EFFECT OF KNOWLEDGE ACCUMULATION AND UTILIZATION ON ORGANIZATION PERFORMANCE IN SELECTED STATE CORPORATIONS IN KENYA

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ABSTRACT

Knowledge management is known to optimize organizational productivity and performance. As organizations sought to improve their performance and try to achieve organizational performance, gaining knowledge was seen as a key component. The main objective of this research was to determine the effect of knowledge accumulation and utilization on organization performance in selected state corporations in Kenya. The study adopted descriptive research design to obtain data from the target population of 179 State corporations in Kenya. The findings show that coefficient of correlation R was 0.866, an indication of a strong correlation between the variables. The coefficient of adjusted determination R^2 was 0.740 which translates to 74.0%, this shows changes in organizational performance can largely be explained by the two independent variables. The study concludes that knowledge accumulation has a significant influence on organizational performance this is due to States Corporation's engagement in research to generate new knowledge. Knowledge utilization has a significant influence on organizational performance of State Corporations. The study recommends that State Corporations ought to refine their internal processes in line with the strengths of the staff, conduct internal experiments to improve service delivery to customers, collect customer feedback to inform future decisions and use customer feedback to improve their processes. State corporations ought to utilize its knowledge to departmentalize its operations, reuse its knowledge to strengthen its operations, use its knowledge to influence the kind of culture it wants to prevail and collaborate with other stakeholders in ensuring competitiveness.

Key Words: *knowledge accumulation, knowledge utilization, organization performance, state corporations, Kenya*

INTRODUCTION

Knowledge management practices are mechanism devised by organizations to help them draw tacit knowledge that people carry with them, observe and learn from their experience and turn it into explicit knowledge which can be formally documented, stored and shared (Kianto et all., 2018). The practices simply explain knowledge management processes which ensure that organizations get information to inform their decision-making process. Singh (2001) identified key knowledge management practices that play an important role in most organizations today. These are Acquisition, Creation, Accumulation, Packaging, Utilization, Application, Reuse and Ownership. For successful knowledge management practices, information within the organization has to be shared, new skills learned and performance reviews undertaken.

Knowledge accumulation practices entail all measures put in place to access and store relevant information that help an organization gain competitive advantage. In this ever-changing business environment, knowledge has been crucial for organizations to strengthen

their performance. Organizations search for information for various reasons, but the key one is to improve competitive positioning (Sankowska, 2013). Knowledge utilization is the use of knowledge to improve on performance of an organization. Acquisition and utilization of information alone is not sufficient for an organization to gain competitive advantage. For the accumulated information to result into substantial increase in performance of an organization, this information should be shared among employees (Su, Ahlstrom, Li & Cheng, 2013).

Akbar and Tzokas (2013) revealed that there are two components of knowledge that need to be tapped and managed; these are tacit and explicit knowledge. From the epistemology perspective, knowledge that is carried in the mind is referred to as tacit. This is internalized knowledge that individuals possess. In some instances, the individual may not even be aware that they possess this knowledge. The challenge is to capture and convert this into explicit knowledge. Whereas explicit is the knowledge that is articulated, codified and shared. The value of explicit knowledge is realized when it is put into use.

On the other hand, how an organization actions its goals and objectives can be termed as organization performance (Valmohammadi & Ahmadi, 2015). It compares the actual output realized against those projected or those realized by organizations. These organizations maybe within the same industry or in other industries with similar magnitude (Valmohammadi & Ahmadi, 2015). It measures the ability of managers in utilization of resources availed to them to generate value for stakeholders within a stipulated time period. This is commonly referred to as financial periods.

Useful data obtained on performance is critical in identifying important factors that aid or impede the achievement of results. The data may further be used on how to best position the organization in regard to the competition (Kianto et al., 2018). Organizational performance in simple terms checks the precision with which an organization has attained its pre-set strategic goals (Byukusenge & Munene, 2017). This normally depends on the quality of people and how well they are able to use the resources at their disposal for the achievement of a given set organizational goals (Muturi, Ochieng & Njihia, 2015). A key resource here is data.

Different scholars have measured organizational performance differently (Byukusenge & Munene, 2017). For instance, Kaplan and Norton (1995) introduced the Balanced Score Card with four distinct perspectives to counter the traditional financial measures. These four perspectives included: financial, internal processes, customer satisfaction and learning and growth. This was regarded as a better way of measuring organizational performance could be expressed in financial terms. According to Odhon'g and Omolo (2015) financial measures of organization performance mainly pays attention to profits which is measured in different ways.

