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# INFLUENCE OF PROCUREMENT BEST PRACTICES ON PROCUREMENT PERFORMANCE OF COUNTY GOVERNMENTS IN KENYA: A CASE OF BUSIA COUNTY

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## ABSTRACT

Procurement function encompasses the whole process of acquiring goods, services and works; thus begins when an entity has identified a need and decided on its procurement requirement. However, although performance of the procurement function is quite significant in service delivery in both public and private organization, a number of researches have revealed varied assertions on what really influences procurement performance in public institutions. Therefore lack of adequate empirical evidence on significant factors affecting procurement performance function in county governments motivated this study to examine key factors influencing procurement performance in the county government of Busia. The study was informed by the Stock Diffusion theory and Resource Based View theory. The study adopted descriptive survey design and used structured questionnaires to collect data. The study targeted 103 respondents where Yamames formula was applied to get a sample size of 89 respondents. A pilot study was done on 10 respondents selected from the senior management officers in the county government of Trans Nzoia which neighbors Busia County Government, the study area. Descriptive statistics was used to summarize data into meaningful form while inferential statistics was used to determine variable relationships. The study established that procurement planning, procurement staff training, competitive bidding and inventory control have significant influence procurement performance in the county government of Busia. These four supply chain management practices were found to be significant predicator of procurement performance. Therefore, the study concluded that supply chain management practices significantly influenced procurement performance in the county government of Busia. The study recommended that county government should continuously offer procurement staff training so as to improve their skills and knowledge. The study also recommended that there is need to upscale competitive bidding practices in county governments such as supplier compliance assessments/evaluations and regular purchase/repurchase supervision.

Key Words: Procurement Planning, Procurement Staff Training, Competitive Bidding, Inventory Control

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## INTRODUCTION

According to Schiele (2007), procurement performance entails how well organizational procurement objectives have been attained. The extent to which procurement function is able to obtain best value for spent organizational money to purchase products and services is the best indicator of procurement performance. According to Corsten (2009), procurement commonly involves purchase planning, standards determination, specifications development, supplier research and selection, value analysis, financing, price negotiation, making the purchase, supply contract administration, inventory control and stores, and disposal and other related functions.

Procurement best practices is concerned with the management of a significant proportion of the non-pay expenditure and ensuring that the best possible value for money is obtained when committing organization expenditure. The procurement best practices is concerned with obtaining the required goods and services from appropriate suppliers to enable the institution to meet its strategic objectives in an economic, efficient and effective manner.

As Turner (2011) posits, the adoption of procurement best practice is shift away from traditional procurement practices and must therefore be approached from а value opportunity standpoint rather than a process standpoint. There must a shift away from the rudimentary procurement such as soliciting a minimum number of bids and selecting the cheapest one which as Turner (2011) suggests, carries risks which includes missed opportunities for maximum value.

Globally, 60% of quality systems in public procurement have not delivered the expected benefits (Soudry, 2007). Heeks (2010) reported that 35% of procurement system in public sector in developing countries are total failures, 50% are partial failures, while the remaining 15% are successes. Chang (2011) reported that in 2010, 40% of Korea"s total public procurement (124 billion USD) was conducted through manual procurement system.

In Africa, to boost procurement performance, the concept of inventory control has been a popular concept in accounting and procurement systems since 1930s. According to the report made by The Institute of Auditors Research Foundation, internal control systems gained popularity during the industrialization period. For instance, in Nigeria, the fact that inventory are believed to provide a direct link between production and sales and constitute good percentage of organizational costs has made many organizations invest heavily on systems that can enhance inventory control. The organizations had to come up with organizational inventory control policies and long term inventory management plans where the top management is directly involved (Ogbo, 2014).

To ensure sanity and value for money in the public procurement landscape, the government of Ghana launched the Public Financial Management Reform Programme. The purpose of the programme was to improve financial management in Ghana and the programme further identified weaknesses in the procurement system. Some of these weaknesses included: lack of comprehensive public procurement policy, lack of central body with technical expertise, absence of clearly defined roles and responsibilities for procurement entities (Ameyaw, Mensah & Osei-Tutu, 2012).

The situation is not different in South Africa. Inventory control and procurement performance relationships have been considered a challenge to many organizations, especially the public ones. A study by Nzuza (2012) on Factors affecting the success of inventory control in the Stores Division of the eThekwini Municipality, Durban appreciated that there have been inefficiencies in the inventory systems and suggested a revision of inventory control processes. In response to such findings, there is now in place the Preferential Procurement Policy Framework Act, this act was passed to guide inventory control of municipal authorities (Nzuza, 2012).

Many large public corporations and institutions in Kenya rely on procurement to access most of their products and services, through purchasing and sourcing as well as tendering and contracting. In order to ensure fairness during the bidding process, the Government through the Public Procurement Oversight Authority (PPOA), Public Procurement and Asset Disposal Act (PPDA) of 2015, and the Procurement Regulations of 2015 entrenched the concept of competitive procurement in all government agencies.

Public procurement and Disposal Act (2015) states that procurement planning in the public sector is compulsory in order to ensure efficient procurement of goods, works and services. Those charged with public procurement responsibility must therefore ensure that procurement plans are prepared in line with those of their annual budgets implemented. The implementation and of procurement plans must be monitored on a quarterly basis and adjustments made as necessary. Procurement planning is the responsibility of those charged with procurement responsibility of the organization. Procurement is a complex function of and requires participation of all actors. It is also important for all actors to cooperate and perform their roles for the success of the procurement function. Each procurement activity for acquirement of goods, works and services should be assigned the responsible officials and time within which it should be completed as per the guidelines of Public Procurement Oversight Authority (PPOA).

Further, the aims of PPOA and PPDA is to establish procedures for procurement and the disposal of unserviceable, obsolete or surplus stores and equipment by public entities to maximize economy and efficiency, promote competition and ensure that competitors are treated fairly, promote the integrity and fairness of those procedures, increase transparency and accountability in those procedures and to increase public confidence in those procedures and facilitate the promotion of local industry and economic development. But despite these standards, Kenya loses a lot of taxpayers money to improper procurement practices (GoK, 2017).

