

Strategic Supplier Partnerships and Operational Performance of Food and Beverage Manufacturing Firms in Nakuru County, Kenya

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Abstract: Kenya's vision 2030 lays emphasis on the growth of the manufacturing sector as one of the key drivers of economic growth. Manufacturing sector contribute an estimated 10% to Gross Domestic Product, create 13% of formal employment and 12.5% of exports in the country. However, food and beverage manufacturing firms face many operational challenges including inadequate supplies of raw materials, high costs and slow development and implementation of policies which are deterrent to their operational performance. The current study sought to establish the influence of strategic supplier partnerships on operational performance of food and beverage manufacturing firms. The study was anchored on relational exchange theory. An explanatory design with a cross-sectional approach was employed. The study targeted 50 procurement staff members from 9 food and beverage manufacturing firms operating in Nakuru County. Census technique was applied thus all the food and beverage manufacturing firms were involved in the study. The study used a closed-ended questionnaire to collect data which was analyzed through descriptive and inferential data analysis methods. The study established that there was a strong and positive correlation [$r= 0.702^{**}$] between strategic supplier partnerships and operational performance of food and beverage manufacturing firms. Regression analysis results revealed that the beta coefficient was [$\beta= 0.459$; $p= 0.000$]. Therefore, the relationship between strategic supplier partnerships and operational performance was significant. This implies that the strategic supplier partnerships influenced operational performance of food and beverage manufacturing firms. Based on the findings, it is recommended that food and beverage manufacturing firms should focus more on establishing and maintaining strategic supplier partnerships to promote cost reduction and efficiency for better operational performance.

Key words: Strategic Supplier Partnerships, Operational Performance, Food and Beverage Manufacturing Firm.

1. Introduction

Supply chain management ensures effective flow of goods and services from production to consumption (Kellner & Lasch, 2016). It involves the network of suppliers who move products through various steps to the final users. Supply chain management takes into account coordination of all the different parts of the chain as quickly as possible without losing any of the quality or customer satisfaction, while still keeping costs down (Alexander, Jonathan, & Emmanuel, 2013). Therefore, it is paramount to integrate the internal operations and effectively link them with the external operations by focusing on supply chain management practices. Eduardo, Jose and Alvarez (2014) noted that strategic supplier partnerships are key practice of supply chain management. Strategic supplier partnership enhances the capacity of individual participants and is important in aligning the firm towards the direction of realizing potential benefits (Kushwaha & Sharma, 2016). While encouraging problem solving and common strategic planning, strategic supplier partnerships allows the firm to focus on long-term objectives. They are based on sharing the contribution and responsibilities of each party thereby creating a more efficient environment. Furthermore, by making suppliers part of the product design process, the firm can choose the most cost effective product design mechanisms (Kellner & Lasch, 2016). In addition, suppliers can help evaluate product design which helps in establishing the best technical and economical choice for production.

Kenyan manufacturing sector contribute significant to the Gross Domestic Product and it is one of the big four agenda of the government at the moment (Watiri & Kihara, 2017). Food and beverage sub-sector has the biggest proportion of manufacturing sector in Kenya at 22% according to a report by Kenya association of manufactures (KAM, 2017). According to economic survey by Kenya National Bureau of Statistics (KNBS, 2021) Kenyan manufacturing sector growth slowed down in the year 2020 as the real gross value added went down by 0.1% according to economic survey by Kenya National Bureau of Statistics (KNBS, 2021). This presented a significant decline since the sector grew by 2.5% in the year 2019. The decelerated growth was on account of significant decline by 16.7%, 5.7%, and 3.5% in manufacture of beverages, processing of dairy and manufacture of bakery products respectively (KNBS, 2021). According to Kenya Bureau of Statistics (KNBS, 2017). The decline in growth has further been aggravated by COVID 19 pandemic. Kenya's manufacturing sector contributed 10.3% of the total GDP.

Manufacturing sector has been experiencing growth that falls below the GDP growth. For instance, the manufacturing sector growth increased by only 0.3% from year 2015 to 2016; from 3.2% to 3.5%. This growth is not commensurate to the expectations that manufacturing sector could contribute to 10%, 13% and 12.5% increase in GDP, employment and exports respectively over the medium term period 2013-2021 (Watiri & Kihara, 2017). Supply chain management practices allow manufacturing firms to reduce costs, increase operational efficiency, and improved operational performance. The current study examined supplier strategic partnerships as a practice of supply chain management and its influence on operational performance of food and beverage manufacturing firms in Nakuru County.

