SUPPLIER MANAGEMENT PRACTICES AND SUPPLY CHAIN PERFORMANCE OF RETAIL SECTOR IN KENYA.

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MASTER OF BUSINESS ADMINISTRATION IN PROCUREMENT AND SUPPLIES MANAGEMENT

KCA UNIVERSITY

2025

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A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE OF MASTER OF BUSINESS ADMINISTRATION IN PROCUREMENT AND SUPPLIES MANAGEMENT IN THE SCHOOL OF BUSINESS AT KCA UNIVERSITY

AUGUST 2025

DECLARATION

I declare that this research dissertation is my original work and has not been previously published or submitted elsewhere for award of a degree. I also declare that this contains no material written or published by other people except where due reference is made and author duly acknowledged.

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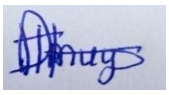
Signature:  Date:13/11/2025

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And have certified that all revisions that the dissertation panel and examiners recommended have been adequately addressed.

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ABSTRACT

Supply chain performance is vital to the success of the retail sector, as it directly influences product availability, customer satisfaction, and operational efficiency. However, the collapse of major retailers like Nakumatt and Uchumi has been partly attributed to poor supply chain management, resulting in profitability declines and operational disruptions. Thus, this study aimed to examine supplier management practices on supply chain performance in Kenya's retail sector. The specific objectives was focusing on supplier selection criteria, supplier collaboration, supplier value management, and supplier capacity building. Anchored on transaction cost theory, resource dependence theory, value chain theory, and dynamic capabilities theory, the study adopted a quantitative approach with a descriptive research design. The target population comprised 13 major supermarket chains, with a census approach yielding a sample size of 78 respondents. Data was collected using a closed-ended Likert scale questionnaire through a drop-and-pick method. Descriptive and inferential analyses was conducted, and findings were presented using tables and charts. The study finding shows that reputation, financial stability, and timely delivery are key supplier selection criteria prioritized by organizations. The study finding indicates that supplier collaboration is strong in Kenyan supermarkets, especially in joint forecasting and shared planning. The study finding reveals that suppliers contribute significantly to customer value through unique product features and flexible responses to market changes. The study finding highlights that suppliers invest in training and innovation, though scalability and technological integration remain areas with mixed performance. The study concluded that supplier collaboration is strong. The study concluded that supplier selection depends on credibility and delivery. The study concluded that supplier value boosts competitiveness. The study concluded that capacity building improves performance. The study recommended that supplier collaboration be strengthened through better digital integration. The study recommended that supplier selection focus more on financial transparency and delivery efficiency. The study recommended that supplier value management emphasize flexibility and long-term alignment. The study recommended that supplier capacity building prioritize innovation and scalability.

ACKNOWLEDGEMENT

The successful completion of this research dissertation would not have been possible without the grace of the Almighty God, as well as the support, guidance, and assistance of many individuals. I extend my sincere gratitude to my supervisor, Dr Jackson Ndolo for his invaluable intellectual support and guidance throughout this process. I am also deeply grateful to my family for their unwavering moral support and encouragement. May God bless you all abundantly.

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DEDICATION

I dedicate this research dissertation to the Almighty God, whose guidance and strength have sustained me throughout this journey. Additionally, I extend my heartfelt dedication to my family for their unwavering support, both financially and emotionally.

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ABBREVIATIONS AND ACRONYMMS

AHP:	Analytical Hierarchy Process
DEA:	Data Envelopment Analysis
DEMATEL:	Decision-Making Trial and Evaluation Laboratory
ISM:	Interpretive Structural Modeling
KPI:	Key Performance Indicators
LARG:	Lean, Agile, Resilience, and Green
MADM:	Multi-Attribute Decision-Making
MCDM:	Multi-Criteria Decision-Making
RDT:	Resource Dependence Theory
SEM:	Structural Equation Modeling
TCT:	Transaction Cost Theory
TOPSIS:	Technique for Order of Preference by Similarity to Ideal Solution

OPERATIONAL DEFINITION OF TERMS

Supplier Capacity Building: is a crucial supplier management practice in Kenya's retail sector that enhances supply chain performance. It involves innovation capability, training programs, skills development, production scalability, and compliance adherence. Strengthening supplier capacity ensures reliability, efficiency, and adherence to industry standards (Aslam, et al.2021).

Supplier Collaboration: is a key supplier management practice in Kenya's retail sector, enhancing supply chain performance through information sharing, joint planning, process integration, technology integration, and goal alignment. Effective collaboration reduces costs, improves efficiency, and strengthens long-term relationships between retailers and suppliers (Emon, et al. 2024).

Supplier Selection Criteria: in supplier management practices within Kenya's retail sector involves evaluating suppliers based on customer service, reputation credibility, financial stability, delivery reliability, and geographical proximity. Retailers prioritize suppliers who can consistently meet demand, ensuring a smooth and efficient supply chain (Mandipa & Sibindi, 2022).

Supplier Value Management: in Kenya's retail sector focuses on improving supply chain performance by driving process improvement,

value creation, product differentiation, supply flexibility, and strategic alignment. Retailers that effectively manage supplier value gain competitive advantages through better service delivery and operational efficiency (Sharma, et al.2021).

Supply Chain Performance: in the Retail Sector in Kenya is measured by delivery reliability, order accuracy, profitability growth, and collaboration effectiveness. Strong supplier management practices improve supply chain performance, leading to cost reductions, increased efficiency, and better customer satisfaction in Kenya's competitive retail market (Har, et al. 2022).

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Supply chain performance in the retail sector plays a critical role in ensuring efficiency, cost reduction, and customer satisfaction. A well-optimized retail supply chain enhances inventory management, minimizes stockouts, and reduces excess inventory, leading to improved profitability. Retailers leverage advanced technologies such as real-time tracking, demand forecasting, and automation to streamline logistics and distribution processes. Effective collaboration with suppliers, distributors, and logistics providers ensures timely delivery and responsiveness to market fluctuations (Rad,et al. 2022).

The performance of supply chains in the global retail industry has been profoundly influenced by technological advancements, globalization, and shifting consumer expectations. As highlighted by Mondol (2021), retailers have increasingly embraced digital transformation initiatives such as artificial intelligence (AI), blockchain technology, and data analytics to enhance operational efficiency. These technologies help improve decision-making, streamline logistics, reduce operational costs, and increase inventory accuracy, thereby allowing retailers to meet customer demands more effectively and adapt swiftly to market dynamics. Globalization has also expanded sourcing options and market reach, while digital tools have enabled real-time visibility and coordination across the supply chain, fostering improved collaboration among stakeholders.

Nevertheless, despite these innovations, significant challenges persist. The COVID-19 pandemic, for instance, exposed deep-rooted vulnerabilities in global supply chains, leading to widespread delays, product shortages, and increased transportation costs (Sharma et al., 2021).

These disruptions highlighted the critical need for building resilience and agility into supply chain strategies to cope with unforeseen events. Retailers are now placing greater emphasis on risk management, diversification of suppliers, nearshoring, and investment in predictive analytics to anticipate potential disruptions. Moreover, sustainability concerns and regulatory pressures are compelling firms to adopt environmentally responsible practices throughout the supply chain. As such, to sustain a competitive edge in the retail sector, companies must not only integrate advanced technologies but also design flexible and robust supply chain models capable of withstanding global uncertainties.

In the United States, leading retailers such as Walmart and Amazon have significantly transformed supply chain performance through the adoption of advanced technologies and strategic practices. According to Gupta and Ramachandran (2021), these companies utilize automation, predictive analytics, and robust supplier partnerships to optimize inventory management, reduce lead times, and improve customer satisfaction. Their investment in state-of-the-art distribution centers, real-time tracking systems, and data-driven decision-making allows them to respond swiftly to market fluctuations and enhance overall supply chain agility. These innovations not only drive operational efficiency but also set industry benchmarks for other retailers worldwide seeking to remain competitive in an increasingly digital and consumer-driven market.

In contrast, emerging markets such as India continue to grapple with persistent supply chain inefficiencies. As noted by Har et al. (2022) issues such as inadequate infrastructure, regulatory complexities, and a highly fragmented supplier base hinder the performance of retail supply chains in the country. These challenges result in higher logistics costs, poor service delivery, and restricted market accessibility, thereby limiting the growth potential of the retail sector. Moreover,

sustainability has become a key consideration globally, with retailers under pressure to minimize their environmental impact. As Sharma et al. (2021) observe, there is a growing push toward eco-friendly logistics practices, including the use of electric vehicles, energy-efficient warehouses, and sustainable packaging. Retailers across both developed and developing economies are now striving to strike a balance between operational efficiency and environmental responsibility in their supply chain strategies.

Supply chain performance in the African retail sector is a critical determinant of economic growth, operational success, and consumer satisfaction. In countries like South Africa, major retail chains such as Shoprite and Pick n Pay have adopted advanced supply chain technologies, including warehouse automation, centralized distribution systems, and data-driven demand forecasting to streamline operations and reduce costs (Mandipa & Sibindi, 2022). These innovations have allowed retailers to improve inventory accuracy, shorten delivery times, and better align supply with consumer demand. Furthermore, investments in digital platforms and e-commerce logistics have begun to transform the retail landscape by enhancing accessibility and service delivery across urban and semi-urban areas.

However, persistent challenges continue to undermine supply chain efficiency across much of the continent (Har et al. (2022). Disruptions such as port congestion, unreliable electricity supply, inadequate infrastructure, and high transportation costs significantly affect the availability and pricing of retail goods (Schleper et al. (2021). The COVID-19 pandemic magnified these structural weaknesses, leading to widespread stockouts, delays in product delivery, and increased pressure on local supply networks (Mahohoma & Agbenyegah, 2024). In response, many African retailers have turned to localized sourcing, regional supply chain integration, and collaboration with local producers to improve resilience and reduce dependence on international suppliers.

Additionally, there is a growing emphasis on sustainable logistics and the adoption of green supply chain practices to align with global environmental goals while maintaining competitive advantage in an evolving market.

In Nigeria, the rapid rise of e-commerce platforms such as Jumia and Konga has significantly increased the demand for streamlined and responsive supply chain management. As noted by Schleper et al. (2021), these platforms have driven growth in online retail, prompting investment in digital logistics solutions and warehousing infrastructure. However, the effectiveness of last-mile delivery remains hindered by persistent challenges such as poor road networks, traffic congestion, and customs delays, which lead to increased delivery times and operational costs. Additionally, informal retail structures and limited access to real-time tracking technologies further complicate supply chain coordination, especially in rural and peri-urban areas. These bottlenecks underscore the need for infrastructure development and enhanced regulatory frameworks to support Nigeria's growing digital retail economy.

In Egypt, the retail sector is actively embracing digital transformation to enhance supply chain visibility and control. Companies are increasingly implementing technologies like blockchain and artificial intelligence to improve transparency, optimize inventory management, and reduce fraud (Mandipa & Sibindi, 2022). These digital tools have the potential to revolutionize Egypt's retail supply chain by facilitating real-time data sharing and predictive analytics. However, the sector continues to face notable obstacles, including fragmented distribution networks, inconsistent government policies, and bureaucratic inefficiencies that delay cross-border and domestic logistics operations. Furthermore, limited integration among supply chain stakeholders and insufficient digital infrastructure in some regions hamper the full realization of these

technological advancements. Addressing these issues is essential for enhancing supply chain agility and supporting the sustainable growth of Egypt's retail industry.

Kenya's retail sector has experienced substantial expansion in recent years, with major players such as Naivas, Quickmart, and Carrefour aggressively increasing their presence nationwide to meet rising consumer demand (Kiriinya, 2021). This growth has been supported by a shift towards organized retailing and greater investment in supply chain infrastructure. However, several challenges persist. Poor road networks, port congestion, and inefficient logistics processes continue to disrupt the smooth flow of goods, especially between urban centers and remote regions (Kinyua et al., 2023). These infrastructural and logistical shortcomings not only delay delivery timelines but also inflate operational costs, ultimately affecting product pricing and consumer satisfaction.

A significant complexity in Kenya's retail supply chain is the dominance of informal retail channels, which account for nearly 70% of all consumer transactions (Rooi et al., 2023). These informal systems often lack standardized inventory practices, making demand forecasting and supply planning highly unpredictable. As a result, organized retailers face issues such as frequent stockouts, overstocking, and increased inventory holding costs. Despite efforts to modernize operations through digital tools like enterprise resource planning (ERP) systems, automated inventory management, and integrated e-commerce platforms, systemic issues remain. Coordination with suppliers is still hampered by fragmented data flows, fluctuating fuel and transportation prices, and complex regulatory requirements that create bottlenecks across the supply chain (Emon et al., 2024). Addressing these challenges through policy reforms, infrastructure investment, and inclusive digital integration with informal actors is essential to enhancing supply chain resilience and supporting long-term retail sector growth in Kenya.

The COVID-19 pandemic further exposed weaknesses in Kenya's retail supply chains, with disruptions in global imports affecting product availability and pricing (Kumar, 2024). This forced retailers to shift towards local sourcing, increasing reliance on domestic suppliers who often struggle with inconsistent production capacity and quality control issues (Patil, 2024). Additionally, high taxation and bureaucratic import procedures have raised operational costs, making it difficult for retailers to maintain competitive pricing. On the positive side, investments in modern distribution centers, strategic partnerships with third-party logistics providers, and the expansion of last-mile delivery services have enhanced supply chain agility in Kenya (Tarigan, et al. 2021).

1.1.1 Supplier Management Practices

Supplier management plays a pivotal role in enhancing the overall performance of supply chains by improving efficiency, reliability, and sustainability. Effective supplier management directly influences cost control, product availability, and customer satisfaction, especially in competitive retail environments (Aslam et al., 2021). Key practices in supplier management include supplier selection, collaboration, value management, and capacity building, each contributing to stronger and more agile supply chain networks. Supplier selection is particularly crucial, as it involves evaluating and choosing suppliers based on critical criteria such as product quality, cost competitiveness, reliability, compliance with industry standards, and lead time (Mandipa & Sibindi, 2022). This process ensures that supply chain operations are supported by capable and consistent partners, thereby reducing the risk of delays, stockouts, and substandard products.

Beyond initial selection, supplier collaboration has emerged as a cornerstone of modern supplier management. It entails building long-term, strategic relationships characterized by mutual trust, transparent information sharing, and joint planning (Emon et al., 2024). Such collaboration

fosters innovation, improves responsiveness to demand fluctuations, and enables joint problem-solving during disruptions, ultimately enhancing supply chain resilience. Additionally, supplier value management focuses on continuously evaluating supplier performance and aligning supplier goals with organizational objectives, while capacity building aims to strengthen suppliers' operational capabilities through training, technology transfers, and process improvements. Together, these strategies not only drive supply chain efficiency but also contribute to sustainable business practices by encouraging ethical sourcing, environmental responsibility, and inclusive growth across supplier networks.

Supplier value management and supplier capacity building are integral to driving continuous improvement and innovation within the supply chain. Supplier value management involves the systematic evaluation of suppliers based on key performance indicators (KPIs) such as delivery reliability, product quality, cost efficiency, and responsiveness to changing requirements (Kumar, 2024). This practice ensures that suppliers consistently align with organizational goals and performance benchmarks. It also includes the implementation of corrective measures when suppliers fall short, thus safeguarding the integrity and reliability of the supply chain. By fostering a culture of accountability and excellence, supplier value management helps companies strengthen strategic partnerships, mitigate risks, and enhance long-term supply chain performance.

On the other hand, supplier capacity building is focused on equipping suppliers with the skills, technology, and resources necessary to meet evolving market and industry demands. This may involve targeted training programs, investment in modern equipment, knowledge transfer, and even financial assistance to improve operational capacity and regulatory compliance (Tarigan et al., 2021). Such initiatives not only enhance the suppliers' ability to deliver high-quality products

but also promote greater innovation, flexibility, and sustainability within the supply chain. As noted by Aslam et al. (2021), these supplier management practices collectively contribute to improved product quality, reduced lead times, lower operational costs, and heightened supply chain agility. Moreover, empowering suppliers helps foster inclusive economic growth and builds resilient supply chains that can better withstand disruptions and adapt to global market changes.

1.1.2 Performance in Retail Sector

Supplier management practices are essential for optimizing supply chain performance in the retail sector by ensuring efficiency, cost-effectiveness, and reliability in the procurement process. Effective supplier selection, evaluation, and collaboration enable retailers to maintain a steady flow of goods, reduce lead times, and enhance service levels. For instance, retailers like Walmart and Tesco use structured supplier performance assessments and key performance indicators to ensure suppliers meet quality, delivery, and cost expectations. By implementing such supplier management practices, retailers can minimize stockouts, improve customer satisfaction, and strengthen supply chain resilience, ultimately driving operational success in a competitive retail market (Rad,et al. 2022).

Supplier management practices play a vital role in improving supply chain performance within the retail sector by promoting cost efficiency, operational agility, innovation, and sustainability. Retailers that invest in collaborative supplier relationships and embrace advanced technologies are better positioned to streamline procurement processes and optimize inventory management (Tarigan et al., 2021). The integration of systems such as Just-in-Time (JIT) inventory management, automated order processing, and real-time supplier communication enables retailers to reduce excess inventory, minimize storage costs, and improve product availability. These

practices not only reduce operational inefficiencies but also allow retailers to respond swiftly to fluctuating consumer demands and market conditions.

Furthermore, proactive supplier engagement encourages the development and adoption of supplier-driven innovations, particularly in areas like sustainable sourcing, biodegradable packaging, and waste reduction initiatives. Such innovations not only support environmental and social governance (ESG) goals but also enhance brand reputation and consumer loyalty in an increasingly eco-conscious market (Aslam et al., 2021). By working closely with suppliers to implement continuous improvement programs and technology upgrades, retailers can achieve greater transparency, traceability, and accountability across the supply chain. This strategic approach to supplier management enables retailers to build resilient and responsive supply chains that contribute to long-term competitiveness and sustainable business growth in a rapidly evolving retail landscape.

