BINDURA UNIVERSITY OF SCIENCE EDUCATION

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DEPARTMENT OF BANKING AND FINANCE

RESEARCH PROJECT

EFFECT OF INVENTORY MANAGEMENT ON THE PROFITABILITY OF Small to Medium Enterprises (SMEs) IN WHOLESALING BUSINESS IN ZIMBABWE. A CASE STUDY OF BINDURA TOWN.

SUBMITTED BY

B1954034

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Name of Student *Signature* *Date*

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Name of Supervisor *Signature* *Date*

…… …… ……/……/…….....

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DEDICATIONS

I wish to dedicate this dissertation to my parents who funded my education from early stages up to now. They are my constant source of inspiration.

Dedications also goes to my two siblings who supported and believed in me during my studies.

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ABSTRACT

Inventory constitutes bulk of current assets small and medium scale enterprises (SMEs) in the wholesaling business. SMEs need to understand the true costs associated with inventory management and poor inventory productivity so as to be able to review the benefits of alternative approaches. The objective of the study was to examine the effect of inventory management on profitability of SMEs in Zimbabwe. The study used a descriptive research design. The population consists of all wholesaling SMEs operating in Bindura Town. The study used simple random sampling. 80 respondents were randomly selected but 66 responded. Data for the study were obtained through the administration of a self-designed questionnaire to accountants of the sampled firms. A multiple regression analysis was conducted to test the model established for the study. Findings of the study reveal that inventory turnover has a significant positive relationship with financial performance of SMEs. The study also reveals that there is a positive relationship between inventory conversion period and profitability; and also significant positive relationship between inventory leanness and profitability. The study concludes that inventory management has a great role to play in corporate financial performance of SMEs hence firms' inventory systems must maintain an appropriate inventory levels to enhance profitability and reduce the inventory costs associated with holding excessive stock in the warehouses. In line with the findings of the study, it is recommended that firms should embrace modern inventory management and production technology that will enhance faster production to shorten inventory conversion period which will in turn improve inventory turnover and profitability.

Table of Contents

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CHAPTER ONE: INTRODUCTION

1.1 Introduction

Zimbabwean economy is primarily defined by small and medium businesses. This business sector is mostly dominated by sole proprietorships, partnerships, and small cooperatives predominate the small business sector. This sector have proven to be the corner-stone of the economy and the government has implemented a wide range of policies and measure to boost this sector but a lot of firms in this sector are struggling to survive or reach full potential in this sector. In a decaying economy like Zimbabwe, this might be caused by a wide range of factors such as inflation, exchange rate fluctuations, poor corporate governance, etc. But this study explores only one factor which is inventory management. This study investigates the effect of inventory management on the profitability of SMEs specifically those in the Wholesaling sector.

Chapter one provides the general overview of the study. This chapter consist of the background of the study, problem statement, research objectives, questions, ethical considerations, limitations and delimitations of the study are there. Furthermore there definition of terms that are frequently used in the research and lastly the chapter summary.

1.2 Background of the Study.

Effective inventory management is of paramount importance to SMEs specifically those in the wholesaling sector since they buy stock in bulk and also supply in bulk. Buying inventory in bulk has some benefits like economies of scale but it is very costly and risky if the inventory is not properly managed (Mathuva 2007). Effective inventory management is now being considered as more of a necessity than merely a trend in the current climate, where constant customer satisfaction or service delivery has emerged as the key to the profitability of firms.

Due to the collapse of the input source, most SMEs in the wholesale sector have resorted to importing stock such as groceries from neighbouring countries mainly South Africa. This has placed much pressure on the SMEs as they have to meet available demand in time and also to forecast on what is needed. Hence planning on inventory management became a pressure to companies as it would be difficult to synchronise demand and supply. Inaccurate inventory

forecast creates a number of problems such as loss of productivity, production of unwanted items, accumulation of costly physical inventor and reduction in levels of customer commitment.

Inventory being the most important aspect of logistics, has taken SME's to implement various inventory management techniques that best suit their organizations to maximize on the best results and manage their inventory. Most SME's in the Wholesaling sector are failing to accurately synchronize demand and supply which leads to excess stock or stock outs. SMEs in the wholesaling sector will remain complacent and accept average profit instead of better performance until they comprehend the true costs associated with poor inventory productivity and inventory management.

In developing nations like Zimbabwe, where continuing socioeconomic growth is a difficulty, there are several ways to look at the issue of inventory control. The main issue with inventory control in the nation has been attributed to the top management officials' failure to give warehouses and stores the attention they deserve, as well as their inability to hire as qualified store officers to handle inventory supervision and management (Makaza 2017). Additionally, there is the associated problem of a lack of storage facilities and the practice of certain cadre employees in many organizations, private or public of violating the stores process (Yusuf, 2003). As a result, given the low degree of computerization, lack of stock level determination, and participation of illiterate and unskilled staff in inventory management, the practice of inventory management in Zimbabwe today has to be significantly improved (Akindipe, 2014). There is a mistaken impression that inventory operation is a non-strategic function in various SMEs which have led under performance of these firms or even closure of some of these companies. Using Bindura Town as a case, this study aims to investigate how inventory management affects the profitability of these firms.

1.3 Problem Statement

In the past 5 years there have been an influx of Small and Medium Enterprises in the wholesaling sector specialising in groceries, kitchen-ware and the clothing which is being facilitated by middle-men popularly known as Runners in Zimbabwe. Most of these businesses

have proven to be a success but some have fallen at premature stages and some are underperforming financially.

These SMEs struggle to keep operational customer loyalty because the majority of them don't maintain adequate inventories or use proper marketing to sell inventory. This problem tends to raise the cost of keeping inventory, which degrades a business' operations. By avoiding waste and storage costs, good management helps to lower the cost of inventory by encouraging quick inventory turnover and a rise in customer loyalty. Low turnover of inventory in the industry is also linked to stock-outs, inadequate advertising and marketing, customer loss, and material obsolescence.

Due to the wholesalers' slow inventory turnover, there may be poor sales, purchase delays, brand substitutions, or even customer disloyalty as a result of clients who shop elsewhere. The impact of inventory management on customer loyalty has therefore been proven based on the aforementioned. In light of this, this study then looked at how inventory management affected the profitability of wholesale SMEs in Bindura, Zimbabwe.

1.4 Research Objectives

1.4.1 Main Research Objective

- To examine the effect of inventory management on the profitability of SMEs in the wholesaling business in Zimbabwe.

1.4.2 Sub-Research Objectives

- To determine the effect inventory turnover ratio on profitability of SMEs in Zimbabwe.
- To determine the effect of inventory conversion period on profitability of SMEs.
- To determine the effect of inventory leanness on the profitability of SMEs

1. 5 Research Hypothesis

H_1: Inventory turnover ratio has significant effect on profitability.

H_2: Inventory conversion period has a significant effect on profitability.

H_3: Inventory leanness has a significant effect on profitability.

1.6 Justification of the Study

Inventory management is a profitability tool which businesses must handle properly. The SMEs in Zimbabwe should change or upgrade their inventory management techniques to reach full

potential specifically those in the wholesaling sector. This study will look to evaluate the best inventory management techniques and design the best model that these firms should adopt.

1.7 Purpose of the Study

The main aim of the study is to discover the nature of relationship between inventory management and the profitability. At the end of the study the relationship of these two variables should be established. Also the other purpose is to ascertain the influence of inventory turnover, inventory conversion period and inventory leanness on profitability of SMEs.

1.8 Significance of the Study

1.8.1 To Policy

The study offers conclusions that can serve as the basis for future policy decisions. The study's findings may be used by local governing bodies like SMEDCO to create the required rules that will help SMES adopt efficient inventory management techniques in order to increase their revenues.

1.8.2 To SMEs

The link between inventory management and profitability will help the businesses understand how improving inventory management procedures may truly affect the profitability of the business. There are a variety of correlations between inventory and profitability, according to various research from various scenarios.

1.8.3 To Academia

Researchers in the field of financial management who may want to do more research will find the study beneficial since it expands the body of expertise in the subject for inventory management.

1.9 Delimitation of the Study

The study's focus includes the business's profit and inventory management for SMEs in Zimbabwe. It also goes into the efficacy of inventory control and keeping costs in relation to profitability.

1.10 Limitation of the Study

The study's focus includes the company's profit and inventory management for SMEs in Zimbabwe. Additionally, it examines the efficacy of inventory control as well as holding expenses in the context of profitability.

1.11 Definition of Key Terms

Inventory

It is the term used to describe the stockpile of goods that a company has available for sale as well as the parts that go into making those goods (Bolten, 1976).Inventory Management

Inventory management is an art and science of maintaining inventory levels of a given category of products that incur the lowest cost in line with other related management priorities and objectives (Jessop, 1999).

Economic Order Quantity (EOQ)

According to Mathuva (2007), it may be described as the degree of inventory order that reduces the overall cost of managing inventory.

Profitability

According to Lawrence et al. (2009), it often refers to extra income, owner revenues from sales, related costs, and financial gains arising from someone's transactions or from their vocation.

1.12 Structure of the Dissertation

CHAPTER ONE

The research commences with this chapter which comprises of the background of inventory management and profitability , problem statement, research objectives, research questions, research objectives, limitations, delimitations and lastly definitions of the terms in that order.

CHAPTER TWO

This chapter is all about literature review. Theoretical and Empirical literature for inventory management and profitability of SMEs is reviewed in this chapter. Also the research gap is found in this chapter and lastly the conceptual framework of the study.

