



**INFLUENCE OF SUPPLY CHAIN MANAGEMENT PRACTICES ON THE PERFORMANCE OF FAST MOVING
MANUFACTURING FIRMS IN NAIROBI CITY COUNTY, KENYA**

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ABSTRACT

This study sought to identify the influence of supply chain management practices on the performance of fast moving goods manufacturers in Nairobi County, Kenya. Additionally, the study aimed to identify the influence of supply chain elements such as purchasing, distribution, operation, and integration on the performance of fast moving manufacturing firms. The study used descriptive survey design and the target population was 51 fast moving goods manufacturers in Nairobi County, Kenya. Primary data was collected by use of structured questionnaires through drop and pick method. The research instrument generated quantitative data, which was analyzed by the use of descriptive and inferential statistics. Purchasing had a positive influence on the performance of fast moving goods manufacturers in Nairobi County ($\beta_1=0.521$, p -value=0.000). Secondly, distribution had a positive influence with ($\beta_2=0.345$, p -value=0.001). Additionally, operation indicated a ($\beta_3=0.260$, p -value=0.004). Finally, the model indicated that integration had a weak positive influence on the performance of fast moving goods manufacturers ($\beta_3=0.123$, p -value=0.019). The r -squared in this study was 0.767, which implied that the four independent variables explained up to 76.7% of the dependent variable. F -critical was (2.606). The study concluded that fast moving manufacturing companies in Nairobi County were using supply chains management practices such as purchasing, distribution, operations, and integration. The study also concluded that supply chain management practices had a significant influence on the performance of manufacturers in Nairobi County. The study found that fast-moving manufacturers companies did not exchange information that helped establish business planning and did not share proprietary information with suppliers through an effective integration system. In addition, fast moving goods manufacturing companies did not achieve effective purchasing practices due to lack of evaluating their suppliers frequently and had no compatible communication and information system with their supplier.

Key Words: *purchasing, distribution, operation, integration, manufacturing firms*

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INTRODUCTION

Supply chain management is defined as the supervision of supply chain activities while focusing on maximizing customer value and achieving a maintainable level of competitive edge (Prachad & Tata, 2010). The business dynamism environment is characterized by intense competition, diminishing resources and internationalization among other factors; many manufacturing firms are forced to produce products at lower costs. Majority of the manufacturing companies are adopting supply management control techniques which minimize operational costs hence maximizing profits (Sharma & Arya, 2016). Supply management practices improve efficiency on the supply chain, and thus it plays an essential role among manufacturing firms.

In manufacturing firms, too much stock could lead to tied capital, increase in holding cost, deterioration of materials, obsolescence and, theft. Materials shortage in manufacturing firms can lead to production process interruption, underutilization of machines and poor customers' relations. Among fast moving manufacturing firms, supply chain management is in the production process, and therefore its management helps a firm to grow and increase its profitability and customer base (Amarnath, 2013). To ensure there is no stock out, which may dissatisfy customer needs, proper supply chain management control must be provided.

The fast moving consumer goods manufacturing firms in Nairobi are considered to be active and fast in the production of a range of items (Apte, 2010). These organizations are mostly concerned with fast moving products like home care products, refreshments, personal care, and foods.

Today, the business environment has taken a paradigm shift; this situation has paved way for the implementation of new supply chain management techniques. This change in business operations has significantly improved the supply chain performance

where companies focus on the overall supply chain performance of firms as opposed to individuals enterprises. According to Shapiro (2015), the increased level of competition has significantly increased the efficiency levels response times, demand forecasting, customer satisfaction, and service delivery. The performance levels of manufacturing companies is measured based on the outputs of companies and more so on the achievement of set goals and objectives which involves production of products for consumer use.

Supply chain management practices refer to the regulation, control, and maximization of inventory in an organization. Silver (2017) defines supply management practices as the supervision and coordination of activities involving supply, storage, distribution, and recording of inventory in an organization to maintain adequate quantities to meet the current needs of the customers without having a loss of excessive supply (Mungai, 2014). Supply control techniques are crucial, and technical knowhow in them is wanted; therefore, procurement staff and managers should be able to apply them to improve the supply performance of their organization.

