**BINDURA UNIVERSITY OF SCIENCE EDUCATION**


**FUCULTY OF COMMERCE**

**DEPARTMENT OF ECONOMICS**

# THE IMPACT OF INVENTORY MANAGEMENT PRACTICES ON ORGANIZATIONAL PERFORMANCE IN FMCG FIRM

A RESEARCH

BY

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A DISSERTATION SUBMITTED IN PARTIAL FULLFILMENT OF THE REQUIREMENTS FOR THE BACHELOR OF COMMERCE HONOURS DEGREE IN PURCHASING AND SUPPLY OF BINDURA UNIVERSITY OF SCIENCE EDUCATION. FACULTY OF COMMERCE

JUNE 2023

**RELEASE FORM**

| | |
|---|---|
| **Name of student:** | Ishmail Mutete |
| **Title of the research project:** | The impact of inventory management practices on organizational performance in FMCG firms |
| **Programme for which the Project was presented:** | Purchasing and supply |
| **Year granted** | 2023 |

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## DECLARATION

I Ishmail Mutete, do hereby declare that this research report is a result of my own work, expert to the extent indicated in the acknowledgements, references and by comments included in the body of this, research, and that it has not been submitted in part or in full for any other degree to any other university

## APPROVAL FORM

The undersigned certify that they have read and recommend to the department of Supply Chain Management, School of Business Sciences and Management, Bindura University of Science Education for acceptance, a project titled Impact of inventory management practice on organisation performance in FMCG sector. Submitted by Ishmail Mutete, In partial fulfilment of the requirements for the Bachelor of Science (Hons) Degree in Purchasing and Supply.

**Dr Mutswangwa**

**Signature ……**

## DEDICATION

My Research study is dedicated to my lovely family and friends. Dedication goes to my father Arnold Mutete mother Reginah Nyahanana whose love for education has no bounds and fully supported my vision and financially. My siblings Ronald, Gift, and Michaela Mutete, to my peers Tawanda Mapito, Loveta Jere my work mates during my attachment period Loyce Kalembo, Dawn Kampango, Sharon Levison, for their support and patience during my entire period of carrying out the study. Great appreciation goes to my incomparable mother for nurturing in me the virtue of hard work, endurance and hope in my carrier endeavors

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# ABSTRACT

In Harare, the study looked at impact of inventory management practices on organisational performance in the FMCG. The goal of the research was to highlight the inventory management practices systems that are employed in FMCGs. To investigate the effect of inventory practices on organisational performance in FMCG firms. The purpose of this study is to see how storage management affects inventory control management systems. The study focuses on manufacturing SMEs in Harare. The population was calculated using Yamane formula (1997) for the sample size for the target population of workers, which has 100 workers according to the 2022 company's Human Resources records, and 50 respondents were chosen, which include staff workers of these with stores officers, procurement officers involved. Questioners and interviews were used to gather primary data, which was then analysed using pie charts, graphs, and tables. Descriptive statistics were used to analyse the data. According to the survey, inventory management control systems have an impact on the operational performance according to 78% of the respondents.

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## LIST OF ACRONYMS AND ABBREVIATIONS

FMCG…… Fast moving commodity goods

EOQ…….. Economic order quantity

JIT……. Just In Time

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# CHAPTER ONE

## Introduction

### 1.0 Introduction

Inventory management is a crucial aspect of retail operations that involves the planning, organizing, and control of goods that a business buys, produces, or sells. Current business atmosphere of unstable currency, exchange rates and increasing competition implies that all companies need to be as efficient as possible at every level, which includes inventory management, which entails more than simply the forecasting and replenishment of stock. Inventory is regarded as an accountancy function, which concerns itself more with inventory valuation. The purpose of inventory monitoring and measurement as it crucial to provide management with the necessary information to improve operations and to day-to-day running of the organization.

### 1.1 Background of the Study

Inventory management is critical aspect of any business operations that involves the planning, organizing, and control of goods that a business buys, produces, or sells. Effective inventory management helps retailers to maintain the right level of stock, avoid stock-outs, reduce waste, and minimize costs. Poor inventory management can result in overstocking, stock-outs, and wastage, which can lead to loss loyal customers, bad publicity, cost of storage.

Inventory management is a critical management issue for most companies regardless of size, Effective flow of inventory in organization is one of the key factors for success. The problems in managing inventory is to maintain the optimum supply of inventory with demand. An organization would ideally want to have enough inventories to satisfy demand. On the other hand, the company does not want to have too much inventory staying on hand because of the cost of holding inventory.

The FMCG industry plays a vital role in the economy of many countries worldwide, providing employment opportunities and contributing to the growth of gross domestic product (GDP). The industry comprises businesses that sell products to consumers, such as clothing, electronics, and groceries, among others. FMCG face various challenges in their operations, including maintaining a profitable business while ensuring customer satisfaction.

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Song, van-Houtum and Van-Mieghem (2019) states that inventory management helps an organization to meet the set production or sales revenues, which is an important component of performance. According to Shin, Wood, and Jun (2016), inventory management helps firms especially manufacturing organizations to smoothen the operations as adequate inventories in place means there would not be disruptions in the production processes on account of inadequate inventories. From the discussion, a positive relationship is expected between inventory management and performance.

The leading retailer that operates several stores across the country, has a wide range of products, including hardware, groceries, and household items faces intense competition from other retailers, and to remain competitive, it needs to maintain efficient and effective inventory management practices. Regardless of level of sophistication of control system, it is argued that

inventory must be leveled down to maximize storage costs and to boost up inventory to the level of customers' demand in the target market (Medard 2013; Atnafuand Balda 2018).

The lack of proper inventory management practices in an organization is a significant problem that needs to be addressed urgently. Without effective inventory management practices, the company may continue to experience stock-outs, overstocking, and increased costs, which could lead to further declines in revenue and profitability. The problem is also accelerated by intense competition in the retail industry, which requires retailers to maintain efficient and effective inventory management practices to remain competitive.

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Improved inventory management practices in FMCG have the potential to positively affect the company's performance. For example, efficient inventory management can lead to a reduction in holding costs, better cash flow management, and increased sales revenue through satisfied customers. Therefore, this study aims to investigate the impact of inventory management practices on FMCG performance.

## 1.2 Statement of the problem

FMCG has been experiencing stock-outs of popular products, resulting in lost sales and dissatisfied customers. This has been a significant challenge for the company, as it has led to a decrease in revenue and customer loyalty. Additionally, FMCG has been overstocking on slow-moving items, leading to increased holding costs and waste. This has resulted in reduced profits and lower overall business performance.

The lack of proper inventory management practices in FMCG is a significant problem that needs to be addressed urgently. Without effective inventory management practices, the company may continue to experience stock-outs and overstocking. This could lead to further declines in revenue and profitability. The problem is also exacerbated by intense competition in the retail industry, which requires retailers to maintain efficient and effective inventory management practices to remain competitive. Another inventory management system that influences organizations business and operational performance is the inventory turnover. Inventory turnover is a measure of management's ability to use resources effectively and efficiently.

Therefore, this study seeks to investigate the impact of inventory management practices on FMCG performance, with the aim of identifying best practices that can help the company improve its inventory management and ultimately enhance its overall business performance.

## 1.3 Objectives of the study

The main objective of this research is to evaluate the impact of inventory management strategies on organizational performance in retail industry in Zimbabwe, a case study of FMCG.

### 1.3.1 Specific objectives

The study ought to achieve the following specific objectives.

1) To examine the inventory management practices used by FMCG
2) To evaluate the impact of inventory management on performance of FMCG

3) To assess the Impact of inventory control systems on storage management on organizational performance at FMCG

### 1.4 Research Questions

This study seeks to discourse the following research questions:

1) What are the inventory management practice systems being utilized by FMCG
2) Which effects does inventory control systems have on organisational performance?
3) What impact does the storage management have on inventory control management systems?

### 1.5 Significance of the study

The significance of the study highlights the importance of the research and how it contributes to the existing body of knowledge in the field. In this case, the study is significant to the following stakeholders

#### 1.5.1 to the firm

Since inventory is one of the most crucial aspects of any business model, the research is intended to benefit FMCG. A close tab on the movement of inventory can make or break the business and that is why entrepreneurs always emphasize on effective inventory management. Inventory management in businesses must grow as the company expands. With a strategic plan in place that optimizes the process of overseeing and managing inventory, including real-time data of inventory conditions and levels, companies can achieve inventory management benefits that include better inventory planning and ordering, increased customer satisfaction minimize the blockage of financial resources as well as managing cash flows.

#### 1.5.2 Contribution to the retail industry

The study provides insights into the impact of inventory management practices on the performance of retail organizations, specifically FMCG. The findings of the study can contribute to the development of best practices in inventory management in the retail industry. By

identifying the causes of stock-outs, overstocking, the study can help the organization improve its inventory management practices. This, in turn, can lead to improved business performance, increased revenue, and profitability.

### 1.5.3 to the researcher

This research is of great concern to the researcher because it is a pre-requisite for the completion of the Purchasing and Supply degree program. It is used to measure student`s progress in attaining the required skills and knowledge of the program understudy. It is hoped that upon conclusion of this research, the researcher will be equipped with inventory management concept, as he would have done a thorough research of the concept. The researcher may also have the knowledge of the impacts of inventory management strategies and how to eliminate the problems in managing inventory to contribute to sustainability of the organization.

### 1.5.4 Academic contribution

The study adds to the existing body of knowledge on inventory management in the retail industry. The findings of the study can contribute to academic research on inventory management practices and their impact on organizational performance.

### 1.5.5 to the University

This research will be of great value to the institution in such a way that other students in conducting research especially those in pursuit of fulfilling BSSCM honors degree can use it. The university may also add to the existing literature review for students who may wish to carry out research in the same area under study.

## 1.6 Scope of the Study

The scope of the study section of the dissertation defines the boundaries of the research, including the specific aspects that will be excretal and the limitations of the study. In this case, the scope of the study is as follows:

1. Industry: The study will focus on the retail industry, specifically FMCG, a leading retailer

that operates several stores across the country.

2. Inventory management practices: The study will examine retail inventory management practices, including planning, organizing, and controlling of goods that the organization buys, produces, or sells.

3. Causes of stock-outs, overstocking, and waste: The study will investigate the causes of stock-outs, overstocking, and waste, including factors such as poor demand forecasting, inefficient ordering systems, and inadequate inventory tracking systems.

4. Impact on performance: The study will determine the impact of inventory management practices on FMCGs performance, including revenue, inventory turnover, and profitability.

5. Recommendations: The study will provide recommendations to FMCG on how to improve its inventory management practices based on the study findings.

## 1.7 Limitations

### 1.7.1 Financial constraints

The researcher was not funded; therefore, the resources were limited. Due to limited resources like stationery and transport costs, the researcher found it difficult to carry out his research effectively. With an effort to moderate financial shortcomings, the researcher sourced funds from family members.

### 1.7.2 Data availability

The study will rely on data provided, which may have limitations in terms of accuracy and completeness.

### 1.7.3 Time and resource constraints

The study will be conducted within a specific period and with limited resources, which may

affect the depth and scope of the research.

