

Knowledge Capabilities and Performance of County Governments in Kenya: A Survey of County Departments of Kiambu County Government

Felista Lekaram Jared Deya, PhD
School of Business and Entrepreneurship, Jomo Kenyatta University of Agriculture and Technology, Kenya
* E-mail of the corresponding author: flekaram@gmail.com

Abstract

There is a growing need for governments globally to develop and implement strategies of knowledge capabilities to take advantage of distributed knowledge assets to enhance the performance of their employees. Knowledge capabilities are viewed as a tool for harnessing the knowledge value and engaging it in integrative processes with organizational infrastructure, people, and processes. Organizations must leverage its existing knowledge capabilities and apply the knowledge in its operation to sustain competitiveness both locally and international. The county government systems are barely 10 years old and there is the growing need to leverage on the essential asset of human resource brought about by knowledge management for realization of fast growth. The main objective of this study was to determine how knowledge capabilities influence the performance of County governments in Kenya. The study determined the effect of knowledge acquisition capabilities, knowledge application capabilities, knowledge storage capabilities and knowledge protection capabilities on the performance of County governments in Kenya. The study adopted census method targeting 34 management staff of Kiambu County. Primary data was collected using structured questionnaire. The questionnaires were piloted with 4 staffs from the neighboring Nairobi County to determine their validity and reliability. Quantitative data was analyzed using Descriptive statistics analysis which was done by measuring central tendencies which included frequencies, means, standard deviations and regression. Descriptive statistics were carried out using Statistical Package for Social Sciences (SPSS). Inferential statistics which included correlation (r) and regression (R2) through the use of Multiple Linear Regression model were employed to establish the significance of the independent variables on the dependent variable. The study found that knowledge acquisition capabilities have a positive and significant effect on the performance of county governments in Kenya (β1=0.690, p-value=0.000). Moreover, knowledge application capabilities have a positive and significant effect on the performance of county governments in Kenya (β 2=0.596, p-value=0.000). Further, the study found that knowledge storage capabilities have a significant and positive effect on the performance of county governments in Kenya (β1=0.548, p-value=0.009). This study therefore recommends that County governments should develop proper strategies such as creating a suitable learning culture and facilitating innovativeness to encourage the acquisition of knowledge and skills. In addition, the county governments should use appropriate technology for application of knowledge as well as incorporate knowledge into organizational processes, procedures, culture and identity, routines, policies, systems, and documents, as well as individuals to aid in the application of knowledge.

Keywords: Knowledge Capabilities, Acquisition, Application, Protection, Performance

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Introduction

Government organizations such as public utilities are now expending significant efforts on technological innovations to increase competitiveness and upgrade their capabilities (Chiu & Chen, 2016). Organizations currently embrace the knowledge management concept, which involves gathering, organizing, analyzing, storing, and sharing information using defined techniques. The information is stored as the knowledge that will be used for organization decision making and also training new employees. In line with Kenya's vision 2030, which aims to create a globally knowledge-based and competitive economy, the ministry of planning has prepared a management policy that aims to create an enabling environment for the government to promote mainstreaming of knowledge management principles and practices in public, private and non-state actors (State department of planning, 2021).

Most of the global public organizations are observed to have a high degree of bureaucracy, leading to decision-making delays hence poor utilization of public funds and promotion of accountability (Esterhuizen, Du Toit & Schutte, 2012). The best scenario to explain a high degree of bureaucracy is the many well-experienced professionals in many fields in the public sector who have worked for a long time in a particular department. Organizations usually hope to gain efficiency through knowledge management by ensuring information sharing between various government levels, thus developing systems and eliminating the old ones leading to improved overall performance. In line with Kenya's vision 2030, the aims are to create a globally knowledge-base and



competitive economy (State department of planning, 2021).

