# Influence of Bid Evaluation Criteria on Procurement Function Performance of Kiambu County Government in Kenya

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### Abstract

Procurement is perceived as prone to corruption resulting to wastage and affecting the quality of services. County governments have been noted as losing billions of shillings by awarding tenders to bidders who are unqualified for the tasks given. This has resulted to stalling of county projects and also poor services. As such, this study sought to establish the influence of bid evaluation criteria on procurement function performance of Kiambu County Government. The specific objectives of this study were to examine the influence of bidders' financial position; quality commitment; human resource competence and delivery reliability on procurement function performance of Kiambu County Government, Kenya. The study was guided by Carters '10 Cs' Bid Evaluation Theory, Transaction cost theory and the Deming Quality management theory. A descriptive correlational research design was adopted. The study targeted 84 stakeholders involved in tender evaluation namely the Procurement staffs, Finance staffs and Engineers as technical staffs and Human resource staffs as representatives of user department in Kiambu county government. The researcher employed Census method since the target population was small and therefore all the 84 respondents were issued questionnaires for the purpose of data collection. The research auestionnaire was subjected to a pilot test to determine its validity and reliability. The data was analyzed with the facilitation of the Statistical Package for Social Sciences software. Data analysis was in both descriptive statistics and inferential statistics. The null hypotheses were tested using the t-statistics at 95% confidence level. The results of the study were presented in form of tables accompanied by relevant interpretations and discussions. The study established that bidder's financial position, quality commitment, HR competence and delivery reliability had a positive significant relationship with the procurement function performance of Kiambu county government. Further the regression analysis indicated that the financial position, quality commitment, HR competence and delivery reliability of the bidder had a significant influence on procurement function performance of Kiambu county government. Further, the independent variables taken together cumulatively accounted for 30.8% of the total variation in procurement function performance of Kiambu county government. In this regard the study recommended that the tender evaluation committee should evaluate financial position of the bidders to ensure that the selected bidders have sufficient capacity to fulfil their contractual obligations. They should as well as assess quality commitment of bidder by ensuring that they have implemented quality control and quality assurance procedures so as to enhance procurement function performance. Further ensure that bidders have the right number of employees that have knowledge, skills and experience in their respective areas to ensure effective and efficient service delivery. Finally award tenders to bidders that have good track record of delivery history to improve procurement performance. The findings of this research are expected to be important to Kiambu county government procurement practitioners by demonstrating to them the importance of bid evaluation and providing a variety of criteria to use during tender evaluation stage so as to achieve value for money. In addition, it will help them in making informed decisions in awarding tenders. On the other hand, it will also be helpful to public procurement policy makers to make a review on the criteria of awarding tenders so that most economic tender is awarded tender rather than lowest quoted bidder.

**Key words:** Bid Evaluation Criteria; Financial position; Quality Commitment; Human resource competence; Delivery reliability; and Procurement Function performance.

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#### I. Introduction

### 1.1 Background of the Study

In the present global competing environment tender evaluation is considered very critical as it helps in cost reduction, improving on quality and delivery of goods, services and works, thereby helping the buying organization to survive (Johnson & Flynn, 2015). The main objective of tender evaluation is to assess and compare all tenders received, in accordance with the predefined criteria and selecting the successful bidder to be awarded a contract (Chartered Institute of Procurement and Supply, 2018). To ensure value for money, transparency and integrity evaluation criteria should be established at an earlier phase of procurement cycle. After the contract requirements have been defined and the selection method decided the evaluation criteria are set so that the buyer can appropriately evaluate which Bidder is best able to deliver the requirements and maximize Value for Money (World Bank, 2016).

The award criteria constitute the basis on which a buyer chooses the best tender and awards a contract (Sigma, 2016). Procurement entities therefore evaluates bidders to determine their: financial stability, quality commitment, production capacity, delivery reliability, human resource competence, technical competence, Environmental and sustainability considerations, organization culture, corporate social responsibility, ethical criteria and labour standards so as to determine the bidder that meets user requirements (CIPS, 2018).

Bid evaluation is vital in the procurement process as it provides a great opportunity for procurement entities to achieve value for money (Lyson & Farrington, 2016). Business success in a world dominated by global markets depends on the success of the bid evaluation and award. The direct and indirect impacts of the unsuccessful decisions become more important in companies that are more dependent on the bidders (Johnson & Flynn, 2015). Over the years the purchasing functions have continued receiving an increment of attention in procurement entities (Musau, 2015). It is vital to assess the procurement performance because of the advantages that it accrues such as increase in efficiency and productivity. In procurement the selection and maintenance of competent bidders is very essential. Other variables, however, affect the ability of a company to choose the right bidder.

