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# Factors Influencing Performance of Construction Procurement Contracts at Kenya Ports Authority, Mombasa County, Kenya

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## Abstract

Construction procurement contracts have been a subject of passionate debate among taxpayers in Kenya. Many of them feel there is a lot of wastages and corruption in public construction projects. Reports published by the Auditor General reveal that, construction procurement contracts in most cases are discharged by breach as opposed to by performance. This study, therefore, sought to examine the factors that influence performance of construction procurement contracts in the public sector. The objectives of the study were; to assess the influence of procurement ethical practice, procurement contract administration, procurement contractor selection, and procurement planning on the performance of construction procurement contracts at KPA. Four theories have been applied in this study. These include, The Normative Ethics theory, the Stakeholder theory, the Transactional theory and the Planning theory. Each of these theories explains the relevance of the independent variables. The target population comprised four divisions of Kenya Ports Authority; namely the internal audit, legal, finance and infrastructure. The sampling technique used was stratified sampling. The sample size was 75 employees. Data collection instruments used was questionnaires. Statistical Package for Social Sciences was used to analyze the data. The statistical tests that were employed include Pearson correlation, ANOVA and multiple linear regression. Out of the 75 questionnaires which were disseminated, 54 were filled and returned. This represented a response rate of 72% .The data analysis revealed that there was a correlation between the dependent and independent variables. The multiple regression output, presented an R square value of 0.813. The Analysis of Variance revealed a p value of less than 0.05 which confirmed that the statistical test was significant and therefore the null hypothesis was rejected in favour of the alternative hypothesis. The multiple regression analysis revealed that all the independent variables had a p value of less than 0.05. This study therefore concluded that, there was a positive linear relationship between construction procurement contracts and procurement ethical practices,

procurement contract administration, procurement contractor selection and procurement planning. The study recommended Kenya Ports Authority to, practice procurement ethics throughout the procurement cycle, undertake procurement contract administration, employ procurement contractor selection before award and ensure procurement plans are prepared as prescribed by law before tender advertisement.

**Keywords:** *Procurement Ethical Practices, Procurement Contract Administration, Procurement Contractor Selection, Construction Procurement Contracts, Kenya Ports Authority.*

## 1.0 Introduction

### 1.1 Background of the Study

Construction is one of the largest industries and contributes to about 10% of the Gross Domestic Product in industrialized nations, (OECD, 2017). The construction industry has complexity in its nature because it contains large number of parties such as procuring entities, contractors, consultants, and regulators. It is a very important industry in the economic development of any nation especially in developing countries. The performance of the construction industry is affected by national economies (OECD, 2017). An efficient construction sector is a pre-requisite to effective national development, since construction procurement contracts are usually a major contributor to Gross Domestic Product (World Bank, 2017). OECD (2017), alludes that performance of a construction procurement contract is likely to fail due to a government failure to establish a coherent institutional and policy framework. UN (2012), observes that many construction procurement contracts fail in time performance, others fail in cost performance and others due to poor planning. In the past, there were many construction procurement contracts, which finished with poor performance because of many evidential reasons such as; ethical issues by employees of a procuring entity, poor procurement planning, illegal contract amendment, and variations.

In Kenya, poor management of construction procurement contracts has led to an almost total collapse of infrastructure, decline in productivity and increase in poverty, (KNBS, 2017). Mathenge (2012), states that the current Kenyan procurement contracts are deficient of ethical inclination. More coordinated planning and close monitoring of construction procurement contracts is necessary for organizations to reap benefits of value for money (Engelbert, 2017). Sabiiti *et al.*, (2013), confirm that only 29% of construction procurement contracts are completed within original contractual time. Thai (2017) indicates that any improvement in the public procurement system can have a direct and beneficial effect on the overall economic situation of a country.

#### 1.1.1 Profile of Kenya Ports Authority, Mombasa

According to KPA (2015), the authority is mandated to manage and operate the Port of Mombasa and all scheduled seaports along Kenya's coastline that include Lamu, Malindi, Kilifi, Mtwapa, Kiunga, Shimoni, Funzi and Vanga. In addition, the Authority manages Inland Waterways as well as Inland Container Depots at Embakasi, Eldoret, and Kisumu. For years, Mombasa has been known as the city of merchants. After the construction of the Kenya-Uganda railways (1895-1902), a new port was born west of Mombasa Island. Subsequently the Port became an increasingly busy trading post for the region. Due to its strategic location, midway between South Africa and the Gulf of Aden the Port has experienced tremendous traffic through the years (KPA, 2015).

According to KPA (2015) the Port of Mombasa is the gateway to East and Central Africa, and is one of the busiest Ports along the East African coastline. The Port provides direct connectivity to over 80 Ports worldwide and is linked to a vast hinterland comprising Uganda, Rwanda, Burundi, Eastern Democratic Republic of Congo, Northern Tanzania, Southern Sudan, Somalia, and Ethiopia by road. A railway line also transverse from the Port to Uganda and Tanzania. KPA is mandated to manage and operate the Port of Mombasa and all scheduled seaports along Kenya's coastline that include Lamu, Malindi, Kilifi, Mtwapa, Kiunga, Shimoni, Funzi and Vanga. In addition, the Authority manages Inland and Waterways as well as Inland Container Depots at Embakasi, Eldoret, and Kisumu. KPA offers services in the following areas: marine operations, conventional cargo operations, container terminal operations, port logistics and support services (KPA, 2015). KPA's vision is World-class seaport of choice, while its mission is to facilitate and promote global maritime trade through the provision of competitive port services. Its core values are service excellence, teamwork, integrity and we care. Currently, KPA has over five thousand employees (KPA, 2015). According to KPA (2015), the authority has undertaken major construction works which run into billions of shillings. A case in point, is the Mombasa Port Development Project and the Lamu Port. There are also a good number of construction maintenance works that are ongoing inside the port. Due to the magnitude of construction works, the authority processes construction procurement contracts each financial year that run into millions of shillings

