

**INFLUENCE OF WAREHOUSE MANAGEMENT PRACTICES ON  
OPERATIONAL EFFICIENCY: A CASE STUDY OF FARGO COURIER LIMITED**

**FRIDAH RUDIAH NJUGUNA**

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THE AWARD OF THE DEGREE OF BACHELOR OF MANAGEMENT AND  
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## DECLARATION

This project is my original work and has not been presented for a degree in any other University

Signature..... Date .....

Fridah Rudiah Njuguna

BML/34/01276/1/23

This project has been submitted for examination with my approval as University Supervisor

Signature..... Date .....

Prof Emmanuel Awuor

The Management University of Africa

## **DEDICATION**

I dedicate this study to my loving husband, David Dickson Gitari, and our wonderful children, Ashley Kagendo and Jayden Njuguna. Your steadfast assistance, patience, and encouragement have been my greatest a source of support during this academic endeavour. I also honour the memory of my late mother, Veronica Muthoni, whose values and love continue to guide me. Special thanks to my father, David Njuguna, for his steady presence and belief in my dreams. This achievement is ours together.

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## ABSTRACT

The general objective of this study was to examine the influence of warehouse management practices on operational efficiency: A case study of Fargo Courier Limited. Specific Objectives included; To assess the effect of strategic supplier partnerships on operational efficiency at Fargo Courier Limited, to examine the influence of warehouse layout on operational efficiency at Fargo Courier Limited, to evaluate the impact of the inventory management system on operational efficiency at Fargo Courier Limited and to determine the effect of technology adoption on operational efficiency at Fargo Courier Limited. A descriptive survey was used for the study design. This research's primary target group was employees of Fargo Courier Limited. Thus, 93 employees of Fargo Courier Limited were targeted. The research employed a census to select the suitable sample size since the study population is fairly small. To acquire primary data, a questionnaire with structure was implemented as a collection information strategy. Pilot research was carried out to test the survey questions beforehand. This research project used a quantitative data analysis approach, including consistency checks, data cleaning, and descriptive statistics to examine structured questionnaires and data obtained. The study found that Strategic supplier partnerships enhance operational efficiency by streamlining processes and reducing costs. These partnerships are reinforced by well-defined contracts, ensuring seamless service and responsiveness to shifting demands. Warehouse layout design, including sufficient storage space, efficient personnel and equipment movement, and strategically placed storage racks, also contribute to operational efficiency. The inventory management system at Fargo Courier Limited improves stock levels, decision-making, and inventory control practices, reducing operational inefficiencies. Technological adoption, such as real-time tracking tools and robotics, enhances warehouse performance and efficiency, enhancing order fulfillment and minimizing downtimes. These factors directly impact Fargo Courier Limited's operational effectiveness. The study recommends that Fargo Courier Limited strengthen its operational efficiency through strategic supplier partnerships, restructure warehouses, and improve workflow efficiency. It suggests evaluating workflows, adjusting aisle widths and storage arrangements, and implementing ergonomic storage systems for efficient order fulfillment. The study also suggests incorporating sophisticated systems for managing inventories, including robotics, AI systems, and IoT devices, to improve real-time tracking and forecasting accuracy. Regular staff training and regular audits are also recommended. The use of modern technologies, such as automation, can enhance speed, precision, and real-time data retrieval. The study also suggests conducting a single case comparative study on various courier or logistics companies to gain insights into optimal industry practices and standards. The study also highlights the impact of automation and digital shifts on employee roles, customer perceptions, and environmental sustainability.

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## **ACRONYMS AND ABBREVIATIONS**

- RFID** : Radio-Frequency Identification
- WMPs** : Warehouse Management Practices
- WMS** : Warehouse Management System

## OPERATIONAL DEFINITION OF TERMS

- Inventory Management System** : A system or process used to track, control, and optimize stock levels, ensuring accurate, timely inventory data and minimizing stockouts, overstocking, and shrinkage.
- Operational Efficiency** : A measure of how effectively an organization uses resources to deliver services or goods, minimizing waste and delays while maximizing productivity and service quality.
- Strategic Supplier Partnerships** : Long-lasting collaborations amongst firms and key vendors aimed at improving reliability, cost efficiency, and mutual value through shared goals, trust, communication, and joint planning.
- Technology Adoption** : The integration and use of digital tools such as WMS, RFID, and automation in warehouse operations to increase speed, accuracy, and overall efficiency.
- Warehouse Layout** : The physical arrangement of storage areas, equipment, and movement paths in a warehouse, designed to optimize space utilization and streamline inventory handling and flow.

# CHAPTER ONE

## INTRODUCTION

### 1.0 Introduction

The chapter was organized according to the following outline: Background to the study, statement of the problem, and research objectives and questions. Moreover, the chapter describes the scope and importance of this research.

### 1.1 Background

According to Buzu (2021), warehousing management techniques relate to the strategies, processes, and tactics utilized to successfully supervise commodity distribution, processing, and storage inside a warehouse. Warehouse Management Practices are critical to the logistical operations of processing companies in both developed and developing countries. They boost efficiency and effectiveness in regulating products transportation and storage, resulting in higher corporate performance. WMPs maximize space, labor, and equipment use, lowering handling and storage expenses. Oluyemisi et al. (2020) believe that WMPs are critical for increasing the value of commodities, maximizing quality, regulating inventory levels, and maintaining product safety (Abdul Rahman, et al., 2023).

According to Mwizerwa and Akumuntu (2024), warehouse management systems incorporate real-time data, scheduling, and package monitoring to identify and address issues as soon as feasible. They also reduce delays and assist in identifying bottlenecks. In international logistics, warehouse management is essential for maintaining a seamless supply chain and providing customer service. When it comes to attaining and making shop revenues, location is crucial. To increase storage capacity and get a competitive edge, warehouse area optimization is crucial. Value-added services, stock control, reverse logistics, customer care, distribution, customer clearing, and other value-added services should all be provided by warehouses. The productivity of the workforce, the material handling procedure, and the warehouse management system all affect overall warehouse performance (Buzu, 2021).

Globally, significant operational efficacy is ensured by effective warehouse management. Amazon in the United States exemplifies a corporation using contemporary automation and a real-time inventory system to optimize warehouse efficiency, accelerate order processing, and reduce errors (Udoh & Oluka, 2024). German courier firms use lean warehousing and just-

in-time methodologies to optimize space and labor, enhance delivery precision, and save expenses. The integration of robots with Kaizen concepts in Japan promotes continuous process improvements in warehouses, hence augmenting productivity and efficiency. All these countries use advanced technology that enhance their strategic frameworks and procedures, leading to greater operational efficiency and competitive advantage throughout the supply chain performance (Faber, De Koster, & Smidts, 2018).

In Africa, warehouse management strategies significantly influence operational efficiency across various areas. Retailers in South Africa have adopted WMS leading to higher order accuracy owing to increased automation in retail and fast-moving consumer goods (FMCG). Logistics businesses are boosting spending into worker training as well as inventory management solutions targeted at stockout reduction paired with speedier delivery in Nigeria (Nenavani & Jain, 2022). Businesses in Egypt are currently focusing on integrating ERP systems along with enhancing warehouse layout aiming towards smoother operations with higher accuracy over inventory. Operational efficiency is increasing all throughout the continent, while adoption levels varied from area to region (Kumar et al., 2023)

In Kenya, efficient warehouse management is reaping increasing emphasis concerning operational efficiency in fields such as carriage, manufacturing, and retail. More organizations are employing Warehouse Management Systems (WMS) to increase monitoring of stocks, orders, and space use (Mohamud et al., 2023). Companies like Safaricom and Twiga Foods manage their stocks digitally and have altered their warehouse layouts to shorten lead times and cut the cost of operations. Moreover, personnel training paired with barcodes and RFID technologies are boosting picking and dispatch accuracy. The need for expedited and reliable delivery is reshaping contemporary practices in Kenya due to increasing competition with traditional warehouse methods (Laosirihongthong, et al., 2018).

