

**EFFECTS OF TENDERING PROCESS ON SERVICES DELIVERY IN ROAD
CONSTRUCTION SECTOR. A CASE OF KERRA**

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DECLARATION

I declare that this research project is my original work except where stated otherwise and that it has never been submitted to any other institution of higher learning for any award.

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HDE-324-004-6823/2016

This research project has been submitted for examination with my approval as the University supervisor.

Signature: **Date:**

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DEDICATION

I dedicate this research study to my family and friends for their emotional and material support throughout my study.

ACKNOWLEDGEMENT

I am thankful to God for the blessings He Has shown me throughout my entire study period. I also appreciate the guidance and support of my supervisor, Dr. Makori Moronge without whose help; this project would not have been a success. Finally, I appreciate the support of my family and friends whose encouragement, prayers and support have been my strength throughout my study period. To everyone who in one way or another contributed to the success of this study, your support knows no measure.

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DEFINITION OF TERMS

Contract management is the process of managing contract creation, execution and analysis to maximize operational and financial performance at an organization, all while reducing financial risk.

Process is described to be a set of activities having inputs and outputs, beginning and end and usually occurring in a certain sequence.

Procurement planning is the process of deciding what to buy, when and from what source.

Public Services - the services which are funded with public money.

Public tendering process is a function that includes all stages of the process of acquiring property, works and services, involving the use of public funds to accomplish specified public goals.

Service delivery describes the distribution of basic resources citizens depend on like water, electricity, sanitation, infrastructure, land, and housing.

Supplier selection is the process of selecting a company/entity to acquire the necessary materials to support the outputs of the organization.

Tendering is the process of choosing the best or cheapest company to supply goods or do a job by asking several companies to make offers for supplying the goods or doing the work.

ABBREVIATIONS

ANOVA	-	Analysis of Variance
AVL	-	Approved Vendors List
ERS	-	Economic Recovery Strategy
ICB	-	International Competitive Bidding
KeRRA	-	Kenya Rural Roads Authority
KRB	-	Kenya Roads Board
NCT	-	National Competitive Tendering
NPM	-	New Public Management
RFI	-	Requesting for Information
RFQ	-	Requesting for Quotation
RICS	-	Road Inventory and Condition Survey
SPSS	-	Statistical Package for Social Scientists

ABSTRACT

The aim of this study was to establish the effects of tendering process on services delivery in road construction sector in Kenya. The study was guided by the objectives; to determine the influence of Procurement Planning on services delivery in road construction sector in Kenya; To find out the influence of Tendering Method on services delivery in road construction sector in Kenya; To assess the influence that supplier selection has on services delivery in road construction sector in Kenya; To establish the influence of contract management on services delivery in road construction sector in Kenya. The target population of the study was 196 employees of KERRA The sample frame included the employees defined by their departments. Data collection instrument used was the questionnaires. The pilot test was conducted to ensure the validity and reliability of the instruments. The findings were analysed using Statistical Package for Social Sciences (SPSS Version 21) and presented using windows 8 Microsoft office (version 2014). It is notable that there exists strong positive relationship between the independent variables and dependent variable as shown by R value (0.844). The coefficient of determination is between zero and one (Robinson, 2010). The data showed that the high R square is 0.712. It shows that the independent variables in the study were able to explain 71.20% variation in the service delivery in the road sector while the remaining 29.80% is explained by the variables or other aspects outside the model. Procurement planning is usually the first stage of procurement process and therefore organization need to develop the skills of the employees on developing quality procurement plans based on the approved budgets. The study recommends that the organization need to identify the most appropriate procurement methods to enhance service delivery. There is need to have an open tendering to increase the needed experience and qualified tenderers, lead to fairness and transparency in the tendering process. The study recommends that there is need for organization to create and maintain a good relationship with the contractors. There should be a mutual trust between the contractor and organization. There is need to enhance regular communication with the contractor and timely management of possible problems in the contract. The study recommends that the organization control and manage contract changes efficiently by ensuring that the contractors are paid in time. There should be regular communication between the organization and contractor. The organization should ensure that the contract terms were well adhered to and final reports always well maintained.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The extent that procurement of goods and services is of benefit to a public organization, and the public at large depends on how effective and efficient the tendering process is (Snider & Rendon, 2012). Public tendering process entails all phases used in acquisition of works, property and services, that involve the use of money belonging to the public to accomplish certain public goal. The process commences with need identification and concludes with the completion of contract. The evaluation of needs is carried out, products, scope of works, or services identified, delivery means and procedure for entering into a contract determined, the buying entity and supplier enter into a contract arrangement and services, goods or works are performed (Bolton, 2008). Tendering process is the sequential phases in the cycle of procurement, which include the procurement plan, procedures choice, soliciting of tenderers, examining and evaluating offers, awarding of contract as well as contract management. In other words, the tendering process begins from need identification, through suppliers selection, to awarding of contract and contract management, including disposal (Lindsley & Stephenson, 2008).

Public tendering process follows a stipulated legal framework during execution while advancing goals of the government (Gordon, 2009). The public entities carrying out the tender may have internal aims such as efficiency, cost and on time delivery of goods or services. In the same token, the public organizations have to attend to the objectives and goals of the public in general who may happen to have conflicting demands (Knight, Harland & Telgen, 2012). This complicates the tendering process and more so the tendering entities who have to attain the expected objectives. In the long run, many tendering entities suffer massive losses because of

poor management of the tendering processes. The tendering process is mainly comprised of the tender plan, tendering itself as well as contract management (Shirima, 2009).

The processes of tendering especially tender planning impacts on duration it takes for the execution of works, goods or services to be delivered, the quality and also cost of the works, services or goods acquired, (Basheka, 2008). The management of contract stage aids government entities in getting the right quality of goods or services, within a specific time and budget. It is vital to take note of the tendering processes, among them planning, supplier selection, tendering method, as well as contract management, and it requires a holistic approach. These processes have a central role in the tendering process particularly in managing the contract smoothly and ultimate delivery of expected outputs. Consequently, so as to have a thorough tendering system, efficient tendering processes are of extreme importance to the tendering organization (Mahmood, 2010).

According to Liu, Wang and Wilkinson (2016), efficient and effective tendering processes results in positive social impacts such as enhanced expectation of realizing other government objectives, more access to government contracts by citizens, better reputation for government institutions, and quality social services including stable and reliable electricity, better roads, clean water, airports, schools, hospitals (Raymond, 2008). Poor public tendering processes translates to higher cost to the government and the citizens, delays in execution of projects or deliverables which ends up in escalation of cost, poorly executed project and delaying the delivery of benefits to the beneficiaries. They further result in poor proficiency of job contracts, delivering of poor-quality goods, delaying of benefits to the beneficiaries and nurtures elements of corruption in the tendering process (Tweneboah & Ndebugri, 2017).

Service delivery is a function that is very fundamental in the relationship between citizens and government of the day (Wagana, Iravo, Nzulwa & Kihoro, 2016). Government performance is measured through service delivery to its people (Shimengah, 2018). Abe and Oluwaleye (2014) contends that the people expects to better service delivery from the government. They offered that improved health care at affordable rates, low inflation, provision of good urban roads and good road networks to the rural areas for the transport of agricultural products and raw materials, better education, provision of clean water, are the indices that can be used to measure service delivery to the people. Scholars around the globe contend that service delivery is an indicator of the health of a society, which strengthens the social contact between the state and its citizens. Public service delivery is also a key determinant of quality of life and an important element of poverty reduction strategy (Akinboade, Mokwena, & Kinfack, 2013).

In the most recent, several public service reforms have been started that aim to place satisfaction of a citizen at the centre of service delivery and policy making (Korir, Rotich & Bengat, 2015). Efforts under the Economic Recovery Strategy (ERS) to improve service delivery in the public sector through creating a solid link between budgeting, planning and implementation; while improving strategic management as well as performance management have been termed as a few of other recent initiatives to improve public service delivery (Muriu, 2017). The Kenyan government has constantly intensified efforts to bring about change in attitude in the public service, orientation in service delivery, performance management, skills inventory assessments, service delivery computerization, and also through training and development (Okech, 2017).

1.2 Statement of the Problem

The service delivery in government has continued to draw attention from the internal and external environment. Weakness in delivering public services can be put down to governance failure in developing countries, but it can be equally the case in the context of developed countries (Kemoni & Ngulube, 2008). It is a matter of how, in a given socioeconomic context, a particular country chooses to have its public services designed, developed and delivered. Various factors affecting service delivery include factors such as workforce remuneration, promotional procedures, training, and organizational culture among other factors (Pathak, Naz, Singh & Smith, 2010). However, it is important to note that service delivery in government institutions is highly dependent on efficient and effective tendering processes. Despite the existence of procurement departments and tendering committees in public institutions, the service deliveries they offer are still questionable. Kulshrestha (2013) notes that there is lack of transparency, efficiency, and unreliable delivery of services that mainly originates from poor tendering processes.

Efficient tendering system is a main prerequisite of managing public expenditure in a contemporary budgetary system. Effective tendering policies and practices can reduce public expenditure; yield timely outputs, stimulate private sector development; as well as reduce delays, waste, corruption and inefficiencies in government (Djurovic-Todorovic & Djordjevic, 2009). Conversely, using public funds inefficiently emanates from issues across the whole process of tendering, from needs identification, bidding documents creation, to a tender process that lacks competition and transparency especially during bidding, evaluation of bids, contract awarding, as well as poor contract supervision. Despite the efforts made to streamlining the public tendering processes in Kenya, tendering processes are still inefficient and usually lack proper

accountability. Shirima (2009) is of the opinion that, tendering processes are key among the things that impede attainment of value for money in public sector procurement.

