



Electronic Theses and Dissertations

2023

Influence of supply chain management on the performance of distributors of fast-moving consumer goods companies in Kenya: a case of select key distributors.

Rono, Chepkorir
Strathmore Business School
Strathmore University

Recommended Citation

Rono, C. (2023). *Influence of supply chain management on the performance of distributors of fast-moving consumer goods companies in Kenya: A case of select key distributors* [Strathmore University].

<http://hdl.handle.net/11071/13457>

Follow this and additional works at: <http://hdl.handle.net/11071/13457>

**INFLUENCE OF SUPPLY CHAIN MANAGEMENT ON THE
PERFORMANCE OF DISTRIBUTORS OF FAST-MOVING CONSUMER
GOODS COMPANIES IN KENYA: A CASE OF SELECT KEY
DISTRIBUTORS**

CHEPKORIR RONO

MBA/136246/20

**A RESEARCH SUBMITTED IN PARTIAL FULFILLMENT FOR THE
REQUIREMENTS OF THE DEGREE IN MASTER OF BUSINESS
ADMINISTRATION AT STRATHMORE UNIVERSITY**

VT OMNES VNVM SINT

JUNE 2023

DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the dissertation itself.

© No part of this dissertation may be reproduced without the permission of the author and Strathmore University

Chepkorir Rono

MBA/136246/20

Approval

The dissertation of Chepkorir Rono was approved by the following:

Prof. Simon Wagura Ndiritu

Associate Professor, Development Economics and Agribusiness

Strathmore University Business School

Dr. Ceaser Mwangi

Executive Dean

Strathmore University Business School.

Dr. Bernard Shibwabo

Director, Office of Graduate Studies

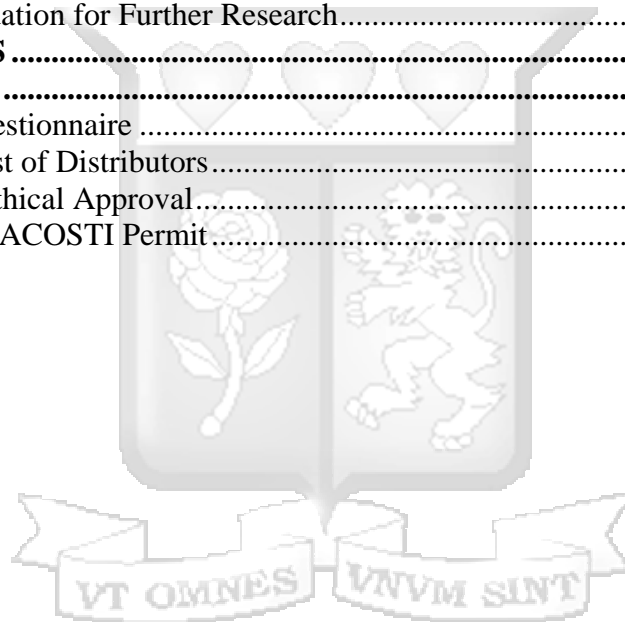
ABSTRACT

The main objective of this study was to determine the influence of SCM on the performance of distributors of top FMCGs in Kenya. The study was guided by the following specific objectives: to determine the effect of inventory availability on the performance of FMCG distribution firms in Kenya, to assess the effect of order fulfillment on the performance of FMCG distribution firms in Kenya, to establish the effect of quality management on the performance of FMCG distribution firms in Kenya and to determine the effect of returns management on the performance of FMCG distribution firms in Kenya. This study employed a cross-sectional correlational research design and targeted 67 distributor firms which distribute the products of 4 major FMCG firms in Kenya. The population included the 42 Unilever Kenya distributors, 9 Colgate Palmolive Kenya distributors, 7 Reckitt Benckiser Services Kenya Ltd distributors and 9 L'Oréal Kenya distributors. The data was collected using structured questionnaires. The study managed to collect data from all 63 firms representing 100% response rate. The other four companies which had been included amongst the firms involved during pre-testing the questionnaire were not considered for the purpose of actual data collection. The data was analyzed using SPSS version 25 and the output showed positive coefficients for each independent variable as well as low significant values. This study established that the supply chain management has a strong positive effect on performance of distributor firms. This study concludes that SCM positively influences distributor firm performance. Also, the study concluded that inventory availability, order fulfilment, quality management and returns management have a significant effect on performance of the distributor firms individually. Based on the findings, the study recommends that producers, distributors and other players in the distribution chain to ensure goods reach the final consumers should work closely to ensure highly functional supply chain.

TABLE OF CONTENTS

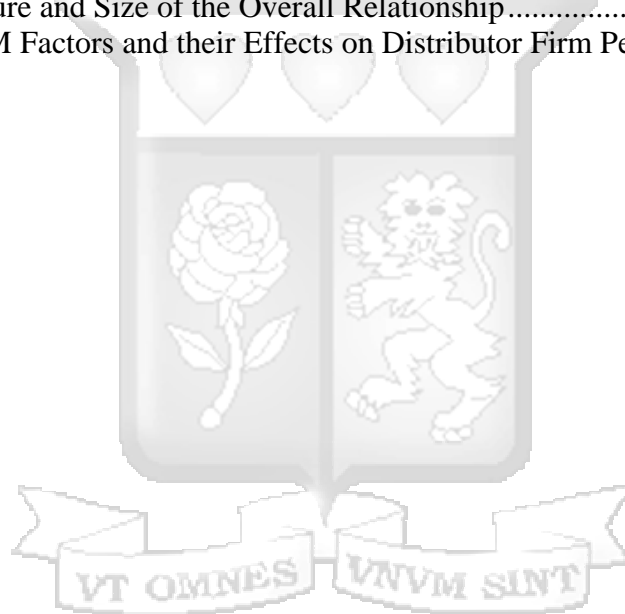
DECLARATION	ii
ABSTRACT	iii
LIST OF TABLES.....	vi
LIST OF FIGURES.....	vii
ACRONYMS AND ABBREVIATONS.....	viii
ACKNOWLEDGEMENT	ix
DEDICATION	x
CHAPTER ONE.....	1
INTRODUCTION	1
1.1 Background of the Study	1
1.1.1 Supply Chain Management	2
1.1.2 Distribution Firm Performance.....	3
1.1.3 FMCG Industry	4
1.2 Problem Statement	5
1.3 Research Objective.....	7
1.4 Research Questions	7
1.5 Scope of the Study.....	8
1.6 Significance of the study	8
1.7 Chapter Summary	9
CHAPTER TWO.....	10
LITERATURE REVIEW	10
2.1 Introduction	10
2.2 Theoretical Review.....	10
2.2.1 Network Perspective (NP) theory.....	10
2.2.2 Resource-Based View	11
2.3 Empirical Review	12
2.3.1 Inventory Availability and Distribution Firms Performance.....	12
2.3.2 Order Fulfillment and Distribution Firms Performance	14
2.3.3 Quality Management and Performance of Distribution Firms	15
2.3.4 Returns Management and Distribution Firms Performance.....	16
2.5 Research Gap.....	18
2.6 Conceptual Review.....	24
CHAPTER THREE	26
RESEARCH METHODOLOGY.....	26
3.1 Introduction	26
3.2 Research Philosophies	26
3.3 Research Design	26
3.4 Population and Sampling.....	27
3.4.1 Population.....	27
3.4.2 Sampling.....	28
3.4 Data Collection Methods.....	28
3.5 Data Analysis	29
3.6 Research Quality	29
3.6.1 Pilot Study	29
3.6.2 Validity of the Research Instruments	30
3.6.3 Reliability of the Research Instruments	30
3.6.4 Diagnostic Tests	30
3.7 Ethical Issues in Research	31
3.8 Chapter Summary	31

CHAPTER FOUR	33
PRESENTATION OF RESEARCH FINDINGS	33
4.1 Introduction	33
4.2 Reliability and Validity Tests.....	33
4.3 General Information	34
4.4 Descriptive Analysis.....	36
4.5 Inferential Analysis	41
4.5.1 Diagnostic Tests for Assumption of Multiple Linear Regression	41
4.5.2 Test of Relationships between the SCM and Distributor Firm Performance	45
CHAPTER FIVE	48
DISCUSSION, CONCLUSION, AND RECOMMENDATIONS	48
5.1 Introduction	48
5.2 Discussion of Findings	48
5.3 Conclusion.....	50
5.4 Limitation of the Study.....	51
5.5 Recommendations	52
5.6 Recommendation for Further Research.....	52
REFERENCES	54
APPENDICES	64
Appendix I: Questionnaire	64
Appendix II: List of Distributors.....	68
Appendix III: Ethical Approval.....	70
Appendix IV: NACOSTI Permit.....	71



LIST OF TABLES

Table 2.1: Summary of the Research Gaps	22
Table 4.1: Reliability Test	33
Table 4.2: Work Experience as a Distributor Manager	35
Table 4.3: Years the organizations operated as Appointed FMCG distributors.....	35
Table 4.4: Number of FMCGs the Firms Act as Their Appointed Distributors.....	36
Table 4.5: Constructs Measuring Inventory Availability	37
Table 4.6: Constructs Measuring Order Fulfillment	38
Table 4.7: Constructs Measuring Quality Management.....	39
Table 4.8: Constructs Measuring Returns Management	40
Table 4.9: Constructs Measuring Distributor Firm Performance	41
Table 4.10: Test of Linearity through Correlation Matrix	42
Table 4.11: Tests of Normality.....	44
Table 4.12: Test of Homoscedasticity	44
Table 4.13: Test of Multicollinearity.....	45
Table 4.14: Autocorrelation Test.....	45
Table 4.15: Nature and Size of the Overall Relationship.....	46
Table 4.16: SCM Factors and their Effects on Distributor Firm Performance	47



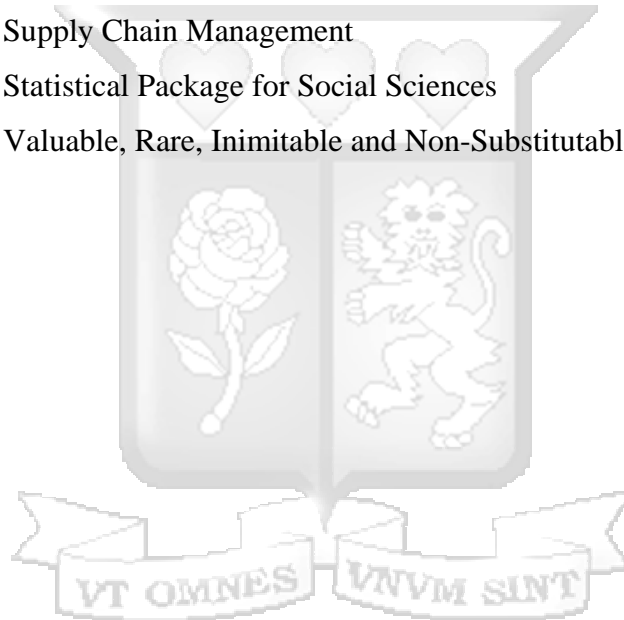
LIST OF FIGURES

Figure 2.1: Conceptual framework.....	25
Figure 4.1: Normal Q-Q Plot of Distribution Firm Performance.....	43



ACRONYMS AND ABBREVIATONS

AI	Artificial Intelligence
EPS	Earnings Per Share
FMCG	First Moving Consumer Goods
KEBS	Kenya Bureau of Standards
NACOSTI	National Commission for Science, Technology & Innovation
NP	Network Perspectives
RBV	Resources Based View
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Investments
SCM	Supply Chain Management
SPSS	Statistical Package for Social Sciences
VRIN	Valuable, Rare, Inimitable and Non-Substitutable



ACKNOWLEDGEMENT

I would like to thank my family and friends for their immense support and encouragement throughout this academic journey.

I sincerely thank my Supervisor, Prof Simon Ndiritu for his continuous guidance and support to ensure this paper meets the required standard.

I express my gratitude to the employees of the various organizations who took part in this study, without whom this research would not have been possible.

Above all, I thank the Almighty God who has made all this possible in His time.



DEDICATION

I dedicate this research to my family for their immense support and encouragement throughout my academic journey.



CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Effective Supply chain management (SCM) has become crucial for firm performance in the wake of increasing competitions in a globalized economy (Mukhamedjanova, 2020). SCM enhances planning and implementation of supply chain activities which help organizations to attain competitiveness, customer satisfaction and overall firm performance. Hassan and Abbasi (2021) opine that SCM predicates the integration of business processes and value addition to customers and stakeholders. Oelze, Brandenburg, Jansen and Warasthe (2018) assert that SCM integrates business processes from suppliers to consumers which contribute to improved organizational performance and gaining competitive advantage.

Sutanto and Japutra (2021) defined supply chain management as the process of planning, implementing, and controlling supply chain activities to achieve customer satisfaction. Nkwabi (2019) noted that supply chain management involves managing organizational networks to ensure efficiency in the supply chain to enhance customer satisfaction. Nkwabi (2019) further indicated that supply chain management refers to the coordination of supply chain partners, such as suppliers, customers, third-party customers, and intermediaries. Therefore, supply chain management leads to improved business activities, customer satisfaction, better stakeholders' management, and enhanced organizational performance.

Consequently, the factors that enhance SCM and understanding their influence on firm performance need to be adequately clarified. Hassan and Abbasi (2021) accentuated that organizations should implement supply chain management to enhance competitive advantage. Similarly, Nkwabi (2019) argue that proper SCM should help firms to achieve coordination of supply chain partners, such as suppliers, customers, third-party customers, and intermediaries. Conceptually, proper supply chain management points towards improved business activities, customer satisfaction, stakeholder management, and enhanced organizational performance. Integrated SCM enhances operational performance, improves inventory management and liquidity (Nkwabi, 2019). Sutanto and Japutra (2021) noted that SCM reduces operating costs and enhance efficacy in organizational processes while Cannella, Dominguez,

Framinan and Ponte (2018) determined that SCM enhances business performance.

1.1.1 Supply Chain Management

While Supply chain management emerged in early 1980s, the concept was popularized by the seminal works of Handfield and Nichols Jr (1999). Since then, the concept has been written about by different authors. According to Mukhamedjanova (2020) SCM simply refer to management of movements of goods and services. It promotes planning and implementation of supply chain activities to facilitate movement of goods and services from producers to end users. Hassan and Abbasi (2021) advanced that SCM is centered upon integration of business processes for value addition to customers and stakeholders. On the other hand, Oelze et al. (2018) define SCM as processes leading to integration of business processes from suppliers to consumers which contribute to improved organizational performance and gain of competitive advantage.

