INFLUENCE OF SUPPLIER EVALUATION CRITERIA ON PROCUREMENT PERFORMANCE OF NON-GOVERNMENTAL ORGANIZATIONS IN KENYA

URBANUS KIOKO MUTISO & Dr. GEORGE OCHIHI
INFLUENCE OF SUPPLIER EVALUATION CRITERIA ON PROCUREMENT PERFORMANCE OF NON-GOVERNMENTAL ORGANIZATIONS IN KENYA

1* URBANUS KIOKO MUTISO
Post Graduate Student, Department of Procurement and Logistics
Jomo Kenyatta University of Agriculture and Technology

*Corresponding Author’s Email: ukioko9@gmail.com

2* Dr. George Ochiri,
Lecturer, Department of Procurement and Logistics,
Jomo Kenyatta University of Agriculture and Technology

Abstract

Purpose: The purpose of the study was to assess the influence of supplier evaluation criteria on procurement performance of non-governmental organizations in Kenya with an aim of making recommendations on proper use of supplier evaluation.

Methodology: This research study adopted a descriptive research design approach. The researcher preferred this method because it allowed an in-depth study of the subject. The target population was 168 heads of procurement. The 2018 NGO coordination board directory has a listing of all the 168 NGO’s spread all over the country. The study will combine two methods in its data collection that is, questionnaires and key informant interviews. After data collection, quantitative data was coded using Statistical Package for Social Science (SPSS) version 20. Data was analyzed through descriptive statistical methods such as means, standard deviation, frequencies and percentage. Inferential analyses were used in relation to correlation analysis and regression analysis to test the relationship between the four explanatory variables and the explained variable.

Results: The independent variables reported R value of .846 indicating that there is perfect relationship between dependent variable and independent variables. R square value of 0.716 which means that 71.6% of the corresponding variation in procurement performance of the non-governmental organizations can be explained or predicted by (supplier commitment to quality, supplier financial status, supplier technical expertise, supplier basic profile) which indicated that the model fitted the study data. The results of regression analysis revealed that there was a significant positive relationship between dependent variable and independent variable at (β = 1.240), p=0.00 <0.05).

Conclusion: The response rate of the study was 71%. The findings of the study indicated that supplier commitment to quality, supplier financial status, supplier technical expertise and supplier basic profile have a positive relationship with procurement performance of NGO’s in Kenya

Policy recommendation: the study recommended that NGO’s should embrace supplier evaluation criteria so as to improve procurement performance and further researches should to be carried out in other institutions to find out if the same results can be obtained.

Keywords: supplier commitment, supplier financial status, supplier technical expertise, supplier basic profile
1.0 INTRODUCTION

Supplier selection is one of the classic areas of research in supply chain management. In fact, past reviews of literature in supplier selection indicate a strong diversity in the systemic approaches in supplier selection methodology as well as in supplier selection criteria (Ho, 2010). Traditionally, vendors are selected from among many suppliers on their ability to meet the quality requirements, delivery schedule, and the price offered.

Selection of appropriate suppliers is one of the fundamental strategies for enhancing the quality of output of any organization, which has a direct influence on the company’s reputation. Despite many multinational humanitarian organizations’ efforts to implement social and environmental issues in their supply chains, a gap exists between the desirability of supply chain sustainability in theory and its implementation in practice (Bowen, 2011).

A study by Salli and Palut (2017) carried out in Turkey investigated the effect of supplier selection and collaboration for humanitarian relief supply chains, he researcher study focused on supplier selection criteria consisting of geographical location, lead time reduction, relational orientation flexibility and resource size as per the study findings most of the humanitarian organizations were to be majorly selecting their suppliers based geographical location as the highest considered factor and relational oriented as the least considered factor.

Olorunniwo and Jolayemi (2014) conducted a study on using supplier selection sub-criteria: selected illustrative demographic analyses in Nigeria. The study analyzed how supplier selection factors like supplier geographical location, cost, technical capability and supplier profile influenced the choice of the purchasers’ supplier selection. The findings of the study revealed that majority of the purchasers considered the supplier cost and technical capability when selecting its suppliers geographical location and supplier profile was least considered respectively.

The ability to develop appropriate supplier evaluation criteria is a measure used in the determination of procurement performance. For instance, the use of the financial stability criteria is seen to be a good indicator of supplier performance. Several studies have been carried out in Kenya regarding supplier evaluation criteria and firm performance, however these studies have been majorly on profit making entities and state entities

1.2 Problem Statement

According to the World Bank (2011) non-governmental organizations are usually non-profit entities that obtain at least 90% of their funding from private sources. Usually, NGO donors requires that a firm be clear on financial regulations that are in line with those of the parent offices, with strong laid down internal controls (Transparency International, 2010). It faces escalating pressure to do more with less, to maximize resources, lower costs and meet the needs of diverse stakeholders (Amayi, 2011).

Non-governmental organizations are constantly struggling to maintain their autonomy and control over their own objectives and programs, while at the same time balancing pressure from their donor, government and other partners (KPMG, 2012). KIPPRA (2016) observes that NGO’s are donor driven and each donor will come up with terms and conditions which influence their activities such as allocation of funds. By virtue of resources, donors are strategically placed to exercise enormous influence on policies and practices (Strickland, 2015).
Non-governmental organisations in Kenya have for a long time been struggling with serious issues of poor procurement performance where cases of 80% misappropriation of resources have been reported due to lack of knowledge on supplier evaluation which have affected the level of service delivery offered and more so efficiency and effectiveness of the projects implemented (KNBS, 2012).

Several studies have been done internationally, Pollock (2017) did a study on supplier evaluation, he concluded that procurement accounts for 73% to 84% of a company’s total costs and argues that companies can save up to 20% from their annual procurement bill by implementing an efficient supplier evaluation system. Locally, Studies have also been done on supplier evaluation UNHCR (2015) noted that, UNHCR procurement from suppliers in Kenya increased from $84 million to $146 million 50% increase from the previous year.

