



**EFFECT OF SUPPLIER EVALUATION ON PERFORMANCE OF THE PROCUREMENT FUNCTION OF PRIVATE HEALTH INSTITUTIONS IN KISUMU COUNTY, KENYA**

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**ABSTRACT**

*This study sought to determine the effect of supplier evaluation on performance of procurement function of the private health institutions in Kisumu County. This was cross sectional survey study where data was collected in private health institutions in Kisumu County at a single point in time. Population of the study was 75 procurement staff of the 25 private health institutions in Kisumu County while the sample size was all the 75 staff working in the procurement departments. Data was collected through structured questionnaires that was administered through drop and pick technique. The collected data was analyzed and mean and standard deviations used to describe the variables in the study while regression analysis was computed to determine the effect of supplier evaluation on performance of procurement function of the private health institutions in Kisumu County. Both descriptive and inferential statistics indicated that all the study's conceptualized variables (supplier quality commitment, supplier financial stability and supplier competence) significantly influenced performance of procurement function of private health institutions in Kisumu County (dependent variable). The study concluded that one; supplier quality commitment is a mandatory requirement for boosting the procurement function; two, supplier financial stability boost procurement performance function by minimizing costs associated with re-advertisements of tenders due to prequalified supplier's financial inability; and three, supplier competence is a significant determinant of procurement performance, since overall supplier capability in terms of product/service quality responsiveness guarantees customer satisfaction. The study recommended that one, the procurement office should consider supplier's quality commitment to ensure that procured goods/services meet customer needs and standards, two, the procurement office should evaluate suppliers' financial stability in determining suppliers' financial capability of supplying procured goods/services; and three, to boost the procurement performance function, procurement officers should carefully assess supplier's competence in supplying quality goods/services before being awarded bids.*

**Key Words:** *Supplier Quality Commitment, Supplier Financial Stability, Supplier Competence, Procurement*

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## INTRODUCTION

Supplier evaluation is an integral part of the supply chain function as this will determine the general performance of the supply chain in terms of quality, cost and delivery time and enhance continuous supply. Supplier evaluation involves critically analyzing your suppliers which involves tasks such as periodical visits, supplier rating and appraisal. Supplier evaluation can enhance organizational performance across the supply chain by minimizing operational costs, shortening process cycle, refining quality performance and enhancing customer satisfaction.

Supplier quality management is a set of activities in most cases initiated by the management to improve organization performance. Such activities include measuring and tracking the cost of supplier quality, using performance based score cards to measure supplier performance, conducting supplier audits and establishing effective communication channel with suppliers among many more, with an aim of achieving customer satisfaction. The impact of supplier quality on an organization's performance is large and direct, and the general understanding is that a firm's quality performance (output) can only be as good as the quality performance of its suppliers (input). An increasing tendency towards supplier development by organizations as supplier quality integration is found to be a critical dimension of quality excellence.

Supplier evaluation a process conducted at the tender stage and can be in the form of either a questionnaire, interview or site visit to assess the supplier's capability in terms of capacity, financial stability, quality standards, performance and organizational structure and process in place. Both existing and potential suppliers are scored on suitability and either approved or rejected to be added onto the approved supplier list (ASL). This helps to improve existing suppliers performance and also can periodically ensure you have the right sized and fit of suppliers on your approved list.

Performance is the measure of output in terms of quality, deliver time/ order cycle time, cost and the

ability to continuously supply. Measuring supplier performance is an important means of modifying managerial behavior, and aligning the relationship with the strategic and operational goals of the buyer firm (Paul, Patel & Mutai, 2008). Performance measures provide the information necessary for decision makers to plan, control and direct the activities of the organization. They also allow managers to measure performance, and to direct improvement activities by identifying deviations from standards. For purchasing managers, the evaluation and monitoring of supplier performance is a critical responsibility.

In Kenya, both private and public corporations and institutions rely on procurement to access most of their products and services, through purchasing and sourcing as well as tendering and contracting. In order to ensure fairness during the bidding process, the Government through the Public Procurement Oversight Authority (PPOA), Public Procurement and Asset Disposal Act (PPDA) of 2015, and the Procurement Regulations of 2015 entrenched the concept of competitive procurement in all government agencies. That is, the aims of PPOA and PPDA is to establish procedures for procurement and the disposal of unserviceable, obsolete or surplus stores and equipment by public entities to maximize economy and efficiency, promote competition and ensure that competitors are treated fairly, promote the integrity and fairness of those procedures, increase transparency and accountability in those procedures and to increase public confidence in those procedures and facilitate the promotion of local industry and economic development. But despite these standards, Kenya loses a lot of taxpayers' money to improper procurement practices which negatively affects the performance of the procurement function (GoK, 2017).

