

**INFLUENCE OF SUPPLIER EVALUATION CRITERIA ON PERFORMANCE OF
SUPPLIERS IN PUBLIC ENTITIES IN KENYA
A CASE OF PUBLIC ENTITIES IN KISII COUNTY**

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Abstract

Supplier's evaluation is a critical stage in the procurement process because it helps an organization to identify potential supplier who could be called upon to provide goods and services. If not well done, the procuring institution would result in having to contract the wrong individuals or companies to supply goods services and works. The purpose of this study was to find out the influence of supplier evaluation criteria on performance of suppliers in public institutions in Kisii County. The study was significant because the findings shall assist the management of public entities to have an understanding on supplier evaluation criteria. The limitation of the study was that it focused on public institutions in Kisii County out of other different institutions in the country. This may have not be representative enough of all the entities. The study adopted descriptive research design because it provides an in-depth account of events or processes accruing in that particular instance. Findings indicate that Quality of the Supplier services is affected by supplier's financial capacity, Maintenance costs are used to measure supplier's financial capacity, Warranty is used to measure supplier's financial capacity and technical capacity is conducted. Under supplier evaluation objective results indicated that many of the institutions highly evaluated suppliers in terms of their past performance before they are prequalified. The study concludes that; institutions in Kenya employ several criteria in supplier evaluation processes which majorly include selection based on the following criteria; quality of the supplier services during selection, financial position of the supplier, past performance of the supplier, supplier efficiency in service delivery supplier charges, constitution and the PPOA guidelines. The study therefore, based on the findings and conclusions presented above makes recommendations that; the management and the supply chain management for the institutions in Kenya need to effectively evaluate the most effective evaluation criteria that would facilitate its supplier performance.

Keywords: *financial evaluation, supplier performance, technical capacity*

Background of the study

From a global point of view supplier evaluation entails the activities used to evaluate the abilities of potential suppliers and then to select them to configure a buyer's supply chain for long-term competitive advantage (Choi and Hartley, 1996; Vonderembse and Tracey 1999). Supplier selection is critical (Lao, Hong and Rao 2010) as firms become more and more dependent on their suppliers; the abilities of those suppliers are key resources in the development of the buyer's own capabilities and performance. For example, Gonzalez and Quesada

(2004) found out that supplier evaluation was the most essential supply management process for achieving product quality. However, a firm's ability to employ or enhance its own strength in a strategically important domain such as quality by leveraging supplier capabilities in quality may depend not only on its ability to select a capable supplier in the quality domain but also on its ability to successfully integrate the supplier into the firm's operations and network. Successful supplier evaluation is a source for competitive advantage; they affect competitive performance of public institutions positively if effectively selected.

Although scant empirical research has examined the performance effects of supplier evaluation (Handfield & Ragatz 2005 is a notable exception), several studies have investigated the effects of supplier integration. In some studies supplier integration is modelled as a construct separate from customer integration or internal integration (e.g., Scannell et al., 2000; Petersen et al., 2005; Swink, Narasimhan and Wang 2007), whereas in others it is subsumed into other integration constructs (e.g., encompassing internal and supplier integration; Maloni and Benton 2000; Nairn and Lalwani 2008). The small number of studies on integration and the conflicting findings indicate that the verdict is still out as to whether integration improves procurement performance (Petersen et al. 2005) improving economy can be described as achieving the lowest possible costs. Improving efficiency is getting fully output from available resources, and improved effectiveness is all about attaining objectives set. This can be reached through improving the level of service to end users. e.g. improving service levels, attaining budget targets and improved relationship with internal customers and suppliers.

A well-managed and structured approach to supplier evaluation ensures that the suppliers have the necessary skills and knowledge to do the job and that they are equipped to their full potential. The institution will gain from this through cost saving, enhanced quality, effectiveness and efficiency. i.e. financial costs, minimizing delay costs e.g. when work cannot be done because of lack of equipment necessary for the job and reputational costs. Effective supplier evaluation can also ensure that suppliers understand the aims, objectives and strategies which will cascade into their personal aims and objectives. From a practitioner standpoint, the issue of selection and its relationship to integration in fostering buyer capability has become increasingly important (Monczka, Trent and Handfield 1998; Krause et al. 2001). Supplier performance involves allocation of enough resources financial, personnel, time, and creating a chain of command or organizational structure. It involves giving out responsibility of specific tasks or processes to specific individuals or groups. It also involves managing the process. This includes monitoring results, comparing to benchmarks and best practices, evaluating the efficacy and efficiency of the process, controlling for variances, and making adjustments to the process as necessary. Supplier evaluation is an on-going, never-ending, integrated process requiring continuous reassessment and reformation (Olson et al., 2005).

