

ROLE OF SUPPLIER EVALUATION CRITERIA ON SUPPLY CHAIN PERFORMANCE IN KENYA: A CASE OF AUDITOR-GENERAL'S OFFICE

¹ATIENO MILDRED, ²DR. SAMSON NYANG'AU PAUL

Abstract: Selecting and maintaining competent suppliers is very essential in procurement. However, many factors affect a firm's ability to choose the right supplier. Less has been done to investigate the Role of supplier evaluation criteria on Supply chain performance in Kenya, particularly in Office of the Auditor-General. This study was undertaken with the main objective of assessing the Role of Supplier evaluation criteria on Supply Chain Performance in Kenya with reference to Office of the Auditor-General. The study was guided by four variables; supplier technical capability, supplier finances, quality management and lead-time. A structured questionnaire was used to collect information on the role of supplier evaluation criteria on supply chain performance in Kenya with reference to Office of the Auditor-General.

Keywords: Supplier Evaluation, Evaluation Criteria, Supply Chain and Supply Chain Performance.

1. INTRODUCTION

Supplier evaluation is a significant process for any organization because on average, products that are purchased account for between forty and sixty percent of sales of end products (Chartered Institute of Procurement and Supply). This directly influence the quality and cost of purchased products; a small gain in cost due to supplier selection has significant benefits for organizations. Supplier evaluation is one of the activities executed by procurement staff and one whose effective execution determines the success or failure in the procurement performance. Purchases from suppliers account for more than half of total costs for most companies and in some industries, such as electronics, telecommunications, construction, and automotive, this portion is normally substantially higher (Gadde & Håkansson, 2001).

Statement of the problem:

The purpose was to assess the Role of Supplier Evaluation Criteria on supply chain performance in Kenya with reference to Office of the Auditor-General. The basic supplier selection tool has traditionally been the competitive bid and suppliers have been selected on the basis of the competition of their offer. However, there are more and more situations in which competitive bidding is not sufficient. This is the case whenever close relations have to be established with suppliers. Buyers must then proceed to a comprehensive evaluation of their potential suppliers and need to assess their overall capabilities as much as their ability to fulfill specific needs. In order to satisfy the emerging demand for a reservoir or panel of dependable suppliers, accessible at all time as specific needs arise, the supplier selection process must comprise two distinct activities. First is a continuous activity of supplier qualification in which suppliers are evaluated on the basis of their capabilities and secondly is a discrete activity of supplier selection triggered by specific needs and in which suppliers are evaluated on the basis of their offer and capabilities. It is important to bear in mind that generally speaking the construction of a panel of qualified suppliers entails significant expenses that might be justified only for critical purchase segments (Aseka, 2010).

Several studies have been undertaken on supplier selection and evaluation. Završnik (1998) established that purchasing management has a significant bearing on the profitability and performance of organizations and their overall competitiveness. According to Agaba and Shipman (2006), negative procurement practices are manifested in wrong computation of costs by evaluation teams, shoddy commodities and goods, poor performance of construction works, failure to complete performance of contracts on time or not at all. According to Schiele (2007), extensive supplier audits significantly influence a firm's performance level. Effective procurement promises to cut operational costs all across the supply chain, but it also raises the expectations of buyers posing a challenge for buyer satisfaction and supply chain performance. Weber, Current, and Benton (1991) in their study showed that assessment of a supplier's willingness and ability to share information significantly affects performance. However, less has been done in developing countries as these studies were majorly done in the developed countries. There is clear evidence of prolonged inefficiency, financial mismanagement, waste and malpractices among these, lack of procurement ethics in many Kenyan corporations and parastatals (Aseka, 2010). Government demands high procurement performance, efficiency and reduced cost in respect of supply and service cost to be reduced and one of the ways is supplier evaluation and hence, the importance of vigorously supplier evaluation.

A number of studies have been done in the area of procurement in Kenyan context. For instance Ondieki (2000) in his study recommended that manufacturing firms should borrow a leaf from those that have successful proactive procurement functions in place. However, the study did not show the benefits firms stand to gain by adopting proactive procurement practices. Kakwezi and Sony (2010) illustrated that procurement planning is an ingredient to service delivery, but the study focused on service delivery ignoring other measures of procurement like financial gains from cost reduction. On the other hand Nantage (2011) asserts that strategic procurement management has a direct impact on the financial performance of financial Banks.