Yusuf and Wanjau (2014) highlighted that the organizations with no clearly defined responsibility for the management of knowledge hinder the execution of practices of knowledge management across the departments. Knowledge transfer and Knowledge insufficiency are other public sector challenge due to the trends of employee retirement. Pee and Kankanhalli (2016) noted that the public sector in Kenya comprises 50% of a workforce aged 50 years and above. Most of the aging workforce is in the senior management of the public sector, which is a crisis endangering the systems of knowledge management in the public sector. In-line with the current effort by County governments to address the issue of knowledge management, this study sought to examine the influence of knowledge capabilities on performance of County governments in Kenya: A survey study of Kiambu County Departments.

Statement of the Problem

It has been acknowledged that the organization's most valuable resource is knowledge (Gituma, 2017). According to Doaei and Dehghani (2010), knowledge has received unique consideration from the organization's management in contrast to other resources because it is a very sophisticated asset. Even though knowledge management capabilities are becoming more and more popular among organizations throughout the globe, County governments in Kenya have not given it much consideration. With intensifying need for quality service delivery in the Counties since the inception of County governments in Kenya by the 2010 constitution, County governments have not yet employed knowledge management capabilities as vital resource for ensuring their performance. Despite literature having shown that knowledge management capabilities are essential for improving performance of organizations, County governments in Kenya have not adequately employed knowledge management capabilities for spurring their performance (Ahmed, Fiaz & Shoaib, 2015).

Thus, the problem to be addressed in this study is to determine how county governments in Kenya apply this unique resource of knowledge capabilities. The county governments have continued to experience challenges, which have derailed their public performance and administrative operations (Mwongozo, 2017). A study by Ntoiti (2013), found out that there is weak; financial management practices, human resource management practices, information technology and government regulations. Knowledge has in the recent past been recognized as the organization's most important asset (Gituma, 2017). Despite the rising popularity of knowledge management across different organizations of the world, in Kenya, knowledge capabilities have not established too much consideration from the county governments.

Kinyua, Muathe & Kilika (2015), sought to establish knowledge management processes of acquisition, transformation and usage on governments. Therefore, information management capabilities have a statistically significant inspiration on the performance of microfinance establishments in Kenya. In view of the above issues, there is scanty empirical literature to help these firm associate knowledge capabilities to their performance, hence this study sought to link the gap in knowledge that the previous researches did not capture in addition to scrutinize the influence of knowledge capabilities on performance of County governments in Kenya: A survey study of Kiambu County Departments.

The objectives of the study were;

- i. To determine the influence of knowledge acquisition capabilities on performance of Kiambu County.
- ii. To assess the influence of knowledge application capabilities on performance of Kiambu County.
- iii. To examine the influence of knowledge storage capabilities on performance of Kiambu County.
- iv. To establish the influence of knowledge protection capabilities on performance of Kiambu County.

Literature Review

Theoretical Review

This study will be anchored on Knowledge Spiral theory, Organizational Learning Theory, Resource-Based Theory (RBT) and Knowledge-Based View Theory. The study adopted a Knowledge Spiral theory. In 1995, Nonaka and Takeuchi conducted a study on the Japanese companies' successes in achieving innovation and creativity. According to Nonaka and Takeuchi (2009), the knowledge spiral theory has four knowledge conversion modes making up the entire process of knowledge creation. Knowledge conversion modes include; externalization, internalization, socialization, and combination. The Knowledge Spiral theory was relevant to this study because the County Government of Kiambu should have the capability to create and acquire new knowledge.

Organization learning theory was developed by Argyris and Schon (1995), who suggested that learning takes place through the process of detecting and correcting errors. Organizational learning is described as a process whereby learning is facilitated through social interactions and organization levels. In organizations that are always learning, new ideas and knowledge are infused by scanning the outside environment, hiring new talent and specialists when they are needed, and allocating resources to employee training and development. This theory supported the first objective which sought to determine the influence of knowledge acquisition capabilities on the performance of Kiambu County.



Resource based theory (RBT) was developed by Barney's (1991). According to RBT, a firm's heterogeneity results from its possession of heterogeneous resources, which means that because of this, the organization has a variety of tactics. The major goal of this approach is to get management to pay attention to the company's internal resources while attempting to build those resources, capabilities, and competencies that can produce a lasting competitive advantage. This theory was relevant to this study since it informed the dependent variable which was performance and it also supported objective three which examined the influence of knowledge storage capabilities on the performance of Kiambu County.

