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FACTORS INFLUENCING KNOWLEDGE MANAGEMENT PRACTICES IN THE COMMERCIAL BANKS IN KENYA

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Abstract

Purpose: The study sought to determine factors influencing knowledge management practices in the commercial banks in Kenya

Methodology: The study adopted a descriptive survey research design. The population of 44 commercial banks was identified. A sample of 17 banks was chosen using random sampling. A stratified approach was used to select respondents and a total of 85 respondents were surveyed from five departments in each of the 17 banks. Quantitative statistical techniques were used during the analysis to describe and analyze data. The results of the analysis were presented and interpreted in the form of descriptive statistics, as well as inferential statistics.

Results: Regression result indicated that there exists a positive linear relationship between organizational Culture and Knowledge Management practices. Results indicate that there exists a positive linear relationship between organizational structure and Knowledge Management practices. This is evidenced by an odds ratio of 28.988. The relationship is significant as shown by a p value of 0.0113.Results indicated that there was a positive and significant correlation of 0.759 between Information technology and Knowledge management practices. Results indicate that there exists a positive linear relationship between Organization Leadership and Knowledge Management Practices. This is evidenced by a regression coefficient of 125.198. The relationship is significant as shown by a p value of 0.0058.

Unique contribution to theory, practice and policy: The study recommends that commercial banks in Kenya should continue investing in leadership as doing so would improve their knowledge management practices. In addition, commercial banks should adopt more flexible structures that support knowledge acquisition, dissemination and storage. The study advocates that the cultural orientation of the organizations should be such that it supports the perception of knowledge management practices. Furthermore, commercial banks should continue investing in Information technology as doing so would improve the knowledge management practices.

Keywords: *knowledge management practices, organization culture, organization structure, leadership*

1.0 BACKGROUND OF THE STUDY

In the recent past, competitive advantage has become an important component of management decisions. Organisations are increasingly competing amongst themselves to attain an edge over their competitors. This is can be attributed to the economic environment which is characterized by economic volatility, high employee turnover, global competition, and rapid changes. A long-term competitive advantage for any country, industry, or company, is now harder to obtain because of the fact that neither money nor technology can, for any length of time, offset the growing imbalances in labor resources. Companies can no longer expect the products and practices that made them successful in the past to keep them viable in the future. Only those organizations that identify a unique way of operating shall survive the intense competition (Radomir et al., 2009).

According to Davenport and Prusak (1998), the only real comparative advantage in developed economies lies in efficient management of the knowledge that an organization possesses. Eventually competitors can almost always match the quality and price of a market leaders' current product or service. By the time that happens though, the knowledge rich, knowledge-managing company will have moved on to a new level of quality, creativity, or efficiency. Knowledge has become a resource with which organizations including business enterprises achieve their aims and objectives. Drucker (1993) asserted that in the new economy, knowledge is not just another resource alongside the traditional factors of production -- labor, capital, and land -- but the only meaningful resource today.

Radomir et al., (2009) noted that the modern business organizations can't compete effectively in the marketplace without skilled managers and employees and without methods for managing their employees' knowledge. Nor can it effectively compete in the marketplace without implementing the "right" processes making use of the "right" technologies, including information technology. This realization has led to emergence of a key practice in organization management of managing data and information within the organization popularly known as Knowledge Management.

Knowledge Management has emerged as one of the most important areas in management practices and has been established as a basic resource for developing firms and economies. KM attempts to build a range of strategies to facilitate the definition, identification, capture, preservation and dissemination of knowledge across an organizational community (Radomir et al., 2009). It focuses on building a culture of collaboration that enriches the firm's knowledge base. This practice of managing the acquired knowledge is aimed at assisting an institution to achieve competitive advantage over the competitors. To remain competitive in the future, organizations will need to abandon their ideas of information hoarding and embrace knowledge sharing. Competitive success will be based less on how strategically physical and financial resources are allocated, and more on how strategically intellectual capital is managed -- from capturing, coding and disseminating information, to acquiring new competencies through training and development, and to re-engineering business processes. In view of these trends, and

recognizing that knowledge has great potential value and because there is a corresponding failure to fully exploit it, some corporations have embarked on comprehensive knowledge management programs (Radomir et al., 2009). If an organization wants to begin managing knowledge as a resource, what should it take into consideration? The organization needs to design and install procedures and processes to create, protect, and use known knowledge, while articulating the purpose and nature of managing knowledge as a resource and embodying it in other initiatives and programs. In addition, anyone considering a foray into the knowledge management arena needs to plan and build environments that will allow employees to feel safe to discover and release their own tacit knowledge. According to Davenport and Prusak (1998), knowledge management systems administer the skills and competencies that lie within an organization, and allow them to blossom by freeing people to be the best that they can beFinancial organizations manage vast data flows varying from the information about customers, their suppliers, their own employees, regulatory authorities, and government among others. To ensure competitiveness and increase quality of customer support, banks are introducing a number of knowledge management systems that assist them to acquire necessary information in market changes while at the same time preserve the acquired knowledge within the organization. (Mizintseva et al, 2009). Despite Knowledge Management system being taunted as a salient strategy to achieve competitive advantage, the adoption of the KM as a competitive advantage strategy among the commercial banks in Kenya has not taken centre stage and to some extent has been rather slow. This study sought to establish the factors that influence the adoption of Knowledge Management practices by Commercial Banks in Kenya using commercial banks operating in Nairobi as the population of the study.