However, despite there being numerous studies done in the developed countries, limited research has been done on the Role of supplier evaluation Criteria on Supply Chain performance in Kenya. The previous studies by Nantage (2011), Kakwezi and Sony (2010) on supplier evaluation did not consider the variables discussed in this study which include supplier finances, supplier technical capability, quality management and lead time. Therefore, this study was undertaken to fill this existing research gaps by establishing the Role of supplier evaluation on supply chain performance in Kenya with reference to Office of the Auditor-General

Objectives:

- i. To find out the role of quality management in supply chain performance
- ii. To establish how supplier's financial capability affects supplier evaluation criteria and supply chain performance.
- iii. To establish effect of lead time on supplier evaluation criteria and supply chain performance
- iv. To determine the effect of supplier's technical capability on supplier evaluation criteria and supply chain performance

2. THEORETICAL REVIEW

Goal Setting Theory:

Goal setting involves the conscious process of establishing levels of performance in order to obtain desirable outcomes. This theory suggests that the individual goals established by an organization play an important role in motivating its superior performance. Goal setting involves the conscious process of establishing levels of performance in order to obtain desirable outcomes. This goal setting theory simply states that the source of motivation is the desire and intention to reach a goal (PSU, 2014). If individuals or teams find that their current performance is not achieving desired goals, they typically become motivated to increase effort or change their strategy, Locke, & Latham, (2002). Goal setting involves the conscious process of establishing levels of performance in order to obtain desirable outcomes.

Expectancy Theory:

Expectancy theory is about the mental processes regarding choice. It explains the processes that an individual undergoes to make choices. It is based on the hypothesis that individuals adjust their behavior in the organization on the basis of anticipated satisfaction of valued goals set by them. Expectancy is the belief that increased effort will lead to increased performance. The individuals modify their behavior in such a way which is most likely to lead them to attain these goals. This theory underlies the concept of performance management as it is believed that performance is influenced by the expectations concerning future events Salaman et al, (2005).

Path Dependency Theory:

Path dependency explains the continued use of a product or practice based on historical preference or use. This is true even if newer, more efficient products or practices are available due to the previous commitments made. Path dependency occurs because it is often easier or more cost effective to simply continue along an already set path than to create an entirely new one.

Institutional Theory:

This is a theory on the deeper and more resilient aspects of social structure. It considers the processes by which structures, including schemes, rules, norms, and routines, become established as authoritative guidelines for social behavior. Different components of institutional theory explain how these elements are created, diffused, adopted, and adapted over space and time; and how they fall into decline and disuse. This theory postulates that in an organization, the supplier selection and evaluation team's efforts to achieve procurement performance in the organization will be required to make realistic goals.

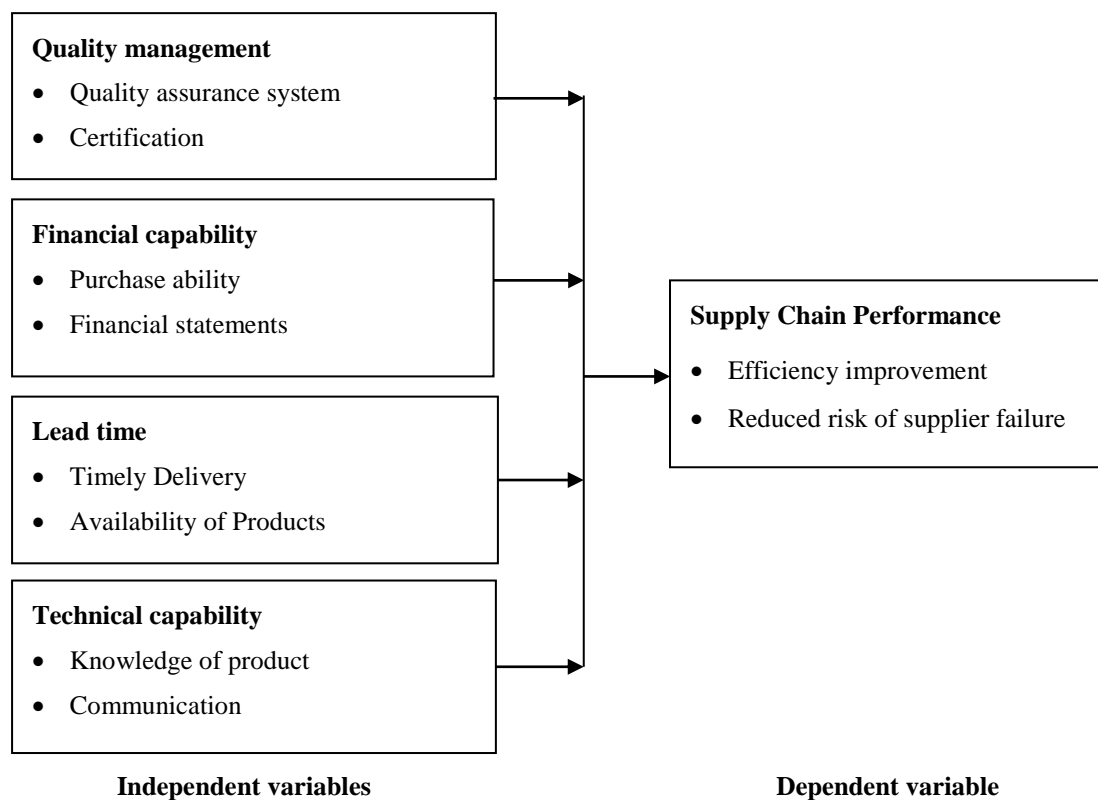
Conceptual Framework:

