KNOWLEDGE MANAGEMENT AND COMMERCIAL BANK PERFORMANCE IN KENYA

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ABSTRACT

One of the core objectives of all commercial banks is to meet the business expenses and make a return on the investment. Preferably the returns made should be on the increase as bank continues operating. Many strategies are employed to try and ensure that owners' wealth is maximized in the world where competition continues to intensify. Free entry to the markets has seen many commercial banks join the financial market, new innovative products and services are being released from time to time owing to technology being incorporate plus most of the services offered by commercial banks are now being offered by microfinance institutions (MFIs) which are now 12 in number and increase number of Saving and credit cooperative society. On top of these, customers' expectations keep on changing as the literacy level rises and therefore to meet their demand banks have to rethink through their processes. It is against this backdrop that the current study sought to examine the effect of knowledge management on performance of commercial banks. Specifically the study sought to determine the relationship between knowledge acquisition, conversion and application on commercial banks performance. The study was based on resources based theory and knowledge economy theory. The study adopted descriptive research design and a sample of 363 respondents who were drawn from supervisors in strategic management department of 22 commercial banks. Descriptive statistics such as frequency, mean, percentages and standard deviation were used to summarize the data. Moreover, regression analysis showed the nature of the relationship between knowledge management and performance of commercial banks while correlation analysis showed the strength. Results of the study revealed a positive and significant relationship between knowledge management and commercial banks performance.

Key Words: Knowledge Acquisition, Conversion, Application, Performance of Commercial Banks

INTRODUCTION

The role played by commercial bank is indispensable and increasingly important for economic development. Banks are usually recognized for the contribution made in the economic activities, innovation, employment and more so in wealth creation for country (Ongore & Kusa, 2013) hence their performance is critical not only to the owners but also other stakeholders. According to Shih, Chang and Lin, (2010) banking sector is a knowledge intensive sector where knowledge is exchanged more than products and services. As such, management of knowledge in banks really matters like in other knowledge-based organizations. Competition from increasing number of banks in a country requires commercial banks to distinguish themselves on the ability of applying and converting leveraged knowledge. By so doing, banks are assured competitive advantage since their business is not only handling money but also driven and sustained by the information (Kinyua, Muathe & Kilika, 2015).

Knowledge management (KM) is defined as the discipline that allows "individuals, teams, organization and communities, more collectively and systematically capture, store, share and apply their knowledge, to achieve their objectives" (Kemboi, 2013). Bounfour (2003) refers to knowledge management as the arrangement of philosophy, systems and specific and administrative gadgets, laid out towards making, granting, utilizing information and data inside and around an association. According to Rasula, Vuksic and Stemberger (2012) the combination of the information possessed by an individual and practising the same can be defined as knowledge. This is to mean that without implementing information, knowledge is useless. The management of the knowledge is therefore what guarantees success of the operations in an organisation especially in the modern times were knowledge is held as a prime asset in a company.

In the lifetime of a bank there are changes that calls upon the application, conversion and sharing of knowledge. For a firm to perform fully, they must be in position to handle changes such as death, retirement, transfer, promotion and so on. To do so, the team in charge, should develop and apply the organisation culture that coordinate employees plus knowledge management plans in all dimensions (Rasula et al., 2012). Existing research shows that there are several dimensions of knowledge management which drive performance (Dröge, Claycomb & Germain, 2003; Sabherwal & Sabherwal, 2005). Among the key ones are knowledge acquisition, conversion and applications. Further, it has been observed that organizations that use these dimensions have a positive and significant correlation with the firm performance (Govind, & Ravindran, 2009; Liao & Wu, 2009; Saini, 2013).

Knowledge acquisition is a process that involves extracting, structuring and organizing knowledge from one source, usually human experts. In banking industry this may be gotten via education and training, social interaction, brain storming sessions and coalitions with key stakeholders. The second dimension, knowledge conversion is the process that defines full picture of what the organisation expects to be done. It may be tacit or explicit. In tacit knowledge conversion the information can subjective and rational in way that cannot be expressed in words while in explicit knowledge conversion information acquired can be translate into spoken words, sentences, formulas or numbers. Sa'nchez and Palacios, (2008) realized that knowledge conversion is vital dimension of KM consisting of the social process through which individuals with different information interact and thereby create new knowledge and increases the quality of both tacit and explicit knowledge. This dimension depends on organizational culture, attitude and values, technology used and the intellectual resources (Nonaka, 1997). With knowledge applications dimension, the management is now able to use problem solving technique that,

when given a set of variables and constraints on these variables one can find a set of values that satisfy all the requirements (Becerra-Fernandez, Gonzales & Sabherwal, 2007). King, Chung and Haney (2008) explain that knowledge application may take different forms, namely elaboration, infusion and thoroughness. For elaboration, different interpretations are required while with infusion, issues underlying are found and in thoroughness, different people are seen to generate different understanding. Knowledge application can therefore be judged from leadership conduct, division of tasks and responsibilities taken, existing systems and performance of the firm as whole. If managed properly organizations benefit from newly created industry structure. As cited, there is going to be a new banking organisation paradigm consisting of agile, collaborate and exposed networks, new world of payments, frictionless trading and in the evolution of market place lending (Smith & Eckenrode, 2016). All these changes require an integration of knowledge management for the success in the banks.

