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

THE PERCEPTION OF EMPLOYEES ON THE EFFECTS OF INVENTORY MANAGEMENT PRACTICES ON THE FINANCIAL PERFOMANCE OF A PETROLEUM COMPANY OPERATING IN A HYPER-INFLATIONARY EVNVIRONMENT. THE CASE OF GLOW PETROLEUM

BY **(B200351A)**

DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE BACHELOR OF COMMERCE HONOURS DEGREE IN ACCOUNTING AT BINDURA UNIVERSITY OF SCIENCE EDUCATION

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APPROVAL FORM

With my consent as Academic Supervisor, this study proposal is submitted to Bindura University of Science Education for review as a component of the Bachelor of Accountancy honors degree.

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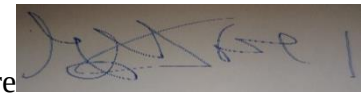
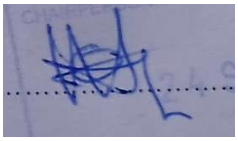
Name of supervisor N.HOVE Signature  Date 24/09/2024

Name of chairman: O.Manyani Signature  Date 24/09/2024

DEDICATION

This research is dedicated to two individuals who have been my guiding light and inspiration, my parents. Your influence has transcended boundaries and shaped me into the person that I am today.

ABSTRACT

This research is aimed at exploring the perception of employees on the effects of inventory management practices on the financial performance of a fuel retailing company operating in a hyperinflationary environment in Zimbabwe. The objectives of the research were to first identify the perception of employees on the inventory management strategies; to investigate and analyze the perception of employees on the challenges being faced by companies in the fuel retail industry in implementation inventory management strategies and to evaluate the employee's perceptions regarding the strengths and weaknesses of companies in the fuel retail industry's inventory management strategies and their influence on the company's financial performance. The study was done through descriptive research design. The main data collection instrument was questionnaires which were distributed to 110 respondents of which 92 were responded to. Included in the sampling frame were regional managers, site managers, finance director, site supervisors, distribution clerks and pump attendants in Glow Petroleum. A statistical package (SPSS) was used to analyze the collected data using descriptive statistics. The research found that quite a number of respondents perceived that the company practiced Economic Order Quantity and that fuel was delivered in time as well as that the company keeps buffer stocks and orders fuel at a predetermined level of fuel. The respondents also perceived that the company does not use price reduction strategies to improve its financial performance but rather ensures timely delivers and offers quality products and services. The perceived challenges faced by the company include the everchanging business environment, hyper-inflation and unfavorable polies put in place by the government and ZERA. Recommendations in the study include training employees to be well equipped with skills to implement proper inventory management practices as well as adopting automated inventory tracking devices/sensors of fuel management and Software Packages. The study concluded that the company uses a combination of techniques including Economic Order Quantity and Just In Time among others and faces unique challenges such as unfavorable policies. The study therefore recommends the company and other companies in the fuel industry to be proactive in terms of inventory management and be up to date with latest inventory management practices that are applicable in the fuel industry as well as train their employees in the aspect of inventory management.

KEY WORDS: Inventory management practices, financial performance, fuel industry, hyperinflation, Glow Petroleum.

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First and foremost, I would like to thank God for giving me this opportunity which many people fail to have and also thank Him for making this journey manageable and possible. I would also like to extend my heartfelt gratitude to my family and friends who have been there for me every step of the way. Special thanks go to my supervisor.

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ABBREVIATIONS

ZERA - Zimbabwe Energy Regulation Authority

NOIC – National Oil Infrastructure Company

SPSS – Statistical Package for Social Sciences

JIT – Just in Time

EOQ – Economic Order Quantity

VMI – Vendor Managed Inventory

RFID – Radio Frequency Identification

CHAPTER

INTRODUCTION

1.0 INTRODUCTION

The global economic environment is continually changing, posing distinct challenges for organizations in every industry. One such difficulty is hyperinflation, which is a time of extremely rapid price increases that may have a substantial influence on the financial performance of a company. Increasing demand for products and services in Zimbabwe has led to the development of management methods that facilitate timely and high-quality service delivery to clients and stakeholders This is especially concerning in the petroleum industry, as fuel prices are extremely susceptible to inflation. Effective inventory management is increasingly viewed as a need in today's competitive economy, where customer happiness is key to differentiation. As the demand for fuel continue to rise, good inventory management becomes important to maintaining a competitive advantage. Inventory management may not always produce perfect outcomes, but it does assist the business assure a smooth flow of operations which is critical for survival in today's economy.

1.1 BACKGROUND OF THE STUDY

The effectiveness and profitability of businesses in a variety of industries are directly impacted by inventory management, which is a crucial aspect of operations management. Effective inventory management is especially important in the petroleum industry because of the high value petroleum products (such as diesel, petrol and paraffin), unstable markets and complex supply chain networks.

According to Goldberg in 2016, the petroleum business is characterized by price volatility and supply chain difficulties. Global oil price and currency exchange rate fluctuations may have substantial repercussions on the cost of petroleum products as well as industry players' profitability. This underlines the need of effective inventory management strategies in reducing costs and mitigating the consequences of price changes

As per a PwC, 2020, assessment on Africa's oil and gas business, the region's petroleum sector is facing issues such as price volatility, geopolitical concerns, and infrastructure restrictions. These reasons underline the importance of effective inventory management strategies for reducing costs, ensuring product availability, and improving operational efficiency. In the petroleum industry, unique challenges are faced in terms of demand fluctuations, regulatory factors, supply chain dynamics etcetera. Around the Africa, costs in the petroleum industry rose from 2022 to 2023 and this has significant impact of many Africans (OPEC Monthly Oil Report) with additional increases predicted for 2024. Because of the volatile nature of oil prices, measures to mitigate risks are an important strategy in inventory management.

Similarly, a report by Bimha, Hoque, and Munapo 2020 highlights the issues that Zimbabwe's petroleum industry faces, including as poor infrastructure, storage capacity that is limited, and inefficient supply chain operations. These reasons emphasize the need of effective inventory management procedures in ensuring timely delivery, reducing stockouts, and streamlining supply chain processes.

The petroleum industry in Zimbabwe is an important sector that provides fuel and related goods to a variety of industries, enterprises, and consumers throughout the country. Fuel can be a raw material in other companies such as those that make cobra, paint or other detergents. It is a significant driver for economic growth, transportation, and industrial operations. However, external factors like as fluctuations in global oil prices, geopolitical crises, and regulatory changes may considerably impact the availability, supply and pricing of petroleum products.

Currently, most petroleum retail outlets are using foreign currency for trading (United States Dollar and South African Rand). This is because the United States Dollar (USD), is the most preferred medium of exchange when procuring the fuel. To avoid shortages and secure their fuel consignments at respective deports, most petroleum companies end up selling their fuel in foreign currency so as to avoid problems associated with currency exchanges from the local currency to USD. This has also helped most companies to deal with problems associated with the unstable

local currency. It can also be noted that before the complete changeover to selling using fuel in USD, there were fuel shortages in 2019-2020 which resulted in a fuel crisis that is, long winding queues, but those that were paying using the USD would always get fuel with no hassle. This means that selling in USD helped companies manage their stocks well and ensure that there was fuel for everyone.

Inadequate inventory management techniques may result in stockouts, more than enough inventory, increase in holding costs, and, eventually, customer unhappiness. Effective inventory management procedures, on the other hand, can help petroleum companies such as Glow Petroleum optimize stock levels, reduce costs, improve supply chain efficiency, and maintain high customer service standards. Poi and Nwokah (2022), found that inventory management is critical in the petroleum business and has an impact on operational performance. The study emphasizes the importance of precise demand forecasting, efficient stock control, and effective order management for optimizing inventory levels and increasing customer satisfaction.

Furthermore, Bimha, Hoque and Munapo (2020), highlight the importance of inventory management in the African petroleum business and its impact on operational performance. The study emphasizes the importance of precise demand forecasting, good stock control, and efficient order management in order to optimize the levels of inventory, save costs, and increase the satisfaction of customers. Similarly, Newstyle, and Opuene in 2022, explored the problems and potential for inventory management in the African gas and oil business. Their study highlighted the importance of implementing current strategies of inventory management which include Vendor-Managed Inventory (VMI) and Just-in-Time (JIT) to improve supply chain orderliness and achieve a competitive advantage.

In Zimbabwe's dynamic and intensely competitive petroleum market, Glow Petroleum stands out as a significant local participant. With over 15 years of experience, the company has expanded its footprint to include 33 retail locations throughout the country and still counting. Glow Petroleum is a retail corporation that sells petroleum products such as diesel, petrol, paraffin and lubricants

for household and industrial usage. The company has a variety of service stations with tanks with storage capacities of thousands of litres.

Glow Petroleum operates in a hyperinflationary setting and by operating in a hyperinflationary environment face a variety of unique obstacles. First and foremost, there is a significant degree of price level fluctuation, which can make it difficult to follow the changes while maintaining enough inventory levels at a fair cost. Second, there is a bigger inflation premium, and money's purchasing value erodes regularly. As a result, the company may need to keep higher stocks to strike a balance between supply and demand, as the cost of stock out is quite high. Finally, the effects of hyperinflation on capital budgeting decisions are significant. The majority of businesses in a hyperinflationary environment would use a current cost accounting system for valuation of inventory, which means inventory will be valued at the lower of cost or net realizable value at the date of the statement of financial status. Inventories are adjusted to reflect present costs using an established general price index.

The aforementioned discussions have prompted the researcher to explore the connection between inventory management techniques and the financial success of a company] in order to discover whether the employees' perspectives on this topic are well-founded. There are few extant researches on inventory management and its impact on financial performance in Zimbabwe, particularly in a hyperinflationary setting. Thus, effective completion of this research may not just contribute to scholarly knowledge in the area of study, but also help professionals when making strategic inventory management decisions.

1.2 THE STATEMENT OF THE PROBLEM

Glow Petroleum's competitiveness in Zimbabwe's petroleum market is heavily reliant on inventory management. However, the petroleum business in Africa, not just Zimbabwe, are affected by regulatory factors and hyper-inflation which all have a direct impact on inventory management procedures. In a hyperinflationary environment, where prices rapidly rise and the value of money deteriorates, inventory management becomes crucial. Political unrest or conflicts in major oilproducing regions can also disrupt fuel supplies and impact prices, such as the civil war in Libya

in 2011 (African Economic Outlook, 2012) which caused a disruption in oil production, resulting in a decrease in global supply and an increase in fuel prices. Effective management of inventory processes may yield a noticeable, favorable effect on the financial yield of a company by reducing costs, improving cash flow, and ensuring product availability. The aim of this research is to assess Glow Petroleum's inventory management techniques, and how it affects its financial performance in the hyper-inflationary economy maintaining a competitive edge in the petroleum business.