Risk mitigation and compliance within supplier management practices also play a significant role in enhancing supply chain performance in the retail sector. Supply chain disruptions, regulatory requirements, and quality control challenges necessitate robust supplier monitoring and risk management strategies. Retailers that conduct regular supplier audits, enforce compliance with industry standards, and diversify supplier bases can minimize vulnerabilities and ensure supply chain continuity. Companies like Amazon and Target implement multi-sourcing strategies and ethical supplier frameworks to mitigate risks associated with supplier failures and reputational damage (Braun, et al. 2023).

1.1.3 Retail Sector in Kenya

The retail sector in Kenya faces significant challenges in supply chain performance, particularly concerning delivery reliability and order accuracy. Kiriinya (2021) highlights that many retail chain stores rate the effectiveness of their strategic supplier collaborations as poor or mixed, leading to frequent stockouts and delayed deliveries. This inefficiency disrupts the supply chain, resulting in customer dissatisfaction and loss of sales. Additionally, the lack of robust supplier relationship management contributes to inaccuracies in order fulfillment, further exacerbating operational challenges within the sector (Kinyua et al., 2023). The absence of streamlined communication and coordination between retailers and suppliers results in mismatched expectations, which worsens when retailers do not leverage technology for inventory management or real-time tracking. These issues are compounded by the inconsistent quality of products supplied, which leads to higher return rates and additional operational costs. As the market becomes increasingly competitive, these logistical inefficiencies undermine retailers' ability to meet customer demands on time, ultimately affecting brand loyalty and profitability. For the sector to thrive, adopting more advanced supply chain technologies, improving supplier collaboration, and ensuring timely order accuracy are critical steps toward restoring efficiency and enhancing customer satisfaction.

Profitability growth in Kenya's retail sector has been adversely affected by financial challenges and unfavorable economic conditions. Over the past decade, ten prominent retail operators have collapsed, including Uchumi and Nakumatt supermarkets, despite government interventions aimed at reviving their operations. These closures are attributed to poor management, ineffective inventory logistics, and fierce competition from both international and local retailers, leading to business failures and significant job losses within the industry (Rooi et al., 2023).

Additionally, rising operational costs, including electricity and fuel prices, have further strained profit margins, while changing consumer preferences and the increasing shift toward e-commerce have disrupted traditional retail models. Many retailers failed to adapt to the digital transformation, and their inability to offer competitive pricing and personalized shopping experiences made them less attractive to the modern consumer. The lack of innovation in customer engagement and weak financial planning contributed to the financial instability of these once-thriving businesses, illustrating the vulnerability of the sector in the face of shifting market dynamics.

Collaboration effectiveness between suppliers and retailers in Kenya remains suboptimal, significantly impacting overall supply chain performance. Kinyua et al. (2023) indicates that the sector's performance in key urban areas has softened, with average yields declining to 7.0% in 2020, a decrease of 1.4 percentage points from previous years. This decline is partly due to inadequate information sharing and coordination between supply chain partners, leading to inefficiencies and reduced competitiveness in the market. In particular, the lack of real-time data sharing, misalignment of inventory levels, and poor communication channels have exacerbated delays and increased operational costs. Furthermore, many small-scale suppliers struggle to access vital market insights, limiting their ability to respond to consumer demand effectively. These challenges hinder the ability of both suppliers and retailers to optimize stock levels, resulting in overstocking or stockouts, which ultimately erodes customer satisfaction and affects profit margins. Improved collaboration, enhanced by digital tools and transparent communication, is critical to reversing this trend and fostering a more competitive and efficient supply chain environment in Kenya.

1.2 Statement of the Problem

Supply chain performance is vital to the success of the retail sector, as it directly influences product availability, customer satisfaction, and operational efficiency. Key performance indicators such as delivery reliability, order accuracy, profitability growth, and collaboration effectiveness are essential metrics that determine a retailer's competitiveness and market position. Efficient supply chains ensure that products are delivered on time, in the correct quantities, and at optimal costs, thereby enhancing customer loyalty and driving business growth (Kinyua et al., 2023).

In Kenya, the retail sector has been grappling with significant supply chain performance issues. A study by Kiriinya (2021) revealed that supermarkets owed 92% of the KES 40 billion in outstanding debts to suppliers for delivered goods, with payment delays extending from the standard 60 days to between 180 and 240 days. These delays have strained supplier relationships, leading to stockouts and reduced order accuracy. Furthermore, the collapse of major retailers like Nakumatt and Uchumi has been partly attributed to poor supply chain management, resulting in profitability declines and operational disruptions. Kinyua et al. (2023) also indicated a subdued performance, with average yields declining to 7.0% in 2020 a decrease of 1.4 percentage points from previous years highlighting challenges in collaboration effectiveness within the supply chain.

Despite the critical role of supplier management practices, their direct influence on supply chain performance metrics in Kenya’s retail sector remains inadequately understood and empirically under-researched. Existing studies had focused on broad aspects of supplier collaboration and relationship management, yet limited attention has been given to how specific supplier management practices such as supplier selection, capacity development, and value creation affect measurable supply chain performance outcomes. For instance, Mwangi and Ragui (2021) examined the relationship between supplier collaboration and retail store performance in

Nairobi County, emphasizing the role of supply chain resilience, while Thuo and Osoro (2022) investigated supplier relationship management and its impact on the performance of retail chain stores in Nairobi City County. While these studies provided valuable insights, they fall short of analyzing how targeted supplier management practices influence key supply chain performance indicators.

This study aimed to fill this gap by analyzing how supplier management practices influence critical supply chain performance metrics in Kenya's retail sector, thereby offering a more comprehensive understanding of the factors affecting supply chain efficiency and effectiveness.

1.3 General Objective of the Study

The main objective of the study was examining supplier management practices on supply chain performance of retail sector in Kenya.

1.3.1 Objectives of the Study

i. To determine the effect of supplier selection criteria on supply chain performance of retail sector in Kenya.
ii. To assess the influence of supplier collaboration on supply chain performance of retail sector in Kenya.
iii. To examine the effect of supplier value management on supply chain performance of retail sector in Kenya.
iv. To determine the effect of supplier capacity building on supply chain performance of retail sector in Kenya.

1.4 Research Question

i. What is the effect of supplier selection criteria on supply chain performance of retail sector in Kenya?

ii. How does supplier collaboration influence supply chain performance of retail sector in Kenya?

iii. What is the effect of supplier value management on supply chain performance of retail sector in Kenya?

iv. How does supplier capacity building affect supply chain performance of retail sector in Kenya?

1.5 Significance of the Study

1.5.1 Retail Sector in Kenya

This study is significant to the retail sector in Kenya as it provides insights into how supplier management practices impact supply chain performance. Given the competitive nature of the retail industry, understanding effective supplier selection, evaluation, collaboration, and relationship management can enhance operational efficiency, reduce costs, and improve service delivery. Retailers such as supermarkets, wholesalers, and e-commerce platforms can utilize the findings to streamline their procurement processes, minimize supply chain disruptions, and enhance customer satisfaction through improved product availability and quality. Moreover, the study contributes to addressing challenges such as supplier reliability, ethical sourcing, and the integration of technology in supplier relationships, thereby fostering sustainable retail business operations.

1.5.2 Policy Makers

For policy makers, this study provides empirical evidence on the role of supplier management practices in enhancing supply chain performance in the retail sector. The findings can inform the development of policies and regulations aimed at improving supplier standards, fostering fair trade

practices, and ensuring transparency in supply chain operations. Government agencies and regulatory bodies, such as the Kenya Bureau of Standards and the Competition Authority of Kenya, can use the insights to strengthen supplier certification, enforce ethical sourcing, and promote supplier development programs that enhance local suppliers' competitiveness.

1.5.3 Future Academicians

This study contributes to the academic discourse on supplier management and supply chain performance, providing a foundation for future research in this field. The study offers a valuable reference for students and researchers interested in procurement, supply chain management, and retail sector dynamics in Kenya. It also fills knowledge gaps by providing localized insights on supplier management strategies, contributing to the broader body of literature on supply chain efficiency in emerging economies.

1.6 Scope of the Study

This study examined supplier management practices and their impact on supply chain performance in the retail sector in Kenya, focusing on supplier selection criteria, supplier collaboration, supplier value management, and supplier capacity building as the controlling variables. The target population consisted of store managers, operations managers, procurement officers, and suppliers from supermarkets and chain stores, as they play a critical role in supplier management and overall supply chain operations. The study was conducted across key retail hubs in Kenya, encompassing both local and international retail chains to provide a comprehensive perspective on supplier management practices. Data collection and analysis took place between January and July 2025, ensuring sufficient time to assess the influence of supplier management strategies on supply chain performance.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presented studies that were conducted in an attempt to understand the examining supplier management practices and supply chain performance in retail sector in Kenya. it is made of Theoretical review, empirical review as well as the conceptual framework.

2.2. Theoretical Review

The study was based on the following theories; transaction cost theory, resource dependence theory, value chain theory and dynamic capabilities theory.

2.2.1 Transaction Cost Theory

Transaction Cost Theory (TCT) was developed by economist Ronald Coase in 1937 (Cuypers, et al. 2021). Coase's work laid the foundation for the theory by explaining why firms exist in a market economy and why certain activities are conducted within firms rather than through the market. The theory was further expanded by Williamson 1970s, who introduced the concept of transaction costs in the context of governance structures. Williamson's contributions were crucial in developing a more formal framework for understanding how firms make decisions regarding vertical integration and outsourcing based on minimizing transaction costs (Chen, et al.2022).

At its core, TCT explains how firms choose between conducting transactions in-house (hierarchical governance) or through the market (market governance). The theory posits that transaction costs such as search and information costs, bargaining and decision costs, and monitoring and enforcement costs are incurred whenever a transaction takes place. According to the theory, firms will opt for the governance structure that minimizes these transaction costs, which

in turn maximizes efficiency. Factors such as asset specificity, uncertainty, and frequency of transactions are key determinants in deciding whether a transaction should occur within the firm or through external market relationships (Liang, et al. 2021).

Despite its broad acceptance, transaction cost theory has faced critiques over the years. Cuypers, et al. (2021) overly simplistic view of human behavior, often assuming rational decision-making in firms while overlooking the complexities of social relationships and organizational culture. Additionally, the theory places significant emphasis on cost minimization, which may not always capture the strategic objectives and long-term relationships that shape contemporary supply chain dynamics (Liang, et al. 2021). In response to these critiques, Chen, et al. (2022) have expanded the theory, incorporating elements from social exchange theory, organizational behavior, and resource-based views to better address the complexities of modern supply chains and governance structures.

In the context of this study, transaction cost theory was applied to determine the effect of supplier selection criteria on supply chain performance in the retail sector in Kenya. By examining the transaction costs associated with different supplier selection processes, the researcher aimed to assess how the costs of identifying, negotiating with, and monitoring suppliers influence overall supply chain performance.

2.2.2 Resource Dependence Theory

Resource Dependence Theory (RDT) was developed by Salancik in 1978. RDT focuses on the way organizations depend on external resources for survival and the strategies they use to manage those dependencies (Barney, et al. 2021). Pfeffer and Salancik emphasized that organizations are

not autonomous but are influenced by their relationships with external entities such as suppliers, customers, and regulatory bodies, which control critical resources (Khan, et al. 2022).

Resource dependence theory suggests that organizations are dependent on external resources such as raw materials, labor, capital, and information necessary for their operations. As a result, organizations seek to manage and reduce their dependence on external sources through various strategies, including forming alliances, acquiring suppliers, or diversifying sources of resources. RDT posits that power within organizations is determined by the control over critical resources, and organizations with greater access to these resources gain more influence over others. The theory highlights how the need to secure resources from external sources shapes the behavior, structure, and strategies of organizations, especially in terms of collaboration and power dynamics (Davis & DeWitt, 2021).

Despite its significant contributions to understanding organizational behavior, Resource Dependence Theory has been critiqued for its narrow focus on power dynamics and external dependence. Li, et al. (2021) argue that RDT overlooks internal factors that also shape organizational behavior, such as internal resources, culture, and leadership styles. Furthermore, RDT assumes that organizations are passive in their relationships with external actors and does not fully consider the role of active agency in shaping these relationships (Khan, et al. 2022). Since its development, the theory has been updated to include more dynamic views of inter-organizational relationships, incorporating concepts from network theory and the study of strategic alliances (Barney, et al. 2021).

In this study, resource dependence theory is applied to investigate the effect of supplier collaboration on supply chain performance in the retail sector in Kenya. The researcher aimed to

explore how retailers in Kenya manage their dependence on suppliers for key resources like products, raw materials, and technology.

2.2.3 Value Chain Theory

Value chain theory was introduced by Porter in 1985. Porter's theory focuses on how firms can gain a competitive advantage by managing their internal activities and processes more effectively than their competitors. By analyzing the value created through each activity within a firm's value chain, companies can identify areas for improvement, optimize their operations, and ultimately deliver greater value to their customers (De Vries, et al. 2023). Value chain theory posits that a firm's competitive advantage is derived from the value it creates at each stage of its internal processes, from raw material acquisition through to product delivery and after-sales service. Porter divides a firm's activities into primary activities and support activities (Rahman, et al.2021).The key idea is that by optimizing these activities and ensuring they are aligned to create value, a firm can differentiate itself in the marketplace and achieve a competitive edge. The theory emphasizes that value is created when the activities of the firm work together effectively, reducing costs and enhancing product quality (Behl, et al. 2022).

While value chain theory has been widely accepted and applied in strategic management, it has faced several critiques Braun, et al. (2023) criticism is its focus on the firm as the primary unit of analysis, which overlooks the complexities of inter-organizational relationships in today's globalized and networked business environments. Modern supply chains often extend beyond the boundaries of a single firm, and this broader network of relationships is not adequately captured by Porter's original framework. Additionally, the theory assumes that value creation is linear, which may not always be the case in dynamic, complex supply chain environments where feedback loops and interdependencies exist De Vries, et al. 2023).

In this study, value chain theory was applied to determine the effect of supplier value management on supply chain performance in the retail sector in Kenya. In analyzing how retail firms manage their suppliers and optimize the value they derive from supplier relationships, the researcher aimed to assess how supplier value management influences supply chain performance. According to the theory, effective management of supplier relationships can lead to improved value creation across key stages of the supply chain, such as sourcing, logistics, and distribution.

2.2.4 Dynamic Capabilities Theory

The dynamic capabilities theory was introduced by Teece, et al. (1997) paper titled Dynamic Capabilities and Strategic Management. Teece and his colleagues proposed that in a rapidly changing business environment, firms need dynamic capabilities the ability to integrate, reconfigure, and renew their resources and competencies in response to external changes to sustain a competitive advantage over time (Buzzao & Rizzi, 2021). Dynamic capabilities theory focuses on a firm's ability to adapt, innovate, and reconfigure its resources and capabilities to meet the demands of a changing environment. Mele, et al., 2023). emphasizes the importance of three key capabilities: the ability to sense opportunities and threats, the ability to seize opportunities by mobilizing resources, and the ability to transform the firm's resource base to maintain or enhance competitive advantage. In essence, the theory underscores the need for flexibility and adaptability in a firm's operations (Chari, et al. 2022).

Dynamic capabilities theory has received significant attention but also faced critiques. According to Herold, et al. (2023). theory is somewhat vague in defining what constitutes a "dynamic capability" and how it can be measured or operationalized. This lack of clarity has made it difficult for researchers and practitioners to apply the theory in a consistent and practical manner. Additionally, Chari, et al. (2022) argue that the theory overemphasizes the role of leadership and

managerial capabilities while underestimating the importance of organizational structure and culture.

In this study, dynamic capabilities theory was applied to examine the effect of supplier capacity building on supply chain performance in the retail sector in Kenya. The researcher explored how retail firms in Kenya develop dynamic capabilities through supplier capacity building, which involves enhancing the skills, technologies, and resources of suppliers to improve overall supply chain performance. By using the framework of dynamic capabilities, the study assesses how retailers sense market opportunities, seize them through strategic supplier development, and transform their supply chains to enhance responsiveness, cost efficiency, and service quality.

2.3 Empirical Review

2.3.1 Supplier Selection Criteria and Supply Chain Performance in Retail Sector

Sarıçam and Yilmaz (2022) aimed to develop an integrated framework for supplier selection and performance evaluation in the apparel retail industry. The study utilized a multi-criteria decision-making (MCDM) approach, combining Analytical Hierarchy Process (AHP) and Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) to evaluate suppliers based on cost, quality, flexibility, and sustainability. Their findings highlighted that a balanced approach to supplier selection, considering not only cost but also long-term strategic fit, significantly enhances supply chain performance. However, the study was limited to the apparel sector, leaving a gap in understanding how similar supplier selection frameworks apply to other retail segments, such as supermarkets and chain stores in Kenya.

Pratap et al. (2022) investigated supplier selection and evaluation in e-commerce enterprises using a Data Envelopment Analysis (DEA) approach to assess supplier efficiency. The study followed a quantitative research design, collecting secondary data from e-commerce firms to analyze supplier performance based on input-output efficiency. The results indicated that efficient suppliers contribute to better supply chain agility, cost reduction, and improved service delivery. Despite these contributions, the study focused on e-commerce enterprises, leaving a knowledge gap regarding how supplier evaluation and performance assessment apply to brick-and-mortar retail stores and hybrid retail models in Kenya, where traditional procurement systems still play a significant role.

