

The Role of Strategic Sourcing on Organization's Performance: A Case Study of Jomo Kenyatta University of Agriculture and Technology

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Abstract- Strategic sourcing is growing at a rapid rate throughout the world because organizations view it as a way to achieve strategic goals, improve customer satisfaction and provide efficiency and effectiveness services. This study was guided by the following objectives: to determine the role of quality of goods and services on organization's performance; to establish the role of cost of goods and service; to establish the role of supplier relationship; the role of timely delivery of goods and services and to determine the role of effective procurement plans on organizational performance. Descriptive research design was used in conducting this study. The target population for the study were the employees of Jomo Kenyatta University of Agriculture and Technology, Main Campus. A sample size of 89 employees, with stratum of top level management, middle level management, first line management and low level management was selected from the various departments. Questionnaires were used to collect data. Data was analyzed using SPSS. To test the validity of the research instruments, the researcher sought expert's opinion and reliability was done to a few employees who were not included in the final study. The study findings were interpreted and discussed. The findings were presented using frequency distribution tables and charts to clearly show the response from the respondents.

The findings of this study suggested that strategic sourcing enables the organization to achieve strategic advantage and at the same time act as a means in which a business condition or problem can be alleviated in a more efficient and effective manner.

Although strategic sourcing is essential to the university, the respondents indicated that quality of goods and services was the most highly rated variable followed by cost of goods and services, timely delivery of supplies, effective procurement plan and lastly supplier relationship in that order. The performance of strategic sourcing was indicated as being affected by poor planning, failure to adhere to procurement plans and inadequate funding.

It was concluded that quality goods and services plays a very major role in determining the organization performance due to its high rating by the respondents. It was also concluded that the cost of goods and services affects its competitiveness. The study finally recommended that the university should maximize on its human capital as its most priced asset, should have a formal strategic sourcing, it should also put all measures in place

to ensure that they do not face severe losses as a result of poor supplier relationship and finally the management should ensure that respective departments should prepare well planned budget and operate within the budget and funds allocated.

Index Terms- Strategic sourcing, Supplier relationship

I. INTRODUCTION

Sourcing has evolved from a traditional purchasing approach which was transactional and opportunistic in nature where organizations used to buy in response to immediate needs, choosing freely from among all the suppliers that can supposedly meet those needs to one that is futuristic and uses plans and strategies. Traditional sourcing was sporadic and transactional and treated each purchase as a discrete transaction. Communication typically entailed haggling over prices, complaining about late shipments or disputing the quality of products.

As a result, traditional sourcing method has had its celebrated failures. Regular reports have been published about cost overruns, contract disputes and poor customer satisfaction. Many of these failures have been due to inflexibility of the sourcing contract, which cannot easily be changed to respond to market pressures and business requirements (Predrag, 2008).

Lysons and Farrington (2006), defines strategic sourcing as "concerned with the top-level, longer-term decision relating to high – profit, high supply risk items and low-profit, high supply risk bottleneck product and services". It's also concerned with the formulation of long-term purchasing policies, supplier base, partnership sourcing, reciprocal and intra- company trading, globalization and countertrade, the purchase of capital equipment and ethical issues. Sourcing costs represent 40 to 80 percent of the cost of goods sold, and 30 to 50 percent of revenues – a ratio that has remained constant in most industries for many years. Companies excelling in strategic sourcing save almost 10 to 20 times as much as it costs to operate their sourcing operations. The effort required to reduce 10 percent of the sourcing cost is much less than gaining similar amount of revenue (Chopra and Meindl, 2003).

In Kenya, the PPDA (2005) stipulates the guidelines on how public entities should source their supplies. The Act establishes

the procedures for efficient public procurement and disposal of unserviceable, obsolete or surplus stores, assets and equipment by public entities. It also provides for the other related matters including integrity, fairness, transparency, efficiency and increasing the public procurement process. The Act also establishes the Public Procurement Oversight Authority (PPOA) which is an independent body to oversee and regulate procurement in the public sector. This body ensures that the procurement procedures established under the Act are complied with, monitor the procurement system, initiate public procurement policy and propose amendments to this Act and to perform such other functions and duties as provided for under this Act. Given the size of public procurement, the Kenyan government decided to initiate reforms through policy, legal and institutional frameworks to enhance transparency, accountability, fairness and competition in the procurement process (PPOA, 2005, Edward, 2011)

PPDA (2005) lays down the guidelines which guides public entities in sourcing their supplies. The Act define procurement as acquisition by purchase, rental, lease, hire, license, tenancy, franchise or by any other means any type of work, assets, services or goods including livestock or any combination. It also establishes procedures for the efficient public procurement and disposal of unserviceable, obsolete or surplus stores, assets and equipment.

