The Significance of Knowledge Management in the Knowledge Economy of the 21st Century

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Loosing knowledgeable and experienced employees is on the rise across the world and in many organisations. The later is on the search for multiple solutions. The economy we live in has become a knowledge economy. The later concept focuses on getting knowledge to as many working professionals and employees in their organisations using multiple channels. All of which should focus on making information and knowledge accessible to many and all. That contributes significantly to the percentage of turn over in organisations. That itself makes the concept of knowledge management even more on demand than ever. Therefore, a systematic well-developed approach should be drafted in place to achieve the desired purpose. Each of which should have two integrates components as part of the process: evaluation and implementation. There isn't a standard format for such but rather a developed framework that suits the purpose of organisations. In this article, and after a thorough analysis in the field backed with professional experiences, we provide a well-developed model of framework in the field of knowledge management that is going to contribute significantly in the field to many organisations and across multiple disciplines.

Introduction

The essence of knowledge management is ensuring that information is shared and transmitted to employees within organisations. This process of gathering information, and sharing such knowledge ensures the development of employees. The later, in a competitive world of today, has become the center of focus of many organisations (Zack, 1999). Employees are challenged with different challenging situations almost every day of their working life. This, in turn, has reflected on obtaining knowledge from the current employees who are busy on their daily activities. Some of which may leave the organisation and take that knowledge away with them. Therefore, a knowledge management system should be established in place to extrapolate the amount of information needed, required, obtained throughout the course of time, and transmitted from the existing generation to the future ones (Alavi & Leidner, 2001).

Research and studies in the area of knowledge management have often suffered setbacks due to the negligence of understanding and realizing that knowledge management is vital is today's organisations (BenMoussa, 2009). Therefore, knowledge management has become even more important than any other time with the fact that today's economy is a knowledge economy. All of which requires proper guidance and that's the main focus of this article.

Scope and Objectives

Knowledge management is not only concerned with collecting and storing information. It is rather of a much wider scope involving the applicability and utility of information actual use. The process of collecting data and information that is made available and accessible to all employees may be very important. However, what is of greater importance is the knowledge made available and usable to working professionals. That being said knowledge must be made contextually of relevance to employees in a particular field.

The focus of this study is on secondary data from a thorough literature review analysis. It covers a wider scope of principles of knowledge management.

Thus, the objective of this study is:

1. Outlining the application of knowledge management.
2. Understanding the process of knowledge management.
3. Highlights problems associated with the application of knowledge management.
4. Shed the light on the impact of the implementation of knowledge management.

Literature Review

Application of Knowledge Management

The application of knowledge management is essentially a ten-step procedure, which enables the knowledge management system to be established based upon the existing facilities of data warehousing, Internet connectivity, and investments for future projected enhancements. Knowledge has become highly important today. It is a fact which is agreed upon by researchers of diverse disciplines, such as economics, management science, sociology, and others. The combination of information generated, together with the learning and experiences, are essential knowledge that can be used at any time. The purposes of which is the interpretation of data and events that may take place during the course of action (Davenport, Long & Beers, 1998).

Our knowledge about anything and everything is very limited. This implies that accumulating knowledge is of great importance in today's world. Knowledge, and the ability to use it through appropriate channels, are perhaps amongst the most vital resources a firm can possess. This knowledge should not be locked up in vaults or make it inaccessible. It rather must be made available and accessible to employees at all the working levels (Gupta, Iyer, & Aronson, 2000).

It is now very clearly understood and appreciated by most organisations that knowledge is the power and ability to remain competitive in the current challenging marketplace. Accordingly, the authors pose the most important and pertinent question, which is: how does a firm handle the process of gathering and processing information?

Information gathering and processing is the most valuable intangible assets in any organization (Davenport, 1996). Resistance, in the initial stages, towards establishing a management system that can be accessible to all is inevitable. The later is expected during and throughout any process. This idea of resistance to change was also projected in a study of overcoming the cultural barriers in sharing knowledge within a firm. It is mentioned that employees generally try to link the knowledge sharing process to problem solving through linking their organisation's culture or pre-existing values with it (McDermott & O'Dell, 2001).

