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# **Knowledge Management as an important tool in Organisational Management: A Review of Literature**

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## **Abstract**

The emergence of knowledge-based economies has placed an importance on effective management of knowledge. The effective management of knowledge has been described as a critical ingredient for organisation seeking to ensure sustainable strategic competitive advantage. This paper reviews literature in the area of knowledge management to bring out the importance of knowledge management in organisation. The paper is able to demonstrate that knowledge management is a key driver of organisational performance and a critical tool for organisational survival, competitiveness and profitability. Therefore creating, managing, sharing and utilizing knowledge effectively is vital for organisations to take full advantage of the value of knowledge. The paper also contributes that, in order for organisations to manage knowledge effectively, attention must be paid on three key components - people, processes and technology. In essence, to ensure organisation's success, the focus should be to connect people, processes, and technology for the purpose of leveraging knowledge.

**Keywords: Knowledge, Management, Organisation, Tool, Literature**

## **Introduction**

*If information is the currency of the knowledge economy, human expertise is the bank where it is kept, invested and exchanged - the researcher.*

*"A firm's competitive advantage depends more than anything on its knowledge: on what it knows- how it uses what it knows – and how fast it can know something new." – HR Magazine 2009, p.1.*

It is no longer a controversy that we live in a globalised world characterised by fast information transfer across large geographic areas by means of the Internet. The consequence of this globalization is the emergence of knowledge-based economies where importance is placed on effective management of human capital to ensure that workers continue to create the right value for the economy. Nowadays, organisations no longer compete solely on the basis of financial capital and strength, rather knowledge is the new competitive advantage in business. In fact the Gross Domestic Product (GDP) growth rate is now determined, amongst other factors, by the quantum and quality of knowledge stock harnessed and applied in the production process in sectors of the economy. This knowledge based economies require that Knowledge Management (KM) good practices be put in place to improve organisation effectiveness. There is a popular

saying that knowledge is power. Based on this assertion, it can be said that the management of knowledge is the key to power.

KM as a discipline has been a focal point of discussion over the past decades. In recent years, the importance of KM has been widely recognized as the foundations of industrialized economies shifted from natural resources to intellectual assets. Since 1995 there has been an explosion in the literature surrounding the developing concept of KM. Today, there is hardly a conference or published journal without seeing literature referring to the concept, KM. The importance of KM as a critical tool in organisation and the society can therefore not be overemphasised. As Desouza (2011) put it, KM has become a trendy buzzword. Much of the interest in KM came from the realization that organisations compete on their knowledge-based assets. Even noncompetitive organisations (e.g. governmental institutions and nonprofits organisations) succeed or fail based on their ability to leverage their knowledge-based assets. It is stated by Teng and Song (2011) that the importance of KM is no longer restricted to knowledge intensive firms in the high-tech industries but to all sectors of the economy. Zack (2003) further says that even companies in the traditional industries, such as cement, can benefit greatly from KM. In essence KM is beneficial to all sectors, be it educational, banking, telecommunications, production/manufacturing, and even the public sectors.

The management of knowledge has generated considerable interest in business and management circles due to its capability to deliver to organisations, strategic results relating to profitability, competitiveness and capacity enhancement (Chua, 2009; Jeon, Kim and Koh 2011). The management of knowledge is promoted as an important and necessary factor for organisational survival and maintenance of competitive strength. KM is identified as a framework for designing an organisation's strategy, structures, and processes so that the organisation can use what it knows to learn and to create economic and social value for its customers and community. Organisations need a good capacity to retain, develop, organise, and utilise their employees' capabilities in order to remain at the forefront and have an edge over competitors. Knowledge and the management of knowledge is regarded as an important features for organisational survival; while the key to understanding the successes and failures of KM within organisations is the identification of resources that allow organisations to recognize, create, transform and distribute knowledge. Organisations that effectively manage and transfer their knowledge are more innovative and perform better (Riege, 2007).

Successful organisations now understand why they must manage knowledge, develop plans as to how to accomplish this objective and devote time and energy to these efforts. This is because KM has been described as a key driver of organisational performance (Bousa and Venkitachalam, 2013), and one of the most important resources for the survival and prosperity of organisations (Teece, Pisano, and Shuen, 1997; Kamhawi, 2012). Therefore managing and utilizing knowledge effectively is vital for organisations to take full advantage of the value of knowledge. The attention and importance given to the acquisition of KM in literature as well as practice in the past years is also of necessity due to changes in the environment such as increasing globalization of competition, speed of information and knowledge aging, dynamics of both product and process innovations, and competition through buyer markets (Greiner, Böhmann and Krcmar, 2007). In a knowledge based economy, KM is increasingly viewed as critical to organisational effectiveness and performance (Bosua and Venkitachalem, 2013).

Martensson (2000) considers KM as an important and necessary component for organisations to survive and maintain competitive keenness and so it is necessary for managers and executives to consider KM as a prerequisite for higher productivity and flexibility in both the private and the public sectors.

There was an initial notion that KM is just another management fad and fashion that executives are eager to add to their assortment of boardroom lexicon to impress contemporaries and that with time, this will fade away (Scarborough and Swan, 2001; Ponzi and Koenig, 2002; Hislop, 2010; Serenko, Bontis, Booker, Sadeddin and Hardie, 2010; Oluikpe, 2012). However, this has been found by research evidences as not true because the number of academic publications on the management of knowledge within organisations has steadily increased since the late 1990s when the concept emerged. Spender (2008) also corroborate this fact stating that KM represents a potentially very important subject area which not only opens up new ways of theorizing about the nature of organisations, but also has the potential to be highly relevant to the interests of the business world in improving business performance. It has been said that knowledge has always been a valuable asset in management, what then is KM and how does it contribute to the success of an organisation?

The paper is organised into eight sections. The first section is devoted to looking at the four key components of knowledge management. The second section looks at the various dimensions of knowledge. The processes of KM (creation, organisation, sharing and application) are presented in section three. The paper reviews management as a concept in section four, while KM is defined in section five. The need to manage knowledge in organisation is highlighted in section six. The relationship between KM and organisational strategy is reviewed in section seven. In the final section, KM as a strategic management tool was presented. The aim is to determine whether the concept of KM is a necessary tool for more efficient management in organisations, especially in Nigeria.

#### **Four key components of knowledge management**

Many organisations have realized that technology-based competitive advantages are transient and that the only sustainable competitive advantages they have are their employees and so to remain at the forefront and maintain a competitive edge organisations must have a good capacity to retain, develop, organise, and utilise their employee competencies (GroËnhaug and Nordhaug, 1992). The realization came that processes and technology alone are not enough to drive an organisation but its human force (staff) are very integral pivot in organisation's success. Therefore, in order to manage knowledge effectively, attention must be paid on to four key components: Knowledge, People, Processes and Technology (KP<sup>2</sup>T) (Desouza 2011). In essence, the focus of KM is to connect people, processes, and technology for the purpose of leveraging knowledge.

Knowledge is described as an essential part of KM. Baloh, Desouza, and Paquette (2011) say that without having knowledge to manage, there would be no knowledge management. Knowledge basically refers to a collection/or a body of information. This could mean that the information is embedded in the form of theories, processes, systems, or it could be voiced in form of opinions, theories, ideas and analysis. Knowledge is a complex concept that attracts

many philosophers, researchers of other disciplines, and practitioners. Different typologies have been developed but the only consensus is the notion that knowledge is more than just mere data and information. Wang and Noe (2010, p117) define knowledge as “information processed by individuals including ideas, facts, expertise, and judgment relevant for individual, team, and organisational performance.” Davenport and Prusak (1998) define knowledge as

“A fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers”  
p4.

