

Strategic Sourcing as a Tool for Improving Firm's Performance

¹Catherine W. Munyi (PhD Student), ²Gregory S. Namusonge, ³Alice Simiyu

^{1,3}Department of Procurement and Logistics, Jomo Kenyatta University of Agriculture and Technology, Kenya

²School of Entrepreneurship, Procurement and Management, Jomo Kenyatta University of Agriculture and Technology, Kenya

Abstract: Purpose The purpose of this paper is to investigate effectiveness of strategic sourcing for improving firm's performance. Design/Methodology/Approach A cross-sectional approach was adopted with primary data collected. The data yielded a response rate of 375 from electricity firms in Kenya. The data collected were put through rigorous statistical analysis to test content validity as well as reliability. Further, simple linear regression model was used to test relationships between strategic sourcing and firm's performance. Findings The finding suggests that a successful implementation of strategic sourcing improves firm's performance through adoption of multiple sourcing strategies as well as maintaining manageable supply base. Further, the paper reveals that wrong choice of suppliers can negatively compromise the quality of products and services of the firm. Research limitations/implications Strategic sourcing is complex and very sensitive issue. While the study show the effect is generally accepted strategic sourcing strategies for improving firm's performance, not all strategic sourcing strategies are covered in the study. Also, the study can be carried on in other sector in order refine the study findings. Originality/Value The study provides an empirical analysis on the strategic sourcing strategies and their effect on firm's performance. Again the study seeks to provide a research agenda which meets the needs of today's business sourcing requirements.

Keywords: Strategic sourcing, Performance of electricity firms in Kenya, Simple regression, Reliability

1 Introduction

Today markets have become very dynamic and customers are demanding move variety, better quality, cheap prices, higher reliability, highly responsiveness and faster delivery of goods and services. Thus, for firms to remain relevant and competitive move favorably in the markets, they should compete as webs of partnering rather than as a single independent entity (Chopra & Meindl, 2003). Equally Petronic (2007) established that firms that are to practice supply chain management, they are able to link their activities with various suppliers, distributors, retailers and customers. Also, supply chains are perceived to link business globally undertakings such as upstream (procurement of raw materials and components) to downstream through distributors, wholesalers, retailers and eventually consumers (Wenfency, 2011).

Hong (2006) noted that for the formation of successful supply chains, firms are required to select the most competitive partners in order to match their requirements. Therefore, to lower expenses, increase efficiency, boost firm's performance and firms should embrace strategic sourcing strategies globally (Zhengjia, 2008). Strategic sourcing is defined as a long term way of searching markets, for potential input sources, securing the continuity of these sources, searching for alternative sources and keeping the relevant knowledge updated (Vollman, Berry,

Whybark, 2004). The sourcing strategy is characterized with establishing supplier base, selecting suppliers and the quantity of goods to be ordered from each supplier selected (Burke, 2005).

Despite the significant advancement of research in strategic sourcing, till to date there is limited research conducted in strategic sourcing in developing countries such as Kenya. The economy of Kenya is the largest in East African countries and largest in purchasing power and thus Kenya has to catch up with middle and developed countries and one of the key are is energy sector. This sector can propel the rest of sectors in the economy if well managed. Till to date energy sector in Kenya has been performing poorly such as high frequent outages and power disruptions risks, high cost of power generation and consumption per customer is decreasing. Hence electricity firms must not only become increase advance in their manufacturing processes, but also adopt world class strategic sourcing strategies. Existing literature point out that strategic sourcing would enable firm to realize their goals in terms of supply, cost reduction, high competitiveness and increase the quality of the product and services (Rendon, 2005) which is becoming an essential perquisite to stay afloat in the market and grow profitable. In spite of the key role of strategic sourcing, scanty scholars' investigation has been conducted in Kenya (Chepngetich, Waiganjo and Karai 2016; Kihanya, Wafula, Onditi, and Munene, 2015; Nyabuto, 2016) whose main focus was a case study of Kenya Power and Lighting Company. Thus it is necessary to identify the strategic sourcing requirements and strategies applicable in electricity firms in Kenya. This would enable the firms to identify and direct their focus on areas that require to be improved.

This paper is structured in the following ways. In section 2, we present how strategic sourcing interacts with the firm's performance from the literature reviewed. Section 3, discusses research methodology. Section 4, statistical analysis of data collected and section 5 presents the conclusions both discussion and implications.