According to the report the increased volume did not match with quality of the services and goods supplied provided as the costs were far much higher than what was supplied this was attributed to poor supplier selection criteria that the concerned procurement professionals used. This resulted to UNHCR not realizing value for money out of the procurement activities in Kenya. All the above studies have been done in different contexts with varying outcomes and impacting on differently depending on the industry and the environment. It is against this back drop that this study seeks to examine the influence of supplier evaluation criteria on procurement performance of non-governmental organizations in Kenya.

1.3 Objectives of the Study

i. To establish the influence of supplier commitment to quality on procurement performance of non-governmental organizations in Kenya.

ii. To find out how supplier financial status influences procurement performance of non-governmental organizations in Kenya.

iii. To assess the influence of supplier technical expertise on procurement performance of non-governmental organizations in Kenya.

iv. To determine the influence of supplier basic profile on procurement performance of non-governmental organizations in Kenya.

2.0 LITERATURE REVIEW

2.1 Empirical Review

Supplier Commitment to Quality and Procurement Performance of NGO’s

Commitment is defined as the belief that a business partner has an ongoing relationship with each other and continuous relationship, it is important to guarantee high and trying to maintain its commitment to a lasting relationship of limited help thus high procurement performance in firms (Černá & Buková, 2016). Commitment among buyers and suppliers brings the desire to develop a stable relationship, a willingness to make short-term sacrifices to maintain the relationship, a confidence in the stability of the relationship, and investments in the relationship thus improving procurement performance (Prasad, Kamath, Barkur & Naik, 2016).

Supplier Financial Status and Procurement Performance of NGO’s

Reuse Selecting firms with financial and business stability increases the likelihood that the partnership will survive through tough times. Firms that are financially stable are likely to offer
long-term relationships, quality products and likely to be more dependable by the purchasing firms due to its guaranteed survival in market (Prasad et al., 2016). Noshad and Awasthi (2018) study found out that suppliers who are financially stable are always in a position to extend credit facilities to their customers and also determine fair prices for the goods and services they offer.

**Supplier Technical Expertise and Procurement Performance of NGO’s**

A study done by Kamenya (2014) on the relationship between supplier evaluation and performance in large food and beverage manufacturing firms in Nairobi revealed that there is a positive relationship between performance and supplier evaluation criteria. The study illustrated that organizations need to consider the environmental friendliness of the supplier, employee capabilities of the supplier and price factors which are significantly influencing performance of the procurement. Other factors including financial stability, quality issues, and supplier’s organizational culture, production capacity of the supplier and preference and reservation were found to have no significant effect on performance.

**Supplier Basic Profile and Procurement Performance of NGO’s**

Organizations and suppliers need to communicate in order to coordinate the flow of products from suppliers to buyers. Products’ prices and contractual arrangements require discussions; delivery schedules and information about technical adaptations need to be exchanged; and occasionally make developments on other strategic issues (Zhou & Benton, 2007). Cannon and Perreault (2009) also emphasizes that buyers and suppliers communicate about common, routine and operational issues such as logistical matters of order status, delivery information and productions schedules, and innovation issues such as product design, future product development plans and market development.

**2.2 Theoretical review**

**Social Development Theory**

Quality management is focused on product and service quality and the means to achieve it (Hall, 2014). Quality management theory focus on continuous improvement therefore uses quality assurance and control of processes as well as products to achieve more consistent quality. Shewhart (2014) made a major step in the evolution towards quality management by creating a method for quality control for production, using statistical methods, first proposed in 1924. This became the foundation for his ongoing work on statistical quality control. W. Edwards Deming later applied statistical process control methods in the United States during World War II, thereby successfully improving quality in the manufacture of munitions and other strategically important products.

Quality management has become such an influential element of doing business that companies have adopted the cost of quality (COQ) model to predict the possible financial burdens of selling a product that is flawed. The COQ recognizes prevention costs, appraisal costs, internal failure, and external costs as foreseeable quality management issues that could not fulfill the needs of the customer (Christine, 2010). Furthermore, an international body has come forward to create a unifying single quality standard known as the ISO 9000, which published a series of quality assurance standards. For a company to become a member of ISO 9000, they must be observed for 9 to 18 months and must meet rigorous quality standards on their goods and services. However, quality control cannot just focus on individual function in order for a procurement manager to be successful they need to implement total quality management (Ferdows, 2013).
TQM embodies the entire organization, from supplier to consumer, to follow a stringent quality management emphasis. TQM incorporates a wide range of methods from the plan, do, check, act circular flow model which provides a company a template to have continuous improvement to the six sigma process. Six sigma is a statistical tool that aims to help reduce defects to a 99% capability rate. Quality in its most basic sense is making the consumer/user content with their good/service and it is the obligation of the procurement manager to ensure that quality awareness is involved with each decision areas (Haberberg & Rieple, 2012).

The European Foundation for Quality Management (EFQM) proposes a model of excellence leading to improved business results. The model is based on the concept that an organization will achieve better results by involving all people in the continuous improvement of their processes. Investors in people have drawn attention to the importance of employees’ engagement for building effective relationship between an organization and its people. Cascading the vision and direction of the organization is one of the strongest levers for generating improved performance (Furusten, 2013).