Procuring entities globally are increasingly relying on selected bidder for the supply of goods, works and services to fulfil their contractual obligations and meet the needs of the user departments. Procurement functions are increasingly becoming under pressure to ensure efficient and cost-effective procurement through selecting most economic advantageous tender. It is thus imperative to state that bid evaluation should be carried out carefully. The choice of tenderer should be guided by an elaborate evaluation of the potential bidders since the bidders can impact the performance of any procurement function or process (Mutai, 2016). As global competition intensifies, procurement entities in Germany and China evaluate their tenders mainly on financial stability, quality and production capacity (Danston, 2015). To achieve competitive advantage worldwide, China and South Korea have been evaluating bidders' quality management systems so as to ensure that supplies meet ISO standards. Companies have no choice but to deliver high quality products and services in order to thrive in today's dynamic global market and to respond to customer demands.

Public procurement entities in countries like Rwanda and South Africa have tender evaluation guidelines and procedures to assess their bidders. The Rwanda public procurement and disposal act 2009 and its regulations 2010 provides tender evaluation procedure to ensure economy, efficiency, transparency, openness, non-discrimination and judicious use of government resources (Mukarumongi, 2018). In South Africa tenders are evaluated on the basis of previous performance experience, financial capacity, management capacity, quality management, litigation and reputation history. Despite well-established criteria public entities in South Africa are still suffering from delivery of poor quality of goods and services (Justus & Okello, 2016).

The evaluation of bidders is in compliance with the Kenyan Public Procurement and Asset Disposal Act 2015 and Public Procurement and Asset Disposal Regulations, 2020. According to section 76 of the PPADA 2015 and Section 32 of PPADR 2020 point out that tender evaluation committee should conduct tender evaluation by comparing each tender to the evaluation criteria in the tender document (Government of Kenya, 2020). The tender evaluation criteria entail the: financial stability, quality commitment, human resource competency, delivery reliability, litigation history, previous work experience and so on depending on the goods works and services to be procured (Lysons & Farrignton 2016). According section 86 of the PPADA, 2015 the successful bidder is the one that has lowest evaluated price, highest score, lowest evaluated total cost and highest technical score (Government of Kenya, 2015). Despite having these procurement legislations put in place by the government many organizations in Kenya feel that bid evaluation has little influence on the purchasing decision since the purchasing decision is mostly determined by price and policy (Kiprotich & Okello, 2016).

#### 1.2 Statement of the Problem

Public procurement is key to government service delivery, yet constraints affect its performance. Procurement is perceived as prone to corruption; occasioning waste and affecting quality of service and life improving opportunities (Mukarumongi, 2018). Auditors General Report (2018) indicated that county governments in Kenya have lost money to the tune of Ksh. 2 billion in the financial year of 2016-2017 by paying bidders whose work was shoddily done, incomplete and not to standards and those who offered poor quality goods and services. According to auditor general report (2018), the county government of Kiambu had un-procedurally awarded contracts to bidders who in most cases failed to finish their jobs. For example, in the report, the county executive awarded the contract for the construction of the githunguri CBD roads at a contract price of Kshs 103,997,581. From the report, a letter of award was not provided for audit review as well as contract documents containing Bills of quantities and as such the scope of the work could not be ascertained. Further in October 2018 a contract was awarded for three additional roads. The contract was irregularly varied by Kshs 23,845,164 to 127,842,745 purposely to accommodate three additional roads (GOK, 2018). Similar contract awards are evident in the report and previous years of which in most cases are left incomplete while the contractors receive their payment. This depicts the extent of the problem in the county. There is need to reverse this worrying trend and win public confidence. Despite Government efforts to improve the procurement system, it is still marred by shoddy works, poor quality goods and services. According to PPRA report thirty percent of inefficiency in public sector in Kenya is linked to bidder performance issues (Mutai, 2016). One of the ways through which organizations strive to reduce bidder related inefficiencies is through bid evaluation (Lysons & Farrignton 2016). Various studies have been carried out in regard to bidder evaluation. Mutiso and Ochiri (2017) conducted a research in non-governmental organizations in Kenya; Chemjor (2015) in parastatals; Naibor and Moronge (2018) in manufacturing companies in Kenya. However, there are few studies that have been done in devolved governments. For this reason, therefore the study sought to determine the influence of bid evaluation criteria on procurement function performance of Kiambu County Government.

### 1.3 Objectives of the study

### 1.3.1 General Objective

The study sought to examine the influence of bid evaluation criteria on procurement function performance of Kiambu County Government in Kenya.

#### 1.3.2 Specific Objectives

- i. To determine the influence of financial position on procurement function performance of Kiambu County Government.
- ii. To assess the influence of quality commitment on procurement function performance of Kiambu County Government.
- iii. To determine the influence of human resource competence on function procurement performance of Kiambu County Government.
- **iv.** To establish the influence of delivery reliability on procurement function performance of Kiambu County Government.

#### **II. Literature Review**

### 2. Literature review

#### 2.1 Theoretical Review

### 2.1.1 Carters '10 Cs', Bid Evaluation Theory

This theory was developed by Ray Cater in 1995 to help buyers determine the most suitable bidder who will be able to perform a contract or a tender that is awarded by providing wide range of criteria to evaluate and rank bidders. The bidder is evaluated on basis of '10 Cs', criteria which includes: cash; competency; commitment; consistency; capacity; control; cost; compatibility, compliance and communication (Caters, 1995). According to Carter, the bidder should be competent to fulfilling the contract by delivering goods, works and services requisitioned by the user. Have cash resources to ensure the stability of supply by determining his profitability and cash flow position (whether it has working funds to pay its bills, buy materials and pay workers), assets he owns, the debts it owes, how its cost are structured and allocated and so its overall financial health.

