

ISSN 2411-7323

www.sagepublishers.com

© SAGE GLOBAL PUBLISHERS

WAREHOUSE MANAGEMENT PRACTICES AND PERFORMANCE OF RETAIL STORES IN NAIROBI CITY COUNTY, KENYA

¹ Rotich Brenda Jebet, ² Dr. Ndeto Charles

¹ Masters Student, Jomo Kenyatta University of Agriculture and Technology

²Lecturer, Jomo Kenyatta University of Agriculture and Technology

ABSTRACT

The general objective was to determine the influence of warehouse management practices on the performance of retail stores in Nairobi County, Kenya. The specific objectives were; to determine the influence of warehouse security management practices and to determine the influence of warehouse automation management practices on the performance of retail stores in Kenya. For the purpose of this study theories on effects of warehouse management practices were reviewed to form its conceptual basis. They include; revealed preference theory and transaction cost analysis as explained in the proceeding sub-section. This was done through a survey administered through questionnaires. The population of the study was the top five retail stores in Kenya as per the GAIN data in 2023, which was determined by their annual food sales for the Nairobi outlets only for the 2023 calendar year. The unit of analysis was the individual retail stores while the unit of observation which defines the independent elements in a population were the employees in the warehouse and procurement department composed the of warehouse manager and procurement manager. This sampling frame was beneficial in ensuring that the retail firms studied have several branches to sufficiently address the research objectives. Primary data was collected by use of structured questionnaires and analyzed using SPSS. The questionnaire was developed based on the research questions outlined in Chapter One. A pre-test was conducted to test the validity of the questionnaire and identify possible problems before data collection commences. The study used descriptive statistics to collect, analyze, and tabulate the data. These include frequencies, measures of central tendencies specifically the mean as well as standard deviation as a measure of dispersion. Regression analysis was conducted using the linear regression equation. The multiple regression analysis revealed that all variables positively impacted retail performance: security management (B = (0.338, p < 0.05), and automation management (B = 0.392, p < 0.05). Automation management practices had the strongest impact, highlighting the importance of adopting technology in retail operations. The study concludes that improving warehouse management practices leads to better retail store performance by enhancing efficiency, reducing losses, and improving customer service. It recommends that retail stores implement robust security measures, and embrace automation technologies to optimize their operations and remain competitive.

Key Words: Warehouse Management Practices, Warehouse Security Management, Warehouse Automation Management, Performance of Retail Stores

Background of the study

As Shah and Khanzode, (2017) state, the objective of a warehouse is to satisfy customers with effective resource utilization and deliver the right product, in the right place and at the right time in good condition. The warehouse provides temporary storage, protection of goods, the fulfillment of individual customer orders, packaging of goods, after-sales services, repairs, testing, inspection, Just in Time (JIT) sequencing, and assembly. Major warehouse operations are classified into receiving, picking, storage and shipping. The storing function includes various sub-functions like department or location assignment and zoning. Further, batching, routing and sorting have been considered as part of the picking process.

Karim, (2018) states that warehouse is more than just a place where inventories are stored. The aims of warehouse management are to increase employee productivity, accuracy and visibility, reduce cost and control the cost of inventory and shipping while providing good customer service. Meanwhile, warehousing is primarily for receiving, storing, packing, and shipping goods and requires labor, capital (land, storage, and handling equipment) and information systems, all of which are expensive.

A warehouse is planned space for the storage and handling of goods and materials. In general, warehouses are focal points for product and information flow between sources of supply and beneficiaries (Anteneh B., 2017). A warehouse is a commercial building for buffering and storage of goods for consumption or an intermediate area for storage of raw materials for production until they are needed. The reasons for warehousing of products are; to achieve transportation and production economies of scale, to take advantage of quantity purchase discounts and forward buys, to maintain a source of supply, to support the firm's customer service policies, support the just-in-time programs of suppliers and customers, providing temporary storage of materials to be disposed or recycled with reverse logistics (Faber,2015).

Paul & Lestari, (2015) the activity to manage the goods stored in the warehouse is called warehousing. While the warehouse has a lot of different operations, they have some common patterns in the material flow and warehouse typical operations such as receiving, put-away, replenishment, internal order picking, gathering and sorting, packing, cross-docking, and delivery.

Faber (2015) stated that Warehouse performance: warehouses aim at simultaneously reducing cost, increasing productivity, and improving customer responsiveness. Measuring warehouse performance provides feedback about how the warehouse performs compared to the requirements or compared to industry peers. As such, it can also provide feedback on the adequacy and effectiveness of an implemented Warehouse Management structure.

The essence of storage in warehousing involves proper arrangement and preserving goods from the time of their production or purchase till their actual use. When storage is done on a large scale and in a specified manner it is called warehousing (Sewe, 2010). Warehousing refers to the activities involving the storage of goods on a large scale in a systematic and orderly manner and making them available conveniently when needed. In other words, warehousing means holding or preserving goods in huge quantities from the time of their purchase or production till their actual use or sale. Warehousing is one of the important auxiliaries to trade. It creates time utility by bridging the time gap between production and consumption of goods. The effective and efficient management of any organization requires that all its constituent elements operate effectively and efficiently as individual SBUs / facilities and together as an integrated whole corporation (Frank et al. 2014).

Statement of the problem.

Sixty percent of Kenyan retail establishments are impacted by poor warehouse infrastructure, according to a World Bank analysis. Inefficiencies and higher operating expenses are caused by things like improper shelving and bad storage conditions (Adewole, 2019). Businesses with

optimized warehouse management systems (WMS) saw a 15-20% increase in inventory turnover rates, according to the Kenya National Bureau of Statistics (KNBS). Effective warehouse management minimizes surplus inventory and stockouts by ensuring that stock levels are kept at ideal levels.