Statement of the Problem

Commercial banks core objective is to meet the business expenses and make a return on the investment (Saini, 2013). Preferably the returns made should be on the increase as bank continues operating. Many strategies are employed to try and ensure that owners' wealth is maximized in the world where competition continues to intensify. Free entry to the markets has seen many commercial banks join the financial market, new innovative products and services are being released from time to time. Although, technology enhances innovation among commercial banks the entrance of Micro finance institutions and savings and credit cooperative societies have intensified the demand for product and service innovation among commercial banks (Cytonn Investment, 2015). On top of these, customers' expectations keep on changing as the literacy level rises and therefore to meet their demand banks have to rethink through their processes.

Of late the government through CBK has strengthened the banking regulations, especially the liquidity requirements, cash reserve ratio in the move to increase capital adequacy and more interestingly the capping of interest rate of 4% basis point above Kenya Bank Reference Rate [KBRR] (Njomo, 2016). These regulations have met banks as a surprise and the survival is for the fittest. In the shortest time ever, the banking industry has witnessed three cases of banks, Imperial, Dubai and Chase bank, being placed under receivership due to corruption and mismanagement in the firm.

Despite the importance of knowledge management in organizations, several independent studies exist on the role of knowledge acquisition, conversion and application on the performance of the organization. Most of the existing studies on knowledge management have been carried in developing economies and there is a limited empirical finding on commercial banks (Lee & Choi, 2003; Yeh, Lai & Ho, 2006; Danish & Munir, 2012; Lange-roodi, 2014; Ahmed, Fiaz & Shoaib, 2015). A study conducted by Kinyua et al., (2015) sought to find the impact of knowledge conversion and application in commercial banks in Kenya. The study only focused on only two dimensions on the KM and they neglected the mediating effect of social capital in the relationship between KM and performance, which has been deemed to influence the customer-bank linkage.

Given the current changing environment under which banks are operating in there is need to conduct a study to ascertain what actually influence bank performance. Moreover, in the view of the above issues, the current study aims to bridge the gaps in knowledge that the previous studies have not captured as

well as investigate the mediating role of social capital. Therefore, this study examined the knowledge acquisition, conversion and application of commercial banks performance in Kenya.

Objectives of the Study

The main objective of the study was to examine the effect of knowledge management on commercial bank performance in Kenya. Specifically the study sought:

- To examine the effect of knowledge acquisition on commercial banks performance in Kenya.
- To establish the effect of knowledge conversion on commercial banks performance in Kenya.
- To determine the effect of knowledge application on commercial banks performance in Kenya.

Hypotheses of the Study

The study tested the following hypotheses:

- Knowledge application has no significant effect on commercial bank performance in Kenya.
- Knowledge conversion has no significant effect on commercial banks performance in Kenya.
- Knowledge application has no significant effect on commercial banks performance in Kenya.

LITERATURE REVIEW

Theoretical Review

Resources Based Theory

Resources based theory was brought forth by Wernerfelt (1984) and Barney (1991). This theory views an organization as the combination of the resources that can be used by the management to transform the organization into greater height. According to Grunert and Hildebrandt (2004), resource based theory (RBT) presupposes that organizations are able obtain a sustainable competitive advantage by making maximum use of the deployed resources and capabilities which are unique to the organization. This implies that the competitive advantage is acquired based on endowed strategic resources that are cannot be/ difficult to imitate, replicate, substitute, scarce or are costly to get at any given time (Kinyua *et al.,* 2015). RBT assumes that firms are able to get and manage these valuable resources for the firm to be effective and efficient. In the perspective of RBT a firm that is effective possesses the ability to acquire the valuable and scarce resources and integrating the same resources in the production of the required service and product (Dess, Lumkin, Einser & McNamara, 2012).

Jones and Hill (2009) points that resources are of two forms: tangible and intangible resources; that a firm may consider. Tangibles resources are those that can be seen and touched such as buildings, plant, property and equipment, stock, land and money while intangible resources are non-physical entities that represent value added by the workers in the organization which cannot be quantified and include; brand image, reputation, intellectual property, firm's culture, knowledge possessed by employees and so on. Resources therefore, can be said to be those organizational factors that enable firm to add value to its customers (Kinyua et al*.,* 2015). As observed it can be deduced that tangible resources precede the intangible resources which are acquired over time, but enable firms to realize competitive advantage (Makhija, 2003). In a nutshell, apart from the common resources, RBT suggests the use of strategic resources to acquire an added competitive advantage.

