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# DETERMINANTS OF EFFECTIVE PROCUREMENT PERFORMANCE AMONG DONOR FUNDED PROJECTS IN THE PUBLIC SECTOR IN KENYA

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## Abstract

**Purpose:** The purpose of the study was to examine the determinants of effective procurement performance among donor funded projects in the public sector in Kenya with an aim of making recommendations on proper use of effective procurement performance practices.

**Methodology:** This research study adopted a descriptive research design approach. The researcher preferred this method because it allows an in-depth study of the subject. To gather data, structured questionnaire was used to collect data from 126 procurement staff in the various departments in the ministry of agriculture. Once collected, data was analyzed using descriptive and inferential statistics. Quantitative data was analyzed using multiple regression analysis. The qualitative data generated was analyzed by use of Statistical Package of Social Sciences (SPSS) version 20.

**Results:** The findings of the study indicated that staff competency, resource allocation, procurement planning and contract management have a positive relationship with effective procurement performance among donor funded projects in the public sector.

**Conclusion:** Based on the study findings, the study concludes that procurement performance among donor funded projects can be improved by staff competency, resource allocation, and procurement planning and contract management.

**Policy recommendation:** The study recommended that public institutions should embrace effective procurement performance so as to improve procurement performance and further researches should to be carried out in other public institutions to find out if the same results can be obtained.

**Keywords:** *staff competency, resource allocation, procurement planning, contract management.*

## **1.0 INTRODUCTION**

### **1.1 Background of the Study**

According to The National Treasury (2015), entities in the Kenyan public sector are required to strictly procure in accordance with the governing procurement policies and regulations as stipulated in the Public Procurement and Asset Disposal Act, (2015) and the regulations thereof. However, the Act exempts procurements under bilateral or multilateral agreements between the Government of Kenya (GoK) and any other foreign government, agency, entity or multilateral agency unless otherwise prescribed in the regulations. This means that different donor funded projects are free to adopt and adhere to procurement policies as set by the different respective donors.

Consequently, execution of common procurement procedures often yields varying degrees of success in project implementation due to lack of uniformity in procurement practices. Kithuka (2013) points out that for over fifty years' project success has been defined by the criteria of time budget and deliverables. Project are successful, if they are carried out on schedule and on budget; achieve the deliverables originally set for it which are then accepted and used by the clients for whom the project was intended to benefit. Donors and development partners hold a strong view that set objectives and targets, both short and long term, are to be highly achievable in a project setting.

#### **1.1.1 Global Perspective**

Indeed, in all countries in the world, estimates of the financial activities of government procurement managers are believed to be in the order of 10% – 30 % of Gross National Product (Calender & Mathews, 2012). In the United States, the government sector procures between \$1.4 and \$1.6 trillion annually. The Federal government alone procured \$231.08 billion and made 33.19 million procurement actions in fiscal year 2012. According to the Procurement Executives Council (2011), the federal government made a purchase card payment every 0.31 seconds, and issued a standard form 281 every 0.77 second and a standard form 279 every 13.91 seconds per each working day

#### **1.1.2 Regional Perspective**

In Africa, most countries have various reasons for wanting to undertake procurement reforms. Some countries undertake reforms to support essential internal administrative improvements, others accept reform programs to help qualify for international financing from multilateral institutions, or to help integrate a country into the multilateral trading system. Procurement reforms are often seen as an important feature of anti-corruption efforts that can help promote good governance (Thai, 2008).

#### **1.1.3 Local Perspective**

Recently, in Kenya a wave of procurement performance that begun in the year 2000, culminated into the enactment of the Public Procurement and Disposal Act (PPDA) 2005, and the Public Procurement and Disposal Regulations (PPDR) 2006. Most recently, to give effect to Article 227 of the Constitution, the parliament enacted the Public Procurement and Asset Disposal Act (PPADA) 2015, which was accented to by the President in December 2015 and became effective in 7th January 2016.

## 1.2 Problem Statement

Sound public procurement policies and practices are among the essential elements of good governance (Deloitte, 2012). However, despite the large amounts of funds directed towards donor funded projects in Kenya aimed at facilitating national development and alleviation of poverty, there is still lack of effectiveness in ensuring that the objectives and goals of the projects are achieved or met (OECD, 2011). Procurement procedures and government bureaucracy are the major factors that contribute to ineffective implementation of projects (PPOA, 2009).

USAID (2012) further notes that the irregular procurement activities in public institutions provide the biggest loophole through which public resources are misappropriated. Consequently, the ineffectiveness of the procurement processes in the public sector has negatively impacted on the achievement of the government's development and project goals (Nyamwoya, 2011). In addition, KIPPRA (2010) points out that public procurement has been characterized by poor staff competency, lack of or poor planning, inadequate or unbalanced resource allocation and poor contract administration and management, which are very costly.

All these factors contribute to the delivery of poor quality projects which are late in completion and mostly at inflated costs. According to Chandra (2012), government ministries are still affected by poor procurement management that affects quality and services delivery. Time and cost over-runs of projects are very common, particularly in the public sector; often culminate in projects becoming uneconomical, and resources not being available to support other current and future projects.

Several studies have been undertaken on procurement performance. Among the studies, Liker and Choi (2015) studied how important resource allocation is in the management of purchasing departments and established that purchasing management has a significant bearing on the procurement performance of organizations and their overall competitiveness. According to Agaba and Shipman (2010), negative procurement practices are manifested in shoddy commodities and goods, poor performance of construction works, failure to complete performance of contracts on time or not at all.

