ANALYSIS OF THE EFFECTIVENESS OF LAST THE MILE DELIVERY STRATEGIES ON CUSTOMER SATISFACTION: A CASE STUDY OF CARREFOUR SUPERMARKET UGANDA

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DECLARATION

I **Buwembo Mark Alvin, S21B12/054,** do declare this that this dissertation is entirely my original work. I affirm that this report has never been submitted to any institution for academic evaluation at Uganda Christian University for the award of any degree and is not a duplicate or reproduction of another individual's work.

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APPROVAL

I hereby certify that the dissertation on the role of sustainable supply chain practices on the operational performance of Organizations prepared by Buwembo Mark Alvin which has been completed under my supervision and is ready for submission for examination marking and approval to the faculty of Business under the department of Procurement and Logistics Management.

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Date 10/09/2024

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ABSTRACT

This study examined the role of sustainable supply chain practices on the operational performance of Coca Cola Beverages in Mbarara. The study was guided by three objectives: to examine the role of sustainable purchasing on operational performance; to assess the role of supplier collaboration on operational performance; and, to assess the role of logistics optimization on operational performance.

The respondents of this study included Coca Cola Beverages Mbarara staff. They were selected on their basis of having crucial roles they play in the sustainable supply chain practices and the operational performance in Coca Cola Beverages in Mbarara. A total of 65 respondents formed the sample size of the study. The study employed a cross sectional design and adopted a mixed approach. Questionnaires were used for the purpose of data collection and an interview guide was employed for qualitative data. The response rate was 100% of the targeted sample size.

The study found out that role of sustainable purchasing on operational performance is that it enables the company to deliver value adding products to its customers as concurrently helping it provide services of unique quality to its customers by delivering its products on time.

The study concluded that supplier collaboration enables the company to create a competitive advantage through sharing information making joint decisions and helps us satisfy customer needs in our operations while assisting the company in its operational inter-organizational relationships.

The study also concluded that logistics optimization reduces costs across our supply chain and enhances us meet the growing demand for fast and efficient supply chain operations through lead times and enhancement of customer satisfaction.

The study recommends that sustainable purchasing should be further enhanced so that it augurs the operational performance through delivering value added products to its customers by providing services of unique quality and delivery of products on time.

The study also recommends that supplier collaboration should be emphasized through sharing information and making joint decisions so as to enable the company to create a competitive advantage while fostering operational inter-organizational relationships.

The study further recommends that logistics optimization should be prioritized to enable the company to reduce costs across its supply chain. This will help the company meet the growing demand for fast and efficient supply chain operations. This can be done through ensuring lead times for enhancement of customer satisfaction.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter includes the background of the study, statement of the problem, conceptual framework, research objectives and research questions scope of the study, significance study and justification. According to a study by Ahi and Searcy (2015), integrating sustainability into supply chain management enhances efficiency, reduces costs, and improves overall business performance.

1.1 Background of the study

Supply chain practices are any business operations that take into account the effects such operations have on the environment in order to ensure environmentally friendly manufacturing and distribution procedures (Awan et al., 2021). Customer satisfaction and supply chain operations are closely related. Supply chain procedures thus prioritize consumer feedback, product quality, and environmental sustainability (De, et al., 2020). Having a competitive advantage at the conclusion of supply chain management requires the identification and selection of practices (Ikram et al., 2018). In the manufacturing sector, these procedures should result in a decrease in air emissions, solid waste, effluent waste, and other hazardous tangible or intangible pollutants. These methods significantly affect profitability and market share in addition to enhancing performance sustainability (Tiwari et al., 2018).

The increasing interest in supply networks from various companies worldwide has led to the development of sustainable supply chain practices (Khan et al., 2019). This interest arises from the fact that, as industrialization levels rise, environmental management has emerged as a matter of shared concern for companies, governments, and consumers (Roberts, 2019). The rising environmental pollution and resource depletion that have plagued human existence over the last several decades are the main causes of worry for environmental concerns in the global market (Shan and

Wang, 2018). The damage that corporations are causing to the climate and the ensuing environmental disasters are becoming major global concerns (Mutingi, 2013).

The emphasis is shifting globally toward sustainable energy, green goods, green technologies, and organic foods. The reasons why people choose to purchase eco-friendly items or participate in making eco-friendly choices are highlighted in the literature (Arshad Ali et al., 2020). The world and its inhabitants may benefit from these decisions. Additionally, it has been noted that buyers are prepared to shell out a premium for environmentally friendly goods (Peattie, 2021). Value, attitude, and conduct are the driving forces behind any purchasing activity, according to an empirical study of Chinese consumers (Keles and Bekimbetova, 2021). Businesses in the US and Europe are starting to take these issues into account when developing supply chain strategies (Mire, et al., 2019).

Globally, laws imposing more stringent environmental standards are being developed, such as ISO 14000 (Basel, 2023). Operational guidelines and standards for the conversion of businesses to environmentally sustainable business practices are provided by ISO 14000 standards (Shan and Wang, 2018). The three areas of economic, social, and environmental issues are addressed by the Sustainable Development Goals (SDGs) of the United Nations (UN, 2017). Germany imposes tariffs on the use of electricity, natural gas, heating oil, gasoline, and diesel in industrial operations. (Clean Energy Wire, 2019). The carbon tax was first imposed in Sweden in 1991 at a rate of €24 per ton of fossil CO2 emitted; as of 2019 (Government of Sweden, 2019), the tariff is €114 per ton. In 2014, Italy's GDP was comprised of 3.57% of tax revenues connected to the environment, accounting for 84% of CO2 emissions from energy usage (OECD, 2018).

To cut carbon emissions and encourage investment in more environmentally friendly supply chain processes, some African nations are enacting carbon taxes and other laws (Basel, 2023). There is pressure on governments to find solutions that will lessen the harm that natural resource extraction and energy use do to the environment (De et al., 2020). African nations have utilized a range of strategies to achieve the objectives of sustainable development and environmental conservation in response to

this tremendous pressure. These strategies include innovation policies, regulations, environmental subsidies, information sharing, and awareness campaigns (Braathren and Greene, 2020). The Sustainable Development Goals (SDGs) and its concepts for sustainable supply chain operations are being implemented in Uganda by the government. Uganda was one of the first nations to include the Sustainable Development Goals (SDGs) into its development plans; nevertheless, a plan for breaking down green growth into implementable sectoral interventions has not yet been developed (NEMA, 2023).. According to Kakaire (2022), sustainable growth in Uganda refers to an inclusive low-emission economic growth process that prioritizes the prudent use of the nation's physical, human, and natural resources while guaranteeing that these resources will continue to support current and future generations. According to empirical macroeconomic sector modeling, if the UGGDS intervention The Uganda Green Growth Development Strategy (UGGDS) was created by the government to operationalise green growth concepts and accelerate the implementation of Uganda Vision 2040, the second National Development Plan (NDP II), and the global development objectives. The goal of Uganda Vision 2040 and the NDPII 2015/16–2019/20 objectives is to ensure their sustainable achievement through the implementation of the Uganda Green Growth Development Strategy (UGGDS 2017/18–2029/30).

s (green growth scenario) are fully implemented, the country's GDP will grow by 10% above the business as usual (BAU) target, create an extra 4 million green jobs, and cut greenhouse gas emissions by 28% when compared to the conventional growth pathway.

1.2 Statement of the problem

The increasing expectations from customers and regulators are compelling companies to shift from traditional supply chains to more sustainable ones (De et al., 2020). This shift enables the production of environmentally friendly products and services, enhancing the competitiveness of companies (Awan et al., 2021). Some firms have taken a proactive approach, adopting sustainable supply chain practices that focus on delivering products and services with minimal harm to society and the environment

(Braathren and Greene, 2020). Consequently, companies are implementing a wide range of innovative practices, including sustainable procurement, production, environmental conservation, supplier collaboration, green product design, optimised warehousing and logistics, and reverse logistics (Peattie, 2021).

However, many companies in Uganda have been slow to adopt these sustainable supply chain practices. According to NEMA (2021), while customer demand is driving the need for sustainability, over 67.2% of supply chain managers face significant challenges and costs in balancing economic, environmental, and social objectives. Failure to adopt sustainable practices will exacerbate Uganda's already degraded environment (MEMA, 2023). NEMA (2023) reports that companies without sustainable supply chains are contributing to environmental degradation at a rate of 7.6% annually.

The Ugandan government, through bodies such as NEMA, the police, and KCCA, has launched campaigns to discourage environmental encroachment by companies. Despite several awareness efforts by NEMA and the Ministry of Environment to encourage sustainable practices, over 80% of companies in Uganda have not complied with these initiatives (NEMA, 2023). If this resistance continues, the rate of environmental destruction in Uganda will likely increase (NEMA, 2023). Therefore, this study seeks to explore the role of sustainable supply chain practices on the operational performance of Coca-Cola Beverages in Mbarara.

1.3 General objective of the study

The general objective of the study was to examine the role of sustainable supply chain practices on the operational performance of Coca Cola Mbarara.

1.4 Specific objectives of the study

1. To examine the role of sustainable purchasing on operational performance of Coca Cola Beverages in Mbarara.

2. To assess the role of supplier collaboration on operational performance of Coca Cola Beverages in Mbarara.

3. To assess the role of logistics optimization on operational performance of Coca Cola Beverages in Mbarara.

1.5 Research Questions

1. What is the role of sustainable purchasing on operational performance of Coca Cola Beverages in Mbarara?

2. What is the role of supplier collaboration on operational performance of Coca Cola Beverages in Mbarara?

3. What is the role of logistics optimization on operational performance of Coca Cola Beverages in Mbarara?

1.6 Scope of the study

1.6.1 Content scope

The study examined the role of sustainable supply chain practices on the operational performance of an organization in Mbarara Uganda. The constant is the independent variable of the study (sustainable supply chain practices, with its sub variables of sustainable purchasing, supplier collaboration and logistics optimization) and how it relates to the dependent variable (operational performance).

