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Knowledge Management: Facilitator For SME's Competitiveness In Nigeria

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KNOWLEDGE MANAGEMENT: FACILITATOR FOR SMEs’ COMPETITIVENESS IN NIGERIA

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Abstract

Knowledge management is a tool which can create a strategic impact in any organisation. It has become one of the most important resources that facilitates and sustains firms’ competitive advantage. Sharing knowledge gives an organisation a long term benefit. However, the success of knowledge management relies on the role played by the organisation itself. Given the global nature of competition, Small and Medium Sized Enterprises (SMEs) in Nigeria are unable to compete, yet there is relatively very little information on knowledge management in the SME sector in Nigeria. This paper intends to discuss the various benefits associated with the adoption of knowledge management in SMEs and the potential benefits awaiting Nigerian SMEs who choose to adopt knowledge management in their operational strategy.

Keywords: Knowledge management, SMEs, adoption, Nigeria
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Abstract

Knowledge management is a tool which can create a strategic impact in any organisation. It has become one of the most important resources that facilitates and sustains firms’ competitive advantage. Sharing knowledge gives an organisation a long term benefit. However, the success of knowledge management relies on the role played by the organisation itself. Given the global nature of competition, Small and Medium Sized Enterprises (SMEs) in Nigeria are unable to compete, yet there is relatively very little information on knowledge management in the SME sector in Nigeria. This paper intends to discuss the various benefits associated with the adoption of knowledge management in SMEs and the potential benefits awaiting Nigerian SMEs who choose to adopt knowledge management in their operational strategy.

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1.0 Introduction

Knowledge has become one of the critical driving forces for business success (Wong, 2005). It has emerged as a key resource in post industrial society (Davenport and Prusak, 1995; Bhatlett and Ghosal, 1993; Nonaka and Takeuchi, 1995; Pillania, 2008). Knowledge is widely recognised as a critical organisational resource irrespective of economic sector or type of organisation (Stewart 1997; Davenport and Prusak, 1998; Sharrat and Usoro, 2003). As a result, many organisations are exploring the field of Knowledge Management (KM) in order to improve and sustain their competitiveness (Wong, 2005). Just like many global corporations, Small and Medium Sized Enterprises (SMEs) need appropriate and up-to-date knowledge in order to compete. SMEs tend to be more susceptible to problems of high staff turnover and knowledge retention, thus knowledge must be appropriately managed, disseminated and retained in SMEs (Nunes et al, 2006; Pillania, 2008). All companies wishing to stay competitive need to develop their ability to maintain, improve, organise, use and
reuse employees’ knowledge (Rantakyro, 2005). Hence, knowledge acquisition, storage, retrieval, and sharing processes should be seen as crucial.

SMEs are often regarded as important investors in the economy. They play an important role in every country’s economy (Breaver, 2005). According to Bodorick et al (2002), SMEs globally contribute about 80% to a country’s economic growth. SMEs in Nigeria are no exception, playing a vital role in terms of employment (Ogechukwu, 2006). Despite the enormous potentials of the SME sector in developing countries, SMEs still fall short of expectation as compared to SMEs in developed countries. SMEs in Nigeria are still very reluctant to take-up KM principles into their daily routines. This paper intends to discuss the benefits associated with the adoption of knowledge management in SMEs and the potential benefits awaiting Nigerian SMEs who choose to adopt knowledge management in their organisational strategy. An extensive literature review was undertaken by investigating numerous papers and data sources to extract the important concepts and issues. In addition, a case study was analysed using qualitative research, composed of semi-structured telephone interviews, thus delivering a better understanding, perception and requirements of Nigeria SMEs in relation to KM. Before proceeding further, it is important to define the terms knowledge and knowledge management.

2.0 Knowledge and Knowledge Management

Knowledge can be defined as a set of intuition, reasoning, insights, experiences related to technology, products, processes, customers, markets, competition and so on (Pillania, 2008). Ihua (2008) defines knowledge as the consciousness/awareness that provides any sort of advantage/benefit over the lack of such consciousness/awareness.

Knowledge management is defined by Pillania (2008) as a systematic, organised, explicit and deliberate ongoing process of creating, disseminating, applying, renewing and updating the knowledge for achieving organisational objectives and by Ihua (2008) as a means of how businesses can leverage the experiences of their product and service offerings, market/business environment to their best advantage, thus generating greater value. KM is becoming a growing concern in management research.
and practice because of its role in determining firms’ innovation capability and in enhancing working life quality of knowledge workers.

