Supplier Selection Practices and Procurement Performance: A Critical Analysis

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Abstract
As market globalization quickens, things to consider when selecting suppliers and the potential suppliers increases. There is a serious concern from the practitioners, government agencies and other stakeholders to what should be done to curb supplier related procurement issues. Evaluation of suppliers is one of the ways an organizations can reduce supplier related inefficiencies. Supplier selection yields positive influence to procurement performance when conducted well. However, what puzzles is the relation hasn't been the case as different scholars give mixed findings. The objective of the study was to establish the influence of supplier selection on procurement performance in county governments. The study was anchored on stakeholder theory and adopted the multiple case studies design. Units of analysis were 14 LREB county governments, target population 196 staff: chief officers, procurement officers and procurement committee members. Primary data were collected. Pilot results (n=20) reveal 20 item instrument reliability (α=0.9563). The study finding (n=181 92.3%) results in two retained attitudes (positive and negative) comprising 7 items with a good fit (p<.005). Bivariate ordered probit regression analysis reveals supplier selection adoption are significantly associated with procurement performance and multivariate ordered probit regression analysis show supplier certification β=1.07(p=.001) are significant meaning they significantly affect procurement performance. Supplier evaluation β=0.3(p=0.179) and supplier comparison β=0.04 (p=0.875) are insignificant meaning they insignificantly predict procurement performance. Study concludes supplier selection practices positively and significantly influence the performance of LREB county governments. The study recommends: supply chain officers be trained on aspects of supplier evaluation, government give attention to supplier selection practices to improve procurement performance. Study may be significant to national and county levels in informing policy direction about SCM practices.
Keywords: Supplier selection, Procurement performance, County governments.
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Introduction
As market globalization quickens, things to consider when selecting suppliers and the potential suppliers increases. There is a serious concern from the practitioners, government agencies and other stakeholders to what should be done to curb supplier related procurement issues. Evaluation of suppliers is one of the ways an organizations can reduce supplier related inefficiencies. Supplier selection yields positive influence to procurement performance when conducted well. However, the relation hasn't been the case as different scholars give mixed findings. Some findings indicate positive significant relationships while other revealing insignificant relationship. PPOA contends in the public sector in republic of Kenya, suppliers are mostly selected based on low price while ignoring strategic relationships and time delivery. In this case the question arises as to what criteria Public institutions and entities should use while selecting suppliers for best procurement performance. The popular approach used to ensure right suppliers are awarded contracts is supplier evaluation and assessment. Therefore the study focused on determinants of supplier selection on procurement performance in county government.

One of the key roles of managers in charge of supply chain is selection of supplier, supply chain managers should select suppliers based on competence and performance. Due to market volatility and dynamism organization managers have realized regardless of their organization strength or brand survival is difficult unless they form a partnership with responsive suppliers whose objective is to fulfill the needs of their client.

Selection of supplier is crucial to organization, aiming at identifying, evaluating and final contracting suppliers. Organizations are often outsourcing non-core activities, leading to dependence and reliance on suppliers. However, question arises as to the criteria used by public sector in selecting and evaluating suppliers. Due to global competing environment, the world is continuously shrinking therefore its necessary for any organization or a firm to manage the costs, revise the quality standards and ensure on time delivery of products and services to survive and thrive and gain competitive advantage. To achieve this an efficient and effective supply chain must be

established. Supply chain is integration of processes and different entities to deliver final product to end consumer in the desired quality and quantity at the right time in the right place. Satisfaction of the end customer defines the success of the supply chain. Technological advancement and demand for varieties of goods and services by the end user led to stiff competition in the globally. Organizations have been forced to improve their supply chain management (SCM) system to increase the agility of the supply chain hence improving the organization performance.

According to report by PPOA report approximately 30% procurement inefficiencies in public sector in Kenya are supplier related performance issues. There is concern to what should be done to curb supplier related procurement issues. Evaluation of suppliers is one of the ways an organizations can reduce supplier related inefficiencies. Supplier evaluation yields positive influence to procurement performance when conducted well. PPOA contends in the public sector in republic of Kenya, suppliers are mostly selected based on low price while ignoring strategic relationships and time delivery. In this case the question arises as to what criteria Public institutions and entities should use while selecting suppliers for best procurement performance. The popular approach used to ensure right suppliers are awarded contracts is supplier evaluation. Therefore the study focuses on determinants of supplier selection on procurement performance in county government. Very few know what the institutions consider in determining the right suppliers, though selection of suppliers is perceived to be riddled with favoritism and secrecy (Bonhestaut 2008).

