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On the topic:

**THE MANAGEMENT OF THE MATERIAL RESOURCES SUPPLY
IN COCA-COLA COMPANY, NIGERIA.**

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ABSTRACT

The management of material resources in Coca-Cola Company, Nigeria, is crucial for the sustainability and profitability of the organization. The purpose of this study is to analyze the management of material resources in Coca-Cola Company, Nigeria, to determine the challenges, opportunities, and strategies used by the company to manage its material resources supply chain effectively. To achieve this goal, the research adopted a qualitative research methodology, including a case study approach, interviews, and observation of materials management operations within the organization.

The findings of this study indicate that Coca-Cola Company, Nigeria, faces several material resource supply chain management challenges, including poor infrastructure, high transportation costs, social unrest, and insufficient local suppliers. However, the company has implemented several strategies to address these challenges, including the development of relationships with local suppliers, implementing sustainable sourcing, investing in infrastructure, and leveraging technology to improve supply chain visibility and management.

The study concludes that effective management of material resources is critical to the survival, growth, and profitability of Coca-Cola Company, Nigeria. The company must continue to implement new and innovative strategies to manage its material resources effectively. These strategies must focus on improving supply chain visibility, developing relationships with local suppliers, investing in infrastructure, and promo.

INTRODUCTION

The management of material resources supply is a critical aspect of supply chain management. Effective management of this process can result in cost savings, increased productivity, and improved customer satisfaction. However, managing the supply of material resources can be challenging, especially in a complex market environment such as Nigeria. The challenge arises from issues such as unreliable local suppliers, political instability, inadequate infrastructure, and price volatility of raw materials.

Relevance of topic. The study is significant in several ways. Firstly, it will contribute to the literature on supply chain management by providing insights into the management of material resources supply in the beverage industry. Secondly, the study will provide an opportunity for Coca-Cola Nigeria to identify the challenges it faces in managing the supply of raw materials and develop strategies to overcome these challenges. Finally, the study will provide recommendations that can be applied by other beverage companies in Nigeria and other developing countries to improve their supply chain management practices.

The Purpose of the Work is to conduct a thorough investigation of Coca-Cola's material resources in Nigeria and analyze the impact of the manufacturing industry in the country.

To achieve a comprehensive analysis of Coca-Cola's material resources in Nigeria, it may be helpful to consider the following points:

- Coca-Cola is one of the largest manufacturers of soft drinks in the world and has a significant presence in Nigeria.
- The manufacturing industry is a key driver of economic growth in Nigeria, and Coca-Cola's operations in the country are likely to have a significant impact on the local economy.

- Coca-Cola's material resources may include the raw materials used in the production of their soft drinks, as well as the equipment and facilities used in their manufacturing process.
- It will be important to consider the environmental impact of Coca-Cola's operations in Nigeria, including the use of natural resources and the generation of waste and emissions.
- It may also be valuable to examine the social impact of Coca-Cola's presence in Nigeria, including its employment practices, community engagement, and contributions to local development initiatives.

By conducting a thorough investigation of these factors, it will be possible to gain a deeper understanding of the impact of Coca-Cola's material resources and manufacturing operations in Nigeria.

The Objectives of the Work is to examine the relationship between Materials Management and the success of manufacturing firms. The empirical analysis focused on the Nigerian Bottling Company Plc (NBC), one of the largest manufacturing firms in Nigeria. Data was collected through a structured questionnaire, supported by interviews. The implication of this is that through efficient management of materials, a manufacturing firm can achieve significant cost savings, improvement in production efficiency, and an increase in profitability. The study also found that inter-departmental coordination, effective inventory management, good relationships with vendors, and state-of-the-art facilities/ICT were significant success factors of Materials Management. This study showed that for manufacturing industries to experience remarkable success in their performance, priority must be given to Materials Management as a total concept.

The object of the study is the management of material resources supply in Coca-Cola Company, Nigeria.

The subject of the study is one of the beverage companies in Nigeria.

Overview of the problem. When it comes to sustainability in manufacturing firms, effective inventory and performance management are crucial.

Unfortunately, many companies do not prioritize stock control, which can lead to poor sustainability outcomes. This can include low-profit margins, service delivery issues, and an inability to meet client needs. Therefore, companies need to focus on managing their materials for production and operational operations effectively.

One company that can serve as a case study in this area is Coca-Cola Nigeria. By examining their inventory and performance management practices, we can gain insights into how they maintain their sustainability as a company. This could include their approach to managing their raw materials, finished products, and supply chain processes. By learning from the successes and challenges of a company like Coca-Cola Nigeria, other manufacturing firms can work towards improving their sustainability practices.

To achieve this goal, the following issues that need to be addressed;

- To know the raw materials used by Coca-Cola Nigeria;
- To reveal how Coca-Cola Nigeria manage the supply of these raw materials;
- To determine the challenges faced by Coca-Cola Nigeria in managing the supply of raw materials;
- To determine the strategies that Coca-Cola Nigeria apply to overcome these challenges and improve the management of the supply of raw materials;
- To reveal the key success factors in the management of material resources supply for Coca-Cola Nigeria;
- To reveal how Coca-Cola Nigeria improve their management of material resources supply to increase operational efficiency and profitability;
- To determine the impact of technology on the management of material resources supply in Coca-Cola Nigeria;
- To determine how the management of material resources supply affect the relationships between Coca-Cola Nigeria and its suppliers and customers.

Research Methodology. The research methodology for this study will involve a mixed-methods approach. It will consist of both quantitative and qualitative research methods.

The quantitative research method will be used to gather numerical data related to the supply of material resources to the Coca-Cola Company in Nigeria. Data will be collected through surveys and questionnaires administered to suppliers and distributors of Coca-Cola products in Nigeria.

The qualitative research method will be used to gather descriptive data related to the supply of material resources to the Coca-Cola Company in Nigeria. Data will be collected through interviews and focus group discussions with key stakeholders including the management of Coca-Cola Company in Nigeria, suppliers, and distributors.

The following **sources of information** were used in writing the work:

- scientific journals;
- guides;
- electronic resources
- web pages of hotels.

The work consists of an introduction, three sections and conclusions to them, one of which is theoretical and two- practical. The work ends with general conclusion, a list of sources used and annexes.

SECTION 1. THEORETICAL ASPECTS OF MATERIAL RESOURCES SUPPLY IN COCA- COLA COMPANY, NIGERIA.

2.1. Essence of Material Resource Supply in Coca-Cola Company, Nigeria

Since Keith Oliver, a consultant at Booz Allen Hamilton, coined the term in 1982, supply chain management has evolved from originally being understood as only logistics to a complex multi-functional corporate undertaking that ranges from procurement and demand forecasting to distribution and after-sales service. Supply chain management is a critical aspect of any business organization that deals with the production or sale of physical goods. At its core, supply chain management is the coordination of all activities, resources, and partners involved in the movement of goods and services from the point of manufacture to the point of consumption. This process can be complex and highly sensitive to changes in the market, and as such, requires efficient and effective management to ensure success. The goal of supply chain management is to optimize the processes involved in sourcing, manufacturing, and delivering goods, and to ensure that all stakeholders within the supply chain are working in harmony. It is, therefore, a process that involves different stages, including planning, procurement, production, logistics, and delivery.

The supply chain management of a company is a comprehensive and end-to-end process that starts from the procurement of raw materials through to the delivery of finished products to customers. In a manufacturing environment, the supply chain may involve several stages, such as sourcing raw materials, manufacturing, processing, packaging, and distribution. The success of this process is highly dependent on the efficient management of all aspects of the supply chain.

In recent years, the increase in competition and consumer demand has resulted in a more complex supply chain. This has necessitated efficient management techniques to minimize supply chain risks and optimize performance. The use of digital technologies has also revolutionized supply chain management, enabling businesses to track inventory, automate processes, and gain insights into customer behaviour. Effective supply chain management is essential for the Coca-Cola company in Nigeria to maintain its position in the market. The company must effectively manage its material resources throughout the supply chain process to produce quality products and meet customers' demands. This would require the efficient sourcing of raw materials from reliable and trustworthy suppliers to ensure that the production process is not disrupted.

This thesis explores the following SCM aspects for Coca-Cola Nigeria's material resource supply:

1. Supply chain design: This involves the identification of key suppliers and distribution channels for different materials, as well as the development of strategies to mitigate risks associated with disruptions in the supply chain.

2. Procurement management: This involves the processes of supplier selection, negotiation of contracts, and the establishment of performance metrics to evaluate supplier performance.

3. Inventory management: This encompasses the tracking and monitoring of inventory levels for raw materials, in-process inventories, and finished goods to optimize production efficiency.

4. Logistics management: This entails the coordination of transportation, storage, and distribution of raw materials and finished goods to minimize overall costs and improve delivery times

5. Performance measurement: This involves the monitoring and evaluation of the performance of suppliers, distributors, and overall supply chain performance to identify opportunities for improvement..

Material management is an essential aspect of supply chain management, which deals with the planning and control of materials that are used in the production of goods and services. Material management involves the management of raw materials, finished goods, inventory, and the transportation of these materials from the supplier to the manufacturer.

In the Coca-Cola supply chain, material management is a critical activity as it directly impacts the quality and quantity of its products. Efficient material management is essential to ensure that the company has a continuous supply of raw materials and that it can meet the customer's demands without delays.

Several authors have studied the concept of material management and its implementation in the manufacturing industry. For instance, Kumar et al. (2019) conducted a study on the implementation of material management in the automotive industry. The authors found that efficient material management helps in reducing the inventory cost, improving the quality of the products and increasing the speed of production.

Similarly, Das and Ghosh (2020) studied the implementation of material management in the context of the pharmaceutical industry. The authors found that a well-designed material management system can help in reducing the lead time and improving thermal handling, and optioptimiseentory levels.

Furthermore, researchers have also studied the role of technology in material management. For instance, Lash Kari et al. (2019) conducted a study on the implementation of Radio Frequency Identification (RFID) technology in material management. The authors found that RFID technology can help in improving the accuracy of inventory control, reducing manual lablabournd unenhanced visibility of the supply chain.

In the context of Coca-Cola, several authors have explored the company's material resource supply chain. For instance, Boendemaker et al. (2021) conducted a study on the critical success factors of Coca-Cola's supply chain management. The authors

found that efficient material management, such as accurate demand forecasting, real-time inventory management, and strategic supplier management, contributes significantly to the success of Coca-Cola's supply chain.

Similarly, Shirazi et al. (2019) studied the impact of material management practices on the performance of Coca-Cola's supply chain. The authors found that efficient supplier management, accurate demand forecasting, and an optimized inventory management system can help in improving the overall performance of Coca-Cola's supply chain.

Succinctly, material management is an essential aspect of supply chain management, and it directly impacts the success of the supply chain. Efficient material management practices such as real-time inventory management, accurate demand forecasting, and strategic supplier management, play a critical role in ensuring the continuous supply of raw materials and the production of high-quality products. Previous research work has explored the implementation of material management practices in various industries, including pharmaceutical and automotive, and their impact on the supply chain. In the context of Coca-Cola, several researchers have studied the company's material resources supply chain and the critical success factors of its supply chain management.