Penrose (1959) made the initial proposal for knowledge-based theory, then Wernerfelt (1984) and Barney (1991) elaborated on it. According to this view, a company's most valuable resource is its knowledge. This theory's proponents contend that the primary factors determining long-term competitive advantage and superior performance within the organization are knowledge-based resources, which are difficult to imitate, socially complex, and based on heterogeneous knowledge and capabilities among companies. Firms that possess stocks of organizational knowledge associated with value that could be described as uncommon or idiosyncratic, stand a good chance of generating sustaining high returns (Raft & Lord, 2002). This theory supported objective four in establishing the influence of knowledge protection capabilities on the performance of Kiambu County.

Conceptual Framework

The independent variable was knowledge capabilities and the dependent variable was performance of County governments.

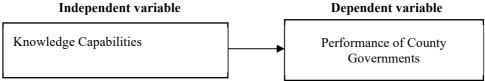


Figure 1: Conceptual Framework

Empirical Literature Review

Research by Nicholas et al. (2020) analyzed how knowledge acquisition affects business performance in Geomatic engineering firms founded in Seychelles. According to the results of the study, the SMEs embraced strategies and practices of knowledge acquisition to a moderate extent. The results also showed that there was a significant positive effect on performance as a result of the knowledge acquisition strategies and practices. According to a study conducted by Papa et al. (2020) in Italy, the authors compared the effects that innovation has on knowledge acquisition in terms of human resource practices and employee retention, the findings of the study showed that innovation had a positive effect on knowledge acquisition.

Ode and Ayavoo (2020) conducted a study on the impact of knowledge management practices on firm innovation. The authors examined the role of knowledge application (implementation) in this relationship. The results found out that knowledge generation, storage and application had significant and positive effect on firm innovation. In addition, Riungu (2015) conducted research to investigate the application of knowledge management in telecommunication companies in Kenya. The study established that the companies had a highly organized knowledge storage through a classified scheme that categorized lessons learned by problem type, subject area, and project type.

Al-Adaileh and Al-Atawi (2011) conducted a study in hospitals by exploring whether the managements of the hospitals used comprehensive databases for stored knowledge. The study established that knowledge storage with ease retrieval was highly considered as a key factor. Knowledge storage was found to have a substantial effect on the performance of an organization which was evaluated by the use of a Balanced Score Card. A study by Ottair (2018) investigated knowledge storage by determining whether there was a flexible tool and mechanism for storing available knowledge. The study also investigated whether the organization kept documents and paper records for stored data if the organization had a modern technological means for knowledge storage.

Ruchi et al (2016) in study of Knowledge Management and performance of Indian software companies found that knowledge acquisition and protection do not affect organization's performance may be due to inadequate attention to knowledge acquisition and protection strategies. Another study by Kinyanjui (2014), examined the effect of knowledge management on firm performance in commercial banks in Nakuru, Eldoret and Kisumu. The study revealed that knowledge protection had a positive and significant effect on performance of the firm. A study by Maravilhas and Martins (2019) investigated the relationship between knowledge management capabilities and organizational performance in Iranian export companies and found that there is a direct and significant relationship between knowledge protection and organizational performance.



Research Methodology

The study adopted a descriptive research design. The study settled on the research design as it was appropriate for the study's objective and assisted the researcher in describing the status of affairs as they exist without variable manipulation. The target population of this study comprised of the CECM, CCO, Directors, the Speaker of the Assembly, the Leader of Majority, Major Party Chief Whip, The Clerk of the Assembly all drawn from the Kiambu county.

