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KNOWLEDGE SHARING PRACTICES AND PERFORMANCE OF PUBLIC RESEARCH INSTITUTIONS IN KENYA

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ABSTRACT

In the dynamically changing environment, knowledge is becoming the most important resource for organization performance, even surpassing other resources such as land and capital. Therefore, the ability to retain organizational knowledge is the key characteristic of sustainable improvement in organization performance. On the contrary, publicly funded research institutions in Kenya, lose experts' knowledge from retiring employees. Knowledge management in publicly funded research institutions in Kenya seems to be a major challenge contributing to poor service delivery and gaps in work performance. Therefore, this study sought to fill the gap by establishing the influence of knowledge sharing practices on performance of publicly funded research institutions in Kenya basing on the knowledge-Based View theory. The study used stratified random approaches to sample 135 respondents out of 6,799 employees in the 12 publicly funded research institutions in Kenya. Both qualitative and quantitative primary as well as secondary data was collected to achieve the study objectives. While qualitative data was analyzed through thematic methods, quantitative data was analyzed using both descriptive statistics (mean scores, percentages and standard deviation) and inferential statistics (Multiple Regression Analysis) through the Statistical Package for Social Sciences (SPSS) version 24.0.



The findings indicated that knowledge sharing practices have a positive significant effect on organizational performance which led to the recommendation that the management of the research organizations should promote knowledge sharing by encouraging team members and departments to share their knowledge and expertise with each other. The management of the public research firms should also invest in creating a knowledge sharing culture which allows employees to mentor each other and share their experiences and lessons learned.

Key Words: *Knowledge Sharing Practices, Performance of Public Research Institutions, Kenya*

BACKGROUND OF THE STUDY

In the fast-paced organizational setting, fast organizational knowledge creation is a competency in an agile workforce and the ability to continually create, adapt, distribute and apply knowledge is very critical in turbulent environments (Ramona & Alexandra, 2019). According to Egeland (2017) due to changing workforce demographics (growth in the number of ageing workers in retiring while there is a reduction in the number of skilled youths to replace them), many organizations are approaching a crisis due to unprecedented ability to retain knowledge. Knowledge loss is the reduction of the capacity for effective action or decision making in a specific organizational context, according to Harvey (2012). Organizations need to put mechanisms in place to capture, share and apply knowledge so that knowledge creation and innovation can be fostered. Knowledge within organizations resides in different sources such as knowledge bases and employees (Hislop, 2016). Organizations should strive to retain this wealth of knowledge before they lose it (Inkinen, 2016). North and Kumta (2020) posits that when discussing knowledge management, the primary concern is how to tap the brains of employees who are retiring, moving on to new jobs or otherwise leaving the organization.

Knowledge sharing is an important part of organizational performance because it helps to spread information, ideas, and innovations throughout an organization (Alhawari & Al-Jarrah, 2012). Knowledge sharing encourages employees to collaborate, develop new ideas, and contribute to organizational goals. It also helps to create an environment of trust and collaboration, which can improve morale and productivity (Katzy et al. 2012). Additionally, knowledge sharing can help to reduce costs, increase efficiency, and improve relationships with customers, suppliers, and other stakeholders. Lastly, knowledge sharing can help to create a culture of learning and innovation that can lead to improved organizational performance (Arif & Wamitu, 2015).

Kenya has 12 publicly funded research institutions with mandates to research various key policy areas such as agriculture, policy, information technology, forestry, industry, marine and crime prevention. However, a Human Resource Audit conducted in Kenya at National and County levels in 2014/15, under the Capacity Assessment and Rationalization of the Public Service (CARPS) Programme revealed that public research institutions are faced with an ageing workforce who retire leaving knowledge vacuum because of the poor knowledge management practices in the organizations. Akoko (2020) also stated that most research firms lack adequate knowledge management practices necessary for retaining sophisticated, tacit knowledge that resides with employees (Given the importance of knowledge audit in this process, this study sought to establish the extent to which it has been implemented and the effect it has on the performance of publicly funded research institutions in Kenya.



STATEMENT OF THE PROBLEM

Although knowledge is becoming the most important resource for driving research institutions performance, many institutions, are continuously losing significant valuable expert knowledge hidden inside the leaving experts without being explicitly codified and retained by the former organization (Mwanzu, Wendo & Kibet, 2021; Mahajan, 2016). Research firms having invested considerably in disseminating valuable knowledge for organisation performance, suffer the immense loss of knowledge after the departure of employees owing to a shortage of appropriate Knowledge Management practices. Most research firms lack adequate knowledge management practices necessary for retaining sophisticated, tacit knowledge that resides with employees (Akoko, 2020; Mohajan, 2016).