PPDA (2005), also sets thresholds which guide the procurement methods in public entities i.e. when to use international open tenders, national open tender, restricted tenders, request for proposal, direct procurement or request for quotation. The Act treats every purchase as a discrete transaction subjected to competitive bidding and therefore it fails to address other benefits that could be accrued if public entities categorize their spending and involve suppliers from early stages of purchase. Government procurement is long and bureaucratic. In Order for JKUAT to be and remain competitive, it needs to exercise sourcing practices that will make it compete competitively with private institution who have less bureaucratic procurement process for the quality supplies at the right quantity, at the right price, time and delivered at the right place. Sourcing strategically can be crucial for JKUAT to obtain or sustain its competitiveness in the marketplace.

General objective

The general objective of this research was to establish the role of strategic sourcing in the performance of an organization.

II. LITERATURE REVIEW

Related work

Institutional theory

This theory explains how an organization's environment through regulative, normative and cognitive mechanisms institutionalizes and legitimizes strategies (Scott, 1995). Although institutional theory and "neo-institutional" theory (e.g. March and Olsen, 1984) differ on whether organizational adaptation is the result of conscious decision processes made to conform to the organization's environment (the latter ascribes more importance to such decisions), both predict that institutional pressures may cause the organization to adopt sourcing strategies that conform to its environment. Varying

institutional pressures may cause organizations to source in different ways which may have economic consequences and may lead to ethical dilemmas. Nonetheless, it is important for firms to be within the range of legitimate sourcing strategies because a legitimate firm obtains resources of higher quality at more favorable terms than an illegitimate firm. On the other hand, if firms are too similar strategically, performance may suffer. Thus, it would appear that firms should select sourcing strategies that help legitimate them, but do not lead to isomorphism. Monitoring changes in government policies and regulations (e.g. changes in changes in free trade agreements among countries, or changes in tax regulations, or legislation supporting minority- and women-owned businesses) as they relate to sourcing decisions may allow a firm to be an early adopter of sourcing innovations. However, outsourcing may have serious negative short- and long-term consequences such as increased costs and decreased performance and the loss of critical skills and knowledge, hence, managers should be careful to make sourcing decisions based on their strategic merit. (Gimeno and Woo, 1996 Deephouse, 1999, Scott, 1995, DiMaggio and Powell, 1983, Rosetti and Choi, 2005, Jennings, 2002)

Agency theory

From the perspective of agency theory, a firm outsourcing a function is the principal, and the supplier is the agent. Agency theory maintains that the make versus buy decision should be determined by the economic relationship between production and transaction costs. If production costs are lower than transaction costs, firms should produce and manage the process internally and vice versa. Transaction costs include the actual outsourcing costs as well as additional monitoring and control costs assumed by the principal. Monitoring costs are any costs incurred by the principal to ensure that the agent is not engaging in activities detrimental to the principal, as well as ensuring the principal is meeting the basic terms and conditions of the outsourcing contract. Control costs represent the legal costs assumed by the principal to enforce the terms of the outsourcing contract upon term violation. (Eisenhardt, 1989; Jensen and Meckling, 1976).

Agency theory tenets imply that lower transaction costs are driving firms away from sourcing internally and toward purchasing or alliance outsourcing relationships. Several primary forces are cited as driving the movement towards more frequent and stronger sourcing relationships between principals and agents. In addition, the increased use of outsourcing as a strategic tool has given many firms increased experience in designing effective monitoring and control systems to manage agent behaviors. Given the increased information available to sourcing principals, increased number of agents and heightened competition among agents, agents assume higher risks for engaging in opportunistic behaviors against principals. . (Logan, 2000, Zsidisin et...al, 2004)

Network theory

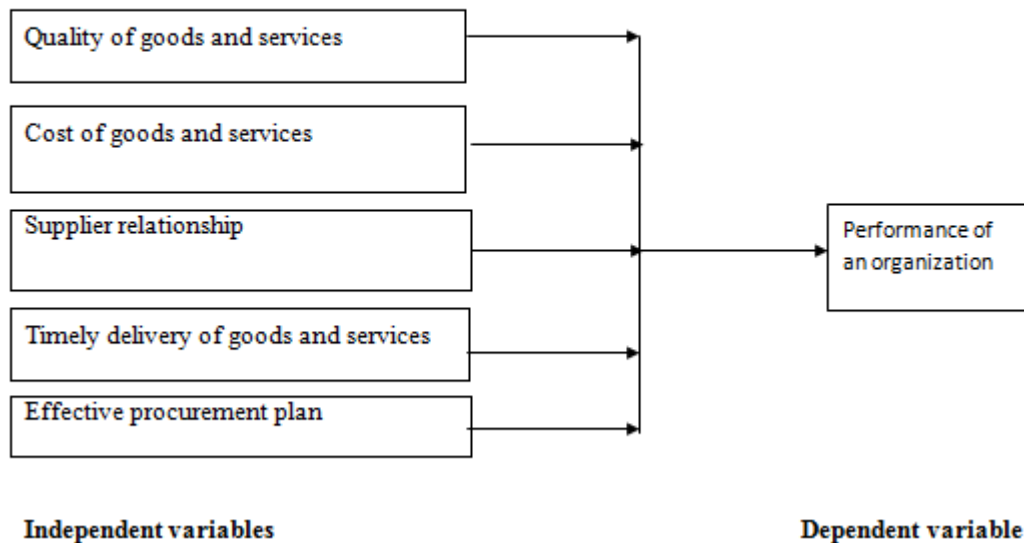
Network theory centers on the relationships a firm has with other firms and on how these relationships influence a firm's behavior and outcomes. Network theory does not seem to inform the choice of when to make, buy or ally. It does however, appear to inform choice of which firms an organization chooses to buy from or engage with as alliance partners. Centrality refers to how