The ability of organizations to offer quality consistently and compete favorable depends how it can access quality products and services (CIPS, 2013). Organizations are under pressure to engage in strategic supplier selection so as to check on material and production costs (Weber 2008). Supplier evaluation provides the platform for the buying entities to understanding how suppliers are performing however studies reveal after having carried out an in-depth evaluation of supplier inefficiencies still exist among selected suppliers (Nadir, 2012). Any organizational success depends on the selection of its suppliers and partners. Procurement is a vital activity in Public entities; severe operational and financial consequences may result from failure to optimize the procurement function. Appropriate suppliers selection is among the fundamental strategies for promoting quality of output of any organization, it has a direct influence on the company's reputation and competitiveness (Adamyan 2002).

Supplier evaluation is among the techniques for supplier's selection used by an organization. Supplier evaluation is an assessment of suppliers quantitatively and qualitatively to ensure best suppliers a portfolio is available for use (Kemunto, 2014).For sustainability buyers should evaluate suppliers regularly for effective and reliable sources of supplies, buyers (Humphreys, 2003). Supplier selection is critical because firms become over dependent on their suppliers (Rao et al 2010). Supplier selection was influential in supply chain management for achieving product quality (Gonzalez et al. 2014). Although, an organization ability to enhance its capability in a strategically important domain like quality by leveraging capabilities of supplier in quality may depend not only on the ability to select supplier who is capable in the quality domain but also on its ability to integrate successfully supplier into the organization network and operations. Organization achieve competitive advantage by successful supplier selection. When selected effectively, they affect performance of public institutions positively.

2.0 Literature Review
Stakeholder Theory
Stakeholder theory was brought to challenge the notion stakeholders are group to whom management are answerable (Freeman, 1984; Jones, 1995 & Walsh, 2005). Freeman *et al.* (2010) suggests it is about how employees, customers, managers, financiers, suppliers and communities interact to create and trade value. To know business is to understand how these relationships change and work over time. Freeman (1984) discussed the relationship between the external environment and companies and the behavior within environment. The model is in form of a chart where the company is at the center and interact with stakeholders connected with the company. The organization stakeholder relationships is dynamic and mutually independent (Freeman, 1999). The basic principles of stakeholder theory are; the organization enters into relationships with stakeholders that influence or are influenced by the company (Savage *et al*. 2004). The theory looks at the nature of relationships in form of processes, results for the stakeholders and organization. It explains how organization decision making processes is influenced by stakeholders so as to be consistent with priorities and needs.

The organization is seen as a grouping of stakeholders whose purpose is to manage their interests and needs (Friedman 2006). The main groups of stakeholders are: Local communities', customers, employees, suppliers and distributors (Friedman, 2006). Drucker (1998) asserts that the theory is promoted by the realization that in modern business environment, it's not the individual businesses that compete but also procurement processes compete as well. This increases the complexity of defining and identifying the stakeholders associated with the business processes. This theory was relevant in this study since it highlights the need for managing the relationships between the organization, suppliers and customers and how such relationships impact the performance. The theory guides supply chain management practices as it flows from the organization to relevant stakeholders who include suppliers and end users.

Empirical Review

Tracey (2008) in his study on analysis of procurement and supplier issues in UK established quality commitment as determining factor for qualifying supplier. It's advisable to manage material and production so as to survive or attain competitive position in global markets, hence effective development of supplier evaluation and selection is recommended. She further observed supplier quality evaluation function's has recently increased in South Korea as companies fight for competitive advantage in the global market. The supplier quality evaluation was established as a strategic resource for attaining high quality levels, cost savings and fast delivery. A study by Kitheka *et al*. (2013) established supplier performance measurement, supplier integration and supplier development commonly used supplier evaluation practices. Competitive supplier sourcing process should be carried out in openness, and transparent to achieve value for money in public sector procurement (EU report 2008). Essential principles to be observed in performing the procurement function include not only readiness and capability to embrace new technology and supplier financial capacity. Technical capability, cost factors, organizational profile, quality assessment, service levels and risk factors affects supplier selection in management of procurement (Mwikali *et al*. 2012). It further indicated supplier selection should be conducted by experts.