1.6.2 Geographical scope

The study was carried out from Coca Cola Beverages in Mbarara which is located in Mbarara P. O. Box, 1572

1.6.3 Time scope

The study covered the period between 2020 and 2024 as this is the period when Coca Cola Mbarara has had inefficiencies in their supply chains.

1.7 Significance of the study

This study is quite important in the following ways;

a. It will provide policymakers and practitioners with a deeper understanding of sustainable supply chain practices and their impact on the operational performance of organisations.

b. It will emphasise the urgent need to enforce sustainable supply chain practices in relation to improving operational performance.

c. It will encourage research and academic discussions on the shortcomings of companies in fully complying with sustainable supply chain practices and the resulting effects on their operational performance.

d. It will enable the researcher to identify the key issues driving debates in the field of sustainable supply chain practices and operational performance, contributing to the existing body of knowledge.

1.8 Conceptual Framework

INDEPENDENT VARIABLE. **DEPENDENT VARIABLE**

THE ROLE OF SUSTAINBLE SUPPLY CHAIN PRACTICES **OPERATIONAL PERFORMANCE**

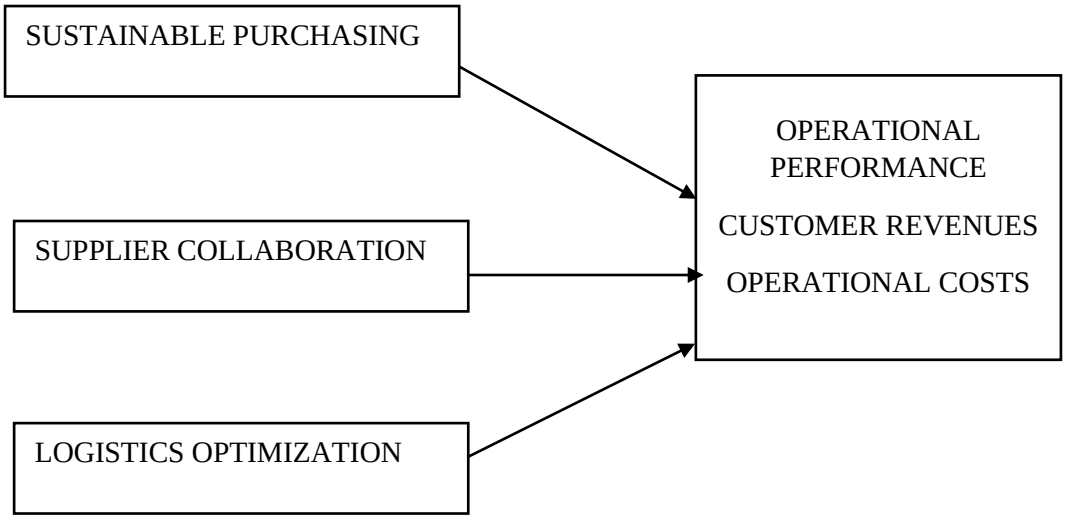

Figure 1: Conceptual Framework Adopted from Barney, 2021; Awan, Kraslawsk i& Huiskonen, 2017.

This conceptual framework illustrates the proposed causal relationships among variables related to a specific issue. The variables are represented within boxes, and arrows denote the relationships between them. The framework examines how sustainable supply chain practices impact the operational performance of an organisation (Rao& Holt, 2022). Specifically, it shows the connection between the independent variable (sustainable supply chain practices) and the dependent variable (operational performance of an organisation) (Awan, Kraslawski&Huiskonen, 2017).

A considerable amount of research highlights various motivations behind sustainable purchasing. Legislation and public policy are identified as key drivers of sustainable practices (Carter and Dresner, 2020; Min and Galle, 2021). Motivations for

implementing sustainable purchasing are linked to multiple stakeholders, including institutional actors (e.g., regulations and compliance, regional development), consumers (e.g., quality, security), shareholders and top management (e.g., brand awareness, profitability, risk management), civil society (e.g., ethical concerns, resource preservation), and suppliers (e.g., partnerships and competitive advantage) (Banerjee et al., 2023; Bansal and Roth, 2020; Lawrence and Morell, 2019; Winn, 2018).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The literature review focuses on the sustainable supply chain practices on the operational performance of an organization This literature is based on the knowledge of existing and credited scholars in the field of supply chain management in general and supply chain mapping in particular.

2.2 Supply Chain Practices

Creating and providing value to the consumer is receiving more attention in a highly competitive corporate climate. In contrast to their rivals, the majority of business organizations focus on offering and delivering goods and services that are more value (Bakar & Hamid, 2018; Maat et al., 2020 &Tukamuhabwa et al., 2021). In order to get a competitive edge in this fiercely competitive business climate, adequate supply chain procedures must be used (Tukamuhabwa et al., 2021).

The supply chain, as defined by Handfield, Nichols (2019, quoted in Seuring& Mu, 2018), includes all processes involved in the movement and conversion of commodities from raw materials. In addition, a supply chain may be thought of as a physical network in which all businesses work together to produce goods, distribute them to consumers, and provide raw materials (Tukamuhabwa et al., 2021).

Supply chain procedures include a range of organizational duties, such as ordering and receiving raw materials, processing raw materials throughout the production process, distributing the end product to customers, and so on (Maqbool et al., 2019).

Supply chain management techniques boost a company's capacity to provide value to its clients, increase profitability, and strengthen the ties and dependencies between businesses (Bakar & Hamid, 2018). Similarly, proficient supply chain management has emerged as a potentially advantageous approach to safeguarding the organization's competitive edge (Bratic, 2019; Islam et al., 2021). Research shows that sustainable purchasing, supplier cooperation, logistics optimization, information sharing, quality

of shared information, and customer relationship management are the most often measured dimensions or factors in supply chain management (SCM) practices (Bakar & Hamid, 2018; Maat et al., 2020 & Islam et al., 2021).

2.2.3 Operational performance

Organizations are under pressure from more and more sources to run more effectively and to implement efficient operating procedures (Hill, 2000; Slack et al., 2004). This includes the need to provide distinctive quality, timely delivery of value-adding goods and services at a reasonable price. Performance was described by Corina, Liviu, and Roxana (20191) as a collection of financial and non-financial measures that provide details on the extent to which goals and outcomes have been attained. Gichuru, Iravo, and Iravo (2018) assert that a company's effectiveness is contingent upon its ability to collaborate not just with its direct partners but also with those partners' own business partners. The creation of new resources is largely dependent on the firm's ongoing interactions with other stakeholders. When two firms pool their resources, they often achieve more benefits than they would have on their own (Haakansson & Ford, 2022).

The goal of operational performance is to create highly dependable, effective, and efficient processes that enable the pursuit of excellence that goes above and beyond for customers (Kivite, 2015). Effective operational strategies that help the businesses make sure the crucial operational components of the organizations are met are produced in order to reach such a sustained operational result. Operational effectiveness results from improved supplier engagement in the organization's overall strategy in addition to increased efficiency and lower costs (Wangeci, 2017). Various metrics have been used in the published literature to assess operational success. Cost, quality, flexibility, and delivery were the metrics that were most often mentioned (McKone et al., 2021; Phan et al., 2018).

The effects of risk sources and supply chain practices have been measured by researchers using a variety of methods, including firm or organizational performance (Cook, Heiser & Sengupta, 2021; Shukla, Garg & Agarwal, 2019), product performance, logistic performance (Effendi, 2015), financial performance (Li, Fan,

Lee & Cheng, 2015), or operational performance (Ahmad &Saifudin, 2014; Chen, 2012; Sundram, Chandran & Bhatti, 2016). However, the metrics used to assess the performance mentioned above are similar. Quality performance, flexibility performance, customer service, delivery performance, and cost performance were the operational performance indicators used to assess SCM (Kauppi et al., 2016).

The logistic impact for supply chain management was used by Effendi (2015), and the metrics were order fill rate, lead time for order fulfillment, operational flexibility, inventory turnover, and overall logistics cost. Profit, cost, ROI, and sale were the dimensions of SCM that were assessed in relation to organizational performance (Florian &Constangioara, 2014). It is clear that a variety of metrics, including operational, organizational, firm, and financial ones, have been used to assess SCM success. According to a performance measurement model that has been created, cost, quality, flexibility, customer happiness, capacity, time, and consistency should all be taken into account when assessing overall performance (Shahbaz, Rasi, Zulfakar, Bin, Abbas & Mubarak, 2018). Thus, every necessity for improved operational performance will be taken into account in this research.

2.3 Role of Sustainable Purchasing on Operational Performance

Since purchasing is responsible for managing business transactions between two or more organizations, it is a crucial internal function for a corporation. Purchasing is seen as a "support function that contributes to obtaining competitive advantage in a business" when examined as a department. Porter (1985). Initially, buying was seen to be more administrative in nature, but in recent years, it has started to be seen as a crucial factor in the success of the business. In this sense, the companies acknowledged that the buying division would change from a purely transactional to a strategic aspect, therefore supporting the long-term viability of the business. The role of purchasers becomes associated with factors that have a long-term impact on business development, in addition to the potential savings that may affect a company's operations. These factors include respect for business ethics, social, environmental, and economic responsibility, and legal requirements (such as the

GDPR, the fight against corruption, sanctions and embargos, etc.). Buyers may assess and reduce related risks while adhering to sustainability standards that are in line with global goals based on the company's consumption policy, i.e. 2030 is the deadline for achieving the Sustainable Development Goals (UN, 2015).

