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INFLUENCE OF SUPPLY CHAIN MANAGEMENT PRACTICES ON PROCUREMENT PERFORMANCE OF COUNTY GOVERNMENT OF KAKAMEGA, KENYA

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ABSTRACT

Supply Chain Management practices is one of the most effective ways of securing competitive advantage and improving organizational performance both in the public and private sector. However, Supply Chain Management practice discourse has emerged in both public and private institutions in Kenya and across the world due to the malpractices and inefficiencies in the procurement process. The wanton plunder of public funds is not an isolated and unfortunate situation in Kenya alone but across the world. The main objective of the study was to assess the influence of supply chain management practices on procurement performance of County Government of Kakamega. The study aimed at determining the influence of supplier selection practices on procurement performance of County Government of Kakamega. The study was guided by the value chain, resource-based and stakeholder theories. The target population of the study was 58 employees of County Government of Kakamega, specifically; Chief Officers, Accountants and Procurement Officers. The study adopted the descriptive survey design. The study used a structured questionnaire as an instrument of data collection. Data collected was collated before being fed in the Statistical Packages for Social Sciences (SPSS) for processing and analysis. Presentation of the study findings was done using descriptive and inferential statistics. The study found that there was a moderate significant relationship between supplier selection practices and procurement performance of County Government of Kakamega. The study also found that supplier selection practices had positive and significant influence on procurement performance of County Government of Kakamega. However, routinely conducting supplier selection exercise for each procurement project was found to be tiresome and time consuming thereby reducing supply chain management function to a mere clerical work. The study therefore recommended that the government should enact legislations and policies to enable procuring entities to engage suppliers from the list of prequalified suppliers without subjecting them to another competitive process.

Key words: Supplier Selection Practices, Procurement Performance, Procuring Entity

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INTRODUCTION

Supply Chain Management (SCM) is one of the practices used to productively incorporate producers, manufacturers and stores in order to effectively convey merchandise to the right location, at the right time and quantity while minimizing costs (Britt, 2010). It is the management of materials and information flow in a supply chain, thus ensuring that customers' needs are satisfied while minimizing overall operating costs. Li et al. (2015) averred that there are five dimensions of SCM practices. namely; strategic supplier partnerships, customer relationships, information dissemination, information quality and internal lean practices.

Globally, a substantial number of scholars aver that Supply Chain Management is the management of all activities from raw materials suppliers so that the expectations of the users and the organizations are met or surpassed (Lyson & Farrington, 2016). In China, Lin (2014) states that even though the agriculture sector was regarded as a one of the mature sectors, there remained significant inefficiencies in on-farm resource management that present opportunities for environmental improvements through adoption of SCM practices.

In Africa, a number of countries have enacted legislations and advocated for the adoption of SCM practices in order to enhance their competitiveness not only in the regional trade but globally. Muogboh and Ojadi (2018) opines that it is a strategic competitive for organizations operating in Africa to understand SCM practices, challenges and enormous business opportunities in the continent.

In Kenya, public procurement is anchored and guided by the Constitution, the Public Procurement and Asset Disposal Act 2015, the Public Procurement and Asset Disposal Regulations 2020 and various policies issued by the National Treasury and the Public Procurement and Regulatory Authority. These legal frameworks emphasize on fairness, competitiveness, cost effectiveness, equity and transparency. These are the vital tenets of SCM practices that if effectively adopted would lead to

improved organizational performance. Barasa (2016) reveal that SCM practices such as supply chain collaboration, green supply chain management, information dissemination and customer relationship management significantly improved the procurement performance of steel manufacturing companies in Kenya.

In the recent past, procurement performance has been attracting great attention not only in Kenya but across the world. This has been aggravated by the widespread none-adherence to the SCM practices. Procurement performance provides the basis for an organization to assess how well it is progressing towards its predetermined objectives, and identify areas of strengths and weakness (Weele, 2006).