pivotal a firm is within a network. High centrality refers to a firm that is always sought out as a partner. Being central within a network offers four key competitive priorities within supply chains: speed, quality, cost, and flexibility. A highly central firm can tap its tight links in order to rush orders when needed, seek out the provider offering the best materials and lowest prices and

make seamless transitions over time. Thus, with regard to sourcing, a firm should strive to be central to its network and should seek sources that are central to their networks. (Gulati et...al, 2000, Thorelli, 1986, Hult et...al, 2006)

Conceptual Framework

Figure 2.1 Conceptual framework



Quality of goods and services

Baily, P.et...al.(2005) quality circles have become a popular approach to the improvement not only of product quality but also of other aspect of company performance and the quality of working life. ISO (1995) as cited in Lysons (2006), defines quality as the totality of features and characteristics of product that bears on the ability to satisfy stated or implied need whereas Crosby (1980, cited in Lysons, 2006, P 266) defines quality as “conformity to requirements not goodness. Quality is very important for ensuring good performance and success of any organization..Quality control contributes to profitability and growth. Quality of goods and services determines the performance of an organization through increased sales, customer retention and business sustainability (Barker, 2006)

Organizations products evolve over time and it is critical to form relationships with suppliers that can effectively meet the changing requirements from the perspective of new product development, design, manufacturing processes and manufacturing capability, at lower costs. Such suppliers are more likely in the long run to have the infrastructure and organizational capabilities in place to effectively meet the changing demands of the buying firms. Quality management practices with strategic implications such as total quality management, zero defects, process improvement, statistical process control, and continuous process improvement lead to tangible improvements in quality and cost reduction

(Barker, 2006 De Ron,1998 ,Lederer and Rhee, 1995,Tham, 1988 ,Koulamas, 1992, Tummalaset...al, 1997, Coughlan and Wood, 1992, The Economist 2006, Global Investor 2005).

Cost of goods and service

Strategic sourcing differs in its focus and execution from traditional purchasing and offers several obvious benefits. Traditional purchasing focuses on purchase price, whereas strategic sourcing focuses on the true cost to the customer. Strategic sourcing benefits both buyers and suppliers. It benefits buyers because they can negotiate lower unit prices for high-volume purchases, thus reducing cost of goods sold and maintaining the ability to price their products competitively. It benefits suppliers because they are able to sell a significant portion of their output, which makes planning easier and gives management long-term cash flow visibility.

Strategic sourcing has been proven to be affective and result in cost reduction, increases in productivity, quality improvement, and return on investment. Considering sourcing as strategic has been considered as a driver for company growth. Strategic sourcing allows an organization to shares information with its suppliers in real time with the aim of cutting the cost of materials, minimizing inventory, reducing shortages, and expediting deliveries. Strategic sourcing can reduce costs by consolidating purchases with a limited number of suppliers and by allowing the centralized purchasing departments negotiating leverage via a purchase of increased volume. Strategic sourcing can also help reduce ordering costs of purchasing orders thus reducing inventory handling costs (Rendon, 2005, and Van Weele, 2010, Thomas, 1999)

Supplier Relationships

Competitive forces are putting firms under pressure to improve quality, delivery performance, and responsiveness while simultaneously reducing costs. In response, firms are increasingly exploring ways to leverage their supply chains and in particular, to systematically evaluate the role of suppliers in their activities. One result has been the increased outsourcing of activities not considered to represent core competencies. This has enabled firms to better utilize their resources and increase the value added attributable to them. It also allows them to be more flexible and responsive to changing needs. Outsourcing allows firms to exploit the capabilities, expertise, technologies, and efficiencies of their suppliers. Increased outsourcing, however, implies greater reliance on suppliers and a commensurate need to manage the supplier base. This has for some companies meant reducing and streamlining the supplier base, and/or developing closer relationships with suppliers. It is critical for companies to have good relationships with strategic suppliers and that the strategic suppliers are aware of the implicit or explicit criteria by which buyers evaluate relationships. Strong relationships with supplier can provide great benefits for buyer and supplier. The direct, significant and positive relationship between strategic sourcing and buyer-supplier relationship empirically validates the assertions made by [Carr and Pearson \(1999\)](#) that strategic purchasing positively impacts buyer-supplier relationships. ([Pralhad and Hamel, 1990](#) , [Scannell et... al, 2000](#) , Pressey et...al, 2007, Sánchez - Rodríguez, 2009, Thomas, 1999, Carr and Pearson, 1999, [Modi and Mabert 2007](#), [Chan and Chin \(2007\)](#)).

