

FACTORS AFFECTING PROCUREMENT PERFORMANCE OF COUNTY GOVERNMENTS: A CASE STUDY OF MOMBASA COUNTY

Vol. 6, Iss. 2, pp 1241 - 1261, May 11, 2019. www.strategicjournals.com, @Strategic Journals

# FACTORS AFFECTING PROCUREMENT PERFORMANCE OF COUNTY GOVERNMENTS: A CASE STUDY OF MOMBASA COUNTY

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Accepted: May 9, 2019

#### **ABSTRACT**

This study aimed at analyzing the factors affecting procurement performance in Mombasa County government in Kenya. The survey adopted a descriptive research design, and the target population of the study consisted of 75 staff involved in procurement activities in Mombasa County government. The data collected was analyzed, summarized and tabulated by use of SPSS Version 23 software. On procurement planning, the study established that it permitted the creation of a procurement strategy for procuring each requirement that would be included in the procurement plan. It helped the county government to prioritize what to buy, when and from what sources and allowed planners to determine if expectations were realistic; particularly the expectations of the requesting entities, which expected their requirements met on short notice and over a shorter period than the application of the corresponding procurement method allows. On procurement information system, the study established that electronic procurement improved on transaction times, on-going purchases could qualify customers for volume discounts or special offers and E-procurement software made it possible to automate buying and selling. On procurement staff competency, the study established that competent staff could put in place procurement strategies and they were able to implement them effectively thus helping the procurement department to achieve their objectives. On the reliability of suppliers, the study established that suppliers with a healthy financial muscle were relied upon since they could supply and wait for a more extended period for payments approvals. The study concluded that procurement planning, procurement information system; procurement staff competence and reliability of suppliers had a significant and positive influence on procurement performance of county government. The study recommended that county governments should continuously plan for the procurement processes to adopt the best and new practices that reduce operational costs and enhance efficiency.

**Key terms:** Procurement information, Procurement performance, Procurement Planning, Procurement, Reliability of supplier, Staff Competence, Technical capability

**CITATION:** Mwakodi, R. M., & Wandera, J. (2019). Factors affecting procurement performance of county governments: A case study of Mombasa County. *The Strategic Journal of Business & Change Management*, 6 (2), 1241–1261.

#### INTRODUCTION

In the last decade, procurement performance has attracted significant attention from practitioners, academicians, and researchers due to continued dismal performance. There has been an increasing concern of how firms handle the entire procurement process considering the massive budget allocated. Organization for Economic Co-operation as well as Development (OECD) and Development Assistance Committee DAC (2013) estimated the volume of global public sector procurement at 8 percent (\$3.2 trillion) of the worldwide GDP of \$40 trillion. Pegnato (2013) estimated United States federal procurement at around \$200 billion per annum, and Coggburn (2013) put the combined procurement for state and local governments at more than \$1 trillion. Given the enormous global public sector procurement budget, its performance is critical to not only the performance of public sector organizations but also to economies around the world. In the contemporary world of competition in all sectors, and ever-dwindling budgets, procurement strategy is becoming increasingly important (Heller, 2013). Firms have to understand critical success factors in implementing effective procurement strategies, processes, and systems. As a result of short-sightedness, the management of many firms fails to appreciate the importance of system-wide performance measures. Despite the importance of procurement, there has been limited research done to examine factors affecting procurement in County governments.

In Europe, public sector procurement is governed by the UK regulations that implement the EU procurement directives. These apply to most procurement with a total value over a specified threshold. The United Kingdom rules do not cover procurements which are below the threshold; however, they are still subject to EU Treaty principles. This is explained in details in the Policy and Standards Framework. Many developed nations, government organizations across the world tend to spend

between 8 percent and 25 percent of GDP on goods and services in the UK, and public procurement expenses are around £149 billion (Department of Environment, Food, and Rural Affairs, 2018). In Africa, public procurement procedures are poorly executed, and this negatively affects the realization of enhanced economic development in the region. In Nigeria for instance, high level of corruption and bureaucratic procedures in the government are some of the critical challenges responsible for lack of development of road network infrastructure in the northern parts of the country (Organization for Economic Co-operation and Development, 2013).

The promulgation of the new constitution brought in devolution which established national and county governments with each having ministries to ensure that Government resources are devolved to facilitate socio-economic development at both federal and county levels. It's the responsibility of the ministries at both national and county levels to initiate and guide all departments to prepare their ministerial budgets. The Kenya public procurement process is established by the public procurement and disposal Act 2005. The act specifies the procedure to be followed by the public entities when making procurement or disposal of a public asset (GoK, 2015).

Mombasa County is among the 47 Counties of Kenya. It is the capital and city in the County of Mombasa. Formerly, it was one of the districts of Kenya, but in 2013 it was reconstituted as a County, on the same boundaries. The County is located in the South Eastern section of the previous Coast region. It borders Kwale County to the South West, the Indian Ocean to the East, Kilifi County to the North and is divided into four divisions namely: Mombasa Island, Changamwe, Likoni, and Kisauni. Also, it is composed of six parliamentary constituencies which include Changamwe, Jomvu, Kisauni, Nyali, Likoni, and Mvita.