1.1 Commercial Banks in Kenya

Tscoegh L. (2004) has noted that the history of banking in Kenya goes back to latest 1896 when National Bank of India opened an outlet in Mombasa, which was to become the predecessor of Kenya Commercial Bank in the early seventies, when the Government acquired 100% of the shares to take full control of then the largest commercial bank in Kenya, though it had evolved through a series of earlier mergers and acquisitions. However, going by the licensing dates reflected in the CBK's list of current banks, what is now Standard Chartered was licensed in 1905 making it the oldest among the 43 of them (CBK, 2000). Other banks licensed earlier in the pre-independence period include Barclays Bank and two other Indian related banks: Bank of India and Bank of Baroda, followed by Diamond Trust Bank Group, NIC Bank Group (Tscoegh L.2004). Upon independence, the monetary and banking system shared by Kenya, Uganda and Tanzania – all being former British governed territories - was broken up in 1965, and the Central Bank of Kenya was established in 1966 through an Act of Parliament dubbed The Central Bank of Kenya Act of 1966 (CBK, 2000). The immediate post-independence period witnessed the licensing of other banks mainly benefiting from the goodwill of the Government to enhance the financial systems (CBK, 2000). Such institutions were what is now Housing Finance in 1965 after being co-founded between Commonwealth Development Corporation (CDC) and the Kenyan Government; Co-operative Bank of Kenya in 1968 in response to the growing co-operative movement in the country and the National Bank (CBK, 2000). The seventies witnessed the licensing of banks initially mainly as branches of foreign banks (CBK, 2000). Eighties and nineties however saw the rise and fall of the so called "political" banks in Kenya that are

believed to have had close links to the political establishment and that were involved in channeling illegal inflows and acted as conduits for the proceeds of corruption derailing inflation and credit trends and causing a dramatic fall in the shilling (Waweru & Kalani, 2009). Meanwhile, in response to the growing need for microfinance, the eighties also witnessed the establishment of several indigenous non-banking financial institutions like Equity Building Society, Family Building Society and The Finance Institution of Africa (Johnson, Malkamaki & Wanjau, 2005), some which have since been converted into banks – like, respectively, Equity Bank Limited, Family Bank Limited and Fina Bank Limited in the current decade. Currently, the commercial banking sector comprises 44 institutions, 3 of which the government has substantial stake – or public financial institutions and the rest being privately owned. Of the privately owned commercial banks, 28 are local while 11 are foreign by virtue of stake in excess of 50% being foreign (CBK, 2010). That notwithstanding, all commercial banks are governed by the Companies Act, the Banking Act, the Central Bank of Kenya Act and the various prudential guidelines issued by the CBK (Co-operative Bank [Co-op], 2008). The CBK, which falls under the docket of the Minister for Finance, is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system (Family Bank, 2009). In addition, the banks have come together under the Kenya Bankers Association (KBA) which serves as a lobby for the banking sector's interests and also serves as forum to address issues affecting members (PwC, 2009).

1.2 Statement of the Problem

Since the early 1990s, knowledge management has become a widely discussed topic in organizational management. Organizations increasingly recognize that employee knowledge is their most valuable asset (Radomir et al., 2009). Business leaders talk about knowledge as the chief organizational asset and the key to a sustainable competitive advantage. And although organizations recognize the value of knowledge, they have little understanding of how to create and leverage it in practice to achieve the designed advantage in the market place (Wenger, 1998). As observed in a survey by Mohayidin et al (2007), on the application of knowledge management in enhancing performance in Malaysian Universities, most organizations have invested heavily in information and communication technologies (ICT); however, the new technologies have not enabled the free flow and sharing of knowledge among members of the respective organizations. Gupta and Govindarajan (2000) in their study on KM and Social Dimension, objects that effective knowledge management depends not merely on information and information technology, but more on the social and organizational environment within which people operate.Many studies agree that as organizations contemplate ways to enable and manage organizational knowledge, they will encounter factors that either facilitate or create barriers to knowledge management. There has been a host of studies attempting to investigate what these factors are. Such studies include Radomir et al., 2009; Nonaka and Takeuchi, 1995; Hislop 2005; Newman and Chaharbaghi ,2000 ; Ellis and Rumizen, 2002. However, these studies were done in developed countries such as Japan and emerging economies such as India. Studies on KM conducted for Africa in general and Kenya in particular are scanty and this paucity of local studies from a contextual knowledge gap.