In Kenya, ninety three percent (93%) of all freight and passenger traffic is carried by road. The road network is extensive, consisting of approximately 161,451.4 kilometers (out of which 10% is paved, while the rest of the network is either gravel or earth roads). It is estimated that about 30% of the paved roads are in good condition while only about 20% of the unpaved roads is in maintainable condition. Hence a large portion of the network is in either poor or failed condition and requires urgent rehabilitation to restore it to a maintainable condition. According to the latest data from the Road Inventory and Condition Survey (RICS), the condition of paved roads is – 19% good, 22% fair and 59% poor; while condition of unpaved roads is - 12% good, 22% fair and 66% failed (KRB Annual Report, 2016). According to Annual Public Roads Programme for the Financial Year 2017/2018, road maintenance levy fund collected was 63.5 Billion Kenya Shillings from which 11.4 Billion Kenya Shillings (32%) was allocated to KeRRA. Comparatively, this is huge allocation and yet very little has been achieved in terms of road development, rehabilitation, maintenance and management of rural roads in the country which falls under KeRRA. It is from this point of view that this study seeks to find if tendering process has any effects on services delivery particularly in road construction sector. Besides, there is not a single study that has been carried out in this area and especially using a case of KeRRA. Therefore, this study will seek to fill this gap.

1.3 Objectives of the Study

The aim of this study was to establish the effects of tendering process on services delivery in road construction sector in Kenya

1.3.1 Specific Objectives of the Study

The study was guided by the objectives;

- i. To determine the influence of Procurement Planning on services delivery in road construction sector in Kenya.
- ii. To find out the influence of Tendering Method on services delivery in road construction sector in Kenya.
- iii. To assess the influence that supplier selection has on services delivery in road construction sector in Kenya.
- iv. To establish the influence of contract management on services delivery in road construction sector in Kenya.

1.4 Research Questions

The study was guided by the following research questions;

- i. What influence does Tender Planning has on services delivery in road construction sector in Kenya?
- ii. What is the influence of Tendering method on services delivery in road construction sector in Kenya?
- iii. What is the influence of supplier selection on services delivery in road construction sector in Kenya?
- iv. How does contract management influence services delivery in road construction sector in Kenya?

1.5. Justification of the Study

The study was useful to the government in identifying key success areas in the tendering process as well as key challenges that are involved in the process. Through this study, policy makers was able to identify the gaps in the current tendering system and put in place remedial measures that ensured better and effective service delivery in the country. The researcher acquired hands-on research skills and moreover, a deeper understanding into the effects of tendering process on services delivery in road construction sector. The study was useful to scholars evaluating the effects of tendering process on services delivery in the public sector particularly in road construction sector. The study shall add to the body of knowledge in the area of tendering process as well as services delivery in road construction sector. Future researchers may use the recommendations of this research to further study the area of tendering process as well as services delivery in road construction sector.

1.6 Scope of the Study

The scope of this research was limited to KeRRA which is a State Corporation within the State Department of Infrastructure under the Ministry of Transport, Infrastructure, Housing and Urban Development and established through the Kenya Roads Act, 2007. The research targeted KeRRA employees especially the ones working in procurement department. The study was limited to the four research objectives namely; To determine the influence of Tender Planning on services delivery in road construction sector in Kenya; To find out the influence of Tendering method on services delivery in road construction sector in Kenya; To establish the influence of contract management on services delivery in road construction sector in Kenya; and To assess the influence that supplier selection has on services delivery in road construction sector in Kenya.

1.7 Limitations of the Study

The anticipated limiting factors to the study included; strict organizational policies on information management. The policies require that high standards of confidentiality be applied whereby information relating to budget operations and financial management and strategic plans is highly guarded by the entity and employees in particular. These might lead to respondents refusal to respond to the research instruments or the information provided may lack a lot in details. However, the researcher assured the affected respondents that the information they provided was treated with utmost confidentiality and was used strictly for academic purposes only. Secondly, because the study adopted simple random sampling method in sample selection, some respondents might have information relevant to the study but they might end up not being picked in the representative sample size. To mitigate this the researcher ensured that there was fair representation of the sample.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the theoretical and empirical literature to enhance understanding of the research content. The chapter also examines the Conceptual framework to inform the linkages and relationship between study variables.

2.2 Theoretical Review

This study will be founded on Principal-Agent Theory and New Public Management Theory.

2.2.1 Principal-Agent Theory

The Principal-Agent theory (also known as Agency Theory) was proposed by Jensen and Meckling in 1976 and is one of the main theoretical foundations for describing and analysing public governance. The theory brings out the relationship between a ‘principal’ who has objectives that are specific and ‘an agent’ who is mandated with the implementation of activities geared towards achieving those objectives. Principal-agent theory is dependent on flow of information between the principal and the agent as well as power positions. The issue arises with management of agent’s interests by the principal so that the agent’s interests are matched with the principal’s goals (Leruth & Paul, 2008).

The theory directs that two fundamental tasks have first to be dealt with by the principal so as to choose and control their agents. The first task entails the selection of the best agents as well as creating incentives in order to get the desired results from them. The second task demands that the principal monitors if their agent’s performance is as agreed (Gailmard, 2012). A problem may arise when the principal and the agent have conflicting goals or when verification of what the agent is actually doing is expensive or difficult for the principal. In this case asymmetric

information introduces a moral hazard problem and an issue of adverse selection (Ballwieser, Bamberg, Beckmann, Bester, Blickle, Ewert & Gaynor, 2012). The problem of agency is predominantly prominent on the public service delivery demand-side, that originates from the fact that people involved such like politicians, citizens and contractors or suppliers have interests that are divergent in nature (Kamara, Ofori-Owusu & Sesay, 2012).

Whipple and Roh (2010) links the Principal-Agent theory to bottom-up and top down models of governance. In the bottom-up model, the citizen is the definitive principal, while the agent is the politician who represent the citizen in decision-making. In the top down model, public entities act as agents and execute duties while acting for the government in this case the principal. As a result, administrators of public entities who execute functions entailing delivery of services are agents of citizens and politicians. Podrug, Filipovic and Milic (2010) further posits that in a democratic polity, the ultimate principals are the citizens who are consumers of specific services provided by the government. In the Principal-Agent theory, they are principal in the sense that politicians as agents seek their mandate from them and act as the representatives of the public.

The theory is relevant to this study as it lays a better foundation in understanding the connection where “the principal” delegates work to “the agent”. Public institutions such KeRRA act as the agents of citizens and must act in good faith to fulfill the principles of the principal. The principals are the beneficiaries that is users of the services or the citizens, while public institutions acting as organs for making decision are agents. These agency relationships provide public managers with incentives to disclose information voluntarily, allowing their activities to be monitored (Lambright, 2008). This study examined the effects that tendering processes have on services delivery in the road construction sector based on Principal-Agent theory.

2.2.2 New Public Management Theory

The new public management theory developed by Hood in 1991 contends that to restructure the public sector in a more effective and cost-efficient way then it has to be opened up to a greater influence from private sector. Hughes (2012) asserts that new public management reform agendas focused on improving service quality in the public sector, public expenditure saving, making government operations more efficient as well as increasing the effectiveness of implementing policies. The opinion that monopolistic and large public organizations are fundamentally inept had a serious impact on the new public management theory emergence (Diefenbach, 2009). New Public Management theory embodies a set of values, ideas and practices that aim to emulate practices in the private sector in the public sector (Groot & Budding, 2008).

Gumede and Dipholo (2014) further observed that reinventing government was needed so as to transform the public sector as well as eradicate bureaucracy by harnessing the entrepreneurial spirit. Simonet (2011) notes that the new public management theory borrows its logical foundation from public choice theory, that views government from productivity and markets point of view, and also from managerialism, that utilizes management methods in achievement of productive gains. The three fundamental issues that the new public management theory seeks resolution to include; value for public funds; services that are centred on the community and a responsive workforce in public sector (Cohen, 2016). The new public management (NPM) theory specifically focuses on making governments more efficient (van Waarden & van Kersbergen, 2009). The overriding idea of new public management is using market techniques in improving public sector performance. The key characteristics of new public management are e-

governance, performance management, outsourcing and contracting out, accountability and decentralization (Zungura, 2014).

The new public management theory is based on applying market principles into public policy and management. The new public management theory is relevant to the current study as it informs tender planning, tendering methods, contract management, supplier selection and service delivery variables. The theory advocates for citizens participation in the process of evaluating public services since the new public management principle of customer responsiveness requires that the degree of the user satisfaction be measured (Simonet, 2011). The broad idea of new public management theory in the public sector, is using market mechanisms to make service providers and managers more accountable and responsive (Mongkol, 2011). The proponents of this theory advocates that the government should put in place social accountability mechanisms to increase efficiency in service delivery.

2.3 Conceptual Framework

According to Johnson and Christensen (2008), conceptual frameworks are designed from a number of broad ideas and theories that aid a researcher to suitably identify the problem they are researching on, structure their questions and find necessary literature. It is a brief explanation together with a visual or graphical depiction of the key ideas of the study and relations among them. The conceptual framework of this study is illustrated in Figure 2.1.