Knowledge is the insights, understandings, and practical know-how that people possess. It is the fundamental resource that allows people function intelligently. 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 and Ekundayo, 2011). Davenport, De Long and Beers (1998) define knowledge as information combined with experience, context, interpretation, reflection, and perspective that adds a new level of insight. Allee (1997) says that knowledge becomes meaningful when it is seen in the larger context of culture, which evolves out of beliefs and philosophy. Sveiby (1997) describes knowledge as the capacity to act on information and thereby make it valuable, therefore knowledge can be said to be ineffectual if not used. In organisations, knowledge becomes embedded not only in documents or repositories, but also in organisational routines, processes, practices, norms and cultures.

The second component of KM is people. People are the sources of knowledge. The ability of humans to think creatively and uniquely, coupled with experiences and talents, make humans valuable sources of knowledge. People are the creators and consumers of knowledge because individuals consume knowledge from various sources on a daily basis, in addition to creating knowledge. In essence, KM begins, revolves around, and ends, with people. It is therefore pertinent to consider people in KM strategy and implementation. People face emergent knowledge needs as part of daily assignment or routine. And these needs should be met through tools, processes, systems and protocols to seek integrate and apply relevant knowledge. As Drucker (1999) points out, workers (people) need to be able to seek out knowledge, experiment with it, learn from it, and even teach others as they innovate so as to promote new knowledge creation. Having a KM program that enables the sense of the importance of people is a very important to organisational success.

Baloh et al. (2011) define processes, which is another KM component, as mechanical and logical artifacts that guide how work is conducted in organisations. Processes govern work in organisation and so are critical to the functioning of organisation. It is therefore pertinent for a KM program to recognize their importance. Processes might be made of, and executed by, humans, machines, or a combination of the two. A critical requirement for KM is to be able to understand work processes and how to map them. By so doing, inputs, outputs, personnel, resources and work being conducted in a given process can be easily described. Mapping of processes helps to depict what is really going on in the organisation and how tasks are being accomplished. Knowledge needed to accomplish tasks can then be articulated and requisite technology or human intervention can be deployed to meet these needs with the goal of increasing effectiveness and efficiency in the organisation.

The last component of KM is technology. Technology is a critical enabler and foundational element of a KM plan. With the advances in Information and Communication Technologies (ICTs), KM can be attained through technological solutions. ICTs facilitate collaboration between people and teams which are geographically dispersed. ICTs also facilitate KM activities through the codification of knowledge as well as rich and interactive forms of communication through the Internet. While technology is important and can significantly enable KM, it is pertinent to state that it is not a solution in and of itself. Technology does not make organisation share knowledge, but if people want to share it, technology can increase the reach and scope of such exchanges. Putting an ICT-based KM system in place is not in and of itself going to make people utilise it, but the success of KM initiatives involves taking account of the socio-cultural factors which inhibit people's willingness to share knowledge, such as conflict, trust, time or concerns about loss of power/status (Sun and Scott, 2005).

### **Dimensions of knowledge**

Blackler (1995) defines knowledge as taking five distinct forms: embodied, embedded, embrained, encultured, and encoded. He defines embodied knowledge as knowledge that is gained through training of the body to perform a task, and Hislop (2013); Strati (2007); Yakhlef (2010) point out that it is impossible to totally disembodify this knowledge from people. Embedded knowledge is a knowledge that is found in routines and systems. Organisational common tasks, routines or the common ways people go about their jobs, can hold embedded knowledge, as the routines facilitate learning amongst the employees that go beyond their job tasks. Hislop (2013) corroborates this fact by stating that knowledge is embedded, and inseparable from, practice. That is, knowledge that is embedded in work practices is simultaneously embodied by the workers who carry out these practices (Strati, 2007; Yakhlef, 2010).

Embrained is defined as the knowledge that a person can possess, but has difficulty expressing in words or sharing with other. It is further described as a knowledge that one cannot easily write down, talk about with others, or represent with pictures or other tools. It is gained through experience over time and may reflect one's perceptions, opinions, values and morals. Encultured knowledge is described as a set of knowledge that is shared among groups of people who share a similar environment or culture, such as what is accepted, what actions and opinions are considered normal, and what behaviours are expected of people. Encoded knowledge is a form of knowledge that can be easily written down, expressed in words or diagrams, and is transferrable through multiple channels and means. Procedure manuals, guidelines, process diagram, flowcharts, recipes and instructions are all examples of encoded knowledge, because they are encoded in a physical form that is understandable by a lot of people.

Therefore in organisation, it can be said that organisational knowledge is *embodied* and *embrained* in the staff, *embedded* in routines/common tasks, *encultured* among the staff, and *encoded* in manuals, guidelines and procedures. Davenport and Prusak (2000) says that in organisations, knowledge becomes embedded not only in documents or repositories, but also in organisational routines, processes, practices, norms and cultures Organisational knowledge is therefore the sum of the critical intellectual capital residing within an organisation. It is an

embedded knowledge which is found primarily in specialize relationships among individuals and groups and in particular norms, attitudes, information flows, and ways of making decisions that shape their dealings with each other (Badaracco, 1991).

Knowledge can be distinguished in two different types. Polanyi (1966, 1967); Nonaka (1994); Nonaka and Takeuchi (1995) describe knowledge as existing in two dimensions – tacit and explicit knowledge. In essence, knowledge is most commonly categorised as either explicit (coded) or tacit (that which is in people's heads). Tacit knowledge is the personal and context-specific knowledge of a person that resides in the human mind, behaviour, and perception (Duffy 2000). It evolves from people's interactions and requires skill and practice. Tacit knowledge is highly personal (held within the holder), subjective, difficult to formalize, articulate and communicate fully, experience based, contextualized, job specific, transferred through conversation or narrative, not captured by formal education or training and may even be subconscious but capable of becoming explicit knowledge (Nonaka and Takeuchi, 1995, Hislop, 2013). It is the type of knowledge that is used mostly by organisational members in the performance of duties. Tacit knowledge is hard to verbalise because it is expressed through action based skills and cannot be reduced to rules and recipes. It is deeply rooted in action, procedures, commitment, ideals, values and it can only be indirectly accessed (Baloh et al., 2011).

Tacit knowledge is *embrained* knowledge and is at the ontological dimension in which its explication requires the use of metaphors and an extensive process of socialization. Sharing of tacit knowledge is made possible through networking among those who possess it, and this is referred to as Communities of Practice (CoP). It is of importance to note that tacit knowledge is not easy to imitate by competitors so this makes it a crucial source of sustainable competitive advantage. Thus, the major concern of organisation is the need to envelop strategies for the transformation of the tacit knowledge into explicit knowledge so as to derive maximum benefit from the organisation's intellectual capital.

