



**FACTORS INFLUENCING PUBLIC PROCUREMENT LEGAL FRAMEWORK IMPLEMENTATION IN NAIROBI CITY COUNTY**

**Ndongu, P. K., & Miroga, J.**

---

**FACTORS INFLUENCING PUBLIC PROCUREMENT LEGAL FRAMEWORK IMPLEMENTATION IN NAIROBI CITY COUNTY**

**Ndongu, P. K.,<sup>1\*</sup> & Miroga, J.<sup>2</sup>**

<sup>1\*</sup>Msc. Candidate, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya

<sup>2</sup> Ph.D, Lecturer, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya

**Accepted: October 7, 2019**

---

**ABSTRACT**

*This study found out the factors influencing public procurement legal framework implementation. A case study of The Nairobi County Government. Specifically, the study assessed whether top management support, procurement proficiency, technological advancement and procurement ethics influence the public procurement legal framework implementation in Nairobi City County. This research was informed by institutional theory, resource based theory, selection theory and stakeholders' theory that had their roots in Procurement and supply chain management. The target population was 202 stakeholders derived from all levels of management that included the top management, the middle level management and lower level management. Data sources used both secondary and primary using clear developed questionnaires and checklists to collect data on study variables. The data was analysed using descriptive, correlation and regression techniques to facilitate discussions and writing of the study results and conclusions. The study used convenience sampling to sample the unit of observation. Descriptive statistics including frequencies, percentages, means and standard deviations was used to capture the characteristics of the variables and inferential statistics (correlation and regression analysis) were used to analyze the relationships between the dependent and the independent variables. Results were presented using tables. The response rate of the study was 81%. The findings of the study indicated that procurement proficiency, technological advancement, procurement ethics and top management support have a positive relationship with Public Procurement legal framework implementation. Finally, the study recommended that Public entity should adopt procurement proficiency, technological advancement, procurement ethics and top management to improve Public Procurement legal framework implementation and further researches should to be carried out in other procuring entities to find out if the same results can be obtained.*

**Key Words:** *Top Management Support, Procurement Proficiency, Technological Advancement, Procurement Ethics*

---

**CITATION:** Ndongu, P. K., & Miroga, J. (2019). Factors influencing public procurement legal framework implementation in Nairobi City County. *The Strategic Journal of Business & Change Management*, 6 (4), 317 – 334.

---

## INTRODUCTION

Public procurement generally is the acquisition by governments of various goods, services or works from either private business or state owned enterprises (SOEs). Governments all over the world procure goods, services and works amounting to billions of dollars every year aimed at providing services to the citizens. The worldwide public procurement market is estimated at approximately US\$ 9.5 trillion each year (World Bank, 2017). Of this developing countries spend an estimated \$ 820 billion a year worth of citizens funds, about 50 percent or more of total government expenditure. The World Bank (2017) estimates that generally government procurement average as much as 16% to 33% of Gross Domestic Product (GDP) in different countries. Government procurements therefore not only provide essential services to citizens but create significant opportunities to businesses and spur economic growth in countries.

According to Odhiambo and Kamau (2003) Tanzania has been the only country since 2001 in East Africa to have an Act of Parliament for Public Procurement. The Act establishes the following key institutions: the Central Tender Board; the Ministerial/ Independent Departments Tender Boards; the Regional Tender Boards; the District Tender Boards; the Local Government Authority Tender Boards; the Parastatal Tender Boards; and, the Public Procurements Appeal Authority.

The public procurement system has evolved into different forms from independence. Kenya's public procurements immediately after independence were conducted by the colonialist's Crown Agents, the British Empire's business outfit operating in various colonies in Africa at the time. This continued until the early 1970s when the country developed the Procurement Manual, the first formal procurement document that would form the basis for regulating public procurement by government ministries, departments and state corporations. In the year

2001 within the premises of the Exchequer and Audit Act, the Ministry of Finance established the Public Procurement Regulations which was the starting phase when public procurement in Kenya were regulated through legislations. In 2005 the country enacted for the first time a specific Act of Parliament on matters of procurement and disposal called the Public Procurement and Disposal Act, 2005. This Act was repealed in January 2016 through the Public Procurement and Asset Disposal Act, 2015 which forms the basis of regulating procurement, disposals and inventory management by all public entities in the country at the moment (2019).

Nairobi County is one of the 47 counties in Kenya that were created after the promulgation of the Kenyan constitution 2010. It is the smallest yet the most populous of the counties with an estimated population of about 4 million people (census report, 2009). Nairobi County also doubles up as the Capital City of Kenya. The county's primary goal is to make Nairobi the premier destination to work, live and investments. To realise this objective, the county government intends to offer accessible, sustainable, and affordable services as well as provide an enabling environment for economic and community development. The county faces a myriad of problems including overpopulation, poor sanitation, poor housing, traffic congestion, inadequate clean water, corruption and poor garbage disposal services.

### Statement of the Problem

The problems the city faces such as uncollected garbage, lack of drugs in the county's hospitals, pot-holes in most of the city's roads, amongst many other problems all point to implications on the efficiency of the procurement function in the county (Garvin, 2017). Such problems may be caused by weaknesses in procurement planning, ineffective absorption of funds, unnecessary delays in the procurement processes, inflated cost estimates of items and generally corruption. A well working and efficient procurement system is not determined necessarily by

availability of finances but the competence of those involved in the procurement functions in making appropriate decisions on various aspects of procurement and supply chain – for instance, do we procure or do it ourselves? Do we use a public private partnership or do we go for a loan? What items are priorities? All these are procurement decisions.

