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## An Analysis Of Procurement Procedures On The Implementation Of Government Construction Projects In Kenyan Public Universities: Case Study Of Masinde Muliro University

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### **Abstract:**

*The universities just like any other public institutions in Kenya are buyers of goods, services and works. Hence public procurement plays a critical role in the Kenyan economy and an important factor in economic growth. Sound and efficient use of scarce public resources is the responsibility of the government and every public entity. Despite the efforts made by the PPOA to strengthen the public procurement system in Kenya, a number of government funded construction projects in the public sector exceed the contract sum, time schedule or general gross inefficiency. The objective of this study is; to analyse the influence of procurement procedures on construction project implementation in public universities. Descriptive survey design was used in the study using questionnaires and an observation checklist as instruments which were validated by piloting in private universities. The sample size was purposive targeting a population of twenty university employees seconded to construction projects. The primary data was collected by administration of questionnaires. Collected data was factor analysed by use of percentages, frequencies among others. Ordinal regression analysis was employed for quantitative data. The findings indicated that 80% of respondents agreed that procurement procedures greatly influenced implementation of construction projects in the Kenyan public universities, hence recommended that procedures should be strictly adhered to, for quality end products. Areas for further research; Analysis of value addition of strategic approaches in procurement activities on the implementation of construction projects in public universities, Determination of the influence of contextual factors on the relationship between procurement function activities and project implementation of construction projects in public universities. In conclusion findings of this study may assist the construction industry to embrace the procurement procedures for satisfactory end results that will satisfy the project sponsor, users and stakeholders.*

**Key words:** Goods, Procurement procedures, Project implementation, Services, Works

### **1.Introduction**

#### *1.1.Background*

Procurement evolved through four successive stages that have greatly influenced the procurement services. Lysons and Farington (2006) noted that the four successive stages are product; process, relational and performance centred purchasing. In the construction projects the performance centred purchasing stage is the most relevant as it focuses on the best products/materials management methods that employs an integrated methodology to manage relationships, processes and outcomes jointly with the suppliers. (Bailey, et al 2005)

Sourcing involves much more than picking a supplier or contractor for each requirement in isolation. It involves continuing relationships, decisions about how to allocate the available business and what terms to do business with. (Bailey, et al 2005) Another factor that needs to be kept in mind in making key source decisions is; who else should be involved in the process? Three American writers Robinson, Faris, and Wind back in 1967 identified the decision making unit, categorised as user, buyer, the decision maker, the gatekeeper and influence.

Over the years, purchasing management has been increasingly gaining importance as a crucial role within organizations and its survival and prosperity to evidently being duly recognized. In the public sector, there is a need for various forms of materials to support government programmes in Universities for education activities. Alonzo Decker (2002) observed that management depends on purchasing to produce profit through savings developed from well planned and carefully executed purchasing programs. Therefore this study seeks to investigate the influence of procurement services on the implementation of government construction projects in the Kenyan public universities.

### *1.2.Statement Of The Problem*

Despite the efforts made by the PPOA to strengthen the public procurement system in Kenya, a number of government projects in the public sector like university construction projects exceed the contract sum, time schedule or generally gross inefficiency in such activities. This has raised a number of questions; to what extent does procurement procedures influence project implementation? This study seeks to answer this question by analysing the effects of procurement procedures on the implementation of the government construction projects in the Kenyan public universities.

### *1.3 Objective Of The Study*

Analyse the influence of procurement procedures on project implementation

### *1.4.Research Question*

How does procurement procedures influence project implementation in public universities?

## **2.Literature Review**

### *2.1 Procurement Procedures*

Across the globe the procurement services can determine the success or failure of any organisation. Purchasing is viewed as a service function to the university construction projects. It is subordinated to the civil engineering and finance among others (Jones 1997) Majority of the projects employ the services of a dedicated team of purchasing and supply specialists. Never the less it's a specialised service because it's about proactive purchasing, where the kind of work becomes more strategic in emphasis, concentrating more upon such activities as negotiating long-term relations, supplier development, and total cost reduction, rather than ordering and replenishing routines (Bailey, et al, pg5, 6) which is summarised in the employment of the right procurement procedures and strategic approach in purchasing management.