According to the Bruntland World Commission study from 2017, one of the earliest definitions of sustainability is "the development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs." Sustainability, according to Shrivastava (2019), has the capacity to lower long-term risks related to resource depletion, energy cost volatility, product liability, pollution, and waste management. Sustainability is defined as "achieving success today without compromising the needs of the future" by Bourdreau and Ramstand (2015).

According to Ehrenfeld (2018), sustainability is also defined as "the possibility that human and other forms of life on Earth will flourish forever." The author noted societal problems including the never-ending consumerism that defines contemporary life and provided doable advice on cultivating a sustainable attitude. Although there isn't a single accepted definition for sustainability (Berns et al., 2019), it was determined that sustainability would be a motivating factor that requires attention. In a growing number of firms attempting to define, execute, and enhance the economic, environmental, and social aspects of their operations, sustainable business development has grown to constitute a significant aspect of corporate strategy.

Being a strategic objective for managers, sustainability in business has been one of the most significant topics discussed at the international level in the past ten years. Achieving the triple bottom line—economic, social, and environmental advantages all at once—is how a sustainable business effectively contributes to sustainability (Dyllick and Hockerts, 2022; Elkington, 2019).

According to Schein (2018), understanding sustainability encompasses both innovative long-term ecological and restorative business models as well as short-term, business-as-usual economics. The author makes the following points: nature has inherent

worth, people are a part of the global ecosystem, not something apart from it, and humans should think long-term and holistically in order to reduce their influence on natural systems. It is crucial to remember that the economic side include more than just short-term outcomes like annual net income; it also includes factors like a company's reputation and long-term alliances that support long-term business success. Hence, achieving a goal of properly balancing short- and long-term corporate goals is part of managing sustainability.

Among other corporate roles, the buying function is seen as a significant change agent that offers a chance to incorporate environmental considerations into every division of a company (Zsidisin and Hendrick, 2018; Preuss, 2021). It was clarified that achieving environmental sustainability might provide a business a competitive edge or increase economic profitability (Wald, 2016; Sharma et al., 2010). (Carter et al., 2020; Porter and van der Linde, 2021). The concepts of socially responsible buying (Carter and Jennings, 2020), green purchasing (Large and Thomsen, 2017), and green supply chain (Bowen et al., 2016) were used to discuss sustainability in the purchasing activity. Large and Thomsen (2019) defined environmental or green buying as the incorporation of environmental factors into purchasing decisions and practices.

Green supply chains (Bowen et al., 2006), socially conscious buying (Carter and Jennings, 2022), and green purchasing (Large and Thomsen, 2011) were some of the ways that sustainability was addressed in the purchasing activity. Large and Thomsen (2011) defined green or environmental buying as the incorporation of environmental factors into purchasing decisions and practices. "The principles of sustainable development, such as ensuring a strong, healthy, and just society, living within environmental limits, and promoting good governance" are in line with sustainable buying practices (Walker and Brammer, 2019). By "seeking resource efficiency, and improving the quality of products and services and ultimately optimizing costs," UN Global Marketplace (2021) defines sustainable purchasing as integrating requirements, specifications, and criteria targeting the protection of the environment, of social progress, and in support of economic development.

More specifically, sustainable supply chains (SSC), which incorporate business processes like material procurement, assembly and production, product storage and distribution, customer service, and a three-dimensional approach (economic, social, and environmental), have developed the need for performance improvement and sustainability achievement in organizations. Because of this, firms are now identifying strategies and resources to integrate and execute sustainable practices throughout the supply chain, turning sustainable supply chain management (SSCM) into a competitive advantage (Chardine-Baumann &Botta-Genoulaz, 2014). Because of these actions, there is an increasing need to comprehend how a company should engage with its suppliers and manage its supply chain procedures in order to improve performance and put a greater emphasis on sustainability.

Furthermore, research and literature studies are debating the complexity of supply chains and the challenge of offering frameworks in the many industrial sectors (Pullman, Maloni, & Carter, 2009). A broad field appears to exist for the advancement of this subject and the exploration of fresh data, according to recent research (Ahi, Jaber, & Searcy, 2016; Ahi & Searcy, 2015a; Marshall, McCarthy, Heavey, & McGrath, 2015; Taticchi, Garengo, Nudurupati, Tonelli, & Pasqualino, 2014; Yu & Tseng, 2014).

There are currently few models available to measure the performance of sustainable supply chain management due to the limited understanding of the theory, application, and measurement of sustainable practices that impact the chain's members during this early stage of research (Carter & Rogers, 2008; Diabat, Kannan, &Mathiyazhagan, 2018; Gopal & Thakkar, 2019a). Due to this, businesses are now only able to monitor a small portion of sustainability in their own operations and are unable to evaluate the sustainability of their suppliers and consumers farther down the supply chain. Determining their actual expenses has so proven to be quite difficult. Despite this, the concept of supply chain sustainability has advanced significantly, and studies have been conducted recently to assess this problem in comparison with the goal of assisting in the creation and execution of sustainable action plans, even if this is a challenging task (Ahi & Searcy, 2018b).

Thus, in supply chain management, sustainable procurement emphasizes resource use, environmental effects, and supplier engagement and cooperation (Turker&Altuntas, 2019; Van Hoof &Thiell, 2021). Moreover, practical case studies demonstrate the need of tracking sustainable performance in the supply chain from the standpoints of procurement and supplier management (Gualandris&Kalchschmidt, 2016; Wilhelm, et al, 2016). Furthermore, while assessing the procurement process, metrics and indicators related to sustainable supply chains should be taken into account. According to Suraraksa and Shin (2019), buying plays a crucial role in supply chain management and may establish strategic procedures. Effective chain operations now heavily rely on outsourcing, and improving supply chain performance is said to need careful supplier selection and oversight.

2.4 Role of Supplier Collaboration in Operational Performance

According to Anthony (2020, quoted in Ihunwo&Opara, 2021), cooperation is defined as when two or more businesses share the duty of communicating information about shared planning, management, execution, and performance assessment. According to Togar and Sridharan (2022) collaboration is the process of two or more chain members working together to generate a competitive advantage by exchanging information, making choices together, and sharing advantages that come from meeting consumer demands more profitably than they could by acting alone. Cooperative interorganizational ties, which are socially constructed vehicles for group action, may be seen as a kind of collaboration. Collaboration involves tasks that are carried out subtly rather than unilaterally by emphasizing relational interaction (Heide 2003). According to Simatupang&Sridharan (2019), shared goals, integrated policies, cooperative decision-making, and information exchange about gains and losses are necessary for productive cooperation.

Collaboration in the supply chain has become a successful and long-lasting business strategy in supply chain management (Prajogo&Olhager, 2017). Business-to-business connections have shortened the time it takes for products and services to reach the market and have essentially removed geographical and cultural barriers in

international supply chains (Yaakub & Mustafa, 2015). Due to the removal of intermediaries, this has produced high sales and high income (Hadjikhani&LaPlaca, 2017). Over the last several years, internet use in Kenya has gradually increased, which has led to the establishment of information and communication technology (ICT) companies. The Internet revolution has not excluded emerging economies in Asia or Africa, since the majority of small and medium-sized businesses are starting to see the advantages of business-to-business e-commerce for economic growth.

The primary goal of supply chain cooperation is to increase the effectiveness of interorganizational supply connections from the point of origin to the end user, with a focus on the interfaces between the various supply chain activities (Montoya-Torres & Ortiz-Vargas, 2016). Infrastructure for information and communication technology (ICT) has long been extolled as the engine behind supply chain cooperation mechanisms globally (Prajogo&Olhager, 2017). It is believed that all supply chain partners working together have the same objective in mind: providing consumers with products and services at the lowest feasible cost (Hudnurkar, Jakhar&Rathod, 2017). The supply chain partners are able to reduce redundancy in their procedures by streamlining them due to their shared objective.

The fourth pillar in developing a plan to provide supply chain excellence is working together with suppliers and consumers (Slone, 2004). According to Moore (2012), the relationships formed under the new paradigm of supplier relationship management add value in two ways: first, cooperative efforts have the potential to improve working relationships, which eventually raises the value that each partner derives from the relationship.

The fourth pillar in developing a plan to provide supply chain excellence is working together with suppliers and consumers (Slone, 2004). Working with decision-makers at the supplier level to identify enhancements that may be implemented that will have a quantifiable, advantageous financial effect for both businesses is known as supplier cooperation. Partners provide resources via commitment to uphold and advance the objectives of the partnership. The expectation of a connection is crucial for encouraging cooperation in interorganizational partnerships, according to Heide and

John (2019) and Krause (2016). Collaborative relationships need the backing of the whole company. A buyer has to be able to bargain with a supplier and reach a mutually beneficial and trustworthy arrangement. This cannot happen if managers are simply concerned with cutting costs or if employees won't delegate part of their responsibilities to the provider. Collaborative connections provide many benefits, including reduced total costs, enhanced quality goods, shortened time to market owing to transparent communication, and advancements in technology and innovation.

Collaboration between supply chain partners may improve their performance and competitiveness in a number of ways (Hudnurkar, Jakhar&Rathod, 2017). Innovative goods, cost control, increased productivity, risk management, and providing consumers with additional business value are a few of these advantages (Giannakis & Papadopoulos, 2016). A common understanding and open communication between firms may foster an atmosphere of trust that fosters business-to-business (B2B) relationships when supply chain cooperation is done well (Lavastre, Gunasekaran&Spalanzani, 2019).