STATEMENT OF THE PROBLEM

Knowledge management is known to optimize organizational productivity and performance. As organizations seek to improve their performance and try to achieve organizational performance, the need to leverage on knowledge increases. It is from this fact that organizations in Kenya invest 30% of their annual budgets for acquisition of information (Kenya Investment Authority, KenInvest, 2018). A number of studies have been done to link knowledge management practices and organizational performance. Globally, Kianto, Hussinki and Vanhala (2015) focused on finding out the impact that knowledge management practices had on market value of firms trading on the Finland Securities Exchange. In this study, 91% of the companies stipulated that knowledge management was a strategic asset. In Thailand, Tikakul and Thomson (2016) looked at the knowledge management practices by SMEs in the manufacturing sector and established that the greatest hindrance to the capture of knowledge management was lack of clear guidelines. While doing a comparative analysis of Brazilian, Portuguese and Polish organizations on KM, Matos, Vairinhos, Batista, Paliszkiewicz and Do Rosário Cabrita, (2016) noted that KM is not used in strategic decision making. The study was done in developed countries and failed to link KM to performance. In Iran, research on the effects of customer knowledge management in e- commerce was carried out by Aghamirian, Dorri and Aghamirian in 2017. This research was limited to the management of information gained from customers. Hardia (2013) in his study on ICT based knowledge management for sustainable development and growth posits that competitive advantage has shifted over the years. Locally, Josephat (2017) investigated on knowledge management practices and performance of national government ministries in Kenya. The findings showed that knowledge management practices have highly been adopted in government ministries. While Kariuki and Wasike (2017) looked at the "Knowledge Management and Performance in Manufacturing Firms: The Mediating Role of Learning Organization". 64% of variation in Learning Organization was explained by Knowledge Management. This study covered manufacturing firms and looked at learning processes within the organizations. Knowledge accumulation and utilization are scantily used in the larger scope of the public sector. Furthermore, none of the studies above examined knowledge accumulation and utilization *vis a vis* organizational performance in state corporations in Kenya, thus this results into gaps that the current study seeks to fill.

PURPOSE OF THE STUDY

The main objective of this research was to determine the effect of knowledge accumulation and utilization on organization performance in selected state corporations in Kenya

THEORETICAL FRAMEWORK

Knowledge Based View of the Firm

This theory was initiated by Wernerfelt (1984) who stated that knowledge is the most strategically significant resource of a firm. As argued by Wernerfelt (1984) the major determinants of firm competitiveness and superior company performance are varied

knowledge foundations and competences among the companies since knowledge-based competencies are usually difficult to be copied and are socially complex. Knowledge as stated by Wernerfelt 1984 is entrenched and inbuilt in many entities like organizational culture and identity, policies, routines, documents, systems, and employees. This perception originally promoted by Penrose (1959) lays its foundation from the resource- based view of the firm and encompasses from there. It originates from the strategic management literature and was later expounded by others.

The firms that recognize what knowledge does in companies would help enhance competitive advantage. Advocates of Knowledge Based Values (KBV) claim that the resource-based perspective is not that much far-fetched from Resource Based View (RBV). Specifically, knowledge is accorded a broad resource rather than one that has special characteristics by RBV. Thus, it does not make a distinction of the various types of knowledge-based capabilities. Information technologies as stated by Alavi and Leidner (2001) can be vital in management of knowledge because of the ease in analysis of data, comprehension of results which inform quality decision making that help organizations achieve a competitive advantage position. In context to their knowledge management strategies, KBV shows that companies can distinguish themselves.

Learning Organizational Theory

The organization learning theory was pioneered by Easterby-Smith, Crossan and Nicolini (2000). It proposes that an organization that assists in learning its members and constantly improves itself is called a learning organization. It is developed when modern organizations face challenges. The main characteristics for a company to have sustainable competitive advantage in a turbulent business environment are business personal competencies, organization culture, teamwork and system thinking. This concept motivates a more interconnected way of thinking from companies. Organizations as stated by Serenko, Bontis and Hardie, (2007) should emulate communities by making employees be committed hence work harder.