Organizations have the responsibility of improving supply chain performance as a way of remaining operational and gain competitive advantage. According to Porter (2010), the achievements of a company shed light on the performance levels of any given organization. It is important to note that supply chain performance is accessed in different levels of management. The hierarchies in question include the strategic, operational and tactical levels wherein trade-offs and policies can be differentiated and suitable controls are exerted. A hierarchy is founded on the horizon of time for activities and the pertinence of decisions to influence the different management levels. According to Silver (2017), supply chain performance measures and metrics depend on supply chain processes/activities, which

include source, plan, and delivery/customer and assemble/make.

Over the past decade, more rapid growth has been experienced in Kenya's FMCG industry. Majumdar (2014) came up with the term (fast moving consumer goods) to represent goods that are sold at a lower price but moves quickly to consumers. Such products have high demand, and they do not stay longer in retailers' shelves. This situation has led to many manufacturers both local and international to enter into this industrial sector to gain market share. Some of the manufacturers include Kapa Oil Refineries, Coca-Cola, Super Loaf Bakers, and many others (Katuse & Njambi, 2013). These products are not only sold in local markets but are exported to other countries. Brierley (2012) argues that FMCG is not only food products based but also include other stuff like electronics, pharmacy products, beverages like beer, cigarettes, and so on.

Some manufacturers have a more significant portion of market share in the oil sector of FMCG than others, and in this case, Bidco Kenya commands a lead of 24% of the stock. Kapa Oil Refineries controls a portion of 12% while Unilever Limited has a market share of 9% (Euromonitor, 2015). Wesonga (2015) argues that there is high competition in Kenya due to factors integrating improved technology in production. This situation has acted as a game-changer hence making it difficult for some of the best-performing manufacturers in Kenya.

FMCG manufactures play a significant role in the Kenyan economy. Kenya association of manufacturers report (2017) indicates that the manufacturing sector with an estimated 3700 manufacturers as at (2010) contributed 10.5% of gross domestic product (GDP) in the year 2015. The report further highlights that in the manufacturing sector, food products lead in with a share of 43%, beverages and tobacco had a share of 8%, printing and media share was 4%, the chemical share was

7%, and essential pharmaceuticals was 1%. The rest included other segments of manufacturing. From the report, it can be analyzed that about 60% of manufactured products are categorized as FMCG. A sizeable number of these manufacturing firms are located in Nairobi with the overall output standing at Kshs 1.9 trillion (KAM, 2017). It also indicated that the manufacturing sector had employed 295, 400 people as at 2015.

Fast moving consumer goods range from different categories depending on their needs. A report by the Kenya association of manufacturers (2017) indicates that food products fall under the category of basic needs. An example of these goods includes things like maize and wheat flour, milk, bread, cooking oil, rice, etc. The other category comprises pieces of products such as tissue paper, lotions, beauty products, and so on, this range of FMCGs belongs to the category of secondary needs. The other category includes leisure products which include beverages beer, cigarettes, wine and so on. These products are not necessities to human beings life, but their consumptions are as a result of habits from human behavior (cooper & Schindler, 2016).

Statement of the Problem

Supply management practices are applied by fast moving manufacturing firms to enable them to achieve efficiency and effectiveness. According to Chae et al., (2014), the use of supply chain elements such as purchasing and distribution go hand in hand by facilitating companies to cut the cost of operation in material management and during production. Besides, a study by Lambert (2016) presents information that effective supply management should have proper incorporation of operations management to increase the level of customers' satisfaction by delivering products that meet the users' needs. Also, for an efficient supply management, integration is a key feature in order fulfillment by reducing the lead times during supply acquisition and material processing (Aura, 2017).

In Kenya, there have been an increased level of inefficiency as a result of poor alignment of the supply chain practices with the performance targets of fast moving manufacturing companies (aura, 2017). According to world bank international (2016), manufacturing sector in Kenya, and particularly in Nairobi, is one of the largest GDP contributors at 24.5% and from within manufacturing sector, food and other pieces of products contribute to over 55% of manufactured products as at the year 2016. Despite this economic contribution, a report by the Kenya association of manufacturers indicated that, the profitability of the sector had reduced by 20% between 2012 and 2016 fiscal period. Besides, a further study by the Waithaka (2017) indicates that fast moving manufacturing companies are losing an additional 18% due to lack of effective supply chain management practices.