Sheykhizadeh et al. (2024) proposed a hybrid decision-making framework for supplier selection in the pharmaceutical industry, integrating Lean, Agile, Resilience, and Green (LARG) supply chain criteria. The study employed fuzzy logic and Multi-Attribute Decision-Making (MADM) techniques to evaluate supplier performance while balancing cost efficiency, environmental sustainability, and responsiveness to disruptions. Their findings emphasized that integrating sustainability and resilience factors in supplier selection leads to greater long-term supply chain stability. However, the study was confined to the pharmaceutical industry, presenting a research gap on how LARG-based supplier selection applies to general retail supply chains, particularly supermarkets and chain stores in Kenya, where sustainability and resilience are emerging concerns.

Owich and Odero (2023) examined supplier selection practices and supply chain performance in county referral hospitals in Kenya, focusing on procurement processes, quality assurance, and supplier relationship management. The study adopted a descriptive survey research design, collecting primary data through structured questionnaires from procurement officers and

hospital administrators. The findings revealed that inefficient supplier selection processes contribute to supply chain delays and increased operational costs, negatively affecting service delivery. Although the study provided valuable insights into supplier management in public healthcare, it did not explore how similar selection practices influence supply chain performance in Kenya's retail sector, which has different procurement dynamics and private-sector-driven supply chains.

Kimunya and Thogori (2023) analyzed supplier selection and performance in Kenya's pharmaceutical industry, focusing on the role of technical capability, financial stability, and ethical considerations in supplier evaluation. The study used a mixed-method approach, combining surveys and interviews with procurement officers from pharmaceutical companies. The results indicated that supplier reliability, compliance with regulatory standards, and financial health significantly impact supply chain efficiency. While the study provided useful insights, it was limited to the pharmaceutical industry, leaving a gap in understanding how supplier selection and evaluation criteria influence the broader retail sector in Kenya, where supplier relationships are shaped by market competitiveness and consumer demand patterns.

Meena, et al. (2023) conducted a study that focused on evaluating supplier performance and selection from the lens of sustainable supply chain performance. The primary objective was to develop a comprehensive model for assessing and selecting suppliers based on sustainability dimensions such as environmental responsibility, social accountability, and economic viability. The study utilized an integrated methodology that combined multi-criteria decision-making (MCDM) techniques, including the Analytical Hierarchy Process (AHP) and Technique for Order of Preference by Similarity to Ideal Solution (TOPSIS). The steps involved identifying key sustainability criteria, ranking them through AHP, and evaluating supplier alternatives using

TOPSIS to determine the most sustainable option. The findings highlighted that environmental criteria, such as emissions control and resource efficiency, played a critical role in supplier selection, followed closely by supplier innovation and ethical labor practices. The study emphasized the increasing importance of embedding sustainability metrics in supplier performance evaluation. However, a notable knowledge gap exists in how retail firms in Kenya are integrating these sustainability-focused supplier selection practices into their procurement processes. Due to limited regulatory enforcement, low awareness of environmental practices, and cost-sensitive operations, many Kenyan retailers still prioritize price and delivery speed over sustainability, pointing to the need for a contextualized supplier evaluation framework that accommodates both sustainability and operational efficiency.

Sabri, et al. (2022) investigated supplier selection and supply chain configuration specifically within project-based environments, where time, cost, and quality are crucial constraints. The main objective of their study was to provide a decision-support framework for selecting suppliers and configuring supply chains to meet dynamic project requirements. They employed a two-stage methodology, combining qualitative case study analysis with a quantitative optimization model. The first step involved identifying critical supplier selection attributes through interviews with project managers, followed by the development of a mixed-integer linear programming model to optimize supplier selection based on project constraints. Their results revealed that flexibility, lead time, and risk-sharing capabilities were the most valued supplier attributes in project settings. Furthermore, the study showed that the configuration of the supply chain around these capabilities improved overall project performance. Despite the model's robustness, the authors acknowledged a lack of empirical validation in retail settings, especially within developing countries like Kenya. In the Kenyan retail sector, projects such as store rollouts,

system upgrades, or seasonal product sourcing are common, yet supplier selection often remains ad hoc and cost-driven. This points to a critical knowledge gap in adapting and applying structured supplier selection and configuration models to retail operations that face high uncertainty and fragmented supply chains.

Nasrollahi et al. (2023) explored resilient supplier selection in the desalination supply chain using fuzzy Decision-Making Trial and Evaluation Laboratory (DEMATEL) and Interpretive Structural Modeling (ISM). The study's objective was to develop a hierarchy of criteria that influence resilient supplier selection, particularly in volatile and resource-constrained environments. The methodology involved identifying a set of resilience criteria through expert consultation, using fuzzy DEMATEL to analyze causal relationships among the criteria, and applying ISM to structure them hierarchically. Key steps included collecting expert judgments, converting linguistic variables into fuzzy numbers, computing influence weights, and generating structural models. The study found that key resilience factors include supply disruption management, geographical proximity, financial stability, and adaptability to demand variability. These findings are highly relevant in the context of global supply disruptions such as pandemics or geopolitical conflicts. However, a knowledge gap persists in understanding how such resilience-focused supplier selection frameworks can be localized and operationalized within the Kenyan retail sector. In Kenya, where infrastructure challenges and frequent logistical disruptions prevail, supplier resilience is critical, yet most retailers lack structured methods for evaluating it, relying instead on long-standing informal relationships that may not withstand systemic shocks.

Pamucar, et al. (2023) presented a study that addressed supplier selection in the healthcare supply chain during the COVID-19 pandemic using a novel fuzzy rough set-based decision-making model. The objective was to identify the most reliable suppliers during high-risk scenarios

where data uncertainty and time pressure dominate. The authors proposed a hybrid model that integrates fuzzy rough sets with multi-criteria decision-making approaches to handle ambiguity in supplier evaluation. The methodology included collecting expert opinions on supplier evaluation criteria, transforming qualitative assessments into fuzzy values, applying rough set theory to reduce dimensionality, and ranking supplier alternatives based on aggregated evaluations. Findings indicated that during crises, criteria such as responsiveness, inventory availability, communication efficiency, and risk management capabilities outweighed traditional cost-based metrics. While this model was designed for healthcare, its implications are broad and applicable to other sectors, including retail. Yet, the study did not explore how such adaptive supplier evaluation models could be extended to retail supply chains in Kenya. Kenyan retail firms, particularly during crises like COVID-19, faced severe stockouts and supplier failures, highlighting a pressing need for agile and robust supplier selection methods. However, a lack of investment in data-driven decision systems and dependence on manual procurement processes limits their ability to adopt advanced models such as fuzzy rough set-based frameworks.

2.3.2 Supplier Collaboration and Supply Chain Performance in Retail Sector

Mwangi and Ragui (2021) examined the relationship between supplier collaboration and retail stores' performance in Nairobi County, Kenya, with supply chain resilience as an intervening variable. The study utilized a descriptive research design, collecting primary data from retail store managers through structured questionnaires. Using regression analysis, the study found that supplier collaboration significantly enhances supply chain resilience, which in turn improves overall performance. However, the study focused solely on supply chain resilience as the mediating factor, leaving a knowledge gap in understanding how other supplier management practices, such as collaboration, influence supply chain performance in Kenya’s retail sector.

Kipruto and Eric (2021) investigated the role of supply chain collaboration on the operational performance of third-party logistics (3PL) service providers in Kenya. The study employed a quantitative approach, utilizing surveys to collect data from logistics managers. Using Structural Equation Modeling (SEM), the study found that strong supplier collaboration leads to cost efficiency, reduced lead times, and improved service delivery. While the study provided valuable insights into logistics operations, it did not explore how supplier collaboration specifically impacts retail sector supply chains, where supplier-retailer relationships are more dynamic and influenced by consumer demand patterns.

Mulweye et al. (2024) studied supplier collaboration and performance in the food and beverage manufacturing industry in Kenya, focusing on the extent to which information sharing, joint decision-making, and trust-based relationships influence performance. The study adopted a mixed-method research design, combining both qualitative interviews and quantitative surveys with procurement officers and supply chain managers. The findings indicated that effective supplier collaboration improves supply chain efficiency, reduces operational costs, and enhances product availability. However, the study was limited to the manufacturing sector, creating a research gap in how similar collaborative practices apply to retail supermarkets and chain stores, where supplier relationships are shaped by shelf-life constraints and high inventory turnover.

Chebichii et al. (2021) explored the influence of buyer-supplier collaboration on organizational performance in Kenya's food and beverage sector. The study utilized a descriptive survey design, collecting data from procurement managers in leading beverage firms. Findings revealed that collaboration through long-term contracts, shared risk management, and supplier development significantly improves performance. However, the study focused on manufacturers rather than retailers, leaving a gap in understanding how buyer-supplier collaboration affects

supply chain performance in Kenya's retail industry, where demand fluctuations and price sensitivity play a crucial role.

Wairimu (2023) analyzed the relationship between dynamic supply chain capabilities and resilience in Kenya's retail chain stores, with a focus on adaptability, flexibility, and responsiveness to disruptions. Using a case study approach, the study collected data through interviews and surveys with supply chain executives. The findings showed that supply chain resilience is enhanced when firms develop strong supplier relationships and invest in capacity-building programs. However, the study did not specifically address supplier management practices such as supplier selection criteria, collaboration models, and supplier value management, which are crucial to understanding supplier performance in retail supply chains.

Rajab (2024) examined the impact of supply chain strategic alliances on manufacturing firm performance in Kenya, focusing on partnerships between firms and key suppliers. The study applied a longitudinal research design, tracking performance indicators over time through surveys and financial data analysis. Findings revealed that firms engaging in strategic supplier alliances experience higher profitability, better inventory management, and improved supply chain responsiveness. However, the study was centered on manufacturing firms rather than the retail sector, leaving a gap in understanding how retail supply chains can leverage supplier alliances to enhance performance.

Andalib Ardakani, Soltanmohammadi, and Seuring (2023) explored how collaboration with both customers and suppliers impacts the performance of green supply chains. The objective of their study was to evaluate the effects of upstream (supplier) and downstream (customer) partnerships on environmental, economic, and operational performance indicators. The researchers employed a survey-based quantitative methodology, targeting managers in manufacturing firms

with active green supply chain initiatives. The methodological steps included data collection through structured questionnaires, application of structural equation modeling (SEM) to test hypotheses, and analysis of the relationships among collaboration variables and performance outcomes. Their findings revealed that close collaboration with suppliers significantly enhances green operational performance, particularly in areas like waste reduction, eco-design, and sustainable procurement. Similarly, engaging customers improved responsiveness to environmental concerns and encouraged innovation in green product offerings. However, the study also identified a gap concerning the integration of such collaborative practices in emerging economies, especially in the retail sector of Kenya. In particular, Kenyan retailers often face limitations in adopting green supplier partnerships due to insufficient regulatory frameworks, limited environmental awareness, and underdeveloped supplier capabilities in sustainability.

Govindan et al. (2021) focused on identifying and analyzing the key performance indicators (KPIs) that drive sustainable collaboration between manufacturers and suppliers. The objective of the study was to develop a structural model that could rank and prioritize KPIs influencing sustainable supplier collaboration. The methodology used was a grey Decision-Making Trial and Evaluation Laboratory approach, which involved expert input to analyze causal relationships among performance indicators. Key steps included identifying relevant KPIs, constructing influence-relation diagrams, and evaluating the relative importance of each KPI. The study found that environmental compliance, mutual trust, information sharing, and risk management were the most influential KPIs in successful manufacturer-supplier collaborations. It also highlighted that sustainable collaboration is strengthened when KPIs are clearly communicated and jointly monitored. Nevertheless, the study exposed a knowledge gap in how such KPI frameworks are implemented within retail supply chains in countries like Kenya, where

informal supplier relationships and inconsistent performance monitoring practices often prevail. This calls for tailored KPI development strategies and stronger regulatory support to enhance supplier management and sustainability performance in the Kenyan retail context.

Akhavan and Philsoophian (2023) examined the role of blockchain technology in enhancing supply chain collaboration and performance, with supply chain resilience acting as a moderating variable. The primary objective of their research was to analyze how blockchain-enabled transparency and traceability impact the quality of collaboration among supply chain partners. They employed a quantitative research design that included a large-scale survey distributed to logistics and procurement professionals in various industries. The methodology involved factor analysis to validate constructs, followed by regression analysis to examine the mediating and moderating effects of blockchain and resilience. Findings showed that blockchain significantly improved supplier collaboration by increasing trust, reducing lead times, and enabling real-time data exchange. Resilience further enhanced these outcomes by helping firms adapt to disruptions more effectively. However, the authors noted a critical knowledge gap in the readiness and infrastructure required to implement blockchain in retail supply chains in developing countries such as Kenya. Most Kenyan retailers lack the digital infrastructure and investment capacity to fully leverage blockchain's benefits, suggesting a need for capacity-building initiatives and public-private partnerships to support the adoption of such technologies in the retail sector.

2.3.3 Supplier Value Management and Supply Chain Performance in Retail Sector

Ali et al.(2021) examine the use of Einstein geometric aggregation operators within a novel complex interval-valued Pythagorean fuzzy setting, applying this methodology to green supply chain management. The study's objective is to improve supplier management in green supply chains by leveraging fuzzy logic and complex interval-valued data. The authors employ a

mathematical model combining aggregation operators with fuzzy logic to assess supplier performance and decision-making in green supply chains. Their findings demonstrate that the proposed model can enhance decision-making in supplier selection, particularly in sustainable supply chain contexts. However, the study's focus on theoretical modeling and its application to green supply chains leaves a gap in practical applications, especially in retail sectors such as those in Kenya, where supply chain management practices may differ from the theoretical models used in other contexts.

Bae et al. (2025) offer a supplier-centered view of cascading private labor governance in global value chains, addressing the critical role of competent suppliers in the functioning of these chains. The study seeks to identify how supplier competencies influence labor governance and the efficiency of global supply chains. The authors use a qualitative approach, conducting in-depth interviews with industry experts to understand the relationships between suppliers and labor governance structures. Their findings highlight that competent suppliers can bridge gaps in labor governance by enhancing supplier accountability and operational performance. This study's knowledge gap lies in its lack of direct applicability to retail supply chain performance, particularly in the context of Kenya's retail sector, where supplier competence may be affected by local factors such as resource availability and labor practices.

Sharma et al. (2021) explore strategies for accelerating retail supply chain performance in the face of pandemic disruptions, with a focus on adopting resilient strategies to mitigate long-term effects. The study's objective is to identify strategies that retailers can adopt to make their supply chains more resilient against unexpected disruptions. The authors utilize a mixed-methods approach, combining surveys of retail managers and interviews with industry experts to gather insights on supply chain strategies. Their findings emphasize the importance of flexibility,

digitalization, and supplier relationship management in maintaining supply chain performance during crises. Although this study provides useful insights into resilient supply chains, it lacks a specific focus on supplier management practices within the Kenyan retail sector, where disruptions may have different causes and consequences compared to other global markets.

Prohl and Kleinaltenkamp (2020) focus on managing value-in-use in business markets, specifically examining how firms can create value in the use phase of the product life cycle. The study's objective is to understand how businesses can enhance value creation in customer relationships through the strategic management of product usage. The authors employ a qualitative case study approach, using interviews with managers in various business sectors to explore value creation processes. Their findings suggest that managing value-in-use is crucial for maintaining long-term customer satisfaction and loyalty. However, this study does not specifically address supplier management in retail supply chains, particularly in regions like Kenya, where factors such as product usage, customer relationships, and value creation might have different dynamics compared to other markets.

Kahkonen and Lintukangas (2012) examine the underlying potential of supply management in value creation, focusing on the strategic role of supply management in adding value to the overall business process. The study's objective is to identify how effective supply management practices can enhance value creation in organizations. The authors employ a survey-based methodology, collecting data from supply chain managers in various industries to assess the role of supply management in value creation. Their findings indicate that supplier collaboration and relationship management are critical factors in enhancing organizational value. The knowledge gap in this study is its limited focus on retail supply chains, particularly in developing countries

like Kenya, where supply management practices may differ significantly from those observed in global markets.

Hong and Hales (2021) examined the performance implications of blockchain technology integration within supply chain management, specifically focusing on companies actively adopting blockchain solutions. The objective of the study was to evaluate how blockchain systems affect transparency, trust, and efficiency in supply chain operations. The researchers used a mixed-method approach that involved both qualitative interviews with blockchain integration firms and quantitative analysis of performance data from selected supply chains. The methodology included case study analysis, data collection on operational metrics, and the use of performance indicators such as delivery lead time, transaction cost, and accuracy of inventory records. The study found that blockchain enhances traceability, fosters real-time data sharing, and minimizes transactional inefficiencies. Additionally, firms with blockchain-integrated systems reported higher levels of trust between suppliers and buyers and significant reductions in fraud and inventory errors. However, a notable knowledge gap exists in terms of the adoption and applicability of blockchain in the Kenyan retail sector, where digital infrastructure is still developing. Specifically, there is limited understanding of how blockchain could be practically implemented by retailers like Naivas or Carrefour to improve supplier management and supply chain transparency, given resource and technological constraints.

Venkataraman and Pinto (2023) focused on cost and value management in project-based environments, offering strategic insights into balancing cost control with value delivery. The main objective was to provide a framework for integrating cost management with value creation, particularly in supply chain and project settings. The authors employed a conceptual and case-based methodology, combining theoretical models with real-world project management case

studies to illustrate the application of various cost and value tools. Key methodological steps included cost estimation, value engineering, and stakeholder analysis. The findings emphasized the importance of understanding total cost of ownership, aligning supplier performance with project value goals, and fostering long-term supplier relationships to maximize value. It was also found that organizations benefit more when suppliers are integrated into the project value chain early in the planning stage. Despite these insights, a significant knowledge gap remains in the contextual application of value-based supplier management practices in retail supply chains in Kenya. Retailers in Kenya may not systematically integrate cost and value considerations when selecting or managing suppliers, limiting their ability to build strategic partnerships that enhance performance and reduce long-term costs.

