Effects of Quality Procurement process on Procurement Performance of Public Universities in Kenya

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Abstract

Public Procurement has been exposed to reforms and regulations. Procurement departments focus on getting technologically advanced goods and services that have no defect in a timely and cost-effective manner. It is against this background that this study sought to determine the effects of orders adhering to specifications, adjusted orders, timely delivery and complete delivery on procurement performance. A cross-sectional survey design was used to collect data. Data was analyzed using multiple linear regression model. Findings indicated that quality procurement process (adjusted order, timely delivery, complete delivery and adherence to specification) were statistically significant predictors of procurement performance. The study concluded that quality procurement process is depended upon to heighten procurement performance. In view of that, it is recommended that for better procurement performance, public universities should ensure that quality is enshrined in their procurement process.

Key Words: *Quality Procurement Process, Procurement performance*

1. Introduction

Quality on procurement performance is managing and ensuring the procurement processes in an organization are conducted in an efficient and effective manner (Gheorghe, 2014). Firms can make the procurement process of an organization to be the source for quality improvement by planning, controlling, monitoring, measurement and analysis (Gheorghe, 2014). According to Gheorghe (2014), the procurement process must embrace an exhaustive definition of the need, an organization must also identify and select suppliers based on their abilities to perform and comply with the stated requirements, in addition, organizations must establish and develop strong relationships with vetted suppliers and finally continuously monitor the efficiency of quality procurement process.

Quality Procurement is not just a matter of getting the right goods, services and products requested by user; rather it is one that enhances the whole process to generate substantial business value (Heunis et al, 2024). Procurement departments can enhance the procurement process by incorporating contract management system, by having standard contracts templates that would only require updates when new contracts are established. They can also increase capability of the staff within procurement through training and development, and this will lead to increase in productivity, he further argued that organizations need to establish good buyer-supplier by treating their suppliers fairly, paying them on time and issuing complete product specifications. In addition, organization needs to reduce expenses through technology and also have both analytical and negotiation skills (Heunis et al, 2024). Procurement performance is considered to be the result of two elements: procurement effectiveness and procurement efficiency (Van Weele, 2006). Efficiency measures how successfully the inputs have been transformed into outputs, while effectiveness measures how successfully the system achieves its desired output. Organizations can ensure they maximize their purchasing efficiency and effectiveness by creating clear roles and procedures within the procurement process (Mebrate and Shumet, 2024). Measuring performance provides the basis for an organization to assess how well it is progressing towards its pre-determined objectives, identifies areas of strengths and weaknesses and decides on future initiatives with the goal of how to initiate performance improvements (Mebrate and Shumet, 2024).

Certain key performance indicators can help business understand its purchasing habits and indicate superior or inferior performance. Delivery on time is the first key step to supply chain excellence and leads to customer satisfaction (Mogire et al, 2023). Timely delivery means superior performance and vice versa. Completeness of deliveries means superior performance, receiving incorrect order, either too much quantity or too little indicates financial problems, production issues, or poorly trained personnel. Timely payments indicate superior performance and vice versa (Franque et al., 2021). Unit Cost refers to cost of procurement in terms of resources/time, cheap product indicates inferior quality, and organizations must ensure goods are procured /sold within the market range. Quality refers to adhering to specifications, this indicates superior performance and vice versa (Quentin et al, 2019). Anin et al (2022) puts quality as a criterion of performance. Anin et al. (2022) also argues that quality has a positive impact on growth and return on assets. The performance indicators used were processing

of invoices, unsupplied orders and emergency orders.

2. RESEARCH METHODOLOGY

2.1. Research Design

A cross-sectional –survey research design was used. This research design was preferred because the researcher was to collect data at one point in time translating to ease of data gathering and assessment, short study duration and moderate cost. There were different groups identified for the study, finally it enables data to be collected from a large number of samples. This study adopted primary data collection method; this was achieved through the use of group administered questionnaires, self-administered questionnaires and mail -out questionnaires.

2.2. Sample Size and Sampling Technique

The study targeted all the thirty-one public universities in Kenya. The researcher used cluster sampling technique, this method was preferred since there is homogeneity among public universities in Kenya and therefore selection of any one university allows for generalization of the results as well as mutual exclusivity. The target respondents comprised of procurement and finance staff from each of the public universities. The researcher had twenty-four clusters; from the clusters, the researcher used simple random sampling to select Moi University which has a total of 60 staff at Procurement and Finance department; in addition, the university has 140 pre-qualified suppliers. Census technique was used to get the sample size. All the pre-qualified suppliers and members of staff were used as sample size because the population was not vast and it enabled the researcher to have minimum bias and reduce errors in interpreting data collected.

3. Data Analysis

After the data was collected by the researcher, it was coded, checked for completeness edited transformed and organized into a database via the statistical package for social sciences (SPSS) version 20 which facilitated accurate and efficient analysis of inferential statistics. Once the coding procedures had been established, reliable output was delivered. The information was displayed by use of tables. Regression analysis was used to determine the degree of relationship in the patterns of variation through the calculation of the coefficient of correlation which was used to test hypothesis of the study. Multiple linear regression analysis was used to analyze the overall effect of the independent variables and the dependent variable.

4. RESULTS AND DISCUSSION

4.1. Quality in the procurement process and Procurement Performance

Respondents were asked questions relating to number of orders delivered in full, orders that met specification, number of adjusted orders and orders processed on time. The descriptive statistics and inferential statistics are presented in table 1 and 2 respectively.