Explicit knowledge in contrast is formal and systematic; can be codified, collected, stored, and disseminated. It is not bound to a person and has primarily the character of data. Explicit knowledge exists at the epistemological dimension where explication is possible using written or coded formats (Nonaka, 1994). Explicit knowledge is documented and public; structured, fixed-content, externalized, and conscious (Duffy, 2000). Explicit knowledge is what can be captured and shared through information technology. It can be codified into formal information that comes in tangible forms as written books, documents, manuals, white papers, guidelines, blueprints, technical specifications, scientific formulas, databases, organisational designs and policy manuals. It can be easily formalized and documented, articulated, expressed in words or numbers, and shared formally, as people are aware of it. As it can be processed, transmitted, and stored relatively easily, it is not difficult for organisations to capture this knowledge in repositories, systems, or operating technologies and share it throughout organisations. Polanyi (1966) distinguishes between tacit and explicit knowledge by suggesting that it is possible for people to know more than they can tell.

The words explicit and tacit can be misleading because they imply that they are exclusive. However, Nonaka and Takeuchi (1995) say that explicit knowledge is “grounded” in tacit

knowledge and is created by externalization (visualization, articulation, or codification) of tacit knowledge. Explicit knowledge is the part of tacit knowledge that can be expressed verbally and does not represent the entire body of knowledge. While tacit knowledge can be possessed by itself, explicit knowledge must rely on being tacitly understood and applied, hence all knowledge is either tacit or rooted in tacit knowledge. Baloh et al. (2011) give a good example of explicit and tacit knowledge, which is a cooking recipe. Explicit knowledge used in cooking includes a list and measures of ingredients to be used and a short description of the cooking process. Tacit knowledge is an understanding of what and how much of ingredients to include, and also the process of actually preparing the particular dish. Processes such as adding particular ingredients in a certain order or in a certain way, or using certain method, or the timing of cooking and these are often difficult to explain.

Koenig (2012) however, describes this characterization of knowledge into explicit and tacit as rather too simple. He suggests that knowledge is better described as explicit, implicit, and tacit. Explicit means information or knowledge that is set out in tangible form. Implicit is information or knowledge that is not set out in tangible form but could be made explicit, while tacit is information or knowledge that one would have extreme difficulty operationally setting out in tangible form. Choo (2002), on the other hand, categorise organisational knowledge into tacit, explicit and cultural. But whether tacit, implicit, explicit or cultural, the most obvious point is the making of the organisation's data and information available to the members of the organisation.

In whatever dimension knowledge exists, the transfer is in large part a transfer of information. Knowledge is the product of the interaction of explicit and tacit knowledge and the process of creating knowledge results in a spiralling of knowledge acquisition. It starts with people sharing their internal tacit knowledge by socialising with others or by capturing it in digital or analogue form. Other people then internalise the shared knowledge, and that process creates new knowledge. These people, with the newly created knowledge, then share this knowledge with others, and the process begins again. Hibbard (1997) articulate this process as innovation. Tacit and explicit knowledge are increasingly being emphasized in both practice and literature, as a management tool to be exploited for the manipulation of organisational knowledge which is shared through humanware, groupware, intranets, listserves, databases, and repositories.

Because knowledge is largely tacit and individually owned, it is difficult to have charge of, and control over it. To exploit knowledge more efficiently organisations need to codify and store the individual's knowledge. This involves making tacit knowledge explicit and transposing individual knowledge into organisational knowledge. These transformation processes have been made possible through ICTs. An organisation's task with KM should focus on transposing tacit knowledge into implicit and explicit knowledge and see to it that individual knowledge becomes organisational knowledge. This can be explained not only by a need for organisations to better manage knowledge by establishing core competencies for individuals, judging success and performance indicators via recognition of invisible assets, but also for organisations to strive to become an innovative organisation and a learning organisation with a knowledge sharing culture (Martensson 2000).

## **Processes of KM**



KM is viewed as a process, where many activities are formed to carry out key elements of an organisation's KM strategy and operations. For instance, an organisation must first identify and capture knowledge, and then organize it in order to bring knowledge within the organisational boundaries. Knowledge is also transferred and shared throughout the members of the organisation using both human and technological means. Through this transfer, the members of the organisation can apply the new knowledge to their tasks/work activities, which can include the use of KM systems or developing the business case for an organisation's KM projects.

The creation and development of knowledge is an important and intrinsic feature of KM (Dul, Ceylan, and Jaspers 2011; Nonaka 1991, 1994; Nonaka and Takeuchi 1995; Pan and Scarbrough, 1999). The creation of knowledge is essential for the survival of any organisation. Knowledge creation is an activity that occurs throughout daily activities, at work or in social setting. Knowledge creation occurs in many dynamic forms, which could be through humanistic means (such as formal training or talking with people who share similar interests) or technical mechanisms (data mining activities). Knowledge creation is primarily a human process; technology can facilitate knowledge creation but cannot replace people. Organisations leverage on their ability to create knowledge, innovate, and generate value with new knowledge. This is knowledge that leads to new and innovative products; knowledge that improves internal processes and operations; or knowledge to improve the strategic decision-making capabilities and direction of the organisation. Hislop (2013) says that the ability to create knowledge and generate a competitive advantage is now essential for any organisation that wishes to remain sustainable within its marketplace.

The need to create knowledge in organisation has been identified above. It is equally important to point out that, in order for any activities requiring knowledge to be effective, knowledge held by organisations must be easily accessible and retrievable. This means that organisations must organize their knowledge so it is retrievable by the appropriate individuals. In other words, the fundamental objective of organizing knowledge is to allow for its retrieval. The consequences of not organizing knowledge in a manner that leads to retrieval and use can be severe. It is therefore important for organisations to spend resources and efforts in managing and organizing the knowledge that exists within the boundaries of the organisation.

Given that companies and organisations are increasingly gaining competitive advantages from intellectual assets rather than physical assets, organisations that do not implement effective KM strategies faces difficulties. When an employee leaves an organisation, his idea, information, experience, contact, relationships and insights leave with him if no attempts are made to identify, capture and share this knowledge in the organisation. How then can we ensure an employee's knowledge is not lost when such employee leaves? This brings us to sharing of knowledge. Knowledge sharing has been described as a key activity of effective KM (Gururajan and Fink, 2010; Lee and Choi, 2003; Olatokun and Nwafor, 2012; Amayah, 2013; Rabi, 2009; Epetimehin and Ekundayo, 2011; Oluikpe, 2012; Paquette and Desousa, 2011; Ekeke, 2011). In order for knowledge to be utilised once it is created, thereby providing value to the organisation, it must be shared with colleagues, teammates, and co-workers. The sharing and transferring of knowledge is very vital to KM, given the fact that organisations struggle with knowledge loss resulting from employee turnover. In addition to retirement, critical knowledge loss occurs by job transfer, mobility and alternative work arrangements. It is therefore the responsibility of all

members in organisations to generate and share knowledge by adopting the attitude of “knowledge as part of self” under which sharing knowledge becomes a personal issue and one that requires personal commitment.

In addition, for any organisation, the ultimate goal of managing knowledge is to increase profit by improving the efficiency of operations, increasing the quality and quantity of innovations, and enhancing competitiveness. However, this desired benefit cannot be achieved without knowledge collected being effectively applied within the organisation. Therefore employees at all levels of organisation need to make a systematic effort to utilise the knowledge available at different points of their activities, such as decision making. The organisation’s ability to apply its knowledge to critical business activities serves as the key link between the business goals of a KM program and its actual, realized benefits. Reusing knowledge inevitably requires the active participation of knowledge workers, typically organised in work groups in an organisation (Hislop, 2013; Dul et al., 2011).

