



Assessment of Knowledge Management Strategies on Performance of Kenya Marine and Fisheries Research Institute

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

The study determined the influence of knowledge management strategies on the performance of Kenya Marine and Fisheries Research Institute. The study objectives were to determine how knowledge acquisition, storage, expertise (Technology) and accessibility influence the performance of Kenya Marine and Fisheries Research Institute. The study was guided by Resource-Based View (RBV), Knowledge-Based View (KBV), Dynamic Capabilities Theory (DCT) and Social Exchange Theory (SET). Since the study involved gathering of quantitative and qualitative data, it adopted mixed method approach. The study employed a descriptive survey research design, this was due to the prediction of knowledge management strategies and the performance Kenya Marine and Fisheries Research Institute, in the analysis of different trends, and the formulation of hypotheses that directs future actions. The target population was 168 employees from the Kenya

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Marine and Fisheries Research Institute. The researcher sampled 118 respondents using Yamane formula (2007) formula, by doing so, the chance of bias in participant selection was reduced and the sample was guaranteed to be representative of the whole population. Data was analyzed using descriptive statistics in the form of means, percentages, and frequencies with help of Statistical Package for Social Sciences v25 (SPSS V25) software. Results were displayed in form of pie chart and tables from which inferences and conclusions were drawn. The findings of the study revealed that knowledge sharing had the most significant influence on the performance of Kenya Marine and Fisheries Research Institute while knowledge acquisition had the least influence on performance of Kenya Marine and Fisheries Research Institute. The research finally concluded that knowledge management strategies had a significant effect on the performance of Kenya Marine and Fisheries Research Institute.

Keywords: Knowledge; management strategies; performance and Kenya marine and fisheries research institute.

1. INTRODUCTION

Knowledge Management is crucial in an establishment's wellbeing, being that it guarantees formation and promulgation of knowledge adeptly in an entity. For the purpose of corroborating that the establishment achieves its targets, it has to see to it that there are several actions in the establishment that allows for organizational knowledge to be available and within reach.

In the global realm, Nan & Huei [1] researched on knowledge management adeptness and institutional efficiency in Taiwanese public establishment and the moderator duty of an establishment's obligation. The research concluded that knowledge management applications are vital in achieving organizational efficacy. Yuan & Chau (2015) researched the effects of knowledge management potency in the business procedure in banks and hospitals in China. The research found out that the execution of knowledge management being a branch of a company's game plan guarantees levels of high productivity in the activities of an establishment. Khuram [2] researched on the amalgamation of knowledge plan of action and knowledge management undertaking on performance and organizational inventiveness of India's listed undertakings. The research confirmed that in order to certify endurance and rivalry in a dynamic environment, knowledge management is of essence. Endeavors are focused on retaining, analyzing, and organizing employees' expertise, with the crucial objective of making knowledge within easy reach to the users. Organizations obtain capabilities making it possible for them to compete and perform better through execution of these undertakings. Growing and taking possession of these

capabilities depends on the knowledge management strategies in organizations. For any organization to improve on productivity and efficiency, it is important for it to put plans in place that outlines how the organization will manage and centralize company information, data, and knowledge.

Dodla & Jones [3] postulates that knowledge management strategies aid and abet how an organization manages knowledge, data, and the use of information. Knowledge management networks are important constituents of an organization's comprehensive success. The mainstay of a favorable outcome and strategy execution sheds light on where an organization excels, survives, or yields to outside influences [4]. Organizations depend on effective management and knowledge in all states of the business cycle [5]. There is a growing awareness of the importance of gathering, locating, capturing, and sharing collective knowledge and expertise. Societies are developing effective and efficient knowledge management methods to address problems and benefit from opportunities [6], making knowledge management increasingly vital.

