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**“Using Knowledge Management for  
Organisational Learning”**



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## Abstract

Knowledge management (KM) or knowledge intercourse in organizations is based on knowing of knowledge beginning and knowledge channel. In implementation, KM is a methodology to benefit from the knowledge that resides in a disposal by using it to win the organization's assignment. The dealing of tacit or underlying knowledge to unambiguous and convenient formats, the goal of many KM projects, is challenging and dowered with current direction issues. This article discovers the various types of contexts staleness is based on inclination the incentive nature of knowledge itself. The article critiques some prevalent research in the KM literature and concludes with a perspective towards knowledge management programs improved around knowledge.

**Keywords:** Knowledge Management, Information management, knowledge methodologies

## I. Introduction

Knowledge management is not a new concept. Knowledge is considered as a strategic tool to make quality decisions on the basis of available information and data. Knowledge management is a term applied to any initiative involving people, processes and technology that leverages the knowledge within an organisation to achieve its objectives. Introducing and expanding the knowledge base within an organisation is not as easy as it is with the information base as knowledge is an intangible asset which cannot be easily understood, classified, shared and measured.

### *1.1 Defining Knowledge Management*

There is no universal definition of knowledge management, just as there is no agreement as to what constitutes knowledge. Knowledge management involves blending the information available in organisation's processes and turning it into actionable knowledge via a technology platform (DiMattia and Order, 1997). Knowledge management comprises a range of strategies and practices used in an organisation to identify, create, represent, distribute and enable insights and experiences. Such insights and experiences comprise knowledge, either embodied in individuals or embedded in organisational processes or practices. According to McInerney and LeFevre (2000), knowledge management is an effort to increase useful knowledge within the organisation. Ways to do this include encouraging communication, offering learning opportunities to employees and promoting the sharing of appropriate knowledge artefacts within an organisation.

The contributory fields of knowledge management encompass business administration, information systems, management, media, computer science, public health and public policy (Alavi and Leidner, 1999). The different perspectives of knowledge management are:

1. Knowledge management relates to systems and technologies.
2. Knowledge management is about organizational learning.
3. Knowledge management consists of processes, methods and techniques used within an organization.
4. Knowledge management means creating and managing knowledge assets and hence servers as a foundation for acquiring intellectual capital.

5. Knowledge management is a holistic initiative across the entire organization to achieve excellence in all its working areas.

According to Haeckel and Nolan (1993), an organisation's complexity is based upon the number of information sources it has, the business elements it coordinates and the types of relationships to bind these elements. An organisation's intelligence quotient is determined by three critical attributes: connecting - ability to access knowledge and information; sharing - ability to integrate and share information; structuring - ability to extract meanings from the available data.

### ***1.2 Constituents of Knowledge Management***

Knowledge management may be viewed in terms of people, processes or structures, culture and technology where people refers to the individuals in the organisation who can influence others with their knowledge; processes pertain to approaches which vary from organisation to organisation; structure attributes to the business processes and organisational structures that facilitate knowledge sharing; culture relates to creating conducive atmosphere and environment within the organisation which facilitate the individuals to participate and take initiatives in managing the available knowledge; and technology corresponds to the means chosen to store the extracted knowledge.

Skyrme and Amidon (1997) observe that employees of an organization often stuck up in executing specific tasks for which the required knowledge already exists somewhere within the organization but is not known to them. In such a scenario, there is a need to establish an intranet within the organization and creating a database that contains best practices for various tasks performed by the organization. Whenever, an organization formulates a new model to handle a specific task, the methodology for that model should be updated into the knowledge database of the organization. The organizations who seek to acquire new techniques and procedures to perform their work more effectively need to create conducive environment where the culture of learning can flourish. Knowledge management activities that the organization can opt to acquire are listed in Table 1.