### **1.1.1 Strategic Supplier Partnerships**

Strategic supplier partnerships establish ongoing collaborative networks linking a firm with essential suppliers based on trust, similar objectives, mutual advantages beyond simple transactions like better supply continuity or even decreased costs while maximizing innovations (Atnafu, & Balda, 2018). Earnest connections with suppliers may also involve shared planning sessions for future orders followed by assessment meetings on previously set performance indicators with co-created risk mitigation methods. The partnership's evolution

is evaluated through metrics such as duration, integration depth, decision-making, contract renewals, communication frequency, joint problem-solving engagements, reliable lead times, and consistent quality benchmarks (Nenavani, & Jain, 2022).

### **1.1.2 Warehouse Layout**

The warehouse layout deals to the placement of items, equipment, and the routes inside a warehouse in such a manner as to optimize space use while simplifying movement of stock and workers. A correctly planned layout enhances picking efficiency while lowering congestion and handling time. While most businesses employ zonal plans or flow-through designs, some also adopt U-shaped layouts. The metrics evaluating operational efficiency in warehouses include warehouse space utilization rates, average picking distance, travel time for different jobs, item accessibility, and worker accidents within defined areas (Mohamud et al., 2023).

### **1.1.3 Inventory Management System**

An inventory management system includes of procedures, tools, and software essential for monitoring ordered products in stock as well as their storage level along with controlling the reorder points of each individual product smoothly boosting overall productivity control systems. An efficient inventory management system decreases overstock occurrences , lowers stock outs ,enhances order fulfillment improved accuracy. Automated warning signals, real-time information data, and predictive analytics are part of systems that deliver actionable insight on a continual basis, assuring ongoing optimization. Accurate inventory offers better monitoring, leading to enhanced performance, removing overstocks, lowering miss fulfillment rates, and avoiding reconciling shelf counts (Atnafu & Balda, 2018).

### **1.1.4 Technology Adoption**

Integrating digital tools and systems to speed operations, eliminate manual duties, and enhance accuracy in warehouse management is termed technology adoption. Automation of procedures like scanning barcodes, employing RFID systems, WMS, real-time tracking software, and other pertinent technologies qualifies as modern era technology adoption in warehouse management. The benefit of using such technology surely boosts visibility and control across all warehouse activities. In this respect, the goals are specified by the number of technologies installed, system utilization rate, percentage of automated operations, data accuracy improvement, training frequency on new systems. Moreover, job completion time

and mistake rate reduction are other valuable measures to analyze the effect of technology integration (Elrayah & Keong, 2023).

### **1.1.5 Operational Efficiency**

Operational efficiency relates to the capability of supplying services or goods with respect to lowest resources needed while optimizing production and quality within a certain organizational setup constraint. This concentrates around optimizing process components along with waste reduction while increasing turnaround time. Order accuracy, cost efficiency, and time management are critical for company performance assessment in warehouse services. These factors may boost functional accuracy and offer as important insights. Customer satisfaction ratings and timeliness marks are crucial peripheral indicators that increase operational efficiency and display ease in accomplishing operational objectives (Buba et al., 2019).

### **1.1.6 Fargo Courier Limited**

Fargo Courier Limited is a private logistics and courier service provider headquartered in Kenya. Among the many services it provides are expedited package delivery, warehousing, freight forwarding, and document handling. The company serves corporate clients, SMEs, and individual customers through a network of branches across the country. Fargo employs various logistics technologies and relies on fleet management systems, trained personnel, and warehouse facilities to enhance service delivery. As a subject of study, it represents a model of how courier firms' structure and manage warehousing operations, making it relevant for operational efficiency analysis.

## **1.2 Statement of the Problem**

Warehouse management is essential to assuring operational efficiency by simplifying managing inventories, order processing, and space use (Mwizerwa & Akumuntu, 2024). However, many logistics organizations encounter ongoing inefficiencies that limit service delivery. Globally, warehousing may account for up to 25% of overall logistics expenses (Deloitte, 2022), with inefficiencies leading to delays and losses. In Kenya, approximately 40% of delivery delays among courier businesses are attributable to poor warehousing operations, including insufficient inventory systems and poor space use (KAM, 2023). Fargo Courier less, a prominent courier business, continues to battle with these difficulties, however less data exists on how certain warehouse management strategies effect operating efficiency (Mohamud et al., 2023).

Several research has been undertaken to analyze the influence of managing warehouses strategies on operational efficiency. Buba et al. (2019) discovered that integrated warehouse procedures considerably boost organizational efficiency via optimized procedures. Abdul Rahman et al. (2023) discovered that measuring efficiency measures such as picking accuracy and inventory turnover directly enhances logistics efficiency. Buzu (2021) revealed that warehousing strategies, including space efficiency and inventory management, impact warehouse performance favorably. Mwizerwa and Akumuntu (2024) stressed the relevance of warehouse structure and cooperation in enhancing supply chain results. Likewise, Faber et al. (2018) found that integrating warehouse management structure with operational context greatly enhances performance and operational agility. These data show the importance of good warehousing procedures.

While these studies support the importance of excellent warehousing procedures, few have focused on courier service organizations, especially in Kenya, leaving a gap in contextualized, industry-specific information.

### **1.3 Objectives**

The general objective of this study was to examine the influence of warehouse management practices on operational efficiency: A case study of Fargo Courier Limited.

#### **1.3.1 Specific Objectives**

- i. To assess the effect of strategic supplier partnerships on operational efficiency at Fargo Courier Limited.
- ii. To examine the influence of warehouse layout on operational efficiency at Fargo Courier Limited.
- iii. To evaluate the impact of the inventory management system on operational efficiency at Fargo Courier Limited.
- iv. To determine the effect of technology adoption on operational efficiency at Fargo Courier Limited.

### **1.4 Research Questions**

- i. What is the effect of strategic supplier partnerships on the operational efficiency of Fargo Courier Limited?
- ii. How does warehouse layout influence operational efficiency at Fargo Courier Limited?

- iii. What is the impact of the inventory management system on operational efficiency at Fargo Courier Limited?
- iv. To what extent does technology adoption affect operational efficiency at Fargo Courier Limited?

### **1.5 Significance of Study**

The research project will be significant to policy makers as it will expose the impacts of warehouse administration methods on the effectiveness of operations in the logistics industry. These characteristics will guide rules and standards that drive technological integration, engagement with important suppliers, and enhanced warehouse layout. This permits greater competition in national supply chains and couriers and delivery services.

The research results will give Fargo Courier Limited with concrete recommendations for strengthening warehouse operating procedures. via assessing the inventory control systems, personnel abilities, and spatial allocation efficiency, management teams may remedy identified operational weaknesses via precise interventions. Hence, delivery timetables are simplified, expenses decreased, customer satisfaction enhanced, thereby bolstering the company's market position.

From a scholarly standpoint, this study will expand knowledge of warehouse management within the courier service business in Kenya. As a point of reference, it will be utilized to compare other studies on various parts of logistics firm's operations or recurring study concerning operational efficiency. Also, the discoveries will lead to enhanced study in supply chain and operations management by identifying factors or oversights establishing new variables still demands deeper evaluation.

### **1.6 Scope**

This investigation investigated the influence of warehouse administration practices on operational effectiveness. The study focused on the following factors; Strategic Supplier Partnerships, Warehouse Layout, Inventory Management System, Technology Adoption. Employees of Fargo Courier Limited were the main target respondents. The research was conducted from the month of June 2025 to August 2025.

## **1.7 Chapter Summary**

The section discussed the background to the study, statement of the problem, and research objectives and questions. The chapter concluded the relevance of the study and scope the research.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.0 Introduction

The chapter described the literature that underpin the investigation. The chapter goes on to cover the relevant theories and studies, and also the research gaps. The chapter continues to provide the research's conceptual structure and operationalization of variables.