Warehouse management is critical in the performance of a firm through improving the top and bottom lines of a company (Miller, 2017). It aims at achieving an inventory balance of not holding too much stock hence tying up capital and incurring costs in storage, spoilage, pilferage and obsolescence and the ability to avail goods whenever and where they are needed and in good quality so as not to lose sales and incur further costs. Even though companies are aware of the importance of inventory management, there are several barriers that still hinder implementation of this. The bull whip effect, improper stock control systems, limited skills and capability of personnel in this area have been mentioned as barriers to successful warehouse management (Naliaka & Namusonge, 2015).

There have been numerous studies on operations strategies and their effect on organizational performance. Research by Lowson (2015) established that there is a clear correlation between the application of these strategies and achievement of strategic and tactical goals of firms over a long period. Warehouse management has been found to play a key role in service levels in retail supply chains (Asif, Farhad, & Byrne, 2016). The success of modern retailers in growth rate, profitability and market expansion is largely determined by the role and incorporation of logistics and inventory management in the corporate strategy (Abrahamsson & Rehme, 2018).

In Kenya the problem of poor performance and closure of large retail stores has also been experienced. According (Guguyu, 2019) from the recent happenings of the downfall of Choppies Supermarket, the warehouse department had contributed to the failure as the firm was experiencing stock outs, theft of their stock and pilferage. The CEO of Choppies was also accused of declaring ghost stock to increase the recorded sales. On the other hand, other retail since Nakumatt and Uchumi earlier went down the same path. According to (Kipchumba, 2017) one of the reasons Nakumatt supermarket ended up closing down was the fact that wayward employees and suppliers took advantage of the poor management structure to seal from the company and dead stock issues. Gideon, (2018) stated that adoption of automation of warehouse systems, proper layout and appropriate location was an issue in the textile retail industry in Kenya that led to poor performance of the firms and even closure of others.

According to research by the African Supply Chain Institute (ASCI), retailers might save up to 25% on operating expenses by implementing effective warehouse management techniques. This reduction is a result of increased space utilization, reduced labor expenses, and enhanced inventory control. The Kenya Institute for Public Policy Research and Analysis (KIPPRA) has performed research that indicates retailers who implement efficient warehouse management strategies have a 15% higher rate of customer satisfaction. Order mistakes and delivery times are decreased with efficient warehousing, improving overall service quality (Thuku, 2019).

In a study done by Mercy (2019), she realized that retailers such as Carrefour and Shoprite who are entering the Kenyan market, experienced challenges in accessing warehouses that were big enough to suit their needs and also the existing small warehouses lacked modern design features Some firms such as Naivas supermarket are performing incredibly well increasing their customer base and profits despite the stiff competition in the retail, variability in customer demand and outsourcing functions. As a result, this prompted me to desire to conduct a study on the influence of warehouse management strategies on the performance of the retail industry in Kenya.

Objectives of the study

General objective

The general objective was to determine the influence of warehouse management practices and the performance of retail stores in Nairobi City County, Kenya.

Specific objectives

The specific objectives were;

- **i.** To find out the influence of security management practices on the performance of the retail stores in Nairobi City County, Kenya.
- **ii.** To establish the influence of automation management practices on the performance of the retail stores in Nairobi City County, Kenya.

LITERATURE REVIEW

Theoretical Framework

Risk Management Theory

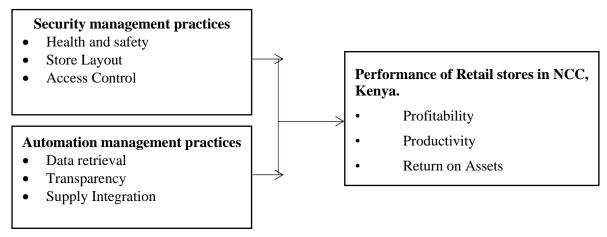
Risk management theory suggests that through retail store risk analysis and evaluation, the threats and vulnerabilities regarding information access security could be estimated and assessed. The evaluation results could be used for planning information security requirements and risk control measures. The goal is to make information access security risk an acceptable level in an organization.

Wright, (1999) pointed out that risk management is a process of establishing and maintaining information security within an organization. The crux of risk management is risk assessment; namely, through information security risk assessment, an organization could take appropriate measures to protect information cost-effectively. Reid and Floyd, (2001) proposed a ``risk analysis flow chart", and considered that an organization should assess the threats and vulnerabilities of its information assets. The goal of organizational controls is to lower the risk to an acceptable level. The interplay of risk assessment and risk control makes information security risk under an acceptable level and actualizes the control procedures.

Transaction Cost Analysis (TAC)

In keeping with Halldorsson (2007), Transaction value evaluation (TCA) is a theory that ensures that charges across the supply chain are stored at a minimum. Transaction fee technique has been broadly used in one-of-a-kind regions, especially in economics and organizational studies. In the early 1970s, the mathematical economist, Williamson, included TCA into, the overall equilibrium version and installation of his transaction cost economics inside the new concept of the firm. Halldorsson (2007) suggests that businesses can reduce their transaction expenses by using vertical integration and growing the extent of belief on the same time. This kind of integration can reduce the costs of stock management whilst increasing the service stage of both inner and external clients even as liberating capital to be used in other areas of the employer.

Conceptual Framework



Independent Variables

Security management practices

The term "security" generally refers to "the state of being free or protected against danger or threat" and it is usually related to threats that are perpetrated voluntarily against a target. One part of security includes "safety" with the difference that "security" includes those threats that are intentionally performed on a target, while safety is based mostly on operational accidents and relates often to potential damage to society and its individuals.

Automation Management Practices

Warehouse automation is a combination of a random-access concept, highly sophisticated and other applications with minimal or reduced human intervention. This is a current emerging trend/issue as far as store operations are concerned both countrywide and worldwide. Most organization are trying to adopt automation to better and ease their store's function operations. Some insight into these trends can be discerned from the sales of receiving and issuing of automated materials handling equipment, which have been growing steadily in recent years.