Irfan et al. (2023) explored the evolution of suppliers from purely business-to-business operations to business-to-consumer models as a strategy for climbing up the value chain. The study aimed to understand how suppliers develop new capabilities through their interactions with buyers, enabling them to eventually serve end customers directly. The researchers used a longitudinal case study methodology involving in-depth interviews with suppliers across different industries who had successfully made this transition. Data was collected in multiple phases, focusing on capability development, innovation practices, and supply chain restructuring. The findings revealed that sustained buyer-supplier relationships facilitate knowledge transfer, which in turn equips suppliers with marketing, branding, and customer service capabilities. Suppliers that invested in learning and innovation were better positioned to diversify into direct-to-consumer markets. Nonetheless, the study identified a knowledge gap concerning how such transitions can be facilitated in underdeveloped retail markets like Kenya. Specifically, there is little empirical data on how supplier learning and development is supported by major retailers in Kenya, and whether such

practices can enable local suppliers to become more independent and innovative in meeting end-user demand.

2.3.4 Supplier Capacity Building and Supply Chain Performance in Retail Sector

Alikhani, et al. 2021) examine the design of retail supply chain networks with a focus on concurrent resilience capabilities. The study's objective is to integrate resilience into the supply chain network design to ensure both flexibility and robustness in the face of disruptions. The authors employ a mixed-methods approach, utilizing optimization models and simulation techniques to assess the resilience of supply chain networks under various scenarios. Their findings reveal that incorporating resilience strategies such as diversification and capacity buffers significantly enhances the supply chain's ability to withstand disruptions. However, the study does not specifically address supplier management practices in retail sectors in developing countries, such as Kenya, where supply chains may face unique challenges related to infrastructure, resources, and supplier capabilities. This leaves a knowledge gap in how resilience can be effectively applied in the Kenyan retail context, especially with regards to supplier collaboration and capacity building.

Tukamuhabwa, et al. (2023) explore the role of internal social capital, logistics capabilities, and supply chain risk management capabilities as antecedents to supplier performance in the public healthcare sector of a developing economy. The study's objective is to understand how these factors contribute to the performance of suppliers within a supply chain, particularly in public healthcare settings. The authors use a quantitative approach, conducting surveys of healthcare supply chain managers and suppliers in Uganda to assess the impact of these antecedents on supplier performance. Their findings suggest that both internal social capital and logistics capabilities are significantly correlated with improved supplier performance, which in turn enhances supply chain

efficiency and reduces risk. While this study provides valuable insights into supplier performance, it does not specifically consider the retail sector, especially in Kenya, where the dynamics of supplier performance and risk management might differ due to varying market conditions and stakeholder expectations.

Rombe and Hadi (2022) analyze the impact of supply chain capability and performance on the marketing performance of retail sectors. The study aims to investigate how the capabilities within a supply chain, including procurement, logistics, and supplier management, affect the marketing outcomes of retail firms. The authors use a structural equation modeling approach, collecting data from retail firms to analyze the relationships between supply chain capabilities, performance, and marketing outcomes. Their findings indicate that strong supply chain capabilities, particularly in supplier management and logistics, lead to better marketing performance by improving product availability and customer satisfaction. However, this study does not directly address the Kenyan retail sector, where supply chain capabilities may be influenced by different factors, such as market size, economic conditions, and the local supply base. This highlights a gap in understanding how supply chain capabilities specifically impact the marketing performance of retail firms in Kenya, particularly regarding supplier relationships.

Li, et al. (2021) investigate supply chain coordination through capacity reservation and quantity flexibility contracts. The study's objective is to examine how firms can improve coordination with suppliers using contractual arrangements to manage capacity and flexibility in supply chains. The authors adopt a game-theoretic approach, modeling capacity reservation and quantity flexibility contracts and analyzing them through simulation. Their findings suggest that these contracts can lead to better coordination between supply chain partners, reducing inventory costs and improving supply chain performance. Although the study offers valuable insights into

contract-based coordination, it does not specifically focus on the retail sector or on supplier management practices in developing countries like Kenya, where supplier relationships and contract enforcement mechanisms might differ. This gap highlights the need for research on how these coordination mechanisms can be adapted and applied in the Kenyan retail context.

Xie, et al. (2021) explore the impact of capacity on a supplier's distribution channel selection in the context of retail platforms. The study's objective is to understand how suppliers make decisions about which distribution channels to use based on their production capacity. The authors use a mathematical modeling approach, analyzing the relationship between supplier capacity and the selection of distribution channels under different market conditions. Their findings indicate that suppliers with higher capacity are more likely to select retail platforms with broader customer reach, as these platforms can handle larger volumes of goods. However, the study does not address the specific challenges faced by suppliers in the Kenyan retail market, where factors such as limited infrastructure and market fragmentation may influence distribution channel decisions. This presents a knowledge gap in how capacity and distribution channel decisions are made in the Kenyan retail sector and how suppliers adapt to local market conditions.

Kähkönen et al. (2023) investigated how the COVID-19 pandemic served as a catalyst for the development of dynamic capabilities and the enhancement of supply chain resilience. The primary objective of the study was to analyze how firms responded to the crisis by evolving their supply chain capabilities to mitigate disruptions. The authors adopted a qualitative research methodology, relying on semi-structured interviews with supply chain professionals from different industries to gather detailed insights. The study employed a thematic analysis approach to identify recurring patterns and themes related to capability development. The findings revealed that firms improved their resilience by investing in flexible sourcing strategies, enhancing digital

communication systems, and strengthening collaborative relationships with suppliers. The research demonstrated that crisis situations can drive rapid innovation and strategic capability upgrades in supply chain networks. However, a key knowledge gap identified is the lack of contextual application to developing economies such as Kenya, particularly in the retail sector where supply chain resilience is often constrained by limited infrastructure and technology. Moreover, the study did not specifically explore supplier management practices in a retail context, which is crucial for understanding how supermarkets in Kenya can enhance their adaptability and performance under stress.

Liao, Hu, and Chen (2021) aimed to examine the impact of supply chain integration and capabilities on business performance within business-to-business network cooperation settings. The study employed a quantitative research design using survey data collected from 232 firms operating in various industries in Taiwan. Structural equation modeling was used to analyze the relationships between supply chain integration, operational capabilities, and firm performance. The results showed a significant positive effect of both internal and external supply chain integration on supply chain capabilities, which in turn positively influenced business performance. Notably, the authors highlighted the role of information sharing, collaborative planning, and supplier coordination as enablers of improved performance outcomes. The study emphasized that firms engaging in network cooperation must prioritize capability development for better supply chain outcomes. Nevertheless, a key knowledge gap exists concerning how these integration strategies and capabilities are applied in the retail sector of developing countries, especially Kenya. The study does not account for the structural limitations or cultural nuances that affect supply chain integration in Kenyan retail, nor does it explore how local retailers manage supplier relationships

amid infrastructural and technological challenges. Therefore, further research is needed to contextualize these findings in Kenya's unique retail supply chain environment.

Gu et al. (2021) explored the relationship between supplier development practices, big data analytics capability, and firm performance. The objective of the study was to understand how investment in supplier development and big data analytics can enhance a firm's competitive performance. A quantitative approach was adopted, using data from 212 manufacturing firms in China. The researchers applied multiple regression analysis to examine the mediating role of big data analytics in the link between supplier development and firm performance. Their findings indicated that supplier development significantly enhances a firm's data analytics capability, which in turn leads to better decision-making and improved overall performance. Supplier development activities such as training, joint problem-solving, and investment in supplier technologies were found to be essential drivers of analytics competence. However, a critical knowledge gap remains regarding the extent to which these practices are implemented in the retail sector of developing economies like Kenya. Specifically, the study does not examine whether retailers in Kenya are leveraging supplier development as a means of enhancing data analytics or supply chain performance. Given that many retailers in Kenya operate with limited resources and technological infrastructure, it is essential to explore how supplier development can be adapted to such contexts to drive efficiency and competitiveness.

2.4 Conceptual Framework

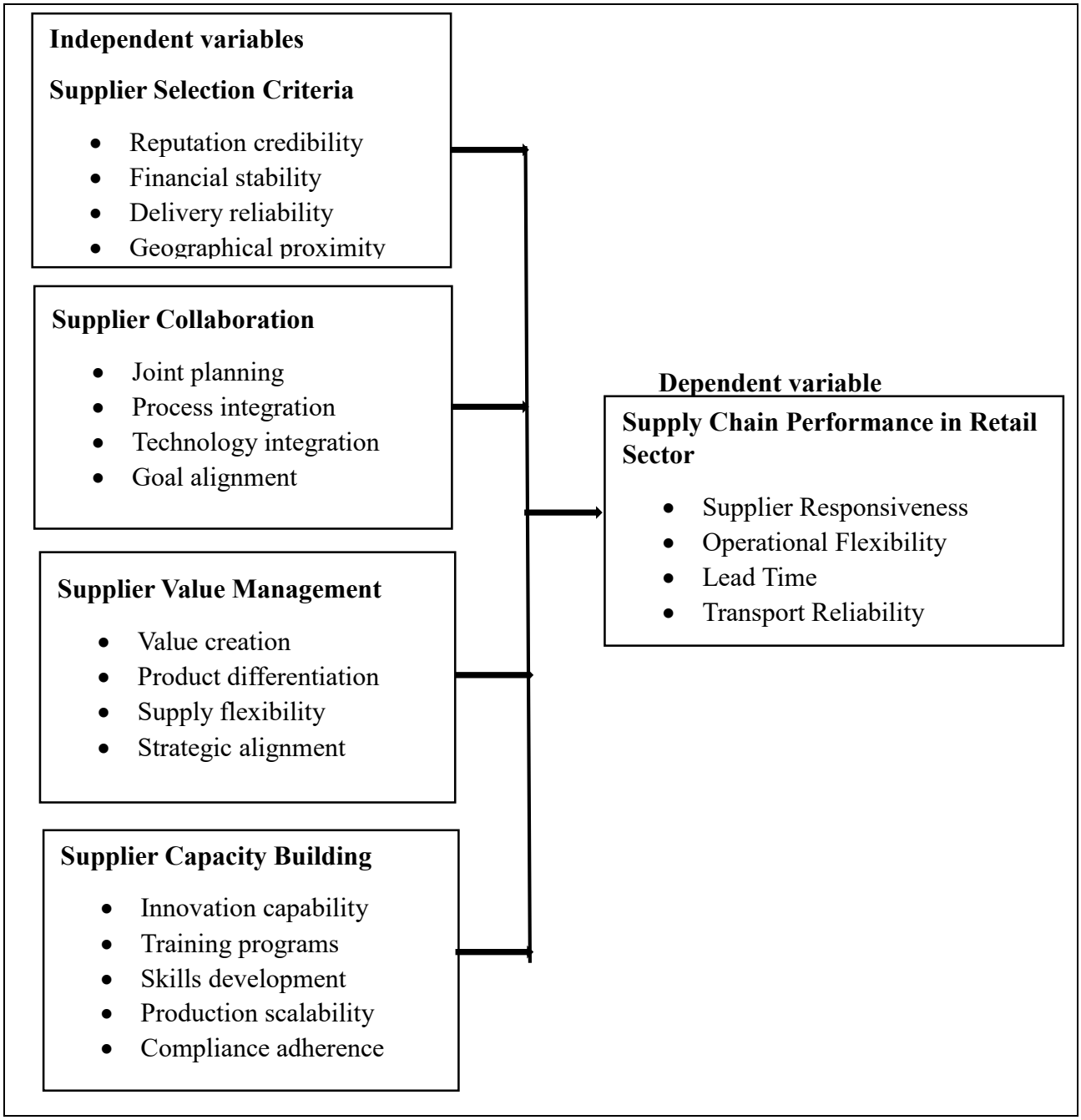
Independent variables **Dependent variable**

The conceptual framework links supplier management practices; supplier selection criteria, collaboration, value management, and capacity building to supply chain performance in Kenya's

retail sector, measured by delivery reliability, order accuracy, profitability growth, and collaboration effectiveness.

FIGURE 2.1

Conceptual Framework



2.5 Operationalization of Variables

TABLE 1

Operationalization of Variables

Type of Variable	Variable	Variable indicator	Measurement Scale	Type of Analysis
Independent Variables	Supplier Selection Criteria	• Reputation credibility • Financial stability • Delivery reliability • Geographical proximity	Interval scale	Descriptive/ Statistics
	Supplier Collaboration	• Joint planning • Process integration • Technology integration • Goal alignment	Interval scale	Descriptive Statistics
	Supplier Value Management	• Value creation • Product differentiation • Supply flexibility • Strategic alignment	Interval scale	Descriptive Statistics
	Supplier Capacity Building	• Training programs • Skills development • Production scalability • Compliance adherence	Interval scale	Descriptive Statistics
Dependent Variable	Supply Chain Performance in Retail Sector	• Order accuracy • Profitability growth • Collaboration effectiveness	Interval scale	Descriptive statistics

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter described the research methodology; it comprises of research design, population, sample size and sampling procedure, data collection method and data analysis techniques.

3.2 Research Design

A descriptive study design is a scientific approach that entails watching and describing a subject's activity without in any way altering it (Islam, et al. 2022). The research study adopted a quantitative approach and employ a descriptive research design. Descriptive studies focused on determining where, what, and how a phenomenon occurs. The descriptive survey was utilized in preliminary and exploratory studies to enable the researcher to gather information, summarize, present, and interpret data for clarification purposes. Therefore, the selection of the descriptive design was based on its suitability for preliminary and exploratory studies to gather, summarize, present, and interpret information to clarify supplier management practices and supply chain performance in retail sector in Kenya.

3.3 Target Population

The target population refers to the entire group of individuals or entities that a researcher intends to study and from which the sample is drawn (Islam, et al. 2022). The findings of the research were expected to be applicable to the entire population, ensuring alignment with the specific objectives of the study. According to the Competition Authority of Kenya database 2025, there were 13 major supermarket chains operating in Kenya's retail sector. The study focused on 13 major supermarket chains in Kenya because they have established supply chain structures, employed specialized staff,

and represented the largest share of the retail market. This selection ensured consistency, relevance, and reliability in analyzing supplier management practices and supply chain performance.

Therefore, the study selected only one staff member (supervisor or coordinator) from each department per supermarket chain, the estimated number of participants was based on the formula: one staff member per department per supermarket. With 13 supermarket chains and six targeted departments operations, purchasing, logistics/distribution, warehouse, quality assurance, and finance this results in 13 staff members per department. Therefore, the total estimated number of participants for the study was 78, ensuring that each selected staff member is directly involved in supplier management practices and supply chain performance oversight within their respective departments.

TABLE 3.1

Number of Staff Per Department in 13 Supermarket Chains

Type of Staff	Proportion Per Supermarket	Number of Staff
Operation staff	1	13
Purchasing staff	1	13
Logistics / Distribution staff	1	13
Warehouse staff	1	13
Quality Assurance staff	1	13
Finance staff	1	13
Total	6	**78**

Sources: **13 major supermarket chains databases 2025**

3.4 Sampling and Sampling Procedure

3.4.1 Sample Size

The study adopted employed purposive sampling procedure approach, including staffs from 13 major supermarket chains in Kenya's retail sector. Since these supermarkets hold a substantial market share and rely heavily on supply chain practices, they are crucial for the study. The research

selected one supervisor or department coordinators from each of the following six key departments within each supermarket: operation, supply chain, logistics/distribution, warehouse, quality assurance, and finance. Thus, the total sample size for this study was 78 respondents, ensuring representation from all key functional areas.

3.4.2 Sampling Procedure

The study used a purposive sampling technique, meaning all 13 major supermarket chains were included. This method ensured comprehensive data collection by incorporating every relevant entity in the target population. A purposive sampling technique was applied within each supermarket chain to select one staff member from each of the six key departments: procurement, supply chain, logistics/distribution, warehouse, quality assurance, and finance. The purposive selection ensured that only employees with direct involvement in supply chain processes were included, improving the accuracy and relevance of the study findings. This approach eliminated sampling bias and enhances the generalizability of the research conclusions.

3.5 Research Instrumentation

A research instrument is a structured tool used to collect data that aligns with the study's objectives (Buntins et al., 2021). This study utilized closed-ended Likert scale questionnaire to obtain quantitative data by measuring respondents' levels of agreement or disagreement with specific statements. The questionnaire was divided into six sections: Section 1 captured demographic information, Sections 2 to 5 focused on key aspects of supplier management practices, including supplier selection criteria, supplier collaboration, supplier value management, and supplier capacity building, while Section 6 collected data on supply chain performance in retail sector. This

structured approach ensured comprehensive data collection, enhancing the reliability and validity of the study findings.

3.6 Pilot Test

A pilot test was conducted within one of the 13 major supermarket chains included in the study but in different departments not targeted in the main research. A total of 10 staff members participated in the pilot test, selected from various targeted departments to ensure diverse feedback. This process helped assess the clarity, reliability, and validity of the questionnaire before the full data collection. The pilot test also identified ambiguities, assess respondent understanding, and ensure that the research instrument effectively captured the required data. Feedback obtained used to refine the questionnaire, improving question clarity and eliminating potential biases to enhance data quality.

3.6.1 Validity of Data Collection Instrument

Validity refers to the extent to which a research instrument accurately measures what it is intended to measure (Buntins et al., 2021). To ensure validity, the questionnaire underwent content, construct, and face validity assessments by experts in supply chain management and research methodology. Content validity ensured that all key aspects of supply chain integration and organizational performance are adequately covered, while construct validity confirmed that the questionnaire aligns with the theoretical framework of the study. Face validity was assessed to determine whether the instrument appears relevant and understandable to respondents.

3.6.2 Reliability of Data Collection Instrument

Reliability refers to the consistency and dependability of the research instrument in producing stable results over repeated trials (Bragazzi, et al. 2023). The Cronbach's Alpha coefficient was

used to test the internal consistency of the questionnaire, with a reliability threshold of 0.7 or higher indicating acceptable reliability (Islam, et al. 2022). The pilot test data was analyzed to check the consistency of responses, ensuring that the instrument provides accurate and reproducible results. Any necessary revisions were made to improve the reliability of the data collection tool.

