Global Journal of Management and Business Research: A Administration and Management
Volume 18 Issue 5 Version 1.0 Year 2018
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Knowledge Management as an Extension of Organisational Learning Process

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Abstract- It is no longer strange for individuals and organisations alike to appreciate that only organisations that are innovative will survive in very turbulent economic landscape. It is also a fact that innovations can only be achieved when an organisation continuously learns and becomes a learning organisation. A learning organisation is characterized by the stock of both tacit and explicit knowledge which it has acquired over time and how the stock of knowledge is utilized. The stock of knowledge becomes useful only when it is shared and utilized for the overall improvement in all organisational processes and human capital enhancement.

This conceptual paper suggests that as important as the concept of knowledge management is, rather than treating it as a different management concept, it ought to be treated as a major component of organisational learning process. In fact, knowledge management is and should be an extension of organisational learning because when there is no learning; there will not be any knowledge to manage. This paper also revealed that lack of interpersonal relationship, lack of organisational trust, skills, and time inadequacy are the major factors that hinder organisational members from sharing knowledge.

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GJMBR-A Classification: JEL Code: M19

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Knowledge Management as an Extension of Organisational Learning Process

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I. Introduction

The management of our stock of knowledge resources or intellectual assets has become a topic that is universally popular to both academicians and practitioners (Koohang, Paliszkiewicz, & Gołuchowski, 2017). Little wonder, most contemporary organisations have realized the importance of utilizing knowledge resources, in order to enhance their competitiveness and innovativeness, and have therefore shifted their emphasis to knowledge based systems (Mills, & Smith, 2011). In fact, our dynamic environment, as a prerequisite, requires an increase in corporate capabilities so as to create sustainable competitiveness in organisational processes and performance (Rehman, Asghar, & Ahmad, 2015).

No wonder, Omotayo (2015) has indicated that knowledge management (KM) remains a key to the door of competitive advantage among firms in the same industry because it broadens acquired knowledge by increasing the ability of organizations to be creative, thereby putting them at an advantageous position in relation to their competitors. Therefore, the only firms that will remain competitive in their dynamic environments are those ones that are outstanding in terms of innovativeness and creativity (Desouza, & Paquette, 2011).

That is why some authors argue that a lot of studies is now carried out with a view to identifying why knowledge acquisition, sharing, and application in organizational settings has rapidly increased from the 1990's, and has remained so (Serenko, Bontis, Booker, Sadeddin, & Hardie, 2010).

To some authors, the term knowledge management is a phenomenon that became popular for a very short while and it is not practically attainable (Wilson, 2002).

Wilson went further to state that he could not formulate a coherent definition of knowledge management, which to him, is quite different from information management. The reason could be that the concept has so many perspectives and no definition can fit into all of these perspectives.

The growth and development of knowledge management as a concept is understandable, considering the history of the concept, which, to me ought to be treated as an offshoot or extension of organisational learning. According to Gurdal and Kumkale (2014), the need for knowledge management is to provide some benefits to the organisation (as cited in Paliszkiewicz, Svanadze, & Jikia, 2017).

Although it is relatively recent, its historical development and popularity has helped to throw weight on the importance of intellectual activities over traditional form of resources like land and capital (Spender, 2014). It is no longer strange that knowledge management has now been known to be a source of an organisational competitive advantage, just like the concept of organisational learning. Knowledge management is an extension of organisational learning because an organisation that does not learn can never have any knowledge to store, to share and to use. Knowledge has come to be regarded as an organisational resource that must be managed effectively if an organisation is desirous of standing the pace of competition and environmental dynamism. According to Dalkir (2005) knowledge is now regarded as a commodity or an intellectual asset, but possesses significantly distinct features different from normal commodities, for instance, when individual shares knowledge with

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another person, his stock of knowledge does not deplete, rather, his knowledge base expands.

