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KNOWLEDGE MANAGEMENT IN ORGANISATIONS: A CRITICAL REVIEW

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Abstract *The purpose of this paper is to conduct an in-depth review of various concepts related to knowledge management (KM) and investigate the importance and process of KM as well. The word "Knowledge" means that which is known. In the process of knowing there are two parties (entities): one man, the knower and the other the knowee, i.e., things and concepts. Impact and interaction between the two gives birth to knowledge. The knower is always man and the knowee is made up of entities, i.e., things or concepts. When man knows the entities, Knowledge is established. KM is a process, which deals with knowledge creation, acquisition, packaging and application or reuse of knowledge. In the present study, various scholarly articles were identified using multiple databases. The main search terms that were used on the databases were KM, KM systems, knowledge, information systems, information theory. When choosing which articles to include the finding result was limited to articles and then a selection of relevant ones was made. At first, few theoretical bases about KM which include definitions and stages about KM have been summarised and analysed. Then, a comprehensive review about the major approaches for designing the KM system from different perspectives has been conducted. The contributions of this paper will be useful for both academics and practitioners for the study of KM. The result shows that KM is the main key for the organisations to stay competitive. Besides, KM also creates innovation and ideas that are unique from others. The analysis of the paper is based on literature review; therefore, the concepts developed in the paper need empirical testing.*

Keywords: *Knowledge, Knowledge Management, Tacit Knowledge, Explicit Knowledge*

Introduction

In the dynamic world the focus is on spontaneity and fast reactive and continuously living systems. There is an overload of information, which causes chaos. The twenty-first century is the age of science. Wonderful inventions are being made every day, typically represented by Research & Development (R&D). In order to generate new knowledge, it is important to learn to manage information.

Business is all about putting ideas into action, knowledge needs to be created or identified, and Organisations are also trying to find tools to benefit from chaos and create innovations in the chaotic world and to transfer them through the organic world to products of mechanic world. Basically knowledge is the fuel that provides the energy for corporate or organisation's innovation, wealth creation, and work force productivity. The most important asset that has been considered for any organisation is knowledge (Palacios & Garrigos, 2006). Knowledge refers to a theoretical or practical understanding of a subject. KM has turned into an extremely common term in the twenty-first century, as it has been connected to a wide range of exercises and regions with the reason for overseeing, making and upgrading scholarly resources (Shannak, 2009).

KM is tied in with creating, sharing and applying information inside the firm to pick up and continue an upper hand (Petersen & Poulfelt, 2002). Its popularity has increased rapidly in the last decade. Also, KM has been widely used recently by firms and organisations in order to improve decision-making, product innovation, productivity and profits (Edvardsson, 2006).

Concisely the purpose of the paper is to:

- Take an overview about KM,
- Take an overview of KM process and
- Take a summary of importance of KM.

Methodology

In the review process, the author adopted the principles of a systematic review as recommended by Jesson et al. (2011) namely:

- Mapping the field through a scoping review
- Comprehensive search
- Quality assessment
- Data extraction

- Synthesis
- Write up

Two major indexing and abstracting databases – Web of Science and Scopus – were used for the extraction of the papers for review. Furthermore, aggregating database, ProQuest was also made use of. The inclusion criteria included publications of empirical nature, in English language and peer-reviewed spanning across a period of 1994-2016. The main focus of the papers was on KM and its allied processes. Grey literature such as reports and non-academic research content was also extracted using aggregating database, ProQuest. The main search terms that were used on the databases were knowledge management, KM, knowledge management systems, knowledge, information systems and information theory. The final articles documented for the literature review were based on the relevance and irrelevant articles were excluded. In order to fully understand the subject, some articles regarding similar areas as knowledge, KM and information system were collected to provide information needed.

Knowledge Management

A standout among the most acknowledged definitions about KM is that information is a dynamic human asset of defence of the individual convictions to get reality (Nonaka, 1994). It can then be stated that knowledge is an invisible or intangible asset, in which its acquisition involves complex cognitive processes of perception, learning, communication, association and reasoning (Epetimehin & Ekundayo, 2011). Knowledge is the idea, ability, experience and vision that gives a structure to making, assessing and utilising the data (Soltani & Navimipour, 2016). Generally, knowledge can be divided into two types – tacit and explicit (Hubert, 1996).

Tacit Knowledge: It is inaccessible to general public. It resides in the mind of people. Thus, it is hard to formalise, even often difficult to communicate. This type of knowledge can be seen in the behaviour or action of person.

