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An Assessment of Procurement Planning Practices on User Perception of Procurement Performance: A Case Study of Masinde Muliro University of Science and Technology, Kenya

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Abstract:

The main purpose of the study was to investigate the impact of procurement strategy on public sector procurement performance perceptions. Owing to the diversity of functions, the use of public funds by a purchasing body to purchase products, facilities, and works is known as public procurement. The study's basic objectives on a case study of Masinde Muliro University of Science and Technology were conducted to determine the impact of procurement strategy on user perceptions of procurement performance in the public sector. In this study, a descriptive research design was adopted. Employees of Masinde Muliro University of Science and Technology were the target population. The study employed a descriptive design. The target population consisted of 1157 employees from Masinde Muliro University of Science and Technology. To generate a sample size of 286 respondents, researchers utilized purposeful, simple random, and stratified sampling procedures. Data was collected using a questionnaire. This study employed the Cronbach alpha coefficient as an indicator of test instrument reliability, at a threshold of 0.7 and beyond. Construct validity and material validity were employed to allow structured modifications of the research instrument for the purpose of enhancement and refinement. The data received from the departments was descriptively analyzed using SPSS version 25 to determine how dependent and independent variables are related. Pearson correlation coefficient was used to evaluate the strength of the association between the dependent and independent variables (r). The metrics for measuring the institutions' performance was the quality of service to user departments' satisfaction. The study found out that procurement planning practices contribute significantly on user perception of performance in MMUST. This study recommends that the MMUST management should incorporate procurement planning in their operations to enhance performance.

Keywords: Procurement practices, user perceptions, procurement planning

1. Introduction

The choice to conduct the study in this University comes in handy as it is among public universities within Western Kenya hence offering research chances. If the department wants to stand up competitively, it must accelerate and make more efficient not only the partial internal departmental procurement processes but also the management of tangible and intangible procurement information flows within the whole institution (Jayaraman and Luo, 2007).

According to Huemer (2012) information flow in supply chain helps to coordinate the physical flows and the interdependencies amongst departments in the organizations supply chain. Furthermore, the extent to which information is shared in a supply chain is growing, making it easier for competitors to share information (Pham et al., 2019).

Information flow has become the blood life of organizations regardless of their size (Orantes-Jimenez et al., 2015). Procurement practice is an integrated approach beginning with planning and control of materials, logistics, services, and information stream from suppliers to manufacturers or service providers to the end client; it represents the most important change in business management practices (Ibrahim and Hamid, 2014). Procurement is practiced by companies all over the world because of its demonstrated effects such as improved financial performance, delivery time reduction, well build trust among suppliers and greater customer satisfaction. Effective procurement practices have become a theoretically valuable approach to securing viable advantages and improving managerial performance since competition is no longer amongst organizations but between department chains (Kwak, Seo and Mason, 2018). It entails getting the right amount of the right commodity or the right quality of the right service to the right place at the right time while reducing costs within and across all stakeholders. Andreassen et al., (2018) asserts that procurement is about competing for value, collaborating with user departments and suppliers to create a position of strength in the market place based on a value derived from the end-user.

Today, the substantial survival ability of the procurement departments rests in their adaptability to constant changes to different emerging problems within the whole public segment (Bell and Figueiredo, 2012). The effectiveness can be observed through the distinct sections as well as the whole public sector not only able to satisfy users' wishes but rather capable of disclosing flexible reactions to their requirements (Balka, Raasch and Herstatt, 2014).

The growing pressure of user perceptions on the accelerated reaction of suppliers enforces shortening time periods for processing orders (Lee *et al.*, 2014). It is, however, often possible to carry it out only at the expense of enormous effort of the production company and leads to the non-economic rise of costs. That is why management seeks ways of eliminating or reducing costs. It creates the environment in which the systems controlled by the demand are applied (Arteconiet *et al.*, 2014). The systems controlled in such a way are an essential prerequisite for the creation and setting of the production and all related processes that are to maximum degree balanced and simultaneously adaptable.

Public procurement refers to the utilization of civic resources in order to acquire products, services as well as works (Amembaet *et al.*, 2013). Procurement has numerous hurdles, including the legislative framework, market structure, and political context in which procurers operate. As a result, achieving efficacy in public procurement is a lofty goal (Ackah *et al.*, 2014). In developing nations, public procurement is acknowledged as a crucial component of service delivery (Jibrin, Ejura, and Augustine, 2014), resulting in an increase in overall spending. There is a need for accountability and transparency in government procurement because of the large amount of money involved and the fact that this money originates from the general population (Demirag and Khadaroo, 2011). Procurement practices are a collection of activities that must be carried out in order to support good supply chain management.

