



INFLUENCE OF PROCUREMENT PRACTICES ON PROCUREMENT PERFORMANCE IN DEVOLVED GOVERNMENTS IN KENYA

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Abstract

This study sought to examine influence of procurement practices on procurement performance in the Nairobi City County Government, Kenya. The specific objective was to determine how procurement planning practices, supplier sourcing practices, contract management practices and inventory management practices influence procurement performance in the Nairobi City County Government, Kenya. Correctional research design was used in this study. The population of this study was 124 comprising of supply chain officers, user departments and accounting officers in the Nairobi City County Government. The sample size of the study was 95 respondents selected using stratified random sampling technique. Data was collected using self-administered structured questionnaire. Descriptive analysis included; frequencies, Mean, Standard deviation and percentage while inferential analysis involved correlation analysis and multiple linear regression analysis. The findings were presented using tables and models. Pearson correlation analysis indicated that there is significant relationship supplier sourcing and procurement performance. Similar results were obtained for procurement planning, contract management and inventory management. Multiple linear regression revealed that up to 65.2% of variance in procurement performance is accounted for by selected procurement practices used in this study. The study concluded that procurement planning had greatest significant influence on procurement performance, followed by contract management, inventory and last supplier sourcing in Nairobi City County Government. The study recommended that to boost

procurement performance, supply chain officers should carefully assess supplier's competence in supplying quality goods and services during supplier sourcing. The Nairobi City County Government supply chain management department should focus on contract terms and timeline to minimize delays in service delivery by suppliers. The study recommends that during procurement planning, primary consideration should be given to the specifications provided by user departments.

Keywords: Supplier Sourcing Practices, Contract Management Practices, Inventory Management Practices, Procurement Planning, Procurement Performance, Procurement Practices, Devolved Governments

INTRODUCTION

The most significant elements of procurement performance are the efficiency and efficacy of purchases. Procurement performance is the backbone of an organization's success, according to Barsemoi, Mwangagi, and Asienyo (2014), since it results in the competitive purchase and acquisition of high-quality commodities, which gives the company's goods or services a competitive edge in the market. However, the researchers believe that poor procurement performance leads to a decrease in profitability, which is a major impediment to the organization's development as it causes delivery delays, lower-quality goods, and an increase in faults and defects.

The performance of procurement involves how effectively organizational procurement targets have been achieved. Procurement performance is best measured by the extent to which procurement operations are able to get maximum value for every dollar spent on the purchase of goods and services (Kiage, 2017). Procurement typically consists of planning, standards setting, creation of specifications, research and selection of suppliers, value analysis, finance, pricing negotiations, buying, contract administration, inventory check and storage and disposal and associated activities.

The performance of public entities in the procurement arena, in the eyes of stakeholders, includes a number of gray areas, ranging from procurement methods that take an excessive amount of time, resulting in delays in the acquisition of goods and services. According to Mutangili (2019), insufficient procurement methods are one of the key failures in public procurement, and this is highlighted in his results. Wanyonyi and Muturi (2015) have affirmed that strong public procurement is essential for all nations to develop and a practical representation of their national resolve to make the best use of public resources. Non-compliance with standardized procurement procedures results in poor coordination among

multiple departments and increases the existence of financial resource leakages, which prove to be an expensive component of the overall procurement function management process as a whole (Kiromo, 2015).

Organization's procurement performance is achieved through effective procurement practices which are a blueprint that may be applied to all organizations, irrespective of the contexts in which they operate; however, this has been quite a challenge in County Governments in Kenya (Transparency International, 2019). This is supported by the findings of Barber, Garza-Reyes, Kumar, and Abdi (2017), who state that effective procurement methods are critical to the success of government programs because they serve as a connection between policy and delivery.

Procurement practices are those management measures that are conducted in order to enhance the performance of the procurement function. The procurement practices of other organizations have been defined as a set of activities undertaken by an organization in order to promote effective management of its supply chain, as well as the approaches applied in the integration, management and coordination of supply, demand, and relationships in order to effectively satisfy clients (Sindiga, Paul & Mbura, 2019). In addition to ensuring compliance with procurement rules and regulations, best practices in procurement include Supplier collaboration, inventory management, and information sharing are all important aspects of doing business. Make certain that there is sufficient experience in SCM. Communication and customer service that works are essential. Constantly increasing performance and innovation while maintaining anonymity, adoption of information and communication technologies. The use of standard papers in the procurement process, procurement planning, Contract Management, and other aspects of the procurement process. Developing a procurement process that is socially responsible and environmentally sustainable, obtaining competitive bids and maintaining a clear division of responsibilities (Talib, Muhoho, & Makali, 2020).

The notion of procurement practice is not particularly new one in Kenya since the nation has extensively copied concepts of effective contract management and procurement management from the (OECD) countries. According to Ondieki (2015), Kenya's procurement process exhibits poor performance as evidenced by formality measures, resistance to the Act, overpricing, inferior planning, contracts that are poorly managed, inadequacy in accountability and transparency, material repetition, and debasement of materials. Many significant public organizations and institutions in Kenya depend on procurement to get the majority of their goods and services. This includes buying and sourcing, as well as bidding and contracting, among other methods. Despite these restrictions, Kenya loses a significant amount of taxpaying money due to the use of inappropriate procurement procedures (GoK, 2017). Therefore, inadequate

procurement procedures in national and regional government entities have also hindered service delivery.

Africog (2019) showed that the core concepts underlying public procurement in Nairobi City County are the value for money, ethical standards and competitiveness, as well as openness and accountability. The 2019 Auditor General's report showed price inflation up to three times that of the real price, therefore breaching the general procurement guideline that standard products and services must be acquired at current market rates. Direct procurement of products and services, such as event locations, entertainment and tents, was widespread. The study also claimed that products and services were deemed irregularly acquired in that no pre-qualification registers, no requisitions, no tender documents, no signed contracts, and no inspection or acceptance reports were produced. In certain instances, the service providers were not prequalified. No quotes were included to verify if the item was procured competitively. The user departments had no request to assess the necessity for the purchase

Statement of the Problem

Procurement performance that falls short of expectations is a widespread issue in many county governments, with an incalculable cost that exceeds USD 0.5 million (Ksh 50 million) every year (Transparency International, 2019). Tom (2019) showed that the county suffers from inefficiency and incompetence, resulting in a loss of more than Ksh.50 million each year. It is estimated that the majority of the tendered works/services have a mark-up of 60 percent above the market costs, according to the Public Procurement Regulatory Authority (PPRA).

