

FACTORS AFFECTING PERFORMANCE OF PROCUREMENT FUNCTION IN COUNTY GOVERNMENTS: A CASE STUDY OF COUNTY GOVERNMENT OF NYAMIRA, KENYA

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Abstract

The purpose of this study was to determine the factors affecting the performance of procurement function in county governments, taking a case of Nyamira County Government in Kenya. In Nyamira County Government, procurement functions of most public entities have not been complying with the set procurement process and performance procedures leading to irregular and subjective decisions. The specific objectives of the study included: to establish the effect of tendering methods on the performance of procurement function in Nyamira County Government; to assess the effect of procurement staff competency on the performance of procurement function in Nyamira County Government; and to determine the effect of supplier management on the performance of procurement function in Nyamira County Government. The study adopted a case study research design. The target population for the study was made of 220 participants from Nyamira County procurement section. The study used purposive sampling technique. The sample size of the study was 220 respondents determined from the target population. The data collection tool used in this study was the use of questionnaires. The data collected from the questionnaires was analysed using descriptive statistics through Statistical Package of Social Sciences and Microsoft Office Excel while qualitative data was qualitatively analysed through content analysis. Descriptive statistics to be employed were: frequencies and percentages. Inferential statistics used was multiple regression analysis. The study confirmed that procurement staff competency had greater effect on procurement function as compared to tendering methods and supplier management. It was also clear that there was no significant relationship between tendering methods and performance coupled with supplier management of procurement function. It was recommended that county government procurement function should adopt those methods having high level of accuracy in order to improve their performance. The county government staff involved in procurement function to strengthen the staff competency by training them on various skills to improve the performance of procurement function. There is need to take the supplier into orientation so that there is effective honouring of the orders given to them.

Keywords: Procurement function, tendering, staff competency, supplier management



I. INTRODUCTION

1.1 Background of the study

Procurement formed part of the key operations within the county government since it was through procurement that the county government acquired the various resources that ensure its continued existence. Every day, the governments all over the world were constantly involved in the process of procurement for goods, services, assets and works. Public procurement had been used as an essential tool for achieving economic, social and other objectives (Dobler, 2012).

One initiative established by the European Union (EU) as part of its plans to solve the financial crisis was an accelerated public procurement procedure. The EU Commission believed that speeding up procurement procedures could support member state actions to foster growth in their economies through rapid execution of major public investment projects. Total public procurement in the EU, i.e., the purchases of goods, services and public works by governments and public utilities, was estimated at about 16.5% of the EU's Gross Domestic Product or GDP (European Commission, 2011).

In the United States, government procurement enacted by public entities runs to over USD 7 trillion yearly (Hans-Joachim, Harvey, & Friton, 2012). From history, the data that constituted procurement information had been presented with numerous gaps which led to significant reforms (Halchin, 2013). The System for Award Management was one such reform that consolidated seven procurement functions and made it easier to procure. However, here, contracts are inserted in the internet inasmuch as efforts are being made to do that (Halchin, 2013).

It was reported in 2006 that the procurement functions of most public entities in Tanzania were not complying with the set procurement process and performance procedures leading to irregular and subjective decisions; which have had significant negative consequences to the whole country (Lema, 2013). Notwithstanding the reforms enacted by both professional and government based parties like the Procurement and Supplies Professional and Technician Board (PSPTB) together with the Public Procurement Regulatory Authority (PPRA); there have still been gaps witnessed in the implementation of public procurement across board (Lema, 2013).

The Uganda situation is also problematic with Tumutegyereize (2013) asserting that the country has been unable to offer social contracts to disenfranchised citizens as a response to the requirements of public procurement. Also, despite e-procurement, major projects like the Karuma Dam estimated to cost USD \$202m together with the USD \$88.8m pension tower have never been completed. The Ugandan system was meant to offer a strong impetus to the



operations of the public procurement professional body in the country but so far to no avail (Tumutegyereize, 2013).

There were also major problems occasioned by the devolution structure of government whose procurement operations seemed geared to be a conduit for corruption and diversion of funds to private hands through tenders and kickbacks (Ramadhani & Kibet, 2015). This has been characterized by numerous complaints from stakeholders and rendering of supportive evidence to that effect. Issues such as corruptions, extended lead-time for procurement and external pressures had impacted proper performance of procurement function in Nyamira County Government (Nyaboke & Muturi, 2017). Nyamira County complaints sheet contained service providers' complaints on the slow pace of procuring and a perceived external influence from politicians and other interest groups among others (Complaints sheet, 2015).