Also related to that, Sutanto and Japutra (2021) defined supply chain management as the process of planning, implementing, and controlling supply chain activities to achieve customer satisfaction. Ray et al. (2016) highlights the key supply chain activities in an organization which includes Inventory management and Order fulfilment processes. Cannella et al. (2018) intimated that there are five major processes involved in SCM. The five processes include executing the strategy, the source of raw materials, manufacturing the product, transportation and logistics, and a return management system. The source of raw materials entails inventory availability, manufacturing the product focuses on the quality management and the productivity, and the return system is concerns with the returns management.

Inventory availability is suitable for meeting consumer demands which is essential for firm performance (Cui & Bassamboo, 2016). Inventory availability helps companies to maintain the appropriate inventory levels. Thus, businesses with adequate inventory availability can meet customer demands appropriately which means guaranteed sales and organizational financial performance. Similarly, order fulfillment is the process taken by a business from a sales order until delivering the order to the customer (Yang, Li, & Campbell, 2020). The main steps involved include receiving the order, processing the order, and delivering the order to the customer which ensures the

customer satisfaction and in a sale is completed hence revenue.

Quality management on the other hand, are practices and techniques that lead to development and design of quality products and services in designing organizational products which meet consumer needs and expectations enhancing business performance (Fernandes, Sampaio, Sameiro & Truong, 2017). Also, Shaharudin, Govindan, Zailani, Tan and Iranmanesh (2017) describe the returns management as processes and efforts involved in managing product returns from the customer after selling when there are reasonable and legitimate reasons for return. Organizations must therefore adopt, review and communicate effectively, the return policies and practices to stakeholders because return management contributes to customer satisfaction, leading to improved business performance.

Based on the researchers' definitions and conceptualization of SCM, it should help an organization to ensure inventory availability, order fulfillment, quality management and returns management which benefits the stakeholders such as producer, distributor, retailer and consumers. This is further supported by Nkwabi (2019), who posited that SCM involves management of organizational networks to ensure efficacy in the supply chain, to enhance customer satisfaction. Therefore, supply chain management leads to improved business activities, customer satisfaction, stakeholders' management, enhanced organizational competitiveness and performance (Oelze et al., 2018; Mukhamedjanova, 2020; Hassan & Abbasi, 2021; Sutanto & Japutra, 2021).

1.1.2 Distribution Firm Performance

Distribution is a key aspect in marketing which is made up of different players that facilitate movement of goods and services from manufacturers to the end consumer forming a distribution channel. Achieving a proper distribution strategy has been an area of focus for both marketing and supply chains in fast moving consumer goods organizations as it plays a critical role in their success (Mwanza & Ingari, 2015)

Le (2005) defined firm performance as an economic measure of a firm's ability to use human and material resources to achieve the firm's targets. Nguyen, Nguyen, Nguyen and Do (2021) argue that performance can be accessed through return on equity (ROE), return on investments (ROI), return on assets (ROA) and earnings per share (EPS) which constitute the quantitative measurements of firm performance. They

consider the output, also called the end result of the inputs such as human and capital expenditures and its processes. The disadvantage of that those quantitative measures are that some important qualitative factors of the organizational performance are not included (Atnafu & Balda, 2018).

Other measures of performance include competitive advantage which compares ability of an organization to compete against its peers (Barney, 1991). Also, customer satisfaction is an important indicator of performance because it assesses the extent to which consumers of the company's products are satisfied by their consumption of the products. This is an important ingredient in determining whether they should make repeat purchase to ensure the company is assured of sales, at least in the immediate and short-run (Rashid, 2016). Another measure of performance is the organizational performance which is a company's actual output in relation to intended output. This is an interesting way to assess the chances that the organization has been meeting the intended output. Accomplishment by meeting objectives shows the firm's effectiveness and efficiency in utilization of resources (Atnafu & Balda, 2018). Consequently, the three measures of performance such as competitive advantage, customer satisfaction and organizational satisfaction when used together provides a comprehensive measure of firm performance.

1.1.3 FMCG Industry

Fast Moving Consumer Goods (FMCG) are consumer packaged goods that includes all consumables other than groceries that users purchase on a regular basis (Ray, Basak & Seddiqe, 2016). According to Ray et al. (2016) the FMCG industry is on a high growth trajectory with demand expected to multiply over the coming years. This study focused on FMCG brands and top FMCG firms that deal with personal care and homecare products in Kenya. The top FMCG firms in Kenya include Unilever Kenya, Colgate Palmolive Kenya, Reckitt Benckiser Services Kenya Ltd, and L'Oréal.

Unilever Kenya is one of the major producers of first moving consumer goods (FMCGs) in Kenya. The FMCGs are the products that are sold quickly, normally at low cost and include non-durable commodities like packaged foods, household goods, toiletries, beverages, candies, cosmetics and drugs amongst other consumables (Unilever, 2021). Unilever is ranked as the top FMCG in Kenya ahead of Coca-Cola,

EABL, Proctor and Gamble, Brookside, and British American Tobacco (Nyamwaro & Moronge, 2018). The FMCG industry is highly regulated by Kenya Bureau of Standards (KEBS). Unilever Kenya is a major FMCG player in the Kenya and has embarked on a journey to create value for its extensive distribution network by expanding its suppliers' and retailers' value chains (Muchiri, 2016). The company plans have been to foster an agile distribution network to improve its business performance through enhanced value chain. However, the success of that goal is performance of the distribution firms. Already, the company has the advantage of 42 distributors which makes it essential for the Unilever to rethink the role of the distributors and the factors that influence their performance to give them appropriate support (Unilever, 2021).

A well performing supply chains network can be sustained only if the distributors are stable and performing over the competitors. Colgate Palmolive Kenya provides oral care by manufacturing toothpastes, toothbrushes, and mouthwashes (Colgate-Palmolive Company, 2022). Colgate is important in the FMCG industry in Kenya because it provides toothpastes that mitigate cavities, plaque, and gingivitis. In Kenya, it is the leading toothpaste, with a market share of more than 62%. Reckitt Benckiser Services Kenya Ltd develops brands that provide health and hygiene. They develop products such as Dettol, Mortein, Harpic, Jik, Air Wick, Doom, among other popular brands. These unique disinfectants and cleaning products by Reckitt Benckiser Services Kenya Ltd control more than 75% of the market share in the Kenyan market.

1.2 Problem Statement

Distribution of FMCGs plays a significant role in ensuring the important goods reach the users on time to avert shortages and associated costs. Consumers suffer when distribution of a good or service is hampered and reach them at high costs or are delayed reaching them, creating a shortage (Panya & Marendi, 2021). The manufacturers lose in terms of sales revenue and potential profitability. In Kenya and indeed globally, shortages of certain goods and services has been witnessed because of the recent Covid-19 disruptions and fuel shortages which hamper mobility. Nyaga (2014) established that distribution of FMCGs in Kenya is challenged by competition from cheap imports, high prices, ineffective promotion campaigns and ineffective systems to forecast demand. FMCG distributors work to overcome distribution

challenges and that is possible through proper SCM developed by all supply chain stakeholders (Cannella et al., 2018).

From a global context, Zhao, Ji, and Feng (2020) established that supply chain management faces various supply-demand problems, including delivery delays, stockouts, and overstocking. According to Zhao et al. (2020), these problems are encountered due to a lack of efficacy in supply chain management. Abdel-Basset, Manogaran, and Mohamed (2018) outlined the various challenges faced in supply chain management including globalization, customer intimacy, and risk management. In addition, Abdel-Basset et al. (2018) argued that the complexity of the supply chain is increasing due to the multiplication of elements in the supply chain. Therefore, the role of inventory availability, order fulfillment, quality management and returns management need to be studied to empirically determine the effect of each of those factors on distributor firm performance.

A study by Weber and Badenhorst-Weiss (2018) identified challenges facing African distribution firms as reverse logistics, cold distribution chain requirements, order fulfilment reliability and physical distribution amongst others. According to Cannella et al. (2018), effective supply chain management leads to gaining a competitive advantage in the market and concluded that lack of process alignment leads to failure of supply chain integration, which leads to the failure of the supply chain management process (Kumar et al., 2017). Locally, studies on influence of SCM on the performance of distributors of FMCG are rare. The few that exist focus on effects of FMCGs distribution on manufacturer performance and strategies to enhance distribution. For instance, Muiga and Patrick (2018) noted that inventory management, information flow and transport management are key factors that influence FMCG distribution. Otieno (2018) analyzed factors influencing use of selective distribution and noted complexity of consumer needs, improper communication, managerial support and implementation costs as major challenges for adoption for effective distribution. Thus, improved performance should be realized to ensure efficacy in the organizations.

Based on the reviewed literature, there is scanty information on influence of SCM on the performance of top FMCGs distributors, particularly in the Kenyan context. Most

studies that exist in developed market contexts focus on influence of SCM on performance of manufacturers. The role of inventory availability, order fulfillment, quality management and returns management on the performance of distribution firms in Kenyan context is particularly unattended to by empirical researchers. Therefore, a dearth of studies exists on the SCM factors that influence performance of distributors of fast-moving consumer goods in Kenya. This study seeks to bridge this gap by conducting a study to determine the influence of SCM on performance of FMCGs distribution firms in Kenya by specifically considering the essential SCM factors such as inventory availability, order fulfillment, quality management and returns management.

1.3 Research Objective

The main objective of this study was to determine the influence of SCM on the performance of distributors of top FMCGs in Kenya. The specific objectives for the study are:

- i. To determine the effect of inventory availability on the performance of FMCG distribution firms in Kenya.
- ii. To assess the effect of order fulfillment on the performance of FMCG distribution firms in Kenya.
- iii. To establish the effect of quality management on the performance of FMCG distribution firms in Kenya.
- iv. To determine the effect of returns management on the performance of FMCG distribution firms in Kenya.

1.4 Research Questions

This study was guided by the following research questions:

- i. What is the effect of inventory availability on the performance of FMCG distribution firms in Kenya?
- ii. How does order fulfillment affect the performance of FMCG distribution firms in Kenya?
- iii. What is the effect of quality management on the performance of FMCG distribution firms in Kenya?
- iv. What is the effect of returns management on the performance of FMCG distribution firms in Kenya?

1.5 Scope of the Study

The study was limited to analyzing how SCM influences performance of appointed distributors of Top FMCGs companies in Kenya. The scope of distribution firms' performance was limited to inventory availability, order fulfillment, quality management, and returns management. Inventory availability was limited to the following aspects: inventory control, management, and turnovers. Order fulfillment was limited to order cycle time, fill rate, and picking accuracy. Quality management was limited to product quality, quality assessments, and defects reduction. Return management was limited to return policies, gate keeping, and return of goods.

The contextual scope was the fast-moving consumer goods (FMCG) distribution firms involved in the distribution of top FMCGs companies in Kenya. The methodology scope was a cross-sectional descriptive research design. The population scope was distribution managers, and the study was undertaken from August 2021 to Oct 2022.

1.6 Significance of the study

The results of the study have implications to various benefactors. They include policy makers, practitioners, and scholars. Policy makers include the regulators of the industry dealing with FMCGs like Kenya bureau of standards (KEBS). The results can benefit the regulators of FMCG sector through relevant regulations to help the players such as distributors and end users to be protected against problems such as product quality and defect issues. High quality products that meet standards required for consumption can benefit the country through better health for consumers of those products.

Practitioners such as FMCG firms in Kenya can use this study's findings to develop organizational policies for their distribution firms to enhance their performance. In addition, the adoption of these policies may increase the supply chain effectiveness and business performance. Understanding the role of SCM factors such as inventory availability, order fulfillment, quality management and returns management on performance of FMCG distribution firms can benefit both the manufacturers and the distributor firms.

The results of the study can also be beneficial to scholars. This study is of a noteworthy contribution to the existing literature concerning supply chain

management and the performance of distribution firms. Future scholars researching a similar topic can use this study's results as a reference point. Researchers may use this study's findings to add to identify study gaps and add to the body of knowledge.

1.7 Chapter Summary

This chapter has provided a succinct introduction of the study on influence of supply chain management on the performance of distributors of fast-moving consumer goods in Kenya. It includes the background of the study which itemizes the SCM factors such as inventory availability, order fulfillment, quality management and returns management. The dependent variable which is the distribution firm performance is indicated to be measured using competitive advantage, customer satisfaction and organizational performance. The context is top FMCGs distributors in Kenya. Problem is explained, research objectives stated as well as the scope and significance of the study.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the existing literature regarding the supply chain management factors influencing FMCGs distribution firms' performance. It contains the theoretical and empirical literature review in relation to the study. It also provides the summary of findings, knowledge gaps and conceptual framework. Therefore, the chapter lays the conceptual foundation of the study.

2.2 Theoretical Review

This section provides a discussion of the theories upon which the study is anchored on. The theories include the network perspectives (NP) theory and the resources-based view (RBV). The relevance of each theory to the study is articulated.

2.2.1 Network Perspective (NP) theory

Network perspective is the anchoring theory in the current research. Network perspectives theory explains the connections and relationships between entities within a supply chain right from the level of design and production to the consumption. Galaskiewicz (2011) explained that the theory was introduced in 1980s but has been developed to focus relationships between not just two entities or strategic alliances as inter alia, but to include multiple relationships among diverse firms that make up a supply chain. The theory uses charts to show direct and indirection links between various players. Some theorists have criticized network theory. For example, Lazzarini, Chaddad and Cook (2001) argued that network is not a theoretical, second it is mere interconnections analysis, third, research neglects the dynamics and it neglects agency.

However, since many firms are interlinked in a supply chain framework, the theory is related to the current study because it can help to identify the critical players from the clusters of players to efficiently give and receive important information and insights (Frostenson & Prenekert, 2015). Network theory helps management to understand interpersonal relationships and structures to engage key players. Also, there are high interdependencies and interactions between firms, resources, and processes.

Organizations can use the theory to distinguish between signals and noise and use important and accurate information for decisions. The theory can help a distributor of FMCG to identify important players to integrate with to ensure inventory availability, order fulfillment, quality management and returns management to gain competitiveness, customer satisfaction and competitiveness (Galaskiewicz, 2011).

2.2.2 Resource-Based View

The resource-based view is a supportive theory in this study. It was developed by Barney (1991) to explain the importance of organizational resources in gaining a competitive advantage. Barney (1991) claimed that organizational resources are pivotal in achieving organizational performance. Barney (1991) further classified organizational resources into organizational, human, and physical resources. Organizational resources refer to the organization's structure, planning, and coordination. Human resources refer to the employees' training and experience. Physical resources refer to organizational equipment, technology, and other assets. The resource-based view model suggested that organizational resources add value to the organization. Organizational resources should be valuable, rare, inimitable, and non-substitutable (VRIN). These resources promote competitive advantage, leading to superior performance.

