



**SUPPLIER RELATIONSHIP MANAGEMENT AND PERFORMANCE OF FOOD AND BEVERAGES MANUFACTURING FIRMS IN NAIROBI CITY COUNTY, KENYA**

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**ABSTRACT**

The general objective of this study was to establish the influence of supplier relationship management on performance of food and beverages manufacturing firms in Nairobi City County, Kenya. Specifically, the study sought to examine the effect of supplier selection on performance of food and beverages manufacturing firms in Nairobi City County, Kenya and to assess the effect of strategic collaboration on performance of food and beverages manufacturing firms in Nairobi City County, Kenya. The descriptive research design was employed where data was collected one point in time. This study therefore targeted senior management employees (1 top management employee, 2 middle level management employees and 3 lower management employees) in all the 105 firms. The total target population was therefore be 630 employees. The study's sample size was reached at using Krejcie and Morgan sample size determination formula. The 239 respondents were chosen with the help of stratified random sampling technique. This study relied on both primary and secondary data. Primary data was collected through use of semi structured questionnaires. The study also conducted pilot test to test the validity and the reliability of the data collection instrument. The data collection instrument generated both qualitative and quantitative data. The study used both descriptive and inferential statistics for data analysis with the aid of Statistical Package for Social Sciences (SPSS version 25). Descriptive statistics such as mean, standard deviation, frequency and percentages were used in this study. In relation to inferential statistics, the study used correlation analysis. This was used to establish the relationship between the independent and the dependent variables. Data was then presented in a tables, bar charts and pie charts. The study concludes that supplier selection has a positive and significant effect on performance of food and beverages manufacturing firms in Nairobi City County, Kenya. The study also concludes that supplier collaboration has a positive and significant effect on performance of food and beverages manufacturing firms in Nairobi City County, Kenya. Based on the findings, the management of manufacturing firms in Kenya should develop a comprehensive set of criteria for evaluating and selecting suppliers. Further, the management should foster collaboration between the company and its suppliers by creating platforms for open communication, idea exchange, and joint problem-solving

**Key Words:** Supplier Relationship Management, Supplier Selection, Strategic Collaboration, Food and Beverages Manufacturing Firms

## **Background to the Study**

Manufacturing industries play a critical role in economic growth and development. Manufacturing provides a significant source of demand for goods and services in other sectors of the economy; however, the sales to other industries are not captured in measures of manufacturing sector GDP but are counted in the broader measure of its gross output. Based on the recent statistics, manufacturing contributes £ 6.7 trillion to the global economy (Suleiman, 2016). The manufacturing sector employed 12.4 million workers in 2015 or about 8.8 percent of total U.S employed population (Suleiman, 2016). Manufacturing industries generated \$2.1 trillion in GDP (12.5 percent of total U.S. gross domestic product) in 2013. In the United Kingdom, manufacturing makes up 10% of GVA and 45% of UK exports and directly employs 2.7 million people (Merozwa, 2015).

Although the best performing firms in most African countries are productive even by international standards, and firms in some sectors are as productive as those in East Asia (Banerjee & Majundar, 2014), the average manufacturing firm in Sub-Saharan Africa is three times less productive than the average firm in the best performing East Asian countries. The average firm in Sub-Saharan Africa produces about US\$3,300 of output per worker in 2015 dollars (Ajibike & Arema, 2015). In comparison, the average firm in the successful East Asian exporting economies (China, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam) produces about US\$6,500 of output per worker. The results are also consistent with the fact that firms in China are more productive than firms in Vietnam and that the latter, in turn, are more productive than firms in the three African countries they studied (Fafchamps & Quinn, 2016).

Supplier Relationship Management (SRM) is the discipline of strategically planning for, and managing, all interactions with third party organizations that supply goods and/or services to an organization in order to maximize the value of those interactions (Odongo & Motari, 2020). SRM entails creating closer, more collaborative relationships with key suppliers in order to uncover and realize new value and reduce risk of failure (Kosgei & Gitau, 2016). The immediate objective of SRM is to streamline and make more effective the sourcing processes between an enterprise and its suppliers. It is a strategic, enterprise-wide, long-term, multi-functional, dynamic approach to selecting suppliers of goods and services and managing them and the whole value network from raw materials to final customer use and disposal to continually reduce total ownership costs, manage risks, and improve performance - quality, responsiveness, reliability, and flexibility (Beatrice & Mulyungi, 2019). SRM includes both business practices and software and is part of the information flow component of supply chain management (SCM). SRM practices create a common frame of reference to enable effective communication between an enterprise and suppliers who may use quite different business practices and terminology (Mwangi & Mwangangi, 2018).

