EFFECT OF STRATEGIC KNOWLEDGE MANAGEMENT ON PERFORMANCE OF COMMERCIAL BANKS IN KENYA

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ABSTRACT

Globalization, rapid technological developments and dynamic business environment have contributed to uncertainty and unpredictability in all sectors which have emphasized the importance of the ability of an organization to adapt to unexpected changes. To cope with changes in business environment, organizations are embracing the concept of strategic knowledge management (SKM) as a process of gathering, managing and sharing employees' knowledge capital throughout the organization to ensure organizational effectiveness. Knowledge sharing throughout the organization enhances existing organizational business processes, introduces more efficient and effective business processes and removes redundant processes. Many organizations are agreeing that to grow, stay competitive and survive, they have to constantly change their strategies to meet new business demands and this explains the growth of interest in knowledge management over the last decade. The study adopted a descriptive research design. This approach was suitable for this study, since the study intended to collect comprehensive information through descriptions which would be helpful for identifying variables. The target population of this study was 322 management staff working in the bank's headquarters. The study focused more on the top, middle and low level management staffs who are directly dealing with the day to day management of the bank since they are the ones conversant with the subject matter of the study. The study was employed stratified random sampling technique in coming up with a sample size of 146 respondents from a total of 322 of representatives of management staff. The primary research data was collected from the management staff. Data analysis tool that was dependent on the type of data to be analyzed depending on whether the data was qualitative or quantitative. The quantitative data in this research was analyzed by descriptive statistics using statistical package for social sciences (SPSS) version 21. Content analysis was also be used in processing of this data and results presented in prose form. In addition, a multivariate regression model was applied to determine the relative importance of each of the four variables with respect to performance. Data was presented in tables, charts and graphs. The results showed that that knowledge acquisition significantly affects performance of commercial banks in Kenya. The analysis of the findings deduced that knowledge conversion significantly influence organizational performance of commercials banks. The findings of the study showed that knowledge protection had great effect on performance of commercial banks in Kenya. The research established that knowledge applications affect the performance of commercial banks in Kenya to a great extent. Based on the research findings, the study concludes that knowledge management processes capability is key in achieving performance of commercial banks in Kenya. To enhance the level of KM the commercial banks in Kenya, the study makes the following suggestions; Managers of commercial banks of Kenya should understand and develop a better way of implementing an overall KM which is composed of acquisition, conversion, protection and processes. The managers of commercial banks of Kenya should improve knowledge acquisition in their organization. The managers of commercial banks of Kenya should coordinate and synchronize internalization, externalization and socialization in the organization in order to establish their significant effect on performance of the organization.

Key Words: *strategic knowledge management, knowledge capital, knowledge conversion, knowledge protection, knowledge applications, knowledge acquisition*

INTRODUCTION

Globalization, rapid technological developments and dynamic business environment have contributed to uncertainty and unpredictability in all sectors which have emphasized the importance of the ability of an organization to adapt to unexpected changes. Therefore, dynamism is important for organizations to tailor their operations and their capability to cope with changes in the operating environment in order to enhance their effectiveness in business. Organizations with adaptability as one of their main characteristics can survive and prosper in today‘s environment. Beneficial impacts of dynamism are increasingly acknowledged and support that is more empirical emerges on the link between dynamic capabilities and firm effectiveness (Sharifi & Zhang, 2009).

The aspect of viewing knowledge as a means to improve company's competitive ability inevitably endows KM with a "strategic" attribute; KM is posited to help firms remain in viable in turbulent environment. To cope with changes in business environment, organizations are embracing the concept of strategic knowledge management (SKM) as a process of gathering, managing and sharing employees' knowledge capital throughout the organization to ensure organizational effectiveness. According to Kelleher and Levene (2009), knowledge sharing throughout the organization enhances existing business processes, introduces more efficient business processes and removes redundant processes. It is a discipline that promotes a collaborative approach to the creation, capture, organization access and use of an enterprise's knowledge assets. KM has therefore become a mainstream priority for companies of all sizes and a complement to the organization’s business activities. With new economy increasingly becoming a more knowledge-based economy, knowledge is becoming the most important asset for organizational success (Kelleher & Levene, 2009).

Many organizations have benefited immensely from adoption of KM techniques. Gray (2011) indicated that through successful knowledge capturing, sharing, and creation, firms can improve organisational effectiveness therefore enhancing the performance and creating more possibilities to gain performances. In knowledge management, an organization’s competitive advantages depend on the organization ability to learn faster than its competitors to ensure effectiveness in its operation do. Sunassee and Sewry (2011) noted that there is indisputable need for knowledge management practices in the workplace to enable managers to promote knowledge sharing, acquisition and retention of intellectual capital.

Commercial banks are under tremendous pressure for increased accountability from external and internal sources. External pressures raised by stakeholders like employers and government agencies for measurable improvements in performance. Petrides and Nodine

(2009) observed that commercial banks need to invest in vast number of experts who facilitate KM. If the banks rely on only one expert individual to conduct ongoing exercises in improving performance outcomes, it can hamper the flexibility and responsiveness of the organization. The challenge is to convert the knowledge that currently resides in this individual and make it widely and easily available to any banker. Thus, strategic knowledge management can lead to improvements in sharing knowledge, both explicit and tacit, and subsequently benefit the organization as a whole. Strategic knowledge management can be thought of as a framework or an approach that enables people within an organization to develop a set of practices systematically to collect information and share what they know (e.g. skills, experiences, beliefs, values, ideas, etc.), leading to action that improves services and outcomes (Petrides & Nodine, 2009).

In the developing countries, strategic knowledge management and organisational learning have received much attention in recent times, owing to the increased recognition which has been accorded knowledge as a source of organisational success and sustainability.The South African banking industry is characterized by intense competition; therefore, banks should utilize their knowledge resources effectively to create competitive advantages and develop a greater ability to act and adapt to the ever-changing tastes and needs of customers. To achieve this competitive advantage, it is imperative that banks must embrace the knowledge management (KM) philosophy as a strategic asset central to product and process innovation, executive decision-making and organizational adaptation and renewal. Enhanced performance is reflected in more informed decision-making, streamlined processes, reduced duplication, more innovation, advanced data integrity and greater cooperation within the bank. KM contributes to cost efficiency and improved service delivery (Cong & Pandya, 2013).

In a study on the role of strategic knowledge management in enhancing organizational performance in selected banks of South Africa, Chigada (2014) indicated that strategic Knowledge management has been cited as a strategic asset and a source of competitive advantage for banking organizations. Though KM has been implemented in commercial and business environments towards operational advantages and financial gains, KM survival principles and tools might help South African banks improve performance and fulfill their mandate. Knowledge, when properly managed, can significantly enhance an organization's performance.

Strategic knowledge management in many organisations in Uganda have failed to deliver much-needed benefits, partly due to the lack of integration of the two approaches. Evidence of such failure is reflected in the increasing number of investments in information technology and staff development which have not been matched with the improved management of knowledge and learning at such institutions (Turyasingura, 2011).