Supplier selection is a crucial process that addresses how organizations select strategic suppliers in order to enhance their competitive advantage. Over the years, the supplier selection process has evolved into a more complex process that not only considers price but also series of qualitative and quantitative factors vital for firms' survival and growth (Ho et al., 2010). The use of effective SCM practices is one of the valuable ways of securing competitive advantage and improving organizational performance. SCM practices are a set of invaluable activities undertaken effectively their organization to improve performance and meet their customers' needs. Due to the growing interest in SCM, various scholars have discoursed that SCM practices impacts organizations' performance both directly indirectly (Aseka, 2010).

There are seven indicators of supplier selection practices that should be considered when selecting suppliers, namely; supplier testing capability, scope of resources, technical expertise, industry knowledge, commitment to quality, suppliers process capability and commitment to continuous improvement in products and processes. The selected suppliers should be able to satisfy the needs of the buyer. In addition, in a partnership environment, the price of key materials and

services are often considered and negotiated when supplier selection. Further, the total cost of ownership that considers other aspects of acquisition and service delivery is also significant when establishing appropriate supplier selection criterion (Micheli, 2008).

Statement of the problem

Supply Chain Management practice discourse has emerged in both public and private institutions in Kenya and across the world due to the malpractices, mismanagement and inefficiencies in the procurement process. As a result, it has become a challenge to many organizations to implement and experience the impact of these practices (Chemoiywo, 2014). An exploratory survey by Katheo and Mwangangi, (2018) on Kenyan County Government performance indicates that 45% of the respondents had negative comments on the performance of County Governments in terms of service delivery. On average, the Kenyan public sector spends a significant percentage of their budgets on procurement (Auditor General Report, Financial Year 2017/2018). In Kenyan public sector, increased costs, untimely service delivery, delay in procurement of goods, works and services, poor quality goods, corruption and wastages of public funds have been the hallmark of wanton plunder of public resources. This notwithstanding, counties still receive billions for procurement budgets (Mihal, 2015). In the financial year 2014/2015, a number of county governments in Kenya incurred expenditure totaling Kshs 14 billions of procuring entities (Auditor General Report, Financial Year 2014/2015). SCM inefficiencies have been cited as one of the main causes of skyrocketing projects costs in the public sector. Though this is the case, there is still lack of agreement on whether it is the deviation from good practice that registers this inefficiency. One school of thought (Ebrahim & Mahamoud 2014) corroborates while Dalton and Canella 2003 and Kimani, 2013 dissent. It is against this backdrop that the study assessed the influence of supply chain management practices on procurement performance of County Government of Kakamega.

Objectives of the study

The general objective of the study was to examine the influence of supply chain management practices on procurement performance of county government of Kakamega. The specific objective was to assess the influence of supplier selection practices on procurement performance of County Government of Kakamega.

The study was guided by the hypothesis; H_{01} There exists no significant influence of supplier selection practices on procurement performance of County Government of Kakamega.

LITERATURE REVIEW

Value Chain Theory

It was developed by Michael Porter in 1985. In his book 'Competitive Advantage' (1985), he explains that a value chain is a collection of activities that are performed by a company to create value for its customers. Value creation creates added value which leads to competitive advantage. Ultimately, added value also creates a higher profitability for an organization. The theory was relevant to this study since it highlights activities that should be performed by an organization to create value for its customers. In this context, the organization is the County Government of Kakamega and the customers are residents of Kakamega County who expect value for their taxes through improved service delivery.

Resource-Based View Theory

It was developed by Barney (1991) and Wernerfelt (1984) who avers that a firm's competency is based on the efficient use of its resources. The theory states that the competitive advantage of a firm is rooted in its assets/resources that are valuable and inimitable. The theory was relevant to the study since employees of the county government of Kakamega have been bestowed with enormous resources that should be prudently used to ensure that the public get improved service delivery. On the other hand, the theory attests that employees who are hired based on their competence and skills

are assets to help organizations gain competitive advantage.