In the above definition, services can be perceived as things that suppliers can offer. Different researches have noticed some diversities within the service supply chain. Physical handling of products such as manufacturing, with centralized and standardized processes, is not completely efficient in a service supply chain as several of the decisions are taken locally and the disparity and uncertainties in output are complex because of human involvement. Information exchange among chain partners is a crucial aspect of service supply chain management, according to Huo, Zhao, and Zhou (2014). Information flow is crucial in relation to identifying demand, sharing information, establishing expectations through a service level agreement or statement of work. Feedback regarding the effectiveness of offered services should be shared. To succeed with the delivery of services, Lomer, Buger and Lasch (2020) found that high levels of cooperation and transparency can increase operational performance and reduce interruptions in the chain.

According to Phipps *et al.*, (2013) civic procurement is perceived to be inherently complex as well as dynamic given the multiple functions they are expected to perform. According to the Public Procurement and Asset Disposition Act (2015), procurement is defined as the acquisition of works, assets, services, or goods, including livestock, through purchase, rent, or lease, or other related contractual approaches, and includes advisory, planning, and processing within the supply chain system.

According to a recent report by the National Taxpayers Association, the enlightened public of the twenty-first century has demanded good governance, proper monitoring and evaluation of public funds, and complete compliance with the law by officers charged with managing public funds through procurement (NTPA, 2013). Public procurement accounted for 18.42% of global GDP, according to Gabela and Okeke-Uzodike (2020). In developing nations, public procurement is increasingly regarded as a critical component of service delivery (Mahmood, 2010), accounting for a significant amount of overall expenditure. For example, it accounts for 60% of Kenya's public spending, 70% of Uganda's, 40% of Malawi's, and 58 percent of Angola's (Mutoro, Makokha and Namisonge, 2018). According to Ayoyi and Mukoswa (2015), Kenya has continuously experienced visible development in the sense that it operated without regulations in the 1960s; however, the 1970s through 1990s saw its operations planned by treasury bills, and Kenya introduced procurement guidelines in 2006 through the implementation of novel standards for civic procurement. With relation to Article 227 (2010) of the Kenyan constitution, a new framework has now been designed to verify that state-owned companies are more flexible to successfully handle existing opportunities across varied marketplaces in order to maximize the value of Kenyan citizens. The Kenyan constitution has also acknowledged the contribution of the procurement system towards the development of the national economy. According to Section 227(1) public enterprises are expected to contract in agreement with systems or bodies that are transparent, competitive as well as cost-effective. It is possible to minimize government spending by implementing genuine procurement methods (Ohashi, 2009).

Procurement in the commercial sector, public sector, donor sector, and non-governmental organisations, according to the Kenyan government, can be divided into four categories. All of the above industries have turned to procurement management as a result of the need to be flexible and effective, and in order to do so, proper procurement planning is required. The municipal, state, and federal governments, as well as corporations, financial institutions, and government-owned and controlled businesses, make up the public sector (Bergmann *et al.*, 2016). Masinde Muliro University of Science and Technology is classified as part of this industry.

Internal and external pressures are putting pressure on the public sector to enhance its performance (Sarrico *et al.*, 2012). To do this, they must examine how they plan, create budgets, implement and manage programs, and deliver services in order to meet the government's and people's demands for increased performance and accountability (Mwilu, 2013). Top level managers in the public sector must measure performance to determine whether departments are performing as expected, to motivate employees and all stakeholders, to persuade legislators that the organization is doing a good job, to ensure that employees are doing the right things, to determine budgeting priorities, and to determine the exact people who should act to improve performance (Berman, 2015).