## **Statement of the Problem**

The Kenyan public procurement system has evolved from a largely crude unregulated system to a highly regulated system (PPOA, 2009). Despite the progress made, the Kenyan procurement system still faces a myriad of challenges. World Bank Report (2018) indicated that, the average project funds absorption rate was less than 10% per annum which was attributed to a constrained procurement performance. According to PPOA Capacity Building Strategy Report, 2011-2014; less than 10% of procured contracts were done according to procurement compliance regulations and procurement audit checks also revealed that compliance in public procurement in Kenya is still inadequate and reason for poor procurement performance in many public institutions. In Busia County, according to TISA (2018), 88 % of projects were behind schedule for which there was expression by the respondents that, the performance derailed procurement county government projects performance

A number of researches on procurement best practices have revealed varied assertions on what really influences procurement performance in public institutions. For instance studies by Thai (2001); Pauw, (2002; Babich and Pettijohn, (2004): Anget (2005); Acquaye (2011) have shown divergent views on how competitive bidding influence procurement performance. Further. other scholars; Adamyan (2002); Kovacs (2008); Lysons (2008); Handfield (2009); Hardy 2011); Kavale and Mwikali (2012) found conflicting views about the most appropriate for procurement best practices criteria that can guarantee robust procurement performance. Therefore lack of comprehensive empirical evidence on procurement best practices and performance necessitated this study to be undertaken.

## **Objectives of the Study**

The general objective of the study is to examine influence of procurement best practices on procurement performance of county governments in Kenya in Busia County government. The specific objectives were;

- To assess the influence of Competitive bidding on procurement performance in the county government of Busia.
- To examine influence of procurement planning on procurement performance in the county government of Busia.
- To evaluate the influence of inventory controls on procurement performance in the county government of Busia.
- To determine influence of procurement staff training on procurement performance in the county government of Busia.

The research was guided by the following hypotheses;

- H<sub>01</sub>: Competitive bidding does not significantly influence procurement performance in the county government of Busia.
- H<sub>02</sub>: Procurement planning does not significantly influence procurement performance in the county government of Busia.
- H<sub>03</sub>: Inventory controls do not significantly influence procurement performance in the county government of Busia.
- H<sub>04</sub>: Procurement staff training does not significantly influence procurement performance in the county government of Busia.

## LITERATURE REVIEW

## **Stock Diffusion theory**

Stock diffusion theory by Eaton (1999) outlines a dynamic approach to inventory management used for non-stationary items with non-constant means and variance. That is, according to stock diffusion theory, stock consumption is modeled as a Markov process with a slow diffusion term. Fokker Planck equation is used to derive the probability distribution of stock consumption and reorder time. Management of the inventory distributed in this manner makes it possible to keep safety stock at minimum levels (Braglia, 2013). Similarly, it ensures the inventory costs are kept at minimal levels without interrupting the internal operations of the organization.

Stock diffusion concept can also be applied in supply environment with random and controllable demand and continuous input flow with fixed uncontrollable rate under finite storage capacity (Kitaeva, 2014). To control inventory in such an uncertain environment, there is need to develop internal inventory control systems that allows direct and real time flow of information on materials; information flow between suppliers and the organization.

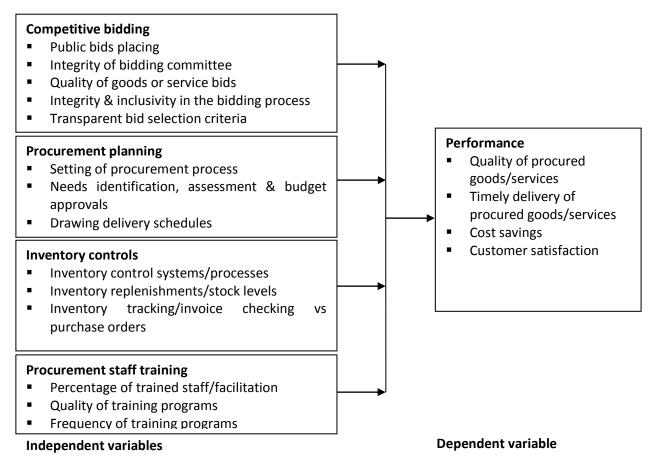
#### **Resource Based View Theory**

Resource Based View theory by Barney (1991), asserts that a firms resources and capabilities are its most important assets; thus the primary concern of RBV theory is about obtaining access to another firms core competencies to gain competitive advantage (Steinle & Schiele, 2008). In this regard, Steinle and Schiele (2008) assert that suppliers can be regarded as resources in case they are sufficiently bound to a firm. With these assumptions they clearly follow the extended resource based view, implying, resources can also be obtained through inter-firm connection from the external environment. They proceed by setting suppliers in context with the four resource attributes, mentioned in Barney (1991).

Following his logic, suppliers can be argued to contribute to a competitive goods or services in case they offer valuable products, are rare in the sense of being not comparable to others, their products are not easy to substitute, and the relationship between buyer and supplier is difficult to imitate (Steinle & Schiele, 2008).

The RBV theory further claims, that within an industry only few suppliers exist which offer valuable resources, being a preferred customer of

them can have a contribution to a competitive advantage of the firm, which supports the focus of the resource based view Steinle and Schiele (2008). Therefore, the resource based contributes to the decision about the supplier portfolio by considering the relationship between buyer and supplier as the mean to achieve a competitive goods and services. Suppliers are seen as valuable resources themselves or as the source to access them, and by becoming their preferred customer; firms do not only gain preferential treatment but also the ability to distance competitors which do not have the same status.



