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SUPPLY CHAIN PRACTICES AND PERFORMANCE OF LARGE MANUFACTURING FIRMS IN NAIROBI CITY COUNTY, KENYA

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ABSTRACT

Supply chain practices have become increasingly important in enhancing organizational efficiency, competitiveness, and overall performance in the manufacturing sector. Despite their recognized importance, many manufacturing firms continue to experience operational challenges associated with planning and delivery processes. This study sought to establish the relationship between supply chain practices and the performance of large manufacturing firms in Nairobi City County, Kenya. Specifically, the study examined the effect of planning practices and delivery practices on the performance of large manufacturing firms. The study adopted a descriptive research design utilizing both qualitative and quantitative approaches. The target population comprised 163 managers drawn from large manufacturing firms in Nairobi City County, including procurement, finance, production, and administration managers. A census survey was employed, and data were collected using structured and semi-structured questionnaires. A pilot study involving 16 respondents was conducted to ascertain the reliability and validity of the research instrument. Data were analyzed using the Statistical Package for Social Sciences (SPSS) Version 29 through descriptive statistics, correlation analysis, and multiple regression analysis. The findings revealed that planning practices and delivery practices had a positive and statistically significant influence on the performance of large manufacturing firms. Planning practices exhibited the strongest relationship with firm performance, while delivery practices also contributed significantly to performance improvement. The regression results indicated that the two variables jointly explained 64.9% of the variation in organizational performance. The study concluded that effective planning practices, including demand forecasting, inventory management, periodic reviews, and expenditure analysis, as well as efficient delivery practices such as transportation management and clear distribution routes, are critical drivers of organizational performance. The study recommends that large manufacturing firms strengthen planning and delivery practices by enhancing demand forecasting systems, inventory control mechanisms, transportation management, and distribution networks to improve operational efficiency and overall organizational performance.

Keywords: Supply Chain Practices, Planning Practices, Delivery Practices, Organizational Performance, Manufacturing Firms, Nairobi City County, Kenya.

INTRODUCTION

The science of supply chain management (SCM) examines suppliers and consumers from upstream to downstream in order to reduce costs and provide customers with better value. According to the supply chain council, a supply chain is a network of interconnected businesses that collaborate to manage, monitor, and enhance the flow of information and commodities from suppliers to final consumers (Umair, Zhang, Han & Haq, 2019). The purposeful and methodical coordination of conventional business operations that support the company's internal operations and the distribution network between clients is another definition of supply chain management. Changes in the distribution of supply chains are very dynamic, the things that affect it include direct customers and also announcements of new regulations. From the statements that have been mentioned, the changes in the supply chain distribution are very dynamic, making the SCM topic will continue to evolve and continue to adapt as needed in an effort to provide better alternative solutions (Lancion & Howard, 2019). For this reason, it is obligatory to know any new concepts in the discussion of SCM scientific concepts.

Supply chain practices greatly influence company or organizational performance. Competitive advantage indicates that the supply chain is correct, because it includes supplier management, customer management, inventory management, distribution, development, and design of new products (Umair et al., 2019). SCM in large manufacturing occupies a position that is widely studied by researchers compared to SCM in other fields. Of the 100 articles reviewed, 39% study SCM in large manufacturing. However, it should also be noted that the facts indicate that in theory, SCM lags behind in developing its scientific base compared to other scientific disciplines. So that, a systematic review is needed to add theoretical shared insights in the field and sub-field of SCM science (Lancion & Howard, 2019). Therefore, in this paper, we try to write down terms or theories from the scientific development of SCM.

The coordination of business operations and procedures across a network of enterprises is a component of supply chain management, or SCM. These networks are involved in turning raw materials into completed commodities and shipping them to consumers; they might differ in size and the kinds of products they handle (Lancion & Howard, 2019). In the modern economy, attaining supply chain management (SCM) efficiency is crucial for obtaining a sustained competitive advantage and successfully satisfying supply chain demands. The relationship between various business components, the coordination of supply chain activities, and the significance of effective logistics are all highlighted by supply chain management. Therefore, businesses can improve their supply chain management performance by addressing the complexities of integration and encouraging cooperation among supply chain partners (Umair et al., 2019). This framework offers background information, significance, and a clear indication of the focus of the research on the relationship between supply chain management and logistics. It provides a route map for readers. This viewpoint recognizes that all firms participate in the upstream and downstream flow of information, capital, goods, and services (Lambert, 2004). According to Umair et al. (2019), this viewpoint emphasizes the significance of comprehending the supply chain's structure, which is made up of three components: suppliers, network design features, and various kinds of links that connect operations.

Statement of the Problem

In the past years, supply chain practices have acquired an important role because of their ability to raise social accountability and also improve economic performance of big manufacturing companies in Kenya, Nairobi City County (Muinde & Mukulu, 2020). In Nairobi City, the practice of supply chain system on firms has been a matter of concern to sometime on the performance of

firms. With the understanding of the importance of its role in determining the presence and competitiveness of large firms in the global market over a long-term perspective (Nyile, Ismail & Osoro, 2021). Both the USA and Africa have central influence in the global environment in terms of supply chain practices, with the former highly promoting innovation and the latter present as a region with special sustainability risks and opportunities (Adam et al., 2019). This review would focus on the advancements in supply chains in the USA and Africa and give an idea of peculiarities of the practice and obstacles that they have to deal with (Muinde & Mukulu, 2020).