## **1.2 Statement of the Problem**

PPOA (2009) suggests that construction procurement contracts expenditure represents about 35% of the operating revenue of a public entity. This shows that the budget for construction procurement contracts are significant and therefore prudent expenditure is very important. Prudent expenditure would include discharging the construction procurement contracts through performance. However, according to Auditor General of Kenya (2015), most construction procurement contracts are discharged by breach. This has yielded to several problems. Firstly, there has been a huge loss in public resources which has consequently contributed to the suffering of the poor (Engelbert, 2017). This is so because money that is intended to deliver services for the public, is wasted and misappropriated through corruption (Engelbert, 2017).

Secondly, construction procurement contracts are hardly executed within the agreed contractual period (Auditor General Kenya, 2015). The consequence of untimely delivery of a contract is unnecessary inconveniences because services are not made available to the public on a timely basis (Thai, 2017). Thirdly, payments are made for poor quality work done which subsequently deny the Government value for money (Auditor General Kenya, 2013). Fourthly, according to the Auditor General Kenya (2013), they are several construction procurement contracts that have been affected by illegality, rendering them null and void at least and exposing them to expensive and protracted lawsuits at best.

According to PPOA (2009), contracting and contract administration are identified as a major weakness of KPA in the procurement cycle. KPA prepares their own contracts, which do not conform entirely to the recommended PPOA formats. In addition, there are cases where construction work commenced and was executed without a written and signed construction procurement contracts. PPOA, (2009) further asserts that, there has been extensive overruns in the construction procurement budgets brought about by frequent variations in the terms of the



contracts. The main categories of variations are revision of scope of work, unforeseen conditions of work, inaccurate or inappropriate estimates and delay in completion. Most of the procurement proceedings in Kenya Ports Authority are not linked to the procurement plan. There is lack of appropriate procurement planning including procurement needs identification, packaging and procurement scheduling that has led to several cancelations of procurement proceedings due to non-availability of funding (PPOA, 2009).

Following publications of several reports by the Auditor General of Kenya, there has been a growing concern by taxpayers and the Public Accounts Committee of the National Assembly, on the performance of construction procurement contracts in public entities. Despite this concern, very limited research has been done to determine exactly, why construction procurement contracts are hardly discharged by performance. A gap thus exists in determining the specific factors that influence performance of construction procurement contracts. Therefore, to bridge this gap, this study sought to ascertain the factors that influence performance of construction procurement contracts at Kenya Ports Authority.

### **1.3 Specific Objectives**

1. To ascertain the influence of procurement ethical practices on performance of construction procurement contracts at Kenya Ports Authority.
2. To assess the influence of procurement contract administration on performance of construction procurement contracts at Kenya Ports Authority.
3. To examine the influence of procurement contractor selection on performance of construction procurement contracts at Kenya Ports Authority.
4. To determine the influence of procurement planning on performance of construction procurement contracts at Kenya Ports Authority.

### **1.4. Research Questions**

2. What is the influence of procurement ethical practices on performance of construction procurement contracts at Kenya Ports Authority?
3. How does procurement contract administration influence performance of construction procurement contracts at Kenya Ports Authority?
4. What is the influence of procurement contractor selection on performance of construction procurement contracts at Kenya Ports Authority?
5. How does procurement planning influence performance of construction procurement contracts at Kenya Ports Authority.

## **2.0 Literature Review**

### **2.1 Theoretical Review**

This study was built on the underpinning theories that inform the study variables.

#### **2.1.1 The Normative Ethics Theory**

At KPA, all resources that are used to fund construction procurement contracts are collected from taxpayers. When resources are wasted through public procurement because of unethical practices, the taxpayers feel dissatisfied. This means a morally wrong act has been committed (Cummins, 2016). Jennings (2015) argues that, Normative Ethics theory tries to explain and regulate what is wrong and what is right. This theory is founded on the golden rule of doing unto others what you want them to do unto you. It implies in the context of public procurement, that public officers

should conduct themselves in a right way as they discharge their duties. It will be morally wrong to misappropriate public funds through fraud, corruption, obstruction and collusion (Jenning, 2015). The theory further explains that, those entrusted with public resources, must act ethically when dispensing those resources. Acting ethically means being honest, transparent, and fair and conducting due diligence (Cummins, 2016). This theory is relevant since it informs the variable of Ethical Practices.

### **2.1.2 The Stakeholder Theory**

Miles (2012) suggests that in the traditional view of a company, only the owners or shareholders of the company are important, and the company has a binding fiduciary duty to put their needs first, to increase value for them. Stakeholder theory instead argues that there are other parties involved, including employees, customers, suppliers, financiers, communities, government bodies, trade associations, and trade unions. Even competitors are sometimes counted as stakeholders; their status being derived from their capacity to affect the firm and its stakeholders. Thai (2017) suggests that, the basic tenets of Stakeholder theory are: the organization enters into relationships with many groups that influence or are influenced by the company i.e. Stakeholders; the theory focuses on the nature of these relationships in terms of processes and results for the company and for stakeholders, the interest of all legitimate stakeholders are of great value and it is assumed there is no stakeholders whose interest is above others. According to Miles (2012), the concept of stakeholder management was developed so that organizations could recognize, analyze, and examine the characteristics of partners being influenced by organizational behavior. Thai (2017), tries to explain that this theory generally describes the coming together of an organization with other stakeholders, how synergies are made, and how interests of all stakeholders should be well represented and managed. This theory puts into perspective the collaboration and reciprocity nature of relationship that should exist between a procuring unit and a contractor. The two entities are equally important and none is above the other. It is particularly relevant during contract administration period of construction procurement contracts.

