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EFFECT OF SUPPLIER FINANCIAL STABILITY ON PUBLIC PROCUREMENT PERFORMANCE. A CASE STUDY OF KEPHIS, KENYA

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ABSTRACT

Public procurement is essential in the delivery of government services yet it is affected by many constraints which impact performance. In spite of the many efforts by the government to improve the procurement system, a number of problems still face the system such as shoddy work, and lack of quality goods and services. Supplier rating has been proposed as cure of public procurement method. Despite its use in public procurement system in Kenya, a lot of complaints have been made by buyers regarding the capacity of suppliers. Therefore the main purpose of the study is to analyze the effect of supplier financial stability on public procurement performance. A descriptive research design was adopted, and the study is anchored on lean supplier competence model, the fuzzy set theory and the grey system theory. The study targeted a population of 102 employees of KEPHIS. Primary data was obtained using questionnaires, analysed using both descriptive and inferential statistics and presented in form of tables and graphs. The relationship between variables was determined using correlation coefficient and multilinear regression equation. Hypothesis was tested using ANOVA. A pilot study was done to establish the validity and reliability of the questionnaire. From the findings there was a statistically significant positive relationship between Supplier Financial Stability and the Public Procurement Performance (r=.684, p=0.000). The study concludes that the following factors which are considered by some organizations when selecting suppliers determine performance of procurement function; financial stability of suppliers. It can therefore be concluded that financial stability of suppliers affects supplier rating. KEPHIS should undertake financial stability appraisal of suppliers in depth and detail before awarding them contracts for supply of various goods or services. The researcher suggests that a study be carried out by other scholars to establish other determinants of procurement function performance in other sectors.

Keywords: *Supplier Financial Stability, Public Procurement Performance*

INTRODUCTION

The success of supply chain management has been massively associated with an improvement in competitiveness. Its contribution to the sustenance of competitive advantage is embedded in the relative performance concept measured through a performance comparison with competitors. To

gain and sustain competitive advantage, many public and private companies have now centered their efforts to improve supply chain performance by making them more effective and efficient (Hughes & Wadd, 2012).

Because of the benefits associated with successful supply chain management, a need exists on the need to manage supply chain risks, which more often are the result of internal and external forces of the organization's supply chain. Many of these efforts have stressed on the facilitation of supplier evaluation and relationship management. Organizations have developed several approaches for the identification, assessment analysis and treatment of areas that are vulnerable to supply chain risks as part of their supply risk management (Zheng & Ling, 2013).

Global competition has forced organizations to rely heavily on the success in the process of selecting suppliers. A lack of coordination and errors in such a process causes delays and poor customer services. Because of its profound effect on reduction of costs, on profitability and business flexibility, decisions made by the purchasing department of a business have a substantial effect on the efficiency and effectiveness of the business (Chan & Kumar, 2014). Nadir (2012) stated that supplier rating is an instrument used by firms to understand the performance of suppliers to separate those who are performing from those not performing.

To survive in the present competitive African market and satisfy customer needs, the only option left to companies is to offer goods and services of a superior quality. The production of such quality in turn requires the companies to select the best suppliers for their products. The result of this is that global firms spend much time and effort in evaluating and selecting the "right" suppliers. The unit tasked with decision-making therefore uses a variety of supplier selection models in guiding them through the decision-making process. Managers hence devote a large percentage of resources to supplier evaluation more so in developed economies (Medlin, 2013).

In Kenya, approximately 60% of the revenue from the government is allocated to procurement. The government is a key purchaser of goods and services in the nation. Procurement by the government is done through a number of public institutions located all over the country. Because of this, the government has instituted a number of policies and requirements to be followed when directing public procurement (Mukabi, 2014). The constitution of Kenya, (2010) has made a number of provisions related to public procurement as a procedure quoted in article 227. The Public Procurement and Asset Disposal 2015, was instituted to streamline and accelerate operations of public institutions by ensuring that procurement procedures are transparent, promote accountability and minimize the wastage of resources, because public institutions have a substantial role in the creation of value, job opportunities, demand for goods and services and contribute to the nation's wealth.