The task of developing and exploiting both tangible and intangible knowledge resource of an organisation is knowledge management. Tangible assets include information and experience based knowledge about customers, suppliers, products, competitors and so on. Intangible assets include the competencies and knowledge resources of people within the organisation. In brief, KM refers to the totality of organisational strategies aimed at creating a smart organisation which is able to leverage up on its tangible and intangible assets, to learn from past experiences whether successful or unsuccessful, and to create new knowledge (Menkoff et al, 2002). Furthermore, Huttengegger (2003) defines KM systems as information technology systems that support KM activities and hence are generally concerned with enhancing competitiveness by the appropriate use of all available knowledge.

Biejerse (2000) explained that KM is the management of information within an organisation and this is achieved by steering the strategy, structure, culture, systems, capabilities, and attitude of people with regard to the knowledge. Gurteen (1998) and Nor (2004) outlined KM as an emerging set of processes that govern organisational and business process design as well as specific processes, applications and technologies that help knowledge workers dramatically leverage their capability and ability to deliver business value. KM is a timely business strategy, which seeks to capture the knowledge residing in people’s mind and consciousness in order to help a company remain competitive and progressive, marked with revolutionary changes (Teng and Hawamdeh, 2002).

KM according to Newman (1996) cited in Frey (2001) directs and enhances organisational decisions as to how, where and when to create and account for new knowledge. Capturing knowledge prevents the loss of critical knowledge due to retirement (Igbo et al, 2005) and organisations that are successful in leveraging knowledge usually witness increased efficiencies in operations, higher rates of successful innovations, increased levels of customer service and an ability to have foresight on trends and patterns emerging in the market place (Desouza and Awazu, 2006).
3.0 Effective Knowledge Management

Knowledge has been recognised as a crucial competitive tool for organisational survival and competition (Chan and Chao, 2008). Kamara et al (2002) explains that KM has indeed become the underlying sources for successful organisations regardless of their size and geographical locations. Therefore, a better understanding of the Critical Success Factors (CSFs) for implementing KM in SMEs is needed in order to ensure the success of their efforts.

Having an appropriate set of CSFs are relevant for SMEs. This will assist them to keep in mind the important issues that should be considered when designing and implementing a KM initiative (Wong, 2005). Critical success factors can be defined as areas in which results, if they are satisfactory, will ensure successful competitive performance for the organisation (Rockart, 1979). Saraph et al (1989) viewed them as those critical areas of managerial planning and action that must be practiced in order to achieve effectiveness. In terms of KM, they can be viewed as those activities and practices that should be addressed in order to ensure its successful implementation. CSFs are internal factors that are controllable by an organisation (Wong, 2005). Management leadership and support, culture, trust, information technology, measurement, and organisational infrastructure are some basic CSFs for effective KM in SMEs.

Management leadership plays a key role in influencing the success of KM (Hoarak, 2001; Pan and Scarbrough, 1998; Holsapple and Joshi, 2000; Riebere and Sitar, 2003). Leaders are important in acting as role models to exemplify the desired behaviour for KM. They are expected to exhibit a willingness to share and offer their knowledge freely with others in the organisation, to continuously learn and search for new knowledge and ideas. It is vital that they model their behaviours and actions through deeds not just words because this has a positive impact on employees, and helps to increase the propensity of employees to participate in KM. It is also important for leaders to convey the importance of KM to employees, thereby creating a culture that promotes knowledge sharing and creation. According to Holsapple and Joshi
leaders are required to establish the necessary conditions for effective KM. Support and commitment from senior management is critical to a KM initiative (Sharp, 2003). Storey and Barnett (2000) added that support from top management should be ongoing and should be delivered in a practical manner. Such support could then be transformed into concerted efforts that would contribute to the success of KM (Wong, 2005).