Moreover, Kirungu (2011) in a study on factors influencing implementation of donor funded projects in Kenya cites a World Bank Report (2009) which indicated that the current average project funds absorption rate was less than 10% per annum, which was attributed to a constrained procurement process. While much research has focused on the problems facing donor funding in Kenya, not much research has been done to study determinants of effective procurement performance among donor funded projects. It is against this back drop that this study aims at assessing the determinants of effective procurement performance among donor funded projects in the public sector in Kenya.

## 1.3 Objectives of the Study

- I. To determine the effect of staff competency on procurement performance among donor funded projects in the public sector in Kenya.
- II. To assess the effect of the resource allocation on procurement performance among donor funded projects in the public sector in Kenya.

- III. To establish the effect of procurement planning on procurement performance among donor funded projects in the public sector in Kenya.
- IV. To evaluate the effect of contract management on procurement performance among donor funded projects in the public sector in Kenya.

## 2.0 LITERATURE REVIEW

### 2.1.1 Staff Competency and Procurement Performance of Donor Funded Projects

Abdi (2012) studied procurement practices in Kenya's Public Corporations and found that employees understand what each is supposed to do, there is also segregation of duties thus there are incidences of collusion among them. Okwiri (2012) studied of the roles of ethics in supply chain management of oil corporations and found that employees should be ethically responsible to enhance the performance of procurement in institutions.

Planning, generally, enhances the gathering, evaluating and interpreting of essential data and information in order to produce knowledge relevant to good policy making. In many African countries, planning has not arrived at the level of achieving the aims described because of problems related to human and technical capacities and financial resources (Basheka, 2013).

### 2.1.2 Pareto's Approach and Performance of Manufacturing Firms

#### 2.1.2. Resource Allocation and Procurement Performance of Donor Funded Projects

Different resources, resource aggregations and skills have a part in the evolution and development of institutional competences. Collis and Montgomery (2008) see the RBT as a link between institutional capabilities and the external stakeholders. As such, resources are antecedents to performance and a consequence of performance as well (Palmatier, Dant, & Grewal, 2010).

Performance may be enhanced by changing resource application from building and strengthening business relationships towards making targeted investments in increasing the effectiveness of the relationship so as to improve the relationship's potential to generate commercial value (Palmatier et al., 2012).

#### 2.1.3 Procurement Planning and Procurement Performance of Donor Funded Projects

Edgar and Niegel (2011) in their research titled public procurement planning in developing countries: The Ugandan experience, procurement in Uganda consists 70% of the national budget and yet according to the inspector general of government, 90% of complaints about corruption in the office are procurement related due to unethical practices resulting from lack of proper procurement planning. Organizations should be able to improve their performances by changing their ways of doing things by putting in place the right planning policies governing the procurement function and also by focusing on key drivers of performance to make them competitive in the market.

#### **2.1.4 Contract Management and Procurement Performance of Donor Funded Projects**

Kirungu (2011) in his study of factors influencing the implementation of the donor funded projects on procurement systems of the financial and legal sector technical assistance project under the ministry of finance established that 11% of the respondents believed that the contract management policies have a great effect on the implementation of the donor funded projects, 20% great effect while another 22% reported moderate effect.

She concludes that the major implementation obstacles for donor funded projects implementation are contract management policies and donor guidelines due to bureaucracy which results in low disbursement of donor funds. The fact that both donor and GoK procurement policies and guidelines are applied concurrently only serves to compound an already worse implementation situation.