Statement of the problem

Report by PPOA indicates that up to 30% of procurement inefficiencies in the public sector in Kenya are supplier's performance related. There is therefore an urge as to what can be done to reduce this supplier related procurement issues. One of the ways through which organizations work to reduce supplier related inefficiencies is through the use of best evaluation criteria to evaluate their suppliers.

In real situations, supplier evaluation is expected to positively influence procurement performance. However it is amazing to note that this has not been the case as studies reveal mixed findings with some indicating significant positive relationship while other indicate insignificant relationship. Supplier inefficiencies have led public entities to lose millions of money through rogue and unreliable suppliers (Luchali et al., 2013; Michira, 2013). Despite the extent of documented studies on supplier evaluation there is limited evidence on studies on suppliers' evaluation criteria and how it influence supplier performance in the public sector. Many of the

existing studies have focused more on the methodologies of supplier evaluation (Hung et al., 2009; Wang et al., 2011; Elanchezhian et al., 2010; Aspemar et al., 2009; Ozdemir & Temur, 2009). Thus leaving the gap on the evaluation criteria and the influence it has on supplier performance. This triggered the researcher to find out the influence of supplier evaluation criteria on performance of suppliers in public entities in Kisii County.

Objectives of the study

The study was guided by the following objectives

- i. To establish the influence of supplier financial capacity on performance of suppliers in Kisii county.
- ii. To assess the influence of suppliers technical capacity on performance of suppliers in Kisii county.
- iii. To determine the influence of suppliers performance history on performance of suppliers in Kisii county.
- iv. To find out the influence of price on performance of suppliers in Kisii county

Research Gap

Thairu *et al.*, (2012) and Okello *et al.*, (2014) looked into supplier appraisal as part of supplier monitoring and evaluation. Waweru (2010) studied the effects of inventory levels and stock outs on procurement performance at Kenya forestry research institute. Billow (2013), identified that quality, cost and time affects procurement performance. These studies have helped understand the acquisition domain in this country and also at an international scope. However, all the above studies have failed to highlight fundamental issues within the effect of supplier evaluation criteria on performance of suppliers. This study seeks to address some of these gaps and to bring to the fore.

Research Methodology

The study adopted descriptive research design because it provides an in-depth account of events or processes accruing in that particular instance. The study area was all public institutions in Kisii County. The study targeted all procurement departments in these institutions. The study used stratified random sampling as a sampling technique because it was able to represent not only the overall population but also the key sub groups of the population. Questionnaires were used to collect information because they are easy to administer. The validity of the research instruments were established by seeking opinions of experts in the field of study especially my supervisor. To establish reliability the researcher applied the questionnaires twice to the population. Data analysis was done through use of statistical package for the social science. Data was presented in frequency tables, pie charts and bar graphs.

Descriptive Findings and Analysis

The respondents were asked to rate statements on each of the variables of the study on a scale of 1 to 5 ranging from strongly disagree to strongly agree. The percentage response of the respondents on each scale per variable is presented in the section.

Supplier Financial Capacity

The first objective of the study was to establish the influence of financial capacity on the supplier performance of public entities in Kenya. The study sought to find out the level of respondent's opinion on suppliers financial capacity. The summary of responses as shown in Table 1.

