STRATEGIC ALLIANCE AND PROCUREMENT PERFORMANCE OF PRIVATE SUGAR PROCESSING FIRMS IN KENYA

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Abstract:

In today's world, procurement performance in private sugar firms is one of the emerging issues of concern. Sugar firms are still hurtling down on cost even when the effects are detrimental to the product's quality. In some scenarios, the quality dimension gets altered to save cost, and the management holds high optimism hoping the quality risk does not get discovered. The main objective of the study was to establish the effect of information sharing on the procurement performance of private sugar firms in Kenya. The study was guided by: Information Theory, Principal Agent Theory, and Stakeholders' Theory. Positivism research philosophy was used. The study adopted a descriptive research design. The target population of the study was 50 respondents from ten private sugar manufacturing firms in Kenya. The study employed census sampling. Questionnaires were used to collect primary data. Data was analyzed using descriptive and inferential statistics that involved multiple linear regressions showed that information sharing, supplier training, contract management and strategic alliance explained 62.9% of variations in the procurement performance of private sugar firms in Kenya. Regression coefficients of 0.354 for strategic alliance indicated that embracing supplier management practices improved procurement performance.

JEL: L10; L11; L60; L66

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1. Introduction

1.1 Background of the Study

Procurement performance pertains to the process of ensuring the goods and services that are acquired meet the needs and expectations of the tea manufacturing firms. Procurement performance measurement (PPM) is the systematic process of measuring the effectiveness, efficiency, and spending of procurement teams with the continuous ambition of improving the value of procurement to business. In today's world, procurement performances of private tea firms have been reported to have been reducing. The lead time of the manufacturing firms is too high, the customers are not satisfied with the products and services being offered, the variety of the products is not available to customers and most importantly operational efficiency has been reduced (Connor, Yang, & Jiang, 2018)

The connection paradigm which seeks and builds ways of developing long-term relationships between suppliers and customers has been developed as a result of the expansion of technology, aggressive globalization, innovation and technology, and the implementation of deregulation laws. For companies to reach their full potential in the management of organizations a gap must be filled, in Kenya supplier relationship management due to concerns with chaotic events (Kiarie, 2017). The means of operation for organizations in Kenya have always been present with a large number of them operating without any formal system for the administration of the resources and the suppliers who play a crucial role in supplying the organizations' needs. Despite having a significant need for a supply base, manufacturing companies have made less of an effort to build connections with suppliers that will increase the organization's working conditions (Kiarie, 2017).

Private sugar companies typically retain suppliers at arm's length in situations where they have zero faith in them. The approach is similarly comparable to having little confidence. Some people may not take well to the display of mistrust toward suppliers, and this could result in several procurement-related problems. But even so, there is a security need first and exercise caution.

1.2 Problem Statement

Supplier relationship management practices are one of the critical strategies that have been adopted by many organizations in Kenya and the rest of the world. Supply relationship management practices help organizations simplify and streamline communication channels in operations between a buyer and its suppliers, it aids in cost reduction, reduction of waste, and minimizing price volatility, in the long run, all this helps in improving the quality of products (Mitrega, Forkmann, & Henneb, 2017). Despite the adoption of supplier relationship management practices, sugar firms are still incurring high costs in producing sugar, and the quality of sugar produced is also very low.

In countless scenarios, the quality dimension gets altered to save cost and the management holds high optimism hoping the quality risk does not get discovered. Marginal costs of production of West Kenya Sugar Company have increased by a ratio of 1 as the rate of product quality decreased at a rate of 2.7% in 2021 (Kenya Sugar Board, 2021).

Due to this condition, some of the sugar firms in Kenya have closed down their operations and some producing at half capacity such as Mumias Sugar Company and Muhoroni Sugar as a result of a shortage in products and services that are caused by delay of suppliers to supply goods and service. Many studies have been done on supplier relationship management practices and procurement performance. Most of the research conducted on sugar processing firms has revealed contradicting results which has made it difficult to know whether information sharing affects the procurement performance of private sugar firms in Kenya.

1.2 Objectives of the Study

- To establish the effect of strategic alliance on the procurement performance of private sugar processing firms in Kenya.