Supplier relationship management is a comprehensive approach to managing an enterprise's interactions with the organizations that supply the goods and services it uses. The goal of Supplier Relationship Management (SRM) is to streamline and make more effective the processes between an enterprise and its suppliers just as customer relationship management (Beatrice & Mulyungi, 2019). SRM includes both business practices and software and is part of the information flow component of supply chain management. Yet SRM plays an important role in the reduction of costs and the optimization of firm growth (Kosgei & Gitau, 2016). The short term objectives of SRM are primarily to increase productivity and reduce inventory and cycle time. The long term objectives are to increase market share and profits for all members of the supply chain. SRM ultimately lead to enhanced procurement growth (Miyoko, Marika, & Litondo, 2019). Many retail chain stores lack a proper understanding of SRM techniques (Mwangi & Mwangangi, 2018). Consequently, many retail chain stores experience a wide range of procurement and overall

business problems which erode the suppliers' confidence and thwart business relationships (Shajema, 2018). As a result of such challenges, a mismatch between supplier relationships and retail chain stores growth is eminent (Ochieng, 2018).

In spite of the critical role and positive outcomes that supplier relationship management play on organizational growth (Mwangi & Mwangangi, 2018), Manufacturing firms in Kenya have experienced mixed patterns of positive and negative growth (Kanja & Mwangangi, 2017) leading to lower profits, despite high volumes, and the result has been two thirds of the firms dropping out of the growth curve, hence, their deaths in the volatile competitive retail markets (Odongo & Motari, 2020). This has turned it to be more difficult for the existing firms to maintain market share and achieve growth (Kanja & Mwangangi, 2017). It is therefore essential to assess the influence of supplier relationship management on performance of manufacturing firms.

### **Statement of the Problem**

The manufacturing sector has a great potential for promoting economic growth and competitiveness in the country like Kenya. Data shows that the Government of Kenya spends between 10% - 30% of Gross Domestic Product on procurement alone (Maria, 2013). In Kenya, manufacturing sector is the third leading sector contributing to GDP in Kenya. It contributed 11% of the GDP in 2018 (Kenya Association of Manufacturers, 2018). However, since 2017 some manufacturing firms in Kenya closed their business due to poor performance while others have been forced to relocate their manufacturing plants to other countries. Some companies have also scaled down their manufacturing capacity.

However, the manufacturing sector has experienced the fluctuations over the years under different financial conditions. Data from the Kenya National Bureau of Statistics shows that the manufacturing sector grew by 3.6 percent in the first quarter of 2018, down from 4.1 percent growth in the first quarter of 2017. In the third quarter of 2018, the sector's growth rate was 1.9 percent compared to 3.3 percent in the same quarter in 2017 (Kenya National Bureau of Statistics, 2018). The Kenya Vision 2030 identifies the manufacturing sector as one of the key drivers in the economic pillar for realizing a sustained annual GDP growth of 10 percent geared to make Kenya a middle-income country by the year 2030. Despite the government efforts in improving macroeconomic conditions as well as market de-regulation, the performance of the manufacturing sector according to the Kenya Economic report 2017 regarding contribution to GDP has remained below the medium-term plan and Vision 2030 targets (Njoroge, 2019). Research has shown that supplier relationship management influences firm performance.

Various studies by Owuor and Karanja (2015) studied the effects of strategic supplier development on internal operational performance of retail stores in Kenya. Nyamasege and Biraori (2015) study focused on SRM on the effectiveness of Supply Chain Management in Kenya Public Sector – Ministry of Finance. Beatrice and Mulyungi (2019) study focused on supplier development on procurement performance in Manufacturing Sector in Rwanda. From the afore mentioned, none has been conducted on supplier relationship management and performance of manufacturing firms in Kenya. This has created a knowledge gap. It is against this background that necessitated a study to be carried out on the influence of supplier relationship management on performance of food and beverages manufacturing firms in Nairobi City County, Kenya.

### **Objectives of the Study**

The study was guided by the following specific objectives:

- i. To examine the effect of supplier selection on performance of food and beverages manufacturing firms in Nairobi City County, Kenya.
- ii. To assess the effect of strategic collaboration on performance of food and beverages manufacturing firms in Nairobi City County, Kenya.

## LITERATURE REVIEW

### Theoretical Review

#### Resource Based Theory

The resource-based view (RBV) was advanced by Teece et al., (1997). It emphasizes that a firm utilizes its resources and capabilities to create a competitive advantage that ultimately results in superior value creation and achieve organizational effectiveness. In order to achieve organizational effectiveness, the firm must allocate its resources and capabilities wisely against competing needs as a result of changing business environment. RBV depicts companies as a collection of resources and capabilities required for product or market competition. Resources are the physical capital, human capital, and organizational capital owned or controlled by a firm that can be used to conceive of and implement strategies (Barney, 1991).

According to Barney, resources and capabilities need to meet a four point criteria to provide superior performance. First, they must be valuable, enabling a firm to not only exploit its environmental opportunities but also neutralize its threats. Secondly they must be rare among its current or potential competitors. Thirdly they must be costly to imitate, and lastly they must be without close strategic substitutes. Capabilities reflect company's ability to combine resources that the organization can muster in ways that promote superior performance in a dynamic business environment (Teece et al., 1997). Makadok (2001) identifies two key distinctions between resources and capabilities. First, capabilities are a special type of organizationally embedded, non-transferable, firm specific resource. Second the purpose of capabilities is to improve the productivity of the other resources possessed by the firm.