Manufacturing firms face a challenge of attaining sustainable competitive advantage due to improper utilization of supply chain management practices. Studies by aura (2017) and Waithaka (2017) have not delved deeper in supply management practices explicitly touching on the fast moving manufacturing firms within Nairobi creating a significant research gap which this study aimed to address. Therefore, this study sought to fill this knowledge gap by establishing the influence of supply chain management practices on the performance of fast moving manufacturing firms in Nairobi County, Kenya.

Study Objectives

The overall aim of the study was to determine the influence of supply chain management practices on the performance of fast moving manufacturing firms in Nairobi County, Kenya. The specific objectives were:-

- To analyze the influence of purchasing on the performance of fast moving manufacturing firms in Nairobi County, Kenya
- To establish the impact of distribution on the performance of fast moving manufacturing firms

in Nairobi County, Kenya

- To determine the influence of operations on the performance of fast moving manufacturing firms in Nairobi County, Kenya
- To establish the effect of integration on the performance of fast moving manufacturing firms in Nairobi County, Kenya

LITERATURE REVIEW

Resource dependency theory: This theory relates with purchasing element of supply chain management and was promoted by Nienhüser (2015), is the study of how external resources affect the performance of an organization. The productivity of the tactical and strategic management of a firm relies on the acquisition of external resources. The publication of the “external control of organizations: a resource dependence perspective,” in the 1970s marked the formalization of this theory this is despite having vital importance (Nienhüser, 2015).

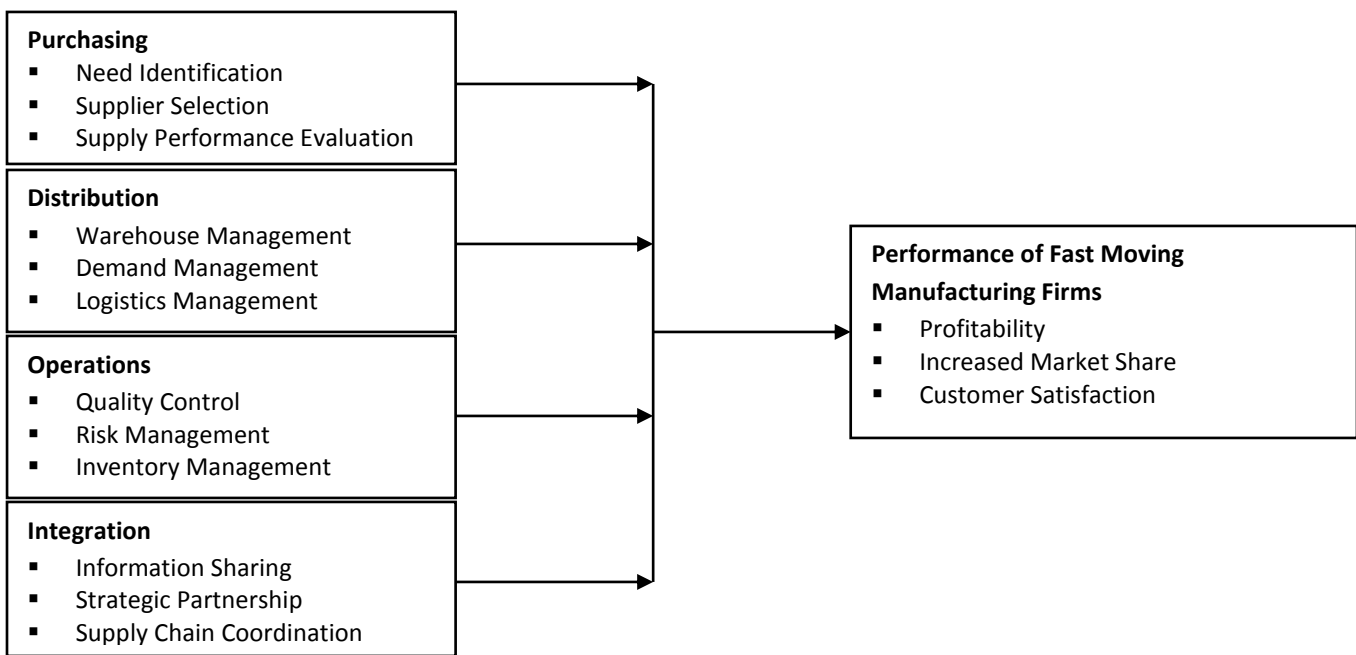
System theory: This theory involves the interdisciplinary study of systems with the aim of expounding on the ideologies that can be functional to different types of systems at different levels of research specifically, regarding distribution in a manufacturing organization (Haddad et al., 2012). This theory is not assumed to be a specialized system thinking; otherwise as an objective outcome of systems science. This theory emphasizes the generalization value across a broad range of systems thus it is applicable in this study to indicate the management of operational supplies and system management in distribution. Various fundamental ideas formed the basis of the systems view, and for example, all events can be explained by a web of relationships among a system, or elements. Secondly, all systems are defined by a universal property, behavior, and pattern that can be analyzed by an observer. According to Shaw (2011), this situation can be used in the development of