There are several proponents of the resource-based view. Vitorino Filho and Moori (2020) stated that the resource-based view has a considerable impact on supply chain performance. Organizational resources are crucial in organizations because they promote organizational agility and adaptability. Businesses should utilize their resources, including organizational, human, and physical resources, to improve business performance. The resource-based view model argues that organizations should create dynamic capabilities. Barney (1991) argued that organizations gain a competitive advantage by managing their resources effectively and efficiently. Thus, it is arguable that organizations should ensure efficacy in supply chain management to realize improved business performance. Furthermore, it is also arguable that effective management of the supply chain factors can improve distribution firms' performance.

The resource-based view model is applicable in the present study because it emphasizes the importance of resource identification. For distributors, supply chain

participants and entire system is a resource than can be used to enhance internal capabilities to attain competitive advantage. This theory is applicable and relevant in the present study because it illuminates the importance of supply chains management factors, such as inventory availability, order fulfillment, quality management, and returns management effectiveness as a resource and how they affect the performance of distribution firms. The resource-based view is further relevant to the present study because it offers a suitable lens to conceptualize and understand how supply chain management factors as a resource can affect the performance of distribution firms.

2.3 Empirical Review

This section examines the independent variables (inventory availability, order fulfillment, quality management, and returns management) and their relationship with the dependent variable (distribution firms' performance).

2.3.1 Inventory Availability and Distribution Firms Performance

Inventory availability plays an important role in enhancing firm competitiveness and performance. The findings are supported by the results of Vergara, Gómez, Martínez and Hernández (2020) in context of Colombian Biosafety Products Company who determined that inventory availability helps organizations respond to their customer requirements and effectively manage the supply chain. In a similar context, Cano, Gomez-Montoya, Cortes, and Campo (2021) noted that inventory availability improves customer satisfaction. The authors further argued that meeting customer demands leads to customer satisfaction and increased brand loyalty. These arguments reveal that inventory availability is critical in meeting customer demands and achieving customer satisfaction. Therefore, organizations should have stable inventory availability to meet their customers' demands. Consequently, it is arguable that customer satisfaction enhances business sustainability, leading to improved organizational performance.

Rashid (2016) studied the role of inventory adequacy in downstream Pakistan SMEs in manufacturing sector and noted that adequate inventory levels improve customer satisfaction. Similarly, the findings of inventory management among SMEs in Harare by Muchaendepi, Mbohwa, Hamandishe and Kanyepe (2019) led to conclusion that inventory should be available because it benefits the customers, enhancing

competitiveness. A study was carried out by Grubor, Milićević and Djokic (2016) in the context of Serbia, East Europe and noted that inventory availability mitigates stock-out situations, reducing storage costs and increases sales for a company. Lower inventory levels affect customer satisfaction, which affects a company's sustainability. Inadequate inventory levels cannot meet customers' demand, which leads to out-of-stock, affecting the firm's overall performance.

Mohamed (2017) studied inventory management in a mixing and mobilization factory in Zawia, Libya and concluded that organizations should implement a max-min inventory control policy to ensure that the organization has sufficient inventory and maintain appropriate stock levels and reduce the storage costs and increase customer satisfaction. That is consistent with the results of Atnafu and Balda (2018) who studied the role of inventory availability in small and micro enterprises in Ethiopian context and concluded that inventory availability as evidenced by the firm's control of inventory, resulting in efficiency in inventory management and efficiency of the supply chain. Similarly, Leung, Chen, Yadav and Gallien (2016) analyzed how inventory management affects stock-outs of vital medicine in Sub-Saharan Africa through field survey in Zambia and noted that inventory availability is imperative in reducing storage costs and ensuring inventory efficiency.

Also, Kefale and Shebo (2019) studied health centres in Adama town, Ethiopia and concluded that inventory helps maintain customers because customers prefer companies that meet their product needs. Naliaka and Namusonge (2015) argued that inventory availability enables organizations to reduce their storage costs, improve delivery time, enhance flexibility, and improve their competitive advantage. Competitiveness enhances business survival and improved performance. Inventory availability is a crucial factor affecting inventory flow across the supply chain, enhancing competitiveness. These arguments show that inventory availability promotes competitiveness in firms. Arguably, inventory availability promotes competitiveness in distribution firms because it promotes cost efficiency, flexibility, and reduction in delivery time. These findings are relevant to the present study. They help the researcher get a perspective on the effect of inventory availability on the performance of distribution firms in fast-moving consumer goods (FMCG) manufacturers in Kenya.

2.3.2 Order Fulfillment and Distribution Firms Performance

Yang, Li, and Campbell (2020) developed a model for order fulfillment performance and argued that order fulfillment determines customer satisfaction and customer loyalty. Maximization of efficiency in the order fulfillment process promotes profitability due to customer loyalty. Effectiveness in the order fulfillment process creates a positive brand attitude among the customers, improving customer satisfaction (Ojha et al., 2019). A positive brand attitude contributes to customer loyalty and increased sales, which promotes enhanced organizational performance. Order fulfillment behaviours affect the consumers' purchasing behaviour, affecting the sustainability of the businesses.

On-time order fulfillment leads to improved customer satisfaction according to the findings of Rashid (2016) in context of Pakistani SMEs in the manufacturing industry. That concurs with the findings of Ojha, Sahin, Shockley and Sridharan (2019) used simulation to study order fulfillment process and noted that it results in the proper coordination of inventory, which reduces the inventory costs, and leads to improved organizational performance. Zaieda, Mansour and Mostafa (2016) studied a leading textile company in Egypt and noted that order fulfillment stimulates supply chain activities, ensuring that these activities are well-coordinated and efficient. Proper coordination of the supply chain activities results in improved organizational performance.

Jirma (2017) analyzed Kenya's national government ministries' management of supply chains and established that order fulfillment is crucial in firm's performance because it involves tracking inventory status, product ordering, storage, and shipping products to the customers. As such, an efficient order fulfillment process promotes the improvement of organizational performance. Also, Nyaga and Noor (2021) found that implementing an order fulfillment strategy helps improve manufacturing firms' performance. The authors noted that effective order fulfillment is a critical component in achieving customer satisfaction. Thus, it is arguable that satisfied customers are likely to repeat their purchase of products. This repeated purchase of products leads to increased sales and enhanced business growth, leading to improved organizational performance. Adopting an order fulfillment plan helps businesses deliver goods accurately and timely to their consumers, enhancing customer satisfaction.

Sarite, Iravo, and Ismail (2018) stated that there are many types of order fulfillment, such as Engineer To Order (ETO). ETO involves building the product according to specific customer specifications. Thus, developing products according to customer specifications promotes customer satisfaction, improving business performance. Order fulfillment cycle time ensures that customers receive orders in their correct specifications and promptly. Thus, an effective order fulfillment process ensures that customers receive quality products promptly. As such, organizations should ensure order fulfillment performance to promote improved organizational performance. These assertions are relevant in the current study because they support that adopting and implementing an effective and efficient order fulfillment strategy leads to improved customer satisfaction and improved organizational performance. Therefore, these assertions can help determine the link between order fulfillment and distribution firms' performance in top FMCGs distribution firms in Kenya.

2.3.3 Quality Management and Performance of Distribution Firms

Kim, Son and Kim (2016) analyzed data from survey obtained by Korean Standards Association and concluded that quality management helps organizations improve business performance and gain a competitive advantage. These studies are relevant in the present study because they suggested that quality management is indispensable in the supply chain process as it improves. Zeng, Tse and Tang (2018) studied Chinese construction industry and concluded that quality management ensures practices and techniques that prevent defects in the products. These studies are relevant to the current study because they suggested that quality management results in competitiveness and improved performance. Fernandes et al. (2017) studied supply chain management and quality management integration and noted that quality management promotes competitiveness and argued that consumers demand in products and services that meet their needs are needed for customer satisfaction and improvement of business performance.

Through a systematic review Bastas and Liyanage (2018) concluded that quality management ensures that products are developed according to customer specifications, promoting customer satisfaction. Customer satisfaction leads to increased business revenue, promoting the improved performance of firms. The defects guarantee quality products that enhance customer satisfaction, enabling

organizations to gain a competitive edge and improve business performance. Kim et al. (2016) noted that quality management ensures that organizational products meet the market demands for high-quality products. High-quality products that meet the customers' requirements promote customer satisfaction. Thus, distribution firms should strive to achieve quality management as it promotes customer satisfaction. Customer satisfaction realizes improved business performance of the distribution firms.

Similarly, Wachiuri, Waiganjo, Ismail, and Odhiambo (2017) agreed with Nyamwaro and Moronge's (2018) findings by asserting that quality management helps firms deliver performance and maintain product quality. Wachiuri et al. (2017) argued that quality management should be used in quality assessment and quality planning. Wachiuri et al. (2017) further argued that quality management should be improved in the distribution processes to ensure improved performance of the distribution firms. These studies concluded that quality management has a positive influence on business performance.

Nyamwaro and Moronge (2018) established that quality management monitors the supply chain process to ensure efficacy. Quality management entails product improvement to ensure that the products meet customer specifications. Products that meet customer satisfaction promote customer loyalty, enhancing sustainability and business performance. Quality management monitors product conformity according to the set standards. This monitoring ensures product improvement and improved product performance. Thus, it is arguable that quality management guarantees product quality. Improved product quality increases product demand, enabling businesses to earn revenue and improve business performance. The study is relevant to the current study because it supports that quality management significantly and positively affects the performance of firms. These findings can help the researcher illuminate the role of quality management in the performance of distribution firms in FMCG manufacturers in Kenya.

2.3.4 Returns Management and Distribution Firms Performance

Ambilkar, Dohale, Gunasekaran and Biloliar (2021) conducted a systematic review of 518 published reports and concluded that proper handling of returns has a positive

effect on shopping behaviour and increases purchases. Increased business profitability leads to improved business performance as reported by Helgesen, Sandanger and Sandbekk (2018) through a survey of large Norwegian companies. Röllecke, Huchzermeier and Schröder (2017) undertook consumer's survey on Californian manufacturing firms and concluded that return management policy before making a purchase decision affirmed that return management policies are salient to consumers because they do not want to be constrained to a particular product or service. Return management programs consider customers partnerships, leading to customer loyalty. Customer loyalty leads to increased business revenues and improved business performance.

Similarly, De Araújo, Matsuoka, Ung, Massote and Sampaio (2017) analyzed an online firm targeting Brazilian market and agreed that returns management determines customer satisfaction. The activities related to returns management, including reverse logistics, returns avoidance, and gatekeeping. Also returns management is essential in achieving sustainability which contributes to organizations' competitiveness. Shaharudin et al. (2017) analyzed 150 manufacturing firms in Malaysia observed that return management affects competitive positioning. Returns management is indispensable in supply chains because it links the market and the logistics because it focuses on the reverse supply chain. Organizations with effective return management policies help develop good customer relations. Chen, Genchev, Willis and Griffis (2019) analyzed Indian firms and established that return management policies promote customer loyalty and long-term business success. It can therefore be argued that organizations with an efficient returns management policy help build customer relationships, and this customer relationship leads to customer loyalty and increased sales, improving business performance.

Through a series of interviews with experts and at Iowa State University and East Carolina University, Chen, Anselmi, Falasca, and Tian (2017) suggested that returns management creates value and improves business performance. A conceptual framework by Hazen, Russo, Confente, and Pellathy (2020) noted that returns management avoids disposing of valuable resources, promoting the growth of the organizational resource base. The growth of the resource base retains amenity values, enhancing organizational sustainability. Dobroselskyi, Madleňák, and Laitkep (2021)

analyzed returns management in e-Commerce companies in the Slovak Republic and suggested that companies that adopt and implement return policies gain a competitive advantage because consumers prefer flexible return policies that allow them to return goods in case of defective goods.

Similarly, Mathu (2021) indicated that returns management recaptures value and helps in the correct disposal of goods. As such, consumers prefer businesses with flexible returns policies, and these return policies attract consumer loyalty, leading to increased profitability of the business. These assertions emphasize that returns management is vital in organizations because it promotes customer satisfaction, which leads to customer loyalty. Customer loyalty enhances customer repeat purchase decisions, leading to improved business performance.

2.5 Research Gap

There were notable research gaps in the literature review. Table 2.1 below presents a summary of the research gaps.



Table 2.1: Summary of the Research Gaps

Author	Title	Methodology	Findings	Research Gap	How the gap is be closed
Grubor, Milićević and Djokic (2016)	How the level of inventory affects product availability and sales	Descriptive research	Established a positive, direct effect of levels of inventory level on sales.	Small, few similar entities analyzed, because the study compared store and on-shelf FMCGs availability from a single retailer, lacking generalizability	More diversified distribution firms analyzed to objectively determine effect of SCM on firm performance.
Jirma and Guyo (2017)	Factors influencing performance of supply chain management strategies in the national government ministries in Kenya	Descriptive research	Supply chain strategies: IT, relationships, regulatory framework, and environmental uncertainties, affect performance of national government ministries.	The study focused on national government ministries.	By conducting multiple linear regressions to test the effects of more independent factors, in context of FMCGs – private sector firms.
Chen, Genchev, Willis and	Analysis of the antecedents of employee development,	Survey from Indian firms and structural equation	Management of firms dynamic capabilities, returns and employee development have a positive impact on	Indian retail sector context.	Study conducted in the Kenyan context to determine relationship in underdeveloped market

Griffis (2019)	dynamic capabilities and returns management.	modelling.	returns management and performance in the market.		context.
Vitorino Filho and Moori (2020)	How SCM affects strategic management (SM), and resource-based view (RBV) and overall business performance (BP)	Qualitative and quantitative exploratory research	SCM enhances SM, both of which have enhances RBV and in turn positively influences BP.	Data collected from 10 companies only.	Data to be collected from 63 diversified distribution firms.
Kim, Son and Kim (2016)	Strategy for improving efficiency of supply chain quality management in buyer-supplier dyads: The suppliers' perspective	Descriptive research	Supply chain quality management results in supplier efficiency.	The study examined the strategies for improving supply chain efficiency: The suppliers' perspective. The study's findings were restricted to suppliers.	By conducting empirical research on the factors influencing SCP in the context of FMCGs distributors in context of developing economy.
Zaieda, Mansour	Evaluating the performance of order	Descriptive research	Effectiveness of the order fulfillment process results in	The study failed to examine other factors that affect the	Study includes predictors inventory availability, order

and Mostafa (2016)	fulfillment process in supply chain		an efficient supply chain	supply chain.	fulfillment, quality management and returns management
Nyamwa ro and Moronge (2018)	The effect of quality management on the supply chain in food manufacturing firms in Kenya.	Descriptive research	Quality management has a significant and positive impact in food manufacturing firms	The study only focused on the effect of quality management on the supply chain, but the study failed to establish other factors that affect the supply chain.	Study analyses effects of inventory availability, order fulfillment, quality management and returns management as predictors of firm performance

Source: Researcher (2022)



2.6 Conceptual Review

A conceptual framework refers to a diagrammatic illustration to explain the relationship between the independent variables (Kivunja, 2018). Figure 2.1 shows a conceptual framework in the present study to describe the relationship between the independent variables which are the supply chain capabilities: inventory availability, order fulfillment, quality management and return management, while the dependent variable is performance of FMCGs distribution firm. The framework also shows the indicators for each of the study variables.