2.3 Conceptual Framework

| Independent Variables | Dependent Variable |
|-----------------------|--------------------|
| **Supplier Commitment to Quality** | **Cost Reduction** |
| • Defect Free Products | • Customer Satisfaction |
| • Quality Assurance Policy | • Timely Delivery |
| • Guarantees and Warranty | |
| **Supplier Financial Status** | |
| • Audited Financial Statements | |
| • Access to Credit Lines | |
| • Fixed Assets Ownership | |
| **Supplier Technical Expertise** | |
| • Experience in Similar Jobs | |
| • Human Capital Expertise | |
| • Equipment and Machinery | |
| **Supplier Basic Profile** | |
| • Compliance to Statutory Regulations | |
| • Physical Location and Address | |
| • Nature of Business | |

Figure 1: Conceptual Framework
3.0 METHODOLOGY

This research study adopted a descriptive research design approach. The researcher preferred this method because it allowed an in-depth study of the subject. The target population was 168 heads of procurement. The 2018 NGO coordination board directory has a listing of all the 168 NGO’s spread all over the country. The study will combine two methods in its data collection that is, questionnaires and key informant interviews. After data collection, quantitative data was coded using Statistical Package for Social Science (SPSS) version 20. Data was analyzed through descriptive statistical methods such as means, standard deviation, frequencies and percentage. Inferential analyses were used in relation to correlation analysis and regression analysis to test the relationship between the four explanatory variables and the explained variable.

4.0 RESULTS FINDINGS

4.1 Descriptive Analysis

Supplier Commitment to Quality

The first objective of the study was to assess the influence of supplier commitment to quality on procurement performance of non-governmental organizations in Kenya. The respondents were asked to indicate to what extent supplier commitment to quality influenced procurement performance of non-governmental organizations in Kenya. Results indicated that majority of the respondents 19% agreed that it was to a very great extent, 33% said that it was to a great extent, 30% said it was moderate, while little extent was 11% and not all was at 7% respectively.

Figure 2: Supplier Commitment to Quality

The respondents were also asked to comment on statements regarding supplier commitment to quality influence on procurement performance of non-governmental organizations in Kenya. The responses were rated on a likert scale and the results presented in Table 1 below and was rated on a 5 point Likert scale ranging from; 1 = strongly disagree to 5 = strongly agree. The scores of ‘strongly disagree’ and ‘disagree’ have been taken to represent a statement not agreed upon, equivalent to mean score of 0 to 2.5. The score of ‘neutral’ has been taken to represent a statement
agreed upon, equivalent to a mean score of 2.6 to 3.4. The score of ‘agree’ and ‘strongly agree’ have been taken to represent a statement highly agreed upon equivalent to a mean score of 3.5 to 5.

Table 1: Supplier Commitment to Quality Influence on Procurement Performance of NGO’s

| Statements                                                                 | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Std. Deviation |
|---------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|------|---------------|
| Defect free products plays a significant role in cost reduction           | 3.0%              | 6.0%     | 5.0%    | 57.0% | 29.0%          | 4.0  | 0.9           |
| Quality assurance policy plays a significant role in cost reduction       | 4.0%              | 4.0%     | 2.0%    | 43.0% | 47.0%          | 4.3  | 1.0           |
| Guarantees and warranty plays a significant role in cost reduction        | 0.0%              | 0.0%     | 0.0%    | 56.0% | 44.0%          | 4.4  | 0.5           |
| Defect free products plays a significant role in improving customer satisfaction | 4.0%              | 4.0%     | 2.0%    | 44.0% | 46.0%          | 4.2  | 1.0           |
| Quality assurance policy plays a significant role in improving customer satisfaction | 1.0%              | 2.0%     | 1.0%    | 48.0% | 48.0%          | 4.4  | 0.7           |
| Guarantees and warranty plays a significant role in improving customer satisfaction | 2.0%              | 2.0%     | 1.0%    | 48.0% | 47.0%          | 4.4  | 0.8           |
| Defect free products plays a significant role in improving timely delivery | 2.0%              | 2.0%     | 1.0%    | 39.0% | 56.0%          | 4.5  | 0.8           |
| Quality assurance policy plays a significant role in timely delivery      | 4.0%              | 4.0%     | 1.0%    | 48.0% | 43.0%          | 4.2  | 1.0           |
| Guarantees and warranty plays a significant role in improving timely delivery | 6.0%              | 6.0%     | 3.0%    | 45.0% | 40.0%          | 4.1  | 1.1           |
| **Average**                                                               |                   |          |         |       | **4.27**       | **0.86** |             |
reduction. Results indicated that majority of the respondents 100% agreed on the statement that Guarantees and warranty plays a significant role in cost reduction.

Results indicated that majority of the respondents 90% agreed on the statement that Defect free products plays a significant role in improving customer satisfaction. Results indicated that majority of the respondents 96% agreed on the statement that Quality assurance policy plays a significant role in improving customer satisfaction. Results indicated that majority of the respondents 95% agreed on the statement that Guarantees and warranty plays a significant role in improving customer satisfaction.

Results indicated that majority of the respondents 92% agreed on the statement that Defect free products plays a significant role in improving timely delivery. Results indicated that majority of the respondents 91% agreed on the statement that Quality assurance policy plays a significant role in timely delivery. Results indicated that majority of the respondents 85% agreed on the statement that Guarantees and warranty plays a significant role in improving timely delivery.

The average mean of the respondents was 4.27 indicating that majority of the respondents agreed with statements regarding supplier commitment to quality influence on procurement performance of non-governmental organizations in Kenya. However the responses were varied as shown by a standard deviation of 0.86. These findings imply that supplier commitment to quality was an important aspect of supplier evaluation criteria in the NGO’s. The findings agree with David (2014) that using supplier commitment to quality when managing procurement can save an organization a lot of unnecessary costs.

Supplier Financial Status

The second objective of the study was to investigate the influence of supplier financial status on procurement performance of non-governmental organizations in Kenya. The respondents were asked to indicate to what extent did supplier financial status influenced procurement performance of non-governmental organizations in Kenya. Results indicated that majority of the respondents 37% agreed that it was to a very great extent, 33% said that it was to a great extent, 19% said it was moderate, while little extent and not all were at 4 and 7% respectively.

Figure 3: Supplier Financial Status

Results indicated that majority of the respondents 77% agreed on statement that Audited financial statements plays a significant role in cost reduction. Results indicated that majority of the respondents 60% agreed on statement that Access to credit lines plays a significant role in cost
Further results indicated that 63% of the respondents were in agreement that Fixed assets ownership plays a significant role in cost reduction.

