowledge as "justified true belief". There is however no single agreed definition of knowledge presently, nor any prospect of one, and there remain numerous competing theories.

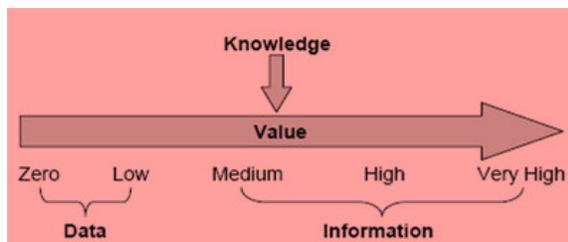
Knowledge acquisition involves complex cognitive processes: perception, learning, communication, association and reasoning. The term *knowledge* is also used to mean the confident understanding of a subject

with the ability to use it for a specific purpose if appropriate.



(Source: http://www.cse.ust.hk/~dekai/600G_2005Q3/notes/KM_Slides_Ch_02.pdf, last accessed on 15 May, 2009)

Information is data with context and relevance. In contrast, data can include millions of useless garbage bits, which are nothing more than uninterrupted zeros and ones. Information involves manipulation of raw data and often information can be used to obtain a more meaningful indication of trends or patterns. The managing of knowledge through systematic sharing is assuming a larger role in organizations around the world, including those involved in development assistance.



(Source: http://www.cse.ust.hk/~dekai/600G_2005Q3/notes/KM_Slides_Ch_02.pdf, last accessed on 15 May, 2009)

Knowledge Management – An Overview

Knowledge Management (KM) may simply be defined as doing what is needed to get the most out of knowledge

resources. It can be applied to individual as well to the organizations. KM is viewed as an increasingly important discipline that promotes the creation, sharing, and leveraging of the organization’s knowledge.

Knowledge Management is the systematic process of finding, selecting, organizing, distilling and presenting information in a way that improves an employee’s comprehension in a specific area of interest.

Knowledge management is “an audit of intellectual assets that highlights unique sources, critical functions and potential bottlenecks which would otherwise hinder the knowledge flow to the point of use”, It protects intellectual assets from decay, seeks opportunities to enhance decisions, services and products through adding intelligence, increasing value and providing flexibility.

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Knowledge in People

Human brain is the mysterious store house of knowledge and that is what we call tacit knowledge. The professionals working in organizations are the examples of this kind of knowledge where the considerable knowledge is their inside the magic box we call brain. This tacit knowledge is the reason which is making firms to companies to find our new ways to retain this knowledge which may be lost as and when the employee is leaving the organizations.

The other type of people knowledge is among the groups of people because of their interpersonal and/or professional relationships. After working for a considerable period of time individuals are well aware of each others strengths, weaknesses, professional knowledge, working style and some aspects which can or can not be taken for granted. Thus a group is a shareware of knowledge. It gives emphasis to the statement that union is strength. The interest groups using on line as well as off line communication techniques are preserving knowledge treasure among groups.

Types of Knowledge

- **Communicating Knowledge:** Symbolic representations can be used to indicate meaning and can be thought of as a dynamic process. Hence the transfer of the symbolic representation can be viewed as one ascription process whereby knowledge can be transferred.
- **Situated knowledge:** is knowledge specific to a particular situation. Situational knowledge is often embedded in language, culture, or traditions.

- **Partial Knowledge:** A discipline called epistemology focuses on partial knowledge. In most realistic cases, it is not possible to have an exhaustive understanding of an information domain, so then we have to live with the fact that our knowledge is always *not complete*, that is, partial. Most real problems have to be solved by taking advantage of a partial understanding of the problem context and problem data.
- **Scientific Knowledge:** Scientific Method has made a significant contribution to our understanding of knowledge. To be termed scientific, a method of inquiry must be based on gathering observable, empirical and measurable evidence subject to specific principles of reasoning. A scientific method consists of the collection of data through observation and experimentation, and the formulation and testing of hypotheses.

Process of Knowledge Management

Knowledge management process is about acquisition, creation, packaging, and application or reuse of knowledge. Some examples of each of these types of knowledge management process are

- *Knowledge acquisition:* finding existing knowledge, understanding requirements, searching among multiple sources.
- *Knowledge creation:* research activities, creative processes in advertising, writing books or articles, making movies, etc.
- *Packaging:* publishing, editing, design work.
- *Applying or using existing knowledge:* auditing, medical diagnosis;
- *Reuse of knowledge for a new purpose:* leveraging knowledge product development processes, software development.

Knowledge in Organizational Entities:

The organizational bodies are also a source of knowledge. Such bodies can be classified in three different categories. The first one is organizational units i.e the part of the organization. The second one is as an entire organization and the third one is as interorganizational relationships viz the relationship between an organization and its customers or suppliers.

As the organization is an integrated structure made up of independent as well as interdependent individual units e.g a department say marketing or sales. The knowledge is stored partially in the relationships among unit members. In nut shell the organizational unit is an interface that is representing a official grouping of individuals, who are working together not because of the common interests but because of the organizational structuring.

