



INVENTORY MANAGEMENT PRACTICES AND PERFORMANCE OF FAST-MOVING CONSUMER GOODS COMPANIES IN NAIROBI CITY COUNTY, KENYA

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ABSTRACT

Despite this booming performance and attraction of the international players, listed FMCG firms at the Nairobi Securities Exchange are very few. Further, their share price index has always witnessed more daily losses than gains. The main focus of this study was to establish the relationship between inventory management practices and performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya. Specifically, the study sought to determine the relationship between stock control practices and performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya and to analyze the relationship between disposal management practices and performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya. This study used descriptive research design. The study targeted 210 respondents comprising of the heads of department in procurement, manufacturing/Operations, Administration, Sales & Marketing and Finance department in 42 FMCG companies operating within Nairobi City County. Since the target population is small, the study used census method. Primary data was collected using a structured questionnaire with closed-ended questions. Data analysis involved both quantitative and qualitative techniques. Qualitative data from open ended questions was analyzed using content analysis and presented in prose form. Quantitative data on the other hand was analyzed using SPSS where descriptive statistics such as mean, standard deviation, frequencies and percentages were used. Correlation analysis was also done to test the strength and direction of linear relationship between variables. Multiple regression analysis was conducted to determine the relationships between the independent variables and the dependent variable. The findings were presented in tables and figures. The study concludes that stock control practices have a positive and significant effect on performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya. The study also concludes that disposal management practices have a positive and significant effect on performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya. Based on the findings, the study recommends that the management of fast moving consumer goods companies in Kenya should Implementing a sophisticated inventory management system that integrates with sales and supply chain operations enables companies to maintain accurate and up-to-date information on stock levels, sales patterns, and order statuses.

Key Words: Inventory Management Practices, Performance of Fast-Moving Consumer Goods, Stock Control Practices, Disposal Management Practices

Background of the Study

According to Statistica (2019), the top 8 FMCG companies globally ranked by net sales are; Nestle AG, the largest food company in the world ranked among the top on the Fortune 500 list of 2017 with a total of 2000 brands worldwide having head office in Switzerland; Johnson & Johnson, which deals with consumer healthcare, medical devices, and pharmaceuticals with 90 brands and headquartered in New Jersey, United States having almost 250 subsidiaries in almost 60 countries worldwide; Pepsi, an American multinational food and beverage company with over 22 brands and revenue of 67 billion US Dollars in 2019; Procter & Gamble, founded in 1837 making it one of the oldest Fortune 500 companies based in Cincinnati in the US and carrying about 105 brands; Unilever, an Anglo-Dutch company with over 300 brands and present in around 190 countries having its headquarters in the United Kingdom and Netherlands; Anheuser-Busch InBev, a Belgian-Brazilian company selling transitional beverages and considered the world's largest beverage company with over 500 brands and operating internationally with its headquarters in Leuven, Belgium; JBS, the world's second largest food company formed in Brazil with more than 300 production facilities in different countries and over 20 sales offices worldwide with an extensive product portfolio, producing chiefly frozen meat & poultry; and Coca Cola, the world's largest beverage company with more than 500 nonalcoholic beverage brands selling in more than 200 countries (Achevi, Juma, & Otinga, 2021).

Kenya is one of 10 African countries with particularly high potential for FMCG expansion, because of surging demand in the food and beverage and personal care segments. Kenya's rapidly expanding fast-moving consumer goods segment has been a major driver of industrial growth, benefiting from the particularly strong demand for food and beverages and personal care products (Statista, 2019). According to a June 2014 report on FMCG in Africa published by KPMG (KPMG, 2018), Growth in the FMCG sector is driven by several factors including Kenya's rising middle class; the African Development Bank (ADB), (2020) estimates that 17% of Kenyans can spend \$2-20 per day

Inventory management is a critical management issue for most companies – large companies, medium-sized companies, and small companies (Ahmed, 2016). Effective inventory flow management is one of the key factors for success. The challenge in managing inventory is to balance the supply of inventory with demand. A company would ideally want to have enough inventories to satisfy the demands of its customers- no lost sales due to inventory stock-outs (Ahmed, 2016). On the other hand, the company does not want to have too much inventory staying on hand because of the cost of carrying inventory. Enough but not too much is the ultimate objective (Coyle, Bardi, and Langley, 2018). The role of inventory management is to ensure faster inventory turnover. It increases inventory turnover by ten (10) and reduces costs by 10% to 40%. The so-called inventory turnover is not yet right to sell products on the shelves based on the principle of first in first out (FIFO) cycle (Ofori-Ayeh, 2016).