With regards to RBT, resources are assumed to be immobile thus giving the firm an opportunity to enjoy the competitive advantage for long tied to integrated configuration that can only be entangled by the

firm only. This is because of the distinctive feature and competency. As suggested by Makhija (2003) valuable resources are found in the knowledge deposit account of the employees. For a firm to be able to generate good performance, then they have to invest in the process of the acquiring, converting and application of knowledge thus the RBT helps inform the dimensions of knowledge management.

Knowledge Economy Theory

Knowledge economic theory tries to explain the key economic problem facing the society which, according to Hayek (1945) is the utilization of available knowledge optimally. Knowledge hierarchies are usually used to acquire and communicate the same knowledge to different agents. These hierarchies give more time to those agents who possess less knowledge in performing and solving routine problems while more able agents are given less time. Agents are seen to be able to solve problem as per the level of their knowledge and leave the rest of the most able who possess a higher level of knowledge.

Garciano and Rossi-Hansberg (2006, p1384) posits that knowledge economy has four features, namely "production that require knowledge, individual with heterogeneous and cognitive skills, communication made possible and organization hierarchy". This is to simply mean that knowledge economy theory premise is placed on the individual with limited time. Those individuals with less knowledge are given more time to deal with day to day problems while the experts are left to handle the expectations. For example, in the banking sector, customer service is structured in such a manner that the technical department with the junior staff handles customer calls and transfers those calls they cannot handle upward (Orlikowski, 1996). The same case applies when the customer is in need of credit from the banks whereby credit dossiers move from the small to the most senior manager. In this case, being determined by risk, complexity and the value of the credit. The higher level of management will only handle a specified amount of risk and value.

Powell and Snellman (2004) redefine the knowledge economy theory as one that involves knowledge intensive activities to increase the production and services by considering technical and scientifically advance way of achieving the end product or services. This theory on its own depends on the intellectual capabilities which is acquired over time and can be termed as the human capital. As embodied in human being, knowledge forms the central point of economic development (Organisation for Economic Co-operation and Development [OECD], 1996). In OECD economies, more than half of gross domestic product can be explained by knowledge-based and social capital activities. In the banking industry, technology has been recognized to boost services offered, however, this service relies on human knowledge.

Empirical Review

Knowledge Management and Firm Performance

A study conducted by Wang, Wang and Liang (2014) to investigate the impact of knowledge sharing on firm performance and the role of intellectual capital. Purposive sampling and correlational methods were applied in the data analysis process. The study hypothesizes that effective knowledge sharing and intellectual capital have a positive influence on the firm's performance. Random and purposive sampling procedures were applied in analyzing the data. The study findings showed that both explicit and tacit

knowledge sharing are very beneficial to the organization. The study gap puts emphasis on the application of both tacit and explicit knowledge sharing.

Shih-Yi and Ching-Han (2012) on their study to investigate the relationship between dynamic capability, knowledge, learning and firm performance. To attain the main objective of the study, a hypothesis was tested on 132 store managers in a leading fast food chain restaurant in Taiwan. In the study, dynamic capability of the store managers was measured by knowledge resources and learning mechanisms. Data was analyzed through the use of descriptive statistics. The study depicted that knowledge resources impact learning mechanisms.

A study by Victer (2014) investigated the strategic implications of knowledge attributes/ understanding the conditions in which knowledge matters to performance. The study findings depict that knowledge diversity is more beneficial and relevant to an organization's performance as opposed to knowledge immobility. In order to achieve the main objective of the study, probability sampling technique was used to collect data from 20 companies that deal with HIV/AIDS drugs from 1997 to 2010. The study hypothesizes that a firm's knowledge is quite significant and relevant to its performance. The study findings depict that understanding the conditions in which knowledge influences performance of the firm has a positive implication to management.

A study by Afzal and Afzal (2014) in their investigation on the effects of knowledge management practices and the moderating role of inter personal trust on a firm's performance. The aim of the study is to find the link between knowledge management processes and the firm's performance using interpersonal trust as the moderator. Correlational design was used to test the relationships between knowledge management practices, interpersonal trust, and the firm's performance. Convenient sampling techniques and quantitative data analysis were applied to analyze the data collected from 38 firms in information technology industries in Pakistan. Descriptive statistics, correlational design and multiple regressions were farther used to analyze the collected data. The study findings depict that the presence of interpersonal trust affects the strength of knowledge management processes and the firm's performance positively. Moreover, the study hypothesizes that the way an organization converts knowledge is directly related to its performance. The variables are categorized into dependent and independent variables. According to the findings, interpersonal trust as an independent variable has a positive impact on the firm's performance.

A Slovenian study done by Omerzel (2010) investigated the impact of knowledge management on small and medium enterprises growth and profitability. Probability sampling technique was used to select data of 1300 small and medium sized Slovenian companies. This was aimed at gathering the work experience and education level of the respondents working in these companies. The study used correlation design. Results of the study depicted that there is a significant relation between the constructs of knowledge acquisition and firm performance. Explorative analysis was applied to analyze the data through use of exploratory and confirmative factorial analysis. Study findings imply that knowledge acquisition and management is very critical for the survival of small and medium enterprises in Slovenia. The current study findings are however not limited to small and medium companies since the data collected can also be applied on large firms.