Figure 2.1: Conceptual framework

Research gaps:

The literature review explained various efforts that have been undertaken to address the Role of Supplier Evaluation Criteria on Supply Chain performance in Kenya with reference to OAG. However, past activities have not yet managed to deliver the requirements of sound Supplier Evaluation Criteria. This has been contributed by existence of various gaps that have not been closed by major past activities and hence supplier evaluation criteria has been dominated by many challenges. Various researchers have adequately described the need for Supplier evaluation in government procurement with most of the research focusing on methods of enhancing Supplier Appraisal. There has been no attempt by scholars to assess the Role of Supplier Evaluation Criteria on Supply Chain Performance. The study therefore, aimed at bridging the gap by assessing the Role of Supplier Evaluation Criteria on Supply Chain Performance in Kenya with reference to OAG.

3. RESEARCH METHODOLOGY

The research design used in this study was descriptive research design. The target population for the study included procurement officers, purchasing officers and staff from other user departments that directly relates with procurement department in sourcing process. Out the approximate 1080 employees, the departments involved had an approximate of 187 employees at the headquarters. This study targeted a sample size of 53 respondents. The study used structured questionnaires in order to collect data. The researcher edited the completed questionnaires for completeness and consistency and data clean-up will followed. The data was then analyzed using descriptive statistics. The descriptive statistical tool (SPSS) was used by the researcher to describe the data.

Model:

Analysis of data used multiple regressions to test the research questions

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

Where, Y=Dependent variable and X1, X2, X3 and X4 are the four independent variables,

Y= Supplier Evaluation Criteria,

β_0 =Constant of Regression,

X1= Quality management

X2= Financial capability,

X3 = Lead time,

X4 = Technical capability

ε = Error of Regression

4. REGRESSION RESULTS

Coefficients of Regression Model:

Table 4.1: Significance of Independent Variables

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	T	Sig
1	(Constant)	010	0.26		0.401	0.000
	Quality of services	0.211	0.590	0.178	0.357	0.012
	Financial capability	0.144	0.81	0.311	1.777	0.002
	Lead time	0.203	0.008	0.88	0.435	0.000
	Technical capability	0.12	0.14	-0.232	-866	0.000

The coefficients in Table 4.1 answer the regression equation relating the depended and the independent variables. Testing the significance of the coefficients at 95% significance level, the table indicates that all the variables had a significance value less than 0.05 thus confirming the significance of the results. Also, from the table, all the variables indicated a positive coefficient indicating a positive relationship between the dependent and independent variables. Based on these coefficients, the regression model therefore becomes;

$$\text{Supply Chain Performance} = 0.010 + 0.211 Cr1 + 0.144 Cr2 + 0.203 + 0.012Cr4$$

As per Table 4.1, the equation ($Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$) becomes:

$$Y = 0.010 + 0.211 + 0.144 + 0.203 + 0.012$$

5. CONCLUSION

The study concluded that suppliers' finances and quality management, lead time and technical capability of suppliers played a role on supply chain performance in OAG-Kenya. The regression model of the study showed that suppliers' finance had a significant role on supply chain performance. This implied that increasing levels of suppliers' finance by a unit would conversely increase the levels of supply chain performance by an equal measure. The study further concludes that organizations in Kenya need to employ several criteria in supplier evaluation processes. Finally, the study concluded that there is a positive and significant relationship between supplier evaluation criteria and supply chain performance in OAG-Kenya. The positive relationship shows that the choice of the evaluation criteria will determine the performance of the supply chain in Kenya. Thus, increasing efficiency in supplier evaluation criteria will result to increased supply chain performance.