A very good understanding and appreciation of the fact that information in particular, and knowledge in general has become recognized as veritable organisation assets, has made it imperative for organisations to put a lot of energy in its management. This therefore involves the application of different strategies, policies and tools in the effective management of knowledge as an organisation asset (Barclay, & Murray, 2000). This paper will first of all, establish the meaning of data, information, knowledge and wisdom. Thereafter, we will discuss the link between organisational learning and knowledge management, and also identify some of the reasons why knowledge sharing is not well accepted by some organisational members.

II. Data-Information-Knowledge-Wisdom Link

The link between data, information, knowledge and wisdom was developed in 1989, by Russel Ackoff (Bernstein, 2009). Through knowledge management system, data can be transformed to information and to knowledge and to wisdom that could help organisations make better decision which will enhance the achievement of their goals. According to Ackoff (1989) "on the average about forty percent of the human mind comprise of data, thirty percent comprise of information, twenty percent consist of knowledge, ten percent consist of understanding, and almost zero consist of wisdom" (as cited in Bernstein, 2009, p. 68).

Data is a simple or mechanical measurement of values, such as age, height, weight etc taken at a particular period of time (Warier, 2003). He further posits that "data is often stored in a database and it is not important to any other person except the person for whom it is meant" (Warier, 2003, p. 3). In order to analyze and process data, meanings must be attached to those discrete values. Data is raw, unprocessed facts that are obtained through the use of measuring instrument. Data may be classified as unprocessed information, no wonder; Ackoff (1989) defines data as figures and facts that are not in any way structured that make no sense on its face value. Some data are structured but they are personalized to the specific needs for which they are collected. That is why it becomes difficult to really distinguish it in very clear terms, from information.

Information means data that have been processed and structured to make it more meaningful and useful to the person that will need it. It is about adding context to discrete data. Information tends to be more refined than data. In other words, what constitutes information to one person may not be information to another person. Information consists of data that have been processed and has become useful to a user (Warier, 2003). It is therefore, a matter of relevance and meaningfulness. "Information provide answers to questions that begin with such words as who, what, where, when, and how many" (Ackoff 1999, p. 129). The physical conversion of data into information can only be accomplished by humans with the application of information technology apparatus, especially when large amount of data is involved.

Knowledge is the ability to use information in a way that it will enable you to achieve your objectives. According to Kakabadse, Kakabadse and Kouzmin (2003), knowledge and "information" may be assumed to be synonyms; however, it is imperative to distinguish them. In other words, "information is imbedded in the form of theories, processes, or systems" (Omotayo, 2015, p. 3). Epetimehin and Ekundayo (2011) state that knowledge is a non-visible or physical asset, whose acquisition occurs through a convoluted intellectual process of perception, learning, communication, association and reasoning. Knowledge is classified into two: tacit and explicit (Noneka, 1994; Noneka, & Takeuchi, 1995).

Wisdom is the ability to select objectives that are consistent with and supportive of a particular set of values. Wisdom is the application of knowledge for the purpose of achieving a particular objective. Wisdom refers to the capacity to improve effectiveness through the application of mental effort often referred to as judgment. It has the attribute of being personal in nature and it is domiciled in the actor (Rowley, & Richard, 2006).

III. Tacit and Explicit Knowledge

According to Baloh, Desouza and Paquette (2011) tacit knowledge is rooted firmly in action, procedures and processes, commitments and values and can only be indirectly accessed.

Explicit knowledge is formalised and systematic. It is codified, collected, stored and easily transmitted from person to person. It is not personally bound and it possesses the qualities of data (Omotayo, 2015).

Explicit knowledge is mostly easily handled in knowledge management software which is effective in handling and facilitating storage, retrieval and modification of documents and texts (Wellman, 2009). Tacit knowledge has to do with intuition and reside in the knower and it is largely experienced based (Nonaka, 1994). According to him, tacit knowledge is action based, very hard to disseminate, and it is highly contextual and personalized. It is also considered the most valuable form of knowledge which most of the time, leads to innovations and breakthroughs (Wellman, 2009). It is embodied in the hearts of the individuals and comprises mental models, values and norms of behaviour.

