

**EFFECTS OF INVENTORY MANAGEMENT ON PROFITABILITY: A CASE OF  
KADOMA PAPER MILLS, ZIMBABWE**



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**THE EFFECTS OF INVENTORY MANAGEMENT ON PROFITABILITY.CASE STUDY OF KADOMA PAPER MILLS.**

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I, the undersigned, hereby acknowledge that this research, except where otherwise specified in the text, is my own work and has not been submitted, in part or full, to any other university for the purpose of obtaining a degree.

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## **DEDICATION**

I dedicate this work to my husband, children and my parents. Special thanks to my husband who has been a pillar of strength and my inspirator throughout my course of study. I thank you all for your unwavering support.

## **ABSTRACT**

This study sought to determine the effect of Inventory Management on Profitability in the Kadoma Paper Mills, Zimbabwe. The researcher adopted the mixed methods research approach. Two sampling techniques, stratified and simple random method were used. Data were collected through interviews and questionnaires. The research uncovered that the inventory management is effective in enhancing profitability of Kadoma Paper Mills, Zimbabwe. The study recommends that Kadoma Paper Mills, Zimbabwe must set a sound procurement department at the Company, the company must organise periodic workshops facilitated by PRAZ so that management and those in the procurement department are exposed to the contemporary functions of procurement. The Human Resources Department should employ those with procurement qualifications so that expertise knowledge on procurement is made available to the company. Lastly, Kadoma Trade Mills, Zimbabwe must lobby for grants from the Government of Zimbabwe to invest in procurement function, given the general increases in cases of involving the procurement function.

## **ACKNOWLEDGEMENTS**

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**Table of Acronyms**

**EOQ : Economic Order Quantity**

**KPM : Kadoma Paper Mills**

**PRAZ : Procurement Agency of Zimbabwe**

**VMI : Vendor Management Inventory**



## **CHAPTER ONE**

### **1.0 INTRODUCTION**

The purpose of the research is to assess the impact of inventory management on profitability of Kadoma Paper Mills, Zimbabwe. Paper firms are crucial in the supply of stationary in numerous sectors. In our today's competitive corporate environment, challenges of inventory management have received significant relevance. The soundness of inventory management in every firm set up relies on its internal structures being put in place. This chapter, offers the backdrop to the problem of the study, statement of the problem, aims and questions of the study, before closing with delimitations and limits of the research. The core purpose of the study is to analyze the efficiency of inventory management strategies that may be utilized to maintain a level of inventory that will offer optimal stock at lowest cost and contribute to excellent execution of job.

### **1.1 BACKGROUND TO THE STUDY**

In the past, inventory management was not believed to be required. In actual fact, extra inventories were viewed as indicator of affluence. Management by then regarded over stocking helpful. But now organizations have begun to adopt good inventory control (Susan & Michael, 2000). (Susan & Michael, 2000). Managers, today require accurate and efficient inventory management in order to decrease costs and stay competitive (Closs, 1989). (Closs, 1989). The COVID outbreak was not the start of problems for the Kadoma Paper Mills. The firm was already in difficulty and had been for a long. Paper mills are disappearing for a variety of causes, according to the study's findings. Outstanding inventory control and management is the consequence of effective inventory management. Keeping the right number of each item on hand while simultaneously maximizing net profit helps a distributor to meet or exceed consumer expectations for product availability. It is the primary purpose of inventory management research to increase profitability without affecting the overall output of the organization, often by increasing the efficiency or productivity of the systems (Axelsson, 2008). Inventory control has a favorable influence on a company's bottom line. As a result, it's critical that you investigate and evaluate the following four ways of inventory management before making a final choice that's right for your company (Cook, 2007).

Since it is the only paper mill in the area, Kadoma Paper Mills, a privately owned business, has grown to be very powerful. Although Kadoma Paper Mills, Zimbabwe, does not fall under this category, Paper Mills in general have considerable obstacles to entry. However, new entrants will face significant expenditures in several areas, such as:

- Start up
- Papermaking equipment
- Plant factory size and location
- Preventative maintenance
- Raw materials
- Regulations

It is imperative that all Paper Mills adhere to environmental and labor laws at every stage of production since the sector is extensively regulated. Operations must also be conducted at 100% efficiency or money is lost. Even though the Kadoma Paper Mill sector is expected to be worth more than \$500 million in 2021, it is becoming more difficult to make a profit in. There has been a downward trend in paper grades, increasing raw material prices, and a significant move to digital communications in recent decades, all of which have contributed to lower demand. Consequently, Kadoma Paper Mill found itself in a difficult financial position. In an effort to stay afloat, it was recently suggested that the corporation was switching its manufacturing from lower-profit paper grades to higher-profit materials. From printing and writing (P&W) grades of paper to recycled packaging, Domtar Paper Mills in the United Kingdom made this switch in August 2020. As a result, the difficulties experienced by Kadoma Paper Mills in Zimbabwe might be attributed in part to the need of adhering to the principles of Inventory Control. The next paragraphs go into detail on the importance of Inventory Control.

## **1.2 STATEMENT OF THE PROBLEM**

Inventory management issues have plagued Kadoma Paper Mills for years, which has resulted in poor profit maximization. Despite the management's best attempts to increase and maximize revenues, these efforts are mostly in vain due to the implementation of inadequate and inefficient inventory control systems. For a long time, the economic significance of the paper sector has been underappreciated. As a consequence of inefficient inventory management, private businesses are

unable to maximize their profits. In a variety of businesses, paper firms play a critical role in supplying stationery. The health of Zimbabwe's paper industry is directly related to the country's overall economic development, hence supporting the country's goal of industrialization set out in Zimbabwe 2030. In reality, inventory management seems to be one of the responsibilities that must be given great thought in the paper industry's expansion. Studies on this topic are few, and there seems to be little emphasis on inventory management and profitability in the paper business setting. As a result, Kadoma Paper Mills in Zimbabwe commissioned this research to investigate the impact of inventory management on the company's profitability.

### **1.3 PURPOSE OF THE STUDY**

This study seeks to determine the effects of inventory management on profitability of Kadoma Paper Mills, Zimbabwe, with the view of coming up with strategies that would enhance profitability of Kadoma Paper Mills, Zimbabwe.

### **1.4 RESEARCH OBJECTIVES**

The main objective of this study is to determine the effects of inventory management on profitability of Kadoma Paper Mills, Zimbabwe.

#### **1.4.1 Specific Objectives**

- (i) To determine the effects of Economic Order Quantity (EOQ) on Profitability for Kadoma Paper Mills, Zimbabwe.
- (ii) To examine the effect of Vendor Management Inventory on Profitability for Kadoma Paper Mills, Zimbabwe.
- (iii) To establish the effects of ABC Analysis on Profitability for Kadoma Paper Mills, Zimbabwe.
- (iv) To proffer recommendations on the effects of inventory management on profitability for Kadoma Paper Mills, Zimbabwe.

## **1.5 RESEARCH QUESTIONS**

- (i) What are the effects of Economic Order Quantity (EOQ) on Profitability for Kadoma Paper Mills, Zimbabwe?
- (ii) How do Vendor Management Inventory (VMI) affect Profitability for Kadoma Paper Mills, Zimbabwe?
- (iii) What are the effects of ABC Analysis on Profitability for Kadoma Paper Mills, Zimbabwe?
- (iv) What strategies can be proffered on the effects of inventory management on that would enhance profitability for Kadoma Paper Mills, Zimbabwe.

## **1.6 SIGNIFICANCE OF THE STUDY**

- **To the Organization**

The study is important to the organization because it will aid managers in making good decisions when it comes to inventory management. To several industries in Zimbabwe, it is hoped that this study shall establish facts about inventory management, the implications on the company's profitability.

It is also of utmost significance to the organisation as it will try to curb other inventory management activities that were being carried out at the expense of the organizations' profitability. Profitability is the major goal for most organizations especially those such as Kadoma Paper Mills which are not government owned.

## **1.7 RESEARCH ASSUMPTIONS**

The research will be based on the following assumptions:



- The researcher shall be able to obtain both historical and contemporary data and information relating to inventory management.
- During the data collection phase, respondents shall be cooperative; and financial resources are going to be enough to meet all the costs involved.
- Respondents to questionnaires and other surveys will give honest and reasonably helpful responses, from their professional know-how and experience adequate for the researcher to make reasonable inferences.

## **1.8 SCOPE OF THE STUDY**

### **1.8.1 Delimitation of the Study**

The research will focus on the Kadoma Paper Mills, which are located in the city of Kadoma. Theory suggests that inventory management might have a positive influence on profitability. In the research, Kadoma Paper Mills, Zimbabwe, workers' opinions will be taken into consideration for the sample.

### **1.8.2 Limitations of the Study**

This may make it difficult for the researcher to get to data that's critical to the study's findings and conclusions. Some workers may be hesitant to discuss their job status for fear that their information may be shared with other parties, which is predicted by the researcher. In any event, the researcher will promise all participants that their opinions will not be referred to in any way.