### *2.2.Procurement Procedures For Projects*

This is a systematic process provided by the law and has to be followed by the public procurement entities. Once the procurement needs have been identified by the end user the very first activity to be undertaken by the PE is the feasibility study then the environmental impact assessment, procurement strategy, procurement plan backed up by market research data, prequalification, procurement management records, tendering, contract award and contract management.

#### 2.3.1.Procurement Planning

A detailed breakdown of goods, works or services required, schedule of planned delivery, implementation, completion dates for all goods and works or services required, estimate of value of each procurement package of goods, works, consultancies and other works, source of funding, indication of items or sections of services, consultancies or works that can be aggregated as a single package, procurement method, details of any committed or planned procurement expenditure under existing multiyear contracts, price adjustment mechanism for long term projects and timeliness for critical stages of the delivery or implementation programme in relation to the instructions issued by the PPOA in the general manual.

#### 2.3.2.Initiating Procurement Requirements

This process only commences after confirming that funds are available for the procurement and signed approval from the authorising official. The procurement is initiated using the requisition form filled by user department and submitted to the procurement unit.

#### 2.3.3.Selecting Procurement Method

There are seven methods of procurement each with different conditions of use. These are further broken down to three; a contracting authority can choose amongst the three; open procedure, restricted procedure and negotiated procedure.

Factors that determine the procurement method of use are the estimated value of goods within the specified threshold, works or services, the urgency of the requirement, limited number of suppliers or service providers among others.

#### 2.3.4. Inviting Tender

The methods of inviting tenders vary depending on the procurement method used by the procuring entity.

#### 2.3.5. Receiving Of Tenders

All submitted sealed tenders will be put in the tender box which is closed until opening time.

#### 2.3.6. Opening Tenders

This is done by the tender opening committee immediately after the deadline for submission of the tenders. Each tender opened will have the name of the person submitting the tender, the total price of the tender and what has been given as the tender security (if applicable) read out loud and record in the tender opening register. Those submitting the tenders or their representatives may attend the opening of the tender.

#### 2.3.7. Evaluation

This is the process by which the best evaluated tender is selected for award of contract from among all the tenders received. Preliminary evaluation is done soon after opening the tenders to await technical evaluation which is done within the thirty days after opening the tenders. This will be done by the technical evaluation committee then financial evaluation will be done within five days after the completion of the technical evaluation.

#### 2.3.8. Confirmation Of Qualifications

A procuring entity may prior to the award of the tender confirm the qualifications of the tenderer who submitted the lowest evaluated responsive tender, to determine whether the tenderer is qualified to be awarded the contract in accordance with the qualifications listed in section 31(1) of the ACT. If the lowest evaluated tenderer is determined not to be qualified in accordance with the ACT then the tender will be rejected and the next lowest evaluated responsive tenderer will be subjected to similar confirmation of qualifications

#### 2.3.9. Award Decision And Communication

Any recommendation to award the contract by the evaluation committee must be submitted to the tender committee for approval and awarding of the contract to the tenderer. The PE then notifies the successful and unsuccessful tenderers' the result at the same time

#### 2.4. Creation Of Contract

The person submitting the successful tender and procuring entity shall enter in to a written contract based on the tender documents, any arithmetic errors are corrected within fourteen days if any after notification.

#### 2.4.1. Contract Management

Once the contract has been placed, it must be managed to ensure that the provider performs in accordance with the terms and conditions of the contract and the PE equally meets the obligations under the contract. Any variations made by user department, should be known to the PE all changes and variations to the contract must be approved by the TC in advance. Variations in quantity must not increase the original contract value by more than 10% & for supplies and 15% for services. The PE must monitor the progress of the contractor in delivering the contract regularly and take action in accordance with the contract as soon as any problem is noticed.

#### 2.4.2. Inspection And Acceptance Of Goods, Works Or Services

This is done by the inspection and acceptance committee to ensure that the correct quantity is received and the technical standards have been met.

