

Effect of Public Procurement Management on Quality Service Provision among State Corporations in Kenya

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Abstract: The purpose of this study was to investigate the effect of public procurement management on quality service provision among the state corporations which is effectively enabling providers of services and goods to the public to achieve higher standards. The specific objectives were: to establish how the procurement legal guidelines improve the quality of goods and services provided to the public by state corporations; to establish how the procurement institutional framework improves the quality of goods and services provided to the public by state corporations; to establish how laid procurement procedures improve the quality of goods and services provided to the public by state corporations and to establish how the management environment among state corporations affects quality of goods and services provided to the public by state corporations. The research employed a descriptive research design that used survey methods. The study focused on 64 of the 127 state corporations in Kenya selected using systematic random sampling. The data was collected using a questionnaire. The data was analyzed using mean and standard deviation. The results indicate that the legal procurement guidelines had a moderate contribution towards the quality of goods and services provided. The procurement institutional framework contributed to the quality of goods and services to a great extent. The procurement procedures had a moderate contribution toward the quality. The management environment moderately contributed to the quality. The quality of goods and services provided to the public was low. The study recommends improved enforcement and strengthening of the adherence to laid down procurement procedure; the existing institutional framework should be changed to support the provision of high quality goods and services and there should also be a change in the general management environment with focus on the culture, leadership and worker motivation of quality on provision of high quality services and goods to the public.

Keywords: Legal procurement guidelines, procurement institution, procurement procedures, management environment, quality of product and state corporation.

1. INTRODUCTION

Background:

There has been gradual evolution Public Procurement System in Kenya from a crude system with no regulations to an orderly legally regulated procurement system. The Government's Procurement system was originally contained in the Supplies Manual of 1978, which was supplemented by circulars that were issued from time to time by the Treasury. The Director of Government Supply Services was responsible for ensuring the proper observance of the provisions of the Manual. The Manual created various tender boards for adjudication of tenders and their awards. In the late 1990's the

government sanctioned the review of the public procurement systems, this review brought to light various shortcomings of the then procurement system. It established that there was no uniform procurement system for the public sector as a whole; public procurement systems did not have sanctions or penalties against persons who breached the regulations in the Supplies Manual, other than internal disciplinary action. Consequently application of the rules was not strict and many of the norms were not followed, also the Supplies Manual did not cover procurement of works, the dispute settlement mechanisms relating to the award procedures as set out in the Manual were weak and unreliable for ensuring fairness and transparency and Records of procurement transactions in many cases were found to be inaccurate or incomplete or absent, which led to suspicions of dishonest dealings at the tender boards. Besides these the systems had other institutional weaknesses that not only undermined its capacity for carrying out their mandates effectively but also led to a public perception that the public sector was not getting maximum value for money spent on procurement.

In view of the above shortcomings it was found necessary to have a law to govern the procurement system in the public sector and to establish the necessary institutions to ensure that all procurement entities observe the provisions of the law for the purpose of attaining the objectives of an open tender system in the sector. These coupled with other developments led to the establishment of the PPOA, and the Public Procurement and disposals Act, 2005 and its regulation 2006. With the PPOA charged with the oversight responsibility of public procurement it's important that the researcher carries out a study of the challenges facing PPE in line with the recent developments in the sector. A lot of research and scholarly writing have been done concerning the paradigm shift from adversarial relationships to mutually beneficial relationships in management. It has been found that public procurement is one area that lags behind in terms of changing from adversarial to mutually beneficial relationships especially in developing nations. Most public sectors in least developed nations use a traditional procurement system which is purely based on adversarial relationships with many suppliers (Welch, 2003). Usually the contracts awarded to suppliers have a fixed expiry date, which means that their relationships end on the expiry date of the contract and a new tendering process triggered when potential suppliers are prompted to compete between them again (Christopher and Juttner, 2000). There is often no attempt to engage into mutually beneficial long term relationship with a selected number of suppliers. This increases procurement costs such as multiple contracts administration, monitoring suppliers' performance, continuous education of suppliers on an institution's processes and requirements (Christopher and Juttner, 2000).

Procurian (2012) acknowledges that global competition, commodity price volatility, sovereign debt, tenuous consumer confidence and expanding regulations are challenges today that leave no hiding places for the timid organizations. Investors are demanding sustained, profitable growth while governments are demanding high quality production at lower costs. In response, organizations are increasingly turning to external service providers for R&D, operations, sales/marketing and back-office operations. However, these relationships are rarely managed strategically by traditional purchasing functions, which are bogged down negotiating tactical deals and transacting Purchasing Officers. The anarchy of uncoordinated, decentralized procurement is no better than an inflexible, bureaucratic corporate buying process. Non-payroll expenditures are diverse; sometimes require large capital outlays, low value purchases, emergency purchases, complex spending hidden in large facilities/distribution/joint venture/outsourcing contracts, etc. These disparate spend types require highly tailored approaches and practices to extract value from them. However, modern management practices like Total Quality Management are coming up as a remedy to harmonize the quality needs of organizations and the consumers of products (Katller and Armstrong, 2004).

Statement of the Problem:

Public procurement has come to play a major role in determining how state corporations provide services to citizens. As a nation grows public procurement influences many areas and changes the way of doing things. A study by Choi (2012) argues that public procurement improves the way services are provided to the public. Due to the perceived importance of public procurement many governments have put in place mechanisms to control their public procurement processes. On the contrary Ssenoga (2006) posits that developing countries fail to achieve high quality of service provision due to the failure of making a decision to open up public procurement markets to all suppliers irrespective of their country of origin. Due to various reasons, public procurement does not automatically achieve the results of providing high quality of goods and services to the citizens who use them. Therefore the success of public procurement varies from country to country and from organization to organization. A research gap existed because there was no study that has been done to explain how the public procurement management among state corporations affects the quality of goods and services they provide to the

public. This gap is filled by answering the question: does public procurement management among state corporations improve the quality of goods and services provided to the public in Kenya?

Objectives of the Study:

General objectives:

The general objective of this study was to investigate the effect of public procurement management on quality service provision among state corporations in Kenya.

Specific objectives of the study:

- i. To establish how the procurement legal guidelines improve the quality of goods and services provided to the public by state corporations
- ii. To establish how the procurement institutional framework improves the quality of goods and services provided to the public by state corporations
- iii. To establish how laid procurement procedures improve the quality of goods and services provided to the public by state corporations
- iv. To establish how the management environment among state corporations affects quality of goods and services provided to the public by state corporations.

Research Questions:

- a. H_{01} Procurement legal guidelines have no effect on the quality of goods and services provided to the public by state corporations.
- b. H_{02} Procurement institutional framework has no effect on the quality of goods and services provided to the public by state corporations.
- c. H_{03} Laid down procurement procedures has no effect on the quality of goods and services provided to the public by state corporations.
- d. H_{04} Management environment among state corporations has no effect on quality of goods and services provided to the public.

Justification of the study:

Scholars of public procurement predict that strong procurement guidelines, institutions coupled with the right management practices can lead to value creation and provision of high quality goods and services to the public through cost reduction and quality improvement. Public procurement is, therefore, a key function among all providers of public services all over the world. However empirical research shows variation in the success of public procurement in guaranteeing high quality goods and services to citizens in different countries and public organization depending on the environment within which the procurement process is done. A research gap existed when it came to establishing the nature of the effect that public procurement in Kenyan state corporations have on the quality of goods and services provide to the public they serve. This study was aimed at filling up this gap and, therefore, justified the study.

2. LITERATURE REVIEW

Theoretical Framework:

The researchers established the following theory relevant to the study which is agency theory.