Organisational culture is another important factor for a successful KM implementation (Davenport et al., 1998; Pan and Scarbrough, 1998). Culture is critical in a firm’s ability to manage its knowledge more effectively (Davenport et al., 1998) as it defines the core benefits, values, norms, and social customs that govern the way individuals act and behave in an organisation. Ouchi (1981) and Ru-Ching et al. (2007) define an enterprise culture as representing a company’s values, which become the norms of its employees’ activities, opinions and conduct. In general, a culture in support of KM is one that highly values knowledge and encourages its creation, sharing and application. Although culture is a wide concept which comprises many facets, the crucial aspect for KM is collaboration. Goh (2002) states that a collaborative culture is an important condition for knowledge transfer to happen between individuals and groups. This is because knowledge transfer requires individuals to come together to interact, exchange ideas and share knowledge with one another. Winston and DeLogitte (2002); Chibelushi (2008) suggest that in SMEs where collaboration between management and employees can be the norm, better quality information technology implementation could occur.

Also, trust is a fundamental aspect of a knowledge-friendly culture (DeTienne and Jackson, 2001; Lee and Choi, 2003). Without a high degree of mutual trust, people will be sceptical about the intentions and behaviour of others and thus may likely withhold their knowledge. Therefore, building a relationship of trust between individuals and groups will help to facilitate a more proactive and open knowledge sharing process.

One of the key enablers for implementing KM is Information Technology (IT). IT is a crucial element of the infrastructure that is required for the creation of new knowledge (Tan and Chin, 2006). It can enable rapid search, access and retrieval of information,
and also support collaboration and communication between organisational members. In essence, IT can certainly play a variety of roles to support an organisation’s KM processes (Alavi and Leidner, 2001; Lee and Hong, 2002).

Measurement gives useful information about a particular situation or activity. Only what is measured can be properly managed. According to Arora (2002), measuring KM is necessary in order to ensure that its envisioned objectives are being attained. Measurement enables organisations to track the progress of KM and helps to determine its benefits and effectiveness. It provides a basis for organisations to evaluate, compare, control and improve upon the performance of KM (Ahmed et al., 1999).

Another important CSF for implementing KM is the development of an appropriate organisational infrastructure. This implies establishing a set of roles and teams to perform knowledge related tasks (Davenport et al., 1998). Despite the fact that there are some existing functions in most organisations such as Human Resource Management (HRM) and IT to support knowledge issues, appointing a team that will be responsible for KM issues is important. An example of this would be the appointment of a Chief Knowledge Officer (CKO), who will be responsible for managing the organisation’s intellectual capital.

In managing organisation’s knowledge, it is very important to have a knowledge management strategy that is well understood by all employees (Syed-Ikhsan, 2004). Having a clear and well planned strategy is a means for driving the success of KM (Leibowitz, 1999). This provides the foundation for an organisation to deploy its capabilities and resources in order to achieve its KM goals. It is important for the strategy to be able to deal with the present situation of the organisation. Moreover, strategy enables employees to identify their individual roles with other employees and keep them aware of the different types of knowledge that need to be managed or shared. Basic strategies for a successful KM process in organisations include motivational aids, resources, training and education, and human resource management.
In order to have a successful KM implementation, it is important to develop a grass root desire amongst employees which will ‘tap into’ the company’s intellectual resources (Hauschild et al 2001). Employees in SMEs must first be motivated to practice KM. If not, no amount of investment, infrastructure and technological intervention will make KM effective. Therefore managers need to put into place the right incentives, rewards or motivational aids to encourage employees to share and apply knowledge. Suitable incentive schemes and reward systems will encourage more knowledge sharing among employees (Manson and Pauleen, 2003; Zhu, 2004). It should be noted that incentive systems should be focused on criteria such as knowledge sharing and contribution, teamwork, creativity and innovative solutions (Chan and Chao, 2008).

A successful KM implementation is also dependent on resources. Financial support is inevitably required if an investment in a technological system is to be made (Wong, 2005). Resource availability is a primary concern in SMEs, therefore it has to be properly considered when implementing a KM initiative. In addition, proper budgeting of resources is vital for KM. One of the key issues for SMEs in achieving effective KM is to deal with their resources. This implies understanding how they can be better acquired, allocated and managed for its success (Wong, 2005).

An appropriate training and education strategy is also important for successful KM. In a basic service organisation, members need to be aware of the need to manage knowledge and to recognise it as a key resource for the validity of the company. Individuals must be trained on how to become successful employees (Desouza and Awazu, 2006). Through training, employees will have a better understanding of the concept of KM. Also, employees should be trained to use KM systems and other technological tools for managing knowledge. This will enable them to utilise the full potentials and compatibilities offered by these tools. In addition, employees should be equipped with the skills to foster creativity, innovation, knowledge sharing and problem solving. Increasing employees’ capabilities has a direct effect on the financial results of the company (Becker et al, 2001). For these reasons, it can be claimed that training employees will have a direct relationship with the performance of the company. Chibelushi (2008) argued that if SMEs are not trained, they will
continue to lack appropriate knowledge and skills, and be unable to plan strategically, which may result in having companies not being able to compete in the market.