Muinde and Mukulu, (2020), noted that such practices help achieve social responsibility meaning that irrespective of the rest of the supply chain ethical standards labor practices are fair, community developments are encouraged, and generally community wellbeing is taken care of. In addition, supply chain practice has been associated with greater economic performance such as cost savings, increases in brand reputation, and accessibility of new markets. Thus, the research was carried out to fill the research gap by injecting new knowledge between supply chain practice and performance of large manufacturing organizations in Kenya.

Objectives of the Study

The general objective was to establish the relationship between supply chain practices and performance of large manufacturing firms in Nairobi City County, Kenya. This study was guided by the following Specific objectives;

i. To assess the effect of planning practices on performance of large manufacturing firms in Nairobi City County, Kenya.
ii. To find out the effect of delivery practices on performance of large manufacturing firms in Nairobi City County, Kenya.

LITERATURE REVIEW

Theoretical Framework

Stakeholder Theory

The stakeholder theory is a theory of organizational management and business ethics that accounts for multiple constituencies impacted by business entities like employees, suppliers, local communities, creditors, and others. It addresses morals and values in managing an organization, such as those related to corporate social responsibility, market economy, and social contract theory. The stakeholder view of strategy integrates a resource-based view and a market-based view, and adds a socio-political level (Eisenhardt, 1989). In fields such as law, management, and human resources, stakeholder theory succeeded in challenging the usual analysis frameworks, by suggesting that stakeholders' needs should be put at the beginning of any action.

Some authors such as Geoffroy Murat tried to apply stakeholder's theory to irregular warfare. They define a stakeholder as any individual, organization or institution that is associated with a firm, and is either affected by the firm in some way, or affects the firm’s action and goals. Stakeholder theory describes the purpose and strategic direction of the firm through the concept that managers need to simultaneous incorporate the legitimate interests of all appropriate stakeholders when making business decisions.

Performance Theory

The Theory of Performance (ToP) develops and relates six foundational concepts to form a framework that can be used to explain performance as well as performance improvements. To

perform is to produce valued results. A performer can be an individual or a group of people engaging in a collaborative effort. Developing performance is a journey, and level of performance describes location in the journey (Eisenhardt, 1989). Current level of performance depends holistically on six components: context, level of knowledge, levels of skills, level of identity, personal factors, and fixed factors. Three axioms are proposed for effective performance improvements.

These involve a performer's mindset, immersion in an enriching environment, and engagement in reflective practice (by Don Elger, University of Idaho) Components of Performance The performance of a system, for example a home entertainment system, depend on the components of the system and on the interactions between these components. Similarly, level of performance of an individual or an organization depends on the following components; quality of results of products, cost effectiveness, capacity and capabilities, levels of knowledge and skills, identity and motivation (Delbufalo, 1956).

Improving Performance, while some factors that influence improving performance are immutable, other factors can be influenced by the performer or by others. Performer's Mindset. Performer's mindset includes actions that engage positive emotions (Danny & Jamal, 1996). Examples include setting challenging goals, allowing failure as a natural part of attaining high performance, and providing conditions in which the performer feels a right amount of safety. The Accelerator Model module provides insights on maintaining a performer's mindset (Eisenhardt, 1989). Immersion in a physical, social, and intellectual environment can elevate performance and stimulate personal as well as professional development. Elements include social interactions, disciplinary knowledge, active learning, emotions (both positive and negative), and spiritual alignment. The Parallel Curriculum, advocated they observed that there is need for advocates four parallel curriculums that reinforce the four adjustable components (Delbufalo, 1956).

The core curriculum and the curriculum of connections focus on knowledge construction. The curriculum of practices emphasizes context and promotes skill development. The curriculum of identity focuses on development of the individual as a member of a professional community. Relaxed alertness aligns with the performer's mindset. Orchestrated involvement in complex challenges and supportive experiences aligns with immersion. Active processing of experiences aligns with reflective practice. Additional support for the axioms can be found in the work. Their model for effective teaching/learning includes knowledge-centered, learner centered, assessment-centered, and community-centered components (Eisenhardt, 1989).

The learner-centered component involves the performer's mindset. The knowledge-centered and community-centered components connote immersion in an enriching environment, while the assessment-centered component embraces elements of reflective practice (Delbufalo, 1956). The importance of having a well-founded conceptual model, appropriate methods for data collection, and reliable and robust system for making inferences about observations is well-established in the work, and this under girds reflective practice in organizational contexts.

Conceptual Framework

Conceptual framework is an analytical tool with several variations and context. It can be applied in different categories of work where an overall picture is needed. It is used to make conceptual distinctions and ideas (Berlin Isaiah, 1953).