On the other hand, prove consistency in delivering and improving quality and service for example track record of reliability or process capability (robust process, quality assurance and control). Moreover, prove capacity to meet current and future needs of the buying organization. Be committed to key values such as quality, service, or cost management. Have control systems in place for monitoring and managing resources for example quality and environmental systems, financial controls, risk management systems and so on. Reduce cost which is an

aspect of price, whole life cost and value for money. Show evidence of compatible with the buying organization both cultural (in terms of values, ethics work approach, management style and so on) and technological (in terms of processes, organization and its IT systems). Should be compliant to sustainable legislations and standards, corporate social responsibility, and lastly can communicate effectively by having supporting technology to support supply chain collaboration (CIPS, 2018).

The theory add value by avoiding wasted cost, time, effort and embarrassment of awarding contract (on the basis of lower price) to a tenderer who subsequently turns out to lack capacity or technical capability to handle work, or turns out have systems and values that are incompatible with the buying organization, or turns out be financially unstable and unable to complete the work because of cash flow problems or business failure (CIPS, 2018). The model assumes that bidder evaluation itself is described as a multi-attribute decision making (MADM) problem that adopts a specific criterion linked to performance (Thakur & Anbanandam, 2015).

Carter's bid evaluation model provides guideline on the criteria to evaluate bidders both in technical evaluation stage and financial evaluation stage of tendering process. From these criteria the tender evaluation committee can be able to determine which bidder has the capacity to fulfil the contract requirements by determining financial position of the bidder, competence of the bidder, quality commitment and delivery reliability. These criteria will form the basis upon which the tender evaluation committee will recommend to the accounting officer (Chief Executive Officer) for the award of tender.

### 2.1.2 Transaction Cost theory

Transaction cost theory was developed by Oliver Williamson in 1979. This theory addresses questions about why firms exist in the first place (which is to minimize costs), how firms define their boundaries, and how they ought to govern operations. In transaction cost economic theory, the main aim of an organization is to reduce the total production costs and transaction costs (Williamson, 1979). Transaction costs affects organization decisions on organizing activities towards vertical integration or otherwise opt for market exchange. The theory identifies and elaborates the requirements suitable for a company to manage an economic exchange externally, and the requirements under which it should manage an economic exchange internally.

This theory implies that a buying organization aims to reduce cost of awarding a contract or tender to a tenderer who subsequently turns out to be financially unstable and unable to complete the work because of cash flow problems or business failure. CIPS, (2018) supports this by pointing out that a financially stable bidder can be relied upon to fulfill major contracts or maintain a continuous, secure supply stream.

### 2.1.3 Deming Quality Management Theory

In 1986 Edwards Deming developed quality management theory which emphasise the need to measure product deviations and continually reduce through the process of Plan-Do-check-Act which forms the basis of kaizen or continuous improvement. In Plan stage, objectives and actions are listed; In Do stage actions are actualized by implementing them into the process. While at Check stage involves reviewing and analysing the result and finally at Act stage determination of what needs to be changed to achieve continuous improvement is done (Deming, 1986).

This theory is based on the concept that continuous improvement helps in increasing quality while reducing cost. Deming placed consideration importance on the role of management, both at the individual and at the company level, believing managers to be responsible for 94% of quality problems. His view was that inappropriate systems, processes and procedures were the root cause of many quality concerns and that workers could do little to influence these issues unless they 'were empowered to do so (CIPS, 2018).

Deriving from 14 points of management Deming points out that bidders should be selected on the basis of quality not entirely on tender quoted price. According to Deming (1986), price has no meaning without a measure of the quality being purchased. Without adequate mechanisms of quality, organizations drift to the lowest quoted bidder, low quality and high cost being the inevitable result. The organization must change its focus from lowest initial price of raw material bought to the lowest sum cost. Deming (1986) and Ishikawa (1985) recommended that companies should collaborate with bidders to ensure that their products and services are of the highest quality. Organizations should involve themselves directly with bidder's quality related activities, such as bidder training and bidder improvement projects (Weele, 2018). Bid evaluation is an essential activity to ensure dependable high quality of incoming inventories in the organization (Monczka et al., 2016).

#### 2.2 Variables Review

### 2.2.1 Financial Position of the Bidder

Financial capacity assessment seeks to ascertain that the bidder has financially capability to meet buyer's requirements. CIPS, (2018) points out that financial appraisal should reduce, but not eliminate the risk of placing business with a company whose financial viability is in doubt. It does, however, provide information enabling considered decisions to be made either when evaluating tenders. Financial status and stability are measured by many factors including sales turnover, profitability and financial liquidity (Lysons & Farrington, 2016). Sales gives on overview of the organization financial size in terms of sales/revenue volume while financial profile evaluates how the enterprise is doing financially compared to its industry. To understand the profitability and solvency of a bidder five key financial ratios are calculated which provide industry benchmarks against a peer group of bidders and Bidder risk score an evaluation of the risk involved in dealing with a bidder (Weele, 2018).

