



**TENDERING PROCEDURES AND PROCUREMENT PERFORMANCE IN
PUBLIC SECTOR: A CASE STUDY OF THE MAASAI MARA
UNIVERSITY**

Jonah Kibet Laboso

School of Business and economics
University of Kabianga
P.O. Box 20130 Kericho, Kenya

Kiprotich Isaac Naibei, PhD*

School of Business and Economics
University of Kabianga
P.O. Box 20130 Kericho, Kenya

***Corresponding Author**

ABSTRACT

All public institutions are expected to be efficient, cost effective, accountable and more responsive to the needs of its clients in procurement of goods, works and services. Effective procurement procedures are vital for the success of public entities. Universities also have an important role in Kenya's socio-economic development. However, public procurement system in Kenya continues to be marred by corruption scandals and losses amounting to millions of shillings. The purpose of the study was to determine the tendering procedures affecting procurement performance of public universities in Kenya. In this study descriptive survey research design was used. The study was conducted at the Maasai Mara University in Narok County with a target population of 60 employees from finance, procurement departments and heads of sections. The study used census sampling techniques. Data was collected using self-administered questionnaires and interview schedules. The data was analyzed by use both descriptive statistics and inferential statistics. The study established that there was significant positive relationship between tendering procedures and procurement performance. It also concluded that tendering procedures affects the performance of procurement. The study recommended that public Universities should adhere to Public Procurement Act

Key Words: Procurement procedures, procurement performance, public sector

1.0 INTRODUCTION

Over the past years, organizations have paid close attention to the importance of effective application of tendering procedures and its subsequent contribution to improved services in all sectors. Kakwezi and Nyeko(2010), the procurement function has not been given the recognition it deserves in developing countries, in most public entities, regardless of the effort by the partners like the World Bank(WB), The International Trade Organization(ITO), the United Nations conference on Trade and Development(UNTD), The World Trade Organization(WTO) and, others. This could be deliberate or sheer ignorance on the value the procurement function could contribute to any organization (Telgen, Zomer, & de Boer, 1997).

Functions like Human Resource (HR) and Finance could have their performance measured, but this is not the case with the procurement function. The failure to establish performance of the procurement function has led to irregular and biased decisions that have costly consequences to every entity. The need to have coherent methods of performance of the procurement function in public entities, particularly in developing countries, has never been as sound as it is now. Delaying execution of this process will worsen the already deteriorating performance, loss of professionals, and Organizations will continue incurring unnecessary costs Development Corporation Directorate & Development Assistance Committee (DCD&DAC, 2003).

The Public Procurement System in Kenya has evolved from a crude system with no regulations to an orderly legally regulated procurement system. The Governments Procurement system was originally contained in the Supplies Manual of 1978, which was supplemented by circulars that were issued from time to time by the Treasury. The Director of Government Supply Services was responsible for ensuring the proper observance of the provisions of the Manual. The Manual created various tender boards for adjudication of tenders and their awards, (Public Procurement Oversight Authority 2015).

According to Odhiambo and Kamau (2003), public procurement is broadly defined as the purchasing, hiring or obtaining by any other contractual means of goods, construction works and services by the public sector. Public procurement is alternatively defined as the purchase of commodities and contracting of construction works and services if such acquisition is effected with resources from state budgets, local authority budgets, state foundation funds, domestic loans or foreign loans guaranteed by the state, foreign aid as well as revenue received from the economic activity of state. Public procurement thus means procurement by a procuring entity using public funds (World Bank, 1995*a*). The items involved in public procurement range from simple goods or services such as clips or cleaning services to large commercial projects, such as the development of infrastructure, including road, power stations and airports. Public procurement is different from private procurement, because in public procurement the economic results must be measured against more complex and long term criteria. Furthermore, public procurement must be transacted with other considerations in mind, besides the economy. These considerations include accountability, non-discrimination among potential suppliers and respect for international obligations. For these reasons, public procurement is subjected in all countries to enacted regulations, in order to protect the public interests. It is worth noting that unlike private procurement, public procurement is a business process within a political system and has

therefore significant consideration of integrity, accountability, national interest and effectiveness (Wittig, 1998).

Prequalification is a process used to investigate and assess the capabilities of the contractors to carry out a job awarded tender to perform the job. The process itself has been examined by many researchers such as Zedan and Skitmore (1994); Merna and Smith, (1990) and Russell and Skiniowski (1988). Prequalification provides a client with a list of contractors that are invited to tender on a regular basis. This is the approach which is mostly used by many countries. The approach uses different criteria considered in evaluation of the overall suitability of contractors. To gain entry to an approved standing list, a contractor applies initially to the client and is then assessed on grounds of financial stability, managerial capability, organizational structure, technical expertise and the previous record of comparable construction, Merna and Smith, (1990). According to Hunt, Logan, Corbetta and Crimmins (1966), it is necessary to consider technical, managerial and financial criteria in the prequalification process. These comprise the applicant's permanent place of business, adequacy of plant and equipment to do the work properly, suitability of financial capability to meet obligations required by the work, appropriateness of technical ability and experience, performance of work of the same type and on a scale of not less than 50% of the projected cost of the proposed contract, the frequency of previous failures to perform contracts properly or failure to complete them on time, the current position of the contractor to perform the contract well, and the contractor's relationship with subcontractors, or employees.