insights into the behavior of complex events and move towards the unification of science.

Lean management theory: This theory has its focus on the operation element of supply chain management activities such as production flow through the steps that add value to the final product. Lean management focuses on returns maximization from the initial capital used in product sourcing and acquisition. Lean supplies management theory eliminates buffer stock and minimizes waste in the process of production (Lai, 2013). Profitability of an organization is positively affected by leanness of the inventory hence making it one of the best ways of inventory control. Cochran (2016) posits that organizations with leaner management processes are competitively obtained from the benefits of industry leanness.

Modern theory of integration: This is a philosophical theory that seeks to increase the relation and efficiency in supply chain management practices regarding integration. According to

Cochran (2016), supply chain activities within an organization should be well aligned with the corporate objective to ensure high yield and competitiveness in the market. In this case, fast moving manufacturing firms have a critical role to play in creating a link between different departments within an organization. Price (2012) opines that the theory of integration is based on the opinion that a chain is only as strong as its weakest link. The challenges of this theory are: long lead time, many unsatisfied orders or those that are implemented with additional effort (extra time), inventory levels that are unnecessarily high, large emergency orders and expedition level, lack of important customer engagement and so on complicates the supply chain practices. Therefore, Price (2012) concludes that these are some of the bottlenecks that fast moving manufacturing companies commonly face warranting inventory control techniques applied in their operations to meet the projected demand of their products.



Independent Variables

Dependent Variable

Figure 1: Conceptual Framework

Empirical Review

According to Kepher, Shalle, and Oduma (2015) for a firm to improve its supply chain performance it is imperative that it initiates process such as inventory management, supplier evaluation, and product development. Bag (2012) affirms that these processes will make it easier for a firm to gain control and oversee its supply chain to ensure that it attains improved operational efficiency. As a result, the top management in an organization is responsible for providing that all the manufacturers and suppliers get to maintain the desired quality of products and services. Through the provisions of supplier evaluation, a firm makes sure that it runs its procurement operations based on ethical business practices.

Dahiya, Guptas, and Jain (2012) posit that distribution practices such as floor, demand and supplier management optimize the supply chain performance in a firm. The procurement world is multi-faceted therefore vulnerable to significant trends such as globalization, customization, and outsourcing. This argument is supported by Casciaro and Piskorski (2014) who asserts that due to complexities in the supply chain it is imperative that firms use effective demand and supplier management to enhance the performance of a firm. To improve the performance of firms, companies have changed their management of procurement functions considering it is an essential part of the business.

Operational decisions such as risk management, supplier performance evaluation, and quality control play a significant role in improving supply chain performance (bag, 2012). Decisions on supply chain are made at locations that directly influence the manufacturing, moving and selling of products. For example, through risk management, an organization improves supply chain performance through having an awareness of tactical and strategic decisions that have been implemented. A study conducted by

Macharia and Onchiri (2014) affirms that operation decisions help in the formulation of a framework that complements the supply chain operation adopted by a company.