1.1. Statement of the Problem

Procurement has continuously experienced massive growth resulting to implementation of procurement bodies for instance the Kenya Institute of Supplies Management. Hsu *et al.*, (2013) notes that organizations continue to witness the pressure to merge the procurement practices and organization's goals. As such, supply chains have been directly connected to entire firms' performance thus making procurement practices essential for any organization's success. However, any organization's purchasing sector is pressurized to attain financial savings with the help of efficient as well as synchronised service delivery. Jasiulewicz-Kaczmarek and Drozyner (2013) perceive procurement practices to be strategic aiming at maximizing organization's productivity, minimize raw materials as well as identify reasonable supply sources. These practices result in information and material flow and are perceived as strategic aspects that enhance an organization's profitability. With considerable empirical research on procurement as well as models aimed at solving problems faced by parastatals, most heads in the public sector are trying to implement the best procurement concepts to ensure that they achieve the combined benefits of dependability, quality and improved cost (Amo and Asante, 2016). Although several studies have been undertaken in Kenya on the notion of procurement planning and its impact on overall organizational performance, there is little evidence on the impact of procurement procedures on user perceptions of procurement performance. For example, Mueni and Moronge (2018) examined the impact of strategic procurement methods on parastatal performance in Kenya and concluded that parastatals should reassess their strategic procurement methods in order to considerably enhance their performance. Kuo, Wu and Deng (2009) assume that if an organization's procurement is perceived to be satisfactory and useful, it tends to be accepted by users. Nonetheless, very little is known regarding how procurement planning influence user perceptions. This may pose a challenge in adjusting or adhering to procurement practices which may lead to poor service delivery among these institutions. This study examined the effects of procurement planning on user perceptions of procurement at MasindeMuliro University of Science and Technology in order to address this gap.

1.2. Objective of the Study

The main purpose of the research was to see how procurement planning affected users' perceptions of procurement performance at MasindeMuliro University of Science and Technology.

1.3. Significance of the Study

The study focussed on procurement planning since institutions spend their finances for daily activities. Most institutions that fail to adhere to procurement planning as a practice leading to reduction of the efficiency of service delivery. MasindeMuliro University of Science and Technology was the best place of this study since it represents the complex procurement structure that is cascaded to the departmental level. To assess the impact of procurement methods on user views of procurement performance, the study used procurement planning as a primary function.

1.3.1. Scope of the Study

This study targeted MasindeMuliro University of Science and Technology where heads of departments were purposively selected and other staff who interact with procurement department randomly selected from all departments apart from procurement department. The Heads of Departments and the selected staff were key respondents in this study. This study was conducted in the public sector and specifically the public university in western Kenya which was narrowed down to MasindeMuliro University of Science and Technology. MMUST was purposively chosen because it has a very elaborate and robust procurement section. The university was found to be the only public university in Kakamega county where the researcher had purposed to undertake his study. It could give the correct picture of user perception on procurement performance in the public sector.

2. Literature Review

A procurement plan, according to Odero and Ayub (2017), is an instrument for implementing a budget that should be prepared by the user departments with the goal of avoiding or limiting excess votes in the entities' budgets and ensuring that procurements do not proceed unless adequate funds are available to pay for them. As a result, all purchase strategies should be properly integrated into the budget and in accordance with procurement rules. An accounting officer must make annual purchase plans based on the format stipulated by the regulations in the official budget before the start of each financial year as part of the yearly budget preparations process. Furthermore, under section 53(4), all asset dispositions must be prepared by the accounting officer in question using an annual asset disposal plan in the format required by the regulations. In addition, section 53(8) stipulates that an accounting officer must not proceed with a procurement until it is certain that sufficient funds are represented in its authorized spending estimates to meet the responsibilities of the resulting contract. In addition, section 53(9) makes it illegal for an accounting officer to start a procurement procedure without first determining if the good, work, or service is budgeted for. Basheka and Sabiiti (2011) alluded that in developed as well as developing nations in the public sector, there is stable and reliable service delivery as a result of procurement planning's contribution within central and local governments. These findings were replicated by findings from a research by (Ngunyi, 2014) whose study concluded that there is a significantly positive relation between procurement systems' practices and organizations' procurement performance in Kenya. Another research by Kakwezi and Nyeko (2019) revealed that planning on budgeting influenced procurement performance.

According to Odero and Ayub (2017), a procurement plan has the ability to reduce costs, shorten timeframes, improve stakeholder relationships, reduce risks, and improve overall performance. Apiyo and Mburu (2014) discovered

procurement planning to be a requirement for subsequent procurement activities as a procurement planning mistake with far-reaching consequences for procurement performance.