Table 1: Financial Status Evaluation

Statement	Strongly Disagree	Disagree	Agree	Strongly Agree	Neutral	Mean	Std Dev
Quality of the supplier							
Services affects suppliers financial capacity.	5.7%	5.7%	11.4%	51.4%	25.7%	3.86	1.06
Financial position of the supplier affects suppliers financial capacity.	8.6%	14.3%	17.1%	31.4%	28.6%	3.57	1.29
Maintenance costs are used to measure suppliers financial capacity turnover over the last 3 years is used to measure suppliers financial capacity	8.6%	5.7%	11.4%	40.0%	34.3%	3.86	1.22
Value of capital assets and return on capital assets affects suppliers' capacity	8.6%	11.4%	22.9%	17.1%	40.0%	3.69	1.35
Average						3.79	1.24

The findings indicate that majority, 77.10%, of all the respondents agreed that the Quality of the supplier services affects suppliers financial capacity, 60% of all the respondents agreed that Financial position of the supplier affects supplier financial capacity., 74.30% of all the respondents indicated that the maintenance costs are used to measure suppliers financial capacity, 57.10% of all the respondents indicated that the turnover over rate of the last 3 years is used to measure suppliers financial capacity while 57.1% of the respondents also agreed that the Value of capital assets and return on capital assets affects suppliers' financial capacity. The average mean of the responses indicated from the results was 3.73 which show that the respondents were agreeing that supplier financial capability affects supplier performance while the standard deviation was 1.23 which indicated that the answers received were varied as they were dispersed far from the mean. The findings were consistent with Pamela (2013) who carried a study on the determinants of supplier selection and evaluation in Pakistan Telecom industry and revealed that supplier financial status was common and that it has a high correlation with supplier performance.

Supplier Technical Capability

The second objective of the study was to evaluate the influence of technical capability on the supplier performance of public entities in Kenya. The study sought to find out the level of respondent's opinion on supplier technical capability and the summary of responses is shown in Table 2.

Table 2: Technical Capability Evaluation

Statement	Strongly Disagree	Disagree	Strongly Agree	Agree	Neutral	Mean	Std Dev
Suppliers labor force							
Skills assesses							
Technical Capacity	5.7%	17.1%	11.4%	28.6%	37.1%	3.74	1.29
Managerial experience							
Assesses the supplier							
Technical capacity.	0.0%	5.7%	17.1%	31.4%	45.7%	4.17	0.92
Training level of the							
support Staff is used							
to access supplier							
technical capacity.	5.7%	14.3%	20.0%	25.7%	34.3%	3.69	1.25
Experience of support							
staff is used to access							
supplier technical							
capacity.	0.0%	14.3%	22.9%	37.1%	25.7%	3.74	1.01
Technical knowhow							
Of team is used to assess							
technical capacity.	2.4%	17.6%	28.0%	20.2%	31.8%	3.52	1.36
Average						3.77	1.17

The summary of the table above show that 65.7% of the respondents indicated that the suppliers labour force skills Is used to assess supplier technical Capacity, 77.1% agreed that the Managerial experience is used to access supplier technical capacity, 60% of all the respondents agreed that the Training level of the support Staff is used to access supplier technical capacity and 62.8% of the respondents agreed that the Experience of support staff on assigned duties is used to access supplier technical capacity. It was also established that 52.0% of the respondents agreed that the Technical knowhow of project team is used to access supplier technical capacity. The average mean of the responses indicated from the results was 3.77 which show that the respondents agreed that technical capability of the supplier influences supplier performance while the standard deviation was 1.17 which indicates that the answers received were varied as they were dispersed far from the mean. The findings were consistent with Mwikali and Kavale (2012) who conducted a study on technical capability, quality assessment, service levels and risk factors involved on evaluation of suppliers and established it was a common practice for firms to engage in evaluation of the technical capability of suppliers.

Suppliers’ performance history

The third objective of the study was to examine the influence of supplier’s performance history on the supplier performance of public entities in Kenya. The study sought to find out the level of respondent’s opinion on suppliers performance. The summary of responses as shown in Table 4.9 indicated that 65.7% of the respondents agreed that the Experience in the industry/field is used to evaluate supplier’s performance, 85.8% agreed that the Previous experience is used to evaluate suppliers performance.62.9% of all the respondents agreed that Similar projects undertaken are used to evaluate suppliers performance. Those respondents who agreed that the Current projects are used to evaluate suppliers’ performance were 62.9% respectively. In addition, the average mean of the responses indicated from the results was 3.87 which show that the

respondents agreed that supplier past performance among public institutions influence supplier performance in Kenya. The standard deviation was 1.13 which indicated that the answers received were varied as they were dispersed far from the mean. The findings were consistent with Warporn (2012) who argued that evaluation of buyer-supplier relationship commitment leads to supplier performance improvement.