According to Macharia and Onchiri (2014), to enhance the supply chain performance in a competitive business environment two or more organizations come together to pool resources. This process ensures that the organizations in question get a plan and execute supply chain activities. Wang et al. (2016) opine that integration in firms occurs when the relationship is described by sincerity and dependence, where risks, rewards, and cost are shared. The initiation of collaborative efforts between partners ensures that organizations attain reduced inventory, low costs of operation, enhanced customer service, and on time deliveries.

METHODOLOGY

The study used descriptive research design, where data was collected from the whole study population at a single point in time to examine the relationship between the variables of interest. The target population for this study entailed 51 fast moving manufacturing companies in Nairobi. The study used fast moving manufacturing firms as the unit of analysis and procurement managers as the unit of observation. However, for purpose of improving the reliability of the result, the study distributed two questionnaires for every company making the total target respondents to 102. The research used a census sampling technique with respect to the unit of analysis; which is the fast moving goods manufacturing companies in Nairobi, Kenya. The study utilized primary data. A structured questionnaire was used to collect data from the respondents. A pilot study was conducted involving 6 manufacturing companies to evaluate the validity and reliability of the questionnaire, making up 11.7% of companies presentation in the pilot test. For every firm, 2 questionnaires were provided to procurement

managers totaling to 12 respondents in pilot sample size, whose representation was 11.7% of total number of respondents. The use of the open and close-ended questionnaire facilitated the collection of qualitative and quantitative data. Qualitative data was analyzed using content analysis. Quantitative data was analyzed using descriptive statistics such as, inferential analysis, standard deviation (std), and Anova. Multiple regression analysis was used to determine the level of statistical significance, the effect or level of influence of the independent variables on the dependent variable. These analyses was done using statistical package for social science version 20 (SPSS V, 20) since it enabled the research to produce frequency tables, inferential statistics, and regression analysis. The following multiple regression model was used for the study:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + E$$

Where;

B0 = Constant

Y= performance of fast moving manufacturing firms in Nairobi County, Kenya.

X1=Purchasing

X2=Distribution

X3=Operations

X4=Integration

Bi = coefficients of regression for the independent variables xi (for i = 1,2,3,4)

E. = error term

RESULTS

Performance of the FMCG

The respondents were asked to indicate key outcomes of an effective supply chain management process in FMCG manufacturing firms. A likert scale was used where 1 signified strongly disagree, 2 signified disagree, 3 signified not sure, 4 signified agree and 5 signified strongly agree. The study revealed that the vast majority, about 66%, believed that performance on supply chain activities was determined by looking at the level of profitability, leads times, and the level of customer satisfaction. However, about a total 30% did not think the performance of fast moving manufacturing companies could be measured by the profitability and the level of satisfaction.

Table 1: Performance of the FMCG

| Performance of the FMCG | There is increased profitability in the organization | There is high market share | Customers show a high level of satisfaction through the customer feedback system | Mean frequency | Percentage frequency |
|-------------------------|--|----------------------------|--|----------------|----------------------|
| Strong agree | 20 | 5 | 3 | 9 | 11.25% |
| Agree | 30 | 45 | 57 | 44 | 55.00% |
| Not sure | 5 | 1 | 0 | 2 | 2.5% |
| Disagree | 16 | 19 | 15 | 17 | 20.83% |
| Strongly disagree | 9 | 10 | 5 | 8 | 10% |
| Total | 80 | 80 | 80 | 80 | 100% |

The data collected revealed that the performance of fast moving manufacturing firms is an aspect dependent on critical activities such as purchasing, distribution, operations, and integration. Mutai and Okello (2016) concurred with the finding of this study by indicating that profitability is a crucial measure of improving organizational performance. As such, the

performance of fast moving manufacturing companies can be determined using profitability margin. This research collaboration was a clear indication that companies could use profit levels to assess their performance over some time.