2. Objective of the Study

The objective of the study was to determine the influence of strategic supplier partnerships on operational performance of food and beverage manufacturing firms in Nakuru County.

3. Literature Review

Strategic supplier partnerships enhance the capacity of individuals in the supply chain and aligns the firm towards the direction of realizing potential benefits that pertains to operational performance (Naveed, 2016). They promote mutual benefit and participation in important policy areas of procurement and supply chain management. Kellner and Lasch (2016) noted that strategic supplier partnerships are based on sharing the contribution and responsibilities of each party thereby creating a more efficient environment. Suppliers can help evaluate product design which helps in establishing the best technical and economical choice for production. Strategic supplier partnerships work better when the links between supply chain partners are performing to the best and thus the more effective firms are internally, the more effective their supply chain will be. Strategic supplier partnership is achieved through the proper application of technology and partnerships. Through this practice, the supply chain can determine how best to meet the demands of the marketplace (Ola & Limberg, 2011). The key elements of strategic supplier partnerships include joint procurement planning, supplier involvement and joint problem solving.

Joint procurement planning entails identification and consolidation of requirements and timeframes for combining procurement engagements of two or more contracting parties (Olapoju, 2019). It is critical in identifying suppliers in the supply chain. Therefore, effective joint procurement planning is important for food and beverage manufacturing companies as supply of inputs determine their operational performance. Kushwaha and Sharma (2016) opined that food and beverage manufacturing companies are encountering competition and pressure to reduce lead times and product prices. The ever-changing markets demand more unique innovations with higher quality products and processes. As such, food and beverage manufacturing companies need to improve supplier involvement in relation to product development processes. Collaboration between manufacturers and supply chain partners at the product development process contributes to production of products that best meet the customer needs (Naveed, 2016). This involvement also results into cost savings which is achieved in the integration of product design and supply chain processes.

Relational exchange theory provides a framework to manage relationship flows, which is important to facilitate resource exchange within and between supply chain management (Gligor, Bozkurt, Russo, & Omar, 2018). The relational exchange arrangement can be viewed as a method to fix the flaws of formal contract, which undermines trust and thereby encourage the opportunistic behavior. The core of the theory is relational norms which can help build up an effective contract governance, and eventually achieve a better vendor- customer relationship. Relation norms are important tools for controlling opportunism and create a healthy long-term collaborative framework for supply chain management (Cortez & Johnston, 2020). Relational exchange theory relates to the study as relational norms helps to build up an effective strategic supplier partnerships which enhance operational performance.

Empirical studies related to strategic supplier partnerships and operational performance have been carried out in the past. Onyango, Kiruri, and Karanja (2015) conducted a study on the effect of strategic supplier relationship management on internal operational performance of manufacturing firms. The findings showed that the strategic supplier relationship management affected the performance. Business-supplier communication and business-supplier joint decision making both individually and jointly have positive effect on internal operational performance. Mwangi (2019) researched on the influence of supply chain optimization on the performance of manufacturing firms in Kenya. The findings indicated that elements of supply chain optimization influenced manufacturing firms' performance. Specifically, the study revealed that the relationship between inventory controls, supplier management, and procurement cost optimization, supply chain automation and performance of manufacturing firms was significant. Furthermore, the staff competence had a moderating effect on the association between supply chain optimization and performance.

A study by Chesaro (2016) found that firms adopted SCM practices which enhanced service delivery, improved decision making, enhanced overall cost reduction and real time delivery of goods and services. Their study used a survey research design using a census approach of 45 firms in Nairobi. Results indicated that there was a significant relationship between SCM practices and operation performance. Musau (2018) carried out a study on supply chain determinants of organizational performance among textile manufacturing firms in Kenya. The findings of the study indicated supply chain information systems, inventory management, buyer-supplier relationship, transport management, and warehouse management positively and significantly affect organizational performance. Moreover, lack of transparency in operations, delayed supplier payments, contractual conflicts, automation of warehouses, poor mechanisms of vehicle scheduling and tracking, inefficient modern inventory management practices and warehouse layout negatively affected performance.