According to CIPS, (2018) the financial evaluation criteria is of essence important since selection of a bidder with poor financial conditions presents a number of dangers to the buyer. To start with the bidder will not be able to fulfil major contracts or maintain a continuous, secure supply stream. Then will not have the capacity to pay for its bidders and staff and therefore be able to fulfil organization contract. On the other hand, insolvency may drive the bidder to cease trading. Moreover, the buyer cannot negotiate fair prices based on the bidder's profitability figures. Lastly the bidder will not provide confidence to the buying organization in considering long term relationships.

Due to financial risk of contracting an incapable bidder CIPS suggest a number of sources to check bidders' financial position: bidder's published financial statements (balance sheet, profit and loss account and cash flow); Secondary data on markets and bidders such as analysis of financial statements and results in the business or trade press; Analysis of published or bespoke financial reports by research agencies; Credit rating companies will, for a fee, provide information on the credit status of a bidder; Networking with other buyers could be a source of financial information and finally inviting the bidder's financial director to make a presentation to organization management (CIPS, (2018).

According to Linda (2019) the financial failure of a key bidder could lead to an organization suffering a significant financial loss, its operations and services being seriously compromised, and its reputation damaged thus it's important to the bidder's financial viability. Studies by Franklin and Rogers (2017), states that when evaluating the financial situation of a potential bidder as a part of the prequalification system. It's required that all bidders have a sound financial structure and to have the financial abilities and competences to source and buy raw material and to follow market developments and trends.

#### 2.2.2 Quality Commitment of the Bidder

The first requirement in bidding for a potential bidder is that the bidder should have a quality system certificated as meeting the requirements of BS/EN ISO 9001 (CIPS, 2018). A buyer needs to assess and ensure that a bidder has robust systems and procedures in place for monitoring and managing its materials. For a buyer looking to procure materials, components or other supplies in commercial setting the most important definitions of right quality are likely to be fitness for purpose and conformance specification. Note that both of these criteria are essentially focused on the bidder ability to satisfy the needs and expectations of the buyer (Weele, 2018). The systems for the detection and correction of defects are called quality control while those for prevention of defects are known as quality assurance and a buyer needs to check whether the bidder has these in place (Lyson & Farrington, 2016).

The procurement function can assess the bidders' commitment to quality through assessment of bidders: quality management systems; accredited quality management systems (eg ISO (9000), buyer involvement in product design and inspection and testing of inward materials by the bidder (CIPS, 2018). If the buying organization can be assured that the bidder has already quality control required to supply right quality inputs, it won't have to duplicate the effort by monitoring or re-inspecting everything on delivery: it can merely check, from time to time, that the bidder quality management systems are working as they should, by sampling outputs or inspecting procedures and documentation. Integration may be as simple as getting a quality guarantees from bidders or there may be detailed formal systems for responsibility sharing, in areas such as specification, inspection, process control, training reporting and adjustment (Baily et al., 2015).

Monczka, et al., (2016) emphasizes that an important part of evaluation processes touches on a bidder's quality management systems and philosophy. According to Lyson & Farrington, (2016) firms appraising quality of bidders will find themselves looking at the following issues: procedures for inspection and testing of purchased materials, accreditation with national and international quality standards bodies such company standards,

Association of Trade Standards, International standards organization (ISO) and British Standards Institution (BSI) (Johnson & Flynn, 2015). The success of the buying organization is highly dependent on how well the bidders perform. It is essential that bidders and buyers have the same understanding of satisfactory quality (Gallego, 2016).

### 2.2.3 Human Resource Competence of the Bidder

Employees are an important asset to the bidder organization. Evaluation of human resource competence of the bidder entails obtaining and assessing information regarding: number of persons employed; use of human resources whether economical with everyone busy or extravagant with excess people doing little or nothing; names; titles; qualifications and experience of managerial staff, training schemes for supervisory and executive staff, encouragement of teamwork and empowerment, worker representation and recognized trade unions; turnover in respect of managerial and operative staff and worker attitudes to the organization and concern for meeting customer requirement (CIPS, 2018).

According to Weele (2014), technical capacity should be applicable for those bidders, where a close relationship exists. Those who have experience with this bidder (e.g. quality control, purchasing, production planning, and manufacturing) are asked to "rate" the bidder based on previously agreed checklist. CIPS (2018) report on monitoring the performance of bidders pointed that strategic monitoring of competence of bidders is important in performance management of operations and most vital, management of buyer bidder relationship. It is essential that any supply chain professionals have required knowledge and skills in buyer bidder relationship competence establishment so as to be in a position to develop appropriate performance criteria both for procurement function and bidders. The report further indicates that performance management criteria should be well communicated to all stakeholders who are directly involved in procurement operations so as to enhance their contribution towards achievement of the desired standards.