**Table 1: Knowledge Management Activities.**

<b>S/N</b>	<b>Activity</b>	<b>Action/Methodology</b>
1	Knowledge Databases	Store best practices, expert directories, knowledge warehousing.
2	Information Management and Knowledge Webs	Information gathering, filtering, classification and storing. Collaborating across and beyond an organisation's functional and geographic boundaries e.g., yellow pages.
3	Incorporation of knowledge into organisational processes	Developing Document Management System by establishing intranet or web portal.
4	Knowledge Centers	Creation of focal points for facilitating flow of knowledge (knowledge accessibility).
5	Introduction of collaborative	Establishing intranets and multi-disciplinary cross-functional

Knowledge is intangible, dynamic and difficult to measure, but without it no organization can survive. The move from an industrially-based economy to knowledge-based or information-based economy in the 21st century entails capacity for learning and a top-notch knowledge management system to attain competitive edge.

### ***1.3 Types of Knowledge***

Knowledge is generally classified into three main categories; Tacit Knowledge, Explicit Knowledge and Background Knowledge.

#### ***1.3.1 Tacit Knowledge***

Tacit or unarticulated knowledge means the knowledge that the employees of an organisation acquire or develop during the execution of their tasks. Tacit knowledge can be in the form of hands-on skills, special know-how, experience, native talent, heuristics and intuitions and in fact is the personal knowledge that is hard to formalise or articulate. This form of knowledge often has a creative robustness and is deeply rooted in actions exercised by the employees during the dispensing of their procedural or routine work. The transfer of tacit knowledge is quite complex as it is linked with the will of the employees to share their experiences with their colleagues. Tacit knowledge in an organisation ensures task effectiveness i.e., the right things are being carried out and all the constituent units of an organisation are focused towards attaining their objectives and collectively contributing towards achieving the mission of the organisation as a whole. Tacit knowledge is bit difficult to communicate or share with others and generally lies in the heads of individuals and groups.

#### ***1.3.2 Explicit knowledge***

Explicit knowledge, also known as rule-based knowledge, is used to match different kinds of measures to be taken in different situations by invoking appropriate rules. Explicit knowledge is normally available in the form of rules/regulations, standard operating procedures and templates. It is used for standardising organisational processes to enhance operational efficiency. Further, explicit knowledge consists of skills and facts that can easily be written down and can be taught to others.

#### ***1.3.3 Background knowledge***

Background knowledge relates to the organisational culture and is communicated through oral and verbal texts such as stories, metaphors, analogies, visions and mission statements. Background knowledge exhibits the organisational working procedure by which employees of an organisation understand particular events, actions or situations in a distinctive ways (Morgan 1986). Background knowledge draws the cognitive context and endows meaning with particular reference to the organisation's tasks.

All of the above mentioned forms of knowledge can be found in any public or private sector organisation. The progressive organisations continuously keep on expanding, renewing and refreshing their knowledge in all the three categories of knowledge. Such organisations promote the learning of tacit knowledge to increase the skill and creative capacity of their employees, benefit from explicit knowledge to maximise their efficiency and develops background knowledge to consolidate distinctive objectives from their counterpart organisations. Table 2 shows a comparative analysis of these three forms of knowledge.

**Table 2: Types of Organisational Knowledge.**

Type	Form	Examples	Uses
Tacit Knowledge	<ul style="list-style-type: none"> <li>Procedural</li> </ul>	<ul style="list-style-type: none"> <li>Know-how</li> <li>Heuristics</li> <li>Intuitions</li> </ul>	Ensures task effectiveness
Explicit Knowledge	<ul style="list-style-type: none"> <li>Declarative</li> <li>Encoded in Working Procedures</li> </ul>	<ul style="list-style-type: none"> <li>Routines</li> <li>SOPs</li> <li>Templates</li> </ul>	Promotes operational efficiency and control
Background Knowledge	<ul style="list-style-type: none"> <li>Contextual</li> <li>Expressed in Texts</li> </ul>	<ul style="list-style-type: none"> <li>Vision</li> <li>Scenarios</li> <li>Metaphors</li> <li>Mindsets</li> </ul>	Instills commitment through shared meaning