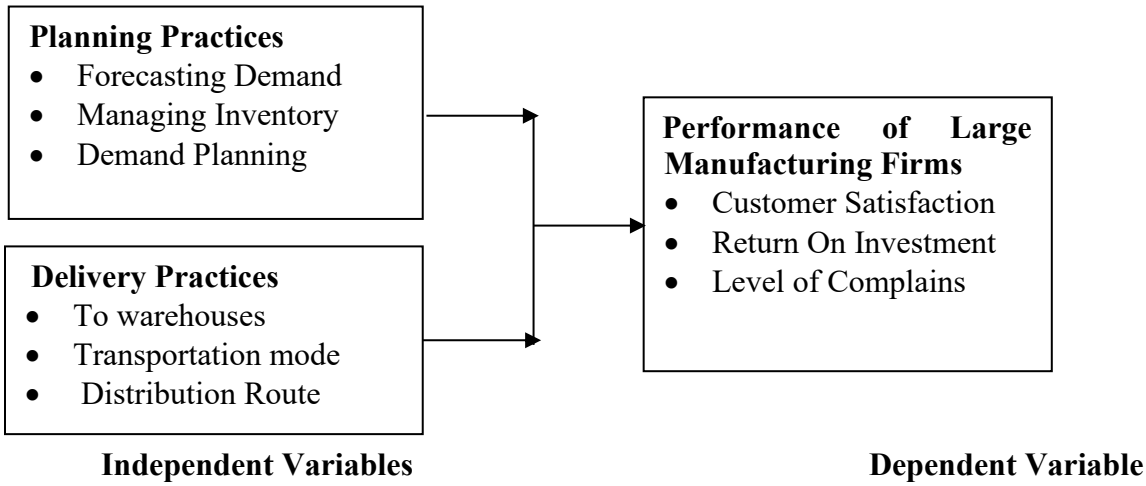

Figure 2. 1: Conceptual Framework

Planning Practices

Planning practices in supply chain management are crucial for balancing supply and demand, minimizing costs, and enhancing customer satisfaction. Here's a breakdown of key areas: Demand Planning: This involves predicting customer demand, which is a foundational element for subsequent planning activities (Abdow, Guyo & Odhiambo, 2018). Accurate demand forecasting helps to determine the right amount of inventory to hold, preventing shortages or overstocking. Supply Planning: This translates demand forecasts into a plan for sourcing materials, production, and distribution. It involves determining production quantities, scheduling production, and managing logistics to meet demand. Inventory Management: This involves determining optimal inventory levels at various points in the supply chain. It aims to balance the need to have enough product available to meet demand with the cost of holding inventory. Distribution Planning: This focuses on planning how and when goods are delivered to customers. It entails overseeing networks for distribution, storage, and transportation. Cooperation and Information Exchange: Sales, marketing, production, logistics, and other departments must work together to plan effectively (Adan, 2018). Effective planning requires coordination and information sharing throughout the supply chain.

To maximize the flow of goods and services from raw materials to the final consumer, supply chain management planning procedures essentially involve making well-informed decisions based on data and analysis (Barasaa & Makenzie, 2021). From locating raw materials to shipping completed goods to the final consumer, supply chain management planning methods include the proactive and strategic coordination of every facet of the supply chain (Abimanyu, Wawan & Erry, 2019). These practices involve forecasting demand, planning production and inventory levels, and coordinating logistics to ensure efficient and cost-effective fulfilment of customer needs. The process of predicting demand and organizing components and materials to satisfy it, as well as production, marketing, distribution, and sales, is known as supply chain planning. This definition's first section discusses predicting product demand (Bahati, 2023).

A supply chain defines a network of communication between the organization and its suppliers providing that this organization will be able to produce and distribute a specific product to the consumers (Barasaa & Makenzie, 2021). This network is a compilation of a number of activities, individuals, organisations, and information, and resources. Supply chain will incorporate every move that takes a product or a service through all its forms up to a finished one as a consumer.

Supply chains are developed by companies to cut down their operation expenses and stay within the business scene relevant and competitive. Supply chain planning is the entire procedure involved in planning a product when it is still in its raw material stage to the final one that is delivered to the consumer. It encompasses both the production of supply and the demand planning together with the sales and operations planning (Bahati, 2023).

Supply planning starts by a plan of demands that has been approved. The plan will have a comprehensive review of the entire sales plans, the ratified channel-wise and regional forecasts, and the customer forecasts (Barasaa & Makenzie, 2021). This plan is then subjected to a step of requiring translation. When the supply chain planning software is availed, the demand plan should be automatically assigned to the location where the demand of that type of relationship between the client and the particular item is normally met. The orders placed by the customers are utilized by the automated software and generate records of identifying the ship-from location. This record is exploited to come up with an estimation of that particular location. The demand transfer in the software does not pose a great challenge to relocate the demand between two locations in sections. Having gone through the translation step, the supply plan is then applied to the generation of a finished goods master production schedule per product, and per location (Bahati, 2023).

The supply plan lists every relevant feature of the manufactured product. Additionally, it contains information on the quantity of inventory that is on hand, the number of open and pending orders, lead times for major manufacturers, buffer inventories, minimum order amounts, and more. The user can conduct a needs and capacity evaluation with this comprehensive supply plan in hand to have a thorough grasp of how supply and demand plans affect resources. The plan can be modified as necessary to resolve any problems (Bahati, 2023). After supply planning is finished, a master plan can be created and approved by the user, which is then sent to the enterprise resource planning (ERP) system for implementation. Daily product planning and ordering can also be done with the master plan in supply chain planning software. A transactional system that facilitates planning and handles real-time demand commitments while taking constraints into account is layered with such a planning suite (Barasaa & Makenzie, 2021).

Supply chain planning has three pitfalls. These are normally observed in the general supply chain management system; this is also applicable in the sub- categories, including, the planning. The first problem is a very limited organizational commitment towards the planning development. Multiplying stakeholders of a business process it is usually hard to have them on the same stage (Bahati, 2023). Inadequate cross-functional cooperation is another issue that results in the obstructions in the preparation of plans. In assessing supply chain planning, firms are likely to consider previous information which is gathered internally in the business. Nevertheless, much more dynamic information can be taken into account that can make companies better prepared and facilitate their operation process. It is always not easy to accomplish ideal supply chain planning; however, it is part and parcel of a business development. As in any system, there may be certain pitfalls and challenges that will have to be resolved. By using smart workarounds, business firms may develop an ideal supply chain planning system (Barasaa & Makenzie, 2021).