In the local sphere, Karani [7] research on factors influencing knowledge management initiatives on the execution of Kenyan mobile companies. The research posited that knowledge management initiatives of Kenyan mobile telephone businesses are essential in their operational performance. Organizational culture, strategy and leadership were picked out by the study as hurdles of knowledge management activities. Mungai (2018) performed his study on knowledge management Practices of Kenya Bureau of Statistics (KEBS). He posited that KEBS adopted knowledge dissemination,

knowledge retrieval, knowledge storage, knowledge sharing and knowledge creation. Nancy (2016) conducted a study how Knowledge Management Practices affected performance of Kenya's selected global audit companies. He posited that knowledge application, knowledge sharing, knowledge acquisition and knowledge identification notably affected the performance of Kenya's audit companies.

Kenya Marine and Fisheries Research Institute (KMFRI) is a State Corporation came into existence in 1979 through Scientific and Technological Act, Cap 250, Kenya. KMFRI's mandate is to undertake research in "marine and freshwater fisheries, aquaculture, environmental and ecological studies, and marine research including chemical and physical oceanography", in order to provide scientific data and knowledge for sustainable development of the Blue Economy. The mission of KEMRI is to generate and disseminate scientific knowledge for sustainable development of the Blue Economy.

1.1 Statement of the Problem

Many authors openly acknowledge the challenge of quantifying the influence of knowledge management strategies on firm performance, despite the specific work done to link knowledge management strategies to performance. Present knowledge management research does not adequately acknowledge or provide a thorough grasp of the role of knowledge management strategies in enhancing company performance. The important challenge for establishments, is not only to assess the effects of knowledge management strategies on performance but also to improve their capacity to create and use knowledge management strategies in order to increase value for their stakeholders. This has become considerably more challenging and tough to accomplish due to the immeasurable nature of information. It is essential to clearly identify the influence anticipated from knowledge management strategies. In an effort to share knowledge, it is increasingly important for organizations to construct an internal portal for employees to access different repositories from a single screen. The Public Sector has continued to offer knowledge-related services to the common citizen. In spite of the challenges related to knowledge management concomitant to the Kenya's public sector, too few scholarly works relating to it are in existence. Research by Yusuf & Wanjau (2014), Muthee [8], Sawe (2017), Charo (2018) and Kamau [9] make up

the list in Kenya. These studies were meant to inquire into the knowledge management and influence on Kenya's key institutions. In this facet, the latter will be divergent from the former as none of these studies plainly laid emphasis on knowledge management and its effects on organizational performance in state corporations and in particular Kenya Marine and Fisheries Research Institute in Kenya. It is against this backdrop that study sought to fill the gap by investigating the influence of knowledge management strategies on the performance of Kenya Marine and Fisheries Research Institute.

1.2 Objectives of the Study

- i. To determine the influence of knowledge acquisition on the performance of Kenya Marine and Fisheries Research Institute.
- ii. To explore the influence of knowledge storage on the performance of Kenya Marine and Fisheries Research Institute
- iii. To investigate the influence of knowledge sharing on the performance of Kenya Marine and Fisheries Research Institute
- iv. To assess the influence of knowledge expertise (Technology) on the performance of Kenya Marine and Fisheries Research Institute.

1.3 Research Questions

- i. What effect does knowledge acquisition have on the performance of Kenya Marine and Fisheries Research Institute?
- ii. What effect does knowledge storage have on the performance Kenya Marine and Fisheries Research Institute?
- iii. What effect does knowledge sharing have on the performance of Kenya Marine and Fisheries Research Institute?
- iv. What effect does knowledge expertise (Technology) have on the performance of Kenya Marine and Fisheries Research Institute?

2. THEORETICAL LITERATURE REVIEW

Among the theories guided this study included the Resource-Based View (RBV), Knowledge-Based View (KBV), Dynamic Capabilities Theory (DCT) and Social Exchange Theory (SET).

2.1 Resource-Based View (RBV) Theory

As opined by Pankaj (2010), Resource Based View (RBV) takes an 'inside-out' view or firm-

specific perspective on why organizations succeed or fail in the market place. A fundamental element of the resource-based theory is that a firm's resources and skills affect its capacity to obtain a competitive advantage. Chatterjee [10] study deduced that RBV theory is useful and relevant for explaining an organization cross-functional capabilities even in the post-COVID-19 period and that there is a positive moderating impact of knowledge management strategies on organization performance.