The appointment letter for the inspection and acceptance committee members' should make clear the duties of those members and insist that they satisfy themselves personally that work has been done in accordance with the contract before authorising payment.

#### 2.5. Sourcing

Lyson (2006) defines the systematic process of sourcing as identification of need, definition and re-evaluation of users needs, make or buy decision, identification of the type of purchase, market analysis, identification of possible suppliers and pre-screen, evaluation of the remaining supplier base, choose supplier, deliver product/perform service lastly make a performance evaluation in the post purchase.

#### 2.5.1. Purchase Research

It is the basis for effective source decisions as a strategic approach. Effective source decisions will only be made when relevant factors have been considered and weighted against the risks and opportunities which apply. (Bailey, et al, 2005pg 178) Purchasing research refers to the systematic gathering, recording and analysing of data about problems relating to the purchasing of goods and services in relation to the past records in the construction industry, it is an important aspect of procurement/purchasing function. This is due to the rapid changes in technology and economic circumstances and purchasing under conditions of uncertainty where strategic decisions

have to be made, need for outsourcing of non critical functions and quantification of the purchasing contribution to profitability and its strategic function in the supply chain.

### 2.5.2.Pre-Negotiation (Planning) &Negotiation

Planning is the stage where the entities aggregate requirements in to large contracts, gain economies of scale and avoid emergency procurement wherever possible.

Negotiation when strategically applied by the procuring entity can yield positively to the project. The researcher agrees with (Spector B.I (1997) where he emphasises that negotiation style depends on the objective to be achieved-short term gain may use the aggressive style, assertive style for this approach tends to lead to long term problems. A longer term win –win approach based on trading wants is far more likely to reap reward-while one party may concede on price it may be gaining on delivery or payment terms.

### 2.5.3.Contracting And Subcontracting

It is a strategy of augmenting limited resources and skills while enabling the contractor to concentrate on their main area of expertise. What is bought in subcontracting is the ability to do the job; capacity, expertise and time (Barnett 1995). A subcontractor is an extension of the buyer's resources, therefore an improvement in the subcontractors' performance is the interest of both parties, and thus continuous appraisal is necessary. Every function think they are the best at their work so the researcher has an observation to the emphasis that specialist staff from each area collaborate as a team for the successful implementation of government construction projects in public universities

### 2.6.University Construction Projects

Universities are public entities making a procurement to which the ACT and regulations apply. Universities are categorised under class B. (PPOA2009). Universities, just like other government organisations, participate in nation building through science and technology where by the ministry of public works together with the university technical team like civil engineers/students and government officers engage in the construction of projects like tuition blocks, science labs, hostels among others when funded by the Government or NGO'S. The P.Es must carry out their procurement activities in accordance with the public procurement and disposal Act, Regulations, Standard Tendering Documents Manuals and any directions from the PPOA.

### 2.7.Procurement Procedures And The Implementation - Relationship

Purchasing services have a great impact in the implementation of government construction projects in government universities in that all the services even if regarded as a service activity; the researcher is convinced that before the procurement plan is developed, the PE decides which procurement strategy to be adopted. In particular the PE decides whether to a single contractor in a turnkey approach or use multiple contractors this strategic approaches add a lot of value to the implementation of the plan as per the planned schedule. The activities are carried out by a committed team who share the same objective of handing over the product to the client on time.

Just in Time Systems would positively influence the completion of the project at the scheduled target time because every stage is taken care of on time using timely information and expertise due to the developed relationship with the suppliers, contractors and subcontractors. The relationship between the right time and project implementation is more less the subsidiary of JIT although this focuses mostly on when the requisition is placed, agreed lead-times and delivery times. The right quantity and implementation of government construction projects in Kenyan public universities still reflects the JIT systems where the quantities should be in the right numbers or volumes just as per the BOQ for timely completion.

All the above mentioned are part of the procurement procedures which if adhered to keenly, it may positively influence the implementation of the construction project positively without any legal issues, delays in deliveries among others.