Performance of Retail Stores in Nairobi City County, Kenya

Performance of the retail stores will be assessed using a set of variables given that performance is multi-dimensional term. In this study, performance will focus on profitability, market share, and inventory turnover. Market share is a key indicator of market competitiveness, that is, how well the retail store is doing against its competitors. Profitability is measured with income and expenses; income is money generated from the activities of the business. Increasing profitability is one of the most important tasks of business managers because a profitable busi ness can survive and reward its owners. Inventory turnover is the rate that inventory stock is sold, or used, and replaced. The inventory turnover ratio is calculated by dividing the cost of goods by average inventory for the same period. A higher ratio tends to point to strong sales and a lower one to weak sales.

Empirical literature review

Security Management Practices

The term "security" generally refers to "the state of being free or protected against danger or threat" and it is usually related to threats that are perpetrated voluntarily against a target (Inglese, 2018). One part of security includes "safety" with the difference that "security" includes those threats that are intentionally performed on a target, while safety is based mostly on operational accidents and relates often to potential damage to society and its individuals. ISO (2008) proposes a definition of supply chain security covering all the efforts to enhance the security of people and cargo in the supply chain against such antagonistic threats as terrorism, fraud piracy, etc.

A study was done by June (2016) reckons that, efforts to assess warehousing security in Ghana and particularly at the Tema port must be emphasized as a result of "flow disruptions" perpetrated by parties working in the security areas. The security incidents considered in this study are those taking place in warehouses, where products, components or raw materials are temporarily stored or moved between companies that are part of supply chains and all attacks deliberately perpetrated against cargo in storage warehouses. To corroborate this point, (Urciuoli, 2010) stated that typical security incidents in warehouses may include theft, smuggling, counterfeiting of the cargo, or terror and contamination.

In today's challenging and competitive world, a company's success can hinge on whether its warehouse security meets customers' expectations in terms of productivity and efficiency. One way to gauge how effectively a warehouse operation meets these expectations is by conducting a warehouse security assessment which is a systematic review of the warehouse functions looking for possible improvements in efficiency and service. A good security assessment takes a quantitative look at productivity and service and identifies patterns and trends; it explains exactly where the warehouse is and what needs to be done to meet the company's goals. It also

helps to compare warehouse measurements with the company's in-house goals as well as industry benchmarks.

According to Abrampah (2019), The major users of warehouses are manufacturers, importers, exporters, wholesalers, and retailers. Warehouses exist primarily to facilitate the movement of goods to the end user. The resources of a warehouse are space, equipment and personnel. The usefulness of a warehouse resides in the effective use of its resources to satisfy customer requirements. Customer requirements are simply the demand to have the right product in good condition at the right place at the right time. Therefore, the product must be accessible and protected. If a warehouse cannot meet these requirements adequately, then the warehouse does not add value to the product and very likely subtracts value from the product (Abrampah, 2019).

According to Michael (2016), Cargo theft is an ever-increasing problem in the transportation industry. It's estimated that cargo theft costs shippers and trucking companies up to \$30 billion a year and it's only getting worse. A recent study showed the frequency of cargo theft claims is increasing13% percent per year" (Sentry Insurance, 2014). Warehouses and distribution centers are frequent targets of burglary, theft, and pilferage. These facilities contain lots of new merchandise in its original packaging, something that is highly desirable to both professional and amateur thieves (Michael, 2016).

The large quantity of merchandise in most warehouses also brings out an emotional feeling within many people that suggests: "Wow, there are so many of these items, they won't miss just one" (Michael, 2016). This feeling can sometimes tempt people who otherwise wouldn't think of themselves as criminals. Warehouses are subject to both internal and external theft. Internal thefts are committed by company employees, contractors, and other "insiders" who have a legitimate reason to be in the warehouse at certain times. External thefts are committed by "outsiders"- people outside of the company who have no legitimate need to be in the warehouse and are coming to the facility specifically to steal (Michael, 2016).

Theft by staff is unfortunately one of the most common types of theft (The British Security Industry Association, 2017) along the same lines, many warehouse employees feel that they are underpaid and underappreciated and look at stealing from the warehouse as a way to supplement their income and to get back at their employer at the same time. There are variety of ways in which warehouse employees can steal: some simply load merchandise into their car during the day; others place merchandise in trash bins and come back later to retrieve it; and still others may pack merchandise into a box and ship it to themselves using a bogus address that they have established just for this purpose. Sometimes, dishonest warehouse employees work in conjunction with dishonest truck drivers to steal from the company. This can be a particularly dangerous combination: the warehouse employee has knowledge of what's coming and going, can plant stolen merchandise in outgoing shipments, and can modify paperwork to cover his tracks while the truck driver has the means to remove the merchandise from the warehouse.

Products or raw materials, such as chemical substances, food or pharmaceuticals, that are moved in distribution chains can be deliberately contaminated or poisoned by terrorists or saboteurs. Examples are given by the contamination of citrus fruits exported from Israel in 2003 (CFSAN, 2003) and glass-contaminated chicken fillets in Sweden (Kris information, 2019). Safety has always been of prime importance in warehousing because of the amount of movement, lifting, and manual handling involved. Even with the levels of mechanization and automation in some modern installations, safety is still of key importance. Safe working practice is a moral obligation and also makes economic sense by minimizing lost staff time, the costs that can be incurred in accident investigations, and the possible legal costs and claims that may be incurred. As a result, we cannot talk about warehousing security without looking at the safety aspect as well (Abrampah, 2019).