Learning organization as stated by Janz and Prasarnphanich, (2003) states that, organizations should reconsider their goals and actions so as to become competitive in a changing environment hence achieve their set goals. In spite of this a company has to make a sound decision for learning to occur by changing actions in accordance to the changing situation. Hence one has to link the action to the result and remember the result. It is similar to psychology and cognitive research to a very great extent because learning begins at a discrete level. But once information is stored in a way that is transmittable and accessible, shared and used as a goal by the organization as stated by Cha, Pingry and Thatcher, (2008), then it becomes a learning organization. Once the information is shared, it is then termed as organizational learning theory. The theory is relevant as it helps in expanding the value that accumulating, sharing and using of knowledge can help an organization improve its productivity and performance.

EMPIRICAL REVIEW

Knowledge Accumulation Practices and Organization Performance

In acquiring new markets and adapting to changes in existing market places and industries, organizations are trying to improve their employees' competencies by using knowledge management practices. Organizational leadership are setting research and development departments so as to acquire new knowledge that would improve their performance and gain competitiveness (Madeira, Vick & Nagano, 2013). It is obvious that accumulating knowledge during the process of research and development and performing industrial mechanisms by making use of the services of technology, knowledge, and organization would be the bases of innovation and the core of future development in industry. From the perspectives of the innovation era and knowledge economy, not only is accumulating knowledge important but disseminating technologies is also the key to leveraging the research and development innovation abilities of industry.

Long, Soubeyran and Soubeyran (2014) investigated on knowledge accumulation within an organization. Specifically, the study focused on knowledge accumulation problem within an organization that cannot prevent the worker from quitting and using the knowledge outside the organization. The study adopted a descriptive research design. Primary data was collected using questionnaires. The analyzed findings indicated that knowledge accumulation follows a cycle where it increases at the start within an organization, peaks and starts to fall over a certain time frame. Whenever accumulation of knowledge is delayed, employees' productivity is reduced which eventually affects the overall organizational performance. The initial knowledge level within an individual affects the overall performance of the organizational. The capacity for knowledge accumulation positively impacts on technical innovation within an organization.

Ly and Lai (2017) did a study on fuzzy AHP analysis of firm-level knowledge accumulation. The study adopted a descriptive design. Primary data was collected using questionnaires. From the findings, it was revealed that knowledge is considered to be a useful tool for a firm's competitiveness and sustainability. There is considerable evidence confirming that Firm-Level Knowledge (FLK) accumulation provides a competitive advantage for firms, through innovation. Therefore, most knowledge-intensive firms accumulate FLK via exploitative practices to prevent deterioration of their innovation performance. Knowledge accumulation is enforced through integration, absorption and sharing of information either from internal and external sources in the organization. In addition, the external environment and organizational culture have significant interaction effects with knowledge accumulation capability on organizational innovation.

Nzui (2014) studied on information and communication technology and knowledge management at World Agroforestry Center (ICRAF) in Kenya. The study adopted a case study design. The study targeted employees at ICRAF who added up to 200 staff. A census was employed since the population was small. Primary data was collected using

questionnaires. From the findings, it was established that ICT has become prevalent in managing knowledge such that more than half of the knowledge in the organization is originating or is acquired from ICT based sources including, websites, blogs, online materials and e-books. And similarly, a big portion of information and knowledge in the organization stored in ICT based systems. The study established that ICT has a major influence on knowledge management practices in the organization with systems being well integrated and information found to be up to date and trusted. The best way to accumulate fast changing information and large amounts of data is through using modern information technological tools and systems.

Haridia (2013) studied the role of ICT in KM in India. The study adopted a descriptive research design. The study relied on questionnaires to collect primary data. The analyzed findings indicated that although India is a developing country, organizations have seen the importance of KM and have invested in ICT infrastructures to facilitate it. However, investment in ICT is not enough, since organizations must also be IT competent.

In another study by Sandström, Stockinger and Vilmark (2017) shared that leaders in organizations should encourage face to face interactions in knowledge dissemination, and they should instill the use of mobile phones and radio to transfer the knowledge has increased.

Knowledge Utilization Practices and Organization Performance

Organizations seek for information so as to solve their everyday challenges and problems facing them in production, service delivery and processing units (Githua, 2013). The knowledge accumulated is used in forecasting on challenges in market needs and customer preferences so as to create products and service lines that best serve the market and as such gain competitiveness (Kinyua, Muathe and Kilika, 2015).