Table 2: Supplier Financial Status Influence on Procurement Performance of NGO’s

|                                                                 | Strongly Agree | Disagree | Neutral | Agree | Strongly Disagree | Mean | Std. Dev |
|------------------------------------------------------------------|----------------|----------|---------|-------|-------------------|------|----------|
| Audited financial statements plays a significant role in cost reduction | 5.0%           | 5.0%     | 13.0%   | 36.0% | 41.0%             | 3.47 | 0.96     |
| Access to credit lines plays a significant role in cost reduction | 6.0%           | 5.0%     | 29.0%   | 44.0% | 16.0%             | 3.59 | 1.02     |
| Fixed assets ownership plays a significant role in cost reduction | 0.0%           | 7.0%     | 30.0%   | 43.0% | 20.0%             | 3.76 | 0.85     |
| Audited financial statements plays a significant role in improving customer satisfaction | 1.0%           | 0.0%     | 39.0%   | 51.0% | 9.0%              | 3.67 | 0.68     |
| Access to credit lines plays a significant role in improving customer satisfaction | 9.0%           | 7.0%     | 30.0%   | 35.0% | 19.0%             | 3.48 | 1.15     |
| Fixed assets ownership plays a significant role in improving customer satisfaction | 5.0%           | 5.0%     | 41.0%   | 36.0% | 13.0%             | 3.47 | 0.96     |
| Audited financial statements plays a significant role in improving timely delivery | 0.0%           | 0.0%     | 39.0%   | 53.0% | 8.0%              | 3.69 | 0.62     |
| Access to credit lines plays a significant role in timely delivery | 0.0%           | 0.0%     | 24.0%   | 34.0% | 42.0%             | 4.18 | 0.80     |
| Fixed assets ownership plays a significant role in improving timely delivery | 3.0%           | 0.0%     | 39.0%   | 45.0% | 13.0%             | 3.65 | 0.82     |
| Average                                                         |                |          |         |       |                   | **3.68** | **0.88** |

Results also indicated that 60% of the respondents agreed that Audited financial statements plays a significant role in improving customer satisfaction. Results also indicated that 54% of the respondents agreed that Access to credit lines plays a significant role in improving customer satisfaction.
satisfaction. Further results indicated that 49% of the respondents were in agreement that Fixed assets ownership plays a significant role in improving customer satisfaction.

Results also indicated that 61% of the respondents agreed that Audited financial statements plays a significant role in improving timely delivery. Results also indicated that 76% of the respondents agreed that Access to credit lines plays a significant role in timely delivery. Results also indicated that 58% of the respondents agreed that Fixed assets ownership plays a significant role in improving timely delivery.

The average mean of the respondents was 3.68 indicating that majority of the respondents agreed with influence of supplier financial status on procurement performance of non-governmental organizations in Kenya. However the responses were varied as shown by a standard deviation of 0.88. These findings indicate that through supplier financial status, the management of NGO’s service could improve their procurement performance. This agrees with a study done by Christopher (2008) that organizations must look toward their supply base. The opportunities for cost savings and processes improvements can be enormous as the impact on margins is considerable.

**Supplier Technical Expertise**

There was also need to establish how supplier technical expertise influenced procurement performance of non-governmental organizations in Kenya as the third objective. The respondents were asked to comment on extent of supplier technical expertise influence procurement performance of non-governmental organizations in Kenya. Results indicated that majority of the respondents 48% agreed that it was to a very great extent, 45% said that it was to a great extent, 2% said it was moderate; little extent was 2% and not at all at 3%.

![Supplier Technical Expertise](image)

**Figure 4: Supplier Technical Expertise**

Results indicated that majority of the respondents 70% agreed on the statement that Experience in similar jobs plays a significant role in cost reduction. Results also indicated that majority of the respondents 94% agreed on the statement that Human capital expertise plays a significant role in cost reduction. Results also indicated that majority of the respondents 53% agreed on the statement that Equipment and machinery plays a significant role in cost reduction.

Results also indicated that majority of the respondents 50% agreed on the statement that Experience in similar jobs plays a significant role in improving customer satisfaction. Results also
indicated that majority of the respondents 80% agreed on the statement that Human capital expertise plays a significant role in improving customer satisfaction. Results also indicated that majority of the respondents 61% agreed on the statement that Equipment and machinery plays a significant role in improving customer satisfaction.

Table 3: Supplier Technical Expertise Influence on Procurement Performance of NGO’s

|                                                  | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Std. Dev |
|--------------------------------------------------|-------------------|----------|---------|-------|----------------|------|----------|
| Experience in similar jobs plays a significant role in cost reduction | 2.0%              | 2.0%     | 26.0%   | 35.0% | 35.0%          | 3.99 | 0.94     |
| Experience in similar jobs plays a significant role in improving customer satisfaction | 0.0%              | 3.0%     | 3.0%    | 34.0% | 60.0%          | 4.51 | 0.70     |
| Experience in similar jobs plays a significant role in improving timely delivery | 5.0%              | 20.0%    | 22.0%   | 27.0% | 26.0%          | 3.49 | 1.22     |
| Experience in similar jobs plays a significant role in cost reduction | 0.0%              | 27.0%    | 23.0%   | 26.0% | 24.0%          | 3.47 | 1.13     |
| Experience in similar jobs plays a significant role in improving customer satisfaction | 0.0%              | 1.0%     | 19.0%   | 51.0% | 29.0%          | 4.08 | 0.72     |
| Experience in similar jobs plays a significant role in improving timely delivery | 1.0%              | 0.0%     | 38.0%   | 28.0% | 33.0%          | 3.92 | 0.90     |
| Equipment and machinery plays a significant role in cost reduction | 1.0%              | 0.0%     | 30.0%   | 25.0% | 42.0%          | 4.04 | 0.97     |
| Equipment and machinery plays a significant role in improving customer satisfaction | 2.0%              | 1.0%     | 41.0%   | 30.0% | 29.0%          | 3.88 | 0.83     |
| Equipment and machinery plays a significant role in improving timely delivery | 1.0%              | 2.0%     | 31.0%   | 28.0% | 38.0%          | 4.00 | 0.93     |
| **Average**                                      | **1.0%**          | **2.0%** | **31.0%** | **28.0%** | **38.0%** | **4.00** | **0.93** |
Results also indicated that majority of the respondents 67% agreed on the statement that Experience in similar jobs plays a significant role in improving timely delivery. Results also indicated that majority of the respondents 59% agreed on the statement that Human capital expertise plays a significant role in timely delivery. Results also indicated that majority of the respondents 66% agreed on the statement that Equipment and machinery plays a significant role in improving timely delivery.