According to Moselhi and Martinelli (1993) in contracts without a fixed price, where the clients have no single criteria for selecting contractors four criteria are essential to the owners objectives; relevancy of experience, depth of organization, financial stability and safety records. For planning and tendering the new parallel Runway for Kingsford Smith Airport, where a design and build contract was the method assigned for the project delivery, the following criteria were investigated for selecting the suitable contractor for the job Herbert and Biggart, (1993); Project management structure, human resources and quality management. Delivery capability and experience in proposed construction methods and plant ownership, current and completed contracts were examined. Relationships, issues such as industrial relations, occupational health and safety, and claims and dispute history were also considered. Financial evaluation which was based on an investigation of measures such as net assets, earnings and several financial ratios including debt to equity, current ratio and ability to carry construction losses were important issues explored. The number of applicants for prequalification is often so great that clients have to reduce the number of contractors to a short list. According to Merna (1990), this process is usually carried out on a subjective basis. The criteria used to narrow down the list might include regional and physical locations, technical and managerial expertise, and type and size of contract.

Moore (1985) proposed a quantitative system for fast track projects to select a contractor. Initially, an evaluation team should visit the contractor's home office to collect the required information and assign preliminary scores to each criterion. These values are weighted with respect to their relative importance on the project. When a category is made up of sub-categories, the weighted value scores of the sub-categories are added to calculate the total value for the

category. These scores should never be based on one person's analysis; a minimum of three evaluators is required for each scoring activity.

A study conducted by Severson, Jaselskis and Russell (1993) investigating trends in contractor financial data helped predict their likelihood of experiencing a claim. The study covered different topics, regarding the assets portion of a contractor's balance sheet; the liabilities, the stockholders' equity and the contractor's income statement. Samelson, and Levitt (1982) focused on construction cost reduction by means of accidents cost control through owner selection of safe contractors. Prequalification criteria are already required by many owners in both negotiated and competitively bid contracts. Questions on Experience Modification Rating (EMR) and the Occupational Safety and Health Association (OSHA) incidence rate, expressed two criteria which would be used as a means of identifying contractors with poor safety performance and would be used to remove them from bid lists.

Dennis (1993) suggested that preparing a suitable bid list jointly between the engineer and the client should include contractors who have previously been prequalified. A review of such prequalification records should satisfy both the engineer and the client in that, each bidder should have; the financial strength to sustain the cash flows likely to arise during the project; experience of the similar nature of projects, competency and plant capacity to complete the project within the constraints of the likely contract; technical capability (including human resources) sufficient to satisfy the requirements of the contract; a complete understanding of similar project scopes and ability to absorb subsequent changes; the facilities (testing, quality control, etc.) necessary to endorse assurance of quality; and comply in all respects with health and safety regulations.

In a contract auction for a multi-story office building, estimated at \$10.4 million for construction and \$1.57 million per year for the operation, Moselhi *et al* (1993), in consultation with the industry experience, established the selection criteria to be considered for bid evaluation to be; bid amount; annual life cycle cost; number of years in business versus bid amount; volume of business against bid amount; financial credit in comparison with bid amount; previous performance; project management organization; technical expertise; time of execution; and relation with subcontractors.

A research study conducted by Merna and Smith (1988) for bid evaluation for the public sector in the UK found that clients who require a tender submission of only an initial lump sum price without qualifications would then request further information for a more detail evaluation of the three lowest bids. Clients who requested a complete package of information checked initially for qualification, alternatives and errors before proceeding to a more detailed technical, financial or contractual evaluation to identify the winning bidder. Hardy, (1978) asserts that the criteria used for bid evaluation should reflect the client's objectives. These means that bids are fully responsive to the contract and bidders are sufficiently well qualified to undertake the contract. The criterion for selecting the successful bidder is therefore that bid which maximizes the return on the client's investment. Thus he proposed that bidders should submit a schedule of the payments they expect to fall due to them during the contract. Both the client and contractor may use this to determine the bids present value.

Ramus and Phil (2006) opines that the selection of a contractor to carry out a construction project is an important matter requiring careful thought. The selection process itself is not an easy task as the decision may result in the success or failure of the entire project. A particular contracting organization will be geared to work for a particular size or price range and will be unsuitable or uneconomical for the contracts outside that range. It is generally believed that wrong tendering practice is a major contributor to organizations inefficiency Ayeni, (1997). Procurement Lawyers Association, (2010), reported that contracts should be awarded on the basis of objective criteria which ensures compliance with the principles of transparency, non-discrimination and equal treatment and which guarantee that tenders are assessed in conditions of effective competition. The tender award regulations allow for two bases of award: lowest price or most economically advantageous tender from the point of view of the contracting authority.

