

## **The Role of Knowledge Sharing in Enhancing Innovation Performance: A Study of Commercial Banks in Kenya**

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### **Abstract**

Modern organizations are exposed to challenges arising due to a complex and an unpredictable competitive environment. Over the years, knowledge sharing has become a major strategic necessity that organizations require to succeed in the global business atmosphere. Knowledge as one of the most vital assets of all corporate organizations must be effectively shared in order to achieve sustainable competitive advantage. The study sought to examine the role of knowledge sharing in enhancing innovation performance amongst Commercial banks in Kenya. The study adopted descriptive survey research design. This study targeted 15 commercial banks in Kakamega County. Structured questionnaires were used to collect data targeting forty five managers who were purposively sampled. A census study was done. Data was analyzed using descriptive and inferential statistics. For descriptive statistics mean and standard deviation were used. For inferential statistics the study utilized Pearson's product moment correlation and simple regression analysis. Data was presented in form of tables. Study findings revealed that knowledge sharing had a positive and significant influence on innovation performance. The study recommends that bank managers should pay keen interest to knowledge sharing strategies in order to enhance innovation performance. The paper contributes to scholarly debate on the role knowledge sharing plays in enhancing innovation performance. The results may assist managers to facilitate knowledge sharing in commercial banks in order to boost innovation performance.

**Key words:** *Commercial Banks, Knowledge Sharing, Innovation Performance*

### **INTRODUCTION**

#### **Background to the study**

According to Jelenic (2011) the globalized business environment has experienced changes in business conditions, liberalization of markets, high costs of production, flexible organizational structures, improved ICT and increase in partnership development. This shows that there is stiff competition and companies have been left with just a few aspects that they may effectively compete on. Tanaji (2012) posited that in a world having demanding business, a firm's competitive edge depends on its ability to manage as well as deploy its assets. The assets can either be tangible or intangible. Knowledge is an example of intangible asset of a firm. A firm's knowledge is a vital asset that guarantees its survival in a business environment that is fiercely competitive. Due to the rise of knowledge-based economy businesses have found it necessary to initiate ways of effectively acquiring and managing varying organizational knowledge. Choi, Kim, Kim and Kim (2006) posited that the production and dissemination of knowledge in

organization can add value. According to Pinho, Rego and Cunha (2012) knowledge management practices is the process of acquisition, creation, utilization, and also sharing of knowledge. Dahiya, Gupta and Jain, (2012) defined knowledge management as being a management strategy that is systematic and integrated which can improve a firm's efficiency and effectiveness through developing, transferring, transmitting, storing, and implementing. Feleagă, Feleagă, Dragomir and Răbu (2013) regarded Knowledge management as a businesses' organizational as well as technological infrastructure that enhances knowledge sharing and reuse and the business' ability to identify, manage, and also share all organizational information. According to Gray (2011) the process of Knowledge management protects assets of intellectual nature from decay, seeks opportunities for enhancing decisions, services as well as products through addition of intelligence, increasing value and also provision of flexibility.

Knowledge sharing has been recognized as a central theme in knowledge management practice and it has also been extensively researched on as it has presented a pressing as well as a challenging research issue for understanding and advancing knowledge management (Heisig, 2009; Chen & Mohamed, 2010). Hsiu-Fen (2010) explained that knowledge sharing involved to capture, organize, reuse and transfer experience-based knowledge which resides within the firm by availing it to others in the business. Knowledge sharing is the process of exchanging personal as well as organizational knowledge. Frappaolo (2006) defined knowledge sharing as a process of conveying knowledge from an individual to another, from individuals to groups or from one firm to another firm. Nonaka (1994) postulated that through knowledge sharing firms are able to integrate any knowledge that is emerging into its strategic development. Knowledge sharing can enable firms to create new knowledge and also develop new products at a lower cost and even at a faster rate than competitors. Hawamdeh (2005) alluded that knowledge sharing resulted to new knowledge creation and innovation that would enhance organizational performance. Geiger and Schrevogg (2012) pointed out that sharing of knowledge was critical in using and leveraging of knowledge resources which were considered as being vital resources by most organizations. Bhatt (2001) Cyr and Choo (2010) identified factors that affected knowledge sharing in organizations such as organizational culture, Individuals attitudes and values towards knowledge sharing and the technology utilized to share knowledge. Knowledge sharing leads to firm success through faster deployment of knowledge to specific parts of the firm that can benefit from it in a great way (Syed-Ikhsan & Rowland, 2004). Andrews and Delahaye (2000) ascertained that knowledge sharing could result to individual and organizational learning. Bartol and Srivastava (2002) noted that it leads to creation of knowledge, organizational learning and even to improved performance. According to Foss (2009) and Foss and Husted and Michailova (2010), knowledge sharing fosters a person's problem-solving ability, resulting to superior knowledge-based capabilities as well as better performance outcomes within an organization. Knowledge sharing establishes a link between an individual and the firm as knowledge is transferred from the individual to the firm level which can create economic value and be a source of competitive advantage (Hendriks, 1999). Davenport and Prusak (1998) reiterated that it was necessary to develop strategies for spontaneous knowledge exchanges with special emphasis on informal relations.