Madeira, Vick and Nagano (2013) carried out a study on how knowledge management in the form of scientific knowledge or literature arises from innovations and the manner in which information technology is managed by organizations. The study adopted a desktop review methodology where relevant source materials were consulted. The findings indicated that knowledge is only useful when it changes operational lines, improves the quality of products made and increasing the income earning of an enterprise. Knowledge that is stored in organizational systems and is not retrieved to inform internal efficiencies for competitive advantage may not be that useful. This is because such information is not able to inform decision making.

Njagi (2017) focused on finding out the influence that knowledge management had on performance outcomes recorded by the Kenya Tourism Board (KTB). A descriptive research design was adopted. The study relied on primary data collected using questionnaires. The target respondents comprised of employees of KTB. In total, 300 staff were targeted. Stratified random sampling was adopted to selected 120 respondents as the sample size. The

study revealed that experienced staff needed to apply available knowledge more effectively and apply the right skills and knowledge on the right task for the organization to attain organizational goals. The study further noted that the manner in which knowledge is utilized in an organization can be measured differently from one organization to another as the processes are not standard. It can be measured by measuring the level of information transmission, efficiency in picking up and utilizing information, information processing efficiency and its application. This brings about knowledge utilization.

Githua (2013) focused on the Not for profit organizations within the health subsector and analyzed how they utilized knowledge management practices competitively. The study adopted a descriptive design. The targeted population comprised of 270 employees drawn from the Not for profit organizations. Stratified random sampling was used to select 90 respondents as the sample size. The study acknowledges distinct approaches applied by organizations to promote knowledge utilization. The first being raising issues on the knowledge, its sources and quality, this is because this information is used in the making of decisions in the firm and it has the potential of making profits or losses. The second aspect is making policies that guide the knowledge management practices in the firms. This runs from creating and acquiring information and knowledge to the use and reuse of the information. The third option is looking at alternative sources of information and how best to share it for utilization and proper storage for reusing the same information in the future times. The fourth aspect on getting support from both the internal and external stakeholders in managing knowledge and creating a culture and strategies on best practices that can be adopted by the leadership and employees in an organization in using knowledge to gain competitiveness through improving performance.

Kinyua *et al.* (2015) looked at how conversion and application of knowledge affected the performance results reported by commercial banks in Kenya. The study adopted a descriptive design. The population of the study comprised of employees of KCB from its head office in Nairobi. The study purposively selected 130 staffs who formed the sample size. From the findings, it was established that knowledge conversion positively influences performance in banking and it is the first step to knowledge application. And furthermore, commercial banks should take initiatives to apply knowledge in their processes and actions so to sustain their performance in the marketplace. The application of knowledge should be embedded in the organizational structure to ensure its strict adherence by all the staffs.

Gakuo and Rotich (2017) examined the effect of strategic knowledge management on performance of commercial banks in Kenya. The study adopted a cross sectional descriptive design. The target population comprised of 43 commercial banks. The study collected primary data using questionnaires. From the analyzed findings, the study established noted that the organization structure consisting of its day to day operational routine, manuals and policies made up the key mechanisms applied in application of knowledge. Knowledge management also involved elaboration of details, infusion into the processes, and thoroughness as adopted by the different teams within the organization. Knowledge reuse is critical in optimization of knowledge utilization within firms to sustain competitive

advantage; this is because the enterprising firms compete in a knowledge-based economy for the limited resources of lack of expertise skills. A lot of information is generated every day with the development of technology and globalization of the markets.

Hongmei (2014) examined how organizations ensured optimal re-use of knowledge in their operations by considering the frameworks developed, application of emerging knowledge management tools and internal strategies. A descriptive research design was employed in the study. The study relied on primary data collected using questionnaires. From the findings, many firms invest heavily in building knowledge management systems and in the research and development sector, but few of those documents and information are kept in easily retrievable electronic formats so as to promote re-use whenever required. Lack of knowledge re-use in organizations, it may be difficult for them to recoup initial investment in such projects especially in carrying out research and development and implementation of systems to manage the knowledge. Knowledge reuse makes emphasis on usage on previously collected information by consumers.