1.3 PURPOSE OF THE STUDY

This study's purpose is to assess and examine Glow Petroleum's present inventory management system in order to discover opportunities for improvement and optimization in this volatile economy. By carrying out this study, the goal is to improve inventory management practices, operational efficiency, reduce costs, reduce stockouts, improve customer satisfaction, and ultimately improve the financial performance within Glow Petroleum and other companies in the petroleum industry. It will also help these companies figure out how to efficiently manage their fuel stocks in this hyper-inflationary economy.

1.4 RESEARCH OBJECTIVES

The objectives of this study are as follows

i. To identify the perception of employees on the inventory management strategies in Glow Petroleum.
ii. To investigate and analyze the perception of employees on the challenges faced by Glow Petroleum in implementing inventory management strategies.
iii. To evaluate employees' perceptions regarding the strengths and weaknesses of Glow Petroleum's inventory management strategies and their influence on the company's financial performance.
iv. To assess is there is a significant difference of employee perceptions of inventory management on financial performance by gender, education and duration of employment in Glow Petroleum.

1.5 RESEARCH QUESTIONS

i. What are the inventory management strategies in Glow Petroleum?

ii. What are the challenges faced by Glow Petroleum in when implementing the inventory management strategies?

iii. What are the employees' perceptions regarding the strength and weaknesses of Glow Petroleum's inventory management strategies and their influence on the company's financial performance?

iv. Is there any significant difference in employee perceptions on inventory management on financial performance by gender, education and duration of employment in Glow Petroleum?

1.6 SIGNIFICANCE OF THE STUDY

This study is of significant value to Glow Petroleum and other firms in the petroleum business around Zimbabwe and Africa operating in an inflationary environment. The importance of analyzing inventory management practices in Glow Petroleum stems from the potential for significant gains in operational efficiency, cost-effectiveness, and overall financial performance. The research will help companies in the industry to think about strategies and tools that they can utilize to effectively manage their inventory. The study will benefit government authorities interested in efficient inventory management, and also help the government identify areas of difficulty in inventory management and implement appropriate solutions to these concerns.

1.7 ASSUMPTIONS OF THE STUDY

The following assumptions underlie this study:

i. The information provided by employees in Glow Petroleum is accurate and full.

ii. Glow Petroleum has an established inventory management system.

iii. All Glow Petroleum stations follow consistent inventory management standards. iv. Glow Petroleum is operating in a hyper-inflationary environment.

1.8 DELIMITATIONS

This research is restricted to evaluating how inventory management practices impacts the financial performance in Glow Petroleum in the current highly volatile economy, working with the service station managers, fuel attendants and employees at the head office.

1.9 LIMITATIONS

The availability or accessibility of specific data from Glow Petroleum may limit the study.

1.10 DEFINATION OF KEY TERMS

Inventory Management Practices: These are the strategies, methods, processes and activities employed by a company to effectively and efficiently manage its inventory of goods or materials which include planning, acquisition, preservation, monitoring, and usage of inventory to meet client's demand, at the same time minimizing costs and maximizing the efficiency of operations.

Financial Performance: A measure of how effectively a corporation manages its resources and achieves its financial objectives. It is a comprehensive assessment of a company's total financial health, including its assets, liabilities, equity, expenses, revenue, profitability, and shareholder value.

Hyper-inflationary: Is a term used when referring to situations in which the prices of all products and services grow uncontrolled over a set time period. In simpler terms, hyperinflation is very rapid inflation.

1.11 SUMMARY

Chapter 1 sets the foundation for the research evaluating the inventory management practices on the financial performance in Glow Petroleum which is currently operating in a hyper-inflationary environment. Included in this chapter is defining the background, the problem statement. It prepares the way for a comprehensive review to be engaged, laying the framework for a thorough research for the chapters that follow.

CHAPTER II

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter discuses Glow Petroleum's specific context to evaluate its inventory management practices in pursuit of financial excellence. Inventory management is an essential part of corporate operations, especially in the petroleum industry, which presents distinct problems and opportunities. The chapter establishes a conceptual framework which will guide the discussion of the study and theoretical framework to support the necessity of the present study and the empirical evaluation on factors that affect inventory management in the energy or petroleum industry.

2.1 INVENTORY MANAGEMENT

Different types of stocks are important to ensure success of many businesses. Inventories refers to the goods or materials that are bought for resale by an organization or for use in production processes. Inventories include items of finished goods, work-in-progress or raw materials or consumables for sale (Azizul and Anton, 2009). They also include buffer stocks which are kept to make allowances for any unexpected increase in demand (Rai, 2014).

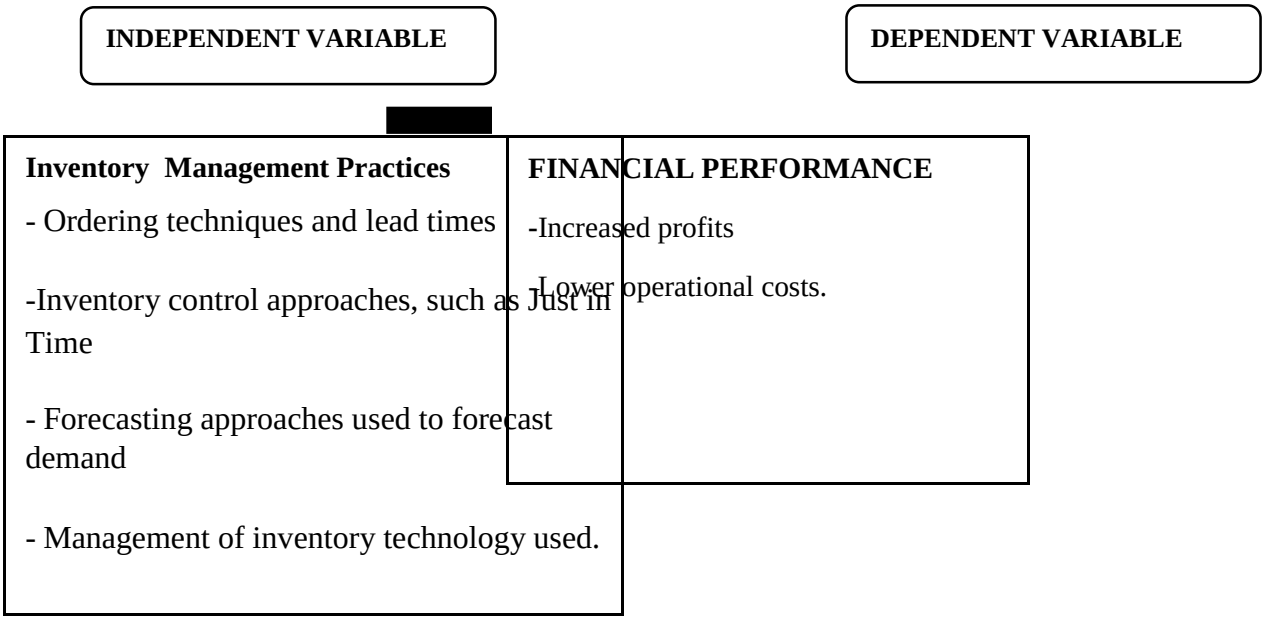
Inventory management are activities which involves overseeing the flow of items from the supplier to the retail outlets, in this case fuel from NOIC Mabvuku or Feruka to service stations; storage of the inventory, in this case storage of the fuel in underground tanks at service stations; optimizing the levels of inventory in order to meet the demand from customers while minimizing costs which include storage and spoilage costs. It includes task such as inventory tracking, ordering or forecasting. Effective inventory management is very crucial for the business to maximize its profits and satisfy customers.

2.2 CONCEPTUAL FRAMEWORK

This research’s conceptual framework identifies the essential concepts, variables, and relationships that will guide the investigation. It offers a structured method to analyzing the elements that influence inventory management techniques and their effect on financial performance in Glow

Petroleum. I]n this research, inventory management practices is the independent variable and financial performance being the dependent variable. The financial performance of Glow Petroleum thus depends on the inventory management practices in the company. The diagram below depicts the study's conceptual framework and the correlations between variables (Kotter, 2001).

Figure 1: Conceptual Framework



2.2.1 Operationalization of Variables

Since this research is based on employees' perceptions, variables will be measured using an extent scale in the survey questions.

Table 1 Operationalization of Variables

VARIABLE	MEASUREMENT
Independent Variable	

Inventory management practices	Perceived effectiveness of inventory management practices Perceived efficiency of inventory management processes
Dependent Variable	
Financial performance	Perceived impact of inventory management practices on financial performance Perceived improvement in financial performance due to inventory management

2.3 THEORATICAL FRAMEWORK

There are various ideas employed to clarify the impact of managing inventory on financial performance. The study draws on the Resource Based View, Contingency Theory, and Theory of Constraints to develop critical concerns about the inventory management systems effects on the financial performance of enterprises in the petroleum industry.

2.3.1 The Resource Based View

Jay Barney's study in the 1990s had a huge impact on the theory also known as the Resource Based View, which became the prevailing approach in strategic management. The view is a strategic management philosophy that sees a company's internal resources as the foundation for gaining a sustained competitive edge. The view suggests that how a firm performs primarily determined by its resources rather than its industry position. The view also states that a firm's resources, including tangible and intangible assets, can provide a competitive edge over the long run if they are highly valued, uncommon, difficult to replicate, and non-substitutable.

The theory implies that good inventory management may result in increased financial performance. If Glow Petroleum manages its inventory well by applying a good inventory management system like, Just in Time or safety stock management, it will have better operational performance and reduction in costs which will lead to improved financial performance and customer satisfaction. This therefore means that effective inventory control practices will give the firm a competitive advantage thereby improving its overall performance

2.3.2 Contingency Theory

The Contingency Theory emerged in organizational studies and management in the late 1960s and early 1970s. It arose in response to prior ideas, such as classical management theories and systems theory, which held that there is a universal set of management principles that can be applied to all businesses in all circumstances. Contingency theory is a management philosophy that states that a one-size-fits-all solution to structuring and managing a business does not exist. Instead, the best management practices and structures are determined by a variety of external and internal factors, including the organization's specific qualities, the industry in which it operates, the contingencies it faces and the overall business environment.

In inventory management, it emphasizes the need to examine multiple scenarios and adopt appropriate methods or practices that correspond with the particular characteristics of the products, conditions on the market, as well as supply chain dynamics to achieve excellent financial results. Glow Petroleum should align its inventory management practices according to the specific nature of the products it sells -fuel, the size of the company, the technology it has as well as the environment it is operating in. The practices should be tailored to best suit the unique contingencies the company may face such as an unexpected rise in demand of fuel. When implementing inventory management practices, the company should also take note of the market uncertainties, product perishability as well as supply chain volatility and how these can impact the implementation and selection of inventory management strategies.

2.3.3 The Theory of Constraints

Goldratt Cox, established this theory, which provides an approach for identifying and controlling constraints that limit a system's overall performance. According to Mabin and Balderstone (2003), the Theory of Constraints can assist organizations in identifying problems, or bottlenecks developing solutions, and successfully implementing strategies. The theory provides useful information for optimizing the quantity of inventory and enhancing the quality of operation by identifying bottlenecks, and prioritizing improvement activities. Using the theory’s lens, companies have the potential to significantly enhance inventory management, ultimately leading to operational excellence and better financial performance.