### **Management as a concept**

Managers play a critical role in shaping the future of every organisation because the decisions, action and inaction taken by managers can often result in the successful execution of operations for the organisation. The most important activity that a manager is engaged with on a daily basis in most organisations is decision making. And the effectiveness and efficiency of managers’ decisions and decision-making processes ultimately determine the success or failures of the organisation. Moon and Desouza (2011) opine that, critical to the success of decision making is the ability for individuals in the organisation to leverage knowledge. They state further that the more accurate the knowledge that is available to managers, the better chance they have in making decisions that will result in positive and desired results for the organisation. This makes it imperative to briefly discuss management in this paper.

What then is management? Management involves motivating resources, both human (e.g. employees) and artificial (e.g. technologies) to work in a coordinated fashion toward the achievement of organisational goals and strategies (Moon and Desouza, 2011). Peter Drucker, regarded as one of the greatest management thinkers state that management has to do with directing the resources and efforts of the business toward opportunities for economically significant results (Drucker, 2006). He is of the opinion that in order to achieve results, management and organisation need to recognize employees as assets rather than liabilities. Mintzberg (2009) posit that management has to do with understanding how to deal with three kinds of assets: action, people and information. Management helps organisations to achieve its tasks, which is done by taking actions, motivating employees, training them and providing information that guides employees in order to help them take more effective actions that will help in achieving the organisational goals.

Management is therefore concerned with the four critical activities: planning, organizing, controlling and leading. Planning is a decision making process whereby a course of action is created to move from a current state to a desired state. It includes gathering information, creating a vision and mission statement, defining goals and objectives, developing strategies, choosing the best course of action, designing and developing the plan to implement the course of action.

Organising involves securing resources, including human resources, financial resources, and physical resources, which are required to implement the plan. Organising requires good communication in order to justify needs and allocate scarce resources within an organisation. Controlling is the process of measuring and evaluating progress and outcomes, and taking corrective action as needed, collecting feedback in order to better control operations and outcomes they will produce. Leading is the ability to inspire shared vision and action among individuals or groups in order to achieve a common goal. According to Peter Drucker, “Management is doing things right; leadership is doing the right things” (Drucker, 2006, p.147). Invariably, the management in the phrase KM deals with planning, organizing and controlling knowledge as well as leading as knowledge champion.

### **The Management of Knowledge**

Hislop (2013, p. 56) define KM as

“an umbrella term which refers to any deliberate efforts to manage the knowledge of an organisation’s workforce, which can be achieved via a wide range of methods including directly, through the use of particular types of ICT, or more indirectly through the management of social processes, the structuring of organisation in particular ways or via the use of particular culture and people management practices”.

Defining KM could be really tasking because KM is a highly interdisciplinary field that attracts scholars and practitioners from various fields (philosophy, information science, library science, economics, management, sociology, engineering, among others). Searching through so many definitions from various authors, the definition from Petrash (1996, p. 370) is adopted, which state that KM is getting the right information in front of the right people at the right time.

The operational origin of KM arose within the consulting community, having realised the potential of the Intranet flavor of the Internet for linking together geographically dispersed and knowledge-based organisations. This realization came at a time when there was recognition that information and knowledge are essential assets for any organisation’s success. And so the focal point in KM is to capture the information and knowledge that is in people's heads as it were, and that has never been explicitly set down and make this available, so it can be used by others in the organisation. Koenig 2012 state that the initial stage of KM was driven primarily by Information Technology (IT), about how to deploy IT to accomplish more effective use of information and knowledge and the hallmark phrase of this stage was termed “best practices”.

The emergence of KM also coincided with the development of the global knowledge based economy in which emphasis has been shifted from traditional factors of production, namely capital, land and labour, to knowledge. The nature of work has changed enormously with the shift from an industrial economy, focusing on commercial products, to a knowledge based economy, where service and expertise are the main business outcomes (Epetimehin and Ekundayo, 2011). Several researchers (Jasimuddin, 2008; Davenport and Prusak, 1998; Day, 1994) argue the effective management of knowledge is a critical ingredient for organisations seeking to ensure sustainable strategic competitive advantages.

## **The Need for Management of Knowledge in Organisations**

Why the need to manage knowledge? The important factors that are driving the need for KM are organisational survival, competitive differentiation, globalization effects and aging workforce. Considering the management dynamics today, the onus of managing knowledge requires utmost focus as most of the work is information based. It is an undisputed fact that organisations compete on the basis of knowledge, since products and services are becoming increasingly complex. Hence the requirement for a life-long learning has become an unavoidable reality and KM has become important because marketplaces are increasingly competitive and the rate of innovation is rising. Downsizing staff also creates a need to replace informal knowledge with formal methods. KM is also of importance because early retirements and increasing mobility of the work force lead to loss of knowledge while changes in strategic direction may result in the loss of knowledge in some specific areas. In other words, knowledge and information have become the medium in which business problems occur. As a result, managing knowledge represents the primary opportunity for achieving substantial savings, significant improvements in human performance, and competitive advantage.

Another important factor that is driving the need for KM is the realization that an organisation must manage its knowledge if it is to survive in today's dynamic and competitive marketplace. Survival concerns are not limited to for-profit firms as nonprofits and even public agencies have all realized the value of KM. Desouza (2011) point out that without adequate care in how knowledge is managed, organisations will not be operating optimally and this will result in the ineffective and inefficient creation and delivery of products and services leading to unsatisfied customers, which is what ultimately leads to the demise of the organisation.

The next common reason for conducting KM is to help in competitive differentiation. All organisations, whether for-profit or not-for-profit, compete within a sector. KM is a critical driver of competitive advantages because it enhances the capacity of organisations to innovate thereby differentiating itself from its competitors. Organisations that are unable to innovate at a sustainable pace will lack the ability to continuously attract new customers, which in turn will lead to their demise. But organisations that are able to innovate will be able to secure, and even retain, their competitive positions in the marketplace (Desouza, 2011).

The advent of globalization has also driven the need for KM, as organisations search to find effective tools and methods for acquiring and sharing knowledge over many structural and cultural barriers. Therefore, globalization has created an urgent need for organisations to be able to manage knowledge across countries and continents. Another need for KM is aging workforce. Most organisations are facing a graying of their workforce and soon much knowledge is going to leave the organisations. This intellectual capital needs to be captured so that future generations in these work environments do not have to repeat mistakes and reinvent knowledge.

Epetimehin and Ekundayo (2011) reveal that KM efforts help organisations to share valuable organisational insights, to reduce redundant work, to avoid reinventing the wheel, to reduce training time for employees, to retain intellectual capital as employees' turnover in an organisation and to adapt to changing environments and markets. KM organisations that are competitively conscious therefore need to effectively implement KM systems. This includes

enforcing a linkage between the archived organisational 'best practices' and the actions taken by organisational members based on that information. This is where the intellectual organisational creativity and innovation comes into the fore. KM is a fundamentally important skill for anyone working in any type of organisation and has many important aspects that contribute to form a strong knowledge management strategy.