## **1.9 DEFINITION OF KEY TERMS AND ABBREVIATIONS**

According to Miller (2010), profitability is a measure of a company's capacity to cover its entire costs with its whole revenue. The same definition has been used in this investigation. Inventory management is defined by Miller (2010) as the process of identifying a company's inventory mix and the various demands placed on that inventory. It helps businesses in determining what inventory to order and when. Inventory management refers to the Economic Order Quantity, Vendor Managed Inventory, and the ABC Analysis for the purposes of this research.

## **1.10 ORGANISATION OF THE STUDY**

The issue and its context were explored in Chapter I, as were the study's background, a description of the problem research goals, and the study's scope. The theoretical and conceptual framework will be covered in Chapter II, which will include a survey of relevant literature. In Chapter III, the research technique will be discussed, and the research philosophy and paradigm will be introduced. Finally, in Chapter V, we'll offer a summary of the study's findings and make suggestions for further research.

### **1.11 CHAPTER SUMMARY**

An overview of inventory management and company profitability may be found in Chapter 1. The issue statement, goals, research questions, and assumptions are all discussed in the same chapter, and the study's importance in dissecting the impacts of contract management on employee behavior is emphasized throughout the text. In this chapter, the boundaries and restrictions were examined. The next chapter is devoted to a survey of literature on insecure work produced by a number of academics.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

Managing inventory is critical to the success of a firm. When an organization's inventory management systems aren't up to snuff, the effects may be disastrous. This chapter provides a literature analysis on the impact of inventory management on a company's profitability. This chapter offers theoretical, empirical, and conceptual frameworks, as well as an examination of research gaps, in accordance with that.

#### **2.1 Theoretical Framework**

The term "inventory control" refers to the practice of keeping sufficient quantities and types of inventories on hand to ensure that products are readily available whenever and wherever they are needed. Inventory management encompasses all of the processes involved in procuring, storing, selling, disposing of, or otherwise making use of materials. Managers of inventory must maintain enough supplies at all times and make creative use of existing storage space in order to avoid running out. It is their duty to keep track of the inventory assets. Because of the limited funds, they must select what to purchase; how and when; and what to order so that merchandise is accessible on time and at a reasonable price (Benedict & Margeridis, 1999). As a result, inventory management entails planning, organizing, and managing the flow of commodities from the original purchase unit to the service point through distribution (Smaros, et al., 2003).

##### **2.1.1 Economic Order Quantity (EOQ) Model**

As stated by Wangari and Kagiri (2015), the EOQ takes into account the time of reordering, the cost of placing an order, and the price of storing items. Costs and storage requirements increase when a corporation repeatedly purchases small amounts of inventory in order to maintain a certain level of stock. Assuming that customer demand is constant, Seghete (2016) asserts that EOQ formula may be applied to any product. Both ordering and holding costs are assumed to stay constant throughout the computation. A company's ability to account for unforeseen occurrences, such as shifting customer demand or seasonal fluctuations in inventory prices or lost sales income owing to inventory shortages, is severely limited by these assumptions. The EOQ model was criticized by Seghete (2016) because of its reliance on assumptions about continuous demand and

stable costs. Many firms experience fluctuations in demand and expenses due to the cyclical nature of the economy.

### **2.1.2 Vendor Management Inventory (VMI) Model**

Inventory management choices are delegated to the manufacturer or supplier under a vendor managed inventory (VMI) supply chain agreement, according to Kontus (2014). This signifies that the upstream agency is in charge of the downstream agent's inventory, which is a supply-chain concept. Managed inventory, continuous replenishment programs, and supplier-aided inventory replenishment are all terms used to describe this sort of relationship. Vendor Managed Inventory (VMI) can be implemented if the customer data on sold products can be sent to the distributor.

- Upstream and downstream agents to plan collaboratively.
- Focus on quality forecasting; safety stocks, lead time, service level and ownership issues.
- Implement the VMI system together.
- Continuously review the VMI system and identify improvements.

The VMI has both advantages and disadvantages, according to Kontus (2014). One of VMI's advantages is that it encourages "demand smoothing," which essentially implies that output equals demand. It is possible for a VMI provider to influence choices that affect transportation in the future. VMI encourages the development of long-term friendships (due to the costs of switching suppliers). VMI initiatives, on the other hand, may lower working capital because to their high cost. Inventory tracking's technology capabilities make it possible for VMI implementations to go awry. If performance decreases, relying on a single VMI provider might be expensive.

### **2.1.3 ABC Analysis Model**

In inventory management, ABC analysis is a method for determining the value of inventory goods based on their relevance to the company (Seghete, 2016). Demand, cost and risk data are used by inventory managers to categorize things into different groups. This aids business executives in determining which of their company's goods or services are most important in terms of financial performance. Class A products are the most significant in terms of sales volume and profitability, followed by Class B, while Class C items are the least important in terms of stock keeping units (SKUs). More than three categories may be used by certain firms when deciding on a

categorization system (A-F, for example). There are some similarities between ABC analysis in cost accounting, or activity-based costing, and inventory management's ABC analysis. In manufacturing, indirect or overhead expenses like as utilities or wages are assigned to goods and services using activity-based costing by accountants (Seghete, 2016).

Working capital expenses may be better controlled, according to Seghete (2016), when inventory is subjected to ABC analysis. An inventory turnover rate, or how frequently a firm needs to replace things after selling through them, may be improved by using the information gathered from the research. ABC Analysis, according to Wangari and Kagiri (2015), provides the following advantages:

- **Increased Inventory Optimization:** The analysis identifies the products that are in demand. A company can then use its precious warehouse space to adequately stock those goods and maintain lower stock levels for Class B or C items.
- **Improved Inventory Forecasting:** Monitoring and collecting data about products that have high customer demand can increase the accuracy of sales forecasting. Managers can use this information to set inventory levels and prices to increase overall revenue for the company.
- **Better Pricing:** A surge in sales for a specific item implies demand is increasing and a price increase may be reasonable, which improves profitability.
- **Informed Supplier Negotiations:** Since companies earn 70% to 80% of their revenue on Class A items, it makes sense to negotiate better terms with suppliers for those items. If the supplier will not agree to lower costs, try negotiating post-purchase services, down payment reductions, free shipping or other cost savings.
- **Strategic Resource Allocation:** ABC analysis is a way to continuously evaluate resource allocation to ensure that Class A items align with customer demand. When demand lowers, reclassify the item to make better use of personnel, time and space for the new Class A products.

- **Better Customer Service:** Service levels depend on many factors, like quantity sold, item cost and profit margins. Once you determine the most profitable items, offer higher service levels for those items.
- **Better Product Life Cycle Management:** Insights into where a product is in its life cycle (launch, growth, maturity or decline) are critical for forecasting demand and stocking inventory levels appropriately.
- **Control Over High-Cost Items:** Class A inventory is closely tied to a company's success. Prioritize monitoring demand and maintaining healthy stock levels, so there's always enough of the key products on hand.
- **Sensible Stock Turnover Rate:** Maintain the stock turnover rate at appropriate levels through methodical inventory control and data capture.
- **Reduced Storage Expenses:** By carrying the correct proportion of stock based on A, B or C classes, you can reduce the inventory carrying costs that come with holding excess inventory.
- **Simplified Supply Chain Management:** Use an ABC analysis of inventory data to determine if it's time to consolidate suppliers or shift to a single source to reduce carrying costs and simplify operations.

According to Seghete (2016), there are certain drawbacks to ABC Analysis, including the fact that it is not a one-size-fits-all approach for inventory management. Depending on the specifics of a company's consumer demand patterns, classifications, systems, and other factors, an ABC analysis may or may not be beneficial. ABC analysis has two major drawbacks: a focus on the financial worth of inventory and a large amount of time and discipline required to use the procedure. That's why this research is looking at how well-managed inventories affect Kadoma Paper Mills in Zimbabwe.

## **2.2 Theories Underpinning the Study**

- **Lean Theory**

There should always be some speculative number of standard products with independent demand on hand, as stated by Heizer and Render (2006) in "inventory management or "inventory planning and control." As a result, a key emphasis of lean theory is inventory system cost minimization. Decisions related to manufacturing, storage, and other aspects of the supply chain are said to be hastened as a result of this approach (Tempelmeier, 2011). The idea is based on the economic order quantity (EOQ) model, which aims to maximize the amount of each individual item ordered. The requirement to investigate how inventory management affects the profitability of Kadoma Paper Mills in Zimbabwe led to the selection of Lean Theory for this project. There may be a variety of operating systems in use to monitor stock levels, as well as a variety of products that may need different treatment, according to the idea. As with just in time, lean is an outgrowth of this concept. We may think of just in time as a pull-based system meant to synchronize both manufacturing and business operations throughout the supply chain. Lean theory's effect on financial performance was studied by Green and Inman (2005). They claim that the hypothesis might remove buffer stock and reduce waste in the manufacturing process. According to Eroglu and Hofer (2011), a business firm's profitability is favorably influenced by leanness. They claim that inventory leanness is the most effective inventory management method out there. Manufacturers are able to make better purchasing choices, lower the amount of inventory they have on hand, and minimize inventory carrying expenses thanks to this approach. Ultimately, the empirical strength of the lean explanation is derived from the time and volume of its implementation. Inventory, on the other hand, limits a company's flexibility to adjust to changes in demand. A number of academic studies have shown that lean supply chain methods and systems may increase asset utilization and customer satisfaction, resulting in increased organizational growth, profitability and market share (Green & Inman, 2005).