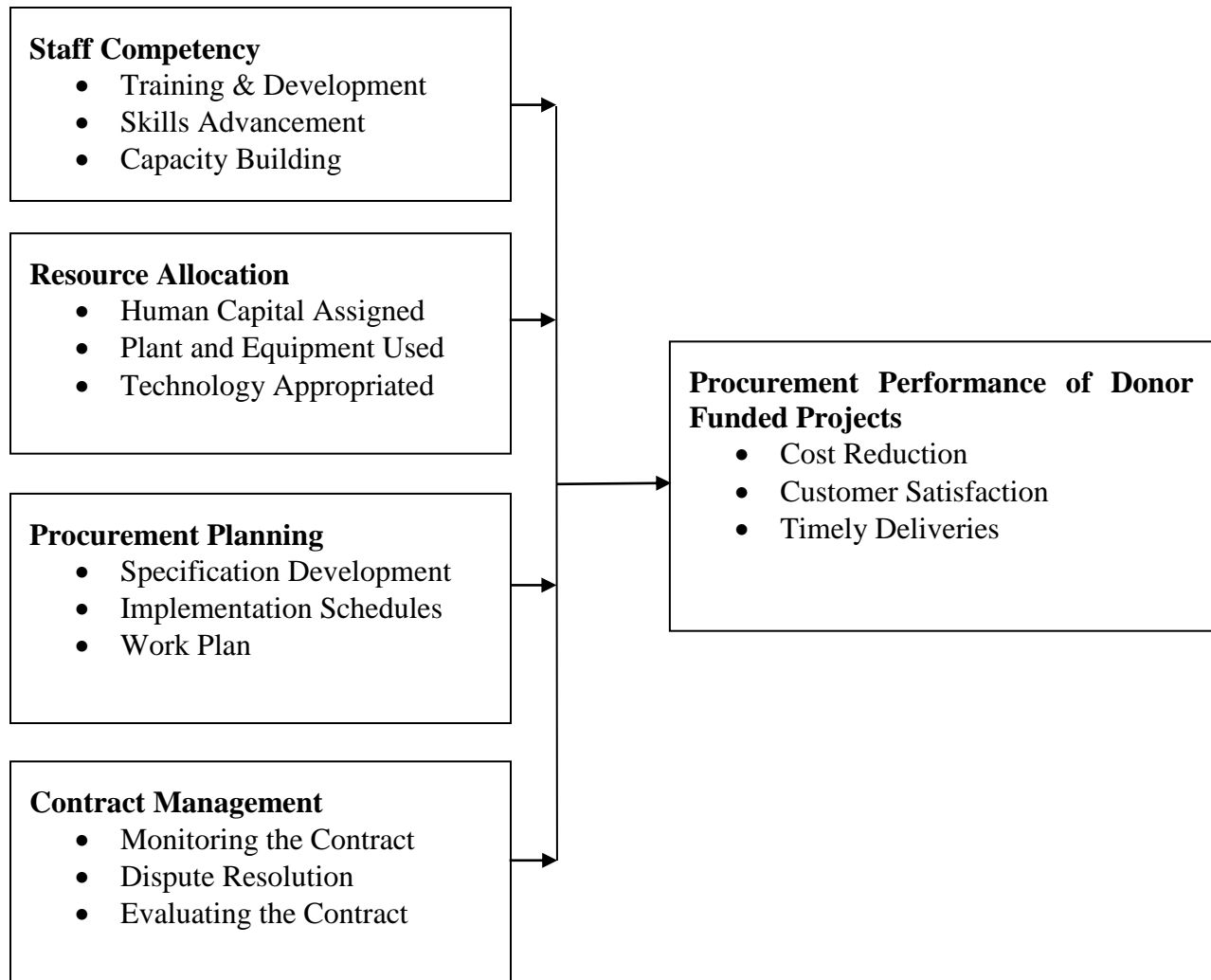
### **2.2 Theoretical review**

#### **2.2.1 The Expectancy Theory**

Expectancy theory by Victor Vroom tells us that employees' commitment to organizational goals depends on the strength of expectation that doing so will be followed by favorable outcome and the value that the individual attach to the reward as well as staff competency (Harrison & Hoek, 2011). This means that employees' commitment is dependent on their perceived gains from meeting the goals of the employer and their competency. Kannan and Tan (2009) argue that unless staff competency gain acceptance through encouraging employees to be more skilled because they want to not because they have to. The Expectancy Theory looks at staff competency in a more comprehensive and realistic way than some of the other theories. Although it is a more complex theory of motivation, it is based on common sense psychology of employees and says that they will be motivated to act when there is an expectancy that their behavior can result in achievement of desired outcomes (Humphreys, Li & Chan, 2014). Underpinning expectancy theory is perception and the anticipation of the likely consequences of behavior. Individuals will aim to predict what consequences of their action may be.

In simpler words the Expectancy Theory can predict if an employee will work for extra hours for skill and competency advancement, maintain superior inter-personal relations, project a more ethical image and do similar other things (Dorward, 2010). The theory emphasizes some very important aspects or variables of staff competence that are performance and functional goals. It establishes relationships between effort, performance, rewards and personal goals and tries to synthesize all these into one theory of motivation. It provides a sort of quantitative formula to finding out the staff competency of employees. It lays emphasis on the value of individual competency and perceptions of what the reality is in the process of motivation. It focuses on utilitarianism as the goal of the employee is to maximize advantage or self-interest and avoid negative consequences. Expectancy theory also implies that staff competency and work satisfaction results in superior performance and not the other way round (Cousins & Speckman, 2008). The Expectancy theory is based on the contingency model and it recognizes that all employees are not motivated by the same things and in the same way.

### 2.3 CONCEPTUAL FRAMEWORK



**Independent Variables**

**Dependent Variable**

**Figure 1: Conceptual Framework**

### 3.0 METHODOLOGY

This research study adopted a descriptive research design approach. The researcher preferred this method because it allows an in-depth study of the subject. To gather data, structured questionnaire was used to collect data from 126 procurement staff in the various departments in the ministry of agriculture. Once collected, data was analyzed using descriptive and inferential statistics. Quantitative data was analyzed using multiple regression analysis. The qualitative data generated was analyzed by use of Statistical Package of Social Sciences (SPSS) version 20.

## 4. 0 RESULTS FINDINGS

### 4.1 Descriptive Statistics

#### 4.1.1 Staff Competency

The first objective of the study was to assess the effect of staff competency on procurement performance among donor funded projects in the public sector in Kenya. The respondents were asked to indicate to what extent staff competency affected donor funded projects in the public sector. Results indicated that majority of the respondents 53% said it was very effective, 31% said that it was effective, 9% said it was somehow effective, while 7% said it was ineffective.



**Figure 2: Staff Competency**

The respondents were also asked to comment on statements regarding the effect of staff competency on procurement performance among donor funded projects in the public sector. The responses were rated on a likert scale and the results presented in Table 1 below. It was rated on a 5 point likert scale ranging from; 1 = strongly disagree to 5 = strongly agree. The scores of 'strongly disagree' and 'disagree' have been taken to represent a statement not agreed upon, equivalent to mean score of 0 to 2.5. The score of 'neutral' has been taken to represent a statement agreed upon, equivalent to a mean score of 2.6 to 3.4. The score of 'agree' and 'strongly agree' have been taken to represent a statement highly agreed upon equivalent to a mean score of 3.5 to 5.

Results indicated that majority of the respondents 57.4% agreed on the statement that training and development play a significant role in cost reductions. Further results indicated that 54.4% of the respondents were in agreement that skills advancement plays a significant role in cost reductions. A 60.3% of the respondents agreed that capacity building plays a significant role in cost reductions.

83.8% of the respondents expressed agreement on the statement that training and development play a significant role in improving customer satisfaction. Results indicated that majority of the respondents 82.3% agreed on the statement that skills advancement plays a significant role in improving customer satisfaction. Results indicated that majority of the respondents 82.4% agreed



on the statement that capacity building plays a significant role in improving customer satisfaction.