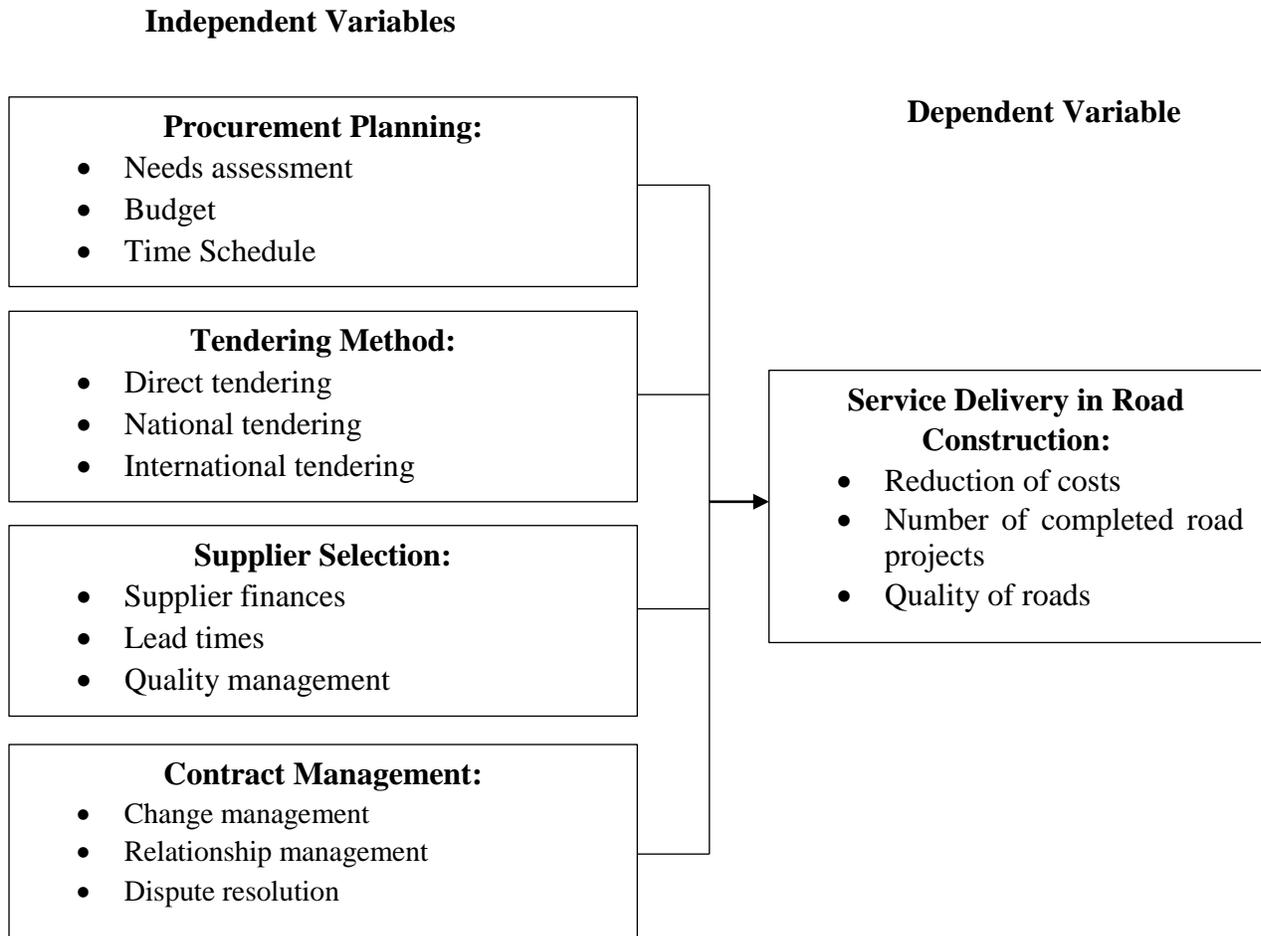


Figure 2.1: Conceptual Framework

Source: Researcher (2018)

2.4 Empirical Review

2.4.1 Procurement Planning

Planning consist of steps with an end result that is not concerned with decisions of ‘today’ but ‘today’s’ impact of decisions that were made ‘yesterday’ (Basheka, 2009). In addition, procurement planning involves finding out the business requirements that are best met by procuring services, works or goods. This process is concerned with; what to procure, how, where, how much, and when to procure (Snider & Rendon, 2012). Khan and Kumar (2012) noted that procurement plan illustrates the products being acquired, as well as when and how

they are going to be acquired from suppliers. This process needs to be supported by other departments through appropriate and timely submission of their procurement needs to the procurement department. In addition, procuring entities need to carry out regular market research on prices of different procurement supplies in order to establish representative cost estimate/budget.

A procurement plan must be prepared as required under public procurement act of 2015 for all public procuring entities so as to avoid emergency procurements and to use suitable procurement method wherever possible. Further, Arney, Yadav, Miller and Wilkerson (2014) notes that procurement plan makes possible aggregation of its requirements wherever possible, both in the procuring entities as well as between procuring entities so as to gain value for money and lessen cost of procurement while drawing on contract framework wherever necessary to provide cost effectiveness, efficiency and a flexible approach to procurement of services, works and supplies which are continuously needed in a given period.

Carrying out yearly procurement planning helps in addressing all departmental requirements within the organizations that are procuring. The plan specifies the procurement method that will be applied for procurements and determines the most effective means of reducing procurement processes' costs while maintaining the quality of materials being procured and at the same time meeting entity's delivery time line (Waigwa & Njeru, 2016). Changing of procurement methods in the approved procurement plan frequently indicates poor procurement plan and subsequently results to inefficient procurement process (Mukura, Shalee, Kanda & Ngatia, 2016).

Preparation of a procurement plan begins with need identification for all procurements originating from the budget, that specifies the amount of money given by the government for procurement purposes so as to realize the targets and objectives it has set in a particular fiscal

year. Mamiro (2012) opines that procuring entities establishes the suitable procurement method to be used for each procurement and the time line for every procurement is set based on the standard time specified in the regulations, giving time allowance for delays that may arise while transmitting documents or clarification of tenders. In the time line, the procurement starting dates as well as critical points should be clearly indicated in the procurement plan.

For the entity to capitalize on efficiency and economy, it may group goods, services or works that are largely related or are similar in nature, or pool assets into one tender or several tenders that are likely to attract the most qualified bids given that they are realistic and will not bring about unnecessary delay during procurement (Mukura *et al.*, 2016). Additionally, procurement plan must be able to organise tender board meetings to a certain limited number so as to reduce costs associated with transactions for tender proceedings and eliminate delays occasioned by lack of quorum of the tendering board members as a result of recurrent absence of some board members. Moreover, the procurement plan needs to be published in all approved media for the purposes of transparency and competition. The publishing media includes newspapers, websites of procurement authorities and procuring entities website. Furthermore, timing publication of a procurement plan allows suppliers ample preparation time and improves effectiveness of the procurement processes (Arney *et al.*, 2014).

Preparing a procurement plan and budget and also packaging procurement processes in a way that that the processes will be faster is a sector that encounters quite a number of challenges (Shirima, 2009). For example, the lack of a procurement plan in procurement entities is a greater challenge that may lead to deviation from using apt procurement method. This may trigger inefficiency in the whole process of procurement or may warrant unplanned and emergency procurements that cannot be justified (Basheka, 2008). Poor procurement planning results in

spiralled cost because of emergency procurements, changes in prices, variation in contract and interest charges due to time overrun in implementation phase. A properly prepared procurement plan offers a firm foundation for other processes of procurement to be effective in the public system and resultantly, reduces delay, while ensuring the entity is compliant with the laws procurement (Githinji & Were, 2018).

Developing a procurement plan is an activity that is extremely critical in the entire procurement cycle. Lacking a sufficient procurement plan will lead to delays in subsequent activities and transaction cost inflation (Engelbert, Kaltenborn & Reit-Born, 2016). The cost may escalate due to fluctuated prices of goods, services or works. A properly and sufficiently prepared procurement plan will minimize delays and transactions costs associated with procurement proceedings as it guides selection of the best method to use in procurement and also well-planned procurement department and Tender Board meetings (Mlinga, 2008).

2.4.2 Tendering method

Appropriate procurement method selection is fundamental for the buyer and supplier as it helps in the general satisfaction of the buyer and success of the project (Ramanathan & Narayanan, 2016). This selection depends on factors such as quality and time as well as the cost and they are generally regarded as the most important attaining the end product in the shortest time possible, highest quality and at the lowest cost (Kakwezi & Nyeko, 2010). Project developers today have a wide variety of procurement methods at their disposal and this has led to performance comparison between different methods of procurement. The variety of tendering methods at the disposal of buying entities has made the decision to choose any particular method for a given task quite a difficult one. Several determinants need to be considered for an informed decision to be made on the right method of procurement.

According to Love, Davis, Edwards and Baccarini (2008), selecting appropriate procurement method involves first carrying out an analysis so as to establish priorities for project objectives and secondly, there is a need to compare variety of other options available before selection of the most appropriate one. It is crucial that the buyer's needs and requirements be presented accurately and vividly. There's a preference for using competitive methods of procurement given that they tend to promote transparency, economy and efficiency, and limit favouritism. This procurement methods include direct procurement, National Competitive Tendering (NCT), International Competitive Tendering among others.

According to the Kenyan Constitution, a public entity involved in procurement may use direct method of procurement where there exists only a single supply or a reasonable alternative does not exist or its substitute for that matter or there is urgency (life and property threatened) and other available procurement methods are impractical. According to Public Procurement Oversight Authority (2016) direct procurement tendering processes is applicable when the purchase is for urgently needed remedial works, provided this is restricted to the minimum requirement to meet the urgent. The other acceptable scenario for direct procurement is when the work can only be provided by one source for physical, technical or policy reasons e.g. requiring the use of proprietary techniques that are obtainable only from one source. The direct procurement has the capability to impacts on the operational performance of public organizations through reduction of the lead times compared to other tendering process. In this context, Tai (2017) notes that public sector institutions increase their operational performance through combining the resources and capabilities of their direct services and good suppliers through embedding inter organizational cooperation in their direct procurement operations.

National Competitive Tendering according to Arrowsmith and Quinot (2013) is a procurement method in which the government or the entity procuring decides to procure from only the domestic contractors or suppliers. NCT may be the preferred method of public procurement where foreign bidders are unlikely to be interested as a result of low/small contract values, nature and scope of the works or where the works are considerably scattered geographically or spread over time or where the works are labour intensive or where the contract value falls within the threshold for and/or where the services, goods or works are locally available at prices that are below the international market. Tenders are expected from suppliers and contractors whose companies are fully owned or has majority ownership by nationals and is registered in the country (Akuffo, 2014). Many governments, typically prefers NCT method as a matter of national policy and for encouraging growth of domestic industry. Even individual buyers or non-governmental adopts NCT as a matter of preference; for the reasons that follow; terms of payments are easier because foreign exchange is not involved; personally contact suppliers is easier as there is no need visas to visit abroad; visiting suppliers for inspection is convenient; a domestic supplier may render better maintenance if need be; and there is no need of knowing sale and purchase laws of foreign countries (Kakwezi & Nyeko, 2010).

International Competitive Tendering according to Jacob (2010) can be used whenever open/competitive tendering is used and effective competition cannot be obtained unless foreign contractors are invited to tender as well as, when items to be procured are not available locally or cannot be provided on account of technical and other competencies together with financial constraint. Song, Landrum and Chernew (2013) noted that ICB has several advantages in that it results in best “value for money” for buying entity due to the competitiveness of process; brings about transparency and helps in reduction of favouritism and corruption; and all suppliers have

an equal chance of winning the tender (Takano, Ishii & Muraki, 2014). Ika, Diallo and Thuillier (2012) cautioned that international bids are expensive to hold and even more expensive to complete so the value of services and products required are usually in the \$ millions and the projects involved are very complex.