An investigation done by Daud (2012) to examine how small, medium enterprises and large firms employ knowledge management in their business activities and the influence of knowledge acquisition

to the firm's performance. The variables were categorized under knowledge acquisition, conversion, application, financial performance and non-financial performance. Descriptive analysis and correlation design were applied. The study hypothesized that knowledge acquisition contributes greatly to the firm's financial and non-financial performance. The study findings show that SMEs need to focus more on knowledge acquisition and application to enhance their financial and non-financial performance.

A Korean study conducted by Vertinsky and Lee (2012) investigated how the exchange climate affects tacit knowledge transfer from foreign parents. The study hypothesized that the difference in the levels of economic development influences tacit knowledge acquisition and tacit knowledge acquisition positively influences international joint ventures. Data collection by use of questionnaires was done between foreign partners and Korean firms. The variables were categorized into inter-firm conflict resolution, inter-firm cooperation and communication. Conflict is measured by four items that assess the extent of conflict resolution, cooperation is measured with three items that assess degree of interparty cooperation and communication is measured by four items that assess frequency of inter-organizational communication. The study findings depict that acquisition of tacit knowledge has a positive influence on the international joint ventures.

Palacios-Marques, Peris-Ortiz and Merigo (2013) investigated the effect of knowledge transfer on firm performance. The study hypothesized that emphasis on competency based management and promoting continuous learning and improving on information technology infrastructure has a positive significance on creating a superior firm performance. Data was collected between February and July 2010 in biotechnology and telecommunication industries in Spain. Both descriptive and correlation analysis were used to analyze the data. The study findings showed a positive significant relationship between the overall knowledge acquisition, knowledge management processes and the firm's performance. The study puts emphasis on managers to encourage techniques and practices that allow for knowledge acquisition among their employees.

A study was conducted by Liu and Deng (2015) to investigate trends in the dimensions of low, medium and high knowledge management capability of business process outsourcing (BPO) firms. The variables under study were firm size, firm age, firm industry and outsourcing age. The study used descriptive research design targeting managers from 605 firms in 2013. Data was collected by use of questionnaires and k-means cluster analysis was applied to analyze the data. Study findings depicted that knowledge application process has an impact on the performance of a firm. The study farther depicts that firms with a low knowledge management capability have moderate level of knowledge application. Moreover, the study findings show that effective application of knowledge is critical in managing business process outsourcing firms.

A study by Birou, Germain and Christensen (2011) to examine the relationships between internal process improvements investments, applied channel logistics knowledge and financial performance for make-to-order and make-to-stock manufacturers. To attain the main objective of the study, secondary data was collected from 210 firms. The variables were measured into epistemology, learning organization, organizational absorptive capacity and applied knowledge. Multi-sample confirmatory factor analysis was used to analyze the data. The study hypothesizes that there is a positive relationship between applied channel logistics knowledge and financial performance for both make-to-order (MTO) and make-to-stock (MTS) firms. The study farther depicts that the relationship between applied channel

logistics and financial performance is stronger for MTO firms than MTS firms. In essence, the study suggests that the relationship between the internal process improvements investments and applied channel logistics knowledge is stronger for MTS firms than for the MTO firms.

Lee, Hsu, Lin and Chen (2011) did a study to investigate the relationships among unlearning, knowledge application and new product development performance while exploring the moderating effect of the information processing mechanism. The study hypothesized that unlearning has significant positive effects on knowledge application and knowledge application has significant positive effects on new product development performance. Data was collected from 112 manufacturing industries by use of questionnaires. Descriptive statistics and correlation analysis were applied in analyzing the data collected. Moreover, the study findings show that information processing mechanisms have partial moderating effects to unlearning and knowledge application.

A study by Lu, Zhu and Chang (2011) to investigate the moderate effects of the interactive use of management control systems on the relation between knowledge management types and marketing project performance. In order to attain the main objective of the study, survey was done in 185 Taiwan companies. The variables were measured into knowledge creator, knowledge integrator, knowledge introducer and non-knowledge management. Quantitative analysis was applied to analyze the data through use of descriptive statistics and correlation analysis. The study hypothesized that knowledge management mechanism has positive significance on marketing project performance. Moreover, the study findings depict that knowledge creator and knowledge introducer do not have direct effect on marketing project performance. Furthermore, emphasis on the interactive use of interpersonal management control systems will assist the knowledge integrator to achieve and improve marketing project performance.