2. Literature Review

2.1 Information Theory (IT)

The information theory which was postulated by (Shannon, 1948). Shannon emphasized that the information measure was solely dependent on the communication process's probabilistic structure. Information theory techniques are probabilistic in nature and some consider information theory to be part of probability theory.

The information of a message describing one of these events quantifies the symbols required to express the event optimally in a given range of possible occurrences. 'Optimal' means that the obtained code word will decide the event unambiguously, distinguishing it from all others in the set, and will be of minimal length, consisting of a minimum number of symbols in addition, information theory gives approaches for distinguishing genuine information from noise and determining the channel capacity required for optimal transmission based on the transmission rate. There are two fundamentally distinct methods for sending messages: discrete signals and continuous signals. Discrete signals can only indicate a limited number of distinct, recognized states. The letters of the English alphabet, for example, are often regarded as discrete messages. Continuous signals, often known as analog signals, are commonly used to transmit quantities that can vary over an infinite range of values.

A famous example is sound. Such continuous quantities, on the other hand, can be approximated by discrete signals, for example, on a digital compact disc or via a digital telecommunication system, by increasing the number of distinct discrete values available until any inaccuracy in the description falls below the level of perception or interest (Lesne, 2014).

2.3 Principal Agent Theory (PAT)

The Principal Agent theory, this theory was put forward by Jensen and Meckling in 1976. This theory explains the reationsjhip between the principal and agent. The agent is the person appointed by the principal to fulfill duties on the principal's behalf. An agent is a person who acts on behalf of another person, the principal, in dealing with other people. The agency theory describes how one party determines the tasks that the other party is expected to perform.

The managers are employed to run the company on behalf of the shareholders. However, if the managers do not own shares in the company, they have no direct interest in future returns for shareholders or the value of the shares. Managers have an employment contract and earn a salary. Unless they own shares, or unless their remuneration is linked to profits or share values, their main interests are likely to be the size of their remuneration package and their status as company managers.

2.4 The Stakeholders Theory

The stakeholder theory was developed from four lines of organization management research: strategic organizational planning, systems theory, corporate social responsibility, and organizational theory (Freeman & Reed, 1983). Stakeholder theory has been variously described as a perspective set of ideas, expressions, and metaphors related to the overarching objective of maximizing stakeholder value. Researchers and practitioners of stakeholder theory emphasize the "jointness" of interests upon which all corporate value creation depends.

Stakeholder theory emerges from the descriptive, normative, and practical taxonomic branches. Descriptive stakeholder theory is used to define an occasion and clarify certain company characteristics and behaviors. It tries to describe participants' opinions on their own companies' goals and purposes, as well as how such actions affect various stakeholders. The instrumental stakeholder theory emphasizes the linkages or lack thereof between stakeholder management and the achievement of long-term firm goals such as growth and profitability (Parmar, et al., 2010).

2.5 Conceptual Framework

This study was guided by a conceptual framework in Figure 2.1. The independent variable was strategic alliance measured by joint planning, supplier development, and training in new technologies. The dependent variable was procurement performance measured by customer satisfaction, product of quality, and operational efficiency.
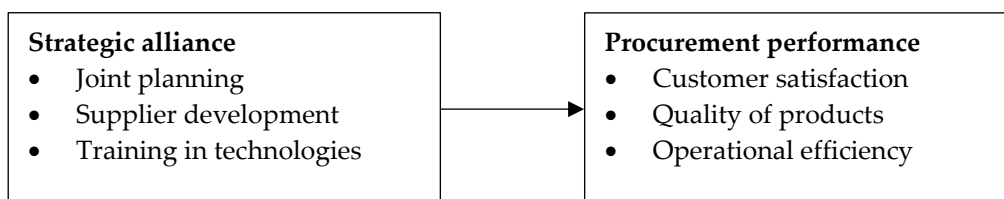

Strategic alliance	Procurement performance
• Joint planning • Supplier development • Training in technologies	• Customer satisfaction • Quality of products • Operational efficiency

Figure 2.1: Conceptual framework

2.6 Empirical Literature

A strategic alliance is an agreement between two companies to collaborate on a mutually advantageous initiative while maintaining each company's independence.