The relationship between the variables in this study is based on the Network Perspective (NP) theory and resource based view (RBV). Availability of inventory, order fulfillment, quality management and returns management are dependent on effectiveness and efficiency of the networks, also called alliances between the entities in a supply chain network (Galaskiewicz, 2011). For instance, inventory availability which is characterized by adequate inventory control, inventory management and inventory turnover management need a supply chain network and that can benefit distributors of products. FMCG producers can create a robust supply chain that gives distinctive competitiveness and therefore can be considered as a unique resource.

Similarly, order fulfilment in a FMCGs producer can be characterized with appropriate order cycle time, order fill rate and order picking accuracy because of the created network which can again be considered as a resource for the overall firm (Galaskiewicz, 2011). Quality management can also help to manage product quality, quality assessment and reduction of defects which can benefit distribution firms with performance (Fernandes et al., 2017). Also, return management characterized with relevant returns policies, gatekeeping and return of goods when circumstances warrants so, can be beneficial to distributors of a particular FMCG producer (Ambilkar, et al., 2021). Based on the reviewed literature, it is intuitive that inventory availability, order fulfillment, quality management and return management can give FMCGs distributor performance through competitive advantage, customer satisfaction and organizational performance (Vitorino et al., 2020). Figure 2.1 below shows the conceptual relationship.

Independent variables

Dependent variable

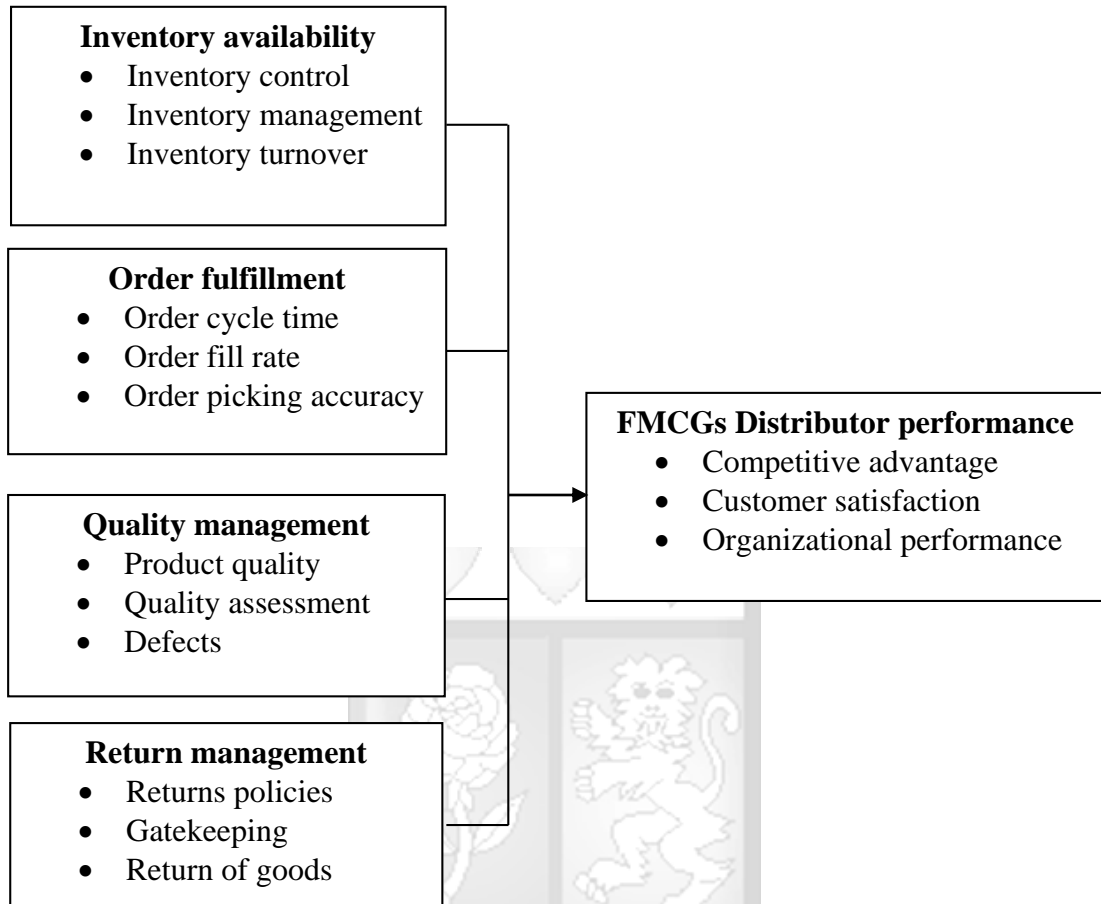


Figure 2.1: Conceptual framework

Source: Researcher (2022)

VT OMNES VNVM SINT

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a review of the research design, population and sampling, data collection methods, data analysis, research quality, and ethical issues in research.

3.2 Research Philosophies

Research philosophies are founded on ontology which refers to what is known to be true and real and epistemology which is about how what is not known can be unpackaged by advancing knowledge (Saunders, Lewis & Thornhill, 2012). The four philosophies include pragmatism, realism, interpretivist, and positivism. Pragmatism focuses on specific study element aiming to solve a specific problem in real world (Collins, 2009). Positivism is an objective approach to research where existing theories are confirmed through objective process where the researcher's opinions and any subjectivity is eliminated. On the other hand, interpretivist philosophy holds that opinions of researcher in observing and interpreting social phenomenon cannot be ignored in research. The realism philosophy marries the interpretivist and positivist principles to explain forces and mechanisms under which phenomenon operates (Saunders et al., 2012).

In this study, positivism philosophy was employed. This philosophy is employed when the study is anchored on a theory or theories and research objectives and hypotheses are tested objectively (Collins, 2009). This study involved formulation of study objectives and hypotheses that were anchored on the existing literature and theories which means that it lies in the positivism philosophy. Objective statistical measurements were obtained and used to test relationships between the measures of SCM and the firm performance.

3.3 Research Design

Research design is described as glue that sticks the research together (Saunders et al., 2012). The research design informs the kind of data collection, analysis, and tests to be conducted. Based on data, research design can be longitudinal or cross-sectional. Longitudinal is when data is collected across time while cross-sectional is when data is collected, usually from different entities at specific point in time (Mugenda

& Mugenda, 2004). Based on research rigor and statistical tests, research design can be exploratory, descriptive, correlational, and causal (experimental). Exploratory studies are a superficial inquiry to lay basis for future research especially for new areas where the problem is not clear (Saunders et al., 2012).

Descriptive research design is where the aim is to describe the how and why of the research situation mostly using descriptive statistics like measures of central tendency. Correlation research is a non-experimental research design is for situations where a researcher seeks to test relationship between two or more variables (Collins, 2009). Causal design is an experimental level of inquiry where the researcher ensures that the effect is only because of the causal variable (Mugenda & Mugenda, 2004). The independent variable influences the dependent variable.

Based on the explanations above, this study employed a cross-sectional correlational research design. The study collected data from different firms within a particular point in time and the data was analyzed to determine the relationships between independent and dependent factors by examining the influence of supply chain management on the performance of distributors of fast-moving consumer goods in Kenya.

3.4 Population and Sampling

3.4.1 Population

A study population refers to the entire number of units that are available and qualify to be selected in a particular study to provide information to be analyzed to make conclusions on a phenomenon (Mugenda & Mugenda, 2004). Supply chain management as described by supply chain capabilities such as inventory availability, order fulfillment, quality management, and return management affect all participants in the supply chain process such as manufacturers, distributors, wholesalers, retailers and consumers (Kim et al., 2016). Wholesalers, retailers and consumers are affected by the presence or absence of the supply chain capabilities above indirectly while distributors are affected more directly because they are the closest link from the point of production. Manufacturers too are affected by the capabilities – inventory availability, order fulfillment, quality management and return management, but the focus of this study was the distribution firms. Producers are best placed to be champions of the above supply chain competencies because they have the vision

behind the production of the goods and its incumbent upon them to ensure there is supply chain competencies. Distributors, however, invest huge amount of resources to be in the distribution business and the supply chain capabilities can be of important strategic advantage.

According to Richard (2022), the top FMCG firms in Kenya include Unilever Kenya, Colgate Palmolive Kenya, Reckitt Benckiser Services Kenya Ltd, and L'Oréal. Distributors of the top four FMCG firms are also the distributor of the smaller firms. Therefore, targeting the distributors of the four top FMCG firms was inclusive of the smaller distributors, hence a fair representation of the FMCG distribution firms. The populations in the current study were the 67 appointed distributors of top FMCG companies that deal with popular home and personal care brands in the market. As at the point of the study, they included 42 appointed distributors of Unilever Kenya, 9 appointed distributors of L'Oreal, 7 appointed distributors of Reckitt Benckiser and 9 appointed distributors of Colgate Palmolive.

3.4.2 Sampling

Sample size is representative of the target population that is selected for purpose of analysis to achieve generalizability (Saunders et al., 2012). The researcher gathered the data from the distributor managers in all the 67 distributors of four selected FMCG firms that deal in home and personal care products in Kenya: Unilever Kenya 42 distributors, Colgate Palmolive Kenya 9 distributors, Reckitt Benckiser Services Kenya Ltd 7 distributors, and L'Oréal Kenya 9 distributors. The Distributor Manager in each of the FMCG distribution firm understands the end-to-end operations of the firm and are therefore suitable respondents as they are knowledgeable and are in a managerial level.

3.4 Data Collection Methods

This study adopted questionnaires as instruments for data collection. The structured questionnaires consist of close-ended questions to enhance the collection of rich quantitative data for purposes of conducting quantitative analysis. Questionnaires were chosen because they are more objective in quantitative data collection. The questionnaires consist of two sections: section A and B. Section A included the general information while section B consist of supply chain management factors

influencing performance of appointed distributors of top FMCG firms in Kenya and constructs on distribution firm performance. The instrument used Likert scale measurement between 1 and 5 where 1= Strongly Disagree (SD), 2= Disagree (D), 3= Undecided (U), 4= Agree (A), and 5= Strongly Agree (SA). The questionnaires were disseminated through google forms.

3.5 Data Analysis

The researcher conducted data analysis using Statistical Package for Social Sciences (SPSS) Version 25. This study adopted multiple linear regressions to predict the impact of the independent variables on the dependent variable. Independent factors are the SCM competencies – inventory availability, order fulfillment, quality management, and return management while dependent variable is firm performance. For each firm, the constructs related to each variable were obtained as measure of the variable. Therefore, an index measuring the SCM competencies, and the firm performance were the ratings for the constructs for each firm based on respondents' assessment of the situation. A multiple linear regression model was as shown below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where: Y= Distribution firm's performance

β_0 = Constant

β_1 to β_4 =Coefficients

X1 = inventory availability

X2= order fulfillment

X3 = quality management

X4 = return management

ε =Error term.

3.6 Research Quality

Research quality can be assessed based on adherence to the tenets of credible research. For example, research instrument should be valid and reliable. Pilot study should be conducted to ensure feasibility of the research instruments and processes. Additionally, data should adhere to the assumptions of regression analysis.

3.6.1 Pilot Study

The researcher conducted a pilot study to pretest the instrument. Ismail et al. (2017)

advised that researchers should conduct a pilot study to enhance the reliability of the research instruments. According to Ismail et al. (2017), the pilot study should be 10-30% of the sample size. The researcher conducted a pilot study before conducting the actual study to enhance the reliability of the questionnaires. Firms involved in pilot study are not supposed to be added into the actual study (Ismail et al., 2017). To ensure reasonable number of firms remained for the actual study, the pilot study involved three senior personnel from one of the distributors of the four distributors of each of the top FMCG producers in Kenya including; Unilever Kenya, Colgate Palmolive Kenya, Reckitt Benckiser Services Kenya Ltd and L'Oréal Kenya. The researcher used the feedback from the pilot study to eliminate ambiguities in the questionnaires.

3.6.2 Validity of the Research Instruments

Validity of questionnaires is determined using content validity (Mohajan, 2017). Mohajan (2017) advised that questionnaires' content validity should be done by improving the questionnaire's content from experts' opinions. Thus, the researcher ensured validity of the questionnaire by consulting with the supervisor and industry professionals on the questions in the questionnaires. The researcher used the feedback to refine the questionnaire and eliminate any ambiguities. Also, senior employees who are knowledgeable on matters under inquiry, such as store manager, distributor manager, territory manager from all the 4 FMCGs companies participated in the questionnaire.

3.6.3 Reliability of the Research Instruments

Mohajan (2017) elucidated that reliability of research instruments refers to the consistency in the findings of the study. The researcher used Cronbach's alpha to determine the reliability of the questionnaires. The Cronbach's alpha was required to range from 0.7 or above, for the constructs' internal consistency to be adequate. If alpha is below 0.7, the construct with highest alpha if deleted would be expunged to attain highest alpha, hence highest internal consistency of the constructs (Riege, 2003).

3.6.4 Diagnostic Tests

For purpose of multiple linear regressions, data set is required to adhere to the

assumptions of multiple linear regressions such as linearity, normality, homoscedasticity, multicollinearity, and autocorrelation. Linearity is the tendency to follow a linear trend. That was tested through scatter plot and correlation matrix of the variables. Linearity was confirmed through visual observation of the trends of the scatter. Normality which is the tendency of the data to follow a bell-shaped distribution was tested using Shapiro Wilk test whereby the significant value for the test was expected to be greater than 0.05 for the data to be considered to be normally distributed. Homoscedasticity is condition of data having equal variances and was tested using visual scatter plot and Koenker test which is considered appropriate for small sample sizes and does not require adherence to assumption of normality (Osborne & Waters, 2002). Multicollinearity is test of whether independent variables have high correlations. It was tested using Variance Inflation Factors (VIFs) and tolerance statistics, whereby none of the factors should have a VIF greater than 5 and tolerance statistics should be less than 1 for data with no multicollinearity. Autocorrelation is a time series problem where data relates with itself across time and is tested using Durbin-Watson (DW) statistic.

3.7 Ethical Issues in Research

According to Clark-Kazak (2017), any research involving human participants should adopt ethical considerations. Prior to field work, permission from Strathmore University review committee and permit from NACOSTI was obtained to authorize the research undertaking. The researcher adopted the principle of informed consent. The researcher informed the respondents about the objectives of the study and participants were accorded voluntary participation. The researcher did not force any participant to participate in the study. The study adopted confidentiality. The questionnaires did not contain any personal information, and the researcher did not reveal the identity of the study participants.