High risk exposure, poor understanding and ignorance about benefits of a standard public procurement procedure, high cost of procurement due to corruption, and low knowledge about rights to tenders from the government institutions by the public especially the youth and women are some of the hurdles in the public service procurement in Kenya (Njenga, 2011), maximization of benefits and reduction of costs in this sector is very important since it contributes to stability of all the other sectors of the economy. Procurement in Kenya has attracted great attention from practitioners, academicians and researchers due to poor levels of performance (Njogu, & Gichinga, 2016). Most of the studies on procurement have focused on the effect of procurement process in companies. Nyagah, and Mugambi (2014) sought to evaluate the effects of the PPDA on effective project implementation in public entities in Kenya. Kisauni Constituency Development Fund (CDF) was taken as the case study. Mbae (2014) investigated the impact of public procurement law on the performance of Machakos county government. Ayoyi, and Mukoswa (2015) conducted a study on ethical issues in public procurement in Kenya. Mukura, Shalee, Kanda, Ngatia (2016) investigate the role of PPOA on procurement regulations in Kenyan state corporations. Telles (2012) conducted a study on low value procurement and transparency. Ngugi and Mugo (2007) examined impact of procurement activities on the operation and effectiveness of public sectors in Kenya. Onyinkwa (2014) conducted a study factors influencing compliance to procurement regulations in public secondary schools in Kenya.

This study observed knowledge gaps in the previous studies that were done on the subject matter in different parts of the country including the Nairobi county and the prosecutions on corruption scandals by government agencies. First, there was no single specific study that had been done to investigate whether procurements at the county achieved the outcomes of right time and right price which were specific objectives of this study. These are two critical outcomes of the procurement processes that must be achieved for the transactions to provide value for money. Second, the prosecutions were more oriented in punishing offenders than devising ways of getting lasting remedies to the scourge of inefficiencies, unethical behaviours and corruption in procurement. This study's results seek to address this latter concern.

### **Study Objective**

Generally, the study sought to investigate the factors influencing public procurement legal framework implementation in Nairobi City County. The specific objectives were;

- To determine the influence of Procurement Proficiency on public procurement legal framework implementation in Nairobi County.
- To establish the influence of Technological advancement on public procurement legal framework implementation in Nairobi County.
- To determine the influence of Procurement Ethics on public procurement legal framework implementation in Nairobi County
- To establishes the influence of Top Management Support on public procurement legal framework implementation in Nairobi County

## **LITERATURE REVIEW**

### **Institutional theory**

Experts have taken an institutional perspective on the adoption of sustainable purchasing practices. A fundamental premise of institutional theory is that it explains why companies often adopt similar

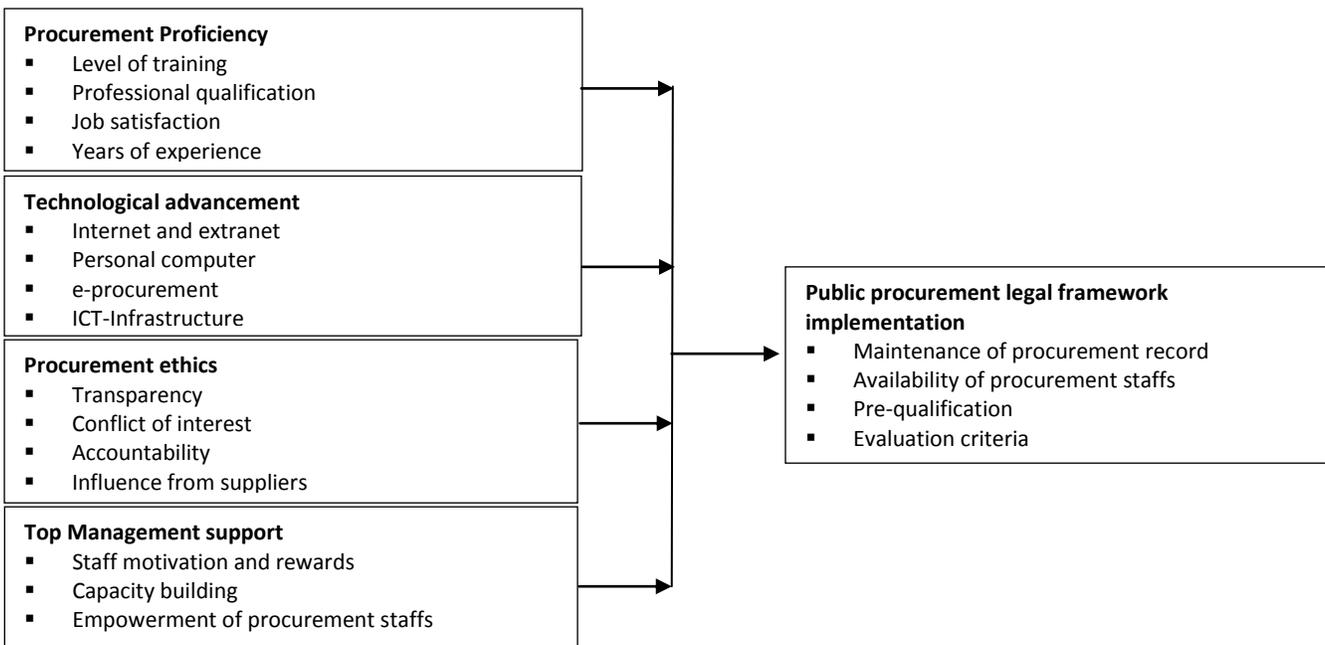
responses and practices. The majority of these papers see the institutional view as a way of explaining the drivers for sustainability responses, assuming for the most part that supply chain level actions are the result of external pressure of a coercive, normative or mimetic (cognitive) nature (Carbone & Moatti 2011, Shi et al., 2012, Adebajo et al., 2013, Hsu et al., 2013, Lee et al., 2013). While it is clearly important to have an understanding of what drives firms to act, it seems this focus on drivers is part of the developmental part of the sub-field.

**Resource-Based Theory**

The resource-based view (RBV) proposes that the basis for firm level competitive advantage lies in the application of bundles of valuable resources at the firm’s disposal (Wernerfelt, 1984). The RBV stipulates four different criteria to evaluate whether these resources constitute sustained competitive advantage: Valuable, Rare, In-imitable and Non-substitutable or ‘VRIN’ (Barney 1991, Peteraf 1993). The basic assumptions of the RBV focus on firm resource heterogeneity and immobility.