Table 1: Sample Frame Distribution

| Management Level | Sample Size | |
|-----------------------------|-------------|--|
| CECM | 10 | |
| CCO | 10 | |
| Directors | 10 | |
| The Speaker of the Assembly | 1 | |
| The Leader of Majority | 1 | |
| Major Party Chief Whip | 1 | |
| The Clerk of the Assembly | 1 | |
| Total | 34 | |

The study adopted census method hence the population of 34 respondents working for County Government of Kiambu was used in the study. This was used in the selection of respondents with a view of gaining insight into the possible effects of knowledge acquisition capabilities on the performance of county governments in Kenya. A questionnaire was administered by the researcher to the relevant respondents through the drop and pick technique. A questionnaire was the most appropriate method for data collection as it provides the requisite information being sought by the researchers.

Data was analyzed quantitative data analysis techniques. Quantitative data was analyzed using descriptive statistics analysis, which was carried out by measuring central tendencies included frequencies, means, standard deviations and regression. Descriptive statistics were conducted using the Statistical Package for Social Sciences (SPSS 25). Inferential statistics included correlation and regression analysis. The findings were presented using frequency tables and charts. The following multiple regression model was applied;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where; Y= organization performance (Dependent Variable); β_0 = Constant; β_1 , β_2 , β_3 and β_4 = coefficients; X_1 = acquisition capabilities (Independent Variable); X_2 = application capabilities (Independent Variable); X_3 = storage capabilities (Independent Variable); X_4 = protection capabilities (Independent Variable); E= error term

Research Findings and Discussions

The sample size of this study consisted of 34 top management employees of Kiambu county government; the CECM, CCO, Directors, the Speaker of the Assembly, the Leader of Majority, Major Party Chief Whip, and The Clerk of the Assembly. Out of the 34 questionnaires that were distributed, 30 questionnaires were dully filled and returned to the researcher hence providing a response rate of 88.24%. Cooper and Schindler (2006) suggest that 75 percent response rate is adequate for data analysis, drawing conclusions as well as making recommendation. This denotes that 88.24% response rate was adequate for data analysis.

Table 2: Questionnaires' Response Rate

| Management Level | Sample Size | Responses | Percent |
|-----------------------------|-------------|-----------|---------|
| CECM | 10 | 8 | 80.00 |
| CCO | 10 | 9 | 90.00 |
| Directors | 10 | 9 | 90.00 |
| The Speaker of the Assembly | 1 | 1 | 100.0 |
| The Leader of Majority | 1 | 1 | 100.0 |
| Major Party Chief Whip | 1 | 1 | 100.0 |
| The Clerk of the Assembly | 1 | 1 | 100.0 |
| Total | 34 | 30 | 88.24 |

Descriptive Statistics

This section covered descriptive statistics on knowledge acquisition capabilities, knowledge application capabilities, knowledge storage capabilities, knowledge protection capabilities and the performance of Kiambu County. The closed ended questions were measured on a 5-point Likert scale, with 1 representing strongly disagree, 2 representing disagree, 3 representing neutral, 4 representing agree and 5 representing strongly agree.

Knowledge Acquisition Capabilities

As shown in Table 3, the respondents agreed with a mean of 3.900 (SD=1.125) that Kiambu County has an



effective learning culture system intended to promote knowledge acquisition among its employees. Moreover, they agreed that Kiambu County has programs intended to improve learning culture as shown by a mean of 3.700 (SD=0.651). Moreover, the respondents agreed that Kiambu County has an effective knowledge acquisition capabilities strategy. This is shown by a mean=3.767 (SD=0.858). With a mean of 4.067, (SD=1.048), the respondents agreed that Kiambu County government has got innovativeness strategies for utilization of the knowledge acquired. In addition, they agreed that the policy on knowledge acquisition has adequate strategies for new knowledge generation as shown by a mean of 3.533 (SD=1.252). Nonetheless, the respondents were neutral with the statement indicating that the most important outcome of knowledge acquisition is new knowledge generation that is considered as a vital resource by Kiambu County. This is shown by a mean of 3.467 (SD=1.196).