The average mean of the respondents was 3.93 indicating that majority of the respondents agreed with influence of supplier technical expertise on procurement performance of non-governmental organizations in Kenya. However the responses were varied as shown by a standard deviation of 0.93. These findings imply that through supplier technical expertise, non-governmental organizations can improve the value gained from all the minor and major procurement processes (Arthur, 2009).

**Supplier basic profile**

There was also need to establish how supplier basic profile influenced procurement performance of non-governmental organizations in Kenya as the third objective. The respondents were asked to comment on extent of supplier basic profile influence procurement performance of non-governmental organizations in Kenya. Results also showed that majority of the respondents indicated 49% was very great extent, 44% great extent, not at all was 2% while little extent and moderate extent was 3% while little extent was at 2%.

![Figure 5: Supplier Basic Profile](image)

Results indicated that majority of the respondents 100% agreed on the statement that Compliance to statutory regulations plays a significant role in cost reduction. Results indicated that majority of the respondents 64% agreed on the statement that Physical location and address plays a significant role in cost reduction. Results indicated that majority of the respondents 47% agreed on the statement that Nature of business plays a significant role in cost reduction.

Results indicated that majority of the respondents 100% agreed on the statement that Compliance to statutory regulations plays a significant role in improving customer satisfaction. Results indicated that majority of the respondents 97% agreed on the statement that Physical location and address plays a significant role in improving customer satisfaction. Results indicated that majority of the respondents 93% agreed on the statement that Nature of business plays a significant role in improving customer satisfaction.
Results indicated that majority of the respondents 91% agreed on the statement that Compliance to statutory regulations plays a significant role in improving timely delivery. Results indicated that majority of the respondents 90% agreed on the statement that Physical location and address plays a significant role in timely delivery. Results indicated that majority of the respondents 89% agreed on the statement that Nature of business plays a significant role in improving timely delivery.

The average mean of the respondents was 4.16 indicating that majority of the respondents agreed with influence of supplier basic profile on procurement performance of non-governmental organizations in Kenya. However the responses were varied as shown by a standard deviation of 0.83. The results imply that non-governmental organizations greatly benefit when supplier basic profile is embraced to reduce costs and improve procurement performance ratings (Ackali, 2009).

Table 4: Supplier Basic Profile Influence on Procurement Performance of NGO’s

| Statements                                                                 | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | Std. Dev |
|---------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|------|----------|
| Compliance to statutory regulations plays a significant role in cost reduction | 0.0%              | 0.0%     | 0.0%    | 48.0% | 52.0%          | 4.52 | 0.50     |
| Physical location and address plays a significant role in cost reduction  | 0.0%              | 0.0%     | 36.0%   | 40.0% | 24.0%          | 3.88 | 0.77     |
| Nature of business plays a significant role in cost reduction            | 15.0%             | 19.0%    | 19.0%   | 20.0% | 27.0%          | 3.25 | 1.42     |
| Compliance to statutory regulations plays a significant role in improving customer satisfaction | 0.0%              | 0.0%     | 0.0%    | 51.0% | 49.0%          | 4.49 | 0.50     |
| Physical location and address plays a significant role in improving customer satisfaction | 0.0%              | 3.0%     | 0.0%    | 54.0% | 43.0%          | 4.37 | 0.65     |
| Nature of business plays a significant role in improving customer satisfaction | 4.0%              | 0.0%     | 3.0%    | 48.0% | 45.0%          | 4.30 | 0.87     |
| Compliance to statutory regulations plays a significant role in improving timely delivery | 0.0%              | 3.0%     | 6.0%    | 51.0% | 40.0%          | 4.28 | 0.71     |
| Physical location and address plays a significant role in timely delivery | 6.0%              | 0.0%     | 4.0%    | 54.0% | 36.0%          | 4.14 | 0.96     |
| Nature of business plays a significant role in improving timely delivery  | 6.0%              | 4.0%     | 1.0%    | 40.0% | 49.0%          | 4.22 | 1.08     |
| **Average**                                                              | **4.16**          |          |         |       | **0.83**       |      |          |

4.2 Correlation Analysis

Correlation analysis was used to determine both the significance and degree of association of the variables and also predict the level of variation in the dependent variable caused by the independent variables. The correlation technique is used to analyze the degree of association between two variables. The results of the correlation analysis are summarized in Table 5.
Table 5: Summary of Pearson’s Correlations

| Variables                      | Supplier Commitment to Quality | Supplier Financial Status | Supplier Technical Expertise | Supplier Basic Profile | Procurement Performance of NGO’s |
|-------------------------------|--------------------------------|--------------------------|----------------------------|------------------------|---------------------------------|
| Supplier Commitment to Quality| Pearson Correlation            |                          |                            |                        |                                 |
| Sig. (2-tailed)               | 1                              | .550**                   | .580**                     | .483**                 | .761**                          |
| Supplier Financial Status     | Pearson Correlation            | .550**                   | 1                          | .434**                 | .659**                          |
| Sig. (2-tailed)               | 0                              | 0                        | 0                          | 0                      | .609**                          |
| Supplier Technical Expertise  | Pearson Correlation            | .580**                   | .434**                     | 1                      | .550**                          |
| Sig. (2-tailed)               | 0                              | 0                        | 0                          | 0                      | .663**                          |
| Supplier Basic Profile        | Pearson Correlation            | .483**                   | .659**                     | .550**                 | 1                               |
| Sig. (2-tailed)               | 0                              | 0                        | 0                          | 0                      | .652**                          |
| Procurement Performance of NGO’s | Pearson Correlation        | .761**                   | .609**                     | .663**                 | .652**                          |
| Sig. (2-tailed)               | 0                              | 0                        | 0                          | 0                      | 1                               |