Essentially, there are three distinct areas of knowledge management. First, external information related to competition, market condition, and consumer behavior pattern. The second is the internal information related to organization structure, knowledge and product development. The third, which is perhaps the most important, is the collection of the internal knowledge of know-how, production process improvements, and the intangible efforts require to do so (Gupta, Iyer, & Aronson, 2000). Knowledge may suffer from two major drawbacks: knowledge disappearance and knowledge distortion. This is particularly the case of firms where knowledge-intensive is of significance in scope and utilisation.

The article by Montano speaks about the large variety of efforts that have gone into the application of knowledge management, and into the evolvement and implementation of a standard framework for generic use. The authors first undertake an exploration of the works which have been completed so far and try to identify the areas of commonalities in these efforts. The efforts have shown a focus on one function or an industry. The absence of a generic methodology has been highlighted by the authors. This research paper is found to be outstanding in its efforts, and the extent of importance laid by it towards formulating an action plan for generic use of the concept of knowledge management. The efforts in this paper have been made by emphasising the positioning of knowledge management into a wider methodology within a systemic approach. This will enable a closer and better ability towards identifying and addressing the factors and aspects which cause the failures or create the success of such endeavors (Rubenstein-Montano, Liebowitz, Buchwalter, McCaw, Newman, Rebeck & Team, 2001).

There is a need for having well-laid out procedures for the evolution and implementation of a suitable knowledge management process for every situation, in every industry, and every function within an organised area of work. Until recently, the methods of evolving a suitable knowledge management system were not only undefined, but also unorganised (Tiwana, 2020).

Problems in the Application of Knowledge Management

The staff on the shop floor find the intricacies of knowledge management a little difficult to appreciate. It may be indicated here that the concept of knowledge management is neither an empty discussion at seminars, nor it is cut and dried formulations, which can guide the shop floor managers to address operational problems accurately. One of the pillars of knowledge management — the pillar of people, of all levels — must be considered for all knowledge management activities. The other two pillars are process, and technology. The integration of these three pillars can lead organisations to successfully apply the principles of knowledge management. In fact, the conceptual ideas and frameworks suggested by knowledge management are not readily made into action plans, which will bail-out the practicing shop floor supervisor (Chan, 2017).

In another study, it has been highlighted that these pillars are not sufficient and the interaction between these factors are essential. A 'learning-by-doing 'environment is necessary, so that the firms can use knowledge management to their benefit and increase their competitive advantage (Bhatt, 2001). As is reflected in the literature review, the process of data collection calls for a joint effort from all employees, in the absence of which the purpose will not be achieved (Gupta, Iyer, & Aronson, 2000). The outset that knowledge management has not yet been put on a firm footing, and though the research has made tangible contributions, the practical

applicability and usefulness of the purpose of such knowledge management systems is alarmingly low (BenMoussa, 2009).

Knowledge is information which is properly blended with the context, experience, reflection, and interpretation, which will make it fit for a ready application in similar problem situations. It has a high intrinsic value by being a ready source of information for people who enter into problematic situations (Yoo, 2012). While at times it may become difficult to distinguish between information and knowledge, both become highly valuable with human participation and interpretation (Bouthillier & Sheaer, 2002). On the other hand, the use of knowledge management and its importance is diluted with it being linked to several special branches of learning. The conceptualisation and analysis in detail about its functioning does not receive any recognition in practical applications, where the knowledge management systems must deliver help and guidance to people at work. In a study that provided a vivid narration of the application of knowledge management in the leading electrical and electronic manufacturer, Siemens, whose systems and processes are regarded as industry benchmarks across the globe. The presentations are made through live examples taken from different functioning areas, which enable the very accurate understanding of the scope, and the extent of coverage provided by any well-laid out knowledge management system in a large undertaking. It highlights in great detail how knowledge management systems can be gainfully utilised for generating working advantages to an organisation, which a mature organisation can use (Davenport, 2001).

