THE EFFECTS OF INVENTORY MANAGEMENT ON SALES PERFORMANCE IN SMALL AND MEDIUM ENTERPRISES (SMEs): A CASE STUDY OF LYALABBISI FARM SUPPLY LIMITED

BY

KIMERA DENNIS

2011/U/HD/359/MBA

DISSERTATION REPORT SUBMITTED TO THE GRADUATE SCHOOL IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER'S DEGREE IN BUSINESS ADMINISTRATION OF KYAMBOGO UNIVERSITY

OCTOBER , 2013

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DECLARATION

I, Kimera Denis, declare that this research dissertation is my original piece of work and has never been submitted for any degree in any University and that the material that is not my original is clearly acknowledged.

STUDENT:

MR KIMERA DENIS

Signature ..... *Kimera Denis* .....

Date ..... 16 | 1 | 2014 .....

APPROVAL

This is to certify that this research dissertation was done under our supervision and has been submitted to Kyambogo University for examination with our approval as the candidate's supervisiors.
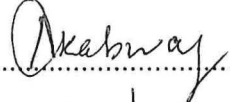
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Signature ....

Date ....16/01/2014...........................

SECOND SUPERVISOR:

MR STEVEN-AKABWAI

Signature ....Akabway.............................

Date ....16/01/2014...........................

DEDICATION

First, I am grateful to almighty God for having enabled me accomplish my dissertation successfully.

I would like to dedicate this report to my relatives especially my mum, Ms Easter Nabirinzi, and my aunties, Ms. Jane Nakiyemba and Ms. Josephine Nassimba who have given me a chance to study and have also seen me through my dissertation.

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TABLE OF CONTENTS

ABSTRACT

The study examined inventory management and sales performance. The objectives of the study includes; the effects of material planning on sales performance, the effects of stock levels on sales performance, and the effects of inventory management on sale performance in SMEs.

The researcher used a quantitative cross sectional survey design during data collection and secondary sources such as text books, journals, magazines, internet, reports and conference proceedings. The study also reveals empirical and theoretical literature on the variable of the topic of study.

Findings indicated that there are effects of inventory management on sales Performance in small and medium enterprises (SMEs).

The researcher recommends that Lyalabbisi Farm Supply Limited should forecast market for its products so that it stocks enough inventories to avoid under stocks, fix the stock levels to avoid inadequate stocks or stock outs; minimize its inventory expenses by using skilled labour, increase its sales by widening the market for its products, identify the order quantity that minimizes total cost of stock holding, stock ordering and purchase costs in order to maximize profits, put into consideration inventory management when planning for better profits in the coming years; and minimize the cost of production as lowest as possible.

Therefore inventory management must be emphasized in Lyalabbisi Farm Supply Limited as a way of improving sales performance of the company and raising its profitability. This should be done by sensitizing inventory management in the company that is to say making sure all employees understand inventory management and its importance to the company.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

The study was undertaken in order to assess the effects of inventory management on sales performance in Small and Medium Enterprises using Lyalabbisi Farm Supply Limited as a case study. This chapter examines; the background to the study, statement of the problem, objectives of the study, research questions, scope of the study, significance of the study and definitions of key terms.

1.1 Background to the study

According to Chalmers (2007), Inventory management refers to the various techniques and controls used to ensure that any stored resources used to satisfy current and future needs of the organization are in right place at the right time in the right quantity. The different types of inventories include raw materials, work in progress inventory, finished goods and supplies such as stationary among others. The inventory management techniques that can be used include; the Economic Order Quantity (EOQ) approach, the Just In Time approach, the Activity Based Costing technique, and Re-order point.

Cybart (2005) looks at inventory management as primarily about specifying the size and placement of stocked goods. He further agreed that inventory management is required at different locations within a facility or within multiple locations of a supply network to protect the regular and planned course of production against the random disturbance of running out of materials or goods. According to Floyd (2000), the scope of inventory management concerns the

fine lines between replenishment lead time, carrying costs of inventory, asset management; inventory forecasting, inventory valuation, inventory visibility; future inventory price forecasting, available physical space for inventory, quality management; replenishment, return and defective goods and demand forecasting.