### 2.2.4 Delivery Reliability of the Bidder

On time delivery is an important criterion for evaluation and selection of bidders. It is also important for firm, long term buyer bidder relationship. A delivery criterion includes delivery of products on time and in a reliable way. The way of delivery (plane - ship) also affects the performance of delivery (Johnson & Flynn, 2015). Bidders should have flexibility for the changes in production and order, and have adequate capacity to match the buyer's needs. The shipping cost is also effective in on time delivery of products. Nowadays, the rise of just in time production modelling, causes the manufacturing companies to work with minimum stocks. Therefore, the importance of on time and exact amount of delivery becomes more important than before especially in most procurement organizations.

Delivery reliability on time criteria involves evaluation on delivery reliability by measuring the delivery time accuracy. Barla (2018) proposes a criterion called keeping a promise of due dates, and is defined to assess the bidder's delivery performance in terms of time. The idea is to measure how well the bidder delivers products within a specified time frame. Erdem and Gocen (2012) suggest a similar criterion called on time delivery and the idea behind that criterion is similar to the one suggested by Barla (2018). This criterion is a combination of three criterions that were discovered during the interviews, namely Delivery reliability, Order lead time and perfect order fulfilment. Instead of having three similar criterions a decision was made to make two independent criterions, both considering delivery reliability but they differ in terms of time and quantity.

Baily et al., (2015) point out that having reliable bidder in terms of time can lead to decrease in necessary safety stock at the organization. Considerations, while evaluating this criterion should be reflected by the definition of the specified time frame. Increase in cost can occur if a bidder delivers late, or the bidder delivers too early in a crowded warehouse, while orders that are delivered too early in an empty warehouse cost almost zero. To make a strong evaluation of this criterion, numerical data is needed and the data should be recorded continuously for each bidder. Since the evaluation of this criterion is based on numerical information this criterion is categorized as quantitative (Monczka, et al., 2016).

Evaluate delivery reliability by measuring the delivery quantity accuracy. This criterion has a lot in common with earlier described criterion Delivery reliability based on time. In this criterion an assessment should be performed on bidder's reliability in terms of quantity and how accurate the bidder really is. Barla (2018) suggest a criterion called keeping the right amounts of orders and defines it as: "Correct orders in correct volume". This criterion measures how well a bidder delivers what is ordered and can be thought of as being a quality indicator within logistics category. The identification and selection of this criterion was done through the interviews and the workshop. Initially there were three criterions that consisted of similar aspects and as described earlier on, these criterions were Delivery reliability, Order lead time and Perfect order fulfilment. Later on during the model creation process these three criterions were converted into two, considering reliability in terms of

quantity and time. This is a quantitative criterion and the assessment must be based on numerical information collected.

Specific criteria that buyers use on measuring delivery reliability are timeliness, consistency and accuracy (Srinivasan, 2014). Timeliness is the fact or quality of being done or occurring at a favorable or useful time, Consistency is quality of always being the same, doing things in the same way, having the same standards while accuracy is the degree to which the result of a measurement, calculation, or specification conforms to the correct value or a standard.

### 2.2.5 Procurement performance

Measuring procurement performance is important as the procurement function plays an ever increasingly important role in the supply chain. Performance measurement is the process of developing specific measurable indicators against which performance can be systematically tracked in order to assess progress towards the achievement of goals and objectives (CIPS, 2018). In order to measure and control the procurement process so as to improve it, it has to be mapped properly (Johnson & Flynn, 2015). A suitable way to govern procurement is through target setting and measuring. This could be done through key performance indicators (KPI). Having KPIs is important because it state performance goals in a way that it is capable of direct detailed, consistent measurement at operational level, using available data collection systems. KPIs are monitored, reviewed and reported on at regular intervals to ensure that the organization project is on track in relation to its most important yardsticks of success (Lyson & Farrington, 2016). According to CIPS, (2018) procurement performance is measured in terms of; cost saving obtained, quality improvement, timeliness, promptness of Service and number of resources of specified grades allocated for the project.

Bid evaluation is largely seen as the most important function of the procurement function since the organization's bidders can affect the price, quality, delivery reliability and availability of its products (Monczka, et. al., 2016). Organizations feel that proper bid evaluation would assist reduce product and material costs whilst ensuring a high degree of quality and after-sales services (Plebankiewicz & Kubek, 2016). The implication here is that an efficient appraisal should be in place for the successful procurement. The important strategy of improving quality of organization output is through selecting suitable bidders, which have as direct effect on organization reputation because they have an adverse effect on the organization performance (Weele, 2018).

### 2.3 Conceptual Framework

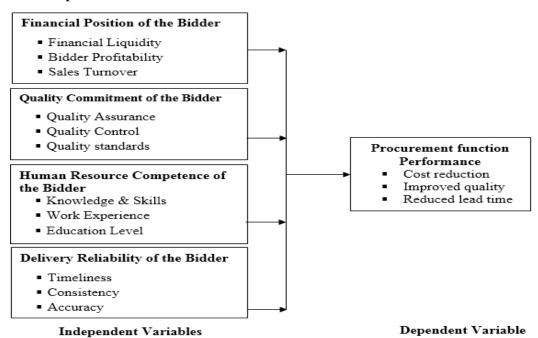


Figure 1: Conceptual Framework Source:(Researcher, 2020)

### III. Research Methodology

### 3.1 Research Design

This study adopted a descriptive correlational research design in carrying out the study. A descriptive correlational research design was appropriate as it describes the current state of affairs as they exist as well as examine the association between variables by determining whether there is any covariance and documenting factual findings (Babbie, 2016).