As postulated by Ngugi and Mugo (2012), poor planning as well as management are major issues experienced by the civic procurement process such demands which are not appropriately identified and estimated or the impracticable budgets as well as the lack of required skills of employees in charge of procurement and their non-compliance with procurement plans. Moreover, Ansoff *et al.*, (2018) also mentioned that when procurement planning is well developed and implanted, it serves as a significant approach of extraction, dispersal as well as assigning of resources. Additionally, Willy and Njeru (2014) in their study concluded that good procurement plans result in an organization's effectiveness and efficiency hence achievement of anticipated objectives.

In order to procure the right quality goods, there is need for detailed specification so as to help identify what the contractor is required to offer and also help the contractors appropriately bid based on specifications in the bid documents. The type of procurement determines whether specifications are simple or complex (Holma *et al.*, 2020).

Because a number of African governments have not given enough attention to the efficient management of public resources, poor procurement planning is a limiting factor for the continent's economic development (Odero and Ayub, 2017). According to Saussier and Tirole (2015), for African countries to progress, they need an efficient public procurement system as well as a national commitment to make the best use of public resources. For a public institution to succeed in its procedures as well as service delivery, it has to consider procurement planning as a vital entity (Changalima, Mushi and Mwiseje, 2020). Angokho, Juma, and Douglas (2014) claim that procurement practices deplete public funds, and that procurement planning can prevent the bulk of government funds from being embezzled through procurement. A good procurement plan, according to Apiyo and Mburu (2014), explains the process of contractually appointing vendors.

The principle of procurement, according to Kavanagh *et al.*, (2012), is that a well-thought-out plan, timetable, and group buying results in cost savings, efficient business operations, and hence greater cost-effectiveness. As a result, processes that constitute the cornerstone of procurement strategy may include group buying, negotiated bulk pricing, and just-in-time delivery, among others.

According to Odero and Ayub (2017), an effective and efficient procurement process can only be achieved with good planning and skilled people, or else the institution's procurement process will be defective. According to Okinyi and Muturi (2016), adherence to procurement strategies has a beneficial impact on procurement performance in institutions. Procurement planning is an extraneous process that does not only comprise a firm's demands that guarantees what to be procured by an institution, how best to meet these organizational needs, the services needed by the organization, the scope of procurement of the goods, the strategies to be employed, the time frame to accomplish the procurement but also the accountability criterion (Metobo, 2016).

It should be noted that the needs assessment, is not only a rigorous but also the systemic process for identifying and addressing the needs, which are therefore the ultimate gaps between current situations and desired situations. This is, therefore, the most significant subject in the procurement process because it acts as a conveyor belt to an effective mechanism to identify the most appropriate measures by evidently pinpointing the challenge to make sure that fixed assets (preceding budget appropriations) are thus not only channelled towards developing but also executing a practicable and relevant resolution for known programs.

3. Research Methodology

A descriptive research design was used in this study. The target population consisted of 1157 employees from Masinde Muliro University of Science and Technology. Purposive, simple random and stratified sampling techniques were used to obtain a sample size of 286 respondents. Data was gathered via a questionnaire. This study employed the Cronbach alpha coefficient as an indicator of test instrument reliability, at a threshold of 0.7 and beyond. Construct validity and material validity were employed to allow structured modifications of the research instrument for the purpose of enhancement and refinement. To determine the relationship between the dependent and independent variables, descriptive SPSS version 25 was used to analyze data received from the departments. The Pearson correlation coefficient was used to determine the strength of the association between the dependent and independent variables (*r*).

4. Findings and Discussion

The Cronbach's Alpha features were used in this study to conduct reliability among the variables under investigation, with the results shown in Table 1. This study employed Corrected Item-total Correlation (CITC) and Cronbach's Alpha to determine internal consistency reliability.

Variable	Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Cronbach's Alpha
Procurement Planning Practices	PPP1	.390	.675	.701
	PPP2	.319	.697	
	PPP3	.672	.582	
	PPP4	.470	.649	
	PPP5	.386	.675	
	PPP6	.376	.679	

Table 1: Cronbach's Alpha and Correlated Item-Total Correlation (CITC)

As shown in the table above, all six questions utilized in this study were pooled into one variable with six items each to examine the data's dependability. As cited by Zijlmans *et al.*, (2019), Cristobal *et al.*, (2007) recommend a CITC of not less than 0.30 as a standard consistency. In this case, items with a CITC of 0.30 or more are perceived to have a stronger consistency compared with those that their CITC is less than 0.30. As presented in table 1, the CITC for every item was above 0.30 hence were considered significantly reliable. Cronbach's Alpha for Procurement Planning Practices, Information Sharing practices, Procurement Staff Competence practices and User Perceptions were $\alpha=.701$, $\alpha=.721$, $\alpha=.799$ and $\alpha=.774$ respectively. Considering that every variable had at least or $\alpha=70$ or more, this research concluded that the variables were highly consistent. Additionally, deletion of any of the 6 items would lower their respective Cronbach's Alpha therefore the study retained all items. The variable under study was therefore found to be significantly reliable.

