Influence of Supplier Responsiveness on Procurement Performance of Parastatals in Mombasa County, Kenya

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ABSTRACT

The purpose of this study was to establish how supplier responsiveness influences procurement performance of parastatals within Mombasa County. The study adopted descriptive research study design. The research was grounded on the Kaizen Theory. The target population comprised of 308 procurement staff members, including both managerial and non-managerial roles, across parastatals in Mombasa County. A sample size of 174 was determined using the Yamane method and respondent were selected using Stratified random sampling technique to ensure equitable representation and eliminate bias. Data analysis was conducted utilizing the statistical software SPSS version 28. Regression analysis was used to ascertain the predictive relationship between dependent and independent variables, with results being presented in tabular form alongside percentages. The findings showed that there was a strong positive correlation between supplier responsiveness and procurement performance(B1=0.307, t=2.354 & p=0.022<0.05), highlighting the critical role of suppliers' ability to swiftly adapt to changing environments and efficiently address challenges in determining overall procurement outcomes. The small standard deviation among participants underscores the consensus on the importance of supplier responsiveness in expediting the procurement process. Notably, the research indicates a significant boost in procurement performance with each unit increase in supplier responsiveness, emphasizing the pivotal role of supplier sensitivity in enhancing procurement success within Mombasa County's state corporations. The study recommends that managers of parastatals should prioritize fostering strong and collaborative relationships with suppliers to enhance responsiveness. Additionally, adoption of electronic procurement solutions can expedite the procurement process and enable quicker responses to market changes.

Keywords: Electronic Procurement Solutions, Kaizen Theory, Parastatals, Procurement Performance, Supplier Responsiveness

I. INTRODUCTION

In today's increasingly competitive business landscape, selecting the right suppliers is paramount to a company's success. One of the critical factors to consider when evaluating potential suppliers is their responsiveness. Responsiveness encompasses a supplier's ability to promptly and effectively communicate, adapt to changing circumstances, and address issues as they arise (Jafari et al., 2023). This factor plays a crucial role in ensuring a seamless supply chain and maintaining high levels of customer satisfaction.

When suppliers are responsive, they can quickly adjust their production processes, allocate resources, and provide accurate delivery timelines, thus helping the buyer to plan and execute their own production processes more efficiently (Sarpong, 2022). In contrast, unresponsive suppliers can disrupt production schedules, leading to costly delays and potential customer dissatisfaction.

Supplier responsiveness also plays a vital role in problem-solving and issue resolution. When unexpected challenges or quality issues arise, a responsive supplier is more likely to collaborate with the buyer to find swift and effective solutions (Richey et al., 2022). This collaborative approach minimizes the influence of disruptions on the supply chain and fosters a more mutually beneficial supplier-buyer relationship.

Supplier responsiveness can be indicative of their commitment to quality and customer satisfaction. Suppliers who prioritize responsiveness are often more attentive to customer needs and are willing to go the extra mile to ensure their products and services meet or exceed expectations (Narasimhan et al., 2020). This commitment can result in higher product quality, fewer defects, and greater overall customer satisfaction.

According to Christopher (2019), suppliers that display a high degree of adaptability contribute to the agility of procurement processes, fostering better alignment with organizational goals. This adaptability empowers public organizations to swiftly respond to market changes, regulatory shifts, and unforeseen disruptions, thus safeguarding

their procurement performance. A study by Narasimhan et al. (2019) emphasizes that suppliers who prioritize customer focus facilitate better collaboration, leading to enhanced procurement performance. Such suppliers not only provide quality products but also contribute to the co-creation of value, fostering long-term partnerships.

The importance of supplier responsiveness is further underscored by the advent of global supply chains. As companies source materials and products from around the world, effective communication and coordination become essential. Responsive suppliers can bridge time zones and cultural differences, ensuring that orders are processed smoothly and potential misunderstandings are minimized (Christopher & Peck, 2019). However, inadequacies of infrastructure act as major bottlenecks that hinder rapid responses and outstanding performances of suppliers in Kenya (Adams & Weber, 2020). Another hindrance is institution weakness and high of procurement expenditures process, delay in decision making also have a great impact on supplier responsiveness, and consequently unsteady delivery of the goods and services (Ncube & Sibanda 2020).