Kenya private health sector is one of the most developed and dynamic in Sub Saharan African. In the health sector where the leading causes of death are HIV/AIDS, acute respiratory infection (ARI), diarrheal diseases, and malaria (World Health

Organization(WHO)2004) the private commercial (for profit) sector and the not for profit sector play critical roles in preventing and treating disease. Even among the poor, the private sector is an important source of care. Forexamples,47percent of the poorest quintile of Kenyans uses a private facility when a child is sick (Marek, Ngatara & Ayuma, 2016).In recognition of this role, the government of Kenya has developed strategic to develop the private health sector in its Vision2030 plan as well as in the strategic plans include social health insurance to increase access to health care, a reduced role for the Ministry of medical services (MOMS) and ministry of public health and sanitation (MOPHS). (These two ministries are the component branches of the recently divided ministry of Health.) some of the key features of those plans include social health insurance to increase access to health care, a reduced role for the ministry of Health in service delivery, more delegation of authority to provincial and district level, and promoting more public and private partnerships(PPPs). The private health sector play a greater role in healthcare provision and identifying ways to improve its procurement functions can help increase equity, access and efficiency in the health system. Over the last 20 years, the private health sector in Kenya has grown significantly. Any meaningful strategy to improve health sector in Kenya must look beyond the public sector and consider the potential of the not for profit (commercial) health sector. The current government of Kenya (GOK) understands this, and the private sector is very much a part of their Vision 2030 plan for growth in all areas, including health. The government's development partners both bilateral and multilateral are also becoming aware of how large a role commercial health providers play in the health system. As a result, there is an important need to understand the characteristics of the private health sector as well as to identify appropriate and effective ways to improve efficiency in the private commercial health sector.

### **Statement of the Problem**

Suppliers are important stakeholders whose operations can impact the overall performance of a given procurement function. The choice of an organization's supplier should be guided by an elaborate evaluation of the potential suppliers since the suppliers can impact the performance of any procurement function or process. Delayed deliveries, poor quality products or services, non-completion of orders and even threats of litigation due to delayed payments is a common scenario experienced by both public and private health institutions.

Report by PPOA in 2015, indicates that up to 30% of procurement inefficiencies in the public sector in Kenya are attributed to supplier's performance issues. There is therefore concern as to what can be done to reduce supplier related procurement issues. One of the ways through which organizations strive to reduce supplier related inefficiencies is through evaluation of suppliers. In ideal situations, supplier evaluation is expected to positively influence procurement performance. However it puzzling to note that the relation has not been the case as studies reveal mixed findings with some indicating significant positive relationship while other indicate insignificant relationship.

As reported by PPOA, in the public sector in Kenya, suppliers are in most cases conventionally selected on the basis of low price and less importance is given to the suppliers who give assurance of on time delivery and long term relationships. The question arises in this case as to what criteria the private health institutions in Kisumu County should use in selecting their suppliers for better procurement performance. Supplier evaluation is arguably one of the popularly used approaches of ensuring the right suppliers are awarded contracts. Most of the researchers have only paid much attention on public institutions like hospital and university, leaving the private sector untouched. For instance, Patel, R. P (2016) Supplier Evaluation: As

a tool for sustainable development in the Public hospitals in Nairobi.

Empirically, there is little regard to the procurement process in public organizations like health institutions where delays in time required for supply and delivery of goods and services has really affected procurement performance function in the health institutions. Therefore lack of empirical evidence on feasible contributing factors of procurement performance function in public organization motivated this study to investigate influence of supplier evaluation on procurement performance in private health institutions in Kisumu County.

### **Objectives of the Study**

The main objective of this study was to find out the influence of supplier evaluation on the general performance of the procurement function of private health institutions in Kisumu County. The specific objectives were;

- To evaluate the effect of supplier's quality commitment on procurement performance in private health institutions in Kisumu County.
- To determine the effect of supplier's financial stability on procurement performance in private health institutions in Kisumu County,
- To assess the influence of supplier's competence on procurement performance in private health institutions in Kisumu County

The study was guided by the following hypotheses

- H<sub>01</sub> Supplier's quality commitment has no significant influence on procurement performance of private health institutions in Kisumu County.
- H<sub>02</sub> Supplier's financial stability has no significant relationship on procurement performance of private health institutions in Kisumu County.
- H<sub>03</sub> Supplier's Competency has no significance influence on procurement performance of health institutions in Kisumu County.