3.7 Data Collection

Self-administered questionnaires will be used to collect data from the logistics/distribution, operations/production, and procurement departments of the selected companies. These questionnaires will be distributed using the drop-and-pick method. Upon obtaining authorization from NACOSTI and a research permit from KCA University, the researcher will develop a comprehensive work plan, conduct a pilot study to test the research instruments, and prepare sufficient questionnaires for distribution. Primary data collection will take place by visiting 13 major supermarket chains in Kenya. Over a period of two working weeks, the researcher will personally deliver the questionnaires to the designated staff members.

To enhance response rates, the study implemented strategies recommended by Long, (2024) such as issuing a preliminary notification outlining the purpose and content of the questionnaires and actively encouraging participation. Before distribution, the researcher ensured that respondents understood the significance of their involvement and the overall importance of the study. This approach aimed to foster cooperation and improve the questionnaire return rate. Additionally, the researcher maintained a questionnaire register to track distribution and collection, ensuring accountability and control. This register was documenting the details of questionnaires issued and those retrieved. Follow-ups was conducted where necessary to ensure that all questionnaires were collected within the specified two-week period.

3.8 Data Analysis and Presentation

Data analysis is a systematic process of organizing, summarizing, and evaluating data using statistical and logical techniques (Mbanaso, et al. 2023). The primary goal of data analysis is to derive meaningful insights, identify patterns or trends, and answer the study's research questions. This study will employ both descriptive and inferential statistical methods using SPSS version 20.0. Descriptive analysis summarized the data using measures such as means, frequencies, and standard deviations to provide an overview of the variables. The study was presented using tables and charts. Inferential analysis, specifically regression modeling, was used to examine the relationship between supply chain integration factors and organizational performance. The regression model is specified as:

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

Where:

$Y =$ supply chain performance in retail sector

$\beta_0 =$Constant (coefficient of intercept)

$X_1 =$ supplier selection criteria

$X_2 =$ supplier collaboration

$X_3 =$ supplier value management

$X_4 =$ supplier capacity building

$\beta_1, \beta_2, \beta_3, \beta_4,$: Regression coefficients

3.9 Diagnostic Tests

Diagnostic tests were conducted to ensure that the collected data met the necessary statistical assumptions for analysis. These tests confirmed the suitability of the data for regression analysis and other statistical procedures (Islam et al., 2022).

3.9.1 Linearity Test

The linearity test assessed whether there was a linear relationship between the independent and dependent variables. Scatter plots and correlation analysis were used to determine if the relationship followed a straight-line pattern. In cases where non-linearity was detected, data transformations or alternative analytical methods were considered (Mbanaso et al., 2023).

3.9.2 Multicollinearity Test

Multicollinearity, which occurs when independent variables are highly correlated and potentially distort regression results, was examined using the Variance Inflation Factor (VIF) and Tolerance Values. A VIF value above 10 indicated potential multicollinearity issues. Where such issues were identified, remedial actions such as removing redundant variables or combining related variables were applied (Long, 2024).

3.9.4 Normality Test

The normality of the data distribution was assessed using the Shapiro-Wilk test, Kolmogorov-Smirnov test, histograms, and Q-Q plots. These tools evaluated whether the residuals conformed to a normal distribution, an essential assumption in many statistical procedures. In instances where normality was violated, data transformations, including logarithmic and square root adjustments, were considered (Islam et al., 2022).

3.10 Ethical Considerations in the Study

Ethical standards were rigorously upheld throughout the research process. Informed consent was obtained from all participating cadres, including retail shop staff and managers, to ensure voluntary participation with a clear understanding of the study's purpose and procedures. Additionally, consent was specifically sought from retail shop managers to ensure their staff felt protected and supported. All collected data were treated with strict confidentiality; responses were coded, and no personally identifiable information was disclosed. Ethical approval was obtained from the relevant institutional review board before data collection commenced. Participants retained the right to withdraw at any point without facing any consequences. The research was designed to benefit both the community and retail shops by providing insights aimed at improving business practices, enhancing staff welfare, and contributing to overall community development. Academic integrity was maintained through proper citation and strict avoidance of plagiarism.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presented the data analysis, including response rate, demographic information, descriptive results, pilot test results, diagnostic tests and inferential results.

4.2 Response Rate

TABLE 4.1

Response Rate

Response Rate	**No.**	**Percentages**
Returned questionnaire	71	91.0
Unreturned questionnaire	7	9.0
Total	**78**	**100**

The study in table 4.1 recorded a strong response rate of 91.0%, with 71 out of 78 questionnaires returned, indicating a high level of participant engagement and enhancing the credibility of the results related to supplier management practices and supply chain performance in Kenya's retail sector. The selection of one staff member per department per supermarket chain, across six key departments operations, purchasing, logistics/distribution, warehouse, quality assurance, and finance in 13 supermarket chains, provided a focused and informed respondent base (Ganesha & Aithal, 2022).This sampling approach ensured relevant insights from individuals directly involved in supply chain functions.

4.2 Demographic Information

4.2.1 Age Bracket of the Respondents

TABLE 2.2

Age Bracket of the Respondents

Age Bracket of the Respondents	Frequency	Percent
18 – 25	9	12.7
26 – 35	19	26.8
36 – 45	12	16.9
46 – 55	15	21.1
Above 55	16	22.5
Total	**71**	**100.0**

The age distribution in table 4.2 of the respondents in the study examining supplier management practices and supply chain performance in the retail sector in Kenya reflects a diverse representation across age groups. The majority of the respondents were aged above 55 years, accounting for 22.5% of the total sample, followed closely by those aged between 26–35 years at 26.8%. Participants aged 46–55 years made up 21.1%, while those in the 36–45 age bracket comprised 16.9%. The youngest group, aged 18–25 years, represented 12.7% of the respondents. This distribution suggests that insights on supplier management practices and supply chain performance were gathered from individuals with varying levels of experience and maturity, potentially enhancing the reliability and breadth of perspectives captured in the study (Kipruto & Eric 2021).

4.2.2 Level of Education of the Respondents

TABLE 4.3

Level of Education of the Respondents

Level of Education of the Respondents	Frequency	Percent
Bachelor's Degree	20	28.2
Master's Degree	34	47.9
Other (Specify)	17	23.9
Total	**71**	**100.0**

The findings in table 4.3 on the level of education of respondents reveals a highly educated workforce within the retail sector in Kenya, which strengthens the reliability and depth of insights gathered on supplier management practices and supply chain performance. The majority of respondents, 47.9%, held a Master's degree, indicating advanced knowledge and likely strategic involvement in supply chain decision-making. Additionally, 28.2% of respondents possessed a Bachelor's degree, further demonstrating a strong academic foundation in business or related fields. The remaining 23.9% categorized their education as "Other," which may include diplomas, professional certifications, or ongoing studies, still contributing valuable practical experience. This high level of education among participants enhances the credibility of the study findings, as it suggests that respondents are likely well-versed in the dynamics of supply chain operations and supplier engagement strategies (Sharma, et al. 2021).

4.2.3 Number of Years in the Retail Industry

TABLE 4.4:

Number of Years in the Retail Industry

Number of Years in the Retail Industry	Frequency	Percent
Less than 1 year	10	14.1
1 – 5 years	11	15.5
6 – 10 years	17	23.9
11 – 15 years	15	21.1
Above 15 years	18	25.4
Total	**71**	**100.0**

The distribution of respondents in table 4.4 based on their number of years in the retail industry indicates a well-balanced representation of experience levels, which is essential for a comprehensive analysis of supplier management practices and supply chain performance in Kenya's retail sector. The highest proportion of respondents, 25.4%, had worked in the retail industry for over 15 years, suggesting a strong base of seasoned professionals with deep industry insights. This was followed by 23.9% who had 6–10 years of experience, and 21.1% who had been in the industry for 11–15 years. Those with 1–5 years of experience accounted for 15.5%, while the least experienced group, with less than one year in the industry, comprised 14.1%. The diversity in experience levels among respondents enhances the study's ability to capture a wide range of perspectives on how supplier practices influence supply chain performance (Gupta & Ramachandran, 2021).

4.2.4 Size of the Retail Business (Based on Number of Employees)

TABLE 4.5:

Size of the Retail Business

Size of the Retail Business (Based on Number of Employees)	Frequency	Percent
Less than 50 (Small enterprise)	20	28.2
50 – 250 (Medium enterprise)	25	35.2
More than 250 (Large enterprise)	26	36.6
Total	**71**	**100.0**

The finding in table 4.4 on the size of retail businesses, categorized by the number of employees, highlights a well-balanced representation across different business scales in Kenya's retail sector. Large enterprises with more than 250 employees constitute the highest proportion at 36.6%, followed closely by medium-sized enterprises (50–250 employees) at 35.2%, and small enterprises with fewer than 50 employees making up 28.2%. This distribution indicates that the study captures perspectives from a wide spectrum of retail operations, from expansive chains to smaller, possibly independent businesses. Such diversity is crucial when examining supplier management practices and their influence on supply chain performance, as organizational size can significantly affect procurement strategies, supplier relationships, and resource capabilities. The inclusion of all business sizes ensures that the findings are relevant and applicable across the retail industry landscape in Kenya.

4.2.5 Years of Operation of the Organization

TABLE 4.6:

Years of Operation of the Organization

Years of Operation of the Organization	Frequency	Percent
Less than 5 years	14	19.7
5 – 10 years	16	22.5
11 – 15 years	18	25.4
More than 15 years	23	32.4
Total	**71**	**100.0**

The distribution of the years on table 4.6 of operation of the organizations shows that most retail businesses participating in the study are well-established. A significant 32.4% have operated for more than 15 years, followed by 25.4% with 11–15 years in business, and 22.5% with 5–10 years of experience. Only 19.7% of the organizations have been in existence for less than 5 years, indicating limited representation of newer entrants. This range suggests that the study draws insights primarily from organizations with extensive experience in the retail sector (Mandipa & Sibindi, 2022). Such longevity likely reflects well-developed supplier management practices and offers deeper understanding of how these practices influence supply chain performance within the Kenyan retail context.

4.2.6 Number of suppliers the organization engage with on a regular basis

TABLE 4.7:

Number of Suppliers the Organization Engage with on Regular Basis

Number of suppliers organization engage with on a regular basis	Frequency	Percent
1 – 10	20	28.2
11 – 50	27	38.0
51 – 100	1	1.4
More than 100	23	32.4
Total	**71**	**100.0**

The number of suppliers retail organizations in table 4.8 regularly engage with varies widely, indicating diverse supply chain structures across the sector in Kenya. A substantial portion, 38.0%, work with 11–50 suppliers, reflecting a moderate level of supplier engagement that allows for flexibility and choice without overwhelming complexity. 32.4% of organizations report working with more than 100 suppliers, suggesting large-scale operations with expansive procurement networks, which may require more sophisticated supplier management practices. Meanwhile, 28.2% engage with 1–10 suppliers, likely representing smaller or more focused operations with close supplier relationships. Only 1.4% work with 51–100 suppliers, showing that this range is less common (Kiriinya, 2021). These variations influence how organizations manage supplier relationships and performance, highlighting the importance of tailoring supply chain strategies to fit the scale and complexity of supplier networks in Kenya's retail sector.

4.3 Descriptive Results

4.3.1 Supplier Selection Criteria

TABLE 3:

Supplier Selection Criteria

Statements on Supplier Selection Criteria	Mean	Std. Deviation
The supplier is known for maintaining a strong reputation in the industry.	4.01	1.177
The supplier has consistently demonstrated business credibility over time.	4.23	.929
The supplier shows consistent financial stability across financial periods.	4.11	1.153
The supplier provides financial records that reflect low risk of default.	3.99	1.347
The supplier delivers goods on time as per the agreed schedule.	4.18	.990
The supplier has a strong track record of honoring delivery commitments.	4.15	1.117
The supplier is located within a reasonable geographical distance.	4.21	.984
The supplier's proximity contributes to faster and more cost-effective delivery.	4.17	1.171

The supplier selection criteria highlighted in table 4. 8 reflect key considerations organizations prioritize when evaluating potential suppliers. Reputation in the industry is important, with a mean score of 4.01 and a standard deviation (SD) of 1.177, suggesting a generally positive perception with some variation in opinion. Business credibility received a higher mean of 4.23 and a lower SD of 0.929, indicating strong agreement and consistent views among respondents. This study was found to be in line with the findings of Sheykhizadeh et al. (2024)

who emphasized that integrating sustainability and resilience factors in supplier selection leads to greater long-term supply chain stability.

Financial stability across periods had a mean of 4.11 and an SD of 1.153, showing moderate agreement and variability. This study was found to be in line with the findings of Pratap et al. (2022) who's results indicated that efficient suppliers contribute to better supply chain agility, cost reduction, and improved service delivery. The provision of low-risk financial records had the lowest mean at 3.99 and the highest SD of 1.347, pointing to more diverse opinions regarding suppliers' financial transparency. Timely delivery of goods scored a mean of 4.18 and SD of 0.990, reflecting strong and fairly consistent approval. This study was found to be in line with the findings of Owich and Odero (2023) who revealed that inefficient supplier selection processes contribute to supply chain delays and increased operational costs, negatively affecting service delivery. Honoring delivery commitments had a close mean of 4.15 with a slightly higher SD of 1.117, indicating general agreement but with more variation. Geographical proximity was rated at 4.21 with an SD of 0.984, showing strong consensus and minimal dispersion. Finally, the role of proximity in cost-effective delivery had a mean of 4.17 and SD of 1.171, suggesting overall agreement but with some differing views. This study was found to be in line with the findings of Sarıçam and Yilmaz (2022) who highlighted that a balanced approach to supplier selection, considering not only cost but also long-term strategic fit, significantly enhances supply chain performance.

4.3.2 Supplier Collaboration

TABLE 4.9:

Supplier Collaboration

Statements on Supplier Collaboration	Mean	Std. Deviation
Supplier engages in joint planning sessions with retail partners.	3.99	1.270
Joint forecasting and demand planning are conducted with the supplier.	4.30	.947
Supplier processes are integrated with retail systems for seamless flow.	4.07	1.199
Operational activities are coordinated between supplier and retailer.	4.15	1.078
Compatible technologies are used to support collaboration with supplier.	4.00	1.384
Information is shared through integrated digital platforms with supplier.	4.04	1.367
Shared objectives are pursued in collaboration with supplier.	4.27	1.014
Goals of supplier are aligned with those of retail partners.	4.18	.931

Table 4. 9 presents various aspects of supplier collaboration, reflecting the extent to which suppliers engage and align with retailers. Joint planning sessions scored a mean of 3.99 with a relatively high standard deviation (SD) of 1.270, indicating moderate agreement but with notable variation in responses This study was found to be in line with the findings of Wairimu (2023) who's indicate that supply chain resilience is enhanced when firms develop strong supplier relationships and invest in capacity-building programs. Joint forecasting and demand planning had the highest mean of 4.30 and a low SD of 0.947, suggesting strong agreement and high consistency

among participants. Integration of supplier processes with retail systems received a mean of 4.07 and an SD of 1.199, showing good agreement with moderate variability. Coordination of operational activities had a mean of 4.15 and a lower SD of 1.078, reflecting generally consistent views. This study was found to be in line with the findings of Chebichii et al. (2021) who revealed that collaboration through long-term contracts, shared risk management, and supplier development significantly improves performance.

The use of compatible technologies scored a mean of 4.00, accompanied by the highest SD of 1.384, indicating more diverse opinions on the technological compatibility in collaborations. Sharing information via integrated digital platforms had a similar pattern, with a mean of 4.04 and a high SD of 1.367, again reflecting a wider range of experiences. Collaboration on shared objectives showed a high mean of 4.27 and a low SD of 1.014, pointing to strong and uniform agreement. Finally, alignment of supplier and retailer goals had a mean of 4.18 and the lowest SD of 0.931, suggesting a high level of consensus. This study was found to be in line with the findings of Mulweye et al. (2024) who' indicated that effective supplier collaboration improves supply chain efficiency, reduces operational costs, and enhances product availability. These results highlight that supplier collaboration is generally strong, particularly in areas such as joint forecasting, shared objectives, and goal alignment, while greater variability is observed in the use of technology and information-sharing mechanisms.

4.3.3 Supplier Value Management

TABLE 4:

Supplier Value Management

Statements on Supplier Value Management	Mean	Std. Deviation
Supplier contributes to creating added value in supply chain operations.	4.15	1.078
Collaborative efforts with supplier enhance overall customer value.	4.17	1.171
Supplier offers unique features that differentiate products in the market.	4.21	.970
Retailer benefits from supplier's ability to provide specialized solutions.	4.04	1.224
Supplier adjusts quickly to changes in order volumes or specifications.	4.15	1.104
High supply flexibility is maintained by supplier during market fluctuations.	4.15	1.078
Supplier objectives are aligned with long-term strategic goals of retailer.	4.32	.997
Strategic priorities of supplier support the retail supply chain vision.	4.04	1.139

Table 4.10 outlines key aspects of supplier value management, highlighting the contributions of suppliers to supply chain operations and customer value. Suppliers' role in creating added value in operations scored a mean of 4.15 with an SD of 1.078, indicating moderate agreement with some variability. This study was found to be in line with the findings of Ali et al.(2021) who demonstrate that the proposed model can enhance decision-making in supplier

selection, particularly in sustainable supply chain contexts. Collaborative efforts to enhance customer value received a slightly higher mean of 4.17 and a similar SD of 1.171, suggesting generally positive views with a range of responses. The unique features offered by suppliers to differentiate products had a mean of 4.21 and a lower SD of 0.970, reflecting strong consensus and agreement This study was found to be in line with the findings of Sharma et al. (2021) who emphasize the importance of flexibility, digitalization, and supplier relationship management in maintaining supply chain performance during crises. Retailer benefits from suppliers providing specialized solutions scored a mean of 4.04 with a higher SD of 1.224, showing greater variation in opinions.