3.8 Chapter Summary

The chapter has detailed methodology for the study. It includes research design which is cross-sectional correlation research design. The study employed positivism research philosophy. Population includes the 67 distributors of top FMCG companies that deal with popular home and personal care brands in the Kenyan market including Unilever Kenya, L'Oreal, Reckitt Benckiser and Colgate Palmolive. Three officers per

company such as store manager, distributor manager and territory manager were involved to pretest the questionnaire in four companies. The distributor managers for the remaining 63 companies were targeted with structured questionnaires through google forms. The questionnaires sought to obtain a Likert scale rating of between 1 and 5 for the measures of SCM competencies – inventory availability, order fulfillment, quality management and return management as well as firm performance. The ratings from distributor manager per organization were used as measure for each of the study variables. Data cleaning was conducted to ensure that data adhere to normality and validity before regression. Multiple linear regression analysis was carried out to determine the relationship between the variables. The results were presented in tables and figures and used to complete the study report.



CHAPTER FOUR

PRESENTATION OF RESEARCH FINDINGS

4.1 Introduction

This chapter presents the research findings. The findings were obtained from the questionnaires. The results are presented in tables and figures. The results are explained before presentation with reference being made for the presented results. The results of reliability test from the pretesting of questionnaires using three respondents (store manager, distributor manager and territory manager), each from four of the distributor firms drawn from amongst the distributors of the select four manufacturers; Unilever Kenya, Colgate Palmolive Kenya, Reckitt Benckiser Services Kenya Ltd and L'Oréal Kenya.

4.2 Reliability and Validity Tests

Reliability of the instrument was ascertained through Cronbach's alpha where by 0.7 was the minimum required to ensure adequate internal consistency of the questions in the questionnaire. From the results shown in table 4.1, the Cronbach's Alpha is 0.695 and the Cronbach's Alpha Based on Standardized Items is 0.707. The result shows the alpha met the preferred criteria and therefore no need to delete any of the constructs (Riege, 2003). Therefore, questionnaire had adequate internal consistency, hence reliable.

Table 4.1: Reliability Test

Case Processing Summary			
		N	%
Cases	Valid	12	100.0
	Excluded ^a	0	0.0
	Total	12	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics		
Cronbach's Alpha Based on Standardized		
Cronbach's Alpha	Items	N of Items
.695	.707	23

Validity of the instrument was enhanced through consultations with the supervisors and industry experts. Apart from the recommendations during the defense stages the researcher sought opinions of the industry experts. They included the senior employees of the companies chosen for pre-testing the questionnaire including store manager, distributor manager, and territory manager from the 4 FMCGs producers. The questionnaire was fine-tuned and the field work exercise followed. The results for the field work exercise were as shown in the ensuing sections.

4.3 General Information

The general information evaluated included the experience of the distributor manager who filled out the questionnaire, the years the organization had been operating as appointed FMCG distributor and the number of the organizations the firm was acting as the appointed distributor in Kenya at the point of the study. The results were as shown in table 4.2, 4.3 and 4.4 in that order.

According to the results in table 4.2, the most distributor managers had work experience ranging from 5 to 10 and 11 to 15 years – 33.3% and 30.2% respectively. That was around 63.5 percent. The remainder was 12 (19%), 9 (14.3%) and 2 (3.2%) were under 5 years, 16 to 20 year and over 20 years respectively. The results show that the distributor managers who gave the information for the study were well experienced to give adequate and credible insights for the study.

Table 4.2: Work Experience as a Distributor Manager

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than 5 years	12	19	19	19
5 to 10 years	21	33.3	33.3	52.4
11 to 15 years	19	30.2	30.2	82.5
16 to 20 years	9	14.3	14.3	96.8
over 20 years	2	3.2	3.2	100
Total	63	100	100	

Source: Researcher (2022)

The other general information that was sought was the number of years the organization had been in operation as appointed FMCG distributor. As indicated in the results in table 4.3, the range of years the organizations had operated as appointed FMGC distributors were 23 (36.5%) for those between 5 to 10 years, 15 (23.8%) for those between 11 to 15 years, 13 (20.6%) for those below 5 years, and 9 (14.3%) for those between 16 and 20 years. According to the results, around 79.4% of the organizations had operated as appointed FMCG distributor for more than 5 years; hence they were the appropriate firms to give insights to this study.

Table 4.3: Years the organizations operated as Appointed FMCG distributors

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than 5 years	13	20.6	20.6	20.6
5 to 10 years	23	36.5	36.5	57.1
11 to 15 years	15	23.8	23.8	81
16 to 20 years	9	14.3	14.3	95.2
over 20 years	3	4.8	4.8	100
Total	63	100	100	

Source: Researcher (2022)

The study also sought to determine the number of companies that the firms under the inquiry traded with as their appointed distributors. Table 4.4 shows that majority 32(50.8%) traded with between 3 and 6 manufacturers, followed by 19(30.2%) which

worked with between 7 and 10 companies. Only 5(7.9%) worked with less than 3 companies while 7 (11.1%) worked with firms exceeding ten companies. Those results show that the organizations studied were credible distributors, a suitable requirement as per the context stipulated in the methodology.

Table 4.4: Number of FMCGs the Firms Act as Their Appointed Distributors

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 3	5	7.9	7.9	7.9
3 to 6 companies	32	50.8	50.8	58.7
Valid 7 to 10 companies	19	30.2	30.2	88.9
11 to 13 companies	7	11.1	11.1	100
Total	63	100	100	

Source: Researcher (2022)

4.4 Descriptive Analysis

A descriptive analysis of the specific constructs measuring the variables was conducted and presented as shown in this section. The constructs measured the independent variables such as returns management, order fulfilment, inventory availability, quality management and the dependent variable which was the distribution firm performance. Since the results emanated from the Likert scale measurements between 1 and 5, measures of central tendency such as mean, median, mode and skewness as well as the standard deviation which is a measure of dispersion were used. Those statistics could help to indicate the range of the measurements. The results in table 4.4 shows that the descriptive statistics for the inventory availability variable.

The result in table 4.5 shows that the median and mode was 4 while the mean ranged between 3.6667 and 4.3333. The construct with least mean was the concept that the “available inventory is sufficient to service all orders in full” while the factor with highest mean was that “the company mitigates variability of inventory, which reduces high inventory costs”. The skewness statistics and the standard deviations for the various factors were low. The statistics show that the respondents agreed that the organizations put adequate measures to ensure inventory availability. Their responses were not significantly different as indicated by the low standard deviation. The low

skewness statistic implies that the measurements for the various variables follow a bell shape, also pointing to a possibility of less dispersion.

Table 4.5: Constructs Measuring Inventory Availability

	N Valid	Mean	Median	Mode	Std. Deviation	Skewness
Employees are required to record and observe the stock level to estimate future requests, avoiding stock outs.	63	4.048	4	4	0.728	-0.332
Available inventory is sufficient to service all orders in full.	63	3.667	4	4	0.568	-0.424
Keeping adequate stock helps the company to meet the customers' needs and prevent frequent shortages.	63	4.222	4	4	0.683	-0.312
Employees are trained on proper inventory management to help the company improve accuracy on inventory orders.	63	3.825	4	4	0.383	-1.756
The company mitigates variability of inventory, which reduces high inventory costs.	63	4.333	4	4	0.475	0.724

Source: Researcher (2022)

The other factor that was analysed is the order fulfilment variable. As shown in table 4.6, the median and mode was 4.00, meaning that the respondents agreed that their company put adequate measures to complete the customer's orders on time. The mean for the various ranged between 4.0635 and 4.2857. The factor with least mean was the statement that "timely replenishment orders with the manufacturer prevent stock outs" while "delivering goods to customers has improved business performance" had the highest mean. The results show that the standard deviation for the various factors was low and the skewness statistic was equally low, a sign that the data had a bell shape. On average, the respondents concurred that the organizations had put measures to process the client's orders on time.

Table 4.6: Constructs Measuring Order Fulfillment

	N Valid	Mean	Median	Mode	Std. Deviation	Skewness
Customers' orders are fulfilled on time.	63	4.270	4	4	0.447	1.063
Timely replenishment orders with the manufacturer prevent stock outs.	63	4.064	4	4	0.504	0.128
The firm's short order cycle time has attracted and retained customers.	63	4.254	4	4	0.439	1.158
The company's timely order fulfilment process promotes competitiveness.	63	4.175	4	4	0.383	1.756
Delivering goods to customers has improved business performance.	63	4.286	4	4	0.455	0.972

Source: Researcher (2022)

The other factor whose constructs were analyzed related to the issue of quality management. Quality management was measured using five factors as shown in table 4.7. According to the results as indicated below, the median and mode for the data were 4.00. The mean ranged between 3.788 and 4.286. The construct with least mean was the statement that, "the company has a quality control process to protect its reputation" while the statement that, "employees monitor products to guarantee quality" had the highest mean. The standard deviation for all the constructs was low implying low variation in responses and the skewness statistics were also low implying that the measurement for the various factors followed a bell shape which also imply low dispersion between the data points.

Table 4.7: Constructs Measuring Quality Management

	N Valid	Mean	Median	Mode	Std. Deviation	Skewness
Employees monitor products to guarantee quality.	63	4.286	4	4	0.455	0.972
The company integrates supply chain partners to create value for the final customers.	63	4.270	4	4	0.447	1.063
Employees ensure a quality assessment is conducted before distributing the products to the customers.	63	3.635	4	4	0.517	-0.932
Products defects are identified and sent back to the manufacturer.	63	4.000	4	4	0.180	0.000
The company has a quality control process to protect its reputation.	63	3.778	4	4	0.522	-0.240

Source: Researcher (2022)

Another factor that was evaluated was the issue of returns management. The results for the descriptive analysis are presented in table 4.8 below. The results show that the median and mode for the constructs ranged from 4 to 5 which show that the respondents agreed with the various questions about the returns management. The mean ranged from 3.857 to 4.921. The factor with least mean was the statement that, “the company’s returns management policy is adhered to” while the statement that “the company issues customer refunds for goods returned to promote customer satisfaction” had the highest mean. The results show that the standard deviation is low implying less variations in the responses while the low skewness imply that the various measurements followed a bell shape, also a sign of less dispersions in the ratings by different respondents in various firms.

Table 4.8: Constructs Measuring Returns Management

	N Valid	Mean	Median	Mode	Std. Deviation	Skewness
The company's returns management policy is adhered to.	63	3.857	4	4	0.564	-0.034
The company addresses issues leading to returns.	63	4.048	4	4	0.490	0.124
The rate of product return affects the company's reputation.	63	4.079	4	4	0.326	1.628
The firm has adopted strategies to ensure returns are managed effectively to promote customer satisfaction.	63	4.191	4	4	0.396	1.615
The company issues customer refunds for goods returned to promote customer satisfaction.	63	4.921	5	5	0.272	-3.189

Source: Researcher (2022)

The other factor that was analysed was the distributor firm performance. The descriptive statistics for the various constructs measuring the factor are presented in table 4.9 below. The results show that the median and mode for various constructs was 4.00 which show that the respondents, in general, concurred with the statements regarding the firm's performance. The mean ranged between 3.952 and 4.413 respectively. The construct with least mean was the statement that "the distribution firm has experienced an improvement in total return on investment" while the statement that the "the distribution firm has experienced improvement in business growth" had highest mean. The standard deviations were low implying low dispersion. Apart from the factor that, the distribution firm has experienced an improvement in total return on investment whose skewness was -4.353, the rest had low skewness statistic. That factor was deleted during the computation of the average measurements for purpose of regression analysis.

Table 4.9: Constructs Measuring Distributor Firm Performance

	N Valid	Mean	Median	Mode	Std. Deviation	Skewness
The distribution firm has experienced improvement in business growth.	63	4.413	4	4	0.496	0.363
Supply chain factors, such as inventory availability, order fulfilment, quality management, and returns management helps the distribution firm to achieve a competitive advantage.	63	4.381	4	4	0.490	0.502
The distribution firm has experienced growth in total return on assets.	63	4.000	4	4	0.000	0.000
The distribution firm's activities are aimed at promoting customer satisfaction.	63	4.333	4	4	0.475	0.724
The distribution firm has experienced an improvement in total return on investment.	63	3.952	4	4	0.215	-4.353

Source: Researcher (2022)

4.5 Inferential Analysis

Test of the relationship between the dependent variable distribution firm performance and the independent variables; inventory availability, order fulfilment, quality management and returns management was undertaken through multiple linear regression analysis. The measurement for each variable was realised by taking the arithmetic mean of the Likert scale ratings for their respective constructs discussed in section 4.4. Before the regression analysis to determine the linear relationship, diagnostic tests were implemented as indicated in the methodology and the results indicated below.

4.5.1 Diagnostic Tests for Assumption of Multiple Linear Regression

Since the study adopted a multiple linear model, one of the diagnostic tests was the linearity test which was tested using correlation matrix and scatter plot. As shown in table 4.10, the test of linearity is explained by high correlation coefficients or when the correlation coefficients are statistically significant at 0.05 and 0.01. While the variables do not have high correlation coefficients, the results in table 4.9 the

correlation of the variables is significant at either 0.01 levels (2-tailed) or at least 0.05 levels (2-tailed). Therefore, based on correlation matrix, the data passed the linearity test and could be analyzed using linear models.

Table 4.10: Test of Linearity through Correlation Matrix

		Inventory Availability	Order Fulfilment	Quality Management	Returns Management	Firm Performance
Inventory Availability	Pearson	1	.454**	.257*	.145	.465**
	Correlation					
	Sig. (2-tailed)		.000	.042	.257	.000
	N	63	63	63	63	63
Order Fulfilment	Pearson	.454**	1	.370**	.008	.469**
	Correlation					
	Sig. (2-tailed)	.000		.003	.950	.000
	N	63	63	63	63	63
Quality Management	Pearson	.257*	.370**	1	.383**	.578**
	Correlation					
	Sig. (2-tailed)	.042	.003		.002	.000
	N	63	63	63	63	63
Returns Management	Pearson	.145	.008	.383**	1	.610**
	Correlation					
	Sig. (2-tailed)	.257	.950	.002		.000
	N	63	63	63	63	63
Firm Performance	Pearson	.465**	.469**	.578**	.610**	1
	Correlation					
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	63	63	63	63	63

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

* . Correlation is significant at the 0.05 level (2-tailed).

Source: Researcher (2022)

Another important assumption of multiple linear regression analysis is the normality test. That was tested using the normal Q-Q plot for the dependent variable which was the distribution firm performance but Shapiro-Wilk was also included in the analysis. Figure 1 below shows the normal Q-Q plot while table 4.11 shows the normality test

statistics. According to the Q-Q- plot, the data points are tightly close the diagonal line which is the requirement for the data to be normally distributed.