Stakeholder Theory

The theory stresses on the interconnected relationships between a business and its customers, suppliers, employees, investors and communities who have a stake in the organization. The theory argues that a firm should create value for all stakeholders, not just shareholders. In 1984, R. Edward Freeman detailed the Stakeholder Theory of organizational management and business ethics that addresses morals and values in managing an organization. The theory advocates for treating all stakeholders with fairness and honesty. In other words, how a firm treats its customers influences the attitudes and behavior of the firm's employees, and how a firm behaves towards the communities in which it operates influences the attitudes and behavior of its suppliers and customers and this affects its performance (Cording et al 2014). The theory was relevant to this study since the residents of Kakamega county are stakeholders who have bestowed upon employees of the county government of Kakamega with huge responsibilities of ensuring that their resources are prudently utilized. It also advocates for consultation and fair treatment of stakeholders by incorporating their views through public participation.

Empirical Review

Katheo and Mwangangi, (2018) conducted a study on the influence of supplier selection criteria on performance of Public Tertiary Training Institutions in Kenya. They adopted a descriptive research design and the study population comprised of all the 78 Public Tertiary Training Institutions in Kenya. The variables of the study included; financial evaluation, commercial evaluation, technical evaluation and quality management. A simple random sampling technique was adopted in the study and findings revealed that all the four variables, namely; financial evaluation, commercial evaluation, technical evaluation and quality management influenced the performance of Public Tertiary Training Institutions in Kenya. Krop and

Iravo (2016) also conducted a study on the effects supplier selection on performance procurement function in public sector using a case of County Government of West Pokot. The variables of the study included; value for money, quality of goods and services, process cost management and timely delivery. According to the findings, 80% of the respondents were of the opinion that value for money was important in supplier selection while 20% were of a contrary opinion. The study also revealed that 76% of the respondents agreed that quality of goods and services should be one of the vital consideration during supplier selection exercise, 24% disagreed.

Martin, Yusuf and Douglas (2014) conducted a study on determinants of supplier selection on performance of public institutions in Kenya using a case of County Government of Kakamega. A descriptive research design was adopted and the target population was procurement staff in the County Government of Kakamega. The study findings revealed that quality of supplies had a positive and significant association on performance of public institutions.

METHODOLOGY

The researcher adopted a descriptive research design in the study. According to Mugenda (2008) descriptive research design analyses the causeeffect relationship between two or more variables. The design was appropriate to the study since the study sought to establish a cause-effect relationship between the study supplier selection practices and procurement performance. The study was carried out at the County Government of Kakamega headquarters and it aimed at getting information from the staff who are involved in supply chain management activities. The target population was 58 employees drawn from eleven departments of County Government of Kakamega. The researcher collected primary data by use of a structured questionnaires which were distributed to the respondents. The respondents were assured of the confidentiality of the information collected. The researcher recruited research assistants who distributed the questionnaires using a drop and pick later method. This technique gave the respondents ample time to respond to at their convenience. The researcher used computer software Statistical Package for Social Scientists (SPSS) version 24 to conduct initial data analysis using simple descriptive statistical measures such as; minimum, maximum, mean, standard deviation and variance to give a glimpse of the general trend. Further examination was done using correlation analysis, regression analysis and multiple regression analysis to ascertain the nature of the relationship between

variables at a generally accepted significance level of p = 0.05.

FINDINGS AND DISCUSSIONS

Supplier Selection Practices on Procurement Performance

Descriptive analysis of the responses on supplier selection practices on procurement performance was done in the scale of 1-5 where 1= Strongly Disagreed (SD), 2 = Disagreed (D), 3 = Neutral, 4 = Agreed (A), and 5 = Strongly Agreed (SA). The summary of the responses was as tabulated in Table 1.