The source of an organization competitive advantage lies mainly in how it exploits its distinctive internal resources and competence by setting strategic objectives based on what they enable it to (David, 2011). The resource-based approach starts with the organizations strengths and seeks an environment that will enable it exploit them by changing environments to suit what it does best rather than changing what it does best to fit the environment. One of the key insights of the resource-based view is that not all organizational resources are a potential source of competitive advantage (Hilt, 2011). However, in order to be competitive, resources must be valuable by being capable of creating customers value allowing the firms to implement strategies that will enable it to meet customers' needs more efficiently and effectively, rare and in high demand, difficult for competitors to imitate and difficult for competitors to substitute. Resource Based Theory will be used in this study to the effect of supplier selection on supplier relationship management on performance of manufacturing firms in Nairobi County, Kenya.

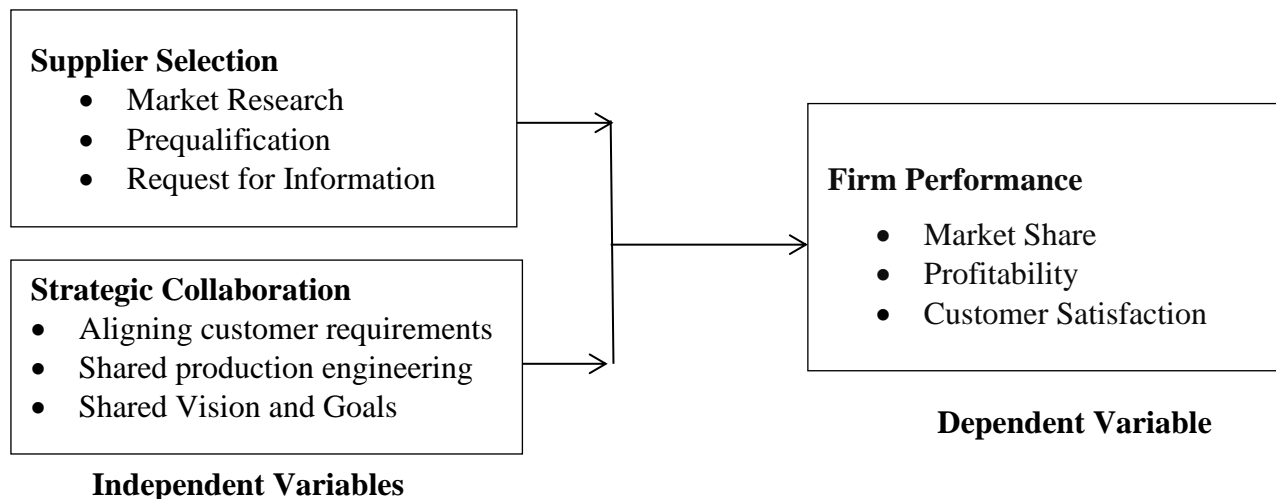
#### Transaction Cost Theory

Transaction cost theory is described as the cost of providing a good or service through the external market rather than having that good or service provided by the internal organization (Coase, 1937). More specifically transaction cost theory helps an organization with the decision to make a product or purchase a product or service. Transaction cost theory relates to global sourcing from a purchasing complexity and resource standpoint because those factors will help drive the make or buy decision for the business. More complex transitions require more oversight and review than less complex and more transactional sourcing activities (Trautmann, Bals, & Hartmann, 2019). Based on this understanding the purchasing organization expends more resources on sourcing activities that are more complex in nature, while less complex purchases require less resources and oversight. Helping the business determine which products or services it will in source or outsource.

According to Oyediran and Akintola (2015) transaction cost theory is one of the key motivators of auditing award and execution of a contract in an organization. The transaction cost economics focuses on the organization of transaction that occur whenever a good or service is transferred from a provider to a user across separate interface. The theory sees institutions and markets as different possible forms of organizing and coordinating economic transactions (Pearson & Grandon, 2015). According to Tran and Huang (2018) transaction cost arises every time a product or service is being transferred from one stage to another where new sets of capabilities are needed to make the products or services. Woodside and Biemans (2015) argues that auditing award and execution of contract lowers the cost of searching, selecting and monitoring suppliers. This study will use Transaction Cost Theory to assess the effect of strategic collaboration on performance of manufacturing firms in Nairobi County, Kenya.

### Conceptual Framework

Figure 1 shows the conceptual framework which will be used in this study and depicts the interrelationship between the study variables. The independent variables are; supplier selection, and supplier collaboration while the dependent variable is performance of food and beverages manufacturing firms in Nairobi City County, Kenya.