In traditional settings, inventories of raw materials, work-in-progress components and finished goods were kept as a buffer against the possibility of running out of needed items (Lwiki, *et al*, 2017). However, large buffer inventories consume valuable resources and generate hidden costs. Consequently, many companies have changed their approach to production and inventory management. Since at least the early 1980s, inventory management leading to inventory reduction has become the primary target, as is often the case in just-in-time (JIT) systems, where raw materials and parts are purchased or produced just in time to be used at each stage of the production process. This approach to inventory management brings considerable cost savings from reduced inventory levels. As a result, inventories have been decreasing in many firms (Agu, Obi-Anike, & Eke, 2016), although evidence of improved firm performance is mixed (Etale, & Bingilar, 2016). It is therefore essential to establish the influence of inventory management strategies on firm performance.

Statement of the Problem

Kenya's rapidly expanding fast-moving consumer goods (FMCG) segment has been a major driver of industrial growth, benefiting from the particularly strong demand for food and beverages (F&B) and personal care products (KPMG, 2019). This has led some international firms to enter the market or increase existing investments in recent years, most notably US firms including the Wrigley Company, PepsiCo, and Coca-Cola among others (Kenya Association of Manufacturers, 2016). Despite this

booming performance and attraction of the international players, listed FMCG firms at the Nairobi Securities Exchange are very few. Further, their share price index has always witnessed more daily losses than gains (Njoroge, 2015). Little enrollment at the Nairobi Securities Exchange, specifically of international 6 players and daily bearish trends on the few listed FMCG firms at the NSE contradicts the FMCG sector's general upward growth that has made it a big contributor to the Kenyan GDP. Research has shown that inventory management practices influence firm performance.

Several studies have been conducted on inventory management practices and firm performance. For instance, Otunga (2021) conducted a study on factors affecting the financial performance of fast-moving consumer goods firms listed on Nairobi securities Exchange. Achola and Were (2018) conducted a study on the influence of marketing strategies on performance of fast-moving consumer goods companies in Nairobi County, Kenya. Oballah, Waiganjo and Wachiuri (2015) researched on the effect of inventory management practices on organizational performance in public health institutions in Kenya: A case study of Kenyatta national hospital. Musau et al (2017) conducted a study on the effect of Inventory Management on Organizational Performance Among Textile Manufacturing Firms in Kenya. Nevertheless, none of these studies showed the the relationship between inventory management practices and performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya. To fill the highlighted gaps, the current study sought to establish the relationship between inventory management practices and performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya

Objectives of the Study

The main focus of this study is to establish the relationship between inventory management practices and performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya

The study was guided by the following specific objectives;

- i. To determine the relationship between stock control practices and performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya
- ii. To analyze the relationship between disposal management practices and performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya

LITERATURE REVIEW

Theoretical Review

Transactional Cost Theory

This theory was formulated by Ronald Coase in 1937. The theory asserts for two parties to complete an economic exchange there must be a cost that is incurred as a basic unit on the resources on effort to be used, (Williamson, 1981). Transaction is thus broadly understood as exchange of goods and or services across physical and technological interfaces, and determined by market forces where when costs of transacting business is high, the transaction is likely to be limited and avoided by the majority leading to a low demand. Conversely, with low costs of transaction, exchanges the goods and/or services become more preferred leading to a high market demand, (David and Han, 2004).

This theory advocates for rational decisions to be made before undertaking any transaction as it propagates rational use of resources in achieving desired goals in an organization. For instance, when presented with different options of undertaking business transactions, it is imperative to go for the one with the lowest cost of transactions and save the resources. The fundamental principle upon which TCT is posited is to understand the specifics and basics of a transaction where two partners are involved. The focus then shifts to the transaction where the costs are low and the benefits are high in terms of revenue, profits and other related gains. This then makes the transaction form a business perspective very favourable. This study will use Transactional Cost Theory to assess the relationship between stock control practices and performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya

Queuing Theory

Queuing theory has its origins in research by Agner Krarup Erlang in 1909. This is a mathematical study of waiting lines or queues. The theory enables mathematical analysis of several related processes, including arriving at the back of the queue, waiting in queue (a storage process) and being served in front of the queue (Xie, Cao & Ong, 2016). The theory permits the derivation and calculation of several performance measures including the average waiting time in the queue or the system, the expected number waiting or receiving service, and the probability of encountering the system in certain states such as empty, full, having an available server or having to wait a certain time to be served (Iman & Borimnejad, 2017).