Knowledge is therefore activated and gained when information is utilized for a new understanding or an insight into the application of new information. KM is "the process of acquiring, sharing, using and managing the knowledge and information of an organisation" (Girard, & Girard, 2015, p. 1). In other words, it has to do with making the optimum application of our intellectual resources in the achievement of group objectives using a multidisciplinary approach. We can therefore define knowledge management as a conscious effort of sourcing for the right knowledge and making it readily available to the right people and helping to distribute and making information actionable in ways that improve organisation capabilities.

When we deliberately study the concept of organizational learning and innovative capability, we discover that it inevitably enhances an organisation's competitive advantage and its innovative strength. It tells us to focus on improving our learning capabilities both at individual, groups and organisational level, in order to achieve desired level of organizational outcomes, which can be performance enhancement or increase in profitability. (Garcıa-Morales, Llorens-Montes, & Verdu-Jover, 2006).

Organizations should endeavour to encourage timely and accurate documentation of our learning and experience and make it accessible for others so that everyone within the organisation will stand to benefit from such experiences. It is only by so doing that the benefit of organisational learning will remain continuous and fruitful (Chawla & Joshi, 2010).

According to Watanabe and Senoo (2010) organizational characteristics and national culture have considerable influence on the practice of knowledge management. Organizational features, such as organisation structure employees' management relationship and such other characteristics of the organisation influences on the knowledge capabilities of an organisation, which is one of the components of knowledge management.

a) Information Technology and Knowledge Management

Information technology is an essential aid and should never be discarded when we are discussing knowledge management. That is why Ahmad and Schroeder (2011) suggest that the establishment of strategies relating to information technology that are on knowledge-based which will provides employee's friendly environment that will encourage the refinement of information and transfer of both tacit and explicit knowledge for the benefit of the whole organisation.

b) Organisational Learning and Knowledge Management

According to Singh and Sharma (2011) knowledge management and organisational learning has a positive relationship and by extension, with employee's performance. In order to improve the employee's performance, knowledge management systems must be enhanced and organizations must have to adopt different policies to enhance its learning capabilities.

KM has grown to be an important concept that is why the concept has gained considerable attention from scholars, practitioners, and policy-makers (Spender, 1996; Nissen, 1998; Pirro, Mastroianni, & Talia, 2010). It is on that basis that organisations are now paying special attention to their stock of both tacit and explicit knowledge. Knowledge is no longer regarded as a freelance source of organisational competence.

c) Factors that influence Knowledge Management

The three most important factors that influence the management of knowledge are knowledge distribution, organizational change and organizational learning (Danish, Nawaz, & Munir, (2012).

Knowledge sharing is an integral part or stage in the KM process. When intellectual assets are stored in archives via documents, procedural manuals, work processes and so on, without sharing, it is of no value. It is only when we share valuable information to those that need them, that we can be said to have engaged in meaningful knowledge management process. It does not end there too, because knowledge that is shared without the practical application or utilization by the receiver is of no benefit to anyone.

Organisations do not change for nothing. There are indeed a lot of reasons why organisations change. It could be a planned or anticipated change, arising from executive or managerial game plan to restrategise in order to capture a new market opportunity. Or it could be caused by a reaction by a competitor's action. In other words, an organization may be acting in such a way to counter a competitive maneuver. Whichever one it is, it is very important for organisations to be current in terms of knowledge creation, storing, sharing and utilization in order to cope with any of such challenges (Danish, Nawaz, & Munir, (2012).