2.4.3 Supplier selection

Supplier selection is considered to be one of the most important steps in the purchasing process and usually occurs after the specification is done. This because too detailed specifications will limit the suppliers hence giving the buyer limited buying power over the supplier (Ho, Xu & Dey, 2010). Supplier selection is generally done working together with buyers, and it relates to all activities that require doing to determine the best supplier (Lee, Kang, Hsu & Hung, 2009). To begin with, the buyer should provide a response to the ‘make-or-buy’ question, and then determine the likely suppliers from the existing or find new suppliers. After the buyer decides to buy, the second step involves determination of the subcontracting method mainly either, turnkey or partial subcontracting. Turnkey subcontracting leaves the whole responsibility of supplying to one supplier while partial subcontracting divides the responsibility between various suppliers. The buyer afterwards decides whether payment to the supplier should be made on a cost-reimbursable basis or fixed-price (Van Weele, 2010; Zhang & Chen, 2013).

The buyer in the next move excludes from the approved vendors list (AVL) the suppliers who do not fit, by making the initial qualifications. In a situation whereby suppliers are still in excess, a buyer can decide to shorten the list by visiting the suppliers or requesting for information (RFI). The buyer then submits requests for quotation (RFQ) to the listed suppliers and waits for them to bid. After receiving and analysing the bids, the buyer may ask clarification questions or carry out negotiations before selecting the best supplier (Van Weele & Van Raaij, 2014). In case there is

an insufficient number of suppliers after RFI or RFQ, then the buyer through market research seeks new suppliers. The seeking process of new suppliers can be carried out through the Internet by using various search engines. By doing so, the buyer is able to find different options from which possible suppliers can now be narrowed down. Furthermore, supplier databases such as Corporate Information and D&B, can be of great assistance in this area (Bergman & Lundberg, 2013).

2.4.4 Contract Management

Benton and McHenry (2010) describe a contract as an agreement between the supplier and the buyer whereby both parties have to agree to the transaction buying before the sale can take place. It is critical that a buyer understands contract laws and terms as well as ways to manage them. Moreover, there are various parts in the contract that the buyer may not understand and as such legal counselling is necessary (Rendon, 2008). The contract should clearly indicate terms and conditions as well as the prices. The supplier must accept all the risks, and take responsibility for such things as late deliveries, which might not be part of the contract. The buyer should normally ask for a fixed price mode of engagement, through competition in bids or negotiating with the supplier as this makes it easier to control the cost (Guth, 2009).

For a contract to be enforceable it must contain four different components, in which case if it lacks any of the components the contract may not be binding. In the first component, both buyer and supplier should have awareness of what they are doing. This means that none of the parties signing the contract can be an alcoholic, a drug addict, or insane. The second component requires that the contract be legal such that the service or product is not against public policy or illegal. In the third component there has to be mutual consideration, which simply means that a certain promised value has to be delivered. Such values include price as well as right quality and

quantity of deliverables. The last component has to do with the agreement by both parties whereby both accept and sign the contract (Knight, Harland & Telgen, 2012). Usually, a penalty clause has to be included in the contracts to ensure that the deliverables are delivered in good condition. Van Weele and Van Raaij (2014) observe that a contract is not complete until it provides a penalty clause that indicates what happens if a party does not honour its obligations, e.g. late deliveries.

Contract management begins after the contract has been signed and all preceding requirements of the contract such as bond or performance security have been finalized. The stage guides all involved parties to meet their commitments and deliver as stipulated in the contract. It deals with the relationships between the procuring entity and supplier of goods and services through developing and implementing a procurement contract. This should be as per the law requirement that recognizes the entry into the force of contract when letter of acceptance is written and is issued to the contractor or supplier, or a written procurement contract is signed by both parties. Contracts if not properly managed they may develop complications, consume a lot of entity resources, involve many other actors, and last longer than was anticipated (Wetzstein, Hartmann, Benton Jr. & Hohenstein, 2016).

The procuring entities through Contract Manager have a responsibility for effectively managing and monitoring quality, scope and timely delivery of works, services or goods and according to the terms and conditions prescribed in the contract (Uyarra, Edler, Garcia-Estevez, Georghiou & Yeow, 2014). The competence of the contract manager is measured through effective management of procurement contracts and attainment of the best possible results of the contract. Procurement regulations guide on how contracts entered are to be managed. Issues like, extending the contract time, variations orders treatment, inspecting and accepting goods/services

delivered, penalties enforcement in cases where violation of contract has been experienced as well as certifying of payments to contractors, suppliers or service providers.

Contract administration makes sure that both parties have performed in accordance with the requirements of the signed contract. The process entails various activities which include management of contract change, measurement of suppliers'/contractors' performance, resolving disputes, reporting of suppliers'/contractors' performance, and carrying out risk management (Rendon, 2010). The best performing contract is dependent upon the contractual terms and conditions as well as the will to ensure its full implementation. Clauses such as resolution of disputes, fluctuation in prices and optimum controls for managing payments improves contract performance. It eliminates effecting payments to contractors or suppliers for substandard or undelivered goods or works. Procuring entities should inspect the delivered works, goods or services as is required by the procurement law and prepare acceptance reports as a prove so as to certify and issue payments to suppliers and contractors (Malaba, Ogolla & Mburu, 2014).

It is requirement by procurement law that a progress report be prepared for works performed by contract manager so as to monitor contractors' performance in terms of cost, quality of work done and time taken. Also, it forms a ground for extending time where contractors request. For works delayed contractors have to pay established damages and in case of delayed payments to suppliers or contractors the procuring entity is obliged to pay with interests. Poor management of contract leads to poorly defined responsibilities and roles, poor performance level, product or works delivered are of poor quality, and rushed decisions or approval on contractual matters (Motza & Conder, 2012). Additionally, contract management as part of procurement processes plays a crucial role in ensuring that procuring entity achieves the goals and projected deliverables (Mahmood, 2010). The works, goods, or services purchased will be within cost/budget, of the

right quality and they will be delivered on time. Also, payments to service provider, suppliers or contractors will be effected on time (Thai, 2008).

2.4.5 Service Delivery

Service is defined as an activity or a product that solves a user's problem or can be useful to users in their day-to-day events. Elsewhere, Carlson and O'Cass (2010) depicted service delivery as the relationship between policy makers, service providers and poor people. Service delivery encompasses services and their supporting systems that are typically regarded as a state responsibility. These include social services (primary education and basic health services), infrastructure (water, sanitation, roads and bridges) and services that promote personal security (Alford, 2009).

It is hard and difficult task to measure services rendered. However, Mugambi (2013) avers that to be effective, services are related to attributes such as; timely and available at space and time scales needed by the user; They also need to be reliable and dependable; usable that is, presented in a format users can fully understand; useful implying that user needs are responded to appropriately; credible so that the user can confidently use it in decision-making and it should also be flexible and responsive to the changing user needs. The determinants of service quality by order of importance include reliability, responsiveness (willingness to help customers and prompt service assurance), and the ability to convey trust, empathy and individualized attention to customers (Mutali, 2008).

The people expect delivery of better services from their government, and the indicators of service delivery according to Sifuna (2012) include improved education, low inflation, better health care, availability of clean water, good road networks especially in rural areas so as to transport agricultural produce and raw materials (Abe & Oluwaleye, 2014). Management of

resources at an individual or entity level should lead to visible results in the form of either tangible goods or services (Kraaijenbrink, Spender & Groen, 2010). For government agencies, this becomes evident in service delivery whose impact manifests in improvement in the economic development, general standard of living, poverty reduction, mitigation of inequalities in income distribution, and improvement in the general well-being of its citizens (Kusumasari, Alam & Siddiqui, 2010).

Service delivery involves the actual production or provision of goods and services to the community. This needs to be conducted in accordance with plans and within the allocated budgetary funds (Bozeman & Su, 2015). According to Denhardt and Denhardt (2015), public service is undergoing transformations of which a key element has been the reconsidering of public service delivery. This is mostly motivated by economic pressures and by increasing expectations from citizens that have been enabled by the renewed sense of managerial possibility, which has emerged internationally.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter sets out research methodology that was adopted to meet the objectives stated in chapter one of this study. The research design, the population of study, sample design and data collection instruments as well as data analysis techniques are discussed in the sections that follow.

3.2 Research Design

According to Verschuren, Doorewaard and Mellion (2010), a research design is the master plan or a framework for action that specifies methods and procedures for acquiring the information needed to obtain answers to the research questions. Researchers view a research design as the way the research is organized, the evidence to be gathered, where and how it was interpreted. So as to develop the research design, research scholars contend that significant choices have to be made based on given rationale (Creswell, 2013). The research is explanatory and follows a cross-sectional survey as the main objective is to determine the effects of tendering process on services delivery in road construction sector. A case of KeRRA, Kenya. Explanatory survey design allows the use of inferential statistics to determine relationship between the study variables in the model (Hair *et al.*, 2010).

3.3 Target Population

According to Neuman (2013), a population is a group of people or institutions that at least share one characteristic. Target population is the entire group of items or people from whom the researcher is seeking to acquire the information relevant to the study (Cooper & Schindler, 2011; Oso & Onen, 2011; Kombo & Tromp, 2011). The source of information was employees and

management of KeRRA, Kenya. This is so as to provide first hand details concerning the information being sought by the study. The total population for this study was 780 employees and management of KeRRA, Kenya.

3.4 Sampling Design

Levy and Lemeshow (2013) define a sample as a representation of a total population enumerated for analysis. Rossi, Wright and Anderson (2013) defines a sample as a carefully selected subgroup that represents the whole population in terms of characteristics. It is the process of obtaining information about an entire population by examining only a part of it. Cooper and Schindler (2011), argue that sampling is commonly used in inferential statistics to make predictions on the behaviour of the population. Using sampling techniques, a researcher is guaranteed that the characteristics of the population are accurately reproduced in the sample. This study adopted simple random sampling method as it enabled the researcher to eliminate sampling bias.