RESEARCH METHODOLOGY

In the current study descriptive research design was used and Kothari (2007) argued that this a design in which the researcher is concerned with answering the questions of how, when, what and why. The population of the study is a collection of all the respondents under investigation in a particular study (Kothari, 2011). The sampling frame constituted of 6464 employees serving in the commercial banks at the supervisory (CBK, 2015). The main research tool to be used in this study was a questionnaire to collect primary data. The questionnaire had been designed to answer the research questions and attain the study objectives were administered among the commercial banks employees who were involved in knowledge management. In order to test the reliability of the instrument to be used in the study, a pilot study was carried out among employees working in two of the financial banks which were excluded from the final study. Data collected was analyzed by use of quantitative technique; quantitative data was analyzed using descriptive statistical method, the statistical tools such as frequency distribution, tables.

RESULTS AND DISCUSSION
Knowledge Management and Commercial Bank Performance

The main objective of the study sought to examine the relationship between knowledge management and commercial bank performance. To achieve this the respondents were requested to show their levels

of agreement on three attributes of knowledge management which were knowledge acquisition, knowledge conversion and knowledge management and the responses from a five point likert scale were summarized using frequency, percentage, mean and standard deviation. The respondents were requested to indicate their level of agreement on a five point Likert Scale. The response options of the scale were; SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree.

Descriptive Analysis on Knowledge Acquisition

The first objective of the study sought to examine the effect of knowledge acquisition on commercial bank performance. Results in Table 1 shows the responses on the effect of knowledge acquisition on commercial banks performance, majority 33.4% agreed and 21.4% strongly agreed that their bank utilizes the entire avenues to acquire knowledge including capturing external knowledge from industrial associations, competitors, suppliers and clients. Secondly, majority 41.2% agreed and 23.7% strongly agreed that their commercial banks normally conduct research to acquire knowledge management. Thirdly, majority 38% agreed and 37.7% strongly agreed that their banks had dedicated resources for acquisition and obtaining knowledge from experienced workers and managers.

Moreover, majority 36.7% agreed and 30.5% strongly agreed that they usually undertake training and education to enhance their knowledge acquisition skills. Similarly, majority 43.5% agreed that leadership in the bank encourages generation of new ideas and they reward to enhance motivation and recruitment of more employees on knowledge acquisition. Further, majority 56.5% strongly agreed that their interaction between the employees and bank stakeholders is usually created so as to enhance understanding their needs and interests. In addition, majority, 45.5% agreed that they look for opportunities to experiment and learn more about customers while 39% strongly agreed that their employees are valued for what they know.

These results were in support of a study by Susana and Joaquin (2012) analyzed information technology competency on knowledge management processes and performance outcomes. The study findings deduced that knowledge management processes play a critical role in market performance and that no direct relations exist between IT competency and the firm's performance.

Table 1: Descriptive Analysis on Knowledge Acquisition

	SD	D	N	A	SA		
	%	%	%	%	%	M	Std
Our bank utilizes all the avenue to acquire knowledge including capturing external knowledge from industrial associations, competitors, suppliers and clients	7.1	12	26	33.4	21.4	3.5	1.2
Our bank normally conducts research to acquire knowledge	3.9	10.1	21.1	41.2	23.7	3.7	1.1
Our bank has dedicated resources for acquisition and obtaining of knowledge from experienced workers and managers	3.6	9.4	11.4	38	37.7	4.0	1.1
We are usually offered education and training on the job to enhance our knowledge	8.4	7.8	16.6	36.7	30.5	3.7	1.2

	SD	D	N	A	SA	M	Std
Leadership in bank encourages generation of new ideas and rewards the same to motivate others	8.8	12.3	20.8	43.5	14.6	3.4	1.1
Interaction between the employees and bank stakeholders is usually invited to enhance understanding of their need and interests	6.2	8.4	1.6	27.3	56.5	4.2	1.2
We look for opportunities to experiment and learn more about customers	7.8	13	4.2	45.5	29.5	3.8	1.2
We look for opportunities to experiment and learn more about products and services, technologies and internal operations	24.7	20.1	4.9	25.6	24.7	3.1	1.6
Our employees are valued for what they know	12.7	16.2	4.5	27.6	39	2.4	1.4
Overall average						**3.5**	**1.2**
n=308							

M=Mean Std=Std deviation SD=Strongly Disagree D=Disagree N=Neutral A = Agree SA=Strongly Agree

Descriptive Analysis on Knowledge Creation

The second objective sought to examine the effect of knowledge creation on commercial bank performance. Results in Table 2 present responses on knowledge creation, from the results majority of the respondents agreed that meetings in their work places helps them in integrating knowledge in their banks (mean =4.4), their banks are able to elicit and translate customers knowledge to readily understandable form (mean =4.0), either their banks were able to elicit and translate knowledge to readily understandable form or they agreed that their banks had ability to articulate ideas or images into readily understandable forms through exchange of information among key players (mean = 3.9). Moreover, majority agreed that through exchange of forms there are able to integrate their knowledge (mean =4.2), use of information technology assists in editing and processing of their information (mean = 4.4), and majority were neutral on actualization of concepts and methods through actual doing and simulations in their banks (mean = 3.4). The results were in agreement with a study by Antonio, Morales and Aranda (2014) investigated knowledge creation and flexibility of distribution of information. The study sought the increase knowledge about the four modes of knowledge conversion and their impact on flexibility of knowledge distribution and performance. The study findings depict that the modes of knowledge conversion have positive direct and indirect influences on the flexibility of the distribution of information thus improving the company's performance. Data was collected amongst organizations with the highest turnover in Spain. Stratified sampling and correlation analysis were applied in analyzing the data. The study finding depicted that there is a positive relationship between flexibility of distribution of information and business performance.