The importance of knowledge as a strategic source of competitive advantage has also been increasing in the Kenyan context. Such growth has been complemented by the recognition that the ability to learn faster than competitors may be the only source of competitive advantage. However, in Africa, and Kenya in particular, there is no clear indicator (s) on how much SKM has been implemented in organizations for better performance (Kinyua, Muathe & Kilika, 2015). The aspect of viewing knowledge as a means to improve company's competitive ability inevitably endows KM with a "strategic" attribute; KM is posited to help firms remain in viable in turbulent environment. Kangogo and Gachunga (2015)points out the major challenge of managing knowledge as capturing and integrating knowledge to share among other members of the organization. Success of an organization is in its ability to collect, store, and distribute specialized knowledge to create and sustain competitive advantage.

In the Banking sector, commercial banks in Kenya have traditionally relied on asset bases and size for competitive advantage but this is becoming more difficult to sustain owing to competition (Simiyu &Waithaka, 2015). Banking is a typical knowledge-intensive industry that involves activities of knowledge exchange (service) rather than exchange of goods. Therefore, managing knowledge has become as important to Commercial Banks as it is for other knowledge based organizations. As noted by Rono (2011), SKM is indispensable in the banking industry because competition and most of the work in the industry are knowledge-based. Moreover, the last open frontier for banks to create competitive advantage may reside in their ability to leverage knowledge, since banking is not just a business of handling money but also a business that is driven and sustained by information. Despite the benefits gained by strategic knowledge management in other industries, there is need to establish whether knowledge management would be of strategic importance in the banking sector.

STATEMENT OF THE PROBLEM

Knowledge management is important as it enables organizations to gain insight and understanding from it is own experience and procedures (Choy, 2011). However, for effective implementation of strategic knowledge management in organizations, it is crucial organization to identify and understand the key factors that will influence the success of strategic knowledge management initiative as these may have profound effects on the organization performance (Ichijo, Krogh & Nonaka, 2012). Unfortunately, organizations are not clear about such factors hence the need for this study.

Many Kenyan business establishments have started implementing knowledge management programs in their organizations. However, strategic knowledge management in the banking industry has not accomplished the same scale of applications and empirical research as in other fields. Less optimistically, the industry has unique characteristics that impact on its potential sustainability. The majority of the banks in Kenya operate with limited resources and tend to focus on day-to-day business operations. They are also bogged with high turnover rate (18.3% for the year 2015) of employees with very many people are leaving the industry with tacit knowledge and the institution has to make do with fresh recruits it hires with no explicit knowledge in banks operation. This is even compounded by knowledge hoarding among the employees seeing it as a source of power.

The application of strategic knowledge management in the banking industry does not really differ from other industries but the increasing complexity of bank's environment makes its implementation more difficult. Banks have realized the crucial role of knowledge management in gaining an edge in this competitive field, but there have been laggards in the adoption of knowledge management usually due to wait and see attitude of what will be the true benefits and pitfalls from early adopters. According to an International Data Corporation's (IDC) survey, only 20% of banks are currently apply a knowledge management principles (Blesio & Molignani, 2010). This trend is actually more prevalent among large banks. With greater awareness of the importance of strategic knowledge management, IDC expects this situation to change in the near future, and knowledge management will become a priority for the banking sector.

Previous studies done on the effect of strategic knowledge management on organizational performance include: Bennett and Gabriel (2010) studied various knowledge management methods in view of organizational structure, culture, size, and environment. Locally, Murianki (2012) conducted a survey of knowledge management structures among Internet Service Providers (ISP) In Kenya, Gathua (2013) looked at knowledge management practices of selected non-profit organizations in the Health Sector-Nairobi County, Mararo (2013) did a study knowledge management practices as a competitive tool in insurance companies in Kenya while Riungu (2015) conducted study on the effect of knowledge management practices on performance of mobile telephone companies in Kenya. To the best of the researcher's knowledge, there is no conclusive evidence on the effect of strategic knowledge management on the performance of commercial banks in Kenya. Thus, owing to the advancements in bank service-oriented technology infrastructure, the unprecedented increase in the demand for knowledgeable workers, and the commonplaceness of service firms, this study sought to establish the effect of strategic knowledge management on the performance of commercial banks in Kenya.

OBJECTIVES OF THE STUDY

The general objective was to establish the effect of strategic knowledge management on the performance of commercial banks in Kenya.

SPECIFIC OBJECTIVES

1. To establish the effect of knowledge acquisition on performance of commercial banks in Kenya
2. To determine the effect of knowledge conversion on performance of commercial banks in Kenya
3. To assess the effect of knowledge protection on performance of commercial banks in Kenya

4. To find out the effect of knowledge application on performance of commercial banks in Kenya

THEORETICAL ORIENTATION

This study was anchored on the organizational knowledge conversion theory, adaptive structuration theory, dynamic capabilities theory and the cognitive learning theory.

Resource Based View Theory

A resource-based view emphasizes that a firm utilizes its resources and capabilities to create a competitive advantage that ultimately results in superior value creation and achieve organizational effectiveness. In order to achieve organizational effectiveness the firm must allocate its resources and capabilities wisely against competing needs as a result of changing business environment. RBV depicts companies as a collection of resources and capabilities required for product or market competition. Resources are the physical capital, human capital, and organizational capital owned or controlled by a firm that can be used to conceive of and implement strategies (Barney, Ketchen & Wright, 2011).

From resource-based view, resources are important unit of analysis to understand a firm‘s strategy. These resources develop organizational capabilities; heterogeneity and immobility of these resources define an organizational effectiveness and reward a firm with superior economic and financial performance. The currently dominant view of business strategy resource-based theory or resource-based view (RBV) of firms is based on the concept of economic rent and the view of the company as a collection of capabilities. This view of strategy has a coherence and integrative role that places it well ahead of other mechanisms of strategic decision making (Kay, 2014). Kay's study was conducted on intergovernmental agency competition, According to His study, Kay, sought to establish achievement of competitive advantage as a result of relational architecture, reputation, innovation and strategic assets.

In a study of this nature, banks' resources include capital, equipment, talent, know-how, skill and knowledge. In a knowledge-based economy, knowledge is the most vital resource in banks, displacing capital in the economy and land in the agricultural economy (Lim, 2013). In a knowledge-based economy, knowledge is the most critical element that determines the success of an industrial undertaking. However, the resource-based theory is silent on how knowledge should be acquired and retained in the organisation. The theory suggests that knowledge is the organizational asset that enables sustainable competitive advantage in hyper-competitive environments. Resource-based theorists consider intellectual capital to be a firm's strategic resource. Strategic knowledge management processes, including knowledge acquisition, knowledge conversion and knowledge application, were used in the study to manage and increase social capital, to enhance firm performance and to sustain competitive advantages. The knowledge-based view of the firm considers knowledge as the most strategically significant resource of the firm (Desouza & Awazu, 2010). This view considers a firm to be a "distributed knowledge system" composed of knowledge-holding employees, and this view holds that the firm's role is to coordinate the work of those employees so that they can create knowledge and value for the firm. Thus the theory of resource based is deemed suitable in studying on strategic knowledge management on firm performance.