#### ***1.4 Knowledge Management Efforts***

Knowledge management efforts are typically focused towards achieving organisational mission and objectives. The key advantages gained through effective knowledge management comprise: improved performance, competitive advantage, innovation and sharing the lessons learned that contribute towards a continuous improvement of the processes and procedures of an organisation. The organisational efforts to acquire knowledge may be distinguished greatly by focusing on the management of knowledge as a strategic asset and attaching a greater emphasis on sharing of knowledge to capacitate employees for larger organisational benefits. This two pronged effort brings about a revolutionary change in the organisational behaviour as individuals and groups share valuable organisational insights which ultimately results in reduction of redundant work, avoids reinventing the wheel per se, curtails the training time for new employees and builds the intellectual capital within the organisation.

#### ***1.5 Information vs Knowledge***

A review of the basic definitions of information management and knowledge management is quite helpful in comprehending differences between them. The key difference between information and knowledge is:

- Data means attributes, events, transactions or metadata. Information attributes to organizing data in such a way that it conveys certain meaning.
- Knowledge is transformation or organizing data and information in an experienced way so that it can be made reusable. Knowledge serves as a basis to make decision based on the available information and facts.

#### ***1.6 Information Management vs Knowledge Management***

The definitions of information management tend to be far more uniform and less complex than the definitions of knowledge management. Many researchers have defined information management differently; Chalee Vorakulpipat, Yacine Rezgui, (2008) defined it as

“systematic way of organising data”, Drucker (2001) described it as “Endowment of data with relevance and purpose” and according to Probst et al. (2002) it is “art of interpreting data”. However, all the definitions converge on a single point that information management is all about managing data in a way that useful information can be extracted from it. On the other hand, defining knowledge management is a much trickier as it originates and resides in the minds of individuals. Davenport and Prusak (1998) argue that knowledge management relates to handling the available and perceived blend of experiences, values, contextual information and intuition; and then incorporating new experiences and information in a cyclic fashion.

In case of knowledge, individuals play a prominent role as creators, carriers, conveyors and users. From a management perspective, information is easily identified, organised and distributed whereas knowledge cannot really be managed because it resides in minds of individuals. Therefore, knowledge management is restricted to creating conducive conditions for individuals to learn from the available information resources and then apply their knowledge to the benefit of their organisation. The application of an individual’s knowledge may be translated into relevant information (documents, best practices, databases, etc) which can be shared and used. Nonaka and Takeuchi (1995) argue that explicit knowledge is a synonym for the word “information” and this latent interplay between knowledge and information have led many practitioners to perceive that information management and knowledge management are interchangeable terms. Whereas, there exists a clear distinction – information management is not at all concerned with the phenomenon and processes involved in knowledge creation and innovation.

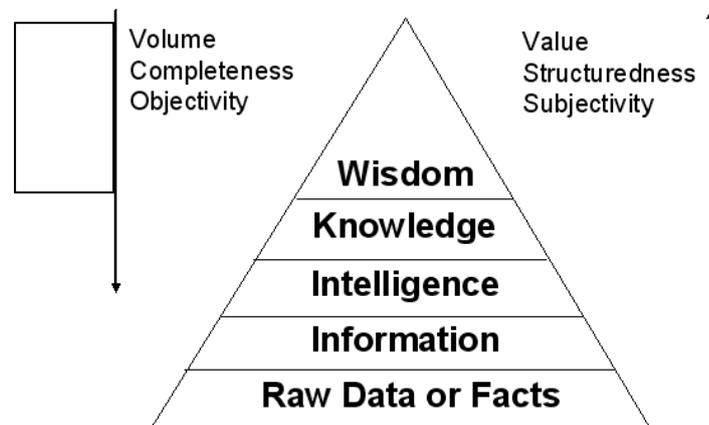
Knowledge management systems should take a holistic or organic view of the organisation and should encompass initiatives in the areas of information management, organisational structure and internal communications. The knowledge management processes are complex as transformation of information into knowledge highly depends on individuals’ willingness to create, act, share and codify their own knowledge. Further, knowledge management is much dependent on solid support of IT infrastructure particularly in the scenarios where different functional units of an organisation are geographically dispersed. Return on Investment (ROI) is the prominent criteria to gauge the success of information management tasks and this makes the knowledge management very distinct from information management which heavily relies on IT. Another difference between information and knowledge management is that information management does not take into account how people learn, create, validate, codify, share knowledge and make decisions.