Statement of the Problem

Public procurement is vital to government service delivery, yet its performance is affected by a number of limitations (World Bank, 2018). The perception towards procurement is that of being prone to corruption; with occasional wastage and influencing quality of service and life (Handfield, 2017). Therefore a need arises to reverse this negative trend and improve public confidence. In spite of much effort by the Government to rectify the procurement system, it is still affected by inferior works, and low quality of goods and services. A lack of proper implementation of acceptable performance standards makes operations costly, causes incoordination of business activities, results in the inaptitude to meet domestic policy goals, and fails in attracting and retaining professionals. Suppliers usually make complaints regarding the capacity of buyers from the public sector (Handfield, 2017).

The existing research on supplier appraisal and procurement performance has only concentrated on pre-tender supplier evaluation with non-attempting to determine the role of vendor rating on procurement performance in the public sector. Therefore, with procurement inefficiencies reported in the public sector and lack of existing studies on vendor rating. The existing research on supplier appraisal and procurement performance has only concentrated on pre-tender supplier evaluation with non-attempting to determine the role of vendor rating on procurement performance in the public sector. To fill this gap, the study therefore sought to assess the effect of supplier financial stability on public procurement performance.

Purpose of the study

To evaluate the effect of supplier financial stability on public procurement performance.

Research Hypothesis

H_{01} Supplier financial stability does not significantly influence public procurement performance.

The Lean Supplier Competence Model

This model by Marks (2007), rates suppliers based on five categories supporting the Lean Kaizen techniques– continuous improvement. The model the interaction of organizations in the five competency areas in which varied degrees of performance are available to help in the ultimate achievement of lean operations. Every section is subdivided into certain "behaviors" or means by which the interaction between the company and the supplier is conducted. The rating for the suppliers range from a"1" as "Less Lean" to a "5" rating as "More Lean."

The five areas and `specified behaviors' required of suppliers for evaluation include quality (specified parts, reliable and consistent, preventive and maintenance predictability procedures for corrective action); delivery (lead times, performance, supplier location); financials (buyer's quality cost, supplier's quality cost, infrastructure and stability of supplier, quantity required by buyer); operational excellence (vision, mission, benchmarking, company culture of supplier, waste management by supplier); general measures of performance (training, designs, support services, capacity, reporting) (Marks, 2007). These measures allow companies to determine business placement on the basis of similar values and goals. While utilizing this model, as the company principles and that of the supplier interlink in eliminating waste, it will reduce costs to the supply chain thereby reducing costs to the final consumer (Xu, 2007).

The theory is linked to the predictor variable. The theory states that such factors are crucial in the rating of suppliers. The relevance of the theory to supplier rating is that it advocates for teamwork. It is much more critical to organizations with the intent to formulate lasting supplier relationship and those with the aim of building strategic partnership with suppliers.

Conceptual Framework

The Figure 1 below shows a conceptual framework on the relationship between supply chain accessibility and the dependent variable, organizational performance.

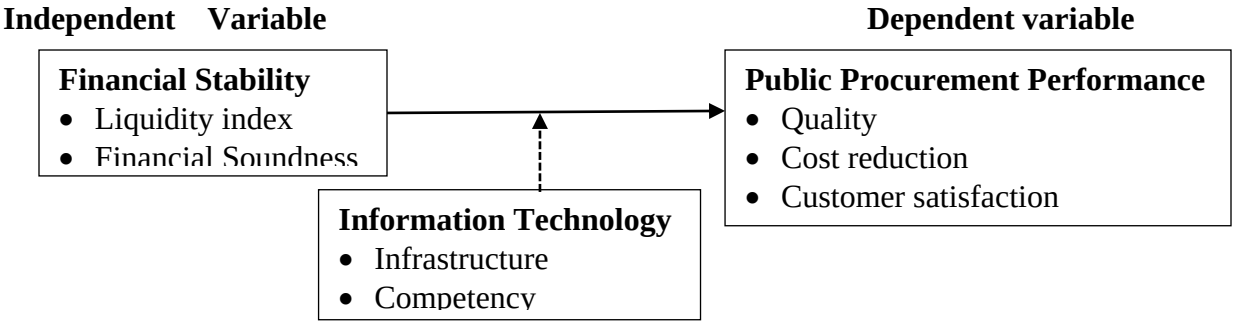

Figure 1: Conceptual Framework

METHODOLOGY

The study employed a descriptive study design. The design is proper because it enable the researcher to break down associations among a substantial number of study factors. It also permits the analyst to break down a number of variables either independently or a combination affecting a specified phenomenon being investigated. A case study is more appropriate since it will allow the researcher to concentrate on a single unit KEPHIS and conduct a study on the effect of supplier rating on supply chain performance at KEPHIS. The 102 employees from KEPHIS formed the target population. Since the population is relatively small, sampling was not done hence, the study was a census of all employees from these departments. The main data for this research was gathered via the use of questionnaires. The Collected data was subjected to an analysis using both descriptive and the inferential statistics. SPSS version 24 was useful in this analysis. The researcher quantitatively presents the findings in form of tables.