The County Government of Mombasa incepts on 14th March 2013 following the implementation of the new

constitution clause forming the counties. The structure of the County Government of Mombasa is composed of the Governor, Deputy Governor, County Executives, County Secretary, and County Officials. The County Government of Mombasa has eleven Departments which include: Agriculture Livestock and Fisheries, Education, Finance and Economic Planning, Health, Planning Land and Housing, Tourism Development, Trade, Energy and Industry, Transport and Infrastructure, Water and Environment, Youth, Gender and Sports and Inspectorate.

The County government of Mombasa is the primary provider of essential services such as health, infrastructure, and education. This is done through the procurement section, making it crucial, and the sheer size of the procurement portfolio has a high impact on the economy and needs to be well managed. Furthermore, it is estimated that 29.5% of the public spending budget is lost either misappropriated through corruption or poorly negotiated contracts, setting high prices on the quotations so that they can get a share on what the supplier is to be paid (Kamau, 2013). If only 20% of this were to be utilized appropriately, the savings in public spending would be some 5-6 billion per year. Public procurement is key to county administration service provision, yet constraints impact its production. Procurement is seen as a gateway to corruption; affecting the quality of service, occasioning waste, and life-enhancing initiatives. There is a need to overhaul this worrying trend and establish public confidence.

Extant reviewed literature has clearly shown the various factors affecting public procurement performance. Nevertheless, most of them have not thoroughly researched procurement procedures, procurement planning and procurement information systems and procurement performance in devolved governments. For instance, Chemoiywo (2014), in her study on public procurement procedures and supply chain performance concluded that on the extent of

compliance with procurement procedures, increasing the capabilities of service providers has been shown to be an essential enhancer of success in the reform of public procurement a principle that's also true for private security firms. It is critical that procurement authorities come up with training programs to reinforce adherence. Mutai (2015) on his study on the impact of procurement policies and procedures on supply chain performance of commercial banks in Kenya revealed that procurement policies and procedures are applied to varying degrees by commercial banks in Kenya in enhancing its supply chain performance.

Consequently, no substantive study has been done on the factors affecting procurement performance in Mombasa County government. Nevertheless, prior researches have difficulty providing evidence on the positive relationship between procurement planning, procurement procedures, procurement staff competence, and procurement performance. The existing knowledge gap inspired the interest in this study. Mixed and inconclusive findings suggested that a more in-depth analysis was required. Furthermore, despite Mombasa County Government initiatives to boost the supplies procedures, it still experiences unsatisfactory tasks, poor quality p, and service provision. Effective implementation of rational performance initiatives results in certain high operational costs, inability to achieve domestic policy goals, uncoordinated business activities, and failure to attract and retain professionals. The current study sought to bridge the identified literature gap by factors examining affecting procurement performance on the public sector with particular focus in Mombasa County government.

# **Research Objectives**

 To establish the effect of procurement planning on procurement performance in Mombasa County Government.

- To determine the effect of procurement information systems on procurement performance in Mombasa County Government.
- To establish the effect of procurement staff competence on procurement performance in Mombasa County Government.
- To determine the effects of the reliability of suppliers on procurement performance in Mombasa County Government.

#### LITERATURE REVIEW

## **Theoretical Framework**

## **Competence Theory**

Arendse developed competence theory in 2013 where he defined competence as the underlying characteristic of an individual that is related to criterion-referenced effective and/or superior performance in a job or situation. Since then some competency frameworks have been developed by different institutions. The theory postulates that the competencies enable the firm to develop the techniques, experts to provide services as well as goods that are of high quality to satisfy the needs of its customers. Competence meant that the individual is motivated to show that they are qualified to perform a task to competency and motivation increases when a person successfully masters a function; this encourages a person to learn more features. Competence theory is a critical tool in assessing the employee's talent in management (Arendse, 2013).

The theory explains the integration of different technologies and coordination of diverse production skills in procurement performance to create value towards achieving the desired objectives. It highlights the need for developing strategies in procurement to have the competence and arrive at the desired result (Lysons, 2013). Kubes et al., (2014) stated that the final list of expertise included in the competency model is sometimes a big surprise for an organization requested for this model. It may discover the

difference between what the organization officially expects and between what is required from the employees. Competency models are created from competencies, and they are a collection of qualities, abilities, skills and other capacities of the staff needed for successful performance of their positions.

# **Technology, Organization and Environment Theory**

The Technology, Organization, and Environment theory was developed in 1990 by Tornatzky and Fleischer. It identifies three aspects of an organization that influences the process by which it adopts and implements technological innovation. These three aspects are technological context, organizational context, and environmental context. The first one describes both the internal and external technologies relevant to the firm, and it includes current practices and equipment internal to the firm, as well as the available technologies external to the firm. Organizational context refers to descriptive measures about the organization such as scope, size, and managerial structure. Environmental context is the platform in which a firm conducts its business, its industry, competitors, and dealings with the government (Tiago and Maria, 2013).