As the time passes the individuals of the unit get new roles in the organization and sometimes they are shifted to other units also. In this process the new members take

their place and inherit some knowledge developed by their predecessors. This knowledge may be the outcome of practices, relationships and the system generated knowledge in that unit.

In fact specific domain knowledge is likely to be related to the specific organizational unit. The organizations are also interested to store some specific knowledge which is contextually w.r.t to a particular domain area.

The values, practices, norms and culture within organization and across its organizational units, contain that knowledge which is not specifically stored within the mind of any one individual. The reaction to a situation or environmental events depend not only one the knowledge stored in individuals and organizational units but also in the overall organizational knowledge that has been developed through ups and down experiences over time.

Finally vital knowledge is also stored in interorganizational relationships. The organizations makes and do the best to maintain the relationships with customers and suppliers on the basis of experience they acquire on knowledge embedded in those relationships. The loyal customers who are using the product of the company and trustworthy suppliers who are supplying the raw material for those products often have considerable knowledge about the strengths and weaknesses of such products.

Advantages of Knowledge Based Systems

- Ease of modification
- Consistency of answers
- 24/7 accessibility
- Preservation of expertise
- Solution of problems involving incomplete data
- Explanation of solution, especially for sharing/internalization
- Wide distribution of rare expertise, especially for direction

Disadvantages of Knowledge Based Systems

- Answers may not always be correct
- Limits not always recognized
- Lack of common sense
- Restricted scalability
- systems often become too complex

Issues and Challenges

With technology ever at a gallop, and business cycles getting shorter all the time, it will be the intangible assets, in particular, knowledge that will add value. Knowledge has been identified as the most critical factor of production in the post-industrial economy. Successful organizations will be those that can assimilate new ideas and translate those ideas into actions faster than their competitors. Knowledge management is how organizations extract values from their intellectual assets.

Biggest challenge is that of changing the culture from “knowledge is power to “knowledge sharing is power”. There are some other obstacles also

- Introversions: afraid to learn from outsiders or expose internal operations to customers.
- Too focused on detailed process : rather than the big picture and the most chaotic process of knowledge creation
- Treating it as one-off project or quick –win : KM is a commitment to the long-term: the organization’s future prosperity.
- Individual disciplines and ‘turf wars’- KM goes beyond the remit of any single function or discipline. All functions must collaborate.
- Organizational recognition and reward systems usually do not sufficiently recognize knowledge contributions. They are linked to traditional financial measures.

Role of IT in Knowledge Management

Information technology (IT) has made it easier to acquire, store, or disseminate knowledge than ever before, many organizations are employing IT to facilitate sharing and integration of knowledge. There are two basic approaches to KM for which IT can provide support: codification and personalization. With the codification approach, more explicit and structured knowledge is codified and stored in knowledge bases. The main role of IT here is to help people share knowledge through common storage so as to achieve economic reuse of knowledge. An example of such IT tools is electronic knowledge repositories. With the personalization approach, more tacit and unstructured knowledge is shared largely through direct personal communication. The main role of IT here is to help people locate each other and communicate so as to achieve complex knowledge transfer. Examples of such IT tools are knowledge expert directories and video-conferencing tools. Both these KM approaches are fundamental to understanding the role of IT in KM.

If properly used IT can accelerate knowledge-sharing capabilities in both time and space dimensions. Locality, timing, and relevancy factors determine the expediency and the strength of IT's role in KM initiatives. On the other hand, due to the difficulty of incorporating most of human behavior aspects in technology, IT cannot fully put into operation many of KM's humanistic features. Therefore, IT cannot be considered the magic bullet that makes a KM initiative a complete success. Hence, IT has to be part of a balanced and integrated set of components. Too much emphasis on technology without incorporating the other critical elements could easily result in a failed system. Furthermore, codifying knowledge with the power of the existing IT and without the support from socio-cultural inputs, will result in de-contextualization, i.e. "knowledge dilution". IT must be accompanied by social networks such as communities of practice and other human interventions to create the requisite synergistic effects.

The growing importance of knowledge as a critical business resource has compelled executives to examine the knowledge underlying their businesses, giving rise to knowledge management (KM) initiatives. Given that advances in information technology (IT) have made it easier to acquire, store, or disseminate knowledge than ever before, many organizations are employing IT to facilitate sharing and integration of knowledge. But considering the complexity of KM initiatives and the variety of IT solutions available on the market, executives must often confront the challenging task of deciding what type of IT solutions to deploy in support of their KM initiatives. This paper aims to shed light on the IT-KM match by investigating the role of IT in successful KM initiatives.

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Conclusion

Knowledge management is not managing or organizing books or journals, searching the Internet for clients or arranging the circulation of materials. However, each of the activities can in some way be part of the knowledge management spectrum and process. Knowledge management is about enhancing the use of organizational knowledge through sound practices of knowledge management and organizational learning. Thus knowledge management is a combination of information management, communication and human resources. Good knowledge centers will put as much emphasis on connecting people with people -'know-who' - as they do on connecting people with information and document collections. They will be concerned with 'active' not 'archive' knowledge, so need to be fully up to speed with what is happening in the organization including current priorities and work in progress - 'who is doing what now'.

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