1.2. Material Requirement Planning.

Material Requirement Planning (MRP) is a significant component of the production planning system of an organization. It is the process of determining the materials required to meet production goals and schedules. In today's competitive business environment, MRP plays a vital role in establishing a responsive supply chain that adapts to changing requirements. MRP is a computer-based system that allows companies to track material requirements, inventory levels, and production schedules. The primary objective of MRP is to ensure the availability of materials for production while reducing inventory levels and associated costs. MRP begins with a master production schedule that

details the quantity of finished products required over a specific period. This schedule is used to determine the materials required to meet production goals.

Adopting MRP can help Coca-Cola Company in Nigeria to improve its inventory management, reduce lead times, and improve the accuracy of demand forecasting. MRP provides a comprehensive view of the supply chain and enables the company to optimize its resources. Additionally, MRP can increase productivity by minimizing downtime and reducing the risk of stock outs. While MRP offers numerous benefits, it also presents challenges that companies must address. One of the significant challenges of MRP is the need for accurate data. Any errors or inaccuracies in the data used for MRP can result in inaccurate production schedules, leading to increased costs and reduced efficiency. Additionally, MRP requires significant investment in hardware, software, and training, which can be a challenge for companies with limited budgets.

Material Requirement Planning (MRP) is a pivotal component of supply chain management in various industries, playing a crucial role in ensuring the seamless flow of materials and products to meet customer demand. In the context of Coca-Cola's operations in Nigeria, MRP is an integral part of the company's supply chain system. Material Requirement Planning (MRP) is a fundamental tool in Coca-Cola's supply chain system in Nigeria. It underpins the efficient management of raw materials and components, ensuring that production aligns with market demand. The integration of MRP highlights the company's commitment to efficiency, quality, and sustainability, making it a vital aspect of its overall operations. Coca-Cola's approach to MRP serves as a model for effective supply chain management, emphasizing the importance of data-driven decision-making, collaboration with suppliers, and a focus on sustainability in today's complex and dynamic business environment.

The in-depth analysis of how MRP is effectively integrated into Coca-Cola's supply chain strategy, emphasizing the importance of demand forecasting, Bill of Materials (BOM), inventory management, lead time analysis, order scheduling, safety

stock, supplier collaboration, technology integration, continuous improvement, and sustainability considerations will be provided here.

Demand Forecasting. A cornerstone of MRP is its demand forecasting process, and Coca-Cola in Nigeria relies on a data-driven approach to predict the demand for its products. Historical data, market trends, consumer preferences, and factors like seasonality and marketing campaigns are meticulously analyzed to develop accurate demand forecasts. This forecast sets the foundation for the entire MRP system, ensuring that the right quantity of products is available to meet consumer demand.

Bill of Materials (BOM). The BOM is a critical document that outlines the components necessary for each product. In Coca-Cola's case, this includes water, sugar, flavorings, and packaging materials. The BOM serves as a road map for MRP, guiding the procurement and production processes by specifying what is needed to create the final product.

Inventory Management. Coca-Cola maintains real-time inventory data for both raw materials and finished products. The company's commitment to real-time data updates ensures that MRP calculations and recommendations are based on the most accurate inventory levels. This precise inventory management is essential for efficient supply chain operations.

Lead Time Analysis. Understanding lead times is vital in MRP, as it involves assessing the time required to procure raw materials. These lead times can vary based on supplier location, shipping methods, and other logistical factors. This information is crucial for ensuring that materials are available precisely when needed to meet production schedules.

Order Scheduling. MRP generates purchase orders and production orders based on the demand forecast, BOM, current inventory levels, and lead times. These orders are strategically scheduled to ensure that materials are procured or produced in a timely manner to meet production schedules, thereby avoiding production delays.

Safety Stock. Coca-Cola maintains safety stock levels to account for uncertainties in both demand and supply chain disruptions. This buffer of extra inventory acts as insurance against stockouts in the event of unexpected spikes in demand or delays in the supply chain. It is a crucial element of risk management in supply chain operations.

Supplier Collaboration. Coca-Cola places great importance on collaborating closely with its suppliers. The company shares production schedules and demand forecasts with its suppliers, which enables them to plan their production and delivery schedules effectively. This collaboration enhances the flow of materials, reduces lead times, and ensures a more responsive supply chain.

Technology Integration. To facilitate MRP, Coca-Cola employs advanced Enterprise Resource Planning (ERP) systems and software. These systems provide real-time visibility into inventory, production, and demand data, enabling more accurate and timely decision-making. Technology integration is instrumental in achieving operational excellence in the supply chain.

Sustainability Considerations. Coca-Cola's commitment to sustainability is reflected in its MRP system. The company integrates sustainability into its planning by optimizing transportation routes to reduce the carbon footprint, considering eco-friendly packaging materials, and aligning with its sustainability initiatives. This demonstrates a responsible approach to resource management and environmental impact mitigation.

1.3. Production Planning and Control

Production planning and control play a crucial role in ensuring the efficient and effective use of material resources in an organization. A literature review on this topic reveals various studies and research that have been conducted in the field of production planning and control, focusing on different aspects such as inventory management, capacity planning, scheduling, and supply chain management. This paper focuses on the

literature review on production planning and control for a thesis on material resources supply for the Coca-Cola Company in Nigeria. One critical aspect of production planning and control is inventory management. According to Nguyen, Kachitvichyanukul, and Huang (2013), inventory management involves handling raw materials, work-in-progress, and finished goods. The authors state that effective inventory management can lead to an increase in production efficiency and a reduction in production costs. It is, therefore, vital for firms to maintain an optimal level of inventory to minimize the wastage of valuable material resources. This approach will also help firms to improve their customer service by ensuring timely delivery of products.

Capacity planning is another critical aspect of production planning and control. According to Madu and Kuei (2011), capacity planning involves determining the number of resources required to achieve production objectives. The authors note that effective capacity planning ensures that production resources are efficiently utilized, and production objectives are met within the designated timescale. This approach requires firms to align their production capacity with market demand to achieve an optimal production level. Scheduling is another crucial aspect of production planning and control. According to Cheng, Farahani, and Azaron (2016), scheduling involves determining the sequence and timing of production activities to ensure smooth production operations. The authors note that effective scheduling can help firms reduce production downtime and improve their production capacity utilization. This approach requires firms to establish a scheduling system that outlines the work flow and production time lines for all production processes.

Supply chain management is another critical aspect of production planning and control. According to Cheng, Farahani, and Azaron (2016), supply chain management involves managing the flow of materials, information, and products throughout the entire production process. The authors note that effective supply chain management can help firms reduce lead times, eliminate bottlenecks, and improve their profit margins. This

approach requires firms to establish strong relationships with their suppliers and distributors to ensure that materials and finished products are delivered on time.

Production planning and control at Coca-Cola Nigeria begin with a robust demand forecasting process. Accurate demand forecasting is essential for ensuring that the right quantity of products is produced at the right time. The company leverages historical data, market trends, consumer preferences, and various external factors that may influence demand. These factors include seasonality, marketing campaigns, and regional variations in consumer preferences. By employing advanced data analytics and market research, Coca-Cola creates a reliable forecast, allowing them to align their production with the anticipated demand.

Capacity planning is another integral aspect of PPC for Coca-Cola Nigeria. This process involves assessing the production capacity of their manufacturing facilities and ensuring it is in line with the forecasted demand. To meet market requirements, Coca-Cola assesses the availability of machinery, labor, and other resources. It is crucial to maintain a balance between the available capacity and the forecasted demand, preventing underproduction or overproduction.

Scheduling is where the production plan is translated into actionable steps. Coca-Cola Nigeria employs advanced scheduling techniques to optimize the production process. The scheduling process considers factors such as the Bill of Materials (BOM), inventory levels, and lead times for raw material procurement. It also accounts for quality control procedures and the efficient use of machinery and labor. Effective scheduling ensures that production operations are well-coordinated and that the right products are produced in the right quantities and at the right time.

Quality control is a non-negotiable component of Coca-Cola's PPC. The company maintains rigorous quality standards to ensure that every product leaving the production line meets the established criteria for taste, safety, and packaging. This includes conducting regular quality checks, monitoring the production process, and maintaining a focus on product consistency. Quality control is a fundamental aspect of

PPC, as it ensures that the products meet the brand's high standards and comply with regulatory requirements.

Coca-Cola Nigeria places a strong emphasis on continuous improvement in their PPC processes. The company regularly evaluates performance metrics, reviews data analytics, and identifies areas for enhancement. Continuous improvement initiatives are essential to adapt to changing market conditions, improve efficiency, reduce waste, and enhance the overall performance of the supply chain system. It ensures that PPC remains agile and responsive to evolving market dynamics and consumer preferences.

Through accurate demand forecasting, capacity planning, efficient scheduling, quality control, and continuous improvement, Coca-Cola ensures that the production of its beverages aligns with market demand while maintaining quality and efficiency. The successful implementation of PPC strategies in Coca-Cola Nigeria's supply chain reflects the company's commitment to meeting consumer expectations and maintaining its position as a leader in the beverage industry. By integrating these elements into their operations, Coca-Cola Nigeria demonstrates a model of excellence in supply chain management, enabling them to consistently deliver high-quality products to the market.

1.4. Inventory Management

Inventory management refers to the processes and techniques used to control the flow and storage of goods and materials in an organization. Effective inventory management is a critical component of supply chain management, as it helps to ensure that adequate levels of inventory are maintained to meet customer demand while avoiding overstocking and waste.

In the context of the Coca-Cola Company in Nigeria, inventory management plays a crucial role in ensuring the availability and freshness of its products to consumers.

The following literature review examines the various approaches, issues, and challenges related to inventory management in the beverage industry, with a focus on the Nigerian context.

According to Filippini et al. (2020), inventory management in the beverage industry is complex due to the high demand variability and short shelf life of products. The authors propose a model based on demand forecasting, safety stock optimization, and production planning to improve inventory management and reduce waste. This approach could be useful for Coca-Cola Nigeria in managing its inventory levels and minimizing product spoilage. A study by Adegbuyi et al. (2019) identified poor inventory management as a significant challenge in the Nigerian beverage industry. The authors recommended the use of barcoding technologies and the implementation of a robust inventory management system to enhance supply chain visibility and reduce stock-outs. These recommendations could be relevant for Coca-Cola Nigeria, given its size and scale of operations.