## **Figure 1: Conceptual Framework**

#### **Empirical Review**

Parkera and Hartley (2003) asserted that competitive contracts give the procuring entity an opportunity to review many different businesses and select the one it feels most appropriately suits the particular project needs. The public agency establishes quality and quantity specifications and sends invitation to bid. The competitive market responds to the invitation, and one or more producer is selected to provide a specific service for a period of time. However, Parkera and Hartley (2003) indicate that one of the main challenges facing procurement contracting practices in public organizations is increase in corruption and collusion due to the use of non-competitive procedures.

Lysons and Farrington, (2006) asserted that bidding is a procurement procedure whereby potential suppliers are invited to make an offer on the price and terms in which they will supply specified goods, services, or works which on acceptance shall be the basis of a subsequent contract. In a study by Zack (2003) found that one of the most concerning reasons is the practice of a contractor intentionally submitting an artificially low bid in anticipation of making their profit through change orders and claims. Some bidders carefully review the bid documents searching for mistakes and ambiguity in areas that could lead to change orders and claims during the project.

Procurement planning is one of the primary functions of procurement with a potential to contribute to the success of local government operations and improved service deliver. It is a function that sets in motion the entire of acquisition/procurement process local governments (Basheka, 2010). Tukuta and Saruchera (2015) study on challenges facing procurement performance in public entities asserted that a well-planned procurement system supported by a feasible regulatory framework can really boost execution of the procurement function.; that is, a legal and policy frameworks that are complicated can pose risks to procurement planning and its effectiveness.

Kabega, Kule and Mbera (2016) studied on the effect of procurement practices on performance of public projects in Rwanda and the study found that there was significant relationship between public procurement planning and performance and that the positive organizational performance in Rwanda was attributed by proper public procurement planning. However, the study investigated practices such as procurement planning, tendering system, and contract administration and did not outline how the government should monitor, control, and train their employees; a gap that was filled by this study.

Chong (2018) study on inventory management recommended that that a procurement process which is termed to be well prepared and implemented increase the possibilities to organizations inventories reduction, encompass good services to customers, cost reduction as well as aid fast turns of inventory. Among the major procurement benefits are through the condition of short-range goals leading to productivity increase and inventory decline as well as less inventory control. Shah (2013) study on the importance of inventory controls in the procurement process argued that poor inventory management affect sales, customer services and revenue, which negatively impact an organizations performance. Therefore, maintaining accurate records of inventory improves customer service by providing knowledge of customers demands; improves organizations productivity by ensuring that materials are available when needed and maximizes revenue by avoiding holding excess inventory that will eventually end up being written off.

Hui (2011) while analyzing procurement issues in Malaysia established that procurement officers were blamed for malpractice and noncompliance to the procurement policies and procedures; recommended rigorous training of procurement officers so that they handle procurement matters professionally.

OECD-DAC (2016) combined studies on procurement performance reiterated that an allencompassing procurement system should have personnel who are professionally trained and are well fortified with the expertise and competent for procurement jobs specified. That is, it is challenging to create a unit or workforce procurement with the right skills and capabilities taken into consideration procurement changes to processes, the introduction or expansion of alternative contracting approaches whose implementation relies on procurement staff training.

## METHODOLOGY

This study adopted descriptive research design. The target population in this study was cases that contain the desired information, thus consists of procurement officers, finance officers, internal auditors and accountants that were perceived to influence the procurement performance in the county government of Busia. The study's sampling frame included procurement officers, internal auditors, accountants and finance officers serving in the county government of Busia. The researcher used structured questionnaires designed according

to the conceptualized study variables (procurement staff training, procurement planning, competitive bidding and inventory controls on the procurement performance) then used the instrument to collect primary data from respondents (procurement officers, internal auditors, accountants and finance officers serving in the county government of Busia). Both descriptive and inferential statistics was computed using SPSS version 23. Descriptive statistics summarized data into meaningful form using frequencies and percentages as well as measures of central tendency (means) and dispersion (standard deviation). Inferential statistics was computed to show variable relationships; that is, regression and correlation analysis was used to determine both the nature and the strength of the relationship between independent and dependent variables. The regression and correlation analysis was based on the association between two (or more) variables. Data was presented in form of models and tables.

The multiple regression analytical model equation is;

 $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$ Y = Procurement Performance

## Table 1: Descriptive statistics; Competitive bidding

# $\beta_0$ = Constant

- $\beta_1 \beta_4 = \text{Beta coefficients}$
- X<sub>1</sub> = Competitive bidding X<sub>2</sub> = Procurement planning
- $X_2$  = Inventory controls
- $X_4$  = Procurement staff training
- $\varepsilon$  = the error term

## FINDINGS

## **Descriptive Analysis**

These were summated responses according to the statements about competitive bidding, procurement planning, inventory control and procurement staff training using Likert scale with values ranging from 5 to 1; that is; 5=Strongly Agree, 4=Agree, 3= Uncertain, 2=Disagree and 1= Strongly Disagree. The results were presented in the table form showing frequencies of responses as per each statement and its corresponding percentage score in brackets.

## **Competitive Bidding**

This objective assessed descriptive responses on whether competitive bidding as a best practice influences procurement performance in the county government of Busia as summarized in table 1.

Statement	5	4	3	2	1	Mean	Std.dev
1. The county government always seeks							
competitive bids from its suppliers for	30	33	1	2	8	4.01	1.23
products & service provision over a	(40.5)	(44.6)	(1.4)	(2.7)	(10.8)	4.01	1.25
particular period of time							
2. Competitive bidding ensures there is	6	28	27	9	4		
value for money through quality of goods				-		3.31	0.98
and services provided	(8.1)	(37.8)	(36.5)	(12.2)	(5.4)		
3. The procurement committee engages in	10	32	22	8	2	2 5 4	0.05
public bids placing	(13.5)	(43.2)	(29.7)	(10.8)	(2.7)	3.54	0.95
4. Quality of goods or service bids	48	15	5	4	2	4 20	1.02
influence procurement performance	(64.9)	(20.3)	(6.8)	(5.4)	(2.7)	4.39	1.02
5. There is transparent bid selection	29	28	5	6	6		
criteria to enhance product and service						3.92	1.24
quality	(39.2)	(37.8)	(6.8)	(8.1)	(8.1)		
Valid listwise 74							
Grand mean =3.84							

From table 1, slight majority of the respondents agreed (44.6%) and strongly agreed (40.5%) that

the county government always sought competitive bids from its suppliers for products and service provision over a particular period of time. However, 10.8% strongly disagreed on the same indicating there are incidences where competitive bidding does not take place.