### **Knowledge management and organisation strategy**

The need to align KM strategy with organisation strategy was identified as critical to the success of KM (Oluikpe, 2012; Gao, Li and Clarke, 2008). du Plessis (2007) opines that an organisation KM strategy is supposed to create an understanding of the organisation's KM resources and where they reside; articulate the role of knowledge in value creation; and comprise a number of integrated projects or activities phased over time including quick wins as well as long term benefits. An organisation's strategy of KM is not arbitrary but depends of the way the company serves its clients, the economics of its business, and the people it hires (Hansen, Nohria and Tierney, 1999). It has been advised that KM should not be implemented because it is just "nice-to-have" (Greiner, et al., 2007). The question is no longer whether or not, knowledge is a critical organisational resource, but on alignment of KM to corporate strategy, measurement of KM impact and driving of business results.

### **KM as a Strategic Management tool**

KM as a strategic management tool has to do with how organisations map out strategies to effectively work or plan to work with KM (Greiner, et al., 2007; Gao et al., 2008; Lee et al., 2012). Strategic management literature has shifted from a resource to a knowledge-based view of the organisation, with propositions centred on knowledge becoming the most important resource enabling organisational capacity and leveraging competitive advantage (Kogut and Zander 1992). KM effort overlap with organisational learning and may be distinguished from that by a greater focus on the management of knowledge as a strategic asset and a focus on encouraging the sharing of knowledge. KM is often described as a management tool but more precisely described either as an operational tool or as a strategically focused management tool (Martensson, 2000).

KM, as a strategic management tool, requires managing the collective information expertise of the employees. It means encompassing knowledge as an explicit business activity that reflects in the organisation's business strategy, policy, guideline, and practice at all the levels. But it has been found that not all KM activities have been shown to positively influence business/organisation performance or to result in a competitive advantage. Many parameters and their interactions need to be considered for the successful application of KM initiatives in an organisation. Different KM strategies have been proposed to be adequate for different types of knowledge (Greiner, et al., 2007). It is pertinent to know that the selection of a suitable KM strategy not only depends on the type of knowledge to be shared but also on the environment the organisation operates in.

To start to create a KM strategy, an organisation needs to build systems for capturing and transferring internal knowledge and best practices (Ash, 1998; Jasimuddin, 2008, Oluikpe, 2012). The underlying premise of KM strategy is that 'best practices' of yesterday may not be

taken for granted as ‘best practices’ of today or tomorrow. In other words, KM strategy is necessary for organisations because what worked yesterday may or may not work for tomorrow. Hence, learning, and relearning processes need to be designed into the organisational business processes. Therefore, to remain aligned with the dynamically changing needs of the business environment, organisations need to continuously re-assess their internal procedures of business for on-going effectiveness. KM is also more than managing knowledge or sources of knowledge; it involves managing the environment where knowledge is exchanged.

To successfully create and implement a KM strategy in organisations, so many authors have suggested that certain critical elements must be included. One of these suggestions is that, a KM strategy should be linked to what the organisation is attempting to achieve. It is also important to articulate the purpose of the KM strategy; the benefits the organisation expects to gain from their work with KM; and how it will affect the employees' work (Merlyn and Välikangas, 1998).

The importance of support from top management has also been suggested to be essential. The personnel function should focus on top management to encourage processes that will promote cross-boundary learning and sharing. This includes helping to set up and, possibly, fund knowledge networks, as well as defining and developing the skills of learning from other people (Mayo, 1998). Organisations that have achieved the greatest success in KM are those that have appointed a senior-level executive to assume the mantle of full-time chief knowledge officer (Gopal and Gagnon, 1995). According to Riege (2007), for KM to be effective, they need to be introduced by senior and middle managers whom not only understand and support the strategic and operational need to align business and KM strategy by also recognize the human, organisational, and technological challenges of newly introduced actions.

Human Resource Management (HRM) practices can also impact on workers’ attitudes towards and participation in KM activities (Hislop, 2013). The use of HRM practices can be seen to be concerned not only with attempting to create a positive attitude towards, and a willingness to participate in, organisational KM activities, but also with making employees committed and loyal to their employer. This is fundamental because, if employees are not committed and loyal to their organisations, there is a risk of losing knowledge possessed by the employees through staff turnover. Recruitment and selection processes by employers can be utilised, as well, to support KM activities. This can be used to recruit people whose values are compatible with the existing organisational culture and whose personalities are conducive to knowledge sharing. Swart and Kinnie (2003); Robertson and Swan (2003); Chen, Hs, Wang and Lin (2011a) found that recruiting people whose values are aligned with those of the organisation was an important factor in the success of the companies they studied.

Retaining employees who possess valuable knowledge should equally be as important an element in an organisation’s KM strategy as motivating employees to participate in knowledge activities. This is because the tacit and embodied nature of much organisational knowledge means that when employees leave an organisation, they take the knowledge with them. In other words, staff turnover means an inevitable leakage and loss of knowledge. The level of commitment an employee feels towards their employer is likely to affect their loyalty to the organisation. As Byrne (2001, p.325) put it, “without loyalty, knowledge is lost”.

The importance of communication is also not to be overemphasized. Nonaka and Konno (1998) found that the missing factor in strategic management texts was communication. A large proportion of the organisations failed to implement the strategies because of a lack of communication. Only a few companies designed a good communication plan to follow through on business strategies. A connection between these two allows organisations to survive in the future. Nonaka and Konno (1998) found that Ba (shared space or context) constitute an important element of knowledge creation and management. Ba, according to Nonaka and Konno (1998) provides the “enabling conditions” for knowledge creation by facilitating interpersonal interactions between people where people share contexts and create knowledge. One successful approach is to create formal learning networks so that the identification and transfer of effective practices become part of the job (Nonaka and Konno 1998; Galagan 1997). Practice communities where employees could meet and solve problems and address issues could also be established. CoP facilitate interpersonal knowledge sharing, providing an effective means for people and organisations to manage and share knowledge. CoP are informal groups of people who have some form of practice and work-related activity in common (Hislop 2013), developing out of the communication and interaction which is a necessary part of most work activities. CoP are groups whose members regularly share knowledge and learn from each other. They share common work activities or interests, recognize the collective value of sharing knowledge, and have developed norms of trust, reciprocity, and cooperation.

The importance of people and culture as the bedrock to successful KM has also been suggested by scholars (King, 2007; Oluikpe, 2012, Desouza and Paquette, 2011; Hislop, 2013). Successful implementation of KM in organisation is linked to such entities as culture and people. Several studies have shown that people and cultural issues are the most difficult problems to resolve, but produce the greatest benefits (King, 2007; Oluikpe, 2012; Hislop, 2013; Desouza and Paquette, 2011). Jashapara (2003); Koudsi (2000) mention that since KM can be integrated into any number of IT systems, the biggest challenge is not a technical one, but a cultural one. The difficult task of overcoming cultural barriers, especially the sentiment that holding information is more valuable than sharing it is a big constraint that needs to be tackled (King 2007). Hislop (2013) shows that human, social and cultural actors are often key in shaping the success or failure of KM initiatives. Knowledge is a resource locked in the human mind, therefore, the sharing and communication of knowledge requires willingness on the part of those who have it to participate in such processes. Therefore, building a culture that value expertise should be encouraged.