Akoko (2020) documented that up to 75% of Kenya government-employed researchers leave employment three years after joining the public research institutions. The knowledge loss makes it difficult for these publicly funded research institutions to sustain their past competitive performance levels (Ernst & Young, 2015). Although there is a wide range of empirical studies on knowledge management (Sousa & Rocha, 2019; Santoro, 2018; Pinky, 2014), literature indicates that knowledge management in the human resource context is a relatively new area and as such the relationship between knowledge management and organization performance is not conclusive (Egeland, 2017; Thaul, 2014). There is therefore the need to devise practices for knowledge management to deal with the potential knowledge loss and to ensure retention of knowledge of retiring experts for sustainable improvement of organization performance. However, conceptual research gaps exist in most of the previous studies linking knowledge management to organizational performance which have largely focused on knowledge management considering systems and not human resource aspects (Cabrales & Paniagua, 2018; García-Gutiérrez et al. 2019). This study hence sought to determine the influence of knowledge sharing on organizational performance while focusing on the human resource aspect of knowledge sharing as opposed to systems.

OBJECTIVE OF THE STUDY

To determine the influence of knowledge sharing practices on the performance of publicly funded research institutions in Kenya.

THEORETICAL LITERATURE REVIEW

The study was anchored on the Human capital theory by Becker (1964) suggests that highly technical experts in temporary employment create new and specific knowledge within the organizations that engage them; which knowledge would not otherwise be developed internally, and is especially valuable in dynamic and competitive industries (Chambel & Sobral 2011). Pastor, Santana and Sierra (2010) added to human capital practices to retention, on the assumption that the risk of collaborators leaving the firm and consequent loss of knowledge should be minimized. Organizations are expected to find the best ways of employee retention (Riveros & Tsai, 2011) whose talent and expertise are determinants of high performance, through human resource practices.

The ageing workforce and its effect on organizations provide the framework for how succession planning and knowledge transfer practices need to be understood and implemented. This shift in the work environment suggests a different approach to retirement. Once a succession plan is created, there is tacit and explicit knowledge that need to be shared with the identified future leaders to make them successful (Marginson, 2019). Drawing from the above propositions, this study proposed that knowledge sharing lead to increase in skills, knowledge and abilities of employees which in turn



contribute to improved firm performance.

CONCEPTUAL FRAMEWORK

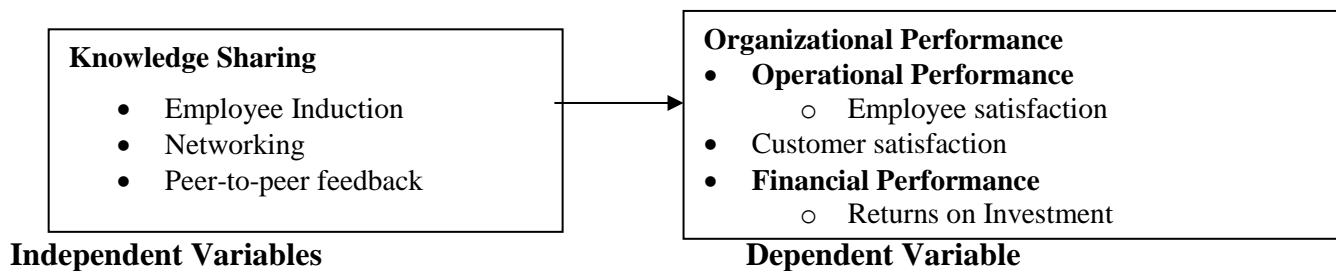


Figure 1: Conceptual Framework

EMPIRICAL LITERATURE REVIEW

Abdela (2016) conducted a study that established that knowledge sharing is a fact of KM processes that has impact on organizational performance. These findings agree with the findings in the study by Alhawari and Al-Jarrah (2012) which found that among the knowledge processes capability, knowledge sharing had a significant impact organizational performance in terms of; customer satisfaction, employee learning and growth, and perceived performance of the organization.