Vision 2030 for financial services is to create a vibrant and even a globally competitive financial sector in Kenya resulting to job creation and also promoting savings in order to finance the overall financial needs (GOK, 2013). Banks play a crucial role in the economic development of

nations and according to Kariuki (2015) they have been envisioned to deliver an economic growth rate of 10 percent per annum. Commercial banks provide payment services as well as financial products which enables households and organizations to take part in the wider economy.

### **Problem Statement**

In Africa, the banking sector's stability has been threatened due to the likelihood of a sharp increase in non-performing loans (Tyson, 2020). The COVID-19 shock has posed downside risks to the credit profiles of banks in Kenya. Moreover, competition is so intense in the banking sector and it has been noted that banks come up with products that are imitable leading to the products being copied by competitors and being modified (Omondi, Rotich, Katuse & Senaji, 2017). Competition may be due to increased level of innovations amongst players and the threat of new entrants into the arena. Banks must identify strategies to assist them to stay on top of competition. This study assumes that through knowledge sharing as a strategy banks can enhance their innovation performance.

Studies on knowledge sharing have been done in diverse industries such as manufacturing firms (Kombo, k'obonyo & Ogotu, 2015, Naisiae & Gitari 2018), Software Outsourcing Vendors (Yang, 2011) and legal firms (Nguthari & Kwasira, 2015). Further an array of studies done have also established that knowledge sharing is significant with regards to different organizational performance aspects such as individual and organizational learning (Andrews & Delahaye, 2000, Bartol & Srivastava, 2002); Knowledge creation (Bartol & Srivastava, 2002); Organizational innovation (Kombo, k'obonyo & Ogotu, 2015) and Product innovation (Yang, 2011). Still, there is a dearth of research into knowledge sharing, especially with respect to its role in enhancing innovation performance. Thus there is a need to understand the role of knowledge sharing in commercial banks in order to amplify its benefit in terms of innovation performance.

### **Study Objective**

The study sought to examine the role of knowledge sharing in enhancing innovation performance amongst Commercial banks in Kenya, hence the hypothesis

*H<sub>01</sub>: Knowledge sharing has no significant influence in enhancing innovation performance amongst Commercial banks in Kenya*

## **LITERATURE REVIEW**

### **Theoretical review**

This study was embedded on Nonaka and Takeuchi's (1995) theory of organizational knowledge creation. Earl (2011) pointed out that, when there was an interaction between tacit and explicit knowledge, they would result into four knowledge conversion steps which included socialization, externalization, combination and internalization. Chong (2010) viewed socialization, externalization, combination and internalization as the basis for knowledge creation and even transfer process. Thus on-going collaboration results to knowledge sharing and creation which may be captured and also retained in a firm. The theory views the interaction of tacit knowledge and explicit knowledge as being essential in knowledge management. The theory explains the creation, sharing and conversion and management of organisational knowledge. Socialization refers to sharing of tacit knowledge and also experiences possessed by

persons with other group members. According to Nonaka and Konno (1998) this can be achieved by capturing knowledge by interacting with external agents and internal organizational members, by physical proximity or even virtual interaction, The socialization of the tacit knowledge is disseminated through externalization (Nonaka, 1994; Nonaka & Takeuchi 1995; Nonaka & Konno, 1998). According to Nonaka (1994), combination involves conversion of the explicit knowledge into the firm's tacit knowledge that rests in an intangible form. It is transformed and shared into tacit form. Knowledge sharing is a critical knowledge process for a firm's knowledge creation (Nonaka & Takeuchi, 1995). Knowledge needs to be moved from individuals to the entire organization so that it may be utilized to fulfil organizational goals.