### 3.2 Target Population

The study targeted 84 stakeholders involved in tender evaluation namely the Procurement staffs, Finance staffs and Engineers as technical staffs and Human resource staffs as representatives of user department in Kiambu county government. The researcher adopted Census method since the target population is small.

#### 3.3 Data Collection Instrument

Questionnaire was used to collect the primary data. According to Kothari & Garg (2019) primary data is information gathered directly from the respondents. The questionnaire was considered appropriate because it was more convenient to administer, they were also fairly cheap and no prior preparations are required before posting.

#### 3.4 Pilot Test

For the first test, the researcher administered the questionnaires to eight respondents who were randomly picked among the procurement staffs in Muranga county government. The rule of the thumb is that 10% of the sample should constitute the pilot test, (Cooper & Schilder, 2014). Questionnaire validity was provided through adequate coverage of the topic under investigation as per the expert advice. The construct validity was ascertained by defining clearly the variables to be measured. The results from reliability indicated that all the variables had Cronbach alpha coefficient values greater than 0.7. Thus, the study instruments met the required reliability threshold and thus were considered reliable for data collection.

### 3.5 Data Analysis

Both descriptive and inferential statistics were used to analyses quantitative data. Using Statistical Program for Social Scientists (SPSS), descriptive statistics was generated in terms of frequencies, percentages, standard deviation and means. Inferential statistics entailed correlation and regression analysis to establish the association between study variables at 95% confidence level, p-value  $\pm 0.05$ .

### IV. Findings and Analysis

### 4.1 Financial Position of the Bidder and procurement function performance

The researcher sought to establish the perceptions of respondents regarding the influence of financial position of the bidder on procurement function performance in Kiambu County Government. The findings were as shown in table 1.

Table 1: Financial Position of the Bidder and Procurement Function Performance

	SA (%)	A (%)	) N (%	) D (%)	) SD (%)	Mean	Std. Dev
Bidders have ability to pay off their short-term debt obligations	27.3	66.7	1.5	4.5	0	4.17	.670
Bidders can be able to convert their assets to cash	10.6	59.1	10.6	16.7	3.0	3.58	.993
Bidders have the ability to earn profits as shown in their financial statements	r <sub>22.7</sub>	72.7	4.5	0	0	4.18	.493
Bidders have strong, long term relationships with customer thus profit margins increase	s <sub>24.2</sub>	59.1	9.1	6.1	1.5	3.98	.850
Bidders' brands have excellent customer recognition and strong reputation for quality thus good profit margins	g 19.7	59.1	15.2	6.1	0	3.92	.771
The bidder's sales turnover is evaluated before considering then for pre-qualification	<sup>n</sup> 33.3	56.1	3.0	6.1	1.5	4.14	.857
Valid N (listwise)	66						

Source: Field Data (2020)

From the above findings it is evident that financial position of the bidder influence procurement function performance of Kiambu County Government.

Table 2: Correlations between Financial Position of the Bidder and Procurement Performance

		Financial Position of the Bidder
	Pearson Correlation	.465**
Procurement Performance	Sig. (2-tailed)	.000
	N	66

### Source: Field Data (2020)

It was observed that there existed a weak significant relationship (r=.465, P=.000) between financial position of the bidder and procurement performance.

### 4.2 Quality commitment of the Bidder and Procurement Function Performance

The study also established the views of the respondents regarding quality commitment of the bidder by computing the percentages, means and standard deviations of their responses. The findings from the analysis were as presented in table 3.

Table 3: Quality commitment of the Bidder and Procurement Function Performance

	SA	A (%	) N (%	) D (%	) SD	Mean	Std.
	(%)				(%)		Dev
Bidders have quality management systems	39.4	51.1	3.0	6.1	0	4.24	.786
Bidders inspect their incoming materials for quality	34.8	60.6	1.5	3.0	0	4.27	.646
Our bidders inspire trust where quality is concerned	37.9	50.5	9.1	3.0	0	4.23	.740
Bidders are in conformance with the ISO standards	25.8	45.5	24.2	3.0	1.5	3.91	.872
Bidders involve buyers in product design to enhance quality	31.8	42.4	9.1	10.6	6.1	3.83	1.171
Bidders' quality control systems are appraised befor considering them for prequalification	e <sub>37.9</sub>	51.5	1.5	6.1	3.0	4.15	.949
Valid N (listwise)	66						

### Source: Field Data (2020)

From the above findings it is evident that Quality Commitment of the bidder influence procurement function performance of Kiambu County Government.