Results also indicated that majority of the respondents 91.2% agreed on the statement that training and development play a significant role in attaining timely deliveries. Results indicated that majority of the respondents 70.6% agreed on the statement that skills advancement play a significant role in attaining timely deliveries. Results indicated that majority of the respondents 83.8% agreed on the statement that capacity building plays a significant role in attaining timely deliveries.

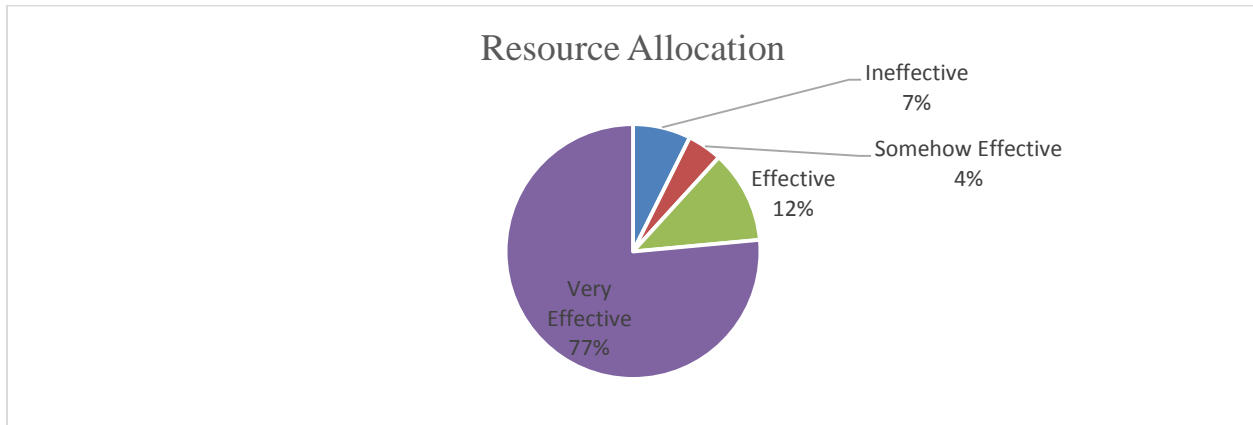
The average mean of all the statements was 3.97 indicating that majority of the respondents agreed that staff competency has an effect on procurement performance among donor funded projects in the public sector. However the variations in the responses were varied as shown by a standard deviation of 1.015. The findings agree with Kinyanjui (2010) that having competent staff when sourcing for a new product or service can be smart but if not done well can prove to be expensive and time consuming.

**Table 1: Staff Competency**

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Deviation
Training and development plays a significant role in cost reduction	8.80%	5.90%	27.90%	26.50%	30.90%	3.65	1.231
Skills advancement plays a significant role in cost reduction	1.50%	4.40%	39.70%	50.00%	4.40%	3.51	0.723
Capacity building plays a significant role in cost reduction	2.90%	2.90%	33.80%	33.80%	26.50%	3.78	0.975
Training and development play a significant role in improving customer satisfaction	5.90%	4.40%	5.90%	41.20%	42.60%	4.1	1.095
Skills advancement plays a significant role in improving customer satisfaction	5.90%	1.50%	10.30%	39.70%	42.60%	4.12	1.058
Capacity building plays a significant role in improving customer satisfaction	8.80%	2.90%	5.90%	41.20%	41.20%	4.03	1.184
Training and development play a significant role in attaining timely deliveries	4.40%	1.50%	2.90%	47.10%	44.10%	4.25	0.936
Skills advancement play a significant role in attaining timely deliveries	0.00%	0.00%	29.40%	29.40%	41.20%	4.12	0.838
Capacity building plays a significant role in attaining timely deliveries	5.90%	2.90%	7.40%	33.80%	50.00%	4.19	1.096
<b>Average</b>						<b>3.97</b>	<b>1.015</b>

#### 4.1.2 Resource Allocation

The second objective of the study was to establish the effect of the resource allocation on procurement performance among donor funded projects in the public sector. The respondents were asked to indicate to what extent resource allocation affected procurement performance among donor funded projects in the public sector. Results indicated that majority of the respondents 77% agreed that it was very effective, 12 % said that it was effective, 7% said it was ineffective, while somehow effective was at 4%.



**Figure 3: Resource Allocation**

The respondents were also asked to comment on statements regarding effect of the resource allocation on procurement performance among donor funded projects in the public sector. Results indicated that majority of the respondents 52.9% agreed on statement that human capital assigned plays a significant role in cost reductions. Further results indicated that 61.8% of the respondents were in agreement that plant and equipment used plays a significant role in cost reductions. 69.1% of the respondents agreed that technology appropriated plays a significant role in cost reductions.

83.8% of the respondents expressed agreement on the statement that human capital assigned plays a significant role in improving customer satisfaction. Results indicated that majority of the respondents 86.7% agreed on the statement that plant and equipment used plays a significant role in improving customer satisfaction. Results indicated that majority of the respondents 47% agreed on the statement that technology appropriated plays a significant role in improving customer satisfaction.

Results indicated that majority of the respondents 48.5% agreed on the statement that human capital assigned plays a significant role in attaining timely deliveries. Results indicated that majority of the respondents 51.4% agreed on the statement that plant and equipment used plays a significant role in attaining timely deliveries. Results indicated that majority of the respondents 45.5% agreed on the statement that technology appropriated plays a significant role in attaining timely deliveries.