Pamela (2013) in her study in Pakistan on determinants of supplier selection in Telecom industry. Research design adopted was explanatory and non-experimental. Findings revealed supplier financial capacity is key factors determining performance of the supplier and procurement performance. Wangui (2014) conducted study to determine strategic supplier factors affecting performance of procurement function in the industry offering services. Study established the effect of past performance, financial stability and reliability of suppliers on performance of procurement function. Study findings revealed past performance, reliability of suppliers and financial stability have a significant effect on performance. Mwikali *et al*. (2012) asserts in his study on service levels and quality assessment, technical capability and risk factors involved in evaluation of suppliers. Supplier selection is supposed to be done by experts since supplier selection is a process vulnerable to political and personal interference in the public sector.

Kiprotich *et al*. (2014) carried out a study on Public Universities to analyze effect of supplier evaluation on performance of procurement function. Findings revealed suppliers' competence and suppliers' quality commitment have significant effect on performance of procurement. Study by Sukati *et al*. (2013) on supplier's capability and its influence on competitive advantage. Study results affirmed a positive significant relationship exists among three supplier capabilities namely manufacturing, production, and research and development (R&D). According to Kamenya (2014) on beverage manufacturing firms in Nairobi while studying the relationship between supplier evaluation and performance. Finding also revealed organizations need to look at price factors, environmental friendliness of a supplier and supplier employee capabilities. It further revealed quality issues, financial stability, production capacity and organizational culture have no significant effect on performance. In their study. Aseka (2010) conducted a study on criteria of supplier selection and performance of manufacturing firms. Study finding revealed positive relation between organization performance and effective supplier selection. It further demonstrated quantitative factors are considered by firms than qualitative factors. Mburu *et al*. (2015) assessed effect of supplier operations on supply chain performance. The findings was derived from sample of 153 experts from manufacturing firms, the study concluded firms that look into capacity of their suppliers have improved supply chain performance. Suppliers. Trevor *et al.* (2013) establishing how supplier culture affect performance of supply chain of an organization's. Study finding disclosed a positive correlation between supplier-buyer cultural fit and performance of supply chain of a firm. Study by Michele (2008) investigating the supplier selection issue as a way to mitigate the overall supply risk, the independent variable was supplier risk while this study focused on procurement performance. Waraporn (2012) in their study on impact of supplier development on supplier performance. They investigated the role of supplier -buyer commitment in supplier performance in Thailand. Study revealed buying company should implement the supplier development strategies by looking at buyer-supplier relationship commitment for improvement performance. The buying entities should develop suppliers for long-term relationship. However, study failed to explore the effect of supplier development on the buyer organization performance.

3.0 Research Methodology

The Multiple case studies design was employed for the current study in order to effectively explain the effect and relationship between information technology in fostering supply chains innovation and entrepreneurship in county government in Kenya. The Multiple case studies design allows the researcher to explore the phenomena under study through the use of a replication strategy. According to Yin (1994) the use of the replication strategy is the same as carrying out a number of separate experiments on closely related topics. Duplication is conducted in two stages, in which cases are selected to obtain similar results, and a theoretical replication stage, in which cases are selected to explore and confirm or disprove the patterns identified in the initial cases. According to this model, if all or most of the cases provide similar results, there can be substantial support for the development of a preliminary theory that describes the phenomena (Eisenhardt, 1989). There are no fast and hard rules in the multiple–case

studies design, about how many cases are required tofulfil the requirements of the duplication strategy. Yin (1994) proposes that six to ten cases, are enough to provide compelling support for the initial set of propositions if the results turn out as predicted. He further argues, the approach of multiple case studies doesn't depend on the type of representative sampling logic used in research, the typical criteria regarding sample size are irrelevant. Instead, the size of the sample is determined by the number of cases needed to reach saturation. This means, data collection until no substantial new findings are revealed. The participants sample is selected clearly to encompass instances in which the phenomena under study are to be found.