Organizational Knowledge Conversion Theory

This study is also anchored to Nonaka and Takeuchi (2011) theory of organizational knowledge conversion which views the interaction processes of tacit and explicit knowledge as essential features in knowledge management. The organizational knowledge conversion (OKC) theory identifies socialisation, internalisation, externalisation and combination (SECI) as the four modes of interaction that facilitate knowledge management in an organisation. Conversion of knowledge from one form to another, results in retention of knowledge in the organizational system. The sharing of knowledge and experience means that, when retirees leave, their knowledge has been retained by new and young employees who remain behind. Senior workers and experts share their knowledge with juniors and new entrants. When tacit knowledge is converted to explicit (externalisation), knowledge is captured in the organisational system and the knowledge is retained in documents and databases. Retention of knowledge includes all activities that preserve knowledge and allow it to remain in the system. It also includes those activities that maintain the viability of knowledge within the system.

The theory is about how to create organisational knowledge, how to share it, how to convert knowledge from one type to another and how to manage organisational knowledge. Knowledge retention refers to all systems and activities that preserve knowledge and allow it to remain in the system once introduced. It includes all activities that maintain the viability of knowledge within the system (Ulrich &Nonaka, 2011). Earl (2011) posit that, when tacit knowledge and explicit knowledge interact with each other, they create four modes of knowledge conversion which are socialisation, externalisation, combination and internalisation (SECI). Chong (2010) view SECI as the engine of the whole knowledge creation and transfer process. The on-going collaborative engagement results in a knowledge dynamic of sharing and creation of knowledge that may be captured and retained in the organisation. Through social interaction between individuals and organisations, knowledge is created and expanded –this interaction is referred to as knowledge conversion.

Adaptive Structuration Theory

Adaptive structuration theory is based on Giddens (1984) structuration theory. This theory is formulated as “the production and reproduction of the social systems through members‟ „use of rules and resources in interaction‟”. Poole and DeSanctis (2009) adapted Giddens‟ (1984) theory to study the interaction of groups and organisations with information technology, and called it adaptive structuration theory (AST). AST criticises the technocentric view of technology use and emphasises the social aspects. Groups and organisations using information technology for their work dynamically create perceptions about the role and utility of the technology, and how it can be applied to their activities. These perceptions influence the way technology is used and hence mediate its impact on group outcomes.

The adaptive saturation theory is concerned with the behaviour of humans as they use technology (such as computers) in a bank. On the other hand the behavioural school implies the way human beings react to the environment, for instance how people behave at FNB or Nedbank, determines how knowledge is managed. The theory also refers to the nature of group-computer interaction since organisations, such as those in the banking industry, now rely heavily on the use of advanced information technology for the purposes of communication and relaying information. Over-reliance on IT has led many organisations and individuals to believe that knowledge is IT, yet AST focuses on communication using information technology, thus highlighting the concepts of appropriation and structuration (Sedera & Zakaria, 2008).

Dewah (2011) posits that the AST draws some links between individuals and organisational learning due to the key concepts that address aspects of group interaction with technology. Organisational learning is regarded as a continuous phenomenon emerging from the social interactions and practices of individuals (Ryu & Chaudhury, 2010). The behavioural school is a kind of community of practice model where there is continuous learning and informal exchange which is enhanced by the availability of knowledge retained and accessible from within as well as outside the organisation. With the advent of interactive communication technologies such as wikis, blogs, Facebook and Twitter, to name but a few, individuals are exposed to new information and knowledge (Taylor & Todd, 2011; Skyrme & Amidon, 2013). While AST criticises the technocentric view of technology use, it places emphasis on social aspects. Technologies such as computers enable the transfer, sharing and, most importantly, the retention of knowledge for preservation and re-use. However, in this study AST was applicable because the two banks were using state of the art technology. All the banks‟ processes were automated and each employee in the bank had a personal computer (PC) or laptop and had access to the intranet and internet. Employees extensively interacted with technology which was likely to change individuals‟ behaviours. As such the theory was applied to knowledge retention strategies.

Dynamic Capabilities Theory

Dynamic capabilities theory postulated by Teece (2011) examines how firms integrate, build, and reconfigure their internal and external firm-specific competencies into new competencies that match their turbulent environment (Roberts & Ashton, 2013). The theory assumes that firms with greater dynamic capabilities will outperform firms with smaller dynamic capabilities. The aim of the theory is to understand how firms use dynamic capabilities to create and sustain a competitive advantage over other firms by responding to and creating environmental changes (Gao & Riley, 2010). Capabilities are a collection of high-level, learned, patterned, repetitious behaviors that an organization can perform better relative to its competition (Nelson & Winter, 2012). Organizational capabilities are called zero-level (or zero-order) capabilities, as they refer to how an organization earns a living by continuing to sell the same product, on the same scale, to the same customers (Winter, 2013).

Bloom, Canning and Chan (2011) created a framework for a proposed model of dynamic capabilities. According to the framework, the firm (1) uses its sensing capabilities to spot, interpret, and pursue opportunities that it perceives from internal and external stimuli; (2) uses its learning capabilities to determine what organizational capabilities must be revamped, rebuilt, or reconfigured into new knowledge; (3) uses its integrating capabilities to collectively understand and to make the necessary changes to its operational capabilities; (4) uses its coordination capabilities to implement and use the reconfigured operational capabilities; and (5) continues to scan external and internal stimuli (Chong, 2010; Bloom, Canning & Chan, 2011).

Commercial banks have specific competences and resources at their disposal that they can use to align their operations with changes with market need. Today knowledge needs in the market is at state of dynamism and all stakeholders look upon these institutions to build these competences on their work force and also to give them forehand information on anticipated changes and of course a way around such changes. These specific competencies include high notch teaching staff, research and development staff and state of art technologies to acquire, convert, protect and ensure application of the knowledge obtained.

Cognitive Learning Theory

This theory postulated by Smith (2011) states that humans generate knowledge and meaning through sequential development of an individual’s cognitive abilities, such as the mental processes of recognize, recall, analyze, reflect, apply, create, understand, and evaluate. The Cognitivists' (Gao & Riley, 2010; Smith, 2011) learning process is adoptive learning of techniques, procedures, organization, and structure to develop internal cognitive structure that strengthens synapses in the brain. The learner requires assistance to develop prior knowledge and integrate new knowledge. The purpose in education is to develop conceptual knowledge, techniques, procedures, and algorithmic problem solving using Verbal/Linguistic and Logical/Mathematical intelligences. The learner requires scaffolding to develop schema and adopt knowledge from both people and the environment. The educators' role is pedagogical in that the instructor must develop conceptual knowledge by managing the content of learning activities. The theory insists that the learner is expected to use skill and knowledge obtained during learning to solve problems in real life situations (Nonaka, 2013).

This theory is relevant to this study in that, it points at elements of knowledge management processes. Since commercial banks collect and disseminate information to customers about their products, the theory notes that customers expect assistance to develop prior knowledge and integrate new knowledge. The knowledge acquired helps customers in problem solving in their quest for optimum bank services.

EMPIRICAL REVIEW

Oliver and Kandadi (2012) stress the central role of human factor in knowledge generation. According to them, knowledge is the individual ability to draw distinctions within a collective domain of action, based on an appreciation of context or theory, or both (Tsoukas & Vladimirou 2013). Thus, knowledge becomes organizational simply due to the fact that it is generated, developed, and maintained by individuals within organizations.