Overall, the scope of the study is focused on inventory management practices in FMCG and their impact on organizational performance, with the aim of providing recommendations for improving inventory management practices. The limitations of the study are important to consider when interpreting the findings and generalizing them to other contexts.

### 1.8 Assumptions of the study

The key assumptions underlying this study is that researcher assumes that the research environment remains unchanged during the period of the study.

### 1.9 Definition of terms

#### 1.9.1 Inventory

Burt et al (2001) defined inventory as a list of items held in inventory that is raw materials, work in progress and finished goods.

#### 1.9.2 Inventory management

According to Phillip Kotler (2000), inventory management is all the activities involved in developing and managing the inventory levels of raw materials, semi-finished materials and finished goods so that adequate supplies are available and the costs of over or under inventories are low.

#### 1.9.3 An inventory management system

It is the set of policies, procedures and controls that monitor inventory to determine the levels should be maintained, when to reorder, and how large orders should be.

#### 1.9.4 Performance

According to Drunker (1995), “performance is the balance between all factors of production that will give the greatest output for the smallest effort.”

### 1.9.5 Organizational Performance

Knowton (1980) defines organizational performance as a phrase, which refers to how efficiently, effectively, and timely an organization meets its goals. Organizational performance can also be in terms of profitability and productivity.

## 1.10 Chapter summary

The chapter looked on the introduction, background of the study, statement of problem, objectives of the study, research questions, and significance of the study, assumptions, and delimitations of the study, limitation of the study and definitions of terms.

Chapter focuses on related literature review, theoretical review, empirical evidence, and gap analysis. Chapter 3 looks at the methodology and data collection, research design, population and sample techniques. Chapter four shows data presentation of data collected and discussions. Lastly, chapter five will give recommendation, conclusion and the summary of the research and findings.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.0 Introduction

Chapter 2 consist of theoretical review, conceptual framework, empirical review, and gap analysis and chapter summary. All these chapters are there to clearly point out theories, empirical evidence, and conceptual evidence as well as research gap.

## 2.1 Theoretical review

Many of the best practices for inventory management, including Vendor Managed Inventory, Just in Time, Forecasting, Collaborative Planning and replacement, Automatic Replenishment, and Material Requirement Planning, according to Sushma (2012). Empirical data has demonstrated that there is limited understanding of these techniques, their mode of operation, and their practical importance in Kenya's manufacturing sector. The significant increase in raw material waste, increased lead times, lost sales, product shortages, backorder penalties, rising production costs, and issues with low quality that are currently destroying the industry may be explained by the lack of awareness and incomplete adoption of these innovative inventory management techniques. Therefore, there is a huge gap between theoretical inventory management and the practical approach when taking the manufacturing industry into account, and it is essential to bridge this gap. As a result, the ideas that follow describe inventory management procedures.

### 2.2.1 Strategic Choice theory

The theory was developed in the 1970s by John child (1972).The strategic choice theory highlighted the relationship between the decisions made by the management and a company's success as well as connections between the internal and external environments of the company. Atnafu, D., & Balda, A. (2018) thesis focused on the importance of management decisions and how they affect the performance of the company. Michelson (2013) developed a strategic choice model that illustrated how organizations, activities, and overall business performance are all

influenced by the environment. The strategic theory was unable to place more emphasis on contextual factors, such as environment, technology, and the degree of operation into account and only focused on how the structure of a firm helps in the performance of a business. The model concentrated on achieving a higher performance level to increase efficiency, especially in the face of limited resources.

When deciding how to boost an organization's performance, the management took a number of options into account, including inventory management approaches. This study sought to better our understanding of the decisions managers makes regarding the selection of inventory management strategies to enhance organizational performance of consumer goods manufacturing firms about profitability, quality, efficiency, optimal production, production targets, and on-time delivery.

### 2.2.3 Transaction Cost Analysis theory

Transaction Cost Analysis (TCA), Williamson, a mathematician, and economist built his transaction costs economics in the innovative theory of an organization at the beginning of the 1970s and integrated TCA into the general equilibrium model according to Hall (2014), is a theory that ensures supply chain expenses are kept to a minimum level. TCA was widely embraced in a number of fields, particularly in the study of economics and organizational structures and performance. According to Williamson (2015), businesses can increase their level of trust while also lowering their transaction costs by integrating vertically. This kind of integration would save inventory management costs, improve the level of service provided to both internal and external clients, and free up capital for use in other areas of a company.

One of an organization's main goals is to reduce expenses, which includes the transaction costs encountered across the supply chain. In most cases, a decrease in transaction costs led to an improvement in profitability. On the other hand, as was previously explained, inventory management strategies were anticipated to be crucial in improving supply chain management effectiveness. This study sought to discover whether the inventory management practices used by companies that manufacture consumer goods contribute to increased profitability because one of the performance metrics used in this study was profitability.

### 2.2.4 The Theory of Economic Order Quantity

The EOQ model proposed by W. Harris (1913)describes a very simple deterministic inventory planning model with trade-off between fixed ordering cost and inventory carrying cost. described as one that is concentrated on ordering portions that minimizes the stability of cost between the inventories holding costs and the reorder costs by Coleman (2013).Tanchoco, et (1980) the EOQ model as critical assumptions that are provided, the costs of holding a stock are known, and are considered constant; there are ordering costs that are perceived to be constant; the level of demand was known, and was regarded as constant; that the lead time cycle was well-known, and was considered constant; that the price per unit was also considered constant; the replenishments made immediately, the entire batch; and the lead time cycle was well-known.

One issue with EOQ is that it frequently overlooks the need for shield stocks, which are kept on hand to account for variations in lead times and demand, making it difficult to put into effect. The EOQ model required that the point of ordering, which was regarded as the highest economically viable quantity of ordering, be established for each item that is preserved in a shop. The model ignored the reality that uncertainties were frequent and common in all firms and assumed that all other variables would remain constant. For instance, uncertainty included changes in the demand's intensity, product damage during shipping, and delivery delays. In this context, the level of demand uncertainty would necessitate that EOQ be prepared to guard against uncertain business circumstances.

Due to uncertainties in the business environment, adjusted economic order quantity was an EOQ model that should be used if demand fluctuation was a common occurrence in this study. It was important to know how widely consumer goods manufacturing firms in Nairobi had implemented the EOQ model as well as how it had affected their performance.

The EOQ formula;

$$EOQ= \sqrt{\frac{2DS}{H}}$$

Where D = Demand in units per year

S = Ordering cost per unit

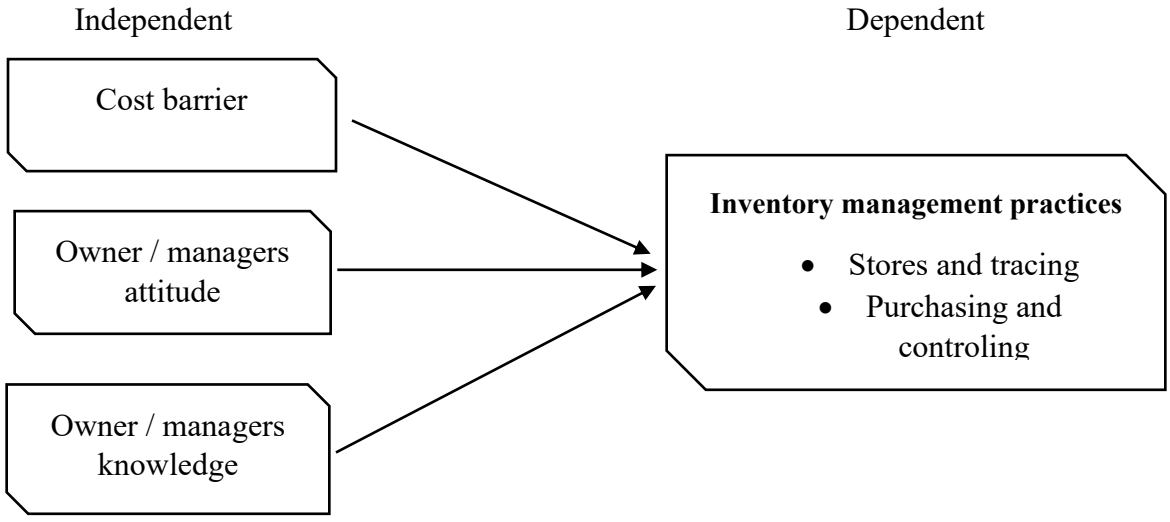
H = cost of holding inventories per unit per year

## 2.3 Conceptual Framework

### 2.3.1 Inventory

Different authors and researchers define the term "inventory" differently depending on the context of their individual research. Reserves are defined by Bhandari (2018) as the company's current assets or tangible assets. An inventory, according to Kant et al. (2019), is a complete detailed list of assets owned by a company or institution, such as goods in stock, department, and equipment. He defines inventory as a means of keeping products in stock at a low cost of purchase and restocking without the intervention of suppliers. According to Rajab (2017), inventory includes all products owned and held to meet customer needs. This is done to ensure that supply disruptions are rare and that customer requirements are always met.

**Figure 2. 1 conceptual framework**




Source: Author

As indicated in the definitions above, the value of inventory varies greatly depending on the subject. In production jargon, inventory refers to stocks of raw materials, semi-finished products,

materials for industrial enterprises and spare parts. While inventories may refer to finished products ready for sale to customers in the case of businesses and institutions, they may also refer to medical equipment and medicines in the case of FMCGs. Inventories typically refer to material resources that businesses, industries, and institutions maintain available to produce goods or finished products that will soon be sold to customers. They are necessary to maintain the operation of production wheels so that the market and distribution system can continue to function smoothly (Godan and Ngugi, 2019).

### 2.3.2 Inventory Management systems

Inventory management systems, according to Ganesh and Uthayakumar (2019), simplify and centralize the process of controlling the movement and maintenance of inventory to ensure that the required amount of inventory is available at the right time and in the right quality. Inventory management systems are used in a wide range of industries, including FMCG, utilities, healthcare, education, and public administration.

ABC analysis, also known as selective inventory control in materials management, is a method of inventory categorization. Inventory is divided into three categories using the ABC method. Items with very strict controls and accurate records, items with less strict controls but good records, and C items with the least possible control. ABC analysis is a tool for finding items that will have a big impact on the total value of stocks, and provides a mechanism for identifying different categories of stocks that will require different management and control (Dasaklis and casino 2019).

According to Shajema (2018), FIFO stands for "first in, first out", which means that the oldest inventory is recorded as sold first, although this does not always mean that the oldest actual item was tracked and sold. In other words, the cost of the inventory that was purchased first is the cost that is expensed first. The inventory value presented in the balance sheet in accordance with the FIFO is the value of the most recently purchased items.

When inventory is purchased and sold from the warehouse, the permanent inventory system updates the inventory data and considers additions and subtractions. It is recommended to use perpetual, because it has a good affect operational characteristics, for example, it provides up-to-date information about stocks and copes better with a minimum amount of physical inventory. Written procedures should be available with a detailed description of the steps to be performed

within a specific inventory management system. All inventory management systems should be carefully evaluated, and inventory placement should be supported by evidence (for example, knowledge of stability and technical justification). A study conducted at the Zewuditu Memorial FMCG in Addis Ababa found that minimum and maximum stock levels are used, although they are performed manually, which compromises the accuracy of stock levels. In addition, the analysis showed that consumption data is used, and stocks are replenished manually. The study also confirms that a FMCG that uses ABC/VEN analysis (Vital, Irreplaceable and Non-essential) to classify products according to their value in stock leads to effective resource management (Azeb Semahegn, 2017).