Katzy *et al.* (2012) mentions communities of practice (CoPs) among the core components in the dissemination of knowledge beyond the Swiss firm's boundaries. The study silently showed that the Swiss firm used CoPs were among the factors that necessitated the transmission of information but failed to clearly show the role of KM culture on the organisational performance. During the Asian conference proceeding of 2012, Arif and Wamitu (2015) concluded that knowledge sharing influences public sector performance and is crucial for competitive advantage. The study also recommended that the government both national and county come up with knowledge sharing policies and also transform into resource centres that can generate knowledge. The same study can be replicated in performing institutions to observe the influence of tacit knowledge sharing and corporate performance. An advanced research such as Longitudinal research can also be undertaken. This will help establish the influence of tacit knowledge sharing on organizational performance over time.

Johansson et al. (2013) identified Communities of Practice as a way for Volvo Technology to further improve Project Knowledge Management, in support of knowledge-sharing between projects within the organization. This personalization strategy using CoP complemented the codification strategy. Iyer, Sharp, and Brush (2017) conducted a study which established that knowledge sharing appears to have an effect on innovation performance. These findings provide several important implications for firms in regard to knowledge transfer and its effect on firm performance. They suggest that greater emphasis should be placed on programs to enhance knowledge generation from such internal sources as the workforce and the research and development teams. Additionally, the results of the direct and indirect effects of knowledge transfer on innovation performance provide useful insight to the understanding not only of the role of knowledge itself but of the accompanying organizational systems designed to utilize that knowledge as well. This suggests that without appropriate systems established to utilize the knowledge generated by the firm, the knowledge will be unable to enhance the innovations of the firm.



Coyte Ricceri, and Guthrie (2012) examined processes used to control the management of knowledge resources in small and medium enterprises (SMEs) in the economic sector and their findings revealed that informal, intensive dialogue and management philosophy, governed by strategy and the management of knowledge resources, were the underlying entrepreneurial practices and functional KM initiatives. An important discovery was the culture of teamwork across all employees and the open communication and accessibility to senior managers. This culture of teamwork indicates the practice of mentoring and cross-functional project teams, since it involves employees across levels and departments in the organization. The results showed that value from knowledge resource management could not be fully realised, unless sufficient resources, such as internal and external contact networks, through which information is transferred and knowledge is shared, human capital, i.e. employees' knowledge, skills, expertise and abilities; organizational or structural capital, i.e. procedures, systems and other forms of codified knowledge that constitute how an organization works; organizational culture, which is generally included in structural capital, were available to harvest that knowledge.

Addom (2010), in a PhD study titled 'Knowledge brokering in the digital age: the case of an agricultural innovation system', sought to understand the phenomenon of knowledge creation and sharing within the agricultural innovation system of Ghana. In order to understand this complex phenomenon of knowledge generation and sharing between and among the stakeholders within the agricultural innovation system, interview and focus group discussion techniques were used to gather data from multiple sources and multiple respondents. The results showed two sources of knowledge generation (local and scientific); wide gaps of knowledge barriers between the knowledge sources; and the presence of intermediary organisations in the system.

Bijaya and Uday (2011) carried out an investigation on KM practices in two information technology (IT) organisations in India, where qualitative data were obtained from the two organizations. Four themes of KM practices emerged after the data were subjected to grounded theory analysis. These are knowledge creation, knowledge sharing, and Knowledge Management. The two sample organizations were compared on these dimensions. Two concepts emerged from this comparison, namely, knowledge enabler, which means knowledge creation in the form of self-learning, rewards for knowledge creation, induction training, decentralized and multi-channel knowledge sharing, knowledge up-gradation by way of job rotation, external and internal benchmarking, a mandatory knowledge transfer process and multilevel Knowledge Management controls and knowledge inhibitors, which is top-driven knowledge sharing which restricts individuals' initiative, responsibility and accountability. External benchmarking of knowledge is less and mostly in-house knowledge up-gradation training and limited ways of Knowledge Management.

The local study by Cheruiyot, Jagongo and Owino (2012) on institutionalizing knowledge to increase organizational performance, found that Manufacturing Enterprises in Kenya had not yet developed a KM system policy. However, those who importantly recognized knowledge had strategic plans to implement KM. The study found that by utilization of KM, organisational performance was achieved as characterized by; growth of business and retention of market share, improvement of production quality, creation and sustenance of strategic competitive advantage, nurturing creativity and innovation, key to company's business strategy, retention and capturing of employee knowledge, maintaining dynamic business environment and markets, knowledge creation and transfer, and avoiding costly mistakes and ill-informed decisions.