Delivery Practices

In essence, delivery practices are critical for ensuring a positive customer experience and driving business success within the broader supply chain framework (Boyce, 2020). In the context of supply chain practices, "delivery practices" refer to the processes, policies, and procedures an organization uses to ensure timely, efficient, and accurate delivery of products or services to

customers. These practices encompass the entire journey from order placement to final delivery, including logistics, transportation, and customer service aspects. Key aspects of delivery practices in supply chain: Logistics and Transportation: This involves planning, implementing, and controlling the movement of goods from suppliers to customers, including warehousing, inventory management, and selecting the appropriate transportation methods (Boit & Osoro, 2021).

Order Fulfillment: The process involves accepting the orders of the customers, picking, and packing the products and makes them ready to ship the items; Shipping and Tracking: It would ensure the products are shipped on time and the accuracy of shipping of the products, which would have real-time tracking of the products shipped (Boyce, 2020). Delivery Products: Supply different delivery products like; Standard, express, same-day to serve customers and their needs. Returns and exchanges: Procedures on how to deal with returns and exchanges should be worked out so as to satisfy the customers. Customer Service: To give sufficient and fast response to any problem related to delivery or concern of the customer. Technology Integration: Making use of technology to optimize efforts in delivery; use of ERP systems, transportation management systems, e-commerce platforms to optimize efforts made in delivery. Performance Measurement: Consistent performance measurement of the delivery performance factors like on time delivery, cost of delivery and customer satisfaction to recognize the aspects that can be improved (Boit & Osoro, 2021).

The Importance of Supply Chain Management; Proper management of supply chains is a very significant factor of any business irrespective of its size or the industry it deals in. With an efficient movement of goods and services between the supplier and the consumers, the company will save a lot of money, with a time lapse reduction, increase on quality assurance and satisfaction to customers (Boyce, 2020). Among the main advantages of effective supply chain management, there should be more visibility in all the stages of the production process. The latter helps businesses detect the possible areas of bottlenecks in real-time and make swift changes with the purpose of unblocking the whole working value chain. Risk mitigation is one more significant benefit. In case of interruptions caused by natural disasters or political instability among other unexpected factors, a well-designed supply chain will ensure that adverse effects to the production schedule and the level of customer service are limited by implementing contingency plans to enable quick reaction on-demand (Boit & Osoro, 2021).

In addition to these benefits, strong supply chain management can also lead to stronger relationships with suppliers as well as higher levels of collaboration between departments within an organization (Boyce, 2020). These factors contribute not only to more streamlined operations but also increased innovation and competitive advantage over time. It’s clear that effective procurement practices are essential for businesses looking to maximize efficiency while minimizing costs in today’s rapidly changing marketplace. As such, investing in robust supply chain management should be a top priority for any company seeking sustained success over the long term (Boit & Osoro, 2021).

Performance of Large Manufacturing Firms

Due to a number of international trade and commercial agreements, medium-sized and big industrial enterprises are currently facing increased pressure to increase their competitiveness. The majority of Gulf Large Manufacturing Firms (GMFs) have been compelled to refocus their operations in order to compete on supply chain-oriented variables, such as responsiveness, flexibility, and serviceability, instead of price and quality (Boit & Osoro, 2021). By recognizing and creating best SCM practices, the Gulf's major industrial companies will be able to boost their productivity, increase their assets, create jobs, and support the region's economic development. A

dynamic environment has been produced by increased competition, rapid technical advancement, a shorter product life cycle, more personalized products, and fluctuating input prices. As a result, manufacturers must be more adaptable, agile, and responsive to meet customer needs (Boyce, 2020).

The adoption and recognition of the best practices as well as its constant evolution are likely to lead to superior business capability resulting in enhanced competitiveness in the long run (Boit & Osoro, 2021). Some of the researches which have worked on examining various forms of best practices and how they have an impact on various levels of performances. On the basis of performance, large manufacturing firms in the Gulf have been divided into two groups namely low and high-performing firms. The undertaking of this study is informed by the assumption that the best firms in the gulf that are large manufactory firms are those who have the best practices. Instead, SCMPs is conceptualized using the seven-dimension construct; and the performance of large manufacturing firms of the Gulf is only two-dimensionally conceptualized (Boyce, 2020).

Supply Chain Management Practices (SCMPs) The seven dimensions of SCMPs include upstream (Supplier collaboration (SCMP/SC)) and downstream (Customer focus (SCMP/CF)) sides of the supply chain, flow of information in and across a supply chain (usage of internet (SCMP/UoI)) and process within the supply chain (flexibility with partners (SCMP/FwP), lean production (SCMP/LP), internal integration (SCMP/II) and quality management (Boyce, 2020). Though the seven dimensions reflect the main factors of SCM practices, the conceptualization cannot be called the list that comprises everything since there will always be certain other factors (geographical proximity, logistics integration, cross-functional teams and so on) which in turn play an important role in the practice.

Supply chains management and improvement. The final conclusion towards which a number of researchers have gravitated is that SCMPs are eventually aimed towards enhancing the performance of firms though this has been named differently as well as deemed through a multidisciplinary lens (Boit & Osoro, 2021) (Boit & Osoro, 2021). Due to a number of international trade and commercial agreements, medium-sized and big industrial enterprises are currently facing increased pressure to increase their competitiveness. The majority of Gulf Large Manufacturing Firms (GMFs) have been compelled to refocus their operations in order to compete on supply chain-oriented variables, such as responsiveness, flexibility, and serviceability, instead of price and quality (Boit & Osoro, 2021). By recognizing and creating best SCM practices, the Gulf's major industrial companies will be able to boost their productivity, increase their assets, create jobs, and support the region's economic development. A dynamic environment has been produced by increased competition, rapid technical advancement, a shorter product life cycle, more personalized products, and fluctuating input prices. As a result, manufacturers must be more adaptable, agile, and responsive to meet customer needs (Boyce, 2020).