### 2.3.3 Types of inventories

Raw materials, work in progress, finished products, and stocks of supplies such as stationery and fuel are the most common types of stocks in various organizations. Raw material stocks, according to Kakuku (2017), are raw materials from suppliers that have not yet entered the production or transformation process. These stocks are crucial to helping the business overcome the challenges of the purchasing department.

Due to internal inefficiency, suppliers often do not provide the promised resources, since the procurement mechanism is slow and inefficient; the company may not be able to receive resources on time. Sometimes problems can be caused by environmental conditions that are not related to suppliers or businesses. If there were no stocks of raw materials, any supply disruptions would be automatically transferred to operational functions. Operations would stop because there would be no input data to convert.

Work in progress (WIP) is defined by Pandey (2019) as products that have been partially completed. These are semi-finished products at various stages of production, and stocks serve as a link between input and output. They symbolize items that require additional work before they can be considered completed. Finished products are products that have been completed and are ready for sale. They link production to marketing or consumption to account for unplanned disruptions in production, as well as to account for uncertain consumer demand variables (Pandey, 2019). Stocks of finished products give the company more flexibility in terms of production and marketing. Van Horne (Van Horne 2020)

According to Stock and Lambert (2019), stocks can be divided into six different categories: Cycle stocks are stocks that are created during the replenishment process and are necessary to meet demand under certain conditions, for example, when a firm can almost accurately estimate demand and replenishment time (order lead time): Stocks in transit. Even if they are not ready for sale or transportation until they arrive at their destination, they can be called a cycle stock: a stock for speculation. Stocks held for reasons other than meeting current demand are known as speculative stocks.

Materials may be purchased in larger quantities than necessary, for example, to take advantage of quantity discounts, to avoid price increases or shortages of materials, or to protect against a possible strike: stocks available only in certain seasons. Seasonal stock is a type of speculative stock that involves the accumulation of stocks before the start of the season in order to maintain a stable workforce and production cycles, or, in the case of agricultural products, stocks accumulated because of the growing season, which limits availability throughout the year.

Stocks that nobody needs, at least right now, are known as dead stocks. The problem is why any company would spend money on storing these goods instead of just throwing them away. One of the factors may be that management expects an increase in demand in the future. On the other hand, getting rid of something may be more expensive than keeping it. However, the most compelling reason to retain these assets is to provide the organization with excellent customer service. Perhaps a large buyer sometimes needs some of these products, so the management keeps them on hand out of politeness.

### 2.3.4 The inventory management control systems used in FMCG firms.

Inventory management refers to the tracking and management of goods, which includes monitoring of goods transported to and from warehouses, as well as reconciliation of stock balances. According to Gupta (2018), firms should create comprehensive inventory management practices, as well as an effective inventory information system, to balance the costs and risks associated with inventory management with the benefits of having inventory to run smoothly.

According to Lucay (2019), excessive inventory levels are undesirable because they increase the risks of inventory obsolescence, inventory loss due to damage or theft, increased storage costs

such as rent and insurance and unnecessary binding of the firm's finances. He goes on to say that if a company maintains a high level of inventory, it reduces revenue, implying that the company's long-term financial position is at risk because the money is not invested in other profitable businesses. This indicates the need for appropriate inventory management systems to protect stocks from theft and damage. You can also use the E.O.Q system, which helps to order exactly what is needed, in accordance with demand, and not surplus. Some of the systems used for inventory management have been discussed below;

### 2.3.5 ABC analysis

This inventory control method involves categorizing products into three groups based on their respective impact on inventory, as well as the financial value of the objects that make up the category (Coyle et al., 2020). The ABC analysis used in this study is a simple and effective approach to analyzing department costs, identifying priority groups of drugs whose use, if improved, can have the greatest clinical and economic impact. ABC analysis gives an accurate and objective picture of the budget expenditures on medicines.

Some products require a higher level of attention than others do. This method requires distinguishing between products that require a lot of attention and those that do not. Using this method, products can be divided into the following groups. Because their financial implications are substantial, but sales are predictable, Class A products require strict procedures and inventory management systems, such as an indefinite system. Class C products, on the other hand, require less attention because they have low financial returns and are often sold out. Class B goods are in the middle of the spectrum between Classes A and C. (Campbell, 2017).

### 2.3.6 Just in time

The inventory system is an advanced inventory management model, in which we can deliver any necessary materials, wherever they are needed and whenever they are needed, on time, with 100 percent guarantees of supplies and without stock availability. JIT is the best inventory management system because it has no inventory, shortages, or replenishment orders. This model, however, requires suppliers (vendors) to be local and 100 percent predictable; orders can be broken down into small orders without additional transportation costs, that is, frequent deliveries

are economically feasible.; and the requirements are well understood. This requires a unified supplier base and a long-term relationship with a supplier that must be of high quality.

It also requires that the supplier have sufficient capacity to deliver at any time, without shifting the cost of excess capacity to the buyer Yankah,P. (2022). The inability to invest in technology and infrastructure hinders the use of inventory management methods in medical institutions. In order to ensure the maximum and minimum levels of reserves, it was necessary to create a proper infrastructure. As a result, the company can reduce storage costs, warehousing costs, and lead-time (Njoroge, 2019).

### 2.3.6 Economic order quantity (EOQ)

This is a method of reducing the total cost of storing inventory and ordering. This method is used to determine the optimal amount of inventory to reduce the total cost of purchasing, transporting and storing inventory (Unlimited). This is a mathematical approach to inventory ordering that reduces the total cost of ordering and storing products to a minimum. The reordering level is a set point between and indicates the point at which the emergency and immediate inventory acquisition procedures must be performed. It informs retailers that the prices of materials have reached the lowest point.

### 2.3.7 VED analysis

The “method is exclusively based on the criticality of inventories. For example, in FMCGs and pharmacies, there are goods that are critical for patient survival and must be always available. Inventory is divided into three categories using VED techniques: desired items, crucial items, and essential items. Essential items are inventory that improves quality and speeds of production; desired items are inventory whose unavailability will not affect production or function of the business; vital commodities are inventory that a business cannot run without; vital commodities are inventory that a business cannot run without; vital commodities are inventory that a business cannot run without; vital commodities are inventory that a business cannot run without; vital commodities are inventory that a business (Pagare et al. 2016) .”

### 2.3.8 Perpetual inventory system

Inventory records are automatically updated, and additions and deletions are considered when inventory items are purchased and released from the warehouse. Perpetual is suggested because it has a positive effect on operational qualities; for instance, it gives current stock information and functions better with a smaller number of physical inventories. Written instructions with a thorough breakdown of the actions to be taken inside a particular inventory management system should be available. Inventory placement should be supported by evidence and all inventory management systems should be properly assessed.

To ensure accurate inventory and staff competency, management systems should be carefully established. According to Ganesh and Uthayakumar (2019), inventory management systems streamline and centralize the process of regulating the movement and upkeep of inventory to guarantee that the necessary amount of inventory is accessible at the appropriate time and in the proper quality.

## 2.4 The effect of inventory control systems on operational performance at Gains Cash and Carry

Systems for managing inventory are essential to an organization's expansion and survival since poor inventory management can cause the company to lose consumers, which will result in subpar service and a decline in sales. It is stressed how inventory management systems affect the financial report of the organization. Because many businesses want to reduce their investments in fixed assets like factories, warehouses, office buildings, equipment, and machine tools, Coyle, Bardi, and Langley (2020) write that inventories as an asset on the balance sheet of corporations have become more important.

The effectiveness of the organization is a concern for specialists in development, finance, operations, law, and strategic planning. In recent years, numerous organizations have made an effort to manage organizational effectiveness by putting in place a system that monitors and assesses performance using a variety of factors, such as financial indicators (for instance, profitability for shareholders), customer service, social responsibility (for instance, corporate citizenship, public relations), and employee satisfaction. Performance of an organization is based on its ability to achieve its goals and objectives, claim West et al. (2010). The effectiveness of an

organization's actions is based on whether it meets its goals, complies with its social responsibilities, or fulfills both. The activity of a community or a nation is impacted by the organizational function.

### 2.4.1 Ensure distribution continuation.

Every industry segment will benefit greatly from this. If you are in charge of controlling production, nothing should stop, for instance if the FMCG is large and you do not want to lose customers. Because of this, supply will increase. Inventory management practices must be continuously updated to guarantee that distribution continues (Mukopi and Iravo 2020).

As a result, the business keeps a reserve stock to satisfy normal production and market demands in order to ensure product availability. In order to act as a buffer or a link between supply and demand and enable production to be directed towards a more stable output, inventory control should be employed as a preventative strategy. The precautionary motive includes the accumulation of stocks to protect against the risk of unpredictable changes in the dynamics of supply and demand, as well as other variables. (2019, Pandey).

### 2.4.2 Cater for demand variability.

To account for this, an inventory management system, such as ABC analysis, should serve as a safety net that enables you to detect swings in demand when businesses are unable to accurately estimate demand or when there is market uncertainty. This is because ABC analysis aids in prioritizing goods with higher prices and higher levels of consumer demand. More inventory is needed when demand is more volatile or unpredictable (Materials Management, 2019). In the healthcare sector, there is no way to predict future demand. Balloon (2020) contends that supplies should be kept in order to boost consumer demand and that products should be accessible so that consumers can order the quantities they want. The goal of the transaction is to ensure daily activities run smoothly. The motivation behind the transaction, according to Pandey (2019), underlines the necessity of maintaining inventory to support continuous production and sales.

Nearly all businesses must keep track of a variety of goods and supplies. This is because operating on just one of each item that will be sold, manufactured, used in office work, or used in

a healthcare company would be all but impossible. Every commonly used or sold object or substance has a reserve, fund, or inventory that is kept in such a way that it can be refilled or augmented as needed from the stocks kept in the reserve. Because supply and demand are unpredictable, stocks are kept in order to ensure that commodities are always available and to lower total inventory management expenses (Drury, 2019). The cautious motive is one of the most crucial purposes of inventory management systems, according to Gittinger (2017). The precautionary goal therefore suggests keeping stocks in order to guard against the threat of unforeseen changes in supply and demand. Most of the time, it is impossible to estimate with certainty how much demand there will be for a given commodity and how long it will take to deliver it.

### 2.4.3 Reduce cost associated with Inventory.

The cost of storage, commonly referred to as the cost of transportation, is the fee charged for products that are kept in storage for a predetermined amount of time. These expenses are connected to the holding of equities prior to their sale or use. Capital expenses, which include any charges related to stock speculation, are among these expenses. The price of the warehouse, which includes the price of the location where items are kept. If nothing else is specified, this could be the cost of a storage unit or the rental fee for a unit. Additionally, included are fees for providing power and water to businesses. Inventory management methods like JIT assist eliminate delay because products are only accepted and ordered when they are required.