## **Review of Variables**

### *Knowledge Sharing*

Knowledge sharing is the exchange of knowledge among organizational employees. According to Lin (2007) knowledge sharing involves exchanging of employees knowledge, experiences and also skills throughout the firm so as to devise new routines as well as mental models. Sharing knowledge can leverage expertise across a firm thus accelerating organizational performance. Knowledge can be shared through departmental meetings, knowledge exchange seminars, informal and even formal workshops, summary reports, mentoring, brainstorming, notice boards, face to face interactions and emails (Wamundila, 2008). According to Dalkir (2011) knowledge sharing can be facilitated by communication and even collaboration technologies that are produced within the firm. Information can be distributed through tools for instance internet, phones, emails, video conferencing, chat rooms, messages, discussion forums, tweets, wikis, webinars, social networks and various other work flow management tools.

### *Innovation Performance*

Daft (2016) posited that Performance was a firm's ability to achieve its goals by utilizing its resources effectively and efficiently. It is a firm's results in comparison to outputs expected. Innovation entails introducing new products, new methods of production, new market entry, new sources of supply and new ways of competition. (Schumpeter, 1934). Griffith, Huergo, Mairesse and Peter (2006) asserted that innovation was an imperative cornerstone in performance with regards to improvement of productivity, performance and also growth. Innovation performance can be attained by firms through the devising certain cultural as well as behavioural practices (Anne, 2012). As such the culture of knowledge sharing can be considered by banks. This study focused on product and market innovation as aspects of innovation performance.

## **Empirical Review**

Yang (2011) established examined the Knowledge Management effect on Product Innovation of Software Outsourcing Vendors in china and found that internal knowledge sharing and also external knowledge assimilation significantly and positively affected product innovation. However the study just focused on product innovation and was done in china. Lin (2007) found that an employees' willingness to donate and also collect knowledge enabled the firm to enhance its innovation capability. Hsiu-Fen (2010) contended that knowledge sharing facilitated generation of new ideas and development of new business opportunities by socialization and workers learning process. Ipe (2013) confirmed that knowledge sharing accelerated learning and innovation. Further, O'Neill, Beauvais and Scholl (2012) suggested that knowledge sharing positively affected organizational outcomes of company's innovation, product improvement as well as employee improvement.

Using cross sectional research design Kombo, K'obonyo and Ogutu (2015) conducted a study to examine whether knowledge strategy affected organizational innovation. The study targeted 655 manufacturing Kenyan firms. Structured questionnaires were administered on managers. The results showed that knowledge strategy positively and significantly affected the firm's innovation activities. However, the study focused on knowledge exploration and knowledge exploitation unlike the current study which focused on knowledge sharing.

Nguthari and Kwasira (2015) carried out a study on the influence of knowledge management practices on legal firms performance. The study utilized descriptive research design and established that knowledge management practices such as knowledge sharing, knowledge implementation amongst others influenced performance. Focusing on Kenyan Commercial banks, Gakuo and Rotich (2017) researched on the effect strategic knowledge management had on performance. The study used descriptive research design and data was collected from a sample of 116 management staff. Results indicated that knowledge acquisition knowledge conversion knowledge protection and knowledge applications influenced performance. The study focused on performance generally unlike the current study which focused on innovation performance. Using descriptive research design Naisiae and Gitari (2018) conducted a study in Nakuru County's manufacturing firms and confirmed that between strategic knowledge management practices. Specifically, the study found that knowledge transfer, application and management policy had a statistically significant positive influence on organizational innovation. Knowledge transfer was significantly and positively correlated to organizational innovation. Knowledge transfer significantly influenced organizational innovation. However, the study was done in a different setting which is the manufacturing firms unlike the current study which was done in Commercial banks.