#### 2.1 Theoretical Literature Review

The study was anchored by Technology Acceptance Model (TAM) and supported by Just-In-Time (JIT) Inventory Theory.

##### 2.1.1 Technology Acceptance Model (TAM)

According to TAM, this was produced by Fred Davis in 1989, Perceived usefulness and perceived ease to utilize are the two most important factors influencing customers' purchasing decisions (Nguyen 2020). The perceived utility is the extent to which a person believes that utilizing some technology will enhance their general production or job performance. Conversely, perceived ease of use is the degree to which a person believes that utilizing the technology would be simple. These components work together to shape consumers' attitudes regarding technology use, which in turn affects how they actually use it (Margo & Jokonya, 2024).

A useful tool for comprehending user behavior in a variety of settings, such as consumer technology and business applications, is the TAM. It offers a clear method for comprehending acceptance by emphasizing perceived utility and usability. Organizations can assess user sentiment and spot any obstacles to technology adoption because to this ease. Adoption of a technology may be impacted by users' views of it, such as its complexity or lack of advantages, underscoring the need of user assistance and training. Over time, TAM has been modified to include both personal and external aspects, such as individual qualities and user experience, as well as enabling circumstances and social impact. The TAM is predicated on a number of assumptions, one of which being those individual perceptions, rather than outside influences, have a significant impact on user acceptability and that these views hold steady over time. Furthermore, TAM makes the assumption that perceived usefulness and usability have a linear relationship, meaning that as perceived utility or

usability increases, so does acceptance and use of the technology (Odhiambo, Ngugi, & Mutua, 2020).

TAM has drawn criticism for being too easy and concentrating primarily on perceived utility and usability, potentially ignoring other elements that impact technology adoption, such as human variations, corporate culture, and social influence. Critics contend that the complexity of actual technology adoption processes may be missed by this limited emphasis. Furthermore, biases may be introduced by TAM's dependence on self-reported assessments in terms of perceived utility and simplicity of usage, which might distort the findings. The theory's applicability to other fields, such mobile apps or cutting-edge technology like artificial intelligence, is called into doubt by its initial setting of information systems. Despite its benefits, TAM could need to be modified or expanded in order to better suit the many circumstances and ever-changing landscape of modern technology adoption. The impact of warehouse technology on Fargo Courier Limited's operating efficiency was evaluated using the model (Akinlabi, 2021).

TAM describes how people embrace and utilize technology according to its perceived utility and usability. In warehouse management, TAM helps assess how employees at Fargo Courier adopt technological systems like warehouse management software. Understanding user acceptance enhances implementation success and contributes to improved operational efficiency through better system usage and integration.

### **2.1.2 Just-In-Time (JIT) Inventory Theory**

By making sure that goods and resources arrive at the exact moment required for production, Taiichi Ohno created Just-In-Time inventory organization in the 1970s. This approach seeks to decrease waste and inventory levels. By emphasizing effectiveness and responsiveness, this strategy enables businesses to maximize inventory turnover and reduce holding costs. JIT lowers the danger of overproduction and surplus stock, which may tie up precious resources and cause obsolescence, by closely matching production schedules with demand (Gallien et al., 2020). The foundation of JIT is the continuous improvement concept, which is often connected to lean manufacturing. This kind of thinking pushes companies to examine their procedures, get rid of things that do not provide value, and encourage staff to solve problems. Organizations may react to consumer demands and market changes faster by optimizing processes and cutting lead times. This flexibility is especially helpful in fields where customer tastes or technological advancements occur quickly (Matsoso et al, 2021).

High levels of cooperation between distributors, manufacturers, and suppliers are necessary for the successful use of JIT. For dependable and prompt material delivery, businesses need to have good connections with their suppliers. In order to promote cooperation, this often entails exchanging data on production schedules and inventory levels (Kairu 2020). Organizations also need to invest in Technologies that enables actual time inventory and manufacturing process observing, enabling prompt modifications as necessary. JIT is not without its difficulties, however. Businesses that rely too much on on-time delivery may be vulnerable to supply chain disruption risks including natural catastrophes, unstable political environments, or transportation problems. As a result, companies have to weigh the advantages of JIT against the need for backup plans. To reduce any hazards, this may include creating alternate supply sources or keeping a certain amount of safety stock on hand (Kamau & Kagiri, 2021).

A system called Just-In-Time (JIT) Inventory Management uses precise product demand forecasts to match production to consumer demands. This strategy is predicated on a steady market with little variation in demand. JIT depends on suppliers providing supplies on time and consistently, necessitating strong bonds and efficient vendor-company communication. JIT is susceptible to supply chain interruptions, however, as any supplier problems or delays may stop production, which results in lost revenue and unhappy consumers. Industries that depend on a small number of important suppliers or have intricate supply networks are particularly vulnerable to this risk. Not every product type can benefit from JIT, particularly those with erratic demand trends or those in sectors where inventory acts as a tactical hedge against market volatility. JIT may also have a detrimental effect on workers' well-being since it puts more strain on them, which may lower morale and cause stress. Additionally, JIt is focus on cost reduction may overshadow the value of staff development and training, which might be harmful to long-term performance (Addy-Tayie, 2012).

JIT emphasizes receiving and managing inventory only when needed, reducing storage costs and waste. In warehouse management at Fargo Courier, JIT supports lean inventory practices, promoting efficiency through accurate forecasting, timely deliveries, and minimal stock levels. This approach aligns with operational efficiency goals by ensuring smooth workflow, minimizing delays, and optimizing space utilization in the warehouse.

## **2.2 Empirical Literature Review**

### **2.2.1 Strategic Supplier Partnerships and Operational Efficiency**

Nenavani and Jain (2022) studied the effects of strategic customer and supplier partnerships and supply chain adaptability affects efficiency in operations, moderating the effects of demand volatility. They collected data using a quantitative research design through structured questionnaires with 346 managers from Indian manufacturing firms. Supply chain professionals formed the sample population, which was drawn through stratified random sampling. Structural equation modeling (SEM) using Smart-PLS was used for the evaluation. All three predictors were confirmed to operational performance enhanced significantly but their effects were weakened by demand uncertainty. The research emphasized the significance of responsive relationship management with vendors and customers for operational success under variable market demand conditions.

Ngetich, Ndolo, and Wanyoike (2022) studied strategic supplier partnerships and their influence on the operational efficiency of food and beverages production companies in Nakuru County, Kenya. The study employed a descriptive research design focusing on 165 procurement staff with census sampling. Data was collected through structured questionnaires and analyzed descriptively and inferentially with SPSS. Results showed supplier partnership featuring strong positive correlation with delivery reliability, cost efficiency, and adherence to quality standards resulting in improved performance operational indicators. The study noted that sustained partnerships and active supplier participation in planning significantly improve performance in the manufacturing industry.

Chepleting, Namusonge, and Makokha (2023) studied the impact of strategic collaborations with suppliers on productivity in operations towards achieving food security through the Agricultural Food Authority in Kenya. For this study, a descriptive study approach was used, with an emphasis on employees in procurement and logistics with relevant government agencies, and a sample of 120 was obtained through purposive sampling. Data was gathered using surveys, and statistical techniques were employed for evaluation. The findings showed that strategic partnerships have a positive impact on efficiency by strengthening input access as well as prompt distribution. The study ended with recommending that vigorous supplier engagement should be prioritized for the food system resilience and national food security objectives.

### **2.2.2 Warehouse Layout and Operational Efficiency**

Mohamud et al. (2023) synthesized available literature to analyze a warehouse's operational layout, concentrating on the layout's role in enhancing warehouse efficiency. This study utilized a qualitative literature review approach, analyzing secondary data from over 50 peer-reviewed articles and industry reports. Its objective was to determine important layout design and operational techniques concerning the specified efficiency metrics of space usage, time saving, and labor productivity. The findings stressed that optimized layouts increase throughput by reducing material handling time and congestion. The authors concluded that achieving optimal warehouse and supply chain efficiency requires integration of strategic operational objectives into the design of the warehouse.