With the use of valuable resources, a firm can develop and/or put into action plans to improve efficiency and effectiveness, which also allow it to seize opportunities and/or minimize environmental hazards. The idea of knowledge management is tied to the RBV hypothesis on grounds that knowledge is a distinct and an unmatched asset assisting establishment gain an edge over others.

A key idea for bettering our understanding of the outsourcing decision is the resource-based perspective. The evaluation of organizational capacities, which connects outsourcing to organizational performance and, ultimately, competitive advantage, can be aided by the resource-based view in particular. The resource-based concept can be applied to outsourcing to evaluate an organization's capabilities to those of suppliers and rivals. Resources and capabilities are regarded as valuable when a company can seize opportunities and fend against threats. Because of these resources, the corporation ought to be able to satisfy the demands of the business environment. The rarity criteria are linked to the number of competitors who own a valued resource. It goes without saying that a valuable resource that many competitors share is a strong candidate for outsourcing because it is unlikely to give one competitor a competitive edge. A valuable item that sets you apart from both current and potential competitors will undoubtedly provide you an edge. Unique and valuable resources can give a company a competitive edge and should be developed organically.

2.2 Knowledge-Based Theory

Knowledge-Based Theory (KBT) explains the part knowledge plays in the accomplishment of company objectives, mostly entailing the obtaining and retaining competitive advantage. It was founded on the understanding that information is a crucial, exclusive resource that

aids an organization in differentiating itself from its rivals Demsetz, & Grant [11].

Today's fecundity is based on an organization's potential to produce further knowledge and learn from mistakes Tzortzaki & Mihiotis (2014). The fresh insights are known as intangible assets as a whole and are for company that created them. According to various studies, each firm's intellectual capital plays a crucial role in its overall success Clarke & Inkinen (2015). Therefore, in order to facilitate the creation and administration of intellectual capital, organizations should work to establish knowledge management systems.

Business managers must work to successfully integrate the knowledge they have acquired from a variety of stakeholders, such as institutions, customers, rivals, and suppliers, as well as focus on the tacit, priceless, and particular knowledge that is crucial to preserving relationships with the most valuable external sources.

2.3 Knowledge Spiral Theory

Developed by Nonaka and Takeuch [12], the Knowledge Spiral Theory pivots on the knowledge twists taking cognizant on the metamorphosis of tacit knowledge into explicit knowledge, bearing on the employees of an establishment, group of the organization and the organizational learning and innovation [13]. The theory established four modes of knowledge conversion from tacit knowledge to tacit knowledge - a process of socialization; from tacit knowledge to explicit knowledge - process of externalization; from explicit knowledge to explicit knowledge - a process of combination and from explicit knowledge to tacit knowledge - a process of internalization [13]. Hence, the acronym coined for this conversion is (SECI) model for the Socialization, Externalization, Combination, and Internalization.

2.4 Theory of Organizational Epistemology

Developed by Von Krogh and Roos [14], the theory of organizational epistemology (TOE) was one of the first theory on knowledge management that made a distinction of the individual knowledge and the social knowledge. The theory stated clearly that knowledge vested on a particular employee of the establishment as well as the social level of that particular employee in an establishment. The theory

elucidated knowledge as all that is in the knowledge of a particular employee [15,16,17]. TOE dispenses a clear concept on the tacit knowledge, not easy to hypothesize out of someone and make more concrete as opposed to the rational stance where the knowledge is regarded as an abstraction in an establishment. A strong need to maintain a link between knowledge objects and those who are knowledgeable about them such as the experts and experienced users is reinforced on the TOE. There is a belief that knowledge management implementation calls for a connection between those knowledgeable about the activities and the functions in the organization and the knowledge, between the knowledge and those individuals in the organization who wish to know about them, and knowers and the need or wish to know based on the theory of epistemology. TOE is of vital importance in the research study as it dispenses the knowledge management practices basis, differentiates the concept of the knowledge based on the individual and organizational viewpoints. The unearthing of the various types of the knowledge, engagements appearing between knowledge sets and articles has come up with important basis on the administration of knowledge practices.