1.1 Statement of the Problem

The global landscape of research on supplier responsiveness and procurement performance is very diverse, featuring publications of authors such Lopez and Muller (2020), for European electronics manufacturing industry, which highlight several factors that influence procurement performance. The application of their research on the task at hand has not been useful because of the wide gap that exists between their research industry and the one that falls under the public sector as well as the existence of a different ecosystem within their learning environment, which has made their findings difficult to understand to Kenya.

Globally, Taherdoost and Brard (2019) found that there is the theory there that product price and supplier quality are highly significant. However, the study has not had a specific regard to supplier responsiveness and its connection to procurement performance.

Studies carried out by Ombui and Maina (2018), and the one conducted by Rajab and Muchelule (2016) revealed problems of supplier unresponsiveness which pinpoint to the important role that suppliers play in running of parastatals effectively and efficiently. These studies focus mainly on the over reforming of Mombasa's County parastatals rather than the relationship between the supplier and the parastatal. The purpose for this study was thus, to find out if the Supplier Responsiveness has a significant effect on the procurement performance of organizations owned by the national government.

1.2 Research Objective

To examine the influence of supplier responsiveness on procurement performance of parastatals in Mombasa County, Kenya.

1.3 Hypothesis

Ho1: Supplier responsiveness does not have a statistically significant influence on procurement performance of parastatals in Mombasa County

II. LITERATURE REVIEW

2.1 Theoretical Framework

This study was grounded on the Kaizen Theory. Kaizen theory, introduced by Masaaki Imai in 1986, emphasizes continuous improvement in organizational processes, products, and services. This term, translating to "change for the better" or "continuous improvement," has been extensively explored in academic and business literature, with Imai widely recognized as its proponent. Scholars, including Gomes (2021), have delved into the theoretical foundations, practical applications, and benefits of Kaizen implementation. Notably, research by Gomes (2021) found positive effects on organizational performance, emphasizing improved operational efficiency and quality. In the specific context of supplier responsiveness, which pertains to suppliers promptly meeting the demands of the purchasing organization, Kaizen theory plays a pivotal role. Aligned with the principles of continuous improvement and mutual development, Kaizen fosters collaboration and open communication with suppliers. This approach encourages active supplier participation in improvement processes, innovation sharing, and overall partnership success (Ncube & Sibanda, 2020). Moreover, Kaizen's focus on eliminating waste and inefficiencies directly influences supplier responsiveness by enhancing supply chain efficiency, leading to improved delivery times, increased flexibility, and heightened customer satisfaction (Alem & Dibiku, 2023).

2.2 Empirical Review

Johnson and Garcia (2019) carried out a study on the role of supplier responsiveness in the procurement performance of European market. Data from a quantitative method was gathered by means of a survey from procurement professionals and the application of regression analysis was utilized to examine supplier responsiveness and procurement performance. Consequently, the reports depicted a great magnitude of positive correlation that enforcement providers were critical in guaranteeing better running and mitigation supply chain breakage.

Boateng and Diallo (2018) conducted a study on the impact of supplier selection criteria on procurement security in Nigeria. The mixed method approach was administered to procurement professionals in the parastatals sector. The findings show that the parastatals that relied on responsive suppliers got increased operating efficiency and cost savings.

Kamau and Njoroge (2021) explored the role played by suppliers' timely delivery and service flexibility in parastatals in Kenya. The research used an integrated methodology to conduct surveys, process procurement personnel, and analyze archived data. The findings showed the correlation between high supplier responsiveness and improved procurement efficiency probability, as parastatals having established strong relations with responsive suppliers encountered no hurdle in their daily operations which most of them found to be quite cost effective.