Automation Management Practices

Warehouse automation is a combination of a random-access concept, highly sophisticated machines/gadgets and computerized control systems that enable the working of various equipment and other applications with minimal or reduced human intervention. This is a current emerging trend/issue as far as store operations are concerned both countrywide and worldwide. Most organization are trying to adopt automation to better and ease their store's function operations. Some insight into these trends can be discerned from the sales of receiving and issuing of automated materials handling equipment, which have been growing steadily in recent years, (Burt et. al, 2016).

According to Saunders (2016), automation first began in the early 1950s and has since then been undergoing various developments and inventions that have kept bettering it over time. Store automation primarily entails the installation of proper and computerized store systems, electronic/automated handling and storage equipment and generally high technologically advanced and computerized issuing and receiving procedures. Store automation has created room for a lot of improvements and accrued many benefits for the organization that have considered automation an option. Some of these benefits include; high quality services, customer satisfaction, easiness in retrieving stock, easy and effective receiving and issuing procedures, better stock control mechanisms, savings on costs and generally well and organized store management among many more (Bailey, 2018).

The activities in the supply chain become easy to run if all organizations with the supply chain department could adopt systems. Adoption of systems enables automation of the various core activities and thus less time will be spent in performing these operations. Automation especially in the stores and procurement department is of much essence to the entire supply chain as these two are part and parcel of the supply chain. Hence managing the supply chain, customers and even issuing goods to the user departments and customers/users and receiving them from suppliers will be much easier. This will increase performance and the generally better management of the supply chain activities, (Sujuan, 2019).

Hines (2017) says that it is a commendable job when organizations across the globe are spending quality time and effort to adopt and embrace the current technological inventions by installing systems and applications that will ensure this succeeds. However, he warns that organizations at the forefront of adopting automation of functions need to be more concerned with the limiting and

influencing factors that may hinder this course. He argues that if all organizations could be computerized and automated, then the performance of these organizations would generally increase by 20-25%. For this to be achieved, the limiting and influencing factors need to be looked into in-depth and addressed.

Technology has continuously played a major role in improving the performance of the various functions in most organizations in the world today. Organizations that have considered and adopted these inventions are benefitting much. However, they may not necessarily continue to benefit if the machines, software and applications are not maintained. Automation is only considered to be successful if there is high maintenance of all the equipment being used to facilitate this automation. Therefore, the management of organizations should ensure that this is adequately adhered to through proper budgeting and following of the right procedures for the procurement of services, (Bartezzaghi, 2013).

Bailey (2018) pointed out that automation cannot run itself. The meaning attached to this is that automation is only possible if there is proper coordination among the employees of the organization. The management of the involved organization ought to ensure that employees are fully trained on the functioning of the automation equipment and machinery. This is not only enough; he further argues that employees should be well motivated as they are the major stakeholders in automation and also should be well informed/versed on the need and benefits

of automation. Stores automation as it is part of the supply chain, may succeed or fail depending on how employees react and run it.

Inventory tracking and control is a key element of operating a successful business. Carrying too much inventory ties up capital that otherwise could be used to invest in your business or to pay bills. Too little inventory can mean you do not have enough products to sell and you lose revenue. To keep just the right amount of inventory on hand, you need a system that will let you track your inventory. In a bar code, or Universal Product Code (UPC) system, every item carries a label that gives information about the item, such as what it is, where it is located and what price it sells for. The code can be scanned with a hand-held bar code reader. Items are scanned at the cash register, as they are sold, and also in the warehouse. Computer programs then analyze the scans and tell you exactly how many items you have sold and how many you still have in the warehouse. This allows you to keep track of sales as well as the number of items you have on hand (Magloff, 2010).

Small businesses often use a stock book, or log book, to keep track of inventory. The number of inventory items is listed in one column in the book, and sales are written in another column. This allows managers to keep track of how many items have been sold. This can also be done on computer. This system may work well when the business involves only one person, or when there are only a few different types of items to sell, but as the business grows, the stock book method can become sloppy. If employees get busy and forget to note items that were sold, you could suddenly find yourself with very low inventory. This method also does not allow you to analyze sales patterns and forecast when you will need to order new items.

Radio frequency identification (RFID) tags each inventory item with a plastic bag containing a programmable microchip and a small antenna. The tags can contain a great deal of information about each item and can be read by hand-held readers. While radio tags are more expensive than bar codes, they also have several advantages over bar code systems. The tags can be read remotely, an entire pallet of tagged goods can be read at once and the information on the tags can be updated as the items are moved from one area to another. The tags can also be set to trigger an alarm when the item leaves the store preventing theft of tagged goods (Donovan, 2010).

Kanban is a Japanese word meaning "billboard" or "sign." This system for inventory tracking is most commonly used by stores, such as grocery stores, where items for sale are placed on a display shelf in the store. When a customer or sales person removes the final item on the shelf, a card is uncovered. This card gives the location in the storeroom where more items can be found. When the items in the storeroom are down to a certain point, such as 10 items left, another card is uncovered indicating how to order more goods from the supplier. This is a simple system, but it may not be useful for analyzing sales patterns and works best when there is stable and even demand from customers (Magloff, 2010).

RESEARCH METHODOLOGY

This study was carried out using descriptive research design. The population of the study was the top five retail stores in Kenya as per the GAIN data in 2023, which was determined by their annual food sales for the Nairobi outlets only for the 2023 calendar year. The unit of analysis was the top five retail stores (Naivas Ltd, Quick Mart Ltd, Eastmat Ltd, Carrefour Ltd and Food Plus Ltd) while the unit of observation comprised 212 respondents, including employees from both the warehouse and procurement departments, specifically the warehouse manager and the procurement manager. The sample size of 138 respondents in this study was computed using Cooper and Schindler's formula. Primary data was collected by use of structured questionnaires and analyzed using SPSS. The study used descriptive statistics to collect, analyze and tabulate the data. These include frequencies, measures of central tendencies specifically the mean as well as standard deviation as a measure of dispersion. Regression analysis was conducted using the multiple regression equation given below. The Statistical Package for the Social Sciences

(SPSS) tool was used to analyze the data and the analyzed data presented in frequency tables and figures.