The existing methodologies to independently optimize facilities layout design and material handling systems are mainly based on minimizing the costs (Hill, 2014). This is despite the fact that the inherent variability causes an accumulation of work- in- progress at the various stages of production which eventually affects competing strategies of an enterprise such as time, cost and quality. Therefore, an integrated methodology that incorporates the variability and concurrently optimizes the layout designs and materials handling is essential (Xie, Huang & Ong, 2016). Queuing model can be utilized to model the planning system variations, identifying risks and genetic algorithm can be implemented to solve the integrated optimization problem. It is also demonstrated that the proposed optimization approach can significantly improve a production system with respect to total travelling time, total work-in-progress in the system, utilization and quantity of material handling equipment and required area.

Queuing systems focus on analysis of customer wait times. Therefore, the theory can be applied to pretty much every aspect of the business, and it can be customize for virtually every probability (Xie, Cao & Ong, 2016). This study will use Queuing Theory to analyze the relationship between disposal management practices and performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya

Conceptual Framework

Conceptual framework refers to a diagrammatic set of interrelated ideas on a particular phenomenon and it's characterized by cause and effect relationships which helps interpret more and hence making it easily understandable. This makes it more straightforward and also easily predictable (Svinicki, 2019). It is a diagram that explains the relationship between dependent and independent variables. In this study, the independent variables were stock control practices and disposal management practices while the dependent variable will be performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya

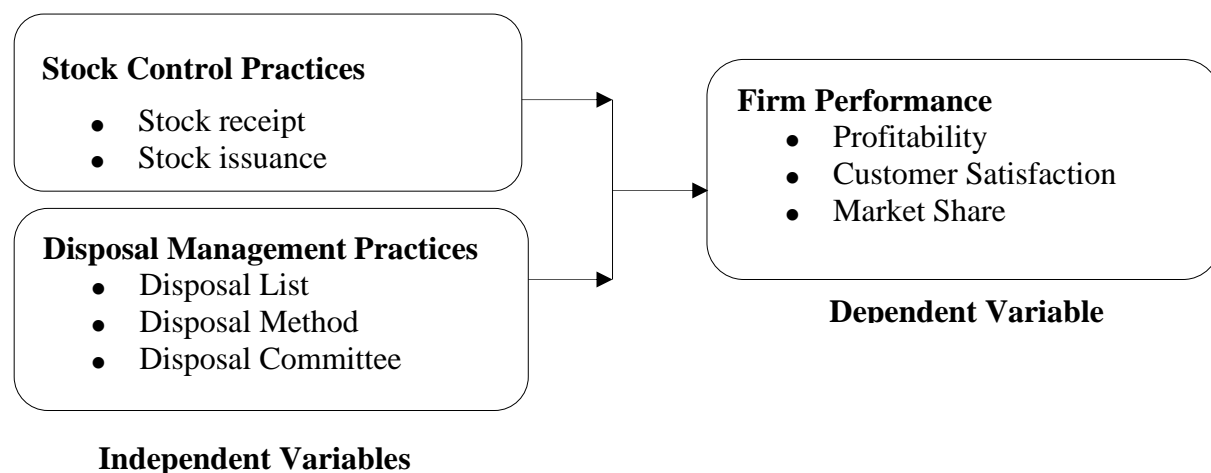


Figure 2. 1: Conceptual Framework

Stock Control Practices

Stock control practices refer to the systematic and strategic methods employed by organizations to manage and regulate their inventory effectively. These practices are designed to ensure that the right quantity of goods is available at the right time, minimizing the risk of stockouts, overstocking, and operational inefficiencies. The goal of stock control is to optimize inventory levels, enhance operational efficiency, and ultimately meet customer demands (Onyango, 2018). Effective stock receipt practices are integral to maintaining accurate inventory levels and facilitating smooth warehouse operations. These practices involve establishing clear procedures for receiving goods, including thorough inspections for both quality and quantity. Accurate documentation, encompassing packing lists, invoices, and any accompanying paperwork, is paramount to track and account for incoming items. Implementing advanced technologies such as barcode scanning or RFID systems can streamline the receipt process, reducing manual errors. Quality checks are essential during the stock receipt phase to ensure that received items meet specified standards and are free from defects (Juan & Martinez, 2019). Stock issuance practices play a critical role in the efficient release of inventory items for various operational purposes. Establishing clear procedures for order fulfillment and internal requisitions is essential. Efficient picking and packing processes contribute to accurate and timely order fulfillment. Real-time inventory tracking is crucial to prevent stockouts or overstock situations, ensuring that stock levels align with demand. Accuracy checks during the stock issuance phase guarantee that the items being released match the order specifications (Rajeeve, 2018)