Table 4. Correlations between Quality Commitment of the Bidder and Procurement Performance

		Quality Commitment of the Bidder
	Pearson Correlation	.457**
Procurement Performance	Sig. (2-tailed)	.000
	N	66
	<u>-</u>	

### Source: Field Data (2020)

From the table it can be established that there exists a weak positive significant relationship (r=.457, p=.000) between quality commitment of the bidders and procurement performance.

#### 4.3 Human Resource Competence of the Bidder and Procurement Function Performance

Respondent's views were sought in relation to human resource competence of the bidder and procurement function performance. The percentages, means and standard deviation were computed and the findings were presented hereafter.

Table 5: Human Resource Competence of the Bidder and Procurement Function Performance

	SA	A (%) N (%) D (%) SD		Mean	Std.		
	(%)				(%)		Dev
Bidders labour force skills and knowledge are evaluate before considering them for prequalification	d <sub>31.8</sub>	51.5	13.6	3.0	0	4.12	.755
The county evaluates experience of bidder's staff	27.3	59.1	9.1	3.0	1.5	4.08	.791
The county evaluates of bidder's staff level of competence	28.8	51.5	9.1	9.1	1.5	3.97	.944
The county evaluates education and qualifications of bidder staff	s 16.7	45.5	18.2	18.2	1.5	3.58	1.024
The county evaluates the operational speeds of the bidder	30.3	42.4	22.7	3.0	1.5	3.97	.894

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

The right number of bidder's staff is evaluated before 21.2 47.0 13.6 13.6 4.5 3.67 1.100 Valid N (listwise) 66

#### Source: Field Data (2020)

From the above findings it is evident that Human Resource Competency of the bidder influence procurement function performance of Kiambu County Government.

Table 6: Correlations between Human Resource Competence of the Bidder and Procurement Performance

		Human Resource Competence of the Bidder
	Pearson Correlation	.348**
Procurement Performance	Sig. (2-tailed)	.004
	N	66

### Source: Field Data (2020)

Findings indicated that there existed a weak positive significant relationship (r=.348, P=.004) between human resource competence of the bidder and procurement performance.

### 4.4 Delivery Reliability of the Bidder and Procurement Function Performance

The study sought to establish the responses of the respondents regarding delivery reliability of the bidder. Findings were established and shown in table 7.

**Table 7: Delivery Reliability of the Bidder and Procurement Function Performance** 

	SA	A (%)N (%) D (%) SD			Mean	Std.	
	(%)				(%)		Dev
Bidders have appropriate fleet management to ensure goods and services are delivered on time					01	4.17	.692
Bidders have computerized systems to ensure timely orderly and delivery						3.55	.995
Bidders have ability to consistently meet what the county orders						4.14	.630
Bidders always deliver exact specification of what we had requested them to deliver				1.5	0	4.21	.795
Bidders usually ensure efficiency in the system in order to meet county's requirements	34.8	57.6	3.0	3.0	1.5	4.21	.775
Valid N (listwise)	66						

#### Source: Field Data (2020)

From the above findings it is evident that Delivery Reliability of the bidder influence procurement function performance of Kiambu County Government.

Table 8: Correlations between Delivery Reliability of the Bidder and Procurement Performance

		Delivery Reliability of the Bidder
	Pearson Correlation	.319**
Procurement Performance	Sig. (2-tailed)	.009
	N	66

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Findings from the table 8 indicated that there was a weak positive significant relationship (r=.319, P=.009) between delivery reliability of the bidder and procurement performance.

### **4.5 Procurement Function Performance**

Descriptive statistics regarding procurement function performance of Kiambu County was established. The findings were as presented in table 9.

**Table 9: Procurement function Performance** 

	SA A N D SD	Mean	Std. Dev
Our bidders always meet the set date of deliveries	31.8 62.13.0 3.0 0	4.23	.652
•			
Our institution strategies focus is on reducing lead time	15.2 71.213.60 0	4.02	.540
Procurement costs have reduced	19.7 53.018.29.1 0	3.83	.852
Overhead costs have reduced	7.6 62.124.24.5 1.5	3.70	.744
There has been enhanced quality of goods	51.5 34.87.6 4.5 1.5	4.30	.911
There has been reduction in bidder quality problems	16.7 51.515.213.63.0	3.65	1.015

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Valid N (listwise) 66

Source: Field Data (2020)

### 4.6 Regression Analysis

The regression analysis was conducted to determine the influence of bid evaluation criteria on procurement function performance of Kiambu County Government.

**Table 10: Model Summary** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.555ª	.308	.262	.41989

#### Source: Field Data (2020)

a. Predictors: (Constant), Delivery Reliability of the Bidder, Financial Position of the Bidder, Human Resource Competence of the bidder, Quality Commitment of the Bidder

The model gave an R-squared value of .308 thus the independent variables (financial position of the bidder, quality commitment of the bidder, human resource competence of the bidder and delivery reliability of the bidder) taken together could account for 30.8% of the total variance in procurement function performance.