1.2 Statement of the problem

Public procurement has been touted as a mechanism that could increase economic and social gains of a country. When the procurement function is performed in an effective manner, the wellbeing of a country can be enhanced. However, the Kenyan situation presents evidence that the efforts so far to enact procurement practices have been inefficient, shrouded in secrecy and characterized by corruption (Ramadhani & Kibet, 2015). The inefficiency and incompetence of administration and management of procurement function in county governments of Kenya contributed to loss of Ksh 50million annually (Public Procurement Oversight Authority, 2010). Victor (2012) asserts that the expenditure tied to procurement can be diminished via effective implementation of the function of procurement. The county governments had cases of stalled development projects and deficit in procurement budget (Paul, 2011).

Worse enough, in all these cases, huge amounts of public resources were wasted and in return value for money is not achieved. In Nyamira County Government, the function of procurement has appeared irregular and disjointed leading to many questions. These decisions had costly consequences for any public entity(Nyaboke & Muturi, 2017). The study by Nyaboke and Muturi(2017) determined the factors affecting implementation of the Public Procurement and Disposal Act in Nyamira County. The study established that long lead time negatively affected implementation of the Public Procurement Disposal Act, 2015. The study failed to show how various factors affected the performance of procurement function in Nyamira County Government. Therefore, this study sought to solve various challenges encountered in procurement entity level at county governments.

Regardless of the effort made by the government and professional bodies like Public Procurement Regulatory Authority (PPRA) and Public Procurement Administrative Review Board (PPARB) on procurement, there were still some deviations during the performance of



procurement practices which the study intended to assess the factors affecting performance of procurement function in County Governments, particularly in Nyamira County Government.

1.3 Research objectives

1.3.1 General objective

The general objective of this study involved the factors affecting the performance of procurement function in county government: a case of Nyamira County Government, Kenya.

1.3.2 Specific objectives

- (i) To establish the effect of tendering methods on the performance of procurement function in Nyamira County Government;
- (ii) To assess the effect of procurement staff competency on the performance of procurement function in Nyamira County Government;
- (iii) To determine the effect of supplier management on the performance of procurement functionin Nyamira County Government.

(iv)

1.4 Research questions

- (i) How do tendering methods affect the performance of procurement function in Nyamira County Government?
- (ii) What is the effect of procurement staff competency on the performance of procurement function in Nyamira County Government?
- (iii) How does the supplier management affect the performance of procurement function in Nyamira County Government?

II. LITERATURE REVIEW

2.1 Theoretical literature

This study related the variables given with Tendering Theory, Quality Management Theory and Game Theory.

2.1.1 Tendering Theory

Gates (1967) referred to tendering theory as a strategy of bidding, accordingly, tendering theory is considered a prescriptive or normative theory as opposed to positive or also descriptive. Tendering theory, according to this argument, is no more than a model of rational behaviour, and rationality according to this argument, is a normative concept. Seen that way, tendering theory like almost all other social science theories would be normative theories, irrelevant to the explanation of actual behaviour (Rosenberg, 1994). However, in a normative theory, the 'ought



to' also implies 'being able to'. Tendering theory is not only about how tendering should be performed, but also an explanation of achievable rationality. Rationality, whether aimed for or postulated as an axiom, is about outcomes (Elser, 1989), which if achieved, will have implications that, at least in principle, can be observed, tested and verified or falsified. Hence, the a priori argument that theories like tendering theory that stipulate rationality and can also be formulated in a normative way as decision rules cannot also be descriptive or positive is invalid. Such an argument must be empirically derived. This study thus used Tendering Theory to establish the effect of tendering methods on performance of procurement function in county government, especially Nyamira County Government in Kenya.

2.1.2 Quality Management Theory

Quality management theory by Heizer and Render (2014), states that the top management commitment and participation in quality management practices are the most important factors for the success of firm. Quality management is considered to have four main components: quality planning, quality control, quality assurance and quality improvement. Quality management is focused not only on product/service quality, but also the means to achieve it.

Quality management theory focuses on continuous improvement therefore uses quality assurance and control of processes to achieve more consistent quality (Hansen, 2014). The theory suggests that quality management is an important aspect for good performance of procurement and supply chain departments. Quality management affects the quality of goods procured and the delivery of quality services to the clients. Quality management results to high customer satisfaction and high firm's performance. The study used Quality management theory to assess the effect of procurement staff competency on performance of procurement function in Nyamira County Government in Kenya.