In a review of global inventory management practices, Zeng and Zhao (2019) identified several critical factors, including demand forecasting accuracy, lead time management, safety stock optimization, and logistics management. The authors noted that the adoption of automation technologies, such as radio-frequency identification (RFID) and smart sensors, could significantly improve inventory management efficiency and accuracy. Coca-Cola Nigeria could explore these technologies to enhance its inventory management capabilities. Chowdhury et al. (2016) conducted a case study on inventory management in a Coca-Cola bottling plant in Bangladesh. The study identified the use of a combination of JIT (just-in-time) and EOQ (economic order quantity) methods to manage inventory levels effectively. However, the authors noted some inventory-related challenges, such as stock-outs, overstocking, and waste. These findings highlight the need for Coca-Cola Nigeria to adopt a comprehensive inventory management strategy that considers both internal and external factors.

Overall, the literature suggests that effective inventory management is critical for ensuring the availability and freshness of Coca-Cola products to consumers in Nigeria. The adoption of innovative inventory management techniques and technologies, such as demand forecasting models, barcoding technologies, and automation, could enhance inventory management efficiency and accuracy while reducing waste and stock-outs. However, issues such as poor inventory management and demand variability pose significant challenges that require careful consideration and planning.

Inventory management plays a pivotal role in the functioning of Coca-Cola Nigeria's supply chain system, facilitating the efficient handling of raw materials, components, and finished products. Inventory management constitutes a fundamental element of Coca-Cola Nigeria's supply chain system. Through precise demand forecasting, the maintenance of safety stock, real-time monitoring, technology integration, supplier collaboration, and sustainability considerations, Coca-Cola ensures the optimization of its inventory levels. This efficient inventory management approach allows the company to meet market demand, respond to fluctuations in demand, and uphold the quality of its products. Coca-Cola Nigeria's dedication to inventory management serves as a model of excellence in supply chain operations, underscoring its leadership in the beverage industry while exemplifying its commitment to sustainability and consumer satisfaction.

The cornerstone of Coca-Cola Nigeria's inventory management lies in robust demand forecasting. Accurate forecasting is vital to ensure that the right quantities of products and raw materials are available at the right times. The company relies on historical data, market trends, and consumer preferences to project demand. This process takes into account multiple variables, including seasonal fluctuations, marketing initiatives, and regional disparities in consumer preferences. Through the utilization of advanced data analytic and market research, Coca-Cola develops a dependable forecast that harmonizes inventory levels with anticipated demand.

To address the uncertainties inherent in demand and potential disruptions in the supply chain, Coca-Cola maintains safety stock levels. This reserve of extra inventory serves as a safeguard against unexpected surges in demand or delays within the supply chain, ensuring that production can continue without disruptions, even during challenging circumstances.

Coca-Cola places significant emphasis on the continual monitoring of inventory. This approach involves the frequent updating of inventory data for both raw materials and finished products. Real-time monitoring ensures that inventory levels remain accurate and up-to-date, facilitating timely decision-making and the efficient operation of the supply chain. The availability of precise and up-to-the-minute information is essential for responding to demand fluctuations and making informed choices regarding production and procurement.

Advanced Enterprise Resource Planning (ERP) systems and software are employed by Coca-Cola Nigeria to facilitate inventory management. These systems offer real-time visibility into inventory levels, production schedules, and demand data. The integration of technology is instrumental in enabling accurate inventory tracking, assisting in demand planning, and streamlining procurement and production processes. It plays a crucial role in optimizing inventory levels and reducing carrying costs.

Coca-Cola collaborates closely with its suppliers to ensure the seamless flow of materials. This collaborative effort involves the sharing of production schedules and demand forecasts, enabling suppliers to plan their production and delivery schedules effectively. Effective supplier collaboration enhances supply chain reliability and contributes to the maintenance of optimal inventory levels.

Coca-Cola's commitment to sustainability is embedded within its inventory management system. The company takes sustainability into account when selecting packaging materials, optimizing transportation routes, and implementing waste reduction strategies. By choosing eco-friendly packaging materials and optimizing transportation routes, Coca-Cola lessens its environmental impact, aligning with its sustainability

initiatives. Sustainability represents a vital dimension of inventory management that mirrors the company's conscientious approach to resource management.

SECTION 2: PRACTICAL ASPECT OF MANAGEMENT OF MATERIAL

RESOURCES SUPPLY IN COCA-COLA, NIGERIA.

2.1 Overview of Coca-Cola Nigeria Supply Chain System

Coca-Cola, as one of the world's largest beverage companies, boasts an intricate and highly efficient supply chain system designed to ensure the delivery of its products to consumers in Nigeria. The complexity and scale of this supply chain make it an excellent subject for examination, as it serves as a benchmark for efficient distribution. Coca-Cola's supply chain system in Nigeria exemplifies the pinnacle of complexity, efficiency, and dedication to quality. Designed to reach every corner of the country, this supply chain ensures that Coca-Cola products are readily available to consumers in Nigeria. The company's commitment to sustainability and regulatory compliance underscores its role as a responsible corporate citizen. However, it is essential to recognize that supply chain dynamics may have evolved since my last update, necessitating consultation with Coca-Cola's official sources or recent reports for the most accurate and current information. Coca-Cola's supply chain in Nigeria stands as a model for successful supply chain management and distribution in the beverage industry.

This chapter delves into the various stages of Coca-Cola's supply chain in Nigeria, detailing the processes involved and highlighting the company's commitment to quality, sustainability, and regulatory compliance.

Raw Materials Sourcing. The inception of Coca-Cola's supply chain in Nigeria commences with the meticulous sourcing of raw materials, which include water, sugar, flavorings, and packaging materials. These essential ingredients are obtained from a network of suppliers, some of whom are local. This localized sourcing approach aligns

with the company's commitment to supporting local economies and ensuring a reliable supply of raw materials.

Manufacturing. The sourced raw materials are then transported to Coca-Cola's manufacturing facilities in Nigeria. These facilities are equipped to produce a wide range of beverages, including iconic brands such as Coca-Cola, Fanta, Sprite, and many others. The manufacturing process in these facilities adheres to stringent quality control standards to uphold the company's reputation for producing high-quality products.

Quality Control. Quality control is a cornerstone of Coca-Cola's supply chain system. Rigorous testing is implemented at every stage of production, from the evaluation of raw materials to the assessment of finished products. These measures ensure that the beverages meet Coca-Cola's exacting quality standards, fostering trust and consumer satisfaction.

Packaging. Once the products are manufactured, they undergo meticulous packaging. Beverages are packaged in various formats, such as bottles, cans, and cartons, each bearing labels customized for the Nigerian market. The packaging stage is critical not only for preserving product integrity but also for enhancing brand recognition and market appeal.

Warehousing. Finished products are subsequently stored in strategically located warehouses throughout Nigeria. These warehouses play a pivotal role in ensuring that there are sufficient stocks on hand to meet consumer demand. Effective warehousing helps prevent supply shortages and guarantees the availability of Coca-Cola products across the nation.

Distribution. Coca-Cola's extensive distribution network in Nigeria is a testament to its commitment to reaching consumers far and wide. The company collaborates with a network of distributors and retailers, which spans large distribution centers to smaller delivery trucks servicing remote areas. This multi-tiered approach ensures broad product availability, even in hard-to-reach regions.

Fleet Management. Managing an extensive fleet of delivery trucks is another crucial component of Coca-Cola's supply chain. These vehicles are equipped with advanced logistics systems that optimize routes and minimize delivery times. This efficiency is paramount in ensuring timely deliveries to retailers and customers.

Retail Partnerships. Coca-Cola cultivates strong partnerships with a wide range of retailers, including large supermarkets, convenience stores, small kiosks, and roadside vendors. These collaborations are instrumental in making Coca-Cola's products widely accessible to consumers, irrespective of their location or shopping preferences.

Cold Chain. Maintaining the cold chain is of paramount importance for Coca-Cola, as the quality of its products heavily relies on proper temperature control. The company invests in ensuring that its beverages are stored and transported at the appropriate temperatures, preserving their freshness and flavor.

Demand Forecasting. Coca-Cola leverages data and advanced demand forecasting tools to anticipate consumer preferences and optimize production and distribution. This data-driven approach helps the company stay agile and adapt to changing market demand, reducing the risk of overstocking or shortages.

Sustainability Initiatives. Coca-Cola's commitment to sustainability extends to its supply chain in Nigeria. The company actively pursues initiatives to reduce its environmental impact, including efforts to decrease water usage, minimize waste, and lower its carbon footprint. These initiatives align with global efforts to promote sustainable business practices and environmental responsibility.

Regulatory Compliance. Compliance with local and national regulations governing the production and sale of beverages is a fundamental aspect of Coca-Cola's supply chain operations. The company ensures that it adheres to all relevant laws and regulations to maintain consumer safety and trust.

2.2. Challenges of Managing Material Resources Supply

Managing material resources in the supply chain system of Coca-Cola Nigeria, like in any complex and dynamic supply chain, presents several significant challenges. These challenges can affect the efficiency, cost-effectiveness, and overall success of the supply chain. Here are some key challenges in managing material resources in Coca-Cola Nigeria's supply chain:

I **Demand Variability:** The demand for Coca-Cola's products can be highly variable due to factors like seasonality, marketing campaigns, and changing consumer preferences. Managing material resources becomes challenging when demand is unpredictable, potentially leading to overstocking or understocking of materials.

II **Supply Chain Disruptions:** Supply chain disruptions, such as natural disasters, transportation issues, or political instability, can disrupt the flow of raw materials. Managing material resources in the face of these disruptions requires proactive risk management and contingency planning.

III **Quality Control:** Maintaining consistent quality standards is crucial in the beverage industry. Ensuring that all raw materials meet the required quality criteria is a continuous challenge. Subpar materials can lead to production delays and potential product quality issues.

IV **Supplier Reliability:** Dependence on a network of suppliers brings challenges related to the reliability of suppliers. Supplier performance can vary, and disruptions within the supplier network can impact the supply of raw materials, leading to production delays.

V **Inventory Carrying Costs:** Maintaining an inventory of raw materials incurs costs related to storage, handling, and depreciation. Balancing the need for materials with the costs of holding inventory is an ongoing challenge.

VI Lead Time Management: Managing lead times for raw materials, especially for imported ingredients, can be complex. Delays in procurement can lead to stock outs and production disruptions.

VII Regulatory Compliance: Meeting regulatory requirements for product safety and quality is paramount in the beverage industry. Managing material resources to ensure compliance with regulations can be demanding and costly.

VIII Sustainability Concerns: Coca-Cola has a strong commitment to sustainability. Managing material resources while minimizing environmental impact, reducing waste, and optimizing transportation routes is a multifaceted challenge.

IX Technology Integration: While technology can greatly aid in managing material resources, it can also be a challenge to integrate and maintain sophisticated systems for inventory control and demand forecasting.

X Economic Factors: Fluctuations in exchange rates, inflation, and economic conditions can impact the cost of raw materials, affecting the financial aspects of managing material resources.

XI Competition: In the beverage industry, competitors may also be vying for the same raw materials. This can lead to price fluctuations and potential scarcity of key materials.

XII Continuous Improvement: Striving for continuous improvement in material resource management requires ongoing analysis and adaptation to changing market conditions and technologies.