Agency Theory:

The agency theory can effectively explain the relationship between procurement and quality of services provision in state corporations. The agency theory was posited by Jensen and Meckling (1976). According to Jensen and Meckling (1976), an agency relationship is a contract under which one or more persons, (called principals) engages another person (called the agent) to perform some service on their behalf which involves delegating some decision-making authority to the

agent. When executing the tasks within the principal-agent relationship, the agent must choose actions that have consequences for both the principal and the agent. Since these outcomes can be either negative or positive for each of the actors, the chosen action of the agent affects the welfare of both.

Agency theory has long been concerned with the issues of control that arise as a result of information asymmetries between agents and the principals (Ross, 1973). In general, all principal-agent relationships are plagued by uncertainty not only in the level of an agent's knowledge, skills and abilities, but also in both the way the agent's action gets transformed into the output and whether or not the agent is acting in the principal's best interest. This uncertainty is the result of the advantageous differential in knowledge held by the agent about his or her own actions in serving the principal. The action taken by both the agent and the principal have costs to either or both of them. The agency theory can apply to both public and private sectors in a way that makes comparison easier between organizations in the two sectors, especially in identifying motivational similarities and differences. Second but just as important, it is easy to see how there is a chain of agency relationships in state corporations that may impact the nature of procurement. For instance, procurement officials typically are employed by state corporations within a set of rules and expectations. Depending upon the rules, procedures, and by-laws of the agreements, there may be differential incentives for purchasers at various levels to utilize cooperatives that may not be apparent without the aid of agency theory (Dixit, 2002). The third reason why agency theory is a fruitful method for modelling public purchasing is that it helps to identify the various incentives of the stakeholders. By clarifying the opportunities and constraints they face, hope is engendered that efficiency, effectiveness, and accountability will be increased.

The Concept of Public Procurement:

Traditionally, public purchasing has been perceived as the intermediate step between the determination of a need by service delivery managers and the satisfaction of that need by suppliers (Coe, 1989). The National Institute of Governmental Purchasing (1989) defines public procurement as the function of responsibility for the acquisition of equipment, materials, supplies, and services. Gordon (1991) contends that public procurement encompasses the total process of supplying goods and services to user agencies and disposing of surplus property. According to Public Procurement and Disposal Act (2005) procurement means the acquisition by purchase, rental, lease, hire purchase, license, tenancy, franchise, or by any other contractual means of any type of works, assets, services or goods including livestock or any combination. In the same Act, a public entity means: the Government or any department of the Government; the courts; the commissions established under the Constitution; a local authority under the Local Government Act; a state corporation; the Central Bank of Kenya; a co-operative society; a public school; a public university; a college or other educational institution maintained or assisted out of public funds; or any other entity prescribed as a public entity (PPDA, 2005). Public procurement therefore means acquisition by purchase, rental, lease, hire purchase, license, tenancy, franchise, or any type of works, services or supplies or any combination up to the time a public entity consumes or utilizes a service as per its requirement and in line with the procurement Act and regulations of Kenya. Public procurement also includes the disposal or divestiture of public assets, including intellectual and proprietary rights and goodwill and other rights of a procuring entity by any means including sale, rental, lease, franchise, auction or any combination however classified, other than those regulated by any other written law PPDA, 2005).

The procurement Process in State Corporations in Kenya:

Public entity procurement is wide ranging and encompasses most goods, works and services available. Items most often procured include food, pipes, vehicles and vehicle supplies, electrical items, pharmaceuticals, chemicals, uniforms, IT requirements, stationery, tools, fuel, and services such as security, catering and vehicle repairs. The extent of their application of the PPDA is constrained by their knowledge of the various provisions and, in some cases, by their financial ability. Though the central government procuring entities indicate that they implement the preferences contained in Section 39, it is not always clear that these have in fact been consciously applied. However, the provisions are applied by default across the board, as suppliers of goods, services and works generally tend to be local small and medium entities. With larger procurements, particularly of specialized goods, works or services, the situation changes and larger, or in certain instances, foreign entities are utilized. The PPDA makes provision for open and alternative forms of procurement. In open procurement open competition or open solicitation is applied in accordance with established procedures set out in the PPDA. The alternative procurement procedures include: restricted tendering, direct procurement; request for proposals; request for quotations; procedures for low-value procurements; and specially permitted procurement

procedures. The procedure to be followed is in a large part determined by the PPDA (2006). The process of general consumable procurement followed by all levels of public procurement entities is much the same. The relevant Procurement Officer (PO) advertises annually for suppliers of goods, services and works. These advertisements are made in the national daily papers. Prior to this, various ministries and departments provide information on what goods, services and works they require and to what specification. Tender documents are drawn up accordingly. In certain instances, tenders may be split amongst several suppliers, each of whom may be more competitive than another in a certain area. The supplier is then notified that he has won the tender and will be a preferred supplier of those items, services or works for the year under a term contract. A register of suppliers is kept, and actual procurement is made through a quotation process from the registered suppliers, or where there is only one short-listed supplier, directly from it (FSD, 2008). An order is then generated by the user ministry or department. It obtains quotations from the pre-qualified supplier(s) and forwards this to the PO. The PO checks that the suppliers are pre-qualified, and that the price range is within the original tender submission. He/she then forwards his/her recommendations to the tender committee, which will make the award final. The PO notifies the user department or ministry which then issues a Local Purchase Order (LPO) (or Local Services Order if it pertained to works or services), as well as an Immediate Letter of Communication to the supplier so that it can begin processing the order (FSD, 2008). In instances where the goods or services required fall outside the gambit of the annual tenders, an open tender is placed in the daily newspapers. Tenders are then adjudicated by the PO and submitted to the tender committee for decision. For low value procurement, cash requisitions are made and the supplier is paid accordingly at the user department level (FSD, 2008).

The Concept of Quality:

The definition of quality has yielded inconsistent results. Abbott (1955) defined quality as value; Gilmore (1974) defined quality as conformance to specifications; Crosby (1979) viewed quality as conformance to requirements; it was viewed as loss avoidance by Taguchi (1986) while Zeithamland Berry (1985) viewed quality as meeting and/or exceeding customers' expectations. Tuchman (1980) equated quality with excellence when he argued that quality means investment of the best skill and effort possible to produce the finest and most admirable results possible. He also added that quality is achieving or reaching for the highest standard as opposed to being satisfied with the sloppy or the fraudulent. Quality, therefore, does not allow compromise with the second-rate.

Juan (1951) incorporated the notions of both excellence and conformance into what he considered quality in which conformance concerns how well the product conforms to design specifications. Feigenbaum (1961) defined quality as best for certain customer conditions. This consideration for the customer led to the definition of Johnson (1988) who equated quality to value and in which the market was the final judge. Later, Feigenbaum (1983) explicitly recognized the importance of services and added them to the quality definition. He stated that product and service quality can be defined as the total composite product and service characteristics of marketing, engineering, manufacturing, and maintenance through which the product and service in use will meet the expectations of the customer. The concept of Total Quality Management can also explain the behaviour in state corporations concerning procurement and provision of quality. However, there is no one definition of the concept of Total Quality Management. All the available definitions are concerned with providing customer satisfaction which is the prime objective of quality management. Stalh (1995) defined Total Quality Management as a systems approach to management that focuses on the enhancement of value to customers by designing and continually improving organizational processes and systems. Rampey and Roberts (1992) defined TQM as a people focus management system that aims at continual increase in customer satisfaction at continual cost. As suggested by the definitions, TQM is concerned with managing an entire system and processes that take inputs, add value to it, and provide an output to internal and external customers. "Ross (1995) posits that TQM is based on a number of ideas. It means thinking about quality in terms of all functions of the enterprise, and it is a start-to-finish process integrating interrelated functions at all levels. TQM is a systems approach which considers every interaction between elements of the organization. Thus, in the TQM approach, the overall effectiveness of the system is higher than the sum of the individual effectiveness of the subsystems. Kidd (2006) defines procurement as the business management function that ensures identification, sourcing, access and management of the external resources that an organization needs or may need to fulfil its strategic objectives. Procurement exists to explore supply market opportunities and to implement resourcing strategies that deliver the best possible supply outcome to the organization, its stakeholders and customers. Kidd contends that the use of effective procurement combined with TQM results into security of supply, lower costs, reduced risk, improved quality, greater added value, increased efficiency and innovation. In the context of procurement,