Procurement ACT has a great influence on the implementation of government construction projects in Kenyan public universities. The procurement ACT has a mandate of providing the legal framework for regulating public procurement to ensure that the buyers and purchasers are protected against unfair dealings and unethical practices. If the contracts are within the law and executed accordingly then the implementation of the construction projects will be perfect.

### 2.8.The Conceptual Framework

The procurement functions are the independent variables. Project implementation is a dependent variable. The relationship between procurement functions and project implementation is moderated by a number of contextual factors like environmental factors, and force majeure among others.

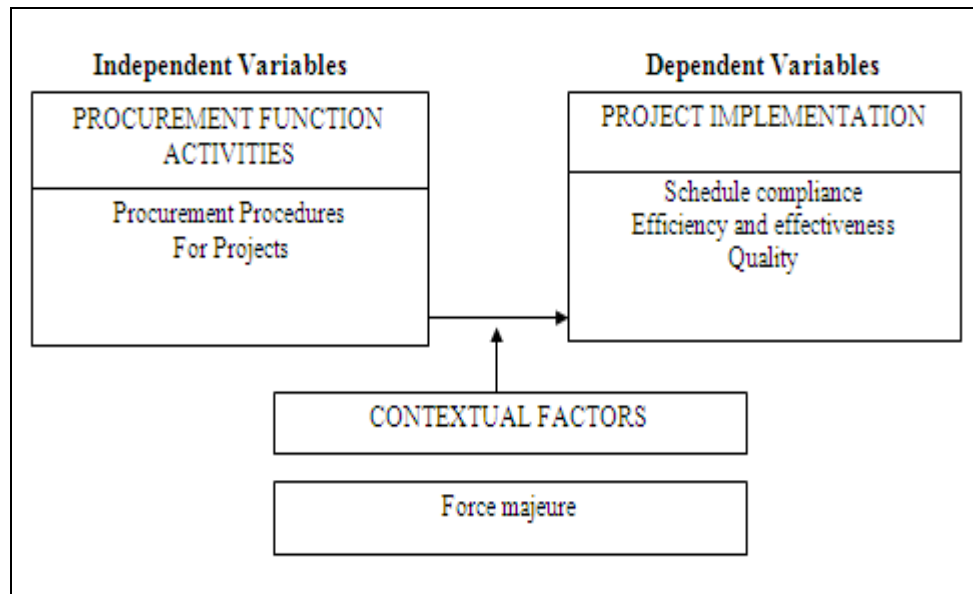


Figure 2: The Conceptual Framework Of The Procurement Services And Project Implementation

### 3. Research Methodology

This study adapted descriptive survey design, where the research was interested in the description of the state of affairs as it exists at the present after implementation of the Public Procurement Act 2005 and Regulations 2006. The study targeted the procurement officers of different levels, the finance officers, architects and engineers of Masinde Muliro University of Science and Technology and users. The grand total was a population of twenty employees of Masinde Muliro University seconded to the government project among others like users of the building was the target population.

Both secondary and primary data was collected for the study. The primary data was collected by administration of questionnaires. While the secondary data was collected by use of documented procurement reports on the construction project and other reports that were relevant to the study.

The researcher used a panel of persons for both content and structural validity. Reliability was tested by giving out six questionnaires to three senior procurement staff and three junior procurement staff in Masinde Muliro University. Split half method was used as a measure of reliability. The collected data or descriptive characteristics to qualitative phenomena were edited coded, classified then analysed according to the factors by use of percentages, frequencies among others.

### 4. Summary Of Findings, Conclusion And Recommendations

#### 4.1. Summary Of Findings

Out of 20 respondents who participated in the study 20% fell below 30 years, 55 between 31-40 years while those above 41 years were 25%. 65% were men and 35% women. 25% had been working for less than five years, 65% between 6-10 years, and 10% between 11-20 years etc. Thus most of the respondents had adequate working experience.