The importance of sharing knowledge needs to be constantly communicated to the employee. Mayo (1998) identifies that the ability to share knowledge and collaborate is missing in organisations because efforts to deploy KM group-ware are frequently met with employee reluctance to share their expertise (Olatokun and Nwafor, 2012, Cole-Gomolski, 1997b). The likely reason for this is that employees are competitive by nature and may be more inclined to hoard than share the knowledge they possess (Forbes, 1997; Hislop, 2013). But on the contrary, a better process of sharing knowledge benefits the organisation. It is therefore been suggested that part of the introduction process for recruits should involve “capturing” their knowledge and experience. Although most new employees bring useful specialist experience with them, few organisations tap this rich reservoir of information. Part of the recruitment exercise should be about passing on the experience of predecessors to new employees. When employee leaves an

organisation, the focus should not be only on asking for the company properties (car, identity card, and so on) but on trying to extract as much knowledge as possible from the exiting staff. Exit interview should be conducted to retrieve information and knowledge. Efforts should be geared towards documenting invaluable critical knowledge from top domain experts and key personnel before they leave the organisations. Other possible option or step is to determine which employees are flight risks and finding a way of retaining them in order not to lose their knowledge and expertise. Retiring employees could also be hired as consultants.

One of the most important issues when working on a KM strategy is to create the right incentives for people to share and apply knowledge (Hansen et al., 1999; Cabrera and Cabrera, 2005; Milne, 2007; Olatokun and Nwafor, 2012). Personal reward systems must support the culture of sharing knowledge (Mayo, 1998). To improve this process, it is crucial to reward employees that contribute their expertise and to make sure employees understand the benefits of KM. But the problem with many reward systems and incentives for sharing knowledge is that useful knowledge comes from the lower cadre in the organisation, from people who are not on incentive systems and probably respond much more readily to the feeling that they belong to highly motivated, leading edge, innovative groups of people (Olatokun and Nwafor 2012).

Aligning KM approaches to fit organisational culture is also a strategy to entrenching good KM initiatives. A lot of KM literature that examines organisational culture argues that it can significantly influence organisational KM activities (Lee and Chen 2005; Chang and Lee, 2007; Liao, Chang, Hu and Yueh, 2012; Rai, 2011). Hislop (2013) define organisational culture as the beliefs and behaviours shared by the members of an organisation regarding what constitutes an appropriate way to think and act in the organisation, while Huczynski and Buchanan (2001), p.624) define organisational culture as “the collection of relatively uniform and enduring values, beliefs, customs, traditions and practices that are shared by an organisation’s members”. Even though aligning KM approaches to fit organisational culture has been suggested by literature as good, on the contrary, creating and managing an organisational culture to support KM activities is widely supported by literature (De Long and Fahey, 2000; Teo, Nishant, Goh and Agarwal, 2011; Hislop, 2013). The reason is that organisational culture can be changed to produce appropriate knowledge related behaviours and values (Teo et al., 2011). KM success can be achieved by modifying an organisation’s culture in ways that encourage and support desired knowledge attitudes and behaviours. Whether organisational cultures should be changed to create appropriate knowledge behaviours and values, or whether KM efforts should be designed to reflect an organisation’s existing cultural values, the bottom line is that there is a mutual relationship between organisational culture and KM activities, which KM managers must bear in mind to successfully create and implement a KM strategy in organisations.

Having Knowledge Repositories that contain databases of codified knowledge assets that are systematically organise to facilitate searching, browsing, and retrieval is also essential (Choo, 2002). Knowledge repositories may contain lessons learned, best practices, planning documents, project proposals, marketing presentations, etc. The implementation of mentoring programs is also important. The use of coaching and mentoring in organisations can facilitate informal sharing of knowledge. This involves the sharing of knowledge between a relatively experienced person (the mentor/coach) and someone less experienced (the mentee) (Karkoulian, Halawi, and McCarthy, 2008).



Creation and adoption of Knowledge Maps (KMaps), which is a “feasible method of coordinating, simplifying, highlighting and navigating through complex silos of information” (Wexler, 2001, p.249; Liebowitz, 2005; Chan and Liebowitz, 2006; Lee and Fink, 2013) is also a good strategy. It has been observed that many organisations do not suffer from lack of knowledge but rather from ways/means of accessing and exploiting knowledge and often times, trying to access the appropriate knowledge can be difficult, time consuming and frustrating. KMap points to knowledge but it does not contain it; rather, it is a guide and not a repository. It can facilitate the discovery of sources of knowledge in organisation, tracing its flow, mapping its existence and its changes, and identifying relationships with other sources of knowledge. Employees in organisation can use KMap to locate relevant sources of expertise or experience within the organisation, which then can provide the knowledge that is being sought (Lee and Fink, 2013).

Lastly, evaluation and feedback are of utmost importance. The need to create a system for evaluating the attempts that are made to use KM is very important. The evaluation system can range from informal attempts, such as talking to people about how “best practice” is shared within the firm. Other management tools/measurements can also be adopted to measure the outcomes from KM usage in the organisation.

## **Conclusion**

The importance of management of knowledge in organisations has been discussed. The effective management of knowledge has been described as a critical ingredient for organisations seeking to ensure sustainable strategic competitive advantage. It has been brought out that processes and technology alone are not enough to drive an organisation, but its people (staff) and the knowledge that reside in the people are a very integral pivot in organisation’s success. Therefore, in order for an organisation to be successful, attention must be paid, not only on the processes and technology, but on knowledge and its workforce (which are people who are the sources of knowledge). KM has also been demonstrated to be tightly related to objectives and business strategies of the organisation and thus a very useful tool in management. If KM fails to add value to the organisation, it is only cost intensive, useless, or counterproductive. A pertinent question that is being asked is whether knowledge is always something good? Knowledge is always assumed to be generally positive. However, it is difficult to assume that knowledge is always positive and good. It has been discussed in this paper that knowledge is one of the resources that provides organisations with sustainable competitive advantages. However, knowledge as such will not have much value for the organisation in building its competitive advantages, but having the relevant knowledge and the ability to leverage and manage knowledge is a strategic management tool. It is therefore essential for management in organisations to look for means to gain, maintain, and leverage knowledge to achieve a lead to higher levels of success for organisations. As Mayo (1998) note, many organisations have been managing knowledge for decades but few of them use KM on a regular basis. In summary, to implement a KM strategy successfully, the creation, organisation, leveraging (sharing) and application of knowledge must be taken into account.