RESEARCH FINDINGS AND DISCUSSIONS

The study obtained an 86% response rate, meaning 118 out of 138 distributed questionnaires were returned. According to Mugenda & Mugenda (2003), a response rate of 50% or above is appropriate to accurately reflect the opinions of the sample. As a result, 86% of responses were considered satisfactory.

Descriptive Statistics

The study discusses its findings about its objectives in this part. 1 Strongly Disagree, 2 Disagree, 3 Neutral, 4 Agree, and 5 Strongly Agree were the five points on a Likert scale. To interpret the results means and standard deviations were utilized. highly disagree (1.0-1.8), disagree (1.9-2.6), neutral (2.7-3.4), agree (3.5-4.2), and highly agree (4.3-5.0) are the ranges that can be interpreted. A standard deviation value of more than two indicates a significant difference in the respondents' opinions, whilst a value of less than two suggests a little variation. In this study, Strongly Disagree indicates a significant difference in opinion, Neutral indicates neither agree nor disagree, meaning that respondents could not find enough statistical evidence to reach a firm conclusion, Disagree indicates a contrary opinion, Agree indicates that the opinion is true, and Strongly Agree indicates a significant degree of agreement on opinion (very true) (Hall, 2010). Based on the study objectives, the descriptive statistics of the study are listed below.

Security Management Practices

The first specific objective was to determine the effect of security management practices on the performance of retail stores in Kenya. The responses' descriptive statistics are displayed in Table 4.6. The Composite Mean of 3.56 suggested that respondents slightly agreed to some extent that security management practices influence the influences. The standard deviation of 1.220 further suggested that the responses did not deviate much from the Mean of 3.56.

security management	SD	D	Ν	A	SA	Mean	Std.
practices	%	%	%	%	%		Dev
Repairs and maintenance of warehouse facilities and machines are done frequently	1.3	11.2	19.8	37.5	30.2	3.84	1.022
The retail store takes the safety and wellbeing of workers seriously.	8.6	27.2	19.8	22.8	21.6	3.22	1.291
The warehouse layout makes it easier to conduct our operations in the retail store	9.9	21.6	11.2	28.9	28.4	3.44	1.360
It is easy to access products to restock our shelves	9.9	28.4	18.5	30.2	12.9	3.08	1.225
Our inventory management policy ensures we minimize the inventory holding costs	1.3	21.6	28.4	30.2	18.5	3.43	1.063
Physical storage facilities are also based on Retail warehouse performance.	8.6	11.2	12.5	21.6	46.1	3.85	1.340
The warehouse manager knows about the facilities he is handling.	9.9	1.3	9.9	28.9	50.0	4.08	1.242
Composite Mean						3.56	1.220

Table 4. 1: Security Management Practices

Respondents (67.7%) agreed repairs and maintenance of warehouse facilities and machines are done frequently while only 1.3% disagreed with only 11.2% neither disagreeing nor agreeing with the statement. The Mean of 3.84 further confirmed the respondents agreed with the statement. Also, on whether the retail store takes the safety and well-being of workers seriously., 44.4% of the respondents agreed while 35.8% disagreed. The Mean of 3.22 further suggested that average, the respondents were undecided on the statement. A study done by June (2016) reckons that efforts to assess warehousing security in Ghana particularly at the Tema port must be emphasized as a result of "flow disruptions" perpetrated by parties working in the security areas.

On the warehouse layout makes it easier to conduct our operations in the retail store, 57.3% of the respondents agreed while 31.5% disagreed. However, the Mean of 3.44 suggested that on average, respondents were undecided on the statement. Respondents (43.15%) agreed that it was easy to access products to restock our shelves, while 38.3% disagreed. The Mean of 3.08 suggested that on average the respondents were undecided. According to Abrampah (2019), The major users of warehouses are manufacturers, importers, exporters, wholesalers, and retailers. Warehouses exist primarily to facilitate the movement of goods to the end user. The resources of a warehouse are space, equipment, and personnel.

Majority of the respondents (67.7%) however, the inventory management policy ensures we minimize the inventory holding costs. The composite Mean of 3.85 further supported the strong agreement of the respondents. Further, the majority of the respondents (78.9%) agreed Physical storage facilities are also based on Retail warehouse performance. The statement was further supported by the composite mean of 4.08. According to Michael (2016), Cargo theft is an ever-increasing problem in the transportation industry. It's estimated that cargo theft costs shippers and trucking companies up to \$30 billion a year and it's only getting worse. A recent study showed the frequency of cargo theft claims is increasing13% percent per year" (Sentry Insurance, 2014). Finally, the majority of respondents, 78.9% agreed that the warehouse manager knows about the facilities he is handling. The composite Mean of 4.08 further supported the strong agreement of the respondents.

Automation Management Practices

Determining the influence of automation management practices on the performance of the retail stores in Nairobi City County, Kenya was the study's second objective. The questions about the study's objective formed the basis for the descriptive statistics of the answers. The results of the respondents' agreement or disagreement with the various claims regarding automation management practices are displayed in Table 4.2. The composite mean of 3.51 and the standard deviation of 1.260 shows that respondents were only marginally in agreement that automation management practices influenced the performance of the retail stores in Kenya. Since every response was less than 2, there wasn't much of a deviation from the mean.