Riungu (2015) did a study to determine how telecommunication firms in Kenya applied knowledge management practices for competitiveness. The study employed a cross sectional descriptive design. The population of the study comprised of senior management staff drawn from telecommunication firms in Kenya. In total, 150 respondents formed the population of the study. The study revealed that reuse of knowledge occurred at the individual employee level where they shared among themselves; individual trainings sought which resulted in individual knowledge seeking. There was also reuse by other employees who acted as consumers who later on transferred the knowledge. This movement of knowledge within the confines of an organization has been defined as quasi-market in which money is not the limiting factor.

According to Muhoya (2016) audit firms in Kenya have been greatly affected by knowledge management practices. They recruit fresh graduates from institutions of higher learning, train them to equip them with necessary skills to perform their duties. However, before the audit firms can earn returns on their investments on training the staff, they leave for greener pastures. This has negatively affected the performance of audit firms in Kenya. Reusing information already saved in archives aides in better decision making, as comparison between situations, market changes, preferences and stakeholders' opinion is made possible (Riungu, 2015). Knowledge can be reused by the people who developed it or by other stakeholders, for instances in school, the knowledge can be used by the original researcher in expanding the information or it can be used by subsequent students in the learning institution. This is only made possible if the knowledge is stored in libraries and repositories and can be retrieved for confirmation.

Assouroko, Ducellier, Boutinaud and Eynard (2014) examined the relationship between reuse of knowledge in product improvement and knowledge management using semantic approach of management. The study noted that in the global industry where there is high competitiveness among companies, advancing technologies allow for storage and reuse of

information. Some operational procedures if properly stored can be used in future times to gain positive results. The study notes that management systems are commonly applied in management of product life cycle as they form key components of information systems.

Owen, Burstein and Mitchell (2004) investigated on knowledge reuse and transfer in a project management environment, such that the paper looked at the project management companies and how they managed knowledge. The study revealed that the project management companies adopted KM practices which included creation, transfer, reuse and management. In reuse, the companies used a model where knowledge is absorbed at a tactical level and flows to a strategic level. The study also revealed that reusing of information saves companies the cost of research and development, as long as knowledge is stored well. Reuse of knowledge is only possible and effective wherever there is a fit between the organization strategy, social networks, collaboration with stakeholders, corporate structure and culture and available technological appliances and systems.

RESEARCH METHODOLOGY

A research design is the blueprint that guides the researcher in the process of answering the questions that define the purpose of the research. It further checks the consistency between the research questions and the proposed research method (Yin, 2017). The study adopted a descriptive research design since the information is collected without changing the environment. The design that was adapted answered five basic questions: who, what, why, when and where (Cox, 2013). The design has been deemed appropriate because of the observational nature of data that was collected from respondents who are employees working in the state corporations as they give their insight on knowledge management practices and its impact on organizational performance. The target population usually has varying characteristics and it is also known as the theoretical population. The target population is the population which the researchers are concerned about in the study (Clark & Creswell, 2014). In this study, the target population is the 179 State Corporations in Kenya. The study adopted a selection approach in choosing participating State Corporations based on those that are Head quartered in Nairobi. Thus, the sample size was 155 State Corporations which surpasses the sample size of between 10-30% of the population that is deemed adequate for generalisation of the study findings to the entire population according to Bryman and Bell (2015). The questionnaires were divided into six sections; A, B, C, D, E and F covering the background information of the respondents and the two study objectives (Knowledge Accumulation and Knowledge Utilization). The questionnaire used the five-point Likert scale where: 1= Not at all; 2 = Little Extent; 3= Moderate Extent; 4= Large Extent and 5= Very Large Extent. Questionnaires were issued to respondents on a drop and pick latter method. At the point of dropping questionnaires, the researcher noted the contact information of respondents. A follow up was made using the identified contact details of respondents to answer any concerns and issue that may have arose while filling in questionnaires. The returned questionnaires were checked for consistency, cleaned, and the useful ones coded and analysed using the Statistical Package for Social Scientists (SPSS V. 23.0) computer software. The researcher analysed the quantitative data using descriptive statistics including:

frequencies, percentages, means and standard deviations. Pearson's correlations analysis was conducted at 95% confidence interval and 5% confidence level 2-tailed to determine the extent to which the knowledge management practices affect organizational performance in state corporations. If the findings were positive it showed positive correlation between the study variables. Multiple regression analysis was conducted to test the relationship between the independent variables (Knowledge Accumulation and Knowledge Utilization) and the dependent variable of (Organizational performance). In addition, the study adopted multiple regression analysis using the model below:

$$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon_i}$$

Where: **Y** = Organizational Performance; $\mathbf{X_1}$ = Knowledge Accumulation; $\mathbf{X_2}$= Knowledge Utilization; $\boldsymbol{\varepsilon}$ = Error Term; $\boldsymbol{\beta_0}$= Constant in the regression model that shows the determining effect of knowledge management practices on organizational performance