Strategic sourcing can be adopted to evaluate suppliers, especially company's capabilities and quality management. Companies need to develop a functional partnership with strategic supplier and buyer-supplier relationships can be a base of competitive advantage if companies combine resources in unique ways. Strategic sourcing includes a wide range of activities namely creating an overall strategy for sourcing, evaluating and selecting suppliers, procuring materials/services and managing supplier relationships. Sourcing if properly structured can effectively combine the core competencies of a given firm with the skills and capabilities of its suppliers. Sourcing decisions are vital for any organizations that want to leverage on its core competencies and outsource other activities in order to gain and retain competitiveness (Sánchez-Rodríguez, 2009, Chiang et...al, 2012, Pressey et...al, 2007, Predrag, 2008, [Anderson and Katz, 1998](#)).

Timely delivery of goods or service

According to Baily, et...al, (2005), if a company is seeking competitive advantage by becoming better able to respond to customer needs as they arise, then it follows that the company require a greater degree of responsiveness from its own suppliers. The achievement of delivery on time is a standard purchasing objective. If goods and material arrive late or work is not completed at the right time, sales may be lost, production halted and damages clauses may be invoked by dissatisfied customers leading to slow down the cash to cash cycle thus reducing the organization's efficiency or profitability. One of the critical roles of strategic sourcing is reducing on lead- time and improving on delivery to meet the customers demand. Lysons and Farrington (2006), define lead time as the period between a customer's order

and delivery of the final product. A small order of a pre-existing item may only have a few hours lead time, but a larger order of custom-made parts may have a lead time of weeks, months or even longer.

Lead time can mean the difference between making the sale and watching a competitor sign the contract. If a company can deliver the product weeks ahead of the competition, it stands a better chance of receiving future orders. Companies must remain realistic with their lead time estimates, but constantly strive to improve their manufacturing process or service provision and reduce lead times. Organizations face challenges when attempting to improve lead time on a product line. Some processes simply take more time to create a high quality product. It can be challenging to offer a competitive lead time to the customer while still maintaining [quality control](#) over production.

A competitive company must have both high quality goods and provide a high quality service by adding value to the chain. By reducing lead time and achieving faster delivery, the company's competitiveness will be enhanced. Within a supply chain context, delivery speed and reliability have become key requirements for competitive differentiation and increased profitability and these two factors will be used to measure the performance of the supply chain. Lead time, delivery time and on time delivery are all important SCM measures as their measurement will have dramatic impact on quality of SCM. short lead time improves root-cause-corrective action systems. Short lead time also shorten the time from problem creation to problem detection. The shorter this time is, the greater the probability of identifying true root cause and implementing effective corrective actions. This results to increased capacity, throughput and sales. An organization can also use short lead time to justify premium pricing. ([Tummalaet...al, 2006](#), [Arnheiter and Maleyoff, 2005](#), [Lamming, 1996](#), [Chan et...al, 2002](#), Murgiano 2006).

Effective procurement plan

According to Baily, et...al, (2005), procurement plan is derived from the plans which have been formulated and should allow for subsequent comparison, evaluation and control of the efforts made to meet the company's objectives. In addition to that budget should be prepared in relation to relevant financial projections and overall company estimates with regards to e.g. return on investment.

PPOA (2009) defines procurement plan as document prepared by each procuring entity annually to plan all procurement requirements necessary to perform the activity plan of the procuring entity. Section 26 of the Act and Regulation 20 require a procurement plan to be prepared for each financial year as part of the annual budget preparation process. It is the responsibility of the head of department to submit an annual departmental plan to the accounting officer at least 30 days before the close of the financial year. Procurement plans should include a detailed breakdown of goods, works and services required and completion of delivery dates.

A multi- year procurement plans may be prepared and integrated into the medium term budgetary expenditure framework.

The benefits of good planning include: better alignment of procurement activities to strategic objectives, improved quality analysis for recommending a course of action, justifying the

project is worth doing, testing that implementation is realistic and achievable, detecting the potential impacts and pitfalls before starting knowing the sustainability of service or product design and delivery. An effective procurement plan provides an organized means whereby time and money are saved..It also provides a framework to that guides the achievement of tasks and duties. (Langford, 2010, Kakabadse, 2005).