The arrangement is less complicated and less enforceable than a joint venture, in which two businesses pool their resources to form a new company organization. The following are types of strategic alliances, the first alliance is a horizontal alliance formed by firms that compete for the same resources, such as consumers or suppliers, and typically represents one-way exchanges (Emami, Welsh, Divari, & Arash, 2022).

In this structure, organizations such as research consortia or trade unions exchange or pool their resources toward a common purpose. The second type of alliance is a vertical alliance, which is an agreement between a company and the entities that supply inputs or use its outputs, such as suppliers, purchasers, financial institutions, or the labor pool. Vertical partnerships typically represent one-way transactions. The third sort of alliance is reciprocal, in which organizations share inputs and outputs in both directions. Firms in reciprocal relationships exchange ideas, personnel, and equipment, share lab space, and send designs back and forth (Umar, 2020).

Bimbola, Lahanmi, Babalola, and Iyabo (2020) conducted a study to analyze the effects of strategic alliance on the financial performance of construction enterprises in Nigeria. The survey design was used in the study to collect information via questionnaires distributed to construction professionals. Three hundred and sixty-three (363) respondents provided data for the study. The descriptive and inferential statistics were used to analyze the study data. The study's findings revealed that strategic alliances have a positive and significant impact on the financial performance of Nigerian construction enterprises.

Charles, Kule, and Kapaya (2021) examined the impact of strategic alliance management on the performance of Rwandan microfinance institutions. The target population consisted of 491 MFIs, with a sample size of 220 calculated using Slovene's formula. The descriptive research design was used in the study. The structured questionnaire was used to obtain primary data for the study. The data collected was analyzed using descriptive and inferential statistics. The association between strategic alliance management and MFI performance was established using structural equation modeling (SEM). According to the study findings, the strategic alliance has a positive and significant effect on the performance of MFIs in Rwanda.

Warutere and Shale (2018) studied the impact of strategic supplier alliance management on supply chain performance in Kenya's devolved government. A case of Murang'a County. The descriptive survey research design, as well as quantitative and qualitative methodologies, were used in the study. The survey's target population was 500 Murang'a County staff members. Structured questionnaires were the primary tool for data gathering. Descriptive and inferential statistics were used to examine the data.

To establish the association between variables, Pearson correlation analysis was used. The study's findings revealed that strategic supplier alliance management has a

positive and significant impact on devolved government supply chain performance in Kenya.

Emami, Welsh, Divari, and Arash (2022) examined the impact of strategic alliance on firm performance among small entrepreneurial firms in the telecommunications industry. The study adopted descriptive research design. The target population of the study was staff of small entrepreneurial firms. The study used primary data collected through questionnaires. data collected was analysed through descriptive and inferential statistics. The study uses structural equation modeling to analyze primary data obtained from a sample of 74 small entrepreneurial firms in the telecommunications sector. The study findings found that strategic alliances significantly and positively impact partners' performance of small entrepreneurial firms in the telecommunication sector.

3. Methodology

3.1 Research Design

The study adopted a descriptive research design. This design was appropriate for collecting information about people's attitude, opinion, and habit. It can be used to obtain information concerning the status of the phenomena and to describe what exists concerning variables and conditions in a situation (Dannels, 2018). Descriptive research has the opportunity to capture data from respondents through a questionnaire (Bloomfield & Fisher, 2019), this design was therefore suitable for this study since it established the effect of supplier relationship management practices on organizational performance of sugar processing firms in Kenya.

3.2 Target Population

According to (Asiamah, Mensah, & Oteng, 2017) target population is a large collection of individuals or objects being the main focus of a scientific query and have similar characteristics and viewed population as a large collection of all subjects from where a stratified sampling is drawn.

This study targeted 50 respondents comprising of 10 merchandise managers, 10 procurement managers, 10 store managers, 10 field supervisors, and 10 chief executive officers in the ten private sugar companies were sampled each company giving one respondent from every category: West Kenya Sugar Company, Butali Sugar Company, Busia Sugar Company, Olepito Sugar Company, Naitiri Sugar Company, Transmara Sugar Company, Sukari Sugar Company, Kwale International Sugar Company, Ranges Sugar Company and Kisii Sugar Company.