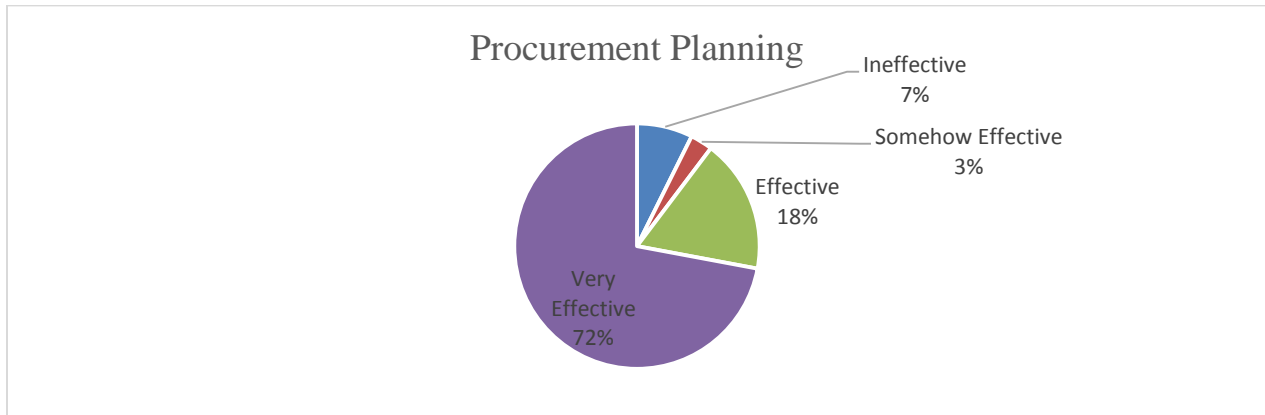
The average mean of all the statements was 3.63 indicating that majority of the respondents agreed that resource allocation had an effect on procurement performance among donor funded projects in the public sector. However the variations in the responses were varied as shown by a standard deviation of 1.198. These findings agree with Howard (2014) that organizations must look at resource allocation for processes improvements. The opportunities for cost savings and improvements can be enormous as the impact on margins and bottom line is considerable.

**Table 2: Resource Allocation**

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Deviation
Human capital assigned plays a significant role in cost reduction	4.40%	4.40%	38.20%	27.90%	25.00%	3.65	1.048
Plant and equipment used plays a significant role in cost reduction	5.90%	2.90%	29.40%	35.30%	26.50%	3.74	1.074
Technology appropriated plays a significant role in cost reduction	4.40%	2.90%	23.50%	29.40%	39.70%	3.97	1.079
Human capital assigned plays a significant role in improving customer satisfaction	7.40%	2.90%	5.90%	42.60%	41.20%	4.07	1.124
Plant and equipment used plays a significant role in improving customer satisfaction	2.90%	4.40%	5.90%	52.90%	33.80%	4.1	0.917
Technology appropriated plays a significant role in improving customer satisfaction	20.60%	14.70%	17.60%	19.10%	27.90%	3.19	1.509
Human capital assigned plays a significant role in attaining timely deliveries	20.60%	11.80%	19.10%	19.10%	29.40%	3.25	1.51
Plant and equipment used plays a significant role in attaining timely deliveries	5.90%	22.10%	20.60%	17.60%	33.80%	3.51	1.321
Technology appropriated plays a significant role in attaining timely deliveries	5.90%	26.50%	22.10%	27.90%	17.60%	3.25	1.202
<b>Average</b>						<b>3.63</b>	<b>1.198</b>

### 4.1.3 Procurement Planning

There was also need to determine the effect of procurement planning on procurement performance among donor funded projects in the public sector. The respondents were asked to comment on extent of procurement planning on procurement performance among donor funded projects in the public sector. Results indicated that majority of the respondents 72% agreed that it was very effective, 18% said that it was effective, while ineffective was at 7% and somehow effective at 3%.



**Figure 4: Procurement Planning**

Results indicated that 66.2% agreed on the statement that specification development plays a significant role in cost reductions. Majority of the respondents 55.9% agreed on the statement that implementation schedules plays a significant role in cost reductions. Further results indicated that 55.9% of the respondents were in agreement with the statement that work plan play a significant role in cost reductions.

66.1% of the respondents agreed that specification development plays a significant role in improving customer satisfaction. 66.4% of the respondents expressed agreement on the statement that implementation schedules play a significant role in improving customer satisfaction. Results indicated that majority of the respondents 54.4% agreed on the statement that work plan play a significant role in improving customer satisfaction.

Results indicated that majority of the respondents 48.6% agreed on the statement that specification development plays a significant role in attaining timely deliveries. Results indicated that majority of the respondents 82.3% agreed on the statement that implementation schedules play a significant role in attaining timely deliveries. Results indicated that majority of the respondents 86.8% agreed on the statement that work plan play a significant role in attaining timely deliveries.