Additionally, this study revealed that the vast majority of the respondents supported the idea that market share adjustment determined the overall effectiveness of organizational performance. Shapiro (2015) study on "modeling the supply chain" found out increased market shared was a better measure of a company's success through the implementation of supply chain management practices. Furthermore, Sharma and Arya (2016) agreed with the finding of this study because they recognized customer satisfaction as a measure for better performance in a manufacturing company. This concurred with the study since most of the respondents agreed to the statement that customers showed a high level of satisfaction through a customer feedback system. All of these indicated that for fast moving manufacturing firms to map their performance, they should look at

the customers' complaints and complements through the organizational feedback system.

Purchasing influence on the performance of FMCG

Respondents were asked about the influence of purchasing activity towards the overall performance of their companies. The study recorded that about 17% strongly agreed that purchasing had a critical influence on performance. Additionally, about 41% of the respondents agreed that purchasing contributed significantly towards efficiency and effectiveness of their companies. Nonetheless, 37% disagreed with statements that purchasing had a critical implication of the performance of fast moving manufacturing companies. Out of all the respondents in this study, only 2.92% were not sure about their position regarding the questions raised by the researcher.

Table 2: Purchasing influence on the performance of FMCG

| Purchasing influence on the performance of FMCG | Users are engaged during the need identification process. | Suppliers are selected competitively and on a fair basis | Suppliers' evaluation and development is conducted regularly | Mean frequency | Percentage frequency |
|--|--|---|---|-----------------------|-----------------------------|
| Strong Agree | 15 | 7 | 20 | 14 | 17.50% |
| Agree | 37 | 35 | 27 | 33 | 41.25% |
| Not Sure | 3 | 1 | 3 | 2 | 2.92% |
| Disagree | 19 | 30 | 24 | 24 | 30.42% |
| Strongly Disagree | 6 | 7 | 6 | 7 | 7.11% |
| Total | 80 | 80 | 80 | 80 | 100% |

Table 2 presented the study's finding on the central role of purchasing influence in enhancing better performance for fast moving manufacturing companies. As performance has a strong relationship with the approaches of purchasing through the supply chain management process. These findings were in line with a study conducted by Kulzy and Fricker (2015) which indicated that purchasing is the most rigorous primary activity in supply chain management. For example, whenever manufacturers bought low-quality commodities, the outcome affected organizational operations. Besides, if firms

acquired materials at a high price due to ineffective purchasing skill, companies were most likely to suffer high cost of operation.

Additionally, Lambert (2016) conducted a study on "supply chain management: processes, partnerships, performance" and discovered that user involvement was the blueprint towards promoting a company's performance. As such, when customers are engaged in a purchasing process, high level of cooperation could be recorded. A study by Mungai (2014) also aligned with the outcome of this study by citing that

the competitive selection of suppliers formed the basis for effective performance in a company. Mungai (2014) further believed that evaluating supplier during the purchasing phase of supply chain management was a critical parameter towards competitiveness.

Distribution influence on supply chain management

With the aim of establishing the relationship of distribution and level of performance in fast moving manufacturing companies, respondents were asked

to provide their perception on distribution, as a supply chain management activity, and its influence on performance. Majority of them, about 81%, agreed that for better performance, a manufacturer should maintain an effective distribution system. Out of 81%, 15 of them strongly agreed while 50 showed a high level of concession. Despite the high level of agreement, a total of about 17% indicated that distribution had nothing to do with firm performance in their companies.

Table 3: Distribution influence on supply chain management

| Distribution influence performance of firms | Floor management is sufficient to support the proper distribution of materials | Distribution Is aligned with customers' demand. | Logistic management is enhanced using modern logistics management information systems | Mean frequency | Percentage frequency |
|---|--|---|---|----------------|----------------------|
| Strongly agree | 12 | 27 | 6 | 15 | 18.75% |
| Agree | 56 | 39 | 54 | 50 | 62.10% |
| Not sure | 0 | 1 | 2 | 1 | 1.25% |
| Disagree | 7 | 10 | 10 | 9 | 11.25% |
| Strongly disagree | 5 | 3 | 8 | 5 | 6.67 |
| Total | 80 | 80 | 80 | 80 | 100% |