## **II. Literature Review**

Theoretically, the knowledge management discipline can be viewed as a direct inheritor of the field of organisational learning. According to Edgar Schein (1993), knowledge management can be seen in the context how individuals and an organisation can learn continuously through self-learning and systemic thinking. Knowledge can be considered as a stock and learning as the flow of knowledge. The competitiveness of an organisation is based on its available stock of knowledge (explicit knowledge) and on the flow of individual and organisational knowledge (tacit and explicit knowledge).

## 2.1 Extracting Knowledge

Understanding the knowledge management requires comprehension of knowledge and managing knowledge processes and how they differ from information and information management. Haeckel and Nolan (1993) proposed a pyramid shaped hierarchy of the transformation of facts into knowledge that leads towards wisdom (Fig.1).



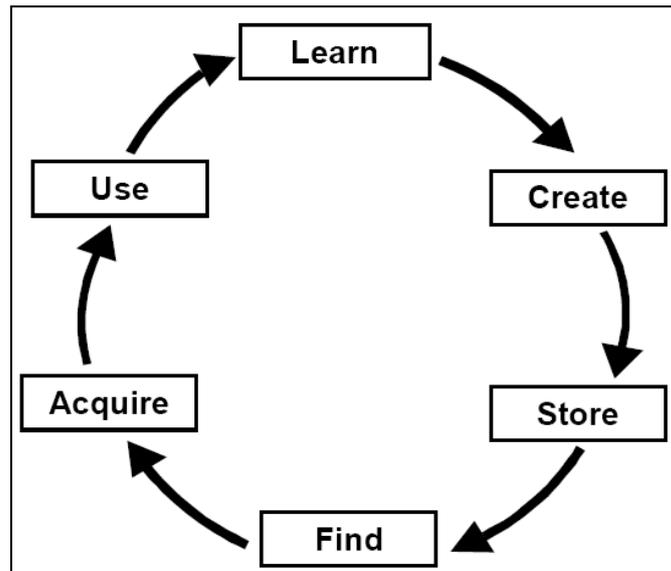
**Fig. 1: Knowledge hierarchy: From facts to wisdom.**

The theme of their proposed hierarchy is: “less is more valuable”. A visit from bottom towards the top in the hierarchy increases the value, structuredness and subjectivity of the material; whereas, a journey from upward direction towards the bottom of the pyramid increases volume, completeness and objectivity of the material. In the knowledge extraction process, information is extracted from the available facts or data and in the next step information is transformed into an intelligence form which finally leads to producing knowledge. The ability and foresight into the application of the extracted knowledge in certain area is surfaced as wisdom of an individual or organisation.

Data and information are codifiable, explicit and easily transferable; whereas, intelligence is extracted through human judgement and intuition. Wisdom is purely contextual and tacit and its transfer from one individual to another requires considerable learning efforts on the part of the learner. Once actionable knowledge is discovered in certain area of an organisational process, the foremost step is to document it which is considered as the rudimentary stage of knowledge management.

## 2.2 Knowledge Generating Cycle

Knowledge management is a cyclic activity to refine the acquired knowledge as well as to generate new knowledge. The ability to use existing knowledge for creating further knowledge is vital for the organizations. Basic theme that underlies the knowledge management techniques is illustrated in Fig. 2 which depicts the processes involved in knowledge generation cycle.

