

---

**Factors Influencing Effective Public Procurement Performance: The Ministry Of Devolution and Planning**

**Mathu Mercy Mwihaki**

College of Human Resource and Development, Jomo Kenyatta University of Agriculture and Technology

**Corresponding Author email:** mathumercy1@gmail.com

**To cite this article:**

Mwihaki, M. (2018). Factors Influencing Effective Public Procurement Performance: The Ministry Of Devolution and Planning. *Journal of International Business, Innovation and Strategic Management*, 1(1), 64-88

**Abstract:** The performance of public procurement has become a fierce debate in matters concerning service delivery in the civil service at the national and county governments in Kenya. Procurement is still marred by shoddy works, poor quality goods and services despite the effort by the governments of developing countries and development partners like World Bank to improve performance of the procurement function. Despite the introduction of e-procurement, there are still major setbacks in public procurement ranging from poor procurement planning and management of the procurement process, needs that are not well identified and estimated, unrealistic budgets and inadequacy of skills of procurement staff responsible for procurement. The current study sought to establish the factors influencing effective public procurement performance at the Ministry of Devolution and Planning in Kenya. The study was hinged on the New Public Management theory, Agency theory, Transaction cost theory, Strategic Triangle theory and Iceberg model. The study specifically sought to establish the influence of staff competency, commitment and support from the top management, implementation of e-procurement technology and procurement planning on public procurement performance. This study employed a descriptive research design. The target population of this study consisted of all the employees at the Ministry of Devolution and Planning. The study used the Fisher formula to come up with a sample of 96 respondents in the study. The study findings indicated staff competency, top management support and procurement planning are positively and significantly associated with procurement performance while E-procurement technology is positively but insignificantly related to procurement performance. The study recommends that the Ministry of Devolution and Planning should put in place measures to improve staff competency. Some of the practices to improve staff competency should include conducting trainings, workshops and seminars that aim to improve the staff skills on operation flexibility regarding IFMIS system. The study also recommends that the Ministry of Devolution and Planning should encourage the top management to support implementation of procurement processes since top management support leads to better procurement performance. The top management should ensure that there is a balanced responsibility allocation, there is financial support for adoption of e-procurement and that there is support of activities regarding procurement procedures as well as spearheading adherence to procurement regulations.

**Keywords:** *Staff Competency, Commitment and Support from the Top Management, e-procurement Technology, Procurement Planning, Public Procurement Performance*

## Introduction

Public Procurement has always been a big part of the developing countries economy accounting for an estimated 9-13% of the developing nations Gross Domestic Product (GDP) and it is therefore an area that needs attention in the face of increasing non-compliance (Odhiambo & Kamau, 2011). Procurement managers and stakeholders in the Public Service serve institutions created and governed by a complex array of statutes, regulations, policies, and directives. They operate in an environment of increasingly intense scrutiny and accelerated changes driven by technology, program reviews, and public and political expectations for service improvements. The performance of public procurement has become a fierce debate in matters concerning service delivery in the civil service at the national and county governments in Kenya (Mutui & Chirchir, 2014). The process of public procurement is also manually done to some extent despite the presence of IFMIS. Worldwide, public procurement has become an issue of public attention and debate, and has been subjected to reforms, restructuring, rules and regulations. Public procurement refers to the acquisition of goods, services and works by a procuring entity using public funds (World Bank, 2011). According to Roodhooft and Abbeele (2012), public bodies have always been big purchasers, dealing with huge budgets. Mahmood, (2010) also reiterated that public procurement represents 18.42% of the world GDP.

In developing countries, public procurement is increasingly recognized as an essential factor in service delivery (Basheka & Bisangabasaija, 2010), and it accounts for a high proportion of total expenditure. In Uganda, procurement and disposal planning are central to proper procurement management. Public Procurement and Disposal of Public Assets (PPDA) Regulation 96(1) provides that a user department shall prepare a multi-annual, rolling work plan for procurement based on the approved budget, which was submitted to the Procurement and disposal unit to facilitate orderly execution of annual procurement activities (Kakwezi & Nyeko, 2013). In Kenya, application of the rules was not strict and many of the norms were not followed. Furthermore, the Supplies Manual did not cover procurement of works; the dispute settlement mechanisms relating to the award procedures as set out in the manual were weak and unreliable for ensuring fairness and transparency. In extreme cases, records of procurement transactions were found to be inaccurate or incomplete or absent (Mbaya, 2013). Ngongo (2009) observes that millions of dollars gets wasted due to inefficient and ineffective procurement structures, policies and procedures as well as failure to impose sanctions for violation of procurement rules thus resulting in poor service delivery. There is hence a need to conduct a study to determine the factors influencing public procurement performance.

## Statement of the Problem

In Kenya, public procurement represents a large fraction (50- 60%) of the government budget. (Okinyi & Muturi, 2016). Statistics available from Transparency International Report revealed that public procurement in Kenya is marred by high levels of non-compliance and inconsistencies with procurement law (TI, 2010). In spite of this, the government loses multimillions in the tendering processes (Okinyi & Muturi, 2016). Public procurement is marred by shoddy works, poor quality goods and services despite the effort by the governments of developing countries and development partners like World Bank to improve performance of the procurement function (DCD/DAC., 2008). Cases of procurement malpractice including Anglo Leasing, the National Hospital Insurance Fund, Civil Servants' Medical Cover Scheme, IEBC BVR kits, the NSSF Tassia estate scandal, and the Standard Gauge Railway are among those that have dominated the media and public discourse (Gichio, 2015). Recently, there was misappropriation of Kshs.826 Million at the Ministry of Devolution and Planning

(Achuka, 2016). Past studies have determined both the challenges of having an effective public procurement process as well as that of implementation of e-procurement. Research gaps in the previous studies necessitated this current study to be conducted. Previous studies for instance, Mauki, (2014) was conducted in the context of the Kenyan Judiciary, Karani, (2014) focused on the National Treasury of Kenya, Hawking, Stein, Wyld and Forster (2004) conducted their studies in Australia while Okinyi and Muturi (2016) focused in Homabay County. This presented a contextual research gap. It is in line with this research gaps that the current study sought to determine the factors influencing effective public procurement performance at the Ministry of Devolution and Planning in Kenya.