### **2.1.3. The Transactional Cost Theory**

In public procurement, the law requires a public entity to follow particular procedures and criteria for evaluating and selecting a contractor. One major rule is that the award of contract shall be given to the contractor with the highest technical score and the lowest financial offer (RoK, 2015). The outcome of this is an economic exchange. According to Hartely & Choi (2013), a Transactional Cost is defined as a cost of making an economic exchange. Transactional Costs are divided into three broad areas. Firstly, there are Search and Information costs. These costs are incurred because of availability of goods in the market and their prevailing prices. Secondly, are the Bargaining costs. These costs are made as result of negotiations and an agreement to enter into legal intentions. Thirdly, there are Policing and Enforcement costs. These costs are made to ensure one party abides to the terms of payment and that appropriate remedy is made in the event of any breach of the items of payment (Hartely & Choi, 2013).

The Transactional Cost theory tries to explain the purpose of why organizations exist and how these organizations use their resources at the best monetary value through economic exchanges. Organizations are willing to outsource services to third parties but at the best economic value (Krause, 2015). This theory explains and predicts that internal resources of an organization, determine its very existence. If an organization spends more than what it can afford, it is likely to

be downsized. However if it can afford to buy services from external environment within its available resources, then the organization will grow (Lamming, 2014). KPA being a public entity bound by procurement laws, is required to select contractors who offer the best service at the lowest financial bid. This is to ensure an organization spends within its allocated resources (Lamming, 2014). This theory is relevant to this study since it informs the variable of Contractor Selection.