Study was conducted in 14 LREB County governments. Targeted population consisted of 196 employees, comprising of the county chief officers, procurement officers and procurement committee member comprising of a total of 196 respondents. Population was targeted because they hold key information with regards to variables of interest in this study. Study adopted random sampling method in which 9 chief officers, 3 procurement committee members and 2 procurement officers were randomly sampled from each of the 14 counties within the LREB. The study used primary data. Primary data is information directly gathered from respondents (Kombo *et al.* 2006). Researcher distributed 196 semi-structured questionnaires to the targeted respondents of which 181 questionnaires were completely filled and collected by the researcher for data management and analysis. Of the 196 questionnaires, 15 were not filled by the respondents. Completed questionnaires were then entered into SPSS for data management and storage and then exported to STATA for analysis of data.

Analytical model
Quantitative data analysis techniques which involve descriptive and inferential statistics were adopted to analyze the data. Probit regression and marginal effect models were adopted for each objective.

Probit regression Model
Probit model is a binary response model which has two possible outcomes donated as 1 and 0. The model estimate the probability of observation with particular features fall into one of the categories. The probit model employs a probit link function.

Suppose Y represents the outcome (procurement performance) variable with two categories and X is a vector of independent variables (supplier selection and procurement performance). The form of the model is below.

$Pr(Y=1|X)=\Phi(X^T\beta)$, …………………………………..(i)

 Pr denotes probability

 Φ Cumulative Distribution Function.

 Parameters β are estimated by likelihood maximum

 Another way of modeling probit model is to assume there is a latent continuous variable y_i^* such that

$Y_i = \begin{cases} 1 & if \ yi *= xi\beta + \epsilon i > 0 \\ 0 & otherwise \end{cases}$ …………………………………..(ii)

Specifying $Pr(y^*>0|x)=F(x\beta)$ to be the cumulative distribution for ϵi conditional on x yields

$Pr(y^*>0|x)= Pr(\epsilon>-x\beta|x)$ ………………………………….(iii)

   $=Pr(\epsilon<x\beta|x)$ (if ϵ has a symmetric distribution)

   $=F(x\beta)$

The pseudo R^2 parameter was used to evaluate the model performance in which pseudo $R^2 >0.5$ was considered fit.

Multiple regression model: $y =\beta_0+\beta_1x_1+\beta_2x_2+\cdots+\beta_kx_k+e_i$ ……………. (iv)

 y is dependent variable, x_1, x_2… x_k are independent variables, e_i is error, β_0, β_1,. . , β_k are parameters. There are k independent variables.

 x_j denotes any of the independent variables, and β_j is its parameter, $j=1 \ … \ k$

Estimated equation: $y=\beta_0+\beta_1x_1+\beta_2x_2+\cdots+\beta_kx_k$ ……………………………….(v)

 y is predicted value, β_0, β_1… β_k are coefficients,

 k is the number of observations,

 i is any of the observations, $i=1 \ … \ n$.

 e_i= actual value minus predicted/fitted value for the dependent variable (Error term)

Objective 1: To establish the effect of supplier evaluation on procurement performance of county government in Kenya.

$$Y=\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + ei$$

Where: Y- Procurement Performance

        β_0, β_1, β_2, β_3 are constants to be determined.

        X_1- Financial capability

        X_2- Technical expertise

        X_3- Past performance

ei- Error term.

Objective 2:   To establish the effect of supplier certification on procurement performance of LREB county government in Kenya

$$Y = \beta_0 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + ei$$

Where: Y- Procurement Performance

$\beta_0, \beta_4, \beta_5 \text{ and } \beta_6$ are constants to be determined.

X_4-Environmental certification

X_5- Quality certification

X_6- Social responsibility

ei- Error term.

Objective 3:   To determine effects of supplier comparison on procurement performance of LREB County government in Kenya

$$Y = \beta_0 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + ei$$

Where: Y- Procurement Performance

$\beta_0, \beta_7, \beta_8 \text{ and } \beta_9$ are parameters to be determined.