The Maasai Mara University is one of the public institutions targeted by the government in procurement reforms. Over time, various publications and guidelines have been produced by the ministry of finance to ensure that the procedures in the procurement of goods, services and works for schools are transparent and that they guide the school management committees at all stages of procurement. These publications include: the Primary School Instructional Materials Management Handbook (July 2004); The School Improvement Grants Management Handbook (August 2005); the handbook of Financial Management Instructions for Primary Schools (2005); The Handbook of Financial Management (2006); and the Secondary Schools and Colleges Procurement Manual (2007). The latter provides procurement guidelines on Kenya Education Sector Support Programme (KESSP) related expenditure. The manuals made reference to other Ministry of Education (MOE) publications that set out in a more comprehensive manner the processes to be observed in the procurement of particular items such as instructional materials and school infrastructure.

Effective management of the procurement function is a precursor to the performance of the system in achieving its intended objectives in both the public and the private sector, Bashuna, (2013). Different procurement functions and responsibilities such as selection, quantification, product specification, pre-selection of suppliers and adjudication of tenders should be properly managed for the function to realize its objectives Mendoza, (2008). Procurement should be planned properly and procurement performance be monitored regularly and monitoring should include an annual external audit. A reliable management information system (MIS) is one of the most important elements in planning and managing procurement. Lack of a functioning MIS or the inability to use it appropriately is a key cause of program failure. There are reports of stalled and abandoned projects, poorly implemented works, and returns of unutilized project funds in various public institutions in the country. This trend shows that there are factors affecting the management of the procurement function. A Properly constituted and managed procurement process should be able to detect the possibility of such occurrences and prevent them. These challenges were also witnessed in the Maasai Mara University and thus confirming a research dilemma to the existence of management challenges faced by the procurement officers.

Procurement performance is a measure of identifying the extent to which the procurement function is able to reach the objectives and goals with minimum costs. Van Weele (2002) noted that there are two main aspects of the procurement performance; effectiveness and efficiency.

Procurement effectiveness as defined by Van Weele (2002) is the extent to which the previously stated goals and objectives are being met. It refers to the relationship between actual and planned performance of any human activity. Additionally, he explains that procurement efficiency is the relationship between planned and actual resources required to realize the established goals and objectives and their related activities, referring to the planned and actual costs. As a result, supplier performance is the most important procurement performance driver.

Vonderembse and Tracey, (1999) noted that measuring procurement performance is important as the purchasing department plays an ever increasingly important role in the supply chain in an economic downturn. They also explained that a reduction in the cost of raw material and services can allow companies to competitively market the price of their finished goods in order to win business. An obvious performance measure of the success of any purchasing department is the amount of money saved by the company (Nyeko 2004). Procurement department, like all other departments in a company, is an element of the overall organization, which must contribute to the achievement of the corporate goals. There is therefore a clear link between the corporate strategy and procurement strategy crucially to be understood, followed and implemented in each function and action (Vonderembse & Tracey, 1999). Buvik and John (2000) explained that procurement has always been integral to the performance of an organization. However, both Buvik and John (2000) further explained that with increasing unpredictability in the market, cut throat competition and looming recession fears, procurement, has become a highly topical area for the senior level management.

Performance of a product is measured through its production of quality goods and services, its cost reduction, shorter lead time among others. A product is said to be of quality when it conforms to its intended purpose, has utility satisfaction to the user, has the right specification and durable as compared to its alternatives. According to Heizer & Render (2003), quality is the ability of a product or service to meet customer/user needs. Quality can mean excellence, meeting customer requirement, quality as value, customer perception and adoption to expectation. Hansen (2001) asserted that it is unfortunate that until today the concept of quality appear fragmented and ambiguous in literature as in practice. The term quality management has different meaning within many business sectors. It is considered to have four main components: quality planning, quality control, quality assurance and quality improvement. Quality management is focused not only on product/service quality, but also the means to achieve it. Quality management theory focus on continuous improvement therefore uses quality assurance and control of processes as well as products to achieve more consistent quality. Shewhart (2001) made a major step in the evolution towards quality management by creating a method for quality control for production, using statistical methods, first proposed in 1924. This became the foundation for his ongoing work on statistical quality control. W. Edwards Deming later applied statistical process control methods in the United States during World War II, thereby successfully improving quality in the manufacture of munitions and other strategically important products

Quality management has become such an influential element of doing business that companies have adopted the Cost of Quality (COQ) model to predict the possible financial burdens of selling a product that is flawed. The COQ recognizes prevention costs, appraisal

costs, internal failure, and external costs as foreseeable quality management issues that could not fulfill the needs of the customer. Quality in its most basic sense is making the consumer/user content with their good/service and it is the obligation of the procurement manager to ensure that quality awareness is involved with each decision areas. The European Foundation for Quality Management (EFQM) proposes a model of excellence leading to improved business results. The model is based on the concept that an organization will achieve better results by involving all people in the continuous improvement of their processes. Investors in people have drawn attention to the importance of employees' engagement for building effective relationship between an organization and its people. Cascading the vision and direction of the organization is one of the strongest levers for generating improved performance, (Mullins, 2010).

Accountability in the public procurement system in Kenya in the past decade has undergone significant changes, from a system with no regulations in the 1960s, to a system regulated by Treasury Circulars in the 1970s, 1980s, 1990s. The latest circulars under operation being those issued in 2005 and 2015 respectively which sets new standards and procedures with the sole aim to provide efficient and effective public procurement and assets disposal guidelines for public entities.