According to the findings of Eroglu and Hofer (2011), a study of US manufacturing enterprises from 2003-2008 found a strong correlation between inventory management practices and financial results. They discovered that a company's profit margins improved as it became leaner. Firms that are slimmer than the industry average often get the benefits of leanness, according to Eroglu and Hofer, (2011) In order to keep track of inventories, they employed empirical leanness indicators.

Rather of looking at the association between inventory performance and total company performance, the researchers in that study opted to look at the opposite. When a business and its trade partners have a long-term relationship and share information, the theory is said to be inapplicable to it.

No matter whether you're running a product or service supply chain, inventory control is critical to the whole process, according to Lean Theory. In today's volatile, worldwide business climate, inventory management plays a critical role in ensuring that demand and supply are properly aligned across the whole supply chain (Bozarth et al., 2010). Even the most fundamental principles and procedures of inventory management are not applied by most enterprises in developing nations, according to the research. Imports of industrial raw materials and components, regulatory delays, and communication issues in underdeveloped nations make it impossible to accurately calculate order lead times (Chen, Frank, & Wu, 2007). Since inventory management is critical to profitability, responsiveness, flexibility and cost-efficiency, the Lean philosophy is essential to its success.

- **Queuing Theory**

This hypothesis will direct the investigation into the connection between efficient inventory management and material handling equipment. The mathematical study of standing in line or in a queue is known as queueing theory (Shingo, 2005). Many related processes may be studied mathematically using the theory, such as coming in line, waiting in queue (storage), and being serviced in front of queue. As a result of this theory, it is possible to derive and calculate a variety of useful performance indicators, such as how long people spend on average in line or in the system as well as the projected number of people who will be served or who will be waiting in line (Houtzeel, 1992).

### **2.3 Empirical Framework**

In addition to inventory management, supply chain elements have been shown to have a significant impact on organizational performance. Gianchore tea plant was studied as a case study in order to determine how inventory management systems impact tea industry operational performance. According to the findings of this research, the usage of material demand planning, distribution



planning, and vendor-managed inventory had a favorable impact on operational efficiency and, in turn, organizational performance.

The financial performance of sugar production companies was evaluated by Lwiki, Ojera, Mugenda, and Wachira (2013). Both primary and secondary data were employed in this investigation. Inventory management has a beneficial effect on both return on sales and return on equity, according to the findings of a correlation study.

Inventory control procedures employed by Agrichemical distributors in Nakuru Central Sub-County, Kenya, were examined by Onchoke and Wanyoike (2016). Self-administered questionnaires were dropped and picked up throughout the research process. Inventory auditing, inventory security procedures, and computerized inventory management were shown to have a favorable and substantial impact on procurement performance based on regression analysis.

When it comes to food processing company performance, inventory management is an important factor to consider, as Mwangi and Nyambura (2015) found out. Descriptive research methodology and multiple regression analysis were used to identify the major factors of inventory management that have a vital effect in the performance of food processing industries.

Wangari and Kagiri (2015) studied the impact of inventory management techniques at Safaricom Kenya Ltd on the company's ability to remain competitive. Drop and pick questionnaires were used to get the data. It turned out that the inventory investment, shrinkage, and turnover findings from regression analysis were important indicators of Safaricom Ltd's and the organization's competitiveness in general.

Ngei and Kihara (2017), on the other hand, investigated how inventory management systems used in gas manufacturing enterprises in Nairobi City County, Kenya, affect their performance. Multiple regressions were utilized to examine both primary and secondary data in the research. VMI, ERP, RFID and e-procurement were shown to have a substantial impact on the performance of gas companies, according to the findings.

In the sugar industry, Mukopi and Iravo (2015) looked at the impact of inventory management on performance. To conduct the study, the researchers selected 30 procurement people from a target population of 100 employees at sugar enterprises in Western Kenya. Strategic supplier alliance, lean inventory methods, legal policies and information technology highly correlated with inventory management and hence business success in the research using ANOVA.

Kitheka and Ondiek (2014) studied the influence of inventory automation on the operation of Western Kenyan hyper markets. Descriptive surveys were conducted in Kisumu, Kakamega, and Bungoma towns and supermarkets. Automating inventory management has a direct, linear effect on store performance, according to regression research.

Kimaiyo and Onchiri (2014) looked at the impact inventory management has on the success of new Kenyan cooperative creameries. There were 500 people in the study's target audience, and the researchers gathered a sample of 83 people from that group. Stock holding and ordering expenses were shown to have a positive impact on the company's performance using descriptive research design methods. Inventory control in supply chain management seems to have a wide range of applications in Kenya, according to a survey. Even in Kenya, there is little evidence to prove how inventory management affects the operation of textile companies. In the lack of such proof, the following hypothesis was put forth:

Anichebe and Agu conducted research (2013) A study on the influence of inventory management on the performance of selected firms in Enugu, Enugu State, was conducted to examine the impact of appropriate inventory management on organizational performance in Yemenite, Hardis & Dromedas, and the Nigeria Bottling Company. The study was conducted using descriptive research methods such as survey and case study. Six hundred and fifty-eight people participated in the research (658). Using the Taro Yamane formula for sample size determination from a limited population, a sample size of 248 was determined. A questionnaire, interviews, observations, books, journals, and the internet were used to collect data. Tables were used to show the data, and percentages were used to analyze it. The theories were tested with the help of Pearson product moment correlation coefficient and linear regression. Despite the fact that the firms surveyed claimed to be adhering to the principles of excellent inventory management, it was found that they nevertheless had issues with inventory insufficiency from time to time. Since their manufacturing was damaged, one or more of their items became scarce, which adversely affected their

profitability and efficacy. According to the results, proper inventory management has a direct impact on the efficiency of an organization's operations.

Organizational productivity is greatly influenced by inventory management. Good inventory management correlates strongly with a company's profitability. According to the research, inventory management is critical to the profitability and development of businesses. If an organization's profitability depends on the amount of items sold, then the quality of the products must be excellent. With this background, the research recommends organizations vary their inventory system to meet individual production demands and to regularly monitor their inventory system in order to maintain production consistency for organizational profitability and effectiveness.

Listed Cement Manufacturing Companies in Kenya were studied by Edwin and Florence (2015), who looked at the impact of inventory management on profitability in the cement industry in Kenya. This study is required to assess the impact of inventory management on the profitability of Kenya's cement manufacturing companies because of their historic contribution to the country's economy. The annual reports of three companies registered on the Nairobi Securities Exchange were examined using cross-sectional data dating back to 1999. (NSE). Multiple regression models were used in the data analysis to determine the link between inventory management and the profitability of the company. Inventory turnover, inventory conversion duration, inventory levels, storage cost, company size, gross profit margin, return on assets, and firm growth are some of the factors considered. The findings show a negative correlation between inventory turnover, inventory conversion time, and storage costs and the company's profitability. In addition, the size of the company and the cost of storage were shown to be closely connected to the volume of inventory. It is recommended by the research that Cement manufacturing companies in Kenya endeavor to keep the proper amount of stock to avoid stock-outs and unnecessary holding costs. A research by Koin, Cheruiyot, and Mwangangi (2014) found that inventory management has a direct impact on an organization's performance. As part of the descriptive research design, 459 workers will be surveyed, and careful consideration will be given to guarantee that a sufficient number of people are sampled. In order to generate a representative sample, 56 workers from the target demographic will be selected Through the use of questionnaires, data will be gathered from supply

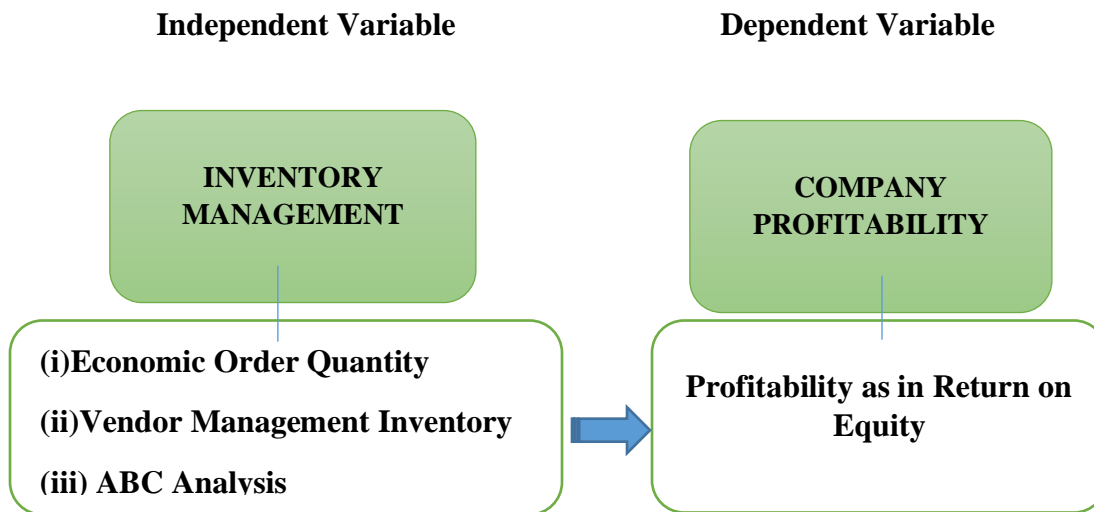
chain departments in conjunction with other chain operations. In order to gather data, questionnaires will be sent to the leaders of the different supply chain business process owners as well as their employees. Statistical software will be used to perform descriptive statistical analysis on the collected data (specs). In the manufacturing industry, inventory management systems, supplier relationships, and order management and warehouse management have a significant impact on supply chain efficiency. This investigation will show that the recommended method is both practicable and successful. Effective inventory management and procurement performance will be provided for decision makers via the results of this study.