Table 3: Aspects of Knowledge Acquisition Capabilities

| | Mean | Std. |
|---|---------|-----------|
| | | Deviation |
| Kiambu County has an effective knowledge acquisition capabilities strategy | 3.767 | 0.858 |
| Kiambu County has an effective learning culture system intended to promote knowledg acquisition among its employees | e3.900 | 1.125 |
| Kiambu County has programs intended to improve learning culture. | 3.700 | 0.651 |
| The policy on knowledge acquisition has adequate strategies for new knowledg generation | e3.533 | 1.252 |
| The most important outcome of knowledge acquisition is new knowledge generation that is considered as a vital resource by Kiambu County | ıt3.467 | 1.196 |
| Kiambu County government has got Innovativeness strategies for utilization of th knowledge acquired | e4.067 | 1.048 |

Knowledge Application Capabilities

The respondents agreed with a mean of 3.933 (SD=0.980) that Kiambu County has a current knowledge process that can meet learning needs through data sources. Moreover, the respondents agreed with mean of 3.600 (SD=1.192) that Kiambu County has an effective written strategy on knowledge application capabilities. Nonetheless, the respondents were neutral that Kiambu County has a clear system for information feedback as shown by a mean of 3.433 (SD=1.251). With a mean of 3.667 (SD=1.028), the respondents agreed that the policy on knowledge application has adequate strategies for knowledge generation and store. Moreover, they agreed that Kiambu County has application capacities that outperform others counties as employees have access to appropriate technology as shown by a mean of 3.500 (SD=1.225). Nonetheless, the respondents were neutral with a mean of 2.833 (SD=1.367) that Kiambu County government knowledge application policy has strategies for utilization of the data sources.

Table 4: Aspects of Knowledge Application Capabilities

| Two to 11 115 peeces of 11110 Wie age 115 pheeces of cusuometes | |
|---|----------------|
| Mean | Std. Deviation |
| Kiambu County has an effective written strategy on knowledge application 3.600 capabilities | 1.192 |
| Kiambu County has a current knowledge process that can meet learning needs3.933 through data sources | 0.980 |
| Kiambu County has a clear system for information feedback. 3.433 | 1.251 |
| Kiambu County has application capacities that outperform others counties as 3.500 employees have access to appropriate technology | 1.225 |
| The policy on knowledge application has adequate strategies for knowledge3.667 generation and store | 1.028 |
| Kiambu County government knowledge application policy has strategies for 2.833 utilization of the data sources | 1.367 |

Knowledge Storage Capabilities

With a mean of 3.933 (SD=1.143), the respondents agreed that Kiambu County has a culture of knowledge storage for utilization. Moreover, they agreed that Kiambu County has soft style recording intended to improve searching for and retrieving coded knowledge. This is shown by a mean of 3.600 (SD=1.102). Moreover, with a mean of 3.600 (SD=1.003), the respondents agreed that hard style recording in the county allows and encourages indexing the knowledge stored in the archives. The respondents agreed that storage of knowledge in Kiambu county is done through hard and soft style recording and retention which can easily be retrieved as shown by a mean of 3.667 (SD=1.269). Moreover, with a mean of 3.600 (SD=1.276), the respondents agreed that retention of organization allows the employees to impress knowledge utilization of Kiambu county. Moreover, they agreed with a mean of 3.567 (SD=1.194) that the policy on knowledge storage has adequate strategies for individual knowledge in Kiambu County.



| Table 5: Aspects of Knowledge Storage Cap | anabilities |
|---|-------------|
|---|-------------|

| | Mean | Std. Deviation |
|---|----------|----------------|
| Kiambu County has a culture of knowledge storage for utilization. | 3.933 | 1.143 |
| Hard style recording in the county allows and encourages indexing the knowled stored in the archives | ge3.600 | 1.003 |
| Kiambu County has soft style recording intended to improve searching for a retrieving coded knowledge | nd3.600 | 1.102 |
| Retention of organization allows the employees to impress knowledge utilization Kiambu county | of3.600 | 1.276 |
| The policy on knowledge storage has adequate strategies for individual knowled in Kiambu County. | ge3.567 | 1.194 |
| Storage of knowledge in Kiambu county is done through hard and soft sty recording and retention which can easily be retrieved | yle3.667 | 1.269 |