### **Research Objectives**

- i. To determine how staff competency influence effective public procurement performance at the Ministry of Devolution and Planning in Kenya
- ii. To establish the influence of the top management support on effective public procurement performance at the Ministry of Devolution and Planning in Kenya
- iii. To evaluate the influence of e-procurement technology on effective public procurement performance at the Ministry of Devolution and Planning in Kenya
- iv. To determine how procurement planning influence effective public procurement performance at the Ministry of Devolution and Planning in Kenya

### **Literature Review**

#### **Theoretical Framework**

##### **New Public Management Theory (NPM theory)**

The NPM movement began in the late 1970s and early 1980s. Its first practitioners emerged in the United Kingdom under Prime Minister Margaret Thatcher and in the municipal governments in the U.S (Aucoin, 1990). According to New Public Management (NPM) philosophy, which has its origins in public-choice theory and managerialism (Dunsire, 1995), modern government should be customer oriented, competitive and result oriented, and thus ICT has a role to play for enhancing the effectiveness of government services hence the concept of new public management is used to strengthen the need and importance of ICT in public sector (Geentanjali, 2011). The use of E-procurement is an example. Electronic procurement in public domain can be seen as a policy tool to support service delivery of public procurement policy, improving transparency and efficiency (Carayannis & Popescu, 2005; Croom & Brandon-Jones, 2005). E-Procurement can assist a government in the way it does business by reducing transactional cost, making better decisions and getting more value (Panayiotou, 2004). E-procurement adoption and usage in the EU and US public sector is being encouraged (Carayannis & Popescu, 2005; Reddick, 2004).

### **Agency Theory**

The theory explains that an agency relationship is a contract under which one or more persons (principals) engages another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent. The principal agent theory as advocated by Donahue (1989) explains that procurement managers in public sector play the relationship role. It helps to explain the role of public procurement personnel in discharging their mandate. It is merely assumed that the principal and the agent do not share the same levels of information, and as such, the agent can opportunistically take advantage of the situation, sometimes to the detriment of the principal. Therefore, procurement managers take on the role of agent for elected representatives, (Eyaa *et al*, 2011). Njiraini *et al* (2006) states that the proponents of this theory argue for increasing participation of the public in the procurement processes. Such participation is likely to enhance the scope of monitoring and enforcement of procurement decisions by public agents and shift the responsibility from the elected representatives to the taxpayers, who are the main principals.

### **Transaction cost theory**

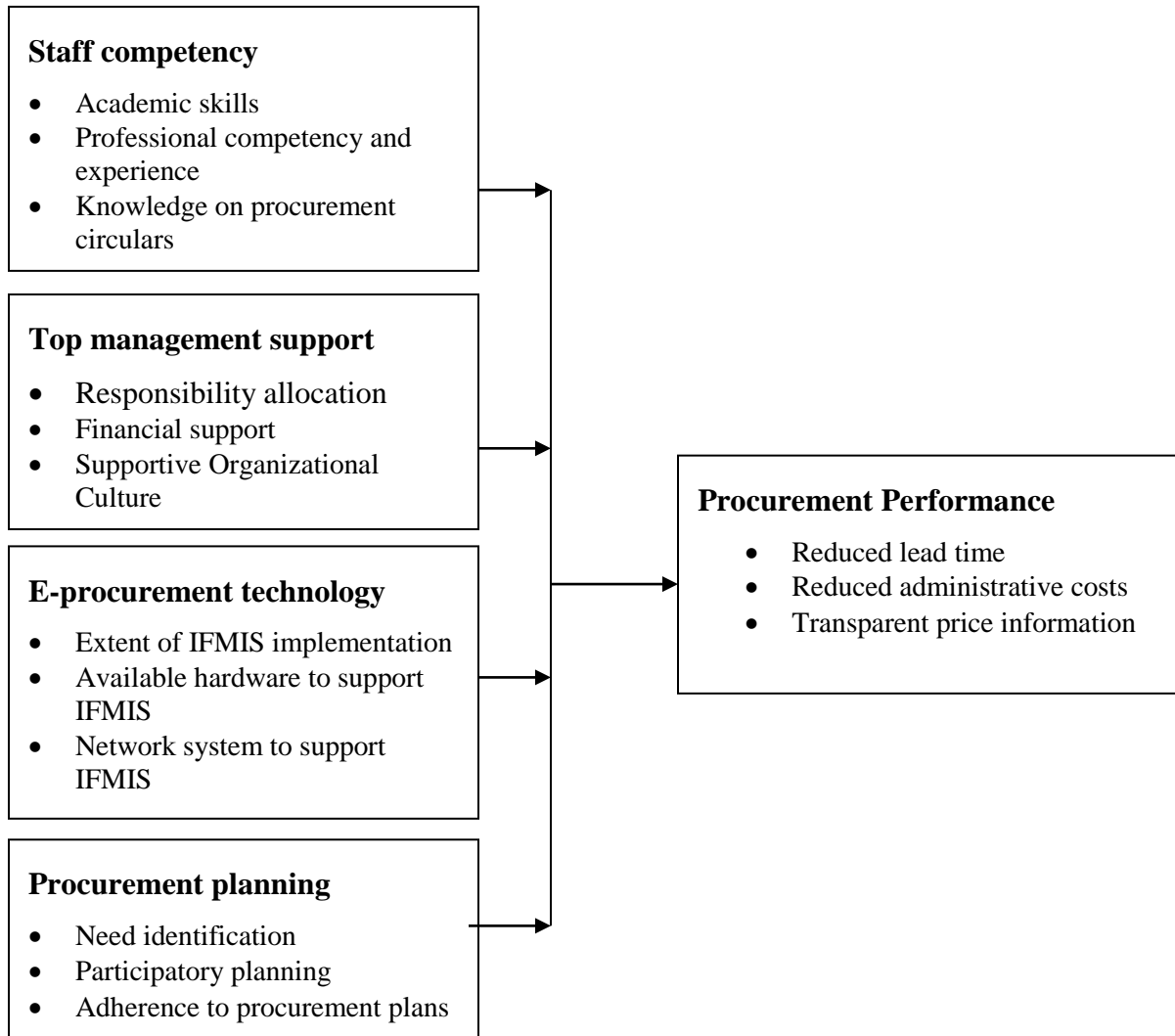
The transaction cost theory was proposed by Coase (1937). Transaction cost refers to the cost of providing for some good or service through the market rather than having it provided from within the firm. Njiraini *et al* (2006) argues that the transaction cost theory can be useful in unraveling sources of barriers to firms intending to participate in public procurement. Such costs include among other things the cost incurred in obtaining and verifying information about the quantity and quality of goods and services and the quality of property rights to be transferred including legal and contractual framework. Njiraini *et al* (2006) argues that transaction costs relating to public procurement are those cost that Enterprises incur in trying to access a contracts. In most cases, communication costs are higher for MSE than large organizations which hinder effective, fair and open competition among suppliers. Mumo *et al* (2013) observes that ten years after the e-government directorate was set to manage ICT in the government, Kenyans are still struggling with the manual access of government services making it difficult for the private sector to engage profitably with the government. This facet has led to exploitation of the procuring entities resulting in poor service delivery to the public besides perpetuating other malpractices such as corruption.