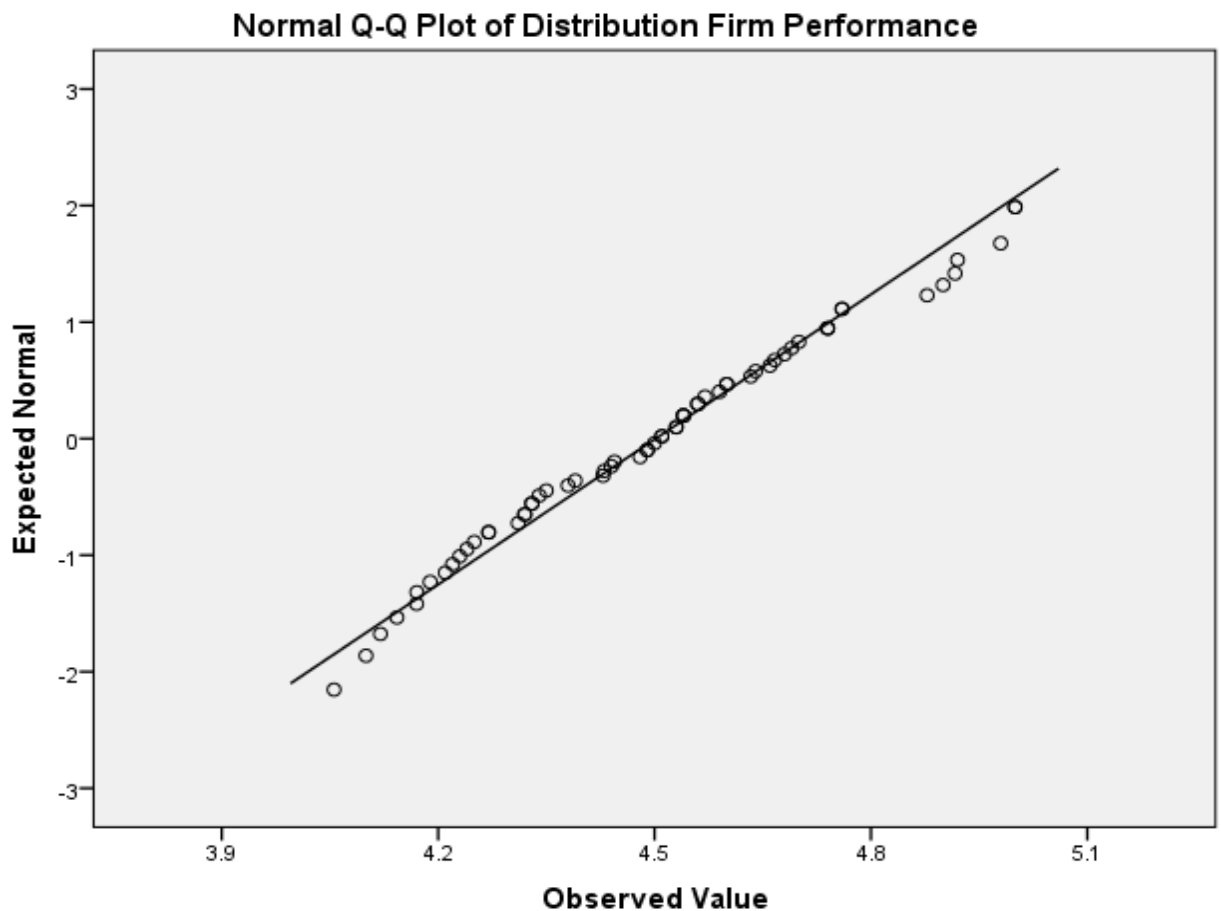


Figure 4.1: Normal Q-Q Plot of Distribution Firm Performance

Source: Researcher (2022)

The results in table 4.11 shows that the significant values for Shapiro-Wilk statistics for all the independent variables are less than 0.05 which means that the variables are not statistically significant. However, the dependent variable, distributor firm performance (sig. 0.239) is greater than 0.05 which confirms the results of figure 1 above. In such circumstance, regression there is no necessity to try converting the dependent variables into normal. As shown in the normal Q-Q plot, the distributions of the regression analysis are normally distributed and no need to transform the independent variables on account of the Shapiro-Wilk test. Osborne (2002) opines that it is the errors of the distribution that need to be normally distributed and not the independent variables' measurements. Therefore, there is no need to conduct data transformations.

Table 4.11: Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Inventory Availability	0.163	63	0.00	0.94	63	0.004
Order Fulfilment	0.126	63	0.014	0.964	63	0.06
Quality Management	0.098	63	.200*	0.959	63	0.036
Returns Management	0.216	63	0.00	0.924	63	0.001
Distribution Firm Performance	0.069	63	.200*	0.975	63	0.239

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: Researcher (2022)

The next test was the test of homoscedasticity. This was undertaken using Koenker test as shown in table 4.12. The null hypothesis in this test is that the data is homoscedastic which means that heteroscedasticity is not present and is confirmed if the significant value is more than 0.05. As shown in the results in table 4.11, the significant value for Koenker test statistic 2.526 is 0.640 which is greater than 0.05. Hence null hypothesis is confirmed, implying that the data has homoscedasticity.

Table 4.12: Test of Homoscedasticity

	LM	Sig
Breusch-Pagan BP	2.654	0.617
Koenker	2.526	0.64

Source: Researcher (2022)

The other test that was conducted was the test of multicollinearity which happens when the independent variables have high correlations. As shown earlier in table 4.10, the predictor variables have statistically significant correlations but the correlation coefficient were not very high. Nonetheless, the test of multicollinearity is one of the five assumptions of multiple linear regression analysis. It is important to test the extent to which the predictor variables influence each other. The test of multicollinearity was conducted using collinearity statistics – tolerance and VIF. The results in table 4.13 show that all tolerance statistics are less than 1 and all variance inflation factors are low. The two statistics indicate that the variables did not have multicollinearity.

Table 4.13: Test of Multicollinearity

Model		Collinearity Statistics	
		Tolerance	VIF
1	Inventory Availability	.772	1.296
	Order Fulfilment	.698	1.433
	Quality Management	.717	1.395
	Returns Management	.819	1.221

a. Dependent Variable: Distribution Firm Performance

Source: Researcher (2022)

Another diagnostic test is the test of autocorrelation. This was undertaken through Durbin-Watson statistic. A statistic of between 1.5 and 2.5 rules out the presence of autocorrelation while statistics both extremes of 1 and 4 implying positive and negative autocorrelation respectively. Based on the findings in table 4.14, the data did not have the problem of autocorrelation.

Table 4.14: Autocorrelation Test

Model	Durbin-Watson
1	1.777 ^a

a. Predictors: (Constant), Returns Management, Order Fulfilment, Inventory Availability, Quality Management

b. Dependent Variable: Distribution Firm Performance

Source: Researcher (2022)

Since the data did not have significant violations to any of the assumptions of multiple linear regression analysis, the data could be analysed through multiple linear regression as detailed in the methodology chapter. The ensuing section contains the test of relationship using the multiple linear regression analysis as per the model indicated in the methodology chapter.

4.5.2 Test of Relationships between the SCM and Distributor Firm Performance

The relationship between the measures of supply chain management (SCM) and distributor firm performance study was tested using regression analysis and the findings were as shown in table 4.15 below. According to the results, the nature and size of the relationship as determined using R (0.814) and R-Square (0.662) is

positive and strong. It implies that supply chain management can influence performance of the distributor firm in a positive manner. That means the improvement of the supply chain management function improves distributor firm performance and vice versa. Based on the analysis of variance (ANOVA) test of the model with F-Statistic 28.392 and the significant value which was 0.000, the results show that the model is statistically significant in explaining the relationship between the dependent variable and the independent factors.

Table 4.15: Nature and Size of the Overall Relationship

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.814 ^a	0.662	0.639	0.1449		

a. Predictors: (Constant), Returns Management, Order Fulfilment, Inventory Availability, Quality Management

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.385	4	0.596	28.392	.000 ^b
	Residual	1.218	58	0.021		
	Total	3.603	62			

Source: Researcher (2022)

The next analysis was to test the specific effects of the factors measuring the supply chain management on firm performance. That is explained by the coefficients and the respective significant values. Based on the study results presented in table 4.16, the relationship between firm performance and the independent variables: Inventory Availability, Order Fulfilment, Quality Management and Returns Management can be expressed using the equation: $Y = -0.197 + 0.271X_1 + 0.223X_2 + 0.227X_3 + 0.398X_4$. Since the coefficients, apart from the constant, are positive, it means that each of the independent variables have a positive influence on distributor firm performance.

All the SCM factors that were analysed have positive coefficient. Returns management (0.398) has largest coefficient followed by inventory availability (0.271) while quality management (0.227) and order fulfilment (0.223) in that order. However, the coefficients did not differ significantly. Notably, their significant values

were less than 0.05 which mean that their individual effects on the distributor firm performance was statistically significant. The significant value is the probability value, also called p value, which is helps researchers to predict the statistical significance of a research finding. The p-value of 0.05 is often used in social sciences which imply 95% true that the independents influence dependent variable. Since the significant values for each of the variables as shown in table 4.16 are below 0.05, inventory availability, order fulfilment, quality management and returns management have a positive and statistically significant individual effect on performance of distributor firms.

Table 4.16: SCM Factors and their Effects on Distributor Firm Performance

Model	Unstandardized		Standardized	T	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	-0.197	0.497		-0.395	0.694
Inventory Availability	0.271	0.115	0.204	2.347	0.022
Order Fulfilment	0.223	0.071	0.287	3.139	0.003
Quality Management	0.227	0.089	0.232	2.568	0.013
Returns Management	0.398	0.069	0.49	5.804	0.000

a. Dependent Variable: Distribution Firm Performance

Source: Researcher (2022)



CHAPTER FIVE

DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusion, and recommendations of the findings for the undertaken study. The chapter summarizes the study and then presents the conclusion and recommendations as per the study objectives. Recommendation for further research is also articulated.

5.2 Discussion of Findings

The main objective of this study was to determine the influence of SCM on the performance of distributors of top FMCGs in Kenya. The study was guided by the following specific objectives: to determine the effect of inventory availability on the performance of FMCG distribution firms in Kenya, to assess the effect of order fulfillment on the performance of FMCG distribution firms in Kenya, to establish the effect of quality management on the performance of FMCG distribution firms in Kenya and to determine the effect of returns management on the performance of FMCG distribution firms in Kenya. The study was anchored on the network perspective theory and resource-based view. As a network of interconnected players, if the supply chain is well managed (Galaskiewicz, 2011) it can give benefits to the involved firms and give them a competitive advantage (Barney, 1991).

This study employed a cross-sectional correlational research design and targeted 67 distributor firms which distribute the products of the major FMCG firms in Kenya. The population included the 42 Unilever Kenya distributors, 9 Colgate Palmolive Kenya distributors, 7 Reckitt Benckiser Services Kenya Ltd distributors and 9 L'Oréal Kenya distributors. The data was collected using structured questionnaires. The study managed to collect data from 63 companies. The other four companies which had been included amongst the firms involved during pre-testing the questionnaire were not considered for the purpose of actual data collection. The data was analysed using SPSS version 25, the results summarized through tables and figures and the findings.

The study results indicated that supply chain management is a critical factor for organization performance. The findings show that the producer and distributor have

put significant to efforts to ensure better supply chain management in Kenya's FMCGs. That was indicated by the fact that the respondents rated the constructs measuring the competencies of supply chain performance highly, meaning they agreed with the efforts put in place to improve supply chain performance. Therefore, the function of inventory availability, order fulfilment, quality management and returns management are taken very seriously in the FMCG sector in Kenya. That is most likely because of the significant role those factors play in satisfying the members actors in the supply chain. Overall, those factors have a strong, positive effect on supply distributor firm performance, based on the R and R-Square which were 0.814 and 0.662.

One of the objectives was to determine the effect of inventory availability on the performance of FMCG distribution firms in Kenya. Inferential statistics show that inventory availability has a positive and statistically significant effect on distributor firm performance. That was confirmed by the positive coefficient 0.271 with significant value equal to 0.022. It means firms with higher inventory availability have better performance than those with lower inventory availability. That makes sense because the firms with rare stock outages can satisfy their customers who depend on the stock which gives them repeat purchases, more sales and profits. The findings concur with network perspective theory that hold that organizations are in a supply chain framework are interconnected and they have shared responsibility to improve the overall benefits for all participants (Lazzarini, Chaddad & Cook, 2001).

Another objective was to assess the effect of order fulfillment on the performance of FMCG distribution firms in Kenya. The study determined that order fulfillment has a positive, statistically significant effect on performance of distributor firms. A supply chain which can process and complete the orders of its clients can give those firms the advantage and help them to perform better. That concurs with the results of Vergara et al. (2020) who determined that inventory availability helps organizations to respond to their customer requirements to the benefit of the players in the supply chain. Also, Cano et al. (2021) opine that availability of inventory enhances customer satisfaction and loyalty to the benefit of the seller through better revenues and profits (Grubor, Milićević & Djokic, 2016). Also, Ojha et al. (2019) noted that order fulfillment efficiency promoted customer loyalty and profitability of firms.

The third objective was to establish the effect of quality management on the performance of FMCG distribution firms in Kenya. The results show that quality management has a positive, statistically significant effect on performance of FMCG distributor firms. Quality of products or services in a supply chain is critical elements for satisfaction of the consumers of the products in supply chain which then informs repeat purchase, consumption and performance. That findings concur with the results of Kim, Son and Kim (2016) who noted that quality management is essential ingredient for competitive advantage and firm performance. That was also supported by the conclusion of Zeng, Tse and Tang (2018) who established that quality reduces defects and wastages which increases satisfaction, loyalty, repeat purchase and competitive advantage of firms. Similarly, Wachiuri et al. (2017) quality in the supply chain enhances distribution process and increases the business in terms of actual volumes which is another measure of firm performance.

The fourth objective was to determine the effect of returns management on the performance of FMCG distribution firms in Kenya. The study established that returns management has a positive, statistically significant effect on performance of FMCG distribution firms. There should be mechanisms to handle returns of goods for different reasons such as failure to conform or for expiry and related reasons. That reduces wastages and losses for the distributors, wholesalers, retailers and consumers which makes the system to be trusted. That is consistent with the views of Ambilkar et al. (2021) who concluded that returns handling is an essential factor which also influences shopping behavior and sales volumes. Consumers are more willing to buy from organizations that they are sure can accept a return for genuine reasons. That builds the partnership between the participants in a supply chain framework. Also, Mathu (2021) noted that consumers prefer to shop from firms with flexible return policies which means it can lead to customer loyalty, repeat purchase which enhances firm performance.

5.3 Conclusion

This study established that the supply chain management has a strong positive effect on performance of distributor firms. This study concludes that SCM positively influences distributor firm performance. Specifically, inventory availability, order fulfilment, quality management and returns management have a positive, statistically

significant individual effect on performance of the distributor firms. The firms in the distribution business can benefit if the members of their supply chain put efforts to ensure that they improve their supply chain framework (Ambilkar et al., 2021). Further, the study concludes that inventory availability, order fulfilment, quality management and returns management have a significant effect on performance of the distributor firms individually.