Order expenses are the price associated with replenishing an order. These total charges are incorporated into the pricing each time you make an order with a supplier. These expenses could involve identifying suppliers, paying for transportation, and placing a purchase order. The E.O.Q. model system has a positive impact on organization since it makes it possible to arrange requirements exactly. This will assist in lowering the order-related expenses. According to Lucay (2018), excessive inventory levels are undesirable since they raise the dangers of inventory obsolescence, inventory loss due to damage or theft, increased storage costs like rent and insurance and unneeded tying up of the company's money.

The process aims to keep enough product on hand to meet demand while lowering the cost of acquiring and keeping stockpiles. The management of department items in accordance with a

specified and scientific approach is a key component of the business model in all pharmacies, particularly those in communities and FMCGs. The supply and demand equation becomes unbalanced because of ineffective inventory management, on the other hand, which also results in an unreasonable increase in the costs of transportation and procurement (Ali, 2016). As a result, a system for managing inventories at a reasonable price needs to be developed. Controls can provide the framework for consistent quality, enhanced financial and operational performance, and increased regulatory compliance when properly installed and implemented throughout daily operations (Wisayawickrama and Karolyon, 2017).

### 2.4.4 High inventory management costs

There are considerable labour and employment expenses associated with inventory management. This is because training more personnel have a high management cost for the institution. Despite the advantages of using inventory management systems, Dirty and Dodds (2019) claim that inventory is an asset that needs to be backed by the business's earnings. The company's capacity to spend in other, more crucial things is constrained by these expenditures. The company's operational success will suffer because of this.

## 2.5 The effects of storage management on inventory management practices.

A study done in Indian healthcare facilities found that efficient control management systems depend on proper storage system management. As a result, goods will have a lengthy shelf life if they are kept properly and stored separately from non-medicinal products. The flow of goods from the source to the manufacture SMEs service should be increased through store management in the safest and most affordable manner possible without suffering major losses. Until they are consumed, consumables should be maintained to maintain their intended quality and prevent damage during transportation (Kokilam et al, 2016). The following is a list of some storage management implications:

### 2.5.1 Improved software data and accurate orders

Locations for products and storage must be current and accurate. This guarantees superior software data for inventory control systems. The permanent system, for instance, will be able to automatically resupply and monitor the assets of manufacturing SMEs and other department companies in real time. If the storage area has information about the serial numbers of the products, the control system for keeping high-value products will be improved.

### 2.5.2 More information

Good storage management enhances the inventory control system's visibility. Inventory management systems will be able to see expiration dates and obsolete stock. Businesses will be able to carry less inventory and avoid carrying too much with better planning and management. This is because you can order precisely the quantity that has been estimated and corresponds to the warehouse space according to the E.O.Q management solutions. Effective storage management increases security by improving the comprehension of inventory management systems. All types of intellectual property will be considered and given top priority.

### 2.5.2 Ensure that inventory control system is ineffectively used.

According to a study done on manufacturing SMEs in Addis Ababa, they do not use the expiration tracking table to keep track of the expiration dates of department products, their inventory management system does not alert them to potential shortages of goods, outdated, expired, or damaged goods, and they do not have enough storage space for all of their goods, which leads to goods being stored on the floor due to a lack of storage space (Hermias Semu Vodajo, 2018).

Stocks in manufacturing SMEs in Zimbabwe may become obsolete, degrade, deteriorate, and break down due to poor storage conditions. This is because inadequate storage will make it difficult to maintain inventory management systems. For instance, the FIFO approach will not function if the data is stored wrongly. Significant overstocking may result from this, and it is possible that patient-harming breakdown products will emerge. Medical supplies should always be kept in a secure location that is specifically designated for storage because they are expensive and in high demand.

## 2.6 Empirical Literature Review

By reporting on the results of a large-scale field test that assesses the short- and long-run opportunity cost of a stock out, Anderson, Fitzsimons, and Simester (2006) evaluated the efficacy of various remedies that businesses might provide to offset the cost of stock outs. Results of the study indicated that a stock out has a negative effect on both more goods in the current order and future orders.

The study demonstrated how making poor inventory decisions results from failing to consider the long-term repercussions of a stock out. The findings have significant ramifications for merchants thinking about using discounts to make up for stock shortages. A study on adaptive inventory management with RFID data was carried out by Saygin (2007). Based on service level, cost, inventory and waste reduction, and decision-making complexity, the study examined three inventory management strategies that use RFID data. According to Adu-2009 Bobi's study on the inventory management procedures of Ghanaian soap manufacturing companies, the firm used both a just-in-time environment and a periodic review system for its inventory management processes.

In their 2010 study, Kim, Kwon, and Kwak examined a multi-stage inventory control with nonstationary consumer demand and a constraint on customer service levels. A multi-agent-based approach for distributed inventory control systems was suggested by the study. (2011) You-Jun, Liang, and Yi-Qian investigated the best inventory model with lots of orders and a permitted shortage. Imeokparia (2013) examines the relationship between inventory management and control and performance in food and beverage industries in Nigeria while the Lagrange Multiplier Method was used to demonstrate that the stationary ordering policy is the best ordering policy. The study's conclusions demonstrated a strong correlation between inventory management and control and the success of Nigerian food and beverage enterprises.

Gokhale and Kaloji (2018) did a study on inventory control and how it affects foundry industry profitability in Belagavi. The study found that inventory management includes the efficient and effective utilization of spare parts and raw materials that are used in manufacturing operations to

produce final goods. The study indicated that failing to manage inventories could endanger a company's long-term viability.

According to Berman and Evans (2017), effective inventory management is essential for retailers to remain competitive in today's market. They argue that by optimizing inventory levels, retailers can improve their profitability and customer satisfaction. Similarly, in a study of inventory management practices in the fashion industry, Song and Wang (2019) found that companies that implemented effective inventory management practices were more likely to be successful and achieve higher levels of customer satisfaction.

Effective inventory management is critical to the success of any retail business, as it impacts several key aspects of organizational performance, including profitability, customer satisfaction, and operational efficiency. This finding is supported by various studies in the field, which highlight the importance of inventory management in the retail industry.For instance, a study by Faisal et al. (2014) found that inventory management practices significantly influence the performance of retail businesses, including their profitability and customer satisfaction. Similarly, a study by Kwon and Kim (2016) found that effective inventory management can enhance operational efficiency and reduce costs for retail businesses.

Mwangi and Thogori (2015) investigated the role of inventory management in the operations of food processing companies in Kenya. The survey used a sample of 110 respondents and a questionnaire to collect data. Research results have shown that unit increases in production maintenance, cost control, record loss reduction and continuous delivery lead to increased efficiency for a food processing company. The report recommended that inventory management should be well-structured and cost management such as transport costs, order costs and production maintenance should be well managed to meet demand, increase product turnover and identify opportunities.

Anichebe and Agu (2013) assessed the impact of proper inventory management on organizational performance in Nigeria. The study used a sample of 248 respondents and collected data through questionnaires and oral interviews. Research results showed a significant relationship between inventory management and organizational performance. The study also concluded that inventory management had a significant impact on organizational productivity and that there was a strong positive correlation between inventory management and

organizational profitability. The study concluded that good inventory management is the key to organizational growth and success.

Etale and Bingilar (2016) investigated the impact of inventory cost management on the profitability of listed brewers in Nigeria. The study used secondary data from annual reports and financial statements of selected brewers listed on the Nigerian Stock Exchange between 2005 and 2014. A study conducted using multiple regression techniques revealed that effective inventory cost management has a positive impact on the profitability of brewers in Nigeria. The study recommended that brewers adopt effective inventory cost management practices, adopt appropriate modern technology for efficient inventory cost management; and employ qualified and competent personnel who should be regularly trained in proper and effective warehouse cost management. Naliaka and Namusonge (2015) investigated the role of inventory management in the competitive advantage of manufacturing firms in Kenya. The study used a descriptive research design. Self-administered questionnaires were used to collect data. The findings of the study indicated that inventory management systems, information technology, inventory lead-time and inventory management practices are critical factors in achieving competitive advantage for Kenyan manufacturing firms.

## 2.7 Gap Analysis

The topic of this area of study gives a gap between the studies, which have been previously carried out by other researchers. There were no clear studies regarding the inventory management on the retail performance in Zimbabwe. The researcher used ABC analysis is a method of classifying inventory items based on their value and importance. Items are classified into three categories: items, which are high-value and high-importance items that require close monitoring and control; B items, which are moderate-value and moderate-importance items that require regular monitoring and control; and C items.

## 2.8 Chapter summary

There is a strong and positive relationship between effective inventory management practices and organizational performance in this chapter. Retail companies should therefore focus on

reducing inventory levels, improving inventory turnover, and optimizing inventory management processes to improve their financial and business performance. The following chapter will investigate the methodology of the study.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.0 Introduction

This research study was carried out under a descriptive research survey, specifically using FMCG as its case study. Its focus was mainly on the design, research subjects, target population and the sample size. The researcher then put a close attention on the ways in which the data came to be collected: either being from the primary data or the secondary data. This focus on the collection of the data was for the researcher's basis to test the reliability of the data to support his subject area being studied. Conclusions were then drawn at the end of this chapter after the validity testing was done basing on the accuracy of data and the research instruments used.

## 3.1 Research design

There are two different approaches in research, which are qualitative and quantitative orientation. However, the literature suggests a growing interest in a mixed approach (triangulation) following on from the argument that 'one is used to strengthen the other. A descriptive survey employs questions which consists of who, what, where, how and when to the population which have been chosen. Mainly the descriptive research is for observing and describing as well as comparing and analyzing. As Kothari (2004) articulated, a descriptive research design formulates a survey in a way of fact-finding enquiries of different kinds.

The research was conducted on a qualitative basis allowing the researcher to investigate the perceptions and views of the chosen population or under target. Kato (2002) expresses that; greater insight can often be obtained when collecting data using qualitative research through such methods as observation, document, and interview. According to Saunders et al. (2009), qualitative research takes the view that it is very difficult for researchers to stand back and be objective, since they are really part of the research process.

## 3.2 Case study research strategy

The research strategy required the researcher to support both the effectiveness of outsourcing and how it influences the productivity of a firm that is FMCG. The research methodology includes the collection of data both from primary and secondary sources.

The source from questionnaire, the review of materials, annual reports, and FMCG system generated data, policy, and procedures. Descriptive survey was used in this study since this research design is effectively used to obtain information concerning the status of inventory management practice in FMCG and its effect on the operational performance. Descriptive survey methods was ideal to describe what exists at present with respect to situational variables (Cooper & Schindler, 2006), this allowed comparative analysis.

The researcher was able to use the secondary data as a source of information as well as the primary source material and the interviews with the key-targeted participants and this gave him a different insight on the study area as the sources provided specific data type. To enhance the quality of the data being collected as well as the research findings, Patton (1990) suggested that, multiple sources of information and completely different data collection techniques have to be employed within the case study.

### 3.3 Population and sample

The targeted population in the study was a total number of 100 people, comprising of 50 permanent employees of FMCG from the finance, production or operations. The population is the group of interest, which is being used by the researcher. Saunders et al. (2009) postulates that, it is upon the selected group of the population that the researcher will base or come to generalize the results to the study.