## References

- Allee, V. (1997). 12 Principles of knowledge management. *Training and Development*, 51(11), 71-74.
- Amayah, A.T. (2013). Determinants of knowledge sharing in a public sector organisation. *Journal of Knowledge Management*, 17(3), 454-471, doi: 10.1108/JKM-11-2012-0369
- Ash, J. (1998). Managing knowledge gives power. *Communication World*, 15(3), 23-26.
- Badaracco, J. L. (1991). *The knowledge link: how firms compete through strategic alliances*. Boston: Harvard Business Press.
- Baloh, P., Desouza, K. C. and Paquette, S. (2011). The concept of knowledge. In: K. C. Desouza and S. Paquette (Eds.), *Knowledge Management: An Introduction* (pp. 35-71). New York: NY: Neal-Schuman Publishers, Inc.
- Blackler, F. (1995). Knowledge, knowledge work, and organisations: An overview and interpretation. *Organisation Studies* 16(6), 1021-1046.
- Bosua, R. and Venkitachalam, K. (2013). Aligning strategies and processes in knowledge management: a framework. *Journal of Knowledge Management*, 17(3), 331-346, doi: 10.1108/JKM-10-2012-0323
- Byrne, R. (2001). Employees: Capital or commodity? *Career Development International*, 6 (6), 324-330.
- Cabrera, E., and Cabrera, A. (2005). Fostering knowledge sharing through people management practices. *International Journal of Human Resource Management*, 16(5), 720-735.
- Chan, K. and Liebowitz, J. (2006). The synergy of social network analysis and knowledge mapping: a case study. *Journal of Management and Decision Making*, 7(1), 19-35.
- Chang, S. and Lee, M. (2007). The effects of organisational culture and knowledge management mechanisms on organisational innovation: an empirical study in Taiwan. *Business Review*, 7(1), 295-301.
- Chen, W.Y., Hs, B.F., Wang, M. L. and Lin, Y.Y. (2011a). Fostering knowledge sharing through human resource management in R and D Teams. *International Journal of Technology Management*, 53(2-4), 309-330.
- Choo, C. W. (2002). Knowledge management. In: J. R. Schement (Ed.) *Encyclopedia of Communication and Information* (pp. 501-506). New York, NY: Macmillan Reference.
- Chua, A.Y. K. (2009). The dark side of successful knowledge management initiatives. *Journal of Knowledge Management*, 13(4), 32-40.

- Cole-Gomolski, B. (1997a), Chase uses new apps to ID best customers. *Computerworld*, 31(35), 49-50.
- Cole-Gomolski, B. (1997b), Users loath to share their know-how. *Computerworld*, 31(46), 6.
- Day, G. S. (1994). Managerial representations of competitive advantage. *Journal of Marketing*, 58, 31-44.
- Davenport, T. H. and Prusak L. (1998). *Working knowledge: How organisations manage what they know*. Boston, MA: Harvard Business School Press.
- Davenport, T. H. and Prusak L. (2000). Working knowledge: How organizations manage what they know. *ACM: Ubiquity* Retrieved August 24, 2013 from [http://www.acm.org/ubiquity/book/t\\_davenport\\_1.html](http://www.acm.org/ubiquity/book/t_davenport_1.html)
- Davenport, T. H., De Long, D. W. and Beers, M.C. (1998). Successful knowledge management projects. *Sloan Management Review*, 39(2), 43-57.
- De Long, D. and Fahey, L. (2000). Diagnosing cultural barriers to knowledge management. *Academy of Management Executive*, 14 (4), 113-127.
- Desouza, K. C. (2011). An introduction to knowledge management. In: K. C. Desouza and S. Paquette (Eds.), *Knowledge Management: An Introduction* (pp. 3-34). New York: NY: Neal-Schuman Publishers, Inc.
- Desouza, K. C. and Paquette, S. (Eds.) (2011). *Knowledge management: An Introduction*. New York: NY: Neal-Schuman Publishers, Inc.
- Drucker, P. F. (1999). Knowledge - Worker Productivity: The Biggest Challenge. *California Management Review*. 41(2), 79-94.
- Drucker, P. F. (2006). What executives should remember? *Harvard Business Review* 84(2), 144-152.
- Duffy, J. (2000). Knowledge management: to be or not to be? *Information Management Journal*, 34(1), 64-67.
- Dul, J., Ceylan, C. and Jaspers, F. (2011). Knowledge workers' creativity and the role of the physical work environment. *Human Resource Management*, 50(6), 715-734.
- du Plessis, M. (2007). Knowledge management and what makes complex implementation successful? *Journal of Knowledge Management*, 11(2), 91-101.

Ekeke, H. E. (2011) Knowledge management in the Nigerian public service. Unpublished Thesis, School of Management and Business, Aberystwyth University, Wales, 322pp. + xviii, <http://hdl.handle.net/2160/7004>

Epetimehin, F. M. and Ekundayo, O. (2011). Organisational knowledge management: survival strategy for Nigeria insurance industry. *Interdisciplinary Review of Economics and Management*, 1(2), 9-15.

Forbes (1997). Knowledge management: the era of shared ideas. *Forbes*, 160 (6), 28.

Galagan, P. A. (1997). Smart companies. *Training and Development*, 51(12), 20-24.

Gao, F., Li, M. and Clarke, S. (2008). Knowledge, management, and knowledge management in business operations. *Journal of Knowledge Management*, 12(2), 3-17, doi:10.1108/13673270810859479

Gopal, C. and Gagnon, J. (1995). Knowledge, information, learning and the IS manager. *Computerworld*, 29(25), 1-7.

Greiner, M.E., Boßmann, T and Kremer, H. (2007). A strategy for knowledge management. *Journal of Knowledge Management*, 11(6) 3-15, doi: 10.1108/13673270710832127

GroËnhaug, K. and Nordhaug, O. (1992). Strategy and competence in firms. *European Management Journal*, 10(4), 438-444.

Gururajan, V. and Fink, D. (2010). Attitudes towards knowledge transfer in an environment to perform. *Journal of knowledge Management*, 14(6), 828-840, doi: 10.1108/1367321011084880

Hansen, M., Nohria, N., and Tierney, T. (1999). What's your strategy for managing knowledge? *Harvard Business Review*, 77(2), 106.

Hibbard, J. (1997). Knowing what we know. *Information week*, 653, 20 October, 46-64.

Hislop, D. (2010). Knowledge management as an ephemeral management fashion? *Journal of Knowledge Management*, 14(6), 779-790.

Hislop, D. (2013). *Knowledge management in organisations: A critical introduction*. 3<sup>rd</sup> Ed. UK: Oxford University Press.

HR Magazine (2009). Leveraging HR and knowledge management in a challenging economy. SHRM Research Quarterly, *HR Magazine*, 54 (6), 1–10.

Huczynski, A. and Buchanan, D. (2001). *Organisational behaviour: An introductory text*. Harlow: Financial Times/Prentice Hall.

- Jashapara, A. (2003). *Knowledge management and culture, knowledge management: An integrated approach*. London: Prentice-Hall.
- Jasimuddin, S. M. (2008). A holistic view of knowledge management strategy. *Journal of Knowledge Management*, 12(2), 57-66, doi: 10.1108/13673270810859514
- Jeon, S., Kim, Y. and Koh, J. (2011). An integrative model for knowledge sharing in communities-of-practice. *Journal of Knowledge Management*, 15(2), 251-269, doi: 10.1108/13673271111119682
- Kamhawi, E. M. (2012). Knowledge management fishbone: A standard framework of organisational enablers, *Journal of Knowledge Management*, 16(5), 808-828, doi: 10.1108/13673271211262826
- Karkoulian, S., Halawi, L. and McCarthy, R. (2008). Knowledge management, formal and informal mentoring: An empirical investigation of Lebanese banks. *The Learning Organisation*, 15(5), 409-420.
- King, W. (2007). A research agenda for the relationships between culture and knowledge management. *Knowledge and Process Management*, 14(3), 226-236.
- Koenig, M. E. D. (2012). What is KM? knowledge management explained. *KM World*, May, 2012. Retrieved Feb. 8, 2013 from <http://www.kmworld.com/Articles/Editorial/What-Is-.../What-is-KM-Knowledge-Management-Explained-82405.aspx>
- Kogut, B. and Zander, U. (1992). Knowledge of the firm, combinative capabilities and the replication of technology. *Organisation Science*, 3, 383-397.
- Koudsi, S. (2000). Actually, it is like brain surgery. *Fortune*, 141(6), 233-234.
- Lee, C. and Chen, W. J. (2005). The effects of internal marketing and organisational culture on knowledge management in the information technology industry. *International Journal of Management*, 22(4), 661-672.
- Lee, H. and Choi, B. (2003). Knowledge Management enablers, processes, and organizational performance: an integrative view and empirical examination. *Journal of Management Information Systems*, 20(1), 179-228.
- Lee, J. and Fink, D. (2013). Knowledge mapping: Encouragements and impediments to adoption. *Journal of Knowledge Management*, 17(1), 16-28.
- Liao, S. H., Chang, W. J., Hu, D. C. and Yueh, Y. L. (2012). Relationships among organisational culture, knowledge acquisition, organisational learning, and organisational innovation in Taiwan's banking and insurance industries. *International Journal of Human Resource Management*, 23(1), 52-70.