Table2: Descriptive Analysis on Knowledge Creation

	SD	D	N	A	SA		
	%	%	%	%	%	M	Std
Meetings helps in integrating knowledge	1.6	5.2	4.9	32.8	55.5	4.4	0.9

	SD	D	N	A	SA	M	Std
Our bank is able to elicit and translate customers' knowledge to readily understandable form	3.6	5.8	13.3	40.3	37	4.0	1.0
Our bank is able to elicit and translate experts' knowledge to readily understandable form	3.2	12.3	12	39.6	32.8	3.9	1.1
To what extent do you agree that your bank has the ability to articulate ideas or images into a readily understandable form	4.2	9.1	12.7	38.3	35.7	3.9	1.1
Exchange of documents helps in integrating knowledge	1.3	5.8	9.1	37.7	46.1	4.2	0.9
There is use of information technology in editing or processing information	1.9	2.6	5.8	36	53.6	4.4	0.9
Knowledge is disseminated through briefs	2.9	6.8	10.7	41.2	38.3	4.1	1.0
Knowledge is organized and integrated through reports	5.5	5.2	11.7	35.1	42.5	4.0	1.1
Bank's processes enhance translating of knowledge (explicit) into application (tacit)	2.3	2.9	14.6	33.4	46.8	4.2	0.9
There is actualization of concepts and methods through the actual doing and simulations	7.1	10.4	29.2	41.2	12	3.4	1.1
Overall average						**4.0**	**1.0**
n=308							

M=Mean Std=Std deviation SD=Strongly Disagree D=Disagree N=Neutral A = Agree SA=Strongly Agree

Descriptive Analysis on Knowledge Application

The third objective of the study sought to establish the effect of knowledge application on commercial bank performance in Kenya. Results in Table 3 shows the study findings on knowledge application amongst commercial banks in Kenya, majority 36% agreed that their bank leadership is pioneered and driven by knowledge management adoption and use, secondly 47.4% strongly agreed that they had knowledge training program in their banks and 39.6% agreed either their banks had continuous improvement as a result of knowledge management application or adoption of knowledge management in their banks. Moreover, majority 40.3% agreed that knowledge management has resulted to efficient process within their banks and 31.8% agreed information management has supported the workers needs.

The results of the study were in agreement with Zhang, Zhao, Lyles and Guo (2015) who investigated the effects of manufacturers absorptive into its mass customization capability. The variables were categorized into knowledge acquisition from customers, knowledge acquisition from suppliers, knowledge assimilation and knowledge application. The study hypothesizes that knowledge acquisition has indirect effects on mass customization capability through knowledge assimilation and knowledge application.

Table 3: Descriptive Analysis on Knowledge Application

	SD	D	N	A	SA		
	%	%	%	%	%	M	Std.
The bank leadership has pioneered and driven knowledge management adoption and use	8.8	7.5	34.1	36	13.6	3.4	1.1
There is a knowledge management training program in our bank	3.2	6.8	10.1	32.5	47.4	4.1	1.1
There are continuous improvements as a result of knowledge management application.	6.5	7.5	26.9	39.6	19.5	3.6	1.1
There is a knowledge management strategy in the bank	4.5	6.2	18.2	39.6	31.5	3.9	1.1
Knowledge management has yielded efficient process	4.9	10.1	16.2	40.3	28.6	3.8	1.1
Information technology (IT) used in knowledge management has supported worker's needs	13	14.3	24	31.8	16.9	3.3	1.3
Overall Average						**3.7**	**1.1**
n=308							

M=Mean Std=Std deviation SD=Strongly Disagree D=Disagree N=Neutral A = Agree SA=Strongly Agree

Descriptive Analysis on Commercial Bank Performance

Results in Table 4 showed that majority agreed 52.3% as a result of knowledge management new products and services has been developed, further majority agreed (39.9%) agreed that there is increased response to market crises and 41.9% agreed that there is continued improvement of existing products. Moreover, majority (31.5%) were not sure whether their banks were in the process of improving their existing processes. Further, majority agreed (47.7%) that their banks has enough incentives to retain their customers, 47.4% agreed that there banks have adaptive mechanisms on recent technology so as to remain profitability and 41.2% agreed that their banks are using available resources effectively so as to serve their customers.