** Correlation is significant at the 0.01 level (2-tailed).

The correlation summary shown in Table 5 indicates that the associations between each of the independent variables and the dependent variable were all significant at the 95% confidence level. The correlation analysis to determine the relationship of supplier evaluation criteria on procurement performance of non-governmental organizations in Kenya, Pearson Correlation coefficient computed and tested at 5% significance level.

The results indicate that there is a positive relationship (r=0.761) between supplier commitment to quality and procurement performance of non-governmental organizations. In addition, the researcher found the relationship to be statistically significant at 5% level (p=0.000, <0.05). The correlation analysis to determine the relationship between supplier commitment to quality and procurement performance of non-governmental organizations, Pearson Correlation coefficient computed and tested at 5% significance level.

The correlation analysis to determine the relationship between supplier financial status and procurement performance of non-governmental organizations, Pearson Correlation coefficient computed and tested at 5% significance level. The results indicate that there is a positive
relationship \( r = 0.609 \) between supplier financial status and procurement performance of non-governmental organizations. In addition, the researcher found the relationship to be statistically significant at 5% level \( p = 0.000, < 0.05 \).

The correlation analysis to determine the relationship between supplier technical expertise and procurement performance of non-governmental organizations, Pearson Correlation coefficient computed and tested at 5% significance level. The results indicate that there is a positive relationship \( r = 0.663 \) supplier technical expertise and procurement performance of non-governmental organizations. In addition, the researcher found the relationship to be statistically significant at 5% level \( p = 0.000, < 0.05 \).

The correlation analysis to determine the relationship between supplier basic profile and procurement performance of non-governmental organizations, Pearson Correlation coefficient computed and tested at 5% significance level. The results indicate that there is a positive relationship \( r = 0.652 \) between supplier basic profile and procurement performance of NGO’s. In addition, the researcher found the relationship to be statistically significant at 5% level \( p = 0.000, < 0.05 \). Hence, it is evident that all the independent variables could explain the changes in the procurement performance of non-governmental organizations on the basis of the correlation analysis.

4.3 Regression Analysis

In this study multivariate regression analysis was used to determine the significance of the relationship between the dependent variable and all the independent variables pooled together. Regression analysis was conducted to find the proportion in the dependent variable (procurement performance of non-governmental organizations) which can be predicted from the independent variables (supplier commitment to quality, supplier financial status, supplier technical expertise, supplier basic profile) Table 8 presents the regression coefficient of independent variables against dependent variable. The results of regression analysis revealed there is a significant positive relationship between dependent variable (procurement performance of non-governmental organizations and the independent variables (supplier commitment to quality, supplier financial status, supplier technical expertise, supplier basic profile).

The independent variables reported R value of .846 indicating that there is perfect relationship between dependent variable and independent variables. R square value of 0.716 which means that 71.6% of the corresponding variation in procurement performance of the non-governmental organizations can be explained or predicted by (supplier commitment to quality, supplier financial status, supplier technical expertise, supplier basic profile) which indicated that the model fitted the study data. The results of regression analysis revealed that there was a significant positive relationship between dependent variable and independent variable at \( \beta = 1.240, p = 0.00 < 0.05 \).

Table 6: Model Summary

| Model | R     | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------|----------|-------------------|---------------------------|
| 1     | .846a | .716     | .704              | .149                      |

\footnotesize a) Predictors: (Constant), Supplier Commitment to Quality, Supplier Financial Status, Supplier Technical Expertise and Supplier Basic Profile
b) Dependent Variable: *Procurement Performance of Non-Governmental Organizations*

Table 7: ANOVA

| Model          | Sum of Squares | df | Mean Square | F       | Sig. |
|----------------|----------------|----|-------------|---------|------|
| Regression     | 5.369          | 4  | 1.342       | 74.555  | .000b|
| Residual       | 2.131          | 115| 0.018       |         |      |
| Total          | 7.5            | 119|             |         |      |

a) Predictors: (Constant), *Supplier Commitment to Quality, Supplier Financial Status, Supplier Technical Expertise and Supplier Basic Profile*

b) Dependent Variable: *Procurement Performance of Non-Governmental Organizations*

The significance value is 0.000 which is less than 0.05 thus the model is statistically significant in predicting how supplier commitment to quality, supplier financial status, supplier technical expertise and supplier basic profile influence procurement performance of non-governmental organizations. These results agree with Paul (2011) results which indicated a positive and significant influence of supplier evaluation criteria on procurement performance of non-governmental organizations.

Table 8: Coefficients of Determination

| Model        | Unstandardized Coefficients | Standardized Coefficients | t    | Sig. |
|--------------|----------------------------|---------------------------|------|------|
|              | B                          | Std. Error                | Beta |      |
| 1 (Constant) | 1.240                      | 0.260                     | 4.771| 0.000|
| Supplier Commitment to Quality | 0.462                   | 0.073                     | 0.463| 6.299| 0.000|
| Supplier Basic Profile | 0.108                   | 0.035                     | 0.243| 3.075| 0.000|
| Supplier Technical Expertise | 0.071                   | 0.023                     | 0.218| 3.008| 0.000|
| Supplier Financial Status | 0.064                   | 0.047                     | 0.099| 1.273| 0.021|

a) Predictors: (Constant), *Supplier Commitment to Quality, Supplier Financial Status, Supplier Technical Expertise and Supplier Basic Profile*

b) Dependent Variable: *Procurement Performance of Non-Governmental Organizations*

The research used a multiple regression model

\[ Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon \]

Where Y = Procurement Performance of Non-Governmental Organizations

\( \beta_0 \) = Constant

\( X_1 \) = Supplier Commitment to Quality

\( X_2 \) = Supplier Financial Status

\( X_3 \) = Supplier Technical Expertise
X4= Supplier Basic Profile

\( \varepsilon = \) Error Term at 95% confidence level.