It was found that an efficient inventory management system had an impact on the performance of the seven-up bottling firm, Nile Mile Enugu, according to a research by Ogbo, Onekanma and Wilfred (2014). The researchers were inspired to conduct this research because they wanted to highlight the significance of an efficient inventory management system for the bottling company's overall success. The study's sample size is comprised of 83 participants. Descriptive statistics and a non-parametric test were used to develop and test a total of four research questions and hypotheses at a 10% significance level (i.e., 0.10). (chi-square that is, X<sup>2</sup>). Flexibility in inventory control management was shown to be a key strategy to attaining organizational success, as the study's findings revealed. Companies profit from inventory control management in three ways: easier storage and retrieval of materials, increased sales effectiveness, and decreased operating costs. The research also revealed a correlation between operational feasibility, the usefulness of inventory control management in the customer-related concerns of the organization, and cost-effectiveness techniques employed to increase the return on investment in the organization. Management experts agree that one area where they should be able to improve is inventory control. Organizations are advised to choose the inventory keeping approach that best matches their business.

Safaricom Ltd Kenya was the subject of a research by Kamau and Assumpta (2008) on the impact of inventory management on organizational competitiveness. The study's particular goals were to examine the impact on Safaricom Ltd.'s competitiveness of inventory shrinkage, inventory investment, and inventory turnover. This study used a descriptive research approach. Those in the finance, customer service, supply, and administrative, and commercial (sales and marketing) areas of Safaricom Kenya Ltd were the target audience. People in those areas were chosen for the

research because they were better able to answer questions on inventory management and the company's ability to remain competitive. A total of 103 members of management from the Nairobi headquarters of the company participated in the survey. The Fishers Formula was used to stratify a sample in a process known as stratified random sampling (SRS). A total of 80 people took part in the survey. Drop and pick later was used to administer a questionnaire that included open-ended and closed-ended questions. The quantitative information gathered from the surveys was entered into an SPSS analytic program after being coded and typed in. The data were analyzed using both descriptive and inferential statistics, which were presented in tables and figures. The research concluded that inventory loss, investment in inventory, and turnover influence Safaricom Ltd.'s competitiveness. The research suggests that inventory management methods are critical to an organization's competitiveness.

## 2.4 Conceptual Framework



**Figure 2.1 Inventory Management and Company Profitability Relationship (Self, 2022)**

### Explanation of Key Terms

Figure 2.1 shows that an efficient inventory management system leads to increased profitability for a business. Economic order quantity (EOQ) refers to the optimal order quantity a corporation should acquire in order to save inventory expenditures. Holding costs, shortfall costs, and order costs are all examples of inventory expenses that a corporation may incur. Manufacturer or supplier inventory management choices are taken over by the seller or retailer in a supply chain agreement

known as Vendor Management Inventory (VMI). This signifies that the upstream agency is in charge of the downstream agent's inventory, which is a supply-chain concept. An whole supply chain may be affected by Vendor Managed Inventory. As a result of VMI, the buyer's profit is always larger, while the supplier's profit fluctuates. When buyer and supplier prices are aligned, VMI may lower overall channel costs in the near term. However, it can also diminish the profit margin for both parties. In the long term, it is more likely to raise the profit of the provider than in the short run to achieve this goal. Finally, VMI is a successful supply chain approach that can achieve many of the advantages that can only be realized in a fully integrated supply chain. Based on their relevance to the company, ABC analysis is an inventory management approach that establishes inventory item values. Demand, cost and risk data are used by inventory managers to categorize things into different groups. A company's profitability may be evaluated by considering all three types of inventory management. To understand how inventory management affects Kadoma Paper Mills, Zimbabwe, this research was conducted.

## **2.5 Research Gap Analysis**

The literature studied revealed a serious lack of knowledge about the impact of inventory management on the profitability of companies. A number of previous research have attempted to establish a causal link between descriptive and qualitative data. In the case of the Kadoma Paper Mills in Zimbabwe, there is no evidence to imply that such a study was conducted.

## **2.6 Chapter Summary**

The purpose of this chapter was to conduct a literature review on the nature, causes, and prevention methods for workplace accidents. This was accomplished by having a detailed conversation on the theoretical and empirical frameworks. Theory of Corporate Governance and theory of service provision. The research methodology is covered in the next chapter.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

Research tools, data gathering methods, and the presentation and analysis of results are examined in this chapter. This refers to the researcher's primary methods for collecting data from the study participants. Sample and sampling processes, as well as the data analysis methodologies used in the study, are covered in length in this chapter. Workers at the Kadoma Paper Mills were surveyed and interviewed for this study, which included the use of questionnaires and interviews. This chapter also discusses the research's target demographic and study population.

#### **3.1 Research design**

Concurrent research was used in this study. For this, the rationale was that it was possible to simultaneously gather and analyze both qualitative and quantitative data at the same time. A research design is a blueprint for conducting a study with maximum control over the factors that may interfere with the validity of the findings, as defined by different authorities. To answer fundamental research questions, it demonstrates how all of the project's major components work together. Researchers used case studies as their research design, collecting data through surveys and interviews. The findings of qualitative and quantitative research may be used in conjunction with each other in this form of mixed methods research design (Greene et al., 1989; Onwuegbuzie & Leech, 2006; Gray, 2010; Onwuegbuzie & Collins, 2007).

##### **3.1.1 Research Approach**

The findings of this study were based on a mixed-methods approach. In order to get the most out of a mixed methods research, it is essential that various types of data be gathered using diverse techniques and methods in ways that exhibit complementary strengths and non-overlapping weaknesses (Harwell, 2011).

### 3.1.2 Research Strategy

A polling method was implemented. It is mentioned in Maddala (2001) that Stone (1978), Benbasat (1984), Yin (1994), Bonoma (1985) and Kaplan (1985) characterize survey research technique as that permits the use of both content and theme and descriptive analysis in the assessment of reality, which is why it is appropriate for this study.

### 3.2 Target population

It's a big group of people or things that's the target of a scientific investigation. As defined by Saunders et al. (1997), a population is a group of individuals from whom conclusions may be drawn. Research is done for the benefit of the general public. Individuals or items that have similar qualities are included in this category. There is a common quality or attribute that connects all members of a certain community. People who participated in this study worked at Kadoma Paper Mills. Because they are directly responsible for the organization's day-to-day operations, workers and executives were included in the sample.

### 3.3 POPULATION OF THE STUDY

Employees at Kadoma Paper Mills in Zimbabwe were included in this study since the researcher was aware of their exact number. Table 3.1 shows the demographics of the participants in this research.

**Table 3.1 Study Population Distribution**

<b>Stratum</b>	<b>No of Employees</b>
Human Resources Staff	7
Procurement Staff	6
Finance Staff	8
Loss Control Staff	6
Sales Marketing Staff	15
Production Staff	83
<b>TOTAL</b>	<b>125</b>



### 3.4 Sample Size

Research is led by Saunders (2016) who argued that a sample size should be big enough to facilitate generalization. His position was that the sample size should range from 10% to 30% of the whole population. Thus, a sample of 24% of the entire population was chosen for this investigation. The results are displayed in the following table:

$$= \frac{s}{\lambda} \text{ of } N$$

$$= \frac{24}{100} \text{ of } 125$$

$$= 30$$

Where,

As outlined by Saunders (2016),  $s$  is the sample percentage range that was selected,  $\lambda$  is the percentage range denominator, and  $N$  is the overall research population. The total number of participants in this study is 48.

#### 3.4.1 Sample of the Study

Employees from the departments of Human Resources, Engineering and Finance were included in this study's sample. As a result, each stratum had an equal share of the sample.

#### 3.4.2 SAMPLING METHOD

It was decided to use a sampling approach based on probability. Probability sampling may be used if the study's population is known to the researcher, according to Kumar (2011). Probability sampling techniques are consistent with this research because they assume that every observation in the population has an equal chance of being included in the sample.

### 3.5 RESEARCH INSTRUMENTS

### **3.5.1 Questionnaires**

In order to acquire quantitative data, we used closed-ended surveys. The purpose of a questionnaire is to gather data that may be used to answer the research question. Because of this, the researcher had to make sure that the study question was crystal clear from the start. Mukonza, (2015) cites Schutte (2006) who claims that an effective questionnaire must have a solid conceptual foundation in order to be more than just a collection of fascinating questions. The formulation of an effective questionnaire requires an in-depth examination of the relevant literature. Following the examination of relevant literature in this research, this questionnaire was created.