The current economy too puts pressure on governments to cut spending and reduce deficits. With public procurement often accounting for a great percentage of a country's Gross Domestic Product (GDP) and public sector budgets, governments are faced with the challenge to keep on adding value to its services and goods while at the same time rigorously reducing their spending. This implies that many government organizations need to shift from a budget driven to a value driven way of thinking and acting, but this also means that there is an important role for the procurement function to fulfill.

However despite the enactment of these Acts and other related measures, public procurement in Kenya continues to be marred by corruption scandals and losses of public funds amounting to billions of shillings. Cases of procurement malpractice have dominated government reports and the public discourse. Contracts to suppliers can be awarded without fair competition. This allows companies with political connections to triumph over their rivals, or companies within the same industry can rig their bids, so that each gets a contract. This increases the cost of services to the public. Corruption can add as much as 50 per cent to a project's costs. Corruption in public procurement is not just about money. It also reduces the quality of work or services and it can affect many lives. People in many cities have paid a terrible personal price for collapsed buildings and counterfeit medicines.

These scandals among others point to inherent weaknesses in the law that must be addressed through the amendment of the law that allows corruption to thrive and defeat the objectives of procurement. It is against this background therefore that the research aimed at determining Tendering procedures affecting procurement performance in public universities in Kenya, which is measured among others, through prices paid for focus goods that should be in alignment with the existing market rates, quality of the supplier goods and timeliness of the supplier in delivery of the said goods,

The general objective of the study was to determine the tendering procedures affecting procurement performance in public Universities in Kenya. Specifically, the study sought to

determine the effect of prequalification of suppliers on procurement performance; establish the effect of evaluation of tenders on procurement performance and to assess the effect of tender award based on cost on procurement performance.

This research work is of much significance to the organization under study in future procurement practices of procuring goods, works and services in utilization of state funds. Similarly, other public and private institution which seeks value for money in their day to day purchases will use these findings as their point of reference. These results will be used to formulate government policies on procurement procedures. The study will also serve as a guide for further research studies for various scholars in different parts of the world seeking more knowledge on procurement. Lastly, these research findings will be of great importance to the researcher in the achievement of the requirements set by the University of Kabianga for the award of Masters of Business Administration Degree in Procurement.

2.0. RESEARCH METHODOLOGY

2.1. Research design

The research adopted a descriptive survey design. This is because it is easy to determine the factors under study accurately. It also has greater efficiency and helps to meet the objective of the study. The method was used in the research to get the views of different respondents who are involved in formulation and implementation of procurement policies. The researcher was therefore able to establish the tendering procedures affecting procurement performance in Maasai Mara University.

2.2. Study Location

The study was conducted in the Maasai Mara University in Narok County specifically in the departments of finance, procurement and university user departments. The Maasai Mara University formerly known as Narok University College was a constituent college of Moi University since 2008, and was granted a charter on February 2013. Before being a constituent college of Moi University, the Narok University College institution served as a teachers training college. The Maasai Mara University is located approximately 1 kilometer off the Narok- Bomet Highway and at least 2 kilometers away from Narok town.

2.3. Population and sample

Target population according to Mugenda and Mugenda (1999), is the totality of cases of people, organizations or institutions, which poses certain characteristics relevant to the study. It is the total number of subjects of the interest to the study. The target population of the study comprise of 60 employees in various departments in the university. The distribution of employees from the targeted departments was as shown in Table 1

Table1

Target Population

Department	Target Population
Procurement	11
Finance	25
Others	24
Total	60

Source: Maasai Mara University (Records, 2016)

According to Kull (1989), sampling is the process by which a relatively small number of individual subjects or events is selected and analyzed in order to find out some information about the entire population from which it was selected. A sample is a small population of the target population. Considering the target population which is small, the researcher used a census technique where a total Population of 60 respondents from different departments was involved. This is because all the selected respondents have the relevant information to address the research objectives.

The researcher got the list of the employees in the targeted departments and questionnaires were administered to them for filling at their convenient time before they were collected by the researcher. The researcher obtained a letter of authority to carry out the research from his university, the School of Graduate Studies. Permission was also sought from National Commission for Science Technology and Innovation (NACOSTI) and also from the Maasai Mara University.

2.4. Data Collection

The main instrument that was used for data collection was a closed and open ended questionnaire where limited responses were required and respondents given opportunity to give their views on relevant issues of study. The researcher administered the questionnaires on a drop and pick later basis that gave the respondents adequate time to fill in the questions without pressure. Respondents were given adequate time to fill their responses and the researcher collected them as soon as they were completed.

The questionnaire that was prepared by the researcher was presented to the researcher's experts in the field of procurement who scrutinized and ratify that the questionnaire covered all the objectives of the study. The questionnaire developed was pilot tested at the University of Kabianga in the departments of procurement, finance and other user departments to ensure that the questions were clear and not ambiguous such that the responses will be consistent with the purpose of the study. Quality control and validity was also ensured through face validity, where the instrument was subjected to experts to check whether it measures what it was intended to measure and construct validity, which was maintained through restricting the questions to the conceptualizations of the variables and ensuring that the indicators of a particular variable fall within the same construct.