In the petroleum industry, it is important for management to focus their attention on the critical constraints that can limit the systems inventory management practice to perform well, such as poor communication or lack of training to properly use the system or poor forecasting, therefore the management should make efforts identify and address these constraints by say giving it priority in terms of resources and time. Other constraints that may need to be addressed can include storage capacity limitation which negatively impacts the inventory management practices and will therefore have an implication on the financial performance of the company.

2.4 Inventory Control Approaches In The Petroleum Industry

Inventory management is crucial in the petroleum industry for businesses to reduce costs, increase profits, and meet demands from consumers. It guarantees that balanced inventory items are available at right quantity, right quality, at the appropriate moment and at the appropriate place (Jay & Barry, 2006). In this section, the scholarly on inventory management approaches that can be applicable in the petroleum sector will be reviewed.

2.4.1 Just In Time Technique

Toyota popularized the Just-in-Time (JIT) inventory practice, which has now been implemented by a variety of businesses across different industries. It is a generally accepted method for reducing inventory levels by coordinating production and delivery with actual consumer demand. According to Hutchins, 1999, JIT is a method that prepares for immediate response to requests without overstocking, either due to the application's approaching deadline or due to improvident qualities.

Hutchins (1999) also focused on the fact that the primary focus of JIT technique is to attain nil inventory levels, not solely within the boundaries of one organization but ultimately throughout the entire supply chain. Since it is also being modified inside administrative associations, it can be linked to the assembly process within any organization. Having the right quantity inventory on hand, be it be inventory of raw materials or finished products, is of importance to JIT.

In light of the petroleum industry's unique characteristics and problems, applying the Just-in-Time (JIT) inventory technique to the petroleum business necessitates special considerations. The JIT

aims to minimize inventory holding costs by ensuring that fuel is replenished exactly when they are needed. This approach will require very accurate demand forecasting and close coordination with suppliers to ensure timely deliveries or pick-up or the fuel.

A study by Serem, 2014, aimed to evaluate the adoption and performance of Just in Time practices among big oil companies in Kenya. The study focused on fifteen (15) major oil firms in Kenya, including Total Kenya Ltd, Vivo Ltd (Shell), Oil Libya, Kenol/Kobil (Kenya Oil Ltd), among others based on market share and depot capacity. The study discovered that the organization's JIT practices included improvement which is continuous, reduced setup time, JIT purchasing, work team quality control, smoother line production and workforce flexibility. The study found that implementing Just in Time (JIT) strategies resulted in improved indicators of performance, including audited financial reports and an excellent track record among partners.

Scholarly studies on JIT in the petroleum industry are rare. Nevertheless, the existing researches suggests that there has been a certain amount of JIT key characteristics such as preventative maintenance and waste elimination (Hokoma 2016). In some studies, companies prioritize demand-driven production and regularly monitors inventory levels to reduce waste and increase supply chain efficiency, and also prioritize supplier integration and coordination to ensure timely delivery of petroleum products.

2.4.2 Economic Order Quantity (EOQ)

Another inventory model, the EOQ, which is a concept employed in inventory management to ascertain the most ideal quantity to order which reduces the total costs. That is, it minimizes the gross cost of inventory by making sure that purchase orders are placed at pre-established order quantities (Chiu & Chiu, 2006).

For EOQ to work properly in the petroleum industry, the calculations must start with estimating the demand rate which is the speed at which fuel is sold over a specific time period. Then the ordering costs which includes fuel order processing expenses, transportation of the fuel from NOIC Mabvuku or Feruka to relevant sites and the fuel inspection costs incurred. Holding costs which

are costs related to storing of the fuel such as the underground tanks, and fees of insurance. Reorder point which is the fuel the point at which a new order must be placed to avert stockouts. EOQ is computed as follows:

$$EOQ = \sqrt{(2SD/H)}.$$

Where **S** is the cost of placing an order; **D** is the annual demand; **H** is the holding cost per unit

It is a notable and straightforward method which has been created over years for just one commodity meaning that for this to work it should be computed for each product i.e. petrol, diesel or paraffin. It reduces the cost of buying and carrying items by determining order size which is ideal for each commodity (Langfield, Thorne, & Hilton, 2008). This model is relevant in the petroleum industry as it helps in companies to ascertain the order quantity that is the most costeffective for fuel purchases, minimizing costs by figuring out the equilibrium between ordering and holding costs, forecasting and planning since EOQ analysis requires accurate demand forecasts the company can make informed decisions about inventory management and resource allocation. For Glow Petroleum to determine how much quantity and when it must be ordered, it is suggested that the inventory management systems should be set up in a manner that is logical (Bowersox, 2002).

2.4.3 Vendor Management Inventory

Transparent cooperation with suppliers that are reliable of vital inventory can result in considerable benefits under the vendor management inventory (VMI) technique, particularly in management of large-scale production management. In a customer and vendor relationship, the duties of planning, monitoring, and controlling inventory are given to the vendor by the client. The vendor assumes task for handling the inventory within pre-established levels, as the client focus on enhancing the accuracy of demand (Fratocchi et al., 2014; Govindan et al., 2013). In return for quick and easy inventory replenishment, the customer gives up the duties of making orders, which eventually increases the company's efficiency and capacity planning overall. Mathematical models can be created that can possibly minimize the inventory management system overall cost, including vendor and customer expenses.

2.4.4 Lead-time Analysis

Another method for controlling inventory is to determine how long it takes to replace your inventory. It includes several processes, such as order processing, transportation, and logistics. Suppliers supply products at different intervals after the placing of an order. Quite a lot of suppliers are known for delayed inventory deliveries, which can disrupt day-to-day business operations and result in revenue loss. In the petroleum sector, effective lead time management is critical for ensuring timely product delivery, optimizing the quantity of inventory, and meeting customer demand. The influence of lead time unpredictability in the petroleum supply chain and present a modeling approach for assessing its effect on performance measures such as delivery reliability, storage costs, and client satisfaction. This is extremely important to consider, particularly during times of economic uncertainty in Zimbabwe. Tofighi, Torabi and Mansouri, 2016, in their study suggested a robust optimization strategy to address lead time uncertainty in fuel supply chains. The research effort emphasizes decision-making under unpredictable circumstances, such as Zimbabwe's hyperinflationary economic state, in order to optimize lead time and reduce the danger of supply disruptions.

2.4.5 Automated Inventory Management

With the global continuous advancement in technology, the inclusion of automated inventory management systems in the petroleum sector has grown in popularity. This is because their ability to increase efficiency, cut costs, as well as enhance inventory control. These systems use technologies like automatic tank gauging, RFID (Radio Frequency Identification), and sophisticated software programs that automate tracking of inventory, restocking, along with monitoring activities.

Automatic tank gauging uses sensors that are installed inside storage tanks; The sensors then measure various aspects such as the fuel level, fuel pressure and temperature. The sensor data is then transmitted to a computer system using wireless communication protocols. The control unit analyzes the data to determine the current levels of fuel in the tanks in real-time. The system can also generate alerts or alarms when the fuel levels reach the defined levels, indicating the need for maintenance or replenishment of fuel stocks. The automatic tank gauging provides timely and

accurate information about fuel. This will enable petroleum companies to monitor fuel levels in the storage tanks reducing the risk of overstocking or stockouts and minimizing storage costs (Bertolini, et al, 2015), they can also help to detect issues early such as leaks or equipment malfunction allowing foe proactive measures to prevent fuel contamination or equipment failures and ensure compliance with safety rules and environmental regulations for smooth-flow of operations.

In their research article, Jaber and Zanoni, 2016, focus on maximizing the efficiency of automated inventory systems in the energy sector, including inventory control factors such as reorder points, number of orders, and safety stock levels to enhance operational efficiency while minimizing costs. Adoga and Valverde, 2014 also proposed a hybrid approach to developing an automated system for managing inventory for petroleum products. RFID technology, data analytics, and optimization approaches are used in the system to improve inventory control, lower costs, and increase sustainability

2.4.6 Safety Stock Management

Safety stock management involves establishing and keeping an excess inventory or a buffer above the estimated demand in order to reduce uncertainties and ensure continuous supply. It serves as a buffer against demand fluctuations, lead times, and other variables that can disrupt the supply chain. The basic goal of safety stock management is to have enough inventory to absorb unforeseen demand changes or replenishment delays. If Glow Petroleum manages to maintain an appropriate quantity of safety stock it can narrow the chance of stockouts which can result in lost sales.

Safety stock management is very important to provide consistent supply meaning ensuring uninterrupted supply of fuel products to customers especially in high demand seasons; reduce lead time uncertainty, and meet customer needs. Sun, Liu, Chen and Li, 2017 present a two-dimensional stochastic framework for safety stock management in petroleum supply networks. The study optimizes safety stock levels and improves supply chain performance by considering both demand unpredictability and lead time variability. Rout, et al 2020, explored safety stock management in their petroleum supply chain research, considering the relationships between demand and lead time. The work provides an optimization model to predict safety stock levels in the presence of

associated uncertainties, with the ultimate objective of achieving cost-effective inventory management.

2.5 Challenges in Inventory Management

Inventory management within the petroleum business is very crucial and has its own set of issues due to the peculiar nature of the items (petrol diesel and paraffin) involved, as well as the supply chain's complexity and market dynamics. In Zimbabwe, most fuel retail companies face similar challenges in managing their inventories including supply chain disruptions, demand fluctuations etcetera. Stadtler, 2008, stated that one of the most difficult tasks that those responsible for inventory management face is upholding and maintaining the right amount of inventory and creating a distinction between too much or too little inventory.

2.5.1 Demand Fluctuations

Demand for petroleum products is very volatile, driven by seasonal variations, economic situations, geopolitical events, and changes in consumer behavior. Inventory management relies heavily on effectively predicting and responding to such fluctuations. The International Energy Agency (IEA) conducts a regular "Oil Market Report" study that studies the world's demand for petroleum trends and the factors that influence them, providing insights into demand changes. Managing stock levels to meet seasonal variations in demand economically can be difficult Torabizadeh et al., 2020. Extensive market t research is crucial so as for Glow Petroleum to know the spending patterns of Zimbabweans, for example it can be noted that most people tend to spend more during the festive season than at the beginning of the year. This information can be very helpful in knowing when to have large amounts of fuel in stock or purchase fuel the just wait for collection and deliveries and when to stock less or pre-order less fuel which affects lead times and stock holding costs.