### **Strategic Triangle Theory**

Public value can be described as the contribution made by the public sector to economic, social and environmental well-being of a society or nation, and can be generally defined as what the public is willing to make sacrifices of money and freedom to achieve (Kelly *et al.*, 2002). Public value theory argues that the creation of public value is the ultimate goal of public sector programmes and activities – the value proposition that should guide public organizations (Moore, 1995; Moore, 2000).

His central proposition was that public resources should be used to increase value not only in an economic sense but also more broadly in terms of what is valued by citizens and communities. Unlike private enterprise, organizations providing public services are directly accountable to citizens and their democratic representatives.

## Conceptual Framework



**Independent Variables**

**Dependent Variable**

**Figure 1: Conceptual Framework**

## Research Methodology

This study employed descriptive research design. The choice of the research design was because of the need to describe the present situation regarding public procurement performance in the public sector in Kenya. This research design is suitable in answering the what, which and when questions. The target population of this study consisted of all the employees at the Ministry of Devolution and Planning. According to the Ministry of Devolution and Planning strategic plan 2014/ 2015, there were 344 employees. The study used a formula to come up with a sample of 96 respondents in the study. Random sampling was then used to select the sample of 96 respondents. The study respondents consisted of employees from the top, middle and non-management positions since public procurement involves the employees in all the levels.

The study used quantitative primary data gathered by use of structured questions. Descriptive statistics, which includes the mean score, standard deviation and frequency distribution, enabled the researcher to meaningfully describe the distribution of measurement. Regression analysis was used for evaluating the multiple independent variables under investigation; correlation model was also used by use of Pearson Product Moment correlation coefficient where the magnitude of the correlation coefficient indicates the strength of the association of the variables under study. Tests were conducted at 95% confidence level. The regression took the following form:

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

Where: Y = Public procurement performance,  $X_1$  = Staff competency,  $X_2$  = Top management support,  $X_3$  = E-procurement,  $X_4$  = Procurement planning,  $e$  = Error term and  $\alpha$  = constant and  $\beta$  = coefficient of independent variables

### Demographic Characteristics

This section analyzes the demographic characteristics of the respondents in terms of their gender, age bracket, educational background and the work experience.

#### Gender Composition of Respondents

Results in Figure 2 reveal that a majority of the respondents, 57% were male while 43% were female. The results implied that Ministry of Devolution and Planning had more male employees than female employees. It was male dominated. In addition, the gender distribution was above the Constitutional of Kenya (2010) threshold of a third, however this did not affect the results of the study. This implies that Ministry of Devolution and Planning adhere to the constitutional requirement of gender requirement.

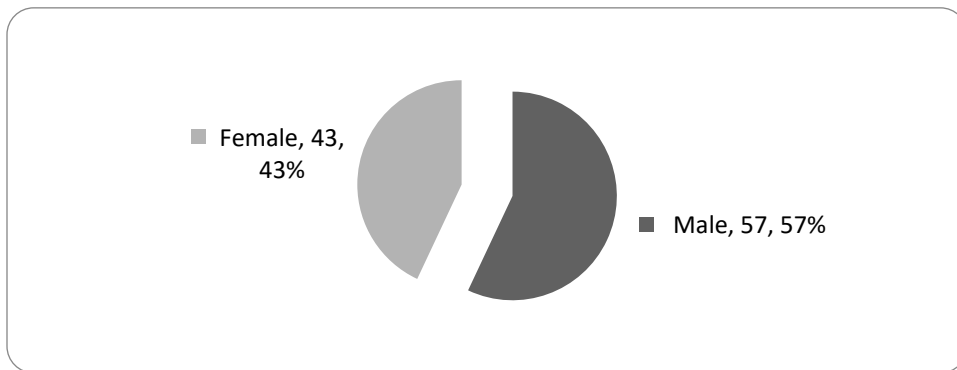
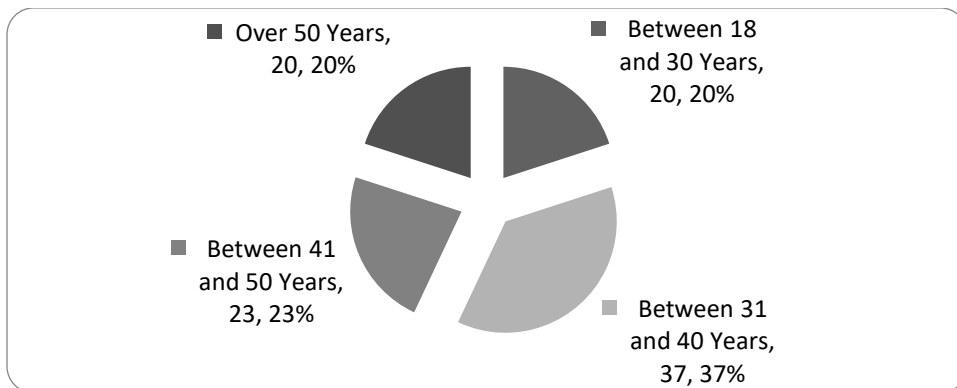


Figure 2: Gender Composition of Respondents

#### Age bracket of Respondents

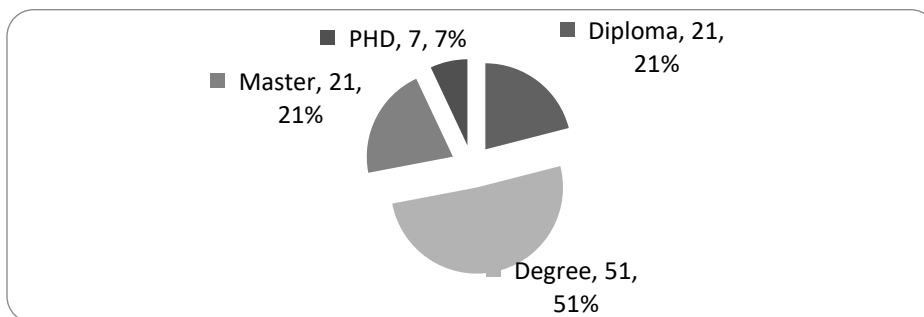
Results in Figure 3 reveal that majority, 37%, of the respondents were aged between 31 and 40 years, 23% were aged between 41 and 50 years while those aged between 18 and 30 years were 20%. This implies that majority of the employees in the Ministry of Devolution and Planning were over 30 years of age and this show that most of the employees have been able to acquire the required academic qualifications and experience.