Tulli (2023) focused on techniques for optimizing warehouse layouts in order to enhance the efficiency of order fulfillment. Employing a conceptual-analytical research method, the study synthesized existing optimization model frameworks, which included ABC analysis, slotting strategies, and simulation-based methods. This study did not collect primary data but analyzed case-based examples and algorithmic models. The results demonstrated that picking speed and inventory accuracy substantially improved with the application of mathematical optimization along with technology integration. It was concluded from the study that businesses can achieve fast order processing with reduced travel distances when a strategic design layout coupled with data analytics is used, resulting in enhanced responsiveness overall.

Ernawati et al. (2023) assessed the influence of warehouse layout on productivity with focus on employees working at PT. Perkasa Primarindo located in Indonesia. The research used a quantitative descriptive method in which information was gathered through questionnaires from 50 employees in the warehouse selected through purposive sampling. Data was analyzed with SPSS using correlation and regression methods. Results indicated significant positive effects of the structure of layout on work productivity that include ease of movement for accessing goods. The study demonstrated that productivity makes workflow better, fatigue decrease, and employee performance increases in operations.

### **2.2.3 Inventory Management System and Operational Efficiency**

Khan, Emon, and Nath (2024) studied the influence of AI-powered inventory control on online retailers' operational effectiveness. The research adopted a quantitative experimental methodology combining simulation-based modeling utilizing real-time retail data from three

major Bangladeshi e-commerce platforms. Instruments featured AI algorithms connected with inventory systems, with performance data assessed using regression models and efficiency measurements. Results indicated that AI-enabled systems drastically decreased stockouts, increased demand forecasting, and boosted order fulfillment speed. The research showed that incorporating AI in inventory procedures may lead to significant increases in operational efficiency, making it a strategic instrument for competitive advantage in online retail.

Addy-Tayie (2012) focuses on enhancing warehouse and inventory management to boost operational effectiveness and transportation safety. The research adopted a qualitative case study technique, evaluating activities at a Ghanaian manufacturing and distribution organization. Data were acquired via observations, interviews, and document analysis. Findings found inefficiencies due by poor stock monitoring, unsuitable layout design, and inefficient coordination between storage and transport services. Recommendations included installing automated inventory systems, training people, and restructuring the warehouse structure. The research revealed that tighter integration between warehouse management and transportation planning greatly boosts operational efficiency and eliminates logistical hazards.

Akinlabi (2021) evaluated the influence of inventory administration strategies on Nigerian flour milling companies' efficiency in operation. A descriptive survey research approach was utilized, targeting 120 workers across three large milling enterprises, with stratified random sampling used. Well-organized surveys were used to collect information, and SPSS was used for regression evaluation and statistical analyses. Results demonstrated that good inventory practices—such as frequent stock assessments, use of contemporary inventory tools, and supplier coordination—positively affect cost reduction, production continuity, and prompt order fulfillment. The research revealed that efficient inventory management is critical for maintaining operational success in the milling sector.

#### **2.2.4 Technology Adoption and Operational Efficiency**

Nguyen (2020) conducted study on enhancing warehouse performance in Vietnamese logistics firms. Through the use of case studies to investigate research goals, this study is mostly carried out using a quantitative research approach. According to the findings, logistics firms in Vietnam have focused more on warehouse operations and made an effort to raise their level of awareness and performance. Modern technological equipment and more

advanced warehouse management system apps are helping almost all businesses reach greater performance levels. Nearly all of the responding organizations have adopted the trend of using IT to upgrade machinery and equipment with more information exchange and integration with suppliers and customers. According to the report's findings, Vietnamese logistics firms have been making progress in offering their customers fully integrated logistics services, including freight forwarding, customs clearance, handling, transportation, warehousing, document services, and added value services.

In Kiambu County, Kenya, Wanjiru and Ngugi (2020) looked at how e-warehousing affected the effectiveness of public health facilities. Descriptive research approach was adopted in this study. Detailed information on a single participant or small group, sometimes including the participants' own stories, is gathered and presented using a descriptive study approach. According to the report, e-warehousing makes it possible to implement a real-time warehouse management system that significantly reduces the amount of paperwork typically involved in warehouse operations and ensures that inventory and information flow in a timely and flawless manner. For public health institutions, E-storage offers a wide variety of fulfillment, storage, and distribution services. Based on the results of the investigation, e-warehousing is crucial to the rapid and robust expansion of public health institutions' supply chains in Kiambu.

Mutua, Ngugi, and Odhiambo (2020) investigated how digital warehousing practices affected the efficiency of Kenyan large manufacturing corporations. The heads of supply chain, production, and logistics made up the unit of observation, while the 138 major manufacturing companies that were registered with the Kenya Association of Manufacturing as large-scale manufacturing enterprises made up the unit of analysis. Questionnaires were used in the procedure for gathering data. The findings of the study showed that digital warehousing technology significantly improved the performance of big manufacturing companies. In light of the findings, the research came to the conclusion that large manufacturing companies in Kenya perform better and more significantly when lean warehousing practices like efficient storage, automated selection, integrated order fulfillment, and efficient packaging, automated shipping, and methods for integrated replenishing are put into place.\