6. RECOMMENDATION

It is recommended that quality oriented product designing, investigation of defects at the source, immediate defects screening on occurrence and inspection of raw materials should be implemented in the operations to improve supply chain performance. Furthermore, the study recommends that the firms should consider supplier financial capability, return on assets, the profitability and the relationship between supplier's gross and net profits and turnover of the supplier during supplier evaluation in the organization as a measure to improve the procurement performance. The study also recommends that procurement managers need to be aware of their supply chain technology preferences and provide the tools and equipment to the suppliers and staff so that they can be more motivated. Finally, the study recommends that procurement managers need to establish a highly co-operative team in which competent specialist staff and suppliers are procured.

Suggestions for Further Research:

There is need for further studies to be undertaken covering other organizations in Kenya to study the effectiveness of the procurement systems as well as the supplier selection and evaluation criteria used. A study also need to be undertaken to evaluate the best practices that effectively lead to best performance in the procurement performance in all public sector organizations in Kenya. Also, a study should be undertaken to investigate the supplier evaluation criteria and procurement performance of the county governments in the devolved system of government.

REFERENCES

- [1] Achuora, J., Arasa, R., & Ochiri, G. (2012). Precursors to effectiveness of public procurement audits for Constituency Development Funds (CDF) in Kenya. *European Scientific Journal*, 8(25) 198-214.
- [2] Agaba, E. & Shipman, N. (2006) public procurement reform in developing countries. The Ugandan experience in piga.
- [3] Araz, C., & Ozkarahan, I. (2007). Supplier evaluation and management system for strategic sourcing based on a new multi criteria sorting procedure. *International journal of production economics*, 106(2), 585-606.
- [4] Aseka, J. (2010). Supplier selection criteria and performance of manufacturing firms listed in the Nairobi Stock Exchange. Nairobi, Kenya: Unpublished MBA project, University of Nairobi.
- [5] Bai, C., & Sarkis, J. (2009) Supplier Selection and Sustainability: a Grey rough Set evaluation. Working paper No. 2009 -05.
- [6] Blome, C., Hollos, D. & Paulraj, A. (2013). Green procurement and green supplier development: antecedents and effects on supplier performance. *International Journal of Production Research*, 52(1), pp 32-49..
- [7] Chemoiwo, P.K. (2014). Public procurement procedures and supply chain performance In state corporations in Kenya. Unpublished MBA project, University of Nairobi.
- [8] Chen, Y. J. (2011). Structured methodology for supplier selection and evaluation in a supply chain. *Information Sciences*, 181(9), 1651-1670.

- [9] Chimwani, B. I., Iravo, M.A., & Tirimba, O.I. (2014). Factors influencing procurement performance in the Kenyan Public Sector: Case study of the State Law Office. *International Journal of Innovation and Applied Studies*, 9(4): 1626-1650.
- [10] Cooper, D. R., & Schindler, P.J. (2003). *Business Research Methods* (8th edition). New Delhi: McGraw-Hill Inc.
- [11] Deyrup, M. (2013). *Successful strategies for teaching undergraduate research*. Lanham: Scarecrow Press, Inc.
- [12] Engelbert, A., Reit, N., & Westen, L. (2012). Procurement Methods in Kenya - A Step towards Transparency? *European Procurement & Public Private Partnership Law Review*, 7(3) 162-171.
- [13] Gordon, S. R. (2008). *Supplier evaluation and performance excellence: a guide to meaningful metrics and successful results*. Ft. Lauderdale, FL, J. Ross Pub.
- [14] Hald, K.S., & Ellegaard, C. (2011). Supplier evaluation processes: the shaping and reshaping of supplier performance. *International Journal of Operations & Production Management*, 31(8) 888-910.
- [15] Herbling, D. (2014). How UK sleuths unearthed Kenya 'Chickengate' scandal. [Online] Businessdailyafrica.com.
- [16] Ismail, S., Wario, G. and Amuhaya, M. (2014). Effects of Buyer/ Supplier Collaboration on E-Procurement Performance in State Corporations in Kenya. 1sted. Geneva: *European Journal of Management Sciences and Economics*, p. *European Journal of Management Sciences and Economics*.