Reliability as described by Mugenda and Mugenda (1999) is a measure of the degree to which an instrument yields consistent results or data after repeated trials. There are various ways

in which qualitative researchers try to show that their findings are reliable (Kothari, 2004; Nahid, 2003).

Reliability of the instruments was estimated using internal consistency technique. This was done after the instrument was pilot tested. Internal consistency is a measure based on the correlations between different items on

the same test or the same subscale on a larger test (Wikipedia, 2016). Internal consistency was measured with Cronbach's Alpha test. A reliable instrument should yield at least Cronbach Alpha coefficient of 0.700. Reliability was measured by distributing 20 questionnaires to the staff of University of Kabianga, this allowed for pretesting of the research instruments. The results were compared using Cronbach's Alpha reliability coefficient which normally ranges between 0 and 1. The correlation coefficient of 0.6 was achieved.

2.5. Data analysis

The data that was collected from the field was edited to remove errors made during data collection, re-checked, and coded for completeness and kept for further analysis and interpretation of the study. It was then summarized and analyzed using descriptive statistics such as frequencies and percentages. Correlation analysis was conducted to establish the relationship between the variables. Data presentation was done using frequency tables and figures which facilitated clear interpretation of results and drawing of conclusions. These findings were later used to establish tendering procedures affecting procurement performance of public universities in Kenya.

3.0. RESULTS

The researcher targeted a population of 60 staff of the Maasai Mara University out of which 58 responses were obtained. This represented a 96.7% response rate. This is a reliable response rate for data analysis as Babbie (2002) posited that any response of 50% and above is adequate for analysis.

As part of the general information, the researcher requested the respondents to indicate their gender, age bracket, education level and working experience. The study sought and obtained details about the gender of the respondents for purposes of knowing their number. Details of the respondents as per their gender are shown in Table 2

Table 2
Gender of respondents

	Freq.	%	Cumulative%
Male	31	53.4	53.4
Female	27	46.6	100.0
Total	58	100.0	

Source (Research 2016)

On the gender of the respondents, the study found that 53.4 of the respondents were male while females formed 46.6% of the respondents. This shows that most of the staff in the institution are male.

Description of the Age of the respondents

The study obtained the age of the respondents as shown in the Table 3

Table 3
Age Bracket of the respondents

Age	n	%	Cum%
18-27years	14	24.1	24.1
28- 37 years	13	22.4	46.6
38-47years	24	41.4	87.9
48 years and above	7	12.1	100.0
Total	58	100.0	

Source (Research 2016)

According to the findings in the Table 3, 24.1% of the respondents were aged between 18 – 27 years, 22.4% were aged between 28 -37 years 41.4% were aged between 38 – 47years while 12.1% were over 48 years. From these findings we can deduce that majority of the workers are between 38 - 47 years. The study sought to obtain the level of education of the respondents. Table 4 shows the education levels.

Table 4.4 Education Levels

	Freque ncy	Perce nt	Cumulativ e Percent
Masters Degree	2	3.4	3.4
Bachelors Degree	27	46.6	50.0
Higher Diploma	1	1.7	51.7
Diploma Certificate	14	24.1	75.9
Other College certificate	7	12.1	87.9
	7	12.1	100.0
Total	58	100.0	

Source (Research 2016)

From the findings in the Table 4, majority of the respondents were holders of Bachelors degree at 46.6% (27), 3.4% (2) had Master degrees, higher Diploma and Diploma holders are 25.8% (15), certificate holders are 12.1% (7) while other college certificate are 12.1% (7). The study also sought to find out working experience of the respondents. Table 5 show the working experience of the respondents

Table 4.5
Working experience

	Freq.	%	Cum.%
less than 1 year	11	19.0	19.0
1-5 years	28	48.3	67.2
10 years and above	19	32.8	100.0
Total	58	100.0	

Source (Research 2016)

Table 5 shows that 19.0% of the respondents (11) have 1 year and below experience, 48.3% (28) have experience of 1-5 years, while 32.8% (19) have 10 years and above working experience. The study revealed that 67.2 % of the employees have 5 years and below working experience. The study also sought to find out job title of the respondents. Table 6 show the job title of the respondents

Table 6
Job title of the respondents

	Freq.	%	Cum %
Head of department	4	6.9	6.9
Assistant head of department	6	10.3	17.2
Supervision	9	15.5	32.8
Technical staff	39	67.2	100.0
Total	58	100.0	

Source (Research 2016)

From the findings in the Table 6, majority of the respondents were technical staff 67.2% (39), supervision 15.5% (9), and assistant head of department 10.3% (17.2) while head of department 6.9% (4).

Prequalification of tenders

In the Table 8 are details of measures of effects of prequalification of suppliers under different key statement obtained from the respondents this statement have been ranked in terms of their mean and standard deviation so as to deduce meaning out of the results.