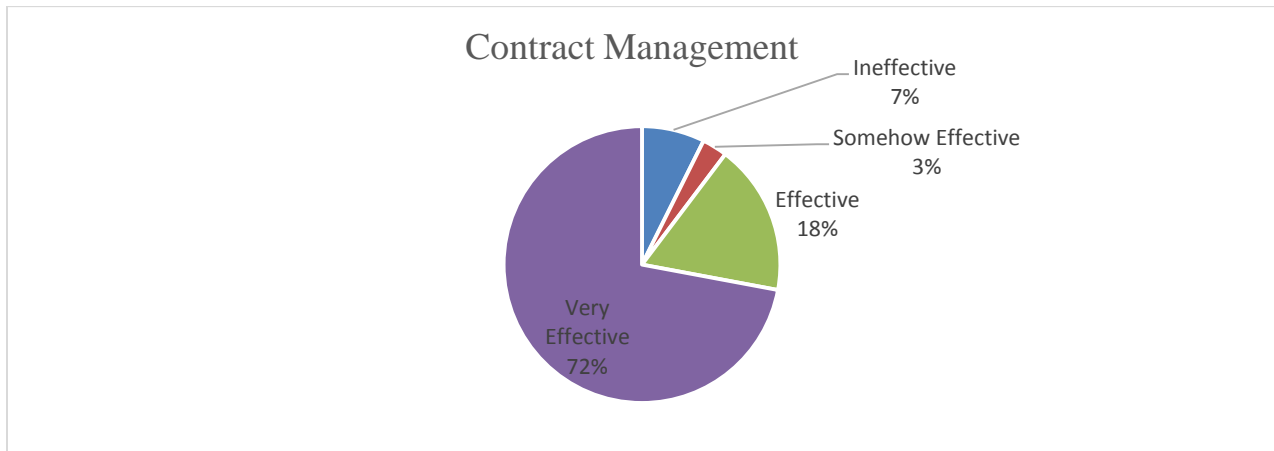
The average mean of all the statements was 3.77 indicating that majority of the respondents agreed on resource allocation having an influence on procurement performance among donor funded projects in the public sector. However the variations in the responses were varied as shown by a standard deviation of 1.134. These findings imply that through proper resource allocation, companies can improve competitive positioning, gain entry to new dynamic markets, supplement critical skills and share the risk (Davila, 2009).

**Table 3: Procurement Planning**

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Deviation
Specification development plays a significant role in cost reduction	4.40%	4.40%	25.00%	32.40%	33.80%	3.87	1.078
Implementation schedules play a significant role in cost reduction	7.40%	1.50%	35.30%	33.80%	22.10%	3.62	1.079
Work plan plays a significant role in cost reduction	2.90%	4.40%	36.80%	30.90%	25.00%	3.71	0.993
Specification development plays a significant role in improving customer satisfaction	7.40%	2.90%	23.50%	27.90%	38.20%	3.87	1.183
Implementation schedules play a significant role in improving customer satisfaction	10.30%	1.50%	22.10%	44.10%	22.10%	3.66	1.154
Work plan plays a significant role in improving customer satisfaction	5.90%	2.90%	36.80%	29.40%	25.00%	3.65	1.076
Specification development plays a significant role in attaining timely deliveries	19.10%	13.20%	19.10%	16.20%	32.40%	3.29	1.517
Implementation schedules play a significant role in attaining timely deliveries	5.90%	5.90%	5.90%	39.70%	42.60%	4.07	1.124
Work plan plays a significant role in attaining timely deliveries	4.40%	2.90%	5.90%	39.70%	47.10%	4.22	1.005
<b>Average</b>						<b>3.77</b>	<b>1.134</b>

#### 4.1.4 Contract Management

There was also need to evaluate the effect of contract management on procurement performance among donor funded projects in the public sector. The respondents were also asked to comment on statements regarding contract management effect on procurement performance among donor funded projects in the public sector. Results showed that 72% of respondents indicated it was very effective, effective were at 18%, ineffective was 7%, while somehow effective was at 3%.



**Figure 5: Contract Management**

Results indicated that majority of the respondents 86.7% agreed on the statement that monitoring the contract plays a significant role in cost reductions. Further results indicated that 86.8% of the respondents were in agreement that dispute resolution plays a significant role in cost reductions. An 83.8% of the respondents agreed that evaluating the contract plays a significant role in cost reductions.

79.4% of the respondents expressed agreement on the statement that monitoring the contract plays a significant role in improving customer satisfaction. Results indicated that majority of the respondents 92.7% agreed on the statement that dispute resolution plays a significant role in improving customer satisfaction. Results indicated that majority of the respondents 91.2% agreed on the statement that evaluating the contract plays a significant role in improving customer satisfaction.

92.6% of the respondents expressed agreement on the statement that monitoring the contract plays a significant role in attaining timely deliveries. Results indicated that majority of the respondents 89.7% agreed on the statement that dispute resolution plays a significant role in attaining timely deliveries. Results indicated that majority of the respondents 86.7% agreed on the statement that evaluating the contract plays a significant role in attaining timely deliveries.

The average mean of all the statements was 4.20 indicating that majority of the respondents agreed contract management had an effect on procurement performance among donor funded projects. However the variations in the responses were varied as shown by a standard deviation of 0.969. The results imply that an organization benefits greatly when contract management is embraced to reduce costs, introduce contract management systems designed to address the organization's needs, and work with the organization to streamline management (Croom & Jones, 2010).

**Table 5: Contract Management**

<b>Statements</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>	<b>Mean</b>	<b>Std. Deviation</b>
Monitoring the contract plays a significant role in cost reduction	4.40%	4.40%	4.40%	44.10%	42.60%	4.16	1.016
Dispute resolution plays a significant role in cost reduction	4.40%	4.40%	4.40%	36.80%	50.00%	4.24	1.038
Evaluating the contract plays a significant role in cost reduction	4.40%	1.50%	10.30%	41.20%	42.60%	4.16	0.987
Monitoring the contract plays a significant role in improving customer satisfaction	8.80%	4.40%	7.40%	38.20%	41.20%	3.99	1.215
Dispute resolution plays a significant role in improving customer satisfaction	2.90%	1.50%	2.90%	41.20%	51.50%	4.37	0.862
Evaluating the contract plays a significant role in improving customer satisfaction	4.40%	1.50%	2.90%	44.10%	47.10%	4.28	0.944
Monitoring the contract plays a significant role in attaining timely deliveries	1.50%	0.00%	5.90%	52.90%	39.70%	4.29	0.714
Dispute resolution plays a significant role in attaining timely deliveries	4.40%	2.90%	2.90%	51.50%	38.20%	4.16	0.956
Evaluating the contract plays a significant role in attaining timely deliveries	4.40%	2.90%	5.90%	44.10%	42.60%	4.18	0.992
<b>Average</b>						<b>4.20</b>	<b>0.969</b>

#### 4.2 Correlation Analysis

Correlation analysis was used to determine both the significance and degree of association of the variables and also predict the level of variation in the dependent variable caused by the independent variables. The correlation technique is used to analyze the degree of relationship between two variables. The results of the correlation analysis are summarized in Table 6.