Table 11: ANOVA<sup>a</sup>

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	4.776	4	1.194	6.772	$.000^{b}$
1	Residual	10.755	61	.176		
	Total	15.530	65			

Source: Field Data (2020)

b. Predictors: (Constant), Delivery Reliability Bidder, Financial Position Bidder, Human Resource Competence, Quality Commitment Bidder

Analysis of variance resulted to an F-value (F  $_{(4, 61)} = 6.772$ , p=.000) which was significant at p<.05 level of significance. This demonstrated that the independent variables taken together had a significant influence on procurement performance in Kiambu County.

Findings from the model coefficients were as indicated in Table 4.12.

**Table 12: Coefficients** 

Model	Unstandar	Unstandardized Coefficients		t	Sig.
	В	Std. Error	Beta		
(Constant)	.410	.348		1.178	.243
Financial Position	.375	.170	.295	2.205	.031
Quality Commitment	.215	.126	.208	1.706	.010
HR Competency	.150	.116	.056	1.293	.008
Delivery Reliability	.200	.147	.161	1.360	.020

Source: Field Data (2020)

The findings from the table 12 indicates that Financial Position, Quality Commitment, HR Competency, Delivery Reliability has a significant influence on procurement function performance of Kiambu County government.

### V. Summary, Conclusions and Recommendations

### 5.1 Summary of the findings

## 5.1.1 Financial Position of the Bidder

Results indicated that majority of the respondents agreed that bidders' have ability to pay off their short-term debt obligations. In addition, respondents agreed that bidders can be able to convert its assets to cash. Again, majority of the respondents agreed that bidders' have the ability to earn profits as shown in their financial statements. Respondents agreed that bidders firm has strong, long term relationships with customers thus profit margins increase. It was observed that respondents agreed that bidders' brands have excellent customer

a. Dependent Variable: Procurement Performance

a. Dependent Variable: Procurement Performance

recognition and strong reputation for quality thus good profit margins. Finally, the study established that respondents agreed that the bidders' sales turnover is evaluated before considering them for pre-qualification.

### 5.1.2 Quality Commitment of the Bidder

Findings indicated that respondents agreed that bidders have quality management systems. Respondents agreed that bidders inspect their incoming materials for quality. Further, respondents agreed that their bidders inspire trust where quality is concerned. It was also agreed that bidders are in conformance with the ISO standards. Additionally, respondents agreed that bidders involve buyers in product design to enhance quality. Respondents agreed that bidder's quality control systems are appraised before considering them for prequalification.

### 5.1.3 Human Resource Competence of the Bidder

Descriptive results indicated that respondents agreed that bidders' labour force skills and knowledge is evaluated before considering them for prequalification. Respondents agreed that the county evaluates experience of bidders' staff. Further, results indicated that respondents agreed that the county evaluates bidders' staff level of competence. They also agreed that the county evaluates education and qualifications of bidders' staff. Majority of the respondents agreed that the county evaluates the operational speeds of the bidder. It was agreed that the right number of bidders' staff is evaluated before considering them for prequalification.

### **5.1.4 Delivery Reliability of the Bidder**

The researcher observed that respondents agreed that bidders have an appropriate fleet management to ensure goods and services are delivered on time. Respondents agreed that bidders have a computerized method to ensure timely orderly and delivery. Also, they agreed that bidders have ability to consistently meet what the county orders. In addition, respondents agreed that their bidders always deliver exact specification of what they had requested them to deliver. Similarly, respondents agreed that their bidders usually ensure efficiency in the system in order to meet county's requirements.

### **5.1.5 Procurement Performance**

The study established that respondents agreed that their bidders always meet the set date of deliveries. Further, respondents agreed with the statement that their institution strategies focus is on reducing lead time. The study indicated that respondents agreed that procurement costs have reduced. On the other hand, respondents agreed that overhead costs have reduced. Respondents agreed that there has been enhanced quality of goods. Also, respondents agreed that there has been reduction in bidder quality problems.

### **5.2 Conclusions of the Study**

From the regression analysis the study concluded that Financial Position, Quality Commitment, HR Competency, Delivery Reliability have a significant influence on procurement function performance of Kiambu County government.

### **5.3 Recommendations**

The study recommended that the Kiambu county government executives to device a financial policy measure that would be relied upon by tender evaluation committee in analysing the financial positions of the bidders. This will ensure that the selected bidders have sufficient capacity to fulfil their contractual obligations.

Kiambu county government bid evaluation committee should award tenders to bidders that have accredited quality management system such as the ISO 9000. On the other hand, to safeguard procurement function performance of county government they should as well conduct due diligence or bidders visit to confirm that bidders have implemented quality control and quality assurance practices.

Bid evaluation committee should continue examining the bidder's staff's qualifications, experience and add further on the training schemes so as to ensure that bidders' staff have capacity to deliver service required to meet user department's needs. This will ensure that the county does not experience delays related with the bidders' inability to deliver the service due to inadequate HR capacity.

The study recommends that the bid evaluation committee in the county government should develop approved list of bidders that have a track record of delivering goods, services and works on time, accurately and consistently. This will ensure that the activities of the county are not delayed by unreliable bidders who cannot deliver their bids in the right time.

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