Disposal Management Practices

Disposal management is a critical aspect of records and information management that involves the systematic and secure removal of records that are no longer needed or have reached the end of their lifecycle (Gachuru, 2022). Proper disposal practices are essential for maintaining data integrity, protecting sensitive information, and ensuring compliance with legal and regulatory requirements. Establishing clear and comprehensive retention policies that specify how long records should be retained based on legal, regulatory, and business requirements. Retention policies serve as a foundation for determining when records are eligible for disposal (Liu, 2017). A disposal list is a structured inventory or record that details the items or records designated for removal, deletion, or destruction as part of the disposal management process. This list is a crucial component of records and information management, providing transparency, accountability, and a systematic approach to the removal of records that are no longer needed (Pearce, 2015)

Disposal methods refer to the systematic and secure processes employed by organizations to remove records, data, or physical items that are no longer needed or have reached the end of their lifecycle. The choice of disposal method depends on the nature of the records, legal and regulatory requirements, and the organization's information security policies (Mulder, 2018). A disposal committee is a designated group within an organization responsible for overseeing and managing the process of disposing of records, data, or physical assets that have reached the end of their lifecycle. This committee plays a crucial role in ensuring that disposal practices align with legal and regulatory requirements, organizational policies, and industry standards (Gitau, 2018).

Empirical Review

Stock Control Practices and Firm Performance

Onyango (2018) researched on stock control practices and operational performance of Kenyan commercial state corporations. The study adopted a descriptive survey research design. The target population comprised of 31 commercial state corporations in Kenya, all 31 commercial state corporations returned dully filled questionnaires producing a response rate of 100 percent. A census survey was done on all the commercial state corporations in Kenya. Primary data was collected using questionnaires. Data collected was analyzed by use of descriptive statistics using SPSS and presented through the percentages, frequencies, mean, standard deviations and regression analysis. The information was then presented by use of tables and bar charts. The finding gave a positive relationship between stock control practices and operational performance. It was found that if stock control

practices is implemented properly, it produces a variety of benefits such as meeting the customers' needs, reduced defect levels, increased profitability, improved cost efficiency, improved communication and better problem solving. The study found that practices of stock control practices are greatly affect operational performance of commercial state corporations in Kenya

a study conducted by Juan and Martinez (2019) on a group of small and medium sized Spanish firms revealed a correlation between managerial practice and implementation of inventory goals. The study which incorporated 8872 firms showed that effective inventory management processes helps increase firms' operational efficiency. Eckert (2017) in his studies on inventory management practices and the role it plays in improving customer service levels. His finding confirmed that, there is a positive correlation between inventory management practices and customer satisfaction due to reduction of stock outs in the firm. Koumanakos (2018) studied the effect of inventory management on firm performance of manufacturing firms operating in Greece. He suggested lean stock control practices lead to an increase in revenue to the firm.

A study conducted by Rajeeve (2018) on 91 Indian machine Tool enterprises to establish the relationship between inventory management practices. The result form this study showed that inventory performance has a positive correlation with management practices. The findings concluded that the higher the level of stocks in the firm, the lower the financial performance due to increase cost associated with holding a lot of stock in the firm. Rajeev (2019) argues that stock control practices are a way of acquiring competitiveness and increase operational performance. The variable of this study is the stock control practices as a independent variable, and dimensions of operational performance as dependent variable. In line with their findings, Erogoglu and Hofer (2021) empirically investigated the contribution of the inventory management on company performance. The study which was conducted in USA revealed that lean inventory practices contributed to fruitful implementation of considerable practices in the company's stock control.

Nyamao and Ojera (2018) researched on inventory management practices and business performance for SmallScale Enterprises in Kenya. The relationship was probed based on primary data gathered by use of a structured questionnaire from 70 SSEs. The empirical results revealed a positive significant relationship between business performance and effective inventory management practices at 0.05 significance level. Further, they showed that inventory budgeting had the largest effect on business performance with a beta coefficient of 0.329, followed by shelf-space management with a beta coefficient of 0.30. Inventory level management had the least but significant effect with a beta coefficient of 0.297

Disposal Management Practices and Firm Performance

Liu (2017) conducted a study on the provincial local waste disposal in five areas of China. The objective of the study was to break down the various kinds of local waste disposal in rustic China and the central point that influence country family unit waste disposal. Stratified random sampling was employed to draw respondents from the study population. According to the study findings, family information was utilized to depict the disposal of local waste in provincial China. Local trash and natural waste econometric models were evaluated to measure the significant determinants of family local trash and human excrete disposal. In light of econometric investigation, it was evident that pay development, rising population, and transportation enhancements had essentially improved household trash disposal, yet adversely influenced the reusing of human excreta. The provision of a sufficient trash collection administration had the best consequences for waste collection and management.