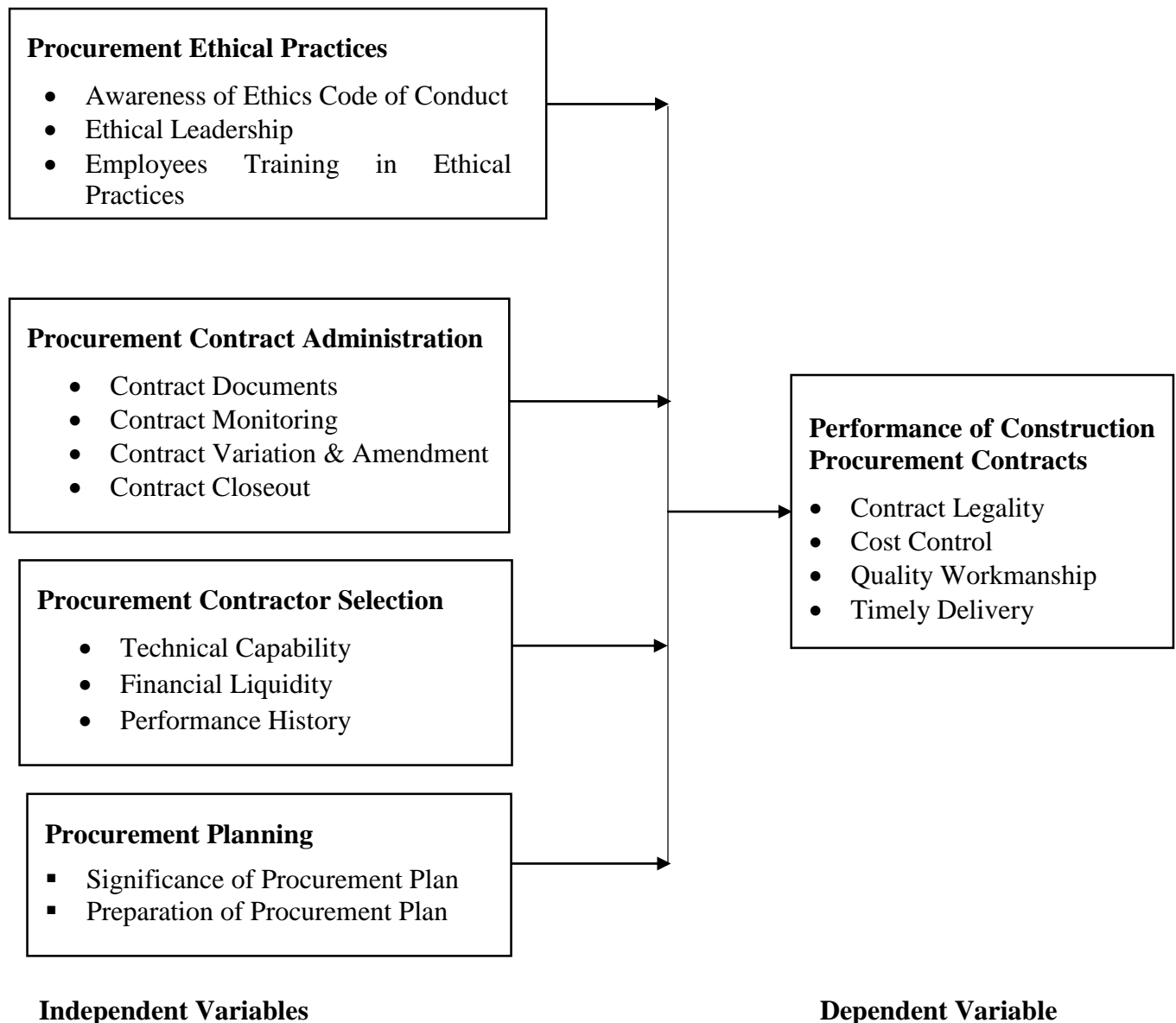
#### **2.1.4 The Planning Theory**

According to Blackwell (2016), for planners and the planning profession, the public interest has always remained relevant as a legitimating principle and a norm for practice, even while philosophers and political theorists debated its existence. The public interest has three roles related to planning. The first one, is to legitimize planning as a state activity. The second one, is as a norm for planning practice: this is how practitioners perceive it and how professional institutions invoke the public interest (Jorge & Lynch, 2017). Blackwell (2016) suggests applying this norm in reality implies a third role: the public interest as a criterion for evaluating planning and its products: policies, projects, and plans. Blackwell (2016) argues that the theory of planning focusses on how the public interest principle is operationalized in evaluating intended or completed actions and the limitations of prevailing evaluation methods and deliberative approaches. In practice, the public interest principle is applied in various arenas: plan and project evaluation in planning and policy analysis, administrative and judicial plan review and courts review of contested decisions and actions (Blackwell, 2016). To give meaning to the public interest as a concept legitimizing state planning, it must have some substantive content.

For the state and its planner agent, applying a public interest criterion in administrative and judicial plan review operationalizes their responsibilities to those affected by plans and their implementation (Jorge & Lynch, 2017). In the context of this research, this theory explains the significance of procurement planning and the possible positive and negative effects it may have on a procuring entity depending on how the theory is used or abused.

#### **2.2 Conceptual Framework**

Mugenda and Mugenda (2008) defines conceptual framework as a concise description of the phenomenon under study accompanied by a graphical or visual depiction of the major variables of the study. It is a research tool intended to assist a study to develop awareness and understanding of the situation under scrutiny and to communicate this. The independent variables and their relationship with dependent variable are presented in the below Figure 1.



**Figure 1: Conceptual Framework**



## **2.3 Empirical Review**

### **2.3.1 Procurement Ethical Practices and Performance of Construction Procurement**

#### **Contracts**

Ethics are the guidelines or rules of conduct by which we aim to live on (Cummins, 2016). UN (2012) defines ethics as moral principles governing or influencing conduct. Professional standards of ethical practice include honorable behavior, trustworthiness, integrity, and transparency. Ethical practices that relate to procurement processes include loyalty, integrity, fairness, transparency, confidentiality, and due diligence (UN, 2012). Thai (2017) emphasizes on procurement ethics being important in procurement for the following reasons: procurement staff are the representatives of their organization in dealing with suppliers and sound ethical conduct in dealing with suppliers, is essential to the creation of long-term relationships. According to BIFM (2015), ethical procurement is essential for three main reasons; to protect the rights of workers, to protect the rights of contractors and to safeguard the reputation of the organization. The damage to an organization reputation if direct or indirect unethical behavior is revealed can be devastating to a business (BIFM, 2015). Engelbert (2017) blames the culture of accumulative corruption on the unethical standards in public procurement. The accumulative corruption takes place in the form of soliciting bribes when overseeing government projects.

According to Thai (2017), compliance with formal elements gives an indication of knowledge of the rules. Procurement managers will comply with the rules if they perceive them as clear. Lack of clarity increases the possibility for procurement regulations noncompliance. Lack of familiarity with procurement rules results into poor compliance levels and this leads to inefficiency, which negatively affects organizations performance. Thai (2017) observes that, employees of a procuring entity, need to be able to demonstrate that their decisions are fair, equitable and made in accordance with the law. There are broad and comprehensive literatures on procurement code of conduct, which both employees of a procuring entity and contractors are required to comply with. On the part of public and state officers, RoK (2015) has clearly stated the code of conduct to be complied with. Firstly, a state officer or a public officer shall not award a contract to himself/herself, spouse, or child, a business associate or private company in which the officer has a substantial or controlling interest. An employee or agent of the procuring entity or a member of the board or committee of the procuring entity who has conflict of interest, shall not take part in the procurement proceedings (RoK, 2015).

### **2.3.2 Procurement Contract Administration and Performance of Construction Procurement**

#### **Contracts**

Jorge & Lynch (2017) define contract administration as a set of activities performed by government officials after a contract has been awarded to determine how well the procuring entity and the contractor perform to meet the requirement of the contracts. According to RoK (2015), contract management includes contract creation, publication of procurement contracts, amendment, or variation of contracts, contract administration, and contract monitoring (RoK 2015). UN (2012) defines contract administration as all actions undertaken by the head of procurement unit after the award of a contract relating to the administrative aspects of the contract, such as contract amendment, contract closure, record retention, contract file and performance

security. For the purposes of effective contract administration, a procuring entity shall use standard tender documents issued by the Public Procurement Regulatory Authority in all procurement proceeding (RoK, 2015).

The tender documents shall be the basis of all procurement contracts and shall constitute at a minimum, contract agreement form, bills of quantities, specifications and general conditions of contract (RoK, 2015). According to PPOA (2009), the following documents shall constitute the contract documents and shall be interpreted in the following order of priority; contract agreement, letter of acceptance, appendix to conditions of contract, conditions of contract, specifications, drawings, bills of quantities and other documents listed in the appendix to conditions of contract. FIDIC (2010) shares a similar definition of what constitute an agreement, when it states that, it means the letter of acceptance, general conditions of contract, specifications, drawings, and schedules. Contract documents of public entities must conform to PPOA formats (PPOA, 2009). A letter of acceptance means the letter of formal acceptance, signed by the procuring entity addressed to the contractor (FIDIC, 2010). According to Duxbury (2015), acceptance may be defined as an unconditional assent, communicated by the offered to the offer or, to all terms of the offer, made with the intention of accepting. Acceptance will not be effective unless communicated to the offer or by the offered (Duxbury, 2015). RoK (2015), shares the same principle that acceptance must be in writing by the accounting officer while Duxbury (2015), argues that unless accepted; an offer has no legal effect. Acceptance of an offer must be done within a specified time.