**Stakeholders Theory**

Stakeholder Theory (ST) has been described in the past as a ‘handmaiden’ approach since it is often used to support the elaboration of other theories such as RBV and Institution, but rarely becomes the focus of development on its own. It is not until Freeman (1984) integrates stakeholder concepts into a coherent construct that the role of stakeholders (i.e. consumers, producers, suppliers) moves closer to the forefront of academic attention. ST has initially centred on defining the stakeholder concept and classifying stakeholders into categories that provide an understanding of stakeholder relationships. Three approaches are adopted in the literature: 1) a psychology based approach of personalities in management and society (Mitroff 1983, Ackerman and Alstott 1999), 2) the effects of groups or individuals towards the achievement of an organization’s goal (Freeman 1984, Mitchell et al. 1997), and most recently: 3) the study of stakeholders in an inter-organizational setting in relation to power and collaboration (Clarkson, 1995; Henriques and Sadosky, 1999).



**Independent variables**

**Dependent variable**

**Figure 1: Conceptual Framework**

## Empirical Literature

Procurement staffs with little training in procurement matters fall into compromising circumstances including breach of the code of conduct and abuse of office, (Victor, 2017). Professionalism in public procurement relates to not only education level and qualifications of the workforce but also to the professional standards in the conduct of business activity (Raymond 2008). Raymond also observes that there are approximately 500,000 purchasing professionals in the United States, only about 10% of these are registered members of professional bodies, and the rest over 90% are not even aware that there are ethical and legal standards involved in procurement.

A study by Osei, Tutu, Mensah and Ameyaw, (2017) in Ghana on the level of compliance with the public procurement Act in public sectors, disclosed a 19.58% compliance levels in the Ashanti region. Findings indicated further that the low compliance level with the procurement Act was due to lack of adequate ICT infrastructure which limited information sharing and low top management support which killed employee's morale as a major factor affecting procurement regulation compliance, (Marendi, Ngugi, Awino & Ondieki, 2015).

It was also found that there was extensive overreliance on older and more labor intensive technologies, (Bukhalo, 2017). It was established that due to procurement functions such as advertisement, enterprises spent more money on manual mechanisms than they would on technology and often faced difficulties of high procurement costs, (Shale, Iravo & Guyo, 2014). Liu, (2016) reveals that ICT systems provides the capability for collaboration and exchange of transactions among organizational involved in procurement activities as well as supply chain functions.

An investigation by Ojo and Gbadebo on reasons for non-compliance in the procurement of construction works in Nigeria cited unethical practices as a major factor contributing towards inefficiencies in public procurement regulatory non-compliance in public institution in Nigeria in return leading to squandering of public funds through fraud, favoritism and extravagance, (Marendi, 2015). A questionnaire and interview guide was used to collect data from 100 respondents. According to Mathenge, (2017) the current Kenya procurement management is characterized by low levels of professional ethics.

Gikonyo, (2016) notes that the worst barrier in fighting corruption is the culture of secrecy in public procurement and related sectors. Unethical practices in public procurement, which includes conflict of interest and corruption, is a matter that could damage relations within the procurement department, other departments such as HR, and relations with suppliers, (Nderui & Were, 2016).

A study by Geo (2017) carried out on the factors influencing compliance with the public procurement law in Ghana established that weak top management support in procurement system has a positive significant impact on compliance. It also found that poor record management practices affect procurement efficiency in organizations to a great extent. The study recommends that the firm's adequate controls should be put in place by introduction and availing a strong top management support and having in place a data management software for managing records in liaison with these both internal and external stakeholders should be connected to the electronic data software for Transparency and efficiency, (Marendi, 2015).

The managers' role in creating and directing entrepreneurial behavior is crucial. Basically, managers can provide facilities and mobilize organizational resource to achieve high level of organizational performance, (Were, 2017). Managers

can represent different styles which involve a fast adaption and acceptance of employee's valuable opinions, championing ideas, people's acknowledgement to do and complete forward ideas, providing necessary resources, or introducing entrepreneurship in different aspects like manners, procedures and processes in the firm ( Antoncic and Hisrich, 2016).

A study by Wanyama (2016) revealed that many firms lose huge amounts of funds annually as result of implementation of ineffective procurement practices which are not in tandem with the public and disposal regulations. Mugo (2017) notes that low level of compliance with procurement regulations, lack of transparency and accountability of procurement funds lowers the level of effectiveness in procurement practices in firms.

## **METHODOLOGY**

The research philosophy for this study was positivism. The study adopted descriptive research design. The study population comprised of the employees and stakeholders in the Nairobi city county. The sampling frame included the Top-level management, Middle level management and Lower level management. The study used stratified random sampling technique in choosing the sample size from the target population. Primary data was collected using structured and unstructured questionnaires. The questionnaires gathered data that was analysed using SPSS. The data analysis mainly involved the use of descriptive analysis. The collected data was analysed using multi linear regression to determine the relationship between the dependent and independent variables. The data collected was coded and entered in the computer using SPSS version 23.

## **RESULTS**

### **Procurement Proficiency**

The respondents were also asked to comment on statements regarding effects of procurement

proficiency on the implementation of legal framework in Nairobi City County. 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' was 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' was taken to represent a statement highly agreed upon equivalent to a mean score of 3.5 to 5.

The respondents were asked to indicate their descriptive responses for procurement proficiency. The result revealed that majority of the respondent with a mean of (4.3) agreed with the statement that procurement staffs meet deadlines in their schedule date. The measure of dispersion around the mean of the statements was 0.67 indicating the responses were varied. The result revealed that majority of the respondent with a mean of (3.6) agreed with the statement that Procurement staffs adequately qualified in procurement matters. The measure of dispersion around the mean of the statements was 0.84 indicating the responses were varied. The result revealed that majority of the respondent with a mean of (3.8) agreed with the statement that Procurement staffs have many years of experience. The measure of dispersion around the mean of the statements was 0.74 indicating the responses were varied.

The result revealed that majority of the respondent with a mean of (3.0) agreed with the statement that Procurement staffs are members of professional bodies. The measure of dispersion around the mean of the statements was 0.93 indicating the responses were varied. The result revealed that majority of the respondent with a mean of (4.2) agreed with the statement that Procurement staffs were trained on all procurement regulations and procedures. The measure of dispersion around the mean of the

statements was 0.71 indicating the responses were varied. The findings agreed with Knudsen (2015) that Procurement staffs with little training in procurement

matters fall into compromising circumstances including breach of the code of conduct and abuse of office.