Rajab and Muchelule (2016) carried out a study to establish the effect of supplier responsiveness on procurement performance in Kenya. The researchers used a sample size 54 employees drawn from procurement department of Kakamega County. Stratified and simple random sampling was used in this study. Questionnaire was used to collect data. Data was analyzed through statistical methods such as means, standard deviation, frequencies and percentage. Inferential analyses were used in relation to correlation analysis and regression analysis to test hypothesis. Study findings showed that supplier responsiveness had positive and significant effect on procurement performance. Thus, supplier responsiveness plays a key role in increasing procurement performance. The study therefore recommends that there is therefore need for county government to source for supplier who respond in time and supply product within the given time.

III. METHODOLOGY

The study adopted descriptive research study design. The target population comprised of 308 procurement staff members, including both managerial and non-managerial roles, across parastatals in Mombasa County. A sample size of 174 was determined using the Yamane method. Stratified random sampling was utilized to ensure equitable representation of the respondents and eliminate bias. Data analysis was conducted utilizing the statistical software SPSS version 28.

Regression analysis was used to ascertain the predictive relationship between dependent and independent variables, with results being presented in tabular form alongside percentages. The regression model adopted the following structure:

$Y= \alpha +\beta 1X1 + \varepsilon$ Where:

Y = is the dependent variable; procurement performance.

α = Constant term

β_1, is the coefficients of the predictor variable and

X_1= Supplier Responsiveness

ε = Error ter

IV. FINDINGS & DISCUSSION

4.1 Response Rate

The response rate for the study was 66.7% which shows that majority of the respondents were confident with the nature of the study as shown in Table 1.

Table 1
Response Rate

Strata	No. of Survey Questionnaires Distributed	No. of Survey Questionnaires Received	Response Rate
Managerial procurement staff	87	54	62.1%
Non Managerial procurement Staff	87	62	71.3%
Total	**174**	**116**	**66.7%**

Among the 174 survey questionnaires that were issued, only 116 were returned. Consequently, the valid response rate was 66.7%, which was sufficient for data processing and analysis. Kothari (2019) suggests that a response rate of 50% is considered adequate, 60% is viewed as good, and 70% or higher is considered excellent. Consequently, this response rate was deemed excellent and suitable for the study.

4.2 Descriptive Results for Supplier Responsiveness

Six statements about the influnce of supplier responsiveness on procurement performance were presented the study respondents. They were requested to respond to the statement using a five scale point. The findings are presented in Table 2 below.

Table 2

Descriptive Results for Supplier Responsiveness

Supplier Responsiveness	Mean	Std. Dev.
The supplier responds promptly to procurement inquiries and requests.	4.84	.365
The supplier adapts to changing circumstances or requirements during the procurement process.	4.84	.365
The supplier shows a strong focus on understanding and meeting our organization's needs	4.83	.381
The supplier efficiently addresses and resolves any procurement-related issues or concerns.	4.78	.622
The supplier proactively communicates updates or changes that could affect the procurement process.	4.53	.655
The supplier aligns their processes with our organization's operational requirements	4.38	.745
Average	**4.7**	**.522**

The respondents appeared to strongly agree that supplier responsiveness should be included in supplier selection criteria in each parastatal, based on the average mean score of 4.7. The assertions exhibited modest variety, as shown by the standard deviation of.522. The respondents very strongly agreed that the supplier answers to requests and queries from the procurement process in a timely manner and that the supplier adjusts to changing requirements or circumstances during the procurement process; the mean score for these two items was 4.84. The statements' matching standard deviation, which showed the least fluctuation in the replies for the two assertions, was.365. Additionally, the respondents strongly agreed that the supplier demonstrates a strong focus on comprehending and fulfilling the needs of the organization, with a mean score of 4.83; the standard deviation was second least, indicating the second least variation of responses.

Moreover, the respondents strongly agreed that the supplier effectively addresses and resolves any procurement-related issues or concerns for the parastatals, with a mean score of 4.78. With a mean score of 4.53 (the respondents strongly agreed), the supplier proactively discloses updates or changes that potentially influence the procurement process. Finally, the respondents agreed that the supplier's processes are in line with the operational needs of our firm, scoring a mean of 4.38. This statement had the greatest associated standard deviation of.745, indicating a high degree of response variance.