Serban and Luan (2011) noted that effective knowledge management helps in change management, influencing business strategy, and a host of other high-value-added activities that impact organizational effectiveness (OE). In knowledge management process, human resource is an indispensable resource. Many firms are highly dependent on their human capital for their organizational effectiveness. The market value of human resource increasingly depends on their intangible assets, such as their knowledge, core competencies, and organizational capabilities (Ulrich & SmallNonaka, 2011). In addition, change seems to be almost a constant today, so that organizations have an increased level of need for expertise and capability to handle changes in management and the implementation of new business policies, practices, knowledge and strategies.

Chong (2011) insisted that activities such as appropriate employee's staffing, employee's ability and technology development, systematic organizational structure development, construction of compensation system about employee's performance should be promoted to use knowledge asset effectively for enhanced organizational effectiveness. Gray (2011) examined empirically that the mutual relationships between knowledge management practice ways proposed in organization to support creation, storage, and transfer of knowledge can raise organizational effectiveness. Specifically, Gray presented five ways such as (a) formal training of employees, (b) construction of knowledge repository, (c) informal knowledge fairs of employees, (d) spur of communities of practices (CoP), and (e) talk rooms of R&D employees about their current projects for knowledge management practice ways to raise organizational performance. However, knowledge need in industry is influenced by a myriad of factors depending on geographical location, levels of technological sophistication, economic status of the nation other factors.

Also, Earl (2011) conducted a study to establish effective knowledge management model from the perspective of organizational capabilities. This perspective suggests that a knowledge infrastructure consisting of technology, structure, and culture along with knowledge process architecture of acquisition, conversion, application, and protection are essential organizational capabilities or preconditions for effective knowledge management. Lee and Choi (2013) emphasized that knowledge management consists of processes to manage knowledge and enablers (or capabilities) to support these processes. They also argue that knowledge management enablers consist of organizational culture, structure, people, and information technology support.

Abdul (2014) noted that knowledge management helps an organization to gain insight and understanding from its own experience. Specific knowledge management activities help focus on organisation on acquiring, storing and utilizing knowledge for problem solving, dynamic leaning, strategic planning and decision making. It also prevents intellectual assets from decay, adds to firm intelligence and provides increased flexibility. According to Gray (2011), knowledge management process is an audit of intellectual assets that highlights unique sources, critical functions and potential bottlenecks, which hinder knowledge flows to the point of use. Knowledge management process protects intellectual assets from decay, seeks opportunities to enhance decisions, services and products through adding intelligence, increasing value and providing flexibility. Knowledge management process complements and enhances other organizational initiatives such as total quality management (TQM), business process re-engineering (BPR) and organizational learning, for enhanced organizational effectiveness.

RESEARCH METHODOLGY

The study adopted a descriptive research design. This approach was suitable for this study, since the study intended to collect comprehensive information through descriptions which will be helpful for identifying variables. Bryman and Bell (2013) assert that a descriptive design seeks to get information that describes existing phenomena by asking questions relating to individual perceptions and attitudes. According to Polit and Beck (2013), in a descriptive study, researchers observe, count, delineate, and classify. They further describe descriptive research studies as studies that have, as their main objective, the accurate portrayal of the characteristics of persons, situations, or groups, and/or the frequency with which certain phenomena occur. The method was chosen since it is more precise and accurate as it involves description of events in a carefully planned way. A descriptive research design determines and reports the way things are (Nassiuma, 2010). Sekaran (2012) observes that a descriptive research design is used when data are collected to describe persons, organizations, settings or phenomena. The data collection for descriptive research presents a number of advantages since it can provide a very multifaceted approach using interviews, observations, questionnaires and participation. The target population of this study was 322 management staff working in the banks headquarters. The study focused more on the top and middle level management staffs who were directly dealing with the day to day management of the bank since they are the ones conversant with the subject matter of the study. To obtain the desired sample size for the study with the population of 322, Nassiuma (2010) formula was used as shown;

$$n = \frac{N\,(cv^2)}{Cv^2 + (N-1)\,e^2}$$

Where: ***n***= sample size

N = population (322)

Cv= coefficient of variation (take 0.6)

e= tolerance of desired level of confidence (take 0.05) at 95% confidence level)

$$n = \frac{322\,(0.6^2)}{0.6^2 + (322-1)\,0.05^2} = 146$$

To obtain the desired sample size from each stratum, stratified sampling formula was used $i = n\,(^N/_P)$, (Kothari, 2009).Where: ***i*** are the number of respondents in the stratum to be sampled, ***n*** is the sample size, ***N*** is the population of the specific stratum, ***P*** is the population. The sample size of each stratum was calculated using the formula $i = n\,(^N/_P)$,

The study employed stratified random sampling technique in coming up with a sample size of 146 respondents from a total of 322 of representatives of management staff. Stratified random sampling was unbiased sampling method of grouping heterogeneous population into homogenous subsets then making a selection within the individual subset to ensure representativeness (Bryman& Bell, 2013).

The primary research data was collected from the management staff using a structured self-administered questionnaire. The questionnaire were administered using a drop and pick later method to the sampled respondents. To establish the validity of the research instrument the researcher sought the opinions of experts in the field of study especially the lecturers in the department of business administration. This helped to improve the content validity of the data that was collected. It facilitated the necessary revision and modification of the research instrument thereby enhancing validity. Cronbach Alpha was used to test the reliability of questions asked for this research. Coefficient of 0.7 is a commonly accepted rule of thumb that indicates acceptable reliability (Sekeran, 2013). All the five scales were found to be reliable as their reliability values exceeded the prescribed threshold of 0.7. This therefore depicts that the research instrument was reliable and therefore required no amendments. The quantitative data in this research was analyzed by descriptive statistics using statistical package for social sciences (SPSS) version 21. Content analysis was also used in processing of this data and results presented in prose form. In addition, a multivariate regression model was applied to determine the relative importance of each of the four variables with respect to performance. The regression model was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where: Y = Organizational performance; β_0 = Constant Term; β_1, β_2, β_3 and β_4 = Beta coefficients; X_1= Knowledge Acquisition; X_2= Knowledge Conversion; X_3= Knowledge Protection; X_4 = Knowledge Application and ε = Error term. In testing the significance of the model, the coefficient of determination (R^2) was used to measure the extent to which the variation in organizational performance is explained by the variations in KM. F-statistic was also be computed at 95% confidence level to test whether there was any significant relationship between KM and organizational performance. This analysis was done using SPSS software and the findings presented in form of a research report.

RESEARCH RESULTS

Knowledge Acquisition

These results showed that that knowledge acquisition significantly affects performance of commercial banks in Kenya. The study established that Intellectual capital development and Knowledge dissemination have great influence on organizational performance, while Development and sustenance of expertise and Development of knowledge have a moderate influence on organizational performance. According to Lopez et al (2014), the focus of the individual is on the acquisition of knowledge, shared understanding is achieved via interpretations, diffusion is via distribution among organizational members and embeddedness comes via organizational memory, systems and rules.

Knowledge Conversion

The analysis of the findings deduced that knowledge conversion significantly influence organizational performance of commercials banks. Furthermore the aspects of knowledge management such as combination were established to have a great influence organizational performance. Other aspects such as socialization, internalization and externalization have also moderate influence on performance of commercial bank of Kenya. This results correlates with Tsoukas (2013) suggests that knowledge conversions occur when people engage in practical activities through participation in social practices, under the guidance of people who are more experienced. On addition, Hildreth and Kimble (2012) emphasize the importance of a mentor in the organization who has a lot of tacit knowledge and who guides the newcomer in learning this tacit knowledge through a practice.