#### **Advantages of questionnaires**

Questionnaires allow respondents to think through their answers without interruption from the interviewer, for example. It saves time, effort, and money for both the sender and the recipient. The questionnaire approach allows for rapid receipt of responses. No need to meet the respondent in person or conduct a long-term research in this situation Using this method, the respondent's emphasis is narrowed down to the most important details. A consistent set of instructions for recording answers ensures some regularity as it is provided in written form. The questionnaire doesn't allow for a lot of flexibility. Respondents' identities are kept secret by the questionnaire. Due to the unreadable handwriting of the responder, questionnaires are often considered to be inconvenient for the researcher to grasp their replies.

### **3.6 Interviews**

Using interviews to get qualitative data is common practice (Zohrabi, 2013). Purposive and convenience sampling approaches were used by the researcher to identify the most informed and information-rich respondents. Because it's so versatile and enables for a considerable deal of data to be extracted from informed and experienced individuals, this research employed the structured in-depth interview or its counterpart, known as the interview guide technique (Patton, 1990).

### **3.7 Pilot study**

Pilot testing of the questionnaires will be conducted in order to ensure that they provide the data needed for the study's validity and reliability. The Kadoma Bakery, a company in Kadoma, will undertake the research as the site for the pilot. The purpose of a pilot study is to acquire preliminary data for a bigger research in order to enhance its quality and efficiency, according to Lancaster,

Dodd and Williamson (2004). Using a pilot study will allow the researcher to make any required adjustments before the real study is conducted.

### **3. 8 Data Collection Procedures**

By asking a series of questions and looking for answers in previous studies, the researcher might boost the validity of his or her work. The issue that arises at this point is how the quantitative and qualitative data strands will be analyzed in this study, given that the pragmatic worldview and abductive methodologies have been used from the beginning of this research proposal paper.

### **3.9 Data analysis plan**

According to Survey Monkey (2015), a data analysis is a road plan for organizing and analyzing survey data, and it should aid in the accomplishment of three goals related to the survey's initial aims. Bar graphs, pie charts, percentages, and frequencies were employed as descriptive statistics from the Likert Scale.

### **3.10 Validity and Reliability of the Study**

#### **3.10.1 Validity Issues in Mixed Methods Research**

The study's content validity was increased by inviting specialists in the business world to examine both the research instruments and the data. This study's academic authors took internal validity into account as well. In this context, it relates to how far one can conclude that no other variable save the one under research was responsible for the outcome. In order to improve internal validity, we used Merriam (1998) and Zohrabi (2013)'s suggested techniques of triangulation, member checks, peer evaluation, and addressing researcher bias.

In a single research, triangulation involves the use of different data gathering methods, such as questionnaires and interviews. Increasing the internal validity of a study may be accomplished by the collection of data from several sources and the use of multiple procedures. Internal validity was improved in this study due to the use of a concurrent research methodology, in which the questionnaire was administered concurrently and independently of the in-depth interviews.

It is important for researchers to share their findings and interpretations with their participants so that they may verify and evaluate the findings themselves. For example, interview findings and interpretations may be given to the interviewees so that they may affirm or deny the substance of what they said during the interview encounter. As a result, the conclusions of the study are more credible and accurate. Because the respondents were asked to affirm or deny the outcomes and interpretations of the interviews, the researcher utilized a member-checking technique. Confirmation of the findings and their interpretations increases the research's internal validity. If this isn't proven, the researcher will have a second chance to revise the study's interpretation and findings. This added to the study's internal validity, as well.

In order to increase the internal validity of the research findings and conclusions, this study also included peer assessment. Peer review and comments are part of the process of peer examination. In order to provide trustworthy data analysis and interpretation that has the significant power to support the research's internal validity, the peers must be seasoned experts in their fields.

### **3.10.2 Reliability Issues in Mixed Methods Research**

Data and results must be reliable in order for any study to succeed. Reliability is concerned with the study results' consistency, reliability, and reproducibility (Nunan, 1999). In quantitative research, it's much easier to acquire the same conclusions since the data are numerical and objective. The fact that qualitative data is narrative and subjective makes it difficult to get identical outcomes. Thus, in qualitative research, the goal is not to get the same results as quantitative research, but to agree that the findings are consistent and trustworthy based on the data collection techniques (Zohrabi, 2013). The researcher's position, triangulation, and audit trail may all be used to ensure the validity of study findings (Merriam, 1998; Lincoln & Guba, 1985; Zohrabi, 2013). All three of the aforementioned methods were used in this investigation to ensure the validity of the results.

### **3.11 Ethical and Legal Considerations**

Confidentiality was maintained throughout this study, which attempts to improve our understanding of how inventory management affects profitability. Every participant in the research was given complete autonomy over whether or not they choose to participate. The researcher also acted in accordance with the respondents' rights. Before conducting an interview, the sample participants were asked to provide their verbal agreement. As a result, the study ensured that the required research authorities were contacted and permission was given, and adequate explanations were given to the participants before the study began.

#### **3.11.1: Human Subject Protection**

Human study subjects ought to be treated with dignity, privacy, and autonomy, which is why researchers should take every effort to ensure that risks and damages to them are kept to a minimum and the benefits of their work are distributed equally (Shamoo&Resnik,2009).

#### **3.11.2: Legality**

Keep abreast with and abide by all applicable legislation, rules, and regulations promulgated by government agencies and institutions (Shamoo&Resnik2009).

#### **3.10.3: Honesty**

Honesty should be your goal in all of your scientific writing. It's important to be up-front about the sources of your information and the conclusions you've reached. The use of false or misleading information is strictly prohibited. Don't mislead your coworkers, grantors, or anybody else for that matter! (Shamoo&Resnik2009).

#### **3.11.4: Informed consent**

Participation in research should be voluntary, and participants should be aware of any potential dangers or advantages before agreeing to participate (Sales&Folkman2000).

#### **3.11.5: Privacy and confidentiality**

Every psychologist's job is to protect the privacy and confidentiality of their patients (Sales&Folkman2000).

### **3.12Chapter Summary**

An summary of the study's methodology is provided in this section. The philosophical foundations of the investigation were offered in a clear overview of the technique. Qualitative and quantitative research methods were covered. They also discussed the various approaches and designs that may be used for sampling. The questionnaire and the interview were two of the data collection techniques covered in this chapter. Additionally, the general public as well as ethical and legal issues have been addressed.

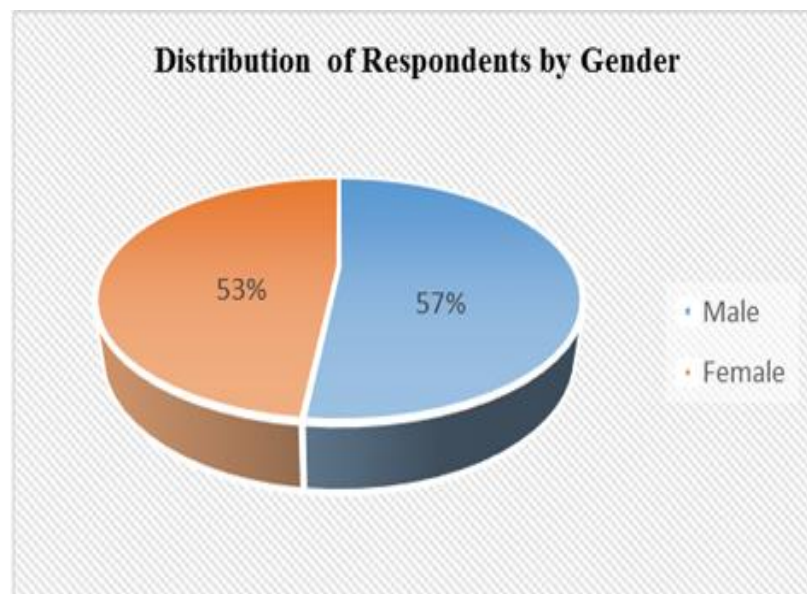
## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

#### 4.0 Introduction

In order to answer the research questions mentioned in Chapter I, this chapter focuses on data presentation and analysis, discussion and interpretation of quantitative and qualitative research results. Socioeconomic and demographic statistics are included in Section 4.1; research findings are covered in Section 4.2. Section 4.3 also includes a chapter summary.

#### 4.1 Presentation and Analysis of Socio-Economic and Demographic Data

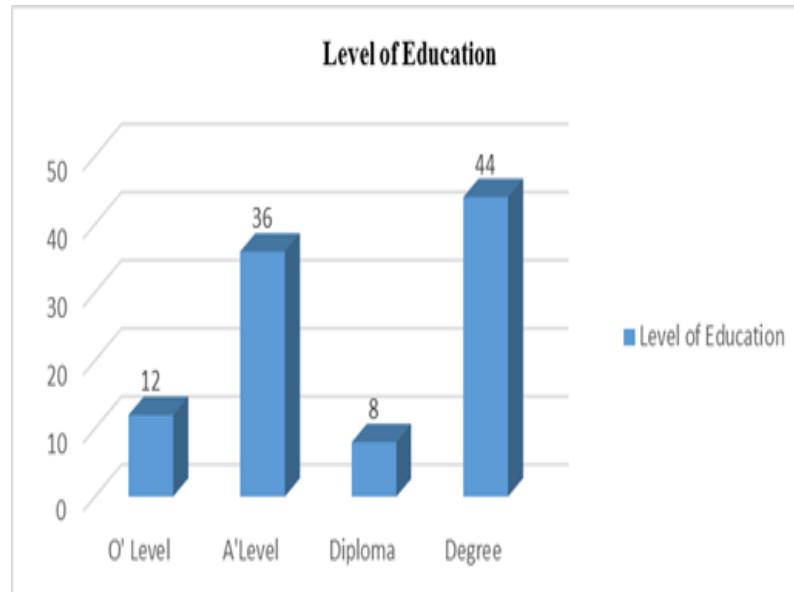


**Figure 4.1: Gender Distribution of Survey Respondents (Source: 2022 Survey Results)**

Figure 4.1 above shows that a large majority of respondents (57%) were male and their female counterparts registered a response rate of (43%).