2. Literature Review

2.1 Strategic Sourcing

Strategic sourcing it deals with searching of markets for potential input sources, searching for alternative sources and keeping the relevant knowledge up to date (Vollman, Berry, & Whybark, 2004). Equally, Burke (2005) established that a successful firms sourcing strategy should be characterized by three key interrelated decisions which includes, criteria for establishing a supplier base; criteria for selecting suppliers who will receive an order from the firm; and the quantity of goods to order from each supplier selected. Sourcing is regarded as complex exercise especially when dealing with unique raw materials, ingredients, parts, components, connectors, apparatus, products, equipment, supplies, and services increase and the numbers of buyers involved in the decisions expand (Duffie & Koester 2005). According to Duffie and Koester (2005), in a global enterprise, one purchasing decision may impact numerous business processes or departments including manufacturing, receiving, distribution, marketing, sales or customer support. Many companies have realized the need for elevating traditional procurement function to modern strategic sourcing for value addition across the supply chain, since the risks of buying the wrong items, services or buying from the wrong supplier can have major impacts and ripple throughout a business (Duffie & Koester 2005). Consequences can range from late delivery to total service failure liability and can even affect market competitiveness.

Strategic sourcing is a systematic and fact-based approach for optimizing an organization's supply base and improving the overall value proposition (Lewicki, Barry, Saunders, & Minton, 2002). It stretches beyond supplier price negotiation and focuses on the total cost of ownership (TCO) incorporating customer needs, organizational goals, and market conditions and getting the best product/service at the best value driven by a rigorous and collaborative approach (Amajor, Smith, & Moreland, 2015). It also addresses all levers for savings, make decisions based on fact analysis and market intelligence and it's a continuous process. The major

objectives of strategic sourcing is to reduce costs while maintaining or improving the quality of a product or service, examine supplier relationship across the entire organization and leverage entire organizations spend (Su, Dyer & Gargeya, 2009) and strategic sourcing expression is used when the activities of sourcing are directly related to sourcing strategy.

Sourcing strategy does not concern with only about selecting the best suppliers based on some standards but it also about the relationships with the suppliers (Pulles, et al., 2014). Sourcing strategies is part of the overall purchasing strategy that is related to defining the number of suppliers a firm will engage for one specific items, provided the given the significance of the item and the structure of the supply market, and how the suppliers are related to each other (Van Weele, 2001; Cousins, et al., 2008). The strategic decisions made with regard to sourcing have different types of economic consequences for the buying firm, the involved suppliers as well as other parties in the business network (Gadde, et al., 2010; Håkansson, et al., 2009). Different types of sourcing strategies have been developed to include single sourcing, multiple sourcing, dual sourcing, delegated sourcing, parallel sourcing, network sourcing and triadic sourcing (Bildsten, 2015). According to Lewicki, et al (2002), sourcing and strategic sourcing are critical steps in buying goods and services and firms should analyze, assess, and select vendors and their goods and services based on set specifications and requirements.

Strategic sourcing affects the organization's performance as it was asserted by Kihanya, Wafula, Onditi, and Munene (2015) in their study on the role of strategic sourcing on organization's Performance.' The study found out that strategic sourcing enables the organization to concentrate on its core functions which enable the company to achieve strategic advantage and at the same time act as a means in which a business conditions or problems can be alleviated in a manner that is more efficient or effective (Kihanya et al, 2015). Another study by Nyabuto (2016) on the influence of strategic procurement on the performance of public enterprises in Kenya: A case of Kenya power limited revealed that strategic procurement has positive impacts such as reduced costs and improvements in quality of goods and services in an organization.

The supply chain for electricity sub-sector has five main key functional stages which include the supply of primary fuel sources, generation, transmission, distribution and supply to the final user (Seth & Scott, 2013). For the power utility firms it is crucial to establish the right sources of raw material, distribution and storage services. The rationale for Kenyan government unbundling power was to enhance overall power efficiency and encourage healthy competition among the electricity supply chain actors (Karekezi & Kimani 2004). This has led the primary fuel stage to have a number of different supply markets operating. Though competition at generation stage was introduced, there is no choice of supply market. However there are diversity of requirements which organizations at each stage would need to source from other organizations and stakeholders such as land, plants and equipment, parts, transport, information, skills among others that need to be sourced strategically so as to get the opportunities to reduce cost to serve power and improve and upgrade product and service offerings.