3. RESEARCH METHODOLOGY

The researcher used descriptive research design. The target population of Kenya Marine and Fisheries Research Institute was 168 staff and the sample population will be 118 staff arrived at using the Yamane [18] formula. The researcher obtained data using questionnaires. To guarantee validity, pre-testing of instruments was done through Pilot testing on fifty (50) respondents who do not constitute the sample. Cronbach's Alpha was used to a certain the reliability of the study's tool. Descriptive statistics

in the form of means, percentages, and frequencies with help of Statistical Package for Social Sciences v25 (SPSS V25) software was used to assess the quantitative data collected on the variables, and the results were displayed in the form of pie charts, graphs, and tables. The researcher utilized a multiple linear regression model to determine the correlation between the independent and the dependent variable[19,20]. The researcher made meaning and interpret, and subsequently drew conclusions from the data analysis [21,22].

4. RESULTS AND DISCUSSION

It was confirmed from Table 1 that the study results of the influence of knowledge acquisition that increased performance stemmed on KMFRI management support of training with a mean of 24.4. From the results of acquiring of new knowledge the respondents alluded to the fact that knowledge through external sources through educational courses, seminars and conferences, positively influenced competence in performance of duties as explained with a mean of 29.2. Knowledge acquisition through exchange of knowledge amongst employees resulted to better working environment for performance as supported by mean of 27.6. Knowledge sources from documented sources, instructions organizational procedures and previously implemented projects positively influenced succession management by a mean of 27.0. Knowledge acquisition through sharing of knowledge amongst employees was a way of knowledge acquisition that improves collaboration between departments for improved performance as adduced by a mean of 26.6. Motivation from the management of Kenya Marine and Fisheries Research Institute to its employees to scale greater heights of knowledge influences employees to increase knowledge by mean of 27.4

Table 1. Knowledge acquisition and performance

Statements	Strongly disagree	Disagree	Moderate	Agree	Strongly Agree	Mean	Standard Deviation
KMFRI Management supports training of its employees on knowledge management for increased performance	0	4	23	31	64	24.4	25.618
Workers get a good scope of new knowledge through external sources namely; educational courses, seminars and	0	10	28	38	70	29.2	27.225

Statements	Strongly disagree	Disagree	Moderate	Agree	Strongly Agree	Mean	Standard Deviation
conferences for competence							
There is exchange of knowledge amongst workers leading to knowledge acquisition for better working environment for performance	2	5	17	23	91	27.6	36.466
Workers depend on written sources of knowledge namely: - documented sources, instructions organizational procedures and previously implemented projects for succession management	3	8	19	49	56	27	24.114
Employees share knowledge during formal and informal encounters for improved collaboration between departments for increased performance	0	11	1	36	85	26.6	35.725
KMFRI leadership motivates/rewards its workers to engage in formal education systems to achieve higher levels of education for improved performance	0	7	19	47	64	27.4	27.208

Source: Research Finding (2024)

Table 2. Knowledge Storage and Performance

Statements	Strongly disagree	Disagree	Moderate	Agree	Strongly Agree	Mean	Standard Deviation
KMFRI encourages employees to store knowledge for future use	0	4	16	53	64	27.4	29.254
Workers record the lessons learned from projects for future use by other workers	0	4	3	35	92	26.8	39.124
Knowledge storing on lessons learned are consistently publicized throughout KMFRI	3	5	19	29	79	27.0	30.951
Reporting and documenting lessons learned is a requirement in KMFRI	0	4	16	46	70	27.2	29.953
When documenting lessons learned for storing knowledge, officers use a structured format made available by the KMFRI management.	3	4	8	34	91	28.0	37.437
Knowledge stored is secured using strong firewalls which are allowed to particular individuals	0	5	23	46	64	27.6	27.190

Source: Research Finding (2024)