An understanding of the manufacturing companies' implementation of relationship collaboration with respect to decision trade-offs involved in contract design has been contributed, according to SajadFayezi and Maryam Zomorrodi's (2015) Australian perspective on the role of relationship collaboration in supply chain agility and flexibility development. The results showed how important relationships are seen to be and how they affect the growth of supply chain flexibility and agility. Additionally, it was shown that practitioners believe that connections with suppliers and customers have a significant impact on the success of their companies.

Dotun (2017) concentrated on supply chain cooperation in 171 companies selected from China, India, and Brazil—three rapidly rising nations. It was shown that good relationships and collaborations throughout the supply chain had a favorable correlation with both product and process innovation capabilities and manufacturing performance. The results provide fresh perspectives on the three nations' manufacturers and demonstrate how their supply chain partnerships with clients have

pushed them to grow their capacity for innovation. Thus, they have been able to profit from enhanced production performance thanks to these new capabilities.

Many developing nations in Africa have not yet embraced the exchange of information between suppliers and customers, but those that have face obstacles in doing so, including those involving supplier-firm relationships, which impede the efficiency of business operations. Proper information sharing in tour firms has been embraced by countries such as South Africa and Ghana. This has aided the businesses in effectively managing their supply chains, which has increased production and made the travel sector lucrative (Chopra & Meindl, 2018).

Otchere, Annan, and Anin (2018) argued that supply chain cooperation gives Ghanaian cocoa manufacturing companies a competitive edge. They maintained that the effective use of pertinent and timely information by all functional components of the supply chain is essential to the success of any firm and serves as a differentiator for that particular one. They contended that since suppliers and retailers have expertise in several fields, their combined knowledge may provide original information that can be used to advance business expertise. Further, improved supplier-retailer ties also increase the likelihood that new products will be accepted.

2.5 Role of Logistics Optimization in Operational Performance

Businesses use logistics optimization as a tactic to satisfy the increasing need for quick and effective supply chain operations (Zhong Xiaoyun, 2022). This approach finds chances for optimization at several levels of the supply chain by concentrating on distinct parts of the chain. The goals of logistics optimization are to improve customer satisfaction, cut lead times, and lower costs across the supply chain (Laursen and Salter, 2016).Logistics optimisation is the process of identifying the most efficient and cost-effective way to organise, coordinate, and carry out the movement of goods and services from one location to another. Each supply chain stage has unique characteristics and potential problems.

, such excess or insufficient inventory to fulfill client needs, delayed shipping deliveries, and product damage during transit (Chopra & Meindl, 2018). Logistics optimization use technology, data analysis, and other techniques to pinpoint the most effective distribution networks, addressing each of these concerns (Zhu & Sarkis, 2018). If shipments are rerouted to avoid excessive mileage, logistics optimisation may result in lower fuel costs. Businesses may lower logistical costs, expedite delivery, and increase customer satisfaction by utilising logistics optimisation technologies and strategies (Wong, Boon-Itt, and Wong, 2017). Businesses may also lessen the impact of transportation on the environment by identifying the most fuel-efficient routes and types of transportation.

From the standpoint of supply chain management, one of the key metrics to gauge the quality of logistics management is the logistics service quality throughout the process of process optimization. The logistics sector has grown quickly in today's world due to the growth of the Internet economy, but its expansion has only affected its size and quantity (JiQingkai, Li Junjing, and Zhao Da, 2022). The fundamentals of logistical thinking's service quality have not altered, and there is still room for improvement. In the process of optimizing the logistics management process, businesses must also consistently raise the bar for logistics service quality and set up a unified system.

Businesses must supervise the upstream and downstream businesses in the logistics industry, examine the issue from the perspective of the supply chain, further develop their capacity to provide logistics services, and work to increase customer satisfaction in order to raise the level of logistics services (Zhong Xiaoyun, 2022). Some businesses have squeezed many commodities during the logistics transportation process in an effort to save money on short-term profits and minimize logistics costs. This has damaged commodities, negatively impacted customer satisfaction, and raised the bar for enterprise logistics services. These outcomes are not helpful for building a positive company reputation or for the logistics industry's healthy and sustainable development (Fu Jinqiang, 2022).

There are legal dangers associated with operating a business, and logistics companies are no different. Hence, it is essential to increase knowledge of legal hazards throughout the operation and growth of logistics firms. Since intellectual property is a company's primary source of competitive advantage, risk prevention and management are centered on it. First and foremost, it is imperative that, in the course of conducting business, enterprises respect the intellectual property rights of other businesses, particularly those in the same industry, in addition to fortifying their own intellectual property rights protection (Xie Xiaodong, 2022). Failure to do so makes it all too easy for disputes involving other businesses' intellectual property to arise. The current state of affairs indicates that businesses are placing a greater emphasis on intellectual property rights; thus, the logistics sector must enhance its risk prevention strategies for intellectual property rights throughout the management process.

Second, as logistics companies grow, they will eventually merge with smaller companies. Because of the complexity of these mergers and acquisitions, companies must thoroughly investigate the legal aspects of these transactions while also conducting in-depth due diligence on the combined companies (Liu Xiaotong, 2022). This will increase their awareness of potential legal risks and help them avoid getting entangled in needless legal disputes. Last but not least, in the heat of actual market competition, many businesses may fabricate their financial statements and real operating conditions to boost their brand and competitiveness. This calls for businesses to thoroughly research the true circumstances of M&A businesses, develop a high level of risk awareness, and lower the likelihood of running afoul of the law.

From a supply chain viewpoint, optimizing the logistics management process may successfully lower logistical costs, increase business efficiency, and raise management standards. An organization that oversees all facets of logistics can guarantee the lowest possible level of service, boost transportation process efficiency, encourage more precise customer discovery through logistics, strengthen the enterprise's core competitiveness, and boost the organization's capacity for long-term growth (Zhong Xiaoyun, 2022). Improving the oversight of the logistics management process may lead

to increased logistics distribution efficiency in the course of business operations and development.

No matter what sort of items are being delivered, increasing the speed of delivery will raise their use value, improve their service quality, and boost customer happiness. In this sense, raising the commodity's intrinsic worth translates into raising its profit margin and lowering its transportation expenses. The commodity will generate profits for the business when the profit surpasses the cost.

In conclusion, supply chain optimization of the logistics management process is a natural byproduct of ongoing improvements in the field of logistics management and is a prerequisite for both social and economic progress. Prior to implementing logistics management process optimization, it is important to identify the issues with the process and determine the causes of these issues. Second, in accordance with the real-world circumstances, effectively use all resources at hand, continuously raise the bar for logistics management, provide clients better services, and encourage the industry's healthy and sustainable growth.

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CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents the methodology adopted in the study. It contains the research design, study area, study population, sample size, tools for data collection, and sources of data, analysis of data and presentation and limitation to the study.

3.1 Research Design

A research design is a strategy that offers the whole structure for gathering data (Max, 2015). According to Mugenda & Mugenda (2005), it may also be described as a strategy that selects study venues, subjects, and methods for gathering data. In order to analyze the nature of study variables within their real-life context and to give an in-depth examination of the research topic at one point in time, a cross-sectional study research design will be used in this study.

Furthermore, the research included both quantitative and qualitative methodologies. In order to quantify the research variables, a quantitative method will be used, and statistical techniques were used for analysis (Cole, 2017). It highlights the need of choosing an appropriate sample size to measure a phenomena for the entire population. The study will be able to enhance the quantitative measures by offering comprehensive explanations of the relationships between the variables through the use of a qualitative method. According to Creswell (2013), qualitative research describes and interprets certain human events by using an open approach to inquiry.

3.2 Study Area

The study area was Coca Cola Beverages in Mbarara district.

3.3 Study Population

Population is defined as a collection of elements about which references are wished to be made(Trevithick., 2016). Target population is a large population from which a sample population isselected (Healey, 2011). The population for this study was200 staff of Coca Cola Beverages in Mbarara. (primary data, 2024)

3.4 Sample Size

The sample size for the study was 65stafffromthe departments of procurement, production, marketing and human resource. The sample size was determined with the help of Yamane's formula of sample size determination as stipulated by Krejcie&Morgan (1970) table for determining sample sizes from pre-determined populations.

3.5 SamplingTechnique

According to Freedman (2014), a sample is a subset of a population that has been selected to reflect the entire population. The purpose of sampling was to collect data from a more focused, smaller sample. This improves efficiency by enabling generalizations about the population to be made without having to look at every individual. Using stratified random selection, samples from each demographic stratum were chosen. A variation on simple random sampling is called stratified random sampling. In this method, the population is divided into groups known as strata that are relatively homogeneous. A simple random sample is then chosen from each stratum, and the results are combined to draw conclusions about the population (Patten et al., 2018). The sample elements for the interviews were chosen using straightforward and intentional sampling techniques. Every department of Coca-Cola Beverages in Mbarara was regarded as a stratum, and employees were chosen at random from each department.

Table 1: Strata of respondents

Category of Respondents	Population Size	Sample size	Sampling Techniques
Supervisors	30	15	Purposive sampling
Department managers	10	5	Purposive sampling
Section managers	40	18	Simple random sampling
Procurement managers	15	5	Purposive sampling
Procurement assistants	115	22	Simple random sampling
Total	**200**	**65**	

SOURCE:(primary Data 2024)

3.6 Data Collection Methods

3.7.1 Questionnaire

A well-crafted tool for gathering information in line with the parameters of research questions is the questionnaire (Nardi & Nardi, 2018). Structured questions were included in questionnaires to get information from the respondents. Both closed- and open-ended questions will be included in these. While open-ended questions were utilized to obtain in-depth information on the issue, closed-ended questions were useful in eliciting exact answers.