Suppliers' ability to adjust quickly to changes in order volumes or specifications had a mean of 4.15 and an SD of 1.104, indicating good agreement but with moderate variability. This study was found to be in line with the findings of Prohl and Kleinaltenkamp (2020) who suggest that managing value-in-use is crucial for maintaining long-term customer satisfaction and loyalty. High supply flexibility during market fluctuations received a mean of 4.15 and an SD of 1.078, reinforcing a consistent but somewhat varied perception. Alignment of supplier objectives with the retailer's long-term strategic goals had the highest mean of 4.32 and an SD of 0.997, indicating strong agreement with relatively low variability. Finally, strategic priorities of the supplier supporting the retailer's supply chain vision had a mean of 4.04 with an SD of 1.139, pointing to moderate agreement but with some variation in the responses. This study was found to be in line with the findings of Bae et al. (2025) who highlight that competent suppliers can bridge gaps in labor governance by enhancing supplier accountability and operational performance. Overall, the results suggest that while suppliers generally add value to supply chain operations, there is

variability in how respondents perceive the supplier's ability to offer specialized solutions and adjust to changes in demand.

4.3.4 Supplier Capacity Building

TABLE 5:

Supplier Capacity Building

Statements on Supplier Capacity Building	Mean	Std. Deviation
Supplier invests in innovative solutions to improve supply chain efficiency.	4.25	1.079
Innovation capability of supplier contributes to competitive advantage.	4.17	1.171
Regular training programs are conducted by supplier for workforce improvement.	4.15	1.023
Training initiatives by supplier enhance supply chain performance.	4.39	.707
Supplier focuses on continuous skills development for operational excellence.	4.35	.699
Improved employee skills from supplier side lead to better service delivery.	4.38	.851
Supplier can scale production based on changing demand levels.	4.23	.929
Increased scalability from supplier supports business growth in retail sector.	4.24	.836

Table 4.11 highlights various aspects of supplier capacity building, emphasizing innovation, training, and scalability to enhance supply chain performance. Suppliers' investment in innovative solutions to improve supply chain efficiency received a mean of 4.25 and an SD of 1.079, indicating a positive perception with some variability in responses. This study was found to

be in line with the findings of Xie, et al. (2021) who indicate that suppliers with higher capacity are more likely to select retail platforms with broader customer reach, as these platforms can handle larger volumes of goods. The innovation capability of the supplier contributing to competitive advantage had a mean of 4.17 and a higher SD of 1.171, suggesting agreement with more varied opinions. Regular training programs conducted by the supplier for workforce improvement scored a mean of 4.15 and an SD of 1.023, showing a generally positive view with moderate variability. This study was found to be in line with the findings of Li, et al. (2021) who suggest that these contracts can lead to better coordination between supply chain partners, reducing inventory costs and improving supply chain performance.

Training initiatives that enhance supply chain performance received a high mean of 4.39 and a low SD of 0.707, reflecting strong consensus with minimal variation. The focus on continuous skills development for operational excellence had a mean of 4.35 and an SD of 0.699, indicating strong agreement with low variability. This study was found to be in line with the findings of Tukamuhabwa, et al. (2023) who suggest that both internal social capital and logistics capabilities are significantly correlated with improved supplier performance, which in turn enhances supply chain efficiency and reduces risk. Improved employee skills leading to better service delivery scored a mean of 4.38 and an SD of 0.851, suggesting a high level of agreement with moderate variation. The supplier's ability to scale production based on changing demand levels received a mean of 4.23 and an SD of 0.929, showing good agreement with moderate variability. Finally, increased scalability supporting business growth in the retail sector had a mean of 4.24 and an SD of 0.836, indicating a generally positive but somewhat varied response. This study was found to be in line with the findings of Rombe and Hadi (2022) who indicate that strong supply chain capabilities, particularly in supplier management and logistics, lead to better

marketing performance by improving product availability and customer satisfaction. Overall, the data suggests that suppliers are viewed positively in terms of capacity building, particularly in training and innovation, with most areas showing strong agreement but with varying levels of perception on certain aspects such as innovation and scalability.

4.3.5 Supply Chain Performance in Retail Sector

TABLE 6.12:

Supply Chain Performance in Retail Sector

Statements on supply chain performance in retail sector	Mean	Std. Deviation
Supplier responds quickly to changes in demand or order requirements.	4.20	1.103
High level of responsiveness from supplier improves retail operations.	4.35	.635
Retail operations adapt effectively to changes in supply and demand.	4.38	.851
Flexible processes support efficient handling of unexpected situations.	4.24	.819
Short lead times are consistently maintained by supply partners.	4.30	.947
Reduced lead time enhances stock availability and customer satisfaction.	4.24	.933
Transport systems used by suppliers are reliable and timely.	4.35	.880
Reliable transportation reduces delays and disruptions in supply chain.	4.37	.797

Table 4.12 illustrates key factors influencing supply chain performance in the retail sector, particularly in terms of responsiveness, flexibility, and reliability. Suppliers' ability to respond quickly to changes in demand or order requirements scored a mean of 4.20 with an SD of 1.103, indicating good agreement but with some variation in responses. A high level of responsiveness from suppliers that improves retail operations received a mean of 4.35 and a low SD of 0.635, suggesting strong consensus with minimal variability. This study was found to be in line with the

findings of Alikhani, et al. (2021) who reveal that incorporating resilience strategies such as diversification and capacity buffers significantly enhances the supply chain's ability to withstand disruptions. The adaptability of retail operations to changes in supply and demand had a mean of 4.38 and an SD of 0.851, reflecting high agreement with moderate variation.

Flexible processes that support efficient handling of unexpected situations had a mean of 4.24 and an SD of 0.819, showing good agreement with some variability. The ability of supply partners to maintain short lead times scored a mean of 4.30 and an SD of 0.947, indicating strong agreement with moderate variation in responses. This study was found to be in line with the findings of Kahkonen and Lintukangas (2012) who indicate that supplier collaboration and relationship management are critical factors in enhancing organizational value. Reduced lead time enhancing stock availability and customer satisfaction had a mean of 4.24 and an SD of 0.933, demonstrating good agreement with moderate variability. The reliability and timeliness of transportation systems used by suppliers had a mean of 4.35 and an SD of 0.880, reflecting positive perceptions with some diversity in responses. Finally, reliable transportation reducing delays and disruptions in the supply chain had a mean of 4.37 and an SD of 0.797, indicating strong agreement with low variability. Overall, the data suggests that respondents perceive supply chain performance in retail positively, particularly in responsiveness, flexibility, and reliability, with relatively low variation in areas such as transportation and operational adaptability. This study was found to be in line with the findings of Rajab (2024) Findings revealed that firms engaging in strategic supplier alliances experience higher profitability, better inventory management, and improved supply chain responsiveness.

4. 4 Pilot Test Results

4.4.1 Validity of Data Collection Instrument

In this study, the validity of the data collection instrument was ensured through a comprehensive process involving content, construct, and face validity assessments. Content validity was achieved by having experts in supply chain management and research methodology review the questionnaire to ensure that all key aspects of supply chain integration and organizational performance were adequately covered. Construct validity was confirmed by aligning the questionnaire with the theoretical framework of the study, ensuring that it measured the intended constructs. Additionally, face validity was assessed to verify that the instrument appeared relevant, clear, and understandable to the respondents. A pilot test was also conducted with a small group of participants to identify any potential issues with the instrument's clarity and relevance. Feedback from the pilot test helped refine the questionnaire, ensuring that it was effective in capturing the necessary data for the study (Ganesha & Aithal, 2022).

4.4.2 Reliability of Data Collection Instrument

TABLE 7:

Reliability of Data Collection Instrument

Reliability Statistics	Number of Items	Cronbach's Alpha
Supplier selection criteria	8	.807
Supplier collaboration	8	.827
Supplier value management	8	.894
Supplier capacity building	8	.896
Supply chain performance in retail sector	8	.842

The Cronbach's Alpha values in table 4. 13 range from 0.807 to 0.896, suggesting good to excellent reliability across all the constructs. Specifically, "Supplier value management" has the

highest Cronbach's Alpha of 0.894, indicating a very high level of consistency in the items measuring this construct. "Supplier capacity building" follows closely with a Cronbach's Alpha of 0.896, also demonstrating excellent reliability. "Supply chain performance in the retail sector" has a strong reliability score of 0.842, while "Supplier collaboration" also shows good internal consistency with a Cronbach's Alpha of 0.827. Lastly, "Supplier selection criteria" has the lowest but still acceptable value of 0.807, reflecting solid reliability. Overall, these Cronbach's Alpha values suggest that the data collection instrument is reliable for measuring the constructs in the study, with all scales exhibiting acceptable to high levels of internal consistency (Ganesha & Aithal, 2022).

4.5 Diagnostic Tests

4.5.1 Linearity Test

TABLE 4.14:

Table of Correlations

		Supplier selection criteria	Supplier collaboration	Supplier value management	Supplier capacity building	Supply chain performance
Supplier selection criteria	Pearson Correlation	1	.878**	.876**	.892**	.921**
	Sig. (2-tailed)		.000	.000	.000	.000
	N		71	71	71	71
Supplier collaboration	Pearson Correlation		1	.845**	.880**	.915**
	Sig. (2-tailed)			.000	.000	.000
	N			71	71	71
Supplier value management	Pearson Correlation			1	.941**	.955**
	Sig. (2-tailed)				.000	.000
	N				71	71
Supplier capacity building	Pearson Correlation				1	.966**
	Sig. (2-tailed)					.000
	N					71
Supply chain performance	Pearson Correlation					1
	Sig. (2-tailed)					
	N					71

The correlation table in table 4. 14 reveals strong and statistically significant positive relationships between all supplier management practices; supplier selection criteria , supplier

collaboration , supplier value management , and supplier capacity building and supply chain performance in Kenya's retail sector. Each variable shows a Pearson correlation coefficient greater than 0.91 with the dependent variable E, indicating very strong linear associations. Notably, supplier capacity building (D) has the highest correlation with supply chain performance (r = 0.966), followed closely by supplier value management (r = 0.955), supplier collaboration (r = 0.915), and supplier selection criteria (r = 0.921). These correlations, all significant at the 0.01 level, suggest that improvements in supplier management practices are strongly linked to enhanced performance across the retail supply chain. The high inter-correlations among the independent variables also indicate a close interdependence, which may call for attention to potential multicollinearity in regression analysis (Press, et al. 2021).

4.5 .2 Multicollinearity Test

TABLE 8:

Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	**VIF**
1	(Constant)		
	Supplier selection criteria	.059	4.302
	Supplier collaboration	.083	2.452
	Supplier value management	.078	3.280
	Supplier capacity building	.085	4.801

The multicollinearity test, in table 4.15 as shown in the table, assesses the extent to which the independent variables related to supplier management practices namely; supplier selection criteria, supplier collaboration, supplier value management, and supplier capacity building are correlated with one another in predicting supply chain performance in the retail sector in Kenya.

The variance inflation factor values for all variables range from 2.452 to 4.801, which are below the commonly accepted threshold of 10, indicating that multicollinearity is not a serious concern in this model. Additionally, the Tolerance values, which are all above 0.05, further confirm the absence of severe multicollinearity (Bayman & Dexter, 2021). These results suggest that each variable provides unique and significant explanatory power in understanding the relationship between supplier management practices and supply chain performance, without distortion caused by redundancy among predictors.

4.5. 4 Normality Test

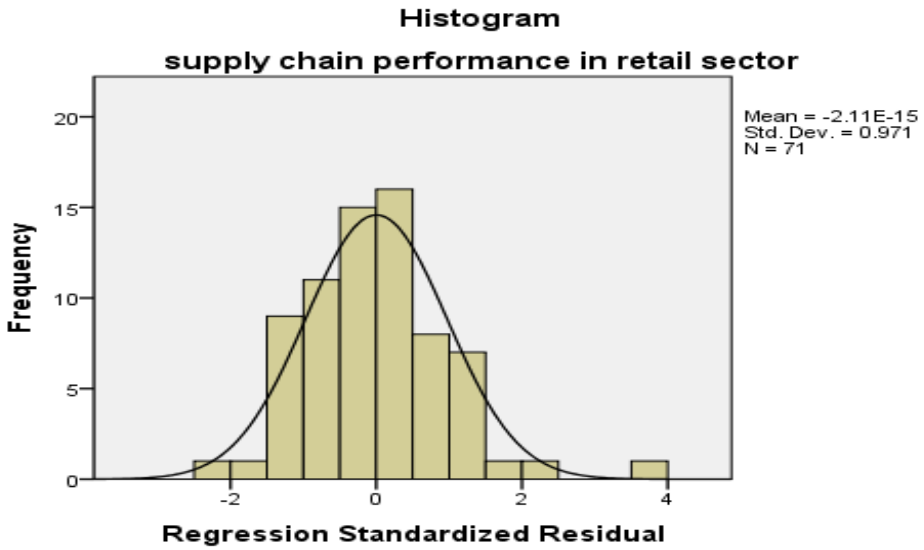


FIGURE 4.1:

Histogram

Based on the histogram for the normality test was assumed to be provided, the distribution of residuals appears approximately bell-shaped and symmetrical, suggesting that the residuals are normally distributed. This supports the assumption of normality in linear regression, which is

essential for making valid inferences about the relationships between variables. In the context of examining supplier management practices including supplier selection criteria, collaboration, value management, and capacity building and their effect on supply chain performance in Kenya's retail sector, this normal distribution of residuals indicates that the model's predictions are reliable and the statistical tests such as F-tests are valid. The normality of residuals enhances confidence in the model's ability to accurately capture and explain the impact of supplier management on supply chain outcomes (Bayman & Dexter, 2021).

4.5.5 Shapiro-Wilk test, Kolmogorov-Smirnov test

TABLE 4.16:

Shapiro-Wilk test, Kolmogorov-Smirnov Test

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
Supplier selection criteria	.216	71	.201	.868	71	.761
Supplier collaboration	.226	71	.340	.843	71	.954
Supplier value management	.217	71	.518	.850	71	.385
Supplier capacity building	.195	71	.482	.805	71	.846
Supply chain performance in retail sector	.222	71	.260	.837	71	.751

The Tests of Normality in table 4. 16 using both the Kolmogorov-Smirnov and Shapiro-Wilk tests show that all variables; supplier selection criteria, supplier collaboration, supplier value management, supplier capacity building and supply chain performance do not significantly deviate from normality. In both tests, the p-values for all variables are well above the conventional

significance level of 0.05 (e.g., Shapiro-Wilk p-values range from 0.385 to 0.954, and Kolmogorov-Smirnov p-values range from 0.201 to 0.518), indicating that the assumption of normality is met. This confirms that the data distributions are sufficiently normal for parametric statistical procedures, such as linear regression (Press, et al. 2021). Therefore, the analysis of the influence of supplier management practices on supply chain performance in Kenya's retail sector can proceed with greater confidence in the validity of inferential statistics derived from these models.

4.6 Inferential Results

4.6.1 Model Summary

TABLE 4.17:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.985[a]	.970	.968	.10774

The model summary in table 4.17 indicates a very strong relationship between supplier management practices and supply chain performance in Kenya's retail sector. The R value of 0.985 shows a high degree of correlation between the independent variables. The R Square value of 0.970 reveals that 97% of the variation in supply chain performance can be explained by the four supplier management practices included in the model. Additionally, the Adjusted R Square of 0.968 confirms the model's robustness after adjusting for the number of predictors, indicating minimal overfitting. The standard error of the estimate (0.10774) suggests a low average deviation of the observed values from the predicted values, further reinforcing the model's accuracy (Press, et al.

2021). Overall, the results demonstrate that supplier management practices are significant predictors of supply chain performance in the retail sector of Kenya.

4.6.2 ANOVA

TABLE 4.18:

ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.973	4	6.243	537.852	.000[b]
	Residual	.766	66	.012		
	Total	25.739	70			

The ANOVA in table 4.18 indicates that the regression model used to examine the effect of supplier management practices on supply chain performance in Kenya's retail sector is statistically significant. The F-statistic of 537.852 with a p-value of .000 demonstrates that the overall model is highly significant, meaning that the combination of the four independent variables; supplier selection criteria, supplier collaboration, supplier value management, and supplier capacity building collectively provides a strong explanation for the variation in supply chain performance. The regression sum of squares (24.973) compared to the relatively small residual sum of squares (0.766) suggests that most of the variation in the dependent variable is accounted for by the predictors (Ganesha & Aithal, 2022). This strong model fit confirms that supplier management practices play a crucial and statistically significant role in enhancing supply chain performance in the retail sector of Kenya.

4.6.3 Coefficients of regression

TABLE 4.19:

Coefficients of Regression

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.872	.086		10.193	.000
	Supplier selection criteria	.113	.044	.136	2.553	.003
	Supplier collaboration	.161	.038	.207	4.172	.001
	Supplier value management	.239	.047	.328	5.069	.002
	Supplier capacity building	.306	.063	.354	4.856	.000

The coefficients in table 4. 19 demonstrates that all four supplier management practices; supplier selection criteria, supplier collaboration, supplier value management, and supplier capacity building have a positive and statistically significant influence on supply chain performance in Kenya's retail sector. Each variable has a p-value less than 0.05, indicating that their effects are significant at the 5% level. Specifically, supplier capacity building shows the strongest standardized impact (Beta = 0.354), followed by supplier value management (Beta = 0.328), supplier collaboration (Beta = 0.207), and supplier selection criteria (Beta = 0.136). This suggests that investing in building suppliers' capabilities and managing their value contributions can yield the highest improvements in supply chain performance. The statistically significant t-values for each variable further reinforce their individual contribution to the model (Press, et al. 2021). These results suggest that improving these key aspects of supplier management can lead to substantial improvements in the efficiency and effectiveness of supply chain operations in Kenya's retail sector.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter offers the summary, conclusions and recommendations to examining supplier management practices and supply chain performance in retail sector in Kenya.