Gachuru (2022) researched on waste management and its effect on employee performance in Nakuru water and sanitation company (NAWASCO), Kenya. A cross-sectional research design was adopted alongside quantitative methods. The 81 employees attached to the technical and operations or production departments of the company constituted the study population. A census design was adopted due to the relatively small study population. A structured questionnaire facilitated data collection. With the assistance of the Statistical Package for Social Sciences tool, the collected data were analyzed using both descriptive and inferential statistics. The results which were presented in table format indicated that there existed a positive, strong and statistically significant relationship between waste management

and employee performance $r = 0.980$; $p = 0.000$) at p -value = 0.05. Also, the results indicated that the effect of waste management on employee performance was statistically significant ($t = 34.726$; $p = 0.000$). The null hypothesis which stated that the effect of waste management on employee performance was not significant, was rejected. The study concluded that waste management played a crucial role with regard to performance of employees working NAWASCO.

Pearce (2015) examined the relationship between waste administration and employee performance in the United States. A cross-sectional research design was adopted. The results of the study were clear that a strong waste reusing activity was a powerful method for waste administration in the US. Thus, the environment which had a successful strong waste reusing activity was sublimely spotless. The study concluded that successful waste reusing procedures were the most ideal approach of waste management.

Mulder (2018) conducted a study on how collection equipment influenced employee performance. The study results indicated that there were three essential types of collection equipment. These included human fueled, creature controlled and the motor controlled equipment. While inspecting the equipment that was progressively viable in collection of strong waste. The mechanized collection equipment (motor controlled) was noted to be extremely successful in collection of tons of waste.

Gitau (2018) researched on construction waste management practices and performance of housing and water projects in Nairobi City County, Kenya. A census of 285 respondents was carried out. Questionnaire was used to collect primary data. Data was analysed using descriptive statistics and inferential statistics such as correlation analysis and regression analysis. The study established that project design, material handling, procurement and reuse, recycle and reduce practices had a positive and significant effects on the performance of housing and water projects. The study concludes that project design strengthens the owner's control of the entire design process and minimizes the risks in finance by contracting with a single firm that is unconditionally committed to the success of the project. Procurement helps the organization maintain quality and consistency, effectively, drive compliance and manage risk. Materials handling ensures that the right quality and quantity of materials are appropriately selected, purchased, delivered and handled on site in a timely manner and at a reasonable cost. Reuse, recycle and reduce practices are vital part in any waste management strategy because they help reduce waste handling and disposal costs, by avoiding the cost of recycling, land filling and combustion. The study recommends that Waste prevention and reduction in the design phases, project design should focus on reuse and recycling, waste-efficient procurement, materials optimization, off-site construction; and deconstruction and flexibility. Prospective contractors should be required in their tenders to indicate the likely waste recovery targets and key performance indicators that can be achieved on the project given the stage of the design. Government should introduce specific legislation governing the handling and disposal of construction wastes and follow up with strict monitoring to ensure compliance.

RESEARCH METHODOLOGY

The descriptive research design was employed. The target population in this study is the FMCG firms in Nairobi County. Nairobi City County was targeted since most of the FMCG companies are concentrated in Nairobi. Latest records from KAM (2021) indicate that there are 42 FMCG companies operating within Nairobi City County. All the 42 FMCGs firms were targeted. The unit of observation in this study was the heads of department in procurement, manufacturing/Operations, Administration, Sales & Marketing and Finance department. On the other hand the unit of observation was the 42 companies. The total target population was therefore be 210 respondents. The study adopted census technique since all the 42 FMCGs firms were targeted. In this study, primary data was collected using a semi-structured questionnaire. The study collected both quantitative and qualitative data. Qualitative data collected was analyzed using content analysis and presented in prose form. On the other hand, quantitative data collected will be analyzed using descriptive statistics techniques such as percentages, frequencies, means, and standard deviation using Statistical Package for Social Sciences (Version 25.0). Pearson R correlation was used to measure the strength and direction of linear relationship between variables. Multiple regression models were fitted to the data in order to determine how the

independent variables influence the dependent variable. Multiple regression Analysis was used in this study because it uses the independent variables in predicting the dependent variable.

Presentation was done in tables and figures.