The questions were designed using five-point Likert scales, where response 1 indicated strong agreement and response 5 indicated severe disagreement. This is due to the fact that the Likert scale is adaptable, measures opinion intensity, is simple to comprehend, and does not require participants to provide a response on a subject with which they may not feel comfortable (Haque et al., 2013).

3.7.2 Interview Guide

The department's randomly chosen employees were interviewed using interview

guides as it makes it simple to completely comprehend someone's perceptions or experiences or discover more about their questionnaire responses. A researcher's instrument for gathering information through oral or face-to-face contact is an interview guide (Katuna, 2019). Because the interviewee is always available for quick assistance, an interview enables the researcher to make sure that the data gathered from them is consistent with the study (Moeckli, 2011)..

3.8 Data Collection Procedure

A letter of introduction to collect data will be obtained from the university. The researcher will get permission from identified companies where data will be collected. After being authorized the respondents will be sensitized about the study being done. The researcher will thengo to the study area and the introductory letter will be presented to the respondents on request.

3.9 Validity and Reliability of Data

3.9.1 Validity of Data

The study adjusts the instruments to meet the goals in order to guarantee the validity of the research instruments. This addressed the typical length of the questionnaire, linguistic clarity, relevancy, and comprehensiveness of the information. According to Norland (2000), validity is determined by how reasonable and accurate the data are, as stated by (LaBoskey, 2014). The supervisor will first go over the questionnaire and interview schedule drafts with the assistant to make sure all pertinent constructs were recorded before determining the face and construct validity of the instruments. To ascertain if the instrument is worthy of being used for the pre-test and, consequently, the research, its content validity will be evaluated. According to Horgas et al. (2008), the Content Validity Index was calculated using Crocker's algorithm.

$$CVI = \frac{\textit{Total Number of items rated as relevant by all respondents}}{\textit{Total Number of items in the Instrument)}}$$

3.9.2 Reliability of Data

The degree to which a research instrument produces consistent data or outcomes after several trials is known as its reliability (Tiberious et al., 2016). The questionnaires were pretested on a small number of respondents who will make up the study's final sample in order to confirm the research instrument's dependability. This allowed researchers to look for anomalies on the instrument's included questions. All items having a Cronbach's alpha of more than 0.7 were deemed dependable and consistent for additional data collection and analysis. Cronbach's alpha coefficients were then calculated as a measure of scale reliability.

3.10 Data Presentation and Data Analysis

The study used qualitative and quantitative data analysis techniques.

3.10.1 Quantitative Data Analysis

Quantitative data analysis involved use of descriptive statistics such as correlation, frequency distribution, percentages, mean and standard deviation.

3.10.2 Qualitative Data Analysis

For qualitative data, it will be edited, summarized and analyzed using content analysis where data collected will be presented in themes for easy interpretation as supported by (Eloet al., 2014).

3.11 Ethical Consideration

Prior to data collection, I will seek the consent of the respondents. I will also inform the respondents of the purpose for which this study is undertaken, i.e. for academic purposes only.

I will also ensure anonymity of the respondents' answers to avoid any possible victimization. Results from the study will be shared if the respondents deem it necessary.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

4.0 Introduction

The chapter focuses on presentation of the analyzed data on the role of sustainable supply chain practices on the operational performance of Coca Cola Beverages in Mbarara. The results in this section are mainly presented using statistical tables that were generated based on study objectives. The statistical tools used in the analysis and interpretation of data are descriptive in nature such as correlation, mean and standard deviation. This section also comprises of the background characteristics of the respondents. Data was collected through administering questionnaires.

4.1 Response Rate

In contrast to the individuals the researcher had targeted, the number of respondents to the study is provided in this part, together with information on the respondents' gender, age, educational attainment, current employment status, and length of service. This was predicated on data from the respondents' interviews and the questionnaire.

This study had a 100% response rate, which was a great response rate. A high response rate may also indicate more accurate results, according to Amin's (2005) theory.

Table 2: Response Rate

Response Rate		**Sample Size**
	Frequency	**Percentage(%)**
Distributed	**65**	**100**
Response	**65**	**100**
Non response	**00**	**00**

Source: (Primary Data, 2024)

4.2 Demographic Characteristics of Respondents

The traits of the respondents are displayed in the results that follow. The study variables were analysed using the mean, frequency distributions, and standard deviation analysis to investigate the relationship between them. The respondents' departments, age, and gender were among the characteristics. The tables below display the results.

Table 3: Age of the Respondents

Age group	**Frequency**	**Percent**
21-30	27	41.5
31-40	24	36.9
41-50	14	21.6
Total	**65**	**100.0**

Source: .(Primary data, 2024)

From Table 3, results show that the age group of 21-30 at 41.5%. These were followed the respondents in the age group of 31-40 at 36.9% and 41-50 at 21.6%. The results therefore show that the respondents were fairly picked from different age groups and thus representative of the respondents in this study.

Table 4: Gender of the Respondents

Gender	Frequency	Percent
Female	23	35.4
Male	42	64.6
Total	**65**	**100.0**

Source: (Primary data, 2024)

The results in Table 4 above show that the majority of the respondents were male (64.6%) while 35.4% were male. The sample shows that the study was dominantly composed of females.

Table 5: Positions of the respondents

Position of the respondents	Frequency	Percent
Procurement Supervisor	6	9.2
Department manager	5	7.6
Section manager	12	18.5
Procurement Assistant	42	64.7
Total	**65**	**100.0**

Source :(Primary data, 2024)

According to Table 5's findings, procurement assistants made up the majority of respondents (64.7%), followed by section managers (18.5%), procurement supervisors (9.2%), and department managers (7.6%). This demonstrates that the study's responses were dispersed equitably. This validates the findings as the opinions of all participants from different categories.

4.3 Findings Based on the Study Objectives.

4.3.1 Role of Sustainable Purchasing on Operational Performance

This objective studied the role of sustainable purchasing on operational performance. Thus a thorough examination of the role of sustainable purchasing on operational performance was made. Respondents were asked to rate the statement regarding the topic for study under this objective, as per the questionnaire which was anchored such that 1 represents Strongly Disagree, 2-Disagree, 3-Neither Agree nor Disagree, 4-Agree and 5-Strongly Agree. Means that are close to 1 or 2 signify Disagreement while those that are close to 4 or 5 show Agreement with the issue being raised.

Table 6: Role of Sustainable Purchasing on Operational Performance

Statements	**Extent of agreement & disagreement**					**Mean**	**Std. Dev.**
	SA	A	NS	D	SD		
	Freq. (%)	Freq. (%)	Freq. (%)	Freq. (%)	Freq. (%)		
Sustainable purchasing enables us to	10	13	8	22	12	3.72	1.03

deliver value adding products to our customers.	(14.4)	(20)	(12.3)	(33.8)	(18.4)		
Sustainable purchasing helps us provide services of unique quality to our customers.	9 (13.8)	12 (18.4)	7 (10.8)	14 (21.5)	23 (35.4)	2.65	1.09
Sustainable purchasing enables us to deliver our products on time.	20 (30.7)	34 (52.3)	9 (13.8)	2 (3.1)	00	3.88	1.07
Sustainable purchasing assists us to deliver our goods at a competitive price.	23 (35.4)	34 (52.3)	5 (7.7)	3 (4.6)	00	3.68	1.10
Sustainable purchasing helps our organization to efficiently cooperate with our direct partners.	16 (24.6)	12 (18.4)	13 (20)	11 (16.9)	13 (20)	2.70	1.06
Sustainable purchasing enhances our partners cooperate with their own business partners.	5 (7.7)	12 (18.4)	13 (20)	20 (30.7)	15 (23.1)	2.67	0.98

Source: (Primary data, 2024)

The findings on the role of sustainable buying on operational performance are displayed in Table 6. The results demonstrate that Coca-Cola may provide value-adding items to its consumers through sustainable buying (mean=3.72). Coca-Cola is able to provide clients services of exceptional quality thanks to sustainable buying

practices (mean=2.65). Coca-Cola is able to supply its products on time thanks to sustainable buying (mean=3.88).

Furthermore, the company's ability to supply items at a reasonable price is aided by sustainable buying (mean=3.68). its organization's ability to work effectively with its direct partners is aided by sustainable buying (mean=2.70). Their partners' cooperation with their own business partners is improved by sustainable purchasing (mean=2.67). The use of sustainable buying practices aids the firm in achieving highly dependable and efficient systems for their commercial operations (mean = 3.75).

Additionally, the firm may attain excellence that surpasses consumer expectations with the help of sustainable buying (mean=2.96). The organization's suppliers are more involved in its overall strategy when they purchase sustainably (mean=3.97). The company's profits have increased thanks to sustainable buying (mean=2.78). The

Correlations

		Sustainable purchasing	Operational performance
Sustainable purchasing	Pearson Correlation	1	.717**
	Sig. (2-tailed)		.000
	N	50	50
Operational performance	Pearson Correlation	.717**	1
	Sig. (2-tailed)	.000	
	N	66	66

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

company has been able to swiftly reach its return on investment (mean=3.50) thanks to sustainable buying. The company's quarterly revenues have increased thanks to sustainable buying (mean=3.62)..

Table7: Pearson's correlation on Sustainable Purchasing and Operational Performance

Source: (*Primary data 2024)*

The findings indicated in table above shows that there is a significant positive relationship between sustainable purchasing and operational performance in Coca Cola Beverages in Mbarara. This relationship is affirmed by r-values of 0.717** with significant p-values of 0.000 at the level of 0.05 (2-tailed) (r = .717**, p< .05). This suggests that as sustainable purchasing improves, the likelihood of operational performance decreases, highlighting the critical role of sustainable purchasing in operational performance.