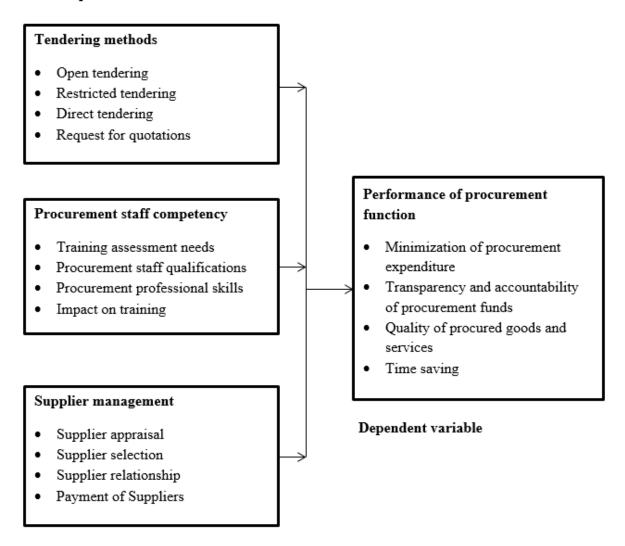
2.1.3 Game Theory

Game theory, originally developed by von Neumann and Morgenstern (2007) argue that many economic decisions involving more than one actor (e.g. a buyer and a supplier) take the form of a sequential, strategic game involving anticipation by one player of the other player's actions. Games such as the Prisoner's Dilemma have been used to show how co-operative behaviour becomes more likely if two actors interact with one another on a repeated basis. This is because repeated interactions enable them to get to know each other, to build trust and to overcome the lack of information available in a one-off interaction about the other party's likely behaviour. The integrated supply chain management literature has applied this reasoning to develop an understanding of how buyers and suppliers can be encouraged to co-operate on a long-term basis and innovate to create a larger pool of value rather than competing over a static pool of value (Macbeth & Ferguson, 1994). A crucial aspect of this approach is the idea that buyers and suppliers should be trusting and transparent with one another, sharing information through



mechanisms such as open book costing to signal their commitment and future intentions. The study thus used the Game theory to establish the effect of supplier management on effective implementation of procurement function in Nyamira County Government in Kenya

2.2 Conceptual framework



Independent variables

Figure 2.1: Conceptual Framework



2.3 Empirical review

According to the study of Msomola (2010) on assessment of effectiveness of tendering procedures and regulations in Local Government (2005) it was commented that; Supply of goods, works and public services to the people can be effectively done through tendering. Tendering if performed in conformity to the laid down procedures and regulations as per the PPA 2004 could successfully achieved.

According to Mayavi (2013), tendering method has its advantages and disadvantages. Tender brings knowledge of new methods, technologies, products or services to the buyer, or otherwise not obtained through other purchase technique like direct purchasing. While on disadvantages he argued that tender method is not suitable for urgent requirements.

In the study by Msomola (2010) on effectiveness of tendering procedure in government organization a case study of Arusha municipal council, it was concluded that, the role is to exercise a great care in the setting objectives for financial years. That they should set achieved goals and care should be exercised during the tendering process and laying down procedures in achieving its plans.

Compton (2007) suggested that effective execution of organization procurement procedures greatly depends on the level of employees' training since lack of professional trained staff on procurement functions limits the ability of the organizations to embrace procurement best practices through benchmarking. Charles(2008) contended that lack of professional training is a key impediment to maintenance of high level of professionalism in the execution of procurement procedures in many public-sector organizations.

According to Andrew (2014), new training ideas are developed because trends are towards making training more practical, realistic and pertaining to employees' jobs. Training must give employees broader knowledge to enable them to effectively use new technology and integrate it into the workplace. Lower costs, better quality, faster return on investment, increased productivity and long-term growth are all achieved once employees adapt to changes and are trained accordingly. In the past, training was very classroom / instructor-oriented. This has recently proved ineffective compared to modern developments.

Armstrong (2008) affirmed that continuous employees' training contributes towards improvement of the level of their competency in the execution of respective job task functions. David (2007) argued that competency is a standardized requirement for an individual to properly perform a specific job. It encompasses a combination of knowledge, skills and behaviour used to improve performance. More generally, competency is the state or quality of being adequately or well qualified, having the ability to perform a specific role.



Browne (2004) contended that supplier relationship management is a comprehensive approach to managing an enterprise's interactions with the organizations that supply the goods and services it uses. The goal of supplier relationship management (SRM) is to streamline and make more effective the processes between an enterprise and its suppliers just as customer relationship management (CRM) is intended to streamline and make more effective the processes between an enterprise and its customers.