III. RESEARCH DESIGN

Descriptive research design was used in this study. Data was collected through use of closed and open ended questionnaires that were distributed to JKUAT staff, The target population comprised of staff at the JKUAT main campus since that's where most of procurement is done. The JKUAT structure has classified the university staffs into four categories; top, middle, first line managers and the administrative staffs or staffs at the lower level. (Kothari, 2004, Orodho, 2005, Bennett 1993, Mugenda & Mugenda 2003)

Table 3.1 Target population

No.	Management level	Target population	Sample size
1	Top level management	50	15
2	Middle level management	80	24
3	First line managers	112	34
4	Other staffs	52	16
TOTAL		294	89

Source: Researcher (2015)

The study generated both qualitative and quantitative data through the research instruments. Based on the study objectives and questions, the massive qualitative data collected from the research tools was grouped into meaningful patterns that revealed how categories or themes were related (Verma & Mallick, 1999). Responses from the research tools both open and closed ended were tallied and counted according to themes. They were then analyzed using descriptive statistics such as percentages and frequency tables to produce quantitative data that gave a summary of the study findings. A multiple regression model was developed to describe the relationship between the dependent and independent variable. The regression equation was of the formula:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5$$

Where:

Y= Organization performance (reduced cost)

X1= Right quality of product and/service

X2=Cost of product and service

X3= Timely delivery of goods

X4= Supplier relationship

X5= Effective procurement plans

Statistical Package for social science [SPSS] was used for the analysis. Results were presented in terms of tables, graphs and pie charts.

IV. RESEARCH FINDINGS AND DISCUSSIONS

Respondents Gender

The researcher sought to establish the respondents' gender and the research findings indicated that, 55.1% were male while 44.9% were female.

Respondents age bracket

The respondents were requested to indicate their age bracket.

Table 4.1 Respondent age bracket

Respondents years	Frequency	Percentage
20-25	11	15.9%
26-35	16	23.2%
36-45	27	39.1%
46 and above	15	21.7%
Total	69	100%

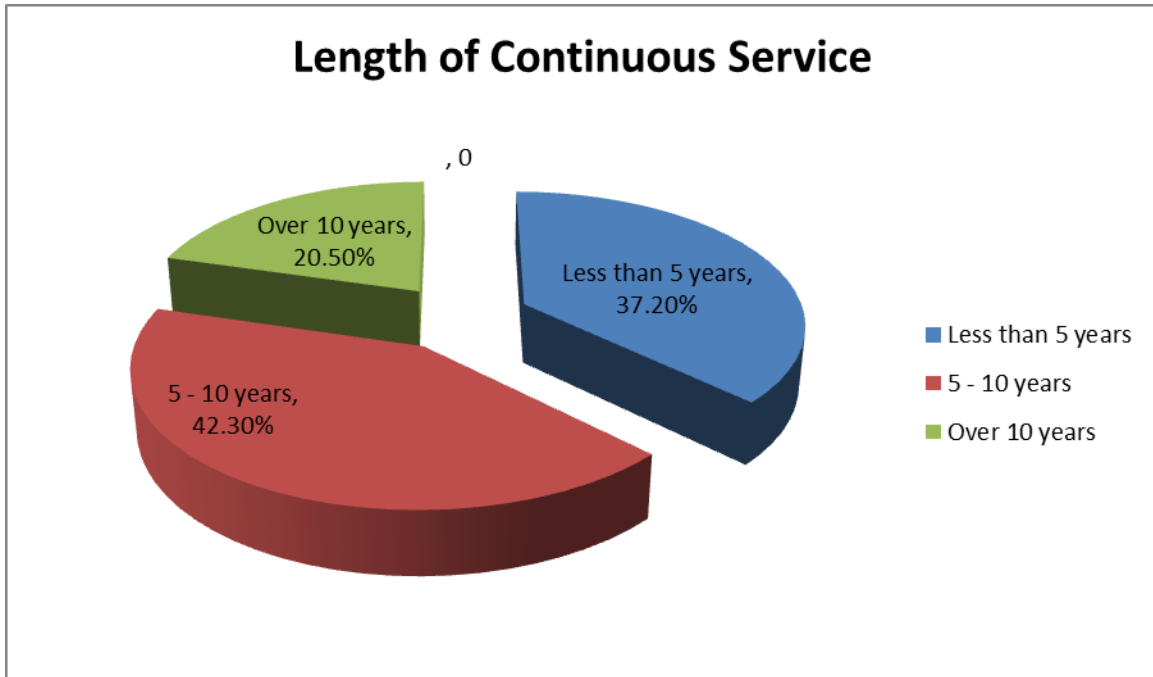
The results in table 4.1 indicates that 39.1% of the respondents were between 36-45 years, 23.2% of the respondents were between 26 and 35 years, 21.7% of the respondents were over 46 years while 15.9% of the respondents indicated that they were between 20-25 years. The results indicate that majority of the respondents were above forty years. With the majority of the staff being over 36 years, they will be nearing their retirement

age and it will be necessary for the organization to have to introduce younger staff in the levels of respondents to facilitate a flawless succession program and also introduce new views in the decision making process.

Length of continuous service with JKUAT

The respondents were requested to indicate the duration they have worked with JKUAT and the results are presented in figure 4.2.