executives are responsible for the integrity of the procurement process by putting in place effective procurement quality management systems that guarantee that the procured inputs (goods, works, services) conform to quality and effectiveness requirements and are conducive to achieve overall organizational objectives. A quality management system consists of: quality planning; quality assurance; quality control; and quality improvement (Dahlgaard et al, 1998). This theory is related to this study since it explains how quality is created in an organization at all the levels of production of goods and services. It therefore indicates that the quality of products created is dependent upon the levels of quality in organizations. According to contract theory of procurement Real-world procurement contracts take on a variety of forms. Rogerson (1992) describes four distinct types of contracts commonly employed as: (1) Pure Fixed price contracts, in which the supplier receives a single, fixed payment for the procured item, regardless of the supplier's realized cost; (2) pure cost reimbursement contracts, in which the payment made to the supplier is precisely the supplier's realized cost of producing the item; (3) incentive Fixed price contracts, in which payment to the supplier increases with realized cost up to a threshold cost level, and is capped at this threshold level; and (4) incentive cost reimbursement contracts, in which payment to the supplier again increases with realized cost up to a threshold, and then reflects realized cost exactly above the threshold.

The Relationship between Procurement and Quality:

Bourn (2012) argued that better value for money from procurement can be achieved in many ways. These ways are: getting an increased level or quality of service at the same cost; avoiding unnecessary purchases; ensuring that user needs are met but not exceeded; specifying the purchasing requirement in output terms so that suppliers can recommend cost-effective and innovative solutions to meet that need; sharpening the approach to negotiations to ensure departments get a good deal from suppliers. Departments should act as intelligent customers by discussing with suppliers all the elements of the contract price including level of service, timescale of the assignment, skill mix of the supplier's team and how costs are to be remunerated. Value can also be maximized through optimizing the cost of delivering a service or goods over the full life of the contract rather than minimizing the initial price; introducing incentives into the contract to ensure continuous cost and quality improvements throughout its duration; aggregating transactions to obtain volume discounts; collaborating with other departments to obtain the best prices and secure better discounts from bulk buying; developing a more effective working relationship with key suppliers to allow both departments and suppliers to get maximum value from the assignment by identifying opportunities to reduce costs and adopt innovative approaches; reducing the cost of buying goods or services by streamlining procurement and finance processes (Unal and Dean, 1991). Mbabazi, Karuhanga and Mukokoma (2010) conducted a study in which they sought to find out how compliance to the legal guidelines affected service delivery within Local Government Procurement Units in Uganda. The data used for the analysis was a combination of qualitative and quantitative. The study found that there was delay in service delivery blamed mainly on red tape in government funding, poor capacity of contractors, weather, and interferences from central government officials. The study also found that, although the target of procurement was to increase quality through reduction of costs, on the ground this was not happening. Costs were instead increasing and quality reducing. This study showed that compliance to legal guidelines was not strict resulting into poor quality of provision of goods and services in the Local Government Procurement Units in Uganda. A study by Meireles (2006) was done to, among other objectives; investigate how the procurement guidelines at the World Bank affected the quality of products and services. The study found that the World Bank has clear and elaborate guidelines concerning bidding and delivery of products and services by those who win bids. As a result the quality of services provided by the World Bank is very high. This was attributed to the strict adherence to the rules. A study conducted by Fraunhofer Institute for Systems and Innovation Research (2005) in Germany sought to find out the relationship between the procurement guidelines and the quality and standards of the procured products across the EU nations. The study found that the guidelines of procurement largely varied from country to country. However, the strictness with which the rules were enforced varied from country to country. Countries that had firm adherence to rules achieved high quality products as compared to those with weak adherence to rules. Thai (2001) conducted a study to investigate and identify common elements of public procurement through an analysis of related literature and summarizing government efforts to improve public procurement practices. The article also comprehensively re-examined public procurement by using a systems approach as a method of inquiry. The study was conducted in the USA. The study found that procurement was a product of an interaction of several institutions. The actual procurement work of the Department of Transportation, for example, was performed by the various sub-agencies' procurement operations. Each of these sub-agencies had its own procurement organization. For example, the Federal Railroad Administration had the Office of Procurement Services, under the Associate Administrator for Administration. Each sub-

agency also had its own procurement rules, which did not conflict with Federal Acquisition Regulations and Transportation Acquisition Regulation. Each sub-agency has its own procurement personnel. The strength of the institutions and the strength of their relationship determined the quality of the products provided to the public. Patrick, Mamati and Onyango (2011) conducted a study to evaluate the influence of the Public Procurement Regulations of 2006 on procurement practices in public institutions in Kenya. The research recognized the importance of the Regulations in public procurement since effective public procurement helps in efficient public financial management by ensuring that only sufficient and necessary public funds are invested in assets. The research adopted descriptive case study design. The study found that there were weak institutions to ensure that public funds are well utilized and that goods and services provided are of high quality. This indicated that strong procurement institutions enhanced provision of high quality of goods and services to the public. Rolfstam, Phillips and Bakker (2009) investigated the public procurement agency as an adopter of private-sector innovation, and how this mechanism can contribute to innovation in general. The study found that institutions need to be taken into account as they too may act as barriers for innovation. Similarly, endogenous institutions should also be incorporated in coordination and institutional re-design. The findings suggested that the nature of institutions that participated in procurement of innovation affected the quality of products and services. Jensen and Payne (2003) conducted a study to develop and test a model of audit procurement as a control mechanism to be utilized within an agency framework to regulate audit quality. The study focused on procurement mechanisms which comprised of multiple components including, a set of procurement procedures geared towards identifying quality, the personal characteristics of the individual procurers, and the organizational characteristics under which procurement decisions are made. The study found that procedures that were clear and enhanced competitive bidding resulted into lower costs of products while pushing up quality. But practices that compromised procedure led to higher prices while reducing quality due to poor competitiveness. In another study Soreide (2002) conducted an investigation to determine the effect of corruption on the procurement process. Corruption was interpreted as a way of avoiding the laid down rules and regulations concerning public procurement. In the findings of the study, it was acknowledged that lack of adherence to laid rules had dire consequences on the quality of the products and services resulting from the procurement process. In short, lack of adherence to rules led to poor quality. Prier and McCue (2006) investigated how the compromising of procurement rules and regulations affected the quality of goods and services provided in the public sector. The study found out that this corruption manifested through accepting bribes, having weak procedures and biased decision-making. This led to poor products and services provided by the public sectors to the consumers of the services and products. A study by Caddick and Dale (1998) sought to establish that the role and activities of the purchasing function in an organization are affected by the introduction and development of Total Quality Management (TQM). The study aimed at showing that the use of TQM as a management strategy had great impact on procurement operations is an interesting. A four-part categorization of: supply market, changes in culture and organizational changes in purchasing, economics and costs, and a revised role for purchasing were used as proxies for the management environment of TQM. The study found that the nature of the environment set within an organization affected the procurement process and therefore the quality.