Secondly, 37.8% and 8.6% of respondents agreed and strongly agreed that competitive bidding ensures there is value for money through quality of goods and services provided; which thus advocates for competitive bidding in the county government of Busia. Similarly, 43.2% and 13.5% of respondents agreed and strongly agreed respectively that procurement committee engages in public bids placing; which ensures transparency in the bidding process.

Most of the respondents, 20.3% and 64.9% of respondents agreed and strongly agreed respectively that quality of goods or service bids influence procurement performance; and further supported by a mean of 4.39 although there was significant variation. Lastly, small majority respondents strongly agreed (37.8%) and agreed (37.8%) that there is transparent bid selection criteria to enhance product and service quality.

#### Table 2: Descriptive statistics; Procurement planning

transparent bid That is selection depicts competitive bidding; and this is supported by Parkera and Hartley (2003) who asserted that competitive contracts give the procuring entity an opportunity to review many different businesses and select the one it feels most appropriately suits the particular project needs. The public agency establishes quality and quantity specifications and sends invitation to bid. The competitive market responds to the invitation, and one or more producer is selected to provide a specific service for a period of time. However, Parkera and Hartley (2003) indicate that one of the main challenges facing procurement contracting practices in public organizations is increase in corruption and collusion due to the use of non-competitive procedures.

## Procurement planning

This objective assessed descriptive responses on whether procurement planning as best practice influences procurement performance in the county government of Busia. The responses were summarized in table 2 showing frequencies with percentages in brackets, means and standard deviations.

Statement	5	4	3	2	1	mean	Std.dev
Need identification is done on all	23	21	3	13	14		
procured goods and services	(31.1)	(28.4)	(4.1)	(17.6)	(18.9)	3.35	1.54
Need assessment is carried out							
before undertaking procurement	15	41	9	6	3		
activities	(20.3)	(55.4)	(12.2)	(8.1)	(4.1)	3.80	0.99
Budgets approvals are obtained	16	45	8	3	2		
before purchase orders are placed	(21.6)	(60.8)	(10.8)	(4.1)	(2.7)	3.95	0.86
Drawing of delivery schedules are	35	27	5	6	1		
done in line with suppliers	(47.3)	(36.5)	(6.8)	(8.1)	(1.4)	4.20	0.98
County most often involve all							
stakeholders with regards to	15	19	11	13	16		
procurement activities	(20.3)	(25.7)	(14.9)	(17.6)	(21.6)	3.05	1.46
Valid listwise 74							
Grand mean =3.67							

From table 2, 31% of the respondents strongly agreed and 28.4% agreed that need identification was done on all procured goods and services in the

County although 18.9% of the respondents strongly disagreed implying that there were some cases where need identification was not done on all

procured goods and services in the County. This was also supported by a significant standard deviation (1.54). Further, most of the respondent agreed (55.4%) that need assessment is carried out before undertaking procurement activities in the County and this was supported by 20.3% of the respondents who strongly agreed on the same.

Similarly, 60.8% and 21.6% of the respondents agreed and strongly agreed respectively that budgets approvals are obtained before purchase orders are placed. However, 10.8% of the respondents were undecided. The results also revealed that 47.3% and 36.5% of the respondents strongly agreed and agreed respectively that drawing of delivery schedules are done in line with suppliers. This observation was supported by a mean of 4.20.

Further, while 50.6% agreed that suppliers are evaluated on the basis of quality of their products and services, 24.7% disagreed to the statement, implying that there are cases of mistrust when it comes to procurement planning. More, so, 55.6% and 11.1% agreed and strongly agreed respectively that suppliers were selected based on their capacity to deliver goods and services, implying that at least suppliers with the capacity to supply procured goods and services are selected.

Table 3: Descriptive statistics; Inventory control

Lastly, 25.7% of the respondents agreed that county most often involve all stakeholders with regards to procurement activities and further 20.3 strongly agreed on the same. However, 21.6% of the respondents strongly disagreed on the involvement of all stakeholders and assertion that was supported by a standard deviation of 1.46. This confirms the results from Mamiro (2013) who pointed out that a major setback related to public procurement performance is improper or weak planning and controlling of the procuring process including not well identified and estimated needs, unmeasurable, unattainable unspecific, and unrealistic budgets which must be addressed at procurement planning stage. Kilonzo (2014) established that company had adopted procurement planning practices that were followed when making company purchasing decisions.

#### Inventory control

This assessed descriptive responses on whether inventory control as procurement best practice influences procurement performance in the county government of Busia. The responses were summarized in table 3 showing frequencies with percentages in brackets, means and standard deviations.

Statement	5	4	3	2	1	mean	Std. Dev
All departments have valid inventory control	35	25	9	2	3		
systems/processes	(47.3)	(33.8)	(12.2)	(2.7)	(4.1)	4.18	1.03
management support independent / reliable	14	23	14	18	5		
Inventory control process	(18.9)	(31.1)	(18.9)	(24.3)	(6.8)	3.31	1.23
All departments have reliable inventory	42	20	5	5	2		
systems to cater for inventory replenishments	(56.8)	(27)	(6.8)	(6.8)	(2.7)	4.28	1.04
There is valid invoice checking before	36	22	5	7	4		
purchase orders are placed	(48.6)	(29.7)	(6.8)	(9.5)	(5.4)	4.07	1.20
There are regular inventory tracking							
mechanisms to check for any flaws in the	29	30	5	6	4		
inventory process	(39.2)	(40.5)	(6.8)	(8.1)	(5.4)	4.00	1.13
Valid listwise 74							
Grand mean =3.97							

From table 3, slight majority respondents strongly agreed (47.3%) that all departments had valid inventory control systems/processes and 33.8.0% of

the respondents agreed. A mean of 4.18 implied departments have valid inventory control systems/processes. Further, 31.1% and 18.9%

agreed and strongly agreed respectively that management supports existence of an independent and reliable Inventory control process. However, 24.3% of the respondents disagreed implying that there are some cases where the management does not support existence of an independent and reliable Inventory control process.