Table 3: Supplier Performance history

Indicator	Strongly Disagree	Disagree Agree	Strongly Agree	Agree	Neutral	Mean	Std Dev
Experience issued to evaluate supplier's performance.	0.0%	14.3%	20.0%	34.3%	31.4%	3.83	1.04
recommendation is used in assessing supplier performance	0.0%	8.6%	5.7%	42.9%	42.9%	4.20	0.90
Previous experience is used to evaluate supplier performance	2.9%	22.9%	11.4%	28.6%	34.3%	3.69	1.25
Similar projects are Used to evaluate suppliers performance	5.7%	8.6%	22.9%	14.3%	48.6%	3.91	1.27
Current projects are used to evaluate suppliers performance.	2.9%	14.3%	22.9%	25.7%	34.3%	3.74	1.17
Average						3.87	1.13

Price

The last objective of the study was to analyse the influence of supplier pricing evaluation on the performance of public entities in Kenya. The study sought to find out the level of respondent's opinion on supplier pricing evaluation. The summary of responses as shown in Table 4.10 indicated that majority, 80% of all the respondents agreed that the Suppliers price Enhanced quality of output, 74.3% of all the respondents agreed that Supplier price flexibility influences supplier performance, 65.7% Market price of materials influenced the price while 80.0% agreed that Forces of demand and supply in the market influences price and thus influence on supplier performance. It was also shown that majority of the respondents, that is, 94.3%, agreed that the Transportation cost influence supplier performance. The average mean of the responses indicated from the results was 3.83 which showed that the respondents agreed that price influenced supplier performance while the standard deviation was 1.06 which indicated that the answers received were varied as they were dispersed far from the mean.

Table 4: Supplier Pricing

Indicator	Strongly Disagree	Disagree	Strongly Agree	Agree	Neutral	Mean	Std Dev
Suppliers' price							
Enhanced quality of output	8.6%	2.9%	8.6%	37.1%	42.9%	4.03	1.20

Supplier price flexibility	5.7%	8.6%	11.4%	31.4%	42.9%	3.97	1.20
Market price of materials	5.7%	8.6%	20.0%	25.7%	40.0%	3.86	1.22
Forces of demand							
And supply in the market	0.0%	8.6%	11.4%	42.9%	37.1%	4.09	0.92
Transportation cost	0.0%	0.0%	5.7%	51.4%	42.9%	4.37	0.60
Average						3.83	1.06

Regression Model Estimation

To establish the influence of supplier selection criteria on the supplier performance of public entities in Kenya, the study adopted a multivariate regression model. The Results were presented in form of tables. The results for the model summary are indicated in Table 4. The regression results show that R was 0.778 which shows that the correlation between the joint predictor variables (financial capability, technical capability, supplier past performance and price of the supplier) and dependent variable (supplier performance of public entities in Kenya) was positive.

Table 5: Model Summary

Model summary			
R	R Square	Adjusted R Square	Std. Error of the Estimate
0.778	0.605	0.552	0.254

The F value of 11.489 was significant at significance value of 0.000 which was less than 0.05 at 5% level of significance. This showed that the overall model was significant. This showed that the combined effect of financial capability, technical capability, supplier past performance and supplier pricing were statistically significant in explaining the supplier performance of public entities in Kenya.

Table 5: Analysis of Variance (Overall Model Significance)

Sum of Squares	df	Mean Square	F	Sig.	
Regression	10.653	4	2.663	11.489	0.000
Residual	6.954	82	0.232		
Total	17.607	86			

Table 6: Regression coefficients

Predictor variables	Beta	Std.	Error	t	Sig.
Constant	1.443		0.509	2.833	0.008
Financial capability	1.146		0.399	2.873	0.007
Technical Capability	0.527		0.211	2.496	0.018
Supplier past performance	1.688		0.338	4.995	0.000
Supplier pricing	0.594		0.263	2.254	0.032

Dependent variable: supplier performance

The final optimal regression model of the study is as presented:

Supplier Performance of public entities = 1.443 + 1.688 Supplier past performance+ 1.146 supplier financial capability + 0.527 Technical capability + 0.594 Supplier pricing.