Casas (2011) conducted a study to analyze how quality culture, leadership and motivation within an organization affected the performance with respect to quality among other performance measures. Quality was measured within the perspective of the consumer. The study found that putting in place a culture that valued quality, having leadership that is decided on quality, and coupled with motivation of the staff brings about high quality production at all levels including procurement. This then leads to high levels of customer satisfaction.

Mandiyambira (2011) did a study in Zimbabwe to find out the strategies of managing supplier relationships that engender value for money in public procurement. A wide literature review was conducted to examine the key converging and diverging views of different authors in terms of supplier relationship management strategies and trends in public procurement. The study revealed that long term relationships with suppliers are the best way of managing supplier relationships as there are more benefits to be gained in long term relationships than adversarial approach. This study also revealed that the managerial practices put in place can greatly affect the nature of procurement and the quality resulting.

Conceptual Framework:

This study has two types of variables: the independent variables and the dependent variable. There are four independent variables, namely, procurement legal guidelines, procurement institutional framework, procurement procedures and management environment. The four independent variables contribute to the quality of goods and services provided to the

public. Quality, therefore, is the dependent variable. The manner the variables are presumed to connect is shown in Fig. 1 below.

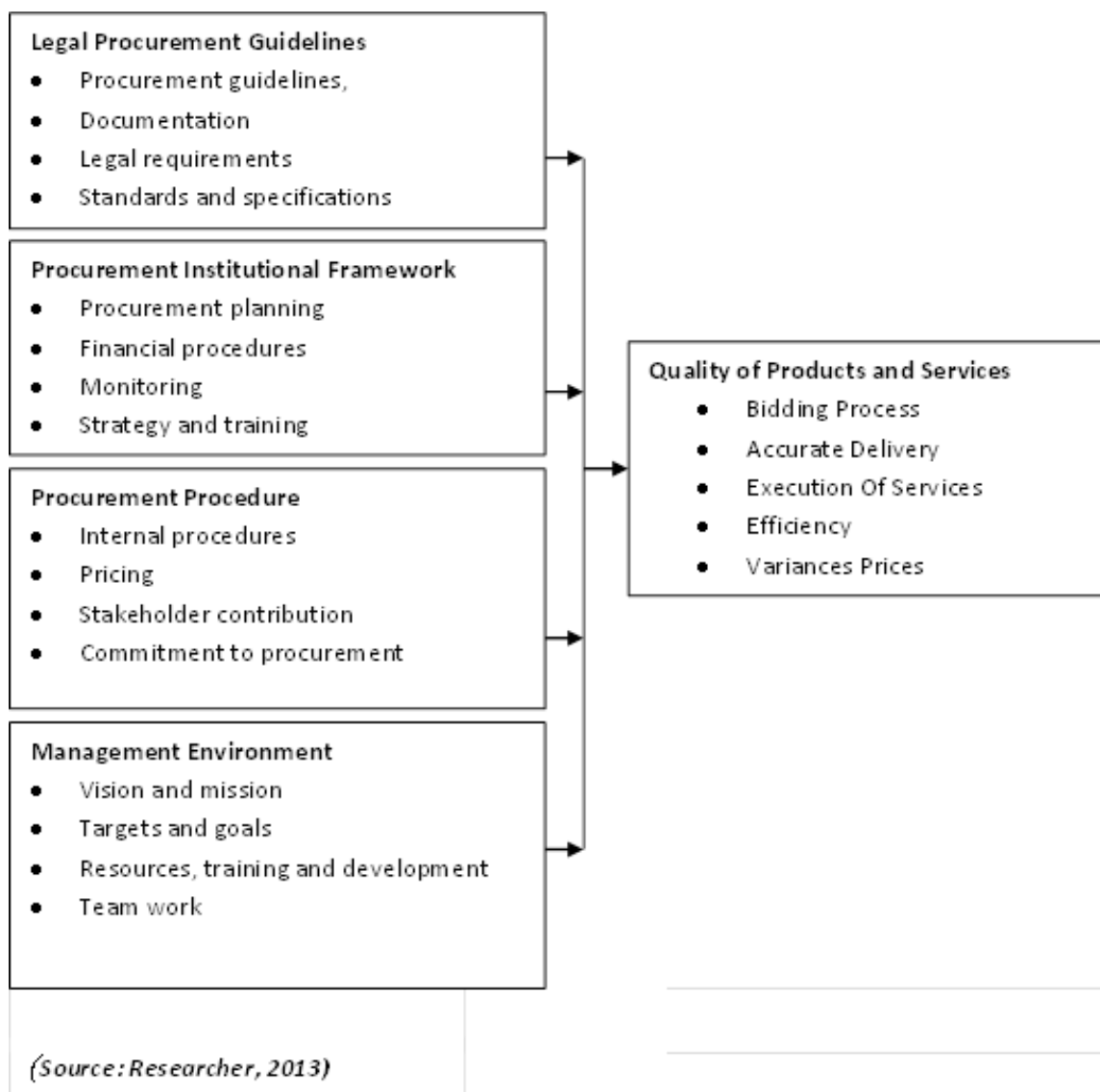


Figure 1: Conceptual Framework

3. RESEARCH METHODOLOGY

Research Design:

This study was descriptive in nature and the researcher used survey method. According to Kothari (2004) an exploratory research is conducted for a problem that has not been clearly understood and is done where not enough is known regarding the relationships between concepts and their explanatory relationship. The exploratory approach is apt for this research since little is known regarding how procurement contributes to quality of services provided by public corporations in Kenya. A Descriptive research is meant to enhance a systematic description that is accurate, valid and reliable regarding the responses on public procurement and its effect on the provision of high quality goods and services to the citizens. This study aims to establish the relationship between procurement and quality of services provided by public corporations in Kenya. The goal can be achieved through using a descriptive methodology. Mandiyambira (2012) used a similar study when conducting a surveying on managing supplier relationships to improve public procurement in Zimbabwe.

Target Population:

Procurement managers of state corporations in Kenya made up the population of this study. The state corporations in Kenya refer to all 127 listed corporations as shown in Appendix I. All the procurement managers, one per State Corporation made up the population. This makes a total of 127 procurement managers.

Sampling Procedure:

The list was divided into groups of two corporations in the order of the list. The number 2 was obtained by Dividing 127 by 64 and approximated. The first corporation from number 1 to 2 as in the list was selected purely randomly. The number chosen indicated the corporation to be selected in each subsequent subgroup. For instance if 2 was selected, every second corporation would participate in the research. This made a total of 64 corporations. In this study number 2 was selected making the sample size 64. One questionnaire was sent to each corporation and required the procurement manager to complete the five subsections. The procurement managers are involved in daily procurement processes and are also managers making them able to provide a fair assessment of the management environment in the corporation they work for. A sample of 64 procurement managers, therefore, made the sample size of this research.

Validity of the Questionnaire:

Bechtold (1959) defined validity as the extent to which the instrument measures what it purports to measure. Content validity is the key type of validity for this study. Content validity pertains to the degree to which the instrument fully assesses or measures the construct of interest. To measure validity, each of the present respondents rated the questionnaire on a scale of 1 to 10. An average score of 7.89 showed that the questionnaire measured what it purported to measure.

Reliability of the Questionnaire:

Reliability refers the extent to which a questionnaire, test, observation or any measurement procedure produces the same results on repeated trials. In short, it is the stability or consistency of scores over time or across raters (Cronbach, 1951). The reliability of the questionnaire will be measured by use of the Cronbach's alpha. George and Mallery (2003) provide the following rules of thumb for Cronbach's alpha values: $\alpha > 0.9$ indicates Excellent reliability; $0.8 < \alpha < 0.9$ indicates good reliability; $0.7 < \alpha < 0.8$ means acceptable reliability; $0.6 < \alpha < 0.7$ indicates questionable reliability; while $0.5 < \alpha < 0.6$ means poor reliability. $\alpha < 0.5$ indicates unacceptable reliability.