**Table 3. 1: Shows the number of workers at FMCG who have been targeted as the population.**

| Section | Population size |
|---|---|
| Procurement | 15 |
| Finance | 10 |

| | |
|---|---|
| Operations | 10 |
| Stores | 15 |
| Total | 50 |

Source: Primary Data

### 3.4 Sampling Procedure

The researcher had to select three departments that are the procurement, finance and the operations department and management staff from the suppliers of FMCG Retail for his sample. Six participants including the managers of the departments or area were representing each selected area of study. This was a result that the researcher could not manage the entire population of the case study therefore had to select a manageable sample.

#### 3.4.1 Primary data

Primary data was collected from respondents from FMCG who were assumed to give firsthand information on the subject under study.

#### 3.4.2 Secondary data

The secondary data was gathered from source like; Annual reports of the company, journals articles, internet, and newspapers related to the area of study. These were combined at length to extract the information required to support the findings from the study respondents.

### 3.5 Sample size

A sample is regarded as subset of the target population from which information is gathered to estimate something about the population (Yin, 2003). Yin (2003) goes on to argue that the aim of sampling is to obtain a representative that looks like the population within an acceptable margin of error. Accordingly, the researcher was very careful when selecting the sample elements as for the need to ensure representation. Kothari (2004) discusses the importance of selecting sample participants and disputes that if a researcher chooses a sample in an objective way, it will be representative.

The researcher conducted the research with a sample of 24 participates from FMCG's departments and the suppliers that are directed affected by the outsourcing. Below is how the sample was selected from the departments being used.

**Table 3. 2: shows how the sample size was selected.**

| Department | Population elements | Sample elements | Sample representation |
|---|---|---|---|
| Procurement | 5 | 4 | 20% |
| Finance | 4 | 4 | 24% |
| Operations | 6 | 5 | 6% |
| Stores | 5 | 3 | 12% |
| Total | 20 | 16 | 12% |

Source: Primary data

### 3.6 Sampling Techniques

The researcher created two groups from each of the chosen departments for sampling purposes that is the procurement, finance and the production or operations department. From the two groups created, one comprised of the top or heads of departments and the other group being from the workers. For the suppliers, the researcher used the active suppliers who were currently working with FMCG.

#### 3.6.1 The systematic sampling technique

The researcher also used the systematic sampling to select the workers who were representing the sample. From the arranged alphabetical names of the workers, cards were used to select the representatives.

### 3.7 Research Instruments

The researcher used questionnaires, interviews, and the use of document review as the research instruments for the project to help in support with the data being collected.

### 3.7.1Questionnaires

The questionnaire involved both open and closed questions for gathering information needed. Open questions are those, which does not give respondents specific responses, and closed questions provide options to choose from the ratings provided. These are known for being straightforward questions. The researcher administered the questions to selected employees and management officials of FMCG.

### 3.7.2 Interviews

The researcher used formal interviewing as a method of data collection and this allowed interaction between the researcher and the respondents in a way that any misunderstanding of the questions and answers provided might easily be corrected. The researcher interviewed the managerial level and employees of the organization. This was useful to obtain the vital information that the low-level employees could not be able to respond.

Interviews provided a multi-perspective understanding of the issues under investigation and they revealed multiple in clarification of the questions not handled or answered well from the questionnaires.

### 3.7.3 Observation

The observation brought closer the researcher to the respondents in discussion. While the researcher observed actions of the respondents, which made it possible to collect data unconsciously of the respondent.

## 3.8 Reliability and Validity

### 3.8.1 Reliability

The researcher used the questions from the questionnaire as well as the interview questions to test for the reliability of which it came to yield similar data, which was collected. Reliability is a concern every time a single observer is the source of data, because we have no certain guard against the impact of that observer's subjectivit (Babbie, 2010, p.158). According to Wilson (2010), reliability issues are most of the time closely associated with subjectivity and once a researcher adopts a subjective approach towards the study, then the level of reliability of the work is going to be compromised.

### 3.8.2 Validity

The researcher used content validity and construct validity for the testing of the validity of the data collected. Content validity focused on ascertaining whether research instruments contained enough questions to cover the purpose of study as obtained from Ritchie and Lewis (2003). The researcher ensured content validity by following objectives during the designing of questionnaire whereas construct validity focused on the construction of questions in the questionnaire. The researcher made sure that all questions are concise and clear and in addition to that, there was use of closed questions that made it easier for participants to complete or answer.

### 3.9 Data Analysis and Presentation Procedure

The data was collected by the means of questionnaire, interviews and document review. Since the qualitative and the quantitative analysis of data was employed, the researcher was able to put the analysed data into presentation using the Microsoft excel package for the tabulation and graphic presentation of the data collected. To draw up conclusions, the analysed data was presented in the

### 3.10 Ethical consideration

It is ethical to ensure that the research is beneficial for the participants in alleviating a given problem (cress well, 2003). Accordingly, this study is aimed at identifying the challenges in targeting and acquiring the right applicant pool and majority of the participants are employees who are directly attached to Inventory management activity of the company. Researcher used content validity and construct validity for the testing of the validity of the data collected. Content validity focused on ascertaining whether research instruments contained enough questions to cover the purpose of study as obtained from Ritchie and Lewis (2003. The researcher made sure that all questions are concise and clear, use of closed questions that made it easier for participants to complete or answer.

### 3.11 Summary

The chapter gave an insight on the research methodology of the research topic covering aspects such as the research design, the targeted population to the study and also the sampling techniques and its size. The chapter also looked at the data collection procedures employed by the researcher. Validity and reliability testing of data was also looked at and the chapter concluded with how the data will be analyzed and presented. Therefore, next chapter will be focusing with the presentation and analysis of data from the research findings.

# CHAPTER FOUR

# PRESENTATION AND ANALYSIS OF FINDINGS

## 4.0 Introduction

This chapter includes all the information that was acquired and extrapolated using research tools like questionnaires and interviewing guides to evaluate the contribution of inventory management control systems to operational performance in the industrial sector. This information was displayed and examined. The percentage method must be used because it offers a consistent measurement for efficient analysis and interpretation. In order to draw a clear conclusion, data presentation techniques like graphs, pie charts, tables, and bar charts were used whenever possible. In this episode, data analysis was used to make the meaning clearer and the research more understandable. As a result, this section is crucial for a stronger study conclusion, and it prepares the ground for the chapter's final recommendations.

**Table 4 . 1: Overall response rate for subjects conducted in the field work.**

| **Responses** | **Frequency** | **Percent** | **Cumulative Percent** |
|---|---|---|---|
| Returned | **39** | **78%** | **78%** |
| Not returned | **11** | **22%** | **22%** |
| **Total** | **50** | **100** | **100** |

Source: Primary Data

A total percentage rate of 78% was obtained from the 50 questionnaires that were issued by the researcher. Of those, 39 were returned. In this context, 78% of the Gains Cash and Carry employees participated in the survey. According to Mabvuregudo (2017), there is a strong

likelihood that the data collected will be reliable when the response rate is high. Creswell (2019) states that a response rate of 60% or above for the administered instruments justifies additional data analysis. The study's conclusion is that there were sufficient responses to use in the data analysis. The response rate can affect the reliability of the results, so it serves as a gauge of the level of assurance that can be placed in the research findings. Nevertheless, 11 questionnaires were not returned because employees were absent from work, and others were unable to complete them due to their hectic work schedules.

### 4.2 Response rate for Interviews

**Table 4 . 2: Interviews response rate**

| Sample group | Designed interview | Attendance | Percentage |
|---|---|---|---|
| Stores office | 5 | 3 | 60% |
| Procurement manager | 3 | 2 | 66.67% |
| Procurement Officer | 7 | 6 | 85.71% |
| Total | 15 | 11 | 73.33% |

Source: Primary Data

There were 15 structured interviews for the stores officers, procurement manager, and procurement officers, and 11 of them were successful, yielding a response rate of 73.33%. Because the questionnaires and interviews produced results of 77.33% and 73.33%, respectively, the findings and analyses demonstrate the research's validity. Because some of the targeted groups were not present at work and others had incredibly busy schedules, the researcher was unable to organize interviews with them in a way that would have yielded a 100% response rate.

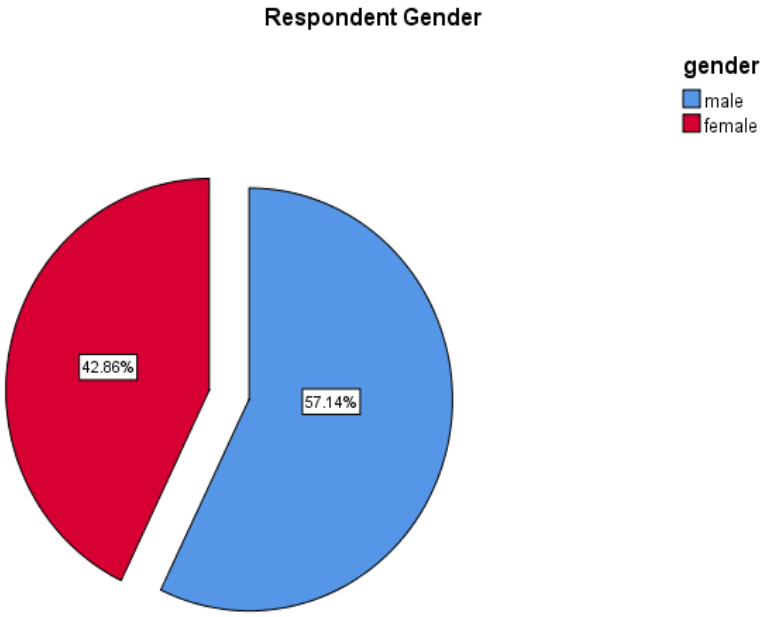
### 4.3 Demography

#### 4.3.1 Respondents' gender

Figure 2 below shows that the respondents who answered the questionnaires were 57.14% males, 42.86.03% being females, and no percentage for the minority that is the transgender person and

hermaphrodites. This showed that the study's respondents were overwhelmingly male, and as a result, women appear to be holding professional positions in the study's field. Additionally, assuming that female respondents are more likely to have a college degree and a job, Figure 2 further demonstrates that the informants were