## **LITERATURE REVIEW**

### **Grey systems theory**

According to Grey System Theory, in a practical business environment, in most instances, supplier selection takes place in an environment with less than perfect information. As such, there is some level of uncertainty in the decisions related to supplier selection. In such an environment, it is important to develop certain indicators or criteria; qualitative or quantitative that the supplier can be subjected to before selection. From this theory, the grey correlation analysis model with seven progressive steps was developed (Zou, 2008). These steps include; grey generation aimed at gathering information on grey aspects, grey modeling done to establish a set of grey variation equations and grey differential equations, grey prediction aimed at achieving a qualitative prediction, grey decision, grey relational analysis and grey control (Tsai, 2003).

The theory of Grey System considers the following factors in deciding on the best supplier; Existence of key factors important to the buyer, the numbers of factors are limited and countable and can be directly attributed to potential suppliers, in dependability of factors and factor expandability. The theory applies the principle of series comparability to generate a grey relation. An evaluation matrix may be developed to facilitate this process. The best supplier is selected by choosing a goal and weighting the values of all evaluation factors based on the characteristics of materials to be sourced based on demand patterns (Zou, 2008). In a supplier selection environment, this theory can be applied evaluation of critical performance areas by the procuring entities.

### **The Lean Supplier Competence Model**

The lean supplier competence model was developed by Marks (2007). Through the model, a gap analysis can be charted and an action plan drawn to bridge the disparity in the organization. The model evaluates the suppliers against the five categories which supports the Lean techniques of

Kaizen –continuous improvement. The supplier competency model explain how organizations interact in the five areas of competency where there is varying degrees of performances ultimately to achieve lean organizational operation. Each category is broken down into “specific behaviors” or ways the company and the supplier interact with each other. These behaviors are rated from a “1” as “less lean” to a rating of a “5” as “more lean.” This measurement allows a company to determine placement of business based on common values and common strategic goals. Using the model, as the business philosophies of the company and the supply base draw together to eliminate waste, the natural result is a reduction of cost to the supply chain and to the ultimate customer.

### **Cox Theory**

Cox Theory Tran & Lau, (2013) argues that firms are increasingly entering into long-term, high dependency exchanges as a result of; increased demand for quality goods, demand for variability of goods, demand for constant innovation, severe price competition and increasing technology costs. Matevz and Maja (2013) established that these changes are forcing firms to enter into complex relationships are; relational contracting, network organizations, strategic alliances and horizontal co-operation. Morrison and Wilhelm (2015) established that the increase in number and complexity of these exchanges in an environment is characterized by uncertainty that has led to the increased interest in the use of obligation contracting.

### **Empirical review**

The concepts of SQM can be viewed as an integration of strategic practices, and such practices need to stretch across inter-organization boundaries to satisfy both existing and new customers (Harland, 1999). Accordingly to Yeung and Lo (2002) view SQM in terms of the managerial efforts necessary for creating an operating environment in which a manufacturer can integrate its supplier capabilities into its operational processes, these managerial efforts can be

clustered into several components, namely management responsibility, supplier selection, supplier development, supplier integration, quality measurement and conducting supplier audits. Fernandez (1995) state that supplier selection, supplier development and supplier integration can be regarded as forming an SQM system, with management responsibility seen as the driver of the being able to map current capacity in the supply base against a company’s mid-term demand forecast, procurement and material planning can spot potential upcoming constraints at an earlier stage. This allows them t to make more conscious and timely decisions for constraint resolution e.g. where and how to best invest in additional capacity, opportunities to bridge shortfalls with short term actions or how best to allocate existing capacities.

Vaidya and Callender (2012) conducted a study on the critical factors that influence successful procurement performance in the public sector and identified end user uptake and training, supplier system integration, security and authentication, reengineering process, performance measurement, top management performance, change management program and supplier quality commitment as the critical factors that determine the success of the procurement function.