Data Processing and Analysis:

A regression analysis of the Likert responses from the questionnaire was done using the mean and standard deviation to determine the extent to which each of the identified factors concerning public procurement affects the quality of products and services provided to the Kenyan public by state corporations. Each of the variables for each state corporation was estimated by the average of the responses of the procurement managers to each of the items under a variable. The relationship between quality of products and services and the independent variables was then analyzed using the simple linear regression model below:

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

Where,

- Y = Quality of products and services
- X_1 = Legal procurement guidelines
- X_2 = Procurement institutional framework
- X_3 = Procurement procedure
- X_4 = Management environment
- α = The intercept term
- $\beta_1, \beta_2, \beta_3, \beta_4$ = The sensitivity of Successful Implementation of quality of products and services to each of the independent variables
- ϵ = The error term of the regression

4. RESEARCH FINDINGS AND DISCUSSIONS

Findings of Demographic Characteristics of Respondents:

Table 4.1 presents the distribution of the respondents. As shown in the table, 26 of the respondents were female making 44.83% while 32 were male making 55.17%. Of the female respondents, 6 had been in their corporations for less than 10 years while 20 had been in the corporation for over 10 years. Of the male respondents, 22 had been in their corporations for less than 10 years while 10 had been in their corporations for over 10 years. In total 28 respondents making 48.28% had been in the corporations for less than 10 years while 30 respondents making 51.72% had been in the corporations for more than 10 years.

Table 4.1: Demographic Characteristics of Respondents

	FEMALE	MALE	TOTAL
LESS THAN 10 YEARS	6(10.34%)	22(37.93%)	28(48.28%)
OVER 10 YEARS	20(34.48%)	10(17.24%)	30(51.72%)
TOTAL	26(44.83%)	32(55.17%)	58(100.00%)

Legal Procurement Guidelines and Quality of Goods and Services:

Legal procurement guidelines variable was measured by the procurement managers of the corporations responding to items in Section B of the questionnaire. Table 4.2 summarizes their responses to the various items concerning legal procurement guidelines. The Grand Mean of 3.29 indicates that the procurement managers generally indicated that the legal procurement guidelines had a moderately significant contribution on the quality of goods and services provided. However, the legal issues that most strongly contributed to the quality of provided goods and services were the strict adherence to standards and specifications ($M=3.52$, $SD=1.30$) and the effectiveness of the mechanisms to ensure that legal guidelines are adhered to at all times ($M=3.66$, $SD=1.01$). The understanding of the legal requirements of procurement ($M=3.03$, $SD=1.15$) had the least contribution to the quality of goods and services provided.

As shown here, the legal requirements do not contribute much to the quality of goods and services provided by the corporations. These findings are in agreement with those of Mbabazi, Karuhanga and Mukokoma (2010) who also found that the legal requirements were not strongly followed to ensure quality in public corporations in Uganda. However, the findings are in sharp contrast with those of Meireles (2006) who established that the high quality of products provided at the World Bank was due to the strict adherence to legal requirements.

Table 4. 2: All Responses to Legal Procurement Guidelines

Legal Procurement Guidelines	MEAN	SD
There are clearly set procurement guidelines	3.21	0.86
Standards and specifications are strictly adhered to	3.52	1.30
Tender documents clearly show on which basis prices should be submitted	3.10	1.23
Complaints regularly arise after procurement procedure are completed	3.21	1.26
Fully understanding all the legal requirements of procurement in your organization	3.03	1.15
There effective mechanisms to ensure the legal guidelines are adhered to at all times	3.66	1.01
GRAND MEAN	3.29	

Table 4.3 shows the analysis of the responses to items on Legal Procurement Guidelines basing on the gender of the respondent. Female respondents had a Grand Mean of 3.23 which was less than that of the Male respondents indicating that the females felt the Legal Procurement Guidelines contributed to the quality of provided goods and services to a lesser extent compared to the male respondents who had a Grand Mean of 3.33. Among the females, however, the greatest contributor to the quality of provided goods and services was the strict adherence to standards and specifications ($M=3.92$, $SD=0.95$) while the least contributors were the tender documents ($M=2.77$, $SD=0.93$). As shown in Table 4.3 the male respondents indicated that the quality of provided goods and services was most strongly affected by the effective

mechanisms to ensure the legal guidelines are adhered to at all times ($M=3.88$, $SD=0.89$). The chi squared analysis of the difference in responses base on gender (Appendix VI a) resulted in a chi squared value of 1.40 which is less than $X^2_{(4,0.05)} = 9.488$. This indicated no statistically significant difference between the responses of male and female respondents.

Table 4. 3: Responses to Legal Procurement Guidelines by Gender

Legal Procurement Guidelines	FEMALE		MALE	
	MEAN	SD	MEAN	SD
There are clearly set procurement guidelines	3.08	0.76	3.31	0.95
Standards and specifications are strictly adhered to	3.92	0.95	3.19	1.47
Tender documents clearly show on which basis prices should be submitted	2.77	0.93	3.38	1.41
Complaints regularly arise after procurement procedure are completed	3.15	1.28	3.25	1.29
Fully understanding all the legal requirements of procurement in your organization	3.08	0.95	3.00	1.32
There effective mechanisms to ensure the legal guidelines are adhered to at all times	3.38	1.12	3.88	0.89
GRAND MEAN	3.23		3.33	

Table 4.4 presents a summary of the responses basing on the length of time the procurement managers had been working at the corporation. The managers were separated into those that had been in the organization for less than 10 years and those who had been there for 10 years or more. Those who had been in the corporations for less than 10 years indicated that legal procurement guidelines moderately contributed to the quality of provided goods and services to a higher extent with a Grand Mean of 3.32 as compared to procurement managers who had been in the corporations for more than 10 years. Procurement managers who had been in their corporations for less than 10 years indicated that the effective mechanisms to ensure the legal guidelines are adhered to at all times ($M=3.79$, $SD=0.89$) had the greatest contribution to the quality of the provided goods and services. Procurement managers who had been in the corporations for over 10 years felt that legal procurement guidelines contributed to the quality of provided good and services to a lesser extent as compared to those who had been in the corporations for less than 10 years. The most contributing factors to them were the strict adherence to standards and specifications ($M=3.53$, $SD=1.19$) and the effective mechanisms to ensure the legal guidelines are adhered to at all times ($M=3.53$, $SD=1.13$). The chi squared analysis of the distributions of the respondents according to the time they had spent in the corporation (Appendix VI b) resulted in a chi squared value of 0.56 which was less than $X^2_{(4,0.05)} = 9.488$. This indicated no statistically significant difference between the views of managers who had been in the corporations for less than 10 years and those who had been there for longer time.

Table 4. 4: Legal Procurement Guidelines by Length of Time at Corporation

Legal Procurement Guidelines	BELOW 10 YRS		OVER 10 YRS	
	MEAN	SD	MEAN	SD
There are clearly set procurement guidelines	3.29	0.99	3.13	0.74
Standards and specifications are strictly adhered to	3.50	1.45	3.53	1.19
Tender documents clearly show on which basis prices should be submitted	3.21	1.48	3.00	1.00
Complaints regularly arise after procurement procedure are completed	3.14	1.41	3.27	1.16
Fully understanding all the legal requirements of procurement in your organization	3.00	1.41	3.07	0.88
There effective mechanisms to ensure the legal guidelines are adhered to at all times	3.79	0.89	3.53	1.13
GRAND MEAN	3.32		3.26	

Procurement Institutional Framework and Quality of Goods and Services:

As shown in Table 4.5 the managers generally agreed that the procurement institutional framework contributed to the quality of goods and services to a great extent (Grand Mean=3.56). The factor that had the greatest contribution was Procurement planning during budget formulation (M=4.17, SD=0.83). The factor identified to have the least contribution was the presence of sustainable strategy and training for procurement officers (M=2.59, SD=0.85).