Procurement performance in the Nairobi city county government has received sharp critics. According to Africog (2019), procurement of goods and services in Nairobi City County lacked the requisite documentation, such as prequalification registers, market surveys, requisitions, quotation registers, quotations/tender documents, signed contracts, inspection and acceptance reports. Akinyi Odhiambo (2015) noted that the Nairobi city county government did not take serious consideration to supplier profile during supplier sourcing leading to inefficiencies in the procurement process. Njagi and Kinoti (2018) further noted that county governments have lost a lot of money in the procurement processes as a result of poor records keeping, inadequate transparency and accountability, transaction inefficiencies, delays in delivery and collusion with suppliers which negatively affects procurement performance. Auditor reports (2016/2017, 2017/2018 and 2018/2019) have indicated that there was irregular award of contracts hence that rates were not commensurate with quantity and quality of works. The reports also indicated that value of money was not realized on the expenditure due to the delay noted in the completion of projects and poor workmanship (Office of the Auditor General, 2020).

Existing studies have not focused on procurement practices and procurement performance in County governments but focused on effects of strategic procurement on performance of county governments in Kenya and procurement performance (Kitavi, Ochieng and Sang, 2020), effectiveness of procurement practices on performance of county governments in Kenya (Cherotich, 2018) and influence of procurement practices on performance of the public sector in Kenya (Ciira & Moronge, 2018). Further, some studies have established insignificant effect of procurement practices on procurement performance (Odero & Ayub, 2017); Leiyani, 2016; Cherotich, Ngacho & Omari, 2018). It's hence against this background the study will be undertaken to examine the influence of procurement practices on procurement performance in the Nairobi City County Government, Kenya.

Objectives of the Study

- i) To examine the influence of procurement planning on procurement performance in the Nairobi City County Government, Kenya.
- ii) To establish the influence of supplier sourcing on procurement performance in the Nairobi City County Government, Kenya.
- iii) To determine the influence of contract management on procurement performance in the Nairobi City County Government, Kenya.
- iv) To evaluate the influence of inventory management on procurement performance in the Nairobi City County Government, Kenya.

Research Questions

- i) What is the influence of procurement planning on procurement performance in the Nairobi City County Government, Kenya?
- ii) What is the influence of supplier sourcing on procurement performance in the Nairobi City County Government, Kenya?
- iii) What is the influence of contract management on procurement performance in the Nairobi City County Government, Kenya?
- iv) What is the influence of inventory management on procurement performance in the Nairobi City County Government, Kenya?

LITERATURE REVIEW

Theoretical Framework

The study was guided by Principal -Agency Theory in regards to procurement planning, Resource Dependency Theory explained supplier sourcing, Theory of Constraints to expound on

inventory management, MacNeil's Relational Contracts Theory explained the effect of contract management on acquisition performance in the Kenya county government of Nairobi City.

Principal -Agency Theory

According to Oluka and Basheka (2012), the essential tenet of the principal-agency theory is that the agent must have a clear knowledge of his or her principal's requirements as well as the capacity to satisfy those requirements successfully. The theory becomes important to the research since it emphasizes the need of thorough procurement planning and specifications, as well as the importance of an objective procedure for monitoring contractors' performance. The study thus will use this theory to determine the effect of need assessments and specifications in procurement planning for effective procurement performance in a procuring entity in the Nairobi City County Government.

Resource Dependency Theory

In accordance with the theory of resource dependency, the acquisition and management of resources are critical to an organization's existence (Pfeffer & Salancik, 1978). When it comes to the purchase of resources, this theory is significant since it investigates the types of choices and possibilities that must be evaluated in regard to supplier sourcing practices. Prior to making a choice, trade-offs must be made that take into account factors such as efficiency and effectiveness, which are important considerations when assessing procurement success. This theoretical framework also will help the study to be able to understand the style of management employed in dealing with allocation of resource and how responsibilities and tasks are divided among each supplier with respect to their capabilities and ability to deliver. Therefore, supplier sourcing can either be efficient or inefficient with regards depending on the framework used.

Theory of Constraints

The theory of constraints was introduced by Eliyahu M. Goldratt in 1984. This theory is primarily concerned with managing neutrality to minimize resource constraints. Kazim (2008) believes that the theory of constraints is built on the premise that a chain is only as strong as its weakest link or constraint, and that it is required to elevate and control the constraint as necessary to achieve success. According to Constraint Theory Problems may increase, if inventory is not adequately tracked, inefficiency and extra expenses are mounted. Supplies are lost, degradation may be uncontrolled, storage occurs, key locations of equipment are unknown, invoicing is inefficient, since supplies are being utilized without a working record, and stock on-site can be overflowing needlessly. The consequence of all of this is inefficiencies and additional

costs. Kenya's Nairobi City County Government will benefit from this hypothesis since it will help explain the relationship between inventory management and procurement success.

MacNeil's Relational Contracts Theory

The deficiency of actuality of the agreement as reflected in norms of approval, on solutions, and on contract acquisition were the primary subjects of Macneil's work prior to 1968, and his work was a painful expression of customary contract law at the time (Macneil, 1968). Macneil outlines five core business elements; collaboration, currency exchange, planning for the future, possible foreign sanctions, public oversight, and manipulation (Macneil, 1969). He also understands that contracts are part of the complicated framework of general trade interactions (Berstrin, 1993). Maclein observes, however, that some relationships are much more relational than others. According to relational contract theory, a spectrum of relationships ranges from highly relational, such as long-term contracts to radar contracts which involve transactional connections, such as the purchase of goods and services manually by mouth. This explained the effect of contract management on acquisition performance in the Kenya county government of Nairobi City.

Conceptual Review

Considering the views of Robson (2011), conceptual framework is the system of concepts, assumptions, expectations, beliefs, and theories that supports and informs your research. The independent variables of the study were supplier sourcing practices; contract management practices, inventory management practices and procurement planning, and procurement performance was used as the dependent variable as shown in Figure 1.