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

The researcher sampled 210 respondents who were each administered with the questionnaires. From the 210 questionnaires 190 were completely filled and returned hence a response rate of 90.5%. The response rate was considered as suitable for making inferences from the data collected. Smith (2011) indicates that a response rate that is above fifty per-cent is considered adequate for data analysis and reporting while a response rate that is above 70% is classified as excellent. Hence, the response rate of this study was within the acceptable limits for drawing conclusions and making recommendations.

Descriptive Statistics Analysis

Stock Control Practices and Firm Performance

The first specific objective of the study was to determine the relationship between stock control practices and performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya. The respondents were requested to indicate their level of agreement on the statements relating to stock control practices and performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya. The results were as shown in Table 1

From the results, the respondents agreed that the organization employs a systematic approach to stock control, ensuring accurate tracking and monitoring of inventory levels (M=3.902, SD= 0.897). In addition, the respondents agreed that there is a well-defined and documented process for forecasting and demand planning to determine optimal stock levels (M=3.884, SD= 0.731). Further, the respondents agreed that the company utilizes technology and software tools to enhance the accuracy and efficiency of stock control practices (M=3.843, SD= 0.763). The respondents also agreed that regular stock audits and reconciliations are conducted to identify and rectify discrepancies in inventory records (M=3.816, SD=0.641). In addition, the respondents agreed that the organization has established clear guidelines for classifying and prioritizing stock items based on factors such as demand, shelf (M=3.736, SD= 0.675).

The respondents agreed that stock control procedures include mechanisms for identifying and addressing obsolete or slow-moving inventory (M=3.721, SD=0.866). The respondents also agreed that the company actively implements just-in-time (JIT) or lean inventory principles to minimize excess stock and carrying costs (M=3.638, SD=0.734).

Table 1: Stock Control Practices and Firm Performance

	Mean	Std. Dev.
The organization employs a systematic approach to stock control, ensuring accurate tracking and monitoring of inventory levels.	3.902	0.897
There is a well-defined and documented process for forecasting and demand planning to determine optimal stock levels.	3.884	0.731
The company utilizes technology and software tools to enhance the accuracy and efficiency of stock control practices.	3.843	0.763
Regular stock audits and reconciliations are conducted to identify and rectify discrepancies in inventory records.	3.816	0.641
The organization has established clear guidelines for classifying and prioritizing stock items based on factors such as demand, shelf life, and criticality.	3.736	0.675
Stock control procedures include mechanisms for identifying and addressing obsolete or slow-moving inventory.	3.721	0.866
The company actively implements just-in-time (JIT) or lean inventory principles to minimize excess stock and carrying costs.	3.638	0.734
Aggregate	3.791	0.758

Disposal Management Practices and Firm Performance

The second specific objective of the study was to analyze the relationship between disposal management practices and performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya. The respondents were requested to indicate their level of agreement on various statements relating to disposal management practices and performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya. The results were as presented in Table 2.

From the results, the respondents agreed that the organization has established and documented procedures for the secure and compliant disposal of business assets and materials (M=3.931, SD=0.891). In addition, the respondents agreed that disposal management practices include the proper identification and categorization of assets earmarked for disposal (M=3.855, SD=0.857). Further, the respondents agreed that there are designated individuals or teams responsible for overseeing and enforcing disposal management policies within the organization (M=3.720, SD=0.714). The respondents also agreed that the organization complies with legal and regulatory requirements related to the disposal of assets, including environmental regulations for hazardous materials (M=3.685, SD=0.677). Further, the respondents agreed that disposal practices include data sanitization protocols to ensure the secure removal of sensitive information from electronic devices before disposal (M=3.678, SD=0.656).

The respondents agreed that the company has implemented environmentally friendly disposal methods, such as recycling or reusing materials whenever possible (M=3.658, SD=0.759). In addition, the respondents agreed that periodic audits are conducted to assess the effectiveness and compliance of disposal management practices with established policies (M=3.649, SD=0.898).

Table 2: Disposal Management Practices and Firm Performance

	Mean	Std. Dev.
The organization has established and documented procedures for the secure and compliant disposal of business assets and materials.	3.931	0.891
Disposal management practices include the proper identification and categorization of assets earmarked for disposal.	3.855	0.857
There are designated individuals or teams responsible for overseeing and enforcing disposal management policies within the organization.	3.720	0.714
The organization complies with legal and regulatory requirements related to the disposal of assets, including environmental regulations for hazardous materials.	3.685	0.677
Disposal practices include data sanitization protocols to ensure the secure removal of sensitive information from electronic devices before disposal.	3.678	0.656
The company has implemented environmentally friendly disposal methods, such as recycling or reusing materials whenever possible.	3.658	0.759
Periodic audits are conducted to assess the effectiveness and compliance of disposal management practices with established policies.	3.649	0.898
Aggregate	3.739	0.779

Firm Performance

The respondents were requested to indicate their level of agreement on various statements relating to performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya. The results were as presented in Table 3.