CHAPTER THREE

This chapter spells out the research methodology of the study. That is; the target population, sample, research methods, data type and also the data analysis and in this case SPSS was used.

CHAPTER FOUR

This chapter is all about the presentation and analysis of the data collected using methods mentioned in chapter three.

CHAPTER FIVE

This is the last chapter where after data analysis is done, conclusion and recommendations are made by the researcher.

1.13 Summary

The chapter provided a comprehensive review of working capital management as well as the concept of inventory. A summary of the aims, limits, and research justification was given in the conclusion. The research's focus, inventory management, has been covered in some detail in the section of literature review that follows.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section reviews the body of research on inventory control and profitability that has been done by different academics. The theoretical literature review, factors affecting company profitability, empirical literature review, and a summary of the literature review are all presented in this chapter.

2.2 Theoretical Literature

The Theory of Economic Order Quantity

The economic order quantity (EOQ) hypothesis was put out by Haris (1913) as a method of determining the ideal amount of inventory. According to Lwiki et al. (2013), EOQ is an inventory level that can reduce both the cost of maintaining inventory and the cost of placing orders for inventory.

To reduce the total cost of the purchase including shipping, the EOQ model is utilised to calculate the ideal order size (Ziukov, 2015). According to Milicevic, Davidovic, and Stefanovic (2010), the market is equivalent to the entire yearly amount the firm is demanding at any given time. While choosing the amount to be utilized while refilling product items, the EOQ model considers a trade-off between storage costs and purchase expenses. Larger numbers of sent volumes often serve as a limit on shipping volume, which lowers ordering costs while raising storage costs, leading to more storage capacity (Schwarz, 2008).

The entire expenditure curve connected with the product has a fixed point, and several prices decrease with product maintenance while other costs fluctuate (Lwikiet al., 2013). While carrying costs are the expenses required to maintain inventories, buying costs being the expenses incurred as fresh inventories are bought or purchased. As a result, the EOQ is determined by adding carrying the cost line to the ordering of the cost curve. The overall purchase costs and the maximum holding costs are identical at this time (Kumar, 2016).

The ideal order volume that will reduce total manufacturing costs is determined using the EOQ technique. The EOQ is a highly useful tool for managing inventories, and it may be used to inventories of produced goods and inventories of ongoing projects, which are inventories of raw materials. It oversees the purchase and storage of inventories in a method that ensures that supply and demand flow at the same rate across the investment in inventories (Kumar, 2016).

In order for the business to select what to purchase and the amount to purchase, Bowersox (2002) contends that it is critical to set up inventory control in a methodical way. Calculating the amount of an Economic Order (EOQ) is required to do this. To build the best structure for the product's re-establishment, financial order number evaluations are required. The deal, for instance, may be set up to take place monthly, sporadically, biannually, or annually.

By doing this, it pushes companies to have minimal or no overhead in their distribution operations. The EOQ and Re-Order Point (ROP) are crucial tools that associations should employ when attempting to enhance stock management in this way.

Just in Time Model

Through the use of excess inventory and related expenditures, the Just in Time (JIT) methodology aims to increase a company's financial efficiency (Shin, Ennis & Spurlin, 2015). According to Obiri-Yeboah, Ackah, and Makafui (2015), the JIT model is founded on three primary tenets: waste management, ongoing product and service quality improvement, and employee or staff involvement in the development and implementation of business initiatives. JIT is a tool for policy development created specially to support businesses involved in waste prevention or reduction. JIT promotes waste reduction and increased productivity.

The just-in-time approach will identify supply chain issues and aid in reducing output waste throughout the network (Kootanaee, Nagendra, and Hamidreza, 2013). Getting the correct products in the appropriate number, quality, and place is the goal of just-in-time (JIT). JIT has the ability to minimize waste and other unnecessary operational-related expenses (Kootanaee, Nagendra, and Hamidreza, 2013) while also increasing productivity and improving production efficiency.

JIT emphasizes that the bare minimum of supplies needed for immediate usage be on hand. As a result, the expense of maintaining stocks is significantly decreased (Kootanaee, Nagendra, and Hamidreza, 2013). Hutchins (1999) also focused on the notion that the main objective of the JIT approach is to achieve zero stock at the end of the day across the whole development network, not just inside the confines of a specific partnership. Given that administrative associations are already changing it, it may be connected to the assembly process inside every organization.

The JIT technique's elements incorporate systematic improvement, such as eliminating the seven different types of waste. The main goal of JIT is to ensure that the firm has the proper amount of inventory on hand to meet both the demands of the production schedule and the

needs of its final customers. A company has to discount less superfluous material the less it depends on stockpiling and delivery. Saving funds of the business's morality and integrity is the ultimate objective of it all.

Pareto (ABC) Model

Vilfredo Pareto first proposed the Pareto hypothesis in 1887. Study of ABC is a classification technique based on the Pareto Principle. When handling goods for an organization, this idea frequently determines which items to select. The ABC analysis typically divides inventories into three groups. Specifically, classes A, B, and, last but not least, C. Monitoring tactics and oversights for Class A items are ineffective. Class C goods often get the least attention from management, whereas Class B things fall somewhere in the middle (Vallabhaneni, 2014). The ABC model divides the items into categories based on how valuable they are. The quantity of cash flows that will be generated by a product, the expense of stocking a goods, the amount of sales for a product, or other factors may all play a role in importance. Breakpoints are thus established for each class after classification has been accomplished (ObiriYeboah, Ackah, & Makafui, 2015).

ABC research is a straightforward, crucial management technique that aids managers in putting in a lot of effort to maximize or limit returns. ABC inventory analysis is helpful for categorizing products based on consumer demand. Due to the intense scrutiny placed on pricey items falling under category A, it also has strict financial supervision. Group B products are not in high demand and are easy to regulate. Group C items are fairly affordable and don't require precise handling (Priyank & Hemant, 2015).

Rules Of Thumb

The majority of businesses often use single-stage estimations or thumb rules to determine production objectives for optimizing their inventory. Typical thumb rules call for setting a target number of delivery days for coverage. Single-stage approximations compute the total amount of inventory needed to fill the order by examining a particular item at one point in time. Thumb rules are frequently industry-specific and might rely on unusual methods including experience, observation, rumor, or a mix of these. A thumb rule could work in one situation but not in yet another, therefore its applicability will depend on the specifics of each situation. Even though it is not formally recognized, this approach is frequently implemented, either alone or in conjunction with many of the inventory-management systems that SMMEs use. Thumb rules, at their most basic level, rely on a combination of experience and common sense to decide how much inventory should be ordered and kept (Rajeev, 2008). The thumb approach legislation has several advantages, the most obvious of which is its ease of application. Instead

of getting competent external assessments, this method is straightforward, somewhat affordable, and can be finished internally. It's pretty simple to comprehend and follow as well. As a result, the strategy is especially appropriate for SMMEs, for whom the cost and time implications of some approaches or systems render them ineffective. Thumb system regulations do not, however, take into account the major factors that could have an impact on the final output. Because it relies on judgments based on personal expertise, which may be unjust, it isn't "evidence oriented." Additionally, the approach's accuracy, effectiveness, and utility were questioned. Additionally, there is always a chance that this approach might produce findings that are deceptive, which occasionally renders it untrustworthy.

Materials Requirements Planning (MRP.1)

In situations when a set order quantity is inappropriate, materials requires planning methodology has been proven to be a useful tool for material management, as stated by Fuller (2000). The software is used to monitor raw material stockpiles, ongoing research, product components, and components. Resource Preparation for Items Inventory management has shown to be a very effective way for planning and managing SMEs businesses. According to Wild (2017), content demand preparation is simply an information process in which purchases are immediately transformed into loads.

There, stocks are kept to a minimum, shipment times are quicker and more dependable, and products are produced more precisely. Thus, the computing network and only smaller businesses are components of the long-term general plan. Based on Salem (1997), inventory administration refers to the systematic method of getting and processing items at the lowest possible cost without interfering with the schedule of development and delivery. As a result, inventory management is a quantitative procedure for choosing whether, when, and how to hold anything for a certain amount of time.

2.1.2Factors that affect Inventory Management

Stock Out

According to (Mazanai, 2012), stock-out situations are the most typical problem encountered by most businesses. These situations have a big influence on customer expectations and negatively affect an organization's success. According to Chandra (2006), when supply shortages happen, some consumers won't be able to stand by for the backorders to arrive, which would reduce an organization's sales.

In the opinion of Kamau and Kagiri (2013), maintaining the proper level of inventory in an organization is the most difficult problem, yet businesses have made efforts to prevent

inventory accumulation since excess acquired or created inventory may raise the facility's total cost.

Planning

The goal of inventory control productivity is to enhance organizational operations and guarantee efficient people, supply, and distribution of goods. One of the key components to maintaining efficient inventory management involves planning. According to Jonsson & Mattsson (2015), planning is a method used to manage inventory that includes anticipating consumer demand, planning to maintain the necessary amount of items, setting reorder points, and managing a company's inventory level. Without cooperation from sellers, it will be more difficult to estimate inventory needs in response to future consumer demands (Toomey, 2000).

Unskilled Labor and Staff

The majority of businesses use unskilled personnel to handle their inventories, according to Othman (2019). These employees frequently lack experience, possess insufficient education, or receive poor treatment at work. Such circumstances, such as spending a lot of time monitoring the product that was placed in the incorrect location or that has an erroneous inventory record, can lead to a degradation in the operations of a company. Therefore, having qualified employees and maintaining adequate control of inventory are crucial for the production company's success.