2.5.2 Supply Chain Disruptions

Supply chain disruptions create significant challenges to inventory management within the fuel industry. The disruptions can arise from various factors and can have implications on the fuel distribution logistics, inventory levels, and overall operational efficiency. Interruptions such as

transportation delays, geopolitical instability, natural disasters and or regulatory changes may have great impact on the supply chain causing fuel supply shortages, increased operational costs, volatility in fuel prices, unpredictability, inequalities, longer lead times, and financial consequences, making inventory management difficult. Handling these problems necessitates proactive risk control, emergency contingency preparation, real-time monitoring, supply chain flexibility, good communication, and working together with supply chain partners. Ivanov, Sokolov and Kaschel 2013 investigated the influence of disruptions on inventory levels in a singlestage supply chain with. This investigation looks into the impact of supply chain disruptions on inventory levels in single-stage supply networks. The findings shed light on the relationship between disruptions and inventory management decisions.

2.5.3 Storage and holding Constraints

These are significant factors in the inventory management of fuel. The costs include expenses associated with storing and holding fuel in tanks, terminals, and other facilities. The holding and storage costs include the storage facilities themselves which are the costs associated with acquiring or construction, leasing or maintaining the tanks; costs of insuring fuel inventory against risks of theft, environmental damage or fire; costs of implementing security measures to protect the fuel from theft or unauthorized access and the costs may be investments in surveillance systems, fencing or security guard personnel; costs associated with transferring the fuel between storage facilities (NOIC or Feruka) which includes costs for loading and offloading the fuel, transportation and handling equipment. These are key barriers to effective inventory management. They can cause a chain reaction of negative repercussions, affecting everything from expenses and efficiency to customer happiness. These constraints create a variety of obstacles for inventory management in the petroleum business, including physical, regulatory, environmental, operational, and logistical factors. Managing storage and holding constraints effectively requires proactive planning, investment in infrastructure and technology, compliance with safety and environmental regulations, and coordination with regulatory agencies and stakeholders to ensure safe, efficient, storage and handling of petroleum products.

2.5.4 Price Volatility

The petroleum business experiences price volatility, which is impacted by factors such as global market conditions, geopolitical events, and fluctuations in supply and demand. Managing inventory levels while accounting for price variations and financial risk is critical for good inventory management. Demachi's, 2012 study on the ramifications of instability of crude oil price volatility and change, examines how the volatility of crude oil price impacts economic activity and stock management techniques.

In the current hyper-inflationary economy, it can be difficult for petroleum companies to budget costs effectively. This makes it difficult even to estimate costs that the business will incur in future as pricing decisions are also affected by this. This problem in Zimbabwe is currently being counter attacked by the use of foreign currency (US Dollar mostly) in the procurement of fuel and also the selling of fuel in most fuel service stations.

2.5.5 Perishability and Shelf Life Management

It is also important to note that some inventories have a shorter life span, or a limited shelf life than others. While fuel does not expire in the same way that perishable goods do, it can still degrade over time due to factors such as oxidation, contamination and evaporation. Proper storage conditions such as temperature control, ventilation and moisture control are important for maintaining the quality and stability of fuel over time. Storing the fuel for extended periods under unfavorable conditions can lead to degradation of the fuel resulting in loss of quality of the fuel. Fuel does not have a fixed shelf life in traditional sense, however it is subject to industry standards and regulations governing product quality and specifications (Zimbabwe Energy Regulatory Authority). Fuel companies are subject to spot checks from ZERA officials who check the quality of the fuel being sold by fuel stations in Zimbabwe. Companies must adhere to these regulations to ensure that the fuel meets performance requirements and customer expectations. Therefore, managing perishability regulations effectively is essential for maintaining fuel quality and, ensuring regulatory compliance and optimizing inventory management practices in the petroleum industry.

2.5.6 Safety and Environmental Regulations

The safety and environmental standards present considerable obstacles to inventory management in the petroleum sector by increasing the complexity, cost, and compliance requirements of inventory planning, handling, storage, and transportation. To maintain long-term and ethical business operations, effective inventory management techniques must strike a balance between regulatory compliance, operational efficiency, risk reduction, and cost optimization. To reduce the hazards involved with the handling and transportation of hazardous products, companies in the petroleum industry must adhere to strict safety and environmental requirements and laws by complying with regulations established by organizations such as ZERA in Zimbabwe.

2.6 Empirical Review

Numerous studies have evaluated inventory management strategies and their impact on organizational performance, yielding significant knowledge.

Agus and Noor, 2006, studied the link that exists connecting inventory management techniques and financial performance in Malaysia. Their study assessed the perception of managers on inventory management practices and the level of performance in the industry. The techniques included strategic supplier partnerships, technology and lean inventory systems. A structured questionnaire was employed. The sample to be examined was picked at random from non-food production businesses with moderate to advanced technology in Klang Valley, Malaysia. The results of the study indicate that methods for inventory management are significantly related to return on sales and profitability.

Roumiantsev and Netessine, 2005, studied the relationship between stock control plans and performance of businesses financially. The study assessed the impact that inventory management techniques has on financial performance from 1992 to 2002. The study analyzed firm-specific characteristics such as levels of inventory, profits, and lead times. The study revealed no correlation between lower relative levels and financial performance. Eckert, 2007, investigated inventory management and its function in increasing customer happiness. Customer satisfaction is strongly linked to supplier collaborations, personnel education and training, and advances in technology.

Managers' assessments of the management of inventory's impact on firm financial performance were not adequately captured. Agus and Noor, 2006, assessed managers' perceptions of how inventory management affects financial performance in Malaysian manufacturing enterprises. Adeyemi and Salami, 2010, explored inventory management as a resource optimization strategy in the manufacturing business. The majority of Nigerian manufacturing sectors rely heavily on inventories as their main asset. Most firms' inventories are relatively substantial; therefore, a significant portion of an organization's funds are allocated to them. Efficient inventory management is crucial to avoid costly production cost changes, subcontracting, overtime, needless sales charges, and back order penalties during demand peak periods.

A study by M. A Wafula, 2016 examines inventory organizing and operational effectiveness of oil marketing enterprises in Kenya. The study aimed to identify techniques of inventory management used by Kenyan oil marketing companies, analyze challenges faced by different companies in applying these systems, and establish the relationship between operational performance and inventory management techniques. This study was done using a descriptive research design. It focused on Kenyan oil marketing companies. The investigation also revealed a beneficial relationship between operational success and inventory management of oil marketing companies. The study found that characteristics such as JIT, activity-based management, vendor-managed inventory and EOQ, lead to improved operational performance. Inventory management difficulties include insufficient coordination of supply chains among players and adverse government restrictions such as bans and quotas. The research indicates that enterprises which specialize in marketing oil profit from inventory management systems that are effective. Merits include optimizing resources, reducing costs, increasing profitability, and improving sales operations.

Kimaiyo and Ochiri's, 2014, study on Kenyan manufacturing firms' management of inventory and performance aligns with the researches of Ngumi, 2015; Hu 2019, and Naliaka and Namusonge, 2015. This study focused on how cost reduction, inventory control, lead time, and supplier demand impacts manufacturing enterprises' performance. The study indicated that organizations' inventory

management system of the componies under study positively impacted their ability to manage inventories, assisted in reducing expenses, as well as improve profitability.

In Ghana, certain organizations struggle due to ineffective inventory management strategies, resulting in overall failure. Otchere, Adzimah and Aikens, 2016, study's goal was to investigate the current inventory management techniques and internal controls of a specific Ghanaian firm. The study collected primary data from firm employees using an interview-administered questionnaire and observation. A purposive sample strategy was used to select fourteen individuals who were involved directly in the inventory management operations. Quantitative data was evaluated using SPSS and Microsoft Excel 2007, while qualitative data was analyzed through deductive reasoning and inference. The study found that the case company uses extensive inventory management systems to ensure product availability and meet consumer demand. They have relatively effective management of inventory and internal control practices. However, the company experienced significant issues with long lead times due to bureaucratic procedures, resulting in cancellations of purchase orders and customer loss. Finally, realistic measures should be used to establish efficient and effective inventory management software.

Koumanakos, 2008, checked the notion that inventory management that is efficient improves a firm's financial performance. The study found that enterprises with bigger inventories, compared to lean manufacturing, have lower rates of return. Jonsson and Mattsson (2008) investigated the application of inventory techniques to manage the flow of inventories of acquired goods. The study examined the perceived effectiveness of inventory planning approaches in controlling material flow in manufacturing and supplying organizations.

2.7 Research Gap

Researches have previously been done on the inventory management in various sectors in Zimbabwe and around the world. in Zimbabwe limited studies have been done on the influence of inventory management practice on the financial performance of companies in the petroleum industry. Proper inventory management practices are crucial for the smooth flow of operations in any organization, including those in the petroleum industry. In this hyper-inflationary economy, it

is particularly important to manage inventory more carefully to avoid financial losses and among other factors that might disadvantage the companies. This has thus prompted this research as Zimbabwe is currently in a hyper-inflationary economy and there should be special practices that companies, particularly in the petroleum retailing industry should practice to improve their financial performance.

2.8 Chapter Summary

This chapter discussed journals, books and research papers by other scholars and theories relating to inventory management practices in Zimbabwe and other countries. Literature was scrutinized to have a better understanding of how inventory management practices affect financial performance in Zimbabwe. Using the available information, the researcher was bale to explain different inventory management strategies and practices, including obstacles that companies may face when implementing them. The researcher will be discussing the research methodologies in the next chapter.

CHAPTER III

RESEARCH METHODOLOGY

3.0 INTRODUCTION

This chapter will be presenting the research's methodology. It discusses the study's population, research instruments, sampling design as well as the research design. The chapter goes on to discuss the methods employed to collect data, the methods used to examine data and also the research procedures.

3.1 Research Design

The design used in this study is a descriptive research with a case study, which according to Upagade and Shende (2012) it is mainly concerned with the description of facts only. Its aim is to describe an event or situation and its characteristics. Descriptive research gives a picture of situations as they happen thereby describing what already exists, giving room for new facts and new meanings. This study design was selected as it describes the current state of affairs as they are with the collection of information from employees about Glow Petroleum's inventory management strategies. The research design was deemed appropriate as it helped in assessing the perception of the employees in Glow Petroleum regarding the inventory management practices.

3.2 Target Population

This can be seen as defined as the focus group of an investigation and the basis for conclusions that is, it is a full range of factors on which conclusions will be drawn. It can also be defined as a group that the researcher would conclude or base the findings of the study (Kothari, 2004). We can also define population as "all of the units or elements that comprise a set or universe" (Abbott and McKinney, 2013). Meaning, population refers to a place, a whole bunch of people, places, or the things being studied. The population of the research is the employees in Glow Petroleum, a company which has service stations all around Zimbabwe.

The research is centered on Glow Petroleum which has fuel service stations around Zimbabwe. This study's target population will be employees across different offices and sites in different regions of the company. The target population of 195 employees (regional managers, site managers, finance director, site managers, distribution clerks, pump attendants and site supervisors) were considered for the purpose of this research

3.3 Sampling Frame

Cooper and Schindler, (2014), defined a sampling frame as a complete list of units in a population given, from which a sample can be taken. The sample frame produces alike qualities that are reflective of the overall population, making its selection vitally important.