Shiveringly, though, the contemporary investigations by Zitkiene and Deksnys (2018) have revealed the innovation resourcefulness of the supplier responsiveness, showing that it can be the engine of the organizational agility and smoothness. These discoveries are, therefore, all the reminder the procurement practitioners have for them to ensure resoluteness and customer responsiveness are the core competencies of their business.

4.3 Procurement Performance

The study sought to find out the effect of Supplier Responsiveness on the procurement performance. The results are presented in Table 3.

Table 3

Descriptive Results for Procurement Performance

Procurement Performance	Mean	Std. Dev.
Supplier Responsiveness enhance the procurement performance	4.79	.487

Supplier responsiveness had a mean of 4.79, with respondents strongly agreeing that suppliers' responsiveness improves procurement performance. The least amount of variation in the replies was shown by the matching standard deviation, which was.487. This findings are in agreement with the finding by Rajab and Muchelule (2016) who found

that supplier responsiveness had positive and significant effect on procurement performance. Thus, supplier responsiveness plays a key role in increasing procurement performance.

4.4 Correlation Analysis Results

To identify the degree of mutuality Pearson correlation method was applied to the related variables. Summated scales from the independent and dependent variables were used to create the measures. The results indicate a positive correlation between supplier responsiveness and procurement performance (0.536). This suggests that there was a positive connection between supplier responsivenes and performance as well as positive correlations between the criteria. The findings of the Pearson's product moment correlations study are shown in Table 6

Table 4

Pearson's Product Moment Correlations Results

Pearson Correlation		
		Procurement Performance
Supplier Responsiveness	Pearson Correlation	.275**
	Sig. (2-tailed)	.000
	N	116

The correlation analysis in Table 6 reveals several positive correlations between supplier responsiveness and procurement performance. Notably, there is a strong positive correlation between supplier responsiveness and procurement performance (0.536), indicating that parastatals with more responsive suppliers tend to achieve better procurement performance.

4.5 Regression Analysis Results

To ascertain if the connection between the study's dependent variable (procurement performance) and independent variable (supplier responsiveness) was linear, regression analysis was used. The following subsections include a tabulation and discussion of the results.

4.5.1 Model Summary Results

The study aimed at determining the regression relationship between procurement performance and responsiveness. The results were as follows.

Table 5

Model Summary Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.944[a]	.891	.883	.28339	1.788

a. Predictors: (Constant) Supplier Responsiveness (X_1),

b. Dependent Variable: Procurement Performance (Y)

Table 5 displays the Adjusted R-square value of 0.883, which indicates that the model accounts for 88.3% of the variance in procurement performance overall. This indicates that the model is unable to account for 11.7% of the variance in procurement performance. Therefore, the findings show that procurement performance is influenceed by the supplier responsiveness. The summary findings of the typical multiple linear regression model are shown in Table 5.

The regression analysis summarized in Table 5 demonstrates the significant predictive power of the regression model in explaining procurement performance based on supplier responsiveness. The high Adjusted R-square value of 0.883 indicates that approximately 88.3% of the variance in procurement performance can be explained by the combined influence of supplier responsiveness. This suggests that these supplier responsivenes plays a crucial role in determining procurement performance among parastatals in Mombasa County.

4.5.2 Analysis of Variance Results

The fact that the residuals are positive suggests that the dependent and independent variable in the research had a meaningful connection. Supplier responsiveness was found to have a substantial influence on procurement performance, as seen by the ANOVA Table 6 below, where F critical at (5, 83) degrees of freedom is 2.38< F

calculated 108.737 at 5% level of significance. The typical multiple linear regressions' ANOVA findings are shown in Table 6.