KM practitioners should be aware of the values of having an HRM team that manages the organisation’s assets and helps to achieve the business objectives. According to Wong (2005), people are the sole originators of knowledge. Therefore, in order to retain employees to work for a company, it is important to provide opportunities for them to grow and to advance in their career. Brelade and Harman (2000) states HR policies and practices need to be designed to allow individuals to meet their personal aspirations. It is also important for owners/managers to offer a conducive working environment in which employees feel comfortable and also, foster job satisfaction amongst them.

KM is now widely recognised to be important to the success or failure of business management. This is because knowledge is one of the key strategic resources that can produce sustained long-term competitive advantage (Lee and Yang, 2000; Jones, 2003). Generally, KM practices are considered as a process involving the management of all knowledge to meet existing and emerging needs, acquire knowledge assets and develop new opportunities (Lin, 2007).

4.0 Small and Medium Sized Enterprises

The definition of Small and Medium Sized Enterprises (SMEs) differs from one country to another. SMEs have been defined against various criteria such as the value of assets employed and the use of energy (Bodorick et al, 2002).

The Department for Business, Enterprise, and Regulatory Reform (BERR) (2009) uses the following definitions: Micro firm: 0-9 employees, Small firm: 0-49 employees: Medium firm: 50-249 employees and large firm: over 250 employees.

The European Union Commission (2003) also defines SMEs, using the same number of employees as used by BERR, but also including annual turnover. Micro Enterprises are those having fewer than 10 employees and having an annual turnover not
exceeding EURO 2 million or an annual balance sheet total not exceeding EURO 2 million. Small enterprises employ fewer than 50 people and have either an annual turnover not exceeding EURO 10 million or an annual balance sheet total not exceeding EURO 10 million. Medium Sized Enterprises are those with fewer than 250 employees and have either an annual turnover not exceeding EURO 43 million.

In the UK, sections 382 and 465 of the companies Act 2006 define a small company as one that has a turnover of not more than £6.5 million, a balance sheet total of not more than £3.26 million and not more than 50 employees. A medium sized company is defined as one with a turnover of not more than £25.9 million, a balance sheet total of not more than £12.9 million, and not more than 250 employees. The majority of workforce is employed by SMEs. Statistics for 2007 published by the DTI Small Business Service (SBS) statistics unit show that out of 4.7 million businesses in the UK, 93 per cent were small firms with fewer than 50 employees and 0.6 per cent were medium firms with 50-249 employees (Small and Medium-Sized Enterprise Statistics for UK and Regions, 2007 in Lal, 2007).

In Nigeria, there is no universally acceptable definition of SMEs as it has varied over time and from organization to organization (Lal, 2007). The National Association of Small and Medium Scale Enterprises (NASME) defines a small scale enterprise as a business with less than 50 people employed by the enterprise and with an annual turnover of ₦100,000,000 (100 million Naira). NASME went further to define a medium scale enterprise as a business with less than 100 employees and with an annual turnover of ₦500, 000,000 (500 million Naira). The Central Bank of Nigeria defines SMEs as any enterprise with a maximum asset base of ₦200, 000,000 (200 million Naira) excluding land and working capital with the number of staff employed by the enterprise expected not to be less than 10 and not more than 300 (Lal, 2007).

KM is essential for SMEs. According to Sparrow (2001), potential competitive advantage of KM may be more profound in a small firm. It has been stated that KM research has been focused more on large firms (Levy et al, 2003), issues related to SMEs are mostly ignored or marginalised (Matlay et al, 2002). In order words, KM seems to have been successfully applied in large companies, but it is largely disregarded by SMEs. This has been attributed to a lack of formal approach to storing,
recording, transferring, auditing and exploiting of organisational knowledge, together with a lack of utilisation of available information technologies (Nunes et al., 2006). SMEs do not manage knowledge like large organisations (Desouza and Awazu, 2006). KM activities within SMEs tend to happen in an informal way, rarely supported by purposely designed information technology systems (Pillania, 2007).