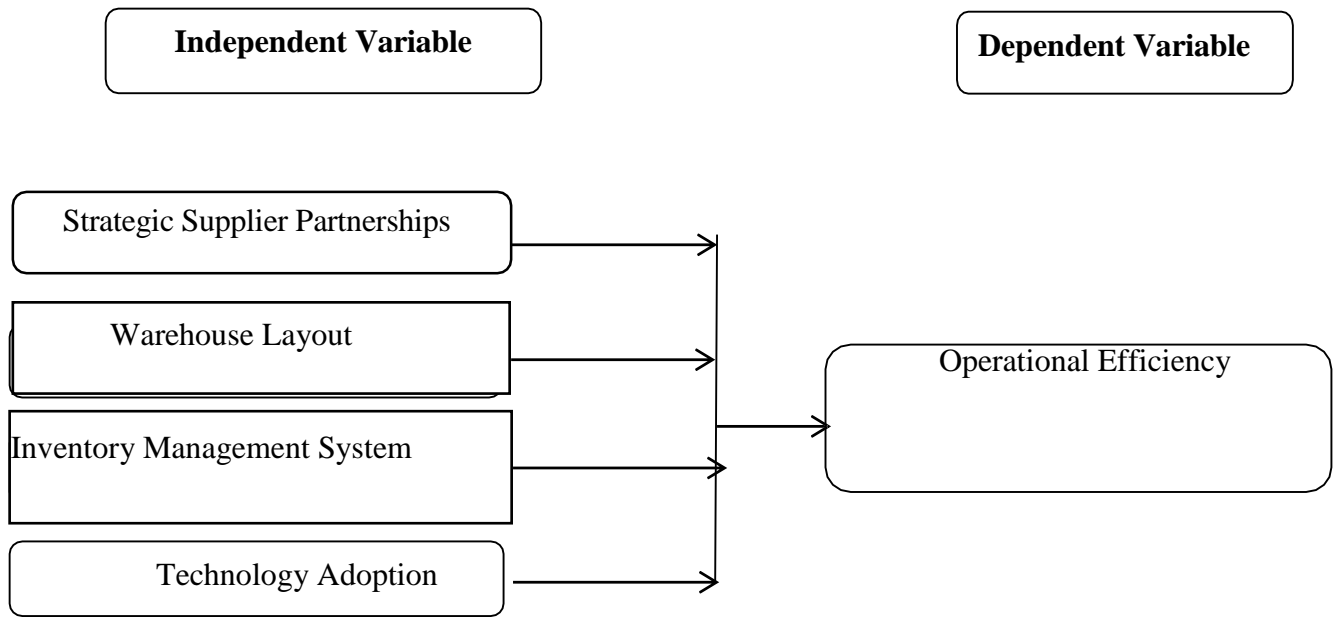
## 2.3 Summary and Research gaps

**Table 1: Summary and Research gaps**

Author and Year	Research Topic	Findings	Research Gaps	Focus of the study
Nenavani and Jain (2022)	How supplier partnerships, customer relationships, and responsiveness affect operational performance	Strategic partnerships, customer relations, and responsiveness improve performance, moderated by demand uncertainty	The study was conducted in India, focusing on manufacturing firms	The current study focused on a Kenyan logistics firm to provide regional and sector-specific insights
Mohamud et al. (2023)	The Importance of Warehouse Layout and Operations for Warehouse Efficiency	Efficient layout enhances material flow, labor productivity, and storage utilization	The study used a literature review approach with no field data	The current study was empirically test layout impact using field data from Fargo Courier
Khan, Emon, and Nath (2024)	The impact of AI-powered inventory management on operational efficiency in online retail	AI systems improve forecasting accuracy, reduce stockouts, and enhance fulfillment speed	The study was conducted in the online retail sector	The current study focused on inventory systems in courier/logistics firms to address sectorial gap
Nguyen (2020)	Improving warehouse performance for Vietnamese logistics enterprises	IT and modern equipment improve performance and integration with partners	The study used a case study approach in Vietnamese logistics firms	The current study focused on a Kenyan courier firm using quantitative methods to address regional and methodological gaps

## 2.4 Conceptual Framework

A theoretical framework, according to Mugenda & Mugenda (2019), is a model that has been put out and describes the model under evaluation as well as the connections between the independent and dependent variables. The research conceptualizes the links between the variables being studied and illustrates them graphically or diagrammatically.



**Figure 1: Conceptual Framework**

**2.5 Operationalization of Variables**

**Table 2: Operationalization of Variables**

Variable	Indicators	Data Collection Tool	Analysis
Strategic Supplier Partnerships	<ul style="list-style-type: none"> <li>• Supplier relationship quality</li> <li>• Delivery lead time</li> <li>• Cost reduction achieved</li> <li>• Supplier responsiveness</li> <li>• Contract compliance rate</li> </ul>	Questionnaire	Descriptive Analysis
Warehouse Layout	<ul style="list-style-type: none"> <li>• Space utilization rate</li> <li>• Material flow efficiency</li> <li>• Picking accuracy rate</li> <li>• Aisle width adequacy</li> <li>• Storage accessibility</li> </ul>	Questionnaire	Descriptive Analysis
Inventory Management System	<ul style="list-style-type: none"> <li>• Stock accuracy level</li> <li>• Reorder point adherence</li> <li>• Inventory turnover rate</li> </ul>	Questionnaire	Descriptive Analysis

Variable	Indicators	Data Collection Tool	Analysis			
Technology Adoption	<ul style="list-style-type: none"> <li>• Stockout frequency</li> <li>• Overstock level</li> </ul>	Questionnaire	Descriptive Analysis			
	<ul style="list-style-type: none"> <li>• System integration level</li> <li>• Real-time tracking</li> <li>• Automation usage</li> <li>• Data accuracy</li> <li>• Technology uptime</li> </ul>					
	Operational Efficiency			<ul style="list-style-type: none"> <li>• Order fulfillment time</li> <li>• Error rate reduction</li> <li>• Process cycle time</li> <li>• Cost per order</li> <li>• Productivity level</li> </ul>	Questionnaire	Descriptive Analysis

## 2.6 Chapter Summary

This chapter discussed the literature reviews that support the issue of this research investigation. The section covered theoretical literature review, review of empirical literature, list of knowledge gaps, conceptual framework, and variable operationalization.

## CHAPTER THREE

### RESEARCH DESIGN AND METHODOLOGY

#### 3.0 Introduction

A thorough explanation of the research study's methodology was presented in this chapter. It covered the research design, research population, sample size and method of choice, research tools and design, validity and reliability of data gathered, as well as ethical concerns.

#### 3.1 Research Design

A descriptive survey was used for the research design. Descriptive survey research, as defined by Lugo (2014), is a study that collects data to ascertain certain characteristics of a population. A comprehensive sample of individuals is surveyed in a descriptive study. The principal advantage of survey research is its ability to generate extensive data from a large sample of individuals. The researcher aimed to gather data on the variables as they are within the sample demographic without modification; hence, the descriptive survey research approach was the most appropriate.

#### 3.2 Target Population

Responses that satisfy the defined criteria are classified as part of the target population, as stated by Burns & Grove (2013). This research's primary target group consisted of employees of Fargo Courier Limited. Thus, 93 employees of Fargo Courier Limited were targeted.

**Table 3: Target Population**

<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
Top management	13	14%
Middle level management	20	22%
Support staff	60	66%
<b>Total</b>	<b>93</b>	<b>100</b>

#### 3.3 Sample and Sampling Technique

Polit and Hungler (2013) define sampling as the procedure for choosing a subset of the population that accurately represents the whole population to collect data on the subject of interest. A small sample of the intended audience is picked for the study in order to calculate the same characteristic throughout the full population. Utilizing samples provides benefits

such as less cost, quicker turnaround, and, if selected appropriately, the possibility to produce outcomes with known accuracy that can be quantitatively assessed. The research employed a census to determine the suitable sample size because the population under study is fairly small. The basic purpose of census sampling, according to Mugenda & Mugenda (2019), was to reach and fairly portray the complete population.

### **3.4 Instruments**

To acquire primary data, a questionnaire with structure was implemented as a data collection strategy. Kothari (2017) describes a survey as a means of gathering, documenting, and acquiring data. The investigator employed the self-administered questionnaire approach for all respondents as it is cheap and allows responders to finish the survey at a moment that is acceptable for them. The survey was tabular Ordinal Likert Scale and the questions were closed-ended. Section I of the questionnaire concentrated on demographics data, whereas Section II focused on research aspects.

### **3.5 Pilot Study**

Pilot studies were conducted to test the survey questions beforehand. The survey was amended in light of the pilot study's results. Any questionnaire difficulties are highlighted by the pilot study (Mugenda & Mugenda 2019). The pilot test included nine of Fargo Courier Limited's target workers.

#### **3.5.1 Validity**

The extent to which an inquiry analyzes what it is seeking is referred to as validity. The capacity of a data collecting tool to gauge what it is designed to examine is known as validity (Mugenda & Mugenda, 2019). A fair judgment regarding whether the tool covers what it should is the consequence of content validity. The study supervisor reviewed the questionnaires to confirm content validity. This approach assisted uncover any probable faults with the research equipment and act as a basis for redesign or other structural adjustments.

#### **3.5.2 Reliability**

According to Polit and Hungler (2013), an instrument's reliability is defined as the consistency or accuracy with which it evaluates the feature that it was designed to measure, offering a genuine picture of the full population under research. Additionally, a study instrument is considered as trustworthy if the results can be repeated using a similar

approach. The reliability coefficient, which should be coefficient of 0.7-1, was used to imply dependability. This was determined by the researcher using the split-half technique to ensure dependability (Mugenda & Mugenda 2019).

### **3.6 Data Collection Procedure**

After the researcher was done writing the proposal, she sought for the approval to perform the study from the Management University of Africa. After the first meetings with those surveyed, the researcher organized a suitable time to deliver study questionnaires to the selected respondents and begin data collecting. After 5 working days, the completed questionnaires were gathered for analysis from the respondents.

### **3.7 Data Analysis and Presentation**

The process of creating responses to questions via the inspection and explanation of obtained information is known as data analysis. In order to examine the structured queries in the questionnaires and the data acquired, this research project employed a quantitative approach to data analysis. Following a consistency check, the returned surveys were cleaned, Microsoft Excel was employed as a tool for coding and evaluating the data. To simplify the complexity of the huge volumes of data that was obtained, including frequency distribution charts and tables, the researcher applied a descriptive statistic.