**Table 1: Procurement Proficiency.**

Statements	Mean	Std. Deviation
Procurement staffs meet deadlines in their schedule date.	4.3	0.67
Procurement staffs adequately qualified in procurement matters.	3.6	0.84
Procurement staffs have many years of experience	3.8	0.76
Procurement staffs are members of professional bodies.	3.0	0.93
Procurement staffs are trained on all procurement regulations and procedures.	4.2	0.71
<b>Overage/Overall</b>	<b>3.8</b>	<b>0.78</b>

### Technological Advancement

The respondents were also asked to comment on statements regarding influence of technological advancement on legal framework implementation. The respondents were asked to indicate descriptive responses for technological advancement. The result revealed that majority of the respondents as indicated by a mean of (3.8) indicated that they agreed with the statement that Tendering was done through e-procurement. The responses were varied as measured by standard deviation of 0.56. The result revealed that majority of the respondents as indicated by a mean of (3.6) indicated that they agreed with the statement that Staffs had access to personal computers. The responses were varied as measured by standard deviation of 0.72. The result revealed that majority of the respondents as indicated by a mean of (3.7) indicated that they agreed with the statement that Complete Fibre connections accessible by staffs. The responses were varied as measured by standard deviation of 0.69

The result revealed that majority of the respondents as indicated by a mean of (3.5) indicated that they agreed with the statement that Procurement department have ICT specialists.. The responses were varied as measured by standard deviation of 0.76. The result revealed that majority of the respondents as indicated by a mean of (3.8) indicated that they agreed with the statement that Exchanging and sharing information is done through ICT tools such as Web. The responses were varied as measured by standard deviation of 0.53. The result revealed that majority of the respondents as indicated by a mean of (3.5) indicated that they agreed with the statement that ICT infrastructure is regularly upgraded in the county. The responses were varied as measured by standard deviation of 0.82 The findings is tandem to Lysons (2013) who asserts that ICT systems provides the capability for collaboration and exchange of transactions among organizational involved in procurement activities as well as supply chain functions.

**Table 2: Technological advancement**

Statements	Mean	Std. Deviation
Tendering is done through e-procurement.	3.8	0.56
Staffs have access to personal computers.	3.6	0.72
Complete Fibre connections accessible by staffs	3.7	0.69
Procurement department have ICT specialists.	3.5	0.76
Exchanging and sharing information is done through ICT tools such as Web	3.8	0.53
ICT infrastructure is regularly upgraded in the county.	3.5	0.82
<b>Overage/Overall</b>	<b>3.6</b>	<b>0.816</b>

### Procurement Ethics

The respondents were asked to indicate their levels of agreement on statements regarding procurement ethics. The results revealed that majority of the respondent (3.9) agreed with the statement that Selection and recruitment policy adhered to when hiring. The responses were varied as shown by the standard deviation of 0.65. The results revealed that majority of the respondent (3.2) agreed with the statement that total transparency guaranteed in all transactions. The responses were varied as shown by the standard deviation of 0.93. The results revealed that majority of the respondent (4.0) agreed with the statement that Presence of close personal relationship between suppliers and procurement managers. The responses were varied as shown by the standard deviation of 0.81.

The results revealed that majority of the respondent (4.2) agreed with the statement that Code of practice for department available to all the staffs. The responses were varied as shown by the standard deviation of 0.91. The results revealed that majority of the respondent (3.7) agreed with the statement

that Formal commercial transactions maintained. The responses were varied as shown by the standard deviation of .53. The results revealed that majority of the respondent (2.4) agreed with the statement that Buying decisions are made by the whole procurement team. The responses were varied as shown by the standard deviation of 0.84.

The results revealed that majority of the respondent (3.1) agreed with the statement that Staff disciplines policy available. The responses were varied as shown by the standard deviation of 0.63. The results revealed that majority of the respondent (3.2) agreed with the statement that Controls measures to manage conflict of interest are in place. The responses were varied as shown by the standard deviation of 0.72. The results revealed that majority of the respondent (3.5) agreed with the statement that E Adherence to procurement code of ethics. The responses were varied as shown by the standard deviation of 0.68. These findings implied that through electronic procurement, organization can improve competitive positioning, gain entry to new dynamic and technology driven markets (Maina, 2008).

**Table 3: Procurement Ethics**

Statements	Mean	Std. Deviation
Selection and recruitment policy adhered to when hiring.	3.9	0.65
Total transparency guaranteed in all transactions	3.2	0.93
Presence of close personal relationship between suppliers and procurement managers.	4.0	0.81
Code of practice for department available to all the staffs	4.2	0.91
Formal commercial transactions maintained.	3.7	0.53
Buying decisions are made by the whole procurement team.	2.4	0.84
Staff disciplines policy available.	3.1	0.63
Controls measures to manage conflict of interest are in place.	3.2	0.72
Adherence to procurement code of ethics	3.5	0.68
<b>Overage/Overall</b>	<b>3.7</b>	<b>0.74</b>

### Management Support

The respondents were requested to indicate the descriptive replies for management support. The results revealed that the bulk of the respondents (3.2)

accepted the statement that Top management understands the importance of implementation of TQM. The responses were different as shown by a standard deviation of 0.82. The results discovered that

majority of the respondent (2.9) approved the Top management enhances staffs to adopt TQM.. The responses were varied as revealed by a standard deviation of 0.93. The results discovered that majority of the respondent (4.3) approved with the statement that Top management enhances direct communication between procurement managers and staffs. The responses were varied as shown by a standard deviation of 0.54.