Empirical Review

Planning Practices

These are some of the supply chain planning techniques and approaches that are utilized by companies to facilitate a smooth, comprehensive supply chain: Data collection Up-to-date data comprising of accurate figures provides and precise data and details that help to understand the supply chain in detail and makes fast decisions (Busola et.al., 2020). Lean principles. Under a system of supply management, which is based on the just-in-time concept, the management will cut down the cost of inventory. There is a quicker delivery of orders and there are fewer overheads (Gatari et al., 2022). This allows easy flow of inventory. Amplified visibility; A supply chain can be an accident-prone area leading to wastages. Having improved visibility of operations one could

minimize the level of inventory losses. Standardization. The supply chain boosts its revenue both in the long run and short run with an enterprise resource system that promotes increased efficiency as a result. As the planning system is in place, the choice of software that can be comprehended by the team becomes an incentive to work with them as there are fewer risks to commit the mistake in the future (Eldin & Ragab, 2019).

Advantages of supply chain planning; When a company has a good supply chain planning system it will gain a number of advantages that could help it improve its competitiveness. These advantages can be as follows: Cost reduction There are some key areas in which a company can facilitate the process of less cost (Griver & Drenser, 2022). Reduced prices will lead to: Better inventory control; Better stocking place of products that are ready and eliminate the risk of damage or wastage of resources; Better systems to respond to customers; Better relations between distributors and the people they sell the products. Better efficiency; As long as a business has gained the ability to integrate chains of supply, innovative product practices, and combined logistics, it will place the organisation in a better place to forecast the demand and make the necessary pathways (Gatari et al., 2022).

The overall prevalence of HIV was (Gatari et al., 2022). This will be the largest advantage. When the organization possesses a well-developed supply chain, this enables it to cope with a dynamic market and adapt to it without constant micro-management and additional analysis; The output of the organization can be increased as well; The communication improves with the supply chain systems as well. The effect of this improvement is the improvement of coordination and cooperation among the companies which deal with the management of the shipments and transportation such as vendors and suppliers.

Improved teamwork; Good business is characterized by better communication. Absent clear communication, the vendors, distributors, and employees of the business might not be able to know your plans systematically (Griver & Drenser, 2022). What supply chain planning does is that improved communication among all entities is achieved and this leads to improved cooperation. Technology has created a way to keep the communication lines open even in a remote working environment or between multi-international offices and time zone. Better profits; When companies become open to advanced technology and employ superior cooperation across the board, it becomes efficient and productive, which translates to a higher degree of profits. Improved supply chain network, the addition of a combination of lean principles to a supply chain, including stock control or waste management, aids establishing a continuous improvement system. Information of more than one business domain improves the supply chain system of your business. minimize Days delay; Delays in supply chain functions can be minimized through a well-laid communication system. Given that each individual in the system has the correct perception of their role in the business, a number of production line challenges can be resolved (Gatari et al., 2022).

Delivery Practices

These are storage, apportionment, touring and the final process of taking the product to the doorstep of the customer. Order Fulfillment: This means taking of customer orders, placing them accurately, and handling the inventory according to the need. Warehousing and Distribution: This involves storing, controlling and effectively transporting goods in warehouses and distribution centers or even directly to customers (Griver & Drenser, 2022). Transportation: This entails finding the right mode of transport (truck, rail, air etc) and the logistics involved in sending the goods to where they are supposed to go. Last-Mile Delivery: This is the last stage of finalizing the delivery of goods at the doorstep of a specific customer, which is usually provided by specialized logistics companies or technologies such as delivery applications (Gatari et al., 2022).

Supply chain management's three elements are; an essential component of any company that handles production, sourcing, and distribution is supply chain management. Managing the movement of products and services from their starting point to their destination is part of the process (Gatari et al., 2022). Supply chain management consists of three parts: logistics, operations, and procurement. Procurement refers to the acquisition of goods or services from external sources (Griver & Drenser, 2022). It involves identifying suppliers who can provide high-quality products at an affordable price. Procurement also includes negotiating contracts with suppliers, monitoring supplier performance and ensuring timely delivery of products. Operations involve transforming raw materials into finished products through various processes such as large manufacturing or assembly. Operations managers strive to optimize production processes by minimizing waste while maximizing efficiency. Logistics focuses on the transportation and storage of finished goods within the supply chain network. This component ensures that products are delivered on time to customers through efficient routing, tracking systems and inventory management techniques. Effective supply chain management requires careful coordination among these three components – procurement, operations, logistics – along with other elements such as demand forecasting and customer service. By properly managing each component in harmony with one another; businesses can improve product quality while reducing costs which ultimately leads to increased profits (Gatari et al., 2022).

RESEARCH METHODOLOGY

The study adopted a descriptive research design that incorporated both qualitative and quantitative approaches. The qualitative component relied on secondary data that were analyzed descriptively, while quantitative data were collected through questionnaires and analyzed to establish relationships among the study variables. The combination of the two approaches enabled a comprehensive examination of supply chain practices and organizational performance (Kothari, 2011).

The target population comprised 163 respondents drawn from large manufacturing firms in Nairobi City County, Kenya. The respondents included Procurement Managers, Finance Managers, Production Managers, and Administrator Managers who possessed relevant knowledge regarding organizational operations and supply chain activities (Ghauri et al., 2020). A census survey was adopted because the target population was relatively small, allowing all members of the population to participate in the study. In addition, purposive sampling was used to identify respondents with relevant experience and exposure in supply chain management functions (Kothari, 2011).