The results also revealed that most of the respondents strongly agreed (56.8%) that all departments had reliable inventory systems to cater for inventory replenishments while 16.0% strongly agreed on the same. However, there was insignificant deviation from the mean as indicated by a mean of 1.04. The results further revealed that 48.6% of the respondents strongly agreed that there is valid invoice checking before purchase orders are placed and further 29.7% agreed on the same. A mean of 4.07 indicated that there is checking of invoice before purchase orders are placed.

Lastly, most of the respondents confirmed that there wre regular inventory tracking mechanisms to

check for any flaws in the inventory process as shown by 39.2% who strongly agreed and further 40.5% agreed on the same. A mean of 4.00 indicated that regular inventory tracking mechanisms to check for any flaws in the inventory process. Kilonzo (2016) hinted that inventory holding should be properly managed in order to ensure smooth operation in a firm through reordering costs, carrying costs and stock out costs. Wangui (2014) study on inventory controls also reiterated that internal inventory operations integrated with supply chain management and systems enabled by the Internet will benefit businesses and stakeholders at large.

## **Procurement staff training**

This objective assessed descriptive responses on whether procurement staff training as a procurement best practice influences procurement performance in the county government of Busia. The responses were summarized in table 4 showing frequencies with percentages in brackets, means and standard deviations.

Statement	5	4	3	2	1	mean	Std.dev
1. Most of procurement staff have							
adequate training in public	14	38	8	10	4		
procurement	(18.9)	(51.4)	(10.8)	(13.5)	(5.4)	3.65	1.10
2.Most of procurement staff have							
adequate knowledge and skills in public	28	31	8	3	4		
requirement	(37.8)	(41.9)	(10.8)	(4.1)	(5.4)	4.03	1.07
3. There is frequent training of staff in	21	23	18	7	5		
public procurement	(28.4)	(31.1)	(24.3)	(9.5)	(6.8)	3.65	1.19
4. The quality of procurement training							
programs determines staff knowledge	30	20	7	5	12		
and skills in public procurement	(40.5)	(27)	(9.5)	(6.8)	(16.2)	3.69	1.47
5. Generally training of staff enhances							
procurement performance function in	27	22	8	7	10		
the county government	(36.5)	(29.7)	(10.8)	(9.5)	(13.5)	3.66	1.41
Valid listwise 74							
Grand mean =3.74							

#### Table 4: Descriptive statistics; Procurement staff training

From table 4, most respondents agreed (51.4%) and strongly agreed (18.9%) that most of procurement staff have adequate training in public procurement although 13.5% disagreed on the same. A mean of 3.65 postulated that most of procurement staff has adequate training in public procurement. More so, 41.9% and 37.8% of respondents agreed and strongly agreed respectively that most procurement staff have adequate knowledge and skills in public requirement. A mean of 4.03 implied that procurement staff at County government of Busia

has adequate knowledge and skills in public requirement.

Further, small majority of respondents agreed (31.1%) that there is frequent training of staff in public procurement and additional 28.4% strongly agreed on the same. A mean of 3.65 revealed that, to a moderate extent, there is frequent training. Similarly, 40.5% and 27.0% of the sampled respondents agreed and strongly that the quality of procurement training programs determines staff knowledge and skills in public procurement

Lastly, small majority of respondents strongly agreed (36.5%) that generally; training of staff enhances procurement performance function in the county government and further supported by 29.7% of the respondents who agreed. A mean of 3.66 supported this assertion that training of staff

enhances procurement performance function in the county government. Wanyonyi and Muturi (2015) study also found that the key contributors to staff competence included training of new employees in the procurement departments, enhancement of team work of procurement staff, acquaintance with the procurement law by the procurement team and employment of qualified and competent personnel in the procurement departments among others; thus reiterating the importance of staff competency in enhancing procurement performance in public institutions. Further, OECD- DAC (2016) combined studies on procurement performance reiterated that an all-encompassing procurement system should have personnel who are professionally trained and are well fortified with the expertise and competent for procurement jobs specified.

#### **Inferential Statistics**

#### **Table 5: Correlations**

		СВ	PP	IC	PST	PPf
CB: Competitive	Pearson Correlation	1	.202	.113	.281*	.424**
bidding	Sig. (2-tailed)		.085	.338	.015	.000
	Ν	74	74	74	74	74
PP: procurement	Pearson Correlation	.202	1	.255*	.309**	.412**
planning	Sig. (2-tailed)	.085		.028	.007	.000
	Ν	74	74	74	74	74
IC: Inventory	Pearson Correlation	.113	.255*	1	.695**	.556**
controls	Sig. (2-tailed)	.338	.028		.000	.000
	Ν	74	74	74	74	74
PST: procurement	Pearson Correlation	.281*	.309**	.695**	1	.607**
staff training	Sig. (2-tailed)	.015	.007	.000		.000
	Ν	74	74	74	74	74
PPf: Procurement	Pearson Correlation	.424**	.412**	.556**	.607**	1
Performance	Sig. (2-tailed)	.000	.000	.000	.000	
	Ν	74	74	74	74	74
*. Correlation is sign	ificant at the 0.05 level (2-tailed).					

\*\* Completion is significant at the 0.00 level (2 tailed).

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

Fifth, multicollinearity was checked using correlations between all pairs of independent variables (e-sourcing, e-data transmission, e-ordering). Most scholars asserts that if correlation coefficient, (r) is close to 1 or -1, then there is multicollinearity but if correlation coefficient (r) is not above 0.9, then there is no multicollinearity. In this study (table 5 on correlation analysis), the highest correlation coefficient between all pairs of the study's independent variables (competitive

bidding, procurement planning, inventory control, procurement staff training) was 0.695, which was below the threshold of 0.9, thus multicollinearity assumption was checked and met.