According to Rowan (2013), the use of information communication technology (ICT) based procurement systems in building construction is affected by technological innovation in the technological context, organizational context, and environmental context. All these contexts determine the level of automation, type of procurement systems to be used in the firm, nature of the ICT infrastructure and how eprocurement is employed in the firm. TOE provides a useful analytical framework that can be used for studying the adoption and assimilation of different types of IT innovations such as ICT integration in procurement. The TOE has a solid theoretical basis, consistent empirical support, and the potential of application to IT innovations domain, though specific factors identified within the three contexts may vary across different studies as suggested by Hsu et al.,

(2013). This theory was useful in this study in determining the effect of procurement information systems on procurement performance in Mombasa County Government.

### **Public Value Theory**

Public value theory was founded in 1995 by Moore. This theory aimed to provide public sector managers with a greater understanding of the constraints and opportunities within which they work and challenges to be able to form publically valuable outcomes. The theory can be summarized as an approach that is used by the management of public services based on the three strategies with its combination of the agreement of valuable and overall strategy, second one being securing of political legitimacy through the authorizing environment, and lastly the availability of the right and appropriate operational capacity (Zheng et al., 2013).

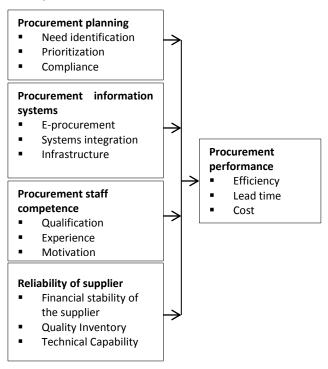
Mark Moore presents the concept of PVM in his book creating public value (2013), based on his research as a professor at Harvard's Kennedy School of Government and his debates with public administrators participating in the Kennedy school's executive programs. Moore states that there are significant differences within private as well as public administration. While private managers create value by conceiving and making products that earn profits, in the public sector the overall aim of administrative tasks seems less precise. Thus, managers need to do to produce value far more ambiguous; and how to measure whether a value has been created far more difficult. According to Moore, (2013), while private managers strive to establish their worthiness, those in the public domain make efforts to provide public value. Moore remains vague on what this public value constitutes exactly, but successive authors describe it as a concept which focuses on: (i) a more full range of value than public goods; (ii) more than outputs and, (iii) what has meaning for people rather than what a public sector decision maker might presume is the best for them (Alford & Flynn, 2013).

## **Supplier Relationship Theory**

Supplier Relation as a theory deals with the organization's relations with its suppliers (Wagner & Bode, 2014). It is a procurement strategy that designs strategic and operational procurement processes and the arrangement supplier of management (Schönsleben, 2016). Supplier Relationship identifies and selects the right stakeholders to give positive results of ownership of the relationship, enhances communication and bring into line strategic objectives. Organizations and their suppliers with different business policies come together into a working relationship through Supplier Relationship (Kerzner, 2017). According to Abdul (2013), supplier selection in the Malaysian telecommunications industry, strategies such as Supplier segmentation and supplier are used to manage supplier relations. Supplier segmentation is grouping suppliers together according to a definite set of standards to find appropriate suppliers with which to participate in supplier relationship (Acevedo, 2016).

Performance management encompasses the setup and constant pursuance of operational measures, which are communally agreed with suppliers (Carter, Monczka, and Mosconi, 2015). Supplier development refers to the involvement of two entities in planning jointly and coming up with long term goals like penetrating the market, joint ventures or strategic alliances (Lysons and Farrington, 2013). Supplier Relationship is essential in the procurement function since suppliers can influence the price, quality, delivery reliability and accessibility of their products (Sonmez, 2016). Materials received in organization depend on the security of suppliers to supply materials on time and as required. The materials also need to be of the right quality, right price delivered at the right time and of the right quantity. There is need to make sure that the suppliers who supply are reliable suppliers. This theory was used to determine the effects of the reliability of supplier on procurement performance in Mombasa County Government.

# **Conceptual Framework**



Independent variables Dependent variable Figure 1: Conceptual Framework Source: Author (2019)

#### **Procurement Planning**

Procurement planning describes the process in which a firm decides what to procure, when and from what source. According to Burt et al., (2013) the purchasing function through which institutions obtain products and services from external suppliers is referred to as procurement planning. It is the fundamental function that sets the stage for successive procurement undertakings. A procurement plan is a document that defines and records the details of departmental purchases from suppliers needed. Furthermore, James (2013) points out that the regulations of planning can be executed in an environment of absolute harmony. Moreover, he states that, as a function, procurement planning endeavours to answer the questions as to what one wants to

procure; when to acquire it; where to obtain them; the time the resources will be readily available; the methods of procurement to be used. Also, it answers how timely acquisition or failure can affect the user of the items; the procuring and disposing entity; efficiency in the procurement method; and the people to be involved in the procurement.

A good procurement plan should describe the process in detail to appoint pertinent suppliers contractually. In the beginning, the items needed to procure are defined, and then the method for acquiring those items is expounded in detail. Finally, the time frame for delivery is scheduled (Basheka, 2013). Moreover, based on Quentin (2013), procurement planning is essential. It is crucial because it helps to decide what to buy, when and from what sources. Also, it enables planners to find out if expectations are viable. Specifically, the anticipations of the requesting groups, which quite often expect their needs attained on short notification as well as over a limited time than the application of the corresponding procurement method allows; it is a chance for all parties involved in the processes to meet to discuss particular procurement requirements.