The results discovered that majority of the respondent (4.2) approved with the statement that Top management recognizes and rewards staffs for their effective performance in quality. The responses were varied as shown by a standard deviation of 0.63. The results discovered that majority of the

respondent (4.1) approved with the statement that Top management provides employees with the required authority to do their work. The responses were varied as shown by a standard deviation of 0.72. The results discovered that majority of the respondent (4.2) approved with the statement that Top management provides employees with the required resources to do their assigned duties. The responses were varied as shown by a standard deviation of 0.81. The average mean response for the statements on management support was 4.4 indicating there was agreement on management support, the variations in the responses. The results imply that an organization benefits greatly when top management is embraced to implement the legal framework (Bird, 2009).

**Table 4: Management support**

Statements	Mean	Std. Deviation
Top management understands the importance of implementation of TQM	3.2	0.82
Top management enhances staffs to adopt TQM.	2.9	0.93
Top management enhances direct communication between procurement managers and staffs.	4.3	0.54
Top management recognizes and rewards staffs for their effective performance in quality.	4.2	0.63
Top management provides employees with the required authority to do their work.	4.1	0.72
Top management provides employees with the required resources to do their assigned duties.	4.2	0.81
<b>Overage/Overall</b>	<b>4.4</b>	<b>0.742</b>

**Correlation Analysis**

**Table 5: Summary of Pearson’s Correlations**

Correlations	Procurement Proficiency	Technological Advancement	Procurement ethics	Management support	Procurement legal framework implementation
<b>Procurement proficiency</b>	Pearson Correlation Sig. (2-Tailed)	1			
<b>Technological Advancement</b>	Pearson Correlation Sig. (2-Tailed)	.372**	1		
<b>Procurement</b>	Pearson	.353**	.449**	1	

<b>ethics</b>	Correlation Sig. (2- Tailed)	0	0			
<b>Management support</b>	Pearson Correlation Sig. (2- Tailed)	.363**	.771**	.547**	1	
		0	0	0		
<b>Procurement legal framework implementation</b>	Pearson Correlation Sig. (2- Tailed)	.556**	.662**	.703**	.691**	1
		0	0	0	0	

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

The correlation summary indicated 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 procurement proficiency and procurement legal framework implementation, Pearson correlation coefficient computed and tested at 5% significance level. The results indicated that there was a positive relationship ( $r=0.556$ ) between procurement proficiency and procurement legal framework implementation in Nairobi city County. 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 technological advancement and procurement legal framework implementation in Nairobi City County, Pearson correlation coefficient computed and tested at 5% significance level. The results indicated that there was a positive relationship ( $r=0.662$ ) between technological advancement and procurement legal framework implementation in Nairobi city County. 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 ethics and procurement legal

framework implementation in Nairobi City County, Pearson correlation coefficient computed and tested at 5% significance level. The results indicated that there was a positive relationship ( $r=0.703$ ) between procurement ethics and procurement legal framework implementation in Nairobi city County. 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 management support and procurement legal framework implementation in Nairobi City County, Pearson correlation coefficient computed and tested at 5% significance level. The results indicated that there was a positive relationship ( $r=.691$ ) between management support and procurement legal framework implementation in Nairobi city County. In addition, the researcher found the relationship to be statistically significant at 5% level ( $p=0.000, <0.05$ ). Hence, it was evident that all the independent variables could explain the changes in the procurement legal framework implementation in Nairobi City County, on the basis of the correlation analysis.

### Regression Analysis

The results of regression analysis revealed there was a significant positive relationship between dependent variable and the independent variable. The

independent variables reported R value of 0.846 indicating that there was perfect relationship between dependent variable and independent variables. R square value of 0.715 means that 71.5% of the corresponding variation in procurement legal framework implementation in Nairobi city County can be explained or predicted by (procurement

proficiency, technological advancement, procurement ethics and management support) which indicated that the model fitted the study data. The results of regression analysis revealed that there was a significant positive relationship between dependent variable and independent variable at ( $\beta = 0.715$ ),  $p=0.000 < 0.05$ ).

**Table 6: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.846 <sup>a</sup>	.715	.703	.14869

Predictors: (Constant), procurement proficiency, technological advancement, procurement ethics and management support

Dependent Variable: procurement legal framework implementation in Nairobi city County

**Table 7: Analysis of Variance (ANOVA).**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.002	4	1.251	65.497	.000 <sup>b</sup>
	Residual	1.99	104	0.0191		
	Total	6.992	108			

Predictors: (Constant), procurement proficiency, technological advancement, procurement ethics and management support

Dependent Variable: procurement legal framework implementation in Nairobi City County

The significance value was 0.000 which was less than 0.05 thus the model is statistically significance in predicting how procurement proficiency, technological advancement, procurement ethics and management support influence procurement legal framework implementation in Nairobi City County. The F critical at 5% level of significance was 18.15. Since F calculated which can be noted from the

ANOVA table above is 56.562 which is greater than the F critical (value= 18.15), this shows that the overall model was significant. The study therefore establishes that; procurement proficiency, technological advancement, procurement ethics and management support were all important procurement legal framework implementation aspects.

**Table 8: Procurement Proficiency and procurement legal framework implementation**

Legal framework implimentation	Coefficient	Standard Error	t	Sig(p)	$p > 0.05$
Procurement proficiency	0.322	0.111	2.896	0.005	No
Constant	2.482	0.407	6.099	0.000	No

R-Squared=29.8%

The results from the table showed that the predictor equation for procurement legal framework implementation(Y) versus procurement proficiency (X) takes the form; procurement legal framework implementation= 0.322 (procurement proficiency) + 2.482. This means that procurement legal framework

implementation is predicted to increase by 0.322 when procurement proficiency went up by 1 (an increase in mean index of procurement proficiency increases the procurement legal framework implementation by a positive unit of mean index value of 0.322).

**Table 9: Technological advancement and procurement legal framework implementation**

Procurement legal framework implementation	Coefficient	Standard Error	t	Sig(p)	p>0.05
Technological advancement	0.209	0.347	2.233	0.028	No
Constant	2.942	0.347	8.472	0.000	No

R-Squared=23.5%

The results from the table showed that the predictor equation for procurement legal framework implementation (Y) versus technological advancement (X) takes the form; procurement legal framework implementation = 0.209 (technological advancement) + 2.942. This meant that procurement legal framework implementation in Nairobi City

County is predicted to increase by 0.209 when technological advancement went up by 1 (an increase in mean index of technological advancement increases the procurement legal framework implementation of the Nairobi City county by a positive unit of mean index value of 0.209.