Local studies such as Kipchumba (2010) also fail to exhaustively address the factors that influence knowledge management practices. In addition, none of the local studies focus on the commercial banking sector. The failure to address all the factors exhaustively forms a conceptual knowledge gap. It is in the hope of addressing these contextual and conceptual gaps that this study attempts to examine factors that influence knowledge management practices among the commercial banks in Kenya.

1.3 Objectives of the Study

1.3.1 Broad Objective

The main objective of the study was to assess the factors influencing knowledge management practices in the commercial banks in Kenya.

1.3.2 Specific Objectives

I. To assess whether organization culture influences knowledge management practices in the commercial banks in Kenya.
II. To establish whether the organization structure influences knowledge management practices in the commercial banks in Kenya
III. To establish whether information and Technology influences knowledge management practices among the commercial banks in Kenya.
IV. To assess whether leadership (top management) influences knowledge management practices in the commercial banks in Kenya.

2.0 LITERATURE REVIEW

2.1 Theoretical Literature

2.1.1 Data, Information and Knowledge

There is a hierarchical distinction between data, information and knowledge that goes from data (facts and figures) to information (data with context) to knowledge (information with meaning). That is, knowledge is an authenticated and expanded view of information that flows from information, which again flows from data (Radomir et al, 2009). Hislop (2005) considers that data is represented by "raw images, numbers, words, sounds etc., which result from observation or measurement" while information is represented by data which is "arranged and organized into a meaningful pattern". The Webster's New Collegiate Dictionary defines knowledge as a range of information and understanding while information in turn is said to be knowledge obtained from investigation, study or instruction; and data is defined as factual information used as a basis for discussion. Similarly, Nonaka & Takeuchi (1995) refer to knowledge as the fluid mix of framed experience, values, contextual information, and expert insights that provide a framework for evaluating amid incorporating new experiences and information. It originates and applies in the minds of the knower and in the organizations; it is not only embedded in documents or repositories but also in organizational routines, practices and norms.

Knowledge can be categorized into two; structured (explicit) and unstructured (tacit) knowledge.

"Explicit knowledge is very often codified in a written form such as manuals, brochures, standardized procedures etc." It is that part of the knowledge "which can exist independently of people in a codifiable form" and which is unambiguous, easy to see and to transfer from one person to another or within a company using different support materials. Thus, we are able to capture the explicit knowledge using written manuals, procedures, documents, books, databases, CD, web pages, diagrams, images etc. and later transfer it to other persons. (Davenport & Prusak,1998). Tacit knowledge, on the other hand, is that part of knowledge that one cannot codify and which more over stays in the heads of people. Tacit knowledge is somehow a result of the way that we understand to do things and as a result, it leads us to evaluating and appreciating things in different ways. Unlike explicit knowledge which can be preserved in a textual form and accessed in the future in order to revise or update it, the tacit knowledge is highly personal and subjective, depending on the values, assumptions and skills of those persons who possess it (Hislop, 2005). As Hislop (2005) notes, tacit knowledge is inexpressible, it is difficult to articulate and sometimes it is even subconscious. And while explicit knowledge can be reproduced and internalized with the purpose of applying it in specific future contexts, tacit knowledge is immaterial, intangible and needs to be observed in certain situations (during personal communications, while performing some actions etc.). In addition, Morey et al (2002) states that a company's knowledge consists of two parts: one part "stored in archives, cabinets, and people's minds, it consists of tangible components (data, procedures, drawings, models, algorithms, documents of analysis, and synthesis)" and a second one which consists of "intangible components (people's abilities, professional knack, private knowledge, "routines"—the unwritten logic of individual and collective action, knowledge of company history, and decisional contexts)."When a company looses its human resource, the company loses its knowledge too. Retention of knowledge within the company is hence recommended and secondly, if not possible to retain it because of different reasons, a company's efforts must be focused on sharing knowledge whenever possible and necessary.

2.1.2 Knowledge Management

Knowledge management is not a new phenomenon, but is, instead a concept that dates back to ancient philosophy, and which gained significance in the social and psychological sciences in the 1950's. The use of KM in business is however more recent, emerging in the 1980's. (Grover and Davenport, 2001).Bateman and Snell (2002)define KM as a set of practices in an organization aimed at discovering and harnessing an organization intellectual resource- fully utilizing the intellects of the organizations people. Knowledge management is also considered as the process of knowledge creation and the "strategy of getting the right knowledge to the right people at the right time" (Grover and Davenport, 2001). Rastogi (2000) defines KM as a systematic and integrative process of coordinating organization-wide activities of acquiring, creating, storing, sharing, diffusing, developing, and deploying knowledge by individuals and groups in pursuit of major organizational goals. It is the process through which organizations create and use their institutional and collective knowledge by incorporating organizational learning, knowledge production, and knowledge distribution. KM is a systematic discipline and set of approaches to enable information and knowledge to grow, flow and create value in an organization. This involves people, information, and workflows, enabling tools, best practices, alliances and communities of practice. The knowledge management process implies the development and the