According to Lucey (2002), in profit making organizations, inventory management is necessary to ensure that the organization overcomes the costs of keeping inventories and to maintain an optimum level of inventories if such organizations are to remain profitable. Lucey (2002) and other scholars agreed that the most common costs associated with investment in inventories are ordering costs; carrying costs and stock-out costs and these can only be overcome by maintaining an optimum level of investment in inventory. Dopuch et al (2009) assert that the above costs are incurred when a firm has inadequate stocks yet these items are demanded. They result from under stocking and short deliveries and lead to missed opportunities as well as consumer dissatisfaction. This makes it crucial for the organization to maintain an optimum level of inventories and thus the need for an effective inventory management system.

Sales performance entails the quality and sales volume (quantity supplied) to the market. According to Chalmers (2007), sales volume is the actual number of units sold and the budgeted number, multiplied by the budgeted selling price per unit; reflecting sale volume, Sale Volume Variance (Actual Sales-Budgeted Sales). However, if a sales transaction is not made, the firm still collects the shopper's behavioral data and stores it in a marketing database. The firm then has the opportunity to segment and analyze this data in order to learn more about a particular customer shopping habits. An analysis can then be performed to determine why this person did not make a purchase as well as what can be done differently to persuade this person to buy their product. It is therefore important for a firm to have a sound, effective and well-coordinated

inventory management system because the business environment is rapidly changing, highly competitive and it drastically affects the sales performance of the firm.

Over the Years, Lyalabbisi Farm Supply Limited has constantly endeavored to introduce better and more effective pest control pesticides products for its esteemed customers. However, this kind of innovation has been achieved due to its vision and foresight coupled with the desire to constantly improve in order to retain its premier status in the country today with different approaches to inventory management.

1.2 Statement of the problem

Pandey (2000), asserts that business experts commonly cite inventory management as a vital element that can spell the difference between success and failure in today's keenly competitive business world yet inventory can be a nuisance, necessity or convenience. Firms place stock in a subsidiary rather than a central position, being an important element in operational effectiveness that often appear on the balance sheet as biggest current assets taking up a lot of money (Conie, 2004). Despite the inventory management measures put in place by SMEs like Lyalabbisi Farm Supply Limited ranging from, re-order point technique, first in first out (FIFO) and last in first out (LIFO), the firm's records still show problem related with inventory such as low sales, low profits, limited return on investment and a small market share which results in poor sales performance (Brigham, 2007) . Basing on the above evidence, it is questionable whether the inventory management affects sales performance hence requiring an investigation.

1.3 Theoretical review

Resource Based View theory holds that in a free-market economy firms can only make profits determined by industry structure and will not be able to sustain abnormal returns due to competition and new entries. However, the Resource Based View (RBV) of the firm argues that firms can do so if they own and are able to utilize their unique resources. RBV dates back to Penrose (1959) and Barney (2001) whose theories suggest that some firms can gain competitive advantages due to the heterogeneous nature of firms' tangible and intangible assets and resources. Particularly, the resources of firms must have the following four characteristics: valuable, rare, imitable and non-substitutable. Multinational firms may be able to earn abnormal returns in the sense that they can exploit their unique resources, especially their intangible resources, such as patents, technologies, processes, marketing and management skills, and apply them to foreign markets. However, at Lyalabbisi Farm Supply Limited where the study is confined, this may be difficult to attain because of perfect competition among the business enterprises due to product homogeneity.

1.4 Purpose of the study

The purpose of the study is to examine the effects of inventory management on sales performance in Small and Medium Enterprises using Lyalabbisi Farm Supply Limited as a case study.

1.5 Objectives of the study

i. To establish the effects of material planning on sales performance in SMEs.

ii. To determine the effects of stock levels on sales performance in SMEs.

iii. To examine the effects of inventory management on sales performance in SMEs.