Table 8
Descriptive statistics on prequalification of suppliers

	N	Me	Std.
		an	Deviation
My organization prequalifies	58	4.09	.470
Invite potential suppliers to prequalify	58	4.21	.409
Encourage suppliers to attend tender opening	58	4.62	.489
Send prequalification document	58	4.21	.767
Prequalified suppliers deliver goods	58	4.36	.485
Prequalified suppliers have predictable deliveries	58	3.93	.792
Prequalification procedures is a transparent process	58	3.93	.856

Source (Research 2016)

The study found that the respondents agree that their organization prequalifies suppliers with mean of 4.09. However, the corresponding standard deviation of 0.470 shows that there is a clear variation in the responses provided by the respondents about prequalification of suppliers. From the Table 4.8 respondents seemed to strongly agree that their organization invite potential suppliers to prequalify as reflected by the mean value of 4.21 which is tending towards the maximum point of 5. However, a standard deviation of 0.409 suggests varied responses regarding invitation of potential suppliers to prequalify.

In Table 8, respondents provided their understanding regarding how the organization encourage suppliers to attend tender opening as shown by a mean of 4.60, this imply that they strongly agree with the statement, though a standard deviation of 0.489 suggests significant differences in responses. The results as reflected in Table 8 show a mean of 4.21. Which show that respondents agree with the statement that organization send prequalification document to suppliers. Consequently, a standard deviation figure of 0.767 raises concerns regarding sending prequalification document. The figure of standard deviation further reveals that the respondents had varied opinion.

The study (as reflected in Table 4.8) found that the respondents agreed that prequalified suppliers deliver goods with a mean value of 4.36. However, the corresponding standard deviation of 0.485 revealed clear variation in the responses provided by the respondents

The study in table 4.8 suggest that respondents seem to agree that prequalified suppliers have predictable deliveries with mean of 3.93 and the standard deviation of 0.792 which suggests that they possess variation in understanding prequalified suppliers have predictable deliveries.

Descriptive statistic on evaluation of tenders

In the Table 4.9 are details of measures of effects of the evaluation of tenders under different key statement obtained from the respondents this statement have been ranked in terms of their mean and standard deviation so as to deduce meaning out of the results.

Table 9

Descriptive statistic on evaluation of tenders

	N	Mean	Std. Deviation
My institution conducts evaluation of tenders	58	4.6034	.49345
Tender evaluation is done by competent committee	58	4.0517	.57499
Evaluation of suppliers is transparent	58	4.3621	.48480
My institution use evaluation of suppliers to procure quality goods	58	3.9483	.60473
Evaluation of tenders attract experienced suppliers	58	3.9655	.64795

Source (Research 2016)

From the results in Table 9, it is clearly evident that respondents were in total agreement that their institution conducts evaluation of tenders as reflected by a mean value of 4.6034 which is tending towards maximum value of 5 (i.e. strongly agreeing). However, the standard deviation of 0.49345 suggests variations in responses.

From the results of the study as reflected by Table 9, respondents agree as to whether tender evaluation is done by competent committee. This was revealed by a mean of 4.0517. However, a standard deviation of 0.57499 suggests variation in the responses generated by the respondents.

Results of the study as reflected in Table 9 also suggest that respondents agree that the evaluation of suppliers is transparent in their organization. This is revealed by a mean of 4.3621,

although the standard deviation of .48480 seems to suggest variation in the responses generated for the evaluation of suppliers. From the study, as reflected in Table 4.9, it can be deduced that respondents slightly agree that their institution use evaluation of suppliers to procure quality goods; this is revealed by a mean value of 3.9483, although the standard deviation under the same test revealed a variations of 0.60473 in responses.

Results of the study in Table 9 shows a mean of 3.5517 which is slightly above the average; this suggests that respondents slightly believe that their institution gets value for money. However, a standard deviation of 0.86191 suggests varied responses as to whether the institution gets value for money From the results of the study in Table 4.10, respondents seem to agree that their institution awards tender to least price suppliers. This is revealed by a mean of 3.7414 which is slightly above the average of 3. However, a standard deviation of 0.82845 suggests a significant variation in the responses generated by the respondents

The study as reflected in Table 4.10, it can be deduced that respondents agree that their organization does not only see least price when awarding tenders, this is revealed by a mean value of 3.7414, although the standard deviation (0.79776) under the same test revealed a variations in responses generated

From Table 9, respondents seem to marginally agree that their institution award tenders to the suppliers with high marks as reflected by the mean value of 3.6207. However, a significant standard deviation figure of 0.95196 reveals varied responses from the respondents on the same, implying that they have different opinions about institution awarding tenders to the suppliers with high marks

Results of the study in Table 4.10 also suggested that employees of their institution do not engage in unethical or dishonesty. This was revealed by a mean value of 3.5172 which is slightly above the average. However, a significant standard deviation of 0.92227 which suggests that in as much as employees of their institution does not engage in unethical or dishonesty, they varied greatly in their responses.

Regression analysis

Multiple regression equation was used to determine the level of prediction of the independent variable (Prequalification of supplier, Evaluation of tenders and Award of tender based cost) for tendering procedures, by the dependent variable for Procurement performance in the University.