Another study discusses the various challenges and issues involved in the implementation of a proper knowledge management system, together with the benefits that are derived from such an application. The article conduces that, amongst others, the yardstick for measuring the effectiveness of the knowledge management system must be insisted upon, so that the system is fine-tuned over time (Alavi & Leidner, 1999). Moreover, knowledge management comes with a resistance to its application in certain organisations, as employees 'link problem solving procedures to the core values or culture of the firms (McDermott & O'Dell, 2001).
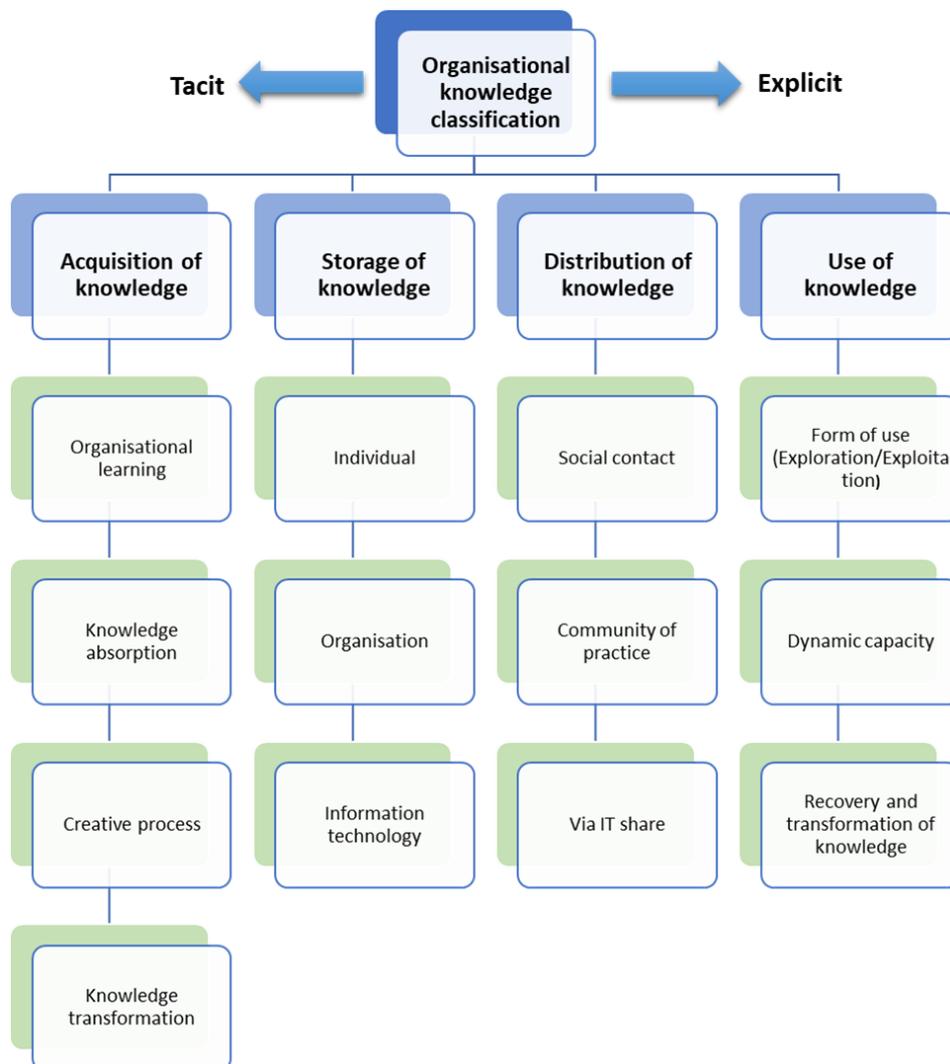
Process of Knowledge Management

This article starts by documenting the fact that the proper systems of knowledge management act as a tool for enabling a development of functioning knowledge management, both effectively, and efficiently, and render help to the functioning departments in executing their duties, and functions. Despite understanding the great usefulness of the properly developed knowledge management facilities, the concept of knowledge management still suffers from a significant amount of lacking clarity (Maier & Hadrich, 2011).