use of knowledge within the firm and finding a way of putting knowledge into action to improve organizational performance (Asoh, 2003). Rastogi (2000) concludes that when a company wants to implement the knowledge management process, it is necessary to find out who are the persons that have the capability to "create", share, and use the knowledge so as to obtain the aimed results. Furthermore, it is imperative to encourage some employees to create and share knowledge, and others, or even the same persons, to learn and use the knowledge, making it possible to apply the collective, explicit and tacit, knowledge to the entire workforce There are two fundamental approaches to knowledge management according to Leidner et al (2006): the process approach and the practice approach. The process approach attempts to codify organizational knowledge through formalized controls, processes, and technologies. The approach frequently involves the use of information technologies, such as intranets, data warehousing, knowledge repositories, decision support tools, and groupware to enhance the quality and speed of knowledge creation and distribution in the organizations.In contrast, the practice approach to knowledge management focus is to build social environments or communities of practice necessary to facilitate the sharing of tacit understanding. These communities are informal social groups that meet regularly to share ideas, insights, and best practices (Wenger, 1998).

2.1.3 Knowledge Management and Competitive Advantage

Firms strive to survive and succeed in competition by pursuing strategies that enable them to perform better than their competitors. As noted by Porter (1980), when two or more firms compete within the same market, one firm possesses a competitive advantage over its rivals when it earns or has the potential to earn a persistently higher rate of profit. Competitive advantage is the ability of the firm to occupy a superior position in an industry and outperform its rivals on the primary performance goal- profitability. A company's superior competitive position allows it to achieve higher profitability than the industry's average It's important to note that competitive advantage can arise from various sources. Porter (1985), establishes that a firm can achieve a higher rate of profit (or potential profit) over a rival in one of two ways: either it supplies an identical product or service at a lower cost (cost reduction strategy), in which case the firm possesses a cost advantage; or it can supply a product or service that is differentiated (differentiation strategy) in such a way that the customer is being able to pay a price premium that exceeds the additional cost of the differentiation advantage.Kipchumba et al.(2010), adds that differentiation by a firm from its competitors is achieved when it provides something unique that is valuable to buyers beyond simply offering a lower price. A firm with a distinctive competence can differentiate its products- provide something unique that is valuable to buyers, or achieve substantially lower cost than its rivals. Consequently, the firm creates more value than its rivals and earns a profit rate substantially above the industry average. The strengths of an organization are grounded in its resources, capabilities and competencies that help a company attain a competitive advantage based on superior efficiency, innovation, quality and customer responsiveness Hill et. al (2001). Profiting from competitive advantage requires that the firm first establishes a competitive advantage, and then sustain its advantage for long enough to reap its rewards.FurtherKipchumba et al (2010) noted that having diagnosed an incumbent's competitive advantage; the imitator can mount a competitive challenge only by assembling the resources and capabilities necessary for imitation. Grant (1991) adds that it would be difficult to imitate such

resources and capabilities. Firms, particularly private companies, adopt a more attractive means of avoiding competition for the firm by withholding information and retaining the intellectual capability enabling them to attaining a competitive advantage over their rivals.