- Liebowitz, J. (2005). Linking social network analysis with the analytic hierarchy process for knowledge mapping in organisations. *Journal of Knowledge Management*, 9(1), 76-86.
- Martensson, M. (2000). A critical review of knowledge management as a management tool. *Journal of Knowledge Management*, 4(3), 204-216.
- Mayo, A. (1998). Memory bankers. *People Management*, 4(2), 22 January, 34-38.
- Merlyn, P. R. and Välikangas, L. (1998). From information technology to knowledge technology: Taking the user into consideration. *Journal of Knowledge Management*, 2(2), 28-35.
- Milne, P. (2007). Motivation, incentives and organizational culture. *Journal of Knowledge Management*, 11(6), 28-38, doi: 10.1108/13673270710832145
- Mintzberg, H. (2009). What managers really do? Wall Street Journal, Business Insight Executive Briefing (interviewed by Martha E. Mangelsdorf), Retrieved August 17, 2014 from <http://www.mintzberg.org/sites/default/files/mgrsreallydo.pdf>
- Moon, J. T. and Desouza, K. C. (2011). The concept of management. In: K. C. Desouza and S. Paquette (Eds.), *Knowledge Management: An Introduction* (pp. 73-96). New York: NY: Neal-Schuman Publishers, Inc.
- Nonaka, I. (1991). The knowledge-creating company. *Harvard Business Review*, 69(6), (Nov.-Dec.), 96-104.
- Nonaka, I. (1994). A dynamic theory of organisational knowledge creation. *Organisation Science*, 5(1), 14-37.
- Nonaka, I., and Konno, N. (1998). The concept of “Ba: building a foundation for knowledge creation. *California Management Review*, 40(3), 40-55.
- Nonaka, I. and Takeuchi, H. (1995). *The knowledge creating company*. New York, NY: Oxford University Press.
- Nonaka, I., von Krogh, G. and Voelpel, S. (2006). Organisational knowledge creation theory: Evolutionary paths and future advances. *Organisation Studies*, 27(8), 1179 – 1208.
- Olatokun, W. and Nwafor, C. I. (2012). The effect of extrinsic and intrinsic motivation on knowledge sharing intentions of civil servants in Ebonyi state, Nigeria. *Information Development*, 28(3), 216-234, doi: 10.1177/0266666912438567
- Oluikpe, P. (2012). Developing a corporate knowledge management strategy. *Journal of Knowledge Management*, 16(6), 862-878, doi: 10.1108/13673271211276164

- Pan, S. and Scarbrough, H. (1999). Knowledge management in practice: An exploratory case study. *Technology Analysis and Strategic Management*, 11(3), 359-374.
- Paquette, S. (2011). Knowledge organisation. In: K. C. Desouza and S. Paquette (Eds.), *Knowledge Management: An Introduction* (pp. 139-178). New York: NY: Neal-Schuman Publishers, Inc.
- Paquette, S. and Desouza, K. C. (2011). Knowledge transfer. In: K. C. Desouza and S. Paquette (Eds.), *Knowledge Management: An Introduction* (pp. 179-212). New York: NY: Neal-Schuman Publishers, Inc.
- Petrash, G. (1996). Dow's journey to a knowledge value management culture. *European Management Journal*, 14(4), 365-373.
- Polanyi, M. (1966). *The tacit dimension*. New York, NY: Doubleday.
- Polanyi, M. (1967). *The tacit dimension*. London, UK: Routledge and Kegan Paul.
- Ponzi, L and Koenig, M (2002). Knowledge management: Another management fad? *Information Research*, 8 (1), paper no. 145, Retrieved Feb 8, 2013 from <http://InformationR.net/ir/8-1/paper145.html>
- Rabiu, M. (2009). Knowledge management in Nigeria oil and gas industry: Theoretical frameworks, practical challenges and opportunities. *Petroleum Technology Development Journal*, 1, 1-10.
- Rai, K. (2011). Knowledge management and organisational culture: A theoretical integrative framework. *Journal of Knowledge Management*, 15(2), 779-801.
- Riege, A. (2007). Actions to overcome knowledge transfer barriers in MNCs. *Journal of Knowledge Management*, 11(1), 48-67.
- Robertson, M. and Swan, J. (2003). Control-what control? Culture and ambiguity within a knowledge intensive firm. *Journal of Management Studies*, 40(4), 861-858.
- Scarbrough, H. and Swan, J. (2001). Explaining the diffusion of knowledge management. *British Journal of Management*, 12(1), 3-12.
- Serenko, A, Bontis, N., Booker, L, Sadeddin, K. and Hardie, T. (2010). A scientometric analysis of knowledge management and intellectual capital academic literature (1994-2008). *Journal of Knowledge Management*, 14(1), 3-23.
- Spender, J. C, (2008). Organisational learning and knowledge management: whence and wither? *Management Learning*, 39(2), 158-176.

- Strati, A. (2007). Sensible knowledge and practice-based learning. *Management Learning*, 38(1), 61-77.
- Sun, P. Y.-T and Scott, J. L. (2005). An investigation of barriers to knowledge transfer. *Journal of Knowledge Management*, 9(2), 75-90, doi: 10.1108/13673270510590236
- Sveiby, K. E. (1997). *The new organizational wealth: Managing and measuring knowledge-based assets*. San Francisco: Berrett-Koehler Publishers, Inc.
- Swart, J. and Kinnie, N. (2003). Sharing knowledge in knowledge intensive firms. *Human Resource Management Journal*, 13(2), 60-75.
- Teece, D. F., Pisano, G. and Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.
- Teng, J. T. C. and Song, S. (2011). An exploratory examination of knowledge-sharing behaviours: solicited and voluntary. *Journal of Knowledge Management*, 15(1), 104-117, doi: 10.1108/13673211111108729
- Teo, T., Nishant, R., Goh, M. and Agarwal, S. (2011). Leveraging collaborative technologies to build a knowledge sharing culture at HP analytics, *MIS Quarterly Executive*, 10(1), 1-18.
- Wang, S. and Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human Resource Management Review*, 20(2), 115-131.
- Wexler, M. (2001). The who, what and why of knowledge mapping. *Journal of Knowledge Management*, 5(3), 249-263.
- Yakhlef, A. (2010). The corporeality of practice-based learning. *Organisation Studies*, 31(4), 409-430.
- Zack, M. H. (2003). Rethinking the knowledge-based organization. *Sloan Management Review*, 44(4), 67-71.