### **2.3.3 Procurement Contractor Selection and Performance of Construction Procurement Contracts**

Contractor selection is the process by which the buyer identifies, evaluates, and contracts with the contractor. Contractors are considered the best tangible assets of any organizations that have varied strengths and weakness that require careful assessment before an award is made (Jorge and Lynch, 2017). Thai (2017) suggests that contractor selection is a process that involves starting from realization of the need for a new contractor, determination and formulation of decision criteria, prequalification, final contractor selection, to the monitoring of the contractor selection. Contractor selection decisions are often complicated by the fact that multiple criteria such as technical capability, quality, and price must be considered in the decision-making process (Jorge & Lynch, 2017). According to Thai, (2017) trade-off among criteria has to be made to align the final sourcing decision with competitive priorities, and business plans. Jorge & Lynch (2017) argue that selection of contractors is a complicated process by the fact that numerous criteria must be considered in the decision making process.

They further explain that it is usually a time consuming process that evaluates contractors on several criteria such as time needed for sourcing and delivering building materials, quality of staff, availability of equipment, reputation of the contractor and his financial strength. Jorge and Lynch (2017) suggest that quality and on time delivery are the most important attributes of purchasing performance evaluation. Thai, (2017) suggests that apart from optimum cost, joint development, and culture, communication was important as an attribute. The author, further suggests that the contractor's history of supply and technical capability also play an important role during supplier's selection. Thai (2017) opines that to get value for money, it is better to assess the financial quotes of several contractors and evaluate the one with the lowest bid. However, he cautions that the lowest bidder may not necessarily be the best. Other factors such as profile history, experience in work of similar nature and professional background of the contractor are equally important. In the

same vein, Hinze (2011) further argues that technical capability of a supplier includes employees who are qualified for the right job and possess the right skills.

### **2.3.4 Procurement Planning and Performance of Construction Procurement Contracts**

According to Thai (2017), a procurement plan endeavors to answer the questions of what do you want to procure, when to procure it, where to procure them from, when the resources will be available, the methods of procurement to use, efficiency in the procurement process and the people to be involved in the procurement. The World Bank states that it describes activities and related procurement arrangements for good, works and services financed by the bank, (World Bank, 2016). A procurement plan has the potential to cut costs, shorten timescales and enhances stakeholder relationships, reduce risks, and improve overall performance, (Thai, 2017).

The UN (2012) contends that, it is essential for effective and timely tendering process, award of contracts and delivery of goods, works, and services. According to Kagendo (2012), procurement planning is the primary function that sets the stage for subsequent procurement activities. Procurement planning has a significant impact on performance of procurement contracts (Kiage, 2013). Kagendo (2012), concluded that while planning for procurement, there is always the challenge of failure to adhere to set plans, especially due to the emergence of personal interests and failure to plan greatly causes inefficiencies in procurement process. Procurement planning is one of the primary functions of procurement with a potential to contribute to the success of contracting and improved contract management (Kagendo, 2012). It greatly influences the efficiency of procurement process in public institutions. The process of procurement planning should engage all key players and departments (Okinyi, 2016). Participatory planning would ensure effective management of cost and risks associated with procurement contracts (Kagendo, 2012).

### **3.0 Research Methodology**

This study adopted descriptive research design in data collection. A descriptive survey is designed to ensure complete description of the data collection process to ensure that there is minimum bias and reduce error in interpretation of the data collected (Coopers & Schindler, 2013). The Kenya Ports Authority has an overall staff population of more than five thousand employees.

The target population of this study comprises 345 management employees who are involved directly in implementation of construction procurement contracts. These employees are involved either in pre-award procurement activities such as tender evaluation and procurement planning and/or post award procurement activities such as contract administration. Kothari & Garg (2014) argue that a sample of about 10% -30% of the population give a good reliability requirement. For this study, the sample size was determine by a percentage of between 10% and 30% of the population. The sample size of the study was 75 respondents. This study administered structured questionnaires to employees of KPA from the sample size. This study employed SPSS to process and analyzes the questionnaires. Data collected was then presented using both statistical techniques (frequency tabulations) and graphical representations (bar charts, graphs, histogram, and pie charts).

A multiple regression analysis was applied to explain the influences of the independent variables on the dependent variable. The relationship of the variables was computed as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon_i \quad (3.1)$$

Where

$Y$  = Construction Procurement Contracts

$X_1$  = Procurement Ethical Practices

$X_2$  = Procurement Contract Administration

$X_3$  = Procurement Contractor Selection

$X_4$  = Procurement Planning

$\beta_0$  is a constant term while  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  &  $\beta_4$  are regression coefficients and  $\epsilon_i$  is the error.

## 4.0 Research Results and Discussion

### 4.1 Response Rate

The research targeted a sample size of 75 employees of the KPA, Mombasa County, Kenya. Out of the 75 questionnaires which were distributed to the respondents, 54 were filled and returned. This represented a response rate of 72% as shown in Table 1. Kothari & Gang (2014) opine that a response rate of 50% is adequate for analysis and reporting; a response rate of 60% is good while a rate of 70% and above is excellent.