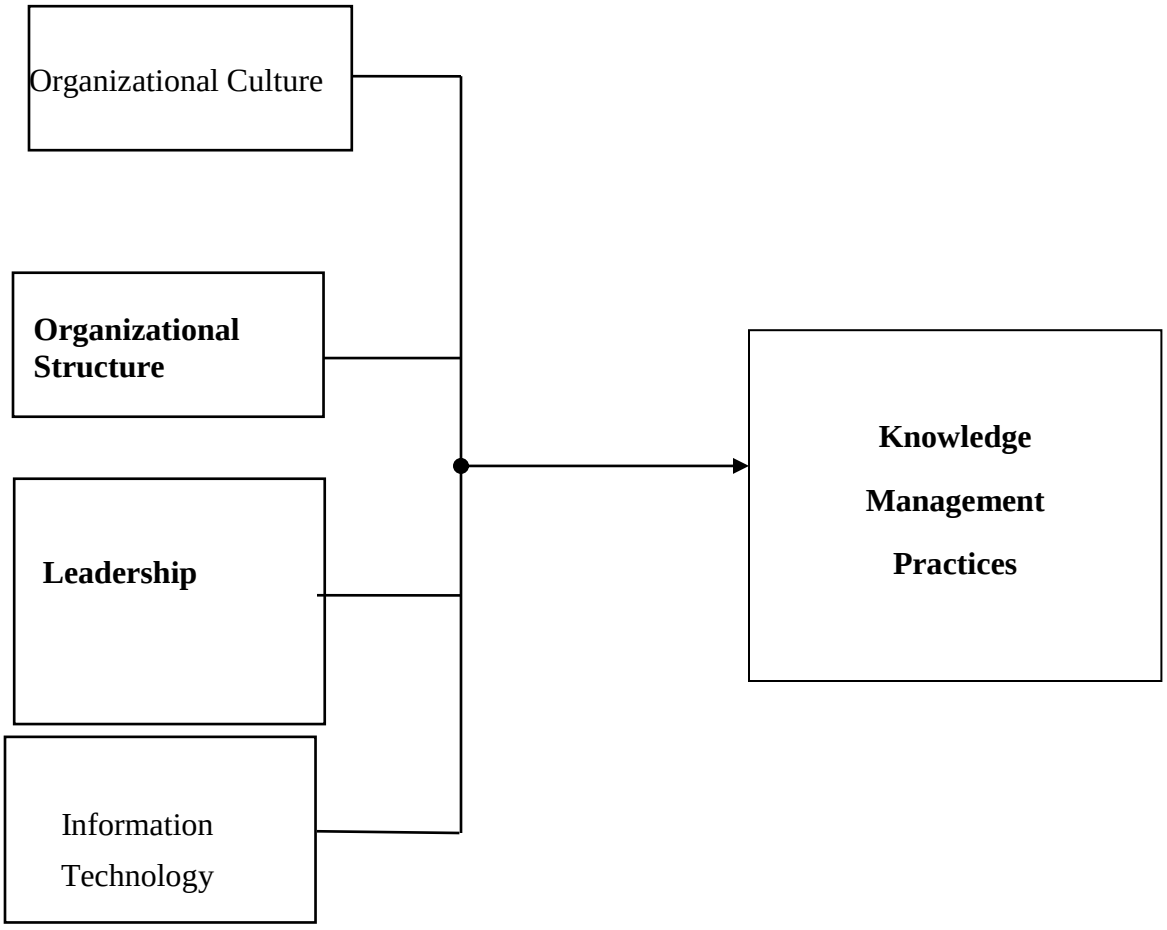

Figure 1: Conceptual Framework

Source: Author (2010)

3.0 RESEARCH METHODOLOGY

The study adopted a descriptive survey research design. The population of 44 commercial banks was identified. A sample of 17 banks was chosen using random sampling. A stratified approach was used to select respondents and a total of 85 respondents were surveyed from five departments in each of the 17 banks. Quantitative statistical techniques were used during the analysis to describe and analyse data. The results of the analysis were presented and interpreted in the form of descriptive statistics, as well as inferential statistics.

4.0 RESULTS AND DISCUSSIONS

4.1 Response Rate

Table 1:Response Rate

	Response	%Response
Successful	68	80%
Unsuccessful	17	20%
Total	85	100%

4.2 Characteristics of Respondents

Majority of respondents were male (60%) an indication that the banking sector is male dominated industry. The majority of respondents (63%) had worked for the bank for five years and below. This is an indicator of high turnover in the banking sector. Majority of the respondents (48%) were at the supervisory level of management which implies that the respondents are more involved in decision making which is key to knowledge management.

Table 2: Characteristics of Respondents

Gender		Length of service	
Male	*60%*	*5 years and below*	*63%*
Female	*40%*	*6 to 10yrs*	*25%*
		11 to 15 yrs	*7%*
		16 and above years	*5%*

Position in bank	
Supervisory	*48%*
Managerial	*31%*
Non Managerial	*21 %*

4.3: Knowledge Management Practices

This subsection examined the current status of knowledge management practices in commercial banks. The main elements of knowledge management practices that were investigated include knowledge acquisition/generation, knowledge storage, and knowledge dissemination.

4.3.1 Total Variance Explained

Table 4 shows the variance of the 10 variables, the percentages of variables attributable to each factor and the cumulative variance of all the factors. Principle component analysis was used and it extracted 4 orthogonal (independent) principle factors. These were the factors with Eigen values greater than 1.

Table 3: Total Variance Explained

	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.598	35.982	35.982	3.598	35.982	35.982	3.003	30.026	30.026
2	3.187	31.866	67.848	3.187	31.866	67.848	3.002	30.015	60.042
3	1.798	17.979	85.828	1.798	17.979	85.828	2.001	20.011	80.052
4	1.417	14.172	100.000	1.417	14.172	100.000	1.995	19.948	100.000
5	1.490E-16	1.490E-15	100.000						
6	7.093E-17	7.093E-16	100.000						
7	-1.677E-17	-1.677E-16	100.000						
8	-3.614E-17	-3.614E-16	100.000						
9	-1.017E-16	-1.017E-15	100.000						
10	-2.242E-	-2.242E-15	100.000						

Extraction Method: Principal Component Analysis.

The scree plot in figure 2 also produced four orthogonal factors

Figure 2: Scree Plot

The results in Table 3 above shows that four (4) components explained total of 100% of the variance. It also so that component 1 represents 35.9% importance, whereas components 2,3 and 4 are represented by 31.8%,17.9% and 14.1% of variance across all items respectively. The initial component matrix was rotated using Varimax (Variance Maximization) with Kaiser Normalization and gave the component transformation matrix as shown on table 3.This matrix shows the loading of the 10 variables on the four factors extracted. The higher the absolute value of the loading the more the factor contribute to the variable. These results aid in identification of variables that falls under each of the extracted factors. The gaps on the table represents loading that are less than 0.5.