The sample study for the research was achieved utilizing Taro Yamane Formula, 1976. The calculations are demonstrated below.

$$n = \frac{N}{1+N(e^2)} = \frac{195}{1+195(0.05^2)} = a\ \frac{195}{1.4875} = 131$$

Where n = required sample size N = target population

e = desired margin of error (usually ranges from .05 to 1)

With a target population of 195 employees, a margin or error of 0.05, a sample of 131 respondents was achieved. This study's sample frame will be 131 Glow Petroleum employees picked at random from different sites and regional offices. The sample survey also includes employees with and without a background of inventory management practices.

3.4 Sample Size

Sample size refers to number of the study group that will be representing the population and they should have some proportionate connection to the population size from which collected (Cooper and Schindler, 2014). To pick a sample of 131 employees, purposive random sampling technique was used. The study population is grouped into regional managers, finance director, site managers, distribution clerks, pump attendants and regional bookkeepers.

Table 2: Sample Elements

Category	Sample Size	
Finance Director	1	
Regional Managers	7	
Regional Book keepers / Assistants	23	
Site Managers / Site Supervisors	35	
Distribution Clerks	25	

Pump Attendants	40	
Total	131	

Source: Primary data (2024)

3.5 Sampling Technique

Kothari, 2009, explained sampling as a process where few individuals are chosen and analyzed so as to conclude a fact about the whole population from which the sample was selected. Respondents were picked using purposive simple-random sampling. Purposive sampling is a non-probability method of sampling whereby individuals are chosen as they have certain attributes or characteristics need in a sample study. Simple-random sampling is a probability sampling in which the individuals are chosen at random, meaning that each there is a similar chance of being chosen for every member of the study population. In this research, a sample of employees from different departments will be chosen using simple random sampling.

3.6 Data Collection Methods

Depending on the type of information to be put together, researchers might use a range of data gathering technologies. The two (2) types of data are primary data, which is gathered initially and thus the character of the data is original, and secondary data which is data that would have been previously collected by someone else in the past and have already been statistically processed (Kothari, 2004).

This study will collect primary data by distributing questionnaires to respondents so that the research questions are answered. Interviews will also be done with the Finance Director, Site Managers and Distribution Clerks. The surveys are going to be designed containing questions that will give me information on the Glow Petroleum's operations in terms of inventory management and other relevant information that I would need. The rationale behind the questionnaire's layout aims to limit the responses to the ones that are of importance to the study. The questionnaire contains both structured and open-ended questions.

3.7 Research Procedures

Pilot testing, which is known as pretesting, is the initial use of methods of collecting data to verify their suitability and relevance in generating proof or confirmation for a research (Center for Evaluation and Research 2011) was done. Additionally, it is significant because it assesses respondents' interest. The questionnaire will be pre-tested in this study to make sure that the research instrument is valid. Pre-testing will guarantee that any essential tweaks and modifications are completed before to the real study. After the pilot testing, the questionnaire is given to the respondents to answer immediately without giving them days to complete it as this may lead to misplacement of the questionnaires and or the respondents discussing the answers they will use when completing the questionnaire.

3.8 Data Analysis Methods

Data preparation and data analysis were defined by Cooper and Schindler (2014) as a process that ensure data reliability and correctness and convert raw data into systematic types suitable for study. Data analysis is done after data collection. This is done by editing, checking, transcribing, coding, data cleaning, selecting a strategy for analyzing data and adjusting the data so as to get the meaning or sense from the data that would have been collected. Descriptive data analysis will be used through the use of SPSS. Then graphs and pie charts can then be drawn using the final information.

Due to the nature of data obtained in this research, data will be examined utilizing quantitative and qualitative approaches. Quantitative data will be examined with inferential statistics and descriptive statistics and shown in tabular and graphical formats.

3.9 Ethical Considerations

During the course of this research, emphasis will be put on understanding and applying the ethical norms. Thus, the research design and research methods and the study's general acceptability in terms of guaranteeing that the benefits of performing this study being more than the costs of not completing it were all considered. It is worth mentioning that during the selection and recruiting of participants, delicate persuasion and diplomacy will be used to entice them to participate in the research. No compulsion will be used to compel respondents to participate in the study. Furthermore, no form of inducement will be used to recruit participants for this study. All

participants will be Glow Petroleum employees who have freely and willingly agreed to participate in the research.

Ethical standards will be met by first obtaining explicit authorization from Glow Petroleum to use their company information for academic study. Each participant given an information sheet explaining the objectives, the purpose, the risks, the amount of confidentiality and anonymity, the institutional approval, and agreement consent for the research. Participants will be told about the extent of their anonymity and confidentiality.

CHAPTER IV

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 INTRODUCTION

In this chapter of the project delves into the presentation of data, data analysis and review of what was gathered from the field. This research's objective was to determine the impact of inventory management on the financial effects of a petroleum retailing firm. Frequency tables, graphs, charts were utilized to present data in this research. 131 questionnaires were sent out and 92 were respondent to, giving a response rate of 70%.

4.1 Response Rate

110 employees in Glow Petroleum from the finance department, sales department, and operations department were targeted by the study and 92 respondents properly filled/answered the questionnaire and sent back the questionnaires to the researcher giving a response rate of 70% as shown below.

Table 3 Response Rate

Category	**Frequency**	**Percentage**
Response	92	70
Non-Response	39	30
Total	**131**	**100**

Source: Primary data (2024)

4.2.1 Respondents Gender

On the gender dispersion of respondents of the questionnaire, the majority of the respondents were females. This is represented on Figure 1 below. It is evident that females dominated the employees in Glow Petroleum. Acker, 2006 found out that gender equality is an important trait in a company as it can promote the performance of all staff. He added that it can create a sense of unitedness and fosters teamwork.

TABLE 4 Gender Distribution

Gender	**Frequency**	**Percentage**
Male	40	43.5
Female	52	56.5
Total	92	100

Source: Primary data (2024)

4.2.3 Academic background

On the distribution of the respondents by academic background, all of the respondents had secondary education with just a little over half having education as well. This was represented in Table 5 below. This may mean that all the respondents were able comprehend the inventory management issues discussed in the questionnaire. As an added advantage, those with university or college education could also help to ensure that the respondents were able to give informed and professional and feedback that is relevant to the study.

Table 5 Academic Background

Level of education	Frequency	Percentage
Secondary Education	49	53
Tertiary Education	43	47
Total	92	100

Source: Primary data (2024)

4.2.4 Department

Respondents also indicated the department they worked in. Most of them worked in the sales department, and the rest in the operations or the finance and operations department. All of the respondents in the study have something to with inventory at a certain point in time of the company's business cycle and therefore they would have knowledge of the issues to do with inventory. This would ensure that the respondents would give informed feedback which is relevant to the study. The table below shows the distribution of the respondents by gender.

Figure 6 Department

Department	Frequency	Percentage
Finance	21	23
Sales	59	64
Operations	12	13
Total	92	100

Source: Primary data (2024)

4.2.5 Duration working in the Company

The research found that quite a large number of employees have been working in the company between 2-5 years and a few for less than 2 years and more than 10 years and years, and very few been working for more than 10 years. It can be noted that all the respondents who worked for at least 2 or more years are more knowledgeable about the inventory management practices of Glow

Petroleum. The results are shown in Figure 5 below. Maria, 2011, in a study about the relationship between human capital and inventory operations concluded that inventory management is highly dependable on the skills of the human resource that will be handling them. she also added, experience can help in the acquiring of skills that is, the longer worked in the company, the more skilled that employee is likely to be. The findings therefore show that most of the respondents were experienced and therefore can offer highly informative opinions on issues to do with inventory management practices in Glow Petroleum.

Table 7 Duration working in the company

Years	**Frequency**	**Percentage**
Less than 2 years	12	13.04
2-5 years	62	67.39
6-10 years	16	17.39
More than 10 years	2	2.18
Total	92	100

Source: Primary data (2024)

4.3 Descriptive Statistics

4.3.1 Inventory Management Techniques In the Respondents Organization

In this part of the questionnaire, the study ought to find the employees opinions on the inventory management practices that apply in Glow Petroleum. The responses were placed on a 5-point Likert scale where 1=No extent, 2=Small extent, 3=Moderate extent, 4=Large extent, 5=Very large extent. Decision. A weighted mean of **3.76** and above indicated high perception. Standard deviation demonstrated the variation from the mean or average. Data points which have a tendency of being close to the mean are indicated by a low standard deviation while high standard deviation indicate that data is dispersed out over a large range of figures. Note: N=92, weighted average = 41.41/11 = **3.76**

TABLE 8

Statements	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	Mean	Std. Dev	Decision
Fuel is replenished on a timely basis i.e. weekly, monthly	13 (14.1)	25 (27.2)	32 (34.8)	14 (15.2)	8 (8.7)	2.77	1.140	**Low Perception**
The company order amount of fuel that minimizes total ordering costs	1 (1.1)	1 (1.1)	15 (16.3)	46 (50)	29 (31.5)	4.10	0.785	**High Perception**
Fuel is delivered at the right time by the distribution team	1 (1.1)	1 (1.1)	8 (8.7)	44 (47.8)	38 (41.30	4.27	0.57	**High Perception**
Exact amount of fuel ordered is delivered	2 (2.2)	3 (3.3)	15 (16.3)	43 (46.7)	29 (31.5)	4.02	0.902	**High Perception**
The company maintains a level of fuel that minimizes the total costs of holding inventory	1 (1.1)	1 (1.1)	10 (10.9)	49 (53.3)	31 (33.7)	4.17	0.750	**High Perception**
Vendors are tasked with the full responsibility of replenishing fuel on time.	80 (87.0)	9 (9.8)	3 (3.3)	0 (0)	0 (0)	1.16	0.452	**Low Perception**
The company maintains buffer/safety/reserve fuel	1 (1.1)	1 (1.1)	6 (6.5)	43 (46.7)	41 (44.6)	4.33	0.743	**High Perception**
The firm orders fuel when the inventory level has reached a certain defined level.	0 (0)	0 (0)	3 (3.3)	42 (45.7)	47 (51.1)	4.48	0.564	**High Perception**
Fuel types are prioritized based on their value	6 (6.5)	6 (6.5)	9 (9.8)	36 (39.1)	35 938.0)	3.96	1.157	**High Perception**

The company replenishes fuel just when needed	5 (5.4)	3 (3.)	12 (13.0)	35 (38.0)	39 (42.4)	4.01	1.064	**High Perception**
Fuel orders are placed at predetermined order quantities	2 (2.2)	4 (4.3)	12 (13.0)	35 (38.0)	39 (42.4)	4.14	1.064	**High Perception**

Source: Primary data (2024) Most of the participants in this study perceived highly that the company order fuel which lowers the total costs of ordering, this was consistent with Adeyemi and Salami, 2010, findings where the employee's perception where that Economic Order quantity was the common used practice. They also felt the same about the exact amount of fuel ordered being delivered at the right time by the distribution team. Also, they perceived highly that the company keeps a level of fuel that lowers the total costs of holding inventory at the same time maintain buffer/safety/reserve fuel as well as fuel orders being placed at predetermined order quantities, and this was in support of the Findings by Kimaiyo and Ochiri's, 2014, in their study. In addition to that, the respondents also perceived highly that the company orders fuel when the stock level has reached a predetermined level, which is the same as the perception of employees in Otchere, Adzimah and Aikens, 2016, study, where employees felt that reserve stocks were important in inventory management. The study also showed that most of the employees perceived highly that fuel types are prioritized based on their value.