5.2 Summary

5.2.1 Supplier Selection Criteria

The supplier selection criteria outlined reflect essential considerations that organizations prioritize when assessing potential suppliers. Reputation in the industry is a key factor, reflecting the general trustworthiness and past performance of a supplier. This is important for maintaining brand integrity and customer confidence. Similarly, business credibility is another critical criterion that organizations use to assess a supplier's reliability, as it indicates the supplier's long-term stability and alignment with organizational values. Financial stability also plays a central role in supplier selection, as organizations prefer suppliers that demonstrate consistent financial performance, minimizing the risk of disruptions in the supply chain. However, there are diverse opinions regarding the transparency of financial records, which suggests that some suppliers may have discrepancies in how they present their financial stability. Timely delivery of goods and honoring delivery commitments are consistently rated as significant factors, highlighting the importance of reliability and punctuality in maintaining smooth operations. Geographical proximity is another important criterion, as it can reduce lead times and transportation costs, although there are some varying opinions on how much proximity affects cost-effectiveness. For instance, suppliers closer to the organization’s headquarters or distribution centers may have logistical advantages that

further enhance delivery efficiency. This study was found to be in line with the findings of Owich and Odero (2023) who revealed that inefficient supplier selection processes contribute to supply chain delays and increased operational costs, negatively affecting service delivery.

5.2.2 Supplier Collaboration

The findings on supplier collaboration in Kenyan supermarkets strongly align with the principles of Resource Dependence Theory (RDT. According to RDT, organizations depend on external resources for survival and must manage these dependencies strategically (Pfeffer & Salancik, 1978; Barney et al., 2021). In the case of Kenyan supermarkets, their reliance on suppliers for essential resources such as products, raw materials, and even technological inputs demonstrates this interdependence. To manage these dependencies, supermarkets have developed collaborative mechanisms like joint forecasting, shared goal setting, and integrated operational processes. These strategies help reduce uncertainty, align supply with consumer demand, and ensure a more predictable flow of goods consistent with RDT's proposition that organizations build alliances to manage external pressures and resource flows.

At the same time, the study highlights gaps in technological collaboration, particularly in the adoption of digital systems for real-time data sharing. From an RDT perspective, this reflects the uneven distribution of critical technological resources across different suppliers. Those with stronger digital infrastructure hold more influence in collaborative arrangements, while others struggle to meet the requirements for seamless integration. This imbalance reinforces RDT's emphasis on how control over scarce and valuable resources creates power dynamics within inter-organizational relationships (Khan et al., 2022).

Overall, supplier collaboration in Kenyan supermarkets illustrates how organizations actively manage their dependencies on external partners to enhance performance. The reliance on suppliers for critical inputs pushes retailers to cultivate trust, operational synergy, and joint planning. Yet, as RDT also suggests, the digital gap demonstrates that dependencies can create vulnerabilities when resource access is inconsistent. Thus, the theory provides a useful lens for understanding how Kenyan supermarkets navigate both opportunities and challenges in supplier collaboration, balancing dependence with strategies that strengthen supply chain performance (Davis & DeWitt, 2021).

5.2.3 Supplier Value Management

Supplier value management is pivotal for enhancing supply chain efficiency and creating additional customer value. Suppliers play a critical role in improving operational effectiveness, with their contributions generally perceived as valuable, though opinions vary. Collaborative efforts between suppliers and retailers to boost customer value were particularly well-received, signaling the importance of partnerships for mutual benefit. One of the most highly regarded contributions was the ability of suppliers to offer unique product features, allowing retailers to differentiate their products in competitive markets. However, opinions on the value of specialized solutions provided by suppliers varied, with some emphasizing their importance while others felt they could be more tailored to specific market needs. The suppliers' ability to adjust to changes in order volumes or specifications was seen as important, but again, the extent of their flexibility was not uniformly agreed upon. The flexibility of suppliers during market fluctuations, such as price increases or supply chain disruptions, was appreciated, although responses were mixed in terms of the effectiveness of these adjustments. The alignment of supplier objectives with the retailer's long-term strategic goals was also seen as a significant factor in creating strong, sustainable

partnerships, with respondents recognizing the need for a shared vision. This study was found to be in line with the findings of Mulweye et al. (2024) who' indicated that effective supplier collaboration improves supply chain efficiency, reduces operational costs, and enhances product availability.

5.2.4 Supplier Capacity Building

Supplier capacity building is a key factor in boosting supply chain performance, particularly through innovation, training, and scalability. Suppliers are generally perceived as making strong efforts to innovate and improve supply chain efficiency, though there are varying opinions on the degree of innovation and its direct impact on the competitive advantage of retailers. Suppliers' investment in regular and effective training programs is also viewed positively, with many of these programs aimed at enhancing workforce skills and improving supply chain performance. The emphasis on continuous skills development for operational excellence is widely recognized, contributing to better service delivery and ensuring suppliers' capacity to meet evolving market demands. Moreover, the ability of suppliers to scale production based on fluctuations in demand and support retail sector growth is also positively rated, although perceptions on scalability and innovation differ among retailers. In particular, the ability to swiftly adjust production levels to changing market conditions is seen as a critical aspect of a supplier's capacity. While suppliers are highly valued for their contributions in training and innovation, areas like scalability and the integration of cutting-edge technologies show more variability in responses, suggesting room for improvement in these domains to better align with the dynamic nature of the retail sector. This study was found to be in line with the findings of Rombe and Hadi (2022) who indicate that strong supply chain capabilities, particularly in supplier management and logistics, lead to better marketing performance by improving product availability and customer satisfaction.

5.3 Conclusions

The study concluded that supplier collaboration is generally strong and effective in the retail sector in Kenya, characterized by high levels of joint planning, forecasting, goal alignment, and operational coordination. For example, supermarkets like Naivas and Carrefour engage in regular joint forecasting with suppliers to predict consumer demand more accurately and plan their stock levels accordingly, thus reducing overstocking and stockouts. Such practices contribute to smoother operations, improved customer service, and greater supply chain efficiency. However, the study also revealed gaps in technological integration and digital communication platforms. For instance, smaller suppliers may not have the same level of technological infrastructure as larger suppliers like Bidco or Kakuzi, which can make real-time information sharing more challenging. The inconsistency in technological readiness among different suppliers suggests the need for standardization and further investment in digital tools. These challenges in technology integration may limit the full potential of collaboration, particularly in terms of real-time data visibility and faster decision-making. Despite this, the overall picture of supplier collaboration in the retail sector is largely positive, marked by shared goals, trust, and synergy in day-to-day operations.

The study concluded that supplier selection criteria are integral to ensuring effective supplier partnerships and operational efficiency. Factors such as reputation, business credibility, financial stability, and geographical proximity are crucial when evaluating suppliers, especially in sectors where reliability and cost control are critical. For instance, retailers such as Carrefour Kenya highly value supplier reputation and credibility, ensuring that their suppliers meet the high-quality standards expected by customers. Timely delivery is another key factor that supermarkets like Naivas prioritize to maintain a competitive edge in the retail sector, where stock availability directly impacts customer satisfaction. However, while geographical proximity is widely regarded

as important, the study found mixed views on its role in cost-effective delivery. Suppliers located closer to retail centers may provide quicker delivery times, while international suppliers may offer better pricing or specialized products. These varying perspectives on proximity and financial transparency highlight that supplier selection should be a comprehensive process that balances both logistical and financial considerations.

The study concluded that supplier value management is a vital component in strengthening supply chain operations and providing added value to customers. Retailers benefit from supplier contributions that enhance product differentiation, operational efficiency, and responsiveness to market changes. For instance, retailers like Carrefour Kenya can gain a competitive edge through suppliers offering unique and differentiated products, while Naivas can improve supply chain resilience by working closely with suppliers who are flexible and responsive to changes in demand. The study emphasized that alignment between supplier and retailer long-term goals is crucial for fostering sustainable partnerships. Retailers that ensure this alignment, such as Quickmart, are more likely to build strong relationships with suppliers, leading to better performance and customer satisfaction. Additionally, while suppliers' flexibility during market fluctuations and their ability to offer specialized solutions are highly valued, these aspects show variability and can be further optimized for greater efficiency.

The study concluded that supplier capacity building plays an essential role in improving the supply chain performance of retailers in Kenya. Retailers benefit from suppliers' investments in innovation, continuous workforce training, and their ability to scale production according to demand fluctuations. Suppliers that actively engage in innovative practices and regularly upgrade their workforce’s skills contribute significantly to enhancing operational efficiency and delivering better services to the retail sector. For example, retailers such as Carrefour Kenya and Naivas could

see substantial benefits by partnering with suppliers who can offer technological innovations that streamline their supply chain operations and enhance product differentiation. Furthermore, the ability of suppliers to rapidly adjust to changes in order volumes and product specifications helps retailers avoid supply disruptions and maintain smooth operations, even during peak demand seasons. This is especially relevant in high-demand periods such as festive seasons, where demand spikes and suppliers must be agile enough to meet these challenges.

5.4 Recommendations

The study recommended that supplier collaboration in relation to the retail sector in Kenya be strengthened further by building on the existing strategic alignment and operational partnerships between supermarkets and suppliers. For example, supermarkets such as Naivas and Carrefour should continue to enhance their joint forecasting efforts with suppliers, but also focus on ensuring that smaller suppliers have access to digital tools and platforms that facilitate better information sharing. Additionally, it is crucial to invest in compatible technologies and integrated digital platforms that can support real-time data exchange, improve transparency, and streamline decision-making. An example of this could be the Naivas and Carrefour , which could benefit from investing in integrated cloud-based systems that allow suppliers to automatically upload inventory and demand data, thus improving the timeliness and accuracy of supply chain decisions. Furthermore, standardizing digital communication systems across both large and small suppliers will allow for better alignment and smoother information flow. By addressing technological disparities and promoting uniform digital capabilities, retailers and suppliers can create a more agile, responsive, and competitive retail environment in Kenya. This will also help reduce costs, enhance customer satisfaction, and improve overall market competitiveness.

The study recommended that supplier selection criteria should be further refined to achieve greater consistency in key factors, especially in relation to financial transparency and proximity's impact on cost-effective delivery. Retailers like Carrefour and Naivas should focus on improving the consistency of their evaluation process by requiring standardized financial reporting from all suppliers to mitigate discrepancies in perceived financial stability. This would help eliminate ambiguity and improve trust in the supply chain. Additionally, it is recommended that retailers gain a clearer understanding of the role of proximity in enhancing delivery efficiency. While local suppliers may offer faster delivery, international suppliers may still provide significant cost savings due to scale advantages. Therefore, adopting a hybrid approach that incorporates the benefits of both local and international suppliers could be advantageous.

The study recommended that retailers in Kenya, such as Naivas, Carrefour, and Quickmart, enhance supplier value management by focusing on the flexibility and responsiveness of suppliers to both market fluctuations and changes in order volumes. These retailers should prioritize establishing relationships with suppliers who can offer tailored solutions and products that align with customer needs. For example, suppliers capable of adjusting quickly to spikes in demand for seasonal products or specific consumer trends can provide a competitive advantage in the fast-paced retail market. Retailers should also focus on fostering stronger alignment with suppliers' long-term goals to ensure sustainable growth and mutual benefit. For instance, Carrefour Kenya could benefit from strengthening relationships with suppliers who share a vision of long-term innovation, as this would lead to the continuous development of unique products that appeal to a wider customer base. Moreover, retailers should encourage suppliers to offer more specialized solutions that address emerging market trends or specific customer preferences.

The study recommended that supplier capacity building should be prioritized by retailers in Kenya to strengthen their supply chain operations. Retailers like Carrefour Kenya and Naivas Supermarket should seek suppliers that are committed to continuous innovation, investing in both cutting-edge technologies and training programs that enhance workforce capabilities. For instance, suppliers that offer advanced training programs focused on supply chain efficiency, product quality, and customer service can help retailers like Naivas and Carrefour deliver higher-quality products and improve customer satisfaction. Additionally, retailers should prioritize collaboration with suppliers who can quickly scale their production processes in response to demand fluctuations, ensuring the supply chain remains flexible and responsive. To achieve this, retailers should focus on building long-term partnerships with suppliers that have a proven track record in scalability, such as those that can expand production during high-demand periods without compromising quality. By doing so, retailers can enhance the resilience of their supply chains and create a competitive edge, positioning themselves for sustainable growth and success in the dynamic retail environment of Kenya.

5.5 Recommendations for Future Research

The study on supplier management practices and supply chain performance in the retail sector in Kenya highlighted key areas for improvement. Future research should explore the impact of digital integration and supplier collaboration on supply chain efficiency, particularly focusing on the challenges faced by small suppliers in adopting advanced technologies. Additionally, research could examine the effect of refined supplier selection criteria, such as financial transparency and proximity, on operational performance. Further studies on the effectiveness of supplier capacity-building initiatives in enhancing responsiveness and scalability would also provide valuable insights for improving supply chain resilience in the Kenyan retail sector.

REFERENCES

Akhavan, P., & Philsoophian, M. (2023). Improving of supply chain collaboration and performance by using block chain technology as a mediating role and resilience as a moderating variable. *Journal of the Knowledge Economy*, *14*(4), 4561-4582.

Ali, Z., Mahmood, T., Ullah, K., & Khan, Q. (2021). Einstein geometric aggregation operators using a novel complex interval-valued pythagorean fuzzy setting with application in green supplier chain management. *Reports in Mechanical Engineering*, *2*(1), 105-134.

Alikhani, R., Torabi, S. A., & Altay, N. (2021). Retail supply chain network design with concurrent resilience capabilities. *International journal of production economics*, *234*, 108042.

Andalib Ardakani, D., Soltanmohammadi, A., & Seuring, S. (2023). The impact of customer and supplier collaboration on green supply chain performance. *Benchmarking: An International Journal*, *30*(7), 2248-2274.

Aslam, J., Saleem, A., Khan, N. T., & Kim, Y. B. (2021). Factors influencing blockchain adoption in supply chain management practices: A study based on the oil industry. *Journal of Innovation & Knowledge*, *6*(2), 124-134.

Bae, J., Lee, J., Chung, S. W., & Kwon, H. (2025). Competent suppliers as a missing link: A supplier-centered view on cascading private labor governance in global value chains. *Journal of World Business*, *60*(1), 101595.

Barney, J. B., Ketchen Jr, D. J., & Wright, M. (2021). Resource-based theory and the value creation framework. *Journal of Management*, *47*(7), 1936-1955.

Behl, A., Jayawardena, N., Pereira, V., Tarba, S., & Bamel, U. (2022). The role played by relational turbulence in managing agency problems among value chain partners in the sharing economy: A review of the antecedents, benefits, risks, and boundary conditions. *Industrial Marketing Management*, *107*, 39-51.

Bragazzi, N. L., Kong, J. D., Mahroum, N., Tsigalou, C., Khamisy-Farah, R., Converti, M., & Wu, J. (2023). Epidemiological trends and clinical features of the ongoing monkeypox epidemic: a preliminary pooled data analysis and literature review. *Journal of medical virology*, *95*(1), e27931.

Braun, C. L., Bitsch, V., & Häring, A. M. (2023). Developing agri-food value chains: learning networks between exploration and exploitation. *The Journal of Agricultural Education and Extension*, *29*(4), 417-438.

Buzzao, G., & Rizzi, F. (2021). On the conceptualization and measurement of dynamic capabilities for sustainability: Building theory through a systematic literature review. *Business Strategy and the Environment*, *30*(1), 135-175.

Chari, A., Niedenzu, D., Despeisse, M., Machado, C. G., Azevedo, J. D., Boavida-Dias, R., & Johansson, B. (2022). Dynamic capabilities for circular manufacturing supply chains—Exploring the role of Industry 4.0 and resilience. *Business Strategy and the Environment*, *31*(5), 2500-2517.

Chebichii, B. D., Namusonge, G., & Nambuswa, E. (2021). Influence of buyer-supplier collaboration on organizational performance in food and beverage manufacturing companies in Kenya. In *International Journal of Scientific and Research Publications* (Vol. 11, No. 11, pp. 85-100).

Chen, W., Botchie, D., Braganza, A., & Han, H. (2022). A transaction cost perspective on blockchain governance in global value chains. *Strategic Change*, *31*(1), 75-87.

Cuypers, I. R., Hennart, J. F., Silverman, B. S., & Ertug, G. (2021). Transaction cost theory: Past progress, current challenges, and suggestions for the future. *Academy of Management Annals*, *15*(1), 111-150.

Davis, G. F., & DeWitt, T. (2021). Organization theory and the resource-based view of the firm: The great divide. *Journal of Management*, *47*(7), 1684-1697.

de Vries, J. R., Turner, J. A., Finlay-Smits, S., Ryan, A., & Klerkx, L. (2023). Trust in agri-food value chains: a systematic review. *International Food and Agribusiness Management Review*, *26*(2), 175-197.

Emon, M., Khan, T., & Siam, S. (2024). Quantifying the influence of supplier relationship management and supply chain performance. *Brazilian Journal of Operations & Production Management*. https://doi.org/10.14488/bjopm.2015.2024.

Govindan, K., Aditi, Dhingra Darbari, J., Kaul, A., & Jha, P. C. (2021). Structural model for analysis of key performance indicators for sustainable manufacturer–supplier collaboration: A grey-decision-making trial and evaluation laboratory-based approach. *Business Strategy and the Environment*, *30*(4), 1702-1722.

Gu, V. C., Zhou, B., Cao, Q., & Adams, J. (2021). Exploring the relationship between supplier development, big data analytics capability, and firm performance. *Annals of Operations Research*, *302*, 151-172.