The major components on interest in organisational learning are knowledge acquisition, knowledge sharing and knowledge utilization (Warier, 2003). Interestingly, this corresponds also to most definitions of knowledge management given by acclaimed scholars and practitioners. When an organisation learns and keeps stock of what it has learned through individual, groups and organisational level interactions, it is said to be a learning organisation (Watanabe, & Senoo, 2010). Learning organisations keep stock of knowledge and use old knowledge as a basis of acquiring new insight in knowledge creation. They discard outdated knowledge and ensure that knowledge is given to every member of the organisation that requires it. In other words, learning organisations are those organisations that are visibly able to manage the knowledge that they have acquired over time.

Knowledge management focuses on gathering, organising and analyzing the knowledge base of individuals and groups across the organisation in a way that an organisation can benefit through enhanced organisational performance (Wellman, 2009). Many organizations devote a lot of attention to the system of transferring best practices, experiences and knowledge as well as increasing the knowledge base of their organisations.

Knowledge management is the product of tacit knowledge or what may be called undocumented ideas or experience and explicit knowledge that are captured in documents as information. It is from the knowledge management information base that knowledge that is stored, is shared between individuals, teams as well as the whole organisation.

Knowledge management is not limited to information creation and storage, because information that is stored needs to undergo certain processes before they can be shared or utilized. According to Ries and Trout, (1986), the processes include:

Assimilation: This is the process of converting stored data into scientific knowledge through validation and analysis.

Data Compaction: This is the process of refinement whereby information that appears irrelevant is discarded.

Data Substitution: This allows information users to systematically access large arrays of information through the logical representation of developed formats that stands for the original documents.

Repackaging: This is the actual development of the material required for public utilization.

These processes are all embedded in knowledge management perspectives as postulated by Ries and Trout, (1986).

IV. Knowledge Re-use

According to Marcus (2001) there are three roles in the reuse of knowledge.

Firstly, the originator of the knowledge, secondly, knowledge intermediate, that is the person that packages the information for storage, sharing and into its usable form. It has to do with indexing, publishing, mapping and standardization, and finally, the consumer of the knowledge, that is the person or persons that will use the knowledge in question.

Demian and Fruchter (2000) identified two types of knowledge re-use, namely internal and external. Internal has to do with a producer or originator of the message using his own knowledge at some future time. External has to do with when the knowledge consumer uses someone else's knowledge.

V. Barriers to Knowledge Management

Technological barrier: There is often unavailability of software and hardware, coupled with inadequate IT manpower to handle the software, even when it is available. Furthermore, a firm can be caught up in a technological trap caught up by the difference between the time a technology is acquired and the time it is utilized (Herrmann, 2011).

In Africa, for instance many people are comfortable working with mobile phones compared to laptop computers. According to Kelly (2011) most Africans regard mobile phones as their personal computers.

Content barrier: A lot of innate skills and creativity is required to be able to transform tacit knowledge into explicit knowledge. Some ICT apparatus and processes are not easy to explain. This therefore acts as an impediment to knowledge sharing. Example could include unauthorized exchange of information through software within the organisation (Herrmann, 2011).

Barriers in Routines and Procedures: Some processes and procedures are not practically applicable in all situations, for instance regular sectional review. Furthermore, most other procedures, like HR manuals are not rigidly followed because they are cumbersome and mostly prepared by external consultants. Some routines like every midday joint coffee breaks among staff may not be recognized or strictly followed by all employees, which makes them unreliable.

Barriers in Organisation: An organisation executive may create an organisational structure that is favourable to him alone and which coincidentally facilitate the sharing of knowledge without having the interest of the organisation at heart. This may hinder knowledge management because other employees are not carried along in the design of such an organisational structure, but even at that, "structures are multi-layered, polyvalent, and often contradictory and maybe invisible even to those who inhabit them" (Ferguson, 1990, p. 17).

Barriers in Personnel: Individual behaviour characteristics account for most of the challenges encountered in the course of managing human resources as a major organisational asset. For example, for effective management of organisational intellectual resource, individuals in the organisation must view knowledge as crucial capability of their organisation; otherwise it will be extremely difficult for organisation to develop the intellectual competencies of the workers. Secondly, if the structure of the organisation is not innovation friendly, knowledge management is bound to fail (Dalkir, 2005).