Rotich & Ndeto; Int. j. soc. sci. manag & entrep 8(4), 957-971, October 2024;

966

Construction Project Financing	SD %	D %	N %	A %	SA %	Mean	Std. Dev
Our store has automated the order management process	9.9	28.4	18.5	30.2	12.9	3.08	1.225
Our store has increased the level of integration with its suppliers in the recent past	1.3	21.6	28.4	30.2	18.5	3.43	1.063
The store takes the safety and well-being of workers seriously.	25.9	11.2	3.9	21.6	37.5	3.34	1.662
Our store considers supplier's inputs in its inventory	12.5	1.3	8.6	28.9	48.7	4.00	1.326
Our store shares information with its suppliers regularly	9.9	0	18.5	30.2	41.4	3.93	1.222
Our store uses RFID to increase data visibility and customer habits management practices plans	9.9	17.2	20.3	21.6	31.0	3.47	1.348
Our store profitability has increased with increased use of IT	1.3	19.8	19.8	37.5	21.6	3.58	1.074
Our store uses IT to improve customer service and satisfaction	8.6	19.8	28.4	22.8	20.3	3.26	1.233
Composite Mean						3.511	1.269

Concerning the store having automated the order management process 43.1% agreed that the store has automated the order management process while 38.3% had a contrary opinion with 18.5% only neither agreeing nor disagreeing on the number of sources funding the project. The Mean of 3.08 translates to Neutral which means the respondents were convinced to support for or against the statement on the store having automated the order management process. On whether the store has increased the level of integration with its suppliers in the recent past, 22.9% of the respondents disagreed, 28.4% neither agreed nor disagreed, and 48.7% agreed. The mean of 3.43 translates to Neutral and thus respondents were not able to make a conclusive decision whether to agree or disagree with the opinion on whether the store has increased the level of integration with its suppliers in Saunders (2016), automation first began in the early 1950s and has since then been undergoing various developments and inventions that have kept bettering it over time. Store automation primarily entails the installation of proper and computerized store systems, electronic/automated handling and storage equipment, and generally highly technologically advanced and computerized issuing and receiving procedures.

On the issue of the store takes the safety and well-being of workers seriously., 37.1% disagreed, 21.6% undecided, while 59.1% agreed. The mean of 3.34 also translates to Neutral and thus, respondents are undecided whether there are adequate funds for the construction projects. Whether the store considers supplier's inputs in its inventory majority of the respondents agreed with 77.6% while 13.8% disagreed. The mean of 4.00 translates to agree. Thus, majority of the respondents believed the store considers the supplier's inputs in its inventory. Similarly, the majority of the respondents (71.6%) agreed that the store shares information with its suppliers regularly. The mean of 3.93 also supports the findings. Only 9.9% disagreed. According to Hines (2017) says that it is a commendable job when organizations across the globe are spending quality time and effort to adopt and embrace the current technological inventions by installing systems and applications that will ensure this succeeds.

The store uses RFID to increase data visibility and customer habits management practices plans as agreed by a majority 52.6% of the respondents while only 26.1% disagreed. The mean of

Finally, Majority of the respondents (43.1%) agreed that the store uses IT to improve customer service and satisfaction. however, 29.7% have contrary opinions with 18.5% undecided on the issue. The mean of 3.35 suggested that the respondents did not find any evidence to help them decide that the store uses IT to improve customer service and satisfaction. According to Bartezzaghi (2013), technology has continuously played a major role in improving the performance of the various functions in most organizations in the world today. Organizations that have considered and adopted these inventions are benefitting much. However, they may not necessarily continue to benefit if the machines, software and applications are not maintained.

Performance of Retail Stores

The study's main objective was to determine the influence of warehouse management practices and the performance of retail stores in Nairobi City County, Kenya. The composite Mean of 3.35 and a standard deviation of 1.308 suggested that the respondents neither agreed nor disagreed on whether warehouse management practices influence retail stores' performance. Further, the standard deviation of 1.308 indicated that there are minimal variations in the responses.

Performance of Retail Stores	SD	D	Ν	Α	SA	Mean	Std.
	%	%	%	%	%		Dev
Warehouse management practices lead	9.9	19.8	20.3	21.1	28.9	3.39	1.347
to organizational effectiveness.							
Warehouse management practices	9.9	19.8	19.8	28.9	21.6	3.32	1.284
result in increased productivity.							
The port profits increased as a result of	9.9	19.8	28.4	21.6	20.3	3.22	1.256
warehouse management practices							
Order processing practices lead to	9.9	19.8	21.6	20.3	28.4	3.37	1.343
improved quality							
Warehouse management practices	9.9	19.8	19.8	28.9	21.6	3.42	1.274
result to continuous improvement							
(services being provided and							
innovations being performed during							
the service production process							
The quality of work life (motivational	9.9	19.8	19.8	21.6	28.9	3.40	1.348
level of personnel) is affected by							
warehouse management practices							
Composite Mean						3.35	1.308

Table 4. 3: Performance of Retail Stores

The statistics from Table 4.3 show that respondents (50%) agreed that the warehouse management practices lead to organizational effectiveness, while 28.7% disagreed with 20.3% neither agreeing nor disagreeing. The mean of 3.39 further suggested that respondents could not make a conclusive decision on the performance of the retail stores. Moreover, about 50.5% of the respondents believed that warehouse management practices result in increased productivity., 29.7% disagreed while 19.8% neither disagreed nor agreed. The Mean of 3.32 further suggested that, on average there was no statistical evidence to accept or reject the

968

opinion. According to Yatna and Yulianah (2024), market share is a key indicator of market competitiveness, that is, how well the retail store is doing against its competitors. Profitability is measured with income and expenses; income is money generated from the activities of the business.

Respondents (41.9%) agreed that the port profits increased as a result of warehouse management practices while 29.7% disagreed with 28.4% unable to agree or disagree on the opinion. The mean of 3.22 further suggested that the respondents have divided opinions and could not make a conclusive decision on the statement. On whether the order processing practices lead to improved quality, respondents (487%) agreed while 29.7% disagreed while 21.6% were neutral. The mean of 3.42 further suggested neutrality of opinion and thus, on average, respondents could not make a conclusive decision on whether the order processing practices lead to improved quality.