Figure 4.1 Length of continuous services



The results in figure 4.2 indicates that 42.3% of the respondents have been working in the University for 5 to 10 years, 37.2% of the respondents indicated that they have worked in the University for over 10 years while 20.5% of the respondents indicate that they have worked in the University for less than 5 years. The results indicate that majority of the respondents have worked on the University for more than five years and thus they understand the role of strategic sourcing on organization's performance. The implication of this trend is that the companies need to come up with adequate knowledge management policy to preserve the acquired knowledge and retain the same in the case of a loss of an employee. The company should also include a mechanism of rotating the staff in all sections and avoid a situation where staff stay long in a section develop an 'empire building' situation.

Role of Strategic Sourcing on Organization's Performance

Strategic sourcing enables organizations to take advantage of a whole host of benefits and it is fast becoming the preferred model among organizations looking to focus on their core

competencies as well as reduce risk, improve quality of goods and services, timely delivery of goods and services, decrease costs, create a better supplier relationship and improve the efficiency and effectiveness of all the goods and services offered in the organization (Elmuti, 2003).

Quality of Supplies

The respondents were requested to indicate how quality of supplies influenced organization's performance in a likert scale. The range was 'too low(1)' to 'very high' (5). The scores of too low and low have been taken to represent a variable which had a mean score of 0 to 2.5 on the continuous likert scale; ($0 \leq V.L. < 2.4$). The scores of 'moderate' have been taken to represent a variable with a mean score of 2.5 to 3.4 on the continuous likert scale: ($2.5 \leq M < 3.4$) and the score of both high and very high have been taken to represent a variable which had a mean score of 3.5 to 5.0 on a continuous likert scale; ($3.5 \leq V.H. < 5.0$). A standard deviation of >0.7 implies a significant difference on the impact of the variable among respondents. The results represented in table 4.3.

Table 4.3 Quality of goods and services

Quality of Supplies	Mean	Std. Deviation
Are the employees satisfied by the quality of supplies sourced	4.0538	0.5303
Rate of the quality of supplies purchased by the organization	4.0436	0.6070
Extent at which quality of supplies affect the performance	3.4513	0.8041
If the University has put in place measures to manage quality supplies	3.9231	0.7344
Average Mean	3.8680	

From the table 4.3 the results obtained from the survey on the respondents to find out the role played by quality of supplies on organization’s performance show that the average mean was 3.8680 which implied that quality of supplies influenced organization’s performance. This is because the average mean ranged between $3.5 \leq V.H. < 5.0$ which was rated “very high”.

Cost of Goods and Services

The respondents were requested to indicate how cost of goods and services influenced organization’s performance in a likert scale. The range was ‘too low (1)’ to ‘very high’ (5). The

scores of too low and low have been taken to represent a variable which had a mean score of 0 to 2.5 on the continuous likert scale; ($0 \leq V.L. < 2.4$). The scores of ‘moderate’ have been taken to represent a variable with a mean score of 2.5 to 3.4 on the continuous likert scale: ($2.5 \leq M < 3.4$) and the score of both high and very high have been taken to represent a variable which had a mean score of 3.5 to 5.0 on a continuous likert scale; ($3.5 \leq V.H. < 5.0$). A standard deviation of > 0.7 implies a significant difference on the impact of the variable among respondents. The results are presented in table 4.4.

Table 4.4 cost of goods and services

Cost of Goods and Services	Mean	Std. Deviation
How does the university source its supplies	3.7542	0.6153
Prices reflect market price and value for money	4.1531	0.6070
Extent at which cost of supplies affect competitiveness	3.6568	0.8041
If there are other practices that can be employed to secure supplies at a more favourable price	3.7890	0.7344
Average Mean	3.8383	

From the table 4.4 the results obtained from the survey on the respondents to find out the role played by cost of goods and services on organizational performance show that the average mean was 3.8383 which implied that cost of supplies influenced organization’s performance. This is because the average mean ranged between $3.5 \leq V.H. < 5.0$ which was rated “very high”. However, the standard deviation was too high which was indication that there were discrepancies on the impact of the variables among the respondents.

Supplier Relationship

The respondents were requested to indicate how supplier relationship influenced organization’s performance in a likert

scale. The scores of too low and low were taken to represent a variable which had a mean score of 0 to 2.5 on the continuous likert scale; ($0 \leq V.L. < 2.4$). The scores of ‘moderate’ have been taken to represent a variable with a mean score of 2.5 to 3.4 on the continuous likert scale: ($2.5 \leq M < 3.4$) and the score of both high and very high have been taken to represent a variable which had a mean score of 3.5 to 5.0 on a continuous likert scale; ($3.5 \leq V.H. < 5.0$). A standard deviation of > 0.7 implies a significant difference on the impact of the variable among respondents. The results are presented in table 4.5.