Knowledge Protection

The findings of the study showed that knowledge protection had great effect on performance of commercial banks in Kenya. The study is supported by Kelleher, (2010) who indicated that Intellectual property management is mainly an explicit-to-explicit knowledge conversion. It is based on knowledge repositories and, thus, deals with all aspects of knowledge storage, organization and knowledge distribution in a controlled way.The analysis also showed, most of the commercial banks use technical protection in their organization furthermore, it was affirmed by the study that strategic protection greatly influences performance of commercial banks in Kenya. Other aspects such as Juridical protection, Technical protection, Digital product data protection and Organizational Protection were found to have a moderate effects on performance of commercial banks in Kenya. This findings are in conjuction with Haberfellner, Daenzer and Becker (2012) who noted that organizational and juridical protection means are not capable of solving the goal conflict and the piracy and plagiarism situation alone.

Knowledge Applications

The research established that knowledge applications affect the performance of commercial banks in Kenya to a great extent. This finding are in accordance with Blumentritt and Johnston (2009) who suggested that in order to gain competitive advantages, organisations need to enhance the information-knowledge application especially through the implementation of IT-based improvements to. Furthermore, the researched noticed that individuals, organization culture and identity, policies and documents which are attributes of knowledge application greatly influence performance of commercials banks in Kenya. According to Ahmad and An (2013), with the successful application of useful knowledge, industrial companies can improve the process of organisational learning to enhance performance and create more possibilities to gain competitive advantages for the organization. The analysis also showed that routines and systems have a moderate effect on commercial banks. The findings are supported by study of Marwick (2011) who illustrated that efficient and effective knowledge management typically requires an appropriate combination of organizational, social, and managerial initiatives along with the deployment of appropriate technology for application of knowledge.

Bivariate Correlations

The Pearson product-moment correlation coefficient (or Pearson correlation coefficient) is a measure of the strength of a linear association between two variables and is denoted by *r*. The Pearson correlation coefficient, *r*, can take a range of values from +1 to -1. A value of 0 indicates that there is no association between the two variables. A value greater than 0 indicates a positive association, that is, as the value of one variable increases so does the value of the other variable. A value less than 0 indicate a negative association.

Table 1: Bivariate Correlation Matrix

		Performance of commercial banks	Knowledge acquisition	Knowledge conversion	Knowledge protection	Knowledge application
Performance of commercial banks	Pearson Correlation	1				
	Sig. (2-tailed)					
Knowledge acquisition	Pearson Correlation	.842	1			
	Sig. (2-tailed)	.001				
Knowledge conversion	Pearson Correlation	.746	.960	1		
	Sig. (2-tailed)	.000	.000			
Knowledge protection	Pearson Correlation	.905	.923	.950	1	
	Sig. (2-tailed)	.000	.000	.000		
Knowledge application	Pearson Correlation	.594	.896	.917	.953	1
	Sig. (2-tailed)	.015	.000	.000	.000	

The correlation findings show that knowledge acquisition is related to performance of commercial banks in Kenya ($r = 0.842$, $p < 0.05$). This implies that knowledge acquisition affects performance of commercial banks in Kenya and the relationship is statistically significant. In addition, the study reveals that knowledge conversion is related to performance of commercial banks in Kenya ($r=0.746$, $p < 0.05$) implying that knowledge conversion affects performance of commercial banks in Kenya and the relationship is statistically significant. Further, the study reveals that knowledge protection are related to performance of commercial banks in Kenya ($r=0.905$, $p< 0.05$) implying that knowledge protection affects performance of commercial banks in Kenya and the relationship is statistically significant. Finally the study established that knowledge application is related to performance of commercial banks in Kenya ($r=0.594$, $p < 0.01$) implying that knowledge application affects performance of commercial banks in Kenya and the relationship is statistically significant. This implies that all the variables had a positive and significant correlation with performance of commercial banks in Kenya.

Regression Analysis

Regression analysis shows how dependent variable is influenced with independent variables.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.809	0.655	0.641	0.122

Table 2 is a model fit which establish how fit the model equation fits the data. The adjusted R^2 was used to establish the predictive power of the study model and it was found to be 0.641 implying that 64.1% of the variations in performance of commercial banks is explained by knowledge acquisition, knowledge conversion, knowledge protection and knowledge application leaving 35.9% percent unexplained. Therefore, further studies should be done to establish the other factors (35.9%) affecting the performance of commercial banks in Kenya. This concurs with Serban and Luan (2011) who noted that effective knowledge management helps in change management, influencing business strategy, and a host of other high-value-added activities that impact organizational effectiveness (OE).

Table 3: ANOVA results

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	3.041	4	0.760	49.293	0.000
1	Residual	1.604	104	0.015		
	Total	4.645	108			

The probability value of 0.000 indicates that the regression relationship was highly significant in predicting how knowledge acquisition, knowledge conversion, knowledge protection and knowledge affected performance of commercial banks in Kenya. The F calculated at 5 percent level of significance was 49.293since F calculated is greater than the F critical (value = 2.4495), this shows that the overall model was significant.

Table 4: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.987	0.143		6.902	.0000
	Knowledge acquisition	0.722	0.196	0.678	3.684	.0003
	Knowledge conversion	0.663	0.113	0.634	5.867	.0000
	Knowledge protection	0.873	0.148	0.786	5.899	0000
	Knowledge application	0.511	0.162	0.498	3.154	.0023

The established model for the study was:

$$Y = 0.987+ 0.722\ X_1 + 0.663\ X_2 + 0.873\ X_3 + 0.511\ X_4$$

The regression equation above has established that taking all factors into account (knowledge acquisition, knowledge conversion, knowledge protection and knowledge application) constant at zero performance of commercial banks in Kenya was 0.987. The findings presented also show that taking all other independent variables at zero, a unit increase in the knowledge acquisition would lead to a 0.722 increase in the scores of performance of commercial banks and a unit increase in the scores of knowledge conversion would lead to a 0.663 increase in the scores of performance of commercial banks. Further, the findings shows that a unit increases in the scores of knowledge protection would lead to a 0.873 increase in the scores of performance of commercial banks in Kenya. The study also found that a unit increase in the scores of knowledge application would lead to a 0.511 increase in the scores of performance of commercial banks in Kenya. Overall, knowledge protection had the greatest effect on the performance of commercial banks in Kenya, followed by knowledge acquisition, then knowledge conversion while knowledge application had the least effect to the performance of commercial banks in Kenya. All the variables were significant ($p<0.05$) with knowledge conversion and knowledge protection being the most significant ($p = .0000$) followed by knowledge acquisition ($p=.0003$) while knowledge application was the least significant ($p=.0023$). The findings are in line with Earl (2011) who conducted a study to establish effective knowledge management model from the perspective of organizational capabilities. This perspective suggests that a knowledge infrastructure consisting of technology, structure, and culture along with knowledge process architecture of acquisition, conversion, application, and protection are essential organizational capabilities or preconditions for effective knowledge management.