Prior to presenting and analyzing the quantitative findings, the respondents' socioeconomic and demographic characteristics will be discussed. As shown in Figure 4.1, of the 28 participants, 19 men made up 57 percent of the total, while 9 women made up 43 percent of the total participants.

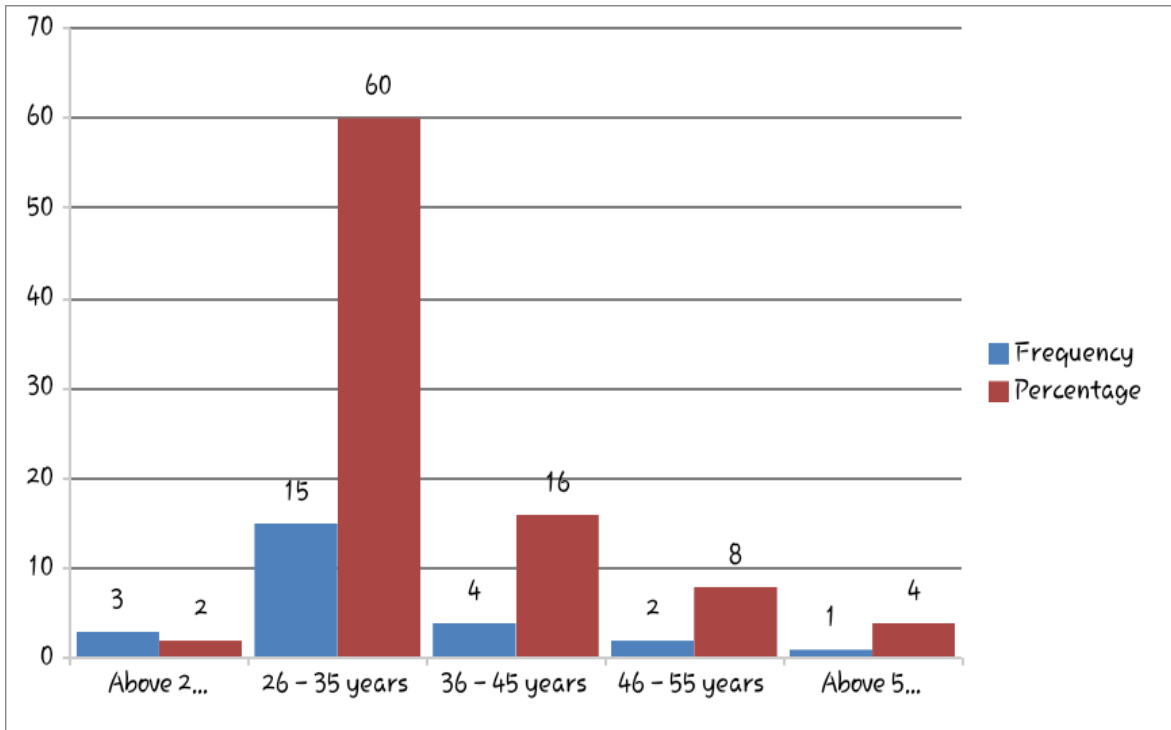
In spite of the fact that there were more men than women in this sample, the results may be regarded well gender-balanced.



**Figure 4.2: Level of Education Distribution of Survey Respondents (Source: 2022 Survey Results)**

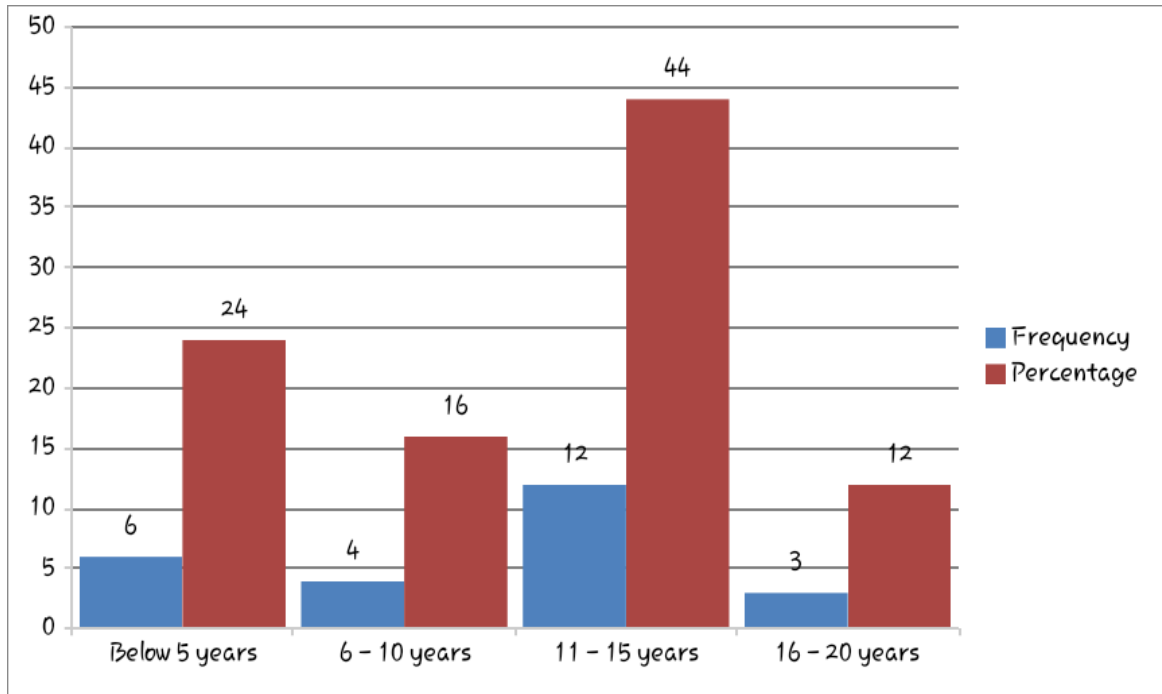
According to the results shown in Figure 4.2, all of the people who took the survey had at least an average level of education. It's safe to say that the vast majority of people who took the survey had a good grasp of the topic at hand. There were twelve people with Ordinary Level credentials, and 36 people with Advanced Level qualifications. There were 8% with diplomas and 44% with degrees.





**Figure 4.3: Age distribution of respondent**

According to the results of the survey, 60 percent of participants were between the ages of 26 and 35. For those between the ages of 36 and 45, this response rate was backed up by 4 respondents (or 16% of the total). For those above 55, the response rate was below 1 percent.



**Figure 4.4: Perceptions on experience of workers at Kadoma Paper Mills**

Figure 4.4 above shows that a large percentage of respondents 12(44%) had work experience that ranged from 10–15years.The lowest response rate of 3(12%) was recorded in the 16–20 years category.

#### **4.2. Presentation, Analysis, Interpretation and Discussion of the Research Results**

Six (6) participants were recruited for the Qualitative Research phase, including two (2) from Human Resources, two (2) from Finance, one (1) from Loss Control, and one (1) from Production (1). The number of participants was therefore six (6). It was suggested by Guest, Bunce and Johnson (2016) that a sample size of between 6 and 12 people is optimal in qualitative research studies aimed at gaining an in-depth knowledge of phenomena. This was used to influence the selection of the total number of participants. As a result, it's a good fit for this research.

##### **(a) Qualitative Research Phase**

**(i) To determine the effects of Economic Order Quantity (EOQ) on Profitability for Kadoma Paper Mills, Zimbabwe**

Research participants were asked whether they had any thoughts on how Kadoma Paper Mills, Zimbabwe's Economic Order Quantity (EOQ) affects profitability. The results have been presented using a theme and content analysis approach.

**One respondent KPM 1 had this to say:**

...very much, they do increase profit for the company...

**One respondent KPM3 had this to say:**

...It is, very much relevant for profit because it minimizes company total costs. It is very much recommended for companies...

**Another respondent KPM2 had this to say:**

...Mmmmm, I am not sure about this one,  
I think those in procurement can shed more light...

**Respondent KPM4 had this to say:**

.....Not out rightly, there are a lot factors that makes a company profitable. However, I doubt to a certain extent that EOQ can result in the profitability of a Company...

**KPM5 and KPM6 had the following response:**

EOQ is very effective for company profitability.  
We urge companies to practice that and I should think with Kadoma Paper Mills, it has been of handy...