However, these studies failed to signify whether the influence of KS was on organizational performance was always true to all organizations. It should however be noted that different forms of organisations have different requirements of knowledge and therefore share knowledge differently. Therefore, it is not clear whether the level of influence of KM on organizational performance of the studied institutions is the same as the level of influence at the publicly funded research institutions in Kenya. A study by Kang and Kim (2013) to determine knowledge generations patterns found that facilitating social networks among employees was not enough to create active knowledge. Instead, each employee needed to be guided to connect to the right experts, who had the correct knowledge (embedded resources) in his or her job. This view is consistent with the tenets of KM (learning by doing) and also the source of tacit knowledge in organizations.

Rasula, Vuksic and Stemberger (2012) study on the impact of knowledge management on performance established between knowledge transfer among companies in Slovenia and Croatia. However, the study did not consider the effect of knowledge transfer on strategy content. The study by Dewah (2012) revealed that the public organizations still lag behind in collaborative and communicative technologies that facilitate knowledge transfer and sharing of tacit knowledge but retention of knowledge generally. The study also found that, some of the organizations studied did not have internet connectivity and websites were not yet functional, which hampered acquisition and sharing of knowledge for retention purposes.

RESEARCH METHODOLOGY

This study adopted a survey research design. It targeted twelve (12) publicly funded research institutes in Kenya classified as either Medical-Biological Sciences Research, Agriculture and Natural Resource Management or Social, economic and industrial sciences Research. A total of 6,799 research personnel where stratified random sampling technique was adopted to sample 135 respondents. The data used in the study was collected using three key methods namely, document analysis, use of questionnaires and interviews (Creswell, 2014). Therefore, since both qualitative and quantitative data was used, the data analysis methods were both qualitative and quantitative. The qualitative data was transcribed and then analyzed through thematic methods. Quantitative data from structured questionnaires on the other hand was analyzed using both descriptive statistics (mean scores and standard deviation) and inferential statistics (Correlation and Regression Analysis). A regression model was used in determination of coefficients of the predictor variable in relation to the dependent variable (organizational performance) as shown.

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

Where Y = Organizational Performance, X_1 = Knowledge Sharing, β_0 is the constant term and ε = error term.

RESEARCH FINDINGS AND DISCUSSION

The researcher administered a total of 135 questionnaires to respondents from research institutions focusing on medical-biological sciences research, research institutes focusing on particular crops and natural resources as well as research in the social, economic and industrial sciences. Out of the number, a total of 102 (76%) were correctly responded to and returned. This response rate was adequate since according to Babin (2010), a response rate of 50% is acceptable for analyzing and publishing while 60% is good and above 70% is considered very good.



Descriptive Findings of Knowledge Sharing

The respondents rated their level of agreement with statements on knowledge sharing practices on a scale of 1 to 5 as shown in Table 1.

Table 1: Descriptive Findings of Knowledge Sharing

Statements	Mean	SD
Employee Induction		
Conducts onboarding activities to allow new employees to share with key personnel	4.16	0.78
Takes new employees on a tour of the organization premises to give them a chance to meet and share with key personnel	4.13	0.75
Conducts orientation of new employees to provide them with an opportunity to ask questions and share with their co-workers	4.06	0.73
Provides an informal setting in social events where new and old employees share their experiences and knowledge	4.00	0.81
Networking		
Creates collaborative learning environments (for example discussion forums, chat rooms) where employees work together to share ideas and solve problems.	4.05	0.83
Encourages attending networking events to make connections and build relationships, sharing new information as well as gaining valuable insights from other professionals	4.08	0.86
Encourages members to join online communities to find and exchange knowledge, discuss topics and share resources as a way of fostering collaboration.	3.94	0.84
Peer-to-Peer Feedbacks		
Encourages open dialogue between peers to ensure that ideas are shared and discussed openly.	3.55	1.38
Establishes regular feedback sessions between peers to ensure that feedback is shared on a regular basis.	3.59	1.42
Ensures that criticism is constructive, focusing on how improvements can be made.	3.56	1.38
Makes sure to actively listen to the feedback being shared by peers in order to learn from each other.	3.93	1.31
Celebrates successes and accomplishments of peers to foster a positive environment.	3.66	1.42
Utilizes peer feedback to come up with solutions to problems, allowing peers to share ideas and collaborate.	4.52	0.50
Average	3.94	1.00