**Figure 4 . 1 Respondents gender**

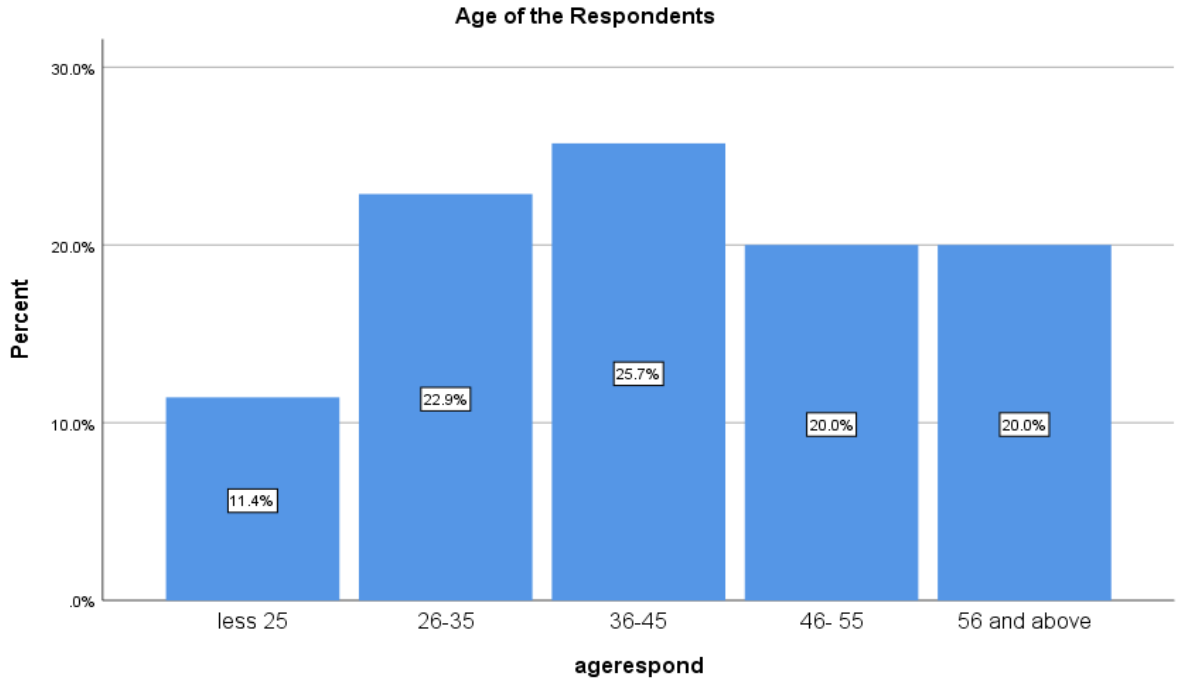



Primary Data

### 4.3.2 Respondents' ages

In order to verify the accuracy and brevity of the information provided with reference to the study objectives, the respondents were asked to specify their age.

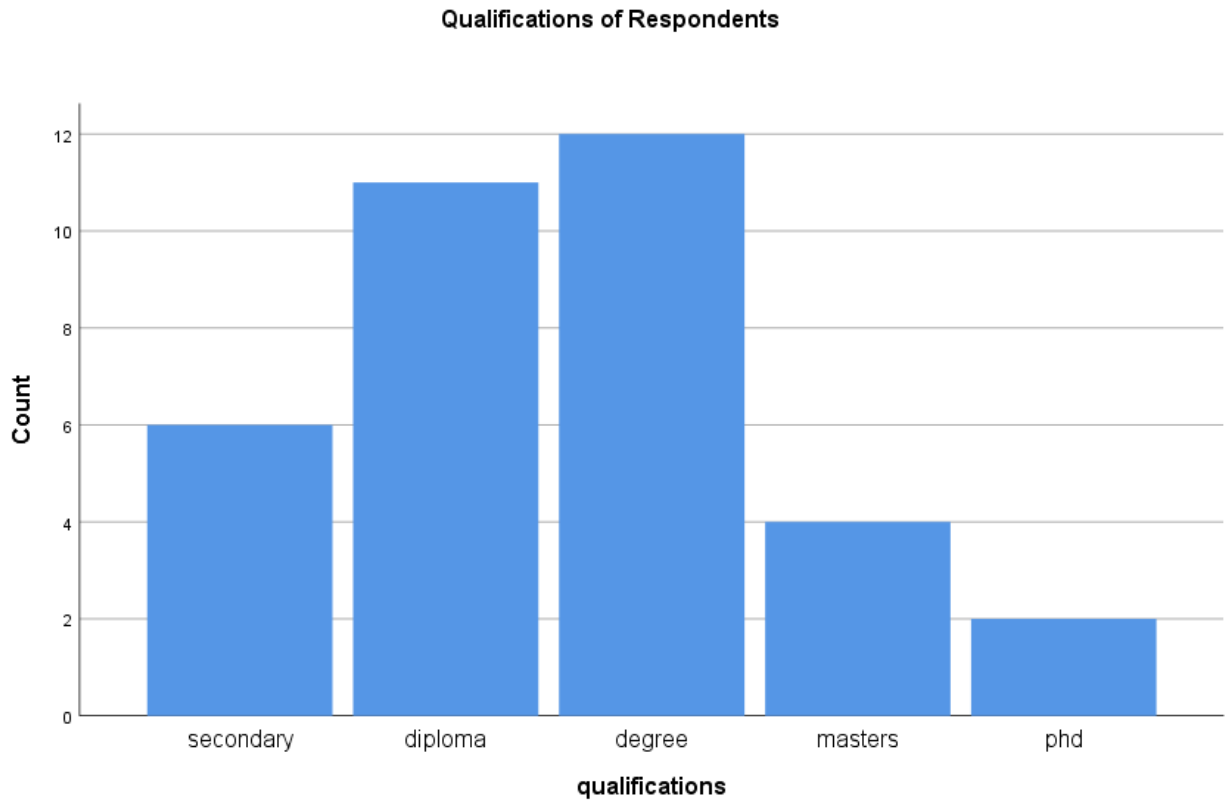
**Figure 4 . 2 Age of respondents**




**Primary Data**

This finding indicates that 69% of the respondents were aging between 26 and 55, which suggests that at this age most of the employees are assumed to have professional backgrounds that make them capable of performing different jobs and at this age most of the respondents were aging between 36 and 45 years of age, followed by 22.9% of the respondents who aged between 26 and 35 years of age and 20% of the respondents aged between 46 and 55 and 56 and above.

**Figure 4 . 3: Educational Background of the Respondents**




**Primary Data**

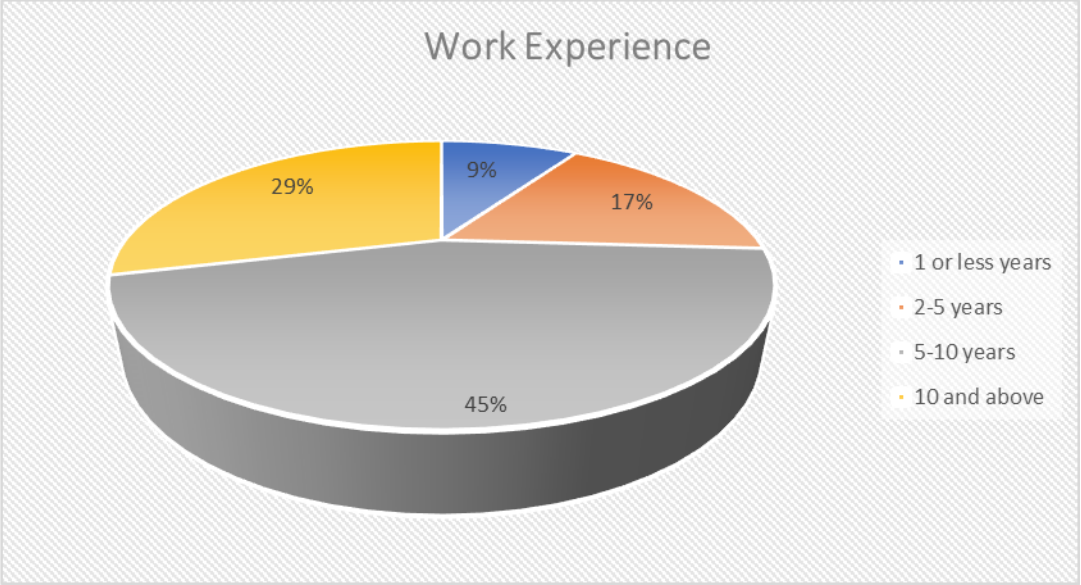
According to study results in Figure 4 above, respondents with university degrees accounted for 41% of respondents, demonstrating that they have the fundamental education needed to be competitive, while respondents with PhDs only made up 5.1% of respondents, those with master's degrees made up 7.7%, those with diplomas made up 30.8%, and respondents with secondary education made up 15.4%. Such statistics allow the researcher to assume that the respondents are professionals.

### 4.3.4 Respondents by virtue of their working experience

The researcher had to look at the data based on the respondents' employment history to get accurate statistics. According to the data gathered, the range of job experience was from one year to more than ten years. The percentage of workers with less than one year of experience was 9%, followed by 10 years or more with 29%, 2 to 5 years with 17%, and less than one year with 45%. The highest working experience was from 6 to 10 years. According to the findings, much of the workforce employed by Gains has been with them for a considerable amount of time, making

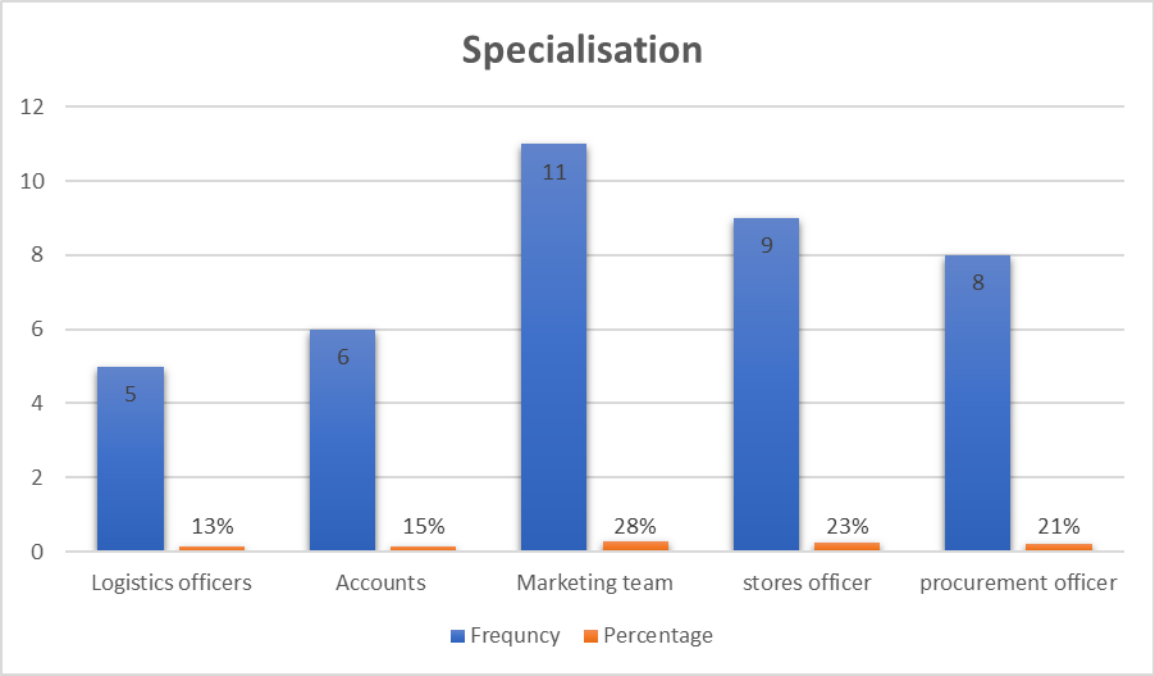
their responses reliable. There was a higher likelihood of producing reliable data. In contrast to individuals who have no experience in FMCG, those with more years of job experience have superior levels of understandability. They had extensive organizational knowledge and were knowledgeable about the subject being studied. According to Saunders (2018), the degree to which a data gathering process would produce consistent findings, similar observations, or transparency in how sense was created from raw data, is known as reliability. However, this has a beneficial impact on inventory via performance since a substantial percentage of employees have sufficient knowledge of the organization's systems and processes and can operate them as shown in Figure below.