3.3 Data Collection Procedure

The research assistants delivered the questionnaires to the respondents in person at each of the ten private sugar firms to gather primary data. The respondents were given two weeks to complete the questionnaires. The research assistants later collected the questionnaires once the allotted time had passed.

3.4 Data Processing and Analysis

The data collected was cleaned, sorted, coded, and run through the Statistical Package for Social Sciences (SPSS) version 27. Both descriptive and inferential statistics were generated. Descriptive statistics comprised of mean, minimum, and maximum statistics. Inferential statistics comprise multiple regression analysis and correlation analysis. Data was presented using tables. The following regression model was used to establish the strength of the relationship between supplier relationship management and procurement performance.

$$Y = \beta_0 + \beta_4 SA + \varepsilon \qquad\qquad (3.2)$$

Where:

Y = procurement performance,

β_0 = constant,

β_4 = regression coefficients,

SA = strategic alliance,

ε = the error term.

4. Research Findings and Discussion

4.1 Descriptive Statistics

Table 1: KMO and Bartlett's Test Results

Construct	No of Items	KMO	Bartlett's test of Sphericity		
			χ^2	Df	P-value
SA	10	0.848	66.613	45	0.020
Procurement performance	10	0.959	108.887	45	0.000

Table 1 results showed KMO values of greater than 0.7 for all constructs hence suitable and based on Bartlett's test with p-values less than 0.05 it was established that the construct had equal variances and hence perfect for factor analysis. Therefore, convergent validity had been established.

Results in Table 2 depicted an average of 4.00 for strategic suppliers frequently engaged in identifying organizational strategic procurement requirements for the company, 4.14 obtained from frequently engagement of suppliers in identifying strategic procurement specification and standardization requirements which improves procurement performance, 4.22 strategic suppliers help in development of procurement specifications and standardization, 4.33 development of procurement specification which improves procurement and supplier performance, 4.36 of the organizations engages its suppliers in identifying distribution delivery centers and new market entry, 4.26 of the organizational helps in increasing the technical capability of the suppliers to meet its supply needs, 4.24 of the organization undertakes supplier evaluation to increase the cost management capabilities of its strategic supplies to meet its supply needs, 4.14 trains its

suppliers on new technology use, 4.50 conduct trainings of suppliers on new technologies which improves procurement and supplier performance, 4.46 of the strategic joint planning improves delivery of goods and lead time of materials.

Table 2: Strategic alliance descriptive statistics

Aspect	Min	Max	Mean
Strategic suppliers are frequently engaged in identifying organization's strategic procurement requirements	2	5	4.00
Frequent engagement of suppliers in identifying strategic procurement specifications and requirements improves procurement performance	2	5	4.14
Strategic suppliers help in the development of procurement specifications and standardization	2	5	4.22
Development of procurement specifications improves procurement and supplier performance	2	5	4.33
The organization engages its suppliers in identifying distribution delivery centers	2	5	4.36
The organization helps increase the technical capability of the suppliers to meet their supply needs	2	5	4.26
The organization undertakes supplier evaluation to increase the cost management capabilities of its strategic supplies to meet its supply needs	1	5	4.24
The organization trains its suppliers on new technology use	2	5	4.14
Training suppliers on new technology improves procurement and supplier performance	2	5	4.50
Strategic joint planning helps to improve delivery and lead time	1	5	4.46

4.2 Correlation Analysis

Given the variables were measured on a Likert scale that involves ranking on a scale of 1 to 5, Spearman's rank correlation analysis was used to establish the association between the independent variables of strategic alliance (SA) and the dependent variable of procurement performance (Y).

Table 3: Correlation analysis results

Variable		SA		Y		
SA	Correlation Coefficient	-.046	.304*	-.072	1.000	.211*
	Sig. (2-tailed)	.751	.032	.619	.	.014
	N	50	50	50	50	50
Y	Correlation Coefficient	.152*	.151*	.217*	.211*	1.000
	Sig. (2-tailed)	.029	.042	.013	.014	.
	N	50	50	50	50	50
*. Correlation is significant at the 0.05 level (2-tailed).						

Note: Y = Procurement performance, SA = Strategic alliance.