1.6 Research questions

i. What are the effects of material planning on sales performance in SMEs?

ii. What are the effects between stock levels on sales performance in SMEs?

iii. What are the effects inventory management on sales performance in SMEs?

1.7 Scope of the study

The study confined itself to Lyalabbisi Farm Supply Limited located along Nakivubo Avenue in Kampala City, Central Division as a representative of the organizations affected with inadequate inventory management which affects their sales performance. The researcher selected Lyalabbisi Farm Supply Limited because; it is near his place of work, easy contact with management and the company is one of SMEs with low sales brought about by poor inventory management.

The research focused on inventory management as the independent variable and sales performance as the dependent variable since the two are interlinked variables. It further considers the effects of material planning on sales performance and effects of stock levels on sales performance.

The study lasted a period of three months and it covered the operations of inventory management and sales performance at Lyalabbisi Farm Supply Limited since January 2013 to date. This period gave the researcher dimensions and variations of inventory management in relation to

sales performance so that the researcher would be able to come up with valid conclusion which made the study a reality.

1.8 Significance of the study

The study will benefit the Small and Medium Enterprises as it will enable them understand the effect of material planning and stock levels on sales performance.

The research will be of importance to other researchers in the field of inventory management and sales performance by providing more literature to them on related topics.

The study, when completed, will help the researcher be awarded a master's degree in business administration by Kyambogo University.

1.9 Definition of key terms

Inventory   is assets that are intended for sale, are in process of being produced for sale or are to be used in producing goods

Inventory management   involves all those efforts made by managers to minimize cost including inventory costs to improve profitability levels.

Sales performance   this entails the quality and sales volume (quantity supplied) to the market.

1.10 Conceptual framework.

Figure 1

Independent variable   **Dependent Variable**

Inventory management	Sales Performance
Material planning	Sales growth
• Economic Order Quantity	Profitability
• Material Requirement planning	
• Just In Time	
• ABC analysis	
Stock levels	Government policy e.g. Limited stock in the premise
• Reorder Level	Economic environment e.g. Booms and depressions
• Safety Stock Level	Technology e.g. poor production
• Maximum Stock Level	

Extraneous

Source; Researcher's Conceptualization 2013

According to the conceptual framework, inventory management was conceptualized as the independent variable whereas, sales performance was the dependent variable intervened by other factors. According to the model, inventory management was measured according to material planning and stock levels. The material planning measures are; Economic Order Quantity, Material Requirement Planning, Just In Time and ABC analysis. The stock levels include; Reorder level, Safety stock level and Maximum Stock Level. Sales performance was measured in regard to sales growth and profitability whereas, intervening variables were measured

7

according to government policy e.g. limited stock in the premise , economic environment e.g. booms and depressions and technology e.g. poor production. (See Figure 1).

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews the existing literature on inventory management and sales performance. The chapter presents ideas organized according to the objectives. This chapter further show the varied views, opinions and concepts of different scholars on the subject at hand. It is important to note that the greatest part of the existing literature on the works of other scholars who have written about the topic of the study or those who have addressed similar issues will be discussed to show their gaps.

2.1 Inventory management

Inventory management includes a company's activities to acquire, dispose, and control of inventories that are necessary for the attainment of a company's objectives. The management of inventories concerns the flow to, within, and from the company and the balance between shortages and excesses in an uncertain environment (Tersin, 1988).

According to McPharson (1987), in apparel manufacturing, "inventory management systems are designed to obtain concise and accurate information for control and planning of planned goods, issues, cuts, projections, WIP and finished goods."

Inventory management has been a concern for academics as well as practitioners, in that overall investment in inventory accounts for relatively large part of a company's assets. Inventory may account for 20 to 40% of total assets (Donselaar, 1996). Inventories tie up money, and success or failure in inventory management impacts a company's financial status. Having too much inventory can be as problematic as having too little inventory. Too much inventory requires

unnecessary costs related to issues of storage, markdowns and obsolescence, while too little results in stock outs or disrupted production. Besides, long-run production associated with a high level of inventory conceals production problems (e.g. quality), which can damage a company's long term performance (Vergin, 1998).