Data were collected using structured and semi-structured questionnaires developed in line with the study objectives. The questionnaires contained both closed-ended and open-ended questions to obtain quantitative and qualitative information from respondents. The questionnaires were administered and collected after a period of three weeks, with confidentiality assured throughout the data collection process (Bell et al., 2023).

A pilot study involving 16 respondents, representing 10% of the target population, was conducted to assess the suitability of the research instrument before the main survey. The pilot study helped establish the reliability and validity of the questionnaire and confirmed its adequacy for data collection (Ghauri et al., 2020). Data analysis was conducted using the Statistical Package for Social Sciences (SPSS) Version 29. Descriptive statistics were used to summarize the data, while multiple regression analysis was employed to determine the effect of planning practices, and

delivery practices on the performance of large manufacturing firms. The results were presented using tables and figures to facilitate interpretation of the findings (Bell et al., 2023).

RESEARCH FINDINGS AND DISCUSSION

Out of 147 questionnaires that were circulated to the respondents, 129 of the respondents dully filled and retuned questionnaires; yielding a response of 87.6%. This was considered to be a very reliable response rate for the generalization of study findings which is in line with Sharma (2015), who states that a response rate of 70% and above is believed to be a reliable response rate. This was less 16 (10%) respondents who were pilot tested.

Descriptive Statistics

In this section, the study presents findings on Likert Scale questions on the role of supply chain management practices and performance of large manufacturing firms in Nairobi City County, Kenya. The study specifically presents the effect of planning practices, and delivery practices on performance of large manufacturing firms in Nairobi City County, Kenya. Respondents were asked to use a 5-point Likert Scale where 5 (SA) = Strongly Agree, 4(A) = Agree, 3(N) = Neutral, 2 (D) = Disagree, and 1(SD) = Strongly Disagree. Results obtained were interpreted using means and standard deviations where a mean value of 1-1.4 was interpreted as; (SD) =Strongly Disagree, (D)= Disagree, N= Neutral, (A)= Agree and (SA) = Strongly Agree.

Planning Practices

Respondents were requested to give their responses in regard to Planning Practices in a five-point Likert Scale where SA=Strongly Agree, A=Agree, N= Neutral, D=Disagree, and SD= Strongly Disagree. Results obtained were presented in Table 1 below:

From the table, the respondents unanimously agreed that Planning Practices affected performance of large manufacturing firms in Nairobi City County, Kenya. Among the practices studied was periodic review and the respondents agreed that they affected the performance of large manufacturing firms with a Mean of 3.742 and Standard Deviation of 1.0600; On the impact of demand forecasting on performance of manufacturing firms in the County, the respondents gave neutral response with a mean of 3.533 and Standard Deviation of .920; Regarding the importance of managing inventory on performance of large manufacturing firms, the respondents strongly agreed with a Mean of 3.903 and Standard Deviation of .910;The same was observed with the importance of analysing level of spending whereby the respondents gave a response of strongly agree with a Mean of 4.061 and Standard Deviation of .12949.

On the suggestion that failure to undertake demand planning had no impact on performance of large manufacturing firms in Nairobi City County, Kenya the respondents disagreed with a Mean of 3.541 and Standard Deviation of 1.3018; Generally on whether Planning Practices affect performance of large manufacturing firms in Nairobi City County, Kenya, the respondents agreed with a Mean of 3.566 and a Standard Deviation of .7015. This finding concurs with Nyile *et al.* (2022) who observed that clear description of Planning Practices enhances effective performance of large manufacturing firms in Nairobi City County, Kenya.

Table 1: Descriptive Statistics on Planning Practices

Statement	Mean	Std. Dev.
Periodic reviews affect performance of large manufacturing firms in Nairobi City County.	3.74	1.060
Demand forecasting has an impact on performance of large manufacturing firms in Nairobi City County.	3.53	0.920
Managing inventory is important for performance of large manufacturing firms in Nairobi City County.	3.90	0.905
Analysing level of spending is important for performance of large manufacturing firms in Nairobi City County.	4.06	0.129
Failure to undertake demand planning does not affect performance of large manufacturing firms in Nairobi City County.	3.54	1.301
Aggregate Mean/Standard Deviation	**3.566**	**0.701**

Source: Research Data (2026).

Delivery Practices

Respondents were asked to give their responses in regard to delivery practices on performance of large manufacturing firms in Nairobi City County, Kenya i.e. 5-point Likert Scale where SA=Strongly Agree, A=Agree, N= Neutral, D=Disagree, and SD= Strongly Disagree. Their responses are presented in table 2 below:

From table 2, respondents agreed that delivery practices ensure performance of Nairobi City County, Kenya; the respondent gave a Mean of 4.037 and Standard Deviation of .7307; maximizing delivery to warehouse improves performance of large manufacturing firms in Nairobi City County, Kenya , the respondents gave strongly disagree response with a Mean of 4.002 and Standard Deviation of .7307; transportation mode affects performance of large manufacturing firms in Nairobi City County Kenya; they gave strongly agree response with a Mean of 4.206, Standard Deviation of .8130; ensuring there are clear distribution routes is important for better performance of large manufacturing firms in Nairobi City County, Kenya they gave a Mean of 4.009 and Standard Deviation of .8073;

These findings are in line with the findings of Nyile *et al.* (2022) who observed that the improvement of delivery practices is the best value reaction to sort out non-performance and increase return on investment.