**Figure 3: Age bracket of Respondents**

### Educational background of Respondents

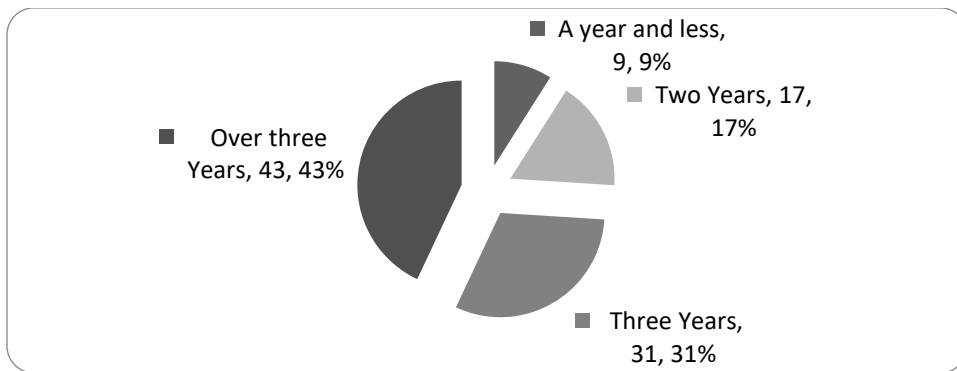
Results in Figure 4 reveal that 51% of the respondents had a University degree, 21% had a Masters degree and 28% had a diploma and PHD. This implies that majority of employees in the Ministry of Devolution and Planning are literate. This indicates that the participants in the study had high understanding and knowledge on the issue pertaining their discipline.



**Figure 4: Educational background of the respondents**

### Work experience

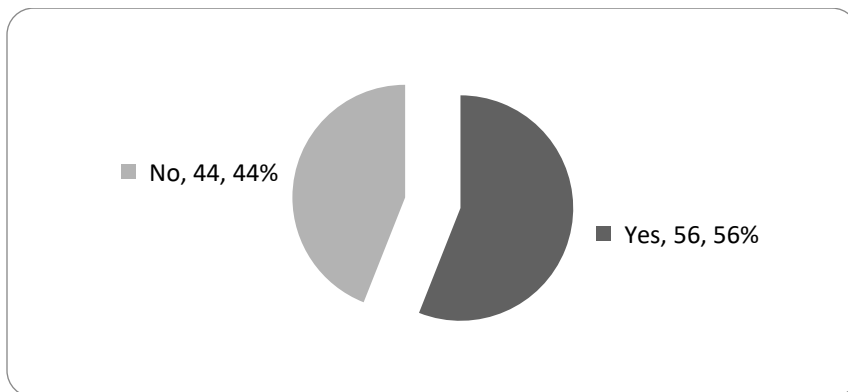
Results in Figure 5 reveal that majority, 43% of the respondents had worked in their departments for over three years, 31% had worked for three years in their departments while 26% had worked in their departments for a period less than two years. Having a low percentage number of respondents who have worked in the company for less than a year implies that there is a moderately low turnover in the industry. Furthermore, the findings mean that very few people work in the Ministry beyond the third year as only 43% had worked for over 3 years. The findings agree with the argument by George & Jones (1996) and Flanagan (1974) that labor experience in a company leads to low turnover.



**Figure 5: Work experience**

### Staff Competency

The first objective of the study was to determine how staff competency influence effective public procurement performance at the Ministry of Devolution and Planning in Kenya. The respondents were asked to indicate whether the staffs were competent in carrying out procurement at the ministry. The results are as indicated in Figure 6.



**Figure 6: Staff competency**

The findings indicated that 56% of the respondents agreed that the staffs were competent in carrying out procurement at the ministry. 44% disagreed that the staff are competent. According to Gallagher (2007), IFMIS implementation involves considerable human resources requirements and capacity building needs throughout the entire ministry. The low level of computer literacy in developing countries must first be adequately addressed before such projects can be truly viable. Implementation of proper strategies geared towards improving public performance won't be successful without capacity.



Based on these findings, incompetence rate of 44% implies that there is still lack of enough capacity to spearhead implementation of E-procurement in order to foster better procurement performance.

### **Descriptive analysis of Staff competency**

The respondents were requested to indicate their agreement or disagreement with statements concerning staff competency. The statements were on a scale of 1 to 5 where 1 was strongly disagree, 2 was disagree, 3 was neutral, 4 was agree and 5 was strongly agree. The results are as presented in Table 1.

**Table 1: Staff Competency**

<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Mean</b>	<b>Std Dev</b>
The staff have the required academic qualifications	16.70%	17.90%	19.20%	20.50%	25.60%	3.21	1.44
The staff have the required professional competency and experience	20.50%	15.40%	23.10%	20.50%	20.50%	3.05	1.42
The staffs respond well to changes in job requirements	14.10%	11.50%	32.10%	20.50%	21.80%	3.24	1.31
The staff have been trained on operation flexibility regarding IFMIS system	9.00%	3.80%	28.20%	25.60%	33.30%	3.92	1.08
The staff have the required knowledge on procurement circulars	10.30%	2.60%	12.80%	19.20%	55.10%	4.06	1.31
<b>Average</b>						<b>3.50</b>	<b>1.31</b>

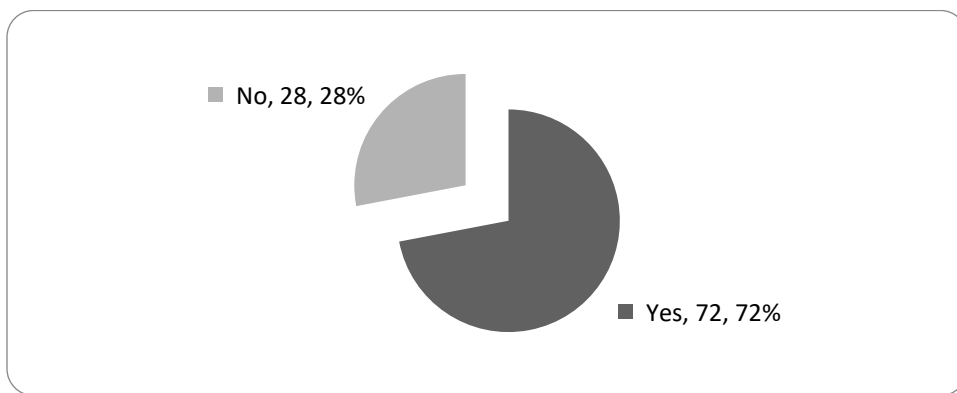
The results indicate that 46.1% of the respondents agree that the staff have the required academic qualifications, 41.0% agree that the staff have the required professional competency and experience while 42.3% agree that the staffs respond well to changes in job requirements. Those who agreed that the staff have been trained on operation flexibility regarding IFMIS system were 58.9% and those who agreed that the staff have the required knowledge on procurement circulars were 74.3%. The overall mean score of 3.5 indicated that majority of the respondents agreed on statements on staff competency while a standard deviation of 1.31 indicated a small variation in the responses.