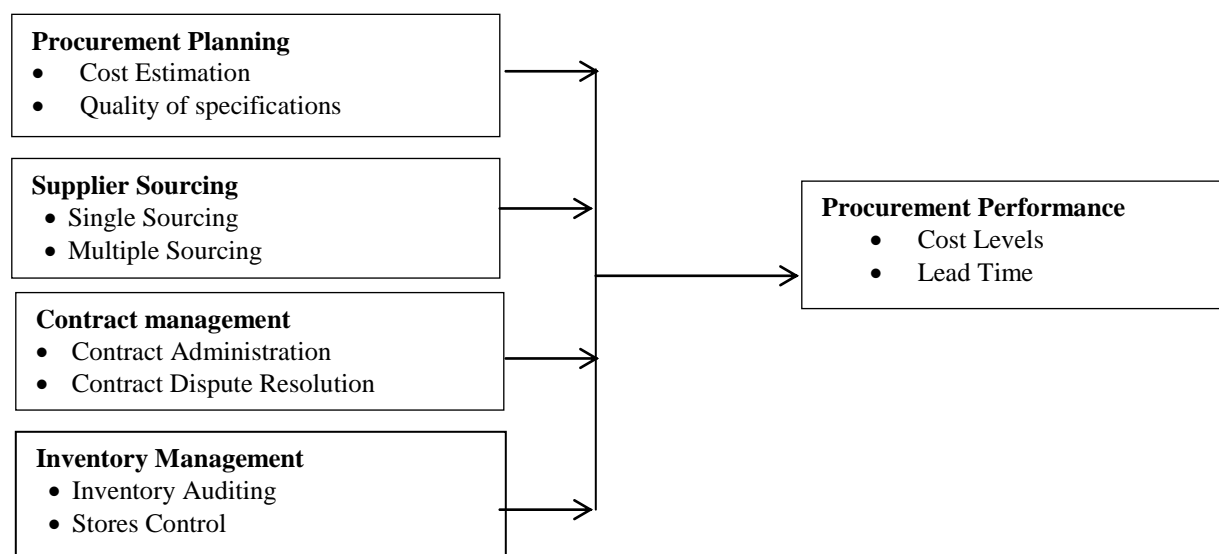


Figure 1: Conceptual Framework

Empirical Review

Procurement Planning and Procurement Performance

Salim and Kitheka (2019) aimed to identify the impact of procurement strategy on state-owned companies' procurement performance in Mombasa County, Kenya. It was found that the identification of procurement needs has a major impact on the procurement performance of government companies in Mombasa County, Kenya. In conclusion, procurement budget costs & projections have a significant impact on public corporation procurement performance in Mombasa County, Kenya. Wanyonyi and Muturi (2015) investigated how the public procurement activities of public entities influence procurement planning and political intervention. The results of this research have shown that most public institutions have an annual procurement strategy developed

Miriti and Mwangangi (2018) sought to investigate how acquisition strategy has an effect on the performance of the supply chain of the Kenya Medical Supplies Authority. The study has shown that the evaluation of procurement needs, budgeting, quality standards and supplier selection have had a positive and significant effect on the supply chain performance of Kenya Medical Supplies Authority. Mesa (2018) looked at the factors that influence procurement performance in the Nakuru Law Courts' Judiciary Department. The research found that effective procurement planning affects service delivery success, which workers are frequently educated on procurement processes, that proper contract management improves procurement performance, and that not all suppliers have access to tender information and may apply online.

Supplier Sourcing and Procurement Performance

According to the findings of the Manyega and Okibo (2015) research, sourcing of the supplier may provide an organization with a chance to improve its efficiency and effectiveness. Mutai and Okello (2016) conducted an investigation of the sourcing of suppliers and the relationship between this and the capacity of Kenyan universities to perform. According to the findings of the Kamath, Barkur, and Naik (2018) research, quality and concerns are meaningless when it comes to picking suppliers. The management of the supply chain and the manufacturer collaboration has a significant influence on the assessment of suppliers. The findings of the research also revealed that the assessment of suppliers has a significant influence on process improvement. According to Obinda and Gichure (2017), coordination between supplier sourcing and sourcing staff, as well as adequate communication networks, affects productivity in the procurement department and ensures that the right supplier is selected to meet evolving and expected needs in the procurement department. According to the findings of the research, procurement efficiency in public organizations is dependent on the

sourcing of suppliers, communication between procurement and user departments, and quality monitoring of products and services provided by suppliers.

Contract Management and Procurement Performance

Kariuki and Paul (2019) tried to assess the impact on Kenya's county governments' procurement procedures through contract management. Following the findings of this research, county governments in Kenya were shown to have a substantial and beneficial impact on their procurement performance in the areas of contract monitoring, management capability, contract relationship, and contract planning. Ogembo and Muturi (2019) attempted to determine what impact contract management had on procurement performance in Kenya's devolved administrations. According to the findings of the research, contract automation, a contract management team, strategic contract management, and contract risk management must all be implemented successfully in order to enhance procurement performance within Kenya's decentralized government.

Khatenje (2017) sought to determine the extent to which contract management affects the supply chain performance of Tuskys supermarket in Kisii town by conducting a research project. Specifically, the study found the most difficult contract management procedure in the supermarket to be unrealistic time and budget expectations, which interfere with the ability to effectively manage contracts. Despite the difficulties that contract management procedures face, there are effective evaluation procedures in place for the awarding of contracts in the grocery store. In a study by Wanjiru and Mburu (2016), they found out that the four variables, that is relationship management, contract administration, post contract appraisal and contract closure positively and significantly affect procurement performance.