CONCLUSIONS

Based on the research findings, the study concludes that knowledge management processes capability is key in achieving performance of commercial banks in Kenya. Knowledge management processes capability promotes knowledge acquisition in commercial banks in

Kenya, knowledge conversion in commercial banks, knowledge protection in commercial banks, as well as knowledge application in the commercial banks of Kenya.

The study further concludes that knowledge acquisition positively and significantly affects performance of commercial banks in Kenya. The study found that Intellectual capital development and Knowledge dissemination had high influence on performance of commercial banks of Kenya while development and sustenance of expertise and development of knowledge had a moderate influence on organizational performance.

The study affirms that knowledge conversion positively and significantly influences organizational performance of commercials banks. Combination as well as other aspects such as socialization, internalization and externalization influenced performance of commercial bank of Kenya.

The study also concludes that knowledge protection is very key for proper performance of commercial banks in Kenya. The banks that used technical protection, strategic protection juridical protection, technical protection, digital product data protection and organizational Protection were found to have a high performance level than those who don't.

The research finally concludes that knowledge applications had a significant effect on the performance of commercial banks in Kenya. The study found out that the commercial banks of Kenya have impressed attributes of knowledge applications such as individuals, organization culture and identity, policies and documents in their organization which had results into improved performance. However, routines and systems were found to have less influence on performance of commercial banks in Kenya.

The study finally conclude that knowledge protection had the greatest effect on the performance of commercial banks in Kenya, followed by knowledge acquisition, then knowledge conversion while knowledge application had the least effect to the performance of commercial banks in Kenya. This notwithstanding, all the study variables were significant ($p<0.05$).

RECOMMENDATIONS

To enhance the level of KM the commercial banks in Kenya, the study makes the following suggestions; Managers of commercial banks of Kenya should understand and develop a better way of implementing an overall KM which is composed of acquisition, conversion, protection and processes. These correlated and complementary capabilities should not be considered in isolation but rather should be integrated and combined to leverage, exploit and sustain a performance of commercial banks. The managers of commercial banks of Kenya should improve knowledge acquisition in their organization. They should apply intellectual capital development and Knowledge dissemination to higher extent since has high influence on organization performance. The managers of commercial banks of Kenya should coordinate and synchronize internalization, externalization and socialization in the organization in order to establish their significant effect on performance of the organization. At the same time, they need to keep in mind that cultural attributes are also of the most importance to social infrastructure capability and also exert the most influence on other capabilities.

On knowledge conversion, the study recommends that senior in commercial banks management should clearly support the role of knowledge in corporate success, make sure that their employees understand this issue and more importantly, encourage them to participate in on-the-job training and learning, as well as in capturing and transferring knowledge. Regarding human skills, business managers must emphasize employee understanding of their own and others tasks, develop their expertise, and enable them to communicate well with all other organizational members.

The managers of commercial banks should impress knowledge protection such as technical protection, strategic protection, juridical protection, digital product data protection and organizational Protection in their institutions in order to enhance knowledge protection in their organization. The managers of commercial banks must build up an organizational design which enables the creation of new knowledge, knowledge exchange and transfer across functional boundaries. At the same time, knowledge needs to be frequently examined for errors and mistakes.

Managers also need to take advantage of technological capability to support knowledge application processes. In particular, organizations should use technology to map the location of specific types of knowledge, thereby facilitating the application and sharing of knowledge. Technology also needs to be applied to facilitate people in multiple locations to learn as a group from a single or multiple resources and at a single or multiple points in time. By doing so, social and technical infrastructure elements can complement each other and come together to enhance knowledge-oriented processes. The study finally, recommends that commercial banks should base its performance on knowledge creation. Organization's managers should continue to examine knowledge for errors/mistakes frequently. The study also recommends that managers of commercial banks in Kenya should come up with standardized reward system for sharing knowledge.

REFERENCES

Akhavan, P. (2016). Major Trends in Knowledge Management Research: A Bibliometric Study. *Scientometrics*, 107(3), 1249-1264.

Alavi, M., &Leinder, D. (2013). Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues. *MIS Quarterly*, 25(1), 134 - 207.

Asava, E. M. (2009). *Organizational Culture and Leadership* (3rd. Eed.). Jossy-Bass.

Barney, J.B., Ketchen& D. J., & Wright, M. (2011). The Future of Resource-Based Theory: Revitalization or Decline? *Journal of Management*, 37(5), 1299-1315.

Barua, A., Kriebel, C., & Mukhopadhyay, T., (2013). Information Technology and Business Value: An Analytical and Empirical Investigation. Information Systems Research 6(1), 3–23.

Beardwell, I, Holden, L. & Claydon, T. (2014). *Resource Management: A Contemporary Approach*, 4th Edition, Prentice Hall, Essex

Beijerse, R.P. (2009). Questions in Knowledge Management: Defining and Conceptualizing a Phenomenon, *Journal of Knowledge Management*, 3(6), 29-34.

Blesio, H. M., & Molignani, Z. M. (2010). Acculturation of Knowledge Management Initiative in Commercial Banks: The Case of Malaysia. *Asia-Pacific Journal of Information Technology and Multimedia*, *1*(1), 38-47.

Bloom, D., Canning, D., & Chan, K. (2011). *Higher Education and Economic Development in Africa, Human Development sector, Africa Region*. Harvard University Press.

Blumentritt, R., & Johnston, R. (2009). Towards A Strategy For Knowledge Management, *Technology Analysis and Strategic Management*, 11(3), 287-300.

Bollinger, R., & Smith, A. (2011). Managing Organizational Knowledge as a Strategic Asset. *Journal of knowledge management*, 5(7). 8-18.

Bontis, N., &Nikitopoulos, H. (2011). Parallels in *Knowledge Cycles*. *Computers in Human Behavior*, 27(4), 1438-1444.

Bosch, K. W. (2009). *A Framework of Characterizing Knowledge Management Methods, Practices, and Technologies*. Washington University Course EMGT 298.T1, Spring.

Bryman, A., & Bell, E. (2013). *Synthesizing Research*; A Guide for Literature Reviews (3rd Ed) Sage: Thousand Oaks.

Carrillo, P. M., Robinson, H., Al-Ghassani, A. & Anumba, C. (2010). Knowledge Management in UK Construction: Strategies, Resources and Barriers. *Project Management Journal*, *35*(1), 46-56.

Castanias, R., Helfat, C., (2013). Managerial Resources and Rents. *Journal of Management* 17(1), 155–171.

Chigada, J. (2014).*The role of knowledge management in enhancing organizational performance in selected banks of South Africa*. Unpublished MBA project, University of South Africa.

Chong, S. C. (2010). KM critical Success Factors: A Comparison of Perceived Importance Versus Implementation in Malaysian ICT Companies. *The Learning Organization*, 13(3), 118-132.

Cong, X. and Pandya, K. (2013).Issues of KM in the public sector. *Electronic Journal of Knowledge Management*, 1(2): 25-33

Creswell, J. W (2013).*Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks: Sage Publications, Inc.

Davenport, T. H. (2011). Putting the Enterprise into the Enterprise System. *Harvard Business Review*, 76(4), 45-89.

Davenport, T. H., & Prusak, L. (2010). Working knowledge: How organizations manage what they organizational memory. *Sloan Management Review*, 41(3), 69–79.