The regression equation will be;

\[
Y = 1.240 + 0.462X_1 + 0.108X_2 + 0.071X_3 + 0.064X_4
\]

The regression equation above has established that taking all factors into account (supplier commitment to quality, supplier financial status, supplier technical expertise, supplier basic profile) constant at zero, procurement performance of non-governmental organizations will be an index of 1.240. The findings presented also shows that taking all other independent variables at zero, a unit increase in supplier commitment to quality will lead to a 0.462 increase in procurement performance of non-governmental organizations. The P-value was 0.000 which is less than 0.05 and thus the relationship was significant.

The study also found that a unit increase in supplier financial status will lead to a 0.064 increase in procurement performance of non-governmental organizations. The P-value was 0.021 and thus the relationship was significant. In addition, the study found that a unit increase in supplier technical expertise will lead to a 0.071 increase in the procurement performance of non-governmental organizations. The P-value was 0.000 and thus the relationship was significant.

Lastly, the study found that a unit increase in supplier basic profile policy will lead to a 0.108 increase in the procurement performance of non-governmental organizations. The P-value was 0.000 and hence the relationship was significant since the p-value was lower than 0.05. The findings of the study show that, supplier commitment to quality contributed most to procurement performance of NGO’s.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The study sought to examine the influence of supplier evaluation criteria on procurement performance of non-governmental organizations in Kenya. The study targeted heads of procurement of NGO’s. A total of 120 heads of procurement participated.

The response rate of the study was 71%. The findings of the study indicated that supplier commitment to quality, supplier financial status, supplier technical expertise and supplier basic profile have a positive relationship with procurement performance of NGO’s in Kenya.

5.2 Policy recommendation

The study recommended that NGO’s should embrace supplier evaluation criteria so as to improve procurement performance and further researches should to be carried out in other institutions to find out if the same results can be obtained.

5.3 Areas for Further Research and recommendations

The study is a milestone for further research in the field of procurement performance among parastatals in Africa and particularly in Kenya. The findings demonstrated the important IFMIS platforms to the performance of parastatals to include; online inventory management, electronic vendor evaluation, online payments and online contract management. The current study obtained an R² of 71.5% and should therefore be expanded further in future in order to include other IFMIS platforms that may as well have a positive significance to procurement performance of parastatals. Existing literature indicates that as a future avenue of research, there is need to undertake similar
research in other institutions and public sector organizations in Kenya and other countries in order to establish whether the explored IFMIS platforms herein can be generalized to affect procurement performance in other public institutions. The study recommended that public institutions should embrace IFMIS technology so as to improve performance and further researches should to be carried out in other public institutions to find out if the same results can be obtained.

References

Cua, O., McKone, E., & Schroeder, G. (2011). Relationships between implementation of supplier evaluation, JIT, and TPM and manufacturing performance. *Journal of Operations Management*, 19(6), 675-694.

Dale, B.G. (2013). *Managing Quality*, Fourth Edition, Hertfordshire: Prentice Hall.

David C.W., & Robert, J.F. (2014). *Manufacturing Planning and Control Systems for Supply Chain Management*. Mcgraw-Hill Education - Europe

Demirbag, M., Tatoglu, E., Tekinkus, M. & Zaim, S. (2010). An analysis of the relationship between supplier evaluation implementation and organizational performance. *Journal of Manufacturing Technology Management*, 17(6), 829-847.

Dunn, S. D. (2008). *Statistics and Data analysis for the Behavioral Science*: Mc Graw Hill

Eriksson, H., & Hansson, J. (2011). ‘The impact of supplier evaluation on financial performance. Measuring Business Excellence, 7(1), 36–50.

Evans, R., & Dean, W. (2008). *Total quality: Management, organization and strategy* (3rd ed.). Mason: Thompson South-Western.

Ferdows, K (2012). *Global Manufacturing Practices – A World-wide Survey of Practice in Production Planning and Control*, Elsevier, Amsterdam.

Flynn, B., Sakaribara, S. & Schroeder, R. (2009). "A framework for supplier evaluation research", *Journal of Operations Management*, 11(4), 339-366.

Government of Kenya. (2010). *Kenya Vision 2030: A Globally Competitive and Prosperous Kenya*, Nairobi: Government Printers.

Hadavand, S. (2010). Management of Comprehensive Quality in Engineering Educational Programs. *Iranian Journal of Engineering Education*, 12(4), 27-48.

Hoyer, W., & Hoyer, Y. (2010). *Implementation of Supplier evaluation in Small Organizations: A Case Study in Sweden*. Supplier evaluation, 12(8), 988-994.

Isaac, S., & Michael, W.B. (2008). *Handbook in Research and Evaluation for Education and the Behavioral Sciences*. Macdonald and Evans, Ohio, U.S.A

ISO (2008). ‘Supplier evaluation and quality assurance–Vocabulary*, International Organization for Standardization, Geneva.

John, G & Johnson, P. (2012). *Research methods for Managers, 4th Edition*. Sage Publications: London.

Joiner, T. (2012). Supplier evaluation and performance: the role of organization support and co-worker support. *International journal of quality & reliability management*, 24(6), 617-627.

Kakwezi, P., & Nyeko, S., (2010). *Procurement Processes and Performance: Efficiency and Effectiveness of the Procurement Function*: Makerere University Press, Kampala.

KAM (2014). *Kenya manufacturers and exporters directory*. Nairobi: KAM.