Very few studies have focused on the benefits of KM for SMEs. According to McAdam and Reid (2001), the benefits of KM on studied organisations were mainly based on reduced cost and improved quality and efficiency. Salojarvi et al. (2005) argued that firms that work with KM on a systematic basis grow faster in terms of annual sales growth than firms that do not have a KM strategy and practice. It has been emphasised that studies regarding the advantage of KM in larger firms have revealed various benefits, including increased profits, productivity, innovation, improved employee skills, better customer handling sales growth and better decision making. However, SMEs are lagging behind because formal strategies and policies are usually absent and they rely on unsystematic ways of sharing and utilizing knowledge which tend to focus on short term gains. In addition, SMEs usually depend on rather unsophisticated IT tools (Evardson, 2006).

According to Ihua (2008), there are vast potential benefits awaiting SMEs who choose to adopt a KM initiative as part of their overall strategy. The major benefits include enhanced improvements in turnover and increased profitability facilitated by the production of new products and services suited to meet market needs; improved organisation’s customer service management; higher employee retention rates through the recognition of employees’ values, knowledge and sharing abilities; streamlined company operations and cost reduction; enhanced organizational learning and improved creative abilities; a sense of identity, security, loyalty, responsibility and commitment in employees; strategically positioning of the company, offering readiness for market penetration; improved organizational efficiency and effectiveness (Ihua, 2008). It also brings about immediate results in solving organisation wide problems; develops a constant competitive long range service and technology strategies; stimulates and motivates employees; establishes a formalised knowledge transfer system (best practice, lessons, learned); captures and uses knowledge from sources outside the firm; improves integration of knowledge within
firm and assist to develop a culture that enhances organisational growth and success (Egbu *et al*, 2005).

However, irrespective of the tremendous benefits associated with KM, there are still some general challenges associated with KM in most SMEs. Some of the challenges include knowledge identification, knowledge capture, knowledge storage, knowledge mapping, knowledge dissemination and knowledge creation.

A big challenge for SMEs is identifying accurately what knowledge is useful and where to get the appropriate knowledge. SMEs find it difficult to maintain and leverage existing knowledge. Kamara *et al* (2002) states that to have the knowledge of the people skills for a specific task, knowledge of the abilities of suppliers and sub-contractors and also knowing who to contact when there is a problem, was considered to be a key asset of any KM strategy.

Barchan (1999) proposes that an organisation loses more than the people’s knowledge, for example investment made for professional development and competence when a member of staff leaves an organisation. In most cases, when an employee leaves an organisation, the co-employees temporarily maintain the position until another person is recruited. In SMEs, the attempt to transform tacit knowledge (knowledge that is held by individuals but not able to be readily expressed) into explicit knowledge (knowledge that can be communicated and shared) tends to be difficult. Most times, the importance of the employee’s knowledge is often realised perhaps too late, when the employee is about to leave the organisation, as he/she prepares to take with him/her knowledge and experiences gained over the years (Egbu *et al*, 2005).

Storing of knowledge is an important challenge for SMEs. Converting tacit into explicit knowledge and sharing such knowledge is essential in an organisation with scarce resources. SMEs have different organisational strengths to manage organisational knowledge by virtue of their size and structure (Egbu and Sturges, 2001) hence; IT should be used as a means to store knowledge in SMEs. Bergeron and Raymond (1992) argued that IT could be used as a strategic weapon by small
firms to maintain their competitiveness and attain a favourable position within the sector.

Knowledge mapping is the field within KM that aims to optimise the efficient and effective use of the organisation’s knowledge. Speel et al (1999) define knowledge mapping as the process, methods and tools for analysing knowledge areas in order to discover features or meaning and to visualise those in a comprehensive and transparent form, such that the relevant business features are clearly highlighted. Davenport and Prusak (1998) noted that developing a knowledge map involves locating important knowledge within the organisation and then publishing some sort of list or pictures that shows where to find it. They are created by transferring certain aspects of knowledge into a graphical form that is easily understandable.

Knowledge dissemination consists of knowledge transfer and knowledge sharing. Lack of time, lack of communication skills and rapid change in ICT are underlined as some of the main concerns for knowledge dissemination in SMEs. The element of trust plays an important role in knowledge dissemination. Face to face discussion is an important method of knowledge dissemination (Egbe et al, 2005).