Research gaps were identified from the previous studies and formed the basis for the current study. A study by Mwangi (2019) revealed that inventory controls, supplier management, and procurement cost optimization, supply chain automation influenced the performance of manufacturing firms. Musau (2018) found that supply chain information systems, inventory management, buyer-supplier relationship, transport management, and warehouse management positively and significantly affected organizational performance of textile manufacturing firms. However, the current study analyzed different parameters of strategic supplier partnerships comprising joint procurement planning and supplier involvement. A research Chesaro (2016) was not specific on the type of manufacturing firms but involved a general survey of manufacturing firms in Nairobi County. The current study specifically involved food and beverage manufacturing firms in Nakuru County.

4. Methodology

Explanatory research design with a cross-sectional approach was employed. Explanatory research design goes beyond description of a phenomenon by attempting to explain reasons for a given phenomenon that a descriptive study only observes (Sekaran & Bougie, 2016). The target population comprised all the procurement staff in the 9 food and beverage (F&B) manufacturing firms in Nakuru County, Kenya. The study therefore targeted all the 50 procurement staff in the 9 F&B manufacturing firms. Descriptive analysis employed means, percentages, and standard deviations in describing how strategic supplier partnerships influenced operational performance. On the other hand, inferential analysis employed correlation analysis and regression analysis to establish the relationship between strategic supplier partnerships and operational performance of food and beverage manufacturing firms.

5. Results

This section outlines the analysis results pertaining to the influence of strategic supplier partnerships on operational performance of food and beverage manufacturing firms.

5.1 Influence of Strategic Supplier Partnerships on Operational Performance

The descriptive findings for strategic supplier partnerships as a practice of supply chain management are illustrated on Table 1.

Table 1: Influence of Strategic Supplier Partnerships on Operational Performance

Strategic Supplier Partnerships	N	SA 5	A 4	N 3	D 2	SD 1	Mean	Std. Dev
We always involve our suppliers in planning our procurement activities thus enhancing efficiency	37	51.4%	24.3%	18.9%	5.4%	-	4.22	.947
We have mechanisms that help suppliers to continuously improve on their product quality	37	40.5%	35.1%	16.2%	5.4%	2.7%	4.05	.797
In my firm, quality and efficiency are considered in selecting suppliers	37	37.8%	35.1%	21.6%	2.7%	2.7%	4.03	1.026
We encourage development of suppliers in order to enhance expertise in the procurement process	37	8.1%	13.5%	51.4%	27%	-	3.03	.866
We normally involve suppliers in problem solving on aspects related to the procurement process	37	40.5%	48.6%	5.4%	5.4%	-	4.24	.796
Arising from our close relations with our suppliers, product defects have been minimized	37	8.1%	40.5%	32.4%	8.1%	10.8%	3.27	1.097
Our partnership with suppliers has thus enhanced our internal procurement operations	37	27%	62.2%	8.1%	2.7%	-	4.14	.673

Descriptive findings of the study showed that strategic supplier partnerships influence operational performance of food and beverage manufacturing firms. Table 1 indicates that 51.4% of the procurement staff members strongly agreed while 24.3% agreed (mean=4.22; std. dev=0.947) that their companies always involve suppliers in planning the procurement activities thus enhancing efficiency. Majority of the procurement officers (40.5%) revealed (mean=4.05; std. dev=.797) that food and beverage manufacturing firms have mechanisms that help suppliers to continuously improve on their product quality. The procurement officers further agreed (mean=4.03; std. dev=1.026) that quality and efficiency are considered in selecting suppliers. However, 51.4% of the respondents had differing opinions (mean=3.03; std. dev=.866) on whether their companies encouraged development of suppliers in a bid to enhance expertise in the procurement process. They also agreed (mean=4.24; std. dev=.796) that food and beverage manufacturing firms normally involve suppliers in problem solving on aspects related to the procurement process. Moreover, 62.2% of the procurement staff members concurred (mean=4.14; std.dev=.673) that partnership with suppliers enhance internal procurement operations. Based on descriptive findings, it was found that strategic supplier partnerships determined operational performance of food and beverage manufacturing firms. The companies with strong supplier partnerships were associated with effective operational performance.

5.2 Descriptive Statistics for Operational Performance

The descriptive findings for operational performance are illustrated on Table 2.