Knowledge management should contain an intervention of topics or content, strategies, instruments or systems, and knowledge management organisation and processes (Maier &

Remus, 2003). Four steps or stages have been mentioned by the authors, which lead to an effective implementation of the knowledge management application. These stages are the identification of relevant knowledge, finding a proper system of storage, dissemination of the contents to the respective and prospective users, and using the knowledge to check its effectiveness and conduct further fine tuning (Alavi & Leidner, 2001).

Figure 1. The Process of Knowledge Management of Alavi and Leidner (2001)


Implementation of Knowledge Management

The implementation of knowledge management deals with the successful application of development, retrieval, storage, and dissemination of information in a company, in order to

improve its performance. Moreover, the implementation of knowledge management is required in organisations in a systematic manner to remain competitive (Gupta, Iyer, & Aronson, 2000).

The research finds that the implementation of knowledge management has wide variations in its applications. The prior studies conducted occurred in a variety of situations ranging from research and development, and all the way to production and sales planning. It may be noted that the information and knowledge need of each of these sectors called for efficiencies, which differed immensely between themselves, and the criticality of one, were at variance with the criticalities of the other. Many market-based self-funding entities were in the business of delivering knowledge to people in need, which were made available to the users at a cost.

These efforts in the market had many superficial similarities, in the sense that in almost all such ventures, there were people responsible for handling the inputs in different fields of concern, and a chief executive to ensure that the subsystems worked according to the overall business strategies of the firm. Operationally, they had many identifiable characteristics. First, they collected data and created knowledge out of the data. Second, they ensured that accessing the knowledge was of utmost importance for their functioning in the market. Third, they actively ensured the improvement of the environment from where the data — which eventually generated knowledge — was collected. Finally, all considered that knowledge was their most important asset, which could be delivered as a product to the users in need.

Figure 2. The Knowledge Management Model of Jones and Shideh (2020)
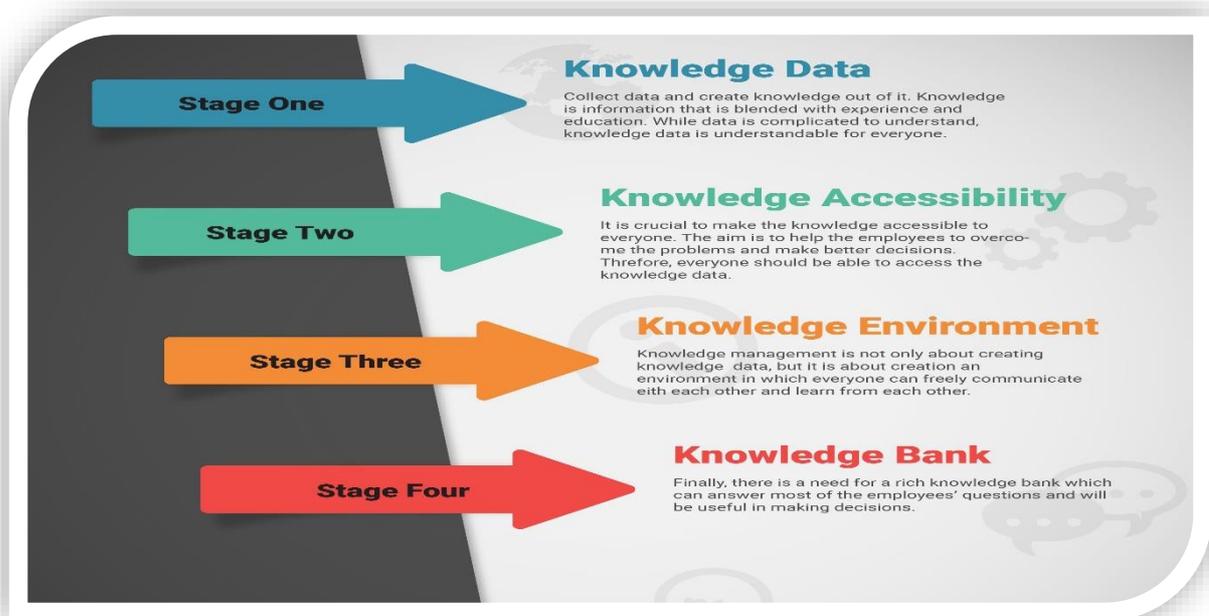
Methodology