**Figure 1: Conceptual Framework**

### Supplier Selection

Supplier selection is a critical process in supply chain management and procurement for any organization, including manufacturing firms. It involves identifying, evaluating, and choosing suppliers who can provide goods or services that meet the organization's requirements in terms of quality, cost, delivery, and other important factors. Effective supplier selection is vital to ensure a reliable and efficient supply chain, minimize risks, and enhance overall business performance (Taherdoost & Brard, 2019). Supplier selection entails; market research, prequalification and request for Information. Market research is a systematic process of collecting, analyzing, and interpreting data related to a specific market, industry, or target audience. It involves gathering valuable information to understand market dynamics, consumer behavior, and competitor activities. Market research plays a crucial role in guiding business decisions and formulating effective strategies (Gharakhani, 2016)

Prequalification is an essential component of supplier selection and is often used to streamline the supplier evaluation process. It involves an initial assessment of potential suppliers before inviting them to participate in a more detailed bidding or tendering process. The primary objective of prequalification is to identify suppliers who meet the minimum criteria and qualifications to be considered for further engagement (Huang, 2019). Naibor and Moronge (2018) holds that request for Information (RFI) is another important component of supplier selection. It is a formal process where organizations gather information about potential suppliers to assess their capabilities, services, and suitability for a specific project or contract. The RFI is typically sent out before the formal Request for Proposal (RFP) or Request for Quotation (RFQ) to help organizations gather preliminary information about potential suppliers

### **Supplier Collaboration**

Supplier collaboration is a strategic approach that involves the active engagement and cooperation between organizations and their suppliers to achieve common goals, improve supply chain efficiency, and drive mutual success. It goes beyond the traditional buyer-supplier relationship and emphasizes a more collaborative and integrated approach to working together. Supplier collaboration aims to create a seamless and transparent flow of information, resources, and knowledge between the parties (Morgan & Hunt, 2017). Shalle, Guyo, and Amuhaya, (2018) indicates that aligning customer requirements is a critical process for businesses to ensure that their products, services, and overall offerings meet the expectations and needs of their target customers. By aligning customer requirements, organizations can deliver value, enhance customer satisfaction, and gain a competitive advantage in the market. Shared production engineering refers to a collaborative approach where multiple organizations or partners pool their resources, knowledge, and expertise in the field of production engineering to achieve common goals and optimize manufacturing processes. It involves sharing best practices, technologies, and innovations to enhance productivity, efficiency, and overall performance in the production environment. Shared production engineering can take various forms, such as joint research and development, technology transfer, or consortiums formed to tackle specific production challenges (Kamau & Odari, 2017).

### **Empirical Review**

#### **Supplier Selection and Performance**

Taherdoost and Brard (2019) conducted a study on analyzing the Process of Supplier Selection Criteria and Methods. The current paper provides an overall picture of research on supply chain management, supplier selection criteria and supplier selection evaluation methods (multi-criteria decision making). A summary of the process of supplier selection can be helpful for companies to have a clear understanding of the concept in order to improve their success and competitiveness. The results show that the application of a structured decision-making technique is vital, especially under the complex conditions that include both qualitative and quantitative criteria.

Gharakhani (2016) researched on the evaluation of supplier selection Criteria by Fuzzy DEMATEL Method. Supply chain management can be considered as a key component of competitive strategy to enhance organisational productivity, performance and profitability (Askarany et al,2010). The aim of this paper is use the fuzzy DEMATEL method to find the intensity of influence of supplier selection criteria. This research designed questionnaire. Questionnaires sent to ten professional experts in different departments of automobile industry in Iran. From the fuzzy DEMATEL results, it can be understood the Willingness and Attitude is the most influence and the strongest connection to other criteria.

Huang (2019) citing from Barney works suggested that a firm's core resources and capabilities are the important tools for the organization in gaining and preserving sustainable competitive advantage. Thus, the needs of selecting supplier were not only to meet the buyer needs in term of products and performance but also in alignment with goals and objectives of both parties (Hsu et al., 2016). According to Huang (2019) definition, resources refer to all assets, capabilities, organizational processes, firm attributes, information and knowledge controlled by a firm that can improve its efficiency and effectiveness. The RBV theory informs the manufacturing firm's importance of valuing its processes and resources as it forms part of their competitive advantage. Similarly, the approach through which an organization takes in formulating its supplier selection criteria ought to consider the process as part of critical resource that defines their marketability.

Naibor and Moronge (2018) conducted a study on the influence of supplier selection criteria on performance of manufacturing companies in Kenya. The study adopted a descriptive survey design. The target population was the manufacturing firms registered by the Kenya Association of Manufacturers by June 2017. Yamane formula was used to determine a sample size of 87. The head of procurement functions from each firm was considered for the study. Quantitative primary data was used for analysis. The findings revealed that supplier evaluation criteria had a positive and significant influence on performance of manufacturing firms in Kenya. All the four variables positively and significantly influence performance. The study recommended that manufacturing firms operating in Kenya should aim to enhance their financial status evaluation practices so as to record an improvement in performance because financial status evaluation helped establish whether the supplier can have continuity in supply before being bankrupt. Some of the financial indicators to be evaluated were credit worthiness, level of financial accountability and financing mode