**Table 6: Summary of Pearson's Correlations**

		<b>Staff Competen cy</b>	<b>Resource Allocation</b>	<b>Procu re ment Planning</b>	<b>Contract Managem ent</b>	<b>Procu re ment Perform ance</b>
<b>Staff Competency</b>	Pearson Correlation Sig. (2-tailed)	1				
<b>Resource Allocation</b>	Pearson Correlation Sig. (2-tailed)	.863**	1			
<b>Procurement Planning</b>	Pearson Correlation Sig. (2-tailed)	.904**	.959**	1		
<b>Contract Management</b>	Pearson Correlation Sig. (2-tailed)	.890**	.889**	.905**	1	
<b>Procurement Performance</b>	Pearson Correlation Sig. (2-tailed)	.744**	.663**	.721**	.812**	1
		0.000	0.000	0.000	0.000	

\*\* Correlation is Significant at the 0.05 Level (2-Tailed).

The correlation summary shown in Table 6 indicates that the associations between each of the independent variables and the dependent variable were all significant at the 95% confidence level. The correlation analysis to determine the relationship between effective procurement performance among donor funded projects in the public sector, Pearson's correlation coefficient computed and tested at 5% significance level. The results indicate that there is a positive relationship ( $r=0.744$ ) between staff competency and procurement performance among donor funded projects. In addition, the researcher found the relationship to be statistically significant at 5% level ( $p=0.000$ ,  $<0.05$ ).



The correlation analysis to determine the relationship between resource allocation and procurement performance among donor funded projects, Pearson correlation coefficient computed and tested at 5% significance level. The results indicate that there is a positive relationship ( $r=0.663$ ) between resource allocation and procurement performance among donor funded projects. In addition, the researcher found the relationship to be statistically significant at 5% level ( $p=0.000, <0.05$ ).

The correlation analysis to determine the relationship between procurement planning and procurement performance among donor funded projects in the public sector, Pearson correlation coefficient computed and tested at 5% significance level. The results indicate that there is a positive relationship ( $r=0.721$ ) procurement planning and procurement performance among donor funded projects in the public sector. In addition, the researcher found the relationship to be statistically significant at 5% level ( $p=0.000, <0.05$ ).

The correlation analysis to determine the relationship between procurement performances among donor funded projects in the public sector, Pearson correlation coefficient computed and tested at 5% significance level. The results indicate that there is a positive relationship ( $r= 0.812$ ) between contract management and procurement performance among donor funded projects in the public sector. In addition, the researcher found the relationship to be statistically significant at 5% level ( $p=0.000,<0.05$ ).

### 4.3 Regression Analysis

In this study multivariate regression analysis was used to determine the significance of the relationship between the dependent variable and all the independent variables pooled together. Regression analysis was conducted to find the proportion in the dependent variable (procurement performance among donor funded projects) which can be predicted from the independent variables (staff competency, resource allocation, and procurement planning and contract management).

Table 7 presents the regression coefficient of independent variables against dependent variable. The results of regression analysis revealed there is a significant positive relationship between dependent variable and the independent variable. The independent variables reported R value of 0.832 indicating that there is perfect relationship between dependent variable and independent variables. R square value of 0.693 means that 69.3% of the corresponding variation in procurement performance among donor funded projects can be explained or predicted by (staff competency, resource allocation, and procurement planning and contract management). The results of regression analysis revealed that there was a significant positive relationship between dependent variable and independent variable at ( $\beta = 0.1194$ ),  $p=0.000 <0.05$ ).

**Table 7: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.832 <sup>a</sup>	.693	.673	.1194

a) Predictors: (Constant), Staff Competency, Resource Allocation, Procurement Planning and Contract Management

b) Dependent Variable: Procurement Performance among Donor Funded Projects

**Table 8: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.03	4	0.508	56.444	.000 <sup>b</sup>
	Residual	0.90	97	0.009		
	Total	2.93	101			

a) Predictors: (Constant), Staff Competency, Resource Allocation, Procurement Planning and Contract Management

b) Dependent Variable: Procurement Performance among Donor Funded Projects

The significance value is 0.000 which is less than 0.05 thus the model is statistically significant in predicting how staff competency, resource allocation, procurement planning and contract management affect procurement performance among donor funded projects. The F critical at 5% level of significance was 26.80. Since F calculated which can be noted from the ANOVA table above is 56.44 which is greater than the F critical (value = 26.80), this shows that the overall model was significant. The study therefore establishes that; staff competency, resource allocation, and procurement planning and contract management were all important factors affecting procurement performance among donor funded projects. These results agree with Asaari and Razak (2010) results which indicated a positive and significant effect of strategic procurement management on procurement performance among donor funded projects.