From the results, the respondents agreed that financial statements reflect consistent revenue growth and profitability (M=3.882, SD=0.876). In addition, the respondents agreed that the organization effectively manages working capital to ensure financial stability (M=3.876, SD=0.897). Further, the respondents agreed that the company invests strategically in capital expenditures for sustainable growth (M=3.872, SD=0.784). The respondents also agreed that the company stays abreast of market trends and adapts its product offerings accordingly (M=3.869, SD=0.698).

The respondents agreed that the organization is quick to respond to changes in consumer preferences and demands (M=3.854, SD=0.653). In addition, the respondents agreed that research and development efforts focus on anticipating and capitalizing on emerging market trends (M=3.765, SD=0.789). Further, the respondents agreed that the organization maintains an efficient and widespread distribution network to ensure product availability (M=3.741, SD=0.712). The respondents also agreed that distribution channels are regularly evaluated and optimized for cost-effectiveness (M=3.645, SD=0.587). The respondents agreed that the company leverages technology for supply chain management to enhance distribution efficiency (M=3.626, SD=0.876).

Table 3: Firm Performance

	Mean	Std. Deviation
Financial statements reflect consistent revenue growth and profitability	3.882	0.876
The organization effectively manages working capital to ensure financial stability	3.876	0.897
The company invests strategically in capital expenditures for sustainable growth	3.872	0.784
The company stays abreast of market trends and adapts its product offerings accordingly	3.869	0.698
The organization is quick to respond to changes in consumer preferences and demands	3.854	0.653
Research and development efforts focus on anticipating and capitalizing on emerging market trends	3.765	0.789
The organization maintains an efficient and widespread distribution network to ensure product availability	3.741	0.712
Distribution channels are regularly evaluated and optimized for cost-effectiveness	3.645	0.587
The company leverages technology for supply chain management to enhance distribution efficiency	3.626	0.876
Aggregate	3.792	0.764

Correlation Analysis

The present study used Pearson correlation analysis to determine the strength of association between independent variables (stock control practices and disposal management practices) and the dependent variable (performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya). Pearson correlation coefficient range between zero and one, where by the strength of association increase with increase in the value of the correlation coefficients.

Table 4: Correlation Coefficients

		Firm Performance	Stock Control Practices	Disposal Management Practices
Firm Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	190		
Stock Control Practices	Pearson Correlation	.827**	1	
	Sig. (2-tailed)	.003		
	N	190	190	
Disposal Management Practices	Pearson Correlation	.895**	.119	1
	Sig. (2-tailed)	.000	.067	
	N	190	190	190

The results revealed that there is a very strong relationship between stock control practices and performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya ($r = 0.827$, p value = 0.003). The relationship was significant since the p value 0.003 was less than 0.05

(significant level). The findings conform to the findings of Erogoglu and Hofer (2021) that there is a very strong relationship between stock control practices and firm performance.

The results also revealed that there was a very strong relationship between disposal management practices and performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya ($r = 0.895$, $p \text{ value} = 0.000$). The relationship was significant since the $p \text{ value} 0.000$ was less than 0.05 (significant level). The findings are in line with the results of Gachuru (2022) who revealed that there is a very strong relationship between disposal management practices and firm performance.

Regression Analysis

Multivariate regression analysis was used to assess the relationship between independent variables (stock control practices, and disposal management practices) and the dependent variable (performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya)

Table 5: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	0.202	0.051		3.961	0.000
	stock control practices	0.481	0.125	0.480	3.848	0.003
	disposal management practices	0.425	0.109	0.424	3.899	0.002

a Dependent Variable: performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya

The result revealed that stock control practices has significant effect on performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya, $\beta_1=0.481$, $p \text{ value}= 0.003$). The relationship was considered significant since the $p \text{ value} 0.003$ was less than the significant level of 0.05 . The findings conform to the findings of Erogoglu and Hofer (2021) that there is a very strong relationship between stock control practices and firm performance

In addition, the results revealed that disposal management practices has significant effect on performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya $\beta_1=0.425$, $p \text{ value}= 0.002$). The relationship was considered significant since the $p \text{ value} 0.002$ was less than the significant level of 0.05 . The findings are in line with the results of Gachuru (2022) who revealed that there is a very strong relationship between disposal management practices and firm performance.