Table 4.5 Supplier relationship

Supplier Relationship	Mean	Std. Deviation
Does the university embrace supplier relationship	3.1540	0.5670
Type of relationship university maintains with the suppliers	3.7253	0.7529
If the current supplier relationship maintained influence supplier relationship	3.4514	0.8589
Rate at which the supplier performance influence organizational performance	3.2634	0.6689
Average Mean	3.3985	

From the table 4.5 the results obtained from the survey on the respondents to find out the role played by supplier relationship on organizational performance show that the average mean was 3.3985 which implied that supplier relationship had a moderate influence on organizational performance. This is because the average mean was between $2.5 \leq M < 3.4$ which was rated “moderate”. However the standard deviation was too high which was indication that there were discrepancies on the impact of the variables among the respondents.

Timely Delivery of Goods and Services

The respondents were requested to indicate how timely delivery of goods and services influenced organization’s

performance in a likert scale. The scores of too low and low were taken to represent a variable which had a mean score of 0 to 2.5 on the continuous likert scale; ($0 \leq V.L < 2.4$). The scores of ‘moderate’ have been taken to represent a variable with a mean score of 2.5 to 3.4 on the continuous likert scale: ($2.5 \leq M < 3.4$) and the score of both high and very high have been taken to represent a variable which had a mean score of 3.5 to 5.0 on a continuous likert scale; ($3.5 \leq V.H. < 5.0$). A standard deviation of > 0.7 implies a significant difference on the impact of the variable among respondents. The results are represented in table 4.6.

Table 4. 6 Timely delivery of goods and services

Timely Delivery of Goods and Services	Mean	Std. Deviation
Do suppliers meet on time fully delivery	3.5810	0.1574
Rate at which timely delivery of goods and services affects organizational performance	3.6580	0.2985
Average Mean	3.6195	

From the table 4.6 the results obtained from the survey on the respondents to find out the role played by timely delivery of goods and services on organizational performance show that the average mean was 3.6195 which implied that timely delivery of goods and services had a very high influence on organizational performance. This is because the average mean was between $3.5 \leq M < 5.0$ which was rated “very high”. However the standard deviation was too low which was indication that there were no or little discrepancies on the impact of the variables among the respondents. When asked what led to late payment of suppliers, the respondents indicated late payments of credits and initiation of procurement on when cash flow is health and budgetary allocation were suggested by most of the respondents to avoid late payments.

Effective Procurement Plan

The respondents were requested to indicate how effective procurement plan influenced organizational performance in a likert scale. The scores of too low and low were taken to represent a variable which had a mean score of 0 to 2.5 on the continuous likert scale; ($0 \leq V.L < 2.4$). The scores of ‘moderate’ have been taken to represent a variable with a mean score of 2.5 to 3.4 on the continuous likert scale: ($2.5 \leq M < 3.4$) and the score of both high and very high have been taken to represent a variable which had a mean score of 3.5 to 5.0 on a continuous likert scale; ($3.5 \leq V.H. < 5.0$). A standard deviation of > 0.7 implies a significant difference on the impact of the variable among respondents. The results are represented in table 4.7.

Table 4.7 Effective procurement plan

Effective Procurement Plan	Mean	Std. Deviation
Does the university develop a procurement plan	4.0148	0.4210
Does the organization adhere to the developed plan	3.6451	0.2545
How effective is the procurement plan	2.9854	0.6892
If the department participate in the development of University’s strategic management plan	3.3568	0.4568
Extent at which procurement plan is linked to strategic plan of the University	3.4125	0.6157
Average Mean	3.4829	

From the table 4.7 the results obtained from the survey on the respondents to find out the role played by effective procurement plan on organization’s performance show that the average mean was 3.4829 which implied that effective procurement plan had a moderate influence on organization’s performance. This is because the average mean was between

$2.5 \leq M < 3.4$ which was rated “moderate”. The standard deviation was low, an indication that there were few discrepancies on the impact of the variables among the respondents.

Summary of the Role of Strategic Sourcing

Table 4.8 Summary role the strategic sourcing

Role of Strategic Sourcing	Average Mean
Quality of goods and services	3.8680
Cost of goods and services	3.8383
Supplier relationship	3.3985
Timely delivery of supplies	3.6195
Effective procurement plan	3.4829

The results in table 4.3 indicate that roles considered by JKUAT strategic sourcing was quality of goods and services (average mean 3.8680), cost of goods and services (average mean 3.8383), timely delivery of goods and services (average mean 3.6195), effective procurement plan (average mean 3.4829), and supplier relationship (mean 3.3985). This study shows that quality of goods was the highly rated role of strategic sourcing followed by cost of goods, timely delivery of supplies, effective procurement plan and lastly supplier relationship. There

low variation of standard deviation in most of the variables. This indicated that the respondents were unanimous on the role of strategic sourcing on organization’s performance.