The findings agree with an argument by Nzambu (2015) that staff requires necessary skills and experience to carry out procurements effectively and that the staff competencies influence procurement performance to a large extent. The findings also agree with Lysons and Dillingham, (2003) who indicated that procurement personnel should be knowledgeable about specifications so as to be able to secure value for money. Furthermore, knowledgeable, dependable and versatile employees have the ability to overcome the obstacles to change, and can meet performance goals even when other resources are scarce.

Gallagher (2007) also argued that the use of electronic systems regarding procurement for instance IFMIS system requires great technical knowhow because of the complexities involved with it and the staff needs to be trained on how to properly use it. If there is low technical knowhow, implementation of the programme will be low and procurement performance will adversely be affected (Gallagher, 2007).

### Top Management Support

The second objective of the study was to establish the influence of top management support on effective public procurement performance at the Ministry of Devolution and Planning in Kenya. The respondents were asked to indicate whether the top management offers the required support in improving procurement performance. The results are as indicated in Figure 7.



**Figure 7: Top Management Support**

The findings indicated that 72% of the respondents agreed that the top management offers the required support in improving procurement performance. 28% disagreed with the statement. Miller & Wilson (2004) argues that the success rate of the implementation of any project relies heavily on the commitment of the organization. The best designed project will fail without firm commitment. It is therefore important to adequately assess commitment to reform. Based on this, and the fact that majority, 72% agreed that the top management offers help, then the performance of procurement is likely to improve in the near future.

### Descriptive analysis of Top Management Support

The respondents were requested to indicate their agreement or disagreement with statements concerning top management support. The statements were on a scale of 1 to 5 where 1 was strongly disagree, 2 was disagree, 3 was neutral, 4 was agree and 5 was strongly agree. The results are as presented in Table 2.

**Table 2: Top Management Support**

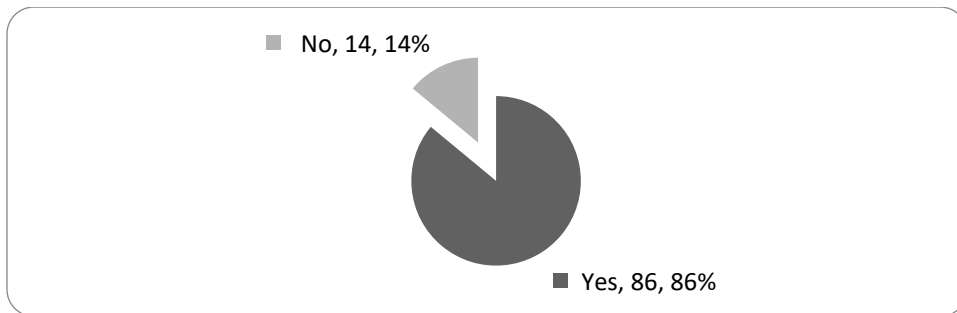
Statement	1	2	3	4	5	Mean	Std Dev
There is balanced responsibility allocation by the top management	16.70%	16.70%	29.50%	23.10%	14.10%	3.01	1.28
The top management financially supports adoption of e-procurement	15.40%	14.10%	16.70%	25.60%	28.20%	3.37	1.42
There is commitment toward better procurement performance	5.10%	9.00%	23.10%	33.30%	29.50%	3.73	1.14
The top management supports coordination of activities regarding procurement procedures	7.70%	9.00%	15.40%	20.50%	47.40%	3.91	1.30
The top management spearheads adherence to procurement regulations	7.70%	9.00%	15.40%	20.50%	47.40%	3.91	1.30
Average						3.59	1.29

The study findings indicated that only 37.2% of the respondents agreed that there is balanced responsibility allocation by the top management, 53.8% on the other hand agreed that the top management financially supports adoption of e-procurement while 62.8% agreed that there is commitment toward better procurement performance. Those who agreed that the top management supports coordination of activities regarding procurement procedures as well as spearheading adherence to procurement regulations were 67.9%.

The overall mean score of 3.59 implies that majority of the respondents agreed with the statements on top management. The standard deviation of 1.29 indicated that there was a small variation in the responses on statements concerning top management support. Nzambu (2015) argued that top management plays important roles in ensuring that the staffs employed are competent, resources allocations are available, budgets are prepared and adhered to, and staffs are taken to training to increase their knowledge and skills. This support from the management leads to successful implementation of projects.

### **E-procurement technology**

The third objective of the study was to evaluate the influence of E-procurement technology on effective public procurement performance at the Ministry of Devolution and Planning in Kenya. The respondents were asked to indicate whether the management had implemented functional E-procurement technology. The results are as indicated in Figure 8.



**Figure 8: E-procurement technology**

The findings indicated that 86% of the respondents agreed that the management has implemented functional E-procurement technology while only 14% indicated that the management has not implemented functional E-procurement technology. The findings support the argument by Mambo (2015) a number of organizations in Kenya have successfully adopted the use of e-procurement technology. The finding also indicates that E-procurement has been implemented in line with the report on e-government strategy paper (2004) that e-procurement was one of the medium term objectives which were to be implemented by June 2007 (Malela, 2012).

### **Descriptive analysis of E-procurement technology**

The respondents were requested to indicate their agreement or disagreement with statements concerning E-procurement technology. The statements were on a scale of 1 to 5 where 1 was strongly disagree, 2 was disagree, 3 was neutral, 4 was agree and 5 was strongly agree. The results are as presented in Table 3.