**Table 1: Questionnaire Response Rate**

|              | Frequency | Percentage |
|--------------|-----------|------------|
| Response     | 54        | 72%        |
| Non Response | 21        | 28%        |
| <b>Total</b> | <b>75</b> | <b>100</b> |

#### 4.2.1 Procurement Ethical Practices

**Table 2: Procurement Ethical Practices**

##### Descriptive Statistics

|   | N  | Mean | Std Deviation |
|---|----|------|---------------|
| Awareness of procurement ethics code of conduct among public officers influences performance of construction procurement contracts  | 54 | 3.91 | 0.875         |
| Ethical practices such as honesty, transparency, fairness and integrity influence performance of construction procurement contracts | 54 | 3.83 | 0.927         |
| Leading by example by top management in ethical practices influences performance of construction procurement contracts              | 54 | 3.72 | 0.856         |
| Periodic training in ethics and integrity among public officers influences performance of construction procurement contracts        | 54 | 3.91 | 0.830         |

The first objective of the study was to ascertain the influence of procurement ethical practices on performance of construction procurement contracts at Kenya Ports Authority. Respondents were asked to respond to four questions on ethical practices as shown in Table 2. The analysis of the questions revealed that respondents on a mean of between 3.72 and 3.91, agreed that procurement ethical practices influences performance of construction procurement contracts. This is an agreement with RoK (2015) that public officers should comply with ethical code of conduct while discharging their duties.

#### 4.2.2 Procurement Contract Administration

**Table 3: Procurement Contract Administration**

##### Descriptive Statistics

|   | N  | Mean | Std Dev. |
|---|----|------|----------|
| The legality of the following documents influences performance of construction procurement contracts:<br>contract agreement, letter of acceptance, conditions of contract, specifications, drawings and bills of quantities | 54 | 4.33 | 0.777    |
| Contract monitoring of construction projects such as monthly site meeting and financial appraisal of a project, influence the performance of construction procurement contracts   | 54 | 4.09 | 0.591    |
| Adhering to the legal limit in contract variation and amendments, influence the performance of construction procurement contracts   | 54 | 4.09 | 0.591    |



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|   |    |      |       |
|---|----|------|-------|
| Issuance of a practical completion certificate to signify contract closeout, influences performance of construction procurement contracts | 54 | 4.00 | 0.673 |
|---|----|------|-------|

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The second objective of the study was to assess the influence of procurement contract administration on performance of construction procurement contracts at Kenya Ports Authority. Respondents were asked to reply to four questions on procurement contract administration as shown in Table 3. The analysis of the questions revealed that respondents on a mean of between 4 and 4.33, agreed that procurement contract administration influences performance of construction procurement contracts. This is an agreement with RoK (2015), that head of procuring entities are required to undertake contract administration activities to ensure construction procurement contracts performance.

#### 4.2.3 Procurement Contractor Selection

**Table 4 Procurement Contractor Selection**

##### **Descriptive Statistics**

|  | <b>N</b> | <b>Mean</b> | <b>Std Dev.</b> |
|--|----------|-------------|-----------------|
| Selecting a contractor on the basis of technical capability, financial strength and history of performance, influences the performance of construction procurement contracts             | 54       | 4.11        | 0.793           |
| Technical capability of a contractor such as skilled labor in construction and availability of construction equipment, influences the performance of a construction procurement contract | 54       | 4.04        | 0.800           |
| Financial stability of a contractor, influences performance of a construction procurement contract   | 54       | 3.85        | 0.833           |
| A good history of performance of a contractor, influences performance of a construction procurement contract   | 54       | 3.78        | 0.883           |

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The third objective of the study was to examine the influence of procurement contractor selection on performance of construction procurement contracts at Kenya Ports Authority. Respondents were asked to reply to four questions on procurement contractor selection as shown in Table 4. The analysis of the questions revealed that respondents on a mean of 3.78 and 4.11, agreed that procurement contractor selection influences performance of construction procurement contracts. This is an agreement with RoK (2015) that requires contractors to be evaluated on the basis of technical and financial capabilities.

#### 4.2.4 Procurement Planning

**Table 5: Procurement Planning**

##### **Descriptive Statistics**

|  | N  | Mean | Std<br>Deviation |
|--|----|------|------------------|
| A signed procurement plan by a head of department, influences performance of a construction procurement contract             | 54 | 3.78 | 0.965            |
| A detailed procurement plan, influences performance of a construction procurement plan                                       | 54 | 3.85 | 0.94             |
| Formulation of a procurement plan before tender advertisement, influences performance of a construction procurement contract | 54 | 3.7  | 0.924            |
| Regular monitoring of a procurement plan, influences performance of a construction procurement contract                      | 54 | 3.83 | 0.863            |

The fourth objective of the study was to determine the influence of procurement planning on performance of construction procurement contracts at Kenya Ports Authority. Respondents were asked to reply to four questions on procurement planning as shown in Table 5. The analysis of the questions revealed that respondents on a mean of between 3.7 and 3.85, agreed that procurement planning influences performance of construction procurement contracts. This coincides with RoK (2015) that requires accounting officers to prepare procurement plans before the commencement of a procurement cycle.

#### 4.3 Correlation Analysis

In order to determine the relationship between the independent variables and dependent variable, the study undertook correlation analysis to ascertain the coefficient of correlation and coefficient of determination.

##### 4.3.1 Coefficient of Correlation

Pearson Bivariate correlation coefficient was employed to analyze the correlation between the dependent variable (performance of construction procurement contracts) and the independent variables (procurement ethical practices, procurement contract administration, procurement contractor selection, and procurement planning). The purpose of this coefficient is to determine the strength of relationship between dependent and the independent variables. According to Kothari

& Gang (2014), a relationship is assumed to be linear if the coefficient ranges from -1.0 (perfect negative correlation) to + 1.0 (perfect positive correlation). The analysis shown in Table 6 below, reveals the strength of association between the dependent variable (performance of construction procurement contracts) and the independent variables (procurement ethical practices, procurement contract administration, procurement contractor selection, and procurement planning). Procurement ethical practices had a coefficient of 0.707, procurement contract administration had a coefficient of 0.768, and procurement contractor selection had a coefficient of 0.816 while procurement planning had a coefficient of 0.831. According to Kothari and Garg (2014), these coefficient values reveal a strong correlation between the dependent and independent variables.