Those results imply that organizations operating in a supply chain framework that tries to optimize benefits to the members through inventory availability, order fulfilment, quality management and returns management can post higher financial results than their peers in other contexts (Ojha et al., 2019). As indicated in the study results, the benefits of those factors is felt through customer satisfaction, repeat purchase and positive word of mouth. That makes the supply chain to contribute to the firm's competitive advantage and more essentially, its financial performance (Wachiuri et al., 2017; Mathu, 2021)

5.4 Limitation of the Study

The findings of the study are to be used for knowledge, policy and practice, but with caution because of the limitations inherent in the type of methodology that was used. For instance, respondents can rate their conditions fairly and in other times, they can respond to the questions without making conscious critical considerations. The delimitation to those weaknesses was by ensuring that the questionnaire was a structured one and contained adequate but few questions. That can minimize possible fatigue and help to encourage respondents to take ample time to complete the questionnaire. Also, absence of unstructured questions ensured that the respondents responded to similar questions.

Also the regression methods have limitations. Even if all the assumptions of linear regression analysis are met, the results may not be fully applicable in all contexts because the model was based on a sample from distribution firms in Kenyan only. Besides, the data were the averages of the findings from respondents' ratings on the issues related to the various variables. The quantification process of the qualitative issues like inventory availability, order fulfilment, quality management and returns management was subjective and the model developed from such data should be used

with caution. However, quantification of qualitative concepts is a credible method devised to employ objective quantitative techniques to derive meaning from diverse concepts in the varied phenomena of the universe.

5.5 Recommendations

The study recommends that the organizations in a supply chain framework should aim to achieve high levels of SCM to benefit the members of the supply chain. This study established that the supply chain management can enhance performance of distributor firms. By extrapolation, it can be argued that other organizations in a supply chain framework can benefit from the improved supply chain management practices. That includes the producers, wholesalers, retailers and customers as well as the support entities such as those providing the transportation and warehousing.

The study recommends that the organizations should aim to improve inventory availability, order fulfilment, quality management and returns management. Producers should ascertain product quality and streamline returns management processes. Also, distributors in conjunction with producers and other members of supply chain framework should put adequate measures to ensure availability of quality stock, put adequate resources to ensure they can process their client's orders in a timely manner. Those ingredients for SCM call organizations to commit adequate resources and review their efforts to ensure that the systems and structures work to the benefit of the members of the supply chain.

5.6 Recommendation for Further Research

This study established that the supply chain management can benefit the distributor firms with better performance. Future studies can focus on the effects of SCM on performance of other members of the supply chain including producer, wholesalers and retailers. Also, SCM has experienced tremendous evolution.

The emergence of innovations such as automations, artificial intelligence (AI) and data analytics have contributed to the SCM. Future studies can investigate the impact of either automation, AI and data analytics or all of them on supply chain performance. Also, the challenges encountered in implementing the SCM frameworks including tools needed for planning, monitoring and reporting should be evaluated.

Studies can focus on how better SCM systems can be achieved to benefit SCM professionals with proper tools that are needed to enhance delivery of products and services in firms for benefit of the firms involved and their clients.



REFERENCES

- Abdel-Basset, M., Manogaran, G., & Mohamed, M. (2018). Internet of things (IoT) and its impact on supply chain: A framework for building smart, secure and efficient systems. *Future Generation Computer Systems*, 86, 614-628.
- Ambilkar, P., Dohale, V., Gunasekaran, A., & Bilolikar, V. (2021). Product returns management: A comprehensive review and future research agenda. *International Journal of Production Research*, 1-25. doi:10.1080/00207543.2021.1933645
- Atnafu, D., & Balda, A. (2018). The impact of inventory management practice on firms' competitiveness and organizational performance: Empirical evidence from micro and small enterprises in Ethiopia. *Cogent Business & Management*, 5(1), 1-16. doi:10.1080/23311975.2018.1503219
- Barney, J. (1991). Firms resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. Retrieved from [https://josephmahoney.web.illinois.edu/BA545_Fall%202019/Barney%20\(1991\).pdf](https://josephmahoney.web.illinois.edu/BA545_Fall%202019/Barney%20(1991).pdf)
- Bastas, A., & Liyanage, K. (2018). Sustainable supply chain quality management: A systematic review. *Journal of Cleaner Production*, 181, 726-744. doi:10.1016/j.jclepro.2018.01.110
- Cannella, S., Dominguez, R., Framinan, J. M., & Ponte, B. (2018). Evolving trends in supply chain management: Complexity, new technologies, and innovative methodological approaches. *Complexity*, 2018, 1-3. doi:10.1155/2018/7916849
- Cano, J. A., Gomez-Montoya, R. A., Cortes, P., & Campo, E. A. (2021). MRP systems considering fuzzy capacity, lead times and inventory availability. *International Journal of Simulation Modelling*, 20(1), 29-39. doi:10.2507/ijssimm20-1-538

- Chen, H., Anselmi, K., Falasca, M., & Tian, Y. (2017). Measuring returns management orientation. *The International Journal of Logistics Management*, 28(2), 251-265. doi:10.1108/ijlm-06-2015-0095
- Chen, H., Genchev, S. E., Willis, G., & Griffis, B. (2019). Returns management employee development: Antecedents and outcomes. *The International Journal of Logistics Management*, 30(4), 1016-1038. doi:10.1108/ijlm-08-2018-0218
- Clark-Kazak, C. (2017). Ethical considerations: Research with people in situations of forced migration. *Refuge*, 33(2), 11-17. doi.org/10.7202/1043059ar
- Collins, R. (2009). *The sociology of philosophies*. Harvard University Press.
- Colgate-Palmolive Company. (2022). Colgate®: Toothpaste, toothbrushes & oral care resources. Retrieved from <https://www.colgate.ke/>
- De Araújo, A. C., Matsuoka, E. M., Ung, J. E., Massote, A., & Sampaio, M. (2017). An exploratory study on the returns management process in an online retailer. *International Journal of Logistics Research and Applications*, 21(3), 345-362. doi:10.1080/13675567.2017.1370080
- Dobroselskyi, M., Madleňák, R., & Laitkep, D. (2021). Analysis of return logistics in e-Commerce companies on the example of the Slovak Republic. *Transportation Research Procedia*, 55, 318-325. doi:10.1016/j.trpro.2021.06.037
- Fernandes, A. C., Sampaio, P., Sameiro, M., & Truong, H. Q. (2017). Supply chain management and quality management integration. *International Journal of Quality & Reliability Management*, 34(1), 53-67. doi:10.1108/ijqrm-03-2015-0041
- Frostenson, M., & Prenekert, F. (2015). Sustainable supply chain management when focal firms are complex: a network perspective. *Journal of Cleaner Production*, 107, 85-94.

- Galaskiewicz, J. (2011). Studying supply chains from a social network perspective. *Journal of Supply Chain Management*, 47(1), 4-8.
- Grubor, A., Milićević, N., & Djokic, N. (2016). The effect of inventory level on product availability and sale. *Prague Economic Papers*, 25(2), 221-233. doi:10.18267/j.pep.556
- Handfield, R. B., & Nichols Jr, E. L. (1999). *Introduction to Supply Chain Management*, Prentice Hall, Englewood Cliffs, NJ.
- Hassan, N. M., & Abbasi, M. N. (2021). A review of supply chain integration extents, contingencies and performance: A post COVID-19 review. *Operations Research Perspectives*, 8, 1-10. doi:10.1016/j.orp.2021.100183
- Hazen, B. T., Russo, I., Confente, I., & Pellathy, D. (2020). Supply chain management for circular economy: Conceptual framework and research agenda. *The International Journal of Logistics Management*, 32(2), 510-537. doi:10.1108/ijlm-12-2019-0332
- Helgesen, Ø., Sandanger, H. M., & Sandbekk, J. (2018). Do customer profitability analyses pay? A survey of large Norwegian companies. *International Journal of Managerial and Financial Accounting*, 10(4), 352-377. doi:10.1504/ijmfa.2018.095970
- Heydari, M., Lai, K. K., & Zhou, X. (2020). Creating sustainable order fulfilment processes through managing the risk: Evidence from the disposable products industry. *Sustainability*, 12(7), 1-32. doi:10.3390/su12072871
- Ismail, N., Kinchin, G., & Edwards, J. (2017). Pilot study, does it really matter? Learning lessons from conducting a pilot study for a qualitative PhD thesis. *International Journal of Social Science Research*, 6(1), 1. doi.org/10.5296/ijssr.v6i1.11720
- Jirma, H. D. (2017). Factors influencing performance of supply chain management strategies in the national government ministries in Kenya. *Strategic Journal*

of Business & Change Management, 4(4), 866 - 894. Retrieved from <https://strategicjournals.com/index.php/journal/article/view/591>

Kefale, A. T., & Shebo, H. H. (2019). Availability of essential medicines and pharmaceutical inventory management practice at health centres of Adama town, Ethiopia. *BMC Health Services Research*, 19(1), 1-7. doi:10.1186/s12913-019-4087-0

Kim, H. J., Son, J., & Kim, S. W. (2016). Strategy for improving efficiency of supply chain quality management in buyer-supplier dyads: The suppliers' perspective. *Mathematical Problems in Engineering*, 2016, 1-10. doi:10.1155/2016/8641702

Kivunja, C. (2018). Distinguishing between theory, theoretical framework, and conceptual framework: A systematic review of lessons from the Field. *International Journal of Higher Education*, 7(6), 44-72. doi:10.5430/ijhe.v7n6p44

Kumar, V., Chibuzo, E. N., Garza-Reyes, J. A., Kumari, A., Rocha-Lona, L., & Lopez-Torres, G. C. (2017). *The impact of supply chain integration on performance: Evidence from the UK food sector*. Conference session presented at 27th International Conference on Flexible Automation and Intelligent Manufacturing, FAIM2017, Modena, Italy. Retrieved from <https://www.sciencedirect.com/science/article/pii/S2351978917303918?via%3Dihub>

Lazzarini, S., Chaddad, F., & Cook, M. (2001). Integrating supply chain and network analyses: the study of net chains. *Journal on chain and network science*, 1(1), 7-22.

Le, T. B. T. (2005). *Analysis of firm performance in manufacturing enterprises of Vietnam Coal Corporation*. Master Thesis, National Economics University.

Leung, N. Z., Chen, A., Yadav, P., & Gallien, J. (2016). The impact of inventory management on stockouts of essential drugs in sub-Saharan Africa:

- Secondary analysis of a Field experiment in Zambia. *PLOS ONE*, 11(5), 1-18.
doi:10.1371/journal.pone.0156026
- Mathu, K. (2021). Supply chain management as a competitive advantage of fast moving consumer goods SMEs in South Africa. *Journal of Energy and Natural Resources*, 10(1), 33-38. doi:10.11648/j.jenr.20211001.14
- Mohajan, H. K. (2017). Two criteria for good measurements in research: Validity and reliability. *Annals of SpiruHaret University. Economic Series*, 17(4), 59-82.
doi.org/ 10.26458/1746
- Mohamed, E. K. (2017). Main inventory management elements on reducing storage cost. *Asian Journal of Business and Management*, 5(2), 54-61. doi:10.24203/ajbm.v5i2.4651
- Muchaendepi, W., Mbohwa, C., Hamandishe, T., & Kanyepe, J. (2019). Inventory management and performance of SMEs in the manufacturing sector of Harare. *Procedia Manufacturing*, 33, 454-461.
doi:10.1016/j.promfg.2019.04.056
- Muchiri, P. (2016). New Unilever regional office at Karen. Retrieved from <https://www.unilever-ewa.com/news/press-releases/2016/new-unilever-regional-office-at-karen-paves-the-way-for-growth-in-east-africa.html>
- Mugenda, O.M. & Mugenda, A.G. (2004). *Research Methods, Quantitative and Qualitative Approaches*. ACT, Nairobi
- Mukhamedjanova, A. K. (2020). Concept of supply chain management. *Journal of critical reviews*, 7(02), 759-766. doi:10.31838/jcr.07.02.139
- Muiga, W. J. & Patrick, M. (2018). Influence of logistics management on distribution performance of fast moving consumer goods in Nairobi City County, Kenya. *International Journal of Business Management and Finance*, 1(38), 651-671.

- Mwanza, P., & Ingari, B. (2015). Strategic role of distribution as a source of competitive advantage in fast-moving consumer goods in Kenya. *International Journal of Scientific and Research Publications*, 590.
- Naliaka, V. W., & Namusonge, G. (2015). Role of inventory management on competitive advantage among manufacturing firms in Kenya: A case study of UNGA Group Limited. *International Journal of Academic Research in Business and Social Sciences*, 5(5), 87-104. doi:10.6007/ijarbss/v5-i5/1595
- Nguyen, V. H., Nguyen, T. T. C., Nguyen, V. T., & Do, D. T. (2021). Internal Factors Affecting Firm Performance: A Case Study in Vietnam. *The Journal of Asian Finance, Economics and Business*, 8(5), 303-314.
- Nkwabi, J. M. (2019). Supply chain management constraints in Tanzanian small and medium enterprises. *African Journal of Business Management*, 13(16), 564-570. doi:10.5897/ajbm2019.8876
- Nyaga, J. (2014). Factors affecting distribution of fast moving consumer goods in Kenya: A case of Eveready East Africa. *International Journal of Social Sciences and Entrepreneurship*, 1 (12), 290-302.
- Nyaga, L. M., & Noor, S. L. (2021). Order fulfilment scalability on performance of large manufacturing firms in Nairobi City County, Kenya. *The Strategic Journal of Business & Change Management*, 8(2), 402-407. Retrieved from <http://www.strategicjournals.com/index.php/journal/article/view/2004>
- Nyamwaro, L. K., & Moronge, M. (2018). Influence of quality management on supply chain performance of food manufacturing firms in Nairobi County, Kenya. *The Strategic Journal of Business & Change Management*, 5(2), 1933 - 1956. Retrieved from <https://strategicjournals.com/index.php/journal/article/view/757>
- Osborne, J. (2002). Notes on the use of data transformations. *Practical assessment, research, and evaluation*, 8(1), 6.