### **Supplier Collaboration and Performance**

Comparative studies show that supply chain firms with high levels of collaboration have greater chances of sustaining their relationship than those in less collaborative supply chains (Myhr&Spekman, 2015). In this respect ,buyer-supplier collaboration refers to “two or more chain members working together to create a competitive advantage (Sridharan & Togar, 2018).It is also a form of relational exchange that requires information sharing, incentive alignment and joint decision making (Corsten & Felde, 2015; Simatupang&Sridharan, 2015). This enhances trust, commitment and adaptation between firms with their suppliers subsequently resulting in relationship continuity (Morgan & Hunt, 2017)

By focusing on relational exchange collaboration entails the activities that are undertaken faintly rather than unilaterally (Heide 2018; Zahear&Zenkatraman 2019; Simatupang&Sridharan 2019) suggest that the requirements for effective collaboration are mutual objectives, integrated policies joint decision making information sharing of benefits and losses. Today, buyer- supplier relationships have become “strategic” and the process of relationship development is accelerated as firms strive to create relationships to achieve their goals. An important phenomenon related to buyer-seller relationships is that many buyers are developing single source suppliers because of the pressure to increase quality, reduce inventory, develop just-in-time systems, and decrease time to market. The ultimate goal in developing these capabilities is to reduce costs.

Shalle, Guyo, and Amuhaya, (2018) Concluded that buyer/supplier collaboration enhances procurement performance hence creating a competitive advantage through sharing information making joint decision, inter-organizational relationship. This indicates that the level of supply chain collaboration has an important interaction effect on the relation between external resources and buying firm performance, where collaborative forms of buyer-supplier exchange facilitate greater access to external resources. The findings are pointer to the responsiveness, flexibility,

commitment and the belief of the trading partners are willing to devote energy to sustaining the relationship.

Kamau and Odari (2017) researched on the effect of supplier collaboration on organizational competitiveness of manufacturing firms in Kenya: Case of East African Breweries Ltd. The study adopted a descriptive research design with the target population of 150 employees of East Africa Breweries a sample size of 60 employees were used which were selected using stratified random sampling technique. Questionnaire was used as the data collection instrument. Pilot test was carried on five respondents to determine the validity and reliability of data collection instruments. The study concluded that supplier collaboration increases organization competitiveness to a very great extent thus the study recommends that the manufacturing firms should work closely and support their suppliers. Having long term relationships with them so that they can end up having also collaborative relationship which in turns not only leads to a win win situation but to also a win more-win more situations

### **RESEARCH METHODOLOGY**

The descriptive research design was employed where data was collected one point in time. Creswell and Creswell (2017) notes that a descriptive survey seeks to obtain information that describes existing phenomena by asking questions relating to individual perceptions and attitudes. The target population for this study was manufacturing firms in Kenya. Information on the firms was retrieved from Kenya Association of Manufacturers (KAM, 2022). The manufacturing firms were the unit of analysis while the top managers were the unit of observation. The object from which information is obtained is referred to as a unit of observation (Cooper & Schindler, 2016). The study's target population includes the senior managers in large manufacturing firms in Nairobi County Kenya. According to KAM (2018), the total number of manufacturing firms is 15. This study therefore targeted senior management employees (1 top management employee, 2 middle level management employees and 3 lower management employees) in all the 105 firms. The total target population was therefore be 630 employees.

The study's sample size was reached at using Krejcie and Morgan sample size determination formula (Russell, 2013). Using this formula a representative sample was obtained. The study's total population is 630. The 239 respondents were chosen with the help of stratified random sampling technique. Stratified random sampling technique was used since the population of interest is not homogeneous and could be sub-divided into groups or strata to obtain a representative sample. The study then used simple random sampling to select respondents from each group. Primary data was used in this study. The study's primary data was obtained using semi-structured questionnaires.

The researcher carried out a pilot study to ensure the data collection tool is reliable and valid. The pilot test helped correct some of the challenges encountered before undertaking the final study. The pretesting sample was made of 23 respondents, representing 10% of the sample size. The results from the pilot test were not used in the main study. In addition, the respondents used in the pilot test were excluded from the final study.

Quantitative and qualitative data was generated from the closed-ended and open-ended questions, respectively. Qualitative data was analysed on thematic basis and the findings provided in a narrative form. Inferential and descriptive statistics was employed for analysis of quantitative data with the assistance of Statistical Package for Social Sciences (SPSS version 25).

### **PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA**

From the 239 questionnaires 231 were completely filled and returned hence a response rate of 96.7%. The response rate was considered as suitable for making inferences from the data collected. Smith (2018) indicates that a response rate that is above fifty per-cent is considered adequate for



data analysis and reporting while a response rate that is above 70% is classified as excellent. Hence, the response rate of this study was within the acceptable limits for drawing conclusions and making recommendations.