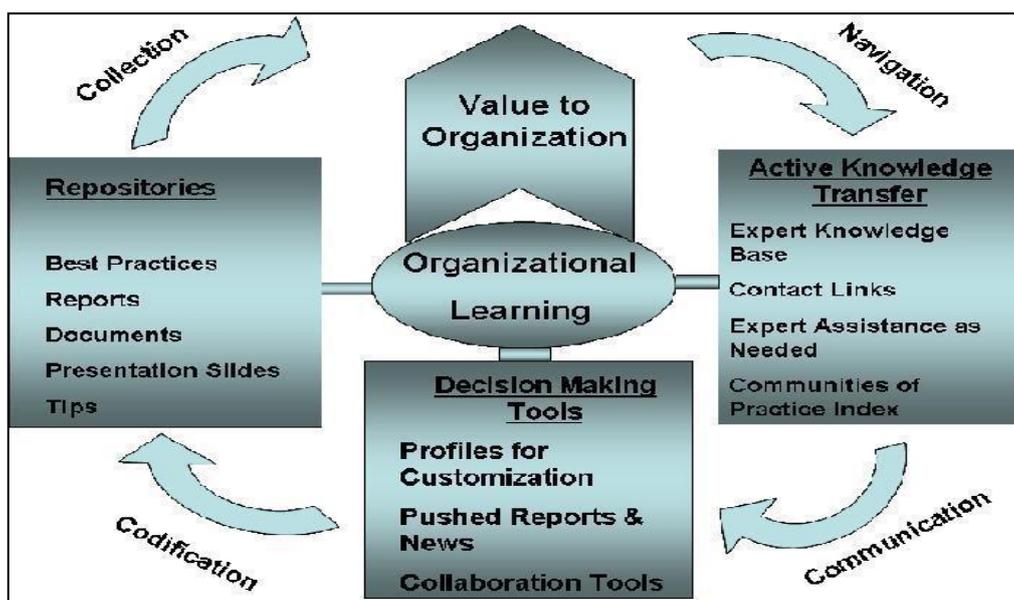


**Fig. 2. Knowledge Management Cycle.**

Everyone *learns* while doing certain work; the learnt knowledge is *recorded* or *created* and is *stored* in some hard or soft form for future retrieval. The knowledge thus *acquired* is *used* or *shared* subsequently to perform similar type of work. Organizations also refine the acquired knowledge on the basis of new experiences and innovation can occur at any stage of the knowledge generation cycle.

### 2.3 Organizational Learning Process

Knowledge is essence of the competitive edge of an organization and it is embedded in processes, products, systems and controls of an organization. Knowledge is versatile in nature and can be transferred formally through training or informally through workplace socialization. Fig. 3 shows an organization learning model.



**Fig. 3. Organizational Learning Process Model**

### 2.4 Roots of Knowledge Management

Knowledge management is attributed to managing six different areas; innovation, information management, knowledge-based systems, intellectual capital, learning organization and business transformation. Innovation takes impetus from “out of the box” thinking. There is a need to establish a “learning culture” within the organisations for effective knowledge exchange; and such type of organisations are called learning organisations. The “learning culture” within the organisation identifies areas where appropriate changes in the organisational behaviour can improve knowledge exchange. Fig. 4 illustrates the learning management model comprising the aforementioned six areas.