Lack of Funds

In fact, as Carter and Price (2018) have emphasized, if adequate funding is not available, the company's operations would be disrupted. Additionally, Dobler, Burt, and Lee (2009) noted that the inability of money to be effectively assigned to the operations of all companies will limit the efficacy of managing inventory..

Under and Over Production

Indira and Aroon (2018) state that past studies have discovered that underproduction, overproduction, condition of stock-out, halt in the delivery of raw materials, and discrepancy in stocks are typical inventory management difficulties in the company. Underproduction, according to Baltagi (2005), happens when the production rate is lower than the market's demand and each unit of fully made items that enters the warehouse is instantly distributed to the consumers. As a result, the warehouse has little to no protective stockpiles. If the safety stocks are unable to satisfy the needs of the industry due to low production, a stock-out crisis will result.

As a result, consumer satisfaction may suffer, which decreases sales. Overproduction, according to Kuppapally (2008), occurs when a business produces more inventory than is

necessary and wastes money, storage space, time, effort, etc. According to Mercado (2007), overproduction happens when production rates exceed customer demand, and the majority of the inventory is kept in warehouses. That indicates that the product is heavily indebted while the stockpiles are kept at the manufacturer. That indicates that the good is heavily indebted while the stockpiles are kept at the manufacturer. In basic terms, excess warehouse inventory might constrain an organization's financial resources.

According to Magad (2013), poor sourcing will result in a high level of raw materials processed at the factory, leading to widespread waste across the organization, while overproduction would lead to a large level of completed goods gathered in warehouses.

Lead Times

The lead time for a product, or the time between the issuing of an order and the delivery date, has a considerable impact on methods for managing inventory. Lead times for some industries and products are exceptionally long. First off, a shorter lead time reduces the quantity of long-term goods and inventory which the supplier must store, as well as other inventory-related duties like process tracking, routine physical manufacturing, and general warehouse maintenance.

2.1.3 Costs Associated With Inventories

According to Petrucelli (2013), there's two types of expenses related to stocks within a managerial perspective. However, Lysons and Farrington (2006) also point out that the economics of inventory management and stock control are defined by an examination of the expenses associated with acquiring and transferring inventories in both of these categories.

Acquisition Cost

Numerous order-related expenses are carried regardless of order quantity; for instance, the cost of an order would be the same whether 1 or 1000 tons were delivered.

Holding Costs

Viglia (2014) explains that inventory holding costs are of two types:

i) Cost of inventory proportional to the value, such as:

The targeted return on capital for the firm is more realistically represented by financial charges like interest charged on capital that is locked up in inventories and may be calculated using the bank rate.

ii) Stock prices relative to the physical features, such as:

Storage costs – Space for storage, storage prices, heating, and electricity lighting.

Cost of labor - pertaining to examination and handling.

• Clerical expenses for documents and paperwork pertaining to the businesses.

Fuller (2003) states that the expense of inventories accounts for almost two thirds of gross costs across certain production and building undertakings. Consequently, the deciding factor is clearly the materials handling performance.

Costs of Stock-Outs

According to Chandler (2010), the price of having insufficient inventories is :

Loss of manufacturing output, the expenses of idle time and fixed expenses spread over a lower output level, the cost of any action implemented to handle a stock-out, such as purchasing from another stock at a higher price, switching production, obtaining substitute materials, and the cost of losing the trust of customers as a result of being unable to deliver on time or delivering it late.

According to Hobson (2005), a stock-out of an item ordered by the customer may result in lost sales or demand, diminished goodwill, and expenses associated with handling backorders, including additional paperwork.

2.3 EMPIRICAL LITERATURE REVIEW

2.3.1 Studies on Inventory Management and Profitability

Panigrahi (2013) – Relationship between inventory management and profitability.

The author stated above conducted a research on the relationship between inventory management and profitability, interviewing five of the largest cement manufacturers in India between the years of 2001 and 2010. Using regression analysis, the study measured profitability utilizing the variable that was dependent: "gross operating profit" and used the current ratio, company size, and financial debt ratio as control factors. The findings revealed an adverse relationship between the length of inventory turnover and the firms' production. It has been revealed that the overall debt ratio has an adverse correlation with the profitability of firms as determined by gross operating earnings.

Nasr (2007) - Effect of Inventory Turnover and Conversion on Pakistan Enterprises.

The author stated above investigated how inventory turnover affected Pakistani enterprises' daytime and existing ratios of net operating income.

Over a six-year period, from 1999 to 2004, they chose a sample of nine Pakistani firms that were listed on the Karachi Stock Exchange, and they discovered a substantial inverse relationship between inventory movement time and market profitability.

On the relationship between profitability and the inventory conversion duration, Nasr (2007) and Panigrahi (2013) discovered similar findings. Despite the fact that they conducted their

research in various nations and businesses, they both came to the same conclusion: the inventory conversion period and profitability are negatively correlated. These investigations also used various time periods, and Panigrahi used the regression approach to analyze the data, although Nasr withheld the study methodology he employed

Raheman, Sekeroglu, and Altan (2014) – Impact of inventory management of firms' competitive ability.

These two authors studied the impact of inventory management on firms' ability to compete in Turkey's spinning, fruit, wholesale, and retail sectors between 2003 and 2012. The research used the computer software SPSS 20 edition to examine data taken from the income statements of chosen organizations using regression as well as correlation techniques. The research revealed a relationship between inventory control and productivity in the food business, but not in the moving, SMEs, or retail industries.

Anichebe & Agu (2013) – Assessment of the effectiveness of inventory management on organizational performance.

These two authors from Nigeria assessed the effects of effective inventory management on organizational performance. Data were gathered for the study using an oral interview technique and a questionnaire with a sample of 248 respondents. The analytical findings revealed a significant relationship between inventory control and organizational efficiency. The research also established a strong positive correlation between inventory management and productivity of an organization and concluded that inventory management has a significant impact on an organization's competitiveness. The study came to the conclusion that efficient resource management is crucial to the growth and sustainability of a business.

Based on the aforementioned findings, inventory management is essential for a company's financial success. The studies came from businesses in various industries. Raheman, Sekeroglu, and Altan used software to analyze the data utilizing regression and correlation methods. The technique of data analysis performed was not specified by Anichebe and Agu. Additionally, the research was done in several nations and locations.

Fullerton et al. (2017) - The relationship between financial success and the extent of JIT adoption

In 253 SMEs in the USA, Fullerton et al. (2017) looked at the relationship between financial success and the extent of JIT adoption. The results showed that JIT-adopting businesses often saw higher sales and decreased inventory-related expenses.

The value of material oversight rests on the assumption that any significant effort made by the materials supplier in lowering material costs would go a fair way in increasing productivity and the rate of return on investment. Subramanian (2007) conducted an analysis of financial statements of plenty of private and public sector organizations and found that materials account for nearly 60% of the total expenditure.

2.3.2 Studies on Inventory Management of SMEs

Madishetti and Kibona (2013) – Inventory management of SMEs.

The authors stated above found that a small or medium-sized enterprise's (SME) performance may be significantly increased by well-designed and executed resource control. They looked at the connection between inventory turnover and productivity as well as the impact of inventory control on SMEs' productivity. They used the financial statements data for the 2006–2011 period and an index of 26 SMEs in Tanzania. In order to evaluate the impact of the turnover of inventory cycle on gross operating revenue, regression analysis was applied. The results showed that there was a strong negative linear relationship between productivity and the period of inventory turnover.

Koh, Demirbag, Bayraktar, Tatoglu, and Zaim (2007) – Connections between SCM practices, operational performance and organizational performance,

The authors stated above tested an approach to discovering the connections between various SCM practices, operational performance, and organizational performance related to SCM and examined an increasing problem concerning the fundamental elements of SCM practices. The study focused on Turkish SMEs. The study discovered that elements connected to outsourcing and multi-suppliers (OMS), as well as strategic cooperation and lean practices (SCLP), had a definite beneficial impact on the operating effectiveness of small and medium-sized businesses. However, the study found that these factors only had a significant and indirect beneficial impact on company performance as it relates to SCM.

The two studies mentioned above focused on SME inventory management. The link among the inventory conversion duration and profitability is the main topic of Madishetti and Kibona's study. In Tanzania, where they conducted their investigation, they employed the regression approach to examine the data. While Koh, Demirbag, Bayraktar, Tatoglu, and Zaim's study

focused on how the supply chain and profitability relate to one another. They conducted a survey on SMEs in Turkey, but they didn't specify the process they used to evaluate the results. However, these studies' differences result from the various goals of their respective researchers. Additionally, both studies include a variety of holes that need to be filled in.

(2011) Russel and Taylor conducted study on the use of EOQ for material control. We see that in EOQ methods, factors like demand being known and consistent, lead time, quick product reception, and purchasing cost per device remaining constant throughout the year are all present. Teunter et al. (2012) conducted research on the asset control approach that is most often used in businesses. He discovered that the ABC study is a tool for resource management that is extensively utilized around the world.

In order to track inventories of imported items based on material mobility, Jonsson and Mattsson (2008) investigated the use of inventory forecasting methodologies. The study examined the perceived effectiveness of material organizing techniques used in manufacturing and distribution businesses control the transportation of numerous types of materials. They examined the variations in perspectives on performance planning based on the methodologies and characteristics chosen for the planning.

Munyao et al. (2015) examined how SMEs in Mombasa County used inventory control to increase the effectiveness of the manufacturing department. The study employed a group of 45 SMEs businesses using a descriptive research approach, with questionnaires used to collect the data. The study's findings revealed that industrial businesses use a variety of material management tactics, including action point, JIT, EOQ, and regular analysis procedures.