Coca-Cola Nigeria faces these challenges daily in managing its material resources within its supply chain system. Overcoming these challenges involves a combination of robust supply chain strategies, technology utilization, supplier collaboration, contingency planning, and a commitment to quality and sustainability, reflecting Coca-Cola's dedication to delivering high-quality products to its customers in Nigeria.

2.3. Analysis of Data from Field

This chapter analyses and talk about the data collected. The descriptive statistics used to analyze the data collected are the Mode and Frequency table. Bar charts and pie charts are the plots used to assess the management of the material resources supply in coca cola Company, Nigeria. The data used for this study was obtained from staff of coca cola Company in Nigeria.

To provide a comprehensive analysis of the material resources supply chain in the Coca-Cola Company in Nigeria, the research design will take into account the following factors:

- The sourcing and procurement process of raw materials and packaging materials
- The transportation and logistics involved in the supply chain
- The management of inventory and the control of the flow of supplies
- The technology and systems used in the supply chain
- The challenges and obstacles faced by the company in the process

By using both quantitative and qualitative methods to analyze the data collected from primary and secondary sources, the research will be able to provide a detailed understanding of the material resources supply chain in the Coca-Cola Company in Nigeria. This will enable the company to identify areas where improvements can be made to enhance efficiency and reduce costs. Ultimately, the study aims to contribute to the sustainable growth of the company and the Nigerian economy as a whole.

This data collection approach will allow us to gather a wide range of perspectives and insights on the topic at hand. Here are some benefits of each data collection instrument:

- Surveys are great for gathering a large amount of data quickly and efficiently. They can be administered online or in person and allow for standardized questions and responses.
- Questionnaires can be more detailed than surveys and often include open-ended questions that allow for more qualitative data. They can also be administered online or in person.
- Interviews are a great way to gather in-depth information from individuals.
- They can be conducted in person or over the phone and allow for follow-up questions and clarification.
- Focus group discussions are useful for gathering data from a group of people who share similar experiences or perspectives. They allow for interaction and discussion among participants, which can lead to a deeper understanding of the topic.

By using a combination of these data collection instruments, we can ensure that we are capturing a comprehensive view of the topic and gathering rich, diverse data.

The Google online form will be the instrument used to collect data in this study. And it will be shared through various media platforms. The questionnaire used the standard fixed-response alternative questions, which require the respondent to choose from a predetermined set of answers for each question. According to Malhotra and Birks (2003, p. 224), the survey approach is the most commonly used method of primary data collection in marketing research, with the benefits of ease of administration and data consistency.

Sampling is the technique of obtaining samples from a population. Sampling can either be probability or non-probability. Probability sampling uses the probability technique and laws of randomness. Examples of probability include simple random, systematic, stratified and clustered sampling. For non-probability, they do not follow probability techniques or randomness. Examples of non-probability include Quota sampling and judgmental sampling.

For this research work, a random sampling technique will be used since the researcher made use of Google Forms.

Simple Random Sampling (SRS) is an unbiased sampling technique. Simple random sampling is a sample chosen from a population in which a sample is chosen randomly, all with the same probability. In simple random sampling, the samples have an equal probability of being selected and it involves the randomization process. Random selection of sample units was ensured to remove any form of bias.

The advantages of simple random sampling include: that it is free from errors in classification. It is suitable for data analysis which includes the use of inferential statistics. It is free from bias and prejudice and it is very easy to assess the sampling error in the method.

One of the disadvantages of the simple random sampling method is that it cannot be employed where the units of the population are heterogeneous sample frame will focus only on the employees in the material resources supply unit of Coca-Cola Company in Nigeria.

After the collection of the data set from Coca-Cola employees. A data frame was created in Microsoft Excel with the data. The data was then imported to SPSS.

In the process of collating the data, the questionnaires were sorted out. After sorting out the questionnaires, some were excluded from the study due to incomplete surveys or careless answers that would greatly impact the estimation method. Finally, 115 samples were retained.

2.4 Result of Data Analysis

Exploratory data analysis helps condense the data into a more manageable form and therefore provides a better overall picture of the data. There is no discrimination between

male and female in the distribution of the questionnaire. The total number of responses for the study is one hundred and fifteen (115).

2.4.1 Descriptive Statistics

What is your Gender?

Gender	Frequency
Male	61
Female	54

Table 2.1 Frequency table for Gender

The table above shows the frequency table for the gender of the respondent. 61 males corresponding 53.0% of the population, 54 Female corresponding to 47.0% of the population. This means that there are more male employed.

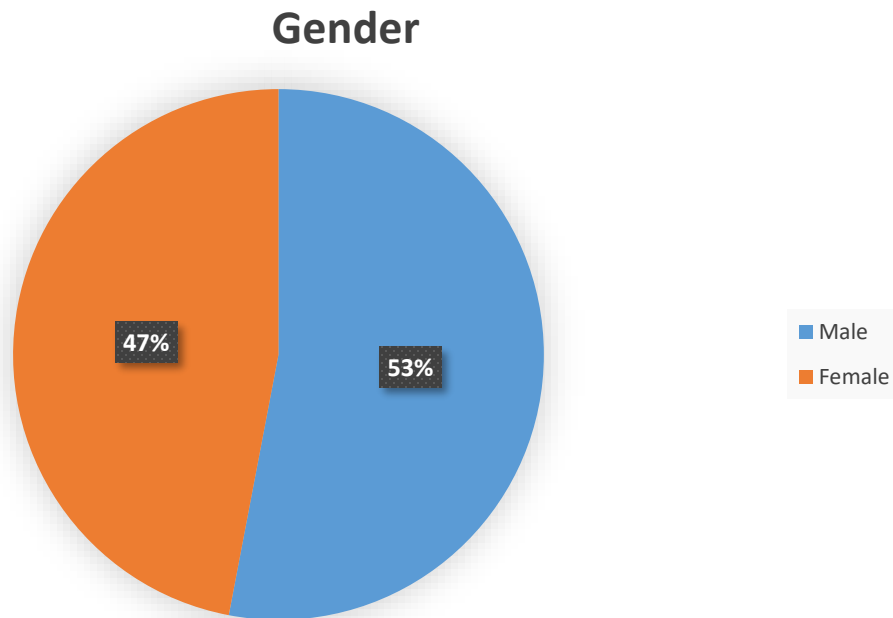


Figure 2.1 A pie chart showing the Gender

What is your Age?

Age	Frequency
18-20	26
21-25	28
26-40	32
Above 40	29

Table 2.2 Frequency table for Age

Table 2.2 shows the frequency table for the age range of the coca cola staff in which 26 of the staff falls between the ages of 18-20 representing 22.6% of the population of staff who fill the questionnaire, 28 staff falls between the ages of 21-25 representing 24% of the population of staff who fill the questionnaire, 32 of the staff falls the between the age range of 26-40 representing 27.8% of the population of staff who fill the questionnaire, 29 of the staff falls between the age range of above 40 representing 25.2% of the population of staff who fill the questionnaire.

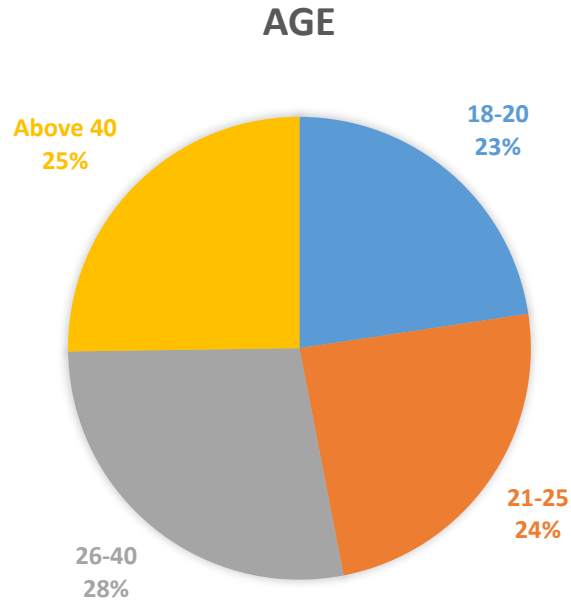


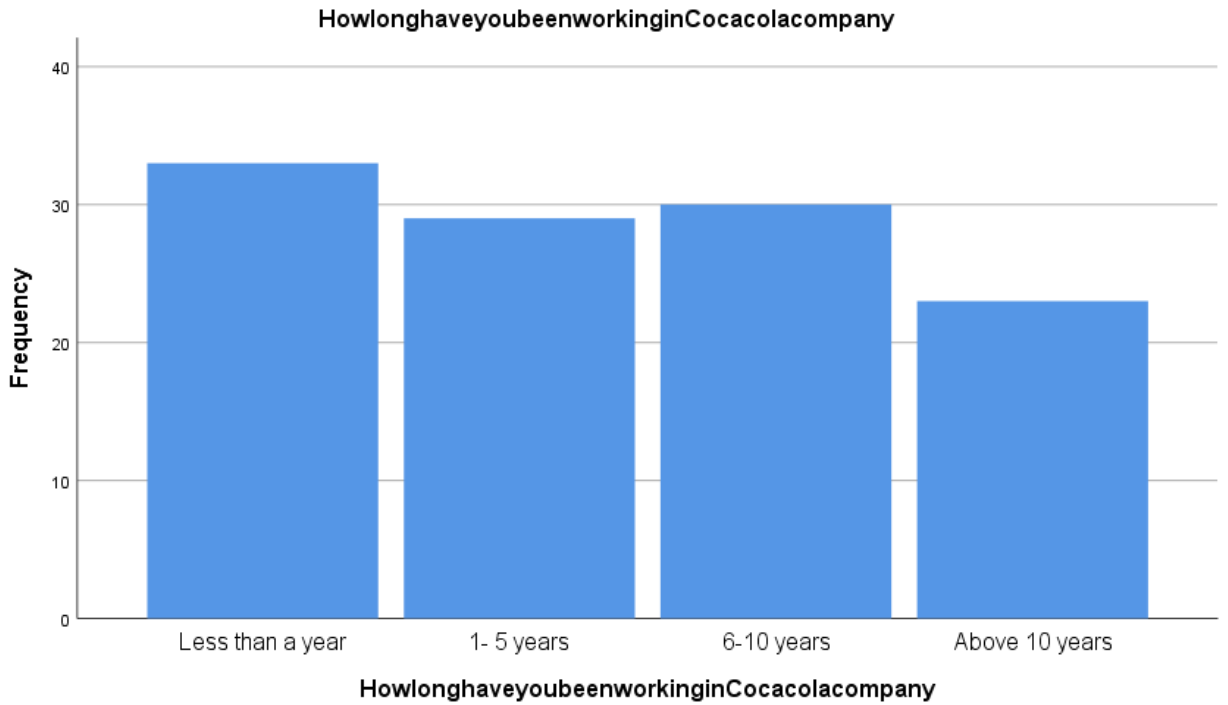
Figure 2.2 A pie chart showing the Age Range

How long have you been working in coca cola company?