Desouza, K. C., & Awazu, Y. (2010). Knowledge management at SMEs: five peculiarities. *Journal of knowledge management*, *10*(1), 32-43.

Doaei, H. A., & Dehghani, J. (2010). Strategic Gap Analysis of KM Dimensions in Knowledge Based Organizations. *Journal of Strategic Management*, 1(1), 47-68.

Drucker, P. F. (2013). *Managing Oneself*. Harvard Business Review Press.

Dyer, G., & McDonough, B. (2013). The State of KM. *Knowledge Management Journal, 6*(1), 56 – 90.

Earl, M. (2011). Knowledge Management Strategies. *Journal of Management Information Systems*, 18(1), 215–223.

Easterby-Smith, M., & Lyles, M. (2013). *The Blackwell Handbook of Organizational Learning and Knowledge Management*. Oxford: Blackwell.

Eisemon, T. (2012). Private Initiatives in Higher Education in Kenya. *Journal of Higher Education*, 24(2), 157-175.

Empson, L. (2009). *The challenge of managing knowledge*. Financial times: Mastering Strategy.

Feeny, D., & Ives, B., (2012). In Search of Sustainability: Reaping Long-Term Advantage from Investment in Information Technology. *Journal of Management Information Systems* 7(1), 27–46.

Frankfort-Nachmias, C., & Nachmias, D. (2012), *Research Methods in the Social Sciences*, 5th edition. New York: St. Martin's Press.

Gathua, T. C. W. (2013). *Knowledge Management Practices Of Selected Non-profit Organizations In The Health Sector - Nairobi County*. Unpublished MBA project, University of Nairobi.

Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. Univ of California Press.

Grant, R. M. (2013). The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation, *California Management Review*, 33(3), 114-35.

Gray, K. (2011). The Ontario leadership framework 2012. *With a Discussion of the Research Foundations*, 47(7), 45-67.

Grayson, C. (2009). Knowledge Transfer: Discover Your Value Proposition. *Strategy & Leadership*, 27(2), 10-15.

Hannan, M. T., & Freeman, Jr. (2012). *Obstacles to the Comparative Study of Organisational Effectiveness.* San Francisco: Jossey-Bass.

Hartman, E. M. (2013). *Organizational Ethics and the Good Life*.New York: Oxford University Press.

Harvey, M., &McMeekin, A. (2009). *Public or Private Economies of Knowledge?: Turbulence in the Biological Sciences*. Edward Elgar Publishing.

Hoopes, B. N., Madsen, Y.J., & Walker. L.T. (2013). Knowledge, Management, and Knowledge Management In Business Operations. *Emerald Journal Of Knowledge Management.* 12(2):3-17.

Huber, G. (2013). Organizational Learning: The Contributing Processes And The Literatures, *Organization Science*, 2(1), 88-115.

Inkpen, A. C., & Dinur, A. (2012). Knowledge management processes and international joint venture. *Organization Science*, *9*(4), 454-68.

Kangogo, F. and Gachunga, H., (2015). *Influence of Knowledge Management Practices on Enhancing Service Delivery in The Banking Sector in Kenya: A Case of Commercial Banks in Kenya***.** Unpublished MBA project, JKUAT.

Kay, R.L. (2014). Skills of an Effective Administrator. *Harvard Business Review*, 52(5), 90–102.

Kelleher, D., & Levene, S. (2010). Knowledge Management: A Guide to Good Practice, *British Standards Institution*, London, UK.

Kiamba, C. (2009). *Entrepreneurialism and Adaptability in Kenyan Universities in The Face Of Declining Donor and Government Support*. A paper presented at the Nuffic Conference on The changing landscape at The Hague.

Kimaiyo,J., Kapkiyai, D., & Chepkemoi, N. (2015). Effect of Knowledge Management on Firm Performance in Commercial Banks in Nakuru, Eldoret And Kisumu. *Information and Management*, 41,8-13.

King, W. R., & Ko, D. G. (2011). Evaluating Knowledge Management and the Learning Organization: An Information/Knowledge Value Chain Approach. *Communications of the Association for Information Systems*, 5(14), 1–26.

King, W.R., & Lekse. W. (2013). Deriving Managerial Benefit From Knowledge Search: A Paradigm 340 Shift? *Information and Management*, 43(7), 874–883.

Kinyua, G. M., Muathe, M.A., & Kiliki, J. M. (2015). *Effect of Knowledge Conversion and Knowledge Application on Performance of Commercial Banks in Kenya*. Unpublished article. Kenyatta University.

Lamb, J. (2011). The Connectivity Map: A New Tool for Biomedical Research. *Nature Reviews Cancer*, *7*(1), 54-60.

Levene, S. (2009). Governing Knowledge Sharing In Organizations: Levels of Analysis, Governance Mechanisms, and Research Directions. *Journal of Management Studies*, 47(3), 455-482.

Lim, C. (2013). Youth risk behavior surveillance—United States, 2013. *MMWR SurveillSumm*, 57(4), 1-131.

Love, P., Edum-Fotwe, F., & Irani, Z. (2013). Management of Knowledge in Project Environments. *International Journal of Project Management*, 21(7), 155-156.

MacIntosh, E. & Doherty, A. (2011). Extending the Scope of Organizational Culture: The External Perception of an Internal Phenomenon. *Sport Management Review*, 10(1), 45-64.

Makadok, A. C. (2013). Learning and Knowledge Acquisition through International Strategic Alliances, Competitiveness and Global Leadership in the 21st Century. *The Academy of Management Executive*, 12(12), 223-229.

Mararo, E. N. (2013). *Knowledge Management Practices As A Competitive Tool In Insurance Companies In Kenya.* Unpublished MBA project, University of Nairobi.

Marwick, A. D. (2010). Knowledge Management Technology. *IBM Systems Journal*, 40(4), 56 – 79.

Maseki, C. (2012). *Knowledge Management and Performance of Commercial Banks in Kenya*. Unpublished MBA project, University of Nairobi

Matsuno, K., & Mentzer, J. T. (2010). The Effects of Strategy Type on the Market Orientation-Performance Relationship. *Journal of Marketing*, 64(4), 1-16.

Mbirithi, D. M. (2014). *Management Challenges Facing Kenya's Public Universities and Implications For the Quality Of Education*. Unpublished MBA project, Kenyatta University.

Moussetis, R. (2011). *How Ansoff interfaces with both the planning and learning schools of thought in strategy*. Emerald Group Publishing. http://dx.doi.org/10.1108/175113411 1109955

Murianki, K.O. (2012). *Knowledge Management within Publicly Quoted Firms in Kenya*. Unpublished MBA thesis, University of Nairobi

Nassiuma, D. K. (2010). *Survey Sampling*: *Theory and Practice*, Unpublished MBA thesis, University of Nairobi.

Nelson, N. H. & Winter, J. Y. (2012). KM Critical Success Factors: A Comparison of Perceived Importance Versus Implementation in Malaysian ICT Companies. *The Learning Organization*, 13(3), 118-132.

Newman, B., & Conrad, K. W. (2009). *A Framework of Characterizing Knowledge Management Methods, Practices, and Technologies*, Washington University Course EMGT 298.T1, Spring.