The findings of the study on knowledge sharing revealed that a culture of storing knowledge for future use is embedded in the organization as shown by a mean of 27.4. Each employee is required to record the lessons learned from projects the results of which are used by other staff on new projects and this is supported by a mean of 26.8. Knowledge storing on lessons learned are consistently publicized throughout KMFRI as further supported by a mean of 27.0. A structured format is made available for reporting, documenting and storing lessons learned and is supported by a mean of 28.0. Security of knowledge is of paramount importance as alluded by the respondents and this is done by use of strong firewalls, the mandate of which is bestowed on particular individuals as supported by a mean of 27.6.

Results from the study on the above parameter of knowledge sharing had it that knowledge sharing sustains improved performance as shown by the mean of 27.6. Moreover, by a mean of 28.2 the respondents' views were that KMFRI encourages employees to create and share new knowledge and be conscious to need. 27.8 views from the respondents alluded that sharing lessons learnt places employees on a good footing as they will not repeat mistakes done in prior projects leading to minimized mistakes in future for improved performance. Employees are required to prepare reports for sharing with others as shown by mean of 27.4. Knowledge sharing of KMFRI products with external customers and stakeholders raises

confidence levels and awareness thereby placing KMFRI's on the global image and competitive advantage as shown by a mean of 28.2.

The reaction from the respondents on the effect of knowledge expertise (Technology) was that top management support for employees to acquire IT skills has led to improved productivity as performance as evidenced by mean of 27.8. IT tools of work are significant for effective application of knowledge as depicted by mean of 25.4. Respondents deduced that platforms for official and unofficial communication resulting in a culture of belongingness and feeling part of the organization leading to improved performance as evidenced by a mean of 30.8. Intranet services to employees has improved communication by a mean of 25.0 leading to improved performance. Training on Enterprise Resource Planning has let to better coordination of processes for increased performance as shown by a mean of 25.0.

The respondents' views on knowledge acquisition were in agreement that knowledge acquisition through training has led to improved goods and services as shown by mean of 27.0. Consequently, knowledge has increased customer satisfaction by a mean of 27.8. Knowledge sharing has led to good customer experience in thus competitive advantage as depicted by the mean of 27.8. Through knowledge expertise (Technology) there is marked increase in the response to market behavior evidenced by a mean of 27.8.

Table 3. Knowledge sharing and performance

Statements	Strongly disagree	Disagree	Moderate	Agree	Strongly Agree	Mean	Standard Deviation
In KMFRI knowledge sharing improves sustained performance	0	10	20	46	62	27.6	25.745
KMFRI encourages new knowledge creation and sharing conscious to need	0	14	16	32	79	28.2	30.581
The management makes efforts to sensitize employees on the need of sharing lessons learned for minimized mistakes in future	0	13	16	16	94	27.8	37.592
Preparing reports on lessons learned for	0	4	28	59	46	27.4	25.706

Statements	Strongly disagree	Disagree	Moderate	Agree	Strongly Agree	Mean	Standard Deviation
future use in KMFRI is a requirement							
Employees use structured format made available by KMFRI for knowledge sharing	0	0	14	28	57	19.8	23.816
KMFRI shares knowledge with its customers and stakeholders	0	4	11	30	96	28.2	39.613

Source: Research Finding (2024)

Table 4. Knowledge expertise (Technology) and performance

Statements	Strongly disagree	Disagree	Moderate	Agree	Strongly Agree	Mean	Standard Deviation
There is top management support in IT skills training and development	0	13	25	30	56	24.8	20.945
In KMFRI, services and processes are embedded with IT applications for increased performance	3	5	16	33	82	27.8	32.553
Employees are provided with computers to perform their jobs and ERP system has been put in place	0	4	13	40	70	25.4	29.407
Official and unofficial WhatsApp platforms for faster communication	0	10	19	35	90	30.8	35.506
Official internal communication is through intranet and every employee is assigned a corporate email for efficiency	0	0	4	35	86	25.0	37.121
KMFRI staff have been trained on Enterprise Resource Planning (ERP) for better coordination of processes for increased performance	0	1	12	60	52	25.0	28.827

Source: Research Finding (2024)

Results from regression analysis are presented in Table 6 above. The outcome disclosed R² of 0.621 and important adaptable all at 5% level of significance. It is evident that 62.1% convert into dependent variable (performance of Kenya Marine and Fisheries Research Institute) can be attributed to changes in the independent variables namely, knowledge acquisition, knowledge storage, and knowledge sharing and knowledge expertise (Technology).