4.3.2 Role of Supplier Collaboration on Operational Performance

This objective focused on the role of supplier collaboration on operational performance. Thus a thorough examination of therole of supplier collaboration on operational performance was made. Respondents were asked to rate the statement regarding the topic for study under this objective, as per the questionnaire which was anchored such that 1 represents Strongly Disagree, 2-Disagree, 3-Neither Agree nor Disagree, 4-Agree and 5-Strongly Agree. Means that are close to 1 or 2 signify Disagreement while those that are close to 4 or 5 show Agreement with the issue being raised.

Table 8:Role of Supplier Collaboration on Operational Performance

Statements	Extent of agreement & disagreement					Mean	Std. Dev.
	SA	A	NS	D	SD		
	Freq. (%)	Freq. (%)	Freq. (%)	Freq. (%)	Freq. (%)		
Supplier collaboration enables us to create a competitive advantage through sharing information making joint decisions.	24 (36.9)	26 (40)	7 (10.7)	4 (6.1)	4 (6.1)	3.12	1.18
Supplier collaboration helps us satisfy customer needs in our operations.	20 (30.7)	30 (46.1)	9 (13.8)	3 (4.6)	3 (4.6)	3.12	1.17
Supplier collaboration assists us in our operational inter-organizational relationships.	15 (23.1)	24 (36.9)	13 (20)	13 (20)	00	2.88	0.96
Supplier collaboration enables us build our strategy to deliver supply chain excellence	23 (35.4)	13 (20)	17 (26.1)	12 (18.5)	00	2.65	1.03
Sustainable purchasing aids us in ensuring consistent delivery our goods and services.	5 (7.7)	12 (18.4)	15 (23.1)	19 (29.2)	13 (20)	2.71	0.95
Supplier collaboration enables us to deliver our products on time.	1 (1.5)	21 (32.3)	20 (30.7)	10 (15.4)	14 (21.5)	2.61	1.02

Source: (Primary data, 2024)

The results on the role of supplier collaboration on operational performance are shown in Table 8 above. The findings show that supplier cooperation gives the business a competitive edge by allowing information exchange and group decision-making (mean=3.12). Working with suppliers enables the business to operate in a way that meets consumer demands (mean=3.12). The company's operational interorganizational ties benefit from supplier collaboration (mean=2.88).

The firm may develop its plan to achieve supply chain excellence through supplier partnership (mean=2.63). The organization can ensure consistent supply of products and services by using sustainable buying practices (mean = 2.71). Cooperation among suppliers helps the business deliver its goods on schedule (mean=2.61).

Cooperation among suppliers helps the business supply its products at a competitive price (mean=3.68). Collaboration between suppliers and the organization facilitates effective cooperation with direct partners (mean=2.70). Partner cooperation with suppliers improves partner cooperation with other business partners (mean=2.67).

Table 9: Pearson's correlation on Supplier Collaboration on Operational Performance social wellbeing and neglect patterns in blended families

Correlations

		Supplier collaboration	Operational performance
Supplier collaboration	Pearson Correlation	1	.733**
	Sig. (2-tailed)		.000
	N	50	50
Operational performance	Pearson Correlation	.733**	1
	Sig. (2-tailed)	.000	
	N	66	66

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

Source: (*Primary data,2024)*

The findings indicated in table above shows that there is a significant positive relationship between supplier collaboration and operational performance in Coca Cola Beverages in Mbarara. This relationship is affirmed by r-values of 0.733** with significant p-values of 0.000 at the level of 0.05 (2-tailed) (r = .733**, p< .05). This emphasizes the importance of fostering supplier collaboration to mitigate and enhance operational performance.

4.3.3 Role of Logistics Optimization on Operational Performance

This objective dealt with the role of logistics optimization on operational performance. Thus a thorough examination of the role of logistics optimization on operational performance was made. Respondents were asked to rate the statement regarding the topic for study under this objective, as per the questionnaire which was

anchored such that 1 represents Strongly Disagree, 2-Disagree, 3-Neither Agree nor Disagree, 4-Agree and 5-Strongly Agree. Means that are close to 1 or 2 signify Disagreement while those that are close to 4 or 5 show Agreement with the issue being raised.

Table 10:Role of Logistics Optimization on Operational Performance

Statements	**Extent of agreement & disagreement**					**Mean**	**Std. Dev.**
	SA	A	NS	D	SD		
	Freq. (%)	Freq. (%)	Freq. (%)	Freq. (%)	Freq. (%)		
Logistics optimization reduces costs across our supply chain.	29 (44.6)	15 (23.1)	11 (16.9)	5 (7.7)	5 (7.7)	3.00	1.10
Logistics optimization enhances us meet the growing demand for fast and efficient supply chain operations.	20 (30.7)	26 (40)	10 (14.4)	5 (7.7)	4 (6.2)	2.88	1.02
Logistics optimization decreases lead times.	18 (27.8)	22 (33.8)	12 (18.5)	8 (12.3)	3 (4.6)	2.86	1.08
Logistics optimization enhances our customer satisfaction.	23 (35.4)	27 (41.5)	5 (7.7)	5 (7.7)	00	2.81	1.08
Logistics optimization enables our company to implement efficient and cost-effective planning.	19 (29.2)	20 (30.7	20 (30.7	4 (6.2)	1 (1.5)	2.69	1.11

		)	)				
Logistics optimization assists us in organizing our company operations.	29 (44.6)	24 (36.9)	22 (33.4)	00	00	3.63	1.16

Source: (Primary data, 2024)

The results in table 10, show the findings on the role of logistics optimization on operational performance. The results indicate that logistics optimization reduces costs across the supply chain (mean=3.00). Logistics optimization enhances the organization meet the growing demand for fast and efficient supply chain operations (mean=2.88). Logistics optimization decreases lead times (mean=2.86). Logistics optimization enhances the customer satisfaction (mean=2.81).

Logistics optimization enables the company to implement efficient and cost-effective planning (mean=2.69). Logistics optimization assists the company in organizing their company operations (mean=3.63). Logistics optimization improves the company's inventory levels so that they are not too high or too low to meet customer demands (mean=3.64). Logistics optimization enables their fast shipment of deliveries (mean=3.50).

Logistics optimization helps avoid damage to products during transport (mean=3.63). Logistics optimization optimizes logistics costs (mean=3.64). Logistics optimization helps reduce transportation's environmental impact through using most fuel-efficient routes and modes of transportation (mean=3.64).

Table 11: Pearson's correlation on Logistics Optimization and Operational Performance economic wellbeing and neglect patterns in blended families

Correlations

		Logistics optimization	Operational performance
Logistics optimization	Pearson Correlation	1	.754**
	Sig. (2-tailed)		.000
	N	50	50
Operational performance	Pearson Correlation	.754**	1
	Sig. (2-tailed)	.000	
	N	50	50

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

Source: (*Primary data,2024)*

The findings indicated in table above shows that there is a significant positive relationship between logistical optimization and operational performance in Coca Cola Mbarara. This relationship is affirmed by r-values of 0.754** with significant p-values of 0.000 at the level of 0.05 (2-tailed) (r = .754**, p< .05). This implies that better logistics optimization is strongly associated with lower operational performance, indicating that logistical optimization is crucial for increasing operational performance.

4.3.3 Operational Performance

This objective focused on the operational performance. Thus a thorough examination of the operational performance was made. Respondents were asked to rate the statement regarding the topic for study under this objective, as per the questionnaire which was anchored such that 1 represents Strongly Disagree, 2-Disagree, 3-Neither Agree nor Disagree, 4-Agree and 5-Strongly Agree. Means that are close to 1 or 2 signify Disagreement while those that are close to 4 or 5 show Agreement with the issue being raised.

Table 12: Operational Performance

Operational Performance	Mean	Std. Deviation
Our costs are low across our supply chain.	3.64	1.03
We meet the growing demand for fast and efficient supply chain operations.	3.64	1.03
We have decreased lead times.	3.50	1.20
Our operations augment our customer satisfaction.	3.63	1.16
Our company implements efficient and cost-effective planning.	3.64	1.03
Our operations are well organized.	3.63	1.16
We have keep enough inventory levels to meet customer demands.	3.64	1.03
We have fast shipment of deliveries.	3.50	1.20
We try to avoid damage to products during transportation.	3.63	1.16
We identify and use the most efficient distribution networks.	3.64	1.03
We reduces our fuel costs.	3.63	1.16
We have quick delivery times.	3.64	1.03
We keep reduced logistics costs.	3.50	1.20
We ensure that our transportation has least environmental impact by using most fuel-efficient routes and modes of transportation.	2.81	1.08

Source: (Primary data, 2024)

Results concerning operational performance shows that the company's costs are low across the supply chain (mean=3.64). They meet the growing demand for fast and efficient supply chain operations (mean=3.64). They have decreased lead times (mean=3.50). The operations augment their customer satisfaction (mean=3.63). The company implements efficient and cost-effective planning (mean=3.64). The

operations are well organized (mean=3.63). They have to keep enough inventory levels to meet customer demands (mean=3.64). They have fast shipment of deliveries (mean=3.50).

More so, the company tries to avoid damage to products during transportation (mean=3.63). They identify and use the most efficient distribution networks (mean=3.64). They reduce their fuel costs (mean=3.63). They have quick delivery times (mean=3.64). They keep reduced logistics costs (mean=3.50). They ensure that their transportation has least environmental impact by using most fuel-efficient routes and modes of transportation (mean=2.81).