**Figure 4 . 4: Working Experience of respondents**




Source: Primary Data

**Figure 4 . 5 Area of specialization of respondents**




Primary data source

5 (13%) logistics officers, 6 (15%) accounts, 11 (28%) marketing, 9 (23%) store officers, and 8 (20%) procurement officials made up the positions of the responders. This indicates that the majority of employees Gains are senior personnel, meaning they have greater knowledge and experience, making them qualified to respond to our study's questions.

**4.4 Inventory management practice systems used in FMCG industry.**

As their comments were circled on a five-point Likert scale ranging from strongly disagree to strongly agree, the respondents were asked how much they felt the following approaches of inventory management control towards enhancement of operational performance strategies to curb. The median scores were between 4 and 5, which indicates that most respondents either strongly agreed with or agreed with the statement made below on the contribution of inventory control strategies to operational success. The standard deviation varied between one and two. The fact that none of the responses had standard deviations below one indicates that the responses are in harmony. The lowest number (score=1) means that the respondents strongly disagree, and the highest score (score=5) that they strongly agree. The replies ranged from 4 to 5,

indicating that respondents strongly agreed and agreed that the variables would improve operational performance.

**Table 4 . 3: Descriptive Statistics**

| | Mean | Std. Deviation | Variance |
|---|---|---|---|
| a) ABC analysis | 5.98 | 1.197 | 1.434 |
| b) Just in time techniques | 6.07 | 1.198 | 1.433 |
| c) Economic order quantity (EOQ) | 5.90 | 1.374 | 1.887 |
| d) Simulation | 5.90 | 1.464 | 2.144 |
| e) Vendor managed inventory | 5.98 | 1.271 | 1.615 |

Source: Primary Data source

The researcher wanted to determine if FMCG firms were organizing their store stocks by importance. The responses to this question show a mean of 5.98 and a standard deviation of 1.197, indicating that the respondents overwhelmingly agreed that Gains Cash and Carry uses inventory techniques like ABC analysis. This indicates that FMCG firms engaged in wholesale pay more attention to store inventory. The researcher also wanted to know if FMCG firms bought goods after receiving orders from clients. Results from the responses to the survey showed a mean and standard deviation of 5.98. (1.198). (1.198). Displays all the responses, all of which are in the same category. These survey results demonstrated that, contrary to what most study respondents claimed, Gains do not actually buy goods once clients place orders for goods.

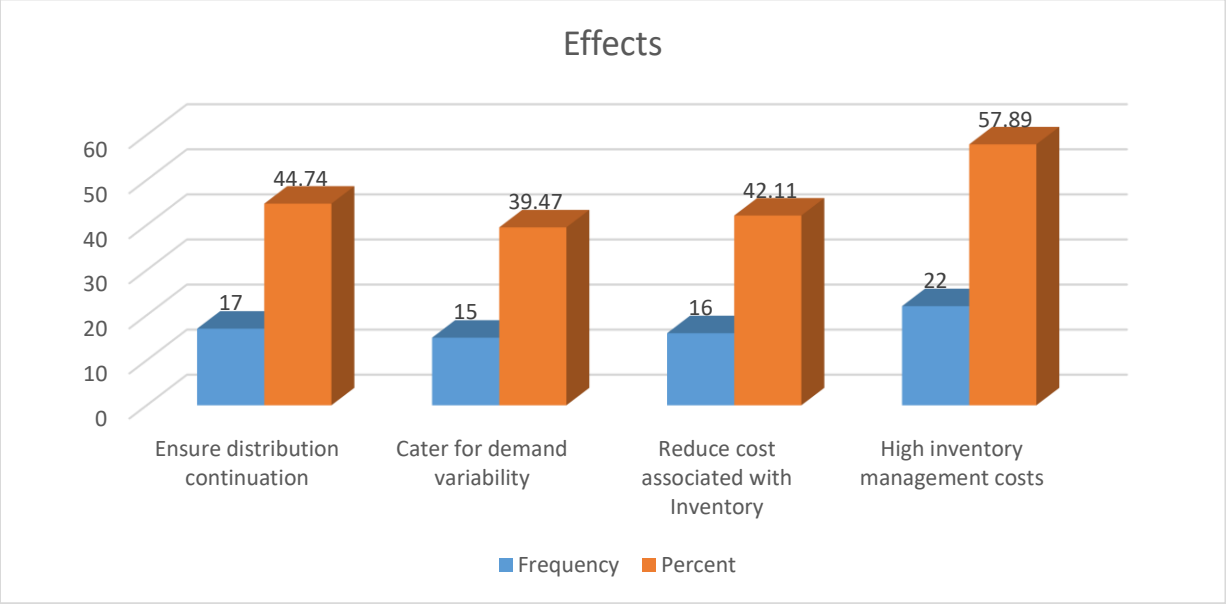
With a mean of 5.90 and a standard deviation of 1.374, Table 4.4 reveals that respondents agreed that the lack of inventory management systems in FMCG firms would negatively affect such businesses' operational performance. Since more than 3.5 of the respondents concur, one is led to believe that the inventory systems help Gains cash and Carry perform at higher levels. The respondents strongly agreed that Gains' s computers are linked with those of suppliers in a real-

time environment, which enhances continual supply of inventory, as shown by the mean of 5.90 and standard deviation of 1.464 in Table 4.4. This is in line with research by Mettler T. & Rohner P. (2019), who found that technology and supplier relationships had a favourable impact on organizational performance. This suggests that inventory management control systems are incredibly helpful for improving business operations.

### 4.5 Effect of inventory control practices on the operational performance

The study explored effect of inventory control to operational performance. The reason was to establish whether respondents were aware that inventory control practices contribute greatly to the operational performance.

**Figure 4 . 6: Effect of inventory control practices on the performance**



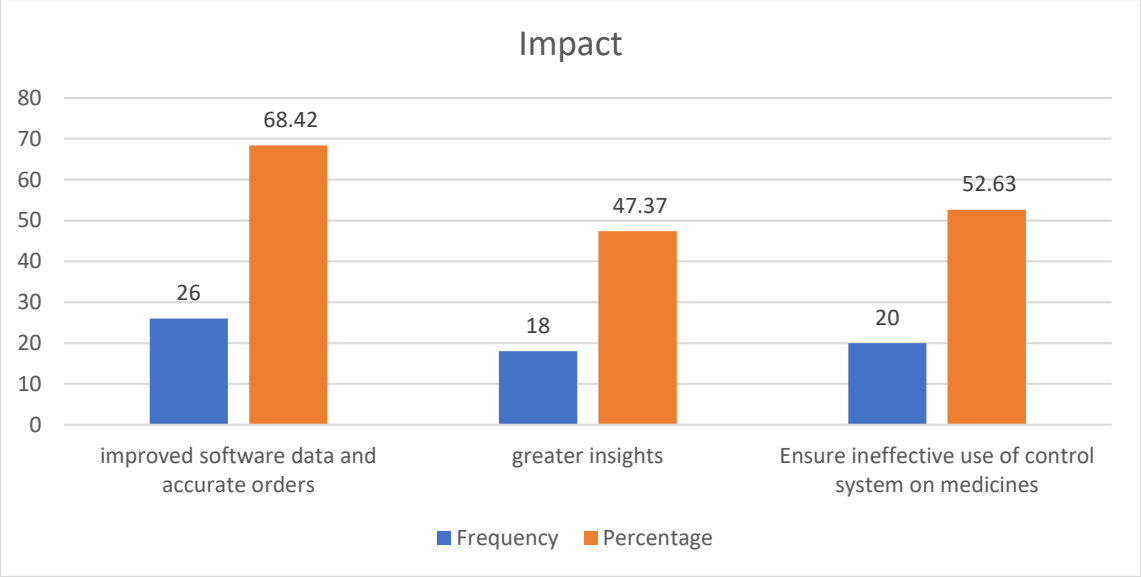

Primary Data source

According to the data in Fig. 4.6, 44.74% of the respondents believed that inventory control systems guarantee the continuance of distribution, which enhances operational performance because everything is neatly organized, particularly in the production departments. Making an organization inventory is now possible.

According to the study's findings, 57.89% of participants believed that inventory control systems are linked to inventory management expenses that have an impact on FMCGs' performance.

Despite the benefits of maintaining inventory control systems, Puxty and Dodds (2019) pointed out that, inventories are an asset that must be supported by the profits of the business. These expenses limit a company's ability to fund other expenses that have a significant impact on performance. According to the study's findings, 42.11% of the respondents claimed that lower expenses related with inventory control influence improved operation efficiency. The E.O.Q model system, according to Richard (2020), benefits the organization by making it easier to order precisely what is required.

**Figure 4 . 7: Impact of storage management on inventory control systems**




Source: Primary Data

Results of the research if there is good storage, 68.42% (26 respondents out of 39) concur that enhanced software data and accurate orders play a significant part in inventory management systems, and if the software is not changed, it promotes poor inventory. Hullic T reported similar outcomes (2018). According to Khan (2017), operational performance is hampered by a lack of the most recent software and adequate storage.

However, 47.37% (18 respondents) agreed that proper storage would give them more insight into expiration dates and obsolete stock, which will enable them to keep better inventory. Better planning therefore led to improved operational performance, which helped businesses reduce stock outs and keep their stock levels in check. In addition, 52.63% of the respondents stated that ineffective use of the control system on goods in most FMCG firms would result in poor storage, which will cause a shortage of inventory.

### 4.6 Results discussion

According to the findings, several FMCG firms in Harare use inventory management practices systems. The findings imply that inventory management control systems do really affect operational performance. Storage is important because it affects inventory management controls, which influence whether the systems are used positively or negatively. The findings above demonstrate how crucial it is for FMCG firms to employ inventory management control systems as they guarantee increased organisational performance and improved customer satisfaction.

### 4.7 Chapter Summary

This chapter's main objective was to convey the data that had been gathered and examined. The data gathered for this study was sufficient to fulfil the study's objectives and helped in the process of coming to insightful conclusions. The respondents' responses were used to gather the data, which was then displayed through graphs, pie charts, and tables that showed frequencies and percentages. The respondents offered insightful information on evaluations of inventory management control systems on operational effectiveness in Harare's manufacturing sector. Interviews, questionnaires, and primary data sources from the organization were used to obtain the data.

# CHAPTER FIVE

## SUMMARY, CONCLUSIONS AND RECOMANDATIONS

### 5.0 Introduction

The main objective of the entire research project whose focus was to look into how inventory management practices affected the organisational performance of Harare's FMCG sector was summarized in this chapter. The research topics will be separated from the summary conclusions.

### 5.1 Summary of findings

The research population consisted of procurement officers, stores officers, procurement manager, accounts clerks, and members of the marketing team. It was conducted on a sample of 50 respondents using questioners and interviews as research instruments. The study's interview response rate was 73% and its questionnaire response rate was 78%. The research, which was conducted in Harare, concentrated on inventory management control systems in the manufacturing industry. The main objective of the study was to determine whether and how well Gains Cash and Carry Company uses inventory management practice systems.