Inventory Management and Procurement Performance

Kamakia (2015) investigated the connection between inventory management methods and petroleum marketing companies' supply chain performance in Nairobi. According to the results of the research, all of the examined petroleum companies in Nairobi employ Inventory Management Techniques; this is the first evidence that these techniques assist them in improving their firms' Supply Chain Performance. Orina (2018) showed that inventory documentation factors influence inventory management because of poor automated filling processes, knowledge skills particularly in technology are challenged because of the absence of necessary resources and inadequate training in current technology. Funds were linked to other expenditures leading to expenditure. Onyango (2017) showed that FMCG manufacturing companies in Nairobi County used inventory management techniques such as just in time,

inventory controlled by sellers, reorder level, amount of economic order, business resource planning and materiel need planning. The study concluded that inventory management practices (on time, vendor-managed inventories, reorder level, quantities for economic orders and business resource planning) had a positive impact on supply chain performance measures, which include inventory holding cost, stock, obsolescence and ordering cost.

MATERIAL AND METHODS

This research adopted the correctional research design because the study aims at not only determining the direction relationships among variables but also relationships between different variables. The study population was all employees of Nairobi City County Government. The sampling frame consisted of supply chain officers, user departments and accounting officers in the Nairobi City County Government where 124 respondents from the sampling frame were selected. In this study, stratified sampling technique was utilized while respondents were selected through simple random sampling. The study's sample size was determined using Taro Yamane's proportional sampling technique formula. Therefore, a sample size was calculated as per Taro Yamane's formula shown below;

$$n = N / (1 + (e)^2)$$

Where n = Sample size

N = population under study

e = margin error (0.05)

I = constant

Therefore;

$$n = 124 / (1 + 124 (0.05)^2)$$

n = 94.65648855 rounded off to 95

From the calculation, 95 was used for this study as the sample size, where respondents were randomly selected as per table 1.

Table 1: Sample Size

Departments	Respondents	Sample Size
Supply Chain Officers	84	64
User departments	30	23
Accounting Officers	10	8
Total	124	95

The questionnaire used in this study was created by the researcher himself. Respondents' responses were measured using a five-point Likert scale ranging from 1 to 5, with 1 representing strongly disagrees and 5 representing strongly agree. It was necessary to run a pilot test to confirm that the study instrument was valid and reliable in order to gather data that was compatible with the primary purpose. Testing the questionnaires' reliability and validity was done via pilot study. Pilot study entailed 10 respondents from supply chain department of the County Government Kiambu which borders Nairobi City County Government. When it came to testing content validity, it was important to consult with supervisors and other lecturers in the area of concern to ensure that the questions measured what they were intended to measure, that the wording was clear, that the questions provided responses, and that there was no research bias. The results of content validity indicated that the instrument was valid in regards to Content clarity of words, relevant, simple objective, accurate, complete and credible. The descriptive and inferential statistics methods were used in this investigation. Tables were used to code and tabulate the data collected during fieldwork. A computer program called Statistical Package for Social Sciences (SPSS) version 23.0 for Windows was used to do the data analysis. To display the different properties of the data sets, descriptive statistics such as mean, frequency, percentage, and standard deviation were employed. The study adopted the following multiple regression model;

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

Where;

Y is the dependent variable (Procurement Performance); β_0 is the regression constant; β_1 , β_2 , β_3 and β_4 are the coefficients of independent variables; X_1 is Supplier sourcing; X_2 is Inventory management; X_3 is Contract management; X_4 is Procurement planning; ε is error term

RESULTS AND DISCUSSION

Preliminaries Results

Ninety-five (95) questionnaires were distributed to respondents, seventy-two (72) were received, this represented 75.8% response rate and 23 questionnaires were not received this accounted for 24.2% of the total questionnaires distributed. Content validity was used in testing instrument validity. Content validity was applied by checking clarity of words, statements to ensure they have adequate content plus seeking expert opinion on the research instrument. Expert judgment of content was employed using Makueni County Government supply chain professionals and supervisor, Dr. Samuel Muli. The pilot study also examined relevance,

simplicity, objectivity, accuracy, completeness, credibility and modality. The results of content validity indicated that the instrument was valid in regards to Content clarity of words, relevant, simple objective, accurate, complete and credible hence suitable to achieve study objectives. For reliability tests Cronbach alpha was applied for each variable which had a range 0.848 to 0.968 thus for this, Cronbach alpha statistic with a value of 0.7 or more was considered reliable. The test items were retained and used in this study hence considered reliable as shown in the Table 2.

Table 2: Reliability Tests

Variable	No of Items	Cronbach Alpha	Reliable
Procurement Planning	6	0.968	Yes
Supplier Sourcing	6	0.848	Yes
Contract Management	6	0.960	Yes
Inventory Management	6	0.951	Yes
Procurement Performance	6	0.888	Yes
N=10			

Descriptive Statistics

Descriptive statistics are used to define and describe the properties of a set of data (Mboya, 2019). The presentation of descriptive statistics is based on the frequencies, percentage, mean and standard deviation of study variables. These variables were procurement planning, supplier sourcing, contract management and inventory management which were independent variables while procurement performance was dependent variable. The respondents were asked to indicate their level of agreement from 1 strongly disagree, 2-disagree, 3-neutral, 4-agree and 5 strongly agree. The findings are as follows.

Procurement planning

The first objective of this study was to examine the influence of procurement planning on procurement performance in the Nairobi City County Government. So as to achieve this objective, the researcher sought to find out how procurement planning influences the procurement performance.

The results are presented in Table 3 in which percentage are presented inside brackets while frequency outside brackets.

Table 3: Descriptive statistics for Procurement Planning

Procurement Planning	5	4	3	2	1	Mean	SD
At county government, procurement planning is properly conceived and implemented.	16 (22.2)	24 (33.3)	16 (22.2)	4 (5.6)	12 (16.7)	3.39	1.35
Quality specifications help in procurement planning	26 (36.1)	26 (36.1)	8 (11.1)	2 (2.8)	10 (13.9)	3.78	1.35
Cost estimates are always in line with the identified needs	14 (19.4)	30 (41.7)	14 (19.4)	2 (2.8)	12 (16.7)	3.44	1.31
All budgeted items are included in the procurement planning	14 (19.4)	26 (36.1)	15 (20.8)	5 (6.9)	12 (16.7)	3.35	1.33
All items planned and budgeted are procured.	8 (11.1)	43 (59.7)	7 (9.7)	4 (5.6)	10 (13.9)	3.49	1.20
Appropriate market research is often conducted before procuring the required items	19 (26.4)	24 (33.3)	17 (23.6)	2 (2.8)	10 (13.9)	3.56	1.30
Overall Score						3.50	1.31

N=72; KEY: 1= Strongly Disagree; 2= Disagree; 3=Neutral;

4=Agree; 5=Strongly Agree; SD= Standard Deviation.