Therefore, the primary goal of inventory management has been to maximize a company's profitability by minimizing the cost tied up with inventory and at the same time meeting the customer service requirements (Ellram,1998). Traditionally, inventories caused conflicts between functional units within a company or between companies. For example, within a company, purchasing, production, and marketing people want to build a high level of inventory for raw material cost reduction, efficient production run, and customer service level, while warehousing and finance people want to reduce the inventory level for storage space and economic reasons (Tersine, 1988).

2.1.1 Definition and Type of Inventory

Inventory can be defined as any idle resource or tangible asset which can be seen, weighed, and counted. This includes supplies, raw materials, work in process (WIP), and finished goods (Tersine, 1988). Goldratt and Cox's (1992) definition is "money the system invests in things that it intends to sell: materials waiting to be processed, work in process, and finished goods".

Tersine (1988) defines raw materials, WIP, finished goods and supply. Raw materials are items purchased from suppliers to be used as inputs into the production process and modified or transformed into finished goods. WIP refers to partially completed final products that are still in the production process. Finished goods are final products available for sale, distribution, or storage. Supplies are items for maintenance, repair, and operating supplies (i.e., pencils, paper, light bulbs, typewriter, ribbons, and facility maintenance items). Supplies are excluded from this

study's discussion because they are not a part of the final product. Of the three classes of inventory that become final products, poor finished goods present the worst problem because finished goods contain the most value and require the highest inventory holding cost.

2.1.2 Roles of Inventory

Traditionally, a relatively high level of inventory has been kept in a company. The reasons for building inventory can be found in inventory's five functional roles: economies of scale, balance of supply and demand, specialization in manufacturing, protection from uncertainties, and inventory as buffer (Vergin, 1998).

First, purchasing or producing a bulk of items (i.e., economies of scale) enables a company to cut costs by allowing setup cost reduction, price discounts, and spreading the factory overhead expenses.

Second, inventory provides balance between supply and demand. Supply and demand do not always match at any given time for reasons such as seasonal demand pattern or seasonal supply pattern. To maintain a stable workforce and production scheduling, and to avoid problems due to capacity limits, production can be used to build inventory. Peak demand can be anticipated by building inventories in excess of current demand.

Third, inventory enables a manufacturer to specialize in the item by obtaining focused factory and learning-curve effects. Focused factory is a small factory dedicated to a specific product with a single product line to maximize productivity and quality. According to learning 26 curve effect, a worker can gain skill and efficiency from their own experience from the repetitious practice with the long product runs.

Fourth, inventory serves to protect uncertainties in demand and supply. Inventory is necessary in case demand for finished goods fluctuates or if the suppliers' ability to meet the buyers' demand

11

is not reliable. Raw material inventory is required in case of supply shortage and price increases. WIP inventory is needed to avoid a shutdown and stabilize workflow. Finished goods inventory improves customer service levels by avoiding stock outs due to variability in demand and manufacturing lead-time.

Lastly, inventory is used as buffer in the supply chain. It takes time to transit inventory from one operation to another within a company or one node to another in the supply chain (i.e., supplier to manufacturer, manufacturer to distributor, distributor to customer). A certain amount of inventory throughout the chain ensures the independence of each operation team or channel member. Raw materials inventory isolates the supplier from the user, in-process inventory isolates production departments from each other, and finished goods inventory isolates the customer from the manufacturer.

2.1.3 Importance of inventory

Inventory plays an negligible role in the growth and survival of an organization in the sense that failure to an effective and efficient management of inventory, will mean that the organization will lose customers and sales will decline. Emphasizing on the importance of inventory on the balance sheet of companies, Coyle, (2003) state that "inventory as an asset on the balance sheet of companies has taken an increased significance because of the strategy of many firms to reduce their investment in fixed assets, that is, plants, warehouses, office buildings, equipment and machinery.