Regression Analysis

The roles of strategic sourcing were investigated from the results of the respondents. From Table 4.9 below, the established multiple linear regression equation becomes:

$$Y = -0.887 + 0.07X_1 + 0.009X_2 + 0.14X_3 + 1.008X_4 + 0.006X_5$$

Table 4.9 Results of general least square

Model 1	Un-standardized Coefficients		Standardized Coefficients	
	B	Std. Error	Beta	t
(Constant)	-.887	.618		-1.436
X ₁	.007	.006	-.349	-1.249
X ₂	.009	.006	-.585	-1.566
X ₃	.140	.005	-.017	-.061
X ₄	.008	.006	.568	1.349
X ₅	.006	.004	.328	1.135

Source: Researcher 2015

The intercept of the vertical axis has a value (-0.887) and means that that the point where the independent variables is zero then the performance will be negative. The coefficient of all the independent variables are positive at $\alpha = 5\%$, and implies that the increase in the independent variables results in an increase in

the university’s performance. From the coefficients, it can be deduced that the most critical role of strategic sourcing is quality of goods and services which affects an organizations performance at a higher rate than other variables.

Table 4.10 Model summary

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	F-statistic
1	.664 ^a	.4409	.339	.2296886	59.4

Source: Researchers’ computation

The R², also called the coefficient of determination, is the percentage of the variance in the dependent variable explained uniquely or jointly by the independent variables and is 66.4 %. This means that 66.4 % of the changes in the university strategic sourcing are explained by the changes in the independent variables in the model. The remaining 33.6% of the changes in the Y is explained by other factors not in the model. The C is the constant, where the regression line intercepts the y axis, representing the amount the dependent y will be when all the independent variables are 0. Here C is -0.887; the probability of

the coefficient is significant. The F statistic is used to test the significance of R. Overall; the model is significant as F-statistics is 59.4.

V. SUMMARY OF FINDINGS

The study found out that strategic sourcing has a role to play in organization’s performance. In order to meet the standards the university desires, the university need to consider: quality of goods and services, the cost of goods and services,

supplier relationship, timely delivery of goods and services and effective procurement plan.

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.

Although strategic sourcing is essential to the university, the respondents indicated that quality of goods and services was the most highly rated variable followed by cost of goods and services, timely delivery of supplies, effective procurement plan and lastly supplier relationship in that order. The performance of strategic sourcing was indicated as being affected by poor planning, failure to adhere to procurement plans, inadequate funding, sourcing before being really ready and increase in costs of administering the sourcing function.

VI. CONCLUSION

The broad research questions relating to the role of strategic sourcing on an organization's performance was studied and the findings were analysed so as to draw conclusions. The study established that strategic sourcing was affected by various factors which include quality of goods and services, cost of goods and services, supplier relationship, timely delivery of goods and services and the effective planning and adherence to the procurement plans.

In establishing the role of quality goods and services on the organization's performance, it was concluded that quality of goods and services plays a very major role in determining the organization performance. Substandard goods and services translate to more cost incurred, wastages and this could mean loss of business to a competitor.

The research also indicated that the university sources its supplies competitively and this affects the final price charged on the goods and services offered by the university. Hence the cost of goods and services sourced affect university competitiveness. Strategic sourcing is attractive to senior management and it's a top level decision making hence it can be used to improves some of the dimensions of organization's performance. This is evident especially in resource allocation as contained in the annual procurement plans generated by each and every department. However, with the fluctuation in prices, increased demand of higher education in the country and continued under funding from the government, the institution is forced to adjust its budget.

VII. RECOMMENDATIONS

Based on the research findings, the following recommendations should be considered as the university work towards maximizing on the benefits of the strategic sourcing:

1. The university should maximize on its human capital as it most priced asset. The research identified that majority of its staff are well educated and it should therefore ensure that it retain them so as to maximize on their expertise.
2. The study found out that the university's strategic sourcing was affected by factors resulting from non-

adherence to planning and sourcing process and it is therefore recommends that the university should have a formal strategic sourcing process so that they can make decisions which would result to management of risks and securing added value and continuous improvement.

3. The study established that the university is faced with delays in payment of suppliers, difficult procurement process which takes a lot of time and emergencies purchases and sometimes above the planned request. It is therefore recommended that JKUAT should put all measures in place to ensure that they do not face severe losses as a resulting from poor supplier relationship.
4. It is further recommended that instead of competitive sourcing, a framework contract can be employed so that value for money can be realized.
5. Finally, the management should ensure that respective department should prepare well planned budget and operate within the budget and funds allocated.

7.4 Recommendations for Further Research

The study was on Jomo Kenyatta University of Agriculture and Technology which is a public university and a public entity. This research therefore should be replicated in other public universities and other public entities and the results be compared so as to establish whether there is consistency among the universities on the role of strategic sourcing on organization's performance. This is because private universities do not have bureaucratic procedures when it comes to strategic sourcing.

It's important for a further research to investigate the role of a competent and productive human resource towards implementation of such reforms for an enhanced performance. Future researchers should also embark on researching the risks associated with strategic sourcing and factors inhibiting strategic sourcing in both private and public sectors.

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