Research scholars offer different strategies that can be used to determine the sample size. For a small population a researcher may use census, copy a sample size from similar studies or even apply a formula to calculate the size. According to Ahmed, Mahfouz and Fdul (2011), a sample should be sufficient so as to capture the desired effect sizes and represent a population. Francis *et al.* (2010) proposed a minimum sample size for quantitative surveys to be 300 to 500 respondents. This study was guided by the model proposed by Daniel (Arifin, 2013):

$$n = (z^2 pq)/d^2$$

Where:

n = is the desired sample size

z = standardized normal deviations at a confidence level of 95.0% which is 1.96

p = the proportion in the target population that assumes the characteristics being sought. In this study, a 50:50 basis assumed which is a probability of 50% (0.5).

q = The balance from p to add up to 100%. That is 1-P, in this case will be 50% (0.5) = 0.5

d = measure of level of Significance, at 95.0% confidence interval, the level of significance is 0.05

The effective sample population for the study is derived as: $n = (1.96^2 \times 0.5 \times 0.5) / 0.05^2 = 384$.

Due to cost and speed of carrying out the survey and also the convenience of finding the survey sample. A second order multistage sampling technique was applied to determine a representative sample size. The study employed Slovin's formula (Tejada & Punzalan, 2012) to come up with a smaller sample size.

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

Where;

n is the desired sample size

N is the first stage sample size that is 384

e is the margin of error at 95.0% confidence interval

$$n = 384 / (1 + 384 \times 0.05^2)$$

Therefore, the desired sample size was 196 respondents.

3.5 Data Collection Instruments

The study used structured questionnaires for collecting primary data from respondents. Bryman (2015) define a questionnaire as a set of questions or statements that assess attitudes, opinions, beliefs, biographical information or other forms of information. Considering that the entire target population is able to read and write the researcher was therefore, d questionnaires for primary data collection. The questionnaire also provides an opportunity for anonymity so that the

researcher would be able to get a precise information; thereby giving the informant an opportunity to give truthful information.

A 5-point Likert scale was employed to measure the ratings of various items by respondents in relation to various variables that are under study. The respondents were asked to rate on a scale of 1-5 how given statements apply to their respective areas of work/job environment. A Likert scale is preferred because it is considered more reliable as respondents are likely to answer all or most of the questions contained in the questionnaire. Moreover, the Likert scale ratings constitute interval scale attributes hence it can be evaluated easily using standard techniques (Barua, 2013).

3.5.1 Reliability of the Instrument

Reliability is broadly defined as the degree to which measures are free from error and therefore yield consistent results (Kimberlin & Winterstein, 2008). LoBiondo-Wood and Haber (2014) define reliability as the trustworthiness or accuracy of measurement of a research instrument. Reliability is concerned with the ability of an instrument to measure consistently. Cronbach Alpha was used to test reliability of the research questionnaire. Representative questionnaires from the pilot test was subjected to reliability test. A Cronbach alpha of 0.7 and above but less than 1 was treated as an acceptable reliability (Tavakol & Dennick, 2011; Drost, 2011). Those questionnaire items that do not attain the threshold were amended as seen necessary.

3.6 Data Collection Procedure

The researcher met top management for affirmation of his intention to carry out the study at KeRRA and for clarification of significant of the study and the commitment that was required from the management. In the second phase, the respondents were briefed before data collection whereby, the purpose and scope of the study was communicated to the respondents. The

researcher also used the opportunity to assure the respondents of his commitment to research ethics preservation of confidentiality. Additionally, there was a letter of introduction attached to the questionnaires emphasizing on the scope and purpose of the study. The third phase was then data collection phase where the researcher using drop and pick later method administered questionnaires to the respondents.

3.7 Data Analysis and Presentation

Data collected was first edited, formatted and organized for coding into the Statistical Package for Social Scientists (SPSS Version 25) data viable table. Data entered in SPSS was verified and missing data was deleted. The data was analysed quantitatively to obtain descriptive statistics while correlation and regression analysis was used to obtain inferential statistics. Assumptions underlying the multivariate analysis was conducted and the statistical parameters generated from the software was presented in tables and charts for easier interpretation. Further, Analysis of Variance (ANOVA) was utilized in testing the significance of the overall model. The decision rule for F-statistic is to accept the model if p-value is smaller or equal to the critical value of 0.05 level of significance or to reject the model if p-value is greater than the critical value of 0.05 level of significance (Garson, 2012). Based on the statistical findings the researcher was able to draw conclusions from the responses.

Multiple Linear Regression Analysis was used in estimating how dependent variable (Service Delivery) relate with the independent variables (Procurement Planning, Tendering Method, Supplier Selection, and Contract Management) and provided a means of objectivity in assessing the degree and nature of the relationship between the dependent and independent variables. Multiple regression analysis involves combining several predictor variables in a single regression equation. Multiple linear regressions are used where the independent (Predictor) variables are

more than one and the multiple regression assumptions are met by the data being analysed (Montgomery, Peck & Vining, 2012). The study was guided by a model of the form:

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

Where:

Y = Represents the dependent variable (Service Delivery)

β_0 = The Constant or the value of Y when all X -values are zero.

β_i = The regression coefficients ($i = 1, 2, 3$ and 4). The regression coefficients indicate the relative importance of each of the independent variables in prediction of the dependent variable.

X_i = The independent variables ($i = 1, 2, 3$ and 4) will explain the variation in the dependent variable (Service Delivery). In this case:

X_1 = Procurement Planning

X_2 = Tendering Method

X_3 = Supplier Selection

X_4 = Contract Management

ε = the error term (To account for all other Variables not considered in the study), assumed to be normally distributed with mean zero and constant variance.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter discusses the findings obtained from the field. The chapter presents the background information of the respondents, and the findings of the analysis based on the objectives of the study. The primary data was gathered from the questionnaires as the research instruments. For this purpose, the various statistical analysis tools like Cronbach's alpha and multiple regression analysis were employed to establish the effects of tendering process on service delivery in road construction sector in Kenya. The chapter is divided into descriptive statistics and inferential statistics.

4.2 Response Rate

One hundred and ninety six (196) questionnaires were distributed to the targeted respondents. Out of the 196 questionnaires sent, 150 were fully filled contributing to a response rate of 76.53%. A response rate of above 60% is considered acceptable for the purpose of any research (Kothari, 2004). This was in line with Orodho (2009) that a response rate above 50% contributes towards gathering of sufficient data that could be generalized to represent the opinions of respondents about the study problem in the target population. This was above the 50% which is considered adequate in descriptive statistics according to Mugenda & Mugenda (2012). Contacts prior to the dispatch of the questionnaires and follow up calls could account for the fairly high response rate. Quantitative data obtained from the questionnaires were presented in tables, frequencies and percentages as shown hereafter.

Table 4.1 Response Rate

	Questionnaires Administered	Questionnaires filled & Returned	Percentage
Respondents	196	150	76.53%

4.3 Pilot Study Results

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials (Mugenda & Mugenda, 2008). Cronbach's alpha was applied to determine the reliability of the data obtained from the respondents. Cronbach's alpha test indicated a value above the cut off of 0.7 which is acceptable according to Joppe (2010). According to Table 4.2 the data collection instrument was reliable and the data collected from the respondents was reliable to drive a conclusion.

Table 4.2: Reliability Test

Variable	Cronbach's Alpha	No of Items
Procurement Planning	.735	5
Tendering methods	.776	5
Supplier Selection	.867	5
Contract Management	.776	5

4.4 Background Information

This section presents the personal details of the respondents and it provides data regarding the study and is necessary for the determination of whether the individuals in a particular study are a representative sample of the target population and testing appropriateness of the respondent in answering the questions for generalization purposes.

4.4.1 Gender of the Respondent

The study sought to find out the gender of the respondents. From the findings, 71% of the respondents were female while only 29% of the respondents were male. This findings show that majority of the management level employees are male which is contrary to the affirmative action roles that require at least 30% of either gender in the management level of every sector. The results indicate that the two genders were adequately represented in the study since there is none which was more than the two-thirds. In addition the findings show that both genders have been involved in the study and therefore there was no gender bias on the study though there was no equal distribution of the gender.

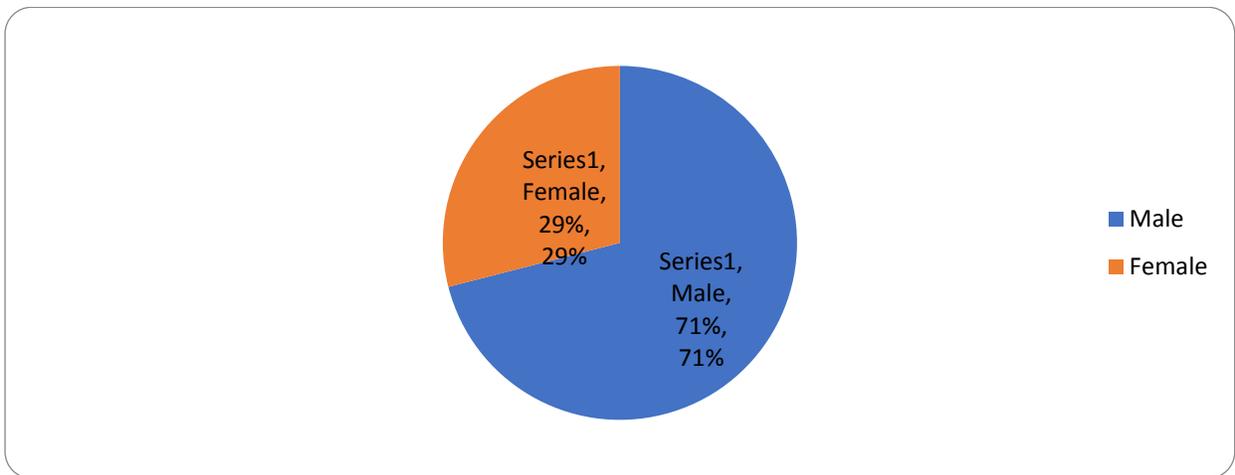


Figure 4.1: Gender of the Respondent

4.4.2 Years of Service/Working period

The study sought to find out the years of experience of the respondents have worked for Kenya road sector and the analysis has been presented in Figure 4.2. Majority (45%) of the respondent had worked in the organization for a period of 11- 15 years, 31% had worked for 6-11 years, 15% for a period above 15 years and 5% had worked less than 5 years. In most organizations in

the public sector, the promotion to managerial level of management is highly based on the number of year of service as well as the managerial skills of the employees. It is for this reason the majority of people in the managerial level which is the target population for this study have been in this services for over 10 years. This implies that the majority of respondents have wide range of experience and therefore they understand the role procurement has had on the performance of the service. These findings were in line with Braxton (2008) that respondents with a high working experience assist in providing reliable data on the study problem since they have technical experience on the problem being investigated by the study.