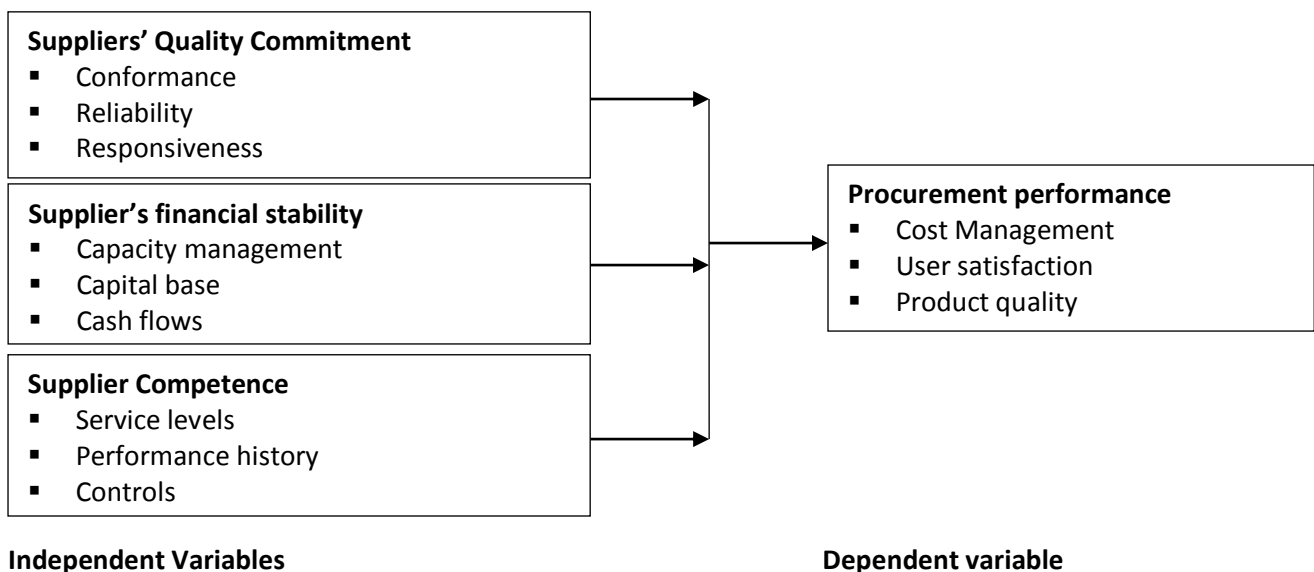
According to KaiHaseklever, (2016) Managing the end-to-end capacity management cycle is a challenging and time consuming task. The impact of potential delivery short falls for a company is too critical to be managed in between other day-to-day operation. Effective capacity management requires a structured and cross-functional approach as almost all operational function are involved. Today supplier capacity management is an integral part of supply chain risk management securing top and bottom line profit.

Teutemann, (2010) study found that the sole concern of bureaucrats in the public sector is to try to exhaust fully their procurement budget so as to avoid reductions in their future budget, hence cost reductions due to competitive procurement procedures in one year do not necessarily result in

increase in subsequent budgets thus must source for suppliers with good financial capacity so as to boost procurement performance.

A study by Kirande and Rotich, (2014) on the determinants of public procurement performance in Kenyan established that the main concern of procurement function is to make sure that one buys from the best suppliers and also improve the current suppliers. The organizations therefore choose suppliers with who have the capacity to deliver. The study further observed that supplier evaluation can work as a tool to influence future behavior of both buyer and supplier organization. By connecting procurement targets to certain supplier competence, organizations achieve higher supplier performance thereby leading of CIPS (2013) in their report on monitoring the performance of suppliers pointed that strategic monitoring of competence of suppliers is critical in management of performance operation and most importantly, management of supplier-buyer relationship. It is important that any procurement and supplies professional have the required skills in supplier relationship competence determination so as to be in a position to develop appropriate performance criteria both for suppliers and the entire procurement function.

A study by Kirande and Rotich (2014) on the determinants of public procurement performance in Kenyan Universities established that the main concern of procurement function is to make sure that one buys from the best suppliers and also improve the current suppliers. The organizations therefore choose suppliers with who have the capacity to deliver. The study further observed that supplier evaluation can work as a tool to influence future behavior of both buyer and supplier organization. By connecting procurement targets to certain supplier competence, organizations achieve higher supplier performance thereby leading to improved procurement performance. On the other hand Nzau (2014) in his study on factors affecting procurement performance of public Universities in Nairobi County found out that selection of suppliers is done based on certain set criteria and the needs of the procuring entity. He points out that among the factors which affects the procurement performance includes timely preparation of procurement plan, strategic supplier selection plus buyer supplier relationships among other factors.



**Figure 1: Conceptual Framework**

## METHODOLOGY

This study adopted a survey design. This design enabled the researcher to relate supplier evaluation with procurement operational performance. It was a survey as primary data was collected from procurement staffs of the 25 private health institutions in Kisumu County. The target population was 25 private healthcare providers in Kisumu County. All the procurement staffs in these private health institutions constituted the population. Sample frame for this study was 75 procurement staffs of the private health institutions. That is, there was at least 3

procurement staff from the 25 Private health institutions in Kisumu County. Data was collected using structured questionnaires. Data collected was analyzed through SPSS (Statistical Package of Social Sciences) version 21. Data was coded for analysis.

## FINDINGS AND DISCUSSIONS

### Suppliers' Quality Commitment

These were summarized responses on whether supplier's quality commitment influence procurement function of private health institutions in Kisumu County. The descriptive results were presented in table 1.