2.2 Performance of Firms Measurement

Performance measure entails both quantitative and qualitative assessment of degree to which a firm achieves the general or specific objectives (Lysons & Gillingham, 2003). Traditionally, performances of firms were based on financial indicators such as profit, market share and cost. Performance measures in supply chain range from cost and non-cost measures (Lunga & Mbanje, 2015), financial and business process perspectives (Chopra & Meindl, 2010), to customer satisfaction, revenues, as well as learning and growth (Taghipour, Bagheri, Khodarezaei & Farid, 2015), as well as operational measures such as quality performance or cycle time (Sherman, 2001). Performance measure are used in several ways within the firm including forming a basis for; evaluation and reward of individuals, allocation of scarce resources among strategic business units, and making decisions that increase future profitability (Chan & Qi, 2006). It is therefore important for firms to consider the nature of SCM practices that

influence the supply chain performance. A well-designed performance measurement system is important in understanding and improving the performance of all the actors in the supply chain operations (Chan & Qi, 2006). However, nowadays performance measurement should be based on both financial and non-financial indicators such as quality, delivery time, lead times, customer satisfaction and among others. In this study both financial and non-financial indicators were used to measure the firms' performance such as revenue generation and customer satisfaction. This led to the following research hypothesis; H01: Strategic sourcing has no significant influence on the performance of electricity firms in Kenya

3. Methodology

3.1 Instrument Development

To ensure content validity, all instruments were adapted from the existing previous research in strategic sourcing, which deemed to have reliable and valid scales. A five-point Likert scale anchored by 1 (Strongly Disagree) 5 (Strongly agree) was used to assess the degree of strategic sourcing in the opinion statements provided "kindly assess to what extent you agree or disagree with the following opinion statement". Firms performance was also measured using a five-point Likert scale of 1(Strongly Disagree) 5(Strongly Agree) and by ticking in the box of the revenue indicators provided for the last five years.

3.2 Data Collection

The study focused on electricity firms in Kenya because few studies have been featured in this sector. Logistics/supply chain/procurement managers in senior positions were targeted to answer the dropped questionnaires since they possessed sufficient knowledge regarding overall process of strategic sourcing and firms' performance. After randomly selecting 375 samples of respondents, the questionnaires were dropped and which generated later a response rate of 317.

4. Results

The following section contains the findings of strategic sourcing and firms' performance in the descriptive and inferential statistics form. The respondents were asked to indicate the sourcing strategies their firms' have been using in the past 5 years up to 2017 to acquire goods and services. From the findings in Table 4.1 indicated that majority of electricity firms (56%) have been adopting multiple strategies for sourcing materials, 29 percent of respondents indicated that their electricity firms have been using single sourcing strategies and 15 percent of respondents indicated that they have been using dual sourcing strategies in sourcing materials for their firms

Table 1: Strategic sourcing strategies

Sourcing strategies	Frequency	%
single sourcing	110	29
Multiple sourcing	210	56
Dual sourcing/other strategies	55	15

Further on descriptive statistics, the study sought respondents' opinion on influence of strategic sourcing on the performance of electricity firms in Kenya based on the following scale: 5 SA=strongly agree, 4 A=agree, 3 UN=undecided, 2 D=disagree, 1 SD=strongly disagree. A standard deviation of more than one implies a significant difference in respondents. The results were as shown in Table 4.2. From the findings, majority of the respondents agreed that strategic sourcing optimizes the organizations' supply base and improves on organizations' relationships with a mean of 4.347 and standard deviation of 1.102. Likewise, the study found out that majority of the respondents agreed that sourcing decisions of one organization along the electricity firms supply chain impact other organization's processes and spending with a mean

rate of 3.968 and a SD of 1.090, quite a number of the respondents were undecided. The findings also revealed that electricity firms incorporate the customers' needs such as on time delivery and quality products when sourcing with a mean rate of 4.31. Equally, the study established that buying a wrong item or service or buying from a wrong supplier can have a major impact on product and service offerings by electricity firms with a mean rate of 4.2. Likewise, it was established that the sourcing decisions of one organization along the electricity firms supply chain impact other organization's processes and spend with a mean rate of 3.9.

Table 2: Strategic Sourcing Descriptive Statistics analysis

Opinion statements	SA (%)	A (%)	UN (%)	D (%)	SD (%)	Mean	Std. Deviation
1. The sourcing decisions of one organization along the electricity firms supply chain impact other organization's processes and spend	42.6	23.0	26.8	3.8	3.8	3.968	1.090
2. Buying a wrong item / service or buying from a wrong supplier can have a major impact on product and service offerings	61.5	23.0	0.0	7.9	7.6	4.230	1.250
3. Strategic sourcing optimizes the organizations' supply base and improves on organizations' relationships	61.2	27.4	3.8	0.0	7.6	4.347	1.102
4. Strategic sourcing incorporates the customers' needs such as on time delivery and quality products	61.5	23.0	7.9	0.0	7.6	4.309	1.133

An additional test was conducted on simple regression to determine the influence of strategic sourcing on performance of electricity firms in Kenya. The model used was $Y = \beta_0 + \beta_1 X_1 + \epsilon$. Where: Y= Performance of electricity sub-sector supply chain β_0 =constant (Slope) of the Model β_1 is the coefficient for X_1 ; X_1 = Strategic sourcing practice; ϵ = error term

The null hypothesis was

H01: Strategic sourcing has no significant influence on the performance of electricity firms in Kenya.