Table 1: Descriptive Statistics on Supplier Selection Practices

Description	N	SD (%)	D (%)	Neutral (%)	A (%)	SA (%)	Mean	S.D
Officers with relevant technical expertise are involved in the evaluation and selection of suppliers.	58	4 (6.9)	3 (5.2)	13 (22.4)	24 (41.4)	14 (24.1)	4.01	1.128
Past performance of suppliers is a key consideration in the selection of potential suppliers.	58	2 (3.4)	4 (6.9)	11 (19.0)	23 (39.7)	18 (31.0)	3.88	1.044
Financial capability is a critical criteria used when evaluating suppliers.	58	0 (0.0)	2 (3.4)	21 (36.2)	21 (36.2)	14 (24.1)	4.00	0.937
Suppliers with relevant certifications from government agencies exhibit a high level of performance.	58	1 (1.7)	2 (3.4)	12 (20.7)	27 (46.6)	16 (27.6)	3.98	0.887
Supplier selection practices leads to improved procurement performance.	58	2 (3.4)	2 (3.4)	19 (32.8)	20 (34.5)	15 (25.8)	4.02	1.031

The results in table 1 indicated that officers with relevant technical expertise are involved in the evaluation and selection of suppliers (mean = 4.01; Std dev = 1.128), past performance of suppliers is a key consideration in the selection of potential suppliers (mean = 3.88; Std dev = 1.044), financial capability is a critical criteria used when evaluating suppliers (mean = 4.00; Std dev = 0.937), suppliers with relevant certifications from government agencies exhibit a high level of performance (mean = 3.98; Std dev = 0.887) and supplier selection practices leads to improved procurement performance (mean = 4.02; Std dev = 1.031). These

findings concur with Micheli (2008) assertion that supplier selection practices, namely; supplier testing capability, scope of resources, technical expertise, industry knowledge, commitment to quality, suppliers process capability and commitment to continuous improvement in products and processes enhance performance of suppliers.

Procurement performance

Respondents were given statements on procurement performance and ask to state their level of agreement. The summary of their responses was as tabulated in Table 2.

Table 2: Descriptive Statistics on Procurement Performance

Description	N	SD	D	Neutral	Α	SA	Mean	S.D
		(%)	(%)	(%)	(%)	(%)		
Adoption of Supplier selection practices	58	2	1	26	17	12	3.62	0.952
results to timely delivery of services.		(3.4)	(1.7)	(44.8)	(29.3)	(20.7)		
Adoption of Supplier relationship practices	58	1	3	4	32	18	4.09	1.192
translate to cost reduction.		(1.7)	(5.2)	(6.9)	(55.2)	(31.0)		
Implementation of inventory control	58	2	3	8	26	19	3.98	1.192
practices results to reduction in wastages.		(3.4)	(5.2)	(13.8)	(44.8)	(32.8)		
Outsourcing practices lead to timely delivery	58	2	1	11	28	16	3.95	0.926
of services.		(3.4)	(1.7)	(19.0)	(48.3)	(27.6)		
Implementation of supply chain management	58	1	1	11	28	21	4.16	0.834
practices positively impact procurement		(1.7)	(1.7)	(19.0)	(48.3)	(36.2)		
performance								

Findings in Table 2 reveal that adoption of supplier selection practices results to timely delivery of services (mean = 3.62; Std dev = 0.592), adoption of supplier relationship practices translate to cost reduction (mean = 4.09; Std dev = 1.192), implementation of inventory control practices results to reduction in wastages (mean = 3.98; Std dev = 1.192), outsourcing practices lead to timely delivery of services (mean = 3.95; Std dev = 0.926) and implementation of supply chain management practices positively impact procurement performance (mean = 4.16; Std dev = 0.834). The findings agree with the sentiments of Aseka (2010) that the use of effective SCM practices is one of the valuable ways of securing competitive advantage and improving organizational performance. He avers that due to the growing interest in SCM, various scholars have discoursed that SCM practices impacts organizations' performance both directly or indirectly.