The findings indicate that out of 72 respondents who took part in the study, 33.3% agreed while 22.2% strongly agreed that county government, procurement planning is properly conceived and implemented. The line had a mean of 3.39 indicating at county government, procurement planning is properly conceived and implemented at a moderate extent. Furthermore, 36.1% of the respondents agreed that quality specifications help in procurement planning which was further supported by 36.1% of the respondents. This observation was supported by a mean of 3.78.

On the statement that cost estimates are always in line with the identified needs, 41.7% agreed while 19.4% strongly agreed. The statement had a mean of 3.44 indicating that cost estimates are always in line with the identified needs. The results also revealed that 36.1% agreed and 19.4% strongly agreed that all budgeted items are included in the procurement planning with a mean of 3.35. The mean was further supported by 20.8% of the respondents who were neutral. The outcome further revealed that 11.1% and 59.7% strongly agreed and agreed respectively that the all items planned and budgeted are procured. This was supported by mean of 3.49 although 13.9% of the respondents strongly disagreed.

Lastly, 26.4% strongly agreed and further 33.3% agreed that appropriate market research is often conducted before procuring the required items with a mean of 3.56 and standard deviation of 1.30. Averagely, the level of procurement planning had a mean of 3.50 implying that majority of the respondents were in agreement with procurement planning statement. This finding is congruent to that of Kiage (2013) who indicated that procurement planning has a substantial impact on procurement performance. This finding supports those of Ouma and Kilonzi (2014) who posited that resource planning is significant and contributes to public entity procurement and it is an important aspect in determining effectiveness of the procurement process.

Supplier sourcing

The second objective of this study was to determine how supplier sourcing influences procurement performance in the Nairobi City County Government. To achieve this, the researcher queried the respondents about the supplier sourcing in respect to procurement performance. The responses are as shown in Table 4 in which percentage are presented inside brackets while frequency outside brackets.

Table 4: Descriptive statistics for Supplier Sourcing

Supplier Sourcing	5	4	3	2	1	Mean	SD
The county government sources suppliers according to their pricing structures	35 (48.6)	8 (11.1)	20 (27.8)	4 (5.6)	5 (6.9)	3.89	1.27
During supplier sourcing, supplier profile is put into consideration to establish their capabilities	10 (13.9)	24 (33.3)	23 (31.9)	11 (15.3)	4 (5.6)	3.35	1.08
The county government prefers suppliers who have necessary certification and authorizations from relevant bodies	20 (27.8)	25 (34.7)	10 (13.9)	13 (18.1)	4 (5.6)	3.61	1.23
During sourcing, in-depth comparison is carried out among various suppliers to establish their suitability	24 (33.3)	25 (34.7)	15 (20.8)	6 (8.3)	2 (2.8)	3.88	1.06
The county government carries out supplier sourcing in a transparent way adhering laid down regulations	25 (34.7)	17 (23.6)	14 (19.4)	11 (15.3)	5 (6.9)	3.64	1.29

The county government has a competitive process for identifying a suppliers	26 (36.1)	14 (19.4)	18 (25)	10 (13.9)	4 (5.6)	3.67	1.26
Overall Score						3.67	1.20
N=72; KEY: 1= Strongly Disagree; 2= Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree; SD= Standard Deviation.							

From Table 4, the results indicated that 48.6% of the sampled respondents strongly agreed that the county government sources suppliers according to their pricing structures while 11.1% agreed with a mean of 3.89. On the other hand, 27.8% of the respondents were neutral in regard to county government sources suppliers according to their pricing structures. The results also indicated that few of the respondents (33.3%) agreed that during supplier sourcing, supplier profile is put into consideration to establish their capabilities while 13.9% of the respondent strongly agreed. On the hand, 15.3% disagreed and 5.6% strongly disagreed that during supplier sourcing, supplier profile is put into consideration to establish their capabilities n with a mean of 3.35.

In regards to the county government prefers suppliers who have necessary certification and authorizations from relevant bodies, 27.8% of the respondents strongly agreed that the county government prefers suppliers who have necessary certification and authorizations from relevant bodies while 34.7% agreed with a mean of 3.61. The results also revealed that majority of the respondents were in agreement with sourcing, in-depth comparison is carried out among various suppliers to establish their suitability of which 33.3% strongly agreed and the 34.7% agreed on that assertion with a mean of 3.88 although 20.8% of the respondents were neutral.

The results further revealed that 34.7% of the respondents strongly agreed that county government carries out supplier sourcing in a transparent way adhering lay down regulations while 23.6% of the respondents agreed on the same. On the other hand, 19.4% of the respondents were neutral on indication that the county government carries out supplier sourcing in a transparent way adhering laid down regulations with a mean of 3.64. Lastly, 36.1% of the respondents strongly agreed that the county government has a competitive process for identifying suppliers and 19.4% agreed on the same with a mean of 3.67. Averagely, the level of supplier sourcing had a mean of 3.67 implying that majority of the respondents were in agreement with supplier sourcing statement. According to Manyega and Okibo (2015), good supplier sourcing helps to identify those who can meet the conditions of the purchase from all who claim to be able to supply. Time and money spent on careful source selection is a long –

run investment because once a good choice has been made, succeeding orders can be placed economically and with confidence.

Contract management

The third objective of this study was to determine how contract management influences procurement performance in the Nairobi City County Government. So as to achieve this objective, the study sought to establish the degree to which contract management influenced procurement performance. The findings are as shown in table 5 in which percentages are presented inside brackets while frequency outside brackets.