**Table 3: E-procurement technology**

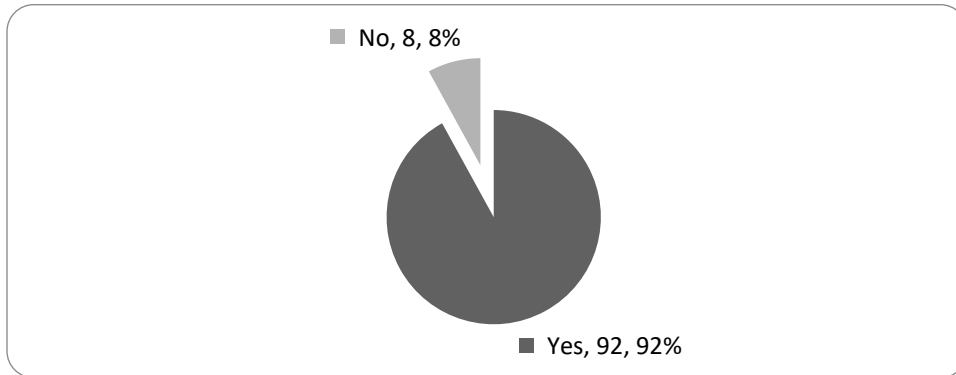
Statement	1	2	3	4	5	Mean	Std Dev
The available computers are enough to support IFMIS system	20.50%	12.80%	24.40%	19.20%	23.10%	3.12	1.44
There is a fully functioning and strong network system to support IFMIS system	6.40%	5.10%	10.30%	16.70%	61.50%	4.22	1.21
There are enough IT experts	1.30%	3.80%	19.20%	28.20%	47.40%	4.17	0.96
There are necessary counter mechanisms to handle issues related to information security risk	17.90%	17.90%	32.10%	20.50%	11.50%	2.90	1.25
There are enough strategies to incorporate rapid technology changes in operation of IFMIS systems	17.90%	9.00%	26.90%	24.40%	21.80%	3.23	1.38
Average						3.53	1.25

The study findings on the statements on E-procurement indicated that 42.3% of the respondents revealed that the available computers are enough to support IFMIS system, majority of them, 78.2%, agreed that there is a fully functioning and strong network system to support IFMIS system and 75.6% agreed that there is enough IT experts. Furthermore, 32.1% agreed that there are necessary counter mechanisms to handle issues related to information security risk and 46.2% on the other hand agreed that there are enough strategies to incorporate rapid technology changes in operation of IFMIS systems. The rating of the statements on E-procurement had an overall mean rating of 3.53 which indicated that majority of the respondents on average agreed on the statements. The findings also indicated a small variation in the responses as indicated by a standard deviation of 1.25.

The findings of the study agree with the findings of a study by Mutui (2014) conducted on the effects of the implementation of integrated financial management information system on procurement performance of the Kenyan Government Ministries and found out that there is a moderate extent of IFMIS implementation among the government ministries in Kenya. The study findings also agree with the findings of a study by Hawking, Stein, Wyld and Forster (2004) that the factors affecting e-procurement implementation were inadequate technical infrastructure, lack of skilled personnel, inadequate technological infrastructure of business partners, inadequate e-procurement solutions and upper management support.

## Procurement planning

The fourth objective of the study was to determine the influence of procurement planning on effective public procurement performance at the Ministry of Devolution and Planning in Kenya. The respondents were asked to indicate whether planning was done before procurement. The results are as indicated in Figure 9.



**Figure 9: Procurement planning**

The findings indicated that 92% of the respondents agreed that there is planning before procuring while only 8% indicated that planning is not done. This findings agree with Manyara (2006) that procurement planning preparation of procurement plan is very important to many organizations and it needs close cooperation between PMU, user departments and management in general as it acts as a road map to procurement of the organization which later assures the availability of goods and services for continuous operations hence achieve the targeted goals.

## Descriptive analysis of procurement planning

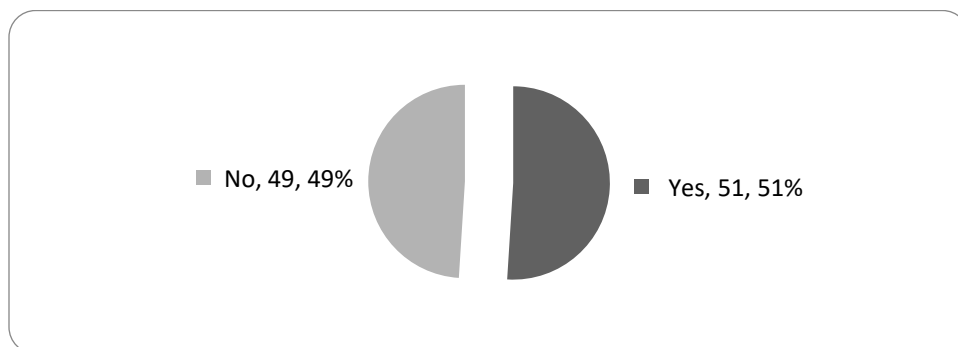
The respondents were requested to indicate their agreement or disagreement with statements concerning procurement planning. The statements were on a scale of 1 to 5 where 1 was strongly disagree, 2 was disagree, 3 was neutral, 4 was agree and 5 was strongly agree. The results are as presented in Table 4. The findings on procurement planning indicated that 50.0% of the respondents indicated that proper need identification is conducted before procuring at the Ministry of Devolution and Planning; only 23.1% agreed that there is participatory planning during the procurement process and majority of the respondents, 83.3%, agreed that there is compliance to procurement plans during procurement process. On the other hand, 42.3% indicated that there is timely planning of procurement process and majority of the respondents, 67.9%, agreed that the key departments such as accounts work in harmony during procurement planning. The study findings also revealed an average mean score of 3.68 which indicated that majority of the respondents agreed with the statements on procurement planning. There was a small variation in the responses regarding procurement planning as indicated by a standard deviation of 1.33. These study findings agree with the findings of a study by Mamiro (2010) which found out that one of the major setbacks in public procurement is poor procurement planning and management of the procurement process which include needs that are not well identified and estimated, unrealistic budgets and inadequacy of skills of procurement staff responsible for procurement.

**Table 4: Procurement planning**

Statement	1	2	3	4	5	Mean	Std Dev
Proper need identification is conducted before procuring	14.10%	21.80%	14.10%	25.60%	24.40%	3.24	1.41
There is participatory planning during the procurement process	11.50%	17.90%	11.50%	20.50%	38.50%	3.97	1.40
There is compliance to procurement plans during procurement process	0.00%	3.80%	12.80%	24.40%	59.00%	4.38	0.86
There is timely planning of procurement process	30.80%	6.40%	20.50%	7.70%	34.60%	3.09	1.67
The key departments such as accounts work in harmony during procurement planning	12.80%	3.80%	15.40%	34.60%	33.30%	3.72	1.32
<b>Average</b>						<b>3.68</b>	<b>1.33</b>

**Procurement performance**

The respondents were asked to indicate their thoughts on whether enough has been done to improve procurement performance. The results are as indicated in Figure 10.