Table 3 showed that a vast majority in this study believed that distribution had a critical influence on the effectiveness of fast moving manufacturing companies. These findings concurred with Darian-Smith and Mccarty (2017) who indicated that distribution was the backbone of supply chain management activities because it played a critical part in a company's competitive advantage. Therefore, the role of distribution is considered essential by fast-moving manufacturers. Furthermore, Haddad et al. (2012) argued that floor management was a productive part of the distribution that enabled the supply chain to instill the current flow of material in and out of the organization. This argument can be related to the findings of this study since most of the respondents cited floor management was an essential

attribute whose proper application gained their companies better performance.

Operations influence on supply chain management

To unravel the contribution of operation management, on the effectiveness and efficiency of a firm, the study required the respondents to indicate how their operation were aligned with quality, whether they risked management strategies, and how often inventory was audited. It was revealed that 25% strongly agreed that operations were vital in their success, 45% agreed that operation activities were responsible for sustainable milestones achieved by the firms. However, 24% indicated that operation management activities were less critical towards the success of their organizations. Out of these respondents, only about 3% who did not respond to the questions provided.

Table 4: Operations influence on supply chain management

| Operations influence on performance of firms | Operations are well aligned with quality controls | Risk management is a crucial operation process carried up regularly in the firm | Inventory management operation is carried out by professional to ensure reduced stock holding cost | Mean frequency | Percentage frequency |
|--|---|---|--|----------------|----------------------|
| Strong agree | 23 | 17 | 21 | 20 | 25.46% |
| Agree | 32 | 41 | 37 | 37 | 45.83% |
| Not sure | 5 | 1 | 2 | 2 | 3.33% |
| Disagree | 12 | 14 | 12 | 14 | 15.80% |
| Strongly disagree | 8 | 7 | 8 | 7 | 9.60% |
| Total | 80 | 80 | 80 | 80 | 100% |

The study established that FMCG manufacturing firms in Nairobi County relied on operations to ensure competitiveness. This study concurred with the recommendation offered by Chimwani, Iravo, and Tirimba (2014) who indicated that supply chain operations management determined the ability of a firm to perform better amidst competitors. Chimwani et al. (2014) proved that whenever operations are aligned with the objective of achieving quality, a firm would always experience a high level of performance compared with others. This study found matched these claims with a high level of support from the responses which showed a high level of correlation with other existing studies.

Integration influence on supply chain management

To determine the influence of integration on overall firm performance, the research posed a question on the impact of integration on the effectiveness of fast moving manufacturing firms. The study revealed that about 70% of the respondents agreed that integration was a key determinant of a company success. As such, they indicated that integration consisted of elements, such as sharing information, strategic partnership, and inter-departmental relationship. Nonetheless, 27% cumulatively perceived that the importance of integration was of less importance compared to other performance determinants in this study.

Table 5: Integration influence on supply chain management

| Integration influence on the performance of firms | Information sharing between internal and external stakeholders is prompt and effective | There exist a strategic partnership between the company and other market players such as suppliers. | Supply chain activities are well coordinated between different departments in the organization. | Mean frequency | Percentage frequency |
|---|--|---|---|----------------|----------------------|
| Strong agree | 13 | 23 | 34 | 23 | 29.17% |
| Agree | 41 | 37 | 22 | 34 | 41.67% |
| Not sure | 2 | 1 | 0 | 1 | 1.25% |
| Disagree | 20 | 9 | 13 | 14 | 17.50 |
| Strongly disagree | 4 | 10 | 11 | 8 | 10% |
| Total | 80 | 80 | 80 | 80 | 100% |

The study found that fast-moving manufacturing firms in Nairobi County relied heavily on the concept of supply chain integration to gain competitive performance. These findings agreed with Barna and Peto (2015) who argued that the

most critical part of integration in supply chain entailed sharing information between suppliers and buyers. This situation indicated that the study's findings were within the critical concepts deliberated on by other researchers in different

fields. Besides, the study was well aligned with the finds presented by Beamon (2014) who argued that integration, as a supply chain management practice relied on the ability of a company to create strategic relationships with other players in

the market. Better corporate interaction with the outside world was considered essential element in enhancing company operations which, consequently, led to better performance.