Similarly, on whether the warehouse management practices result in continuous improvement (services being provided and innovations being performed during the service production process, 50.5% of the respondents agreed while 29.7% disagreed, the mean of 3.42 further suggested that on average the respondents were neutral on that matter. Also, about 50.5% of the respondents opined that the quality of work life (motivational level of personnel) is affected by warehouse management practices, 29.7% were contrary while 19.8% were undecided on their opinion. The mean of 3.40 further suggested that on average the respondents were neutral i.e., they could not make a conclusive decision on whether to agree or disagree with the opinion. According to Junior (2015), Inventory turnover is the rate that which inventory stock is sold, used, and replaced. The inventory turnover ratio is calculated by dividing the cost of goods by the average inventory for the same period. A higher ratio tends to point to strong sales and a lower one to weak sales.

Correlation Analysis

Correlation analysis was used to measure the strength and direction of the relationships between the independent variables and the performance of retail stores. The Pearson correlation coefficient was used to determine the strength of these relationships, as summarized in Table 4.4 below. If the correlation values are $r = \pm 0.1$ to ± 0.29 then the relationship between the two variables is small, if it is $r = \pm 0.3$ to ± 0.49 the relationship is medium, and when $r = \pm 0.5$ and above there is a strong relationship between the two variables under consideration.

Variable		Performance	Security Management	Automation Management
Performance	Pearson Correlation Sig. (2-tailed)	1		
	Ν	118		
Security Management	Pearson Correlation	0.763**	1	
U	Sig. (2-tailed)	0.000		
	N	118	118	
Automation	Pearson Correlation	0.780**	0.340	1
Management	Sig. (2-tailed)	0.000	0.311	
-	N	118	118	118

Table 4. 4: Correlation Analysis

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

Security management practices were positively correlated with retail performance (r = 0.763, p < 0.05), indicating that robust security measures, such as monitoring and access control, significantly improve the performance of retail stores. These findings are consistent with June (2016), who found that enhanced security measures in warehouses reduce incidents of theft and damage, thereby improving operational efficiency.

The study also found a strong positive relationship between automation management practices and the performance of retail stores (r = 0.780, p < 0.05). This suggests that automated systems, including inventory management software and RFID technologies, significantly enhance the efficiency of retail operations. Hines (2017) noted that the adoption of automation can boost efficiency by 20-25%, supporting the positive correlation observed in this study.

Multiple Regression Analysis

The beta coefficients provide insights into the individual contributions of each independent variable to the dependent variable, illustrating their relative impact on the performance of retail stores.

	Unstandardized		Standardized	
	Coeffi	cients	Coefficients	
Model	В	Std. Error	Beta	t
(Constant)	0.652	0.098		6.653
Security Management	0.338	0.076	0.291	4.447
Automation Management	0.392	0.082	0.335	4.780

Table 4. 5: Beta Coefficients

The regression equation derived from the coefficients is:

$\mathbf{Y} = \mathbf{0.652} + \mathbf{0.338X_1} + \mathbf{0.392X_2}$

Where:

- Y = Performance of retail stores
- X₁ = Security Management
- X₂ = Automation Management

Security management practices (B = 0.338, p < 0.05) show a significant positive influence on performance, indicating that effective security measures help minimize losses and protect inventory. The results support Michael (2016), who noted that strong security protocols in warehouses can prevent theft and reduce losses.

Automation management practices have the strongest influence on performance (B = 0.392, p < 0.05). This finding underscores the importance of adopting technology to streamline warehouse operations and enhance service delivery. The study by Hines (2017) supports this, showing that automation can significantly improve operational efficiency in retail settings.

Conclusions

The study concludes that security management practices are vital for minimizing losses and protecting inventory in retail stores. Implementing strong security protocols, such as surveillance and access control, helps in reducing incidents of theft and damage. This, in turn, improves operational efficiency and the overall performance of retail stores.

Automation plays a significant role in enhancing the performance of retail stores. The study concludes that adopting automated systems, such as inventory management software and RFID technologies, streamlines operations and improves data accuracy. This leads to better decision-making and improved customer service, making automation a critical aspect of retail success.

Recommendations

Security Management Practices

Retail stores should enhance their security management practices by investing in modern surveillance systems, access control mechanisms, and security training for staff. Regular security assessments should be conducted to identify vulnerabilities in the storage and handling processes. Implementing a robust security strategy will not only protect inventory but also

Sig. 0.000 0.000

0.000

foster a safer working environment for employees, ultimately contributing to improved performance.

Automation Management Practices

Retail stores should embrace automation to streamline their operations and improve service delivery. Investments in technologies such as RFID systems, automated order processing software, and integrated supplier communication platforms can significantly enhance inventory management and operational efficiency. Training employees on the use of these technologies is also critical to ensure that automation efforts translate into improved performance. Moreover, retail stores should continuously monitor the performance of automated systems and upgrade them as needed to stay competitive.

Suggestions for Further Studies

The study's model explained 71.4% of the variance in retail performance, indicating that other factors account for the remaining 28.6%. Future research could explore additional variables that may influence the performance of retail stores, such as employee training programs, customer relationship management, and external economic factors like inflation and consumer spending behavior. Additionally, studies could focus on a longitudinal analysis to assess the long-term impact of warehouse management practices on retail performance.