X_7-Product quality

X_8- supplier reputation

X_9- Product price

ei- Error term.

Table 3. 1 Distribution of population per County

County	Category Chief officer	Procurement Committee Members	Procurement Officers	Total
Nyamira	9	3	2	14
Kisii	9	3	2	14
Busia	9	3	2	14
Bungoma	9	3	2	14
Kakamega	9	3	2	14
Vihiga	9	3	2	14
Transzoia	9	3	2	14
Nandi	9	3	2	14
Bomet	9	3	2	14
Kericho	9	3	2	14
Kisumu	9	3	2	14
Siaya	9	3	2	14
Migori	9	3	2	14
Homabay	9	3	2	14
Total	**126**	**42**	**28**	**196**

Source: Survey Data (2019)

3.1 Response Rate

A response rate of 92 percent was recorded from study. According to Creswell *et al*. (2014), a return rate of 50% is adequate, 60% is good enough, while the return rate of above 70% is very good. Based on this finding, the current study's questionnaire return rate of 92.3% is considered very well.

Table 3.2 Response Rate

Questionnaires	Number (n)	Percentage (%)
Filled and Collected	181	92.3
Not Filled and Not Used	15	6.7
Total	196	100

Source: Survey Data (2019)

Results and Discussion

4.1. Demographic characteristics of the respondents of County Government in Kenya.

From Table 4.1, considering education level, most (46.41%) of the respondents were college diploma followed by graduate (first degree) (37.02%) and the least number of the respondents had education level of college certificate (2.21%). On years worked in public procurement and supplies management department (PPSM), majority (45.86%) had only worked for less than one year followed by between one to five years (36.46) and the respondents who

had worked between five to fifteen years were the small number among the respondents (17.68%). Among the respondents on sections of department in public procurement and supplies management department, most of them were on the procurement section (72.93%) followed by stores and inventory section (16.57%) and the least respondents were on the records management section (10.5). Respondents were also asked to indicate their membership category in procurement professional body (PPB) and the results showed that majority were student member (48.07%) followed by none membership (26.52%) and the least number of respondents belonged to associate member (4.97%).

Table 4. 1: Socio-demographic characteristics of the respondents

Variables	Frequency (N)	Percentage (%)
Education Level		
Doctorate	13	7.18
Masters	13	7.18
Graduate (First degree)	67	37.02
College Diploma	84	46.41
College Certificate	4	2.21
Years Worked in PPSM		
Less than a year	83	45.86
Between 1-5 Years	66	36.46
Between 5-15 years	32	17.68
Sections of Department in PPSM		
Records Management	19	10.5
Procurement	132	72.93
Stores and Inventory	30	16.57
Membership Category in PPB		
None	48	26.52
Student Member	87	48.07
Associate Member	9	4.97
Full Member	37	20.44

Source: Survey Data (2019)

4.2. Parameter Estimates for Bivariate Ordered Probit Regression Analysis

Table 4.2 shows that, there is a positive relationship between supplier evaluation and procurement performance in the County Government. The result indicates that, a unit increase in supplier evaluation practices is more likely to improve procurement performance in the County Government (coefficient=1.11, p-value <0.001, 95%CI= (0.85, 1.37)). According to the result, supplier certification was (1.05, 1.59) significantly correlated with procurement performance at 95% confidence interval. A unit improvement in supplier certification practices is more likely to improve procurement performance in the county governments (coefficient=1.32, p-value<0.001, 95%CI= (1.05, 1.59).

The result further indicated that, supplier comparison has (0.87, 1.44) a significant association with procurement performance at 95% confidence interval. A unit increase in supplier comparison practices is more likely to improve procurement performance in the County Governments (coefficient=1.16, p-value<0.001, 95%CI= (0.87, 1.44).

Table 4. 2: Parameter Estimates for Bivariate Ordered Probit Regression Analysis

	Procurement Performance		
Variables	Coefficient	95% CI	P-Value
Supplier Evaluation	1.11	(0.85, 1.37)	**<0.001**
Supplier Certification	1.32	(1.05, 1.59)	**<0.001**
Supplier Comparison	1.16	(0.87, 1.44)	**<0.001**

Source: Survey Data (2019), **P-value<0.05 shows significance

4.2.1. Marginal Effect from Bivariate Ordered Probit Regression Model

Table 4.3 shows marginal effect from a bivariate ordered regression model analysis of each of the independent variables and the dependent variable at 95% confidence interval. Probability value of less than 0.05 shows statistically significant association.