To test the above hypothesis, linear regression was used to test the relationship between strategic sourcing and performance of electricity firms in Kenya. Path coefficients were used to determine the direction and strength while T statistics provided information on the significance to the relationships. The results are presented in Table 4.3.

Table 3: Model Summary of Strategic Sourcing

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-	Watson
1	.36 ^a	.130	.122	3.06230	1.927	

a. Predictors: (Constant), Strategic sourcing

b. Dependent Variable: Performance of electricity firms in Kenya

The R2 for the regression model between strategic sourcing and performance of electricity firms in Kenya was 0.122 meaning that strategic sourcing explain 12.2 % variation in the performance of electricity firms in Kenya while the remaining variation is explained by the error term. The

regression model was a good fit as indicated by a significant Fstatistic (F=17.418, p<0.05). See Table 4.4.

Table 4: ANOVA of Strategic Sourcing

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	3.919	1	3.919	17.418	.000 ^b
Residual	2953.961	315	9.378		
Total	2957.880	316			

a. Dependent Variable: Performance of electricity firms in Kenya

b. Predictors: (Constant), Strategic sourcing

The regression model obtained from the output was

$$\text{Performance} = 13.113 + 0.381 \text{ strategic sourcing} + \text{error}$$

The regression coefficient for strategic sourcing was 0.376. This indicated that a unit increase in the strategic sourcing would result in 37.6% increase in the performance of electricity firms in Kenya. The t-statistic for the regression coefficient for strategic sourcing was significant at 5% level of significance (T=11.646, p<0.05) implying rejection of null hypothesis. See Table 4.25. On the basis of these statistics the study concluded that, there was significant positive relationship between strategic sourcing and performance of electricity firms in Kenya.

Table 5: Coefficients Strategic Sourcing

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	13.113	.881		14.889	.000
	Strategic sourcing	.381	.0630	.376	11.646	.001

a. Dependent Variable: Performance of electricity firms in Kenya

5. Discussion

5.1 Theoretical Contribution

The study contributes to the understanding of association between strategic sourcing and firm's performance. The study established that electricity firms' in Kenya mainly have adopted multiple and single sourcing strategies, however there are also some few firms which have adopted dual and other sourcing strategies. Therefore, it is important for firms to adopt various types of sourcing strategies when acquiring goods and service in order to complement one another as noted by Bildsten (2015). This is because strategic decisions made with regard to sourcing have different types of economic consequences for the buying firm and should be carefully chosen (Håkansson, et al., 2009).

Also, it was noted that strategic sourcing optimizes the organizations' supply base and improves on organizations' relationships. Likewise, it was found that sourcing decisions of one organization along the electricity firms supply chain impact other organization's processes and spending. Equally, firms should incorporate clear specifications of the customers' needs such as on time delivery and quality products when sourcing. However, it was noted that, buying a wrong item or service or buying from a wrong supplier can have a major impact on product and service offerings by electricity firms. These findings concurred with the study Duffie and Koester (2005).

5.2 Managerial Contribution

The study recommends that electricity firms should adopt sourcing strategies that suits their needs and requirements. However, electricity firms that have adopted multiple sourcing

strategies should be cautious since it might be very expensive to manage many suppliers. The study also, recommends to the management of electricity firms that they should adopt strategic sourcing as a way of optimizing their supply base and as a way of improving firms' relationships. Equally, the study recommends to the management of electricity firms to incorporate customer needs in their strategic sourcing such as on time delivery and quality products. The study also, recommends that management of electricity firms should prepare correct specification to avoid purchasing wrong items. Moreover, the study recommends to the management of electricity firms that they should include sourcing strategy in their policy statement because it was noted from the study that strategic sourcing strategy improve performance of electricity firms positively.

5.3 Limitations and Future Research

Strategic sourcing is complex and very sensitive issue. While the study show the effect is generally accepted strategic sourcing strategies for improving firm's performance, not all strategic sourcing strategies are covered in the study. Also, the study can be carried on in other sector in order refine the study findings.

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