Table 4: Descriptive Analysis on Commercial Bank Performance

	SD	D	N	A	SA		
	%	%	%	%	%	M	Std
As result of knowledge management new products and services have emerged	5.5	8.8	25.6	52.3	7.8	3.5	1
There is increased speed of response to market crises	7.5	12	31.8	39.9	8.8	3.3	1
There is continued improvement on the existing products	6.2	8.1	25	41.9	18.8	3.6	1.1
Bank is serious in improvement of existing processes	12	22.4	31.5	27.6	6.5	2.9	1.1

	SD	D	N	A	SA	M	Std
There enough incentives to ensure customer retention	7.8	5.2	11.7	47.7	27.6	3.8	1.1
As a result of adapting knowledge management there has been increase profitability	7.5	9.1	24	47.4	12	3.5	1.1
Our bank is achieving higher customer satisfaction	8.8	12.7	29.5	39.3	9.7	3.3	1.1
Our bank is utilizing available resources efficiently to serve customer fasters and effectively than before	13.6	15.3	18.5	41.2	11.4	3.2	1.2
Overall average						**3.4**	**1.1**
n=308							

M=Mean Std=Std deviation SD=Strongly Disagree D=Disagree N=Neutral A = Agree SA=Strongly Agree

Inferential Statistics

Correlation Analysis

Results in Table 5 revealed that there was a positive and significant relationship between knowledge acquisition and commercial bank performance (rho = 0.503, p value <0.05). Secondly, there was a positive and significant relationship between knowledge conversion and commercial bank performance (rho = 0.853, p value <0.00). Thirdly, there was a positive and significant relationship between knowledge application and commercial banks performance (rho = 0.772, p value <0.05). A close scrutiny on the relationship between independent variables revealed though all of them had positive and significant relationship none of them was highly correlated.

Table 5: Correlation Analysis

|	Commercial Bank Performance	Knowledge Acquisition	Knowledge Conversion	Knowledge Application
Commercial Bank Performance	1			
Knowledge Acquisition	.503**	1		
	0.00			
Knowledge Conversion	.853**	.294**	1	
	0.00	0.00		
Knowledge Application	.772**	.279**	.483**	1
	0.00	0.00	0.00	

Regression Analysis

In the following section both regression analysis and diagnostic tests for regression analysis are carried out.

Regression Diagnostic Tests
Normality
The pictorial presentation in Figure 1 depicts that investment decision was normally distributed since the mean of zero and standard deviation of 1.
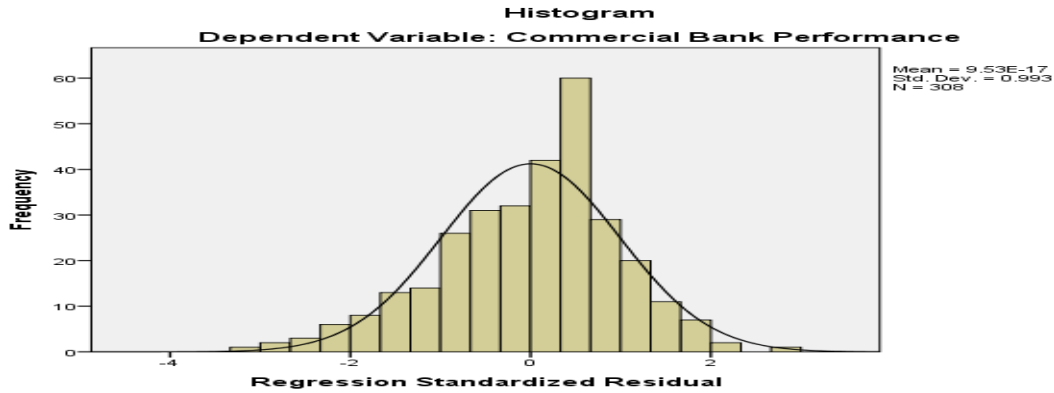
Figure 1: Normality Test

Results in Table 4.6 shows that both Tolerance and Variance inflation factors (VIF) was used to test for multicollinearity and since none of the VIF is greater than 5 then there is no collinearity among the independent variables.

Table 6: Multicollinearity Test

	Collinearity Statistics	
	Tolerance	VIF
Knowledge Acquisition	0.44	2.25
Knowledge Conversion	0.43	2.32
Knowledge Application	0.50	2.00

Results in Table 7 shows that 94% of the variation in commercial bank performance can be explained by knowledge acquisition, conversion and application. The remaining variation can be explained by other factors not included in the model.

Table 7: Model Summary on Relationship between Knowledge Management and Commercial Bank Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.97	0.94	0.94	0.25

a Predictors: (Constant), Knowledge Application , Knowledge Acquisition , Knowledge Conversion

Analysis of variance in Table 8 shows the overall significance of the model, since the p value is less than 0.05 then the changes in commercial banks performance can be jointly influenced by knowledge acquisition, conversion and application and at least one of the slope coefficients is none zero.