**Table 6: Pearson Correlation Coefficient**

|                                    | Ethical Practices | Contract Administration | Contractor Selection | Procurement Planning | Construction Procurement Contracts |
|------------------------------------|-------------------|-------------------------|----------------------|----------------------|------------------------------------|
| Ethical Practices                  | 1.00              |                         |                      |                      |                                    |
| Contract Administration            | 0.602<br>0.000    | 1.000                   |                      |                      |                                    |
| Contractor Selection               | 0.457<br>0.001    | 0.758<br>0.000          | 1.000                |                      |                                    |
| Procurement Planning               | 0.500<br>0.000    | 0.508<br>0.000          | 0.613<br>0.000       | 1.000                |                                    |
| Construction Procurement Contracts | 0.707<br>0.000    | 0.768<br>0.000          | 0.816<br>0.000       | 0.831<br>0.000       | 1.000                              |

#### 4.3.2 Coefficient of Determination ( $R^2$ )

In order to assess the research model, all the four objectives were subjected to linear regression analysis. Table 7 shows a model summary with a R. Square value of 0.813. The model explains 81.3% of the variance on performance of construction procurement contracts. This means that 81.3% of the relationship is explained by the identified four factors namely, ethical practices, contract administration, contractor selection, and procurement planning. The other 18.7% is explained by other factors in the performance of construction procurement contracts not studied in this research. This explains that there are other factors other than the four proposed in this model which can be employed to predict the performance of construction procurement contracts. In summary, the four factors under study determine 81.3% of the relationship while the rest, 18.7% is determined by other factors.

**Table 7 Coefficient of Determination ( $R^2$ )**

**Model Summary**

| Model | R     | R Square | Adjusted R Square | Std Error of the Estimate |
|-------|-------|----------|-------------------|---------------------------|
| 1     | 0.902 | 0.813    | 0.798             | 0.20717                   |

a. Predictors: (Constant), Ethical Practices, Contract Administration, Contractor Selection, Procurement Planning

#### 4.4 Regression Analysis

##### 4.4.1 Analysis of Variance (ANOVA)

According to Kothari & Garg (2014), in simple linear regression analysis, t-test and F-test are used to test the same hypothesis. Multiple regression analysis F-test is used to test the overall validity of the model. Table 8 indicates a p value of 0.000 which is less than 0.05. This explains that the test is significant and therefore the null hypothesis is rejected. This analysis therefore confirms that procurement ethics, procurement contract administration, procurement contractor selection and procurement planning have an influence on the performance of construction procurement contracts.

**Table 8: ANOVA**

| ANOVA |            |               |    |             |              |
|-------|------------|---------------|----|-------------|--------------|
| Model |            | Sum of Square | df | Mean Square | F Sig        |
| 1     | Regression | 9.132         | 4  | 2.283       | 53.095 0.000 |
|       | Residual   | 2.103         | 49 | 0.043       |              |
|       | Total      | 11.235        | 53 |             |              |

a. Dependent Variable: Construction Procurement Contracts

b. Predictors: (Constant), Ethical Practices, Contract Administration, Contractor Selector, Procurement Planning

##### 4.4.2 Multiple Regression

Table 9 shows the outcome of the multiple regression analysis. The constant and all the independent variables have a p value of less than 0.05. This therefore confirms that the test was significant and therefore there is a positive linear relationship between construction procurement contracts and procurement ethical practices, procurement contract administration, procurement contractor selection and procurement planning.

**Table 9: Multiple Regression**

**Coefficients**

|       |                         | Unstandardized Coefficients |            | Standardized Coefficients |        |
|-------|-------------------------|-----------------------------|------------|---------------------------|--------|
| Model |                         | B                           | Std. Error | Beta                      | t      |
| 1     | (Constant)              | 0.537                       | 0.138      |                           | 3.898  |
|       | Ethical Practices       | 0.180                       | 0.030      | 0.267                     | 5.974  |
|       | Contract Administration | 0.170                       | 0.044      | 0.239                     | 3.838  |
|       | Contractor Selection    | 0.203                       | 0.035      | 0.333                     | 5.715  |
|       | Procurement Planning    | 0.320                       | 0.023      | 0.545                     | 14.046 |

The coefficient values in Table 9 now complete the regression equation as follows:

$$Y=0.537+0.180X_1+0.170X_2+0.203X_3+0.320X_4$$

Where **Y** represents Construction Procurement Contracts

**X<sub>1</sub>** = Procurement Ethical Practices

**X<sub>2</sub>** = Procurement Contract Administration

**X<sub>3</sub>** = Procurement Contractor Selection

**X<sub>4</sub>** = Procurement Planning

The coefficients in Table 9 have the following significance. If all the independent variables are held at zero then the value of the dependent variable (performance of construction procurement contracts) will be 0.537. Holding all other variables at zero except for procurement ethical practices, then a unit increase in ethical practice, will result to a value of 0.180 in the performance of procurement construction procurement contracts. Holding all other variables at zero except for procurement contract administration, then a unit increase of procurement contract administration will result to a value of 0.170 in the performance of construction procurement contracts. Holding all other variables at zero except for procurement contractor selection, then a unit increase in procurement contractor selection will result to a value of 0.203 in the performance of construction procurement contracts. Likewise, holding all other variables at zero except for procurement planning, then a unit increase in procurement planning will lead to a value of 0.320 in the performance of construction procurement contracts. This analysis therefore, concludes that the four independent variables of this study have a positive and significant relationship with the construction procurement contracts.