Years	Frequency
Less than a year	33
1-5 years	29
6-10 years	30
Above 10 years	23

Table 2.3 Frequency table of How long have you been working in coca cola company.

Table 2.3 shows the frequency table for how long they have been working in the company. 33 responded less than a year which represent 28.7% of the population. 29 responded 1-5 years, which represent 25.2% of the population. 30 responded working for 6-10 years representing 26.1% of the population. 23 responded working for above 10 years representing 20.0% of the population.



What specific raw materials do you believe are crucial in the production processes of Coca-Cola Nigeria?

What specific raw materials do you believe are crucial in the production processes of Coca-Cola Nigeria?	Frequency
Sugar	20
Water	23
Flavoring agents	21
Preservatives	32

Carbon dioxide	19

Table 2.4 what specific raw materials do you believe are crucial in the production processes of Coca-Cola Nigeria?

Table 5.4 shows the frequency table for what specific raw materials do you believe are crucial in the production processes of Coca-Cola Nigeria? Out of the 115 response gotten, 20 respondent answered Sugar which represent 17.4% of the population, 23 respondent answered water which represent 20.0% of the population, 21 respondent answered Flavoring agents which represent 18.3% of the population, 32 respondent answered Preservatives which represent 27.8% of the population and 19 respondent answered Carbon dioxide which represent 17.4% of the population.

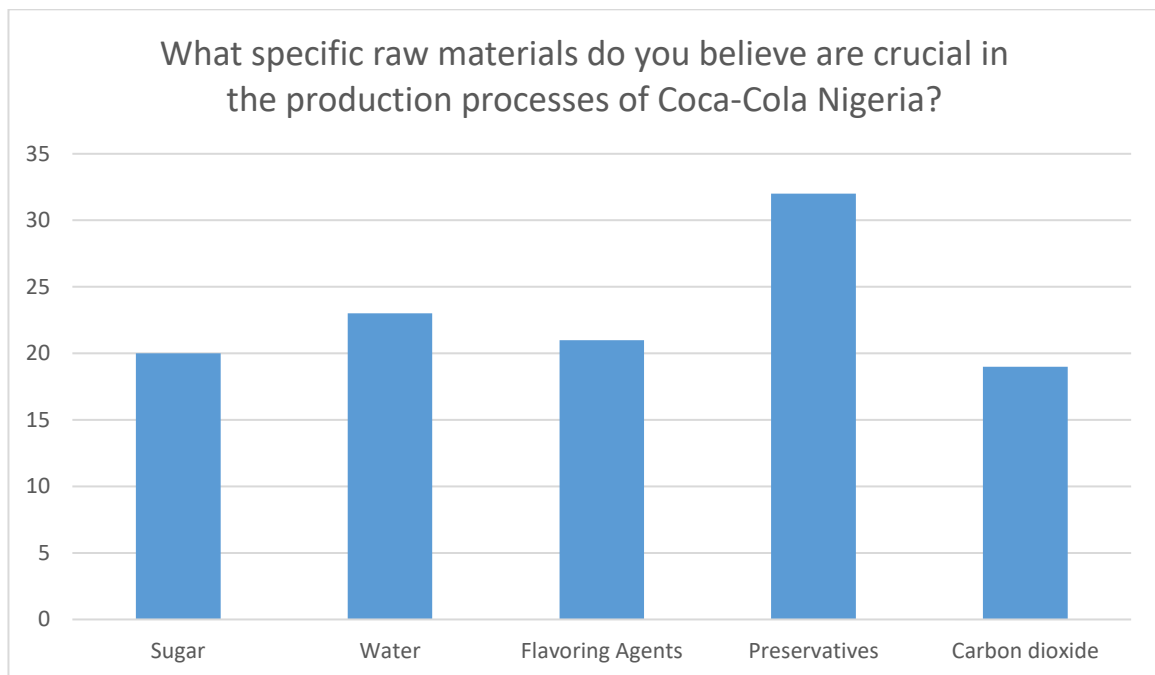


Figure 2.4 A chart showing what specific raw materials do you believe are crucial in the production processes of Coca-Cola Nigeria?

How does Coca-Cola Nigeria currently handle the procurement and management of its raw material supplies?

How does Coca-Cola Nigeria currently handle the procurement and management of its raw material supplies?	Frequency
Direct procurement from suppliers	45
Through third-party distributors	41
Combination of direct and distributor procurement	29

Table 2.5 how does Coca-Cola Nigeria currently handle the procurement and management of its raw material supplies?

Table 2.5 shows the frequency of How Coca-Cola Nigeria currently handle the procurement and management of its raw material supplies. 45 responded direct procurement from suppliers representing 39.1% of the population, 41 responded through third-party distributors representing 35.7% of the population, 29 responded Combination of direct and distributor procurement representing 25.2% of the population.

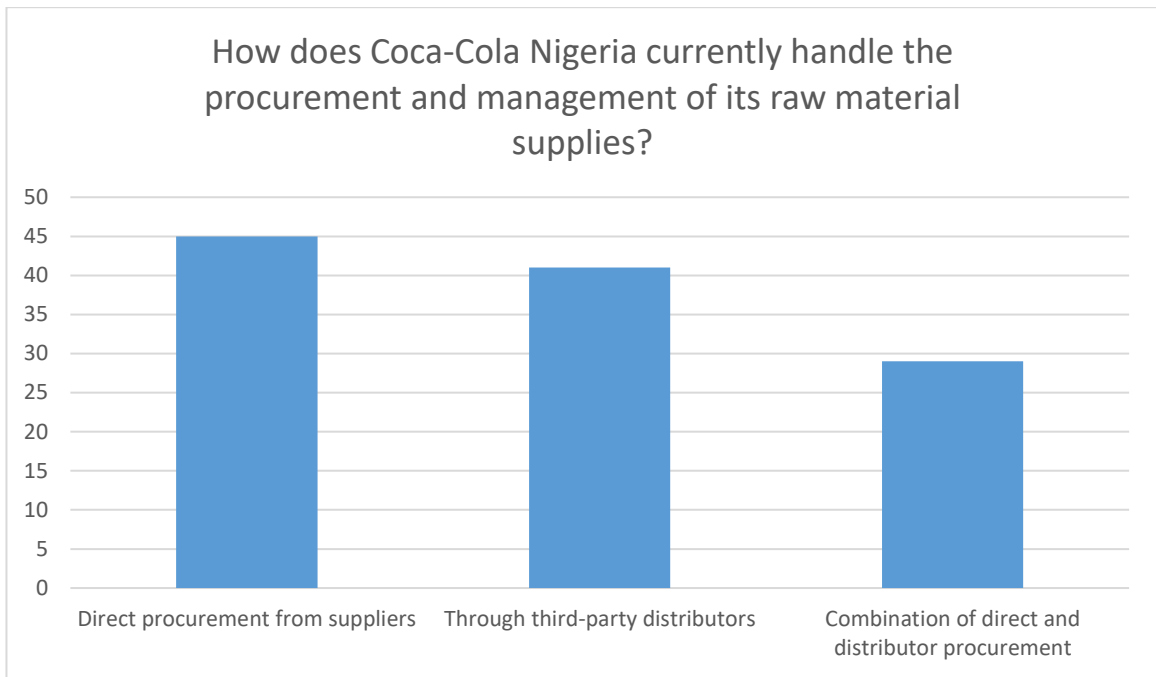


Figure 2.5 a chart showing the response how Coca-Cola Nigeria currently handle the procurement and management of its raw material supplies.

Could you identify any challenges or obstacles faced by Coca-Cola Nigeria in the process of managing the supply of raw materials?

Could you identify any challenges or obstacles faced by Coca-Cola Nigeria in the process of managing the supply of raw materials?	Frequency
Transportation issues	21
Quality control concerns	32
Fluctuating raw material prices	29
Regulatory compliance challenges	10
Others	23

Table 2.6 could you identify any challenges or obstacles faced by Coca-Cola Nigeria in the process of managing the supply of raw materials?

The table above shows response about the challenges or obstacles faced by Coca-Cola Nigeria in the process of managing the supply of raw materials. 21 respondent representing 18.3% of the population answered Transportation issues, 32 respondent representing 27.8% of the population answered Quality control concerns, 29 respondent representing 25.2% of the population answered Fluctuating raw material prices, 10 respondent representing 8.7% of the population answered Regulatory compliance challenges, while 23 respondent representing 20.0% of the population answered others.

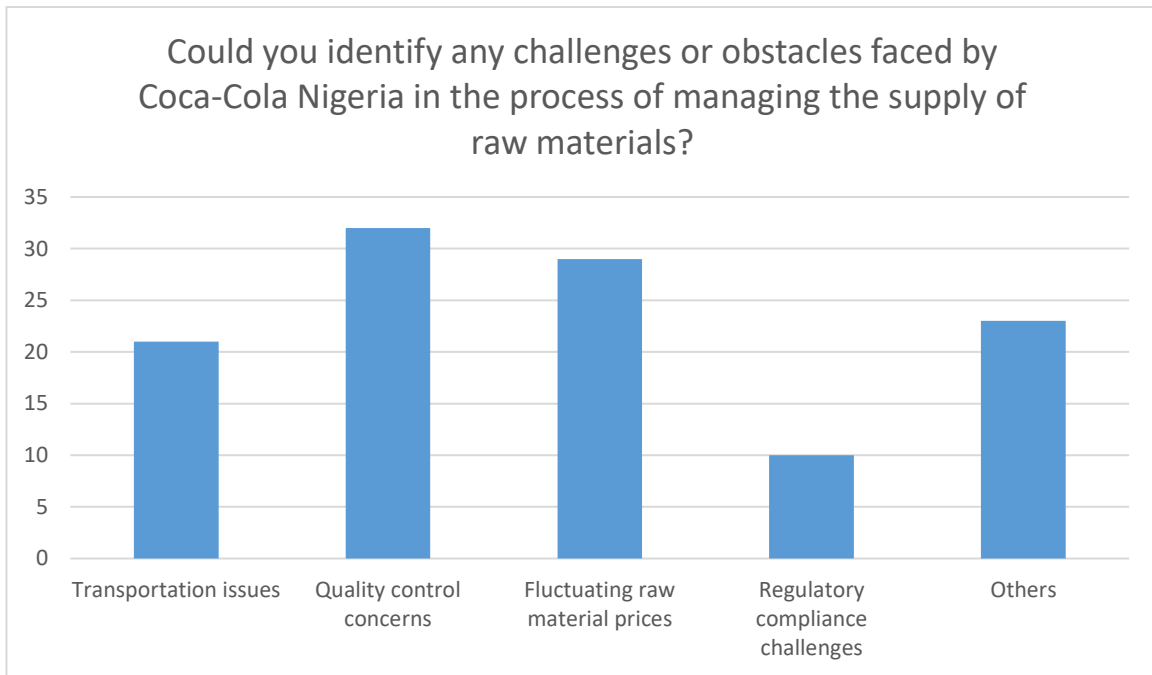


Figure 2.6 a chart showing the challenges or obstacles faced by Coca-Cola Nigeria in the process of managing the supply of raw materials?