Table 8: ANOVA on Relationship between Knowledge Management and Commercial Bank Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	287.464	3	95.821	1491.115	0.000
	Residual	19.536	304	0.064		
	Total	**307**	**307**			

a Dependent Variable: Commercial Bank Performance

b Predictors: (Constant), Knowledge Application , Knowledge Acquisition , Knowledge Conversion

Results in Table 9 shows the regression coefficient, in the Table t ratio shows the acceptance region of the null hypothesis. If the T ratio is greater than + or − 1.96 then there is a significant relationship between dependent and independent variable and then null hypothesis should be rejected. Alternatively, the p value can be used to test the acceptance of the null hypothesis and if the p value is less than 0.05 then we should reject the null hypothesis otherwise we should accept it. The B column will be used to show the nature of the relationship and if it has a positive sign then there is a positive relationship if negative then there is a negative relationship.

Results of the study revealed that there was a positive and significant relationship between knowledge acquisition and commercial banks performance in Kenya, (β = 0.211, p value <0.05). This implies that a unit change in knowledge acquisition increases commercial bank performance by 0.211 while holding other factors constant.

Secondly, there was a positive and significant relationship between knowledge conversion and commercial banks performance (β = 0.583, p value <0.05). This implies that a unit change in knowledge conversion increases commercial bank performance by 0.583 units while holding other factors constant.

Finally, there was a positive and significant relationship between knowledge application and commercial banks performance (β = 0.431, p value <0.05). This implies that a unit change in knowledge application increases commercial bank performance by 0.431 units. Therefore, it can be inferred that knowledge management has positive and significant relationship with commercial banks performance in Kenya. These results were in support of both resources based theory and Shih-Yi and Ching (2012) who showed that knowledge management positively impacts performance in that it increases the store's performance. The implication of the study is that store managers ought to develop knowledge management avenues in order to be able to deal with the changing environment

Table 9: Regression Coefficients on Relationship between Knowledge Management and Commercial Bank Performance

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.11E-18	0.014		.000	1
	Knowledge Acquisition	0.211	0.015	0.211	13.778	0.00

Knowledge Conversion	0.583	0.017	0.583	34.643	0.00
Knowledge Application	0.431	0.017	0.431	25.733	0.00

a Dependent Variable: Commercial Bank Performance

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The test results to examine the significant of the relationship between knowledge management and commercial banks performance in Kenya was examined using both regression and correlation analyses. The model coefficient for correlation and regression were all positive and contributed significantly to commercial banks performance, this implied that knowledge management (knowledge acquisition, knowledge conversion and knowledge application) adopted by commercial banks in Kenya and matched the specific requirements of banks and consequently contributed positively towards commercial banks performance. The null hypotheses which stated that knowledge management had no significant on commercial bank performance were rejected and an alternative confirmed that knowledge management had positive significant influence on commercial banks performance. The results were in support of resources based view through the accumulation of relevant knowledge would ensure that commercial bank gains competitive advantage and remains a going concern. Moreover, descriptive analysis revealed that most of the respondent agreed that knowledge management influenced commercial banks performance and its impact can be mirrored by decision which had been consistently adopted on knowledge acquisition, conversion and application by the respective commercial banks.

Conclusion

Various theories of knowledge management has been proposed and embraced in attempt to achieve excellence in organizations. Two of these theories which have gained prominence are resources based and knowledge management theories. Consequently, the current study was hinged on the duo in order to examine relationship between knowledge management and commercial bank performance as well as social capital mediating effect. Based on the findings it is evident that knowledge management has significant influence on commercial banks performance. The findings indicate that knowledge management is demonstrated among commercial banks in Kenya; specifically, knowledge acquisition, knowledge conversion and knowledge application have significant contribution on commercial bank performance.

Since knowledge management has positive influence on commercial banks performance there is need to continuously execute research to accumulate knowledge, develop avenues geared towards accumulation and access of knowledge from both suppliers and customers. Moreover, an interactive environment ought to create within commercial banks through seminars, mentorship, coaching, capacity building, team building and rotational assignments.

Recommendations

Knowledge management is an issue of great significance to an organization as it is concerned with joint coherence between employees, suppliers and customers thus it calls for eagerness to go above and beyond the call of duties while performing duties so as to ultimately enhance company performance. Since knowledge management has influence on commercial bank performance, it is essential for management to evaluate the knowledge management practices adopted and practiced by a specific bank. On the basis of the obtained results, management in commercial banks should focus on increasing commercial banks performance through the adoption of the knowledge management attributes of acquisition, conversion and application and consequently enhances and build social capital.

On knowledge acquisition, the study recommends that leaders should inspire employees with their enthusiasm and confidence towards accomplishment of organizational goals and objectives and direct them towards acquiring more information from suppliers and customers. On knowledge conversion, the study recommends that leaders should invest considerable resources on conversion and sharing with specific sectors of an organization. On knowledge application, the study recommends commercial banks should enhance interrelationships between departments so as to work cohesively while applying the knowledge with the sole purpose of attaining competitive advantage.

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