Kaynak, H. (2010). The relationship between supplier evaluation and their effects on firm performance. *Journal of Operations Management*, 21(4), 405–435.
Kazemi, M., & Hooshyar, V. (2009). Determining the Readiness Levels of University Chancellors to Use supplier evaluation- Case Study: A State University; Higher Education Magazine, 31(7), 85-108.

Kenneth, Lysons, Brian & Farrington, (2011). Purchasing and Supply Chain Management: Seventh Edition, Person Education Limited.

KIPPRA. (2010). The Demographic Governance Support Programme (DGSP). Nairobi: KIPPRA.

Kirungu, K.H. (2012). An Investigation of Possible Constraints to Efficient Management Of the Supply Chain in Government Hospitals. A Case Study for Kenyatta National Hospital. Mombasa: Government Training Institute.

KNBS (2008). National Service Delivery Survey Report. Nairobi: Kenya National Bureau of Statistics.

Kombo, D. & Tromp, D. (2010). Project and Thesis Writing, an introduction. Nairobi: Pauline Publications Africa.

Kothari, C.R. (2008). Research Methodology; Methods & Techniques (2nd ed.). New Delhi; New Age International Press Limited.

Lai, M. (2008). An investigation into the relationship between supplier evaluation and hospital performance in Taiwan Public Hospital, Paper presented at the Thirty Second Annual meeting of the Western Decision Science Institute, Hawaii.

Larry, H. (2013). Advanced Statistics in Research: Reading, Understanding, and Writing Up Data Analysis Results. Publisher: Shadow Finch Media LLC

Lee, M., Rho, H., & Lee, S. (2009). Impact of Malcolm Baldrige National Quality Award criteria on organizational quality performance. International Journal of Production Research, 41(9), 2003–2020.

Malik, A., Iqbal, Z., Shaukat, R., & Yong, J. (2010). Supplier evaluation and organizational performance: Evidence from Pakistani SMEs, International Journal of Engineering & Technology, 10(4), 26-31.

Mann & Zhang (2010). Some cultural/geographical styles in quality strategies and quality costs (P.R. China versus Australia), International Journal of Production Economics, 41(5), 81-92.

Masters, R. J. (2009). Overcoming the barriers to supplier evaluation’s success, International Journal of Quality Progress, 29(5), 53–55.

Mugenda, O., & Mugenda, A. (2012). Research Methods: Qualitative and Quantitative Approaches. Nairobi: Africa Centre for Technology Studies.

Ngechu, M. (2009). Understanding the Research Process and Methods. An Introduction to Research Methods. Acts press, Nairobi.

Nikzad-Zeidi, M., & Tayebi, M. (2012). The Effect of supplier evaluation establishment on customer Satisfaction Aiming at Sustainable Development. 13(3), 99-104.

Nwabueze, U. (2008). An industry betrayed: the case of supplier evaluation in manufacturing, The supplier evaluation journal, 13(6), 400-408.

Nyeko, P. K. (2008). Procurement Processes and Performance: Efficiency and Effectiveness of the Procurement Function.

Oakland, J. (2010). Supplier evaluation (2ed). Oxford, Great Britain: Butterworth-Heinemann.

Orodho C. R. (2009). Element of Education and Social Sciences. Research Methods 2nd Edition, Kanezja Publishers. New Delhi.
Phu-Van, H. (2011). *An empirical study supplier evaluation approach to information system development process* (Unpublished doctorate’s dissertation). Virginia Polytechnic Institute and State University, Virginia, USA.

PPOA. (2007). *Assessing Procurement Systems in Kenya Report*. Nairobi: Public Oversight Authority.

Republic of Kenya (2013). *Ministry of Planning and National Development*, the National Economic and Social Council and the Office of the President.

Robbins, S. & Coulter, M. (2009). “*Foundations of management*”, Frenchs Forest, NSW: Pearson Education.

Rotich, L. M. (2011). Influence of Planning on Procurement Performance in the Kenya, *International Journal of Human Resource and Research Publication*, 12(4), 289-292.

Rouse, M. (2009). *Definition of supplier evaluation*, Related glossary terms. Updated September

Samuel, O. L. (2009). *Supplier evaluation System of Uniliver Ghana Limited* (Unpublished doctorate’s dissertation). St. Clement University, Turks and Caicos Island.

Saunders, M. Lewis, P & Hill, T. (2008). *Research Methods for Business Students*, 3rd edition. England: Prentice hall.

Seleim, A. (2010). Knowledge Management and Organizational Performance in Egyptian Software Firms. *International Journal of Knowledge Management*, 3(4), 29-48.

Sha’ri, M. Y. & Elaine, A. (2010). Supplier evaluation implementation issues: review and cases. *International Journal of Operations & Production Management*, 20(6), 634-655.

Shirima, D. L. (2008). Value for Money Through Reduced Procurement Transaction Costs and Improved Efficiency. *Tanzania Procurement Journal*, 3(4), 44-52.

Smith, A.K. (2013). *Supplier evaluation in the public sector*. Quality Progress Publishers, 3rd edition, Lagos, Nigeria.

Tari, J., Molina, J., & Castejun, J. (2010). The relationship between supplier evaluation and their effects on quality outcomes. *European Journal of Operational Research*, 183(7), 483–501.

Wanyama, J. (2013). *The effectiveness of the Procurement Regulations in Kenya*. Nairobi: Pr Academics Press.

Witjaksono, A. (2012). *The difference of supplier evaluation and organization performance between supplier evaluation firms and non-supplier evaluation firms*, 2nd conference on management, Economics and social science 4(2), 139-143.

World Bank (2013). “*Reducing Supply Chain Barriers Could Increase Global GDP Up To 6 Times More Than Removing All Import Tariffs Report*”, Switzerland.

Yong, J., & Wilkinson, A. (2010). Rethinking supplier evaluation. *Supplier evaluation Journal.*, 12(8), 247-258.