**(ii) To Examine the Effect of Vendor Management Inventory (VMI) on Profitability for Kadoma Paper Mills, Zimbabwe**

Research participants' thoughts on the impact of vendor management inventory on profitability for Kadoma Paper Mills, Zimbabwe, are the rationale for this purpose. The results have been presented using a theme and content analysis approach.

One respondent **KPM3** and **KPM6** had this to say:

...As long a company has no proper records of vendor numbers, supply of raw materials and other services tend to suffer. Yes VMI is very Key for Company Profitability...

Respondents **KPM1** and **KPM2** shared the similar sentiments:

...Yes, some VMI is effective in the positive on company profitability...

Respondent **KPM4** had this to share:

...Yes, VMI is effective in the profitability of a Company. It has to be practiced all the time...

Respondent **KPM5** had this to share:

...This may as well sound somehow, because there is need to manage this supply chain agreement closely. If there is poor management, honestly this cannot be effective on company profitability. So, mmmmmmm, to a certain extent, and especially for Kadoma Paper Mills, we had some challenges. So can't put a finger on its effectiveness. ...

**(iii) To Establish the effects of ABC Analysis on Profitability for Kadoma Paper Mills, Zimbabwe**

This objective was adopted to determine whether research participants had knowledge on the effectiveness of ABC Analysis on Profitably of Kadoma Paper Mills, Zimbabwe.

**KPM1** and **KPM6** had this to say:

...Company need not to just buy inventory without them ascertaining their importance to the business. This has been the scenario for this company, to that end, ABC analysis has not been followed thus, impacting negatively on the profitability of this company...

One respondent **KPM3** had this to say:

...Very important. If irrelevant stock is bought, what it means is you tie down sales, resulting in negatively effecting the profits of the company. ...

Another respondent **KPM2** had this to say:

....Yes, it has to be practiced for a Company to realize profits. Remember it's a game of sales volumes. Without increased sales, it becomes a challenge for profits to be realized...

Respondent **KPM4** had this to say:

...Yaaaa, very much important for the firm...

KPM5 had the following response:

Outright, why purchasing goods that will take time to dispose?  
Why buy raw materials that are not needed immediately? ABC  
is very important in realizing profits...

(b) Quantitative Research Phase

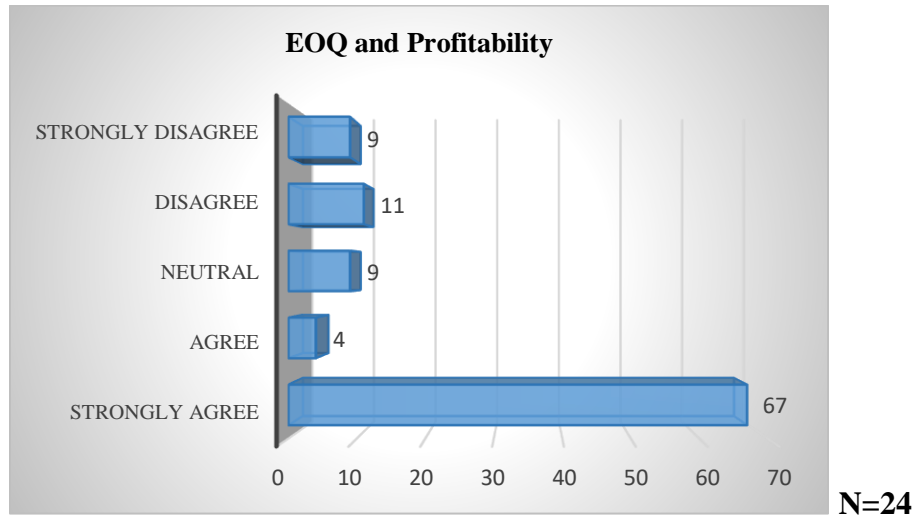
- Research Participants Response Rate

4 Sales Marketing Staff, 1 Procurement Staff and 19 Production Staff were surveyed in the quantitative phase. To better understand how inventory management affects a company's bottom line, it was necessary to look at response rates to see whether they were indicative of the intended audience. 22 of the 24 people in the sample participated in the research. As demonstrated in Table 4.1, the total response rate was 91.6 percent. It was determined that this response rate was appropriate for the study based on Draugalis, Coons, and Plaza's (2008) guideline that researchers aim for response rates of around 60%.

**Table 4.1 Response Rate**

Category of Response	Expected Sample Size	No. Responding	Response Rate
Sales Marketing Staff	4	4	100%
Procurement Staff	1	1	100%
Production Staff	19	17	89.5 %
<b>Total</b>	<b>24</b>	<b>22</b>	<b>91.6%</b>

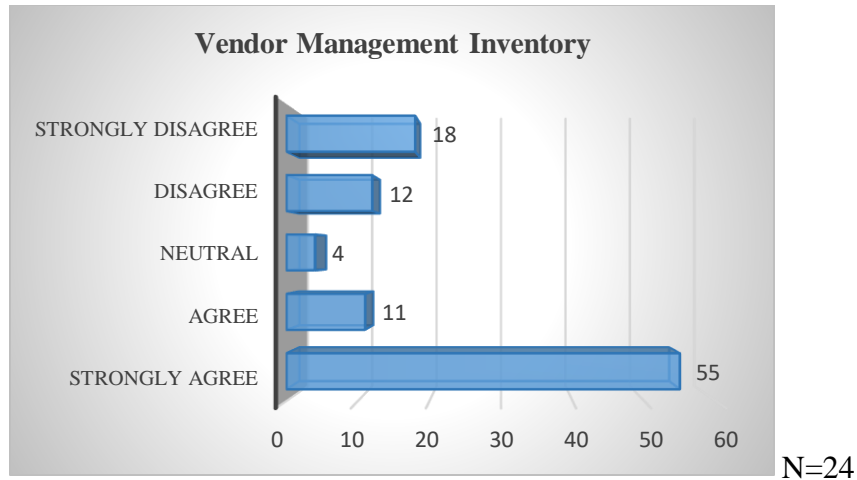
**(i) To determine the effects of Economic Order Quantity (EOQ) on Profitability for Kadoma Paper Mills, Zimbabwe**



**Figure 4.5 Effect of EOQ on Profitability (Source: 2022 Survey Results)**

- According to the findings, 71% of those polled believe that better control of Kadoma Paper Mills, Zimbabwe's economic order quantity leads to higher profitability, with the remaining nine percent (9%). There is only a 20% chance that Kadoma Paper Mills, Zimbabwe, would lose money as a consequence of Economic Order Quantity (EOQ). The findings are in line with those from the earlier phase of qualitative research.

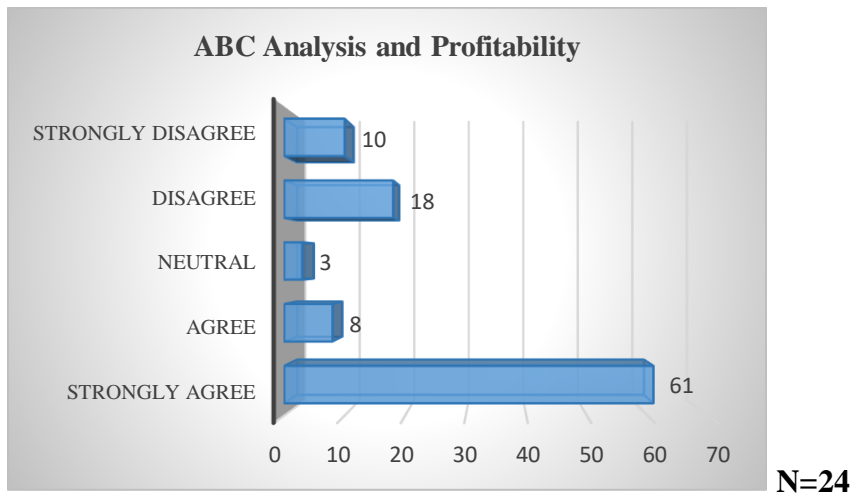
**(i) To Examine the Effect of Vendor Management Inventory (VMI) on Profitability for Kadoma Paper Mills, Zimbabwe**



**Figure 4.6 Effect of VMI on Profitability (Source: 2022 Survey Results)**

Vendor Management Inventory was cited by 66% of respondents as a factor in the success of Kadoma Paper Mills, Zimbabwe, with 4% of respondents being unconvinced. Vendor Management Inventory is profitable for Kadoma Paper Mills in Zimbabwe, according to just 30% of the company's employees.

**(ii) To Establish the effects of ABC Analysis on Profitability for Kadoma Paper Mills, Zimbabwe**



**Figure 4.7 Effect of ABC Analysis on Profitability (Source: 2022 Survey Results)**



69 percent of the survey respondents said that the use of ABC Analysis in inventory management for Kadoma Paper Mills, Zimbabwe, resulted in corporate profitability, with a mere three percent saying they were unconcerned. There is 38% opposition to Kadoma Paper Mills, Zimbabwe, profiting from ABC Analysis.