Table 3 results indicated correlation coefficients of 0.014. The coefficients had p-values of less than 0.05 for strategic alliance which was 0.014.

Table 4: Regression analysis diagnostics

Model		Unstandardized Coefficients		T	Sig.	Collinearity Statistics
		B	Std. Error			Tolerance
1	(Constant)	2.920	0.720	4.056	.017	1.108
SA	.482	.068	7.088	.038	.902	

In Table 4, a regression model is extracted to show the relationship between supplier relationship management practices and procurement performance.

$$Y = 2.920 + 0.482SA \qquad (4.1)$$

A regression coefficient of 0.482 with a t-statistic and p-value of 7.088 and 0.038 respectively indicated that there was a significant positive relationship between strategic alliance and procurement performance at a 5% level of significance. This implied that a percentage increase in the belief of having strategic alliances with strategic suppliers increases the procurement performance of private sugar firms in Kenya by 0.482%. This may be ascribed to frequent engagements with strategic suppliers, strategic suppliers help in the development of procurement specifications, suppliers' engagement in identifying distribution/ delivery centers and training of suppliers on new technology, and strategic market alliance to improve delivery time. The findings are similar to what was established by Charles et al. (2021), Warutere and Shale (2018), and Emami et al. (2022), who found that strategic alliance had a positive and significant association with the performance of MFIs in Rwanda, Kenya's devolved government and small entrepreneurial firms in the telecommunication sector respectively.

5. Summary, Conclusion and Recommendations

5.1 Summary
The fourth objective of this study was to establish the effect of strategic alliance on the procurement performance of private sugar processing firms in Kenya which was based on the null hypothesis that strategic alliance has no significant effect on the procurement performance of private sugar processing firms in Kenya. Based on descriptive statistics, respondents agreed that frequent engagement of suppliers in identifying strategic procurement requirements and development of procurement specifications improves sugar firms' procurement performance while they strongly agreed that training suppliers on new technology improves sugar firms' procurement performance.

A correlation coefficient of 0.211 with a p-value of 0.014 for strategic alliance and procurement performance indicated that there was a significant positive association between strategic alliance and procurement performance of private sugar firms in Kenya. Further, a regression coefficient of 0.482 with a p-value of 7 0.038 indicated that there was a significant positive relationship between strategic alliance and procurement performance at a 5% level of significance such that a percentage increase in the belief of

having strategic alliance with strategic Suppliers increases procurement performance of private sugar firms in Kenya by 0.482%.

5.2 Conclusions

The objective of this study was to establish the effect of strategic alliance on the procurement performance of private sugar processing firms in Kenya which was based on the null hypothesis that strategic alliance has no significant effect on the procurement performance of private sugar processing firms in Kenya. A regression coefficient of 0.482 with a t-statistic and p-value of 7.088 and 0.038 respectively indicated that there was a significant positive relationship between strategic alliance and procurement performance at a 5% level of significance. This implied that a percentage increase in the belief in having strategic alliances with strategic Suppliers increases the procurement performance of private sugar firms in Kenya by 0.482%. The establishment of a significant positive relationship between strategic alliance and procurement performance indicated that the null hypothesis for rejected such that strategic alliance affected the procurement performance of private sugar firms in Kenya. Embracing strategic alliances therefore enhances and procurement performance of private sugar firms in Kenya.

5.3 Recommendation

As for the strategic alliance variable, a percentage increase in the belief of having strategic alliances with strategic Suppliers increases the procurement performance of private sugar firms in Kenya by 0.482%. It is therefore necessary for the firms to embrace strategic alliances with suppliers if they intend to enhance procurement performance. This may be realized through frequent engagements with strategic suppliers, engaging strategic suppliers in the development of procurement specifications and standardization in identifying distribution/ delivery centers, and training suppliers on new technology and strategic market alliances to improve delivery time.

The coming of two different companies together helps the organization to run smoothly and the suppliers tend to understand the organizational strategies and goals, the sugar companies employing strategic alliances will give them better standards and grounds to perform better on the market and also achieve the competing age. They are also able to plan and target future markets with huge volumes of sales and penetrate new entrants.

Conflict of Interest Statement
The author declares no conflict of interest.

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