In your opinion, what strategies could Coca-Cola Nigeria adopt to overcome challenges related to the supply of raw materials and enhance overall management?

In your opinion, what strategies could Coca-Cola Nigeria adopt to overcome challenges related to the supply of raw materials and enhance overall management?	Frequency
Diversification of suppliers	23

Long-term contracts with suppliers	22
Investment in local sourcing	30
Technology integration	24
Others	16

Table 2.7 in your opinion, what strategies could Coca-Cola Nigeria adopt to overcome challenges related to the supply of raw materials and enhance overall management?

Table 2.7 shows the frequency table for in your opinion, what strategies could Coca-Cola Nigeria adopt to overcome challenges related to the supply of raw materials and enhance overall management? 23 responded Diversification of suppliers which represent 20.0% of the population. 22 responded Long-term contracts with suppliers which represent 19.1% of the population. 30 responded Investment in local sourcing representing 26.1% of the population. 24 responded Technology integration representing 20.9% of the population. 16 responded others representing 13.9% of the population.

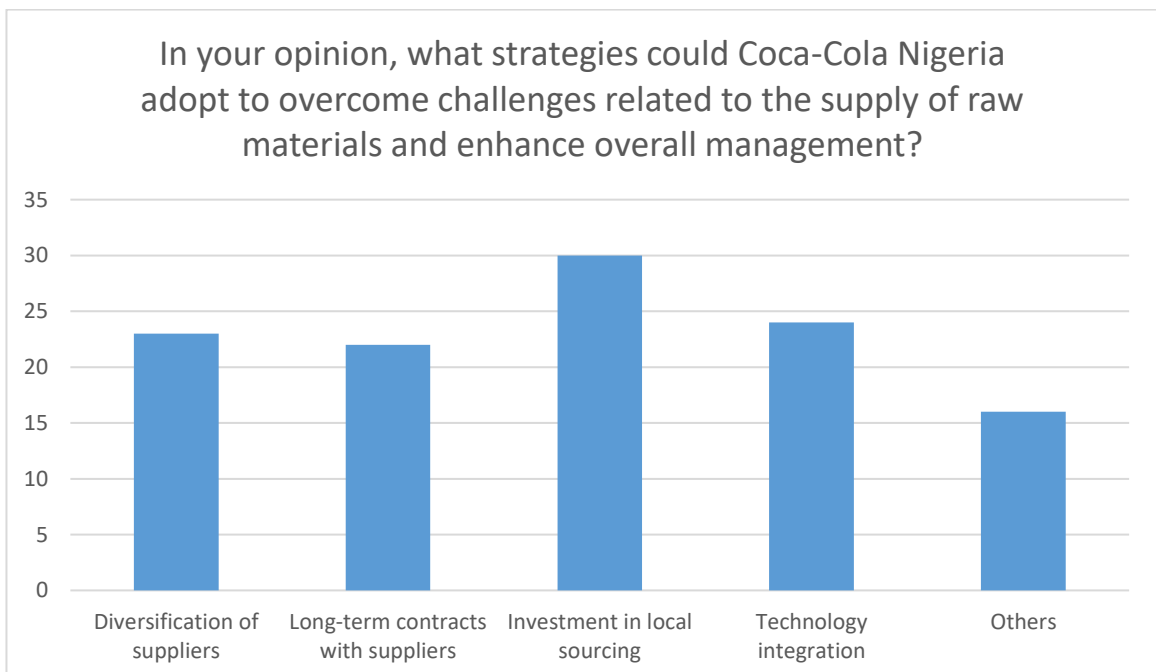


Figure 2.7 a chart showing the response of in your opinion, what strategies could Coca-Cola Nigeria adopt to overcome challenges related to the supply of raw materials and enhance overall management.

From your perspective, what factors contribute significantly to the successful management of material resources supply for Coca-Cola Nigeria?

From your perspective, what factors contribute significantly to the successful management of material resources supply for Coca-Cola Nigeria?	Frequency
Efficient logistics	22
Sustainable sourcing practices	31
Advanced forecasting methods	26
Effective supplier relationships	23
Other	13

Table 2.8 from your perspective, what factors contribute significantly to the successful management of material resources supply for Coca-Cola Nigeria?

The table above shows the response to from your perspective, what factors contribute significantly to the successful management of material resources supply for Coca-Cola Nigeria? 22 responded efficient logistics representing 19.1% of the population, 31 responded Sustainable sourcing practices representing 27.0% of the population, 23 responded Effective supplier relationships representing 20.0% of the population, 26 responded Advanced forecasting methods representing 22.6% of the population, 13 responded others representing 11.3% of the population.

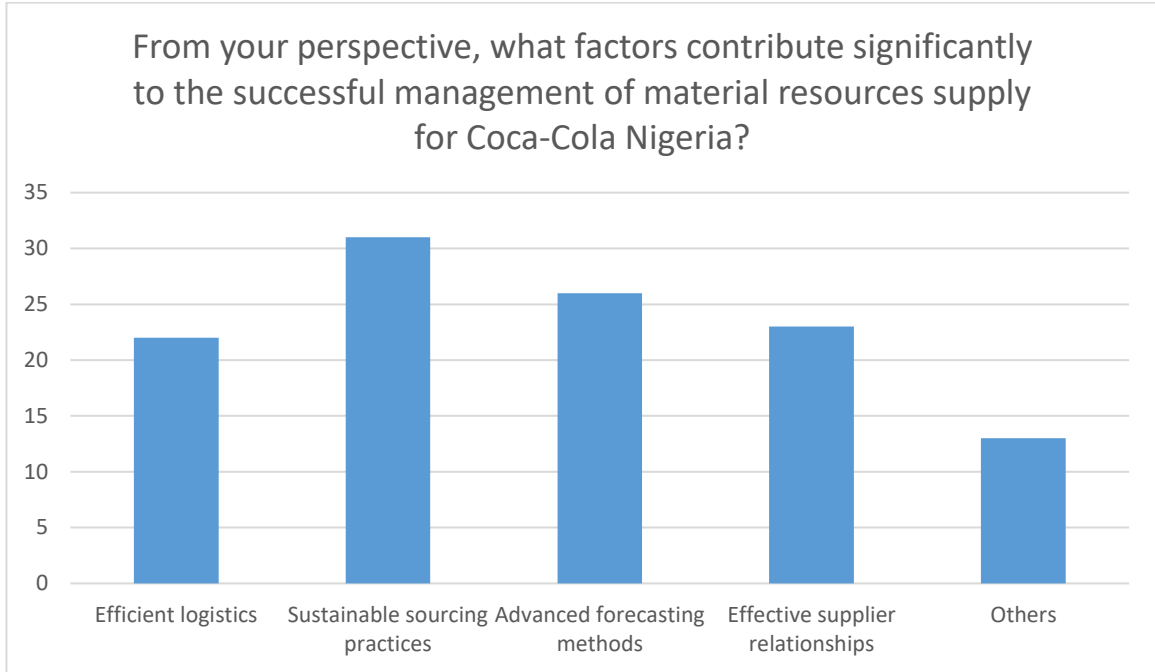


Figure 2.8 A chart showing the factors that contribute significantly to the successful management of material resources supply for Coca-Cola Nigeria?

How do you think Coca-Cola Nigeria could improve its management of material resources supply to achieve increased operational efficiency and profitability

How do you think Coca-Cola Nigeria could improve its management of material resources supply to achieve increased operational efficiency and profitability?	Frequency
Implementing advanced inventory management systems	25

Enhancing production planning processes	24
Investing in automation technologies	28
Exploring cost-effective sourcing alternatives	23
Others	15

Table 2.9 how do you think Coca-Cola Nigeria could improve its management of material resources supply to achieve increased operational efficiency and profitability?

Table 2.9 shows how Coca-Cola Nigeria could improve its management of material resources supply to achieve increased operational efficiency and profitability. 25 responded Implementing advanced inventory management systems representing 21.7% of the population, 24 responded Enhancing production planning processes representing 20.9%, 28 responded investing in automation technologies representing 24.3%, 23 responded Exploring cost-effective sourcing alternatives representing 20.0%, and 15 responded others representing 13.0%.

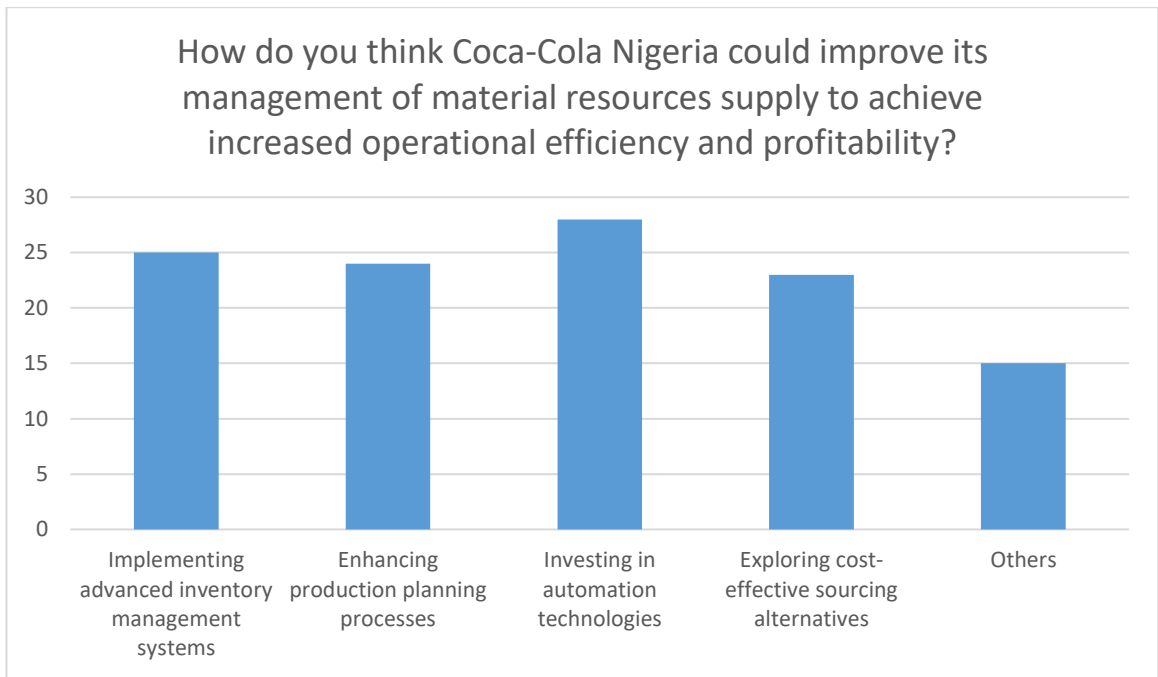


Figure 2.9 a chart showing how do you think Coca-Cola Nigeria could improve its management of material resources supply to achieve increased operational efficiency and profitability?