Table 5: Descriptive statistics for Contract Management

Contract Management	5	4	3	2	1	Mean	SD
Decisions on centralized roles are made to guide contract performance	19 (26.4)	27 (37.5)	15 (20.8)	2 (2.8)	9 (12.5)	3.63	1.26
The county government always ensures that there are appointed contract implementation teams to supervise contracts	21 (29.2)	18 (25)	19 (26.4)	8 (11.1)	6 (8.3)	3.56	1.25
Different organizing roles are appropriately assigned to different personnel during contract management	12 (16.7)	27 (37.5)	23 (31.9)	6 (8.3)	4 (5.6)	3.51	1.05
Planning roles are appropriately assigned to different personnel during contract management	10 (13.9)	32 (44.4)	18 (25)	8 (11.1)	4 (5.6)	3.50	1.05
County government always supervises its contracts by ensuring that the contractor meets the specified terms and conditions of the contract	23 (31.9)	28 (38.9)	11 (15.3)	6 (8.3)	4 (5.6)	3.83	1.14
County government periodically conducts quality inspections on its running contracts	23 (31.9)	25 (34.7)	12 (16.7)	6 (8.3)	6 (8.3)	3.74	1.23
Overall Score						3.63	1.16

N=72; KEY: 1= Strongly Disagree; 2= Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree; SD= Standard Deviation.

Results in Table 5, revealed that 26.4% of the sampled respondents strongly agreed that the decisions on centralized roles are made to guide contract performance and 37.5% of the respondents agreed on the same with a mean of 3.63. However, 20.8% of the respondents were neutral a suggestion that not all decisions on centralized roles are made to guide contract performance. The results also revealed that 25.0% of the respondents agreed that the county government always ensures that there are appointed contract implementation teams to supervise contracts while 29.2% strongly agreed on the same although 26.4% were neutral with a mean of 3.56. In regards to different organizing roles are appropriately assigned to different personnel during contract management, 35.1% of the respondents agreed with this assertion while 16.7% strongly agreed. However, 31.9% of the respondents were undecided with a mean of 3.51.

The results also revealed that few of the respondents (13.9%) strongly agreed that planning roles are appropriately assigned to different personnel during contract management and further 44.4% agreed with a mean of 3.50. However, 25.0% of the respondents were neutral, an indication that planning roles are appropriately assigned to different personnel during contract management. More so, 38.9% of the respondents agreed while 31.9% strongly agreed with a mean of 3.83 that County government always supervises its contracts by ensuring that the contractor meets the specified terms and conditions of the contract. However, 5.6% of the respondents strongly disagreed that Nairobi City County Government always supervises its contracts by ensuring that the contractor meets the specified terms and conditions of the contract.

Lastly, 31.9% of the respondents strongly agreed that Nairobi City County Government periodically conducts quality inspections on its running contracts and further 34.7% agreed with a mean of 3.74. Averagely, the level of supplier sourcing had a mean of 3.63 with a standard deviation of 1.16 implying that majority of the respondents were in agreement with contract management statements.

These findings are congruent to those of Deva raj, Vaidya Nathan and Mishra (2012) who concluded that the presence of poor contract management that is characterized by payments delays to suppliers obstructs greatly their ability to offer timely service delivery leading to delays that derails organizational procurement timelines and schedules. The findings support those of SIGMA (2011) that contracts are frequently complex, may involve multiple actors, last a long time and may consume many resources. It is therefore vital that they are properly managed.

Inventory management

The third objective of this study was to identify the influence of inventory management on procurement performance in the Nairobi City County Government. To achieve this, the researcher probed the respondents about the inventory management. The findings are in table 6 in which percentage are presented inside brackets while frequency outside the brackets.

Table 6: Descriptive statistics for Inventory Management

Inventory Management	5	4	3	2	1	Mean	SD
There is adequate standing operating procedures on inventory auditing	11 (15.3)	30 (41.7)	18 (25)	11 (15.3)	2 (2.8)	3.51	1.02
The county government manages inventories based on product or service cost	16 (22.2)	28 (38.9)	18 (25)	8 (11.1)	2 (2.8)	3.67	1.03
The county government do adhere to inventory management policies	17 (23.6)	29 (40.3)	16 (22.2)	8 (11.1)	2 (2.8)	3.71	1.04
Application of Economic Order Quantity helps improve County government supply chain performance through Supply chain integration	24 (33.3)	26 (36.1)	14 (19.4)	6 (8.3)	2 (2.8)	3.89	1.06
County government uses contracts that allows placing orders on need basis to manage its inventory (such as framework agreements)	19 (26.4)	32 (44.4)	13 (18.1)	6 (8.3)	2 (2.8)	3.83	1.01
County government use stores ledger and stock control cards in managing inventories (such as S3 cards)	22 (30.6)	28 (38.9)	16 (22.2)	4 (5.6)	2 (2.8)	3.89	1.00
Overall Score						3.75	1.03

N=72;

KEY: 1= Strongly Disagree; 2= Disagree; 3=Neutral;

4=Agree; 5=Strongly Agree; SD= Standard Deviation.

From Table 6, slight majority of the respondents (41.7%) agreed that there are adequate standing operating procedures on inventory auditing while 15.3% of the respondents strongly

agreed with a mean of 3.51. However, 25.0% of the respondents were neutral and indicated that some of the standing operating procedures on inventory auditing. Similarly, 38.9% of the respondents agreed that the county government manage inventories basing on Product/service cost and further 22.2% strongly agreed with a mean of 3.67. However, few of the respondents (23.6%) strongly agreed that the county government do adhere to inventory management policies and further 40.3% agreed on the same. On the hand, 22.2% of the respondents were neutral and 11.1% disagreed with a mean of 3.71.

In regards to Application of Economic Order Quantity helps improve organizational supply chain performance through supply chain integration, majority of the respondents were in agreement as shown by 36.1% of the respondents who agreed and 33.3% who strongly agreed with a mean of 3.89. The results also revealed that 44.4% of the respondents agreed county government uses contracts that allows placing orders on need basis to manage its inventory (such as framework agreements) and further 26.4% strongly agreed with a mean of 3.83. Lastly, 38.9% of the respondents agreed that in terms of County government use stores ledger and stock control cards in managing inventories (such as S3 cards) and additional 30.6% of the respondents strongly agreed with a mean of 3.89. Averagely, the level of inventory management had a mean of 3.75 implying that majority of the respondents were in agreement with inventory management.

The study further revealed that inventory management is meant to improve the procurement performance of a business by reduction of excess inventory together with associated cost. Kootanaee et al. (2013), emphasize on having in hand the minimum required quantity of materials for immediate use. As such, inventory holding costs are substantially reduced.