Correlation between supplier selection practices and procurement performance

The Pearson Correlation was done using a 2-tailed test, setting the significance value at 0.05. Values smaller than the significance value (0.05) were considered significant while those values greater than 0.05 were said to be insignificant. The findings indicate that there is a moderate positive significant relationship between supplier selection practices and procurement performance (r = 0.562, p-value = 0.013). This implied that implementation of supplier selection practices leads to an increase in procurement performance of County Government of Kakamega by 0.562. The p-value was 0.013 which shows that supplier selection practices are statistically significant since it is below the critical p-value of 0.05 at 95% confidence level.

Regression results of supplier selection practices and procurement performance

A simple regression analysis was conducted to determine the relationship between the variables and the results were shown in Table 3.

Table 3: Model summary of supplier selection practices and procurement performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.562ª	.315	.303	2.77841

a. Dependent Variable: procurement performance

b. Predictors: (Constant), supplier selection practices

From the Table 3, the R square value for the relationship between supplier selection practices and procurement performance was 0.315. This implies that 31.5% of the variation in procurement

performance of County Government of Kakamega could be attributed to changes in supplier selection practices.

Table 4: Coefficients for supplier selection practices and procurement performance

Model			ndardized fficients	Standardized Coefficients	Sig.	
		В	Std. Error	Beta		
1	(Constant)	10.038	1.955		5.135	.0459
	Supplier selection practices	.517	.102	.562	5.080	.035

- a. Dependent Variable: procurement performance
- b. b. Predictors: (Constant), supplier selection practices

From the Table 4, the findings showed that the procurement performance of County Government of Kakamega have an index of 10.038 when supplier selection practices are held constant. In addition, the beta coefficient was 0.517 which showed that a unit increase in supplier selection practices would result to a 0.517 increase in procurement performance of County Government of Kakamega. The relationship is significant as the p-value (0.035)

was less than the significance level (0.05). Based on the outcome of the regression model; $Y = \beta_0 + \beta_1 X_1 + \epsilon$ as shown in Table 4, the model thus became; $Y = 10.038 + 0.517X_1 + 1.955$. Therefore, the null hypothesis was rejected and the alternative hypothesis accepted.

Analysis of Variance

Analysis of variance was conducted and the result is shown in Table 5.

Table 5: ANOVA for supplier selection practices and procurement performance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	199.221	1	199.221	25.807	.000 ^b
	Residual	432.296	56	7.720		
	Total	631.517	57			

- a. Dependent Variable: procurement performance
- b. Predictors: (Constant), supplier selection practices

From the findings in Table 5, at 0.05 level of significance, the ANOVA test indicated that the independent variable namely; supplier selection practices are important in predicting procurement performance of County Government of Kakamega as indicated by significance value of 0.000 which is less than 0.05 level of significance (p = 0.000 < 0.05).

CONCLUSION AND RECOMMENDATIONS

The study concluded that supplier selection practices had positive and significant influence on procurement performance of County Government of Kakamega. The study also concluded that County

Government of Kakamega used technical expertise, past performance of suppliers, financial capability and relevant certification when selecting suppliers. The study further concluded that there was a moderate significant relationship between supplier selection practices and procurement performance of County Government of Kakamega.

The study found that supplier selection practices had positive and significant influence on procurement performance of County Government of Kakamega. However, routinely conducting supplier selection exercise for each procurement project was tiresome and time consuming thereby reducing supply chain management function to a

mere clerical work. The study therefore recommends that the government should enact legislations and policies to enable procuring entities to engage suppliers from the list of prequalified suppliers without subjecting them to another competitive process.

Suggestions for future study

The current research focused on County

- government of Kakamega, the study can also be done on a wider area by conductive a survey at selected county governments located in a specified geographical region.
- The relationship between supply chain determinants and organizational service delivery in public institutions in Kenya.

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