Despite the fact that MRP was most successful at boosting the success of the production section, the survey indicated that the majority of SMEs industrial organizations employed action level techniques. Researchers have examined several inventory accounting techniques.

The authors did not always provide the data analysis methodology. The research was done over a number of years. Based on particular findings from the aforementioned study, the appropriate inventory management technique would, however, depend on the type of goods that a business manages. An business may occasionally use particular inventory management techniques for certain product types.

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2.3.3 Studies on Costs associated with Inventory

Walter & Grabner studied a survey of more than 1400 customers in a chain of retail stores. In the event of a stock out, they estimated data on what customers were likely to do, such as switching to a product with a potentially different quality, traveling to the market, or visiting another store. Based on their analytical projections, they determined that a single stock-out situation may result in a loss of 24.2% of the selling price. The figures on the predicted loss roughly quadrupled to 47.8% of the retail price owing to the increased chance of losing the client if the stock-out scenario persists, that is, if the consumer decided to return to the store days later and still could not locate the item required.

The effectiveness of inventory control at the Kenyan State Ministry of Defense was examined by Kariuki (2013). According to the report, stock-outs, pricing fluctuations, and interruptions in product purchases are all effects of the protracted bureaucratic procurement procedure. The study also revealed that the handling of inventories is negatively impacted by the early dispatch of cash. The survey also discovered that records of closed stores and a lack of experienced and knowledgeable employees are barriers to an efficient inventory management and control system.

The impact of input costs on the firm competitiveness of the Nigerian brewery sector has been studied by Okwo and Ugwunta (2012). The percentages of revenue and general administrative expenses, the expense of the sold goods (inventory), outstanding, payables, and depreciation were used in the study as independent factors, and profitability was used as a dependent variable. They discovered, among other things, that the expense of the sold products (inventory) had a significant positive link to profitability using Ordinary Least Squares and multiple regression approaches. Kariuki's study also concentrated on issues with inventories. Any one of those problems raises the price. Losses to the company result, for instance, from the impact of supply shortages and the availability of unskilled labor.

Inventory Management and Financial Performance of SSEs

The results of the study by Nyabwaga et al. (2013), titled Stock Management Strategies and Market Quality for Small Scale Enterprises (SSEs) in Kenya, showed that the initial research project objective, which evaluated SSEs' management of inventory activities, asked respondents to provide information on how frequently they budgeted for inventory, analyze inventory rates, and examine shelf-space delivery. Using a mean of 3.60 and 3.89, the data showed that SSEs routinely planned inventory budgets and evaluated inventory rates.

However, the SSEs made greater changes to levels of stock than they had planned. These findings suggest that SSE managers or owners possess a solid understanding of procurement practices, procurement budgeting, and inventory level analysis and are thus likely to be able to effectively monitor item amounts and align supply and demand with consumer demand.

These results are consistent with those by Kwame (2007), who found that the majority of the surveyed firms also evaluated their anticipated inventory budgets as well as inventory rates. SSEs seldom examined their use of shelf space, which means they might not be able to adjust their stock levels in response to shifting client demand.

The research, however, were conducted across a range of years. Kwame kept his research's methodology a secret. While Nyabwanga mentioned that managers and owners had been interviewed.

Studies of Inventory Management in Nigerian Firms

The effect of resource control on the corporate performance and competitiveness of Nigerian SMEs enterprises has been studied by Augustine and Agu (2013). Using the Pearson commodity moment correlation coefficient and linear regression approaches, the study found a significant association between asset control and production. In Nigeria, Ogbo, Onekanma, and Ukpere (2014) examined the relationship between effective control of assets and an enterprise's efficiency. Managing inventory increased investment returns, according to a case study of a bottling firm that used descriptive statistics and the non-parametric Chi-Square test to analyze the data. In Nigeria, studies on inventory control were done. The dependent factors influence the results

Augustine and Agu also employed linear regression and the pearson moment correlation coefficient, but Ogbo, Onekanma, and Ukpere used simple statistics and the non-parametric chi-square technique. The differences in the methodologies adopted come from differences in the study goals.

Studies of Inventory Management from Different Countries

A research from 1998 to 2003 on the trend in working capital management and its impact on enterprises, using 58 small SMEs in Mauritius, was reported by Padachi (2006). Regression analysis used for this study revealed a relationship between higher inventory and receivables spending and poorer production. Days of inventory, Days of Accounts Receivable, Days of Accounts Payable, and Period of Cash Conversion were the primary factors considered in the study.

Deloof (2003) investigated the association between inventory conversion duration and corporate profitability using a sample of 1,009 significant Belgian non-financial enterprises for the years 1992–1996. The report's data correlation and regression analysis techniques revealed a strong inverse relationship between the gross operational profit of Belgian enterprises and the period of inventory turnover.

The studies focus on inventory, although they use different types of analysis. Padachi (2006) conducted study on the results of working capital management that included inventories. Regression was also employed by the researcher to analyze the data. While Deloof (2003) sought to establish a link between profitability and the length of the inventory conversion phase. For data analysis, he employed correlation and regression analysis. Even though they conducted their research at several organizations in various business sectors, both writers employed regression analysis.

2.4 RESEARCH GAP

According to the literature, several research has been done on the connection between inventory management and business financial success. However, no one Zimbabwean author has ever written a piece of literature discussing how managing inventory affects the profitability of SMEs engaged in wholesale trade in the context of Bindura Town and the present economic climate (2018–2023). Additionally, the majority of the writers did not fully disclose how they acquired the data for their investigations. Additional study was done on businesses with various types of inventories, or businesses with diverse lines of business.

2.5 THE CONCEPTUAL FRAMEWORK

The conceptual framework outlines the relationship between variables of study. It shows the relationship between the 3 independent variables which are inventory turnover ratio, inventory conversion and inventory leanness and their connection with the dependent variable which is profitability. This is illustrated in Figure 2.1 below.

Figure 1 illustrates conceptual framework.

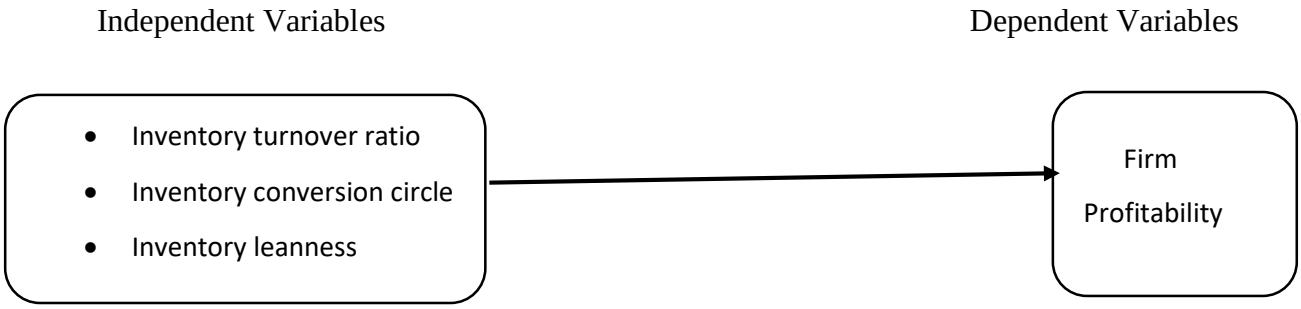

Figure 1 Conceptual Framework

The conceptual framework is shown in Figure 2.1 above. The efficiency of inventory management affects the company's profitability. Profitability of a company will increase if its inventory is handled effectively utilizing the right strategies, and vice versa.

2.6 Summary

The chapter looked at what has been published by researchers and scholars on the subject matter. It covered inventory management as a tool for profitability. The chapter looked at both comprehensive theoretical and empirical literature and conceptual framework in line with the objectives of the study based on relevant literature on each objective of the study. The next chapter shall focus on research methodology.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section examines the analyst's method of information gathering for the investigation, or exploration. To reveal the driving forces behind each in the examination endeavor, elements of the exploration strategy and the testing methods are combined.

3.2 Research Design

Bendiab (2012) defines research design as the process by which the researcher prepares to gather raw data for analysis and draw conclusions. The research design is crucial for obtaining accurate findings and achieving the study's objectives. Choosing an inappropriate design can lead to unsatisfactory results. Research design may be concise, descriptive, or experimental, and in this case, the researcher used a descriptive research design.

3.2.1 Descriptive research design

Shaw and Hayes (2016) state that descriptive research is useful in verifying, analyzing and expressing theories of current practice as it reflects actual conditions. The objective of this research is to comprehend the present methods of SMEs inventory management and how it impacts their financial performance. Descriptive research design is employed to describe and explain the current situation using multiple topics and questionnaires (Marczyk et al., 2013).

The study utilized a descriptive approach due to its ability to accommodate various forms of data and integrate human experience, along with the effectiveness of inventory management techniques as measured by the researcher's questionnaires. Moreover, the descriptive quantitative approach has several benefits, including its ability to collect large amounts of data in any field and the researcher's ability to gain insights from both qualitative and quantitative data. Furthermore, the study's participants were unaware that they were being observed during their daily operations, and the data was collected from diverse sources within various SMEs.

The descriptive analysis method is advantageous as it provides a clear picture of the current situation. It also allows for the collection of large amounts of data, which increases reliability and focuses on practical studies that generate analyzable data. Additionally, it can aid in producing targeted analyses that can yield useful recommendations. However, there are also some limitations to this method. As it relies on observational techniques, the study's findings may not be conclusive. Respondents may provide answers that are biased to please the researcher, and they may not feel comfortable answering open-ended questions. Nonetheless,

the researcher was careful not to ask for sensitive information to address these concerns. Furthermore, the researcher used written documents such as stock sheets and financial statements to supplement the data collected through questionnaires.