The findings indicate that the nature of the institution contributes to the quality of goods and services provided. This supports the findings of Rolfstam, Phillips and Bakker (2009) who found that the nature of an institution is a key factor contributing to the quality of goods and services provided. Institutions with clear processes and procedures were bound to have high quality procurements unlike those without clear procedure and processes. The studies also agree with those of Soreide (2002) who found that lack of adherence to rules indeed lowered the quality of goods and services provided in organizations.

Table 4. 5: All Responses to Procurement Institutional Framework

	MEAN	SD
Procurement planning is a key part of the budget formulation	4.17	0.83
Financial procedures support timely procurement, contract execution, and payment	3.79	1.30
There are clear systems and procedures for monitoring procurement	3.69	1.32
There is a sustainable strategy and training for procurement officers	2.59	0.85
GRAND MEAN	3.56	

Table 4.6 shows the responses to items concerning the institutional framework with the respondents grouped by their gender. As shown in the table, female respondents indicated that than the procurement institutional framework contributed to the quality of provided goods and services to a great extent (Grand Mean =3.58). According to the female procurement managers, factors that most greatly contributed to the quality of provided goods and services were the inclusion of procurement planning as a key part of budget formulation (M=3.85, SD 0.90) and the clear systems and procedures for monitoring procurement (M=3.85, SD=1.72). The male procurement managers also indicated that the procurement institutional framework contributed to the quality of the provided goods and services (Grand Mean = 3.55). They indicated that the making of procurement planning a key part of the budget formulation most greatly contributed to the quality of provided goods and services (M=4.44, SD=0.73). The chi squared analysis of the independence between the responses of the male and female procurement managers (Appendix VII a) revealed that the responses were not statistically significantly different as shown by the chi squared value of 0.17 which was less than $X^2_{(4,0.05)} = 9.488$. This indicated no statistically significant difference between the responses of male and female respondents.

Table 4. 6: Responses Procurement Institutional Framework by Gender

Procurement Institutional Framework	FEMALE		MALE	
	MEAN	SD	MEAN	SD
Procurement planning is a key part of the budget formulation	3.85	0.90	4.44	0.73
Financial procedures support timely procurement, contract execution, and payment	3.77	1.69	3.81	0.98
There are clear systems and procedures for monitoring procurement	3.85	1.72	3.56	0.96
There is a sustainable strategy and training for procurement officers	2.85	0.80	2.38	0.89
GRAND MEAN	3.58		3.55	

Table 4.7 presents an analysis of the responses from the procurement managers categorized according to whether the procurement manager had been in the corporation for less than 10 years or for more than 10 years. Procurement managers who had been in the corporation for less than 10 years indicated that procurement institutional framework had moderate contribution on the quality of goods and services provided (Grand Mean = 3.41). However, making procurement planning a key part of the budget formulation had the greatest contribution on the quality of goods and services provided (M=4.21, SD=0.80).

Procurement managers who had been in their corporations for over 10 years indicated that procurement institutional framework contributed to the quality of provided goods and services to a great extent (Grand Mean = 3.70). They also indicated that making procurement planning a key part of the budget formulation had the greatest contribution on the quality of goods and services provided (M=4.13, SD=0.92). The chi squared analysis of the responses of the procurement managers according to whether they had been in the corporation for over or less than 10 years (Appendix VII b) resulted in a chi squared value of 1.72 which was less than $X^2_{(4,0.05)} = 9.488$. This indicated no statistically significant difference between the views of the procurement managers that had been in the corporations for less than 10 years and those who had been in the corporations for over 10 years.

Table 4. 7: Procurement Institutional Framework by Length of Time

Procurement Institutional Framework	LESS 10 YEARS		OVER 10 YEARS	
	MEAN	SD	MEAN	SD
Procurement planning is a key part of the budget formulation	4.21	0.80	4.13	0.92
Financial procedures support timely procurement, contract execution, and payment	3.57	1.02	4.00	1.56
There are clear systems and procedures for monitoring procurement	3.50	0.94	3.87	1.64
There is a sustainable strategy and training for procurement officers	2.36	0.84	2.80	0.86
GRAND MEAN	3.41		3.70	

Procurement Procedure and Quality of Goods and Services Provided:

Table 4.8 analyzes the responses and indicates that generally, the procurement managers agreed that the procurement procedure had a moderate contribution on the quality of goods and services provided (Grand Mean = 3.37). However, the basing of purchases on market prices generating savings contributed most on the quality of goods and services provided (M=3.66, SD=0.97). The least contributing factor were the mechanisms to prevent collusive behavior in procurement (M=2.72, SD=1.36).

Table 4. 8: All Responses to Procurement Procedure

Procurement Procedure	MEAN	SD
There are clear laid down internal procurement procedures	3.34	1.14
Purchases are based on market prices and can generate savings	3.66	0.97
Stakeholders effectively contribute to the operations of procurement	3.59	0.98
Procurement transactions are made and commitments met within reasonable time	3.34	1.37
Procurement, information is made available and effectively communicated and shared among various stakeholders	3.59	1.02
There are effective mechanisms to prevent collusive behavior in procurement	2.72	1.36
GRAND MEAN	3.37	

Table 4.9 provides the analysis of the responses by procurement managers basing on their gender. Female procurement managers indicated that procurement procedure contributed to the quality of goods and services provided to a great extent (Grand Mean=3.50). They indicated that basing purchases on market prices and generating savings had the greatest contribution on the quality of provided goods and services (M=3.92, SD=0.86). On the contrary, mechanisms to prevent collusive behavior in procurement had the least contribution to the quality of provided goods and services (M=2.69, SD=1.25).

The male procurement managers indicated that procurement procedure moderately contributed to the quality of goods and services provided (Grand Mean=3.27). The factor that most contributed to the quality of provided goods and services was the availability of procurement information and the effective of the information to various stakeholders (M=3.69,

SD=1.01). The chi squared analysis of the independence in the distributions (Appendix VIII a) resulted in the chi-squared value of 5.89 which was less than $X^2_{(4,0.05)} = 9.488$. This indicated no statistically significant difference between the views of male and female respondents.

Table 4. 9: Responses to Procurement Procedure by Gender

Procurement Procedure	FEMALE		MALE	
	MEAN	SD	MEAN	SD
There are clear laid down internal procurement Procedures	3.46	1.05	3.25	1.24
Purchases are based on market prices and can generate savings	3.92	0.86	3.44	1.03
Stakeholders effectively contribute to the operations of procurement	3.77	0.93	3.44	1.03
Procurement transactions are made and commitments met within reasonable time	3.69	1.03	3.06	1.57
Procurement, information is made available and effectively communicated and shared among various stakeholders	3.46	1.05	3.69	1.01
There are effective mechanisms to prevent collusive behavior in procurement	2.69	1.25	2.75	1.48
GRAND MEAN	3.50		3.27	

As shown in Table 4.10, procurement managers who had been in their corporations for less than 10 years indicated that procurement procedure contributed to the quality of provided goods and services to a great extent (Grand Mean =3.57). Making procurement transactions and meeting commitments within reasonable time had the greatest contribution to the quality of provided goods and services (M=3.86, SD = 1.17). Procurement managers who had been in their corporations for over 10 years indicated that procurement procedure contributed moderately to the quality of provided goods and services (Grand Mean=3.19). They indicated that basing purchases on market prices had the greatest contribution to the quality of provided goods and services (M=3.67, SD=0.99). However, a chi squared analysis of the distribution of the responses (Appendix VIII b) indicated no difference in the views according to time in the corporation. The chi squared values was 2.19 which was less than $X^2_{(4,0.05)} = 9.488$. This indicated no statistically significant difference.