Conclusions

the study concludes that stock control practices have a positive and significant effect on performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya. Findings revealed that stock receipt, stock issuance and stock storage influences performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya.

The study also concludes that disposal management practices have a positive and significant effect on performance of fast-moving consumer goods (FMCGs) companies in Nairobi city county, Kenya. Findings revealed that disposal list, disposal method and disposal committee influence performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya.

Recommendations

the study recommends that the management of fast moving consumer goods companies in Kenya should adopt advanced inventory management systems with real-time tracking capabilities. Implementing a sophisticated inventory management system that integrates with sales and supply chain operations enables companies to maintain accurate and up-to-date information on stock levels, sales patterns, and order statuses.

The study also recommends that the management of fast moving consumer goods companies in Kenya should implement a comprehensive waste reduction and recycling program. By establishing and actively managing a program focused on reducing waste generation and increasing recycling rates, FMCG companies can significantly enhance their operational efficiency and environmental performance.

Suggestions for Further Studies

This study was limited to the relationship between inventory management practices and performance of fast moving consumer goods (FMCGs) companies in Nairobi city county, Kenya hence the study findings cannot be generalized to firm performance in other firms in Kenya. The study therefore suggests further studies on the relationship between inventory management practices and firm performance in other firms in Kenya.

REFERENCES

- Achevi, D., Juma, D., & Otinga, H. N. (2021). Inventory control techniques and performance of procurement function at Vihiga County Referral Hospital, Kenya. *International Journal of Economics, Commerce and Management*, 9(10), 141-162.
- Achola, G. O., & Were, S. (2018). Influence of marketing strategies on performance of fast-moving consumer goods companies in Nairobi County, Kenya. *Stratford Peer Reviewed Journals and Book Publishing Journal of Marketing & Communication*, 1(1), 32-42.
- Agu, A. O., Obi-Anike, H. O., & Eke, C. N. (2016). Effect of inventory management on the organizational performance of the selected manufacturing firms. *Singaporean Journal of Business Economics, and Management Studies*, 5(4), 56-69.
- Ahmed, A. D. (2016). Effect of inventory management on financial performance: Evidence from Nigerian conglomerate. *International Journal of Economics and Management Engineering*, 10(9), 3182-3186.
- Erogoglu, A., & Hofer, C. (2021). Contribution of inventory management on company performance: Empirical evidence from the USA. *International Journal of Supply Chain Management*, 5(2), 507-520.
- Gitau, D. (2018). Construction waste management practices and performance of housing and water projects in Nairobi City County, Kenya. Retrieved from <https://ir-library.ku.ac.ke/bitstream/handle/123456789/22468/>
- Gachuru, G. G. (2022). Waste management and its effect on employee performance in Nakuru Water and Sanitation Company (NAWASCO), Kenya. *African Multidisciplinary Journal of Research*, 2(2), 23-56.
- Juan, M., & Martinez, M. (2019). Inventory management practices and operational performance of Spanish SMEs. *International Journal of Business Management*, 5(3), 201-217.
- Koumanakos, D. P. (2018). The effect of inventory management on firm performance. *International Journal of Productivity and Performance Management*, 57(5), 355-369.
- Lwiki, T., Ojera, P. B., Mugenda, N. G., & Wachira, V. K. (2017). The impact of inventory management practices on financial performance of sugar manufacturing firms in Kenya. *International Journal of Business, Humanities and Technology*, 3(5), 75-85.
- Mulder, D. (2018). Collection equipment and its impact on employee performance: A study in waste management systems. *Journal of Environmental Management*, 6(1), 123-138.
- Nyamao, N. R., & Ojera, P. B. (2018). Inventory management practices and business performance for small-scale enterprises in Kenya. *KCA Journal of Business Management*, 4(1), 11-28.

- Oballah, D., Waiganjo, E., & Wachiuri, W. E. (2015). The effect of inventory management practices on organizational performance in public health institutions in Kenya: A case study of Kenyatta National Hospital. *International Journal of Education and Research*, 3(3), 703-714.
- Onyango, G. (2018). Stock control practices and operational performance of Kenyan commercial state corporations. Retrieved from <http://erepository.uonbi.ac.ke/bitstream/handle/11295/102837/>
- Pearce, J. (2015). Relationship between waste administration and employee performance in the United States. *Journal of Business Management*, 3(4), 245-260.
- Rajeeve, M. (2018). Stock control practices and their effect on financial performance of Indian machine tool enterprises. *Journal of Operations Management*, 7(2), 134-150.