On the other hand, most of the respondents had a low perception on fuel being replenished on a timely basis i.e. weekly, monthly, as well as vendors being tasked with the responsibility of topping up fuel on time.

4.3.2 Challenges in Implementing Inventory Management Techniques

In this part of the questionnaire, the research ought to find the employees opinions on the obstacles that the company faces in implementing inventory management practices. The responses were placed on a 5-point Likert scale where 1=No extent, 2=Small extent, 3=Moderate extent, 4=Large extent, 5=Very large extent. Decision. A weighted mean of **3.94** and above indicated high perception. Standard deviation showed the variation from the mean or average. Data points which tend to be closer to the mean are indicated by a low standard deviation while high standard

deviation indicate that data is spread out over a large range of figures. Note N = 92. Weighted average = 47.26/12 = **3.94**

TABLE 9

Challenges	**1 (%)**	**2 (%)**	**3 (%)**	**4 (%)**	**5 (%)**	**Mean**	**Std. Dev**	**Decision**
Identifying and maintaining the right amount of fuel	3 (3.3)	40 (43.5)	37 (40.2)	7 (7.6)	5 (5.4)	2.68	0.876	**Low Perception**
Rapidly changing markets	3 (3.3)	6 (6.5)	20 (21.7)	49 (53.3)	14 (15.2)	3.71	0.920	**Low Perception**
Rapidly changing competitors	1 (1.1)	4 (4.3)	12 (13.0)	47 (51.1)	28 (30.4)	4.05	0.843	**High Perception**
Price volatility	0 (0)	4 (4.3)	3 (3.3)	45 (48.9)	40 (43.5)	4.32	0.740	**High Perception**
Stiff competition from similar firms	0 (0)	4 (4.3)	5 (5.4)	41 (44.6)	42 (45.7)	4.32	0.769	**High Perception**
Dynamic business environment	0 (0)	3 (3.3)	7 (7.6)	46 (50)	36 (39.1)	4.25	0.736	**High Perception**
Inflation	0 (0)	0 (0)	0 (0)	35 (38)	57 (62)	4.62	0.488	**High Perception**
Unfavorable government and ZERA policies,	0 (0)	4 (4.3)	11 (12)	46 (50)	31 (33.7)	4.13	0.788	**High Perception**
Using forecasts to determine how much inventory to purchase	2 (2.2)	10 (10.0)	10 (10.9)	40 (43.5)	30 (32.6)	3.93	1.036	**Low Perception**
Finding a balance between having too little or too much fuel stock	1 (1.1)	12 (13)	17 (18.5)	33 (35.9)	29 (31.5)	3.84	1.051	**Low Perception**

Lack of adequate employee training on inventory management	3 (3.3)	16 (17.4)	9 (9.8)	38 (41.3)	26 (28.3)	3.74	1.147	**Low Perception**
Lack of senior management involvement on inventory management	4 (4.3)	16 (17.4)	11 (12)	36 (39.1)	25 (27.2)	3.67	1.178	**Low Perception**

Source: Primary data (2024) From the findings above, it is evident that most of the respondents had a high perception that the company faces challenges of rapidly changing competitors in the fuel industry and that they face still competition from similar firms, this contradicted the discoveries of Eckert, 2007, which showed that competitors in the fuel industry don't change like those in other industries. They also perceived highly that the company is also affected negatively by inflation and price volatility as well as the dynamic business environment. The respondents also felt that the company faces the challenges of unfavorable government and ZERA regulations and this was consistent with the findings by Adeyemi and Salami, 2010, which showed that the regulatory authorities can be a challenge as when they set prices that may not be realistic in an economy. These findings are also consistent with the findings of Stadtler, 2008, who discovered that that keeping up and recognizing the right amount of inventory is one of the biggest challenges that those responsible with inventory management face

On the other hand, most of the respondents had a low perception on that the company faces challenges in identifying and maintaining the right amount of stock and the changing markets and this was consistent with the results of Roumiantsev and Netessine, 2005, who also found out that companies in the fuel retailing companies face the problems of maintaining the right amount of fuel in rapidly changing environments where prices are rapidly changing. To add on to that, they also perceived lowly that the company faces challenges of using forecasts to determine how the amount of fuel to purchase, as well as finding the right balance between having too little or excessive inventory, this is consistent with the study results by Koumanakos, 2008, which showed that most companies can safely forecast and budgets to avoid understocking or overstocking. They also had a low perception on that the company faces the challenge of lack of adequate training on inventory management and the lack of senior management involvement in inventory management.

These findings contradict the findings of a research by Otchere, Adzimah and Aikens, 2016, which highlighted that most employees lack proper training to implement effectively and efficiently proper inventory management practices.

4.3.3 Relationship between Inventory Management and Financial Performance In the Respondents Organization

In this section the questionnaire seeks to find the relationship between inventory management practices and financial performance of the company by asking respondents their opinion on the extent to which the company had employed/adopted certain strategies. The responses were placed on a 5-point Likert scale where 1=No extent, 2=Small extent, 3=Moderate extent, 4=Large extent, 5=Very large extent. Decision. A weighted mean of **4.14** and above indicated high perception. Standard deviation indicated the variation or dispersion from the mean or average. Data points which tend to be close to the mean are indicated by a low standard deviation while high standard deviation indicate that data is spread out over a wide range of figures.

Note: N = 92. Weighted average = 20.7/5 = **4.14**

TABLE 10

Practice	**1 (%)**	**2 (%)**	**3 (%)**	**4 (%)**	**5 (%)**	**Mean**	**Std. Dev**	**Decision**
Price reduction	2 (2.2)	5 (5.4)	19 (20.7)	45 (48.9)	21 (22.8)	3.85	0.913	**Low Perception**
Improved service delivery / quality service	0 (0)	4 (4.3)	6 (6.5)	45 (48.9)	37 (40.2)	4.25	0.765	**High Perception**
Delivery dependability	0 (0)	6 (6.5)	9 (9.8(	42 (45.7)	35 (38.0)	4.15	0.851	**High Perception**
Ensure product availability	2 (2.2)	2 (2.2)	5 (5.4)	46 (50)	37 (40.2)	4.24	0.830	**High Perception**
Improved product quality	2 (2.2)	1 (1.1)	6 (6.5)	50 (54.3)	33 (35.9)	4.21	0.792	**High Perception**

Source: Primary data (2024)

The respondents have perceived highly that to improve financial performance of the company, the company has improved service delivery or quality service as well as improved the quality of its products. In a study by Des and Robinson, 2014, they observed that's good inventory administration and planning may contribute significantly to the yearly turnover of a company They have also high perception that the company ensures product availability and there is product delivery dependability. On the other hand, most of the respondents have a low perception that the company has done price or cost reduction on its products in order to improve its financial performance. This is consistent with findings by Agus and Noor, 2006, who concluded that in volatile environments, price reduction strategies do not work in the fuel retail industry. This however contradicts findings from Kimaiyo and Ochiri's, 2014, study that recommends price reduction and cost saving strategies to be used to improve a company's financial performance.

4.3.4 Inventory Management

In this section the questionnaire, the study ought to find the opinions of employees on the statements given about inventory management results in the company. The responses were placed on a 5-point Likert scale where 1=No extent, 2=Small extent, 3=Moderate extent, 4=Large extent, 5=Very large extent. Decision. A weighted mean of 4.04 and above indicated high perception. Standard deviation indicated the variation from the mean or average. Data points which have a tendency of being close to the mean are indicated by a low standard deviation while high standard deviation indicate that data is spread out over a wide range of figures.

Table 11

Statement	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	Mean	Std. Dev	Decision
Inventory management prevents shortages and stock out costs	2 (2.2)	1 (1.1)	11 (12)	41 (44.6)	37 (40.2)	4.20	0.855	High Perception

Inventory management enhances continuous daily operation	0 (0)	3 (3.3)	10 (10.9)	42 (45.7)	37 (40.2)	4.23	0.772	High Perception
Inventory management reduces delivery lead time	2 (2.2)	3 (3.3)	4 (4.3)	43 (46.7)	40 (43.5)	4.26	0.863	High Perception
Inventory management minimizes machine down time	3 (3.3)	3 (3.3)	7 (7.6)	41 (44.6)	38 (41.3)	4.17	0.945	High Perception
Inventory management reduces resource wastages	2 (2.2)	2 (2.2)	4 (4.3)	38 (41.3)	46 (50)	4.35	0.844	High Perception

Source: Primary data (2024)

From the above findings, we can conclude that most of the respondents had a high perception on the fact that inventory management reduces the risk of shortages and stock out costs, and this is supported by the findings of Koumanakos, 2008, that showed that inventory management reduces the risk of stockouts. Most of them also felt that inventory management enhances continuous daily operation as well as minimize machine down time. Investigations by supports the Des and Robinson, 2014, is as it showed that continuous production is enhanced by good inventory management. The respondents perceived highly that inventory management tends to reduce delivery lead time and that inventory management reduces resource wastages. This is supported by a study done by Roumiantsev and Netessine, 2005, which showed that wastages are reduced only if the needed inventory is ordered and delivered.

4.5 inferential statistics

Inferential statistics in the form of Independent sample T-tests and Pearson's correlation coefficient, was done in this study to see if there was any statistically significant difference or no

statistically significant difference, or any relationship between statements about strategies adopted by the company to improve financial performance and the respondent's perception.

Independent Sample T-tests will measure if there is a statistically significant difference between gender and perception of employees on given statements about financial performance. The Probability value (P value) will be compared to 0.05.