Table 10: Summary of regression model

Un standardiz ed Coefficient s	Std Coefficien ts	Beta	Sig.
B	Std. Erro r		

(Constant)	3.21	1.03		.003
	8	4		
Supplier				
Prequalification	-.239	.115	-.185	.042
Tender evaluation	-.589	.244	-.214	.019
Tender award	.707	.084	.705	.000
<i>R</i>	=.788 ^a			
<i>R</i> ²	=.			
620				
<i>Adjusted R</i> ²	=..599			

Dependent Variable: Procurement performance; n=58

Table 10: Shows a summary of the regression model. The predictors in this model are Prequalification of supplier, Evaluation of tenders and Award of tender based cost and the dependent variables is procurement performance. Findings revealed that collectively the predictors accounts for 62.0% of the procurement performance of the University as shown by $R^2=0.62(p<0.001)$. This implies that the procurement performance of the University can be significantly improved by following tendering procedures.

The established regression equation was

$$Y = 3.218 - 0.239x_1 - 0.589x_2 + 0.707x_3$$

From the regression equation, the study revealed that Prequalification of supplier, Evaluation of tenders and Award of tender based on cost at 3.218, a unit increase in Prequalification of supplier would lead to decrease in procurement performance of the University by a factor of -0.239, a unit increase in Evaluation of tenders would lead to decrease in procurement performance by a factor -0.589, a unit increase in Award of tender based cost would lead to increase in procurement performance 0.707.

4.0. DISCUSSION

Results revealed that the prequalification of suppliers significantly affect $r=-0.281$ ($p<0.05$) the procurement performance in Public Universities. Prequalification of suppliers affects procurement performance by determination of the responsibility of each supplier to satisfactorily undertake and complete a certain supplies. The study showed that prequalification of suppliers helps in screening suppliers according to a given set of criteria, in order to determine their capability to perform their assignment. The research findings agree with Puthitha, (2011) in his research on defining contractor prequalification criteria, tendering criteria, and tendering procedure in Cambodia building and housing construction projects.

The study findings indicate that evaluation of tenders significantly affects $r=-0.295$ ($p<0.05$) the procurement performance in public Universities; by ensuring evaluation is done by competent committee and ensuring there transparency in evaluation of suppliers. The unreasonable suppliers could then be subjected to verification, investigation or rejection based upon University preference during evaluation. The findings of the study are in line with the assertions' of Merna and Smith (1988) in their study on process for bid evaluation in public sector in the UK.

The study also revealed that Award of tender based cost affects $r=0.717$ ($p<0.01$) the procurement performance in public Universities. The university will get value for their money and will award tenders with the lowest price and with high marks in evaluation process which requires every bidder to meet all mandatory requirements, technical requirements and financial ability as was set in the tender document. The findings agree with the World Bank report 2008 that tendering is based on the principles competitiveness, fairness and accessibility, transparency, openness and probity.

It can be concluded that tendering procedures affects procurement performances of the public Universities. Therefore, Public Universities in Kenya should institute strong and effective procedures of prequalification of suppliers. This will ensure the prequalified suppliers will meet their obligation. It can also be concluded that strong tender evaluation process results in getting quality supplies in the Public Universities. Awarding tender based on cost will lead to getting value for money by the University. The study therefore, concludes that Public Universities in Kenya should ensure that they have very strong internal tendering procedures since it improves procurement performance.

From the findings of the the study recommends that management of Public Universities should put in place a clear process of prequalification of suppliers, this will ensure that the prequalified supplier will meet their obligation to supply quality deliveries. From the study it is also recommended that the Universities should have effective evaluation of tenders which proved to help in identifying unreasonable suppliers by subjecting them to thorough verification, investigation and rejection based on set criteria and ensuring transparency, fairness and ethical issues in the tendering process is observed. Lastly the study also recommends that the awarding of tenders should be based on cost, this will assist the Public Universities to realize value for their money.

The study recommends that further research focusing on the effect of tendering process on procurement performance in other industries like cooperative societies, micro finance institutions and even non-governmental organization this could perhaps reveal more focused results as different industries may respond differently to certain information releases.

REFERENCES

- Alchian, A. A., & Demsetz, H. (1972). Production, Information Costs and Economic Organization. *American Economic Review*, Vol. 62, pp. 772-795.
- Ambe I. M, Badenhorst-Weiss J. A (2011b). Grounded Theory Analysis of Municipal Supply Chain Management. *Afr. J. Bus. Manag.* 5 (29):11562-11571 Approach, *Trans Res Rec* 1282, Washington D.C., 89-94.