Key: *Very Low Extent = 1 – 1.4: Low Extent = 1.5 – 2.4: Moderate Extent = 2.5 – 3.4: High Extent = 3.5 – 4.4: Very High Extent = 4.5 – 5.4, M = Mean, SD = Standard Deviation*

The results in Table 1 indicated an agreement that research organizations publicly funded in Kenya, conduct onboarding activities to allow new employees to share with key personnel (M = 4.16 ; SD = 0.78), take new employees on a tour of the organization premises to give them a chance to meet and share with key personnel (M = 4.13 ; SD = 0.75), conduct orientation of new employees to provide them with an opportunity to ask questions and share with their co-workers (M



= 4.06 ; SD = 0.73) and provide an informal setting in social events where new and old employees share their experiences and knowledge (M = 4.00 ; SD = 0.81). The findings imply that most of the publicly funded research institutions in Kenya have adopted employee induction as a method of knowledge sharing to a high extent.

The descriptive findings further showed that the organizations encourage attending networking events to make connections and build relationships, sharing new information as well as gaining valuable insights from other professionals (M = 4.08; SD = 0.86). They also encourage members to join online communities to find and exchange knowledge, discuss topics and share resources as a way of fostering collaboration (M = 3.94; SD = 0.84) and Create collaborative learning environments (for example discussion forums, chat rooms) where employees work together to share ideas and solve problems (M = 4.05; SD = 0.83). The findings imply that most of the publicly funded research institutions in Kenya have adopted networking as a method of knowledge sharing to a high extent.

Lastly, it was documented that the organizations have encouraged open dialogue between peers to ensure that ideas are shared and discussed openly (M = 3.55; SD = 1.38), make sure to actively listen to the feedback being shared by peers in order to learn from each other (M = 3.93; SD = 1.31) and celebrate successes and accomplishments of peers to foster a positive environment (M = 3.66; SD = 1.42). Additionally, they utilize peer feedback to come up with solutions to problems, allowing peers to share ideas and collaborate (M = 4.52; SD = 0.50) and also ensure that criticism is constructive, focusing on how improvements can be made. (M = 3.56; SD = 1.38). The findings imply that most of the publicly funded research institutions in Kenya have adopted peer to peer feedbacks as a method of knowledge sharing to a high extent.

Knowledge sharing is supposed to build a learning organization by making learning routine, where everyone continually assesses themselves looking for ways to improve. Additionally, it stimulates cultural change and innovation by encouraging the free flow of ideas among staff members. When knowledge is shared, it ensures that it remains within the organizations and passed down to other incoming staff members. The organizational culture will thus not be lost but passed down. In this study, knowledge sharing practices have been implemented to a high extent which implies that the publicly funded research institutions are likely to experience the positive benefits of well effected knowledge sharing practices which range from culture protection, innovation and productivity. As a result, it can be argued continued adoption of these practices would greatly enhance the performance of these institutions. In their assessment, Alhawari and Al-Jarrah (2012) similarly noted related knowledge sharing practices among organizations.

The study also sought to obtain in-depth analysis of the knowledge sharing practices in the organizations through KII questions. In the KII, the respondents were asked to discuss the effectiveness of knowledge sharing in their organizations. The summarized responses presented in Table 2 indicate that the increases collaboration and innovation: Knowledge sharing encourages employees to collaborate and share ideas, which leads to increased innovation in the workplace. It is also effective in improving decision-making: By having access to different perspectives and insights, employees can make better decisions.

The respondents further indicated that its fasters problem-solving: With access to a wider range of knowledge, employees can find solutions to problems faster. It also increases efficiency: When employees can access the right knowledge at the right time, they are more efficient and productive. Another main theme was enhancing organizational learning: Knowledge sharing encourages employees to learn from one another and develop their skills, which leads to a more



knowledgeable and engaged workforce. This confirms the descriptive findings described above.

Table 2: Summary of Key Themes of Knowledge Sharing Practices

Question	Summary of Main Themes
How effective do you think knowledge sharing is in enhancing knowledge management??	Majority of the respondents stated that knowledge sharing increases collaboration and innovation, fasters problem-solving and enhances organizational learning

Organizational Performance

The organizational performance of the publicly funded research firms in terms of non-financial measures (customer satisfaction index and employee satisfaction index both out of 10) and returns on investment was established through document analysis guide. The results in Figure 2 indicate that on a scale of 1 to 10, the research organizations averaged an index of 7.31 in the year 2016 which then increased steadily to 7.35 in the years 2017 and 2018 before a further increase to 7.67 in the year 2020. This implied an improvement in the ranking to demonstrate that the customers rated the services from publicly funded research institutions as better. Generally, these values are above 70% to imply a good ranking from the customers on their satisfaction rate.