Table 2: Descriptive Statistics on Delivery practices

Statement	Mean	Std. Dev.
Delivery practices affect performance of large manufacturing firms in Nairobi City County, Kenya.	4.03	0.730
Maximizing delivery to warehouses improves performance of large manufacturing firms in Nairobi City County.	4.00	0.730
Mode of transport affects performance of large manufacturing firms in Nairobi City County, Kenya.	4.20	0.813
Clear distribution routes improve performance of large manufacturing firms in Nairobi City County, Kenya.	3.95	0.836

Source: Research Data (2026).

Performance of Large Manufacturing Firms in Nairobi City County, Kenya

Respondents gave their level of agreement on various statements relating with performance of Manufacturing Firms in Nairobi City County, Kenya. The results were as presented in Table 3 below:

From the research findings, respondents were in agreement that performance of large manufacturing firms in Nairobi City County , Kenya, is affected by Planning Practices, whereby they agreed at 62%; When they were asked to indicate their level of agreement on effect of Delivery Practices on performance of large manufacturing firms in Nairobi City County, Kenya, they gave agree response of 74%; The outcome is in line with the findings of Mutai and Osoro (2021) who observed that some of the factors that contribute to inefficiency in public procurement as corruption, delayed payments, poor planning, statutory amendments, insufficient use of strategic evaluation, low public participation, and improper payment procedures negatively affects performance of large manufacturing firms in Nairobi City County, Kenya.

Table 3: Descriptive Statistics on Performance of Manufacturing firms in Nairobi City County, County

Statement	Yes (%)	No (%)
Planning practices affect performance of large manufacturing firms in Nairobi City County, Kenya.	62	38
Delivery practices affect performance of large manufacturing firms in Nairobi City County, Kenya.	74	26

Source: Research Data (2026).

Pearson Correlation Analysis

The study further conducted inferential statistics entailing both Pearson and regression analysis with a view to determine both the nature and respective strengths of associations between the conceptualized predictors such as Planning Practices, and Delivery Practices and their effect on performance of large manufacturing firms in Nairobi City County, Kenya.

Table 4: Correlation Coefficients

Variable		Performance	Planning Practices	Delivery Practices
Performance of Large Manufacturing Firms	Pearson correlation	1		
Planning Practices	Pearson correlation	.534**	1	
	Sig. (2-tailed)	.000		
	N	129	129	
Delivery Practices	Pearson correlation	.150*	.240*	1
	Sig. (2-tailed)	.000	.035	
	N	129	129	129

From the findings, a positive correlation is seen between each independent variable and the dependent variable. The strongest correlation was established between Planning Practices and Performance of Large Manufacturing Firms in Nairobi City County, Kenya (r = 0.534) and the weakest relationship found between Delivery Practices and Performance of Large Manufacturing Firms in Nairobi City County (r = 0.150). This is in tandem with the findings of Ongeri and Osoro (2021), who observed that all independent variables were had a statistically significant association with the dependent variable at over 0.05 level of confidence.

Regression Analysis

Model of Goodness of Fit

Regression analysis was used to establish the strengths of relationship between the performance of large manufacturing firms in Nairobi City County, Kenya, (dependent variable) and the

predicting variables; Planning Practices, and Delivery Practices (Independent Variables). The results indicated a correlation value (R) of 0.806 which depicts that there is a good linear dependence between the independent variable and dependent variables. This finding is in line with the findings of Ongeri and Osoro (2021). They observed that this also to depict the significance of the regression analysis done at 95% confidence level. This implies that the regression model is significant and can thus be used to evaluate the association between the dependent and independent variables. This finding is in line with the findings of Ottmann (2015), who observed that analysis of variance statistics examines the differences between group means and their associated procedures.

Table 5: Model of Goodness of Fit

Model	R	R Square (R^2)	Adjusted R Square	Std. Error of the Estimate
1	0.806	0.649	0.614	0.052

a. Predictors: (Constant), Planning Practices, and Delivery Practices.
b. Dependent Variable: Performance of Large Manufacturing Firms in Nairobi City County, Kenya.

With an R-squared of 0.649, the model indicates that Planning practices, and Delivery practices can contribute up to 64.9% on performance of large manufacturing firms in Nairobi City County while 35.1% is variation which is explained by other indicators which were not included in this study or model. A measure of goodness of fit synopses the discrepancy between observed values and the values anticipated under the model in question. This finding is in line with the findings of Mwakubo and Ikiara (2007).

Analysis of Variance (ANOVA) Test

From the results in table 4.15, analysis of variance statistics was conducted to determine the differences in the means of the dependent and independent variables to indicate whether a relationship exists between the two. The P-value of 0.005 implies that organizational performance of large manufacturing firms in Nairobi City County have a significant relationship with Planning practices and delivery practices which is significant at 95 % level of significance.

Table 6: ANOVA Test

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.155	1	1.073	21.417	0.000
Residual	6.465	128	0.051		
Total	10.620	129			

a. Predictors: (Constant), Planning Practices, and Delivery Practices.
b. Dependent Variable: Performance of Large Manufacturing Firms in Nairobi City County, Kenya.

Regression Coefficients of Determination

To determine the relationship between the independent variables and the dependent variable and the respective strengths, the regression analysis produced coefficients of determination. Findings in table 7 reveal a positive relationship between the independent variables and performances of large manufacturing firms in Nairobi City County, Kenya,

From the result indicated below, it's clear that when all the independent variables are regressed against the dependent variable the constant gives a negative result meaning there is a strong relationship and each predictor has an effect on the dependent variable.