Table 4: Rotated Component Matrix

	Component			
Questions to respondents	**1**	**2**	**3**	**4**
1.Then bank has a policy on the information backups as well as system backups	.995			
2. The bank encourages experienced workers to transfer their knowledge to new or less experienced workers.	.995			
3. The bank captures and uses knowledge obtained from other industry sources such as industrial regulators, associations, competitors, clients and suppliers	.995			
4. The bank conducts seminars, induction trainings, mentorship and job shadowing to facilitate knowledge transfer		.985		
5. The bank encourages the staff to go for further studies by reimbursing tuition fees for successfully attempted units		.985		

	Component			
Questions to respondents	**1**	**2**	**3**	**4**
6. The has a system and policies in place which are intended to promote knowledge sharing		.985		
7.The bank has a written policy on knowledge acquisition			.991	
8. The banks processes are compiled into operational manuals such as audit manual, credit manual, treasury manual			.991	
9. The bank has a research department, a think tank or a committee that discusses new ideas or products.				.978
10.The bank has invested in a IT platform that support data warehousing				.978

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

4.3.2 Relationship between Factors and KMP

A Pearson correlation was carried out in order to identify the association of the study variables. Results indicate that there is a positive and significant correlation between KMP and all the four factors namely IT (0.759), Leadership (0.760), Structure (0.602) and culture (0.481). The rest of the findings are given in Table 5

Table 5: Pearson Correlation Analysis

Correlations						
Factors influencing KM	Pearson Correlation	KMP	IT	Leadership	Structure	Culture
KMP	Pearson Correlation	1	.759**	.760**	.602**	.481**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	68	68	68	68	68
IT	Pearson Correlation	.759**	1	.528**	.416**	.260*

	Sig. (2-tailed)	.000		.000	.000	.032
	N	68	68	68	68	68
Leadership	Pearson Correlation	.760**	.528**	1	.403**	.127
	Sig. (2-tailed)	.000	.000		.001	.302
	N	68	68	68	68	68
Structure	Pearson Correlation	.602**	.416**	.403**	1	.179
	Sig. (2-tailed)	.000	.000	.001		.145
	N	68	68	68	68	68
Culture	Pearson Correlation	.481**	.260*	.127	.179	1
	Sig. (2-tailed)	.000	.032	.302	.145	
	N	68	68	68	68	68

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

4.3.3 Logistic Regression

A logistic regression analysis was conducted in an attempt to investigate the causal relationship between the dependent variable (knowledge management practices) and factors such as culture, leadership, structure and IT. The dependent variables was recorded into a binary variable such that likert scores of les than 3.5 were assigned the dummy value 0 (No) and likert scores of above 3.5 were assigned a dummy value of 1(Yes).In the beginning block, the logistic model was able to classify 62/68 of the YES responses correctly. This indicated an overall correct prediction of 91.2%. This implies that given no other information, it is possible to conclude that if one was to conclude that effective knowledge management practices exist, one would be correct 91.2% of the time.

Table 6: Classification Table, b- Begining Block

Block 0: Beginning Block

			Predicted		
			Binary_KMP		
	Observed		No	Yes	Percentage Correct
Step 0	Binary_KMP	No	0	6	.0
		Yes	0	62	100.0
	Overall Percentage				91.2

a. Constant is included in the model.

			Predicted		
			Binary_KMP		
	Observed		No	Yes	Percentage Correct
Step 0	Binary_KMP	No	0	6	.0
		Yes	0	62	100.0
	Overall Percentage				91.2

a. Constant is included in the model.

b. The cut value is .500

Under Variables in the Equation it is possible to observe that the intercept-only model is ln(odds) = 2.335. If we exponentiate both sides of this expression we find that our predicted odds [Exp(B)] = .10.333. That is, the predicted odds of deciding to rate Yes on the existence of effective knowledge management practices is 10.333. Since 6 of our respondents decided to rate NO on existence of effective knowledge management practices and 62 decided to rate YES, our observed odds are 62/6 = 10.333. This further implies that the odds of a respondent deciding to give a rating of Yes are 10.333 time higher than the odds of deciding to rate No.

The Wald Chi-Square statistic, which tests the unique contribution of each predictor, in the context of the other predictors -- that is, holding constant the other predictors -- that is, eliminating any overlap between predictors indicates that a constant a constant as a predictor meets the conventional .05 standard for statistical significance.

Table 7: Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	2.335	.428	29.836	1	.000	10.333

The Block 0 "Variables not in the Equation" show how much the **-2 Log Likelihood** statistic would drop if a single predictor were added to the model (which already has the intercept). The probability values indicate that the addition of IT to the model would significantly drop the **-2 Log Likelihood** statistic (p value =0.001); the addition of Leadership to the model would significantly drop the **-2 Log Likelihood** statistic (p value =0.000); the addition of Structure to the model would significantly drop the **-2 Log Likelihood** statistic (p value =0.024); Overall, the addition of the four variables would make the model to be statistically significant (p value =0.002).