Nonaka, I. (2011). The Knowledge-Creating Company. *Harvard Business Review*, 85(78), 162-171.

Nonaka, I., & Takeuchi, H. (2011). The Wise Leader. *Harvard Business Review*, 89(5), 58-67.

Northouse, P. (2014). *Leadership*: *Theory and Practice*(3rd Ed.). Thousand Oaks, CA: Sage.

Okunoye, A., & Bertaux, N. (2013). *Addressing Contextual Issues in Knowledge Management: A Guiding Framework*. New York, NY.

Oliver, S., & KandadiK., R. (2012). How to Develop Knowledge Culture in Organizations? A Multiple 357 Case Study of Large Distributed Organizations. *Journal of Knowledge Management*, 10(4), 6–24.

Orodho, C. (2013). *Research Methods in the Social Sciences*. London: Arnold.

Pareek, U. & Rao, T.V (2012). *Designing and Managing Human Resource Systems*, Oxford & IBH Publishing Company, Delhi.

Park, V., & Nodine, A. (2009). Co-constructing Distributed Leadership: District And School Connections In Data-Driven Decision-Making. *School Leadership and Management*, 29(5), 477-494.

Polit, T., & Beck, W. (2013). Evidence of Predictability in the Cross-Section of Bank Stock Returns. *Journal of Banking and Finance*, 27(7), 817-850.

Poole, M. S., & DeSanctis, G. (2009). Use of group decision support systems as an appropriation process. In *System Sciences, 2009. Vol. IV: Emerging Technologies and Applications Track, Proceedings of the Twenty-Second Annual Hawaii International Conference on*. Vol. 4, pp. 149-157.

Porter, M.E. (2011). *Competitive Advantage: Creating and Sustaining Superior Performance*, with a new introduction. New York: Free Press.

Rastogi, P.N. (2010). Knowledge Management and Intellectual Capital - The New Virtuous Reality of Competitiveness. *Human Systems Management*, 19(1), 39-49.

Rezgui, Y., Hopfe, C. J., & Vorakulpipat, C. (2010). Generations of Knowledge Management in the Architecture, Engineering and Construction Industry: An Evolutionary Perspective. *Advanced Engineering Informatics*, 24(2), 219-228.

Riungu, A. K. (2015). *Effect of knowledge management practices on performance of mobile telephone companies in Kenya*. Unpublished MBA project, University of Nairobi.

Robertson, M., & Hammersley, G.M. (2010). Knowledge Management Practices Within A Knowledge Intensive Firm: The Significance of the People Management Dimension, *Journal of European Industrial Training*, 24(2), 241-53.

Rono, C. (2011). *Knowledge Management Practices by Commercial Banks In Kenya*. Published Thesis, University of Nairobi

Rumelt, R., Schendel, D. & Teece, D., (2013). Strategic Management and Economics. *Strategic Management Journal*, 12(5), 29-67.

Ryu, C. & Chaudhury, A. (2010). Knowledge acquisition via three learning processes in enterprise information portals: learning-by-investment, learning-by-doing, and learning-from-others. *Mis Quarterly*, 245-278.

Sedera, D., & Zakaria, N. H. (2008). Adaptive structuration theory view of post implementation knowledge management for enterprise systems. *PACIS 2008 Proceedings*, 179.

Sekaran, U. (2012). *Research Methods for Business: A Skill Building Approach*. (4th Ed). New York: John Wiley and Sons.

Serban, A. M. & Luan, J. (2012). Overview of Knowledge Management. *New Directions for Institutional Research*, 2012(113), 5-16.

Sharifi, S. & Zhang, M. (2009). Sense-making and recipes: examples from selected small firms. *International Journal of Entrepreneurial Behavior & Research*, 15(6), 555-570

Simiyu, M. & Waithaka, B. (2015). The Effect of Knowledge Management Factors on Implementation of Business Strategy among Commercial Banks: A Case Of Banking Institutions In Chuka Town, Kenya**.** *European Journal of Business and Social Sciences*, Vol. 4, No. 08, November 2015. P.P. 260 - *28*4

Skyme, R., & Amid, P. (2013). Relationship between corporate knowledge management and the firm's innovation capability. *International Journal of Services Technology and Management*, 8(1), 62-79.

Somekh, B., & Cathy, M. (2009). *Research Methods in the Social Sciences*: Eds. Bridget Somekh and Cathy Lewin.

Spender, J. C. (2013). *Competitive Advantage From Tacit Knowledge? Unpacking The Concept And Its Strategic Implications*. London: Sage, 56-73.

Sproul, D. (2013). Genomic Insights into Cancer-Associated Aberrant Cpg Island Hypermethylation. *Briefings in Functional Genomics*, 12(3), 174-190.

Stankosky, M. (2012).*Creating the Discipline of Knowledge Management*. Butterworth: Heinemann Publication.

Sternberg, R. J., & Horvath, J. A. (2013). A prototype view of expert teaching. *Educational Researcher*,24(6), 9-17.

Stonehouse, G. H., & Pemberton, J. D. (2009). Learning and Knowledge Management in the Intelligent Organization. Participation and Empowerment: *An International Journal*, 7(5):94-144.

Sunassee , H.D., &Sewry, K.H (2011). Meeting Czech Knowledge Management Challenges Head-On: KM-Be. At-It. *Knowledge Management in Emerging Economies: Social, Organizational and Cultural Implementation*, 6(7), 56-90.

Taylor, S. & Todd, P. (2011). An integrated model of waste management behavior a test of household recycling and composting intentions. *Environment and behavior*, 27(5), 603-630.

Teigland, R. (2009). Born Virtuals and Avapreneurship: A Case Study of Achieving Successful Outcomes in Peace Train–a Second Life Organization. *Journal for Virtual Worlds Research*, 2(4). 67-90.

Thompson, M. D. (2014). Knowledge Management And Knowledge Management Systems: Conceptual Foundations And Research Issues. *MIS Quarterly*, *25*(1), 134 - 207.

Turyasingura, W. (2011). *Interdependency of Knowledge Management and Organisational Learning: The Case of Higher Education Institutions in Uganda*. Unpublished MBA project, University of the Witwatersrand.

Tylor, E. (2012). *Primitive Culture*: *Volume One*. New York: Harper and Row.

Wangari, E. (2009). *A Study of the Linkage of Critical Success Factors and Knowledge Management Systems at Olivado Kenya (EPZ) Ltd.* Unpublished MBA thesis, University of Nairobi.

Wemby, A. (2010). *Crafting a Dual-Market Strategy*: A Case Study of Burberry.

Wilkesmann, U., Wilkesmann, M., & Virgillito, A. (2009). The Absence of Cooperation is Not Necessarily Defection: Structural and Motivational Constraints Of Knowledge Transfer In A Social Dilemma Situation. *Organization Studies*, 30(10), 1141-1164.

Yeh, Y. J., Lai, S. Q., & Ho, C. T. (2013). Knowledge Management Enablers: A Case Study, *Industrial Management and Data Systems*, 106(6), pp. 793-810.

Zollo, M., & Winter, S. (2011). *From Organizational Routines to Dynamic Capabilities. Working Paper 99-07*, Reginald H. Jones Center, the Wharton School, University of Pennsylvania.