Table 6
ANOVA[a] Results

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	34.930	4	8.733	108.737	.000[b]
	Residual	4.256	111	.080		
	Total	39.186	115			

a. Dependent Variable: Procurement Performance (Y)
b. Predictors: (Constant), Supplier Responsiveness (X_1)

The ANOVA results in Table 6 further support the notion that supplier responsiveness significantly influence procurement performance. The significant F-value of 108.737 ($p < 0.001$) indicates that the regression model is statistically significant in predicting procurement performance based on supplier responsiveness. This suggests that variations in these supplier responsiveness has a substantial influence on procurement performance among parastatals in Mombasa County.

4.5.3 Regression Coefficients Results

The analysis yielded the regression model's coefficient, which was then shown. The equation for regression is shown below.

Table 7
Regression Coefficients[a] Results

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model 1	**B**	**Std. Error**	**Beta**	**t**	**Sig.**	**Tolerance**	**VIF**
(Constant)	.088	.171		.517	.608		
Supplier Responsiveness (**X_1**)	.253	.107	.307	2.354	.022	.120	8.325

a. Dependent Variable: Procurement Performance (Y)

$Y=0.088+0.253X_1 + 0$.171
Y –Procurement Performance
X_1–Supplier Responsiveness

The regression coefficients presented in Table 7 reveal the positive coefficients for supplier responsiveness (0.253) indicate that improvements in reponse time lead to higher procurement performance. This implies that parastatals in Mombasa County can enhance their procurement performance by selecting suppliers who are more responsive. These findings corroborate the findings of previous research by Lamming (2020) and van Weele (2018), which highlighted the critical role of supplier responsivenes in achieving procurement objectives.

4.6 Hypotheses Testing

According to the study null hypothesis, that "supplier responsiveness does not have a statistically significant influence on procurement performance of parastatals in Mombasa County." As seen in the Table 8 below (B=0.307, t=2.354 & p=0.022<0.05), the results showed that Supplier Responsiveness had a substantial influence on the procurement performance of parastatals in Mombasa County. The regression coefficients presented in Table 8 reveal the positive coefficients for supplier responsiveness (0.253) indicate that improvements in reponse time lead to higher procurement performance. This implies that parastatals in Mombasa County can enhance their procurement performance by selecting suppliers who are more responsive. These findings corroborate the findings of previous research by Lamming (2020) and van Weele (2018), which highlighted the critical role of supplier responsivenes in achieving procurement objectives.As a result, the study disregarded H01 and came to the conclusion that,there is a significant statistical influence of supplier responsiveness on procurement performanace of parastatals in Mombasa County. According to the null hypothesis, there is no significant statistical influence of supplier responsiveness on procurement performance of parastatals in Mombasa County. With a p-value of 0.022—less than the significance level of 0.05—the statistical test findings showed that Supplier Responsiveness has a significant statistical influence on the procurement performance of parastatals in Mombasa County. Therefore, it was concluded that the parastatals default-

characterizing procurement performance in Mombasa County highly depends on Supplier Responsiveness, which made it necessary to reject the null hypothesis and accept the alternative hypothesis.

Table 8

Hypotheses Test Results

Research Hypotheses		B	t	Sig.	Decision
$H_0$1:	Supplier responsiveness does not have a statistically significant influence on procurement performance of parastatals in Mombasa County	0.307	2.354	0.022	Reject the $H_0$1.

V. CONCLUSIONS & RECOMMENDATIONS

5.1 Conclusion

The study's descriptive statistics confirm a strong positive correlation between supplier responsiveness and procurement performance, highlighting the critical role of suppliers' ability to swiftly adapt to changing environments and efficiently address challenges in determining overall procurement outcomes. The small standard deviation among participants underscores the consensus on the importance of supplier responsiveness in expediting the procurement process. Notably, the research indicates a significant boost in procurement performance with each unit increase in supplier responsiveness, emphasizing the pivotal role of supplier sensitivity in enhancing procurement success within Mombasa County's state corporations.

5.2 Recommendations

The study recommends that Managers of parastatals should prioritize fostering strong and collaborative relationships with suppliers to enhance responsiveness. Additionally, adoption of electronic procurement solutions can expedite the procurement process and enable quicker responses to market changes.

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