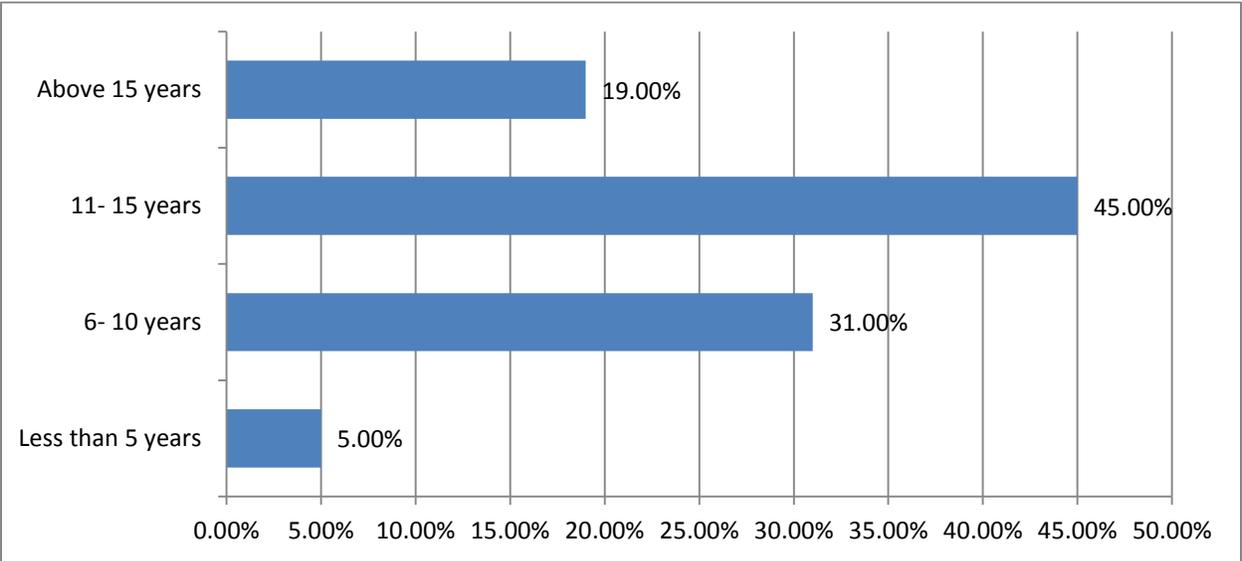


Figure 4.2: Years of experience

4.4.3 Level of Education

Education is paramount in enabling the respondents to conceptualize issues related to tendering process in the road construction sector in Kenya. It was established from the study that 62% of the respondents had bachelors, 28 % had diplomas and 10% had post graduate degrees and above. The findings shows that majority of respondents working in the road construction sector in Kenya have bachelor degree qualifications contributing to 62% of the respondents. This

implies that the majority of the respondents had the capability to accurately respond to the questionnaires since they have the knowledge and ability to conceptualize issues affecting the road sector. This concurs with Joppe (2000) that during research process, respondents with technical knowledge on the study problem assist in gathering reliable and accurate data on the problem under investigation. This demonstrated that most of the road construction sector had qualified professionals with technical knowledge and skills on the study problem. This is also a good sign that those people charged with responsibility of management have adequate skills to manage and provide tendering process in the road sector. This is shown in Figure 4.3 below.

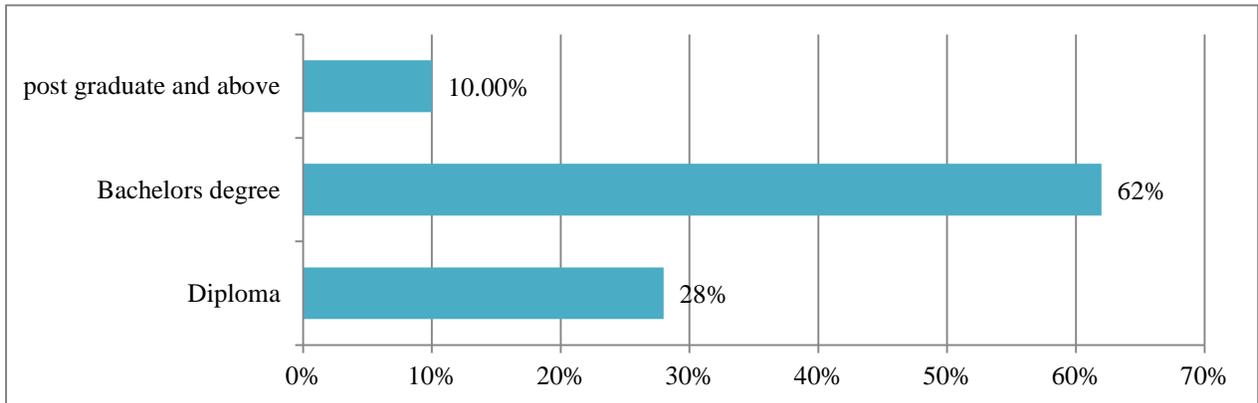


Figure 4.3: Level of Education

4.4.4 Respondents Departments

The study sought to establish from the respondents from the departments they were working in order to make conclusions on the study problem. The studies in Figure 4.4 show that 60% of the respondents were drawn from the procurement department, 30% from the finance department and 10% from the ICT department. The study findings indicate that these departments were chosen because they were directly involved in the procurement processes in the organization. The respondents in management positions were targeted because they are the people who approve and authorize various processes and operations in the organization.

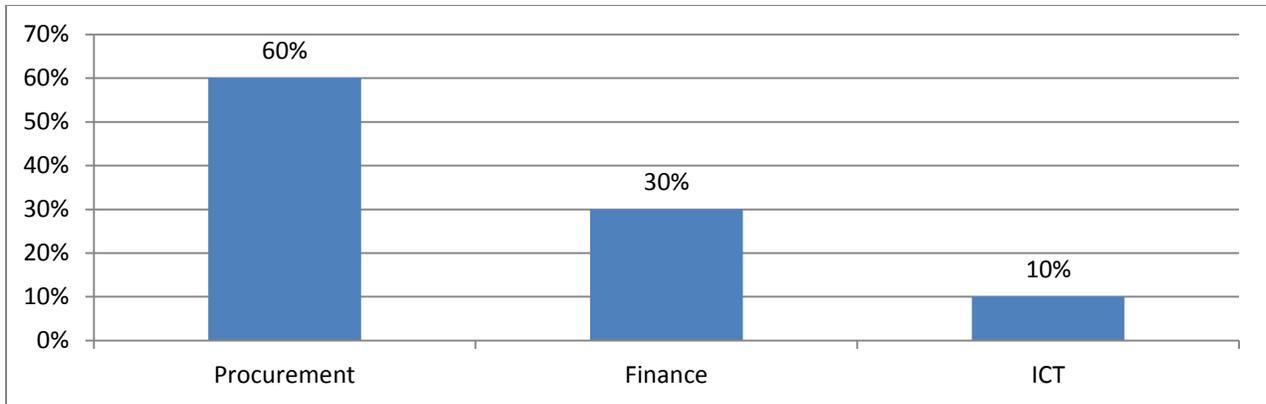


Figure 4.4: Respondents Departments

4.5. Procurement Planning

The study sought to assess the effects of procurement planning on the service delivery in the road construction sector in Kenya. This section presents findings to statements posed in this regard with responses given on a five-point likert scale (where 1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5= Strongly Agree). Table 4.3 presents the findings. The scores of ‘strongly disagree’ and ‘disagree’ have been taken to represent a statement not agreed upon, equivalent to mean score of 0 to 2.5. The score of ‘Neutral’ has been taken to represent a statement equivalent to a mean score of 2.6 to 3.4. The score of ‘agree’ and ‘strongly agree’ have been taken to represent a statement highly agreed upon equivalent to a mean score of 3.5 to 5.0.

Table 4.3 presents the findings as tabulated, a majority of respondents were found to be neutral with the statement posed in regard to the effects of procurement planning on the service delivery in the road construction sector in Kenya. The study established that the procurement methods used in the organization are in line with the Act (Mean=3.212). The organization carries out procurement in accordance with the set procedures (Mean=3.009). The procurement plan is prepared early enough to allow for proper allocation of funds (Mean=2.897).).The budget is first approved before any procurement is initiated ((Mean=3.112). The organization ensures there is a

procurement plan to avoid reckless and over spending of funds ((Mean=3.342). The study findings imply that procurement planning affects service delivery in the road construction sector in Kenya. The study findings are in tandem with literature review by Byokusheka (2010) and Basheka (2004) argued that employees involvement is very critical in formulation of procurement plans and the top management need to have necessary leadership skill which would enable them involve all employees in decision making. The study finally indicated that the procurement thresholds are being observed to a small extent especially in the deciding which procurement method should be applied. This implies that the organization is not fully adhering to the procurement rules relating to procurement threshold. The findings are contrary to PPADA (2015) which indicates that the organizations must fully comply to the laid down procurement rules and regulation.

Table 4.3: Procurement Planning Statistics

Procurement Planning	Mean	Std. Dev
The procurement methods used in the organization are in line with the Act	3.212	1.243
The organization carries out procurement in accordance with the set procedures	3.009	1.432
The procurement plan is prepared early enough to allow for proper allocation of funds	2.897	1.535
The budget is first approved before any procurement is initiated	3.112	1.529
The organization ensures there is a procurement plan to avoid reckless and over spending of funds	3.342	1.908

4.6. Tendering Methods

The study sought to assess the influence of tendering methods on service delivery in the road sector in Kenya. This section presents findings to statements posed in this regard with responses given on a five-point Likert scale (where 1 = strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5= Strongly Agree). Table 4.3 presents the findings. The scores of ‘strongly disagree’ and ‘disagree’ have been taken to represent a statement not agreed upon, equivalent to mean score of 0 to 2.5. The score of ‘Neutral’ has been taken to represent a statement equivalent to a mean score of 2.6 to 3.4. The score of ‘agree’ and ‘strongly agree’ have been taken to represent a statement highly agreed upon equivalent to a mean score of 3.5 to 5.0. Table 4.4 presents the findings.