Explicit Knowledge: It is well communicable and available in some media, for example, books, lectures, etc. Thus, it is formalised knowledge and readily available. Explicit knowledge can also be categorised in 'Information' (specification) and 'Processes' (works instructions).

So, the knowledge available in human mind is difficult to access; on the other hand, the knowledge in books or in other media is easily accessible. Here, we are concerned about the academic knowledge; but besides, there is administrative knowledge, which is important in running the organisation and taking day to day and policy decisions.

Thus, KM is 'maximum utilisation of human (Tacit), documentary (Explicit) and corporate (Cooperative) knowledge for improvement of organisation'. Tacit knowledge of an individual dwells in the human personality, conduct and discernment (Duffy, 2000). Koenig (2012) suggested that explicit knowledge implies data or information that is set out in tangible frame. Different experts or researchers have defined KM in several ways. KM is the ability to oversee information, for example, gathering inner or outer information of associations, changing over them to new thought or methodology, applying them and protecting them (Gold et al., 2001). Lytras et al. (2002) defined KM as a systematic, explicit and application of knowledge that will help the organisations to maximise the organisations' knowledge-related effectiveness and returns from the knowledge assets. In light of this, KM can be characterised as a procedure of catching, putting away, sharing and utilising information (Leidneret al., 2006; Chang & Lin, 2015). Plus, it can likewise be characterised as a precise procedure for social event, arranging and imparting both inferred and unequivocal learning of representatives, which can be utilised in their works (Schultze & Leidner, 2002; Alavi et al., 2005; Massey & Montoya-Weiss, 2006).

Today, there is a general agreement that the capacity to oversee learning is indispensable for accomplishment in any organisations (Grant, 1996; Hansen et al., 1999; Cabrera and Cabrera, 2005). In other words, literature highlights that any company, in order to be competitive, should create new knowledge, share it across organizational entities, and rapidly embody it in new technologies and products (Schlegelmilch & Penz, 2002). The significance of KM for any organisation's prosperity is reflected in the development of productions on this theme from a wide scope management research fields (Minbaeva et al., 2009).

Performance Measure for Knowledge Management

Wang et al. (2016) proposed a record arrangement of KM, which incorporates four segments: the KM process, the organisational knowledge structure, the economic benefits and the proficiency. Wang et al. (2015) arranged the execution measures into three classifications: knowledge resources, KM processes and the variables that influence KM. Wang and Zheng (2010) proposed a KM execution assessment technique that incorporates information framework, structure capital, human capital, mental capital and market capital. Wu et al. (2009) built up an assessment technique for KM execution in view of the principal component analysis. The measure record comprises of knowledge stocks, development level of the learning organisations, information management and marketing ability. Tseng (2008) proposed an arrangement grid that groups the execution pointers for potential use in KM execution estimations. Also, the assessment criteria of this technique incorporate process, human and information technology (IT).

Process of Knowledge Management

There are four steps in KM process (Kayworth & Leidner, 2003; Zaim, 2006; Fong & Choi, 2009).

Knowledge Creation: This process includes new usage of knowledge or replacing the current information. It requires the organisations to filter for new information, both inside and outside of the organisations (Chen & Edgington, 2005; Carrion et al., 2012).

Knowledge Storage: The organisations ought to organise and deal with the knowledge along these lines (Massey & Montoya-Weiss, 2006; Heisig, 2009; Ling et al., 2009).

Knowledge Dissemination: This process involves sharing and exchanging knowledge among individuals or network of individuals (Alaviet al., 2005; Carrion et al., 2016).

Knowledge Application: Knowledge application is when available knowledge is used to make decisions and perform tasks through direction and routines.

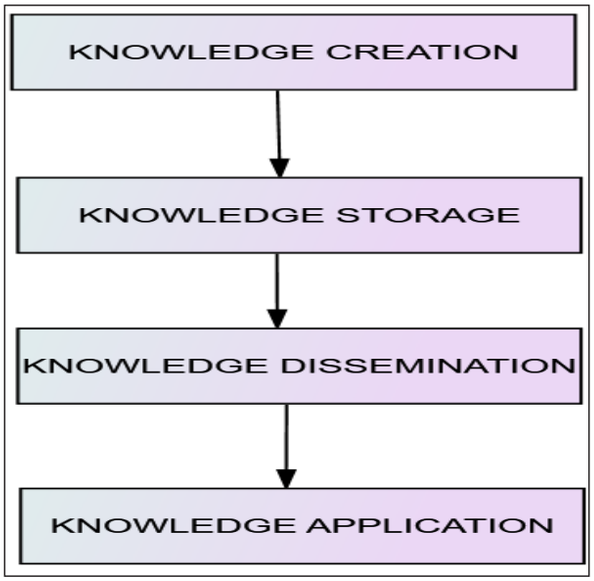

Fig. 1: Process of Knowledge Management (Zaim, 2006)