From the regression model above it clearly indicates that supplier's past performance has the highest influence of 1.688 on supplier performance, financial capability of the supplier at 1.146, supplier pricing at 0.594 and the technical capability which is the list at 0.527.

Summary

The research was undertaken with the aim of investigating the supplier evaluation criteria and its influence to the supplier performance in Kenya. The findings from the study revealed that majority of the institutions considered evaluation mainly on the quality of the supplier services, financial capability of the supplier as well as the flexibility of the supplier during evaluation. Other considerations were supplier efficiency in service delivery, price/cost charged by the supplier, constitution and the PPOA guidelines, communication between the organization and supplier, supplier technical capability, supplier profile, transparency of the supplier with confidential information, service offering experience of the supplier in certain services/products and also compliance with procurement procedures.

Influence of Technical Capability Evaluation on supplier performance

The findings showed that the respondents agreed that technical capability evaluation is conducted in their companies. The findings also indicated that technical capability evaluation has a positive and significant influence on supplier performance of public entities in Kisii County implying that an increase in company evaluation of the technical capability of its suppliers such as labour force capacity, technical knowledge of operation and staff level of expertise leads to a significant improvement in supplier performance of Public entities firms in Kenya.

Influence of Supplier Past Performance on supplier performance

With regard to supplier performance, the study findings indicated that best practices in supplier evaluation results to reduction in product and material costs as well as enhanced quality of output. Findings also revealed that with good supplier evaluation, an organization encounters a decreased rate of return inwards, reduced supplier quality problems, elimination of unnecessary steps in production process, supplier flexibility, effectiveness in supply chain management, as well leads to procurement function working effectively in compliance with supplier selection procedures.

Influence of Financial Capacity on supplier performance

The study findings on the influence of financial capacity criteria on supplier performance revealed that financial position based evaluation of the Supplier also had a great and very great extent of influence to the supplier performance. The past three year's rate of return of a supplier is used to determine the suppliers' financial position.

Influence of Price on the supplier performance

Price/cost charged by the supplier evaluation criteria as well was reported to have a great effect on supplier performance. Other evaluation criteria employed were constitution and the PPOA guidelines criteria, ability of the supplier to be open in information sharing with the organization, Supplier technical capability as well as supplier profile which were found to have a great effect on procurement performance. Findings revealed further that the ability/willingness of the supplier to be open in sharing confidential information, selection based on the service offering experience of the supplier in certain services/products and compliance with procurement procedures greatly affects supplier performance.

Conclusion

Based on the above presented findings, the study concludes that; institutions in Kenya employ many criteria in supplier evaluation processes. These majorly include selection based on the following criteria; financial position of the supplier, past performance of the supplier, supplier service delivery efficiency, supplier charges, communication between the organization and supplier, supplier technical capability, supplier profile, ability of the supplier to share confidential information, supplier service offering experience in certain services/products as well as compliance with procurement procedures.

There is a positive and significant relationship between supplier evaluation criteria and supplier performance in institutions. The positive relationship shows that the choice of the evaluation criteria will determine the performance of the supplier in the institutions. Thus, increasing efficiency in supplier selection and evaluation criteria will result to increased supplier performance.

Recommendations

The study therefore, based on the findings and conclusions presented above makes recommendations that; the management and the entire supply chain management for the institutions in Kenya need to effectively evaluate the past performance of the supplier which will help to facilitate its supplier performance. Also, having effective evaluation on the financial capability of the supplier will determine the ability of the supplier performance of the institutions. There is need to ensure that technical capability and the pricing of the supplier are looked into to aid select the best supplier which will lead to better supplier performance. The study also recommends that, institutions as well as other corporations should be guided by the constitution as well as the PPOA guidelines on supplier evaluation for these to ensure effectiveness and performance of the supplier.

Suggestions for Further Study

The study recommended future research to focus on other supplier evaluation criteria other than the four investigated in this study since the four account for up 60.50% of the performance of public entities in Kenya. This therefore means that other factors not studied in this research contribute 39.50% of the performance of public entities in Kenya. Future studies can focus on establishing these other factors which can range from other supplier evaluation criteria to non-evaluation criteria. There is a need to establish the influence of supplier evaluation criteria on performance per sector and conduct a comparative study. Furthermore, other studies can focus on a different context other than the public institutions.

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