Table 8: Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	IT	10.934	1	.001
		Leadership	13.552	1	.000
		Structure	5.125	1	.024
		Culture	3.122	1	.077
	Overall Statistics		17.199	4	.002

The study added the variables IT, Leadership, Structure and Culture as predictors. Omnibus Tests of Model Coefficients reported a Chi-Square of 23.984 on 4 *df*, significant beyond .001. This is a test of the null hypothesis that adding the IT, Leadership, Structure and Culture to the model has not significantly increased our ability to predict the decisions made by study respondents. It is therefore possible to conclude that adding the four predictors significantly increased our ability to predict the decisions made by our respondents.

Table 9: Omnibus Tests of Model Coefficients

Block 1: Method = Enter

		Chi-square	Degree of freedom	Sig.
Step 1	Step	23.984	4	.000
	Block	23.984	4	.000
	Model	23.984	4	.000

Under Model Summary we see that the -2 Log Likelihood statistic is 16.603. This statistic measures how poorly the model predicts the decisions -- the smaller the statistic the better the model. The Default statistic of a model with intercept (constant only) is 40.587. Adding the four variables (IT, leadership, structure and culture) variable reduced the -2 Log Likelihood statistic by a very large number (40.587 – 16.603 = 23.984), the chi-square(X2) statistic we just discussed in the previous paragraph. The Cox & Snell R2 can be interpreted like R2 in a multiple regression, but cannot reach a maximum value of 1. The Nagelkerke R2 can reach a maximum of 1. The associated p value of -2 Log Likelihood, Cox & Snell R2 and Nagelkerke R2 is 0.000 implying that the model goodness of fit was satisfactory. The Nagelkerke R2 indicates that 66.1% of variances in the dependent variable can be explained byvariance in the four predictors. In addition, 33.9% of variances in the dependent variable are explained by other predictors not included in the model.

Table 10: Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	16.603[a]	.297	.661

a. Estimation terminated at iteration number 11 because parameter estimates changed by less than .001.

The Hosmer-Lemeshow tests the null hypothesis that there is a linear relationship between the predictor variablesand the log odds of the criterion variable. Cases are arranged in order by their predicted probability on the criterion variable. Expected frequencies are computed based on the assumption that there is a linear relationship between the weighted combination of the predictor variables and the log odds of the criterion variable. A chi-square statistic is computed comparing the observed frequencies with those expected under the linear model. A nonsignificant chi-square indicates that the data fit the model well. In this study, it was possible to conclude that there exists a linear relationship between the predictor variables and the log odds of the knowledge management practices (X2=0.769, df=7, p value =0.998).

Table 11: Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	.769	7	.998

Table 12 revealed that the overall success rate in classification has improved from 91% to 97% once the four predictors were introduced in the model.

Table 12: Classification Table

			Predicted		
			Binary_KMP		
	Observed		No	Yes	Percentage Correct
Step 1	Binary_KMP	No	4	2	66.7
		Yes	0	62	100.0
	Overall Percentage				97.1

a. The cut value is .500

The regression results yielded the following equation;

Ln(ODDsKMP)=-42.327+3.001IT+4.830Leadership+3.397Structure+1.855Culture

The Wald Chi-Square statistic, which tests the unique contribution of each predictor, in the context of the other predictors- that is, holding constant the other predictors -- that is eliminating any overlap between predictors, indicates that each predictor meets the conventional .05 standard for statistical significance. That is IT is a positive and significant predictor of the odds ratio of knowledge management practices (X^2=1.239; p value =0.026). Leadership is a positive significant predictor of the odds ratio of knowledge management practices (X^2=3.599; p value =0.0058). Structure is also a positive and significant predictor of the odds ratio of knowledge management practices (X^2=2.505; p value =0.011). Finally, organizational Culture is also a positive and significant predictor of the odds ratio of knowledge management practices (X^2=1.064; p value =0.030)The 20.102 odds ratio for IT indicates that the odds of rating Yes to the existence of effective knowledge management practices increases by a multiplicative factor of 20.102 as the score of IT increases by one point in the 5 point likert scale. The findings are consistent with those of (Zack et al., (1999) who asserts that ICT also supports the different sub processes of KM by facilitating the capture, codification, transfer, application and protection of knowledge. Findings also agree with Davenport &Prusak(1998) who argues that IT has been used for collecting and codifying knowledge for distribution into decision support systems and explicit systems, keeping track of training and employee development programmes, organizational policies reports, writing manuals and in enhancing expertise.