### **3.8 Ethical Considerations**

#### **3.8.1 Informed Consent**

Using the norm of knowing assent, the investigator made certain that none of the persons was under any stress as a consequence of confusing test expectations (Oliver, 2016). Oliver stresses that some respondents might still wish to take part even if they choose not to totally appreciate the subject because they may be scared off by the expert's predicament or the research's language.

#### **3.8.2 Voluntary Participation**

The people who responded weren't under any coercion and were picked at random. The aim and rationale of the test will be communicated to every participant. This assured that everyone participating in this research was free from pressure to study for the exam.

#### **3.8.3 Confidentiality**

Data and information obtained for this research was treated with the greatest secrecy. The secrecy idea is significant because it secures the private of research participants (Adrianna, 2018).

#### **3.8.4 Privacy**

The researcher also made sure that respondents are safeguarded from exploitation in the event that data slips into the wrong individuals. None of the of it is going to be utilized for reasons unrelated to those described in the aims of this research.

#### **3.8.5 Anonymity**

The investigator took measures to ensure that study participants keep their anonymity since some respondents may not want their identities to be disclosed.

#### **3.9 Chapter Summary**

This segment described the methods used to conduct the study, along with the demographic, sample design, and research methodology, sampling, and data analysis together with ethical issues.

## CHAPTER FOUR

### RESEARCH FINDINGS AND DISCUSSION

#### 4.0 Introduction

This chapter covered the examination of field data as well as the primary research findings. The chapter includes the delivery of results; limits of the investigation, and chapter summary.

#### 4.1 Response Rate

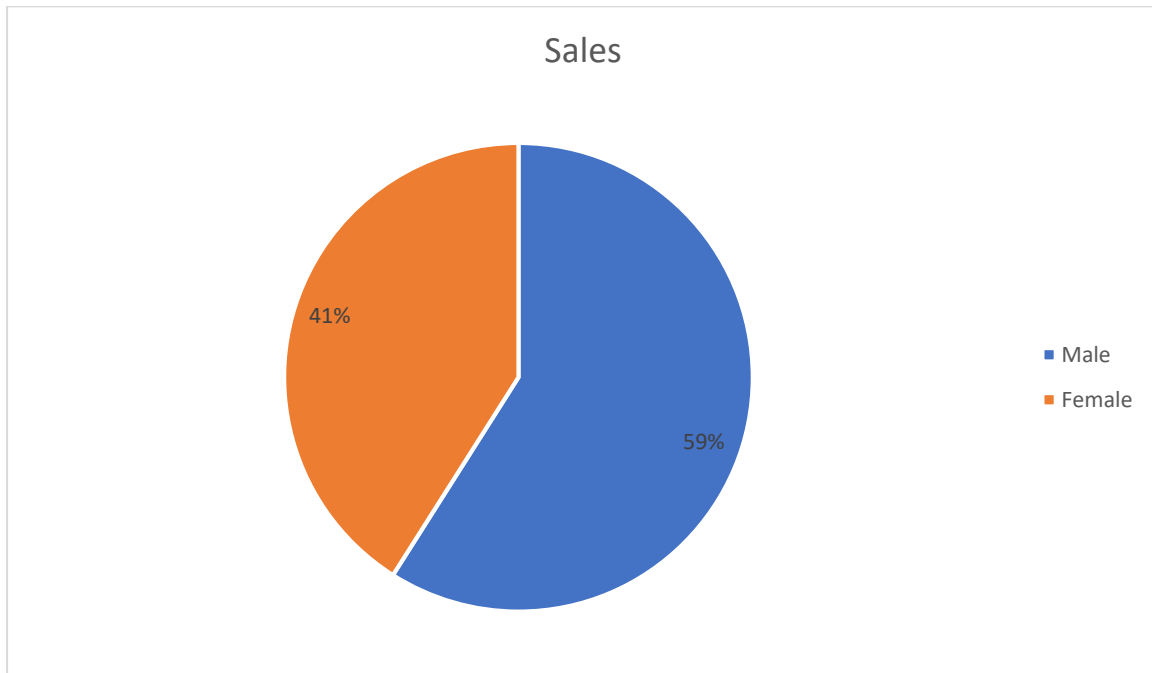
Out of the 93 questionnaires given, 70 (75%) answered, while 23 (25%) did not. According to Gitonga and Njeru (2014), response rates are less significant if the study's purpose is to gain insight and more significant if the goal is to quantify consequences or make generalizations to a larger population. Acceptable response rates are affected by the survey's administration techniques.

**Table 4: Response Rate**

<b>Questionnaires</b>	<b>Frequency</b>	<b>Percentage</b>
Respondents	70	75%
Non-respondents	23	25%
<b>Total</b>	<b>93</b>	<b>100</b>

## 4.2 Demographic Findings

### 4.2.1 Gender



**Figure 2: Gender**

Figure 2 depicts the gender responses supplied by each survey participant. Based on the results of the investigation, the bulk of individuals who participated were men (59% of the sample), with female respondents accounting for 41%. The findings revealed that, in compared to female employees, men constituted the majority of the workforce at this company.

### 4.2.2 Age Range

**Table 5: Age Range**

Questionnaires	Frequency	Percentage
18 to 29 Years	11	16%
30 to 39 Years	18	26%
40 to 49 Years	26	37%
Above 50 years	15	21%
<b>Total</b>	<b>70</b>	<b>100</b>

According to their age group, 26% of individuals surveyed were between the ages of 30 and 39, 16% were between the ages of 18 and 29, 37% were between the ages of 40 and 49, and just 21% claimed to be over 50. This result contradicts earlier research by Darmadi (2013) and Marinova et al. (2010), who discovered that the average age of their studies was around 40 years old.

#### 4.2.3 Level of Education

**Table 6: Level of Education**

Questionnaires	Frequency	Percentage
Certificate	8	11%
Diploma	14	20%
Undergraduate	32	46%
Postgraduate	16	23%
<b>Total</b>	<b>70</b>	<b>100</b>

The majority of survey respondents (46%) and those with diplomas (20%) had undergraduate degrees. holders of certificates (11%), and those with master's degrees (23%). Table 6 displays these statistics. Given that more than 70% of those surveyed had completed at least a diploma program, it is thought that these credentials are sufficient to improve work performance throughout the county. The findings support those of Chiliya and Roberts-Lombard (2012), who found that a worker's educational background significantly affects the efficacy of the company.

### 4.3 Descriptive Analysis

#### 4.3.1 Strategic Supplier Partnerships

**Table 7: Strategic Supplier Partnerships**

Statement	Mean	STD
The organization maintains strong, long-term relationships with key suppliers that enhance overall supply chain performance.	3.97	1.07
Our suppliers consistently meet the agreed delivery lead times, contributing to smooth operations.	4.05	1.05
Partnering with strategic suppliers has led to significant reductions in operational and procurement costs.	3.95	1.15
Our suppliers demonstrate high responsiveness to urgent orders and changing demand.	4.15	1.24
Contracts with suppliers are clearly defined and compliance is	3.84	0.87

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consistently achieved.

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The operational efficiency of Fargo Courier Limited is positively affected by strategic supplier partnerships, as noted in the findings in Table 7. The company has strong long-term partnerships with important suppliers (Mean = 3.97, STD = 1.07), and suppliers routinely meet the specified delivery lead times (Mean = 4.05, STD = 1.05). These partnerships have also contributed to reduced costs (Mean = 3.95, STD = 1.15), and the suppliers respond to urgent requests (Mean = 4.15, STD = 1.24). In addition, the degree of definition, compliance to defined supplier contracts, and collaboration has been noted to be positively strong (Mean = 3.84, STD = 0.87).