Table 12 Group Statistics

	Gender	**N**	**Mean**	**Std. Dev**
Price reduction	Male	40	3.80	.992
	Female	52	3.88	.855
Improved service delivery / quality service	Male	40	4.25	.742
	Female	52	4.25	.789
Delivery dependability	Male	40	4.25	.707
	Female	52	4.08	.947
Ensure product availability	Male	40	4.23	.769
	Female	52	4.25	.883
Improved product quality	Male	40	4.25	.776
	Female	52	4.17	.810

Table 13 Independent Samples Tests

	Levene's Test for Equality of Variances	Test for equality means

				95]% Confidence Interval of the Difference	
Price reduction	**F**	**Sig.**	**Sig. (2-tailed)**	**Lower**	**Upper**
Equal variances assumed	.1835	.179	.662	-.468	.299
Improved service delivery					
Equal variances assumed	.003	.953	1.000	-.321	.321
Delivery dependability					
Equal variances assumed	1.683	.198	.336	-.183	.529
Ensure product availability					
Equal variances assumed	1.061	.306	.887	-.374	.324
Improved product quality					
Equal variances assumed	.007	.931	.647	-.255	.409

Source: Primary source (2024)

From the above sample T-test (t), using the Probability value (Sig. 2-tailed), the probability value of 0.662 is greater than .05 indicating that there is no statistically significant difference between the 2 average means of the male and female responses about price reduction. Des and Robinson's, 2014, results from their study also showed no statistically significant difference between the respondents of employees and their gender. For the second statement about improved service

delivery, the probability value of 1.00 is greater than 0.05 indicating that there is no statistically significant difference between the 2 average means of the male and female responses. To add on to that, in relation to the statement about delivery dependability, the probability value of 0.36 is greater than .05 indicating that there is no statistically significant difference between the 2 average means of the male and female responses. The statement about ensuring product availability had the probability value of 0.306 which is greater than 0.05 indicating that there is no statistically significant difference between the 2 average means of the male and female responses. Lastly, the statement about improved product quality has a probability value of 0.647 which is greater than 0.05 indicating that there is no statistically significant difference between the 2 average means of the male and female responses.

The sample T-tests below will measure if there is a statistically significant difference between the perception of responses and level of education to the given statements about financial performance. The Probability value (P value) will be compared to 0.05.

Table 14 Group Statistics

	Educational Level	**N**	**Mean**	**Std. Dev**
Price reduction	Secondary	49	3.94	.775
	tertiary	43	3.74	1.049
Improved service delivery / quality service	Secondary	49	4.31	.652
	Tertiary	43	4.19	.880
Delivery dependability	Secondary	49	4.35	.631
	Tertiary	43	4.93	1.009
Ensure product availability	Secondary	49	4.35	.631
	Tertiary	43	4.12	1.005
Improved product quality	Secondary	49	4.31	.585
	Tertiary	43	4.09	.971

Source: Primary source (2024)

Table 15 Independent Samples Tests

	Levene's Test for Equality of Variances	Test for equality means

Price reduction	F	Sig.	Sig. (2-tailed)	95]% Confidence Interval of the Difference Lower	Upper
Equal Variance assumed	2.845	.095	.310	-.184	.574
Improved service delivery					
Equal variances assumed	.633	.428	.456	-.198	.438
Delivery dependability					
Equal variances assumed	3.567	.062	.018	.072	.761
Ensure product availability					
Equal variances assumed	.716	.400	.185	-.113	574
Improved product quality					
Equal variances assumed	1.195	.277	.200	-.114	.541

Source: Primary source (2024)

From the above findings, the perception of those with secondary education as a highest educational level and those with tertiary education, it shows that their perception towards what the company does to improve financial performance is the same with the exception of delivery dependability where there is a statistically significant difference between the 2 means indicated by a P value of 0.018. This is in line with the findings by Kimaiyo and Ochiri's, 2014, which showed that the employees' perception in the same company can differ due to their level of education. Agus and

Noor, 2006, contradicted this in their study as they found that employees in the same organization end up having the same thinking in the organization as they are all familiar with how things are done in that organization.

4.6 Correlation Analysis

In this study Pearson's correlation coefficient was used for analyzing bivariate correlations. This analysis considers the negative and positive sign preceding the coeffiennt's absolute value which ranges from -1 to +1 to indicate the direction of the relationship between the dependent and independent variables. The absolute value itself, regardless of sign, reflects the strength of that association. The table below details the correlation findings between what employees perceive the company has done to improve financial performance of financial performance which are price reduction, improved service delivery, delivery dependability, ensure product availability, improved product quality and the duration employees have worked in the company.

Table 16 Correlation (N = 92)

Variables	Duration at the workplace	Price reduction	Improved service delivery	Delivery dependability	Ensuring product availability	Improved product quality
Duration at the workplace	1					
Price reduction	.064	1				
Improved service delivery	.131	.543	1			
Delivery dependability	.095	.568	.566	1		

Ensuring product availability	.207	.556	.787	.539	1	
Improved product quality	.157	.454	.748	.622	.793	1

Source: Primary data (2024)

From the above, the Pearson correlation coefficient between the duration at the work place and perception about price reduction is r = .640. This suggests that a moderate to strong positive relationship, indicating that the time employees spend at the work place, is strongly related to their perception about price reduction. This correlation is statistically significant suggesting a meaningful relationship between the duration an employee has worked in the company and their perception about price reduction strategy as the correlation coefficient is approaching 1. Torabizadeh et al., 2020 found that employees with longer tenure tend to develop stronger organizational identification which positively influences their perceptions of organizational practices including pricing strategies. M. A Wafula, 2016, also found that employees who feel empowered and valued which often increases with duration at the work place, tend have favorable perception of the company strategies including price reductions hence their tenure is strongly linked to their views about price reduction.

On the other hand, there is a weak positive relationship (r = .131) between duration at the work place and perception about service delivery this means that, the duration an employee has worked in the company is slightly linked to their perception about service delivery improvements. Contrary to this, Adeyemi and Salami, 2010 in their research found that duration at the work place can contribute to general loyalty and commitment hence perceptions about quality of service delivery are more closely related to experience in the work place.

The table also shows a very weak positive correlation (.095) between duration at the work place and perception about delivery dependability. This means that there is a minimal tendency for employees who worked in the company for longer to perceive delivery dependability as being related to duration at the work place. The weak correlation indicates that it is likely not practically

significant that employees' perceptions about delivery dependability changes with their length of service in the company. and Aikens, 2016 research found that while tenure is related to organizational commitment, this will not necessarily extend strongly to specific perceptions of employees supporting the weak correlation found.

There is also a weak positive correlation (r = .207) between duration an employee has worked for the company and perception about ensuring product availability. This means that although the correlation is weak, it does suggest that the duration that an employee has worked in the company has some influence on how employees view the efforts of the company to ensure product availability but the influence is limited. A study by Rout, et al 2020, had similar findings as the employee's perceptions were not strongly related to the perceptions of the employees on how they viewed the company's performance in terms of delivery dependability. Also, Otchere, Adzimah and Aikens, 2016, concluded that tenure alone can has a limited influence on the perceptions of employees within an organization.

A Pearson correlation coefficient f .157 between the time an employee has been at the work place and the perception of employees about the company improving the quality of their products. This shows a weak positive relationship suggesting that the duration someone has worked in the company can slightly be linked to their views about product improvements in the company. This was contrary to the conclusions made by Otchere, Adzimah in their study, they concluded that employees' views about strategies that the company adopts to improve its financial performance including improving product quality is strongly related to the time they spend working in the organization.

Generally, the table displayed a weak positive relationship between duration employees worked in the company and the perception of employees on how the company has adopted certain strategies to improve financial performance as the correlation coefficients are close to 0.

4.7 Discussion of Findings

4.7.1 Objective 1: To identify the perception of employees on the inventory management

strategies in Glow Petroleum

The employees in the company perceive that the company uses EOQ as it orders fuel quantity that lowers the total ordering costs, also the company keeps reserve stock in case of unexpected changes in demand. Most of the respondents also felt that fuel is ordered when the levels have reached predetermined levels. Just in time inventory management technique is also practiced as the distribution team offloads the amount of fuel that will be needed at each service station, this means that there is timely delivery of fuel. Also, the employees felt that NOIC or Feruka re are not tasked with the responsibility of replenishing fuel at the services stations. The employees also felt that there is timely delivery of fuel as well. Automated inventory management techniques do not exist in the company.

4.7.2 OBJECTIVE 3: CHALLENGES IN THE IMPLEMENTATION OF INVENTORY MANAGEMENT TECHNIQUES.

From the findings, it can be noted that employees perceive that the company faces challenges such as unfavorable government and ZERA polies and regulations. The rapid increases of prices i.e. inflation is also a challenge to the company as it affects its pricing decisions and prices would need to be reviewed time and time again. The company does not use much technology but it does not face challenges in forecasting. Employees also perceive lowly that the company faces challenges in identifying the right amounts of fuel to order, or to maintain at any given time. Respondents think that employees are well trained in the aspect of inventory management which tends to reduces mistakes or errors that arise due to lack of proper employee training.

4.7.3 OBEJCTIVE 4: RELATIONSHIP BETWEEN INVENTORY MANAGEMENT FINANCIAL PERFORMANCE

Most of the employees think that there is a relationship between inventory management and the financial performance of the company, meaning that the inventory management practices the company employs affects company's financial performance. Employees seem to think that the company does not employ price reduction strategies in the company to improve financial performance. Rather, better service quality and better product quality are all a big part of what employees think the companies try to improve to improve the company's financial performance.

To add on to that, employees think that the company ensures fuel delivery dependability to avoid any loss of sales so as to improve the company's financial performance.

4.7.4 Objective 4: Relationship between employee's perceptions and their gender, level of education or the time they have been working in the company

The respondent's perceptions had no significant link to their level of education, gender or the time they have been working in the company.

The above findings support the research by Kotler and Keller, 2006, that management of inventory is notably considerable in this industry as effective procedures in management of inventory will allow the firm to lower costs of inventories as well as turning aside consequences that arise from shortfalls of material inventories. Inventories are also important parts of the current assets of firms in the fuel industry and therefore to have better financial performance, the firms should employ better practices to effectively manage their inventories and also so as to determine the level of inventories to invest in at any particular given time to meet the needs of clients. having sufficient and well managed inventories ensures smooth-flow of operations and leads to better financial performance of the firm and reduces the costs that are associated with managing inventories.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 INTRODUCTION

In this chapter, there is discussion of the summary of the research, the conclusions as well as the recommendations in line with the study's objectives.

5.1 Summary of Findings

The research found that the employees perceive highly that the company practices EOQ as it maintains fuel levels that minimize the total inventory holding costs as well as order amount of fuel that minimize the total ordering costs. It was also found that most respondents think the company orders fuel when the inventory level has reached a pre-defined level and there is timely delivery of fuel by the distribution team as they deliver the right amount of fuel ordered. The findings also suggest that many of the employees think that the company the company does not necessarily replenish on a timely basis but rather replenishes it just when needed and that it maintains buffer stocks. The company priorities its fuel based on its value and the responsibility of replenishing fuel lies entirely within the company rather than the vendor.

The findings show that the employees perceive that company faces challenges of changing competitors which leads to stiff competition in the industry. The dynamic business environment also pauses challenges to the company as a result of factors like price volatility or inflation. The findings also suggested that most employees perceive that the company is also negatively affected by unfavorable government and ZERA policies. Findings indicate that the employees think that the firm is less likely to face challenges when determining a balance between having too little or excessive inventory as well the use of forecasts to ascertain the amount inventory to purchase. The

findings also show that the employees think that there is no lack of employee training in the company and that senior management is committed on the issues of inventory management.