Importance of Knowledge Management

Sharing of Information: Research organisations and commercial organisation (such as industries, other service sectors, etc.) require heavy sharing of knowledge, because they are productive. Sharing is required in order to catch production, as intellectual production in R&D organisation requires sharing of research knowledge, while market-oriented production in commercial organisations requires sharing of techniques and ideas in their projects. So, a lot of knowledge flow is sought in these two types of organisations.

Decision Making: Another need of KM is in decision-making or policy making. KM acts as a tool for the policy makers of an organisation, which assists them to take serious policy decisions and day-to-day decisions.

Access to Information: KM provides easy access to the information required by any of corporate bodies, executive or researcher. It helps them to find the answer of their question or assist them in finding. It may consist of database of literature, directory on literature or persons. It assists a researcher or executive whenever he/she requires information within the organisation or outside the organisation. A knowledge base can have links to the external sources too.

Economy: Another vital use of KM is saving through the proper communication among the researchers or executives. KM provides the knowledge of already undertaken projects or researches within the organisation or if needed outside the organisation. So, it avoids the duplication of work. Even technology can be used for communication and, thus, transportation cost can be reduced.

Value Addition: Another important use of KM is value addition to the existing products or decisions. It helps to take the best possible decision, which has even futuristic approach and, hence, the product will be value added and can do more than just to fulfil the purpose. Through value addition and assistance in decision-making, it increases the institutional productivity.

Challenges of Knowledge Management

KM is not easy task. It poses several challenges:

Intellectual: Knowledge is often a tacit. The management of tacit knowledge is biggest challenge for knowledge managers, because it resides in human mind unexpressed and the boundary of such knowledge is fuzzy. It can be seen only in one's behaviour. So, it is very difficult to understand and codify what is there in one's mind.

Culture: Most of the people don't want to share their knowledge. This is mostly due to insecurity or narrow mindedness. Besides, there is another group, which is neutral and has the opinion not to interfere; thus, it is neutral and away from knowledge sharing.

Obsolescence: Information is booming up and, in this environment, obsolescence is too rapid. Different types of information become obsolete as soon as they as they are generated, e.g., stock exchange information. The difficulty lies in as to how to use knowledge base, having such

information. This type of knowledge base is ever changing and, thus, the earlier one becomes obsolete as soon as new information is added to it. So, it requires to 'push' such information to capable users for proper utilisation. But difficulty is, how to find a capable user and then in what form information should be 'pushed'.

Overloading: Knowledge gets accumulated, but we know that it becomes obsolete too, which is basically due to the obsolescence of information. So, if obsolete information is not removed from knowledge base, it makes it overloaded with useless information. But the distinction of useful and useless information is difficult.

Technology: It is also difficult to keep track of changing technology. The obsolescence of KM tools is also high. Technology in itself is not KM but it helps KM to a large extent. Besides the changing technology, the challenge is, how to simplify the communication of knowledge so that whatever knowledge is available in organisation it will be easily accessible by the users.

Structure: Another challenge for KM is to define the structure of KM system, i.e. structure should show overall economy. Often, there is a discussion for a centralised and decentralised system. Each has its advantages and disadvantages. In a centralised system, concentration of knowledge is always at a single nod. It has a great degree of economy; but side-by-side, it enhances traffic in only one and one point. While decentralised approach is less economical, it provides much security from damage of data and easy access.

Conclusions

In conclusions, KM should be well understood as a strategic process, as it involves the planning, implementation and outcome. There is confusion that KM is basically a technological process; but in due course of study, it is found that it is more strategy oriented towards the goal of organisation, whether it is an academic, R&D or commercial organisation. KM is basically for sharing and collaboration of knowledge, as it assists corporate, executives and researchers in self-learning. In this research, focus is on providing a deep theoretical review and analysis of KM along with the understanding of KM process, and importance of KM.

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