## **Procurement Information Systems**

ICT enables information sharing which organizations in the procurement system can use for eliminating bloated inventory levels caused by the cumulative effect of imperfect information cascading up through a supply chain. Daugherty, Myers, and Autry, (2018) pointed out that integration of information is also a critical component in considerable replenishment programs that are automatic. Strategies such as vendor managed inventory (VMI) and collaborative planning, forecasting and replenishment (CPFR) are based on an enhanced degree of automation in both the flow of physical materials, products as well as integrated data between corporations to increase the effectiveness in the whole system. It makes information processing time improves and procurement performance tremendously.

**Process** incorporation can improve supplies performance. ICT gives elegant ways to store, process, distribute and exchange critical information with customers and suppliers in the entire procurement system. Simatupang and Sridharan (2014), emphasized that knowledge is the glue that holds organizations intact and can be utilized to incorporate procurement process initiatives both within a process and across multiple operations. Information demand, forecasting on and replenishment are recognized as a central component in the integration of planning and control. Internal integration focuses on cross-functional processes. Externally, the focus is on relationships with outside customers and suppliers. A link can have various intensity levels ranging from lowest open-market negotiations. Also, cooperation, and coordination to the highest collaboration level. Coordination is based on a high degree of trust, commitment, and sharing of information. It needs incorporating performance systems with decision making, information sharing and incentive alignment in the SC.

#### **Procurement Staff Competence**

Armstrong and Baron (2013) point out that competency is the utilization of skills and knowledge; the behavior needed to get things done the correct way possible and performance delivery. Besides competency indicates adequacy of knowledge and skills that enable someone to act in various situations (Aketch and Karanja, 2013). According to Russell, (2013), an absence of adequate knowledge in procurement matters, may end up with severe consequences including breaches of codes of conduct. According to Banda, (2013), many organizations do not have staff with the right competence critical to good procurement process management. As a result, considerable continuous investment is incurred in training and development, and there is a need for extensive external training for human resources to be able to improve and contribute to the efficiency of organizations (Appiah, 2013).

Moreover, Saunders, (2018) advises that multiskilling offers employees with a variety of skills and should be developed extensively. Hence, all employees need broad and continuous education and training. Leenders and Fearon, (2014) noted that qualifications are crucial for value-based management which requires employees to assess and improve processes while contributing to team performance. Bailey et al., (2015) suggested that the existence of top-down objectives with related performance measures, and process guidelines link individual or performance to the firm's goals and expectations of management which require proper qualifications.

Banda, (2013) stated that many organizations lack competent staffs with the proper knowledge for good procurement process management. He further noted that authorities should give greater emphasis on developing competence to adopt best practice more widely. According to Berger and Humphrey, (2013), a procurement function that is carried professionally is the core of delivery of any service on value for money principle. Furthermore, Sultana (2013) stated that for one to sustain economic growth and effective performance, it is essential to optimize the contribution of employees to the aims and goals of the organizations. Therefore. competence can ensure that the benefits of new products and services are brought to the attention of the right person in the organization.

# Reliability of supplier

Reliability of the supplier is only defined as the ability of a company to consistently supply as an acceptable product at the required time (Wisner et al., 2014). Reliability of supplier affects county government procurement performance a great deal (Mbae, 2014). Procuring entity should always find out whether the inventory level of the supplier is on acceptable standards. Low inventory levels would mean that the

supplier would not be able to meet the requirement and they would begin to start their procuring process. According to Monczka et al., (2015) suppliers' need to be competent in technical ability to efficiently provide high-quality product or service, ensure future adjustments to perform and improve development efforts. These technical criteria ensure supplier shifts into full market place (Simeka and Were, 2016). Financial stability of the supplier affects procurement performance, and therefore supplier economic evaluation should be keenly carried out. Supplier evaluation criteria should include financial ability and cost of factors, production capacity and employee capabilities among others (Lysons & Farrington, 2014). Financially stable suppliers pose lower business risks as they are likely to remain independent than their economically weak counterparts (Kipkorir, 2013).

#### **Procurement Performance**

Van Weele, (2013) states that buying performance is taken to be the outcome of two elements which are purchasing efficiency and purchasing effectiveness. Performance gives the base for an institution to examine how better it is on track towards its predetermined aims, points out areas of weaknesses and strengths and as well as decides on future activities with the objective of how to propagate performance enhancements. This means that buying performance is not an end in itself. But, a means to efficient and effective control as well as monitoring of the purchasing function. Ombaka, (2013) listed that efficiency procurement procedure is one which makes use of great habits by stopping corruption. A critical evaluation of suppliers before selection can significantly improve the performance of the procurement function in carrying out its mandate (Martin, 2013).

Private businesses evaluate suppliers before awarding contracts to supply various products, services or carry out works. Choy and Lee (2013), stated that supplier

selection consists of a five-phase process: the realization of the requirement for a new supplier, the determination as well as the establishment of the criteria for making decisions; prequalification; final supplier selection and monitoring of the supplier selection. Similarly, Van (2013) stated that there is a link between procurement process, efficiency, effectiveness, and performance. Performance is a crucial driver for competitiveness and improvement of the quality of services. Assessment of procurement performance helps organizations to reduce cost, enhance profitability, assured supplies, quality improvements and competitive advantage.