According to Table 4.3, supplier evaluation and procurement performance are statistically associated at 95% confidence interval. The result shows that, a unit increase in the supplier evaluation is more likely to decrease fair procurement performance by 6% (dy/dx=-0.06, p-value=0.004, 95%Ci= (-0.12, -0.02)), good procurement performance by 33% (dy/dx=-0.33, p-value<0.001, 95%Ci= (-0.43, -0.22)) and improve a very good procurement performance by 39% (dy/dx=0.39, p-value<0.001, 95%Ci= (0.31, 0.47)).

The Table 4.3 also shows that, supply certification practices and procurement performance show significant

relationship at 95% confidence interval. The result indicates that, one unit increase in the supplier certification practices is more likely to decrease fair procurement performance by 5% (dy/dx=-0.05, p-value=0.016, 95%Ci= (-0.09, -0.01)), good procurement performance by 40% (dy/dx=-0.4, p-value<0.001, 95%Ci= (-0.51, -0.29)) and improve a very good procurement performance by 45% (dy/dx=0.45, p-value<0.001, 95%Ci= (0.36, 0.54)).

The result further shows that, supplier comparison and procurement performance are significantly correlated at 95% confidence interval. The result indicates that, a unit increase in the supplier comparison practices is more likely to decrease fair procurement performance by 9% (dy/dx=-0.09, p-value<0.001, 95%Ci= (-0.14, -0.04)), good procurement performance by 33% (dy/dx=-0.33, p-value<0.001, 95%Ci= (-0.14, -0.04)) and improve a very good procurement performance by 42% (dy/dx=0.42, p-value<0.001, 95%Ci= (0.32, 0.52)).

Table 4. 3: Marginal Effect from Bivariate Ordered Probit Regression

Procurement Performance	Ordered Probit Marginal Effect for Fair Procurement Performance (20-39%)			Ordered Probit Marginal Effect for Good Procurement Performance (40-59%)			Ordered Probit Marginal Effect for Very Good Procurement Performance (60-79%)		
	dy/dx	95% CI	P-Value	dy/dx	95% CI	P-Value	dy/dx	95% CI	P-Value
Supplier Evaluation	-0.06	(-0.12, 0.02)	- 0.004	-0.33	(-0.43, 0.22)	- <0.001	0.39	(0.31, 0.47)	**<0.001**
Supplier Certification	-0.05	(-0.09, 0.01)	- 0.016	-0.4	(-0.51, 0.29)	- <0.001	0.45	(0.36, 0.54)	**<0.001**
Supplier Comparison	-0.09	(-0.14, 0.04)	- <0.001	-0.33	(-0.14, 0.04)	- <0.001	0.42	(0.32, 0.52)	**<0.001**

Source: Survey Data (2019), **P-value<0.05 shows significance

4.2.2. Multivariate Ordered Probit Regression Model

In order to establish the influence of supplier selection practices on procurement performance in the County Government, All the significant variables from the bivariate ordered probit regression analysis were included in the multivariate ordered probit regression model as shown in the Table 4.6, Supplier evaluation practices and supplier comparison practices showed insignificance at 95 % confidence interval (p value>0.05). Supply certification was the only variable that showed statistical significance at 95% confidence level (α=5%).

4.2.3 Coefficients from Multivariate Ordered Probit Regression Model

Table 4.4 shows that, there is a significant influence of supplier certification practices on procurement performance (Coefficient=1.07, 95%CI= (0.68, 1.46), p-value<0.001). This implies that an increase in supplier certification practices by one unit is more likely to increase procurement performance by 1.07 units.