Knowledge creation is another challenge for SMEs. It is a process of adding value to previous knowledge through innovation (Duffy, 2000). New skills and competences of the employees have a vital role to play in the survival of an organisation. It is also accepted that knowledge creation is a challenge, which to some extent could be seen as an indication of the lack of resources in SMEs to identify and use important external sources of scientific expertise and advice in generating new knowledge (Rothwell and Mark, 1992).

Levy et al (2003) argued that SMEs are knowledge creators but are poor at knowledge retention. In order words, SMEs need to develop their understanding of KM as a key business drive rather than a resource.
5.0 SMEs in Nigeria

Nigeria is a developing country in sub Saharan Africa where SMEs account for 60 to 70 per cent in terms of employment according to Ojukwu (2006). Lal (2007) stated that SMEs currently represent about 90 percent of the industrial sector in terms of number of enterprises. A study conducted by the International Finance Corporation (IFC) in 2001, estimated that 96 per cent of all businesses in Nigeria are SMEs compared to 53 per cent in USA, 65 per cent in the EU (European Union) with SMEs in both places accounting for over 50 per cent of their respective country’s Gross Domestic Product (GDP). Given the above figures, it is important for such businesses to be prepared to take full advantage of any benefit offered by KM. Effective knowledge management can give SMEs a better opportunity to compete in their markets and soon this will be a competitive necessity for survival in all organisations.

In both developed and developing countries, governments are turning to small scale industries as a means of economic development. SMEs are particularly considered as the driving force for the economy in Nigeria (Bada, 2002). They assist in promoting the growth of the country’s economy, hence all the levels of government at different times have policies which promote the growth and sustenance of SMEs (Ogechukwu, 2006).

In the UK, SMEs are seen as the driving force behind job creation and wealth creation. The future of the economy relies heavily on ensuring that SMEs improve their competitiveness by their performances (Ilesami, 2007). SMEs also play a vital role in enhancing the economic development of Nigeria, having contributed greatly by the provision of employment opportunities, marketing of goods and services, supplying the needs of larger industries and also in terms of growth and development of the rural areas. They have also brought about the growth of indigenous entrepreneurship in Nigeria (Ogechukwu, 2006) and increased local participation in the manufacturing sector. By so doing, they have assisted in curtailing the rising rate of unemployment. They are known to account for a large percentage of all businesses in the country and a favourable percentage of the nation’s GDP (Ogechukwu, 2006).
If given the necessary support, SMEs could become important players in the development process of the Nigerian economy, having proved to be one of the most viable sectors with economic growth potentials (Lal, 2007).

6.0 Knowledge Management Challenges in Nigeria SMEs

While KM seems to be successfully applied in large companies in Nigeria, it is largely disregarded by most SMEs. Nunes et al (2006) and Pillania (2008) state that the reason why SMEs disregard KM in most cases is due to lack of a formal approach to the sharing, recording, transferring, auditing and exploiting of organisational knowledge together with a lack of utilization of available information technologies. The major challenges associated with KM in Nigeria SMEs include the lack of KM concept within owners/managers, lack of technical knowledge, lack of government support, cultural barrier, technology, lack of skills and training and also cost.

The adoption of KM is reliant upon its acceptance by business owners. Many SME owners/managers in Nigeria are not familiar with the conceptual basis and potential benefits of KM. An owner’s enthusiasm for technology is a major motivator in the adoption of KM. Since one of the objectives of KM is to maximise return on an organisation’s tangible and intangible knowledge assets and resources such as customer related information, competencies and experiences resident in the minds of employees (Menkoff, 2002), it is important for owners/managers to understand KM concepts and be committed to support KM implementation (Wong and Aspinwall, 2005). Managers must develop a system that will enable workers to think and act flexibly to productively meet company goals (Singh et al, 2008).

Therefore, owners/managers of SMEs should be willing to adopt KM as it will serve as a motivator for employees. Although SMEs are usually faced with limited resources and many uncompleted projects, owners/managers’ support will ensure that KM implementation is successful (Ilesami, 2007). There is a need for owners/managers to attend training programmes that will enlighten them on the
benefits associated with adoption of KM. Owners/managers should also be willing to conduct training sessions for staff that will assist in creating awareness on the benefits of effective KM in organisations. For example, computerised files should be used to record and keep track of customers’ preferences, enquiries and so on, aimed at improving customers’ relationships. It is also important to have an efficient and suitable information and communication infrastructure.