### **4.3 Discussion of the Findings and Results from the Mixed Method Research**

Qualitative and quantitative study findings from Kadoma Paper Milling, Zimbabwe, reveal that the participants are well aware of the impact of inventory management on profitability. The findings are compared to those of Heizer and Render (2006) and Shingo (2005), both of the Lean and Queuing theories, respectively. According to all of the comments, inventory management increases the profitability of businesses. This study's findings are in line with those of Lwiki, Ojera, Mugenda, and Wachira (2013), who showed that inventory management had a beneficial effect both on revenue generated and return on equity earned. In addition, Mwangi and Nyambura (2015) performed research that recognized inventory management's major features, including production maintenance, cost control, loss reduction, and continuous supply, as critical to food processing firms' success. Economic Order Quantity (EOQ) is a key variable in this study's conclusions. An investigation of how inventory management systems used by gas manufacturing companies in Nairobi City County impact their performance was undertaken similarly by Ngei and Kihara (2017) Multivariate regression analysis was utilized to examine the main and secondary data collected for the research. VMI, ERP, RFID and e-procurement were shown to have a substantial impact on the performance of gas companies... Both Anichebe and Agu (2013) came to the same conclusion. These findings show that in order for Kadoma Paper Mills, Zimbabwe to make a profit, it must take into account how well it manages the Inventory Management function, as shown by its positive association with Profitability.

### **4.4 Chapter Summary**

Results and topics were presented in this chapter based on replies from the participants. Themes were examined in the context of the research goals that framed this investigation. There were findings from the qualitative and quantitative phases. For the study's research questions, this

chapter displays and examines the data that was gathered throughout the research process. There are two parts to this. Part one is dedicated to presenting and analyzing data, while Part two is devoted to discussing and interpreting those results. The major medium for presenting numerical data were bar graphs, pie charts, and tables, whereas interview reports were given in prose.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION(S) AND RECOMMENDATIONS**

#### **5.0 Introduction**

Sections: There are five in this chapter. Prior to discussing the results in section 5.3, an overview of the research is provided. Finally, in section 5.5, we give our findings and suggestions. Giving the next research suggestion before summarizing the chapter.

#### **5.1 Summary of the Study**

The issue statement, research goals, research questions, and the importance of the investigation were described in Chapter 1 of the study. We did a quick assessment of the relevant literature so that the researcher could comprehend what other authors and researchers have previously done in this field, and so that our investigation may identify current knowledge gaps. Details on research limitations were provided. Chapter two was the next stop on the tour.

The study's research methods were discussed in detail in Chapter 3. This study examined the research's guiding principles, methodology, approach, and design. Sample size and sampling methodology were also discussed in detail once the research population was outlined. Measures put in place to improve the validity and reliability of the study findings and outcomes were reviewed, as were other validity and reliability difficulties. The study's ethics were examined, as well as the procedures that were taken to assure the study's ethical conduct. The third chapter had come to a close.

The results of the study were presented, analyzed, and discussed in Chapter Four. Prior to presenting the quantitative and qualitative study findings and findings analysis, the socio-economic and demographic data were given in stages, with each step building on the one before it.

## **5.2 Findings of the Study**

The answers to the research questions form the basis of the discussion in this part of the paper. Respondents' responses were solicited via the use of research questions and the fourth aim was utilized to provide appropriate suggestions.

### **Question 1: What are the effects of Economic Order Quantity (EOQ) on Profitability for Kadoma Paper Mills, Zimbabwe?**

Economic Order Quantity may help Kadoma Paper Mills in Zimbabwe, according to the research. Some responders, on the other hand, were uninterested in the subject, while others were certain that the profitability of Kadoma Paper Mills, Zimbabwe, is due to Economic Order Quantity. In both quantitative and qualitative terms, this was a significant finding.

### **Question 2: How do Vendor Management Inventory (VMI) affect Profitability for Kadoma Paper Mills, Zimbabwe?**

Kadoma Paper Mills, Zimbabwe, profited from Vendor Management Inventory, according to research. Kadoma Paper Mills, Zimbabwe, relies on Vendor Management Inventory, yet some respondents were uninterested and others completely disagreed with this claim. In both quantitative and qualitative terms, this was a significant finding.

### **Question 3: What are the effects of ABC Analysis on Profitability for Kadoma Paper Mills, Zimbabwe?**

According to the findings, the ABC Analysis made the Kadoma Paper Mills in Zimbabwe profitable. Yet some were unconcerned, while yet others flatly refused to acknowledge that the ABC Analysis is responsible for Kadoma Paper Mills' (Zimbabwe) financial success. In both quantitative and qualitative terms, this was a significant finding.

## **5.3 Conclusion of the Study**

There is still more work to be done at Kadoma Paper Mills, Zimbabwe, even if the factors examined had a favorable link with the company's profitability. This is due to the fact that some

of the participants in the study disagreed with the assertion, while others were ambivalent about the idea.

#### **5.4 Recommendations of the Study**

The recommendations suggested by this study are underpinned by the third research question which says:

#### **Question 4: What strategies can be proffered on the effects of inventory management on that would enhance profitability for Kadoma Paper Mills, Zimbabwe?**

This section makes recommendations based on the findings of the study to stakeholders involved, with the recommendation giving attention to the augmentation of the effectiveness of Inventory management for Kadoma Paper Mills, Zimbabwe.

- **Setting a Sound Procurement Department at the Company:** Kadoma Paper Mills Company should consider setting up a sound procurement department so that it independently conducts its functions, paying attention to the importance of inventory management.
- **Organizing Workshops:** There is need for the management at Kadoma Paper Mills Company, Zimbabwe to periodically conduct workshop with the blessings of the PRAZ so that management and those in the procurement department are exposed to the contemporary functions of procurement.
- **Strategic Internal Audit Mechanism:** The Human Resources Department should employ those with procurement qualifications so that expertise knowledge on procurement is made available to the company.

- Grants from the Government of Zimbabwe: The government of Zimbabwe must provide funds for companies to invest in procurement function, given the general increases in cases of involving the procurement function.

### **5.5 Areas for Further Research**

In light of the rising tide of procurement-related corruption charges, further study is needed on the subject. Furthermore, there is need to evaluate whether Kadoma Paper Mills Company has appropriate people to cope with the procurement function considering the increase of its consumer base.

### **5.6 Chapter Summary**

The conclusions of the study were summarized in this chapter, based on the research questions. The Kadoma Paper Mills, Zimbabwe, could use some of these measures to improve inventory management, according to the findings of the research. The chapter summary also included ideas for further investigation.

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## **APPENDICES**

### **APPENDIX 1. INTRODUCTION LETTER**

6 May 2022

Dear Respondent

I am a student of Bachelors Honours Degree in Purchasing and Supply with Bindura University of Science Education. My research study seeks to determine the effects of Inventory Management on Profitability for the Kadoma Paper Mill, Zimbabwe, with the view of coming up with strategies that would enhance profitability. The study is important in that its findings will provide not only new but critical knowledge to the government, policy makers, practitioners, scholars, researchers and other stakeholders and for this reason, I humbly request you to complete the questionnaire as honestly and realistically as possible. By answering all the questions honestly and sincerely you will enable the researcher to generate new knowledge that will help people enjoy the benefits of health sector and other key stakeholders who will implement the recommendations of the study.

Based on the observance of sound research ethics, I promise to treat both the identity of the respondent and the responses as confidential material. In keeping with the principles of confidentiality and anonymity, you are not allowed to write your name on the questionnaire. You are kindly requested to sign in the space provided below to show that you have voluntarily agreed to respond to this questionnaire.

Last but not least, allow me to take this opportunity to thank you in advance for your support.

Yours faithfully,

**Paidamoyo K Yottamu**

NB. Respondent's Signature for Informed Consent: \_\_\_\_\_

This questionnaire should be completed by a respondents from Kadoma Paper Mill, Zimbabwe by ticking in the most appropriate box. Thank you in advance for responding to all the questionnaire items.

**APPENDIX 2: SEMI-STRUCTURED INTERVIEWS**

**SECTION A**

Demographic and General Information

1. Gender Male  Female

2. How long have you been working at Kadoma Paper Mills?

1-2 years  3-4 years  5-6 years

**SECTION B**

What are the effects of Economic Order Quantity (EOQ) on Profitability for Kadoma Paper Mills, Zimbabwe?

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How do Vendor Management Inventory (VMI) affect Profitability for Kadoma Paper Mills, Zimbabwe?

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What are the effects of ABC Analysis on Profitability for Kadoma Paper Mills, Zimbabwe?

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**APPENDIX 3: CLOSED ENDED QUESTIONNAIRE**

Section A: Personal Information

1. Gender: Male  Female

2. Education Level: Primary  O - Level  A - Level   
Diploma  Bachelor's Degree  Masters   
PhD

## Section B

There are subdued profits at Kadoma Paper Mill despite having seemingly sound Inventory Management System.

## Section C (Tick in the appropriate box)

Question	Question Theme	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	The Following forms of Inventory Management results in Kadoma Paper Mill's Profitability					
	<ul style="list-style-type: none"><li>Economic Order Quantity</li></ul>					
	<ul style="list-style-type: none"><li>Vendor Management Inventory</li></ul>					
	<ul style="list-style-type: none"><li>ABC Analysis</li></ul>					
2	Inventory Management Results in profitability of Kadoma Paper Mills, Zimbabwe					

**END OF QUESTIONNAIRE**