**Table 1: Descriptive statistics: Supplier's Quality Commitment**

	1	5	4	3	2	1	mean	Std.dev
Quality Conformance improves our service cost		8(11.3)	42(59.2)	2(2.8)	17(23.9)	2(2.8)	3.43	0.709
Quality conformance improves our customer satisfaction		5(7.0)	45(63.4)	3(4.2)	11(15.5)	7(9.9)	3.45	0.894
Supplier's reliability help us reduce on unnecessary costs like stock-out costs		6(8.5)	47(66.2)	3(4.2)	12(16.9)	3(4.2)	3.48	0.829
Reliability improves our customer satisfaction		5(7.0)	48(67.6)	2(2.8)	10(14.1)	6(8.5)	3.42	0.977
Reliability improves our service quality		7(9.9)	46(64.8)	3(4.2)	13(18.3)	2(2.8)	3.47	0.778
Responsiveness leads to customer satisfaction since the customers can build trust.		9(12.7)	43(60.5)	6(8.5)	10(14.1)	3(4.2)	3.46	0.855
Responsiveness have greater influence on product/service cost		7(9.9)	44(61.9)	5(7.0)	9(12.7)	6(8.5)	3.47	0.891
Responsiveness improve quality		6(8.5)	49(69.0)	2(2.8)	10(14.1)	4(5.6)	3.49	0.903
<b>Valid listwise 71</b>								
<b>Grand mean = 3.46</b>								

From table 1, most respondents agreed (59.2%) that quality conformance improves our service cost indicating supply of quality products/service minimizes waste thus decrease in re-advertisement costs. This was reinforced by 66.2 of respondents who agreed that supplier's reliability help us reduce on unnecessary costs like stock-out costs. This was supported by Marks, (2007) lean supplier competence model that reinforces that as the business philosophies of the company and the supply base draw together to eliminate waste, the

natural result is a reduction of cost to the supply chain and to the ultimate customer.

In terms of customer satisfaction 63.4% of respondents agreed that quality conformance improves customer satisfaction while a further 67.6% agreed and strongly agreed (7.0%) that reliability improves our customer satisfaction. This implies that product and service quality compliance boosts customer satisfaction of procured goods and services by the health institutions. This is further affirmed by 64.8% of respondents who agreed and



strongly agreed (9.9) that reliability improves service quality. This is supported by Fernandez, (1995) state that supplier selection, supplier development and supplier integration can be regarded as forming an SQM system, with management responsibility seen as the driver of the system that ensures supplier reliability.

In terms of supplier responsiveness as a measure of supplier quality commitment, 60.5% and 12.7% of respondents agreed and strongly agreed respectively that responsiveness leads to customer satisfaction since the customers can build trust. To reinforce, this assertion, 61.9% and 9.9% agreed and strongly agreed respectively that responsiveness has greater influence on

product/service cost, while 69.0% also agreed that responsiveness improves quality, which then boost procurement performance function. This is supported by Yeung and Lo,(2002) who viewed SQM in terms of the managerial efforts necessary for creating an operating environment in which a manufacturer can integrate its supplier capabilities into its operational processes and management responsibility to ensure supplier responsiveness.

### Suppliers' Financial Stability

These were summarized responses on whether supplier's financial influence procurement function of private health institutions in Kisumu County. The descriptive results were presented in table 2.

**Table 2: Descriptive statistics: Supplier's financial stability**

Statement	5	4	3	2	1	mean	Std.dev
Service levels can lead to customer satisfaction through customer good will.	5(7.0)	41(57.7)	9(12.7)	10(14.1)	6(8.5)	3.39	0.836
Service level capability enhances quality of procured products/services	7(9.9)	46(64.7)	7(9.9)	6(8.5)	5(7.0)	3.48	0.822
Supplier capability lowers procurement costs	8(11.3)	44(61.9)	5(7.0)	8(11.3)	6(8.5)	3.45	0.746
Supplier performance history is well evaluated	9(12.7)	48(67.6)	4(5.6)	7(9.9)	3(4.2)	3.49	0.882
Supplier performance history influence procurement performance	6(8.5)	49(69.0)	3(4.2)	9(12.7)	4(5.6)	3.59	0.864
Proper supplier evaluation control enhances customer satisfaction	7(9.9)	47(66.1)	8(11.3)	6(8.5)	3(4.2)	3.56	0.907
<b>Valid listwise</b>	<b>71</b>						
<b>Grand mean</b>	<b>= 3.49</b>						

From table 2, most respondents agreed (57.7%) and strongly agreed (7.0%) that service levels can lead to customer satisfaction through customer good will; while a further 64.7% and 9.9% agreed and strongly agreed respectively that service level capability enhances quality of procured products/services. More so, 61.9% and 11.3% of respondents agreed and strongly agreed respectively that supplier capability lowers procurement costs, implying that supplier's

financial stability boosts his or her capability to supply procured goods, which then minimizes procurements costs incurred in re-advertisements of tenders due to bidders' financial inability to supply procured goods to the health facilities.