Illustrated from the ANOVA calculations above was a significance level of 0.01 (processed

information) with inferences showing that the statistics were ideal for deductions as the significance value is less than 5%. The critical value being less than the calculated value (2.493<4.903) and was reason enough to conclude that knowledge acquisition, knowledge storage, knowledge sharing and knowledge expertise significantly influence performance of Kenya Marine and Fisheries Research Institute. To further compound the results, the significance value was less than 0.05, an indication that the model was statistically significant.

Table 5. Organizational performance

Statements	Strongly disagree	Disagree	Moderate	Agree	Strongly agree	Mean	Standard Deviation
Knowledge acquisition through training has resulted in better goods and services	0	5	14	46	70	27.0	29.967
Knowledge storage has increased customer satisfaction	0	8	23	76	32	27.8	29.702
Knowledge sharing has led good customer experience to increased productivity	0	4	19	61	55	27.8	28.543
Through knowledge expertise (Technology) there has been an increase in the speed of response to market behavior	0	7	16	37	79	27.8	31.823

Source: Research Finding (2024)

Table 6. Regression Analysis

Model	R	R Square	Adjusted R Square	Error of the Estimate
1	.788a	.621	.604	.06210

Source: Research Finding (2024)

Table 7. Anova calculations

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Residual	2.844	4	0.711	4.903	.001 ^b
	Regression	18.85	130	0.145		
	Total	21.694	134			

Source: Research Finding (2024)

Table 8. Standardized & Unstandardized Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	Constant	1.445	0.453		3.190	.002
	Knowledge Acquisition	0.421	0.145	.297	2.903	.003
	Knowledge Storage	0.486	0.159	.131	3.057	.004
	Knowledge Sharing	0.532	0.197	.014	2.701	.005
	Knowledge Expertise (Technology)	0.499	0.174	-.212	-2.868	.001

Source: Research Finding (2024)

The following regression equation was established from the data in Table 8.

$$Y = 1.445 + 0.421*1 + 0.486*2 + 0.532*3 + 0.499*4$$

The above equation constructed supported that clenching knowledge acquisition, knowledge storage, knowledge sharing and knowledge

expertise (Technology) to a constant zero, performance would be at 1.445. Deductions from Table 8. show that knowledge acquisition had a significant coefficient (B= 0.421, p value=0.003). The results infer that knowledge storage had a positive significant effect on performance with a coefficient (B= 0.486, p value=0.004). The findings revealed that knowledge sharing had a significant coefficient (B= 0.532, p value=0.005).

This gathered that knowledge sharing had positive significant effect on performance. The study finding further revealed that knowledge expertise (Technology) had a significant coefficient ($B= 0.499$, $p \text{ value}=0.001$). This implies that knowledge application had positive significant effect on performance. In summary, the knowledge management strategy with the most significant influence on performance was knowledge sharing while knowledge acquisition had the least influence on performance of Kenya Marine and Fisheries Research Institute.