## Multiple regression analysis

Linear regression analyses showing both the F values and the corresponding significant values revealed that the study's independent variables (competitive bidding, procurement planning, inventory control, procurement staff training) are

indeed different from each other and that they affect the dependent variable (procurement performance in the county government of Busia) in a different manner, hence, the possibility of running multiple regression. The mandatory model assumptions for running multiple regression analysis were also checked and met. The results were shown in table 6.

				Std. Error of		Chang	e Statist	ics	
Model	R	R Square	Adjusted R Square	the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.723ª	.522	.494	.43458	.522	18.851	4	69	.000
				ANO	VA <sup>b</sup>				
Model		Su	im of Squares	df	Mean Sq	uare	F		Sig.
1	Regres	sion	14.240	4		3.560	18.8	51	.000 <sup>b</sup>
	Residu	al	13.031	69		.189			
	Total		27.271	73					

Table 6: Multiple Regression analysis

a. Predictors: (Constant), Procurement staff training, Inventory control, Procurement planning, Supplier Finance Capability

b. Dependent Variable: Procurement Performance

Table 6 showed the multiple regression results of the combined effects of the study's independent variables (competitive bidding, procurement planning, inventory control and procurement staff training). The multiple regression results showed the F statistics was significant (F = 18.851; significant at p<.01), thus confirming the fitness of the model. An R<sup>2</sup> of 0.522 shows that the study explains 52.2%% of variation in the procurement performance in the county government of Busia, while other factors not in this study model accounted for 47.8%, hence, it was a good study model.

Further, from the values of unstandardized regression coefficients with standard errors in parenthesis in table 7, all the independent variables

(competitive bidding;  $\beta$  = 0.296 (0.095) at p<0.05; procurement planning;  $\beta$  = 0.137 (0.061) at p<0.05; inventory control;  $\beta$  = -0.242 (0.098) at p<0.01, procurement staff training;  $\beta$  = 0.192 (0.087) at p<0.05, significantly predicted procurement performance in Busia County government (dependent variable). Thus the final multiple regression equation was ;

(v)  $y=1.653 + 0.296X_1 + 0.137X_2 + 0.242X_3 + 0.192X_4$ Where; y= procurement performance  $X_1=$  competitive bidding

X<sub>2</sub>= procurement planning X<sub>3</sub>= inventory control

X<sub>4</sub>= procurement staff training

	Unstandardize	d Coefficients	Standardized Coefficients		
Model	В	Std. Error	Beta	т	Sig.
1 (Constant)	1.653	.507		3.260	.002
Competitive bidding	.296	.095	.275	3.124	.003
Procurement planning	.137	.061	.201	2.268	.026
Inventory control	.242	.098	.288	2.460	.016
Procurement staff training	.192	.087	.268	2.197	.031
a. Dependent Variable: Procurem	ent Performance				

#### **Table 7: Regression Coefficients**

#### Hypothesis testing

Study hypothesis one stated that competitive bidding does not significantly influence procurement performance in the county government of Busia. The study results indicated that there is a positive and significant influence of competitive bidding on procurement performance in the county government of Busia ( $\beta$  = 0.296 (0.095) at p<0.01). Hypothesis one was thus rejected. The results imply that a single increase competitive bidding as procurement best practices will yield 0.296 unit improvement in the procurement performance in the county government of Busia. The results were supported by Parkera and Hartley (2003) who asserted that competitive contracts give the procuring entity an opportunity to review many different businesses and select the one it feels most appropriately suits the particular project needs. More so, Parkera and Hartley (2003) found that one of the main challenges facing procurement contracting practices in public organizations is increase in corruption and collusion due to the use of non-competitive procedures.

Study hypothesis two stated that Procurement planning does not significantly influence performance procurement in the county government of Busia. The study results indicated that there is a positive and significant influence of procurement planning on procurement performance in the county government of Busia (B = 0.137 (0.061) at p<0.05). Hypothesis two was thus rejected. The results implied that a single increase in procurement planning as procurement best practice will yield 0.137 unit improvement in the procurement performance in the county government of Busia. These findings compares favorably with Kiage (2013) who established that performance of procurement in energy sector in Kenya is positively and significantly influenced by procurement planning.

Study **hypothesis three** stated that Inventory controls do not significantly influence procurement performance in the county government of Busia.

The study results indicated that there is a positive significant influence of inventory control on in procurement performance the county government of Busia ( $\beta$  = 0.242 (0.098) at p<0.01). Hypothesis three was thus rejected. The results implied that a single increase in inventory controls will yield 0.242 unit improvement in the procurement performance in the county government of Busia. The results were supported by Onchoke and Wanyoike (2016) who found out that internal inventory security practices have significant positive influence on procurement performance.

Lastly, Study **hypothesis** four stated that procurement staff training does not significantly influence procurement performance in the county government of Busia. The study results indicated that there is a positive and significant influence of procurement staff training as procurement best practice on procurement performance in the county government of Busia ( $\beta$  = 0.192 (0.087) at p<0.05). Hypothesis four was thus rejected. The results implied that a single increase in efficient procurement staff training will yield 0.192 unit improvement in the procurement performance in the county government of Busia.

## CONCLUSIONS AND RECOMMENDATIONS

First, engaging in competitive bidding is an effective way of ensuring that the county gets quality procured goods and services. The county government always sought competitive bids from its suppliers for products & service provision over a particular period of time. Competitive bidding ensures there is value for money through quality of goods and services provided.

The study concluded that procurement planning has significant positive influence on procurement performance in county government of Busia. This postulated that effective and robust procurement planning would results to improvement in procurement performance. For instance, involvement of all departmental heads in setting of procurement processes and procurement needs assessment would enhance procurement performance. Further, budgets were approvals are obtained before purchase orders are placed which also enhance procurement performance.