## 5.0 Conclusion

Based on the results, the study concluded that, there is a positive linear relationship between procurement ethical practices and performance of construction procurement contracts. This signifies that procurement ethical practices influence performance of construction procurement contracts at KPA.



Based on the results, the study concluded that there is a positive linear relationship between procurement contract administration and performance of construction procurement contracts. This signifies that procurement contract administration influences performance of construction procurement contracts at KPA.

Based on the results, the study concluded that there is a positive linear relationship between procurement contractor selection and performance of construction procurement contracts. This signifies that procurement contractor selection influences performance of construction procurement contracts at KPA.

Based on the results, the study concluded that there is a positive linear relationship between procurement planning and performance of construction procurement contracts. This signifies that procurement planning influences performance of construction procurement contracts at KPA.

## **6.0 Recommendation**

The study recommends the following:

1. That Kenya Ports Authority should practice procurement ethics throughout the procurement cycle as this influences performance of construction procurement contracts. Top management should lead by example and periodic training in ethics and integrity should be conducted among its employees.
2. That Kenya Ports Authority should undertake procurement contract administration after contract award as this influences performance of construction procurement contracts. Contract variation and amendment should only be approved within the full context of the law.
3. That Kenya Ports Authority should abide by the criteria of procurement contractor selection as this influences performance of construction procurement contracts. Contractors should only be awarded contracts on the basis of their technical capability, financial strength, and history of performance.
4. That Kenya Ports Authority should ensure that procurement plans are prepared as prescribed by law before tender advertisement as this influences performance of construction procurement contracts.

## 7.0 References

- Auditor General, (2013). *Report of the Auditor General on the Appropriation Accounts for the Year: 2012/2013*. Nairobi: Office of Auditor General.
- Auditor General, (2015). *Report of the Auditor General on the Financial Statement for the National Government for the year 2014/2015*. Nairobi: Office of Auditor General.
- BIFM. (2015). *Ethical Procurement and Supply*. London: British Institute of Facilities Management.
- Blackwell, W. (2016). *Readings in Planning Theory*. London: Blackwell Publishers Ltd.
- Cooper, D, and Schindler, P. (2013). *Business Research Methods*. New York: McGraw Hill.
- Cummins, S. (2016). *Black White and Gray: Law & Ethics in Business*. Stanford: Cengage Learning Publishers.
- Duxbury, R. (2015). *Contract Law*. London: Sweet & Maxwell.
- Engelbert, A. (2017). *Public Procurement Law in Sub Saharan Africa*. Cham: Springer Nature.
- FIDIC. (2010). *Conditions of Contract for Construction*. Geneva: FIDIC.
- Hartley, J. L., & Choi, T. Y. (2013). Supplier development: customers as a catalyst of process change. *Business Horizons*, 39(4), 37-44.
- Hinze, J. (2011). *Construction Contracts*. New York: McGraw Hill Publishers.
- Jennings, M. (2015). *Business Ethics*. Stanford: Cengage Learning Publishers.
- Jorge, A. & Lynch, T. (2017). *Procurement Planning Basics*. Manila: Good Governance Book Publishers.
- Kagendo, N. M. (2010). *Effects of public procurement and disposal act on procurement in parastatals in Kenya* (Dissertation from University of Nairobi).
- Kiage, J. O. (2013). Factors affecting procurement performance: A case of ministry of energy. *International journal of business and commerce*, 3(1), 54-70.
- KNBS (2017). *Economic Survey 2017*. Nairobi: Government Press.
- Kothari, C.R. & Garg, G. (2014). *Research Methodology, Methods & Technique*. New Delhi: New Age International Publishers.
- KPA. (2015). *Kenya Ports Authority Business Plan*. Nairobi: Government Press.
- Mathenge, G. D. (2012). Responsible purchasing and supply chain management in Kenya: A critical analysis of the ethical considerations in Procurement management. *European Journal of Business and Management*, 4(3), 20-12.
- Krause, D. R. (2015). The antecedents of buying firms' efforts to improve suppliers. *Journal of operations management*, 17(2), 205-224.
- Lamming, R. (2014). Squaring lean supply with supply chain management. *International Journal of Operations & Production Management*, 16(2), 183-196.
- Miles, S. (2012). Stakeholder: essentially contested or just confused? *Journal of Business Ethics*, 108(3), 285-298.

- Mugenda, A. & Mugenda, B. (2008). *Research Methods Qualitative & Quantitative Approach*. Nairobi: ACT Press.
- OECD. (2017). *Public Procurement for Innovation, Good Practices and Strategies*. Paris: OECD Publishing.
- Okinyi, T. O., & Muturi, W. (2016). Factors affecting efficiency of procurement in public institutions: a case of public entities in Homabay County. *Int. J. Social Sci. Inf. Technol.*, 2(2), 1-14.
- PPOA. (2009). Procurement Reforms in Kenya. *Journal of Purchasing*, 3-18.
- RoK. (2016). *Public Procurement and Asset Disposal Draft Regulations*. Nairobi: Government Press.
- RoK. (2015). *Public Procurement and Asset Disposal Act*. Nairobi: Government Press.
- Sabiiti, C.K, Muhumuza, E. & Tumutegyeize M. (2013). Performance of the Public Procurement and Disposal System in Uganda. *Journal of Public Procurement and Contract Management*. Vol. 2, No. 1.
- Thai, K.V., (2017). *Global Public Procurement Theories & Practices*. Cham: Springer Nature.
- UN, (2012). *Procurement Practitioner's Handbook*. New York: UN Publishers.
- World Bank, (2017). *World Bank Annual Report 2017*. Washington D.C: World Bank.
- World Bank, (2016). *World Bank Procurement Regulations for IPF Borrowers*. Washington D.C: World Bank.