Table 13: Linear Regression Analysis Results

Model Summary						
Model		R	R Square	AdjustedR Square	Std.Error of the Estimate	
1		.669[a]	.648	.648	.323	
ANOVA[a]						
Model		Sum of squares	df	Mean Square	F	Sig.
1	Regression	73.054	3	24.012	39.642	0.000[b]
	Residual	2.744	40	0.060		
	Total	75.820	43			
Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.459	.356		1.849	.043
	Supplier collaboration	.332	.056	.408	4.576	.000

	Sustainable purchasing	.360	.182	.323	5.003	.000
	Logistics optimization	.223	.281	.268	3.065	.000

a. Dependent Variable:eGP in Mukono District Local Government (MDLG)

b. Predictors:(constant), Technological infrastructure, Organizational capacity, Regulatory and institutional framework

$P \leq 0.05$

Source: *Primary data*

With a standardised error of estimate of 0.332, Table 13's coefficient of determination (R-square) of 0.639 at a significance level of 0.000 indicates that sustainable supply chain practices had an operational performance impact of 66.9% on Coca-Cola Mbarara. The strength of the relationship between supplier cooperation, sustainable purchasing logistics optimisation, and operational performance was shown by the correlation coefficient (R= 0.669 or 67%). This suggests that operational performance can be significantly increased by improved supplier engagement, sustainable purchasing, and logistics optimisation.

F

CHAPTER FIVE
SUMMARY OF FINDINGS, DISCUSSION OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

In this chapter, a discussion of the findings with an aim of drawing conclusions and making recommendations with regard to examining the role of sustainable supply chain practices on the operational performance of Coca Cola Beverages in Mbarara. This was done in line with the objectives of the study.

5.1Summary

The role of sustainable supply chain strategies on an organization's operational efficiency. Regarding this subject, a Coca-Cola Mbarara case was investigated. Operational performance results indicate that our supply chain has minimal expenses for the firm. It was determined that the companies satisfied the increasing need for quick and effective supply chain operations. They also demonstrated shorter lead times and improved customer satisfaction through their operations. The business's use of economical and effective planning was amazing. Its activities are well run, and it maintains adequate stock levels to satisfy consumer requests.

Furthermore, the business makes an effort to prevent product damage while in transit. It determined which distribution networks were most effective and used them. It also accomplished prompt delivery times and lowered its gasoline expenses. This indicates that, since an organization's transportation has the least negative environmental effect by utilizing the most fuel-efficient routes and modes of transportation, sustainable supply chain strategies are essential to its operational performance.

5.2 Role of Sustainable Purchasing on Operational Performance

The findings regarding the role of sustainable purchasing on operational performance demonstrate that Coca-Cola is able to provide customers with value-adding products (mean=3.72). Coca-Cola is able to offer clients services of exceptional quality thanks to sustainable purchasing practices (mean=2.65). Coca-Cola is able to supply its products on time thanks to sustainable purchasing (mean=3.88).

Furthermore, sustainable purchasing helps Coca-Cola offer its products at a price that is competitive (mean=3.68). The Coca-Cola company benefits from sustainable purchasing when it comes to working effectively with its direct partners (mean=2.70). The partners' cooperation with their own business partners is improved by sustainable purchasing (mean=2.67). Coca-Cola may achieve highly dependable, effective, and efficient methods for their business operations with the aid of sustainable purchasing (mean=3.75).

This is in line with (Zsidisin and Hendrick, 2018; Preuss, 2021) who claim that, among other corporate activities, the purchasing function is a key change agent that offers a chance to incorporate environmental considerations into every division of an organization. It was clarified that achieving environmental sustainability could give a business a competitive edge or increase economic profitability (Wald, 2016; Sharma et al., 2010). (Carter et al., 2020; Porter and van der Linde, 2021). The concepts of socially responsible purchasing (Carter and Jennings, 2020), green purchasing (Large and Thomsen, 2017), and green supply chain (Bowen et al., 2016) were used to discuss sustainability in the purchasing activity. Large and Thomsen (2019) defined environmental or green purchasing as the incorporation of environmental factors into purchasing decisions and practices.

It is established that in this instance, socially conscious purchase (Carter and Jennings, 2022), green supply chain (Bowen et al., 2016), or green purchasing (Large and Thomsen, 2019) addressed sustainability in the purchasing activity. Environmental, or "green," purchasing is described by Large and Thomsen (2019) as the incorporation of environmental factors into purchasing decisions and practices. "The principles of sustainable development, such as ensuring a strong, healthy, and

just society, living within environmental limits, and promoting good governance" are in line with sustainable purchasing (Walker and Brammer, 2019).

5.2.1Role of Supplier Collaboration on Operational Performance

The results of the study on the role of supplier collaboration on operational performance show that, by exchanging information and reaching decisions together, suppliers help Coca-Cola gain a competitive edge (mean=3.12). Coca-Cola's operations are able to better meet customer expectations through supplier collaboration (mean=3.12). In their operational interorganizational interactions, Coca Cola benefits from supplier collaboration (mean=2.88).

Coca-Cola can develop its plan to achieve supply chain excellence because of supplier collaboration (mean=2.63). Coca-Cola uses sustainable purchasing to help ensure that their products and services are delivered consistently (mean=2.71). Coca-Cola is able to deliver its products on time because of supplier coordination (mean=2.61).

Given the aforementioned findings, one could contend that the fourth pillar in developing a plan to achieve supply chain excellence is cooperation with suppliers and consumers (Slone, 2004). According to Moore (2012), the relationships formed under the new paradigm of supplier relationship management add value in two ways: first, cooperative efforts have the potential to improve working relationships, which eventually raises the value that each partner derives from the relationship.

It is also important to remember that the fourth pillar in developing a plan to provide supply chain excellence is working together with suppliers and consumers (Slone, 2004). Working with decision-makers at the supplier level to identify enhancements that may be implemented that will have a quantifiable, advantageous financial impact for both organizations is known as supplier collaboration. Partners provide resources through commitment to uphold and advance the objectives of the partnership. According to Heide and John (2019) and Krause (2016), fostering collaboration in inter-organizational partnerships requires a strong anticipation of a relationship. The organization as a whole must encourage collaborative partnerships.

5.2.2Role of Logistics Optimization on Operational Performance

The findings regarding the role of logistics optimisation on operational performance reveal several key points. Logistics optimisation significantly reduces costs across the supply chain (mean=3.00) and helps Coca-Cola meet the increasing demand for rapid and efficient supply chain operations (mean=2.88). It also shortens lead times (mean=2.86) and enhances customer satisfaction (mean=2.81). Furthermore, it allows for more efficient and cost-effective planning (mean=2.69) and aids in the organisation of company operations (mean=3.63). Optimisation improves inventory levels to ensure they are adequately balanced to meet customer demands (mean=3.64) and facilitates faster delivery shipments (mean=3.50).

These results demonstrate that logistics optimisation addresses various operational issues by leveraging technology, data analysis, and other tools to identify the most efficient distribution networks (Zhu & Sarkis, 2018). One notable benefit of logistics optimisation is the reduction in fuel costs through the avoidance of empty miles. By utilizing optimisation tools and strategies, businesses can lower logistics costs, enhance delivery times, and boost customer satisfaction (Wong, Boon-Itt and Wong, 2017). Additionally, route optimisation can help decrease the environmental impact of transportation by identifying the most fuel-efficient routes and modes of transport.

In the context of supply chain management, the quality of logistics services is a critical metric for assessing logistics management effectiveness. Despite the rapid growth of the logistics industry driven by the rise of the Internet economy, the fundamental service quality has not evolved significantly (JiQingkai, Li Junjing and Zhao Da, 2022). Therefore, there is an ongoing need for companies to enhance their logistics service levels and develop a cohesive logistics service quality system as part of the optimisation process.

5.2.3Operational Performance

The company's expenses are low across the supply chain, according to operational performance results (mean=3.64). Coca-Cola satisfies the increasing need for quick

and effective supply chain management (mean=3.64). Coca-Cola's lead times have gotten shorter (mean = 3.50). Customer satisfaction is increased by their operations (mean=3.63). The business uses economical and effective planning (mean=3.64). With a mean of 3.63, the operations are arranged neatly.

Furthermore, the business makes an effort to prevent product damage during transit (mean=3.63). They determine which distribution networks are most effective and employ them (mean=3.64). Their gasoline expenses are decreased (mean=3.63). Their delivery times are rapid. They maintain lower logistical expenses (mean=3.50). By choosing the most fuel-efficient routes and types of transportation, they make sure that their transportation has the least negative environmental effect (mean=2.81).

Corina, Liviu, and Roxana (2019) correctly describe performance as a collection of financial and non-financial measures that provide information on the extent of attainment of goals and outcomes, which is in line with the aforementioned findings. In a similar vein, Gichuru, Iravo, and Iravo (2018) believe that a company's success is contingent upon its ability to collaborate not just with its direct partners but also with those partners' own business partners. The development of new resources is largely dependent on the firm's ongoing interactions with other stakeholders. When two firms pool their resources, they often achieve more benefits than they would have on their own (Haakansson & Ford, 2022).

Similar to this, operational performance is understood to be concentrated on achieving effective and efficient processes that are incredibly dependable and help accomplish excellence that surpasses the expectations of customers (Kivite, 2015). Effective operational strategies that help the businesses make sure the crucial operational components of the organizations are met are produced in order to reach such a sustained operational outcome. Improved supplier participation in the organization's overall strategy contributes to improved operational performance in addition to increased efficiency and lower costs (Wangeci, 2017).

5.3 Conclusions

Sustainable purchasing plays a crucial role in operational performance by allowing the company to offer value-added products and services of exceptional quality to customers, particularly through timely delivery.

Supplier collaboration provides a competitive edge by facilitating information sharing and joint decision-making. This collaboration helps Coca-Cola meet customer needs more effectively and strengthens operational relationships between organisations.