## **METHODOLOGY**

The study adopted descriptive survey research design. According to Kothari (2004) descriptive survey as a research design is flexible as it provides an opportunity for taking into account diverse aspects of the problem being studied. This study targeted 15 commercial banks in Kakamega County. Structured questionnaires were used to collect data from forty five managers who were purposively sampled. The respondents included branch managers, operations managers and customer relations managers. A census study was done as the study population was small. The questionnaires were administered using a drop and pick later method. Data was analyzed using descriptive and inferential statistics. Descriptive statistics employed were standard deviation and mean. Inferential statistics used were Pearson moment correlation and simple regression analysis. The simple regression model below was used;

$$Y = \beta_0 + \beta_1 X_1 + e$$

Where Y = innovation performance,  $\beta_0$ = Constant,  $\beta_1$ =Coefficients of determination,  $X_1$ =knowledge sharing,  $\varepsilon$  = Error term

## **RESULTS AND DISCUSSION**

### **Response Rate**

45 questionnaires were issued and 40 were filled and returned which represented a response rate of 88% response rate. Fincham (2008) concerted that researchers should aim at 60 percent as the response rate.



## Descriptive statistics

### *Descriptive Analysis results for knowledge sharing*

**Table 1 Statements on knowledge sharing**

	N	Mean	Std. Deviation
Staff meetings held to discuss business trends and developments	40	4.12	.790
Employees exchange knowledge and experiences with coworkers	40	4.30	.648
Knowledge shared between supervisors and subordinates	40	4.35	.622
Technology used to disseminate knowledge	40	4.17	.780
Valid N (listwise)	40		

As shown in table 1, majority were in agreement with the statements on knowledge sharing that staff meetings were held to discuss business trends and developments with a mean of 4.12 (SD =.790), employees exchange knowledge and experiences with coworkers with a mean of 4.30 (SD =.648), knowledge is shared between supervisors and subordinates with a mean of 4.35 (SD =.622) and that technology is used to disseminate knowledge which had a mean of 4.17 (SD =.780).

### *Descriptive Analysis results for innovation performance*

**Table 2: Statements on innovation performance**

	N	Mean	Std. Deviation
New products introduced in last 3 years	40	4.25	.898
The organization has improved on quality of its products and services	40	4.35	.622
New products has made us better than our competitors	40	3.82	.747
The organization has identified new potential market	40	3.85	.833
The organization has generated new ways to serve target market	40	4.35	.622
Valid N (listwise)	40		

Majority were in agreement with the statements on innovation performance that new products introduced in last 3 years with a mean of 4.25 (SD =.898), the organization has improved on quality of its products and services with a mean of 4.35 (SD =.632), new products has made us better than our competitors mean of 3.82 (SD =.747), the organization has identified new potential market mean of 3.85 (SD =.833) and that the organization has generated new ways to serve target market with a mean of 4.35 (SD =.622). This statistics are shown through table 1.

## Inferential Statistics

### *Correlation Analysis Results*

Pearson's product moment correlation analysis was used to assess the relationship between knowledge sharing and innovation performance.

**Table 3: Correlation Results**

		Knowledge sharing	Innovation performance
Knowledge sharing	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	40	
Innovation performance	Pearson Correlation	.734**	1
	Sig. (2-tailed)	.000	
	N	40	40

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

Table 3 shows that Knowledge sharing is strongly positively correlated with innovation performance and its significant at 99 % confidence level ( $r=0.734$ ;  $p<0.01$ ). These findings are in agreement with those of Nguthari and Kwasira (2015) who established that there was a strong positive and significant association between knowledge sharing and law firm performance ( $r = 0.664$ ).The findings are also consistent with those of Naisaei and Gitari (2018) who confirmed that knowledge transfer was positively and significantly correlated to organizational innovation ( $r = .696$ ,  $p=0.000$ ,  $\alpha= 0.05$ ).

*Simple Regression Analysis Results*

**Table 4: Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	Change Statistics				
					R Change	Square F	Change	df1	df2
1	.734 <sup>a</sup>	.539	.526	.37876	.539	44.359	1	38	.000

a. Predictors: (Constant), knowledge sharing

b. Dependent Variable: innovation performance

The regression results in table 4 shows that 73.4% of the innovation performance can be explained by knowledge sharing (R squared = 0.734) while the remaining 26.6% can be attributed to other factors which are not covered in the study. According to Alsaeed (2005) when Durbin-Watson is between (1) and (3) there is no autocorrelation problem. Thus Durbin Watson value is 2.213 therefore no autocorrelation problem exists on the regression model.

**Table 5: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.364	1	6.364	44.359	.000 <sup>b</sup>
	Residual	5.451	38	.143		
	Total	11.815	39			

a. Dependent Variable: innovation performance

b. Predictors: (Constant), knowledge sharing

The F change was statistically significant because the p-value was 0.000 and thus significant at 99% confidence level. Therefore the regression model can be used to assess the association between the dependent and independent variable.