**Figure 10: Procurement performance**

The findings indicated that 51% of the respondents agreed that the management has done enough to improve procurement performance while 49% indicated otherwise.

### Descriptive analysis of procurement performance

The respondents were requested to indicate their agreement or disagreement with statements concerning procurement performance. The statements were on a scale of 1 to 5 where 1 was strongly disagree, 2 was disagree, 3 was neutral, 4 was agree and 5 was strongly agree. The results are as presented in Table 5.

**Table 5: Procurement performance**

Statement	1	2	3	4	5	Mean	Std Dev
There is transparency in procurement process	3.80%	1.30%	15.40%	30.80%	48.70%	4.19	1.01
There is accountability in procurement process	3.80%	3.80%	10.30%	33.30%	48.70%	4.19	1.03
The procurement process is effective	0.00%	3.80%	12.80%	24.40%	59.00%	4.38	0.86
The procuring process takes a shorter time	12.80%	3.80%	15.40%	34.60%	33.30%	3.72	1.32
Less administrative costs is used during procuring	12.80%	3.80%	15.40%	34.60%	33.30%	3.72	1.32
<b>Average</b>						<b>4.04</b>	<b>1.11</b>

The results indicate that majority of the respondents, 79.5%, agreed that there is transparency in procurement process, 82.1% agreed that there is accountability in procurement process while 83.3% agreed that the procurement process is effective. Further findings indicated that 67.9% of the respondents agreed that the procuring process takes a shorter time as well as that there is less administrative costs used during procuring. The average mean score of 4.04 revealed that the respondents agreed on most statements on procurement performance. The standard deviation of 1.11 indicated a small variation in the responses.

### Inferential analysis

The study conducted inferential analysis to establish the association and relationship between the study variables. Both Pearson correlation and ordinary least square regression analysis were conducted.

### Correlation analysis

Correlation analysis was conducted to establish the association between the study variables. A correlation matrix was used to indicate the correlation coefficients. Multicollinearity was also tested. The results for correlation analysis are as presented in Table 6. The findings of the study indicates that staff competency was



positively and significantly associated with procurement performance ( $R=0.567$ ,  $P\text{-Value} = 0.000$ ). This implied that the higher the staff competency, the better the procurement performance. The findings agree with the findings of a study by Okinyi and Muturi (2016) conducted on factors affecting efficiency of procurement in public institutions in Homabay County and found out that academic qualifications and experience greatly influence the efficiency of procurement process in public institution. The findings also agree with an argument by Watad & Ospina (2009) that when the organization invests in improving the knowledge and skills of the employees, the investment is returned in the form of more productive and effective employees which improves the overall performance of the organization. The findings also indicate that E-procurement technology is positively and significantly associated with procurement performance ( $R=0.516$ ,  $P\text{-Value}= 0.000$ ). These findings imply that the use of E-procurement is associated with better procurement performance. The findings agree with an argument by Acher (2005) that E- Procurement makes transactions to be standardized and all bids for products and services to be tracked more easily, allowing business owners to use such knowledge to obtain better pricing. Due to faster exchanges of information and delivery of goods and services, e- procurement also promotes shorter product- development cycles thus improving procurement performance.

**Table 6: Correlation analysis**

		<b>Staff Competency</b>	<b>E-procurement technology</b>	<b>Top management support</b>	<b>Procurement planning</b>
Staff Competency	Pearson Correlation Sig. (2-tailed)				
E-procurement technology	Pearson Correlation Sig. (2-tailed)	.536*			
Top management support	Pearson Correlation Sig. (2-tailed)	.531*	.606*		
Procurement planning	Pearson Correlation Sig. (2-tailed)	0.028	0.124	.245*	
Procurement performance	Pearson Correlation Sig. (2-tailed)	.567*	.516*	.581*	.364*

\* Correlation is significant at the 0.05 level (2-tailed).

The findings also agree with Kakwezi and Nyeko (2010) who argue that due to lack of E-procurement adoption, procurement performance in Uganda is poor because of the problem of not having enough information about the procurement procedure, its inputs, outputs, resource consumption and results, and therefore in ability to determine their efficiency and effectiveness. It was also found that top management support was positively and significantly associated with procurement performance ( $R=0.581$ ,  $P\text{-Value} = 0.000$ ). This implied that the higher the top management support the better the procurement performance. The findings of the study agree with the findings of a study by Ngari (2012) which concluded that that the top management support adherence to procurement regulations improves procurement performance in terms of competitiveness, quality of goods and services delivered. The findings further indicated that procurement planning is positively and significantly associated with procurement performance ( $R=0.364$ ,  $P\text{-Value} = 0.001$ ). This implies that

practicing procurement planning is associated with better procurement performance. This is in line with Mbae (2014) who argued that among the major setbacks in public procurement is poor procurement planning and management of the procurement process. Generally, the findings indicated that there is no Multicollinearity between the study variables because there was no Pearson coefficient greater than 0.7. William (2004) indicates that a Multicollinearity value greater than 0.7 indicates presence of Multicollinearity. This implies that conducting a regression analysis would not give spurious results and hence an ordinary least square regression model was conducted.

### Regression analysis

The general objective of the study was to establish the factors influencing effective public procurement performance at the Ministry of Devolution and Planning in Kenya. The study used an ordinary least square regression model to achieve this. The results for the model summary are presented in Table 7.

**Table 7: Model Summary**

<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>	<b>F</b>	<b>Sig.</b>
0.718	0.515	0.489	0.5548	9.974	0.000

The study findings in Table 7 indicate that the four factors (top management support, E-procurement technology, procurement, staff competency) explain 51.5% of the changes in procurement performance as indicated by an R square of 0.515. The findings also indicate that the four factors are jointly positively associated with procurement performance as indicated by an R of 0.718. Furthermore, the findings indicated that the F statistic was significant at 5% level of significance ( $F= 19.392$ ,  $p=0.000$ ) implying that the model fit well. Regression of coefficients results in Table 8 shows that staff competency and procurement performance were positively and significantly related ( $B=0.251$ ,  $p=0.001$ ). The findings imply that the higher the staff competency the better procurement performance. A unit change in staff competency would lead to a 0.251 units change in procurement performance. The results further indicate that structure of E-procurement technology is positively but insignificantly related to procurement performance ( $B=0.148$ ,  $p=0.170$ ). The study findings agree with findings of a study by Mauki (2014) that staff competence influenced implementation of Public Procurement and disposal Act at Kenyan Judiciary and ultimately procurement performance.