#### **METHODOLOGY**

A descriptive research design was deployed to carry out this study. Descriptive research helps discover whether a relationship exists between variables, helps determining the frequency of occurrence and finally, it describes the state of the variables (Cooper and Schindler, 2013). The study used the Statistical Package for Social Sciences (SPSS) to generate descriptive statistics as well as to derive inferential analytics. Regression analysis was applied to demonstrate the relationship between the selected factors affecting procurement performance of Mombasa County government. The multiple linear regression models to be adopted for the study was as follows:

 $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$ 

Where

Y is procurement performance

α is a constant, intercept of the equation

**B1-\beta4** is the regression coefficients of independent variables

X<sub>1</sub> is procurement planning

X<sub>2</sub> is procurement information systems

X<sub>3</sub> is staff competence

**X**<sub>4</sub> is reliability of suppliers

**E** is disturbance term. For computation purposes it is assumed to be 0.

**Table 1: Measurement of Variables** 

Variable		ble Definition		Indicator/Measurement
1.	Procurement Planning	1. 2. 3.	Need Identification Prioritization Compliance	Ordinal Scale 1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree
2.	Procurement Information System		E-procurement System Integration Infrastructure	Ordinal Scale 1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree
3.	Procurement Staff Competence	1. 2. 3.		Ordinal Scale 1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree
4.	Reliability of Suppliers	1. 2. 3.	Financial Stability of suppliers Quality Inventory Technical Capability	Ordinal Scale 1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree
5.	Procurement Performance	1. 2. 3.	Lead Time	Ordinal Scale 1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree

**Table 2: Study Hypothesis and Analytical Models** 

Hypothesis Statement	Hypothesis Test	Decision Rule and Anticipated Model	
H <sub>01</sub> : Procurement planning	Karl Pearson (Beta test)	Reject $H_{01}$ if p-values $\leq 0.05$ otherwise fail to	
has no significant effect on	product moment.	reject if p ≥ 0.05. Analytical model	
procurement performance	H0: β1 = 0	$Y = \alpha + \beta_1 X_1 + \epsilon$	
in Mombasa County	HA: β1 ≠ 0	Where, $\alpha$ = constant, $\beta_1$ , = correlation	
Government.	-To conduct an F - test (ANOVA	coefficient, $X_1$ = Procurement Planning, $\epsilon$ = error	
	test) to assess overall	term	

	robustness and significance of	
	the regression model.	
<b>H02:</b> Procurement	Karl Pearson (Beta test)	Reject $H_{02}$ if p-values $\leq 0.05$ otherwise fail to
information systems have	product moment.	reject if p ≥ 0.05. Analytical model
no significant effect on	H0: β1 = 0	$Y = \alpha + \beta_2 X_2 + \epsilon$
procurement performance	HA: β1 ≠ 0	Where, $\alpha$ = constant, $\beta_2$ , = correlation
in Mombasa County	-To conduct an F - test (ANOVA	coefficient, X <sub>2</sub> = Procurement Information
Government.	test) to assess overall	System, ε = error term
	robustness and significance of	
	the regression model.	
<b>H0₃:</b> Procurement staff	Karl Pearson (Beta test)	Reject $H_{03}$ if p-values $\leq 0.05$ otherwise fail to
competence has no	product moment.	reject if p ≥ 0.05. Analytical model
significant effect on	H0: β1 = 0	$Y = \alpha + \beta_3 X_3 + \epsilon$
procurement performance	HA: β1 ≠ 0	Where, $\alpha$ = constant, $\beta_1$ , = correlation
in Mombasa County	-To conduct an F - test (ANOVA	coefficient, X <sub>3</sub> = Procurement Staff Competence,
Government.	test) to assess overall	$\epsilon$ = error term
	robustness and significance of	
	the regression model.	
<b>H0</b> ₄: Reliability of supplier	Karl Pearson (Beta test)	Reject H02 if p-values ≤ 0.05 otherwise fail to
has no effect on the	product moment.	reject if p ≥ 0.05. Analytical model
procurement performance	H0: β1 = 0	$Y = \alpha + \beta_4 X_4 + \epsilon$
of county government	HA: β1 ≠ 0	Where, $\alpha$ = constant, $\beta_4$ , = correlation
procurement in Mombasa	-To conduct an F - test (ANOVA	coefficient, $X_2$ = Reliability of Suppliers, $\epsilon$ = error
County.	test) to assess overall	term
	robustness and significance of	
	the regression model.	

#### **FINDING**

## **Procurement Planning**

The initial aim of the survey was to assess the effect of procurement planning on procurement performance of county government of Mombasa. Respondents were required to give feedback to set questions related to procurement planning and give their opinions. The statement in the agreement that the user department identified departmental needs had a mean score of about 3.36 and a standard deviation of 1.509. The report in the deal that needs identification helped to achieve end-user satisfaction had a mean score of 3.38 and a standard deviation of 1.497. The statement in the contract that allocation

of resources was as per the county department priorities had an average rating of 3.50 and a standard deviation of 1.344. The report that prioritization of needs led to end-user satisfaction had a mean score of 3.04 and a standard deviation of 1.324. The statement that we had policy and procedure that were complied with during budgeting had a mean score of 3.42 and a standard deviation of 1.341. The report that when policies and procedures were adhered to during budgeting shorten and led time had a mean score of 3.68 and a standard deviation of 1.316. This agreed with Arende, (2015) that procurement policies and procedures help organizations to operate with the budgets.