**Table 6: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.536	.542		.988	.330		
	Knowledge sharing	.847	.127	.734	6.660	.000	1.000	1.000

a. Dependent Variable: innovation performance

From the regression findings the substitution of the equation  $Y = \beta_0 + \beta_1 X_1 + \varepsilon$  became

$$Y = .536 + 0.847X_1$$

This implies that a unit increase in knowledge sharing leads to 0.847 increase in innovation performance. Further the VIF are <10 hence no multi collinearity problem (Cooper & Schindler 2003). For testing the research hypothesis, regression results in table 4.6 were used. The null hypothesis that knowledge sharing has no significant influence on innovation performance in Kenyan commercial banks is rejected at 0.01 significant level,  $P(0.000) < 0.01$ . The findings of the study are congruent to those of Naisaei and Gitari (2018) who confirmed that knowledge transfer had a statistically significant influence on organizational innovation, however the study was done in manufacturing firms thus exhibiting a sectoral gap. Similarly, Yang (2011) confirmed that knowledge sharing influenced product innovation in China. Lin (2007) noted that an employees' willingness to donate and also collect knowledge enabled the firm to enhance its innovation capability.

## CONCLUSION AND RECOMMENDATIONS

### Conclusion

The study concludes that knowledge sharing has an influence on innovation performance. The study affirms Nonaka and Takeuch's (1995) knowledge creation model that points out that through human interaction, socialization facilitates exchange of ideas, skills and even experiences in organizations. This subsequently results to innovation performance in



Commercial banks. The study demonstrates the value of knowledge sharing for better innovation performance. Moreover, commercial bank managers should perceive the significance of Knowledge sharing in enhancing innovation performance especially in the wake of COVID 19 which has posed a serious challenge in the economy.

### **Recommendation**

Commercial banks should encourage a corporate culture that prioritizes knowledge sharing for staff to actively pursue knowledge sharing activities. Bank managers should encourage information sharing through meetings where staff get to discuss new trends in business. Employees should also be encouraged to deliberately share information amongst themselves as colleagues so as to generate new knowledge. Knowledge should also be freely shared between employees and their supervisors. Moreover, appropriate information technology resources should be utilized to share knowledge within an organization such as internet, phones, emails, video conferencing, webinars etc. Lastly, managers need to understand the knowledge sharing key enablers.

### **Suggestions for Further Research**

The study findings were derived from commercial banks in a Kakamega County. Future studies should be done on a larger sample to include commercial banks in other counties and countries. Future studies should be conducted in diverse industries in other sectors for instance higher education institutions and manufacturing sector. In addition the study would benefit from a qualitative investigation through interviews to provide more insights regarding the study phenomenon. Further studies may be done which incorporate intervening variables. Moreover, studies may be done on factors influencing knowledge sharing in organizations.

### **REFERENCES**

- Andrews, K. M., & Delahaye, B. L. (2000). Influences on knowledge processes in organizational learning: The psychological filter. *Journal of Management Studies*, 37(6), 2322-2380.
- Anne,L. (2012). Intellectual capital, Innovation and Performance; A Systematic Review of Literature. *Business and Economics research* 2 .(1). 1-37.
- Bartol, K. M., & Srivastava, A. (2002). Encouraging knowledge sharing: The Role of Organizational Reward Systems. *Journal of Leadership and Organization Studies*, 9(1), 64-76.
- Baum, J. &Ingram, P. (1998). Survival-Enhancing Learning in the Manhattan Hotel Industry, 1898-1980. *Management Science*, 44, 996-1016. <http://dx.doi.org/10.1287/mnsc.44.7.996>
- Bhatt, G. (2001). Knowledge management in organizations: Examining the Interactions Between Technologies, Techniques and People. *Journal of knowledge management* 5 (1), 68-75.