According to Holdren (1999), an important industrial marketing relationship exists between inventory managers and commercial lending officers who write these inventory loans. Inventory managers need to provide their lenders with sufficient information to obtain financing at the

lowest rates. Issues of risk and return of inventory loans are matters of concern for both inventory managers and creditors.

Inventory management is an important concern for managers in all types of businesses. For companies that operate on relatively low profit margins, poor inventory management can seriously undermine the business. The challenge is not to pare inventories to the bone to reduce costs or to have plenty around to satisfy all demands, but to have the right amount to achieve the competitive priorities for the business most efficiently (Ritman, 1999).

Finally, according to Ballou (2004), inventories are found in such places as warehouses, yards, shop floors, transportation equipment and on retail store shelves. Having these inventories on hand can cost between 20 and 40 percent of their values per year. Therefore, carefully managing inventory levels makes good economic sense. Even though many strides have been taken to reduce inventories throughout the supply channel, the annual investment in inventories by manufacturers, retailers and merchant wholesalers, whose sales represent about 99 percent of GNP, is about 12 percent of the U.S gross domestic product.

2.1.4 Inventory costs

According to Gourdin (2001), there are three types of costs that must be considered in setting inventory level. These are holding /carrying costs, ordering costs and stock out costs.

Holding /carrying costs are costs such as storage, handling, insurance, taxes, obsolescence, theft and interest on funds financing the goods. These charges increase as inventory levels rise. In order to minimise carrying costs, management makes frequent orders of small quantities.

Ordering costs are those costs associated with placing an order, including expenses related to personnel in a purchasing department, communications and the handling of the related paperwork. Lowering these costs would be accomplished by placing a small number of orders,

each for a large quantity. unlike carrying costs, ordering costs are generally expressed as a monetary value per order.

Stock out costs include sales that are lost, both short and long term. These charges are probably the most difficult to compute, but arguably the most important because they represent the costs incurred by customers (internal or external) when inventory policies falter. Failure to understand these costs can lead management to maintain higher (or lower) inventory levels than customer requirements may justify.

2.1.5 Inventory control system

Inventory control is the activity which organizes the availability of the customers. It co-ordinates the purchasing, manufacturing and distributing functions to meet the marketing needs. This role includes the supply of current sales items, new products, consumables, spare parts, obsolescent items and all other supplies (Wild, 2002).

Wild (2002), adds that the purpose of the inventory control function in supporting the business activities is to optimize the following three targets: customer service, Inventory costs, and operating costs.

According to Hugo (2002), inventory control is ensuring a sufficient level of stock and satisfying demands regarding quantity, quality, time and place and to control prices. They mention four types of inventory control systems: a system with fixed ordering quantities, a cyclical ordering system, a JIT approach, and a materials requirement planning (MRP) system.

Van (2002) argues that the basic characteristic of the system is that whenever stocks are replenished, the same fixed quantity is ordered (the economic order quantity) every time.

The cyclical ordering system's most prominent characteristic is that the level of all inventory items are received at fixed, predetermined times to determine whether sufficient inventory is

available (Badenhorst 2002). The review cycles vary according to the nature of the inventory, but longer review cycles require higher maximum (as well as average) inventory levels. Shorter review cycle however mean more orders and higher replenishment costs.

Just in time systems focus on reducing inefficiency and unproductive time in the production process to continuously improve the process and the quality of the product or service. Employee involvement and inventory reduction are essential to JIT operations (Ritzman, 1999).

The availability of cost efficient computer systems has allowed firms to make great progress controlling dependent demand inventory. A widely used system that controls dependent demand inventory is the material requirements planning (MRP) system. This system relies on the production schedules developed for final part numbers in the master production schedule (MPS) to determine the timing and quantities of materials required for components or subassemblies (Monczka, 2002).

2.1.6 Inventory management improvement

Gourdin (2001) has identified five activities in order to improve inventory management and these include: top management commitment, improved performance of other logistics activities, improved demand forecasting; inventory management software, and postponement.