5. SUMMARY

Descriptive statistics was used to analyze quantitative data by way of mean, standard deviation and coefficients. In order to investigate the stability of the model and the influence of knowledge management on the performance of Kenya Marine and Fisheries Research Institute, the study carried out an Analysis of Variance (ANOVA). This research sampled a total of 118 respondents from Kenya Marine and Fisheries Research Institute. The general objective this research was to inquire into the influence of knowledge management strategies on the performance of Kenya Marine and Fisheries Research Institute. The specific objectives of the study were; (i) To determine the influence of knowledge acquisition on the performance of Kenya Marine and Fisheries Research Institute, (ii) To explore the influence of knowledge storage on the performance of Kenya Marine and Fisheries Research Institute (iii) To investigate the influence of knowledge sharing on the performance of Kenya Marine and Fisheries Research Institute and (iv) To assess the influence of knowledge expertise (Technology) on the performance of Kenya Marine and Fisheries Research Institute. The findings of this study revealed that knowledge sharing had the most significant influence on the performance of Kenya Marine and Fisheries Research Institute while knowledge acquisition had the least influence on performance of Kenya Marine and Fisheries Research Institute.

6. CONCLUSION

Hinged on the findings of this study, knowledge management strategies are pointers to realizing the performance of Kenya Marine and Fisheries Research Institute. The research deduced that knowledge sharing had the highest positivity influence on the performance of Kenya Marine

and Fisheries Research Institute. Knowledge storage and knowledge expertise ranked second in the influence on the performance of Kenya Marine and Fisheries Research Institute while knowledge expertise (Technology) had the least influence on the performance of Kenya Marine and Fisheries Research Institute. Despite anything to the contrary, all the study variables were significant ($p<0.05$). The research deduced that the combination of the knowledge management strategies influenced the performance of Kenya Marine and Fisheries Research Institute. The research finally concludes that knowledge management strategies had a significant effect on the performance of Kenya Marine and Fisheries Research Institute. The study found out that the Kenya Marine and Fisheries Research Institute had adopted attributes of knowledge management strategies.

7. RECOMMENDATIONS

The findings of this study have policy premises on the performance of Kenya Marine and Fisheries Research Institute. As underpinned by the results of this study, the most contributor and a value addition in organizational performance is knowledge. The following are recommendations based on the findings of this study geared towards the enhancement of the level of Knowledge Management in Kenya Marine and Fisheries Research Institute; Management of Kenya Marine and Fisheries Research Institute ought to be cognizant with the best method of executing an all-inclusive Knowledge Management comprising of acquisition, storage, sharing, and expertise. These corresponding and harmonious strategies should not be considered in seclusion but rather should be linked to grip, capitalize and succor the performance of Kenya Marine and Fisheries Research Institute. Management of Kenya Marine and Fisheries Research Institute should ameliorate on knowledge acquisition in the organization as it ranked the least in the study. Knowledge storage and knowledge sharing strategies should be applied to a higher extent as they have high influence on organizational performance. The study further recommends that KMFRI management up-scales efforts to bolster up the character of knowledge in corporate favorable outcome, enlightening on this endeavor and more significantly, prodding them to participate in on-the-job training and learning, in addition to acquiring and sharing knowledge. Managers should emphasize understanding of human skills

and those of other employees required for tasks in order to develop their expertise for effective internal communication. The study further recommends that managers should emboss knowledge safety in terms safeguarding data within their establishments with a view to intensifying knowledge safety in the organizations. Managers should construct organizational blueprint in order to modelling new knowledge, converse and convey through functional boundaries. Simultaneously, lapses and blunder should frequently be examined on knowledge. The study further recommends that managers exploit the substantive capacities to brace knowledge application activities. Establishments should utilize the technology to plot where specific types of knowledge can be accessed, and by that means expedite the exertion and sharing of knowledge. Internet connectivity should be undertaken to enable employees in different locations to hold virtual meetings. The study recommends that state corporations base their performance on knowledge creation. Managers of organizations should frequently examine knowledge for inaccuracy and flaws. The study also advocates for management of research institutions coin a standardized reward system for sharing knowledge.

This study has not researched comprehensively on knowledge management strategies owing to the variations in state agencies at this moment in time and the state of vigor in management. It is against this background that suggestions for more study have been made. This research suggests that further studies be carried out on other factors outside of this study which influence the performance of State Corporations, Public and Private organizations such as Knowledge Capture, Knowledge Objectives, Knowledge Identification among others in order to further explore this area of study.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during writing or editing of manuscripts.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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