There is always a situation where there is lack of expertise and professional knowledge in an organisation as people are not always aware of the technical developments regarding KM in Nigeria SMEs. One of the main barriers to the use of KM in businesses is the lack of knowledge about the advantages of the technology and the value it could add to businesses (Ilesami, 2007). In Nigeria, lack of technical knowledge of the benefits of KM is a barrier, which prevents businesses from implementing it. The majority of SMEs do not make use in their day-to-day business of various KM tools such as maintaining a customer database, having discussions with customers, conducting market inventions and so on. Furthermore, the development of a truly visionary KM strategy and creation of a business driven IT-based knowledge information system is often neglected. For instance, some SMEs have computers and Internet service but still store customers’ information on papers (Ilesami, 2007).

Lack of government support is another factor. SMEs, unlike larger organisations, will require government support in order to have a competitive edge. The Nigerian government must set up different agencies to look into the various problems associated with SMEs in Nigeria. The government can provide an enabling environment in which KM can realize its full potential. They can help to address the problems and challenges of awareness and infrastructure under-development (Payne, 2001). In developed countries, governments have been able to prioritize the improvement of infrastructures and the upgrading of skills necessary to participate effectively in the restructuring of technology adoption (UNCTAD, 2006).

Cultural barrier is a challenge in Nigeria SMEs. Very often cultural barriers such as distrust, lack of recognition and communication act as demotivators with regard to effective knowledge sharing and utilization of what we know (Von Krogh et al, 2000). Cultures which do not nurture openness and knowledge sharing cannot provide
the appropriate human inputs needed by the organisation for their KM initiatives. Malik and Malik (2008) state that lack of supportive organisational culture and structure may hamper KM initiatives in any organisation.

The technological capability of SMEs in Nigeria needs to be further strengthened. It has been observed that most SMEs under invest in KM related technology due to financial constraints. Therefore, SMEs should consider seeking assistance from government funding schemes for preliminary IT deployment. According to Chan and Chao (2008), a simple KM system with access to the internet, email and database management may serve as a cost effective start. Also, important factors that must be considered in the development of a KM system include simplicity of technology, ease of use, suitability to users’ needs.

In addition, the skill deficiencies appearing in SMEs include not only technological abilities but also management skills (Arendt, 2008). In Nigeria, SME owners are reluctant to train employees. This reluctance to invest in training of employees arises because SME owners are afraid that following the completion of such training and having improved their qualifications, employees will leave and find employment in large companies that offer better salaries.

Furthermore, a factor that has been identified to be influencing adoption decisions is the cost of implementation. This can be defined as the total amount, that it will cost business organisations to implement a new technology (Folorunsho et al., 2006). Many SMEs in Nigeria believe that the cost of implementing KM is too high and that the money can be used for other purposes that will be more effective and profitable than the benefits that can be derived from KM (Folorunsho et al., 2006). Apart from the necessity to raise funds to purchase equipments and softwares, implementing a KM system gives rise to another problem - determining the investment rate of return, as these types of investments are carried out over relatively long periods.
7.0 Case study- Knowledge management at Rino Linex

In this section, data from the case study is presented. The researchers concentrated on primary and secondary sources of data. Primary data for this study was gathered by using a case study via semi-structured interviews of key informants in an SME. Data was collected via telephone interviews, which assisted in gaining an in-depth amount of information on the subject. Furthermore, extensive amount of secondary data was collected and reviewed from various sources which included books and academic journals. A general introduction to the organisation involved is provided below, followed by a discussion of the KM initiatives within the organisation. The company in this paper has been given pseudonyms and some details of the company has been shrouded to maintain company confidentiality.

Rino Linex is an SME located in Lagos, Nigeria. The current Managing Director Ralph Ladoke established the company in 1996. Rino Linex has been at the forefront of revolutionary changes in the construction sector in Nigeria, offering construction, refurbishment and maintenance services along with a range of other value added services. The company began its operation in 1996 with about one million Naira (₦1,000,000) as capital and had an office in Lagos. The company had 20 employees and each of these employees were assigned to a particular task and answerable to a superior. The company’s major role is to carry out construction projects for both the government and the private sector. Rino Linex is committed to provide customers with a high quality integrated infrastructural design, refurbishment and maintenance services at the most cost effective price, with safety as the paramount objective. Their ability to put together a whole range of diverse disciplines and services enables the company to consistently deliver a high level of performance. All these activities were carried out from the office in Lagos. By 1999, the company had grown significantly in size, due to an increase in the number of services they render to customers as well other family members getting involved in running the organisation. Two years later the company decided to create more branches in other parts of the country, most especially in the major cities in Nigeria. Hence, more technical staff were employed and this led to an increase in the number of activities in the company. Some of their services include the supply of building materials, construction of roads, bridges, houses and also refurbishment and maintenance of some structures. They also supply
petroleum products to some organisations. In 2001, the company made sales in excess of five million Naira (₦5,000,000). This led to the creation of more departments and assisted in the various activities that were carried out by the company. It also assisted in increasing the company’s share in the stock market. All these gave the company an added advantage over most construction companies due to the company’s multiple services.