Table 2: Descriptive Statistics for Operational Performance

Operational Performance	N	SA 5	A 4	N 3	D 2	SD 1	Mean	Std. Dev
Our firms production costs have been reducing arising from our supply chain practices	37	54.1%	32.4%	10.8%	2.7%	-	4.38	.794
We have enhanced our factory time efficiency due to the effectiveness of our procurement practices	37	40.5%	40.5%	8.1%	8.1%	2.7%	4.08	1.038
We have minimized waste in our internal operational procedures	37	35.1%	48.6%	8.1%	8.1%	-	4.11	.875
Our procurement function achieves value for money due to increased customer satisfaction	37	32.4%	54.1%	10.8%	2.7%	-	4.16	.727
We have reduced process delays and enhanced our delivery rates	37	37.8%	10.8%	5.4%	1.5%	-	4.24	.863
We have consistently met all our regulatory compliance targets on time	37	40.5%	35.1%	16.2%	8.1%	-	4.08	.954
Our inventory levels have reduced thus leading to reduced inventory costs and minimal stock-outs	37	27%	54.1%	16.2%	2.7%	-	4.05	.743

According to descriptive findings on Table 2, 86.5% of the procurement staff members at least agreed (mean=4.38; std. dev=.794) the production costs of food and beverage manufacturing firms had been reducing arising from our supply chain practices. The respondents agreed (mean=4.08; std.dev=1.038) that company efficiency had been enhanced due to the effectiveness of procurement practices. 48.6% the procurement officers noted that the companies had minimized waste in internal operational procedures. Majority of the respondents also agreed (mean=4.16; std. dev=.727) that procurement function achieves value for money due to increased customer satisfaction. 37.8% of the procurement staff members strongly admitted that their companies had reduced process delays and enhanced delivery rates and consistently met all our regulatory compliance targets on time.

5.3 Correlation Analysis between Strategic Supplier Partnerships and Operational Performance

The goal of the study was to establish the relationship between strategic supplier partnerships and operational performance of food and beverage manufacturing firms in Nakuru County. Correlation analysis was conducted and results are indicated on Table 3.

Table 3: Correlation between Strategic Supplier Partnerships and Operational Performance

		Operational Performance
Strategic Supplier Partnerships		Pearson Correlation .702**
		Sig. (2-tailed) .000
		N 37

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3 illustrates the correlation between strategic supplier partnerships practice and operational performance. The relationship is strong, positive and statistically significant ($r=.702^{**}$, $p=.000$) at 1% significance level. It implies that strategic supplier partnerships influence operational performance of food and beverage manufacturing firms. The positive correlation coefficient indicates that firms with more and stable strategic partnerships are able to achieve high operational performance. An increase in operational performance in food and beverage manufacturing firms is hence attributed to improved strategic supplier partnerships.

5.4 Regression Analysis

Regression analysis was conducted to predict changes in operational performance from variations in strategic supplier partnerships. The results are illustrated on Table 4.

Table 4: Regression Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	1.238	.529		2.340	.026
	Strategic Supplier Partnerships	.459	.086	.532	5.330	.000

a. Dependent Variable: Operational Performance

Multiple regression analysis was done using the following model; $Y=\beta_0 + \beta_1 X_1 + \varepsilon$. Based on regression coefficients, the model can be interpreted as; $Y=1.238 + .459X_1 + .529$.

Based on the regression analysis findings, strategic supplier partnerships had beta coefficient of 0.459 with p-value of .000. The sig./p-value is less than 0.05 significance level. This implies that the relationship between strategic supplier partnerships and operational performance was significant. As such, strategic supplier partnerships influenced operational performance of food and beverage manufacturing firms in Nakuru County.

6. Conclusion

Strategic supplier partnerships influence operational performance of food and beverage manufacturing firms by reducing the significant costs involved in setting up deals with new suppliers. Firms are able to strive for cost savings through cooperation in mutually beneficial relationship with key suppliers. Strategic supplier partnerships support joint procurement planning to reduce delays and help in improving quality and customer service. Furthermore, the strategic supplier partnerships enhance supplier involvement, which improve the communication and help them to gain clear understanding of the business and enable them to meet their needs in a more effective manner. Operational performance in food and beverage manufacturing firms is increased with reduction in supply chain delays and increase in flow of operations. This means that strategic supplier partnerships greatly affect operational performance.

7. Recommendation

Based on the above conclusions on study findings, the researcher recommends that food and beverage manufacturing firms should focus more on establishing strategic supplier partnerships to promote cost reduction and efficiency for better operational performance.

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