FINDINGS

Response Rate

Out of 102 surveys that were given, 90 of them were filled and returned of which 10 were erroneously filled and along these lines were not utilized in the final analysis. Along these lines, 80 were accurately filled and henceforth were utilized for analysis thus a response rate of 78.4%.

Descriptive Statistics

Supplier financial stability on public procurement performance

The initial goal of this research was to evaluate the effect of supplier financial stability on public procurement performance.

Table 1: Supplier financial stability on public procurement performance

Supplier financial stability	SD	D	NS	A	SA	M	SD
Before a procurement contract is granted to a supplier, the financial accounts of the supplier are reviewed.	8.5%	10.5%	3.9%	43.8%	33.3%	2.2	1.2
When it comes to CRB, suppliers with clean records are scrutinized before being granted a procurement contract.	2.0%	15.7%	3.9%	35.9%	42.5%	4.0	1.1
Before a procurement contract is granted to a supplier, the KRA returns of the supplier are assessed.	47.1%	37.3%	3.3%	5.2%	7.2%	1.9	1.2
Supplier prices are on average within the market rate	49.7%	38.6%	2.6%	4.6%	4.6%	1.8	1.0
When assessing the financial soundness of a supplier, the appropriate	4.6%	5.9%	6.5%	44.4%	38.6%	1.9	1.0

precautions are taken.

Source: Field Data (2021)

With a mean score of 2.2 and a standard deviation of 1.2, Table 1 demonstrated that the majority of respondents agreed that before a procurement contract is granted to a supplier, the financial accounts of the supplier are reviewed. Most of those polled agreed that when it comes to CRB, suppliers with clean records are scrutinized before being granted a procurement contract, with a mean score of 4.0 and standard deviation of 1.1 suggesting that CRB status of suppliers was considered in the organization.

The results also showed that majority of the respondents disagreed that before a procurement contract is granted to a supplier, the KRA returns of the supplier are assessed with mean score for place is 1.9 and standard deviation is 1.3 implying that the organization may necessary not be involved in the KRA returns of suppliers. Further, respondents disagreed that supplier prices are on average within the market rate with mean score for place is 1.8 and standard deviation is 1.0. The study established that majority of the respondents agreed that the when assessing the financial soundness of a supplier, the appropriate precautions are taken with mean score for place is 1.9 and standard deviation is 1.0 implying that the financial capability of a supplier was a great determinant in supplier selection.

Regression Analysis

This section contains inferential analysis for supplier financial stability, Financial Soundness, Liquidity index, information technology and public procurement performance as the dependent variable. Model fitness, ANOVA tests, and regression coefficients are examples of inferential statistics covered in this section. The findings reported in Table 2 demonstrate the suitability of the regression model that was employed to describe the occurrences under investigation.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.898[a]	.806	.801	.1.9758

a. Predictors: (Constant),
b. financial stability, Financial Soundness, Liquidity index, information technology

Source: Field Data (2021)

Adjusted R2 which is termed as the coefficient of determination tells us how changes in performance of the procurement function varied with financial stability, Financial Soundness, Liquidity index, and information technology. According to the findings in table above, the value of adjusted R2 is 0.801. This implies that, there was a variation of 80.1 % of performance of the procurement function varied with financial stability, Financial Soundness, Liquidity index, and information technology at a confidence level of 95%. The R squared (R2) value of 0.806 shows that 80.6% of procurement function performance is explained by financial stability, Financial Soundness, Liquidity index, and information technology. The remaining 19.4% is explained by other strategies put in place by the procurement function to enhance its performance. R is the correlation coefficient which shows that there is a strong correlation between the study variables as shown by the correlation coefficient of 0.898.

The findings of the ANOVA are shown in Table 3.