The study concluded that inventory control has significant positive influence on procurement performance in County government of Busia. Most of the departments in the county government were found to valid have inventory control systems/processes. Further, Busia county Government has regular inventory tracking mechanisms to check for any flaws in the inventory process which has improved procurement performance.

In regard to procurement staff training, the study concluded that there is significant positive influence of procurement staff training on procurement performance in county government of Busia. The county government of Busia was found to have adequate training in public procurement. This has resulted to adequate knowledge and skills in public requirement hence improvement in procurement performance in county government of Busia.

The study recommended that County procurement committees should enhance prudent competitive bidding practices to improve quality of procured goods and services.

The study recommended that county governments should be staffed with professionally qualified personnel. This can be achieved via continuous procurement staff training as well as recruitment of procurement staff with requisite professional qualification, certification and experience in procurement practices.

The study recommended that county government should avail adequate resources and at the same time include all stakeholders during procurement planning process so as to cover all aspects of procurement planning such as specification and estimation in timely manner.

Lastly, the study recommended that there is need of County Governments to have an independent and reliable Inventory control process with capabilities of checking any flaws in the inventory process. Further, internal inventory security procedural practices should be considered as one of the strategies for inventory control. The internal inventory security procedural practices should be developed in a participatory manner between the stores and procurement functions documented and should be well communicated across the organization.

## Areas for further studies

The study focused on influence of procurement best practices on procurement performance in the county government of Busia. Some factors such as competitive bidding and supply chain collaboration practices were not considered. Therefore, further studies should consider other factors not captured in this study.

## REFERENCES

- Agaba, E & Shipman N. (2011). Public Procurement Reform in Developing Countries: The Ugandan Experience. In G. Piga & K. V. Thai (Eds.), Advancing Public procurement Practices.
- Alexis, M 2013). Assessing the Effects of the Procurement Act (663) On Public Financial Management in Ashanti Region. purchasing principles and management, 9th ed. washington.
- Amin, K.A., & Chirchir, M.K., (2013). Electronic Procurement and Organizational Performance among Commercial State Corporation. *International Journal of Business and Management*. 15(4), 75-85.
- Basheka, B. C. (2010). Procurement Planning and Accountability of Local Government Procurement Systems in Developing Countries: Evidence from Uganda. *Journal of Public Procurement*, 8 (3), 379-406.
- Braglia, M. R. (2013). Stock diffusion theory: a dynamic model for inventory control. *International Journal of Production Research*, 51(10).

- Brown, B and Hyer, N (2013). Managing projects: a team-based approach, International Edition, Singapore, McGraw- Hill.
- Chandra, P 2014). Projects: planning, analysis, review; (667th ed.)
- Chemoiywo, P. P. (2014). Public Procurement Procedures and Supply Chain Performance in State Corporations in Kenya. *Nairobi: University of Nairobi*.
- Chong, N (2018). Adoption of inter organizational system standards in supply chains: an empirical analysis of Rosetta Net standards, *Industrial Management and Data Systems*, 108 (4), 529–547
- Cooper, D. R. & Schindler, P. S. (2014). Business research methods (12th ed.). New York: McGraw-Hill/Irwin.
- Durry, C (2013). Management and cost accounting: Springer.
- Eaton, J. &. (1999). International Technology Diffusion: Theory and Measurement. *International Economic Review*, 40(3), 537–570.
- Heese, T (2015). Curbing Corruption in Public Procurement, Transparency International, Berlin.
- Hui, M (2011). Supply chain management and its relationship to logistics. Marketing, Production, and Operations Management. *Journal of Business Logistics*, 49(7).
- Hussein, I. M. R & Shale, I .N . (2014). Effects of sustainable procurement practices on organizational performance in manufacturing sector in Kenya: a case of Unilever Kenya Limited. *European Journal of Business Management*, 1 (11), 417-438.
- Jibrin M. S., Ejura S. B. & N. I. (2014). The public procurement reforms in Nigeria: implementation and compliance challenges. *Journal of Asian Business Strategy*, 4(12), 153-166.
- Kabega, C., Kule, J. W., & Mbera, Z. R. (2016). Effect of procurement practices on performance of public projects in Rwanda. International Journal of Economics, Commerce and. *Management United Kingdom*, 4(5) 377 – 192
- Kakwezi, P. &. Nyeko (2014). Procurement Process and Performance: Efficiency and Effectiveness of the Procurement Function. Kampala: Makerere University.
- Karanja M. K. & Kiarie D. (2015). Influence of procurement practices on organization performance in private sector in Kenya: a case study of Guaranty Trust Bank Kenya Ltd. International Journal of Business & Law Research, 3(2), 44 – 60.
- Kibet, W., & Njeru, A.,. (2014). Effect of Procurement Planning on Procurement Performance. Acase study of Agricultural Development Corporation, Nairobi. *International Journal of Business and Commerce*, 25 (7) 58-68.
- Kilonzo, M (2016). Effect of Inventory Management on Procurement performance of Firms Funded by Government Venture Capital in Kenya. *European Journal of Business and Management*, 8(5).
- Kilonzo, M. (2014). Procurement bestpractices and Organizational Performance. A Case study of Cadburys Kenya Ltd. *International Journal of Business and Management*.
- Kiragu, M (2012). Role of procurement practices on the performance of corporate organization in Kenya. A Case of Kenya National Police Service. *International Journal of Academic Research in Business & Social Sciences* 4(10).