4.1. Hypothesis Testing

This research used H_0 as its null hypothesis to mean that there was no significant relationship between independent and dependent variables under study. Based on the proposed standard alpha level of 0.05, this study would discard variable relationship whose value of p would be more than the recommended $p=0.05$. Else, the relationship would be retained.

- H_1 : The Influence of procurement planning practices on User Perception of Procurement Performance.

Linear regression was used to test the Hypothesis to assess the association between Procurement Planning Practices and User Perception.

- H_1 : PPP=UP
 H_0 : PPP \neq UP

Using the regression equation

$$Y=a+b*X$$

Where Y – is the dependent variable

a – is the intercept = Constant

b – Slope =regression coefficient

x – Independent variable

Coefficients ^a						
		Unstandardized Coefficients	Standardized Coefficients			
		Unstandardized Coefficients	Standardized Coefficients			
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.411	.207		6.806	.000
	PPP	.705	.045	.684	15.814	.000

Table 2: PPP and User Perceptions
a. Dependent Variable: UP

As presented in table 2, regression is 1.411. Therefore, improving Procurement planning Practices would increase User Perceptions by same unit. 46.8% of the variance of Procurement Planning Practices can be accounted for by User Perception. $F(1,284) = 250.09$, $<.001$ (Appendix 5). The significant P value was $<.001$ hence this hypothesis was retained.

5. Summary, Conclusion and Recommendation

This study's findings indicate that procurement planning practices have a significant influence on user perceptions regarding procurement performance. Based on these findings, the effectiveness of service delivery is influenced by procurement planning as an increase of the later also increases the former. These results are consistent with findings by Basheka, &Sabiiti (2011) that in public sectors in both developed and developing nations, the efficiency and effectiveness of service delivery is greatly contributed to by procurement planning. These findings also replicate Ngunyi (2014) conclusion that there exists a significant association between organization's systems practices and their overall procurement practices in Kenya. According to Kakwezi and Nyeko (2019) planning on budgeting has a positive impact on organization's procurement performance. These perceptions are in line with this study's findings that budget approval in MMUST is obtained for the needed items before they are purchased which enhances user's satisfaction of service delivery. Also, this study found out that procurement planning permits MMUST to make clear statement of work to ensure user requests are delivered on time without fail to enhance effective service delivery. These findings replicate results from a study by Odero and Ayub (2017) that there exists a significantly positive association between procurement plan and the possibility to cut down on expenses, reducing timescales, managing financial risks and thus improving organizations general procurement service.

The study findings showed that procurement planning practice contributes significantly on user perception of procurement performance in MMUST. Based on Pearson's Correlations, there was a positive correlation between the dependent variable and independent variable: User Perception and Procurement Planning practices. From the correlation, it was noted that the variable had a correlation level of $p<0.1$ which is the significance level used in the study. In this case, any correlation level for the chosen variables with a significance level of $p<0.1$ was considered to be statistically significant. This tells us that the independent variable was positively correlated to the dependent variable. The study also used

regression analysis where any variable relationship whose p value goes beyond 0.05 was discarded. The practices under study were Procurement Planning Practices whose findings were $p < 0.001$ and thus the independent variable was retained.

6. Recommendations

In this study's findings and conclusion, it is recommended that the MMUST management should ensure that procurement planning practices are embraced so as to have a significant influence on user perceptions regarding procurement performance. Basing on the findings, the effectiveness of service delivery is influenced by procurement planning as an increase of the later also increases the former. This could be achieved through frequent trainings of the procurement staff. This study looked at one procurement practice and its effect on user perception of procurement performance in the Public Sector. The practice under study was; Procurement Planning Practices. The researcher recommends further studies to be done on other procurement practices and their effect on the user perception of procurement performance in the Private Sector as this was not one of the objectives to be researched by the researcher in this study.

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