The findings are also in line with Hardy and Williams (2011) that adopting an efficient public procurement system cannot be understated as it improves procurement performance, the performance of the procuring entity and helps policy makers to understand how various policy goals interact and how policy impacts on the overall performance of the procurement system. It was further established that top management support and procurement performance were positively and significantly related ( $B=0.178$ ,  $p=0.039$ ) while procurement planning and procurement performance were also positively and significantly related ( $B=0.336$ ,  $p=0.002$ ).

This shows that a unit change in top management support as well as procurement planning leads to a 0.178 and 0.336 unit change in procurement performance respectively. The findings agree with the argument by Miller & Wilson (2004) that the success rate of the implementation of any project relies heavily on the commitment of

the organization. The best designed project will fail without firm commitment. It is therefore important to adequately assess commitment to reform. The findings also agree with the findings of a study by Manyara (2006) which concluded that procurement planning preparation of procurement plan is very important to many organizations and it needs close cooperation between PMU, user departments and management in general as it acts as a road map to procurement of the organization which later assures the availability of goods and services for continuous operations hence achieve the targeted goals. Furthermore, the findings agree with the findings of a study by Okinyi and Muturi (2016) conducted on factors affecting efficiency of procurement in public institutions in Homabay County and found out that ICT and procurement planning process greatly influence the efficiency of procurement process in public institution. Proper ICT integration, proper planning and contract management process accompanied by right qualification will improve the efficiency and effectiveness of public procurement and enhance customer service delivery in procurement departments in public institution.

**Table 8: Model Coefficients**

---

<b>Indicator</b>	<b>B</b>	<b>Std. Error</b>	<b>t</b>	<b>Sig.</b>
(Constant)	0.953	0.42	2.267	0.026
Staff Competency	0.251	0.072	3.47	0.001
E-Procurement technology	0.148	0.107	1.387	0.170
Top Management Support	0.178	0.084	2.107	0.039
Procurement Planning	0.336	0.102	3.279	0.002

---

## **Conclusions**

Based on the study findings, the study concluded that staff competency was positively and significantly associated with procurement performance implying that the higher the staff competency, the better the procurement support. Furthermore, staff competency and procurement performance are positively and significantly related. The study also concluded that top management support is positively and significantly associated with procurement performance. The study also concluded that top management support and procurement performance are positively and significantly related. Based on the study findings, it was concluded that E-procurement technology is positively and significantly associated with procurement performance. Furthermore, E-procurement technology is positively but insignificantly related to procurement performance. Furthermore, it was concluded that procurement planning is positively and significantly associated with procurement performance. The relationship between procurement planning and procurement performance is positive and significant.

## **Recommendations of the Study**

The study recommendations are in line with the objectives, findings and conclusions of the study. The study recommends that the Ministry of Devolution and Planning should put in place measures to improve staff competency. Some of the practices to improve staff competency should include conducting trainings,

workshops and seminars that aim to improve the staff skills on operation flexibility regarding IFMIS system. This is because higher staff competency improves procurement performance. The study also recommends that Ministry of Devolution and Planning should encourage the top management to support implementation of procurement processes since top management support leads to better procurement performance. The top management should ensure that there is a balanced responsibility allocation, there is financial support for adoption of e-procurement and that there is support of activities regarding procurement procedures as well as spearheading adherence to procurement regulations.

The study also recommends that the Ministry of Devolution and Planning should ensure the use of e-procurement technology since it leads to better procurement performance. The Ministry of Devolution and Planning should increase the number of available computers to support IFMIS system, ensure a fully functioning and strong network system to support IFMIS system and also ensure the availability of enough IT experts. Another recommendation is that the Ministry of Devolution and Planning should ensure proper procurement planning before procuring goods since procurement planning leads to better procurement performance. The Ministry of Devolution and Planning should conduct proper need identification before procuring there should be timely planning of procurement process and key departments such as accounts should work in harmony with the procurement departments during procurement planning.

### **Conflict of Interest**

No potential conflict of interest was reported by the authors.

### **References**

- Archer, N. (2005). An Overview of the Change Management Process in e-Government. *International Journal of Electronic Business*, 3(1), 68–87.
- Carayannis, E.G, &Popescu, D. (2005) Profiling a methodology for economic growth convergence: learning from the EU e-procurement experience for central and eastern European Countries. *Technovation*, 25, 1-14.
- Croom, S., & Brandom-Jones, A. (2005). Key issues in e-procurement: procurement implementation & operation in the public sector. *Journal of Public Procurement*, 5, 367-87
- Gallagher, M.C. (2007) Building Fiscal Infrastructure in Post-Conflict Societies, funded by USAID under Contract GEG-I-06-04-00001-00 Task Order No. 06.
- Geenjali U. (2011), ICT Application in service delivery: A case of Inland Revenue department, Nepal, *Master's thesis, North South University, Bangladesh*
- Hardy, C. &Williams, S. (2011). Assembling E-Government Research Designs: A Transdisciplinary View and Interactive Approach. *Public Administration Review*, 71(3)
- Kakwezi, P. and Nyeko, S, (2013). *Procurement Process and Performance: Efficiency and Effectiveness in the Procurement Process*. Makerere University: Uganda.
- Lysons Kenneth (2006). *Purchasing and Supplies Chain Management*. (Seventh Edition)
- Mamiro, R. G. (2010). Value for Money, the Limping Pillar in Public Procurement. *Tanzania Procurement Journal*, 4 -5.

- Mbaya, P. M. (2013). *Factors influencing compliance with the public procurement legislation in Kenya* (Unpublished MBA, University of Nairobi).
- Miller, S., Wilson, D., and Hickson, D. (2004), *Beyond planning strategies for successfully implementing strategic decisions*, Long Range Planning, Vol. 37 No.1, pp.201-18.
- Mutui, M.F. (2014). *Integrated Financial Management Information System on Procurement Performance of the Public Sector*. Unpublished MBA project, University of Nairobi.
- Ngari, M.K. (2012). *Effects of Public Procurement and Disposal Act on Procurement in Parastatals in Kenya*. Unpublished MBA Project, University of Nairobi.
- Njiraini et al (2006)
- Nzambu, J. M. (2015). *Determinants of procurement performance in county governments: The case of ministry of health and emergency services, Machakos, Kenya* (Doctoral dissertation, University of Nairobi).
- Okinyi, T. O., & Muturi, W.(2016).Factors affecting efficiency of procurement in public institutions: a case of public entities in Homabay county.
- Panayiotou, N., Gayialis, S., &Tatsiopoules, I. (2004). An e-procurement system for government purchasing. *International Journal of Production Economics*, 90, 79-102.
- Watad, M. & Ospina, S. (2009). Integrated managerial training: A program for strategic management development. *Public Personnel Management*, 28 (2), 185-197.