Table 3: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.488	6	0.372	3.131	.048[b]
	Residual	16.121	50	0.329		
	Total	17.609	56			

a. Dependent Variable: public procurement performance
b. Predictors: financial stability, Financial Soundness, Liquidity index, information technology
Source: Field Data (2021)

From the statistics in table above, the processed data, which is the population parameters, had a significance level of 4.8% which shows that the data is ideal for making a conclusion on the population's parameter as the value of significance (p-value) is less than 0.05. The F critical at 5% level of significance was 3.131.Since F calculated is greater than the F critical (Value = 2.021), this shows that the overall model was significant.

Table 4: Regression of coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.833	.172		4.847	.000
supplier financial stability (X_1)	.643	.082	.586	7.835	.694
Financial Soundness (X_2)	.232	.083	.246	2.806	.001
Liquidity index (X_3)	.162	.063	.223	2.583	.000
information technology(X_4)	.142	.082	.132	1.793	.438

a. Dependent Variable: public procurement performance

Source: Field Data (2021)

From the finding in table the established regression equation is;

$Y = 0.833 + 0.643X_1 + 0.232\ X_2 + 0.162X_3 + 0.142\ X_4$

From the above regression model, holding supplier financial stability, Financial Soundness, Liquidity index, information technology and constant, public procurement performance would be at 0.833. It was established that a unit increase in supplier financial stability would cause an increase in performance of the procurement function by a factor of 0.643, a unit increase in Financial Soundness would lead to increase in performance of the procurement function by a factor of 0.232, also a unit increase in Liquidity index would cause an increase in performance of the procurement function by factor of 0.162, further unit increase in information technology would cause an increase in performance of the procurement function by factor of 0.142. The beta values show the degree to which each predictor variable affects the outcomes when all other predictor variables are held constant. We can therefore conclude that supplier financial stability, Financial Soundness, Liquidity index, and information technology have an effect on performance of procurement function.

This data can be interpreted to mean that by dealing with suppliers whose financial stability has been established to be strong and growing stronger, performance of the procurement function will be improved. It is therefore worthwhile to spend time and other resources seeking to establish the level of financial stability of suppliers before awarding the contracts, especially those involving critical items or call for a significant capital outlay.

Hypotheses Testing

Hypothesis testing is the technique utilized for choosing whether sample data offer such help for a hypothesis that speculation can be made. It empowers us to make likelihood proclamations about populace parameter(s). For motivations behind this study, hypothesis was conveyed at 5% criticalness level utilizing p-values. The study attempted to test the legitimacy of the principal

hypothesis of the study which expressed: H01: Supplier financial stability does not significantly influence public procurement performance, since the p-values (.694>.05). Therefore the null hypotheses were accepted.

Discussion of Findings

Research findings in this study have shown that financial stability of suppliers indeed affects performance of procurement function to a very great extent. Financial stability of suppliers is therefore a key supplier related factor that requires to be looked into when evaluating suppliers before awarding them with contracts as it affects the way procurement function executes its duties. These findings are in line with those of Martin, & Milas, (2010) who found out that financial stability of suppliers have a significant effect on performance of procurement function. The literature review analyzed in the study show that analysis of financial stability of suppliers helps in determining the level of risk it would present if a significant contract is awarded to a given supplier. A supplier who has been evaluated and found to be financially stable would not hinder supplier even if payments were delayed. As such, performance of procurement function will not be affected as far as timely deliveries are concerned.

Conclusion

The conclusion of this study is that supplier rating affect performance of procurement function. The study concludes that the following factors which are considered by some organizations when selecting suppliers determine performance of procurement function; financial stability of suppliers, technical competency of suppliers, ethics of suppliers and information technology of suppliers. It is evident from the research study that financial stability of suppliers affects supplier rating on supply chain performance at KEPHIS to a very great extent. It can therefore be concluded that financial stability of suppliers affects supplier rating.

Recommendations

KEPHIS should undertake financial stability appraisal of suppliers in depth and detail before awarding them contracts for supply of various goods or services. By having an in-depth analysis of financial aspects such as turnover of suppliers, possibility of takeover or merger, capacity to fulfill orders and provision of credit terms among others, the company will be able to establish the financial stability of suppliers they are to do business with. Ultimately, performance of the procurement function will be improved.

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