RESEARCH RESULTS

The researcher conducted inferential statistics and correlation analysis to establish the effect and relationship of knowledge management practices on organization performance in the selected state corporations in Kenya. The findings of correlation analysis are as shown in Table 1.

Table 1: Correlation Analysis

		Organizational performance	Knowledge Accumulation	Knowledge Utilization
Organizational performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	117		
Knowledge Accumulation	Pearson Correlation	.238**	1	
	Sig. (2-tailed)	.010		
	N	117	117	
Knowledge Utilization	Pearson Correlation	.610**	.710**	1
	Sig. (2-tailed)	.000	.000	
	N	117	117	117

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

Huber (2004) states that in the interpretation of results for the linear relationships in the study, for a weak correlation, "r" ranges from ± 0.10 to± 0.29; in a moderate correlation, "r" ranges between ±0.30 and ±0.49; while in a strong correlation, "r" ranges from ±0.5 and ± 0.9. The findings in Table 1 pointed out that knowledge accumulation had a Pearson Correlation to organization performance of 0.238 an indication of weak correlation, knowledge utilization had a Pearson Correlation to organization performance of 0.610 an indication of strong correlation. The researcher conducted regression analysis to establish the effect of knowledge management practices on organization performance in the selected state

corporations in Kenya. The findings of coefficient of correlation R and coefficient of adjusted determination R^2 is as shown in Table 2.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.866[a]	.749	.740	.98504

a. Predictors: (Constant), accumulation, utilization
b. Dependent Variable: performance

The findings show that that coefficient of correlation R was 0.866, an indication of a strong correlation between the variables. The coefficient of adjusted determination R^2 was 0.740 which translates to 74.0%, this shows changes in organizational performance can be explained by the two independent variables (accumulation and utilization). The remaining 26% is explained by other factors beyond the scope of current study.

An ANOVA was carried out at 95% level of significance. The findings of $F_{Calculated}$ and $F_{Critical}$ are as shown in Table 3.

Table 3: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	325.018	4	81.254	83.741	.000[b]
Residual	108.675	112	.970		
Total	433.692	116			

a. Predictors: (Constant), accumulation, utilization
b. Dependent Variable: performance

An F test was carried out in a bid to establish if the means of regression and residual were significantly different. This was done by comparing the findings of $F_{Calculated}$ as per the computed table above and the $F_{Critical}$ as informed by the F distribution table. The findings show that $F_{Calculated}$ 83.254 > $F_{Critical}$2.452. This served as an indication that the overall regression model was significant in predicting the effect of knowledge management practices on organization performance in the selected state corporations. This was further supported by significance result of 0.000. The p value was 0.00<0.05, an indication that at least one variable significantly influenced organizational performance. The findings of regression coefficients are as distributed in Table 4.

Table 4: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	-2.239	1.140		-1.964	.052
Knowledge Utilization	-.119	.042	-.375	-2.820	.006
Knowledge Accumulation	-.333	.036	-.792	-9.167	.000

a. Dependent Variable: performance

The regression analysis formula further indicated the extent to which the independent variables affected the dependent variable whereby:

$$\mathbf{Y = -2.239 - 0.119X_1 - 0.333X_2}$$

Thus, by holding other factors constant, organizational performance would be at -2.239. A unit decrease in knowledge utilization when holding other factors constant, organizational performance would be at 0.119. A unit decrease in knowledge accumulation while holding other factors constant, organization performance would be at 0.333. Knowledge accumulation had a significant influence on organization performance. This agrees with Madeira, Vick and Nagano (2013) who stated that organizational leadership set research and development departments so as to acquire new knowledge that would improve their performance and gain competitiveness. Kinyua *et al.* (2015) revealed that knowledge conversion positively influences performance in banking and it is the first step to knowledge application. The findings pointed out that knowledge utilization had a significant effect on organization performance. This agrees with Njagi (2017) who stated that experienced staff needed to apply available knowledge more effectively and apply the right skills and knowledge on the right task for the organization to attain organizational goals.