Table 4. 10: Procurement Procedure by Length of Time at Corporation

Procurement Procedure	LESS 10		OVER 10	
	MEAN	SD	MEAN	SD
There are clear laid down internal procurement Procedures	3.71	0.91	3.00	1.25
Purchases are based on market prices and can generate savings	3.64	1.08	3.67	0.90
Stakeholders effectively contribute to the operations of procurement	3.79	0.97	3.40	0.99
Procurement transactions are made and commitments met within reasonable time	3.86	1.17	2.87	1.41
Procurement, information is made available and effectively communicated and shared among various stakeholders	3.64	1.01	3.53	1.06
There are effective mechanisms to prevent collusive behavior in procurement	2.79	1.37	2.67	1.40
GRAND MEAN	3.57		3.19	

Management Environment and Quality of Goods and Services:

This section provides the analysis of the responses of the procurement managers regarding the management environment in their corporations. As shown in Table 4.11, the procurement manager indicated generally that the management environment moderately contributed to the quality of provided goods and services (Grand Mean=2.78). The clear vision and mission (M=3.38, SD=1.24) and team work and performance appraisal (M=3.38, SD=1.15) were the management factors that had the greatest contribution on the quality of provided goods and services. The findings suggest that the management environment does not focus on bringing value to the corporations through quality procurement. Just as found by Casas (2011) an organization with poor management environment characterized by poor culture, poor leadership and low motivation will procure low quality goods. While an organization with excellent culture, effective leadership and high motivation will procure high quality goods.

Table 4. 11: All Responses to Management Environment

Management Environment	MEAN	SD
Creating clear vision and mission	3.38	1.24
Setting achievable and realistic targets	2.28	1.49
Providing staff with required resources, training and development	2.10	1.37
Encourage team work and performance appraisal	3.38	1.15
Inspiring, empowerment and recognizing staff contribution	2.62	1.32
employee participates in organization decision making	2.66	1.29
Reward best performing employees	3.21	1.57
Top management being constantly informed of issues in procurement	2.66	1.42
GRAND MEAN	2.78	

Table 4.12 analyses the responses of the procurement managers according to their gender. As shown, female procurement managers indicated that the management environment contributed to the quality of provided goods and services to a moderate extent (Grand Mean=3.10). The management environment factor that had the greatest contribution to the quality of provided goods and services was the rewarding of the best performing employees (M=3.62, SD=1.66). The male procurement managers indicated that the management environment contributed to the quality of provided goods and services to a moderate extent (Grand Mean=2.53) though to a lesser extent as compared to the female procurement managers. To the males, the management environment factor that most greatly influenced the quality of provided goods was the clear vision and mission (M=3.25, SD=1.29). The chi squared analysis for the distribution of male and female managers responses concerning the management environment (Appendix IX a) resulted in a chi squared value of 2.19 which was less than $\chi^2_{(4,0.05)} = 9.488$. This indicated no statistically significant difference between the views of male and female respondents.

Table 4. 12: Respondents Management Environment by Gender

Management Environment	FEMALE		MALE	
	MEAN	SD	MEAN	SD
Creating clear vision and mission	3.54	1.20	3.25	1.29
Setting achievable and realistic targets	2.38	1.50	2.19	1.52
Providing staff with required resources, training and Development	2.54	1.45	1.75	1.24
Encourage team work and performance appraisal	3.85	1.07	3.00	1.10
Inspiring, empowerment and recognizing staff Contribution	2.85	1.28	2.44	1.36
Employee participates in organization decision making	3.00	1.22	2.38	1.31
Reward best performing employees	3.62	1.66	2.88	1.45
Top management being constantly informed of issues in procurement	3.00	1.41	2.38	1.41
GRAND MEAN	3.10		2.53	

The responses from the procurement managers were analyzed according to the time they had spend in their corporations and the results are as presented in Table 4.13. Procurement managers who had been in their corporations for less than 10 years indicated that the management environment had a moderate contribution to the quality of provided goods and services (Grand Mean=2.70). The greatest contributing management environment factor was clear vision and mission (M=3.50, SD=1.31).

Table 4. 13: Responses Management Environment by Time at Corporation

Management Environment	LESS 10		OVER 10	
	MEAN	SD	MEAN	SD
Creating clear vision and mission	3.50	1.31	3.40	1.12
Setting achievable and realistic targets	2.17	1.47	2.27	1.44
Providing staff with required resources, training and Development	1.83	1.19	2.20	1.37
Encourage team work and performance appraisal	3.42	1.16	3.27	1.22
Inspiring, empowerment and recognizing staff Contribution	2.58	1.24	2.60	1.30
employee participates in organization decision making	2.67	1.50	2.60	1.18

Reward best performing employees	3.00	1.54	3.27	1.67
Top management being constantly informed of issues in procurement	2.42	1.31	2.87	1.51
GRAND MEAN	2.70		2.81	

In Table 4.13 above, procurement managers who had worked in their corporations for more than 10 years indicated that the management environment contributed moderately to the quality of provided goods and services (Grand Mean=2.81). The management environment factor with the greatest contribution to the quality of provided goods and services was the clear vision and mission (M=3.40, SD=1.12). The chi squared analysis of the distributions of the responses according to whether the procurement manager had been in the corporation for less than or for over 10 years (Appendix IX b) gave a chi-squared value of 1.71 which was less than $X^2_{(4,0.05)} = 9.488$ indicating no statistically significant difference between the responses.

Correlation Analysis:

Table 4.14: Quality of Products and Services by Time at Corporation

Quality of Products and Services	LESS 10		OVER 10	
	MEAN	SD	MEAN	SD
There are limited variations in procurement prices	3.29	0.99	3.47	1.13
Suppliers always deliver the correct goods	3.07	1.14	3.27	1.16
Suppliers always deliver goods on time	3.07	1.33	2.87	1.30
There are no delays in executing procurements	3.36	1.45	3.33	1.45
There is high level of efficiency in the procurement unit	3.14	1.03	3.27	1.10
The bidding process is very competitive	2.86	0.77	3.27	1.28
GRAND MEAN	3.13		3.24	

Table 4.14 presents the Pearson correlation coefficients between pairs of the variables. The correlations between pairs of variables were generally low. The highest positive correlation was between procurement procedure and quality of provided goods and services ($r = 0.3489$) while the lowest positive correlation was between management environment and quality of provided goods and services ($r = 0.0406$). The strongest negative correlation was between legal procurement guidelines and procurement institutional framework ($r = -0.2986$) while the weakest negative correlation was between procurement institutional framework and procurement procedure ($r = -0.0396$). The level of dependence between variables was, therefore low.

Table 4.15: Correlation Matrix

	LPG	PIF	PP	ME	QP
LPG	1.0000				
PIF	-0.2986	1.0000			
PP	-0.1591	-0.0396	1.0000		
ME	-0.0515	0.0756	0.2033	1.0000	
QP	-0.0604	-0.0806	0.3489	0.0406	1.0000

(LPG=legal procurement guidelines, PIF=procurement institutional framework, PP=procurement procedure, ME=management environment, QP=quality of provided goods and services)

Regression Results:

Regression analysis was done to establish the relationship between the independent variables: legal procurement guidelines, procurement institutional framework, procurement procedure and management environment and quality of provided goods and services. The results are presented in Table 4.18. The intercept of the regression was 2.41736 ($p > 0.05$). The coefficient for Legal Procurement Guidelines (X_1) was -0.03122 ($p > 0.05$). The coefficient for Procurement Institutional Framework (X_2) was -0.08484 ($p > 0.05$). The coefficient for Procurement Procedure (X_3) was 0.36383 ($p > 0.05$) while the coefficient of Management Environment (X_4) was -0.01858 ($p > 0.05$). The

coefficient of determination was 0.1271 indicating 12.71% of variation in quality of provided goods and services was explained by variation in the independent variables. For the whole regression, $F_{(4,24)} = 2.18424, p = 0.4943$.