Table 7: Regression Coefficient Results

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	-0.130	0.060	—	-4.004	0.002
Planning Practices	0.420	0.132	0.555	5.472	0.002
Delivery Practices	0.354	0.115	0.321	2.657	0.001

b. Dependent Variable: performance of large Manufacturing firms in Nairobi City County, Kenya

A unit change in planning practices would thus lead to a .420 effect on performance of large Manufacturing firms in Nairobi City County, Kenya sector ceteris paribus. Further a unit change in delivery practices would lead to .354 effect on performance of large manufacturing firms in Nairobi City County and finally a unit change in strategic resolution would have an effect of .354 of performance of large manufacturing firms in Nairobi City County, Kenya. This finding is in line with the findings of Ongeri and Osoro (2021). This implies that among other factors, Planning practices, and delivery practices are significant determinants of performance of Manufacturing firms in Nairobi City County, Kenya.

Conclusion

The study concludes that there is a positive relationship between Planning practices and performance of large manufacturing firms in Nairobi City County, Kenya. These practices include periodic review, demand forecasting, inventory management, analysis of level of spending and demand planning.

The researcher concludes that there is a positive relationship between Delivery Practices and performance of large manufacturing firms in Nairobi City County, Kenya. The practices include maximizing delivery to warehouse improves, transportation mode and clear distribution routes.

Recommendations

The study recommends embracing planning practices including periodic review, demand forecasting, inventory management, analysis of level of spending and demand planning for improvement of performance of large manufacturing firms.

This researcher recommends that delivery practices maximizing delivery to warehouse improves, transportation mode and clear distribution routes need to be taken into account as large manufacturing firms in Nairobi City County endeavour to improve their performance.

REFERENCES

Abdow, A. I., Guyo, W., & Odhiambo, R. (2018). Influence of human capital development on organizational change in the petroleum industries in Kenya. *European Journal of Business and Management, 10*(4), 9–14.

Abimanyu, W., Wawan, H., & Erry, R. (2019). Analysis of inventory management using methodology ROP (reorder point) to minimize DOI (days of inventory). *International Journal of Innovative Science and Research Technology, 4*(7), 313–317.

Adan, M. N. (2018). *Influence of strategic planning on performance of National Bank of Kenya* (Doctoral dissertation, University of Nairobi).

Bahati. (2023). *Organizational cultural change and its impacts on performance in public institutions: The case of Tanzania Public Services College* (Master's thesis, The Open University of Tanzania).

Barasaa, E. W., & Makenzie, C. (2021). Influence of inventory control practices on procurement performance of public hospitals in Trans Nzoia County. *International Journal of Sciences: Basic and Applied Research, 55*(2), 35–58.

Bell, E., Bryman, A., & Harley, B. (2023). *Business research methods*. Oxford University Press.

Boit, S. J., & Osoro, A. (2021). Factors affecting women in strategic management on performance of county government in Trans Nzoia, Kenya. *The International Journal of Business & Management, 9*(10).

Boyce, W. S. (2020). Supply chain relationships. In *Supply Chain and Logistics Management* (pp. 1695–1707).

Busola, et al. (2020). Analysis of inventory management practices for optimal economic performance using ABC and EOQ models. *International Journal of Management, 11*(7), 835–848.

Danny, M., & Jamal, S. (1996). The resource-based view of the firm in two environments: The Hollywood film studios from 1936 to 1965. *Academy of Management Journal, 39*(3), 519–543.

Delbufalo, E. (1956). Agency theory and supply chain management: A literature review. In *Agency Theory and Sustainability in the Global Supply Chain* (pp. 1–15).

Eisenhardt, K. M. (1989). Agency theory and financial planning practice. *Australian Economic Review, 47*(3), 290–303.

Eldin, A., & Ragab, A. (2019). Examining the effect of procurement practices on organizational performance in service organizations: A case study of the Arab Academy for Science, Technology and Maritime Transport. *International Journal of Business and Management Invention, 8*(3), 17–31.

Gatari, C., Shale, N., & Osoro, A. (2022). Inventory management and sustainable performance of state corporations in Kenya. *International Journal of Supply Chain Management, 7*(1), 56–68.

Ghauri, P., Grønhaug, K., & Strange, R. (2020). *Research methods in business studies*. Cambridge University Press.

Griver, K., & Drenser, M. (2022). *Journal of Supply Chain Management, 58*(2), 48–65.

Kothari, C. R. (2011). *Research methodology: Methods and techniques* (2nd ed.). New Age International Publishers.

Lancion, R., & Howard, K. (2019). Inventory management techniques. *International Journal of Business Management*.

Muinde, M., & Mukulu, E. (2020). Influence of procurement risk management on procurement performance in public universities in Kenya. *International Journal of Economics, Commerce and Management*, 395.

Mutai, V. K., & Osoro, A. (2021). Strategic engineering management on performance of all commercial banks in Nyeri County in Kenya. *International Journal of Scientific and Research Publications, 11*(10).

Nyile, E. K., Ismail, N. S., & Osoro, A. (2021). Influence of supply chain leagility on performance of humanitarian aid organizations in Kenya. *Journal of Business and Economic Development, 6*(1), 37–57.

Ongeri, N. V., & Osoro, A. (2021). Effect of warehouse consolidation on performance of registered distribution firms in Nairobi City County in Kenya. *The International Journal of Business & Management, 9*(10).

Sharma, S. (2015). *Research methodology and statistical techniques*. [Publisher not provided].

Umair, A., Zhang, W., Han, Z., & Haq, S. (2019). Impact of logistics management on customer satisfaction: A case of retail stores of Islamabad and Rawalpindi. *American Journal of Industrial and Business Management, 9*(1), 1723–1750.