Inferential Analysis

Table 6: Correlational analysis

| Variable title | Measurement | Performance of FMCG | Purchasing | Distribution | Operations | Integration |
|---------------------|---------------------|---------------------|------------|--------------|------------|-------------|
| Performance of FMCG | Pearson correlation | 1.00 | .768 | .759 * | .695 | .614 |
| | Sig. (2 tailed) | .000 | .000 | .002 | .003 | .004 |
| Purchasing | Pearson correlation | .768 | 1.00 | .467 | .651* | .614 |
| | Sig. (2 tailed) | .000 | .059 | .058 | .062 | .000 |
| Distribution | Pearson correlation | .759* | .425 | 1.00 | .681 * | .621 |
| | Sig. (2 tailed) | .002 | .003 | | .001 | .001 |
| Operations | Pearson correlation | .695 | 6.32 | .673 | 1.00 | .514 |
| | Sig. (2 tailed) | .003 | .006 | .005 | .016 | .000 |
| Integration | Pearson correlation | .614 | .514 | .621 | .517 | 1.00 |
| | Sig. (2 tailed) | .004 | .005 | .001 | .000 | .000 |

Table 7: Regression Analysis

| | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|--------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| (Constant) | .581 | .115 | | 5.042 | .000 |
| Purchasing | .521 | .078 | .222 | 2.825 | .000 |
| Distribution | .345 | .050 | .395 | 6.865 | .001 |
| Operation | .260 | .075 | .159 | 2.139 | .004 |
| Integration | .123 | .070 | .022 | .322 | .019 |

Table 8: Model Summary

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|----------|-------------------|----------------------------|
| 0.876 | .767 | .712 | .09638 |

Table 9: Analysis of Variance (ANOVA)

| | Sum of Squares | DF | Mean Square | F | Sig. |
|--------------|-----------------------|-----------|--------------------|----------|-------------------|
| Regression | 78.250 | 10 | 7.825 | 308.071 | .000 ^B |
| Residual | 1.750 | 69 | .0254 | | |
| Total | 80 | 79 | | | |

CONCLUSION

The study concluded that fast moving manufacturing companies in Nairobi County were using supply chains management practices such as purchasing, distribution, operations, and integration. The study also concluded that supply chain management practices had a significant influence on the performance of manufacturers in Nairobi County. The study found that fast-moving manufacturers do not exchange information that helps establish business planning and do not share proprietary information with suppliers through an effective integration system. In addition, FMCGS do not achieve effective purchasing practices due to lack of evaluating their suppliers frequently and have no compatible communication and information system with their supplier.

RECOMMENDATION

The study found that the use of purchasing practices leads to the elimination of waste, acquiring the best quality, reducing cost, and meeting the needs of customers among manufacturing firms. This study, therefore, recommended that all FMCG should align purchasing agendas with the overall objectives of the company to gain competitiveness.

The study found that operation management activities such as quality control, risk management, and inventory controls form a substantial influence on FMCG's performance. The study, therefore, recommended that all manufacturing firms should adopt operation as a supply chain management

strategy in enhancing performance.

The study also established that distribution played a critical role in incorporating supply chain management practices in manufacturing firms. The study, therefore, recommended that should manufacturers should focus on floor, distribution, and logistics management in a bid to enhance their performance

The study established that system integration is key in supply chain practices and has a significant influence on the level of performance in fast moving manufacturing firms. The study, therefore, recommended that manufacturing firms encourage information sharing, strategic partnerships, and inter-departmental coordination for effective performance.

Areas of Further Research

This study was conducted in the Nairobi, and due to the difference in the business environment in different parts of Kenya, generalizing the findings of this study is not possible. Therefore, the study suggests similar studies in other counties in Kenya. Since the growth of FMCG manufacturers does not depend on supply chain management practices only, further studies should, therefore, be done to identify other factors affecting the performance of FMCG manufacturers such as warehouse management, information technology, strategic supplier partnership, lean inventory systems, and legal policies of the procurement function in the manufacturing industry.

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