**Table 3: Procurement Planning** 

Opinion Statement	Mean	Std. Deviation
The user department identifies departmental needs	3.36	1.509
Need identification help to achieve end user satisfaction	3.38	1.497
Allocations of resources are as per the county department priorities.	3.50	1.344
Prioritization of needs led to end user satisfaction	3.04	1.324
We have policy and procedures that are complied with during budgeting	3.42	1.341
When policies and procedures are adhered to during budgeting shorten the lead time	3.68	1.316

## **Procurement Information System**

Another objective of the study was to assess the effect of procurement information system on procurement performance of county government of Mombasa. Respondents were required to give feedback to set questions related to the procurement information system and give their opinions. The statement in the agreement that E-procurement improved transaction time with a mean score of 4.30 and a standard deviation of 0.974. The report in the deal that E-procurement had enhanced transparency information flow smoothening coordination of departments with a mean score of 4.74 and a standard deviation of 0.443. This statement agreed with Njogu and Gichinga, (2016) that E-procurement in the procurement process reduced human

efficiency interference and promoted and transparency. The report in the agreement that procurement information system in the country had effectively integrated all functional departments lowering the cost of operation had a mean score of 4.26 and a standard deviation of 1.103. The statement in the agreement that system integration had led to a smooth flow of work in all the department which had improved customer satisfaction had a mean score of 4.00 and a standard deviation of 1.340. The statement in the agreement that proper infrastructure had increased accuracy had a mean score of 4.82 and a standard deviation of 0.523. The report in the deal that support had led to a reduction of cost of operation had a mean score of 3.86 and a standard deviation of 1.125.

**Table 4: Procurement Information System** 

Opinion Statement	Mean	Std. Deviation
E procurement improves transaction time	4.30	.974
E procurement has enhanced transparency information flow smoothening coordination of departments	4.74	.443
Procurement information system in the county has effectively integrated all functional department reducing cost of operation	4.26	1.103
System integration has led to smooth flow of work in all the department which has improved customer satisfaction	4.00	1.340
Proper infrastructure has increased accuracy	4.82	.523
Infrastructure has led to reduction of cost of operation	3.86	1.125

#### **Procurement Staff Competence**

The third aim of the survey was to assess the effect of procurement staff competence on procurement performance of Mombasa county government. Respondents were needed to respond to set questions related to procurement staff competence

and give their opinions. The statement that they were training staff to equip them with new knowledge had an average score of about 3.98 and a standard deviation of 1.116. The report that employees were qualified for increasing customer's satisfaction had a mean score of 3.96 and a standard deviation of 0.856.

This result agreed with Chogo, Ibua, Banafa, and Adem, (2016) that qualified procurement staff helped the organization to reduce on legal costs that would be incurred in courts for wrong application of procurement laws. The statement that crews were experienced in their areas of duty had a mean score of 3.56 and a standard deviation of 1.402. The report that experienced employees led to timely decision

making had a mean score of 3.44 and a standard deviation of 1.487. The report that staffs were motivated in their work had a mean score of 3.60 and a standard deviation of 1.604. The statement that crews who were highly motivated offered better services had a mean score of 3.36 as well as a standard deviation of 1.467.

**Table 5: Procurement Staff Competence** 

Opinion Statement	Mean	Std. Deviation
We are training staff to equip them with new knowledge	3.98	1.116
Staffs are qualified increasing customers satisfaction	3.96	.856
Staff are experienced in their areas of duty	3.56	1.402
Experienced staff leads to timely decision making	3.44	1.487
Staff are motivated in their work	3.60	1.604
Staff who are highly motivated offer better services	3.36	1.467

# **Reliability of Suppliers**

The fourth objective of the study was to assess the effect of reliability of suppliers on procurement performance of the Mombasa county government. Participants were needed to respond to set questions related to the security of suppliers and give their opinions. The statement that suppliers who were awarded contracts were financial stable had a mean score of 3.54 and a standard deviation of 1.343. The account that financially stability of the suppliers improved procurement performance had a mean score of 3.68 and a standard deviation of 1.301. The

statement in the agreement that the quality of inventory affects procurement had a mean score of 4.40 and a standard deviation of 0.990. This result agreed with Siricha and Theuri, (2016) that quality of inventory reduces cost in the production section. The statement that quality inventory was supplied on time to avoid stock-outs had a mean score of 3.52 and a standard deviation of 1.216. The statement that suppliers had technical capability had a mean score of 3.30 and a standard deviation of 1.460. The report in the agreement that technical ability led to efficiency in service delivery had a mean score of 4.20 and a standard deviation of 1.161.