Knowledge Protection Capabilities

As shown in Table 6, the respondents agreed with mean of 3.933 (SD=1.143) that regularly, knowledge protection is done on the grounds that the patent and copyright laws are maintained to ensure security of County information. In addition, they agreed that protection is dependably the essential worry in the County administration data frameworks as shown by a mean of 3.933 (SD=1.081). Moreover, the respondents agreed with a mean of 3.733 (SD=1.337) that in making adequate controls the county considers estimations of data utility. With a mean of 3.933 (SD=1.258), the respondents agreed that protecting valuable knowledge and intellectual property of Kiambu County is assisted by various existing protection means. Moreover, they agreed that Kiambu County has well-established instruments such as patents, copyright or trademarks to protect own intellectual property as shown by a mean of 3.867 (SD=1.137). They also agreed that there is precision, consistency, and certification to ensure learning authenticity in Kiambu County. This is shown by a mean of 3.767 (SD=1.251).

Table 6: Aspects of Knowledge Protection Capabilities

| Mear | n Std. Deviation |
|--|---------------------|
| Protection is dependably the essential worry in the County administration data frameworks 3.933 | 1.081 |
| Regularly, knowledge protection is done on the grounds that the patent and copyright laws 3.933 | 1.143 |
| are maintained to ensure security of County information | |
| In making adequate controls the county considers estimations of data utility 3.733 | 1.337 |
| Kiambu County has well-established instruments such as patents, copyright or trademarks 3.867 to protect own intellectual property | 1.137 |
| There is precision, consistency, and certification to ensure learning authenticity Kiambu3.767 county | 1.251 |
| Protecting valuable knowledge and intellectual property of Kiambu county is assisted by 3.933 various existing protection means. | 1.258 |

Performance of County Governments

The measures of the performance of County governments were revenue allocation, projects initiated and completed and customer satisfaction. Revenue collected by County governments for the last 3 years (2019-2021) was as shown in Figure 2. The revenue collected by County governments was 1.067 billion in the year 2019. This figure decreased to 0.897 billion in the year 2020 before increasing to 1.395 billion in the year 2021.

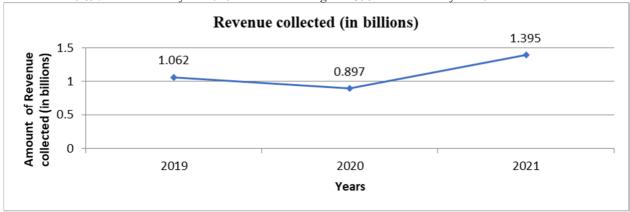


Figure 2: Trend of Revenue Allocation



Projects Initiated and Implemented

The total number of projects initiated by County governments for the last 3 years (2019-2021) was as shown in Figure 3. The projects initiated by County governments in the year 2019 were 49 in number. The number of initiated projects decreased to 25 in the year 2020 and then increased to 35 projects in the year 2021. The total number of projects completed by County governments for the last 3 years (2019-2021) was as shown in Figure 4. As indicated in Figure 4.6, the projects completed by County governments in the year 2019 were 12 in number. In the year 2020, the number of projects completed decreased to 10 before increasing to 16 projects in the year 2021.

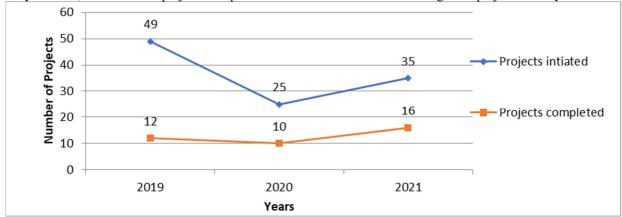


Figure 3: Trend of Projects Imitated and Completed

Customer Satisfaction

Customer satisfaction in the performance of County governments for the last 3 years (2019-2021) was as shown in Figure 4. The customer satisfaction in the performance of County governments was 65.97% in the year 2019. This figure decreased to 62.60% in the year 2020 and further decreased to 60.20% in the year 2021. These finding conform to Huang and Lai (2012) findings that customer satisfaction in the performance of County governments has been decreasing for the last three years.