**Table 10: Procurement Ethics and procurement legal framework Implementation**

Procurement legal framework implementation	Coefficient	Standard Error	t	Sig(p)	p>0.05
Procurement Ethics	0.204	0.099	2.067	0.042	No
Constant	2.909	0.361	8.062	0.000	No

R-Square=21.6%

The results from the table showed that the predictor equation for procurement legal framework implementation (Y) versus procurement ethics (X) takes the form; procurement legal framework implementation = 0.204 (procurement ethics) + 2.909. This meant that procurement legal framework

implementation is predicted to increase by 0.204 when procurement ethics went up by 1 (an increase in mean index of procurement ethics increases the procurement legal framework implementation of the organization by a positive unit of mean index value of 0.204.

**Table 11: Management support and procurement legal framework implementation**

Procurement legal framework implementation	Coefficient	Standard Error	t	Sig(p)	P>0.05
Management support	0.291	0.109	2.677	0.009	No
Constant	2.689	0.368	7.307	0.000	No

R-Squared=20.7%

The results from the table showed that the predictor equation for procurement legal framework implementation (Y) versus management support (X) takes the form; procurement legal framework implementation =0.291 (management support) + 2.689. This means that procurement legal framework

implementation is predicted to increase by 0.291 when management support went up by 1 (an increase in mean index of management support increases the procurement legal framework implementation of the Nairobi City County by a positive unit of mean index value of 0.291.

**Table 12: Coefficients of Determination**

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	

1	(Constant)	2.07	0.193		10.725	0.000
	Procurement proficiency	0.166	0.041	0.255	4.048	0.000
	Technological advancement	0.138	0.053	0.235	2.603	0.010
	Procurement Ethics	0.119	0.021	0.398	5.667	0.000
	Management support	0.09	0.043	0.201	2.093	0.037

Predictors: (Constant), procurement proficiency, technological advancement, procurement ethics and management support

Dependent Variable: procurement legal framework implementation

The research used a multiple regression model

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

The regression equation was;

$$Y = 2.07 + 0.166X_1 + 0.138X_2 + 0.119X_3 + 0.09X_4$$

The regression equation above has established that taking all factors into account (procurement proficiency, technological advancement, procurement ethics and management support) constant at zero, procurement legal framework implementation was an index of 2.07. The findings presented also showed that taking all other independent variables at zero, a unit increase in procurement proficiency will lead to a 0.166 increase in procurement legal framework implementation. The P-value was 0.000 which is less than 0.05 and thus the relationship was significant.

The study also found that a unit increase in technological advancement would lead to a 0.138 increase in procurement legal framework implementation. The P-value was 0.00 and thus the relationship was significant. In addition, the study found that a unit increase in technological advancement will lead to a 0.119 increase in the procurement legal framework implementation. The P-value was 0.000 and thus the relationship was significant.

Lastly, the study found that a unit increase in procurement ethics will lead to a 0.09 increase in the procurement legal framework implementation. The P-value was 0.00 and hence the relationship was significant since the p-value was lower than 0.05. The results of the study show that, procurement ethics

under wrote most to the procurement legal framework implementation.

## CONCLUSION

In regard to procurement proficiency, the regression coefficients of the study showed that it had a significant influence of 0.166 on procurement legal framework implementation. This implied that increasing levels of procurement proficiency elements by a unit would increase the levels of legal framework implementation by 0.166. This shows that procurement proficiency have a positive influence on procurement legal framework in Nairobi City County.

In regard to technological advancement, the regression coefficients of the study show that it has a significant influence of 0.138 on procurement legal framework in Nairobi City County. This implied that increasing levels of technological advancement by a unit would increase the levels of procurement legal framework in Nairobi City County by 0.138. This showed that technological advancement has a positive influence on procurement legal framework in Nairobi City County.

With regard to procurement ethics, the regression coefficients of the study showed that it had a significant influence of 0.119 on procurement legal framework in Nairobi City County. This implied that increasing levels of procurement ethics by a unit would increase the levels of procurement legal framework in Nairobi City County by 0.119. This showed that procurement ethics had a positive

influence on procurement legal framework in Nairobi City County.

In regard to the fourth objective, the regression coefficients of the study showed that it had a significant influence of 0.09 on procurement legal framework in Nairobi City County. This implied that increasing levels of management support by a unit would increase the levels of procurement legal framework in Nairobi City County by 0.09. This showed that management support have a positive influence on procurement legal framework in Nairobi City County. Drawing on this research, lack of procurement proficiency, technological advancement, procurement ethics and management support is leading to poor procurement legal framework in Nairobi City County.

#### **RECOMMENDATIONS**

The study recommended that for Nairobi City County to have better procurement legal framework, they should focus more on using Procurement staffs meeting deadlines in their schedule date, Procurement staffs must be trained on all procurement regulations and procedures. Also, Procurement staffs should be members of professional bodies.

The study recommended that it would be constructive for Nairobi City County to have Procurement department have ICT specialists. Exchanging and sharing information should also be done through ICT tools such as Web and other networks systems.

#### **REFERENCES**

- Aleman, L. N., and Guererro, T. (2016). Good Procurement Practices and SMEs in Global Supply Chains.
- Andrew, A. (2009). Strategic sourcing process model. *Journal of Business and Industrial and Labor Relations Review*, 17, (1), 99-120.
- Bailey, P., Farmer, D., Jessop, D. and Jones, D., (2005). *Purchasing Principles and Management*, 9th edition, Prentice Hall, Harlow, England.

The study recommended that the organizations should embrace Selection and recruitment policy adhered to when hiring, they county should have controls measures to manage conflict of interest in the procurement proceedings. The organization should have policies and procedure to enhance transparency, accountability and supplier development.

The study also recommended that there is need for Nairobi City County to always enhance direct communication between procurement managers and stakeholders. Top management should also establish motivation policies to enhance public procurement management.