The findings are in agreement with Ahmad and Zabri (2016) established that most of the micro retailing enterprises has employed both the unsystematic and unsystematic inventory management approaches in the operation of their businesses. by Panigrahi, Das, Jena and Tanty (2015 concludes that effective management of vendor managed inventory will able to provide competitive advantages for manufacturing industry to survive in long run.

Inferential Statistics

Inferential statistics are used to make inferences about the population based on the survey results. The findings would be more generalizable to the population if the sample is more representative. Inferential statistics consisted of multiple correlations and multiple linear regressions:

Table 7: Correlations Analysis

		Procurement planning	Supplier sourcing	Contract management	Inventory management
Procurement planning	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	72			
Supplier sourcing	Pearson Correlation	.000	1		
	Sig. (2-tailed)	.999			
	N	72	72		
Contract management	Pearson Correlation	.202	.335**	1	
	Sig. (2-tailed)	.088	.004		
	N	72	72	72	
Inventory management	Pearson Correlation	.454**	.062	.103	1
	Sig. (2-tailed)	.000	.603	.390	
	N	72	72	72	72
Procurement performance	Pearson Correlation	.597**	.382**	.528**	.471**
	Sig. (2-tailed)	.000	.001	.000	.000
	N	72	72	72	72

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

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

The results showed that there is positive relationship between procurement planning and procurement performance (Pearson correlation coefficient, $r = 0.597$, $P = 0.000$). This implies that procurement planning is very necessary in procurement performance. Similar results were also obtained by Salim and Kitheka (2019) who found out that the identification of procurement needs has a major impact on the procurement performance of government companies in Mombasa County, Kenya. Willy and Njeru (2014) showed that there was a significant link between procurement planning and procurement performance and concluded, thus, the existence of an acquisition portfolio, effective logistics management and compliance with procurement plans had a favorable influence on institutional procurement.

The results indicate that supplier sourcing has a moderate positive Pearson correlation ($r = 0.382$, $p = 0.001$) influence on procurement performance in Nairobi City County Government. This indicates that Supplier sourcing play a major role in procurement performance. These results are in agreement with Manyega and Okibo (2015) who showed that sourcing of the supplier can give an entity an opportunity to enhance its efficiency and effectiveness. Mutai and

Okello (2016) did an inquiry into sourcing of the suppliers and established that it is related with procurement performance in public universities in Kenya.

The results indicate that there is moderate relationship between contract management and procurement performance in Nairobi City County Government (Pearson correlation coefficient= 0.528, P=0.000). Contract management therefore has a very great influence in procurement performance. Similar results were obtained by Wanjiru and Mburu (2016) who found out that the four variables, that is relationship management, contract administration, post contract appraisal and contract closure positively and significantly affect procurement performance. Khatenje (2017) established that contract management affects the supply chain performance of Tusky's supermarket in Kisii town by conducting a research project.

The analysis in table 7 show that inventory management has a moderate positive Pearson correlation coefficient ($r= 0.471$, $P=0.000$) influence on procurement performance. This indicates that inventory management factors cannot be ignored whenever considering the procurement performance in Nairobi City County Government. This result is supported by Hitimana (2018) who sought to establish the effect of inventory management practices on supply chain performance.

The research concluded that inventory management practices positively impact supply chain performance of construction firms in Nairobi. These findings are in agreement with the Mukopi and Iravo (2015) examined the effect of inventory management on performance of the procurement function of sugar manufacturing companies in the western sugar belt. There was strong relationship between just in time and performance of the procurement function of sugar manufacturing companies in the western sugar belt.

Multiple Linear Regression Analysis

This study was interested in finding out whether and how procurement planning, supplier sourcing, contract management and inventory management influences procurement performance in Nairobi City County Government. The four independent variables were considered together (one equation) as predictors of procurement performance. The study sought to determine the model summary findings in order to determine the overall percentage change in the procurement performance that was explained by all the metric of the procurement practices by use of R^2 .

Table 8: Model Summary and ANOVA Table

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.807 ^a	.652	.631	.56364	.652	31.360	4	67	.000

Model of Fit (ANOVA table)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39.850	4	9.963	31.360	.000 ^b
	Residual	21.285	67	.318		
	Total	61.135	71			

a. Dependent Variable: procurement performance

b. Predictors: (Constant), procurement planning , supplier sourcing, contract management, inventory management

The results from the model summary in Table 8 give us information on the overall summary of the model. It can be deduced that procurement practices account for 65.2% significant variance in procurement performance (R square =.652 P=0.000) implying that 34.8% of the variance in procurement performance is accounted for by other variables not captured in this model. According to the data, the F value is more than one, as demonstrated by a value of 31.360, which indicates that the enhancement obtained as a consequence of model fitting is significantly greater than the model errors/inaccuracies that were not included in the model (F (4,71) = 31.360, P=0.000) The big F value is very unlikely to have occurred by coincidence (99.0 percent), meaning that the final research model has significantly improved in its capacity to forecast procurement performance as a result of the procurement practices examined.

Table 9: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
	(Constant)	-.644	.410				-1.572
procurement planning	.329	.065	.410	4.981	.000	.769	1.301
1 supplier sourcing	.262	.069	.292	3.796	.000	.877	1.140
contract management	.310	.076	.319	4.072	.000	.845	1.183
inventory management	.271	.081	.270	3.329	.001	.789	1.268

a. Dependent Variable: procurement performance

A regression of the four predictor variables against procurement performance established the multiple linear regression model as below as indicated in Table 9.

$$Y = -0.644 + 0.329X_1 + 0.262X_2 + 0.310X_3 + 0.271X_4$$

Where:

Y = Procurement performance

X_1 = procurement planning

X_2 = Supplier sourcing

X_3 = contract management

X_4 = inventory management

From the findings presented in Table 9, all procurement practices in this study had significant effect on the procurement performance. If procurement practices are held at zero or it is absent, the procurement performance in Nairobi City County Government would be -0.644, $p=0.121$. This implies that absence of procurement practices the procurement performance will be negatively insignificantly.