Logistics optimisation lowers costs across the supply chain and supports Coca-Cola in addressing the increasing demand for rapid and efficient operations. It achieves this by reducing lead times and enhancing customer satisfaction.

5.4 Recommendations

- Sustainable purchasing should be further developed to improve operational performance by delivering value-added products and providing exceptional quality and timely delivery of services to customers.
- Emphasis should be placed on supplier collaboration through information sharing and joint decision-making to create a competitive advantage and strengthen inter-organisational relationships.
- Prioritising logistics optimisation is essential to reduce costs across the supply chain and address the growing demand for fast and efficient operations. This can be achieved by ensuring shorter lead times and enhancing customer satisfaction.

5.5 Limitations

- The study was confined to Coca-Cola Beverages in Mbarara, Uganda. This specific focus might not fully capture the impact of sustainable supply chain practices on operational performance across Coca-Cola’s global operations or in other regions.

- Although the study achieved a 100% response rate from 65 respondents, this sample size may be too small to generalize the findings to larger populations, particularly across diverse departments or international branches of Coca-Cola.
- The analysis concentrated on sustainable purchasing, supplier collaboration, and logistics optimization. Other significant factors, such as technological advancements, employee skills, and external market conditions, which may also affect operational performance, were not considered in the study.

5.6 Areas for further research

Practitioners are tasked with achieving various objectives through the purchasing process, including value for money, maintaining market competition, and supporting corporate performance. Sustainable procurement is an additional objective that requires incentivization for practitioners and effective management and measurement of performance.

Businesses and government entities must recognize the cultural shift needed for sustainable procurement, which involves transitioning from a focus solely on cost savings to achieving the best value over the entire lifecycle of a product or service. Commitment from government and senior management is essential to signal the prioritization of sustainable procurement, which can be reinforced through regulation, legislation, and collaboration with suppliers.

Additionally, there is a need for educating purchasing and supply professionals in both the private and public sectors to incorporate sustainable and ethical criteria into their procurement decisions. Sharing best practices in sustainable procurement across sectors is crucial, and creating platforms or websites to showcase successful case studies could be highly beneficial.

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APPENDIX A

QUESTIONNAIRE

Role of Sustainable Supply Chain Practices on the Operational Performance of Coca Cola Beverages in Mbarara.

Greetings, Respondent

I'm Buwembo Mark Alvin, a UCU student who is a finalist in procurement. I am performing research on the "Role of Sustainable Supply Chain Practices on the Operational Performance of Coca-Cola Beverages in Mbarara" as required by my degree program. The reason you were chosen for this study is that the type of information needed is directly related to the contribution you provide to your organisation. Your information will be kept private and used exclusively for academic reasons. The information you submit is intended only for academic use. Would you kindly set aside a short period of time to answer the following queries?

Section A: Personal Data

1. Age: ☐20-25 ☐26-30 ☐31- 35 ☐36-45 ☐Above 45
2. Gender:

☐ Male ☐Female

3. Position:

   ☐ Supervisor☐ Department manager☐ Section manager☐ Procurement officer☐ Procurement Assistant

4. Department:

   ☐ Procurement☐ Sales☐Production☐ Distribution☐ Management

5. Period of employment time with the organization:

☐ 1-3☐ 4-5☐6- 7 ☐ 8-10 ☐Above 11

Section B: Role of Sustainable Purchasing on Operational Performance

State the extent to which you agree with the following statements by placing a tick based on your rating; (1) Strongly disagree (SD) (2) Disagree (D) (3) Neutral (N) (4) Agree (A) (5) Strongly agree (SA)

Role of Sustainable Purchasing on Operational Performance	1	2	3	4	5
	SD	*D*	*N*	*A*	*SA*
Sustainable purchasing enables us to deliver value adding products to our customers.					
Sustainable purchasing helps us provide services of unique quality to our customers.					
Sustainable purchasing enables us to deliver our products on time.					
Sustainable purchasing assists us to deliver our goods at a competitive price.					
Sustainable purchasing helps our organization to efficiently cooperate with our direct partners.					
Sustainable purchasing enhances our partners cooperate with their own business partners.					
Sustainable purchasing helps us in attaining efficient and effective systems that are highly reliable in our business operations.					
Sustainable purchasing assists organization to facilitate					

the achievement of excellence which exceeds customer expectations.					
Sustainable purchasing improves our suppliers' involvement in the general strategy of our organization.					
Sustainable purchasing helps reduce our costs.					
Sustainable purchasing enhances our capacity to operate with flexibility.					
Sustainable purchasing aids us in ensuring consistent delivery our goods and services.					
Sustainable purchasing has enabled us to increase our profits.					
Sustainable purchasing has enabled us to quickly achieve our return on investment.					
Sustainable purchasing has helped us to increase our quarterly sales.					

Section C: Role of Supplier Collaboration on Operational Performance

State the extent to which you agree with the following statements by placing a tick based on your rating; (1) Strongly disagree (SD) (2) Disagree (D) (3) Neutral (N) (4) Agree (A) (5) Strongly agree (SA).

Role of Supplier Collaboration on Operational Performance	1	2	3	4	5
	SD	*D*	*N*	*A*	*SA*
Supplier collaboration enables usto create a competitive advantage through sharing information making joint decisions.					
Supplier collaboration helps us satisfy customer needs					

in our operations.					
Supplier collaboration assists us in our operational interorganizational relationships.					
Supplier collaboration enables us build our strategy to deliver supply chain excellence					
Sustainable purchasing aids us in ensuring consistent delivery our goods and services.					
Supplier collaboration has enabled us to increase our profits.					
Supplier collaboration has enabled us to quickly achieve our return on investment.					
Supplier collaboration has helped us to increase our quarterly sales.					
Supplier collaboration enables us to deliver value adding products to our customers.					
Supplier collaboration helps us provide services of unique quality to our customers.					
Supplier collaboration enables us to deliver our products on time.					
Supplier collaboration assists us to deliver our goods at a competitive price.					
Supplier collaboration helps our organization to efficiently cooperate with our direct partners.					
Supplier collaboration enhances our partners cooperate with their own business partners.					

Section D: Role of Logistics Optimization on Operational Performance

State the extent to which you agree with the following statements by placing a tick based on your rating; (1) Strongly disagree (SD) (2) Disagree (D) (3) Neutral (N) (4) Agree (A) (5) Strongly agree (SA)

Role of Logistics Optimization on Operational Performance	1	2	3	4	5
	SD	*D*	*N*	*A*	*SA*
Logistics optimization reduces costs across our supply chain.					
Logistics optimization enhances us meet the growing demand for fast and efficient supply chain operations.					
Logistics optimization decreases lead times.					
Logistics optimization enhances our customer satisfaction.					
Logistics optimization enables our company to implement efficient and cost-effective planning.					
Logistics optimization assists us in organizing our company operations.					
Logistics optimization improves our inventory levels so that they are not too high or too low to meet customer demands.					
Logistics optimization enables our fast shipment of deliveries.					
Logistics optimization helps avoid damage to products during transport.					
Logistics optimization helps our company identify and use the most efficient distribution networks.					
Logistics optimization reduces our fuel costs					
Logistics optimization increases our customer satisfaction.					
Logistics optimization improves our delivery times.					
Logistics optimization optimizes our logistics costs.					

Logistics optimization helps reduce our transportation's environmental impact through using most fuel-efficient routes and modes of transportation.					

Section E: Operational Performance

State the extent to which you agree with the following statements by placing a tick based on your rating; (1) Strongly disagree (SD) (2) Disagree (D) (3) Neutral (N) (4) Agree (A) (5) Strongly agree (SA)

Operational Performance	1	2	3	4	5
	SD	*D*	*N*	*A*	*SA*
Our costs are low across our supply chain.					
We meet the growing demand for fast and efficient supply chain operations.					
We have decreased lead times.					
Our operations augment our customer satisfaction.					
Our company implements efficient and cost-effective planning.					
Our operations are well organized.					
We have keep enough inventory levels to meet customer demands.					
We have fast shipment of deliveries.					
We try to avoid damage to products during transportation.					
We identify and use the most efficient distribution networks.					
We reduces our fuel costs.					

We have quick delivery times.					
We keep reduced logistics costs.					
We ensure that our transportation has least environmental impact by using most fuel-efficient routes and modes of transportation.					

Thank you for your time.

INTERVIEW GUIDE

Dear Interviewee,

I am Buwembo Mark Alvin, a Procurement finalist student from UCU. As a requirement of my degree program, I am conducting a research **"Role of Sustainable Supply Chain Practices on the Operational Performance of Coca Cola Beverages in Mbarara"**. You have been selected to participate in this study because the contribution you make to your organization is central to the kind of information required. The information you provide is solely for academic purposes and your information will be kept confidential and shall be used only for academic purpose. Please kindly spare some few minutes to respond to the following questions.

1. What is the role of sustainable purchasing on operational performance in this organization?

2. How does supplier collaboration affect operational performance in this organization?

3. How does logistics optimization affect operational performance in this organization?

4. What challenges does your organization face in ensuring that sustainable supply chain practices improve its operation performance??

5. How can these challenges in Question 4 be tackled?

Thank you for your time.

UGANDA CHRISTIAN UNIVERSITY

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SCHOOL OF BUSINESS

19th Aug, 2024

TO WHOM IT MAY CONCERN

Name: **Buwembo Mark Alvin** Reg. No S21B12/054

A bachelor's student who is seeking permission from your office to collect data for herdissertation titled

The role of sustainable supply chain practices on the performance of organizations.

We shall be grateful if you could render assistance to her in collecting the necessary data for her dissertation

The Uganda Christian University School of Business thanks you in advance

.....

Mukisa Simon Peter
Research coordinator