#### 4.3.2 Warehouse Layout

**Table 8: Warehouse Layout**

<b>Statement</b>	<b>Mean</b>	<b>STD</b>
The current warehouse layout ensures optimal utilization of available storage space.	3.91	0.90
The design of the warehouse allows for efficient and uninterrupted material flow during operations.	3.84	1.01
The warehouse layout supports high picking accuracy, reducing errors in order fulfillment.	3.96	0.95
The width of warehouse aisles is sufficient for smooth movement of personnel and equipment.	3.95	0.97
The arrangement of storage racks and items allows easy and quick access to inventory.	4.04	0.83

The Fargo Courier Limited warehouse layout is still considered to be effective and efficient as described in the operational efficiency in Table 8. The layout allows optimal use of storage areas (Mean = 3.91, STD = 0.90) and streamlines the flow of materials (Mean = 3.84, STD = 1.01). It also improves the picking accuracy (Mean = 3.96, STD = 0.95) and provides sufficient aisle space for personnel and equipment to move smoothly (Mean = 3.95, STD = 0.97). In addition, retrieval of inventory is efficient owing to the arrangement of racks and items (Mean = 4.04, STD = 0.83).

### 4.3.3 Inventory Management System

**Table 9: Inventory Management System**

Statement	Mean	STD
The inventory management system accurately reflects real-time stock levels across all product categories.	4.76	1.05
Reorder points are consistently monitored and replenishment is triggered appropriately to avoid stockouts.	4.29	0.96
Inventory is turned over frequently, indicating efficient stock movement and demand forecasting.	3.92	1.14
The frequency of stockouts has been reduced due to improvements in inventory control systems.	3.82	1.02
Overstock situations are rare due to effective tracking and inventory optimization practices.	3.98	1.03

Considering the findings in Table 9, it is evident that the inventory management system greatly enhances operational effectiveness at Fargo Courier Limited. The system tracks stock levels accurately and in real time (Mean=4.76, STD=1.05) and monitors reorder levels to avert stockouts (Mean=4.29, STD=0.96). Demand forecasting efficiency is shown in the Inventory Turnover Ratio (Mean=3.92, STD=1.14). There is an improvement in the frequency of stockouts (Mean=3.82, STD=1.02) due to better control measures. Strong optimization and tracking systems lead to infrequent overstock situations (Mean=3.98, STD=1.03).

### 4.3.4 Technology Adoption

**Table 10: Technology Adoption**

Statement	Mean	STD
The technology systems used in the warehouse are well-integrated with other departments and functions.	3.86	1.03
Real-time tracking tools are actively used to monitor goods throughout the warehouse process.	3.97	1.00
Automation technologies (e.g., scanners, conveyors) have improved speed and accuracy in warehouse operations.	4.07	0.90
The data captured through our warehouse systems is accurate and useful for decision-making.	4.07	0.92
Our warehouse technology infrastructure is reliable, with minimal system downtime affecting operations.	3.96	1.02

As shown in Table 10, adoption of technology is noted in the seamless integration into Fargo Courier Limited's warehouse operations. There is inter-departmental connectivity

(Mean=3.86, STD=1.03), and tracking systems are utilized (Mean=3.97, STD=1.00). Operational speed and accuracy have improved with the use of Automation technologies (Mean=4.07, STD=0.90). Captured data is beneficial for informed decision-making (Mean=4.07, STD=0.92). Moreover, technology supporting warehouse operations is dependable with few interruptions (Mean=3.96, STD=1.02). This reflects strong infrastructure support for warehouse operations.

#### 4.3.5 Operational Efficiency

**Table 11: Operational Efficiency**

Statement	Mean	STD
Orders are fulfilled within the expected timelines, minimizing customer wait times.	3.83	0.93
The number of operational errors in warehouse processes has significantly reduced over time.	4.03	1.09
The overall process cycle time from receiving to dispatching goods is efficient.	3.93	1.03
The cost incurred per order processed is well-managed and optimized.	4.08	0.97
Employee productivity in warehouse operations has improved consistently over the past year.	3.98	1.03

The results highlighted in Table 11 reveal encouraging signs of operational effectiveness at Fargo Courier Limited. The fulfillment of customer orders is achieved within the expected timeframes (Mean=3.83, STD=0.93), and there is a notable improvement in operational mistakes (Mean=4.03, STD=1.09). The process cycle time for receiving and dispatching orders is within reasonable limits (Mean=3.93, STD=1.03), and the average cost per order is efficiently managed (Mean=4.08, STD=0.97). There is Improvement in employee productivity in the warehouse operations (Mean=3.98, STD=1.03), indicating better performance in the warehouse as a whole.

#### 4.4 Limitations of the Study

The focus of this research was Fargo Courier Limited, which could limit the applicability of the results to other courier or logistics companies that operate differently. The use of self-reported answers as a primary method of data collection raises the concern of potential bias or inaccuracy. The primary focus of this research was several warehouse management practices, ignoring other significant influences, such as employee morale or customer insight. Limited time also restricted the depth of analysis performed within the data and the use of

time series performance data. In addition, the constantly changing face of technology might have changed the relevance of some findings by the completion of the report.

#### **4.5 Chapter Summary**

Chapter Four presented and examined the results from the field data, focusing on the effect of warehouse management practices on operational efficiency at Fargo Courier Limited. The chapter covered descriptive analysis of strategic supplier partnerships, warehouse layout, inventory management systems, and technology adoption. Each variable was discussed in relation to its contribution to operational performance. The chapter also outlined the study's limitations, including scope and data collection challenges. Overall, the findings provide clear insights into key warehouse practices driving efficiency within the organization.

## **CHAPTER FIVE**

### **SUMMARY, RECOMMENDATIONS AND CONCLUSIONS**

#### **5.0 Introduction**

The section covers summary of findings, conclusions and recommendations of the study.

#### **5.1 Summary of Findings**

##### **5.1.1 Strategic Supplier Partnerships**

The study found that Fargo Courier Limited's operational efficiency is significantly enhanced by strategic supplier partnerships. The business maintains solid, long-term ties with key suppliers, ensuring they meet delivery lead times and reduce costs. These partnerships also help suppliers respond promptly to urgent requests. The degree of definition, compliance to defined supplier contracts, and collaboration is also positively impacted.

##### **5.1.2 Warehouse Layout**

The study found that the Fargo Courier Limited warehouse layout is considered effective and efficient, allowing optimal use of storage areas, streamlining material flow, improving picking accuracy, providing sufficient aisle space for personnel and equipment, and ensuring efficient inventory retrieval due to the arrangement of racks and items. The operational efficiency findings show that this layout is effective and efficient in enhancing the warehouse's overall effectiveness.

##### **5.1.3 Inventory Management System**

According to the survey, the inventory management system at Fargo Courier Limited significantly improves operational effectiveness by accurately tracking stock levels in real time, avoiding stockouts. The Inventory Turnover Ratio shows improved demand forecasting efficiency, and better control measures lead to an improvement in stockout frequency. Strong optimization and tracking systems result in infrequent overstock situations.

##### **5.1.4 Technology Adoption**

The study found that the study reveals that Fargo Courier Limited's warehouse operations have been significantly improved through the adoption of technology. Inter-departmental connectivity and tracking systems have been implemented, and automation technologies have improved operational speed and accuracy. The data collected is useful for informed decision-

making and the technology supports warehouse operations with few interruptions, indicating strong infrastructure support.

## **5.2 Conclusion**

The research concluded that strategic supplier partnerships positively impact operational efficiency. Stronger relationships and partnerships with suppliers also help streamline processes and decrease purchasing costs. Suppliers often enable seamless service through timely deliveries and demonstrate responsiveness to urgent and shifting demands. These partnerships are further reinforced by well-defined contracts and adherence to the terms. Fargo Courier Limited and its strategic suppliers have collaborative relationships which favorably influence the performance of the supply chain and increase operational dependability.