What role does technology play in the management of material resources supply at Coca-Cola Nigeria, and how has it influenced the overall process?

What role does technology play in the management of material resources supply at Coca-Cola Nigeria, and how has it influenced the overall process?	Frequency
Improved traceability and transparency	25
Enhanced communication with suppliers	25

Real-time data analytics for demand forecasting	30
Streamlined procurement processes	18
Others	17

Table 2.10 what role does technology play in the management of material resources supply at Coca-Cola Nigeria, and how has it influenced the overall process?

Table 2.10 shows role technology play in the management of material resources supply at Coca-Cola Nigeria, and how has it influenced the overall process. 25 respondent representing 21.7% of the population responded Improved traceability and transparency, 25 respondent representing 21.7% of the population responded Enhanced communication with suppliers, 30 respondent representing 26.1% of the population responded Real-time data analytics for demand forecasting, 18 respondent representing 15.7% of the population responded Streamlined procurement processes, and 17 respondent representing 14.8% of the population responded others.

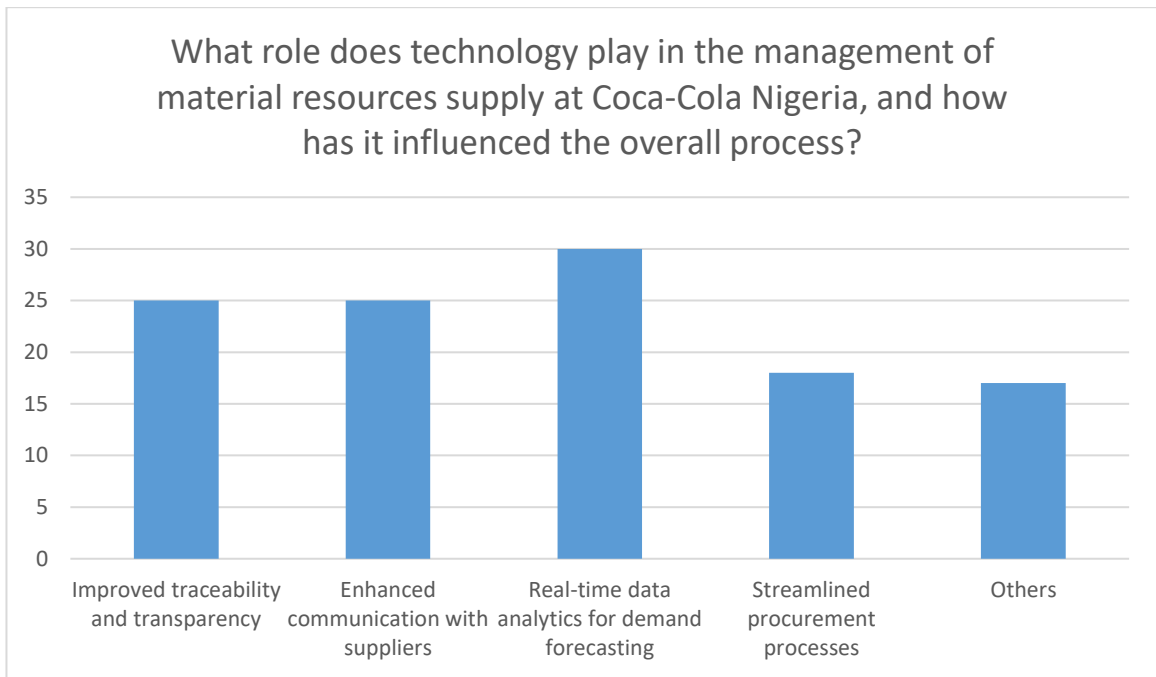


Figure 2.10 a chart showing the role technology play in the management of material resources supply at Coca-Cola Nigeria, and how has it influenced the overall process.

How is the management of material resources supply linked to the relationships between

Coca-Cola Nigeria and its suppliers and customers?

How is the management of material resources supply linked to the relationships between Coca-Cola Nigeria and its suppliers and customers?	Frequency
Collaborative initiatives with suppliers	26
Customer demand influencing procurement strategies	20
Joint sustainability efforts	28
Impact on pricing agreement	22
Others	19

Table 2.11 how is the management of material resources supply linked to the relationships between Coca-Cola Nigeria and its suppliers and customers?

Table 2.11 shows how the management of material resources supply linked to the relationships between Coca-Cola Nigeria and its suppliers and customers. 26 respondent representing 22.6% of the population responded Collaborative initiatives with suppliers, 20 respondent representing 17.4% of the population responded Customer demand influencing procurement strategies, 28 respondent representing 24.3% of the population responded Joint sustainability efforts, 22 respondent representing 19.1% of the population responded Impact on pricing agreement, 19 respondent representing 16.5% of the population responded others.

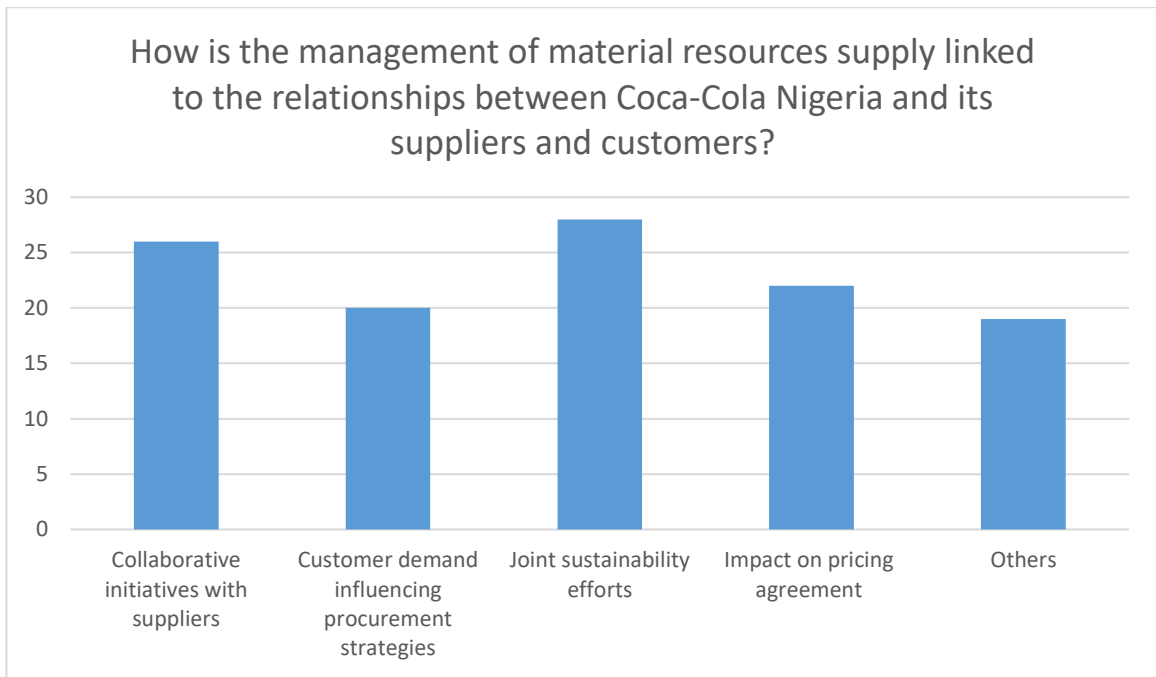


Figure 2.11 a chart showing how the management of material resources supply linked to the relationships between Coca-Cola Nigeria and its suppliers and customers.

The results indicate that preservatives are the most crucial raw material in the production processes of Coca-Cola in Nigeria.

These results suggest that Coca-Cola Nigeria should focus on ensuring a reliable supply of preservatives and water. They should also pay attention to the quality of their flavoring agents and sugar. Carbon dioxide, while not as important as the other raw materials, is still necessary for the production of Coca-Cola, so the company should also take steps to ensure a reliable supply of this ingredient.

The results indicate that Coca-Cola utilizes a combination of direct and distributor procurement methods for its raw material supply. This suggests that Coca-Cola likely uses a combination of methods depending on the specific raw material and the supplier. Ultimately, the best procurement method for Coca-Cola will depend on the specific circumstances of each situation. However, the survey results suggest that the company is using a variety of methods to ensure that it has a reliable and cost-effective supply of raw materials.

The most common challenge faced by Coca Cola Nigeria is quality control concerns. This is followed by fluctuating raw materials prices and transportation issues. Regulatory compliance challenges are the least common challenge faced by the company.

These findings suggest that Coca Cola Nigeria should focus on improving its quality control processes. The company should also take steps to mitigate the risks associated with fluctuating raw materials prices and transportation issues.

SECTION 3. IMPROVEMENT OF

MANAGEMENT OF MATERIAL RESOURCES SUPPLY IN COCA-COLA, NIGERIA.

3.1. Ways to manage material resources supply in Coca-Cola, Nigeria

To manage material resources supply effectively in Coca-Cola Nigeria, the company can employ several strategies to optimize its operations. Here are some key ways:

Supply Chain Visibility and Collaboration: Implement advanced supply chain management systems for real-time visibility into inventory levels, demand forecasts, and production schedules.

Foster collaboration with suppliers, distributors, and retailers to enhance communication and responsiveness throughout the supply chain.

Supplier Relationship Management: Develop strong relationships with key suppliers to ensure a stable and efficient supply of raw materials.

Diversify suppliers to mitigate risks associated with dependency on a single source.

Demand Planning and Forecasting: Utilize accurate demand forecasting tools to anticipate market trends and fluctuations in consumer demand.

Align production schedules with demand forecasts to minimize excess inventory and stockouts.

Inventory Optimization: Implement inventory management techniques such as just-in-time (JIT) to reduce holding costs while maintaining an uninterrupted production flow.

Regularly assess inventory levels and adjust reorder points based on demand patterns.

Technology Integration: Embrace technology solutions like Enterprise Resource Planning (ERP) systems to integrate various aspects of the supply chain, from procurement to distribution.

Explore the use of data analytics for better decision-making and supply chain optimization.

Sustainable Sourcing: Focus on environmentally sustainable sourcing practices to align with corporate social responsibility goals.

Assess and select suppliers based on their commitment to ethical and sustainable business practices.

Risk Management: Develop a comprehensive risk management strategy to identify and mitigate potential disruptions in the supply chain, such as geopolitical issues, natural disasters, or regulatory changes.

Maintain contingency plans to address unforeseen challenges promptly.

Continuous Improvement: Implement a continuous improvement culture to regularly evaluate and enhance supply chain processes.

Seek feedback from stakeholders and conduct regular performance assessments to identify areas for improvement.

Localized Sourcing: Explore opportunities for localized sourcing of materials to reduce lead times and transportation costs.

Build partnerships with local suppliers to support community development initiatives.

Training and Development: Invest in training programs for supply chain personnel to ensure they are equipped with the skills needed to manage material resources efficiently.