As tabulated, a majority of respondents were found that the organization ensures that there is open tendering to increase the needed experience from the tenderers (3.232); The organization offers the open tendering to encourage applications from the qualified tenderers (3.121); The organization ensures that open tendering lead to fairness and transparency in the tendering process (2.998); The organization ensures that the single sourcing of suppliers leads to reduction of procurement costs in the tendering process (2.876); The organization ensures that the single sourcing of suppliers enhance timely delivery of goods and services (2.987). The organization ensures that the request for quotations from suppliers leads to reduction of procurement costs in the tendering (3.154). The study findings indicate that procurement methods influence tendering process in the organization. The study findings are in agreement with literature review by Kiage (2013) notes that request for quotations does not allow for competition in the county’s procurement department. Request for quotations involves the entity lending itself to irregularities

because the procuring entity selects the suppliers, service providers or contractors that it wants to send a request for quotations.

Table 4.4: Tendering Methods Statistics

Tendering Methods	Mean	Std. Dev
The organization ensures that there is open tendering to increase the needed experience from the tenderer	2.987	1.237
The organization offers the open tendering to encourage applications from the qualified tenderers	3.223	1.379
The organization ensures that open tendering lead to fairness and transparency in the tendering process	2.902	1.908
The organization ensures that the single sourcing of suppliers leads to reduction of procurement costs in the tendering process	3.452	1.114
The organization ensures that the single sourcing of suppliers enhance timely delivery of goods and services	2.762	1.238
The organization ensures that the request for quotations from suppliers leads to reduction of procurement costs in the tendering process	4.214	1.908

4.7. Supplier Selection

The study sought to assess the effects of supplier selection on the service delivery in the road construction sector in Kenya. This section presents findings to statements posed in this regard with responses given on a five-point likert scale (where 1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5= Strongly Agree). Table 4.3 presents the findings. The scores of ‘strongly disagree’ and ‘disagree’ have been taken to represent a statement not agreed upon, equivalent to mean score of 0 to 2.5. The score of ‘Neutral’ has been taken to represent a statement equivalent

to a mean score of 2.6 to 3.4. The score of 'agree' and 'strongly agree' have been taken to represent a statement highly agreed upon equivalent to a mean score of 3.5 to 5.0.

Table 4.5 presents the findings as tabulated, a majority of respondents were found to be neutral with the statement posed in regard to the influence of supplier selection on the service delivery in the road construction sector in Kenya. The study established that the organization believes in supplier evaluation to improve performance of its suppliers (Mean=2.908). The organization focuses on building long lasting relationships with suppliers (Mean=3.218). The county organization makes timely payments to the suppliers after goods and service delivery (Mean=2.986). The organization conducts supplier appraisals annually (Mean=3.217).

The study findings are in agreement with literature review by Ansari (2009) that supplier selection allows firm to make better use of their suppliers capabilities and coordinating operational activities through joint planning also results to inventory reduction, smoothing production, improve product quality, and lead time reduction Browne (2004) contends that supplier selection is a comprehensive approach to managing an enterprise's interactions with the organizations that supply the goods and services it uses. The goal of supplier selection is to streamline and make more effective the processes between an enterprise and its suppliers just as customer relationship management (CRM) is intended to streamline and make more effective the processes between an enterprise and its customers.

Table 4.5: Supplier Selection Statistics

Supplier Selection	Mean	Std. Dev
The organization believes in supplier evaluation to improve performance of its suppliers	2.908	1.876
The organization focuses on building long lasting relationships with suppliers	3.218	1.276
The organization makes timely payments to the suppliers after goods and service delivery	2.986	1.653
The organization conducts supplier appraisals annually	3.217	1.287

4.8. Contract Management

The study sought to assess the effects of contract management on the service delivery in the road construction sector in Kenya. This section presents findings to statements posed in this regard with responses given on a five-point likert scale (where 1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5= Strongly Agree). Table 4.6 presents the findings. The scores of ‘strongly disagree’ and ‘disagree’ have been taken to represent a statement not agreed upon, equivalent to mean score of 0 to 2.5. The score of ‘Neutral’ has been taken to represent a statement equivalent to a mean score of 2.6 to 3.4. The score of ‘agree’ and ‘strongly agree’ have been taken to represent a statement highly agreed upon equivalent to a mean score of 3.5 to 5.0.

According to the study results in Table 4.6 presents the study results tabulated, a majority of respondents were found to disagree with the statement that the organization ensures that it controls and certifies that both contracting parties have honored the contractual responsibilities (2.325). The organization controls and certifies activities involved in evaluating degree of successful contract execution (2.223); The organization ensures that there is achievement of the

expected results (2.221); The organization ensures that both parties terminates the contracts effectively (2.321).

Table 4.6: Contract Management Statistics

Contract Management	Mean	Std. Dev
The organization ensures that it controls and certifies that both contracting parties have honored the contractual responsibilities	2.325	.235
The organization controls and certifies activities involved in evaluating degree of successful contract execution	2.223	.321
The organization ensures that there is a of the expected results	2.221	.251
The organization ensures that both parties terminates the contracts effectively	2.321	.238

4.8. Service Delivery

The study sought to determine the effects of tendering process on service delivery in road sector reached attributed to the adoption of the procurement planning, tendering methods, supplier selection Findings in Table 4.7 below reveal improved service delivery in road sector across the 5 year period running from the year 2013 to 201.

In the reduction of costs, a majority of respondents affirmed having grown incrementally from 0%-20% in 2012 (41.9%), to cost reduction by 0%-20% in 2013 (37.9%), 21%-40% in 2014 (34.80%), reduction of costs by 21%-40% in 2015 and 21%-40% in 2016 Quality of roads also recorded positive with a majority affirming a majority of respondents affirmed having grown incrementally from 0%-20% in 2012 (42.30%), to quality of roads by 0%-20% in 2013 (37.7%), 21%-40% in 2014 (3.10%), quality of roads improved by more than 40% in 2015 and improved by more than 40% in 2016(37.50%).

A similar trend was recorded in number of completed roads of 0%-20% in 2012 (44.10%), 0%-20% in 2013 (35.20%), 21%-40% in 2014 (36.40%), number of completed roads improved by

more than 40% in 2015(41.10%) and improved by more than 40% in 2016(37.30%). It can be deduced from the findings that service delivery in road construction sector have considerable improved with the adoption of the procurement planning, tendering methods, supplier selection and contract management.

Table 4.7: Service Delivery

Reduction of Costs	2012	2013	2014	2015	2016
Reduced by 0%-20%	41.9	37.9	33.8	29.7	29.1
Reduced by 21%-40%	33.2	29.6	34.8	31.3	34.7
Reduced by more than 40%	24.9	31.5	31.4	39.0	36.2
Quality of Roads	2012	2013	2014	2015	2016
Reduced by 0%-20%	42.3	37.7	31.6	30.7	29.5
Reduced by 21%-40%	31.8	32.9	36.1	28.2	33
Reduced by more than 40%	25.9	29.4	32.3	41.1	37.5
Number of Roads Completed	2012	2013	2014	2015	2016
Improved by 0%-20%	44.1	35.2	33.4	25.7	27.1
Improved by 21%-40%	31.7	32.6	30.2	33.9	35.6
Improved by more than 40%	23.5	32.2	36.4	40.4	37.3

4.10. Multiple Regression Analysis Model

The study adopted a multiple regression analysis so as to establish the relationship of independent variables and dependent variables. The study applied SPSS to compute the measurements of the multiple regression analysis. According to the model summary Table 4.8, the coefficient of determination (R^2) is used to measure how far the regression model's ability to explain the variation of the independent variables. R is the correlation coefficient which shows the relationship between the independent variables and dependent variable. It is notable that there exists strong positive relationship between the independent variables and dependent variable as shown by R value (0.844).The coefficient of determination is between zero and one (Robinson,

2010). The data showed that the high R square is 0.712. It shows that the independent variables in the study were able to explain 71.20% variation in the service delivery in the road sector while the remaining 29.80% is explained by the variables or other aspects outside the model. The standard error is minimal with a value of 0.01 meaning the model used in the study would have minimal effects of errors associated with service delivery in the road sector. This shows that the model has a good fit since the value is 60%. This concurs with Graham (2012) that R-squared is always between 0 and 100%: 0% indicates that the model explains none of the variability of the response data around its mean and 100% indicates that the model explains the variability of the response data around its mean. In general, the higher the R-squared, the better the model fits the data. This indicates that procurement planning; tendering methods, supplier selection and contract management need to be well adopted to enhance service delivery in the road sector in Kenya.

Table 4.8: Model Summary (Overall)

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.844	.712	.698	.001

F-test was done to test the effect of independent variables on the dependent variable simultaneously. According to Brymann and Cramer (2011), F-statistic test basically shows whether all the independent variables included in the model jointly influence the dependent variable. Based on the study results of the ANOVA Test or F-test in Table 4.9, obtained F-count (calculated) value was 23.749 greater the F-critical (table) value 12.345 with significance of 0.000. Since the significance level of $0.000 < 0.05$ we conclude that the set of independent variables (procurement planning, supplier management, ICT and professionalism) have

significant influence on the implementation of procurement practices in the county governments in Kenya (Y-dependent variable) and this shows that the overall model was significant.

Table 4.9: ANOVA Results

Model	Sum of Squares	d.f	Mean Square	F	Sig.
Regression	65.908	4	16.477	36.253	.000
Residual	65.908	145	.4545		
Total	81.816	149			

NB: F-critical value = 18.764

From the study findings on the regression equation established, taking all factors into account (independent variables) constant at zero service delivery in the road sector would be 16.890. The data findings analysed also shows that taking all other independent variables at zero, a unit increase in procurement planning would lead to a 0.732 increase in service delivery in the road sector. Based at 5% level of significance, procurement planning was found to have a calculated $t = 5.008$ (greater than the tabulated value of $t > 1.96$) and a significance level of 0.000. This indicates that procurement planning influenced service delivery in the road sector in Kenya. The study results corroborates with the findings by Deloitte Consulting (2014) in their survey on the performance in the public sector concluded that was claiming an inordinate amount of procurement planning time and attention greatly affected the implementation and performance of the government operations.