The paper provides the analysis of the statements through a literature review, and a short conclusion of the whole paper. Various articles and research papers published at different time intervals have been studied to fulfil the four objectives of the paper.

As mentioned above, the scope was to work through literature studies in particular. Hence, the selection of literature had to be performed cautiously to ensure that only relevant studies were selected for this study.

Analysis

Through this study, people are seeking fresh solutions to their efforts in delivering purpose and meaning by using knowledge management systems. The reviews provide a close understanding of the knowledge management process truly, and completely. With the help of the information bank, and the knowledge base available, the firm can chart out future courses of action in meeting exigencies of operations. It needs to be understood that the fundamental purpose is to enhance the effectiveness of performance, and not to simply create a stock pile of irrelevant and unusable facts (Dalkir, 2017).

The importance of knowledge management noticed a prominent progress in the fields of information technology and electronic. The later witnessed a significant advancement of progress across the various parts of businesses of today. Thus, whenever, and wherever people faced any problem, which had held them captive, they invariably investigated their experiences for seeking solutions to those new problems. This, in turn, has improved the performance of organisation (Gupta, Iyer, & Aronson, 2000). This inference may open a new area of research, which could explore whether the rate of technological advances in the field could be rendering the need for knowledge management more severely in their operations. While knowledge management would be expected to deliver exact solutions under different problems, and difficult situations (in the changed circumstances), whether they are able to do so, and to what extent, would make for an interesting topic of study. The analysis showed that employees had high expectations of the knowledge management facilities. This achievement of precision in such a diverse work situation implies that the collection and processing of data, together with the systematic warehousing, becomes an important aspect in the working of a knowledge management system. In fact, the knowledge management systems are considered much more useful for information retrieval than the traditional systems used (Dalkir, 2017). Process, technology, and people, together with a learning by doing environment, are what is required to apply knowledge management to the benefit of a firm (Bhatt, 2001).

Conclusions

Knowledge management has proven that it is a very powerful tool in the hands of functioning executives, and it is also the main consideration to ensure that it becomes more, and more useful to operating personnel over time. The strategy formation is an important result from the analysis undertaken from the literature review. The following model can be interpreted from the understanding built using the traits of knowledge management. This resonates with the comprehensive analysis, and critical reviews that are drawn in this research. The figure is given as follows:

Figure 3: Human Capital Investment Model of Jones and Shideh (2020)

Knowledge Management (KM) Assessment: it is the process of obtaining information of knowledge management within organisation and identifying gaps.

Knowledge Management (KM) Analysis: it is the process of interpretation and identifying the crucial sections of an organisations that needs improvements.

Knowledge Management (KM) Training: it is the practical process to increase an employee's awareness and knowledge and make them ready for the implementation of a knowledge management system.

Knowledge Management (KM) Culture: the final step is creating a knowledge management culture within an organisation, where employees can communicate with each other openly, learn from each other, and eliminate the culture of fear.

An in-depth knowledge and understanding of the markets, needs of customers, patents, processes, and products are all highly important strategic resources for the business environment of today. Through the correct use of this vital resource, especially for the bigger firms, it has become inevitable to surviving in the innovation intensive, and competition intense markets.

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