The study indicated that the majority of the respondents agreed that procurement function had an influence on the implementation of government projects. Procurement function influences efficiency in total supply chain cycle time, lead times per the plan, relational supply lead-time against industry norm (special consideration), level of suppliers defect free deliveries, satisfactory delivery performance, flexible purchase order cycle time, suppliers ability to respond to quality problems, supplier cost saving initiatives and delivery reliability, timely total inventory, low supplier rejection rate and delivery documentation and goods (see table 1).

Strategic approaches in procurement activities on project implementation increases quality to specifications that bears the ability to satisfy stated or implied needs, quality that has a balance of technical considerations such as fitness for use, performance, safety and reliability with economic factors including price and availability, enables to produce a product that is acceptable to the customer, reduces delivery time and within the budget due to cost saving, ensures product development process has minimal impact on ongoing business operations.

Procurement procedures affect project implementation as it ensures timely orders, timely deliveries, delivery of good quality material, contribution to value engineering, reduces contractual disputes and enhances quality management of procurement activities. whereas contextual factors like force majeure may cause delay in finances leading to inflation, procurement process taking long time,

corruption of systems, misunderstanding between project team representing different departments, poor planning and general management, changes in designs and increased labour adversely affect government project implementation (see table 2).

#### 4.2. Conclusion

From the study, various conclusions were drawn ie Procurement function greatly influences the implementation of the government construction projects in the Kenyan public universities. Findings of this study revealed that procurement procedures lay a foundation for efficiency and effectiveness hence may assist the construction industry to embrace the procurement procedures for satisfactory end results that will satisfy the project sponsor, users and stakeholders

#### 4.3. Recommendations

In light of the above findings, the study recommends for policies and procedures in all operational functions to be strictly executed for quality end products and suggestions for further research are greatly recommended; further recommends that since the study may benefit scholars during their relevant training and development, researchers in procurement may have to look at the issue of procurement procedures and its effect not only in public universities but all other institutions. Policies need to be put in place in construction project procurement field.

Procurement officials and project implementers need to integrate when implementing projects to ensure their success. Public university stakeholders need to be making rational decisions related to purchasing functions for example placing officers in their right specialization designations and involving purchasing officers in the strategic planning.

#### 5. Areas For Further Research

This study was restricted to investigating the influence of procurement procedures on the implementation of the government construction projects in the Kenyan public universities. Based on the study findings, there is need for further research on the influence of value addition of strategic approaches in procurement activities on project implementation, Determination of the influence of contextual factors on the relationship between procurement function activities and project implementation of construction projects in public universities

#### 6. Tables And Figures

Performance indicators	SA		A		U		D		SD	
	F	%	F	%	F	%	F	%	F	%
Enhances timely orders	9	45	10	50	0	0	1	05	0	0
Enhances timely deliveries	4	20	14	70	2	10	1	05	1	05
Leads to delivery of good quality material	6	30	12	60	1	05	1	05	0	0
Allows for contribution to value engineering	5	25	12	60	1	05	2	10	0	0
Leads to less or no contractual disputes	3	15	9	45	5	25	3	15	0	0
Leads to total quality management of procurement activities	5	25	14	70	1	05	0	0	0	0
Leads to enhancement of transparency in procurement activities.	3	15	15	75	1	05	0	0	1	0
Total	20	100	20	100	20	100	20	100	20	100
		25		61.43		7.86		5.71		0.71

Table 1: Attitude Towards Liaison With The Procurement Team During Project Implementation

Rank Courses	5		6		7		8		9		10	
	F	%	F	%	F	%	F	%	F	%	F	%
Delay in finances leading to inflation	0	0	0	0	0	0	0	0	0	0	13	65
Procurement process taking long time.	6	30	0	0	0	0	0	0	0	0	0	0
Force majeure	6	30	0	0	0	0	0	0	0	0	0	0
Corruption of systems	0	0	0	0	0	0	0	0	0	0	13	65
Misunderstanding between project team representing different departments	0	0	7	35	0	0	0	0	0	0	00	0
Poor planning and general management	0	0	0	0	0	0	0	0	0	0	13	65
Changes in designs& increased labour	0	0	0	00	00	0	0	0	0	0	13	65

*Table 2: The Reasons For Stalling/Exceeding The Budget In Rank*

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