Figure 4: Trend of Customer Satisfaction

Inferential Statistics

In this section, inferential statistics such as multivariate regression and correlation analysis were used to examine the influence of knowledge acquisition capabilities, knowledge application capabilities, knowledge storage capabilities and knowledge protection capabilities on the performance of Kiambu County.

Correlation Analysis

Pearson product-moment correlation coefficient was utilized to assess the strength of association between independent variables (knowledge acquisition capabilities, knowledge application capabilities, knowledge storage capabilities and knowledge protection capabilities) and dependent variable (performance of county governments). The findings were as presented in Table 7.

Storage

Capabilities

Knowledge

Protection

Capabilities



| Table 7: Correlation Coefficients | | | | | | |
|-----------------------------------|-----------------------|----------------|-------------------------|--------------|--------------|--------------|
| | | Performance of | Performance ofKnowledge | | Knowledge | Knowledge |
| | | County | Acquisition | Application | Storage | Protection |
| | | Governments | Capabilities | Capabilities | Capabilities | Capabilities |
| Performance | ofPearson Correlation | 1 | | | | |
| County | Sig. (2-tailed) | | | | | |
| Governments | N | 30 | | | | |
| Knowledge | Pearson Correlation | .860** | 1 | | | |
| Acquisition | Sig. (2-tailed) | .000 | | | | |
| Capabilities | N | 30 | 30 | | | |
| Knowledge | Pearson Correlation | .834** | .062 | 1 | | |
| Application | Sig. (2-tailed) | .000 | .161 | | | |
| Capabilities | N | 30 | 30 | 30 | | |
| Knowledge | Pearson Correlation | .802** | .107 | .152 | 1 | |

.100

.098

.090

30

30

.101

30

.062

.161

30

30

.098

.090

30

1

30

Pearson Correlation

Sig. (2-tailed)

Sig. (2-tailed)

The study found that there exists a positive and significant relationship between knowledge acquisition capabilities and performance of county governments (r=0.860, p-value =0.000). Furthermore, the study found a positive and significant relationship between knowledge application capabilities and the performance of county governments (r=0.834, p-value=0.000). The study established that there exists a positive and significant relationship between knowledge storage capabilities and performance of county governments (r=0.802, p-value =0.000). Furthermore, the study revealed that there is a positive and significant relationship between knowledge protection capabilities and performance of county governments (r=0.757, p-value =0.000).

Regression Analysis for knowledge Capabilities and Organizational Performance

.000

.757*

.000

30

Multivariate regression analysis was carried out to examine the relationship between independent variable (knowledge acquisition capabilities, knowledge application capabilities, knowledge storage capabilities and knowledge protection capabilities) and dependent variable (performance of county governments).

Table 8: Model Summary

| | | | Table 6. Model Sullilla | 1 y |
|-------|-------|----------|-------------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .886ª | 0.784996 | 0.768 | 0.16152 |

As depicted in Table 8, R-squared for the relationship between knowledge capabilities and performance of County governments was 0.785 which means that 78.5% of the variation of dependent variable (performance of county governments) could be explained by independent variables (knowledge acquisition capabilities, knowledge application capabilities, knowledge storage capabilities and knowledge protection capabilities).

| | Table 9: Analysis of Variance | | | | | | |
|-------|-------------------------------|-------------------------------|----|-------------|---------|-------------------|--|
| Model | | Sum of Squares df Mean Square | | Mean Square | F | Sig. | |
| 1 | Regression | 22.720 | 4 | 5.680 | 217.721 | .000 ^b | |
| | Residual | .652 | 25 | .026 | | | |
| | Total | 23.372 | 29 | | | | |

In this study, the ANOVA was performed to determine if the model was good fit for the data. As shown in Table 9, the F-calculated was 217.721 and the F-critical from the F-distribution table was 2.76. Because the F-calculated was greater than F-critical and the p-value (0.000) was not more than the significance level (0.05), the model was considered to be a good fit for the data.