## Descriptive Statistics Analysis

### Supplier Selection and Firm Performance

The first specific objective of the study was to examine the effect of supplier selection on performance of food and beverages manufacturing firms in Nairobi City County, Kenya. The respondents were requested to indicate their level of agreement on statements relating to supplier selection and performance of food and beverages manufacturing firms in Nairobi City County, Kenya. A 5 point Likert scale was used where 1 symbolized strongly disagree, 2 symbolized disagree, 3 symbolized neutral, 4 symbolized agree and 5 symbolized strongly agree. The results were as presented in Table 1.

From the results, the respondents agreed that their manufacturing firm considers various factors when selecting suppliers, such as price, quality, reliability, proximity, and reputation. This is supported by a mean of 3.943 (std. dv = 0.981). In addition, as shown by a mean of 3.926 (std. dv = 0.850), the respondents agreed that the quality of products or services offered by our suppliers is a critical consideration in our supplier selection process. Further, the respondents agreed that they place high importance on price competitiveness when choosing suppliers for their manufacturing operations. This is shown by a mean of 3.911 (std. dv = 0.914).

The respondents also agreed that delivery reliability is a crucial criterion for supplier selection to ensure timely production and delivery of goods. This is shown by a mean of 3.896 (std. dv = 0.947). With a mean of 3.889 (std. dv = 0.856), the respondents agreed that the financial stability of potential suppliers is carefully evaluated to assess their long-term viability as partners. The respondents agreed that they prefer to work with suppliers located close to our manufacturing facility to minimize transportation costs and lead times. This is supported by a mean of 3.876 (std. dv = 0.694). In addition, as shown by a mean of 3.764 (std. dv = 0.892), the respondents agreed that the reputation and past performance of suppliers play a significant role in our decision-making process.

**Table 1: Supplier Selection and Firm Performance**

|  | Mean         | Std. Deviation |
|--|--------------|----------------|
| Our manufacturing firm considers various factors when selecting suppliers, such as price, quality, reliability, proximity, and reputation. | 3.943        | 0.981          |
| The quality of products or services offered by our suppliers is a critical consideration in our supplier selection process.                | 3.926        | 0.850          |
| We place high importance on price competitiveness when choosing suppliers for our manufacturing operations.                                | 3.911        | 0.914          |
| Delivery reliability is a crucial criterion for supplier selection to ensure timely production and delivery of goods.                      | 3.896        | 0.947          |
| The financial stability of potential suppliers is carefully evaluated to assess their long-term viability as partners.                     | 3.889        | 0.856          |
| We prefer to work with suppliers located close to our manufacturing facility to minimize transportation costs and lead times.              | 3.876        | 0.694          |
| The reputation and past performance of suppliers play a significant role in our decision-making process.                                   | 3.764        | 0.892          |
| <b>Aggregate</b>   | <b>3.898</b> | <b>0.873</b>   |

## Strategic Collaboration and Firm Performance

The second specific objective of the study was to assess the effect of strategic collaboration on performance of food and beverages manufacturing firms in Nairobi City County, Kenya. The respondents were requested to indicate their level of agreement on various statements relating to strategic collaboration and performance of food and beverages manufacturing firms in Nairobi City County, Kenya. A 5 point Likert scale was used where 1 symbolized strongly disagree, 2 symbolized disagree, 3 symbolized neutral, 4 symbolized agree and 5 symbolized strongly agree. The results were as presented in Table 2.

From the results, the respondents agreed that strategic collaboration with key suppliers is a fundamental aspect of their manufacturing firm's supply chain strategy. This is supported by a mean of 3.968 (std. dv = 0.905). In addition, as shown by a mean of 3.859 (std. dv = 0.885), the respondents agreed that firm believes that strategic collaboration with suppliers fosters innovation, efficiency, and mutual growth. Further, the respondents agreed that they actively seek collaborative partnerships with suppliers to achieve a competitive advantage in the market. This is shown by a mean of 3.840 (std. dv = 0.605). With a mean of 3.835 (std. dv = 0.981), the respondents agreed that strategic collaboration with suppliers is based on a shared vision, goals, and commitment to long-term success.

The respondents agreed that they value open and transparent communication with their strategic partners to foster trust and synergy. This is supported by a mean of 3.821 (std. dv = 0.873). In addition, as shown by a mean of 3.798 (std. dv = 0.786), the respondents agreed that collaborative problem-solving with suppliers allows us to address challenges proactively and find innovative solutions. Further, the respondents agreed that their manufacturing firm actively identifies opportunities for joint research and development projects with strategic partners. This is shown by a mean of 3.753 (std. dv = 0.962). With a mean of 3.687 (std. dv = 0.786), the respondents agreed that strategic collaboration with key suppliers is a fundamental aspect of our manufacturing firm's supply chain strategy.