In terms of supplier performance history, 67.6% and 12.7% of respondents agreed and strongly agreed respectively that supplier performance history is well evaluated, because poor performance history on the part of the supplier can definitely have a

negative impact on procurement performance function.

Further, 69.0% and 8.5% of respondents agreed and strongly agreed respectively that supplier performance history influence procurement performance; implying that good supplier performance history can necessitate winning of subsequent supply contracts as well evaluated by the procurement office in the health institutions.

Lastly, 66.1% and 9.9% of respondents agreed and strongly agreed that proper supplier evaluation control enhances customer satisfaction. That is, if the procurement office thoroughly evaluates suppliers to understand their history, all incapable suppliers will be muted out, thus, allowing only

financially capable and reliable suppliers to boost the procurement function. This is supported by Kai Haseklever (2016) assertion that managing the end-to-end capacity management cycle is a challenging and time consuming task. The impact of potential delivery short falls for a company is too critical to be managed in between other day-to-day operation. Effective capacity management requires a structured and cross-functional approach as almost all operational function are involved.

### Suppliers' Competence

These are summarized responses on whether supplier's competence influence procurement function of private health institutions in Kisumu County. The descriptive results were presented in table 3.

**Table 3: Descriptive statistics: supplier's competence**

Statement	5	4	3	2	1	mean	Std.dev
Service levels can lead to customer satisfaction through customer good will.	5(7.0)	43(60.6)	9(12.6)	8(11.3)	6(8.5)	3.43	0.855
Service level capability enhances quality of procured products/services	7(9.9)	48(67.6)	4(5.6)	7(9.9)	5(7.0)	3.47	0.891
Supplier capability lowers procurement costs	4(5.6)	50(70.4)	6(8.5)	7(9.9)	4(5.6)	3.58	0.903
Supplier performance history is well evaluated	9(12.7)	53(74.7)	2(2.8)	4(5.6)	3(4.2)	3.69	0.821
Supplier performance history influence procurement performance	7(9.9)	51(71.8)	3(4.2)	6(8.5)	4(5.6)	3.52	0.833
Proper supplier evaluation control enhances customer satisfaction	6(8.5)	49(69.0)	4(5.6)	7(9.9)	5(7.0)	3.45	0.774
<b>Valid listwise</b>	<b>71</b>						
<b>Grand mean</b>	<b>= 3.52</b>						

From table 3, most respondents agreed (60.6%) that service levels can lead to customer satisfaction through customer good will, while 67.6% of respondents agreed that service level capability enhances quality of procured products/services, implying that high service capability enhances customer satisfaction of procured goods/services, which consequently boost procurement performance function.

More so, 70.4% agreed that supplier capability lowers procurement costs, that is, supplier's competence in supplying all items on the advertised tenders minimizing procurement costs in terms of re-advertisement and prequalification costs due to failure on the part of the suppliers who won bids to supply prequalified goods/services to the health institutions.

In terms of supplier competence history, 74.7% of respondents agreed that supplier performance

history is well evaluated, while 71.8% of respondents reinforced this by agreeing that supplier performance history influence procurement performance. This implies that supplier's competence history is well evaluated to weed out rogue suppliers who can compromise the procurement function in the health institutions.

Lastly, 69.0% and 8.5% of respondents agreed and strongly agreed that proper supplier evaluation control enhances customer satisfaction, implying that a well formulated and controlled supplier evaluation system in the procurement office can assist it identify reputable and competent suppliers

to supply quality goods/services that eventually boost customer satisfaction. This is supported by CIPS (2013) report on monitoring the performance of suppliers that pointed that strategic monitoring of competence of suppliers is critical in management of performance operation and most importantly, management of supplier-buyer relationship. It is important that any procurement and supplies professional have the required skills in supplier relationship competence determination so as to be in a position to develop appropriate performance criteria both for suppliers and the entire procurement function.