3.3 Research Population

3.3.1 Population

According to Hussey and Hussey (1997), the population is the totality of all pertinent analytical or data units. According to Rubin et al. (2003), a population must be described in terms of its constituent components and sample units since it is made up of all the elements present in the sampling frame. Employees who have worked for SMEs for at least two years make up the investigation's population for this research since they can offer details on the numerous product output procedures, which are the study's main focus.

3.3.2. Target Population

The target population refers to a group of individuals with a connection to the researcher's topic of interest, from which participants are selected for interviews and questionnaires (Terry, 2012). Sampling was used in this study because it was not feasible to obtain responses from all potential participants. The target population for this research consisted of employees in the accounts department of Wholesaling SMEs in Bindura, estimated to be around 100 individuals.

3.4 Sampling

Sampling can be defined as a method of selecting a smaller group, or sample, from a larger group, or population, in order to estimate or predict the characteristics, information, or outcomes of the larger group, according to Kumar (2013).

3.4.1 Sample Size

(Venkatesh et al, 2013) describe the population as the set of individuals and cases that are relevant to the research. The study utilized a sample of 80 respondents, which was determined using the Raosoft Calculator.

3.4.2. Sampling Techniques

Random Sampling

Random sampling is a method of selecting a sample from a larger population where every item has an equal chance of being chosen. According to Kumar (2013), this method ensures that every possible sample has the same probability of being selected, and each item in the population has an equal chance of being included in the sample. The advantages of simple random sampling include reducing the potential for human bias in selecting the sample and

providing highly representative samples for research purposes. However, the main disadvantage of this method is that it can only be used when a complete and accessible population list is available, which can be difficult to obtain. In this study, due to the limitations of the sampling technique, the researcher selected only 80 respondents.

3.4.3 Validation of the technique used

The author employed a systematic approach in this study to gather data. This method involved grouping similar words together from each department, which was considered the most appropriate approach as inventory management is shared across multiple departments within each firm. From there, a random subset of participants was selected from each department that dealt with inventory management.

3.5 Sources of Data

To reach the research objectives, the study has relied on primary sources of data.

3.5.1 Primary Data

Saunders (2015) explains that primary data refers to data collected by the researcher specifically to address the research question, typically through fieldwork. For this study, Castillo (2013) used questionnaires and interviews to directly obtain raw research data from the respondents. The primary data collection method is highly reliable since the data is unique and relevant to the research topic. Interviews, questionnaires, and telephone surveys were used to collect descriptive data that provides a clear picture of the subject under study. To gather information on inventory management techniques employed by Bindura SMEs, questionnaires were administered, while interviews were conducted to obtain additional data on the usefulness of product performance analysis and its impact on corporate performance. However, primary data collection methods are time-consuming and some respondents may provide inaccurate information.

3.6 Research Instruments

3.6.1 Questionnaires

The tool utilized for data collection was the questionnaire, which consists of a set of ready-made questions designed to be answered by respondents (Truscott et al., 2010). The data collected can be either quantitative or qualitative. In this study, the researcher used questionnaires to collect easily validated quantitative information, which allowed for an examination of the relationship between findings and techniques. The benefit of using questionnaires is that they are inexpensive and easy to handle, allowing for better comparisons

as each person is provided with a questionnaire with similar questions, which is simultaneously distributed to several people.

Questionnaires are suitable for collecting comparable data from multiple individuals because the questions are identical, dynamic, and precise. Both open-ended and closed questions were included in the questionnaire. However, it is possible for respondents to misunderstand some of the questions, which may go undetected. Efforts were taken to ensure that respondents answered the questions easily. Some respondents were unwilling to answer critical questions that they felt were too personal.

3.7 Types of Questions

Scott and Reis et al (2016) categorize questions as either open-ended or closed-ended.

3.7.1 Closed Structured Questions

Palmer (2015) suggests that guided questions are characterized by a set of predetermined questions for which the respondent has a limited range of answers. Respondents are bound by the given choices and are required to provide an answer within the set boundaries. Closed structured questions are advantageous because they are easy to administer, answer, and save time for respondents. However, they limit flexibility as they confine respondents to a set of predetermined options, and the researcher must ensure that all possible responses are included, unless the respondent does not find an appropriate answer by chance.

3.7.2 Open Ended Questions

Clatten (2012) argued that open-ended questions allow respondents to provide their own opinions without being limited by pre-determined options. These types of questions provide valuable qualitative information on specific topics related to the subject. In this research, open-ended questions were used in interviews to obtain flexible responses from the respondents, which addressed certain problematic issues. Open-ended questions encourage creativity and expressiveness in the type of answers given. However, statistical analysis was challenging due to the variation in responses.

3.8 Data Collection Procedure

The researcher requested a document authorizing him to perform the research from Bindura University of Science Education. The firm will get the letter and be asked to give permission for the study to be done. The researcher then produced questionnaires for the purpose of gathering data. The researcher scheduled meetings with respondents in order to conduct

interviews and distribute questionnaires. As the data was being collected, the researcher examined and analyzed it before writing the study report.

3.9 Reliability and Validity of Research Instruments

Coleman (2013) argues that to ensure the accuracy and reliability of data, the researcher must have a clear understanding of it. The concept of validity centers on ensuring that the intended meaning of the study is accurately reflected in the data being analyzed.

3.9.1 Pretesting of the Questionnaire

The researcher achieved successful triangulation by asking the same questions in different ways, resulting in consistent findings across questionnaire implementation and interviews conducted at various times. The study also ensured sample size consistency across data collection methods. A pre-test was conducted to ensure clear and understandable questions. The questionnaire was pretested by six Bachelor of Commerce students at Bindura University, who provided feedback leading to necessary amendments. The revised questionnaire was then administered to the study participants.

3.10 Ethical Considerations

According to Robertson et al. (2011), there are ethical issues to make sure that we are being honest and that we are doing our part to reflect on the subjects of our research. There was no requirement for authors to participate, and respondents were allowed to fill out the survey on their own will. Because surveys were distributed anonymously and participants were warned against writing down their names on the forms, confidentiality was assured

3.11 Data Presentation and Presentation Tools

The information gathered through questionnaires, and personal observations was provided for this study in the form of statistical aid such pie charts, bar graphs, and tables. The quantitative information was created, and the percentages of certain replies received from the respondents were visually shown for the lay audience. As a result, the study organized the data, which consisted mostly of questionnaire data reinforced by interview data, in a sequential and logical manner. Tables proven to be an effective tool for the exact and logical depiction of the summarized data, making their usage crucial. Additionally, graphs were employed to display data and aid in user comprehension, keeping in mind that they were stress-free.

3.12 Data Analysis

Data analysis, according to Rashid (2012), include condensing gathered data to a manageable amount, improving summaries, trend-spotting, and using statistical analysis. Data analysis is a group of techniques that aids in establishing descriptions, identifying patterns, and clarifying

facts. To make sense of anything, information must be gathered. The study evaluated the collected data using the mean, mode, median, and standard deviation.

The statistical package for the social sciences (SPSS) software program was used to examine the data. This approach was chosen for data analysis because it offers options for data management, enabling the researcher to execute case selection, the development of derived data, and file reshaping. Additionally, SPSS offers fundamental features including a statistics application, a modeler tool, For the survey software, a designer of visualizations and text analysts are used.

SPSS offers advantages of its own. It imports specified variable names, types, titles, and value labels automatically. Additionally, there are countless chances for statistical analysis after survey data is entered into SPSS.

On the other hand, purchasing SPSS software is pricey.

3.13 Summary

Critical research methodologies, study designs, and research tools were covered throughout the chapter. The study's target demographic, sample size, and sampling techniques are highlighted in this chapter. Data sources, data collection tools, and the data collection process were also covered. The presentation and analysis of the findings are covered in the next chapter.

CHAPTER FOUR: PRESENTATION AND ANALYSIS OF RESEARCH FINDINGS.

4.1 Introduction

In order to address the research objectives and aims while taking into account the research study difficulty, the outcomes of this study were examined in this chapter. The unprocessed information was collected and analyzed using questionnaires. Data presentation, data response rate analysis, and process interpretation are all topics covered in this chapter.

4.2 SPSS Reliability Test

Table 4.2 Reliability Statistics

Cronbach's Alpha	N of Items
.836	21

Source: Research Findings

The table 4.2 above shows the results of SPSS reliability test that has a high coefficient which is closer to 1 which means the data was reliable.

4.3 Response Rate

80 questionnaires were handed out to accounting departments of various Wholesaling SMEs in Bindura town. A satisfactory response rate of 82.5% was obtained which means that 66 questionnaires were responded.