#### **Areas for Further Research**

This study was not exhaustive meaning as it was only limited to procurement proficiency, technological advancement, procurement ethics and management support that affect public procurement legal framework implementation in Nairobi City County. It was therefore recommended that another study be replicated in other procuring entities. This is because public procurement legal framework is key factor in utilization of the government funds in the public institutions in Kenya. The analysis was limited to the information disclosed by the respondents. The regression model summary shows that the variables considered do not explain 100% variation in the dependent variables of 71.5 % meaning that the study had left out other important variables which should be considered in future studies.

- Barringer, B.R. and Harrison, J.S. (2000). "Walking a tightrope: creating value through inter-organizational relationships", *Journal of Management*, 26(3), 367-403.
- Bernard Marr, (2007) "Strategic Performance Management: Leveraging and Measuring Your Intangible Value Drivers," *Strategic Direction*, (24).
- Chong, A.Y.L. and Ooi, K.B. (2008). 'Adoption of interorganizational system standards in supply chains: an empirical analysis of Rosetta Net standards,' *Industrial Management and Data Systems*, 108 (4), 529–547.
- Christopher, M. (1992). *Logistics and Supply Chain Management: Strategies for Reducing Costs and Improving Services*.
- Cleland, D., and Bidanda, B. (2009). "The Future of Team Leadership in Complex Project Environments". Pennsylvania: Project Management Institute, Inc.
- Collin Scott, Henriette Lundgren and Paul Thompson (2011). "Guide to supply chain management". Spingers London.
- Delaney, J.T. and Huselid, M.A. (2006). 'The impact of human resource management practices on performance in for-profit and nonprofit organizations,' *Academy of Management Journal*, (39), 949–969.
- Fawcett, S. E., Ellram, L. M., and Ogden, J. A. (2007). *Supply chain management: from vision to implementation*. Pearson Prentice Hall.
- Fisher, C., and Lovell, A. (2009). *Business ethics and values: Individual, corporate and international perspectives*. Pearson education.
- Githaiga, M. W. (2014). *Procurement Practices and Performance of the Oil Marketing Firms in Kenya*. Kenya.
- Green, K.W., and Inman, R.A. (2007). 'The impact of JIT-II-selling on organizational performance,' *Industrial Management and Data Systems*, 107, (7), 1018–1035.
- Hamister, J.W. and Suresh, N.C. (2008). "The impact of pricing policy on sales variability in a supermarket retail context," *International Journal of Production Economics*, (111), 441-55.
- Ho, L.A. (2008). 'What affects organizational performance? : the linking of learning and management', *Industrial Management and Data Systems*, 108, (9), 1234– 1254.
- Hughes, D. Jonathan, J. (2010). "What is Supplier Relationship Management and why does it.
- Hutt, M., and Speh, T. (2012). *Business marketing management: B2B*. Cengage Learning. *International Journal of Human Resource and Procurement*, (1).
- Johnson, P.F., and Klassen, R.D. (2005). "E-procurement," *MIT Sloan Management Review*, 46 (2), 7-10.
- Kabega, C., Kule, J. W., and Mbera, Z. R. (2016). *Effect of Procurement Practices on Performance of Public Projects in Rwanda: A Case Study of Bugesera District Office Construction Project*. *Journal of Economics, Commerce and Management*.
- Karanja, K. M., and Kiarie, D. (2015). *Influence of Procurement Practices on Organization Performance in Private Sector of Kenya: A Case Study of Guaranty Trust Bank*. *Journal of Business and Law Research*.

- Kiromo, E. M. (2015). Factors Affecting Procurement and Supply Chain Performance in Building Construction firms in Nairobi. Kenya.
- Luu, T.V., Kim, S.Y., Cao, H.L. and Park, Y.M. (2008) Performance measurement of construction firms in developing countries. *Construction Management and Economics*, 26(4), 373-86.
- Makabira, D., and Waiganjo, E. (2014). Role of Procurement Practices on the Performance of Corporate Organizations in Kenya: A Case Study of Kenya National Police Service.
- McFalls, R. (2016). The Impact of Procurement Practices in the Electronics Sector on Labour Rights and Temporary and other Forms of Employment.
- Melnyk, S. A., Cooper, M. B., and Hartley, J. L. (2011). *Managing operations across the supply chain*. New York, NY: McGraw-Hill Irwin.
- Mistry, J.J. (2006), "Origins of profitability through JIT process in supply chain", *Industrial Management and Data Systems*, (105), (6).
- Mokogi, W. N., Mairura, D. C., and Ombui, D. K. (2015). Effects of Procurement Practices on the Performance of Commercial State Enterprises in Nairobi County.
- Navon, R. (2005) Automated Project Performance Control of Construction Projects. *Automation in Construction*, (14), 467-476.
- Ngunyi, I. W. (2014). *Procurement Practices and the Performance of Parastatals in Kenya*. Kenya: University of Nairobi.
- Palmer, N.A. (2009). *Purchasing and supply management*, 2nd edition. Nairobi: Saleemi publications limited.
- Parasuraman, A. (2002). *A Synergistic Perspective Managing Service Quality*. Service Quality and Productivity.
- Petcavage, S., and Pinkerton, R. (2010). *Supply Management*. New York.
- Poister, T. H. (2010). The future of strategic planning in the public sector: linking strategic management and performance. *Public Administration Review*, 70(1), 246-254.
- Reichel, M., and Ramey, M. (1987). *Conceptual Frameworks for Bibliographic Education*.
- Saleemi, N. A. (1997). *Purchasing and Supply Management*. Nairobi: Saleemi Publishers.
- Sanchez, A. M., and Perez, M. P. (2003). Cooperation and the Ability to Minimize Time and Cost of New Product Development within the Spanish Automotive Supplier Firms. *Journal of Product Innovation Management*.
- Wisner Tan Leong (2012). "Principles of supply chain management, a balanced approach 3rd edition". South-western.
- Crosby, P. B. 2015. *Quality is free: The art of making quality certain*. New York: New American Library.
- Cooper, M.C., Lambert, D.M. and Pagh, J.D. (2017), "Supply chain management: more than a new name for logistics", *International Journal of Logistics Management*, Vol. 8 No. 1, pp. 1-14.
- Cruz, C. (2016), "Purchasing pros search for perfect number of suppliers", *Purchasing*, Vol. 120 No. 11, p. 28.