- Kitaeva, A. S. (2014). Diffusion Approximation in Inventory Management with Examples of Application. Tomsk: *National Research Tomsk Polytechnic University*.
- Koigi, T (2014). Influence of procurement practices on the performance of commercial state Owned Enterprises in Nairobi County. *Unpublished MBA thesis, University of Nairobi*.
- Lundu, B. L., & Shale, N. (2015). Effect of intergrated financial management information system (IFMIS)implementation on supply chain management performance in the devolved government systems in Kenya: A case of Nairobi city county government. *International Academic Journal of Procurement and Supply Chain Management*, 1(5), 1-26.
- Library and Archives Canada. (2014). Report Audit of Procurement Practices. Canada: Library and Archives Canada.
- Iwiki, T. O. (2013). The Impact of Inventory Management Practices on Procurement performance of Sugar Manufacturing Firms in Kenya. International Journal of Business, Humanities and Technology, 3(5), 75-85.
- Makabira D. K. & Waiganjo E. (2014). Role of procurement practices on the performance of corporate organizations in kenya: a case study of Kenya National Police Service. *International Journal of Academic Research in Business and Social Science*, 4(10), 369 389.
- Mamiro R G (2013). Value for money, the limping pillar in public procurement. Tanzania Procurement Journal.;4 -5.
- Mdemu, J. (2013). Effectiveness of Procurement Planning on Service Delivery in Public Sector. A Case study of Tanga City Council. *International Journal of Science and Research*.
- Mullins D R (2013). Accountability and coordination in a decentralized context: Institutional, fiscal and governance issues. Washington, DC: American University;
- Musau, N 2015). Procurement Practices and Performance of Parastatals in Kenya. Nairobi: University of Nairobi.
- Mwangi, M (2015). Analysis of the Effects of Inventory Management on the Performance of the Procurement Function of Sugar Manufacturing Companies in the Western Kenya S(H., 2005) (H., 2005)ugar Belt. International Journal of Scientific and Research Publications, 5(5), 1-14.
- Njeru, B (2008). Factors influencing procurement management of private firms in the vehicle manufacturing industry in Kenya. *Unpublished MBA project, University of Nairobi*.
- Nzuza, Z. W. (2012). Factors affecting the success of inventory control in the Stores Division of the eThekwini Municipality, Durban: a case study. Durban, South Africa: Durban University of Technology.
- Organization Economy Corporation Development- OECD (2016). Development Assistance Commission. Methodology for assessment of national procurement systems. Paris, France:
- Ogbo, A. I., & Ukpere, W. I. (2014). The impact of effective inventory control management on organizational performance: A study of 7up bottling company nile mile Enugu, Nigeria. *Mediterranean Journal of Social Sciences*, 5(10), 109.
- Ogbo, A. O. (2014). The Impact of Effective Inventory Control Management on Organizational Performance: A Study of 7up Bottling Company Nile Mile Enugu, Nigeria. *Mediterranean Journal of Social Sciences*, 5(10), 108-118.

- Ogwel TS, Iravo M, Lagat KM (2016). Factors Influencing Performance of Public ProcurementFunction in Trans-Nzoia County, Kenya. *International Journal of Recent Research in Commerce Economics and Management*; 3(2): 95-106.
- Parkera, D. & Hartley, K. (2003) Transaction costs, relational contracting and public private partnerships: a case study of UK defense. Journal of Purchasing & Supply Management, 9, 97–108.
- Patil, H., & Divekar, B. R. (2014). Inventory Management Challenges for B2C E-commerce Retailers. *Procedia Economics and Finance*, 11, 561-571.
- Prempeh, K. B. (2016). The impact of efficient inventory management on profitability: evidence from selected manufacturing firms in Ghana. *International Journal of Finance and Accounting*, 5(1), 22-26.
- Public Procurement Oversight Authority (2015). Procurement records management procedures manual. Government Printers.
- Rashid, A.R., Taibu, I.M., & Ahmad, W.B.,. (2012). Effect of Procurement System on the Performance of Construction Projects. International Journal of Construction of Supply Chain Management. Cambridge University Press.
- Raymond, S (2013). Benchmarking in public Procurement. Benchmarking. Thousand Oak: CA.
- Rushton, A., Croucher, P., & Baker, a. P. (2011). The handbook of logistics and Distribution management. London: Kogan page ltd.
- Ruth, K. (2012). Information Technology and procurement process in Kenya. Master Thesis, School Of Business, University Of Nairobi.
- Saunders, M., Lewis, P. & Thornhill, A. (2012). Research methods for business students (6th ed.). Harlow: Pearson.
- Shah, A (2013). Global Financial Crisis. practical guide to logistic. New Delhi India.
- Song, J., Haas, C. T., & Caldas, C. H. (2016). Tracking the location of materials on construction job sites. *Journal of Construction Engineering and Management*, 172(11).
- Steinle, B and Schiele, R (2008). Public procurement re-examined, *Journal of Public Procurement*, 4 (1), 211 212.
- Thogori, M., & Gathenya, J. (2014). Role of Inventory Management on Customer Satisfaction among the Manufacturing Firms in Kenya: A Case Study of Delmonte Kenya. *International Journal of Academic Research in Business and Social Sciences,* 4(1), 108.
- Troxell, L. (2015). UCSC Practices for HIPAA Security Rule Compliance. Califonia: University of Califonia.
- Tukuta M. & Saruchera F. (2015). Challenges facing procurement professionals in developing economies: *Unlocking value through professional international purchasing*, 9(1), 9. doi:10.4102/jtscm.v9i1.152.
- Van Weele, A.J. (2012) Purchasing and Supply Chain Management. Analysis, Planning and Practice, 3rd edition. *Thomson Learning, London*.
- Wangui, I. I. (2014). Procurement Practices and the Performance of Public Parastatals in Kenya. Nairobi: University of Nairobi.

- Wanyonyi SC, Muturi W.(2015). Factors Affecting Performance of Procurement Functioning Among Public Technical Training Institutions in Kisumu County, Kenya. *International Journal of Economics, Commerce and Management*; 3(5).
- Ware, P., & Kynoch, A. (2013). Public Procurement Reform: Impact on Contracting Authorities and Tenderers. Credit Control, 34(3), 13.
- William, W (2013). Purchasing and supply chain management: analysis, strategy, planning and practice (5thed.). Andover: Cengage Learning.

World Procurement (2018). Procurement reports across the globe. Free Press, New York, NY