4.4 Demographics of the Respondents

4.4.1 Gender

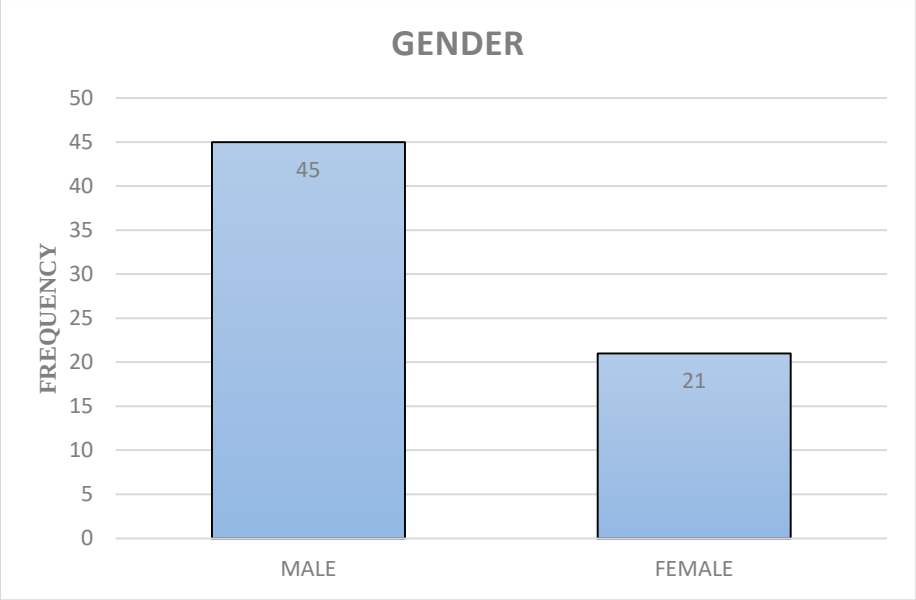

Figure 2 Gender

Fig 4.4.1: Gender distribution of respondents.

The graph on Fig 4.3.1 above shows that, out the 66 responded questionnaires, 45 were Male (which is 68.2%) and 21 were female (which is 31.8%).

4.4.2 Age of respondents.

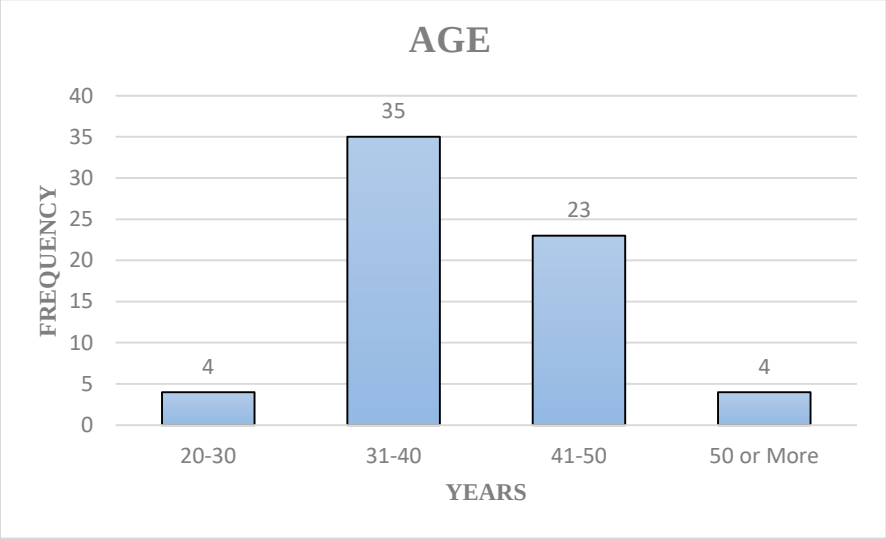

Figure 3 Age of Respondents

Fig 3: Age distribution of respondents.

The graph above shows that out of the 66 respondents, 4 were in between 20 to 30 years of age (6.1%), 35 were between 31 to 40 years (53%), 23 respondents were between 41 to 50 years (34.8%) and lastly 4 respondents were 50 years and above (6.1%). Most respondents were in between 31 to 40 years of age which indicates that most of these firms are employing an energetic workforce.

4.4.3 Level of Education

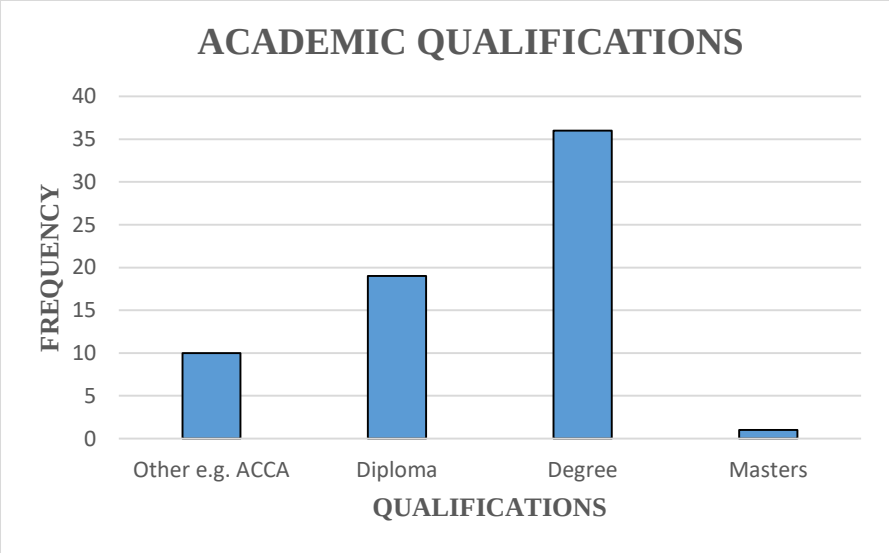

Figure 4 Level of Education

Fig 4. Level of education for respondents.

The results on Fig 4 above show that out of the 66 respondents, 10 (15.2%) respondents had ACCA qualifications or other, 19 respondents (28.8%) were Diploma holders, 36 respondents (54.5%) were degree holders and 1 respondent (1.5%) was a Master's holder. This indicates that the majority had degrees as their highest qualification. According to Mc Kenzie (2010), it is crucial to take into account one's education degree since it influences how policies are implemented and also represents the competency of the individual.

4.3.4 Work Experience

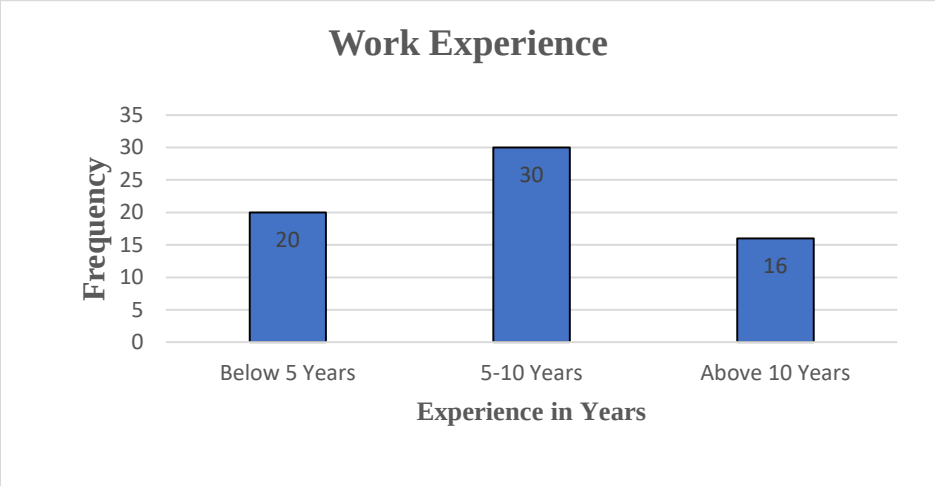

Figure 5 Work Experience

Fig 5: Work Experience of the respondents.

The graph on Fig 5 above shows the different working experience that the respondents possess. Most of the respondents (30) have working experience that is between 5-10 years whereas a few respondents have above 10 years' experience which might be caused by high mobility of labor in the industry.

4.5 Inventory Turnover Ratio

The research also sought to investigate the effect of inventory turnover ratios on profitability and also the nature of the relationship between the two variables. Inventory turnover ratios being part of inventory management, its influence on profitability was questioned. The results analyzed using SPSS are presented in table 4.2 below.

Table 4.2 Inventory Turnover Ratio.

	N	Mean	Std. Deviation
Prioritization of Inventory Turnover Ratio by the business	66	4.486	0.444
Business sets inventory turnover ratio targets	66	3.83	1.494
Business frequently tracks inventory turnover ratio	66	3.65	1.342
Implementation of Inventory Turnover Ratios For the Past 5 years	66	4.5476	0.3557
Importance of higher Inventory Turnover Ratio to Business	66	4.05	0.9675
Valid N (listwise)	66		

Source: Research Findings.

The findings in the table 4.2 above show that most respondents agreed that they were prioritizing the inventory turnover ratios to a very large extent. This is supported by the calculated mean 4.486 that is greater than 4 which means the majority were prioritizing to a very large extent. This was also supported by a small standard deviation of 0.444 which is less than 2. More so, most of the respondents stated that they were setting inventory turnover ratio targets to a moderate extent which is supported by a mean of 3.83 and standard deviation of

1.494. On the implementation of inventory turnover ratios, the majority stated they were implemented to a very large extent which is supported by a higher mean of 4.5476 and a lower standard deviation of 0.3557. Lastly, on the importance of turnover ratios to the performance of business, the majority of respondents stated the ratios are important to a very large extent.

4.6 Inventory Conversion Period.

The study also sought to investigate the effect of inventory conversion period on profitability and also the nature of relationship between the two variables. The respondents were required to determine the extent to which inventory conversion period affects profitability. The response of various respondents analyzed by SPSS are shown in table 4.3 below.

Table 4.6: Inventory Conversion Period.

	N	Mean	Std. Deviation
Awareness of Inventory Conversion Period	66	3.67	1.396
Prioritization Of Inventory Conversion Period	66	4.18	0.893
Setting of Inventory Conversion Period Targets	66	4.32	0.705
Implementation Of Inventory Conversion Period for the Past 5 years	66	4.27	0.904
Valid N (listwise)	66		

Source: Research Findings.