Table 4. 4: Parameter Estimates for multivariate Ordered Probit Regression Analysis

Procurement Performance			
Variable	**Coefficient**	**95% CI**	**P-Value**
Supplier Evaluation	0.3	(-0.14, 0.74)	0.179
Supplier Certification	1.07	(0.68, 1.46)	**<0.001**
Supplier Comparison	0.04	(-0.43, 0.51)	0.878

Source: Survey Data (2019), **P-value<0.05 shows significance

4.2.4. Marginal Effect from Multivariate Ordered Probit Regression Model

Table 4.5 represents results present marginal effect from multiple ordered probit regressions model. It reveals that supplier evaluation and supplier comparison marginal effects were insignificant at all the three levels of procurement performance (p-value>0.05). However, marginal effects for supplier certification showed significance at fair procurement performance, good procurement performance and very good procurement performance.

Table 4. 5: Marginal Effect from Multivariate regression

Variables	Procurement Performance of County Government								
	Fair Performance			Good Performance			Very Good Performance		
	dy/dx	95% CI	P-Value	dy/dx	95% CI	P-Value	dy/dx	95% CI	P-Value
Supplier Evaluation	-0.01	(-0.03, 0.01)	0.229	-0.09	(-0.22, 0.04)	0.179	0.1	(-0.05, 0.25)	0.175
Supplier Certification	-0.04	(-0.07, -0.01)	0.024	-0.32	(-0.46, -0.19)	<0.001	0.36	(0.23, 0.5)	**<0.001**
Supplier Comparison	0	(-0.02, 0.02)	0.879	-0.01	(-0.15, 0.13)	0.878	0.01	(-0.15, 0.17)	0.878

Source: Survey Data (2019), **P-value<0.05 shows significance

The result indicate that, one unit increase in the supplier certification practices is more likely to decrease fair procurement performance by 4% (dy/dx=-0.04, p-value=0.024, 95%Ci=(-0.07,-0.01)), good procurement performance by 32% (dy/dx=-0.32, p-value<0.001, 95%Ci= (-0.46, -0.19)) and improve a very good procurement performance by 36% (dy/dx=0.36, p-value<0.001, 95%Ci= (0.23, 0.5)). The study result generally shows that, selection of suppliers with supplier's certification, result to a better procurement performance. This concurs with the finding of a study by Saleemi (2014), which mentioned that, there is need for firms to have suppliers with supplier's certification for better performance.

However, in regard to the relationship between supplier evaluation and procurement performance of county government, the study result contrast with other studies' findings which shows that, effective supplier evaluation results to better procurement performance (Chemjor, 2015; Mutai & Okello, 2016). The study result also contradicts the finding of a study by Kakwezi & Nyeko (2010), which indicated that, comparison of financial and non-financial performance of the suppliers when selecting a supplier, leads to a better performance of procurement procedures.

Conclusions

Supplier selection practices included supplier evaluation, supplier certification and supplier comparison. From descriptive statistics, the findings revealed LREB county governments in Kenya use technical capability, technical expertise criteria, financial capability criteria, suppliers past performance and current relationship when evaluating suppliers. However, some LREB county governments do not adhere to the set criteria during the supplier evaluation. In relation to supplier certification, study finding revealed the supplier certification practices is more likely to result to fair procurement performance. In addition, staffs working in the supply chain department have little knowledge on supplier certification and social responsibility.

From the correlation analysis the study found there is a positive and significance relationship between supplier certification practices on procurement performance of LREB county government in Kenya (p-value=0.001). The results indicated that a unit improvement in supplier certification practices would lead to a 1.07 unit's improvement in the procurement performance of LREB government in Kenya.

Supplier selection practices positively and significantly influence the performance of LREB county governments. Selection of suppliers who conforms to supplier's certification standards such as environmental certification, quality certification, life cycle certification and knowledge on social responsibility during supplier selection leads to better performance of the county governments. The study also found out that supplier evaluation and supplier comparison negatively and insignificantly affect procurement performance.

Recommendations

Based on the findings and the conclusion above, the study recommends that; the supply chain management of the county governments in Kenya should effectively evaluate using the recommended evaluation criteria before awarding any tender for better procurement performance.

County governments of Kenya should carry out regular suppliers and stuff training on supplier certification standards and social responsibility and there effects on procurement performance.

The county governments must carry out suppliers' comparison in terms of financial capability, technical ability, prices and after services to achieve effective and efficient procurement performance

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