At present the company has four branches in various states across Nigeria. As a family business, a team of dedicated directors run the organization, and currently the company has about 100 employees. This rapid growth resulted in the company’s decision to acquire a web-based Enterprise Resource Planning (ERP) system to enable the integration of information between the various departments and branches in the company. The directors realized the imperatives and benefits of IT for effective KM, in order to stay ahead in the knowledge based economy. The company’s data processing section was centralised on one system. The directors at that time decided to acquire a software known as LSS. This software is used by surveyors and geotechnical personnel while on site. A website was then developed for the company by an external ISP provider to enable Rino Linex to create awareness of its existence, for commercial opportunities and also, to have a better way of interacting with its customers.

Previously, the company was loaded with manual paper works and discontinued knowledge flows between the front-end and back-end operations. Rino Linex is now enabled with a customer oriented online interface where customers can log-in to check the status of their order for the supply of building materials, and can also make enquires. The company has an intranet framework (IFS) which is a corporate network that handles the internal documentation of the company. It is used to integrate other systems to provide better information and data sharing and helps the company’s employees to access email, fill in time sheets, access the company’s staff directory, and so on. It also serves as a link or platform to gain access to the IT section. The company makes use of some software to accomplish its construction work such as AutoCAD software which is used for producing 3D drawings and used by contractors whilst on site to interpret data. A software called Super Stress (SS) is used for administrative work, linked by a software called ISS. The construction and project
division and the civil engineers use the super stress software for structural analysis. It is an important design tool that is used for highlighting possible failures in structural design. All these have assisted in improving the company’s services to its customers.

The acquisition of an ERP system has enhanced communication between the various departments and branches of the company. The new system has also enabled managers to react, rectify problems, and coordinate its team at various construction sites. It allows engineers whilst on site to transmit information to the head office where construction experts can process the data. The ERP solution has resulted in an increase in the company’s productivity and efficiency in terms of scheduling and operations. Previously, Rino Linex management had no control over their staff activities whilst on site and, as such, could not always determine the level of development. The only mode of communication upon completion of a job at that time was via the use of public telephones. However, with the implementation of the new system, a short message service (SMS) is sent through an existing mobile phone network to the head office whenever an employee begins a job and another one is sent when the job is completed. This allows the management and construction experts at the head office to track the precise duration of each job, how well it was accomplished and to issue subsequent job orders (Menkoff et al, 2002). Furthermore, employees were trained on how to use the new technology and some extensive training programs have been implemented to assist staff move towards a customer service oriented business and enable them to keep up to date with new products and services, packages, marketing and sales initiatives. The implementation of the ERP system has enabled Rino Linex to effectively and efficiently manage its organisational knowledge and has increased the company’s turnover.

8.0 Conclusions and Recommendations

KM is still a new concept in Nigeria SMEs; hence, there are still many issues to be considered which are not known. For Nigerian SMEs to be successful in the implementation of KM, special considerations to lack of awareness and the need for the development of a generic KM framework must be taken into account. The effective implementation of KM is governed and facilitated by certain factors.
Knowledge must be identified, captured, stored, mapped, disseminated, created and used effectively to obtain the best possible benefits for SMEs. Any technological infrastructure that is put in place to support KM must be adapted to the organisation’s needs. For Nigerian SMEs to remain competitive the role of owners/managers is very important and organisations need to understand the factors that are critical to the success of KM. As such, considerable care must be taken in the development of CSFs for KM. The Nigerian government needs to make adequate provision for financing the SMEs and making sure the required infrastructures are in place.

For further research more case studies would be helpful in order to have a better understanding of the benefits associated with KM in SMEs.

References