The results in table 4.3 above shows that most respondents are aware of inventory conversion period to a moderate extent. This is supported by a mean of 3.47 which lies between the ranges of 3 to 3.9 which means that it's a moderate response. This was also supported by a standard deviation of 1.396. Most respondents also stated that they prioritized inventory conversion period to a large extent which is supported by a mean of 4.18 which falls within the range of 4 to 4.19 which means they prioritized to a very large extent. This is also supported by a low

standard deviation of 0.893 which is less than 1. Moreover most respondents stated that they were setting inventory conversion period targets to very large extent which is supported by the Mean of 4.32 and a low standard deviation of 0.705. Lastly on the implementation of inventory conversion period, most respondents stated they were implemented to a very large extent. This is supported by a mean of 4.27 which is greater than 4 which means they agreed to a very large extent. This is also supported by a low standard deviation of 0.904.

4.7 Inventory Leanness.

The study also covered the effect of inventory leanness on the profitability of SMEs and also investigation of the relationship between the two variables. The different responses were gathered and analyzed using SPSS as show in table 4.4 below

Table 4.4: Inventory Leanness.

	N	Mean	Std. Deviation
You are aware of inventory leanness	66	3.50	1.350
Prioritization of Inventory Leanness	66	4.20	.980
Implementation of Lean inventory practices e.q JIT,ABC Method,e.t.c	66	4.41	1.215
Keeping Lean Inventory is Crucial	66	4.29	0.322
Valid N (listwise)	66		

Source: Research Findings.

The table 4.4 above shows that most respondents are aware of inventory leanness to a moderate extent. This is supported by the mean of 3.50 which falls within the range of 3 to 3.9 which means most of the responses were moderate. This is also supported by the standard deviation 1.350. On the prioritization of inventory leanness, most respondents stated they prioritized to a very large extent which is supported by a mean of 4.20 which is greater than 4. This is also supported by a low standard deviation of 0.980 which is less than 1. Lastly on the implementation of Lean inventory practices like JIT, most respondents agreed to a very large

extent which is supported by a mean of 4.29 which is greater than 4. It is also supported by a very low standard deviation of 0.322.

4.8 Profitability of the SMEs.

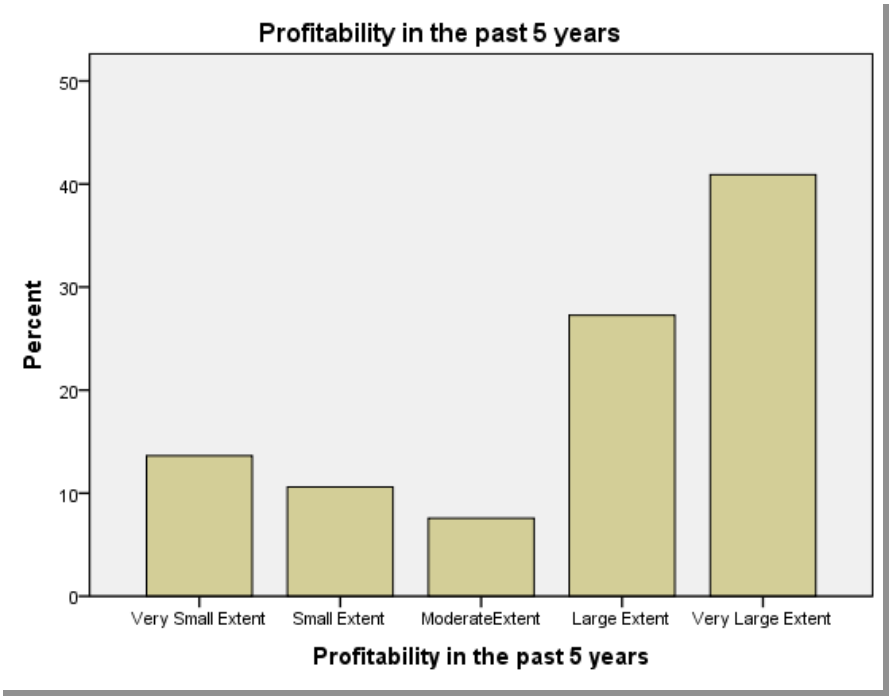

Figure 6 Profitability Of Smes

Fig 6 Profitability of firms.

The graph above shows the different extents of profitability for the SMEs in the past 5 years. Only 9 respondents (13.6%) stated they were experiencing profits increase to very small extent, 7 respondents (10.6%) stated they were experiencing profit increase to a small extent, 5 respondents (7.6%) were moderate on their stance, 18 respondents (27.3%) experienced increase in profits to a large extent and lastly 27 respondents (40.9%) stated they their profits were increasing to a very large extent. The mode was on a very large extent which means that most of these firms were experiencing an increase in profits for the past 5 years. An increase in inventory management practices like inventory turnover ratio, Inventory conversion period and inventory leanness might be the factors that have led to this.

Anichebe & Agu (2013) evaluated how effective inventory management affected firms' performance in Nigeria. 248 respondents made up the sample for the study, and data were then gathered using questionnaires and interviews. The study discovered a strong link between

inventory control and organizational success. The study found a high positive association between inventory management and an organization's profitability as well as a significant impact of inventory management on productivity inside an organization.

However, past research is also supporting the notion that inventory control and profitability are positively correlated. Despite variations in company sectors, geographical locations, and demographic preferences, the results indicate the same association between the factors. Profit therefore serves as a motivator for good inventory management.

4.9 Regression Analysis

This study seeks to investigate the effect of inventory turnover ratio, inventory leanness and inventory conversion period on the profitability of SMEs. Following hypotheses were proposed:

H_1: There is a significant positive effect of inventory turnover ratio on profitability.

H_2: There is a significant positive effect of inventory conversion period on profitability.

H_3: There is a significant positive effect of inventory leanness on profitability.

4.9.1 Regression Analysis Output Tables

Table 4.9.1 : Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.782[a]	.581	.575	1.419

Table 4.9.2 : Anova

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10.687	3	3.562	1.769	.000[b]
	Residual	124.844	62	2.014		
	Total	135.530	65			

Table 4.9.3 : Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.756	.976		1.799	.077
Inventory Turnover Ratio.	1.52	.135	2.048	.384	0.048
Inventory Conversion Period	.224	.181	.162	1.234	.0222
Inventory leanness	.206	.145	.184	1.424	0.0159

As shown in the tables above, the dependent variable (profitability) was regressed on independent variables of inventory turnover ratio, inventory leanness and inventory conversion period. The independent variables significantly predict profitability F (3:63) =1.179, p< 001, which indicates that the 3 independent variables under study have a significant effect on profitability.

Moreover as shown in table 4.8.2 , the R^2 = .581 means that the model explains 58.1% of the variance of profitability. Additionally, coefficients were further assessed to ascertain the effect of each of the independent variables on the dependent variable (profitability).

4.9.2 Results for Hypothesis 1: Effect of Inventory Turnover Ratio and Profitability

H_1 evaluates whether inventory turnover ratio significantly and positively affects profitability. The results revealed in table 4.8.3 show that inventory turnover ratio has a significant and positive effect on profitability (B=1.52, t=2.048, Significance = 0.048).The significance is less than 0.05 which indicates that the model is statistically significant. Hence, H1 was supported.

4.9.3 Results for Hypothesis 2: Effect of Inventory Leanness on Profitability

H_2 evaluates whether inventory leanness significantly and positively affects profitability. The results revealed in table 4.8.3 show that inventory leanness has a significant and positive effect on profitability (B=0.206, t=1.424, Variance= 0.0159). Hence, H2 was supported.

4.9.4 Results for Hypothesis 3: Effect of Inventory Conversion Period on Profitability

H_3 evaluates whether inventory conversion period significantly and positively affects profitability. The results revealed in table 4.8.3 that inventory conversion period has a significant and positive effect on profitability (B=0.224, t=1.234, Variance= 0.022). Hence, H3 was supported.

Hence the empirical model to be estimated becomes: $\mathbf{P= B_0 + B_1IT + B_2IC + B_3 IL + E}$

Where B_0 = Constant

IT= Inventory Turnover

IC= Inventory Conversion Period

IL= Inventory Leanness.

This can be further solved into **P = 1.1756+ 1.52IT + 0.224IC + 0.206IL + E**

4.10 Discussion of Results

According to the regression analysis done, there is a strong positive relationship between inventory management and the profitability of the SMEs. This is in line with the research done by Raheman, Sekeroglu, and Altan (2014) on the impact of inventory management on firms' ability to compete in Turkey's spinning, fruit, wholesale, and retail industries from 2003 to 2012. The research used the computer software SPSS 20 edition to examine data taken from the income statements of chosen organizations using the regression and correlation methods. The results revealed a link between inventory control and productivity in the food business. Anichebe & Agu (2013) found the same results when they examined the effects of good inventory management on organizations' financial performance in Nigeria. This backs up the study's findings.

However on the concept of inventory turnover ratio, there study concluded that there is a positive relationship between inventory turnover ratio and profitability yet this is not in line with the research carried by Panigrahi (2013) on top 5 Indian cement companies where they concluded an inverse relationship between the 2 variables. This might be because they measured using gross operating income which has a negative relation to financial debt ratio. Also other research contradict the findings of this research on inventory conversion period Researchers like Nasr (2007) and Panigrahi (2013) found a negative correlation between profitability and the inventory conversion period.. This might be because of differences in the nature of businesses since most SMEs of this research were grocery suppliers but the other research were on cement companies which require completely stock holding periods

4.11 Summary

The processes for presenting data and an examination of data response rate were the main topics of chapter four. The trend was measured using the mode. The data came from the performed and evaluated surveys and interviews. The summary, conclusion, and suggestions are covered in the next chapter.