**Table 2: Strategic Collaboration and Firm Performance**

|   | Mean         | Std. Deviation |
|---|--------------|----------------|
| Strategic collaboration with key suppliers is a fundamental aspect of our manufacturing firm's supply chain strategy.         | 3.968        | 0.905          |
| Our firm believes that strategic collaboration with suppliers fosters innovation, efficiency, and mutual growth.              | 3.859        | 0.885          |
| We actively seek collaborative partnerships with suppliers to achieve a competitive advantage in the market.                  | 3.840        | 0.605          |
| Strategic collaboration with suppliers is based on a shared vision, goals, and commitment to long-term success.               | 3.835        | 0.981          |
| We value open and transparent communication with our strategic partners to foster trust and synergy.                          | 3.821        | 0.873          |
| Collaborative problem-solving with suppliers allows us to address challenges proactively and find innovative solutions.       | 3.798        | 0.786          |
| Our manufacturing firm actively identifies opportunities for joint research and development projects with strategic partners. | 3.753        | 0.962          |
| Strategic collaboration with key suppliers is a fundamental aspect of our manufacturing firm's supply chain strategy.         | 3.687        | 0.786          |
| <b>Aggregate</b>  | <b>3.819</b> | <b>0.867</b>   |

### Performance of Manufacturing Firm in Kenya

The respondents were requested to indicate their level of agreement on various statements relating to performance of manufacturing firm in Kenya. A 5 point Likert scale was used where 1 symbolized strongly disagree, 2 symbolized disagree, 3 symbolized neutral, 4 symbolized agree and 5 symbolized strongly agree. The results were as presented in Table 3.

From the results, the respondents agreed that performance of their organization has been improving over the years. This is supported by a mean of 3.984 (std. dv = 0.997). In addition, as shown by a mean of 3.907 (std. dv = 0.831), the respondents agreed that profitability of their firm has been improving over the years. Further, the respondents agreed that market share of their organization has increased over the year. This is shown by a mean of 3.828 (std. dv = 0.563). The respondents also agreed that there are few customer complaints concerning the quality of their services. This is shown by a mean of 3.821 (std. dv = 0.851). It was also agreed that respondents are satisfied with the performance of their organization. This is shown by a mean of 3.819 (std. dv = 0.798).

**Table 3: Performance of Manufacturing Firm in Kenya**

|  | Mean         | Std. Deviation |
|--|--------------|----------------|
| The performance of our organization has been improving over the years    | 3.984        | 0.997          |
| The profitability of our firm has been improving over the years          | 3.907        | 0.831          |
| The market share of our organization has increased over the year         | 3.828        | 0.563          |
| There are few customer complaints concerning the quality of our services | 3.821        | 0.851          |
| Am satisfied with the performance of our organization                    | 3.819        | 0.798          |
| <b>Aggregate</b>   | <b>3.829</b> | <b>0.818</b>   |

### Inferential Statistics

#### Correlation Analysis

The present study used Pearson correlation analysis to determine the strength of association between independent variables and the dependent variable (performance of food and beverages manufacturing firms in Nairobi City County, Kenya) dependent variable. Pearson correlation coefficient range between zero and one, where by the strength of association increase with increase in the value of the correlation coefficients. The current study employed Taylor (2018) correlation coefficient ratings where by 0.80 to 1.00 depicts a very strong relationship, 0.60 to 0.79 depicts strong, 0.40 to 0.59 depicts moderate, 0.20 to 0.39 depicts weak.

**Table 4: Correlation Coefficients**

|                         |                     | Firm Performance | Supplier Selection | Strategic Collaboration |
|-------------------------|---------------------|------------------|--------------------|-------------------------|
| Firm Performance        | Pearson Correlation | 1                |                    |                         |
|                         | Sig. (2-tailed)     |                  |                    |                         |
|                         | N                   | 231              |                    |                         |
| Supplier Selection      | Pearson Correlation | .836**           | 1                  |                         |
|                         | Sig. (2-tailed)     | .002             |                    |                         |
|                         | N                   | 231              | 231                |                         |
| Strategic Collaboration | Pearson Correlation | .856**           | .185               | 1                       |
|                         | Sig. (2-tailed)     | .000             | .078               |                         |
|                         | N                   | 231              | 231                | 231                     |

From the results, there was a very strong relationship between supplier selection and performance of food and beverages manufacturing firms in Nairobi City County, Kenya ( $r = 0.836$ ,  $p$  value  $=0.002$ ). The relationship was significant since the  $p$  value  $0.002$  was less than  $0.05$  (significant level). The findings are in line with the findings of Taherdoost and Brard (2019) who indicated that there is a very strong relationship between supplier selection and firm performance.