A unit increase in supplier selection would lead to a 0.600 increase in service delivery in the road sector, supplier selection show a calculated $t = 6.406$ (greater than the tabulated value of $t > 1.96$) and a significance level of 0.002 thus the value of less than 0.05. This indicates that supplier selection influence service delivery in the road sector in Kenya. This provides the supplier selection to focus on the activity, performance standards, and results achieved in respect to the work involved in the planning for, the establishment and subsequent management and use of supply arrangements in the public sector. This helps to ensure the organization achieves maximum spending leverage in supply negotiations. It also ensures consistent and thorough market analysis, costing measures, and compliance methods are applied to each expenditure category (SDPC, 2009).

A unit increase in contract management would lead to 0.545 increases in service delivery in the road sector in Kenya. The contract management was found to have a calculated $t = 5.927$ (greater than the tabulated value of $t > 1.96$) and significance level of 0.015 thus the value of less than 0.05. This indicates that contract management influenced service delivery in the road sector in Kenya. Mahmoodzadeh, Jalalinia, and Yidzi (2009) suggest that contract management enhancement has been among the most significant transformations occurring in the public organization of work across all industrialized world.

Table 4.10: Coefficient Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	β	Std. Error	β		
(Constant)	16.890	2.859		5.908	.000
X ₁ -PP	.732	.146	.687	5.008	.000
X ₂ -TM	.630	.098	.596	6.406	.001
X ₃ -SS	.600	.101	.497	5.927	.006
X ₄ -CM	.545	.109	.456	5.000	.015

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter has summarized the study results in regard to the specific objectives of the study as highlighted in chapter one. The data analyzed in chapter four is interpreted and the results summarized related with both empirical and theoretical literature available in chapter two. The conclusion of the study is related directly to specific objectives then recommendations for both policy and practice.

5.2 Summary of Findings

Specifically, the study investigated effects of tendering process on service delivery in road construction sector in Kenya. The empirical literature showed that tendering process affects service delivery in the road sector is to make any substantial impact on the procurement performance. The findings have been summarized as per the stated objectives:

5.2.1. Procurement Planning

From the descriptive statistics the study established that procurement planning influence implementation of procurement practices in County governments in Kenya. The study established that a majority of respondents were found to be neutral with the statement posed in regard to the influence of procurement planning on the implementation of procurement practices in Kenya. The study established that the procurement methods used in the county are in line with the Act. The county carries out procurement in accordance with the set procedures. The procurement plan is prepared early enough to allow for proper allocation of funds. The budget is first approved before any procurement is initiated. The county ensures there is a procurement plan to avoid reckless and over spending of funds.

5.2.2. Supplier Selection

From the study results, the study established that a majority of respondents were found to be neutral with the statement posed in regard to the influence of supplier selection on the service delivery in the road construction sector in Kenya. The study established that the organization believes in supplier evaluation to improve performance of its suppliers. The organization focuses on building long lasting relationships with suppliers. The organization makes timely payments to the suppliers after goods and service delivery. The organization conducts supplier appraisals annually.

5.2.2. Tendering Methods

From the study results, the study established that a majority of respondents were found to be neutral with the statement that the organization ensures that there is open tendering to increase the needed experience from the tenderers. The organization offers the open tendering to encourage applications from the qualified tenderers and lead to fairness and transparency in the tendering process. The organization ensures that the single sourcing of suppliers leads to reduction of procurement costs in the tendering process. The organization ensures that the single sourcing of suppliers enhance timely delivery of goods and services. The organization ensures that the request for quotations from suppliers leads to reduction of procurement costs in the tendering.

5.2.4. Contract Management

From the study the descriptive statistics stated that a majority of respondents were found to disagree with the statement that the organization ensures that it controls and certifies that both contracting parties have honored the contractual responsibilities. The organization controls and certifies activities involved in evaluating degree of successful contract execution. The

organization ensures that there is achievement of the expected results. The organization ensures that both parties terminate the contracts effectively.

5.3 Conclusions of the Study

The study concludes that there was a significant relation between the procurement planning and service delivery in the road construction sector in Kenya. Procurement planning was found to have a significant positive influence on service delivery in the road construction sector in Kenya. This can be deduced to conclude that increasing levels of procurement planning would increase the levels of service delivery in the road construction sector in Kenya.

The study concludes that there was a significant relation between the tendering methods and service delivery in the road construction sector in Kenya. Tendering methods was found to have a significant positive influence on service delivery in the road construction sector in Kenya. This can be deduced to conclude that increasing levels of tendering methods would increase the levels of service delivery in the road construction sector in Kenya.

Further, the study concludes that there was a significant relation between the supplier selection and service delivery in the road construction sector in Kenya. Supplier selection was found to have a significant positive influence on service delivery in the road construction sector in Kenya. This can be deduced to conclude that increasing levels of supplier selection would increase the levels of service delivery in the road construction sector in Kenya.

Finally, the study concludes that there was a significant relation between contract management and service delivery in the road construction sector in Kenya. Contract management was found to have a significant positive influence on service delivery in the road construction sector in Kenya. This can be deduced to conclude that increasing levels of contract management would increase the levels of service delivery in the road construction sector in Kenya.

5.4 Recommendations of the Study

Procurement planning is usually the first stage of procurement process and therefore organization need to develop the skills of the employees on developing quality procurement plans based on the approved budgets. The top level and lower level employees should be involved in formulation and development of the procurement plans so as to make the process of implementation easier and acceptable by all employees. The procurement personnel's in organization need to carefully study and understand the applicable procurement thresholds in different situations and relevant procurement method applicable.

The study recommends that the organization need to identify the most appropriate procurement methods to enhance service delivery. There is need to have an open tendering to increase the needed experience and qualified tenderers, lead to fairness and transparency in the tendering process. The organization should ensure that that the single sourcing of suppliers leads to reduction of procurement costs in the tendering process and enhance timely delivery of goods and services.

The study recommends that there is need for organization to create and maintain a good relationship with the contractors. There should be a mutual trust between the contractor and organization. There is need to enhance regular communication with the contractor and timely management of possible problems in the contract. The study recommends that the organization control and manage contract changes efficiently by ensuring that the contractors are paid in time. There should be regular communication between the organization and contractor. The organization should ensure that the contract terms were well adhered to and final reports always well maintained.

5.5 Areas for Further Research

The study has established that tendering process affects service delivery in road construction sector in Kenya. The tendering process in terms of procurement planning, tendering methods, supplier selection and contract management accounted for the 62.00% of service delivery in road construction sector in Kenya. There is need to establish other factors which account for 38.00% of service delivery in road construction sector in Kenya. There is need also to establish whether the contract management practices influence service delivery in road construction sector in Kenya.

APPENDICES

Appendix I: Letter of Introduction

Dear Respondent,

RE: REQUEST FOR RESEARCH DATA

I am a student at Jomo Kenyatta University of Agriculture and Technology carrying out a research study on **THE EFFECTS OF TENDERING PROCESS ON SERVICES DELIVERY IN ROAD CONSTRUCTION SECTOR**. You have been selected to participate in this study by filling the attached questionnaire to the best of your knowledge. The information given will be treated with utmost confidentiality and will be used for research purposes only.

Thank you for participating.

.....

(Researcher)

Appendix II: Questionnaire

This questionnaire is divided into five short sections that should take only a few moments of your time to complete. Please respond appropriately in the blanks provided. This is an academic exercise and all information collected from respondents will be treated with strict confidentiality.

Section A: General information

1. What is your gender? Male [] Female []

2. Working Experience

- a. Less than 5 years
- b. 6-10 years
- c. 11 - 15 years
- d. 15 years and above

3. Highest Education Level

- a. Diploma level
- b. University level
- c. Post graduate

4. Department

- a. Procurement
- b. Finance
- c. ICT

Section B: Procurement Planning

Please indicate the extent to which you agree or disagree with the statements regarding procurement planning.

No	Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
		1	2	3	4	5
1	The procurement methods used in the organization are in line with the Act					
2	The organization carries out procurement in accordance with the set procedures					
3	The procurement plan is prepared early enough to allow for proper allocation of funds					
4	The budget is first approved before any procurement is initiated					
5	The organization ensures there is a procurement plan to avoid reckless and over spending of funds					

Section C: Supplier Selection

Please indicate the extent to which you agree or disagree with the statements regarding supplier selection.

No	Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
		1	2	3	4	5
1	The organization believes in supplier evaluation to improve performance of its suppliers					
2	The organization focuses on building long lasting relationships with suppliers					
3	The organization makes timely payments to the suppliers after goods and service delivery					
4	The organization conducts supplier appraisals annually					

Section D: Tendering Methods

Please indicate the extent to which you agree or disagree with the statements regarding tendering methods.

No	Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
		1	2	3	4	5
1	The organization ensures that there is open tendering to increase the needed experience from the tenderer					
2	The organization offers the open tendering to encourage applications from the qualified tenderers					
3	The organization ensures that open tendering lead to fairness and transparency in the tendering process					

No	Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
		1	2	3	4	5
3	The organization ensures that the single sourcing of suppliers leads to reduction of procurement costs in the tendering process					
4	The organization ensures that the single sourcing of suppliers enhance timely delivery of goods and services					
5	The organization ensures that the request for quotations from suppliers leads to reduction of procurement costs in the tendering process					

Section E: Contract Management

Please indicate the extent to which you agree or disagree with the statements regarding contract management

No	Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
		1	2	3	4	5
1	The organization ensures that it controls and certifies that both contracting parties have honored the contractual responsibilities					
2	The organization controls and certifies activities involved in evaluating degree of successful contract execution					
3	The organization ensures that there is a of the expected results					
4	The organization ensures that both parties terminates the contracts effectively					
5	The organization ensures that it controls and certifies that both contracting parties have honored the contractual responsibilities					

SECTION F: Service Delivery

Service delivery can be measured over a period of time while looking into cost reduction, quality of roads and number of completed roads. Please rate them over the period of time indicated below.

Reduction of Costs	2012	2013	2014	2015	2016
Reduced by 0%-20%					
Reduced by 21%-40%					
Reduced by more than 40%					
Quality of Roads					
Reduced by 0%-20%					
Reduced by 21%-40%					
Reduced by more than 40%					
Number of Completed Roads					
Improved by 0%-20%					
Improved by 21%-40%					
Improved by more than 40%					

Thank you very much for your cooperation

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