| Table 10: Regression Coefficients | | | | | | | |
|------------------------------------|------------------------------------|------------|------------------------------|------|---------|--|--|
| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | | |
| | В | Std. Error | Beta | | | | |
| (Constant) | 0.802 | 0.156 | | 5.14 | 110.000 | | |
| Knowledge Acquisition Capabilities | 0.623 | 0.124 | 0.600 | 5.02 | 240.000 | | |
| Knowledge Application Capabilities | 0.451 | 0.121 | 0.448 | 3.72 | 270.012 | | |
| Knowledge Storage Capabilities | 0.381 | 0.158 | 0.390 | 2.4 | 110.024 | | |
| Knowledge Protection Capabilities | 0.258 | 0.124 | 0.239 | 2.08 | 310.410 | | |

Regression equation was;

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



$Y = 0.802 + 0.623X_1 + 0.451X_2 + 0.381X_3 + 0.258X_4 + \epsilon$

The study findings indicated that knowledge acquisition capabilities have a positive and significant effect on performance of county governments (β_1 =0.623, p-value=0.000). These findings conform to Ode and Ayavoo (2020) discoveries that acquiring information greatly impacts competitive advantage. In addition, the study revealed that knowledge application capabilities had a positive and significant effect on the performance of county governments (β_2 =0.451, p-value=0.012). The findings confirm to those of Ode and Ayavoo (2020) who found that knowledge application had a significant and positive effect on firm performance and innovation.

Furthermore, the study established that knowledge storage capabilities had a significant and positive effect on the performance of county governments (β_3 =0.381, p-value=0.024). These findings conform to Kithuka (2020) arguments that sharing and storage of knowledge have a substantial influence on the performance of an organization. The study found that knowledge protection capabilities had a positive and insignificant effect on the performance of county governments (β_4 =0.258, p-value=0.410). These findings are contrary to Ruchi et al (2016) findings that knowledge protection capabilities do not affect organization's performance which may be due to inadequate attention to knowledge acquisition and protection strategies.

Conclusions

The study concludes that knowledge acquisition capabilities have a positive and significant effect on the performance of county governments. This means that enhancing knowledge acquisition capabilities (new knowledge generation, learning culture and innovativeness) enhances the performance of county governments. The study further concludes that knowledge application capabilities have a positive and significant effect on the performance of county governments. This means that enhancing knowledge application capabilities (appropriate technology, information feedback and data sources) enhances the performance of county governments. The study found that knowledge storage capabilities have a significant and positive effect on the performance of county governments. This means that enhancing knowledge storage capabilities (hard style recording, soft style and retention of the organization and individual knowledge) improves the performance of county governments.

Recommendations

This study recommends that County governments should develop proper strategies such as creating a suitable learning culture and facilitating innovativeness to encourage the acquisition of knowledge and skills. The study also recommends that the county governments should use appropriate technology for application of knowledge as well as incorporate knowledge into organizational processes, procedures, culture and identity, routines, policies, systems, and documents, as well as individuals to aid in the application of knowledge. Further, the study recommends that County governments should use hard and soft style recording to store knowledge since it enables easy retrieval and saves time. In addition, the study recommends that Kiambu County government should adopt patents, copyright and trademarks to protect their own intellectual property and stop others from copying their innovation without their consent. Moreover, patents, copyright and trademarks are effective tools to enhance performance as it provides organizations with competitive advantages that make it difficult for others to imitate.

Areas for Further Research

The study was limited to Kiambu County hence, the findings cannot be applied to other counties in Kenya. As a result, this study recommends that more studies should be done to determine how knowledge capabilities influence the performance of county governments in other counties in Kenya. Furthermore, the study discovered that knowledge acquisition capabilities, knowledge application capabilities, knowledge storage capabilities and knowledge protection capabilities can explain 81.9% of the performance of county governments. As such, more studies should to be conducted to examine other factors that influence the performance of county governments.

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