- Cristo´balSa´nchez-Rodr´ıguez, David Hemsworth, A ´ngel R. Mart´ınez-Lorente. (2015), “The effect of supplier development initiatives on purchasing performance: a structural model” .
- Dyer, J., Cho, D., and Chu, W., 2016.Strategic supplier segmentation: the next best practice insupply chain management.California Management Review, 40 (2), 57.
- Dyer J. (2016), “How Chrysler Created an American Keirutsu,” Harvard Business Review, Vol. 38, July – August, pp. 42-56.
- Dr.Sean de BurcaDr. Brian FynesServices Management Centre for Quality &Centre for Quality & Services Management., 2016.
- Dempsey, B. (2013). Research methods.(4thed.). Mason, NJ.Pearson Publishers.
- Dobler, D.W., Burt, D.N., & Lee, L., Jr. (2017). Purchasing and materials management: text and cases (5th ed.). New York : McGraw-Hill.
- Dale B. (2016), Supplier quality and reliability assurance practices in the Spanish auto components industry: A study of implementation issues, European Journal of Purchasing & Supply Management, (7), 187-196.
- Foster, S.T., 2018. Towards an understanding of supply chain quality management. Journal of Operations Management, 26 (4), 461–467.
- Flynn, B. and Flynn, E., 2015. Synergies between supply chain management and quality management: emerging implications. International Journal of Production Research, 43 (16), 3421–3436.
- Flynn, B. and Flynn, E., 2015. Synergies between supply chain management and quality management: emerging implications. International Journal of Production Research, 43 (16), 3421–3436.
- Fine, C.H. (2018), Clockspeed: Winning Industry Control in the Age of Temporary Advantage, Perseus Books, Reading, MA, p. 272.
- Fisher, M.L. (2017), “What is the right supply chain for your product?”, Harvard Business Review, Vol. 75 No. 2, pp. 105-16.
- Garvin, D.A., 2017. Competing on the eight dimensions of quality. Harvard Business Review, 6 (6), 101–109.
- Gustin, C.M., 2014. Supply chain integration: reality or myth? Distribution Business Management Journal, 1 (1), 71–74.
- Gilmore, H. L. 2014. Product conformance cost. Quality progress,7(5): 18-19.
- Gronroos, C. 2013. Strategic management and marketing in the service sector. Cambridge, MA: Marketing Science Institute.
- Hahn, .K., Watts, C.A. and Kim, K.Y. (1990) The supplier development program: A conceptual model, International Journal of Purchasing and Materials Management, 26, 2-7.
- Hughes, M. andPerrons, R.K. (2015), “Shaping and reshaping social capital in buyer-supplier relationships”, Journal of Business Research, Vol. 64, pp. 164-171.
- Hutchins, G., 2012. Supply chain management: a new opportunity. Quality Progress, 35 (4), 111–112.Competitive Advantage Through Supplier Quality Management.

- Heerde, H.V., Helsen, K., and Dekimpe, M.G., 2017. The impact of a product-harm crisis on marketing effectiveness. *Marketing Science*, 26 (2), 230–245.
- Harrington, H. J. (1999): *Cost of Poor Quality*. *International Journal of Strategic Cost Management*. Summer 1999.
- Haberfield, B. and Boyles, M. W., 2015, “Modern concepts of sheet metal formability”, *Metallurgist and Materials Technologist*, pp. 453 - 456.
- Hahn, C.K., Watts, C.A. and Kim, K.Y. (1990), “The supplier development program: a conceptual model”, *Journal of Purchasing & Materials Management*, Vol. 26 No. 3, p. 2.
- Hartley, J.L. and Choi, T.Y. (2016), “Supplier development: customers as a catalyst of process change”, *Business Horizons*, Vol. 39 No. 4, pp. 37-44.
- Handfield, R.B., Krause, D.R., Scannell, T.V. and Monczka, R.M. (2000), “Avoid the pitfalls in supplier development”, *Sloan Management Review*, Vol. 41 No. 2, pp. 37-49.
- Inkpen, A.C. and Tsang, E.W.K. (2015), “Social capital, networks, and knowledge transfer”, *Academy of Management*, Vol. 30 No. 1, pp. 146-165.
- ISO 6508-1986, *Metallic Materials—Hardness Test—Rockwell Test (scales A-B-C-D-E-F- G-H-K)*, International Organization for Standardization (ISO), Geneva, Switzerland (1986).
- Jraisat, L.E. (2010). *Information Sharing in An Export Supply Chain Relationship: The Case of Jordian Fresh Fruit and Vegetable Export Industry*. Brunel University. West London.
- Krause, D.R. and Handfield, R.B. (2007), “Developing a world class supply base”, *Center for Advanced Purchasing Studies*, pp. 1-11.
- Krause, D.R. (1997), “Supplier development: current practices and outcomes”, *International Journal of Purchasing and Materials Management*, Vol. 33 No. 2, pp. 12-19.
- Krause, D.R. (1999), “The determinants of buying firms’ efforts to improve suppliers”, *Journal of Operations Management*, Vol. 17 No. 2, pp. 205-24.
- Krause, D.R., Scannell, T.V. and Calantone, R.J. (2000), “A structural analysis of the effectiveness of buying firms’ strategies to improve supplier performance”, *Decision Sciences*, Vol. 31 No. 1, pp. 33-55.
- Kumar, D. R., 2002, “Formability analysis of extra-deep drawing steel”, *Journal of Materials Processing Technology*, vol. 130-131, pp. 31-41.
- Kothari, C.R. (2006). *Research Methodology: methods & techniques*. (1sted). Nairobi: New age International Publishers
- Lemke, F., Goffin, K., & Szwejcewski, M. (2003). Investigating the meaning of supplier-manufacturer partnerships: an exploratory study. *International Journal of Physical Distribution & Logistics Management*, 33 (1), 12-35.