Inadequate skills in the use technology can be corrected through effective training and the provision of useable technology. Furthermore, there should be all round discussions on the subject matter of knowledge management in order to create awareness among organisational members. Also, organisational members must be encouraged to share information with other

organisational members especially in areas of their core competencies by creating personnel incentives.

Spiela, and Kovac (2017) investigated the factors that promote organisational knowledge sharing and their findings show that personal inclinations, technology and organizational variables are factors that help in predicting an organisation's knowledge sharing orientations. It is very important to note that it is not the quantum of intellectual assets that an organization has that matters, but what is paramount is how the knowledge is shared to bring about optimum utilization of the knowledge (Argote & Ingram, 2000).

The process of knowledge sharing is very important when one considers the fact that knowledge sharing among employees in the same department makes it possible for organisational members to meet their individual goals and objectives faster and also make it easy for them to come up with innovative solutions to their problems (Demartini, & Paoloni, 2013).

In fact, a renowned author asserts that knowledge sharing is very important to organisations because of the following reasons: reduction in cost of operation, speed in meeting production targets, increase in efficiency and effectiveness, increase in innovation, and increase in organisational bottom-line (Hansen, 2002).

However, even with all the supports and encomiums given to knowledge management as a discipline, Barson, Foster, Struck, Ratchev, Pawar, Weber, and Wunram, (2000) argues that knowledge sharing has its own weakness, because according to them, some organizations do not have a culture that permits the distribution of knowledge. For example, Hendriks (1999) note that most knowledge are designed specifically for a particular organisational setting which make such knowledge valueless for other organisations, even when it is made available to them.

There are several other individual factors, for example, lack of interpersonal relationship, lack of organisational trust, skills, and time inadequacy as well as organisational level factors that might hinder organisational members from distributing or sharing knowledge (Lee, & Al-Hawamdeh, 2002).

More importantly, research has also shown that the type of leadership an organisation has, interpersonal helping, and own self-efficacy increases the desire and/or intention to share knowledge (Lin, 2008). The correlation between organisational culture and knowledge sharing is indeed an obvious one because an encouraging environment with shared core norms and value orientation might be positively related to increased knowledge sharing among employees in the sense that knowledge distribution practices more often than not, underlie an organisation's cultural expectations (Zheng, & Fai, 2013).

Another very important factor to consider in discussing organisation knowledge sharing is the concept of organisational trust. Organisational trust represents more specific factor that explains the extent to which an individual believes that sharing knowledge among his or her co-workers will be to the best interest of the organization (Ismail & Yusof, 2008).

VI. Summary and Conclusion

Knowledge management has gained popularity as a management concept with a lot to benefit by organisations that share and utilize knowledge as an intellectual resource. However, knowledge management ought to be treated as the last component of organisational learning, since the goal of the two concepts are technically and fundamentally the same.

The relationship among data, information, wisdom and knowledge was highlighted, with wisdom being at the topmost of the pyramidal shaped interrelationship.

The four components of knowledge management: knowledge acquisition, knowledge storing, knowledge sharing and knowledge utilization was discussed. The problems of sharing knowledge were also reviewed. Knowledge is of two types: tacit and explicit knowledge. Tacit knowledge is embodied in the minds of the individuals and it comprises beliefs, mental models, values and norms of behaviour. Explicit knowledge is codified in the form of document, processes, procedure and manual and is very easy to share.

Lack of interpersonal relationship, lack of organisational trust, skills, and time inadequacy as well as organisational level are the factors that might hinder organisational members from distributing or sharing knowledge.

However, knowledge sharing has its own weakness, because some organizations do not have a culture that permits the distribution of knowledge and even the ones that have the sharing culture do not know how to share knowledge in an effective manner.

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