### Inferential Statistics

**Table 4: Correlations**

		Suppliers Quality Commitment	Suppliers Financial Stability	Suppliers Competence	Procurement Performance
Suppliers Quality Commitment	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	71			
Suppliers Financial Stability	Pearson Correlation	.586**	1		
	Sig. (2-tailed)	.000			
	N	71	71		
Suppliers Competence	Pearson Correlation	.664**	.589**	1	
	Sig. (2-tailed)	.000	.000		
	N	71	71	71	
Procurement Performance	Pearson Correlation	.622**	.781**	.608**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	71	71	71	71

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

**Table 5: Linear influence of supplier quality commitment on procurement performance**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.622 <sup>a</sup>	.387	.378	.49619	.387	43.628	1	69	.000
ANOVA <sup>b</sup>									
Model	Sum of Squares		df	Mean Square	F	Sig.			
1	Regression	10.741	1	10.741	43.628	.000 <sup>a</sup>			
	Residual	16.988	69	.246					
	Total	27.729	70						
Coefficients <sup>a</sup>									
Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.		
		B	Std. Error	Beta					
1	(Constant)	2.786	.283			9.854	.000		
	Suppliers Quality Commitment	.501	.076	.622		6.605	.000		

a. Dependent Variable: Procurement Performance

From table 5, the model summary showed that  $R^2 = 0.387$ ; implying that 38.7% variations in the performance of the procurement function in private health institutions in Kisumu County is explained by supplier quality commitment while other factors not in the study model accounts for 61.3% of variation in performance of the procurement function in private health institutions in Kisumu County. Further, coefficient analysis shows that supplier quality commitment has positive significant influence on performance of procurement function in private health institutions in Kisumu County ( $\beta =$

0.501 (0.076); at  $p < .01$ ). This implied that a single improvement in supplier's quality commitments will lead to 0.501unit increase in the performance of the procurement function in private health institutions in Kisumu County. Therefore, the linear regression equation was;

$$(i) y = 2.786 + 0.501X_1$$

Where;

y = performance of procurement function in private health institutions in Kisumu County.

$X_1$  = supplier quality commitment

**Table 6: Linear influence of supplier financial stability on procurement performance**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.781 <sup>a</sup>	.610	.605	.39577	.610	108.034	1	69	.000
ANOVA <sup>b</sup>									
Model	Sum of Squares		df	Mean Square	F	Sig.			
1	Regression	16.922	1	16.922	108.034	.000 <sup>a</sup>			
	Residual	10.808	69	.157					
	Total	27.729	70						

		Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	1.897	.265		7.150	.000
	Suppliers Financial Stability	.700	.067	.781	10.394	.000

a. Dependent Variable: Procurement Performance

From table 6, the model summary showed that  $R^2 = 0.610$ ; implying that 61.0% variations in the performance of the procurement function in private health institutions in Kisumu County was explained by supplier's financial stability while other factors not in the study model accounts for 39.0% of variation in performance of the procurement function in private health institutions in Kisumu County. Further, coefficient analysis showed that supplier's financial stability has positive significant influence on performance of procurement function in private health institutions in Kisumu County ( $\beta =$

0.700 (0.067); at  $p < .01$ ). This implied that a single improvement in supplier's financial stability will lead to 0.700 unit increase in the performance of the procurement function in private health institutions in Kisumu County. Therefore, the linear regression equation was;

$$(ii) y = 1.896 + 0.700X_2$$

Where;

y = performance of procurement function in private health institutions in Kisumu County.

$X_2$  = supplier's financial stability

**Table 7: Linear influence of suppliers competence on procurement performance**

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics				Sig. F Change
						F Change	df1	df2		
1	.608 <sup>a</sup>	.370	.360	.50336	.370	40.441	1	69		.000

ANOVA <sup>b</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.247	1	10.247	40.441	.000 <sup>a</sup>
	Residual	17.483	69	.253		
	Total	27.729	70			

		Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	2.992	.262		11.437	.000
	Suppliers competence	.446	.070	.608	6.359	.000

a. Dependent Variable: Procurement Performance

From table 7, the model summary showed that  $R^2 = 0.370$ ; implying that 37.0% variations in the performance of the procurement function in private health institutions in Kisumu County was explained

by supplier's competence while other factors not in the study model accounts for 63.0% of variation in performance of the procurement function in private health institutions in Kisumu County. Further,

coefficient analysis shows that supplier's competence has positive significant influence on performance of procurement function in private health institutions in Kisumu County ( $\beta = 0.446$  (0.070); at  $p < 0.01$ ). This implied that a single improvement in supplier's competence will lead to 0.446 unit increase in the performance of the procurement function in private health institutions

in Kisumu County. Therefore, the linear regression equation was;

$$(iii) y = 2.992 + 0.446X_3$$

Where;

y = performance of procurement function in private health institutions in Kisumu County.