**Table 6: Reliability of Suppliers** 

Opinion Statement	Mean	Std. Deviation
Suppliers who are awarded contracts are financial stable	3.54	1.343
Financially stability of the suppliers improves procurement performance	3.68	1.301
Quality of inventory affects procurement	4.40	.990
Quality inventory are supplied on time to avoid stock outs	3.52	1.216
Suppliers have technical capability	3.30	1.460
Technical capability leads to efficiency in service delivery	4.20	1.161

#### **Procurement Performance**

The statement in the agreement that the number of customers has increased had a mean score of 4.10

and a standard deviation of 1.165. The report in the contract that there has been customer satisfaction had a mean a score of 4.28 and a standard deviation of 1.294. The statement in the agreement that the

lead time had reduced had a mean score of 4.44 and a standard deviation of 1.110. This result agreed with Olendo and Kavale (2016) that efficient procurement reduces lead time. The statement in the agreement that stock out had not been experienced had a mean score of 4.86 and a standard deviation of 0.351. Also,

the report in the agreement that procurement cost had reduced had an average rating of 4.84 and a standard deviation of 0.370. The statement in the deal that cost of operation improved had a mean score of 4.94 and a standard deviation of 0.240.

**Table 7: Procurement Performance** 

Opinion Statement	Mean	Std. De	viation
Number of customers has increased		4.10	1.165
There has been customer satisfaction		4.28	1.294
Has the lead time reduced		4.44	1.110
Stock out have not been experienced		4.86	.351
Procurement cost has reduced		4.84	.370
Cost of operation improved		4.94	.240

**Table 8: Pearson Correlation** 

#### **Correlations**

		Correlatio	7113			
	Procurement	Procurement	Procurement Information	Procurement Staff	Reliability of	
	Performance	Planning	Systems	Competence	Supplier	
Procurement	1					
Performance						
	50	)				
Procurement	.156	1				
Planning	.000	)				
	50	50				
Procurement	.537**	.472**	1			
Information Systems	.000	.001				
	50	50	50			
Procurement Staff	.326	.492**	.030	1		
Competence	.001	.000	.837			
	50	50	50	50		
Reliability of	.594**	.457**	.802**	.105	1	
Supplier	.000	.001	.000	.467		
	50	50	50	50	50	

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Table 9: Coefficient of Determination (R<sup>2</sup>)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.818ª	.669	.650	1.76965

a. Predictors: (Constant), Reliability of Supplier, Procurement Staff Competence, Procurement Planning, Procurement Information Systems.

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

Table 10: ANOVA

ANOVA	ANOV	Δʻ	1
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Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	148.755	4	37.189	11.875	.000 <sup>b</sup>
Residual	140.925	45	3.132		
Total	289.680	49			

a. Dependent Variable: Procurement Performance

**Table 11: Coefficients** 

Coefficients

	Standardized				
	<b>Unstandardized Coefficients</b>		Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	4.396	3.216		2.367	.000
Procurement	.044	.075	.082	3.583	.003
Planning					
Procurement	.052	.115	.081	3.447	.005
Information Systems					
Procurement					
Staff	.350	.102	.425	3.427	.001
Competence					
Reliability of Supplier	.390	.128	.536	3.040	.004

a. Dependent Variable: Procurement Performance

The regression equation was:

 $Y = 4.396 + 0.044X_1 + 0.052X_2 + 0.350X_3 + 0.390X_4 + E$ Where;

Y = the dependent variable (Procurement Performance of County Governments)

 $X_1$  = Procurement Planning

X<sub>2</sub> = Procurement Information System

X<sub>3</sub> = Procurement Staff Competence

 $X_4$  = Reliability of Supplier

The regression equation above established that taking all factors into account (Procurement performance of county governments because of procurement planning, procurement information system, procurement staff competence and reliability of suppliers) constant at zero performance of procurement performance will be 4.396. The findings presented also showed that taking all other independent variables at zero, a unit increase in

procurement planning would lead to a 0.044 increase in the scores of procurement performance of county governments; a unit increase in procurement information system would lead to a 0.052 increase in procurement performance of county governments; a unit increase in procurement staff competence would lead to a 0.350 increase in the scores of procurement performance of county governments. These results agree with Muthoka, Oloko, and Obonyo, (2017) that there was a definite link between the independent variables and the dependent variable.

This, therefore, implied that all the four variables had a positive relationship with procurement performance of county governments with the reliability of suppliers contributing most to the dependent variable and procurement planning contributing lowest to the dependent variable. From the table, we saw that the predictor variables of

b. Predictors: (Constant), Reliability of Supplier, Procurement Staff Competence, Procurement Planning, Procurement Information Systems

procurement planning, procurement information system, procurement staff competence and reliability of suppliers got variable coefficients statistically significant since their p-values are less than the general alpha level of 0.05. These results were consistent with Njogu and Gichinga (2016) that effective procurement practices have an overall effect on procurement performance of an organization.

From the table, we saw that the predictor variables of procurement planning, procurement information system, procurement staff competence and reliability of suppliers got variable coefficients statistically significant since their p-values are less than the basic alpha level of 0.05.

## Hypothesis 1

**Ho**<sub>1</sub>: Procurement planning has no significant effect on procurement performance in Mombasa County Government.

Concerning the variable procurement planning, the results in table above indicated that procurement planning does not affect procurement performance of Mombasa County government. This is supported by regression value t-value of 3.583 which is higher than the significance value 2.0 as well as a p-value of 0.00 at 95% level of confidence which is less than 0.05. This result agrees with (Olendo & Kavale, 2016).