The 125.198 odds ratio for Leadership indicates that the odds of rating Yes to the existence of effective knowledge management practices increases by a multiplicative factor of 125.198 as the score of leadership increases by one point in the 5 point likert scale. The finding agrees with that of Güldenberg and Konrath, (2001) 'leaders' play a key role to facilitate and foster the process of innovation and organizational learning in knowledge-based organizations. Conger and Kanungo, (1998) leaders play a crucial role in building and maintaining an organizational culture of learning. They specifically infer that leaders must attach a high value to knowledge, encourage questioning and experimentation through empowerment, build trust, and facilitate experiential learning of tacit knowledgeThe 29.888 odds ratio for Organization structure indicates that the odds of rating Yes to the existence of effective knowledge management practices increases by a multiplicative factor of 29.888 as the score of organization structure increases by one point in the 5 point likert scale. The finding agrees with that of De Long and Seeman, (2000) who asserts that formal structure of most organizations prevented effective knowledge management practices from taking hold. The findings also agree with those of Symon, (2000) who argues that organizational structure that supported effective knowledge management was more permeable, thus allowing for the flow of knowledge regardless of employee role, job function, or other traditional boundaries. The 6.395 odds ratio for Organization culture indicates that the odds of rating Yes to the existence of effective knowledge management practices increases by a multiplicative factor of 6.395 as the score of organization sculture increases by one point in the 5 point likert scale. The findings agree with those of Holowetzki (2002) who noted that the cultural

orientation of employees in an organization highly influences their adoption and passing of information. Cultural orientation further influences how they relate with each other which influences passage of knowledge.

Table 13: Variables in the Equation

								95% C.I.for EXP(B)	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1[a]	IT	3.001	2.696	1.239	1	.0266	20.102	.102	3966.510
	Leadership	4.830	2.546	3.599	1	.0058	125.198	.852	18388.787
	Structure	3.397	2.147	2.505	1	.0113	29.888	.445	2007.704
	Culture	1.855	1.799	1.064	1	.0302	6.395	.188	217.257
	Constant	-42.327	27.151	2.430	1	.0119	.000		

a. Variable(s) entered on step 1: IT, Leadership, Structure, Culture.

5.0 DISCUSSION CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Findings

This section presented the summary of findings. The findings were summarized along the research questions. Correlation analysis indicated that there was a positive and significant correlation between structure and knowledge management practices as shown by a correlation coefficient of 0.481. Regression result indicated that there exists a positive linear relationship between organizational Culture and Knowledge Management practices. This is evidenced by an odds ratio of 6.395. The relationship is significant as shown by a p value of 0.030.There was positive and significant correlation between organizational structure and knowledge management practices as shown by a correlation coefficient of 0.602. Results indicate that there exists a positive linear relationship between organizational structure and Knowledge Management practices. This is evidenced by an odds ratio of 28.988. The relationship is significant as shown by a p value of 0.0113.Results indicated that there was a positive and significant correlation of 0.759 between Information technology and Knowledge management practices. Regression results further indicate that there exists a positive linear relationship between Information technology (IT) and Knowledge Management practices. This is evidenced by an odds ratio of 20.102. The relationship is significant as shown by a p value of 0.0266. Correlation results indicate that there is a positive and significant correlation between leadership and knowledge management practices as shown by a correlational coefficient of 0.76. Results indicate that there exists a positive linear relationship between Organization Leadership and Knowledge Management Practices. This is evidenced by a regression coefficient of 125.198. The relationship is significant as shown by a p value of 0.0058.

5.2 Conclusions

The study came up with the following conclusions. There is a positive and significant relationship between organizational leadership and knowledge management practices in Kenyan commercials banks. Commercial banks whose leadership is transformational experience more superior knowledge management practices. Commercial banks that have put in place proper compensation and reward structure for those staff who engage in knowledge acquisition, transfer and storage experience superior knowledge management practices.The management of commercial banks have an accurate vision of what seems to be the knowledge management status/ position of the bank. This has led to superior knowledge management practices. There is a positive and significant relationship between organizational culture and knowledge management practices in Kenyan commercials banks. Banks with a culture that encourages innovation have superior knowledge management practices. Commercial banks that ensure the minimization of resistance to implementation of the knowledge management practices have superior knowledge management practices. There is a positive and significant relationship between organizational structure and knowledge management practices in Kenyan commercials banks. Banks with structures support knowledge acquisition; dissemination and storage have superior knowledge management practices. Commercial banks with clear reporting lines exhibit superior knowledge management practices than those who don't., The banks structure that supports bottom up communication are also supportive of knowledge management practices. Commercial banks with effective corporate governance mechanisms that enhance accountability, free flow of information and transparency are also supportive of knowledge management practices. There is a positive and significant relationship between organization Information technology and knowledge management practices in Kenyan commercials banks.

5.3 Recommendations

The study recommends that commercial banks in Kenya should continue investing in leadership as doing so would improve their knowledge management practices. In addition, commercial banks should adopt more flexible structures that support knowledge acquisition, dissemination and storage. The study advocates that the cultural orientation of the organizations should be such that it supports the perception of knowledge management practices. Furthermore, commercial banks should continue investing in Information technology as doing so would improve the knowledge management practices.Furthermore, it is important to conduct a study on each element of knowledge management and find out how it is affected by the independent variables. A similar study can also be conducted for other organizations than banks.

5.4 Areas of Further Research

The study suggests that a study on the determinants of knowledge management practices in commercial banks be carried out. For instance, it would be interesting to find out whether the type of ownership (public listed or private) would affect the status of knowledge management. In addition, it would be important to establish whether the size of the bank, the size of its balance sheets, the number of years in operation affects the status of knowledge management.

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