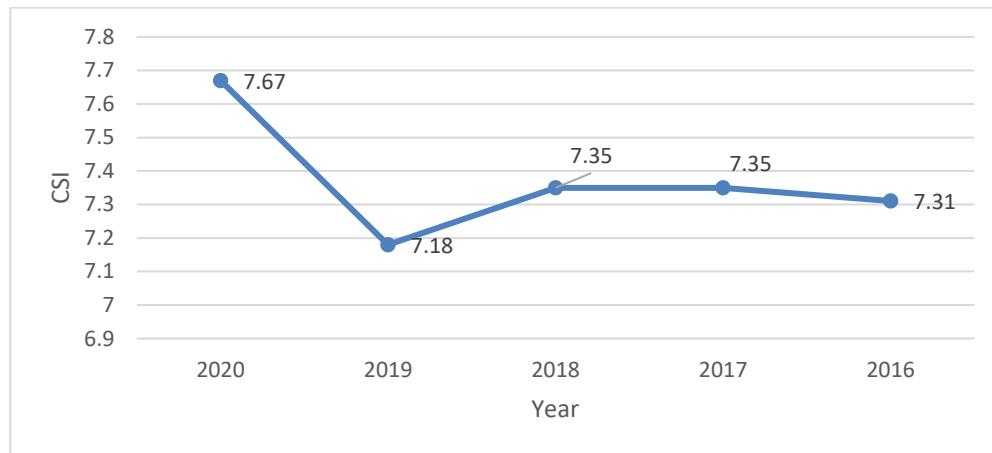


Figure 2: Average Customer Satisfaction Index Trends (2016 – 2020)

The employee satisfaction index was also established and presented in Figure 3 as trends. The results show that on a scale of 1 to 10, the research organizations averaged an index of 7.82 in the year 2016 which decreased to 7.65 in the year 2019 perhaps due to the transition to a new government. However, the index increased to and improved to 8.12 in the year 2020. These values are above 70% to imply a good ranking from the employees.



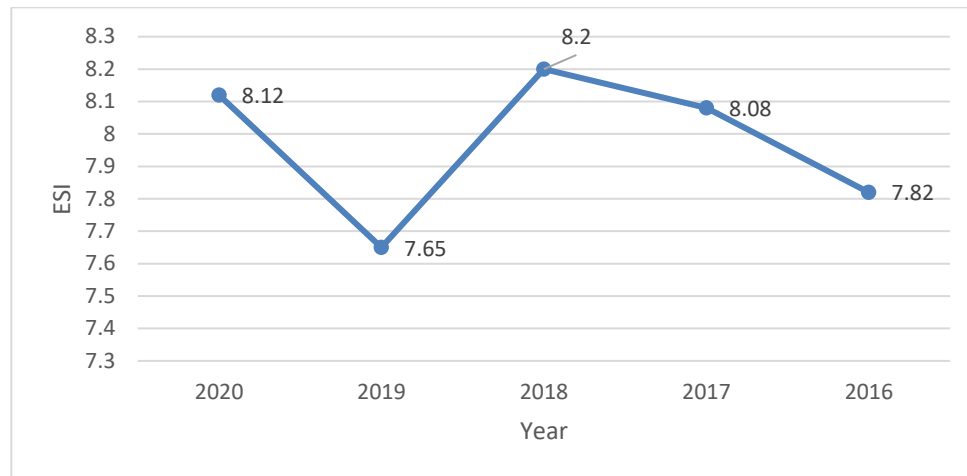


Figure 3: Average Employee satisfaction Index Trends (2016 – 2020)

Figure 4 also shows the percentage number of organizations falling in various ranges of ROI. It was established that majority of the organizations had a ROI averaging between 5% and 9% for the last 5 years which is a good positive ratio as recommended by Chalutz Ben-Gal (2019). Those below the low performance zone of less than 5% were a third the number of firms.