- Chen, L. & Mohamed, S. (2010). The Strategic Importance of Tacit Knowledge Management Activities in Construction. *Construction Innovation: Information, Process, Management* 10(2), 138-163.
- Choi, D. H., Kim, C. M., Kim, S., & Kim, S. H. (2006). Customer Loyalty and Disloyalty in Internet retail stores: Its antecedents and its effect on customer price sensitivity. *International Journal of Management*, 23, 925-943
- Chong, S. C. (2010). KM critical Success Factors: A Comparison of Perceived Importance Versus Implementation in Malaysian ICT Companies. *The Learning Organization*, 13(3), 118-132.
- Cyr, S., & Choo, C. W. (2010). The Individual and Social Dynamics of Knowledge Sharing: An Exploratory Study. *Journal of Documentation*, 66(6), 824–846.
- Daft, A. (2016). *Toward a Model of Organizations as Interpretation Systems*. Academy of Management Review, Dean, Houghton-Mifflin.
- Dahiya, D., Gupta, M., & Jain, P. (2012) Enterprise Knowledge Management System: A Multi Agent Perspective. *Information Systems, Technology and Management*, 285(4), 271-281
- Davenport, T.H., De Long, D.W. & Beer, M.C. (1998). Successful Knowledge Management Projects, *MIT Sloan Management Review*, 39:2, 43-57.
- Davenport, T. H., & Prusak, L. (1998). *Working Knowledge. How Organizations Manage what They Know?* Boston, MA: Harvard Business School Press.
- Earl, M. (2011). Knowledge Management Strategies. *Journal of Management Information Systems*, 18(1), 215–223.
- Feleagă, L., Feleagă, N., Dragomir, V. & Răbu, L. (2013). European Evidence on Intellectual Capital: Linking Methodologies with Firm Disclosures. *Acta Oeconomica*, 63(2), 139–156.
- Fincham, J. E. (2008). Response Rates and Responsiveness for Surveys, Standards and the Journal. *American Journal of Pharmaceutical Education*, 72(2).
- Foss, N. (2009). Alternative Research Strategies in The Knowledge Movement: From Macro Bias to Micro Foundations and Multi-Level Explanation. *European Management Review* 6(1), 16-28.
- Foss, N.J., Husted, K. & Michailova, S. (2010). Governing Knowledge Sharing in Organizations: Levels of Analysis, Governance Mechanisms, And Research Directions. *Journal of Management Studies* 47(3), 455-482.
- Frappaolo, C. (2006). *Knowledge Management*. West Sussex, England: Capstone Publishing

- Gakuo, E. W. Rotich, G. (2017). Effect of Strategic Knowledge Management on Performance of Commercial Banks in Kenya. *International Academic Journal of Human Resource and Business Administration*, 2 (3), 19-45, [http://www.iajournals.org/articles/iajhrba\\_v2\\_i3\\_19\\_45.pdf](http://www.iajournals.org/articles/iajhrba_v2_i3_19_45.pdf)
- Geiger, D., & Schreyogg, G. (2012). Narratives in Knowledge Sharing: Challenging Validity. *Journal of Knowledge Management*, 16(1), 97–113.
- Government of Kenya. (2013). *Kenya Vision 2030*.
- Gray, K. (2011). The Ontario leadership framework 2012. *With a Discussion of the Research Foundations*, 47(7), 45-67
- Griffith, R., Huergo, E., Mairesse, J. & Peters, B. (2006). Innovation and Performance Across four European countries. *Oxford Review of Economic Policy* 22 (4), 483-498.
- Hawamdeh, S. (2003). *Knowledge Management Cultivating Professionals*. Oxford: Chandos Publishing.
- Heisig, P. (2009). Harmonisation of Knowledge Management - Comparing 160 Km Frameworks Around The Globe. *Journal of Knowledge Management* 13(4), 4-31
- Hendriks, P. (1999). Why share knowledge? The influence of ICT on The Motivation for Knowledge Sharing. *Knowledge and Process Management*, 6(2), 91-100.
- Hsiu-Fen, P. (2010). *Quick activities to improve your team: Improve performance in under 15 minutes*. *Journal for Quality and Participation*, 30(4), 29-30.
- Ipe, A. C. (2007). Stages of small-group development revisited. *Group & Organization Studies*, 2(4), 419-427.
- Ismail, M., & Chua, L. (2005). Implication of Knowledge Management in Higher Learning Institutions. *Paper presented in International Conference on Knowledge Management, PWTC: Kuala Lumpur*. Retrieved on 15th April 2019. <http://www.kmtalk.net>
- Janerose S. Omondi J.S., Rotich, G., Katuse, P. & Senaji, T. (2017). The Relationship between Organization Structure and Performance in Commercial Banks in Kenya: The Mediating Role of Innovation, *International Journal of Academic Research in Business and Social Sciences* 2017, Vol. 7, No. 4 ISSN: 2222-6990 pp633-662 DOI: 10.6007/IJARBSS/v7-i4/2838 URL: <http://dx.doi.org/10.6007/IJARBSS/v7-i4/2838>
- Jelenic, D. (2011). *The Importance of Knowledge Management in Organizations - with Emphasis on the Balanced Scorecard Learning and Growth Perspective*. Retrieved from <https://ideas.repec.org/h/isv/mk1p11/33-43.html> on 21st April, 2019.
- Kariuki, F. (2015). Sustainability in the Financial sector. *KBA Centre for Research on Financial Markets and Policy*. 6 (7).76-79