Table 4.16: Regression Analysis Results

	Estimated Coefficients	Std. Error	t value	Pr(> t)
Intercept	2.41736	1.60188	1.509	0.1443
Legal Procurement Guidelines	-0.03122	0.24066	-0.130	0.8979
Procurement Institutional Framework	-0.08484	0.23726	-0.358	0.7238
Procurement Procedure	0.36383	0.20802	1.749	0.0931.
Management Environment	-0.01858	0.14179	-0.131	0.8968

Significance Codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.744 on 24 (d.f)

R-squared: 0.1271, $F_{(4,24)} = 0.8733, p = 0.4943$

The regression model is:

$$QP = 2.42 - 0.03(LPD) - 0.08(PIF) + 0.36(PP) - 0.02(ME)$$

The regression results indicate that the adherence to the legal procurement guidelines is having a negative effect on the quality of the goods and services provided by the public corporations. In accordance with the findings by Mbabazi, Karuhanga and Mukokoma(2010) it indicates that the corporations do not strictly follow set legal guidelines and, therefore, compromising the quality of goods and services provided. The regression results also indicated that the institutional framework regarding procurement is also negatively affecting the quality of goods and services provided. This negative effect is indicative of the findings by Jensen and Payne (2003) who found that the characteristics of the organizations within which the procurement was carried determined the quality of procurement. In this study the negative coefficient indicates that the institutional frameworks do not support high quality procurement. The procurement procedure positively contributes to the quality of goods provided. The findings indicate that due to adherence to well laid procedure, then positive changes in the quality of procurement are realized. The findings agree with those of Soreide (2002) who found that failure to follow laid down procedure led to poor quality of procurement while strict adherence to laid down procedures led to improved procurement. This also confirms the findings of Prier and McCue (2006) who found that accepting avoidance of adhering to laid down procedure through taking bribes, having weak procedures and biased decision-making in the public sector contributed to poor procurement while following procedure improved procurement.

Management environment contributed negatively to the quality of provided goods and services. This indicates the management environment in the public corporations contributed to the poor quality of provided goods and services. The findings agree with those of Mandiyambira (2011) who found that proper management approaches especially focusing on suppliers improved procurement unlike when management did not have strategies to manage suppliers. The results also agree with the findings of Casas (2011) who found that the nature of leadership and management in organizations contributed to the quality of goods and services provided while ineffective leadership and management led to low quality procurement.

5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary of Findings:

The first objective was to establish how the procurement legal guidelines affect the quality of goods and services provided to the public by state corporations. The results indicate that the legal procurement guidelines had a moderate negative contribution towards the quality of goods and services provided. The second objective was to establish how the procurement institutional framework improves the quality of goods and services. The procurement institutional framework contributed to the quality of goods and services to a great extent. The procurement institutional framework has a negative effect on quality of goods and services provided. The third objective was to establish how laid procurement procedures improve the quality of goods and services provided. The procurement procedures had a moderate contribution

toward the quality of goods and services provided. Laid down procedures improve the quality of goods and services provided. The fourth objective was to establish how the management environment in the State corporations affects the quality of goods and services provided to the public. The management environment moderately contributed to the quality of provided goods and services. The quality of goods and services provided to the public was low. The management environment reduces the quality of goods and services provided.

Conclusions:

From the results, the following conclusions can be drawn. First, there is poor adherence to the laid legal procurement guidelines. The failure to strictly follow these laid down legal procedures led to the low quality of services provided to the public. The currently laid legal procedure slows the procurement process and does not guarantee high quality goods and services provided to the customer. Secondly, the institutional framework existing in the corporations did not support provision of high quality goods and services to the public by corporations. This means formal laws, regulations informal conventions, customs, and norms in the corporations did not encourage provision of high quality services to the public. Procurement procedure positively contributes to the quality of goods provided to the public. This leads to the conclusion that the processes contributed to some extent towards the quality of services and goods to the public by way of offering improvement. The quality of goods and services provided was also reduced by the general management environment. The quality culture, leadership effectiveness and motivation levels in the corporations did not encourage provision of high quality services and goods.

Recommendations for Policy and Further Research:

Basing on the conclusions, the following recommendations arise in the light of aiming to improve the goods and services provided to the public by public corporations. First, there has to be improved enforcement of adherence to procurement legal guidelines. Not only should the law be enforced, they should be revised to remove any weaknesses that provided loopholes. This should be done through regular audits by Office of the Auditor General by providing them with both financial and human resource, regular training of staff involved in procurement in the state corporations on the Public Procurement and Asset disposal Act. Public Procurement Oversight Authority should produce standard tender documents which clearly spell out quality standards and how it can be measured objectively. The procurement should also be amended to allow the use of brand names as a means of determining quality because some goods and services are so similar and describing them to get the quality required is very difficult. The existing institutional framework includes the supply chain aspect in the corporations should be changed so that they support the provision of high quality goods and services by the public by corporations. This means that only suppliers accredited by ISO should be used to provide goods and services also suppliers must provide certificate from Kenya Bureau of Standards signifying good quality and also staff involved in the inspection and acceptance of goods and services should be trained on quality standards this will encourage provision of high quality goods and services. The procuring entities should develop a policy on building suppliers and contractor's capacity through regular trainings and also financial strength by paying them promptly this will help them maintain good quality standards. Though procurement procedure positively contributed to the quality of goods provided to the public, the manager did not indicate that the quality of goods and services provided to the public was excellent. Measures should be put in place such as the internal auditing, developing procurement policies and procedures manuals and seeking International Standard Organizations accreditation to standardize processes to make the procurement procedures effective enough to bring about improved provision of services to the public. This study also recommends a change in the general management environment. There should be an inculcation of quality culture of goods and services. Effective leadership should be put in place because without effective leadership, both the procurement processes and provision of services will fail. Performance targets on quality should be set and those who meet and surpasses targets should be rewarded. This will motivate workers towards provision of high quality services and goods to the public. Management should employ only registered members with professional bodies like Kenya Institute of Supplies Management, Chartered Institute of procurement and supply who understand what quality is and its implications to handle procurement issues, section 16 of The Supplies Practitioners Management Act 2007, describes a procurement professional as one who has both academic and professional qualification in procurement and the Public Procurement and Asset Disposal Act 2015 insist that only procurement professional licensed by Kenya Institute of Supplies Management can participate on public procurement and give their advice, managers must adhere to this and this will only be possible through regular human resource audits. The accounting officers must also ensure both functional and performance

specifications are clearly described as ambiguity would result into poor quality. Based on the limitations of the findings of this study; the study recommends that a research be done on the same topic but using historical data. Historical data is less biased than the data collected by a Likert-scaled questionnaire. This study recommends that the research is done across different types of organizations in Kenya in order to enable generalize ability. If the research is repeated across all organizations in Kenya, the findings will be stronger. In fact, given that the East African Community is taking shape, the study can be extended to the East African region. The research can also be repeated after a given time in future to determine whether the scenario is still the same in the public corporations in Kenya. This will show the trend of the changes in procurement management and service provision in public corporations in Kenya.

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