REFERENCES

Abdifatah, H.M, (2018). Supply Chain Practices and their impact on Performance

- Abidi, H., & Klumpp, M. (n.d). *Performance Measurement in Humanitarian Logistics*: Among Humanitarian Organisations in Kenya.Unpublished MBA Research, University of Nairobi.
- Caplice, C., & Sheffi, Y., (2015). A review and evaluation of logistics performance measurement systems. *The International Journal of Logistics Management*, 6(1), 61-74.
- Davidson, A.L., (2016). *Key performance indicators in humanitarian logistics*. Retrieved from http://fritzinstitute.org/PDFs/findings/XS_Davidson_Anne. pdf
- Day, G.S., (2014). The capabilities of market-driven organizations. *Journal of Marketing*, 58(4), 37-52.
- De Toni, A. & Tonchia S., (2012). Manufacturing flexibility: a literature review.
- Drayton, B. (2018). Everyone a changemaker-social entrepreneurship's ultimate goal. In Creating a New Civilization through *Social Entrepreneurship* (pp. 53-61). Routledge.
- Ellinger, A.E., Daugherty, P.J., & Keller, S.B. (2020). The relationship between Marketing and Logistics interdepartmental integration and performance in U.S. manufacturing firms: an empirical study. *Journal of Business Logistics*, 21(1), 1-22.
- Ireton, S. (2021). *Steps to successful supplier/buyer partnerships*. Logistics Today, September, 44-6
- Jahre, M., & C. J. Hatteland (2016). Packages and physical distribution: Implications for integration and standardization. *International Journal of Physical Distribution and Logistics Management*, 34(2), 123-139.
- Junior, A. B. O. (2015). The aggressive competitiveness influence on the retailer company performance. Future studies research journal: *Trends and strategies*, 7(1), 156-183.
- Kaborio, C. N., Kamau, S., & Mbithi, M. (2017). Effect of consumer factors on store brand choice in the retail industry in Kenya: A survey of selected supermarkets in Nairobi County. *International Journal of Business Management & Finance*, 1(20), 332-346.
- Kalathil, A., (2017). Maximizing Supply Chain Performance in the Transportation and
- Kanji, G. K., (2022). *Measuring Business Excellence*. (Routledge Studies in Business Organization and Networks)
- Kinyua, J.K., (2018). Supply Chain Performance in Humanitarian Organisations in Kenya. Unpublished MBA Research, University of Nairobi

- Lin, C. (2016). Influencing factors on the innovation in logistics technologies for logistics service providers in Taiwan. *The Journal of American Academy of Business*, 9(2), 257-63.
- Lindenberg, M., & Bryant, C. (2021). Going Global: Transforming Relief and Development NGOs. Bloomfield, CT: Kumarian Press.
- Literature Review. Retrieved from http://www.fom.de/ download/1875-NOFOMA_Abstract_Humanitarian_ Logistics_01.pdf
- Monczka, R., Trent, R., & Handfield, R. (2015). *Purchasing and supply chain management*. *Cincinnati*, OH: International Thomson Publishing.
- Moore, M.H. (2020). Managing for value: organizational strategy in for-profit, non-profit, and governmental organizations. *Nonprofit and Voluntary Sector Quarterly*, 29(1), 183-204.
- Muigai, R. G., & Mwangi, G. (2024). The Relationship Between the Financial Literacy of the Proprietors and Enterprise Performance of Retail Businesses in Kutus town, Kenya. *European Journal of Economic and Financial Research*, 8(4).
- Ndunda, N. M. (2020). Effectiveness Of The Short Messaging Service Use On People Living With HIV/AIdS For Treatment, Prevention And Control In Kenya: A Case Study Of SWOP Clinic (Doctoral dissertation, University of Nairobi).
- Rinehart, L.M., Myers, M.B., & Eckert, J.A., (2019). Supplier relationships: the impact on security, *Supply Chain Management Review*, 8(6), 52.
- Sakaguchi, L., Pak, N., & Potts, M. D. (2018). Tackling the issue of food waste in restaurants: Options for measurement method, reduction and behavioral change. *Journal of Cleaner Production, 180*, 430-436.
- Sennett, R. (2018). Building and dwelling: Ethics for the city. Farrar, Straus and Giroux.
- Shajema, I. I. (2018). Effect of inventory control practices on performance of retail chain stores in Nairobi County, Kenya. *Journal of International Business, Innovation and Strategic Management*, 2(1), 18-38.
- Tan K.C., Lyman, S.B., & Wisner, JD. (2021). Supply chain management: A strategicperspective. International Journal of Operations and Production Management, 22(6), 614–31.
- Thomas, A., & Kopczak, L., (2015). *From Logistics to Supply Chain Management*: The Path Forward for the Humanitarian Sector".
- Thuku, N. W. (2019). *Effect of value chain management practices on peformance of medium and large scale retail outlets in Nakuru County, Kenya* (Doctoral dissertation, Egerton University).
- Tomasini, R. M., & Van Wassenhove, L. N. (2019). From preparedness to partnerships: case study research on humanitarian logistics. *International Transactions in Operational Research*, 16(5), 549-559.
- Van der Meulen, P.R.H., & Spijkerman, G., (1985) The Logistics Input-Output Model and its Application. *International Journal of Physical Distribution & Logistics Management*, 15(3), 17 25.
- Van Wassenhove, L. N. (2016). Blackett memorial lecture. Humanitarian aid logistics: Supply chain management in high gear. *Journal of the Operational Research Society*, *57*(5), 475–489.
- Whiting, M.C., & Ayala-Öström, B. E., (2019) Advocacy to promote logistics in humanitarian aid, *Management Research News*, 32(11), 1081 1089.
- Wisner, J., Leong, G. & Tan, K., (2015). *Principles of Supply Chain Management*. A Balanced Approach, Manson, OH: Thomson South-Western.
- Wu, M. J., Zhao, K., & Fils-Aime, F. (2022). Response rates of online surveys in published research: A meta-analysis. Computers in Human Behavior Reports, 7, 100206.
- Yatna, C. N., & Yulianah, Y. (2024). Marketing Strategy To Increase Market Share In The Retail Industry. *Jurnal Ekonomi*, *13*(03), 666-680.

971