After examination the hypothesis by comparing the scores of calculated t-value and critical t calculated t-values was 3.583 for procurement planning, which is higher than the critical t36-(0.05) = 2.0, the survey rejected the null hypothesis that procurement planning has no significant effect on procurement performance in Mombasa County Government

Therefore, the study results showed that there is an effect of procurement planning on procurement performance in Mombasa County Government.

#### **Hypothesis 2**

**Ho<sub>2</sub>**: Procurement information system has no significant effect on procurement performance in Mombasa County Government.

Concerning the variable procurement information system, the results in table above indicated that procurement information system does not affect the procurement performance of Mombasa County government. This is supported by regression value t-value of 3.447 which is higher than the critical value 2.0 as well as a p-value of 0.05 at 95% level of significance which is less than 0.05. This result agrees with (Arende, 2015).

After examining the hypothesis by comparing the scores of calculated t-value and critical t calculated t-values was 3.447 for a procurement information system, which is higher than the critical t36-(0.05) = 2.0, the study rejected the null hypothesis that procurement information system has no significant effect on procurement performance in Mombasa County Government

Therefore, the study results show that there is an effect of procurement information system on procurement performance in Mombasa County Government.

# **Hypothesis 3**

**Ho<sub>3</sub>**: Procurement staff competence has no significant effect on procurement performance in Mombasa County Government.

About the variable procurement staff competence, the results in table above indicated that procurement staff competence does not affect procurement performance of Mombasa County government. This is supported by regression value t-value of 3.427 which is higher than the significance value 2.0 as well as a p-value of 0.05 at 95% level of significance which is less than 0.05. This result agrees with (Arende, 2015).

After examining the hypothesis by comparing the scores of calculated t-value and critical t calculated t-values was 3.427 for the procurement information system, which is higher than the critical t36-(0.05) = 2.0, the study rejected the null hypothesis that procurement staff competence has no significant effect on

procurement performance in Mombasa County Government

Therefore, the study results show that hypothesis that there is an effect of procurement staff competence on procurement performance in Mombasa County Government.

## **Hypothesis 4**

**Ho**<sub>4</sub>: Reliability of suppliers has no significant effect on procurement performance in Mombasa County Government.

Concerning the variable reliability of suppliers, the results in table above indicated that the reliability of suppliers has a no effect on procurement performance of Mombasa County government. This is supported by regression value t-value of 3.040 which is higher than the critical value 2.0 and a p-value of 0.05 at 95% level of significance which is less than 0.05. This result agrees with (Arende, 2015).

After examining the hypothesis by comparing the scores of calculated t-value and critical t calculated t-values was 3.040 for the reliability of suppliers, which is higher than the critical t36-(0.05) = 2.0, the study rejected the null hypothesis that security of suppliers has no significant effect on procurement performance in Mombasa County Government

Therefore, the study results show that there is an effect of reliability of suppliers on procurement performance in Mombasa County Government.

#### **CONCLUSION**

Procurement planning had a significant and positive influence on procurement performance of county government. That procurement planning was critical in the success of service delivery at the county government of Mombasa. Supply chain planning ran from prequalification of tenders to tendering to shortlist the bids, the award of tender contracts and delivery of goods and services and inspection of the quality of the same and payment made to suppliers. Planning is positively correlated to the procurement

performance of Mombasa County. Further, the study concluded that procurement planning has the potential of increasing procurement performance of Mombasa County when well nurtured.

Procurement information system had a significant and positive influence on procurement performance of county government. Procurement information system enabled good interaction between the vendors and the service provides helping to improve efficiency in service delivery in the county government of Mombasa. That procurement information system has a positive correlation with procurement performance of Mombasa County. The study further concluded that an increase in the use of procurement information system, the county's procurement performance is bound to increase.

Procurement staff competence had a significant and positive influence on procurement performance of county government. Procurement staff competence helps to reduce wastage of limited resources and fosters efficiency in the delivery of services by the county government. Procurement staff competence has a positive correlation to the procurement performance of Mombasa County. Further, the study concluded that with well-trained procurement staff increases the procurement performance at Mombasa County.

Reliability of suppliers had a significant and positive influence on procurement performance of county government. Satisfied suppliers are essential for timely delivery of goods and services to the county government of Mombasa. That reliability of suppliers has a positive correlation with procurement performance of Mombasa County. Further, the study concluded that satisfied supplier's increases procurement performance of Mombasa County.

# **RECOMMENDATIONS**

County governments should continuously plan for the procurement processes to adopt the best and new practices that reduce operational costs and enhance efficiency. County governments should embrace technology and implement the end to end use of technology that will improve efficiency in county government. That county governments should continuously train their procurement staff with new skills to be able to apply the same at work to reduce costs and increase efficiency. County governments should maintain a good relationship with the supplier and help build their capacity to supply on time and good quality.

#### **Suggestion for Further Research**

This study focused on the factors affecting procurement performance of county government in Mombasa County. Since the independent variables in this study explained only 66.9% of results, it was recommended that an investigation be carried out on other factors on procurement performance of county government in Mombasa County. The research should also be done in a private company or central government department and the results compared to whether there is consistency ascertain procurement performance.

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