Table 1: Quality and Procurement Performance (descriptive statistics)

	1-10 Orders		10-20 Orders		21-30 orders		31-40 orders		Above41 orders	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Complete delivery	0	0	0	0	13	7.1	29	15.8	142	77.2
Timely delivery	0	0	0	0	1	.5	43	23.4	140	76.1
met specifications	0	0	7	3.8	9	4.9	44	23.9	124	67.4
orders adjusted	31	16.8	15	8.2	10	5.4	35	19.0	93	50.5

From table 1; the results show that the majority of the respondent's 142(77.2%) process more than 41 complete orders, 29(15.8%) stated that they process between 31-40 complete orders, 13 (7.1%) of the respondent's process between 21-30 complete orders. This implies that the university receives complete orders. On inquiry of whether delivery of goods is on time, majority of the respondents 140(76.1%) stated more than 41 orders were delivered on time, 43(23.4%) of the respondents indicated that between 31-40 orders were supplied in time and the least number 1(5%) indicated that between 21-30 orders were delivered on time. This implies that goods are delivered on time at the universities. On whether deliveries adhere to specification, majority of the respondents 124(67.4%) specified that above 41% of the orders received at the university, adhere to specification.44 (23.9%) of the respondents indicated that between 31-40 orders delivered, adhere to specification.9 (4.9%) of the respondents said between 21-30 orders adhere to specification while the least number 7(3.8%) indicated that between 10-20 orders adhere to specification. This deduces that most of the supplies received at the university adhere to specification. On the number of orders processed on time after adjustment, majority 95(50.5%) stated more than 41 adjusted orders are processed on time .35(19%) of the respondents indicated that between 31-40 orders were processed on time,10(5.4%) specified that between 21-30 adjusted orders are processed on time.15(8.2%) of the respondents indicated that between 10-20 adjusted orders were processed on time and 31(16.8%) indicated that between 1-10 adjusted orders were processed on time. This implies that although the university adjusts orders, they process the same on time and this covers for inconveniences caused to the supplier. This indicates that there is quality in the procurement processes at the university and this helps build the relationship and in turn improves performance. This agrees with the discoveries of Gheorhe (2014) who concluded that an efficient process of procurement help increase performance. According to Grandia and Warsen (2023), timely and complete delivery momentously affects performance. Patrick (2010) considered timely delivery and communication time lags as factors that greatly boost efficiency in the procurement process. This verdict is also in line with the findings of Munyimi (2019) who established that improved quality contributes to procurement performance. This also supports the findings of Fridkin et al. (2024) who found that absence of quality leads to deterioration of purchasing function.

Table 2 Quality and Procurement Performance (inferential statistics)

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.179	.443		4.913	.000
orders processed	.337	.088	212	3.820	.000
Timely delivery	.293	.119	.137	2.461	.015
met specifications	.103	.065	.083	1.575	.017
orders adjusted	.481	.032	.782	15.150	.000

R =.838; R^2 =. 702; R^2adj =. 696; $p \leq 0.05$

From table 2, the outcomes of the regression indicated the predictor explained 70.2 % of the variance (R^2 = .702; R^2adj =. 696), $P <$ .05; It was found that the variable Quality was positive and it significantly predicted procurement performance, i.e. 70 % of variations in procurement performance are explained by variations in quality in the procurement process. This supports the findings of Laraib et al (2021), Musau (2015) and Kakwezi and Nyeko, (2019) who also established a positive relationship between quality procurement process, and performance of the procurement process. The findings are also consistent with the conclusions of Gheorghe (2014), who established that for procurement process to be deemed quality, specification must be clear and complete; the findings are also in consistent with findings of Grandia and Warsen (2023), who established that timely and complete delivery momentously affects performance. Gudda (2021) considered timely delivery and communication time lags as factors that greatly boost efficiency in the procurement process. From table 2, the results imply that if suppliers fully deliver goods that meet specification, then it is expected that procurement performance would improve in terms of reduced number of unsupplied orders, and faster processing of invoice and emergency orders.

5. Conclusion and Policy Implications

From the results it is the concluded that, Orders adhering to specifications significantly influence procurement performance as indicated by the P-Value of 0.00. Suppliers should ensure the deliveries adhere to specifications given; Procurement entities should make sure specifications are complete.

Secondly, processing adjusted orders on time significantly influence procurement performance. Procurement entities are urged to plan their procurements, this will enable them to know what to buy, how much, when and where, this will go a long way in ensuring there are no emergency orders.

In addition, timely deliveries significantly influence procurement performance. Suppliers are supposed to make sure once

they are given orders, they observe strict timeframes given, and this leads to client satisfaction. Procurement entities need to also understand their suppliers' timelines for seamless transaction.

Finally, completeness of delivery significantly influences procurement performance. Suppliers are supposed to service orders given. Procurement entities prepare complete specifications which will enable suppliers to supply a product that adheres to specifications and is of the right quantity delivered to the specified place and at the right price that gives value for money. Universities and any other organization should conduct their business online; this saves on time and costs.

In conclusion, quality procurement process is depended upon to make conclusions about procurement performance of public universities in Kenya. Efficient and coordinated supply chain while using the right communication channels leads to better procurement process.

A similar study should be carried out on the effect of quality in the procurement process on procurement performance of public universities and private universities in Kenya incorporating more variables. In addition, another study should be carried out incorporating different indicators of measuring quality in the procurement process and performance other than the ones used in this study.

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