The study concluded that a warehouse layout greatly impacts operational efficiency. The layout design contains sufficient storage space to ensure optimal space utilization and smooth material flow for daily operations at Fargo Courier Limited. The design also ensures order accuracy through efficient personnel and equipment movement in properly sized aisles during order fulfillment as well as streamline lift trucks for quick and effortless movement of personnel and equipment. Moreover, strategically placed storage racks enable swift retrieval of items which enhances workflow and diminishes time spent on locating inventory.

The study concluded that the inventory management system of Fargo Courier Limited has been found to greatly enhance operational efficiency. Stock levels are informed and decision-making is done in a timely manner. Stock levels are monitored to avoid stockouts and to ensure operations are continuous. The forecast and movement of stock is effective which increases demand and inventory turnover. Improved inventory control practices have also minimized stockouts and overstock situations. Thus, the system is effective in maintaining balanced inventory levels and reducing operational inefficiencies.

The study concluded that the adoption of technology in Fargo Courier Limited has positively impacted operational efficiency of the warehouse. Other departments technologically intersect with the warehouse, making other department cross-functional workflows seamless. Increased visibility and control over the movement of goods is achieved with real-time tracking tools. Robotics have improved the speed and accuracy of the warehouse processes which enhances order fulfillment. Reliable infrastructure, accurate data collection, and

minimal downtimes aids with continuous operations. Overall, these technological factors enhance performance and efficiency of the warehouse, directly impacting the operational effectiveness of Fargo Courier Limited.

### **5.3 Recommendations**

The study suggests that Fargo Courier Limited focus on reinforcing operational efficiency further through its strategic supplier partnerships. These partnerships can be strengthened through collaboration with trustworthy suppliers that involve routine evaluations, planning meetings, and open communication. Trust and shared aspirations with key suppliers can bolster delivery dependability and cost efficiency. Responsiveness and adherence to contracts, especially from suppliers, enhance operational flow during peak demand, supply chain disruptions, or other logistical challenges.

The study recommend that Fargo Courier Limited improves and benefits from vaulted areas of its warehouses by restructuring them and increasing their workflow efficiency. Set intervals of time can be allocated to evaluate workflows and pinpoint areas that can benefit from accelerated resource flow and improved picking precision. Set intervals of time can be allocated to evaluate workflows and pinpoint areas that can benefit from accelerated resource flow and improved picking precision. To aid operations, staffing, and equipment, the operational procedures demand, aisle widths and storage arrangements should be adjusted. Efficient and flexible order fulfillment can be attained by making fast access to inventory through effective and adaptable ergonomic storage systems.

The study suggests that Fargo Courier Limited enhance its inventory management system by incorporating sophisticated technologies that improve real-time tracking and forecasting accuracy. Continuous monitoring and regular audits will preserve optimal order levels while reducing the probability of stockout and overstock conditions. Staff need to be trained continuously on inventory best practices, and system data should be evaluated regularly to support strategic planning. These actions will enhance stock turnover rates and foster a responsive, lean system.

The study suggests that Fargo Courier Limited should further amplify the use of modern technologies to improve the operational efficiency of the company further. The use of automation technologies such as robotics, AI systems, and IoT devices can improve speed, precision, and real-time data retrieval. Enhanced investment in system reliability and routine

maintenance will increase uptime. Moreover, strategic use of technology by trained personnel and its proper application across systems will enhance the overall efficiency of the warehouse.

#### **5.4 Suggestions for Further Research**

Further investigation should focus on how training employees and corporate culture are applicable in improving the effectiveness of management practices in a warehouse setting. Other considerations include the consequences of external factors like market demand for suppliers, technological disruptions, and regulatory shifts on a business's operational effectiveness. Conducting a single case comparative study on a number of courier or logistics companies may yield additional insights in regard to optimal industry practices and standards. Moreover, examining the sustained impacts of automation and the shifts to digital on the roles of employees in warehouse operations, customer perceptions, and the overall impact on environmental sustainability would enrich the academic discourse and bring practical value to research in the logistics field.

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## **APPENDIX I: INTRODUCTION LETTER**

Dear Respondent

As a student at the Management University of Africa, I'm conducting research to assist me finish the prerequisites for a Business administration. The topic is **INFLUENCE OF WAREHOUSE MANAGEMENT PRACTICES ON OPERATIONAL EFFICIENCY: A CASE STUDY OF FARGO COURIER LIMITED.**

I humbly beg for your assistance with this research by responding to the enclosed questionnaire. You can be sure that any information you submit will be kept confidential and used only for scholarly purposes.

Your assistance is much appreciated.

Yours faithfully,

FRIDAH RUDIAH NJUGUNA

## APPENDIX II: QUESTIONNAIRE

### 1. Please indicate your gender

Male

Female

### 2. Specify your age range

18 to 29 Years

30 to 39 Years

40 to 49 Years

Above 50 years

### 3. Indicate your Level of educational

Certificate

Diploma

Undergraduate

Postgraduate

## SECTION II: INDEPENDENT VARIABLES

Use the Likert scale provided to respond to the following statements.

Where 5: Strongly Agree, 4: Agree, 3: Neutral, 2: Disagree and 1: Strongly Disagree

Variable	Statement	1	2	3	4	5
Strategic Supplier Partnerships	The organization maintains strong, long-term relationships with key suppliers that enhance overall supply chain performance.					
	Our suppliers consistently meet the agreed delivery lead times, contributing to smooth operations.					
	Partnering with strategic suppliers has led to significant reductions in operational and procurement costs.					
	Our suppliers demonstrate high responsiveness to urgent orders and changing demand.					
	Contracts with suppliers are clearly defined and compliance is consistently achieved.					
Warehouse Layout	The current warehouse layout ensures optimal utilization of available storage space.					
	The design of the warehouse allows for efficient and uninterrupted material flow during operations.					
	The warehouse layout supports high picking accuracy, reducing errors in order fulfillment.					
	The width of warehouse aisles is sufficient for smooth movement of personnel and equipment.					
	The arrangement of storage racks and items allows easy and quick access to inventory.					
Inventory Management System	The inventory management system accurately reflects real-time stock levels across all product categories.					
	Reorder points are consistently monitored and replenishment is triggered appropriately to avoid stockouts.					
	Inventory is turned over frequently, indicating efficient stock movement and demand forecasting.					
	The frequency of stockouts has been					

	reduced due to improvements in inventory control systems.					
	Overstock situations are rare due to effective tracking and inventory optimization practices.					
Technology Adoption	The technology systems used in the warehouse are well-integrated with other departments and functions.					
	Real-time tracking tools are actively used to monitor goods throughout the warehouse process.					
	Automation technologies (e.g., scanners, conveyors) have improved speed and accuracy in warehouse operations.					
	The data captured through our warehouse systems is accurate and useful for decision-making.					
	Our warehouse technology infrastructure is reliable, with minimal system downtime affecting operations.					
Operational Efficiency	Orders are fulfilled within the expected timelines, minimizing customer wait times.					
	The number of operational errors in warehouse processes has significantly reduced over time.					
	The overall process cycle time from receiving to dispatching goods is efficient.					
	The cost incurred per order processed is well-managed and optimized.					
	Employee productivity in warehouse operations has improved consistently over the past year.					

## APPENDIX III: DATA COLLECTION LETTER



Date: 21<sup>st</sup> July 2025

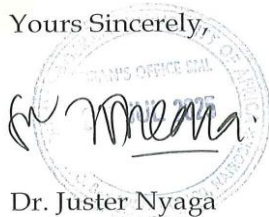
TO WHOM IT MAY CONCERN

**FRIDAH RUDIAH NJUGUNA- BML/34/01276/1/23**

This letter serves to introduce the above named who is a **Bachelors of Management and Leadership (BML)** student and is interested in carrying out research on Influence of Warehouse Management Practices on Operational Efficiency: A Case Study of Fargo Courier Limited.

Any assistance accorded to her in pursuit of this study will be greatly appreciated.

Yours Sincerely,



Dr. Juster Nyaga

**Dean, School of Management and Leadership**