Supplier involvement in product development allows firm to make better use of their suppliers' capabilities and technology to deliver competitive products. Coordinating operational activities through joint planning also results to inventory reduction, smoothing production, improve product quality, and lead time reduction. The firm's integration is an effective strategy in enhancing suppliers' commitment throughout product lifecycle and is an effective strategy in reducing supply uncertainty Handfield (2001). According to Lysons (2007), customer relationship management (CRM) is a widely-implemented strategy for managing a company's interactions with customers, clients and sales prospects.

III. METHODOLOGY3.1 Research design

Case study research design was used to undertake the study. This type of research design was adopted because it came up with the relevant data for analysis. It emphasized on quality in the collection and analysis of data and it was used when collecting data using open –ended questionnaires. This was in accordance to Mugenda and Mugenda (2008), who asserted that a case study type of research design was considered the most appropriate because it described in quantitative terms the degree to which variables were related. The case study was Nyamira County Government of Kenya.

3.2 Target population

The target population included 220 members from all Procuring entities, Accounting officers, Tender Committee, Procurement Committee, Tender Operating Committee, Evaluation Committee, Procurement units, User departments, Inspection and Acceptance Committee, Disposal Committee and Suppliers or bidders. The members in these procurement departments gave relevant information concerning the factors affecting performance of procurement practices in county governments. The study used various officers from these departments for the study.



3.3 Sample size and sampling technique

To obtain the sample population purposive sampling was used, where the entire 11 departments mentioned above took part in the study with an average of 20 employees in each department, thus making a sample population of 220respondents in the departments.

3.4 Data collection

The questionnaire was administered by dropping and picking. The respondents in the questionnaires were 220. The primary source of data collection method used in the study was by questionnaire that gave essential information from the county's authorities. The questionnaire had both open and closed ended questions in order to enable effective data collection. The secondary data was attained from the written materials which included the journals, magazines, internet, other past studies and other relevant books in the county government offices relevant to this study. This enabled the study to compare the data from the questionnaires with the written materials. This enabled effective data collection and analysis from county government.

3.5 Data analysis

In this study the collected data was analysed both qualitatively and quantitatively (Kombo & Tromp, 2003). After collecting data from the respondents, data was edited to determine variations and coded for further analysis. The open-coding procedure was utilized in analysis of data collected in this study as stipulated by Enon (1999). The collected data was analysed through tables, percentages, diagrams, figures with regard to information. Statistical Package for Social Sciences (SPSS, Version 23) was used to obtain descriptive analysis, which involved multiple regression; while frequency and excel software were used for graphs and means. However, data collected was analysed by using both qualitative and quantitative methods. This study used qualitative method to analyse and interpret data as the study involved use of qualitative information. The multiple regression analysis to show linear relationship between the variables was illustrated as follows:

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

Where:

Y = Dependent variable (Performance of procurement function);

 X_1 = First independent variable (Tendering methods);

 X_2 = Second independent variable (Procurement staff competency);



X₃ = Third independent variable (Supplier management);

ε = Random error;

 β_0 = Y intercept (Value of Y when X_n is zero);

 $\beta_1 - \beta_3$ = Coefficients of $X_1 - X_3$ respectively.

IV. RESEARCH FINDINGS AND DISCUSSION

4.1 Tendering Methods

Figure 2 illustrates the preference of tendering methods in the procurement of Nyamira County Government.

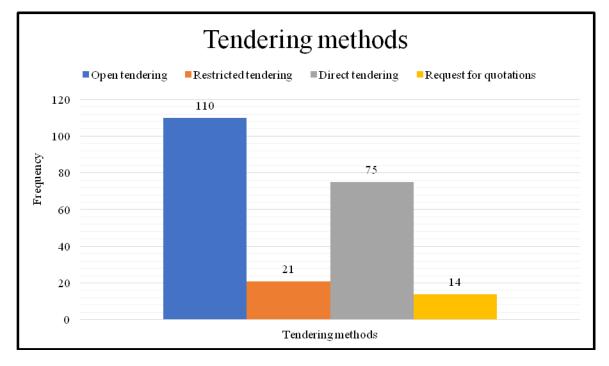


Figure 2: Tendering methods



From the Figure, the most preferred method of tendering was open tendering. This was because it saves time and enables the county government to create good relationship with the communities in the county. Direct tendering has also a greater percentage due to reduction in the cost of procurement and avoiding delay which occurs when the quotations are not made in time. When determining the percentages on the level of accuracy of the tendering methods, it was found that the restricted tendering had the highest percentage of 64% in accuracy. This was because the suppliers are specified and the quality or quantity of materials or services is also specified. However, this method incurs more costs in terms of adhering to the requirements of procurement and budget.