Stay updated on industry best practices and emerging technologies.

By implementing these strategies, Coca-Cola Nigeria can enhance its material resources supply chain, ensuring a consistent and efficient flow of resources for production while adapting to market dynamics and minimizing risks.

3.2 Recommendation for future research on Management of material resources supply in Coca-Cola, Nigeria

Based on the study's focus on material resource supply management in the context of Coca-Cola Company in Nigeria, here are some recommendations for future research:

1. **Comparative Analysis:** Conduct a comparative study to analyze material resource supply management practices across different beverage companies in Nigeria. This research could provide valuable insights into best practices and allow for bench marking, which can benefit the entire industry.
2. **Longitudinal Study:** Perform a longitudinal study to track the evolution of material resource supply management practices in Coca-Cola Nigeria or other similar companies. This could help identify trends, changes, and their impact on the company's success over time.
3. **Sustainability and Environmental Impact:** Investigate the environmental sustainability aspect of material resource supply management, including the reduction of carbon footprint, waste management, and recycling initiatives. This research could provide insights into how companies like Coca-Cola can further align their practices with sustainability goals.
4. **Technological Advancements:** Explore the role of emerging technologies like block chain, and data analytics in enhancing material resource supply management. Investigate how these technologies can be leveraged to improve efficiency, reduce costs, and ensure a consistent supply of high-quality raw materials.

5. **Supply Chain Resilience**: With an increasing focus on global disruptions and supply chain resilience post-COVID-19, research on how Coca-Cola Nigeria or similar firms have adapted to ensure uninterrupted production and distribution in the face of unforeseen challenges can be valuable.

6. **Economic Impact Analysis**: Research the broader economic impact of effective material resource supply management, such as job creation, contribution to GDP, and overall economic development in Nigeria. This could demonstrate the significance of efficient supply chain management for national growth.

7. **Humanitarian and Social Responsibility**: Explore the role of beverage companies in humanitarian and social responsibility efforts related to material resource supply, such as supporting local communities and sustainable sourcing.

By pursuing these research directions, future studies can contribute to a deeper understanding of material resource supply management in manufacturing companies, not only in Nigeria but also in the broader context of developing countries and the global business environment.

3.3 Recommendation for the improvement of management of material resources supply in Coca-Cola, Nigeria

Coca-Cola Nigeria should further strengthen its relationships with suppliers. Regular communication, joint planning, and collaboration can lead to more reliable and timely material deliveries. This can involve sharing forecasting data, which enables suppliers to align their production with Coca-Cola's demand.

She should continuously assess and optimize inventory levels. Implement advanced inventory management techniques, such as just-in-time (JIT) inventory systems, to minimize carrying costs while ensuring a consistent supply of raw materials.

Coca-Cola should invest in building a more resilient supply chain. Develop contingency plans to address unexpected disruptions, whether they are related to natural disasters, market dynamics, or regulatory changes. Being prepared for these challenges is essential for uninterrupted production.

In addition, Coca-Cola should embrace advanced technologies and data analytics for improved material resource supply management. Implementing state-of-the-art supply chain management software and data-driven insights can help in forecasting demand more accurately and ensuring efficient storage and distribution.

By implementing these recommendations, Coca-Cola Nigeria can further enhance its material resource supply management, ensuring a consistent supply of high-quality raw materials, reducing costs, and maintaining a competitive edge in the Nigerian beverage market. Additionally, it can contribute positively to the local community and align with global sustainability goals.

CONCLUSION

This study investigates the pivotal role of material resource supply management in the success of Coca-Cola Company in Nigeria. It emphasizes the importance of consistent supply of high-quality raw materials for the uninterrupted production and distribution of Coca-Cola products. The study covers procurement, storage, distribution, and supply chain coordination. Despite challenges posed by Nigeria's complex market dynamics, Coca-Cola Nigeria has implemented effective strategies for timely delivery, proper storage, and efficient resource utilization, maintaining a competitive edge through streamlined supply chain management.

The research problem at the core of this study focuses on the importance of effective inventory and performance management for sustainability in manufacturing firms, highlighting the detrimental effects of poor stock control. Coca-Cola Nigeria is presented as a case study to illuminate their successful inventory and performance management practices.

The study's objectives aim to examine the relationship between Materials Management and manufacturing firm success, using Coca-Cola Nigeria as a notable example. It identifies inter-departmental coordination, effective inventory management, positive vendor relationships, and advanced facilities/ICT as crucial factors for success in Materials Management.

The study's significance lies in its contributions to supply chain management literature, its potential to address material supply challenges faced by Coca-Cola Nigeria, and its provision of valuable recommendations for beverage companies in Nigeria and other developing countries to enhance their supply chain management practices.

The research methodology employs a combination of quantitative and qualitative approaches, utilizing surveys, questionnaires, interviews, and focus group discussions to gather data related to material resource supply to Coca-Cola Nigeria from various stakeholders, including suppliers, distributors, and the company's management.

The study primarily focuses on examining the supply of material resources used by Coca-Cola Company in Nigeria, evaluating the effectiveness of their supply chain management techniques, and identifying the challenges they face. It also assesses the role of technology in material resource supply management and its impact on the company's performance.

The data analysis provides insights into the demographic composition of the respondents, their perceptions of material resource management, challenges faced, and the strategies and methods employed by Coca-Cola Company to achieve effective material resource management and sustainability. The findings of the study will contribute to a better understanding of material resource supply management in a prominent manufacturing company in Nigeria, offering valuable insights for the industry and the Nigerian economy.

To sum up, this study delved deep into the critical role of managing material resources in the success of Coca-Cola Company in Nigeria, shedding light on various aspects related to the acquisition, storage, distribution, and coordination of raw materials. The research addressed numerous key research inquiries and objectives, providing a comprehensive comprehension of this crucial facet of the company's operations.

Primarily, I explored the significance of efficient material resource management, recognizing it as a fundamental element in achieving cost savings, heightened productivity, and improved customer satisfaction. The effective strategies employed by Coca-Cola Nigeria in this domain highlighted their ability to navigate the complex market dynamics of Nigeria, which include unreliable local suppliers, political instability, infrastructure limitations, and fluctuations in raw material prices.

The research problem underscored the importance of effective inventory and performance management for sustainability in manufacturing firms, emphasizing the risks associated with neglecting inventory control. By using Coca-Cola Nigeria as a case study, we demonstrated how they have successfully handled their inventory and performance,

providing valuable insights for other manufacturing firms striving to enhance their sustainability practices.

Furthermore, the study explored a range of research inquiries encompassing raw material usage, supply management, challenges, improvement strategies, success determinants, technological influences, and the impact of supply management on relationships with suppliers and customers. Through these investigations, we unveiled the multifaceted nature of managing material resource supply in a complex market setting.

Additionally, the study emphasized the critical role of inter-departmental coordination, effective inventory management, positive relationships with vendors, and the utilization of advanced facilities and information technology in achieving success in Materials Management. These elements were identified as pivotal in Coca-Cola Nigeria's ability to maintain a competitive edge.

The research methodology combined both quantitative and qualitative approaches, involving surveys, questionnaires, interviews, and focus group discussions to gather data. This comprehensive approach facilitated a holistic exploration of the material resource supply chain within Coca-Cola Company, Nigeria.

The findings and analysis of the study highlights the significance of preservatives in Coca-Cola production in Nigeria, emphasizing the need for a reliable supply of preservatives and water. Quality control concerns emerge as the primary challenge, prompting a recommendation for Coca-Cola Nigeria to enhance its quality control processes. Additionally, attention to the consistency of flavoring agents, sugar, and a secure supply of carbon dioxide is advised. The company employs a mix of direct and distributor procurement methods for raw materials, adapting to specific circumstances. To address challenges, a focus on mitigating risks associated with fluctuating raw material prices and transportation issues is recommended.

In conclusion, this research adds to the existing body of knowledge in supply chain management and emphasizes the crucial role of effective material resource supply management in maintaining a competitive edge in the manufacturing industry. It

showcases how successful strategies can be applied in a challenging market environment and provides recommendations for companies to attain higher efficiency, cost-effectiveness, and sustainability in their material resource supply chain management.

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APPENDICE

ASSESSMENT OF MATERIAL

RESOURCES SUPPLY MANAGEMENT STRATEGIES IN COCA-COLA

COMPANY IN NIGERIA

* Indicates required question

1. Name *

2. Gender *

Mark only one oval.

Mal

e

Fem

ale

Prefer not to say

3. Age *

Mark only one oval.

- 18-20
- 21-25
- 26-40
- Above 40

EXPERIENCE IN MATERIAL RESOURCES SUPPLY IN
COCA-COLACOMPANY

4. How long have you been working in Coca-cola company? *

Mark only one oval.

- Less than a
 year 1-5
 years
 6-10 years
 Above 10

5. Have you ever worked in the department responsible for material resources supply? *

Mark only one oval.

- y
 e
 s
 n
 o

6. How would you describe the current state of material resources supply? *

Mark only one oval.

Very

Good

Good

Bad

Very

Bad

Not

Sure

7. what processes does Coca-cola company use to manage its material resources? *

Mark only one oval.

- plan to plan
- systematic
- approachuse of
technology
- use of management software

8. How effective are these processes? *

Mark only one oval.

- very
- effective
- effective
- not sure
- not
- effective
- badly
- effective

9. Are there any challenges you face while managing material resources ? *

Mark only one oval.

- Y
- e
- s
- N
- o

10. If yes, what are they? *

11. How does Coca-cola Company choose its supplier of raw materials? *

Mark only one oval.

- quality
- reliability
- financial
- stability location

12. How does the company ensure that the quality of raw materials is consistent with *
its standards?

Mark only one oval.

- audit potential and existing
- suppliers develop product criteria
- and speculationstest product
- inspect throughout production

13. How does the company deal with suppliers who do not meet the required standards? *

Mark only one oval.

- pull out

- work on
- communication
- escalate in a timely
mannerinvest in them

14. How does Coca-cola Company manage its inventory of raw materials? *

Mark only one oval.

- determine the raw materials
- stocktrack raw material
- carefully
- 80/20 rule
- examine
- vendor

15. what methods does the company use to ensure that it does not run out of materials? *

Mark only one oval.

- calculate the raw material
- inventory carefully track raw
- material
- regular
- checking
- demand
- planning

16. Are there any areas in the inventory management process that need improvement? *

Mark only one oval.

Y

e

s

N

o

Not Sure

17. If yes, what are they? *

18. How does Coca-cola Company ensure that its material resources are sustainable? *

Mark only one oval.

- use of environmental standards require data
- consider all parts of the supply chain use of technology

19. What measures does the company take to minimise the negative impact of its material resources on the environment *

Mark only one oval.

- efficient use of electricity improve
-
-

recycling system

avoid waste

20. What suggestions do you have to improve the management of material resources *
supply in Coca-cola Company in Nigeria?
-

21. What changes would you like to see in the material resources supply process in
*
the company

22. Any other comments or suggestions *