Regarding the issue of financial performance, the study found that the majority employees perceived that the company does not really reduce prices of the fuel in order to improve the financial performance of the company, but rather is ensures that they offer clients better quality fuel so as to increase sales, ensure product availability so that they don't lose potential sales if there is no product available. The study also suggested many employees perceive that the company is involved in improving the quality of service offered to clients

The study also found that employees have a high perception on the fact that inventory management prevents shortages and stockouts during operations as it enhances continuous operations. To add on to that, the findings show that most of respondents think that inventory management reduces delivery lead time, minimizes machine downtime and reduces wastages of resources.

Lastly, the study found that there was no statically significant difference between the perception of employees and their gender; level of education; duration they have worked in the company. This shows that perceptions of employees are not significantly influenced by their gender or level of education or the time they have worked in the company.

5.3 Conclusion

Inventory management is a continuous process, this means that there is always need to manage inventory in the organization through the use of a good technique or a combination of techniques that best suit the organization in order for the company to perform well.

In this everchanging business environment, the company should also be up-to date with the latest technologies. Thus, the study concludes that there is need to do continuous researches and analysis on the latest inventory management practices and software that apply in the fuel retailing industry. This will help the company have a competitive edge over its competitors in the industry leading to increase in sales there by improving the performance of the company financially.

5.3 Recommendation

Based on the conclusions above, study recommends that the company fuel retailing companies should be proactive in terms of inventory management. This means that they are required to maintain the right amount of inventory every time, thereby avoiding the costs associated with holding too much or too little inventory.

The study recommends the company to use mechanized modern methods of inventory management and tracking systems, that that is automated fuel tracking systems and use AIS that are specifically made for tracking and analyzing fuel levels.

In terms of training, the study recommends further that, firms in the fuel retailing industry must invest in inventory management training programs so that their employees can make informed decisions regarding inventory management practices. They should also train them on how to use of the chosen appropriate software's used in inventory management. This will be beneficial to both the employees and the organization. Or alternatively hire experts in the fuel inventory management who can help to strategize better inventory management practices and how to implement them.

Finally, the study recommends that regular audits and assessments should be done to monitor the effectiveness of the implemented inventory management practices and methods so as to make necessary adjustments if needed.

5.3 Recommendations for Further Research

This research recommends that further researches be carried out in Zimbabwe and maybe other countries about the effects of inventory management practices on financial performance in other industries such as the textile retail industry or farm produce retail industry to see if the explored factors and results can be generalized across different industries.

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APPENDICES

Appendix 1:

BINDURA UNIVERSITY OF SCIENCE EDUCATION

My name is B200351A a part 4.2 student at Bindura University of Science Education pursuing a Bachelor of Accounting Degree. I am carrying out a research titled THE PERCEPTION OF EMPLOYEES ON THE EFFECTS OF INVENTORY MANAGEMENT PRACTICES ON THE FINANCIAL PERFOMANCE OF A PETROLEUM COMPANY OPERATING IN A HYPERINFLATIONARY EVNVIRONMENT. THE CASE OF GLOW PETROLEUM.

The purpose of this study is to investigate how the current economic conditions in Zimbabwe affects inventory management practices of firms in the petroleum industry. I would really appreciate your participation so that my investigation is a success.

It is important to note that no names are required from participants and participation is completely voluntary. You are also allowed to withdraw your participation at any part of the interview or questionnaire. Information gathered from participants will be confidential and for the purposes of this study only.

I am also kindly asking you to answer the questions truthfully and as accurately as possible.

You can kindly send back the questionnaire to my email.

Thank you.

Appendix 2: QUESTIONNAIRE

Section A: General Information

Demographic Information

Please tick where applicable

1. **GENDER**

Male ☐ Female ☐

2. **AGE**

18-20 ☐ 21-30 ☐ 31-40 41-50 ☐ ☐

51-60 ☐ 61 and above ☐

3. **Highest level of education**

Primary ☐ Secondary ☐

Tertiary ☐

4. **What is your job title?** .....

5. **Department** (tick one)

Finance ☐ Sales ☐

Operations ☐ Marketing ☐

6. **How long have you been working for the company?** (tick one)

Less than 2 years ☐ 2 to 5 years ☐

6 to 10 years ☐ Over 10 years ☐

SECTION B: INVENTORY MANAGEMENT TECHNIQUES

7. **To what extent does each of the following Inventory Management practices apply to your organization?** (Please tick where appropriate)

(Use the scale of: 1-No extent, 2-Small extent, 3- Moderate extent, 4-Large extent, 5-Very large extent).

Statements	**1**	**2**	**3**	**4**	**5**
Fuel is replenished on a timely basis i.e. weekly, monthly					
The company order amounts of fuel that minimizes the total ordering costs					
The right amount of fuel is ordered when needed					
Fuel is delivered at the right time by the distribution team					
Fuel is delivered at the right place by the distribution team					
Exact amount of fuel ordered is delivered					
The company maintains a level of fuel that minimizes the total stock holding costs					
Vendors are tasked with the full responsibility of replenishing fuel on time.					
The company maintains buffer/safety/reserve fuel					
The firm orders fuel when current inventory level has reached a defined level.					
Fuel types are prioritized based on their value					
The company replenishes fuel just when needed					
Fuel orders are placed at predetermined order quantities					
Other practices (specify)					

SECTION C: CHALLENGES IN THE IMPLEMENTATION OF INVENTORY MANAGEMENT TECHNIQUES

8. **To what extent do you think the company face each of the following challenges in managing its inventory?** (Please tick where appropriate)

(Use the scale of: 1- No extent, 2- Small extent, 3- Moderate extent, 4- Large extent, 5- Very large extent).

Challenges	**1**	**2**	**3**	**4**	**5**
Identifying and maintaining the right amount of fuel stock					
Rapidly changing markets					
Rapidly changing competitors					
Price volatility					
Stiff competition from similar firms					
Dynamic business environment					
Inflation					
Unfavorable government and ZERA policies,					
Using forecasts to determine how much fuel to purchase					
Finding the right balance between having too little or too much stock					
Lack of adequate employee training on fuel stock management					
Lack of senior management involvement on fuel stock management					
Others, please specify;					

SECTION D: RELATIONSHIP BETWEEN INVENTORY MANAGEMENT FINANCIAL PERFORMANCE

9. **Indicate the extent to which the organization has performed for each of the following to improve financial performance. (Please tick where appropriate)**

(Use the scale of: 1- No extent, 2- Small extent, 3- Moderate extent, 4- Large extent, 5- Very large extent)

Price/cost reduction					
Improved service delivery / quality service					
Delivery dependability					
Ensure product availability					
Improved product quality					

10. **To what extent do the following statements best suit your opinion. (Please tick where appropriate)**

(Use the scale of: 1- No extent, 2- Small extent, 3- Moderate extent, 4- Large extent, 5- Very large extent)

Statement	**1**	**2**	**3**	**4**	**5**
Inventory management prevents shortages and stock out costs					
Inventory management enhances continuous daily operation					
Inventory management reduces production costs					
Inventory management reduces delivery lead time					
Inventory management minimizes machine down time					
Inventory management reduces resource wastages					

11. **In your own opinion, what practices can be adopted by the company to better manage its inventory so as improve its financial performance?** (Specify)

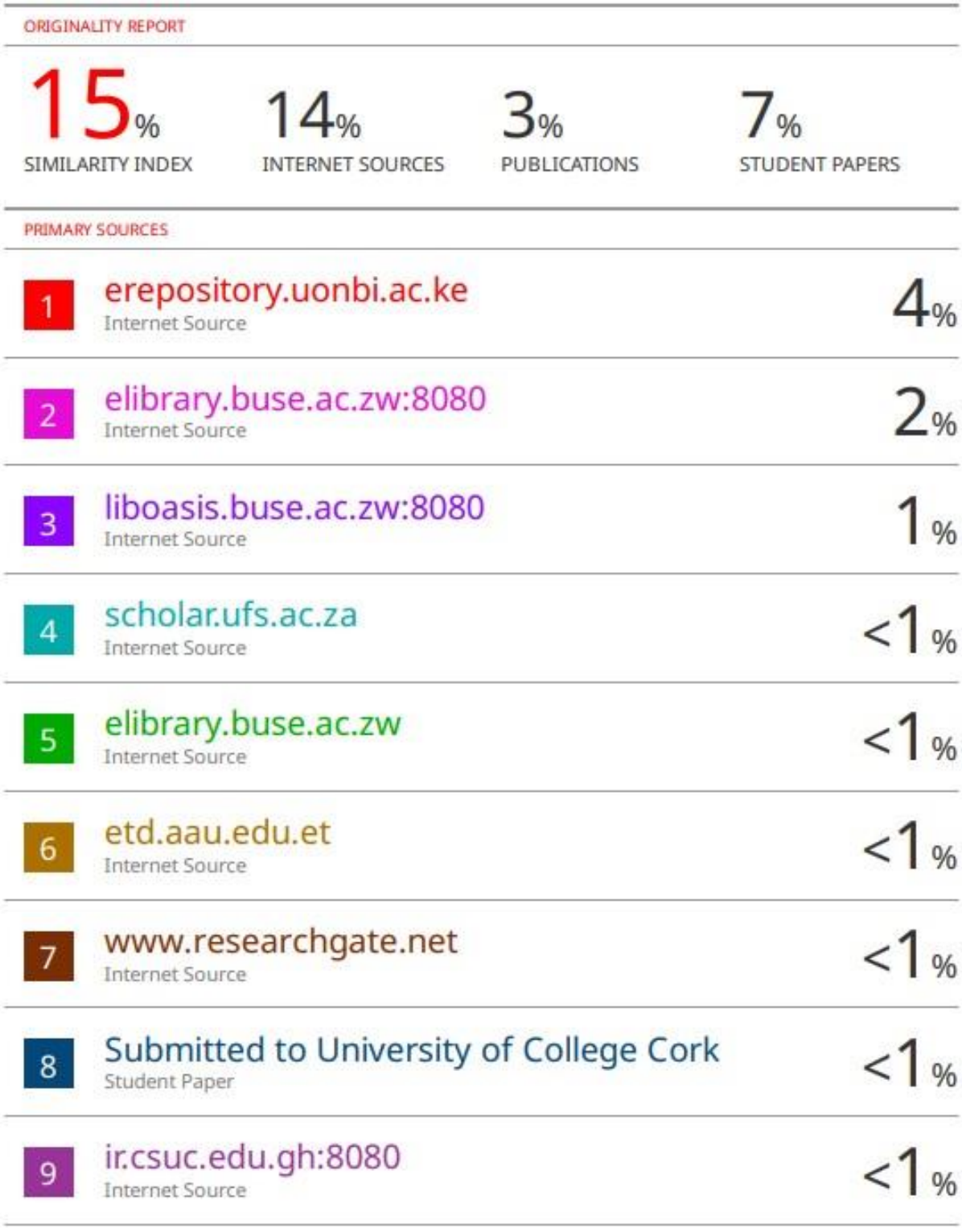
……
……

……

……

THANK YOU FOR YOUR TIME AND COOPERATION!

APPENDIX 3



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