4.2 Procurement Staff Competency

As indicated in Table 1, the study used descriptive statistics to analyse part of the first objective where N represented the sample size, Min was minimum value in the Likert Scale representing the minimum percentage of the staff competency, Max was maximum value representing maximum percentage of the staff competency, Mean was the assumed mean between 0% and 100% and Std. Dev was the standard deviation of assumed mean from the actual mean. The study established that the employees agreed that training help to improve quality of procurement records which had mean of 8 representing the respondents' level of agreement according to the Likert Scale used. On the other hand, the study established the respondents were neutral meaning that they were undecided on the training competence in procurement and also on the competence of employees with procurement skills. This was represented by 6 which meant that employees were undecided on these competences.

Table 1: Elements of staff competence

Elements of staff competence	N	Min.	Max.	Mean	Std. Dev
Staff training	220	10	100	6	2.8
Quality of procurement records	220	20	100	8	1.6
Employees with professional skills in procurement	220	10	100	6	2.2

4.3 Supplier Management

Supplier management is a business process that allows an organization to adequately select its suppliers and negotiate the best prices for goods and services that it purchases. On the extent to



which supplier management affected the procurement function in county government of Nyamira in Kenya, respondents were asked to indicate the extent to which supplier management factors hindered effective implementation of procurement function in the county government. The data was collected from the different indicators of the variable, Supplier management. The data was therefore presented in frequency tables with the median being used as the appropriate measure of central tendency as shown in Table 2

For the variable supplier management, the first indicator inquired from the respondents how often they appraise the suppliers they use annually, 46.8% of the respondents never appraise their suppliers, 30% appraise them once a year, 18.2% appraise suppliers up to twice a year, 2.7% appraise their suppliers up to 3 times annually and 2.3% appraise their suppliers over 3 times annually. The modal class is of the respondents who never appraise suppliers. The mode was found to be 1 which implies that on average the county government procurement staff never appraise the suppliers they use. The respondents also answered to the question how often they pay suppliers in time annually. 5% of the respondents never pay the suppliers in time, 8.2% make timely payments once a year, 12.7% make timely payments up to 2 times a year, 22.7% up to 3 times a year, 51.4% make timely payments over 3 times annually. The modal class is of the respondents who make timely payments to suppliers over 3 times annually. The mode was found to be 5 which implies that on average the county government procurement staff pay their suppliers in time over 3 times annually. Lastly for this indicator the respondents were asked how often annually their suppliers fail to honour the orders issued. 4.1% of the respondents had over 3 times been failed, 10.9% had three times annually, 13.2% of the respondents had 2 times, 15% of them had once a year and 56.8% have never been failed by suppliers. The modal class is of the respondents who never have been failed by suppliers. The mode was found to be 5 which implies that on average the suppliers never fail to honour the orders issued.



Table 2: Supplier management

Supplier management	Over 3 times	Thrice	Twice	Once	Never	Mode
How often do you appraise the	2.30%	2.70%	18.20%	30%	46.80%	1
suppliers you use annually?	- 5	-6	-40	-66	-103	1
How often are suppliers paid in	51.40%	22.70%	12.70%	8.20%	5%	5
time annually?	-113	-50	-28	-18	-11	3
How often annually are	6.40%	8.60%	12.70%	14.10%	58.20%	
delivered goods rejected due to non-conformity to specifications?	-14	-19	-28	-31	-128	1
How often annually do your	4.10%	10.90%	13.20%	15%	56.80%	
suppliers fail to honour the orders issued?	-9	-24	-29	-33	-125	1

4.4 Regression Analysis

The study determined the relationship between independent variables and dependent variable, performance of procurement function in County government of Nyamira. The study conducted a regression analysis to assist clarify this relationship. A linear regression model was used to establish the relationship between the variables:

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

Where: Y= Performance of procurement function, which was measured using the responses on procurement function; β_0 = the Y intercept that is the value of Y when X is zero; β_1 , β_2 and β_3 , are regression coefficients of the following independent variables respectively; X_1 = Tendering methods; X_2 = Procurement staff competency; X_3 = Supplier management. The independent variable was also measured using the responses obtained from the respondents. Table 3 illustrates the model summary where R^2 is 0.987 and adjusted R^2 is 0.969. The ANOVA in Table 4 indicates the sum of squares, mean square and F value. The results are summarized in Table 5.