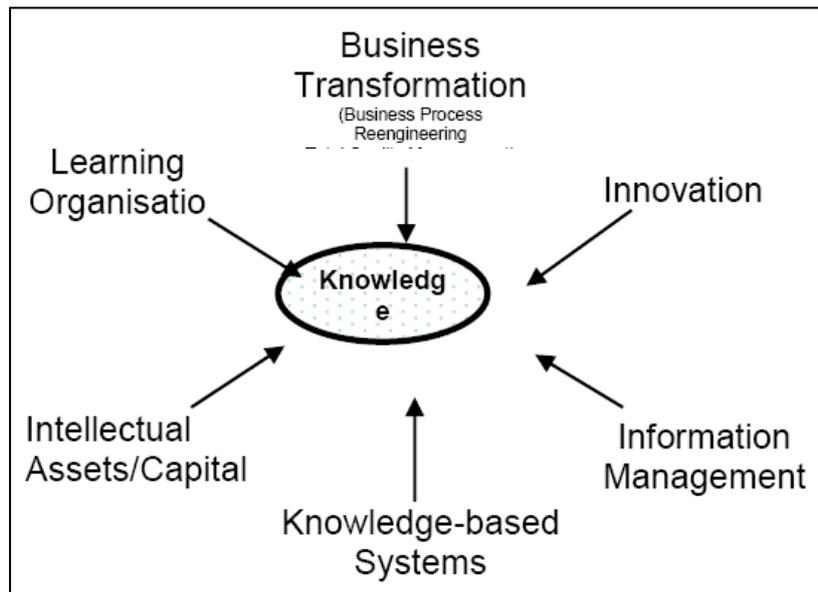


Fig. 4. Roots of Knowledge Management

### III. Critical Evaluation

Table I. Critical Analysis of Knowledge management methodologies

Author/ Reference	Method/ Technique	Key Characteristics	Key points
DiMattia & order (1997)	Defining knowledge management in various formats	Comparison among knowledge management and technology platform	Motivates use of technology as a essential part in improving knowledge management.
Mcinerney. & LeFevre(2000)	Defining knowledge management as different terms	Comparison of different techniques for knowledge management	Emphasis on different method used for transferring knowledge internally to the organization and its employees

Alavi & Liefner (1999)	Categorization of techniques	Knowledge management categorization into different sectors	Defines the perspective of knowledge management with different sectors
Haeckel & Nolan (1993)	Solving the complexity	Describes dependency or Organizational Complexity	Defines three quotient for determining the organizational complexity
Skyrme & Amidon (1997)	Observation of Employees using different techniques	Problems in using knowledge management	Focuses on knowledge that is well known in the organization but employees are not aware of it.
Chalee Vorakulpipat, Yacine Rezgui, (2008)	Systematic Methodologies	Identification of different methodologies	Defines different systematic methodologies for organizing and using knowledge management techniques
Drucker (2001)	Relevance and purpose techniques	Identification of relevant data	Describes the data in format of relevance and purpose for it to be used.
Probst et al. (2002)	Different methodologies for interpretation	Interpretation of data in different scenarios	Describes data solutions and their interpretation as an art
Davenport & Prusak (1998)	Data handling methodologies	Experience based approach Intuition to use the knowledge	Argues on knowledge management usage among different environments and organizations
Nonaka & Takeuchi (1995)	Explicit Knowledge	Defining new terms for knowledge management	Argues between explicit knowledge and information technology
Edgar H. Schein (1993)	Context Driven Approach	Stock learning management	Defining knowledge management in context of individuals and organizational level

#### **IV. Future Work**

The perspective future work to this research could be to look into formulating a robust model for knowledge management associated with various business and organizational processes. Particularly, a number of processes are prone to knowledge management related to cost, schedule and quality of the products and services. The model will be supplemented with a framework that will deal with the knowledge management techniques and improvement of processes that are closely linked with the successful implementation of knowledge management techniques and will be validated through a case study. The future perspective also covers implementation of model in real time environment.

#### **V. Conclusion**

This study highlighted a critical overview of different technique that can considerably improve the quality and productivity of organizations. Besides, the study also looked into the probable methods that can be effectively adopted organizational improvement using the knowledge management methodologies. This study analysed the key concept of Knowledge management with particular reference to organization, individual and business perspective. The main contribution of this study is that it provides an insight into the current understanding of Knowledge management amongst many practitioners, current applications and practices of Knowledge management and the level of research activities being carried out in this field.

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