HYPOTHESIS TESTING

H_{01}: Knowledge accumulation has no significant effect on organization performance in selected state corporations in Kenya

H_{02}: Knowledge utilization has no significant effect on organization performance in selected state corporations in Kenya

The Shairo-Wilk test a carried out yet again in order to test the above null hypotheses.

Table 5: Shapiro-Wilk Test

	Shapiro-Wilk		
	Statistic	**df**	**Sig.**
Organization performance	.899	117	.000
Knowledge Utilization Practices	.914	117	.000
Knowledge Accumulation Practices	.952	117	.000

The significance level of all the independent variables (accumulation and utilization) were reported as 0.00 less than the 0.05 threshold. Thus the null hypotheses were rejected.

A Regression Coefficient test run, further attested to the significant effect that the independent variables had on the dependent variable. The significant value of all the independent variables were 0.00<0.05 threshold as depicted in the table below. This was in support of the rejection of the null hypotheses. The null hypotheses were thus restated in support of the below findings.

Table 6: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	-2.239	1.140		-1.964	.052
Knowledge Utilization	-.119	.042	-.375	-2.820	.006
Knowledge Accumulation	-.333	.036	-.792	-9.167	.000

The study pointed out knowledge accumulation significantly influenced organizational performance. We therefore reject the null hypothesis and fail to reject the alternative hypothesis that states that knowledge accumulation has a significant effect on organization performance in selected state corporations in Kenya. The study established that knowledge utilization had a significant effect on organizational performance. Therefore, we reject the null hypothesis and fail to reject the alternative hypothesis that state that knowledge utilization has a significant effect on organization performance in selected state corporations in Kenya.

CONCLUSION

On knowledge accumulation, the study concludes that knowledge accumulation significantly influenced performance. This was attributed to the following; organization had diverse channels of collecting key information on its processes, increased its knowledge by sponsoring staff to trade fairs and trained its staff regularly. State corporations used customer feedback to improve its processes, hired technically qualified consultants to work together with their staff in projects not performed by internal staff and engaged in research to generate new knowledge. State corporations conducted internal experiments to improve service delivery to its customers, refined its internal processes in line with the strengths of its staff and engaged in research to generate new knowledge that was useful in the organization.

In regard to knowledge utilization, the study concludes that significantly influenced organizational performance. This was attributed to the following factors; state corporation used extensive knowledge it had to develop policies to guide task performance, reused its knowledge to strengthen its operations, collaborated with other stakeholders in ensuring competitiveness and utilized its knowledge in optimizing its structure. State corporations applied the knowledge it had in business processes, allocated right qualified persons to do specialized jobs, used knowledge was acquired in improving its internal processes and customer satisfaction. State corporations used the knowledge it possessed to predict the future, utilized its knowledge to departmentalize its operations and used its knowledge to influence the kind of culture it wanted to prevail in.

RECOMMENDATIONS

Knowledge Accumulation Practices and Organization Performance

The study recommends that state corporations ought to refine their internal processes in line with the strengths of the staff, as well as have diverse channels of collecting key information on its processes. State corporations also ought to hire technically qualified consultants to work together with their staff in projects not performed by internal staff, train their staff regularly, increase knowledge by sponsoring staff to trade fairs and also provide staff with exposure to other parts of the world in a bid to benchmark their services. States corporations ought to engage in research to generate new knowledge, organize forums with research institutions for exchange of knowledge as well as conduct internal experiments to improve service delivery to customers. State Corporations are also encouraged to collect customer feedback to inform future decisions and use customer feedback to improve their processes.

Knowledge Utilization Practices and Organization Performance

The study recommends that state corporations ought to use extensive knowledge they have to develop policies to guide task performance and apply the knowledge in business processes to predict the future. State corporations ought to use knowledge acquired in improving internal processes, to departmentalize operations, reuse knowledge to strengthen operations, allocate right qualified persons to do specialized jobs and use knowledge to influence the kind of culture they want to prevail and collaborate with other stakeholders in ensuring competitiveness. State corporations ought to use knowledge they have to improve customer satisfaction and.

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