Table 3 Model Summary

	Model Summary ^b									
				Std.						
Model	R	R Square	Adjusted R Square	Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin- Watson
1	.987a	0.974	0.969	42.287	0.974	189.626	1	5	0	3.032
	a. Predictors: (Constant), X2									
	b. Dependent Variable: Y									

Table 4: ANOVA

ANOVA ^a								
Model		Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	339086.8	1	339086.8	189.626	.000b		
	Residual	8940.951	5	1788.19				
	Total	348027.7	6					
a. Dependent Variable: Y								
b. Predictors: (Constant), X2								

Table 5: Regression Coefficients

Coefficients ^a								
		Unstandardized Coefficients		Standardized Coefficients				
Model		В	Std.	Data		C: ~		
			Error	Beta	l 4 101	Sig.		
1	(Constant)	-8.258	1.975		-4.181	0.006		
	X1	0.005	0.1	0.01	0.047	0.964		
	X2	2.12	0.348	0.881	6.098	0.001		
	Х3	0.169	0.274	0.111	0.616	0.561		
a. Dependent Variable: Y								



From Table 3, the regression model equation for the factors affecting the performance of procurement function in county government: a case of Nyamira County Government, Kenya is:

 $Y = -8.258 + 0.005X_1 + 2.120X_2 - 0.169X_3$

Where: Y = Performance of Procurement Function

 β_0 = Constant

 β_1 ... β_3 = regression coefficients for the predictor variables

X₁= Tendering methods

 X_2 = Procurement staff competency

X₃= Supplier management

According to Table 4 the regression results show that tendering methods, β_1 = 0.005has a positive relationship on performance of procurement function and with a P-value of 0.964 which is greater than α = 0.05 implies that it is not statistically significant as a measure of performance of procurement function. The Table also shows that β_2 = 2.120 indicates that procurement staff competency has a positive relationship on performance of procurement function and with a P-value of 0.001 which is less than α = 0.05 has significant effect on performance of procurement function. The findings also show that β_3 = 0.169 which implies that supplier management has a positive relationship on performance of procurement function and P-value of 0.561 which is greater than α =0.05 means it is statistically non-significant. In conclusion thereforeX₂ is a good predictor and can be used in the estimation of performance of procurement function while X₁ and X₃ are not good predictors. In respect to the t values for X₁ and X₃ are generally smaller for the positive values and larger for the negative values with respect to those of X₂. This is compatible with the P-Values as discussed above.

4.5 Discussion of the Findings

The study established that procurement function in county governments in Kenya has been affected by various factors. The study confirmed that procurement staff competency had greater effect on procurement function as compared to tendering methods and supplier management. This finding is in line with Christianne (2008), who revealed that lack of professionally trained procurement staff and employment of unqualified and incompetent staff discourages effective performance of procurement function in many public organizations in developing nations. Thus, procurement staff competency improvement is very essential in the performance of procurement function. The study also found out that most respondents were of the opinion that



staff training was the most essential than other elements of staff competency. This finding is in line with Compton (2007) who suggested that effective execution of organization procurement procedures greatly depends on the level of employees' training since lack of professional trained staff on procurement functions limits the ability of the organizations to embrace procurement best practices through benchmarking.

V. CONCLUSION AND RECOMMENDATIONS

On effect of tendering methods on the performance of procurement function in Nyamira County Government, most respondents rated the restricted tendering method as having the highest accuracy. This therefore shows that most sectors of procurement function in the county government prefer restricted tendering method to improve performance. On the relationship between procurement staff competency and the performance of procurement function, the study found out that the employees agreed that training help to improve quality of procurement records which had mean of 8 representing the respondents' level of agreement.

The study also established that supplier management has contributed to the performance of procurement function, especially when it was found that the suppliers had never failed to honour the orders issued. In conclusion, therefore, procurement staff competency is a good predictor and can be used in the estimation of performance of procurement function while tendering methods and supplier management are not good predictors.

The study thus recommends that it is advisable for the county government procurement function to adopt those methods having high level of accuracy in order to improve their performance. This calls upon the county government staff involved in procurement function to strengthen the staff competency by training the them on various skills to improve the performance of procurement function.

Supplier management had a positive relationship on the performance of procurement function. There is need for the county government to take the supplier into orientation so that there is effective honouring of the orders given to them.



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