- Panya, K. O., & Marendi, P. G. (2021). Effects of reverse logistic practices on the performance of fast moving consumer goods companies in Kenya. *The Strategic Journal of Business & Change Management*, 8(4), 747-762.
- Oelze, N., Brandenburg, M., Jansen, C., & Warasthe, R. (2018). Applying sustainable supply chain management frameworks to two German case studies. *IFAC-PapersOnLine*, 51(30), 293-296. doi:10.1016/j.ifacol.2018.11.304
- Ojha, D., Sahin, F., Shockley, J., & Sridharan, S. V. (2019). Is there a performance tradeoff in managing order fulfilment and the bullwhip effect in supply chains? The role of information sharing and information type. *International Journal of Production Economics*, 208, 529-543. doi:10.1016/j.ijpe.2018.12.021
- Osborne, J. W., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical assessment, research, and evaluation*, 8(1), 2.
- Otieno, S. A. (2018). Selective Distribution Strategy And Competitive Advantage Of Fast Moving Consumer Goods Companies In Kisumu County (Doctoral dissertation, University of Nairobi).
- Rashid, A. (2016). Impact of inventory management in downstream chains on customer satisfaction at manufacturing firms. *International Journal of Management, IT and Engineering*, 6(6), 1-19. Retrieved from <http://www.indianjournals.com/ijor.aspx?target=ijor:ijmie&volume=6&issue=6&article=001>
- Ray, S. K., Basak, A., & Seddiqe, K. F. (2016). Study on supply chain management of industries in FMCG sector in Bangladesh. *Global Journal of Researches in Engineering: G Industrial Engineering*, 2.
- Reckitt Benckiser Services Kenya Ltd. (2022). Brands that touch people's lives. Retrieved from <https://www.reckitt.com/brands/>

- Richard, J. (2022). Best Fast-Moving Consumer Goods in Kenya, Sledge, Nairobi. Available at sledge.co.ke.
- Riege, A.M. (2003). Validity and reliability tests in case study research: a literature review with “hands-on” applications for each research phase. *Qualitative Market Research*, 6(2), 75-86. <https://doi.org/10.1108/13522750310470055>
- Röllecke, F. J., Huchzermeier, A., & Schröder, D. (2017). Returning customers: The hidden strategic opportunity of returns management. *California Management Review*, 60(2), 176-203. doi:10.1177/0008125617741125
- Sarite, S. K., Iravo, M. A., & Ismail, N. (2018). Role of order fulfillment on the performance of manufacturing firms in Kenya. *American Journal of Supply Chain Management*, 3(1), 1-15. Retrieved from <https://ajpojournals.org/journals/index.php/AJSCM/article/view/319/447>
- Saunders, M., Lewis, P., & Thornhill, A. (2012). Research methods for business students. *Harlow: Pearson*.
- Shaharudin, M. R., Govindan, K., Zailani, S., Tan, K. C., & Iranmanesh, M. (2017). Product return management: Linking product returns, closed-loop supply chain activities and the effectiveness of the reverse supply chains. *Journal of Cleaner Production*, 149, 1144-1156. doi:10.1016/j.jclepro.2017.02.133
- Sundström, M., & Hjelm-Lidholm, S. (2020). Re-positioning customer loyalty in a fast moving consumer goods market. *Australasian Marketing Journal*, 28(1), 30-34. doi:10.1016/j.ausmj.2019.09.004
- Sutanto, J., & Japutra, A. (2021). The impact of supply chain integration and trust on supply chain performance: Evidence from Indonesia retail sector. *International Journal of Economics and Business Administration*, 9(1), 211-224. doi:10.35808/ijeba/668
- Tao, F., Fan, T., Wang, Y., & Lai, K. K. (2019). Joint pricing and inventory strategies in a supply chain subject to inventory inaccuracy. *International*

Journal of Production Research, 57(9), 2695-2714.
doi:10.1080/00207543.2019.1579933

Unilever (2021). Our company. Retrieved from <https://www.unilever.co.ke/about/>

Unilever Kenya (2022). Unilever Kenya Limited Lit of Distributors. Unilever Limited. Nairobi.

Vergara, I. G., Gómez, M. C., Martínez, I. L., & Hernández, J. V. (2020). Strategies for the preservation of service levels in the inventory management during COVID-19. A case study in a company of biosafety products. *Global Journal of Flexible Systems Management*, 22(1), 65-80. doi:10.21203/rs.3.rs-92185/v1

Vitorino Filho, V. A., & Moori, R. G. (2020). RBV in a context of supply chain management. *Gestão&Produção*, 27(4), 1-20. doi:10.1590/0104-530x4731-20

Wachiuri, E. W., Waiganjo, E., Ismail, N., & Odhiambo, R. (2017). Influence of supplier quality commitment on the performance of state corporations in Kenya. *International Journal of Supply Chain Management*, 2(3), 38 -51.

Weber, A. N., & Badenhorst-Weiss, J. H. A. (2018). The last-mile logistical challenges of an omnichannel grocery retailer: A South African perspective. *Journal of Transport and Supply Chain Management*, 12(1), 1-13.

Yang, L., Li, H., & Campbell, J. F. (2020). Improving order fulfilment performance through integrated inventory management in a multi-item finished goods system. *Journal of Business Logistics*, 41(1), 54-66. doi:10.1111/jbl.12227

Zaieda, A., Mansour, M., & Mostafa, M. (2016). Evaluating the performance of order fulfilment process in supply chain. *Egyptian Journal for Engineering Sciences and Technology*, 20(1), 38-48. doi:10.21608/eijest.2016.97170

Zeng, W., Tse, M. Y., & Tang, M. (2018). Supply chain quality management: An investigation in the Chinese construction industry. *International Journal of Engineering Business Management*, 10, 1-16.
doi:10.1177/1847979018810619

Zhao, J., Ji, M., & Feng, B. (2020). Smarter supply chain: A literature review and practices. *Journal of Data, Information and Management*, 2(2), 95-110.
doi:10.1007/s42488-020-00025-z



APPENDICES

Appendix I: Questionnaire

Section A: General Information

Kindly tick or fill in blank spaces with your most suitable answer or response

1. Please indicate the name of your organization (optional)

2. How many years of work experience do you have as a Distributor Manager?
 Less than 5 years () 5 – 10 years () 11 – 15 years ()
 16 – 20 years () Over 20 years ()
3. How many years has your organization been in operation as an appointed FMCG distributor?
 Less than 5 years () 5 – 10 years () 11 – 15 years ()
 16 – 20 years () Over 20 years ()
4. How many FMCG companies does your firm distribute products for in Kenya as the appointed Distributor?
 Less than 3 () 3 – 6 () 7 – 10 ()
 11 – 13 () Over 14 ()

Section B

Inventory Availability

5. Indicate your level of agreement with the following statements about inventory availability and firm performance by putting a tick [√] to the level you agree with. Please rate the extent to which you agree/disagree with the following statements: 1= Strongly Disagree (SD), 2= Disagree (D), 3= Undecided (U), 4= Agree (A), and 5= Strongly Agree (SA).

no.	Statement	Level of Agreement with Statement				
		SD	D	U	A	SA
		1	2	3	4	5
1	Employees are required to record and observe the stock level to estimate future requests, avoiding stockouts.					
2	Available inventory is sufficient to service all orders in full.					

3	Keeping adequate stock helps the company to meet the customers' needs and prevent frequent shortages.					
4	Employees are trained on proper inventory management to help the company improve accuracy on inventory orders.					
5	The company mitigates variability of inventory, which reduces high inventory costs.					

Order Fulfillment

6. Indicate your level of agreement with the following statements about order fulfillment and firm performance by putting a tick [√] to the level you agree with.

Please rate the extent to which you agree/disagree with the following statements:

1= Strongly Disagree (SD), 2= Disagree (D), 3= Undecided (U), 4= Agree (A), and 5= Strongly Agree (SA).

no.	Statement	Level of Agreement with Statement				
		SD	D	U	A	SA
		1	2	3	4	5
1	Customers' orders are fulfilled on time.					
2	Timely replenishment orders with the manufacturer prevent stockouts.					
3	The firm's short order cycle time has attracted and retained customers.					
4	The company's timely order fulfillment process promotes competitiveness.					
5	Delivering goods late to customers' has improved business performance.					

Quality Management

7. Indicate your level of agreement with the following statements about quality management and firm performance by putting a tick [√] to the level you agree with.

Please rate the extent to which you agree/disagree with the following statements: 1=

Strongly Disagree (SD), 2= Disagree (D), 3= Undecided (U), 4= Agree (A), and 5= Strongly Agree (SA).

no.	Statement	Level of Agreement with Statement				
		SD	D	U	A	SA
		1	2	3	4	5
1	Employees monitor products to guarantee quality.					
2	The company integrates supply chain partners to create value for the final customers.					
3	Employees ensure a quality assessment is conducted before distributing the products to the customers.					
4	Products defects are identified and sent back to the manufacturer.					
5	The company has a quality control process to protect the company's reputation.					

Returns Management

8. Indicate your level of agreement with the following statements about returns management and firm performance by putting a tick [√] to the level you agree with. Please rate the extent to which you agree/disagree with the following statements: 1= Strongly Disagree (SD), 2= Disagree (D), 3= Undecided (U), 4= Agree (A), and 5= Strongly Agree (SA).

no.	Statement	Level of Agreement with Statement				
		SD	D	U	A	SA
		1	2	3	4	5
1	The company's returns management policy is adhered to.					
2	The company addresses issues leading to returns.					
3	The rate of product return affects the company's reputation.					
4	The firm has adopted strategies to ensure returns are managed effectively to promote customer satisfaction.					
5	The company issues customer refunds for goods returned					

	to promote customer satisfaction.					
--	-----------------------------------	--	--	--	--	--

Distribution Firm Performance

9. Indicate your level of agreement with the following statements about distribution firm performance by putting a tick [√] to the level you agree with. Please rate the extent to which you agree/disagree with the following statements: 1= Strongly Disagree (SD), 2= Disagree (D), 3= Undecided (U), 4= Agree (A), and 5= Strongly Agree (SA).

no.	Statement	Level of Agreement with Statement				
		SD	D	U	A	SA
		1	2	3	4	5
1	The distribution firm has experienced improvement in business growth.					
2	Supply chain factors, such as inventory availability, order fulfillment, quality management, and returns management helps the distribution firm to achieve a competitive advantage.					
3	The distribution firm has experienced growth in total return on assets.					
4	The distribution firm's activities are aimed at promoting customer satisfaction.					
5	The distribution firm has experienced an improvement in total return on investment.					

Thank you for taking your time to fill this questionnaire.

Appendix II: List of Distributors

	Distributor Name
1.	Island Distributors
2.	Fratres Limited Voi
3.	Central Tigers
4.	Fratres Limited Wote
5.	Dahlia Trading Co.Ltd (Kakamega)
6.	Dhalia Ltd Busia
7.	Quadco 317 Kisumu
8.	Dahlia Trading Co. Ltd (Luanda)
9.	Fratres Limited Machakos
10.	Abc Masky Stores Limited
11.	Gamaag Agencies
12.	Genesis International Supplies Ltd
13.	Quadco 317 Ltd Awendo
14.	Quadco 317 Ltd Homabay
15.	Banjara Distributors Ltd
16.	Wanjugi Discount Stores(Meru) Ltd
17.	Jamro Distributors Ltd
18.	Diamond East Africa Ltd
19.	Mt Kenya Dist. Ltd Mwingi
20.	Red Seven Distributors Limited
21.	Genesis Int. Supplies Ltd - Kapsabe
22.	Alam Modern Investments Ltd
23.	Mesora Distributors Limited
24.	Four Ways Ltd Kisii
25.	Mtito Tyaa Ventures Ltd
26.	Central Tigers Bomet
27.	Savemore Distributors Ltd
28.	Lodwar Distributors Ltd
29.	Mt Kenya Dist. Ltd Matuu
30.	Central Tigers-Molo
31.	Wanjugi Discount Stores Ltd
32.	Jamro Distributors Ltd-Gilgil
33.	Wanjugi Discount Stores Ltd Zimmerman
34.	Central Tigers Kericho
35.	Fricham Enterprises
36.	Central Tigers Kabarnet
37.	Wanjugi Discount Stores (Embu)
38.	Mkurugenzi Distributors
39.	Diamond Garissa Limited

40.	Abc Masky Stores Limited - Karatina
41.	Finsbury Trading Ltd
42.	Wanjugi Discount Store Meru Ltd(Moyale)

Source: Unilever Kenya (2022)

	Distributor Name
43.	Jumra Ltd
44.	Soipar Ltd
45.	Zen Mahitaji
46.	Khetia Drapers Ltd Kitale
47.	Raisons Distributors Ltd
48.	Mt Kenya Distributors
49	Mega Wholesalers
50	Chandaria industries
51	Ponders Ltd

Source: Colgate Palmolive (2022)

	Distributor Name
52	Salim Bin Alamudi Enterprises
53	Vibs Enterprises
54	Transbionics Limited
55	Eldovasco Limited
56	Medipoint Limited
57	Nyanza Beauty Cosmix
58	Salim Bin Alamudi Enterprises
59	Vibs Enterprises
60	Transbionics Limited

Source: L'Oréal (2022)

	Distributor Name
61	Towfiq General Trading Limited Mombasa
62	Mesora Distributors Ltd
63	Ponders Limited Kenya
64	Zen Mahitaji
65	Khetia Drapers Ltd
66	Harleys Distributors
67	Towfiq General Trading Limited Nairobi

Source: Reckitt (2022)

Appendix III: Ethical Approval



29th August 2022

Ms Rono Chepkorir
Chepkorir.rono@strathmore.edu

Dear Ms Rono,

RE: Influence of Supply Chain Management on the Performance of Distributors of Fast-Moving Consumer Goods Companies in Kenya

This is to inform you that SU-ISERC has reviewed and **approved** your above SU- master's research proposal. Your application reference number is SU-ISERC1466/22. The approval period is from **29th August 2022 to 28th August 2023**.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-ISERC.
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-ISERC within 48 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-ISERC within 48 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to SU-ISERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke/> and obtain other clearances needed.

Yours sincerely,

for: **Dr Ben Ngoye,**
Secretary; SU-ISERC

Cc: Prof Fred Were,
Chairperson; SU-ISERC



Appendix IV: NACOSTI Permit

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 121383	Date of Issue: 17/August/2022
RESEARCH LICENSE	
	
This is to Certify that Ms. Chepkorir Rono of Strathmore University, has been licensed to conduct research in Bomet, Bungoma, Busia, Embu, Garissa, Homabay, Kakamega, Kericho, Kiambu, Kilifi, Kirinyaga, Kisii, Kisumu, Kitui, Machakos, Makueni, Meru, Mombasa, Muranga, Nairobi, Nakuru, Nandi, Narok, Nyeri on the topic: INFLUENCE OF SUPPLY CHAIN MANAGEMENT ON THE PERFORMANCE OF DISTRIBUTORS OF FAST-MOVING CONSUMER GOODS COMPANIES IN KENYA: A CASE OF SELECT KEY DISTRIBUTORS for the period ending : 17/August/2023.	
License No: NACOSTI/P/22/19679	
121383	
Applicant Identification Number	Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
	Verification QR Code 
NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.	