The results also revealed that there was a very strong relationship between strategic collaboration and performance of food and beverages manufacturing firms in Nairobi City County, Kenya ( $r = 0.856$ ,  $p$  value  $=0.000$ ). The relationship was significant since the  $p$  value  $0.000$  was less than  $0.05$  (significant level). The findings are in line with the results of Shalle, Guyo, and Amuhaya, (2018) who revealed that there is a very strong relationship between strategic collaboration and firm performance

### Regression Analysis

Multivariate regression analysis was used to assess the relationship between independent variables (supplier selection and strategic collaboration) and the dependent variable (performance of food and beverages manufacturing firms in Nairobi City County, Kenya)

**Table 5: Model Summary**

| Model | R    | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|------|----------|-------------------|----------------------------|
| 1     | .940 | .884     | .885              | .582                       |

a. Predictors: (Constant), supplier selection and strategic collaboration

The model summary was used to explain the variation in the dependent variable that could be explained by the independent variables. The  $r$ -squared for the relationship between the independent variables and the dependent variable was  $0.884$ . This implied that  $88.4\%$  of the variation in the dependent variable (performance of food and beverages manufacturing firms in Nairobi City County, Kenya) could be explained by independent variables (supplier selection and strategic collaboration).

**Table 6: Analysis of Variance**

| Model        | Sum of Squares | df  | Mean Square | F      | Sig.              |
|--------------|----------------|-----|-------------|--------|-------------------|
| 1 Regression | 12.027         | 4   | 3.018       | 104.07 | .000 <sup>b</sup> |
| Residual     | 6.568          | 226 | .029        |        |                   |
| Total        | 18.595         | 230 |             |        |                   |

a. Dependent Variable: Performance of food and beverages manufacturing firms

b. Predictors: (Constant), supplier selection, and strategic collaboration

The ANOVA was used to determine whether the model was a good fit for the data.  $F$  calculated was  $104.07$  while the  $F$  critical was  $2.412$ . The  $p$  value was  $0.000$ . Since the  $F$ -calculated was greater than the  $F$ -critical and the  $p$  value  $0.000$  was less than  $0.05$ , the model was considered as a good fit for the data. Therefore, the model can be used to predict the influence of supplier selection, and strategic collaboration on performance of food and beverages manufacturing firms in Nairobi City County, Kenya.

**Table 7: Regression Coefficients**

| Model |                         | Unstandardized Coefficients |            | Standardize         | t     | Sig.  |
|-------|-------------------------|-----------------------------|------------|---------------------|-------|-------|
|       |                         | B                           | Std. Error | d Coefficients Beta |       |       |
| 1     | (Constant)              | 0.311                       | 0.082      |                     | 3.793 | 0.003 |
|       | supplier selection      | 0.387                       | 0.091      | 0.388               | 3.593 | 0.003 |
|       | strategic collaboration | 0.392                       | 0.102      | 0.393               | 3.843 | 0.001 |

a Dependent Variable: performance of food and beverages manufacturing firms

The regression model was as follows:

$$Y = 0.311 + 0.387X_1 + 0.392X_2 + \varepsilon$$

According to the results, supplier selection has a significant effect on performance of food and beverages manufacturing firms in Nairobi City County, Kenya ( $\beta_1=0.387$ , p value= 0.003). The relationship was considered significant since the p value 0.003 was less than the significant level of 0.05. The findings are in line with the findings of Taherdoost and Brard (2019) who indicated that there is a very strong relationship between supplier selection and firm performance.

In addition, the results revealed that strategic collaboration has significant effect on performance of food and beverages manufacturing firms in Nairobi City County, Kenya ( $\beta_1=0.392$ , p value= 0.001). The relationship was considered significant since the p value 0.001 was less than the significant level of 0.05. The findings are in line with the results of Shalle, Guyo, and Amuhaya, (2018) who revealed that there is a very strong relationship between strategic collaboration and firm performance.

### Conclusions

The study concludes that supplier selection has a positive and significant effect on performance of food and beverages manufacturing firms in Nairobi City County, Kenya. Findings revealed that market Research, prequalification and request for information influence performance of food and beverages manufacturing firms in Nairobi City County, Kenya

The study also concludes that supplier collaboration has a positive and significant effect on performance of food and beverages manufacturing firms in Nairobi City County, Kenya. Findings revealed that aligning customer requirements, shared production engineering and shared vision and goals influence performance of food and beverages manufacturing firms in Nairobi City County, Kenya.

### Recommendations

The management of manufacturing firms in Kenya should develop a comprehensive set of criteria for evaluating and selecting suppliers. Consider factors such as quality, reliability, cost, flexibility, and social responsibility. Regularly review and update these criteria to ensure they align with the company's strategic objectives.

The management should clearly communicate the company's strategic goals and objectives to suppliers. Aligning supplier activities with the overall business strategy promotes a shared vision and ensures that both parties are working towards common goals.

## Suggestions for Further Studies

This study focused on establishing the influence of supplier relationship management on performance of food and beverages manufacturing firms in Nairobi City County, Kenya. Having been limited to food and beverages manufacturing firms in Nairobi City County, Kenya, the findings of this study cannot be generalized to other manufacturing firms in Kenya. The study therefore suggests further studies on the influence of supplier relationship management on performance of other manufacturing firms in Kenya.

Further, the study found that the independent variables (supplier selection and strategic collaboration) could only explain 88.4% of performance of food and beverages manufacturing firms in Nairobi City County, Kenya. This study therefore suggests research on other factors affecting performance of food and beverages manufacturing firms in Nairobi City County, Kenya

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