It was revealed that procurement planning had also unique significant contribution to the model with $B=0.329$, $p=.000$ implying that when other variables in the model are controlled (Contract management, inventory management and Supplier sourcing), a unit increase in Procurement planning would result to significant increase in procurement performance by 0.329 units. These results are in agreement with Mesa (2018) who looked at the factors that influence procurement performance in the Nakuru Law Courts' Judiciary Department. The study established that procurement planning significantly influenced procurement performance. Miriti and Mwangangi (2018) established that the evaluation of procurement needs, budgeting, quality standards and supplier selection have had a positive and significant effect on the supply chain performance of Kenya Medical Supplies Authority.

Supplier sourcing had unique significant contribution to the model with $B=.262$, $p=.000$ suggesting that controlling of other variables (Contract management, Inventory management and Procurement planning) in the model, a unit increase in supplier sourcing would result to significant increase in procurement performance by 0.262 units. These findings are in agreement with Kamath, Barkur and Naik (2018) whose study showed that sourcing of suppliers significantly influence procurement performance in regards to the quality. Obinda and Gichure (2017) found that coordination between supplier sourcing and sourcing staff and adequate communication networks affects performance in the procurement department and ensures the right supplier is selected to meet evolving and expected needs. According to the study, procurement efficiency in public bodies relies on the sourcing of suppliers, contact between procurement and user departments on quality control of goods and services.

The coefficient of contract management was 0.310, which was significant ($p=0.000$) and also positive. When the variance explained by all other variables (Supplier sourcing, inventory management and Procurement planning) in the model is controlled, a unit increase in contract management would result to significant increase in procurement performance by 0.310 units. The findings concurred with Kariuki and Paul (2019) who assessed the influence of contract management on county government procurement performance a case of Garissa County Government. Following the findings of this research, county governments in Kenya were shown to have a substantial and beneficial impact on their procurement performance in the areas of contract monitoring, management capability, contract relationship, and contract planning. The findings of this study are also supported by Ogembo and Muturi (2019) attempted to determine what impact contract management had on procurement performance in Kenya's devolved administrations.

Another variable that also had a unique significant contribution to the model was the value for inventory management ($B=0.271$, $p=0.001$). When other variables in the model are controlled (Contract management, Supplier sourcing and Procurement planning), a unit increase in inventory management would result to significant increase in procurement performance by 0.271 units. The findings are in agreement with Panigrahi, Das, Jena and Tanty (2015) aimed to empirically examine the impact of Inventory Management Practices on the Production Performances of the manufacturing industry. Findings revealed that inventory management has strong relationship with Production Performances. Njoroge (2015) concluded that inventory management practices are positively related to performance of public hospitals in Nairobi and former Central province.

CONCLUSION AND RECOMMENDATIONS

The study concluded procurement planning had the greatest predictive power; however, it had the least average score implying some aspects of the procurement planning were not fully implemented. For instance, procurement planning is moderately conceived and implemented, cost estimates are moderately in line with the identified needs, not all items planned are in the approved budget and not all items planned and budgeted are procured. However, quality of specifications has the capacity to facilitate procurement planning which is key to better procurement performance. The study established that supplier sourcing has significant positive influence on procurement performance in the Nairobi City County Government. The county government sourced their suppliers according to their pricing structures as well as in-depth comparison is carried out among various suppliers to establish their suitability. However,

extensive supplier profiling is not put into consideration to establish their capabilities which is a significant procurement practice.

Contract management happened to be the major driver of procurement performance in Nairobi City County Government. In this regard, contract management has significant positive influence on procurement performance in the Nairobi City County Government. The county government periodically conducted quality inspections on its running contracts. Nairobi City County Government sometimes supervised contracts by ensuring that the contractor meets the specified terms and conditions of the contract which is a precursor of better procurement performance.

Contract implementation teams are appointed to ensure proper execution of contracts. The study established that Nairobi City County Government has adopted various inventory management practices such as framework agreements and store ledger and stock control cards to reduce the stock and the carrying cost associated in the county and economic Order quantity techniques. This management practices have significantly influence procurement performance in the County. However, the existing standing operating procedures on inventory auditing are not adequate and the county government has not fully adhered to inventory management policies which is important to achieve maximum benefit from inventory management practices.

The study recommends that during procurement planning, primary consideration should be given to the specifications provided by user departments. This will ensure the procurement of quality products and getting value for money. The procurement department should develop procedures to enhance adherence to procurement plans and decision making. The study recommends that to boost procurement performance, accounting officers and supply chain officers should carefully assess supplier's competence during supplier sourcing to help in supplying quality goods/services. The study also recommends that the accounting officers and supply chain management unit should consider supplier's quality commitment to ensure that procured goods/services meet user's needs and standards.

The study recommends that the Nairobi City County Government should optimize the utilization of framework agreements and stores ledger and stock control cards to reduce the stock and the carrying cost associated in the county. The Nairobi City County Government should only store what is being required in the user departments and use of frameworks contracts for common goods and services. To avoid carrying of excess inventory that might be a risk to the county, accurate forecast, should be in place. The Nairobi City County Government Supply Chain Management department should focus on contract terms and timeline to minimize delays in service delivery by suppliers. The study further recommends that Nairobi City County Government should conduct more ad hoc audits and monitoring of the contracts in order to

ensure that service providers comply with the terms and conditions of the contract as required. Basing on study findings, it was recommended that efforts should be made to ensure that all members on the contract implementation team have the required competencies in terms of experience and qualifications in matters regarding the specific contracts/projects being executed. This will help in ensuring quality and timely execution of projects.

LIMITATIONS AND FURTHER STUDIES

The current study investigated influence of procurement practices on procurement performance in the Nairobi City County Government. The study focused on procurement practices which was limited to procurement planning, supplier sourcing, contract management and inventory management. These practices did not explain 100% variation in procurement performance meaning there are other factors that influence procurement performance. The study suggests that further study should consider other variables such as supplier development, supplier involvement in regard to procurement performance. The current study focused on Nairobi City County Government which by the time this study was conducted, it was partially under Nairobi Metropolitan Services therefore limiting the generalization of the conclusion. Even though the finding may be similar to other City county governments such as Kisumu and Mombasa, the study recommended that further studies should consider other counties in Kenya.

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