Gupta, S., & Ramachandran, D. (2021). Emerging market retail: transitioning from a product-centric to a customer-centric approach. *Journal of Retailing*, *97*(4), 597-620.

Har, L. L., Rashid, U. K., Te Chuan, L., Sen, S. C., & Xia, L. Y. (2022). Revolution of retail industry: from perspective of retail 1.0 to 4.0. *Procedia Computer Science*, *200*, 1615-1625.

Herold, S., Heller, J., Rozemeijer, F., & Mahr, D. (2023). Dynamic capabilities for digital procurement transformation: a systematic literature review. *International Journal of Physical Distribution & Logistics Management*, *53*(4), 424-447.

Hong, L., & Hales, D. N. (2021). Blockchain performance in supply chain management: application in blockchain integration companies. *Industrial Management & Data Systems*, *121*(9), 1969-1996.

Imbuhila, C. O. (2024). *Supplier relationship management practices and procurement performance of private sugar processing firms in Kenya* (Doctoral dissertation).

Irfan, I., Au, A. K. M., Khurshid, F., & Chan, F. T. (2023). Learning by supplying to climb the value chain: suppliers' transition from B-to-B to B-to-C. *Supply Chain Management: An International Journal*, *28*(4), 641-665.

Islam, M. R., Khan, N. A., & Baikady, R. (Eds.). (2022). *Principles of social research methodology*. Springer Nature.

Kähkönen, A. K., Evangelista, P., Hallikas, J., Immonen, M., & Lintukangas, K. (2023). COVID-19 as a trigger for dynamic capability development and supply chain resilience improvement. *International Journal of Production Research*, *61*(8), 2696-2715.

Kähkönen, A., & Lintukangas, K. (2012). The underlying potential of supply management in value creation. *Journal of Purchasing and Supply Management*, 18, 68-75. https://doi.org/10.1016/J.PURSUP.2012.04.006.

Khan, S. A. R., Ponce, P., Yu, Z., & Ponce, K. (2022). Investigating economic growth and natural resource dependence: An asymmetric approach in developed and developing economies. *Resources Policy*, *77*, 102672.

Kimunya, A. M., & Thogori, M. (2023). Supplier selection and performance of pharmaceutical companies in Kenya. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, *7*(2).

Kinyua, W. C., Gichuchi, D. M., & Kiambati, K. (2023). Motorcycles delivery innovation and performance of wholesale retail sector in Kenya. *International Journal of Research in Business and Social Science*, *12*(5), 456-462.

Kipruto, Y. W., & Eric, N. (2021). Role of supply chain collaboration on operational performance of third party logistics service providers in Kenya. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, *4*(2).

Kiriinya, A. E. (2021). *Supply Chain Relationship Management Practices and Performance of Pharmaceutical Firms in Kenya* (Doctoral dissertation, JKUAT-Cohred).

Kumar, R. (2024). Supply chain management practices and firm performances. *Interantional journal of scientific research in engineering and management*. https://doi.org/10.55041/ijsrem32930.

Li, J., Luo, X., Wang, Q., & Zhou, W. (2021). Supply chain coordination through capacity reservation contract and quantity flexibility contract. *Omega-international Journal of Management Science*, 99, 102195. https://doi.org/10.1016/j.omega.2020.102195.

Li, X., Mandal, A., & Huo, P. (2021). Cavity frequency-dependent theory for vibrational polariton chemistry. *Nature communications*, *12*(1), 1315.

Liang, T. P., Lin, Y. L., & Hou, H. C. (2021). What drives consumers to adopt a sharing platform: An integrated model of value-based and transaction cost theories. *Information & Management*, *58*(4), 103471.

Liao, S. H., Hu, D. C., & Chen, S. T. (2021). Supply chain integration, capability and performance–a business-to-business network cooperation. *Journal of Business & Industrial Marketing*, *37*(5), 1127-1137.

Long, J. A. (2024). jtools: Analysis and presentation of social scientific data. *Journal of Open Source Software*, *9*(101), 6610.

Mahohoma, N., & Agbenyegah, A. T. (2024). The impact of process, people and physical evidence on small retail business performance in Durban Central, South Africa. *The Actual Problems of Regional Economy Development; Vol. 1, Issue 20*.

Mandipa, G., & Sibindi, A. B. (2022). Financial performance and working capital management practices in the retail sector: empirical evidence from South Africa. *Risks*, *10*(3), 63.

Mbanaso, U. M., Abrahams, L., & Okafor, K. C. (2023). Data collection, presentation and analysis. In *Research Techniques for Computer Science, Information Systems and Cybersecurity* (pp. 115-138). Cham: Springer Nature Switzerland.

Meena, P. L., Katiyar, R., & Kumar, G. (2023). Supplier performance and selection from sustainable supply chain performance perspective. *International Journal of Productivity and Performance Management*, *72*(8), 2420-2445.

Mele, G., Capaldo, G., Secundo, G., & Corvello, V. (2023). Revisiting the idea of knowledge-based dynamic capabilities for digital transformation. *Journal of Knowledge Management*, *28*(2), 532-563.

Mondol, E. P. (2021). The impact of block chain and smart inventory system on supply chain performance at retail industry. *International Journal of Computations, Information and Manufacturing (IJCIM)*, *1*(1).

Mulweye, D., Shale, N., Namusonge, E., & Wachiuri, E. (2024). Supplier Collaboration and Performance of Food and Beverage Manufacturing Firms in Kenya. *International Journal of Supply Chain Management*, *9*(2), 1-19.

Mwangi, P., & Ragui, M. (2021). Arani.(2021). Relationship between supplier collaboration and retail stores performance in Nairobi County, Kenya: Intervening role of supply chain resilience. *International Academic Journal of Human Resource and Business Administration*, *3*(10), 46-66.

Nasrollahi, M., Fathi, M. R., Sobhani, S. M., Khosravi, A., & Noorbakhsh, A. (2023). Modeling resilient supplier selection criteria in desalination supply chain based on fuzzy DEMATEL and ISM. In *Sustainable logistics systems using ai-based meta-heuristics approaches* (pp. 101-115). Routledge.

Owich, J. A., & Odero, J. A. (2023). Supplier Selection Practices And Supply Chain Performance Of County Referral Hospitals In Kenya.

Pamucar, D., Torkayesh, A. E., & Biswas, S. (2023). Supplier selection in healthcare supply chain management during the COVID-19 pandemic: a novel fuzzy rough decision-making approach. *Annals of Operations Research*, *328*(1), 977-1019.

Patil, D. (2024). Enhancing Supply Chain Performance: A Comprehensive Review of Supplier Quality Management Strategies. *Research Journal of Pharmacology and Pharmacodynamics*. https://doi.org/10.52711/2321-5836.2024.00040.

Pratap, S., Daultani, Y., Dwivedi, A., & Zhou, F. (2022). Supplier selection and evaluation in e-commerce enterprises: a data envelopment analysis approach. *Benchmarking: An International Journal*, *29*(1), 325-341.

Prohl, K., & Kleinaltenkamp, M. (2020). Managing value in use in business markets. *Industrial Marketing Management*, 91, 563-580. https://doi.org/10.1016/j.indmarman.2020.03.017.

Rad, F. F., Oghazi, P., Palmié, M., Chirumalla, K., Pashkevich, N., Patel, P. C., & Sattari, S. (2022). Industry 4.0 and supply chain performance: A systematic literature review of the benefits, challenges, and critical success factors of 11 core technologies. *Industrial Marketing Management*, *105*, 268-293.

Rahman, N. S. F. A., Al-Balushi, S. A. M., Hamid, A. A., Al-Kalbani, K. S., & Alemu, A. E. (2021). Logistics Sector Development Integration with Oman Logistics Vision 2040: Analyzing Using Porter's Value Chain Theory. *Academy of Strategic Management Journal*, *20*, 1-19.

Rajab, F. A. (2024). *Supply Chain Strategic Alliances and Performance of Manufacturing Firms in Kenya* (Doctoral dissertation, JKUAT-COHRED).

Rombe, E., & Hadi, S. (2022). The impact of supply chain capability and supply chain performance on marketing performance of retail sectors. *Uncertain Supply Chain Management*. https://doi.org/10.5267/j.uscm.2021.11.005.

Rooi, N., Botha, D., & Van Der Waldt, G. (2023). Corporate social responsibility applications in the retail sector: Lessons from the international experience. *Journal of Contemporary Management*, *20*(1), 499-535.

Sabri, Y., Micheli, G. J., & Cagno, E. (2022). Supplier selection and supply chain configuration in the projects environment. *Production planning & control*, *33*(12), 1155-1172.

Sarıçam, C., & Yilmaz, S. M. (2022). An integrated framework for supplier selection and performance evaluation for apparel retail industry. *Textile Research Journal*, *92*(17-18), 2947-2965.

Schleper, M. C., Gold, S., Trautrims, A., & Baldock, D. (2021). Pandemic-induced knowledge gaps in operations and supply chain management: COVID-19's impacts on retailing. *International Journal of Operations & Production Management*, *41*(3), 193-205.

Sharma, M., Luthra, S., Joshi, S., & Kumar, A. (2021). Accelerating retail supply chain performance against pandemic disruption: adopting resilient strategies to mitigate the long-term effects. *Journal of Enterprise Information Management*, *34*(6), 1844-1873.

Sheykhizadeh, M., Ghasemi, R., Vandchali, H. R., Sepehri, A., & Torabi, S. A. (2024). A hybrid decision-making framework for a supplier selection problem based on lean, agile, resilience, and green criteria: a case study of a pharmaceutical industry. *Environment, Development and Sustainability*, 1-28.

Tarigan, Z., Jiputra, J., & Siagian, H. (2021). The effect of supply chain practices on retailer performance with information technology as moderating variable. *International Journal of Data and Network Science*. https://doi.org/10.5267/j.ijdns.2020.11.003.

Thuo, J. K., & Osoro, A. (2022). Supplier relationship management and performance of retail chain stores in Nairobi city county, Kenya. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, *6*(2).

Tukamuhabwa, B., Mutebi, H., & Isabirye, D. (2023). Supplier performance in the public healthcare: internal social capital, logistics capabilities and supply chain risk management capabilities as antecedents in a developing economy. *Journal of Business and Socio-economic Development*, *3*(1), 50-68.

Venkataraman, R. R., & Pinto, J. K. (2023). *Cost and value management in projects*. John Wiley & Sons.

Wairimu, D. M. (2023). *Relationship between Dynamic Supply Chain Capabilities and Resilience of Retail Chain of Stores in Kenya* (Doctoral dissertation, JKUAT-COHRED).

Xie, X., Hu, P., Yu, J., & Dai, B. (2021). Impact of capacity on the supplier's distribution channel selection in facing a retail platform. *Naval Research Logistics (NRL)*, 68, 837 - 854. https://doi.org/10.1002/nav.21993.

APPENDIX

Appendix I: Research Questionnaire

Introduction

The purpose of this section is to gather general information about the respondents to understand their background in relation to supplier management practices and supply chain performance in the retail sector in Kenya.

A: General Information

1. **Age Bracket (in years)**

a) 18 – 25 { }
b) 26 – 35 { }
c) 36 – 45 { }
d) 46 – 55 { }
e) Above 55 { }

2. **Level of Education**

a) Bachelor's Degree { }
b) Master's Degree { }
c) Other (Specify) _____

3. **Number of Years in the Retail Industry**

a) Less than 1 year { }
b) 1 – 5 years { }
c) 6 – 10 years { }
d) 11 – 15 years { }
e) Above 15 years { }

4. Size of the Retail Business (Based on Number of Employees)

a) Less than 50 (Small enterprise) { }
b) 50 – 250 (Medium enterprise) { }
c) More than 250 (Large enterprise) { }

5. Years of Operation of the Organization:

a) Less than 5 years { }
b) 5 – 10 years { }
c) 11 – 15 years { }
d) More than 15 years { }

6. How many suppliers does your organization engage with on a regular basis?

a) 1 – 10 { }
b) 11 – 50 { }
c) 51 – 100 { }
d) More than 100 { }

B: Effect of Supplier Selection Criteria on Supply Chain Performance in the Retail Sector in Kenya

The following section seeks to determine the effect of supplier selection criteria on supply chain performance. Respondents are requested to indicate their level of agreement with each statement using the scale below:

1 = Strongly Disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

Statements	**1**	**2**	**3**	**4**	**5**
The supplier is known for maintaining a strong reputation in the industry.					
The supplier has consistently demonstrated business credibility over time.					

The supplier shows consistent financial stability across financial periods.					
The supplier provides financial records that reflect low risk of default.					
The supplier delivers goods on time as per the agreed schedule.					
The supplier has a strong track record of honoring delivery commitments.					
The supplier is located within a reasonable geographical distance.					
The supplier's proximity contributes to faster and more cost-effective delivery.					

C: Effect of Supplier Collaboration on Supply Chain Performance in the Retail Sector in Kenya

The following section seeks to determine the effect of supplier collaboration on supply chain performance. Respondents are requested to indicate their level of agreement with each statement using the scale below:

1 = Strongly Disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

Statements	**1**	**2**	**3**	**4**	**5**
Supplier engages in joint planning sessions with retail partners.					
Joint forecasting and demand planning are conducted with the supplier.					
Supplier processes are integrated with retail systems for seamless flow.					
Operational activities are coordinated between supplier and retailer.					
Compatible technologies are used to support collaboration with supplier.					
Information is shared through integrated digital platforms with supplier.					
Shared objectives are pursued in collaboration with supplier.					
Goals of supplier are aligned with those of retail partners.					

D: Effect of Supplier Value Management on Supply Chain Performance in the Retail Sector in Kenya

The following section seeks to determine the effect of supplier value management on supply chain performance. Respondents are requested to indicate their level of agreement with each statement using the scale below:

1 = Strongly Disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

Statements	**1**	**2**	**3**	**4**	**5**
Supplier contributes to creating added value in supply chain operations.					
Collaborative efforts with supplier enhance overall customer value.					
Supplier offers unique features that differentiate products in the market.					
Retailer benefits from supplier's ability to provide specialized solutions.					
Supplier adjusts quickly to changes in order volumes or specifications.					
High supply flexibility is maintained by supplier during market fluctuations.					
Supplier objectives are aligned with long-term strategic goals of retailer.					
Strategic priorities of supplier support the retail supply chain vision.					

E: Effect of Supplier Capacity Building on Supply Chain Performance in the Retail Sector in Kenya

The following section seeks to determine the effect of supplier capacity building on supply chain performance. Respondents are requested to indicate their level of agreement with each statement using the scale below:

1 = Strongly Disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

Statements	**1**	**2**	**3**	**4**	**5**
Supplier invests in innovative solutions to improve supply chain efficiency.					
Innovation capability of supplier contributes to competitive advantage.					

Regular training programs are conducted by supplier for workforce improvement.					
Training initiatives by supplier enhance supply chain performance.					
Supplier focuses on continuous skills development for operational excellence.					
Improved employee skills from supplier side lead to better service delivery.					
Supplier can scale production based on changing demand levels.					
Increased scalability from supplier supports business growth in retail sector.					
Supplier consistently meets legal and regulatory compliance requirements.					
Compliance adherence by supplier reduces risk in the supply chain.					

F: Supply Chain Performance

The following section seeks to determine the supply chain performance. Respondents are requested to indicate their level of agreement with each statement using the scale below:

1 = Strongly Disagree | 2 = Disagree | 3 = Neutral | 4 = Agree | 5 = Strongly Agree

Statements	**1**	**2**	**3**	**4**	**5**
Supplier responds quickly to changes in demand or order requirements.					
High level of responsiveness from supplier improves retail operations.					
Retail operations adapt effectively to changes in supply and demand.					
Flexible processes support efficient handling of unexpected situations.					
Short lead times are consistently maintained by supply partners.					
Reduced lead time enhances stock availability and customer satisfaction.					
Transport systems used by suppliers are reliable and timely.					
Reliable transportation reduces delays and disruptions in supply chain.					

Thank you for your participation!

APPENDIX II: Research Authorization letter

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BOARD OF POST GRADUATE STUDIES

KCAU/BPS/2025 *Date: Monday, May 12, 2025*

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: NDERITU DUNCAN MUYA- REG NO. 23/07940

It is my distinct pleasure to introduce Nderitu Duncan Muya, a student at our institution pursuing a Master of Business Administration- Procurement and Supplies Management degree within the School of Business.

Muya is conducting research on the topic ***«Supplier management practices and supply chain performance in retail sector in Kenya."*** which is part of the requirements of the program h e is pursuing. The research as well as the data procured thereof shall be used for academic purposes only.

Any assistance accorded to him is highly appreciated.

In case of further inquiry, do not hesitate to contact the undersigned.

Yours faithfully,

DR. JACKSON NDOLO
DIRECTOR, BOARD OF POST GRADUATE STUDIES

APPENDIX II: NACOSTI Authorization letter

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 108565

Date of Issue: 15/May/2025

RESEARCH LICENSE

This is to Certify that Mr.. DUNCAN NDERITU MUYA of KCA University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: SUPPLIER MANAGEMENT PRACTICES AND SUPPLY CHAIN PERFORMANCE IN RETAIL SECTOR IN KENYA. for the period ending : 15/May/2026.

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Appendix III: List of major supermarket chains in retail sector in Kenya

1. **Carrefour**
2. **Village Supermarket**
3. **Chandarana Supermarkets**
4. **Eastmatt Supermarkets**
5. **Khetia's Supermarkets**
6. **Magunas Supermarkets**
7. **Shivling Supermarkets**
8. **Cleanshelf Supermarket**
9. **Woolmatt Supermarkets**
10. **Jumaa Supermarkets**
11. **Maathai Supermarkets**
12. **Quick Mart Limited**
13. **Naivas Limited**