CHAPTER 5: FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides an overview of all earlier chapters, the study's findings, the study's conclusion, and recommendations on the findings in light of the research aims. Important findings that were taken into consideration while recommending the best inventory management techniques to boost overall efficiency and financial performance. Researchers identified flaws that were utilized to create suggestions for improvements that may be made.

5.1 Research Findings

5.1.1 The findings on the effect of inventory management on profitability of SMEs

Most respondents believed that inventory management is pivotal to the financial performance of their respective companies. The majority of the respondents agreed with the fact that an improvement in their inventory management will lead to an increase to their profitability. This means that there is a direct relationship between the two variables. This also means that there is a positive relationship between inventory management and profitability.

5.1.2 The findings on the inventory turnover ratio and the extent to which it affects profitability.

Firstly, most respondents stated that this aspect of inventory management implementation is on the rise for the past five years. Also, most respondents believed that inventory turnover ratio is being prioritized by most SMEs which is a good thing for their financial performance. Lastly, the majority of the respondents stated out that inventory turnover ratio affected their profitability to large extent which means this aspect of inventory management positively affects their financial performance.

5.1.3 The findings on Inventory Conversion Period and the extent to which it affects profitability.

It has been found that in the past 5 years, the implementation of the concept of inventory conversion period have been on the rise because of various reasons such as ICT and entrepreneurial education. Also, most respondents believed that inventory conversion period affected the profitability of their business to a greater extent. Also, respondents believed the smaller the conversion period, the more the profit they make. This means that there is an inverse relationship between inventory conversion period and profitability.

5.1.4 The findings on Inventory Leanness and the extent to which it affects profitability.

The first finding is that, the implementation of inventory leanness in the past 5 years have been on the rise due to various reasons. Most respondents believed that keeping a lean inventory can improve their profits since lean inventory have low costs. Also, most respondents agreed that inventory leanness affects their profitability and there is an inverse relationship between the two variables. Lastly Inventory leanness affected their profit to a larger extent

5.2 Conclusions

From the study, inventory management has a huge effect on the profitability of SMEs specifically those in the Zimbabwean wholesaling business. Inventory must be prioritized by the SMEs since it's a cornerstone for profitability. According to the data collected and analyzed, most SMEs in Zimbabwe are now prioritizing this aspect but still not at full capacity. The study also concludes that components of inventory management such as inventory turnover ratio, inventory conversion period and inventory leanness all have a strong positive relationship with profitability. This means that if these 3 aspects are implemented by SMEs, they will lead to an increase to profitability.

5.3 Recommendations

The following are suggestions that SMEs in Zimbabwe should adopt to maximize profit through inventory management:

- Adoption and implementation of the circle counting program. This is a control measure used by businesses to ensure that physical inventory counts match inventory records. This approach entails doing a routine count and documenting the modification of particular products. This can improve inventory leanness and conversion period of the SMEs.
- Adoption of electronic management systems by the use of barcodes ,soft wares and Point Of Sale systems such as such as Katana, Ordoro, Zoho, Square, Upserve and Spocket. These softwares are antidotes to most of inventory management problems stock-outs and overstocking since they provide a stock update at any time.
- Introducing an independent inventory management department. Most SMEs don't have a department dedicated to just inventory management. It is very crucial especially to wholesaling businesses that deal with large sums of inventory.

5.4 Areas of Future Study

The following topics should be studied in the future since they are related to this research:

- Impact of IT on inventory management system

- Computerisation and electronic control of material management system

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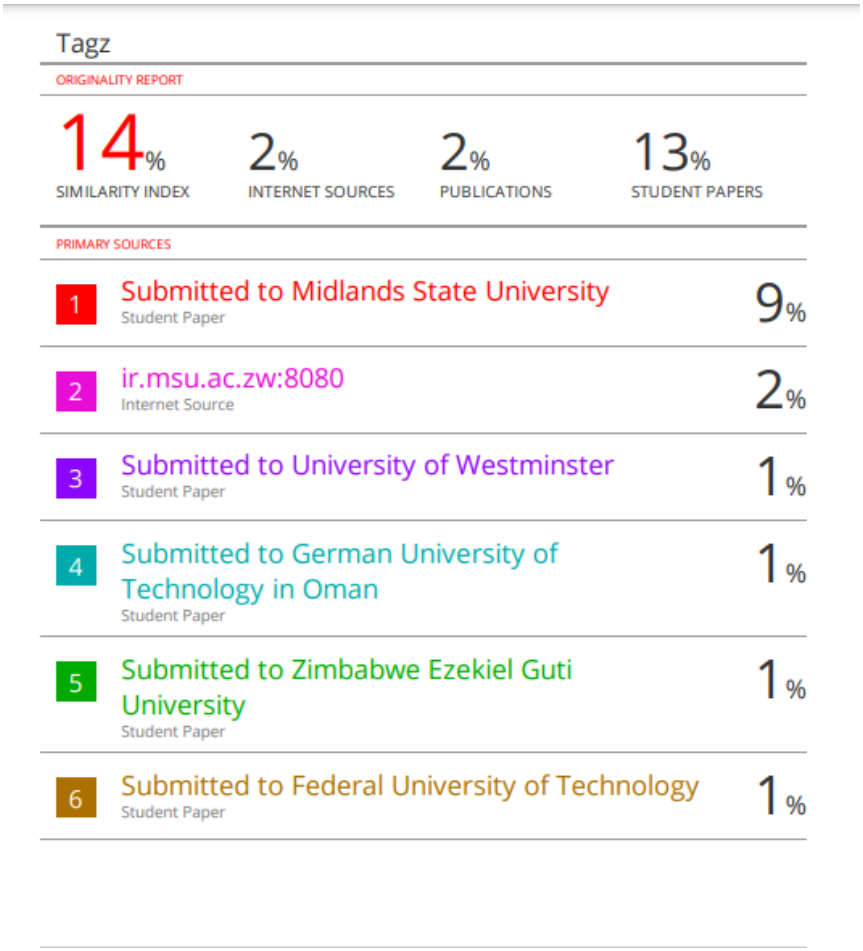

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QUESTIONNAIRE

This questionnaire was assembled by Simbarashe Mwarutsa, a final year student at Bindura University of Science Education. It is intended to collect data for an investigation entitled "an assessment of the effect of inventory management on profitability of SMEs". Your responses will be preserved extreme secrecy and will exclusively be used for educational purposes.

Instructions

1. Do not write your name on the questionnaire
2. Show response by ticking the appropriate answer box and fill in the relevant spaces provided.

Part A General Questions

Please kindly tick against the correct answer

1. GENDER

MALE	
FEMALE	

2. AGE

20 -30 YEARS	
31-40 YEARS	
41-50 YEARS	
50 + YEARS	

3. WORK EXPERIENCE

BELOW 5 YEARS	
5-10 YEARS	
ABOVE 10 YEARS	

4. HIGHEST QUALIFICATION OBTAINED

PHD	
MASTERS	
DEGREE	
DIPLOMA	
OTHER e.g. Acca	

Part B: Inventory Turnover Ratio

Please indicate using the scale which of the following inventory management practices are Successful at your company.

Scale: (1=very small extent, 2= small extent, 3= moderate extent, 4= Large extent, 5= to a Very large extent (Tick as appropriate)

		1	2	3	4	5
1	Your business prioritizes inventory turnover ratio					
2	Your business sets inventory turnover ratio targets					
3	Your company frequently tracks inventory turnover ratio.					
4	Your business often reviews set targets on inventory turnover ratio					
5	High inventory turnover ratio is important to the profitability of your business.					

Any other? Please indicate.

……

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Part C: Inventory Conversion period

Please indicate using the scale how your company treats the following inventory management concepts.

Scale: (1=very small extent, 2= small extent, 3= moderate extent, 4= Large extent, 5= to a Very large extent (Tick as appropriate)

		1	2	3	4	5
1	You are aware of inventory conversion period					
2	Your business prioritizes inventory conversion period					
3	Your business often sets targets of inventory conversion period					
4	Your business frequently tracks inventory conversion period					
5	Your business sets inventory conversion period targets.					
6	Your business often reviews set targets on inventory conversion period					
7	Your business evaluate and manage the risks associated with a low inventory conversion period					
8	A low inventory conversion period affects the profitability of your business					

Part D: Inventory Leanness

Please indicate using the scale how your company treats the following inventory management concepts.

Scale: (1=very small extent, 2= small extent, 3= moderate extent, 4= Large extent, 5= to a Very large extent (Tick as appropriate)

		1	**2**	**3**	**4**	**5**
1	You are aware of inventory leanness					
2	Your business prioritizes inventory leanness					
3	Your business have implemented lean inventory practices					
4	Maintaining lean inventory is important to the profitability of your business					

Part D: Profitability

Kindly indicate using the scale below on the effects inventory management practices on Operational efficiency in the firm

Scale: (1 = Strongly Disagree, 2 = Disagree, 3 = No Opinion, 4 = Agree,5 = Strongly Agree (Tick as appropriate)

	Operational Performance	**1**	**2**	**3**	**4**	**5**
17	The business is experiencing increase in profitability					
18	Inventory conversion period affects profitability					
19	Inventory turnover affects profitability					
20	Inventory leanness on Profitability					

Any other? Please indicate.

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Thank you for participating