- Bashuna, A. (2013) Factors affecting management of procurement Nakuru County
- Brumbaugh, R. B. (1971). Authenticity and Theories of Administrative Behavior. *Administrative Science Quarterly* 16(1): 108-112.
- Daily, C. M., Dalton, D. R., & Canella, A. A. (2003). Corporate governance: Decades of dialogue and data. *Academy of Management Review*, Vol. 28, No. 3, pp. 371-382.
- Dennis, L. (1993), *Handbook of Engineering Management*, Butterworth-Heinemann Ltd.,
- Development Corporation Directorate & Development Assistance Committee (2003). *Strengthening Procurement Capacities in Developing*
- Donaldson. L. & Davis, J. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Academy of Management Review*, Vol. 20, No. 1, pp. 65.
- Ellis, R.D. and Herbsman, Z.J. (1991), Cost-time bidding concept: an innovative
- Hamilton, Martha M. (1998): "Who's Chainsaved Now? Dunlap out as Sunbeams's losses Mount"
- Hamilton, Martha M. (1998): "Who's Chainsaved Now? Dunlap out as Sunbeams's losses Mount" Washington Post, June 16
- Hardy, S.C. (1978), *Bid evaluation study for the World Bank, vol 1*, UTVIIST, Manchester,
- Hardy, S.C. (1978), *Bid evaluation study for the World Bank, vol 1*, UTVIIST, Manchester,
- Hatush et al, (1997) Criteria for contractor selection. *Construction Management and Economics* 15(1):pp. 19-38.
- Herbert, C.P., Biggart, T.P., 1993, Kingsford Smith Airport, Sydney: Planning and Tendering the New parallel Runway, *Proc Inst of Civ Engrs*, Nov., 182-9.
- Herbert, C.P., Biggart, T.P., 1993, Kingsford Smith Airport, Sydney: Planning and Tendering the New parallel Runway, *Proc Inst of Civ Engrs*, Nov., 182-9.
- Herbsman, Z., Ellis, R., 1992, Multiparameter bidding system-innovation in contract administration of Const Engrg and Mangt, 118(1), 142-50.
- Herbsman, Z., Ellis, R., 1992, Multiparameter bidding system-innovation in contract administration of Const Engrg and Mangt, 118(1), 142-50.
- Hunt, H.W., Logan, D.H., Corbetta, R.H., Crimmins, A.H., Bayard, R.P., Lore, H.E., Bogen, S.A., 1966, Contract award practices, *J of the Const Div*, Proc of the ASCE, 92(CO1), 1-16. Institution of Civil Engineers,
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305-360.
- Kakwezi and Nyeko (2010); Factors affecting procurement performance.
- Kenneth Lyson (2006), *Purchasing and Supply Chain Management*
- Kirungu, H., 2009, Public Procurement Situation in Kenya, 2nd East African Public Procurement Forum, Nairobi, Kenya.
- Kothari, (2003) *Research Methodology and Techniques*, New Delhi: WishaPrakshan.
- Kothari, C.R. (2004). *Research Methodology Methods and Techniques*. 2nd Ed., New Age International Publishers
- Lysons & Farrington, (2006). *Purchasing and Supply Chain Management*.
- Mendoza; (2008) *Challenges facing procurement organizations*

- Merna, A. and Smith, N.J. (1988), Bid evaluation for UK civil engineering construction Contracts, Final Report, *Proc Inst Civ*
- Merna, A., Smith, N.J., (1990), Bid evaluation for UK public sector construction contracts, *Proc InstCiv Engrs*, Pt 1, Feb, 91-105
- Minchin, R., and Smith, Gary, Quality-BasednPerformance Rating of Contractors for Prequalification and Bidding Purposes Phase I, NCHRP Research Report Number 10-54, July 2000
- Moore, M.J., 1985, selecting a contractor for fast-track projects, Pt II, Quantitative Evaluation Method, *Plant Engineering*, 39(18), 54-6.
- Moselhi, O., Martinelli, A., (1993). Analysis of bids using multi-attribute utility theory
- Nahid,G.(2003).*Understanding Reliability and Validity in Qualitative Research*. University of Toronto, Toronto, Ontario, Canada.
- Odhiambo, W. & Kamau, P. (2003). Public procurement: Lessons from Kenya, Tanzania and Uganda. OECD Development Centre Working Paper No. 208.
- PPDA. (2005). Public Procurement and Disposal Act
- Public Procurement and Disposal Act (2005) and subsequent regulations of 2006 and 2009.
- Public Procurement and Disposal of Public Assets Authority. (2005),
- Russell, J.S., Skibniewski, M.J., (1988), Decision criteria in contractor prequalification, *J of Mangt in Engrg*, ASCE, 4(2), Apr, 148-64.
- Russell, J.S., Skibniewski, M.J., (1988), Decision criteria in contractor prequalification, Policy Framework, Kenya Institute for Public Policy and Research and Analysis;
- Samelson, N.M., Levitt, R.E., (1982), Owner's guidelines for selecting safe contractors, *J of Const Div*, ASCE, 108(CO4), 617-23
- Severson, G.D., Jaselskis, E.J., Russell, J.S., (1994), Trends in construction contractor financial data, *J of Const Engrg and Mangt*, 119(4)
- Skitmore, R.M., (1990), Analysing bidding performance
- Telgen, J., Zomer, G., & de Boer, L. (1997). *The efficiency and effectiveness of government purchasing in The Netherlands*
- Mugenda and Mugenda (2003) Research Methods, quantitative and qualitative approaches: African centre for technology studies (ACTS) press UK.
- WORLD BANK (1995a), "Guidelines: Procurement under IBRD Loans and IDA Credits", Washington Post, June 16
- UK.
- Wittig, (1998), "Building value through public procurement: a focus on Africa.
- Zedan, H., Skitmore, R.M., (1994), Contractors prequalification and bids evaluation (unpublished).