- Kombo, H.k., K'Obonyo,P., & Ogutu, M.(2015) Knowledge Strategy and Innovation in Manufacturing Firms in Kenya. *International Journal of Scientific Research and Innovative Technology* ISSN: 2313-3759 Vol. 2 No. 10
- Kothari,C.R. (2004). *Research Methodology; Methods and Techniques*. New Delhi; New Age International (P). Ltd
- Lesser, L. & Storck, J. (2001). Communities of Practice and Organizational Performance. *IBM Systems Journal*, 40
- Lin, H. F. (2007). Knowledge sharing and firm innovation capability: an empirical study. *International Journal of Manpower*, 28(3/4), 315-332.
- Naisiae G. N. &Gitari J. (2018). Influence of Strategic Knowledge Management Practices on Organizational Innovation in Large Scale Manufacturing Firms in Nakuru County, Kenya *International Journal of Management and Commerce Innovations* Vol. 5, Issue 2, pp: (595-610), [www.researchpublish.com](http://www.researchpublish.com)
- Nguthari, C.,M. & Kwasira,J. (2015). Influence of Knowledge Management Practices on Performance of Law Firms in Nakuru Town, Kenya. *International Journal of Research in Business Management* Vol. 3, Issue 11, pp, 15-28 [www.impactjournals.us](http://www.impactjournals.us)
- Nonaka, I. (1994) A Dynamic Theory of Organizational Knowledge Creation. *Organization Science*, 5, 14-37. <http://dx.doi.org/10.1287/orsc.5.1.14>
- Nonaka, I., & Konno, N. (1998). The concept of Ba: Building a Foundation for Knowledge Creation. *California Management Review*, 40(3), 40-54.
- Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating Company: How Japanese Companies create the dynamics of innovation*. Oxford: Oxford University Press.
- Nonaka, I. & Takeuchi, H. (1995). *The knowledge-creating company*. Oxford University Press, New York.
- O'Neill, J., Beauvais, L., & Scholl, R. (2012). *A Structure and Culture Model of Organizational Behavior Variability Reduction*. Presented at 2012 Annual Meeting of the Academy of Management.
- Pinho, I., Rego, A., & Cunha, M. P. (2012). Improving Knowledge Management Processes: A Hybrid Positive Approach. *Journal of Knowledge Management*, 16(2), 215–242.
- Schumpeter, J.A.(1934).*The theory of economic development; An Inquiry Into Profits, Capital, Credit , Interest and The Business Cycle*.Transaction Publishers
- Syed-Ikhsan & Rowland, (2004). Bench marking Knowledge Management in public Organization in Malaysia .*International Journal*, Vol. 11(2), pp. 35-51.

- Tanaji, B.S. (2012). Benefits of Knowledge Management System for Banking Sector. *International Journal of Computer Science and Communication*, 3(1), 133-137. Retrieved from [www.researchgate.net](http://www.researchgate.net).
- Tyson, J (2020). The impact of Covid-19 on Africa's banking system <https://odi.org/en/insights/the-impact-of-covid-19-on-africas-banking-system/> accessed on 18<sup>th</sup> February 2021
- Wamundila, S. (2008). *Developing Guidelines for a Knowledge Management Policy to Enhance Knowledge Retention at University of Zambia*. Research Theses, University of South Africa
- Yang, D.(2011).The Effect of Knowledge Management on Product Innovation - Evidence from the Chinese Software Outsourcing Vendors. *iBusiness*, 3, 16-22 doi:10.4236/ib.2011.31003 (<http://www.SciRP.org/journal/ib>)