#### 5.1.1 The inventory management control systems used in FMCG sector.

The findings of the study indicate that certain employees support the application of ABC analysis. The response mean of 5, 98, which indicates that respondents strongly agreed, demonstrates this. According to the findings, the FMCG sector must use the inventory practices that are inadequate to produce a successful organisation performance. To guarantee that your records are accurate and that patients are satisfied, keeping track of the products you have on hand or ordered saves you the time and effort of having to conduct an inventory recount. A sound inventory management plan also aids FMCG firms in saving money that would otherwise be lost on sluggish merchandise.

#### 5.1.2 Impact of storage control on inventory control systems

The results demonstrate that storage management affects inventory control systems more significantly than was previously believed. Since it has an impact on the control systems, storage management is crucial. Ineffective storage methods can reduce the effectiveness of control

systems. Since stock expiration dates will be easier to obtain, good storage management, according to 47.37 percent of respondents, will lead to more insight into inventory control systems. However, 52.63 percent of respondents thought that subpar storage management would lead to inadequate usage of control system goods.

## 5.2 Conclusions

### 5.2.1 The inventory management control systems used at Gains.

To ensure the organization's optimal operational performance, the industry needs inventory management practice systems. The FMCG's inventory management systems must be well- for the stores officers to do their duties effectively. For instance, to guarantee efficient data and record capture, the database must be updated often. The study's findings, which show that not all inventory management practice systems are employed in FMCG, suggest that improvements are needed if controls systems are to be used effectively. Because goods are constantly available, control techniques like ABC, analysis and perpetual are used to ensure customer satisfaction. Systems for inventory practices save both time and money. You can save yourself the trouble of having to undertake an inventory recount to make sure your records are accurate by keeping track of the products you have purchased or on hand.

### 5.2.2 Impact of storage management on inventory control systems

The study's findings indicate that inventory control and storage management systems work well together. Therefore, good storage management improves inventory management, which raises customer satisfaction. The findings of the respondents show that, in 68.42 percent of cases, there is a positive relationship between storage management and inventory control systems. Storage systems are crucial because they produce superior software data, greater insights, and exact orders for inventory control systems.

### 5.2.3 Effect of inventory control systems on Organizational performance

According to the research findings, inventory control systems affect operational effectiveness because they offer product continuity, demand variability, and increased visibility. One of the most important components of every firm are the inventory control systems. It affects the distribution process, purchasing, customer happiness, logistical planning, and control, all of

which are crucial for the organizational performance of a business. Inventory practice systems can be used by businesses to meet higher-than-expected demand. This helps the business prevent inventory shortages.

## 5.3 Recommendations

### 5.3.1 The inventory control systems

The study proposes that FMCG use inventory control systems to prevent product overstock and outages. Inventory systems like ABC analysis and VED analysis should be used to categorize items and guarantee their availability. As a result, inventory management is more effective and efficient, which improves patient satisfaction. To prevent record duplication caused by price disparities, the FIFO (first in, first out) and LIFO (last in, first out) systems of problems should be applied. As a result, there will not be any need to open several cards for individual purchases because of price differences. All invoices and issues ought to be duplicated, serially numbered, and given to the relevant organization department.

The report recommends computerizing inventory control systems to stop unauthorized people from tampering with them. As a result, transactions will be processed more quickly and with fewer fraud mistakes. Additionally, it is advised that the business do annual stock take on a regular basis whether a perpetual/continuous stock control system is in place. To deal with this, techniques might be suggested, with an emphasis on locating broken, sluggish, and outdated goods as well as cut-off practices.

### 5.3.2 Impact of storage management on inventory control systems

FMCG firms in Harare are urged to use the best ways of inventory storage to have a positive influence on inventory management practice systems. The performance of the company's inventory control systems depends on effective storage management. The enhanced inventory effect insight will increase customer satisfaction.

The paper recommends that all raw material providers implement efficient storage management techniques. This will help inventory control systems follow charts and minimize the wasting of raw materials owing to outdated and expired stock. To provide information about each stock

movement and to better monitor inventory, FMCG should computerize all inventory systems instead of employing manual techniques.

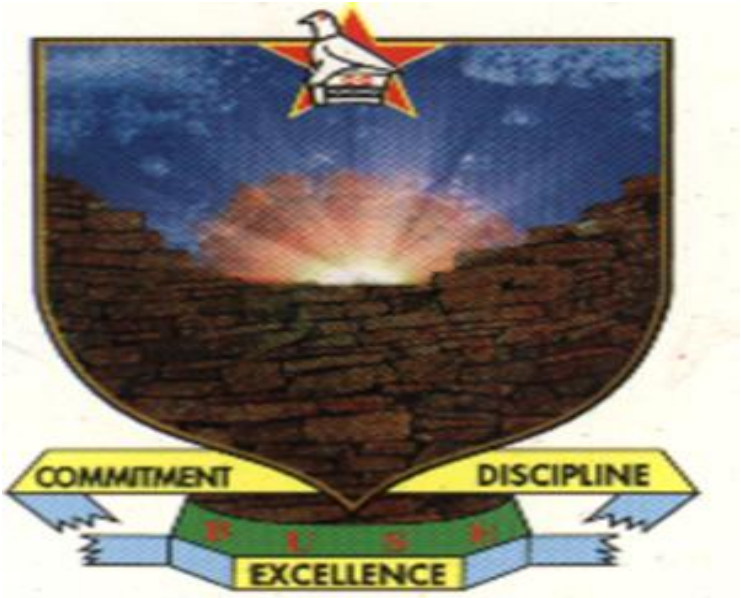
### 5.3.3 Effect of inventory control systems on the operational performance

The research recommends that the FMCG sector evaluate inventory control systems to make sure they have positive outcomes, can accommodate demand unpredictability, and have improved visibility. The firm needs efficient store officers to guarantee optimal organizational performance. Because it enables companies to meet higher-than-expected demand, inventory is essential. Utilizing inventory practice systems will boost operational effectiveness by enabling quick commodity identification in stores and lowering tiredness. The poll found that 44.74 percent of participants believed inventory management solutions improved operational performance by ensuring product continuity.

## 5.4 Area for further study

The other industries in Zimbabwe and provinces, such as manufacturing, healthy, will be the subject of more study. Future studies will also concentrate on how inventory control affects service delivery. The extent to which inventory methods have been used, their effects on success and profitability, and the use of integrated information systems in the inventory of diverse inventories in the manufacturing business are all topics that will be explored in further research.

# APPENDIX 1: STRACTURED QUESTIONNAIRE




**Dear participant**

**RE: COLLECTION OF DATA**

I am …… Reg#, a student from (BUSE) Bindura University of Science Education studying a Bachelor of Science Honors Degree in Purchasing and supply. I am conducting research on "impact of inventory management practices systems on operational performance in FMCG sector."

I kindly request your assistance in this regard by duly filling in the attached questionnaire for collection and use purely for academics' purposes only. Participation is voluntary and you are not forced to answer questions with which you are not comfortable. Your responses will be treated anonymously and will be only used for academics' purposes.

Yours faithfully

(…….)

Cell: …….

Email: …….

**SECTION A: Demography**

**Instructions to the respondent**

1 **Please answer the following questions by placing a tick in the appropriate box provided for each of the questions that follow.**

**a) What is your gender**?

| Male | Female |
|---|---|
| | |

**b) To which age group do you belong**?

| Less than 20 years | 20- 30 years | 30- 40 years | 40- 50 years | 50 years and above |
|---|---|---|---|---|
| | | | | |

c) **What is your level of education?**

| High school | Diploma | Bachelor's Degree | Master's Degree | PhD |
|---|---|---|---|---|
| | | | | |

d) **How long have you been working at FMCG?**

| 1 or less years | 2 - 5 years | 5-10 years | More than 10 years |
|---|---|---|---|
| | | | |

**e) Specify area of specialization?**

Marketing ☐ Logistics officer ☐

Accounts ☐ Procurement officer ☐

Storekeeper ☐ Others (specify)…….

SECTION B: Inventory Management Practice Systems

**Please circle the extent to which you agree or disagree with each of the following statements where applicable.**

**1. 1. Strongly Disagree (SD) 2. Disagree (D) 3. Neutral (N) 4. Agree (A) 5. Strongly Agree (SA)**

The extent to which you agree with the following as practiced in FMCG sector.

| ABC analysis | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Just in time | | | | | |
| Economic order quantity (EOQ) | | | | | |
| Bar-coding | | | | | |
| Simulation | | | | | |
| Vendor managed inventory | | | | | |

SECTION C: EFFECTS OF INVENTORY MANAGEMENT PRACTICES SYSTEMS

**Please circle the extent to which you agree or disagree with each of the following statements where applicable.**

1. **1. Strongly Disagree (SD) 2. Disagree (D) 3. Neutral (N) 4. Agree (A) 5. Strongly Agree (SA)**

Are the following effects have impact on organisational performance in firms?

| Reduce costs associated with inventory | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Ensure distribution continuity | | | | | |
| High inventory management costs | | | | | |
| Demand variability | | | | | |
| Transport cost | | | | | |

Section D: Impact of storage management on inventory control systems

**Please circle the extent to which you agree or disagree with each of the following statements where applicable.**

1. **Strongly Disagree (SD) 2. Disagree (D) 3. Neutral (N) 4. Agree (A) 5. Strongly Agree (SA)**

Does the following help to deliver efficiency on inventory management control systems?

| | | | | | |
|---|---|---|---|---|---|
| Improve software data | 1 | 2 | 3 | 4 | 5 |
| Accurate orders | | | | | |
| Greater insights | | | | | |
| Ensure ineffective use of control systems | | | | | |

# APPENDIX 2: INTERVIEW GUIDE

1. What is the role of inventory management practice systems on operational performance?

2. How effective is inventory management control systems in enhancing operational performance?

3. What effect does inventory practice systems have on operational performance in FMCG firms?

**Thank you for your contributions.**

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# APPEDIX 3 : APPROVAL FORM

P Bag 1020
BINDURA, Zimbabwe
Tel: 271 – 7531-6, 7621-4 ,6230
Fax: 263 – 271 – 7534
Cell No 0777603758

**BINDURA UNIVERSITY OF SCIENCE EDUCATION**
**FACULTY OF COMMERCE**
**ECONOMICS DEPARTMENT**

29 May 2023

**To Whom It May Concern**

Dear Sir/Madam,

**RE: REQUEST FOR PERMISSION TO COLLECT DATA**

This letter serves to inform you that Mutete Ishmail (B193311B) is pursuing Bachelor of Commerce in Purchasing and Supply Degree with our Department. Please assist him with data for his dissertation titled "Impact of inventory management practices on organizational performance in FMCG firms: A case study of Brand Africa."

The information gathered from this research will be used purely for academic purposes and your response will be classified as private and confidential.

Your cooperation will be greatly appreciated.

BINDURA UNIVERSITY OF SCIENCE EDUCATION
CHAIRMAN, DEPARTMENT OF ECONOMICS
29 MAY 2023
PRIVATE BAG 1020, BINDURA, ZIMBABWE

Yours sincerely,

**Dr. S. Mutsvangwa (Chairperson)**