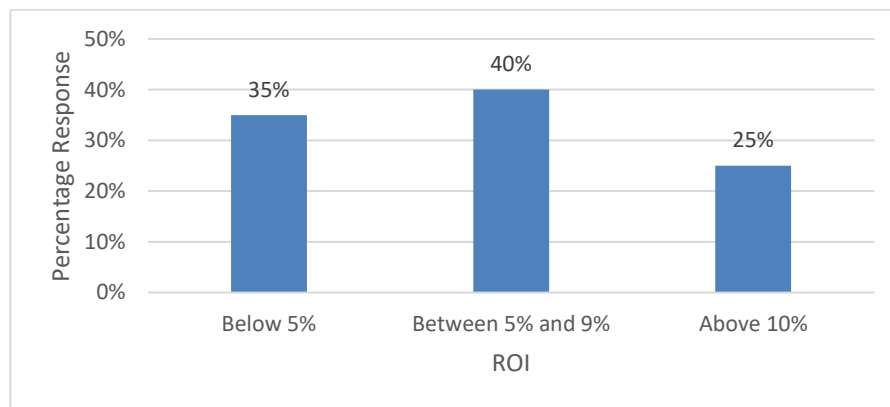


Figure 4: Average ROI

Regression Analysis of Knowledge Sharing and Organizational Performance

A multiple regression analysis was similarly used to establish the influence of knowledge sharing on overall organizational performance. The study results in Table 3 indicated that knowledge sharing practices (employee induction, networking and peer-to-peer feedback) account for up to 73.5% of the variation in organizational performance of publicly funded research institutions in Kenya ($R\text{-square} = 0.735$). This shows that the three knowledge sharing practices have a significant contribution to the overall organizational performance of publicly funded research institutions in Kenya.



ANOVA was used to establish the model fitness of the regression model linking knowledge sharing practices (employee induction, networking and peer-to-peer feedback) to overall organizational performance of publicly funded research institutions in Kenya. The results showed that the regression model was significant and a good fit (Sig < 0.05). This therefore implies that the model was a good predictor of overall organizational performance.

The model coefficients indicated that all the three knowledge sharing practices (employee induction, networking and peer-to-peer feedback) positively influence overall organizational performance of publicly funded research institutions in Kenya ($\beta = 0.391; 0.101; 1.886$) respectively. However, only peer to peer feedback has a significant influence on overall organizational performance (P-value < 0.05). This implies that even though an improvement in these variables was associated with an improvement in overall organizational performance of the firms, only the influence of peer to peer feedback was significant. In comparison, a study by Ibrahim (2016) indicated that firms which adopted knowledge sharing practices had conducted their core project effectively and efficiency thus enhancing overall performance.

Table 3: Regression Analysis of Knowledge Sharing and Overall Performance

Model Summary					
R	R Square	Adjusted R Square	Std. Error of the Estimate		
.857	0.735	0.726	1.2324		
ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Regression	411.79	3	137.263	90.376	.000
Residual	148.842	98	1.519		
Total	560.632	101			
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-1.498	1.646		-0.91	0.365
Outsourcing	0.391	0.308	0.067	1.271	0.207
Use of Retirees	0.101	0.252	0.021	0.402	0.688
Knowledge Regeneration	1.886	0.119	0.84	15.816	0.000
Dependent Variable: Customer Satisfaction					
Predictors: (Constant), Outsourcing, Use of Retirees, Knowledge Regeneration					

CONCLUSIONS

The study concludes that adoption of knowledge sharing practices such as employee induction, networking and peer-to-peer feedback is associated with improved communication, better decision making and increased productivity among publicly funded research institutions in Kenya. Sharing knowledge enables employees to gain access to the knowledge they need to do their jobs better, hence being able to make decisions more quickly, leading to increased efficiency.



RECOMMENDATIONS

Based on the findings, the study recommends the management of the public research firms to invest in creating a knowledge sharing culture: Encourage employees to share their knowledge and ideas with each other. Allow employees to mentor each other and share their experiences and lessons learned. The management should also establish collaborative networks: Encourage employees to form collaborative networks to share information and ideas.

The management of the research organizations should also promote knowledge sharing by encouraging team members and departments to share their knowledge and expertise with each other. There is also a need to encourage and reward knowledge sharing: Recognize and reward employees who share their knowledge and expertise. The organizations should also provide training and development opportunities: Invest in training and development opportunities that will help employees improve their skills and knowledge.