**Table 9: Coefficients of Determination**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	1.197	1.119		1.069	0.028
	Staff Competency	0.913	0.186	0.895	4.908	0.000
	Resource Allocation	0.628	0.268	0.591	2.343	0.002
	Procurement Planning	0.255	0.329	0.138	0.775	0.004
	Contract Management	0.245	0.206	0.353	1.189	0.003

a) Predictors: (Constant), Staff Competency, Resource Allocation, Procurement Planning and Contract Management

b) Dependent Variable: Procurement Performance among Donor Funded Projects

The research used a multiple regression model

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where

**Y** = Procurement Performance among Donor Funded Projects

**$\beta_0$**  = Constant

**X<sub>1</sub>** = Staff Competency

**X<sub>2</sub>** = Resource Allocation

**X<sub>3</sub>** = Procurement Planning

**X<sub>4</sub>** = Contract Management

**$\epsilon$**  = Error Term

The regression equation is;

$$Y = 1.197 + 0.913X_1 + 0.628X_2 + 0.255X_3 + 0.245X_4$$

The regression equation above has established that taking all factors into account (staff competency, resource allocation, procurement planning and contract management) constant at zero, procurement performance among donor funded projects will be an index of 1.197. The findings presented also shows that taking all other independent variables at zero, the study found that a unit increase in staff competency will lead to a 0.913 increase in the procurement performance among donor funded projects. The P-value was 0.000 and hence the relationship was significant since the p-value was lower than 0.05.

The study also found that a unit increase in resource allocation will lead to a 0.628 increase in procurement performance among donor funded projects. The P-value was 0.002 and thus the relationship was significant. In addition, a unit increase in procurement planning will lead to a 0.255 increase in procurement performance among donor funded projects. The P-value was 0.004 which is less 0.05 and thus the relationship was significant.

The study also found that a unit increase in contract management will lead to a 0.245 increase in the procurement performance among donor funded projects. The P-value was 0.003 and thus the relationship was significant. The findings of the study show that, staff competency contributed most to the procurement performance among donor funded projects.

## **5. 0 SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Summary of Findings**

#### **5.1.1 Staff Competency**

The study sought to assess the effect of staff competency on procurement performance among donor funded projects in the public sector as the first objective of the study. A majority of respondents were found to highly agree that the donor funded projects had embraced hiring competent staff with regard to their procurement activities. Training and development and capacity building were common in the donor funded projects. Correlation and regression results revealed that this was an important variable that could perhaps be explained by the observation

from the findings that staff competency was an important factor affecting procurement performance among donor funded projects.

### **5.1.2 Resource Allocation**

The effect of resource allocation on procurement performance among donor funded projects in the public sector was the second objective of the study. A majority of respondents were found to highly agree that the donor funded projects had embraced optimum resource allocation with regard to their procurement activities. Human capital assigned and technology appropriated were common in the donor funded projects. Correlation and regression results revealed that this was an important variable that could perhaps be explained by the observation from the findings that resource allocation was an important factor affecting procurement performance among donor funded projects.

### **5.1.3 Procurement Planning**

The study endeared to assess the effect of procurement planning on procurement performance among donor funded projects in the public sector as the third objective of the study. A majority of respondents were found to highly agree that the donor funded projects had embraced procurement planning with regard to their procurement activities. Specification development and work plan were common in the donor funded projects. Correlation and regression results revealed that this was an important variable that could perhaps be explained by the observation from the findings that procurement planning was an important factor affecting procurement performance among donor funded projects.

### **5.1.4 Contract Management**

The study sought to assess the effect of contract management on procurement performance among donor funded projects in the public sector as the last objective of the study. A majority of respondents were found to highly agree that the donor funded projects had embraced contract management with regard to their procurement activities. Monitoring the contract and dispute resolution were common in the donor funded projects. Correlation and regression results revealed that this was an important variable that could perhaps be explained by the observation from the findings that contract management was an important factor affecting procurement performance among donor funded projects.

### **5.1.5 Procurement Performance of Funded Projects**

The study endeared to determine influence of staff competency, resource allocation, procurement planning and contract management on procurement performance with reference to donor funded projects. The regression results revealed that the strategies identified in the study, that is, staff competency, resource allocation, procurement planning and contract management combined could explain approximately 69.3% of the variations in the procurement performance among donor funded projects. The other 30.7% may be attributed to other strategies not explained by the model or the variables.

## **5.2 Conclusion of the Study**

Based on the study findings, the study concludes that procurement performance among donor funded projects can be improved by staff competency, resource allocation, procurement planning and contract management.

## **5.3 Recommendations of the Study**

### **5.3.1 Staff Competency**

To ensure that donor funded projects have better procurement performance they should focus more on using their training and development programs so as to ascertain the realistic capacity of employees and ensure that there is consistency of quality of work done. In the same regard, they should building the capacity of staff early enough.

### **5.4.2 Resource Allocation**

With regard to the second objective, it would be constructive for donor funded projects to invest more in technology appropriated to reduce the cost of procurement through unnecessary reworks and ensure professional suppliers get it right the first time. This should be done consistently with the partnerships, plant and equipment used.

### **5.4.3 Procurement Planning**

In relation to procurement planning, the donor funded projects should form strategic alliances with their vendors so as to have a more improved working relationship characterized by collaborative specification development and integration of work plans. If donor funded projects embrace systems integration among its suppliers then there will be cost reduction and timing of delivery will improve.

### **5.4.4 Contract Management**

The study recommends that procurement staff in the donor funded projects should ensure that they strictly follow procurement procedures to ensure that goods supplied are of the right quality, in the right quantity, at the right time, to the right place from the right source. This will aim at satisfaction of customers in terms of cost, quality, and timeliness of the delivered product or service, minimizing administrative operating costs, conducting business with integrity, fairness and openness. More checks and controls should be introduced to check on the integrity of the sourcing systems.

## **5.4 Areas for Further Research**

Existing literature indicates that as a future avenue of research, there is need to undertake similar research in other institutions and public sector organizations in Kenya and other countries in order to establish whether the explored determinants of effective procurement performance herein can be generalized to affect procurement performance in other public institutions.

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