Because lower inventories have an impact on many different parts of the logistics systems, senior leadership must ensure that all of those activities are working together to meet customer needs without the luxury of excess stock.

Managers should ensure that the rest of the logistics system is functioning efficiently. It may be that inventory policies have evolved as a way to obscure other problems that should be dealt with directly. By reviewing transportation, order processing, and warehousing functions, for example,

management may find that order-cycle variability can be reduced by improving those activities that would lower the need for inventory.

Demand forecasting is also a way of reducing variability, this time in terms of expected versus actual sales. Better forecasting techniques can be utilized to more accurately predict actual sales. Software is currently available for virtually any type of inventory management situation and allows managers to track sales by item. Costs length of time in inventory and other vectors as well. Many of the more comprehensive packages are structured around some variation of material requirements planning (MRP) or distribution requirements planning (DRP) depending on the nature of the inventory concerned. Briefly, MRP manages material and in process inventory for production while DRP deals with finished product inventory. Together DRP and MRP provide precise control over material flow through the logistics system, from supplier to customer.

Postponement involves modifying or customizing products after the main manufacturing process is complete. Final configuration of products can be delayed until the distribution cycle, or even performed after delivery.

2.2 The effects of material planning on sales performance

Every organization that is engaged in production, sale or trading of Products holds inventory in one or the other form. While production and manufacturing organizations hold raw material inventories, finished goods and spare parts inventories, trading companies might hold only finished goods inventories depending upon the business model.

When in case of raw material inventory management function is essentially dealing with two major functions. First function deals with inventory planning and the second being inventory

tracking. Inventory planners' main job consists in analyzing demand and deciding when to order and how much to order new inventories. Traditional inventory management approach consists of models namely: Economic Order Quantity (EOQ) model, Material Requirements Planning (MRP), Just in time (JIT), Reorder point (Q, R) model, and ABC analysis (Nahmias, 1997).

2.2.1 Economic Order Quantity (EOQ) model

Economic Order Quantity method determines the optimal order quantity that will minimize the total inventory cost. EOQ is a basic model and further models developed based on this model include production Quantity Model and Quantity Discount Model.
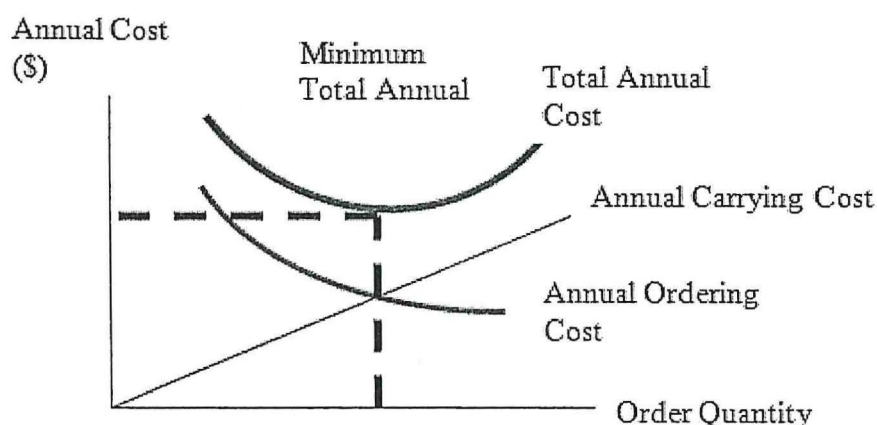
This model pre supposes certain assumptions as under:

- No safety Stocks available in inventory.

- No Shortages allowed in order delivery.

- Demand is at uniform rate and does not fluctuate

- Lead Time for order delivery is constant

- One order = One delivery no shortages allowed.

- This model does not take into account other costs of inventory such as stock out cost, acquisition cost etc to calculate EOQ.