AUTHOR CONTRIBUTIONS

Under the supervision of both Prof. Maurice Sakwa and Dr. Alice Simiyu, university lecturers in the school of Business at JKUAT university, Kenya, Viona Muleke, wrote the concept paper, proposal and thesis as well as the article. Under their guidance, she collected and analyzed data as reflected in the work. Therefore, any grammatical errors are solely hers.

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CONFLICT OF INTEREST DECLARATION

Viona Muleke declares that there are no conflicts of interest regarding the publication of this Manuscript. In addition, the ethical issues; including plagiarism, informed consent, misconduct, data fabrication and (or) falsification, double publication and (or) submission, redundancy has been completely observed by the authors.

REFERENCES

- Abdela, I. (2016). *The impact of knowledge management on organizational performance: The Case of Ethiopian Insurance Corporation*. (Doctoral Thesis, Ababa University, Addis, Addis Ababa).
- Akoko, A. A. (2020). Government Policies' Mediating Influence on the Relationship between Knowledge Management Practices (KMPs') and Sustainability of Sugar Companies in Kenya.
- Alhawari, S. & Al-Jarrah, M. (2012). The Impact of knowledge management processes on the improvement of strategic competence: An empirical study in Jordanian insurance companies. *International Journal of Trade, Economics and Finance*, 3(1), 39- 45.
- Arif, M. Khalfan, M. Barnard, J. H. Heller, N. A.. (2012). Assessing Knowledge Management in construction consultancies: Cases from the UAE. *Australasian Journal of Construction Economics and Building*, 12 (2), 55–



71.

- Creswell, J. W. (2014). *Research design: Quantitative, qualitative, and mixed methods approaches*. Thousand Oaks, USA: SAGE.
- Dewah, P. (2011). *Knowledge Management practices in selected Southern African public broadcasting corporations*. (Doctoral Thesis, University of Fort Hare, Fort Hare, Republic of South Africa). Retrieved from <http://hdl.handle.net/10353/438>.
- Egeland, A. (2017). *Knowledge Management in organizations. A literature review and case study exploring how organizations can transfer and retain knowledge to mitigate knowledge loss when older employees retire* (Masters Thesis, University of Stavanger).
- Hislop, D. (2016). Knowledge management. In *Encyclopedia of human resource management*. Edward Elgar Publishing Limited.
- Inkinen, H. (2016). Review of empirical research on knowledge management practices and firm performance. *Journal of knowledge management*, 1 (8),67-87
- Katz, B. (2017). *Alignment of internal and external business & innovation domains* (Doctoral Thesis, Stellenbosch University). Retrieved from: <https://scholar.sun.ac.za>
- Mohajan, H. K. (2016). Sharing of tacit knowledge in organizations: a review. *American journal of computer science and engineering*, 3(2), 6-19. Retrieved from <http://www.openscienceonline.com/journal/ajcese>
- Mwanzu, A., Wendo, D. R., & Kibet, F. (2021). Knowledge Management for Innovativeness and Sustainable Organizational Development: A Case Study of Selected Corporate Institutions in Kenya. *Library Philosophy and Practice (e-journal) Libraries at University of Nebraska-Lincoln*.
- North, K., & Kumta, G. (2020). *Knowledge management: Value creation through organizational learning*.
- Pinky, J. (2014). *The structure of prior knowledge* (Doctoral thesis, University of Nottingham). Retrieved from http://eprints.nottingham.ac.uk/14553/1/Pinky_Jain_PhD_-_2014_Education_-_Structure_of_Prior_Knowledge.pdf
- Ramona, T., & Alexandra, B. (2019). Knowledge retention within small and medium sized enterprises. *Studies in Business and Economics*, 14(3), 231-238.
- Rasula, J., Vuksic, V. B., & Stemberger, M. I. (2012). The Impact of Knowledge Management on Organizational Performance. *Economic and Business Review*, 14(2), 147 - 168.
- Santoro, G., Vrontis, D., Thrassou, A., & Dezi, L. (2018). The Internet of Things: Building a knowledge management system for open innovation and knowledge management capacity. *Technological forecasting and social change*, 136, 347-354.
- Sousa, M. J., & Rocha, Á. (2019). Leadership styles and skills developed through game-based learning. *Journal of Business Research*, 94, 360-366.
- Thaul. W. (2014). *Supporting learning by tracing personal knowledge formation* (Doctoral Thesis, Plymouth University).



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