$X_3$  = supplier's competence

**Table 8: Multiple regression results**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.810 <sup>a</sup>	.656	.641	.37725	.656	42.612	3	67	.000
ANOVA <sup>b</sup>									
Model		Sum of Squares	df	Mean Square	F	Sig.			
1	Regression	18.194	3	6.065	42.612	.000 <sup>a</sup>			
	Residual	9.536	67	.142					
	Total	27.729	70						

a. Predictors: (Constant), Suppliers Competence, Suppliers Financial Stability, Suppliers Quality Commitment

b. Dependent Variable: Procurement performance

Multiple regression analysis in table 8 showed the multiple regression results of the combined influence of the study's independent variables (supplier financial stability, supplier quality commitment and supplier competence). The model's R squared ( $R^2$ ) was 0.656 which showed that the study explained 65.6% of variation in the performance of the procurement function in private health institutions in Kisumu County, while other factors not in the conceptualized study model accounts for 34.4%, hence, it was a good study model.

Furthermore, Analysis of Variance (ANOVA) shows the mean squares and F statistics significant ( $F = 42.612$ ; significant at  $p < 0.001$ ), thus confirming the fitness of the model and also implied that the study's independent variables (supplier quality commitment, supplier financial stability and supplier competence) have significant variations in their contributions to performance of the procurement function in private health institutions in Kisumu County.

Finally, the values of unstandardized regression coefficients with standard errors in parenthesis in table 9 indicated that all the study's independent variables (supplier quality commitment;  $\beta = 0.568$  (0.079) at  $p < 0.01$ , supplier financial stability;  $\beta = 0.580$  (0.080) at  $p < 0.01$ ; supplier competence;  $\beta = 0.547$  (0.082) at  $p < 0.01$ , significantly influenced performance of the procurement function in private health institutions in Kisumu County (dependent variable).

In this regard, the study's final multiple regression equation was;

$$(iv) y = 1.668 + 0.568X_1 + 0.580X_2 + 0.547X_3$$

Where;

y = performance of procurement function in private health institutions in Kisumu County

$X_1$  = Supplier quality commitment

$X_2$  = Supplier financial stability

$X_3$  = supplier competence

**Table 9: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.668	.265		6.290	.000
	Suppliers Quality Commitment	.568	.079	.634	7.176	.000
	Suppliers Financial Stability	.580	.080	.648	7.232	.000
	Suppliers Competence	.547	.082	.610	6.645	.000

a. Dependent Variable: Procurement Performance

**Hypothesis testing**

First, **study hypothesis one (H<sub>01</sub>)** stated that supplier’s quality commitment has no significant influence on procurement performance of private health institutions in Kisumu County. Multiple regression results indicate that supplier’s quality commitment has significant influence on procurement performance of private health institutions in Kisumu County ( $\beta = 0.568$  (0.079) at  $p < 0.01$ ). **Hypothesis one was therefore rejected.** The results indicated that a single improvement in supplier’s quality commitment led to 0.568 unit improvement in procurement performance of private health institutions in Kisumu County.

Secondly, **study hypothesis two (H<sub>02</sub>)** stated that supplier’s financial stability has no significant influence on procurement performance of private health institutions in Kisumu County. Multiple regression results indicated that supplier’s financial stability has significant influence on procurement performance of private health institutions in Kisumu County ( $\beta = 0.580$  (0.080) at  $p < 0.01$ ). **Hypothesis two was therefore rejected.** The results indicated that a single improvement in supplier’s financial stability level will lead to 0.580 unit improvement in procurement performance of private health institutions in Kisumu County.

Thirdly, **study hypothesis three (H<sub>03</sub>)** stated that supplier’s competence has no significant influence on procurement performance of private health institutions in Kisumu County. Multiple regression

results indicated that supplier’s competence has significant influence on procurement performance of private health institutions in Kisumu County ( $\beta = 0.547$  (0.082) at  $p < 0.01$ ). **Hypothesis three was therefore rejected.** The results indicate that a single improvement in supplier’s competence level will lead to 0.547 unit improvement in procurement performance of private health institutions in Kisumu County.

**CONCLUSIONS**

First, the study concluded that supplier quality commitment is a mandatory requirement for boosting the procurement function.

Secondly, supplier financial stability boost procurement performance function by minimizing costs associated with re-advertisements of tenders due to prequalified supplier’s financial inability.

Thirdly, supplier competence is a significant determinant of procurement performance, since overall supplier capability in terms of product/service quality responsiveness guarantees customer satisfaction.

**RECOMMENDATIONS**

First, the study recommended that the procurement office should consider supplier’s quality commitment to ensure that procured goods/services meet customer needs and standards.

Secondly, the procurement office should evaluate suppliers' financial stability in determining suppliers' financial capability of supplying procured goods/services.

Lastly, to boost the procurement performance function, procurement officers should carefully assess supplier's competence in supplying quality goods/services before being awarded bids.

#### **Areas for further study**

First, a similar study can be done but incorporate electronic procurement to assess its influence on procurement performance function. Secondly, another study can be done but targeting customers or user departments to assess procurement performance in the eyes of procurement service recipients and not procurement officers as procurement service providers.

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