17

In this model, the demand increases for production the inventory gets depleted. When the inventory drops to a critical point the re order process gets triggered. New order is always place for fixed quantities. On receipt of the delivery against the order the inventory level goes up. Through the use of the EOQ model inventory is made available in the stocks for consumption by customer hence leading to increase sales growth and profitability. The increased sale growth and profitability is influenced by limited stock out hence leading to sales performance.

2.2.2 Material requirements planning.

Material requirements planning (MRP) is a computer-based inventory management system designed to assist production managers in scheduling and placing orders for dependent demand items. Dependent demand items are components of finished goods such as raw materials, component parts, and subassemblies for which the amount of inventory needed depends on the level of production of the final product. For example, in a plant that manufactures bicycles, dependent demand inventory items might include aluminum, tires, seats, and derailleurs (Mail-op,2012).

Some of the main benefits of MRP include helping production managers to minimize inventory levels and the associated carrying costs, track material requirements, determine the most economical lot sizes for orders, compute quantities needed as safety stock, allocate production time among various products, plan for future capacity needs and improve in sales performance due to adequate inventory for customers. The information generated by MRP systems is useful in other areas as well. "A range of people in a typical manufacturing company are important users of the information provided by an MRP system," Stevenson (2008) wrote. "Production planners

are obvious users of MRP. Production managers, who must balance workloads across departments and make decisions about scheduling work, and plant foremen, who are responsible for issuing work orders and maintaining production schedules, also rely heavily on MRP output to improve sales performance through sales growth and profitability.

2.2.3 Just in time (JIT)

Just-in-time (JIT) inventory strategy is an inventory management strategy that aims to have as much finished product or intermediate goods as required by a company at the right time, thus reducing inventory costs and wastes without negatively impacting customer supply (Johnston, 2007). The JIT inventory management methodology uses signals, or Kanban, which automatically trigger the replenishment of inventory, cut down on inventory ordering in anticipation of reduced requirements, and improve financial outputs of the business.

JIT inventory management process includes design flow, total quality management (TQM), waste elimination, vendor management, and product and process design (Hollins, 2006). JIT is more commonly used in manufacturing processes rather than end-user facing retail environments. There has been some research into JIT management practices in the restaurant, hotel, and service environment (Shinkins, 2006).

The potential benefits of JIT include; productivity improvements, waste elimination, delivery of supplies at the right quantity and the right time, minimum use of facilities, equipment, materials and human resources, employee involvement, teamwork, and simplification.

A carefully planned implementation of JIT can immediately provide increased teamwork and employee involvement, as the organization works together to find areas of waste to target and

work out ways to reduce waste in that area (Slack, 2007). This results in a simplification of the inventory management system, as well as business processes involved in inventory management. Supplier relationships and data regarding the business are used to identify specific areas where inventory improvements are required. This management process is then used to ensure that the right deliveries occur at the right time to keep the business running until the next delivery (Chambers, 2007). This results in the reduction of waste within the organization, as well as increased efficiency as the inventory management process requires less use of human resources and space.

One general drawback of JIT is that the implementation of JIT, if not integrated into a framework of lean management practices such as total quality management and continuous improvement, can be expensive and counterproductive as it will not be able to achieve the efficiency gains that are one of its major benefits (Hollins, 2006). The JIT management process also requires significant data input that the restaurant may not currently have if it does not have an up to date management system (Shinkins, 2006).

When Just In Time inventory strategy is implemented in an organization, it leads to productivity improvements, waste elimination, delivery of supplies at the right quantity and the right time, minimum use of facilities, equipment, materials and human resources, employee involvement, teamwork, and simplification This finally leads to increase in profits hence influencing good sales performance.

2.2.4 ABC analysis

Stank (2001) asserts that ABC Analysis is a method of tiered inventory or supplier valuation that divides inventory/suppliers into categories based on cost per unit and quantity held in stock or turned over a period of time. This is one of the four methods of overall materials management and inventory management.

ABC analysis can often be confused with Activity Based Costing, a similar sounding term that refers to a method of manufacturing costing that is more refined than the traditional machine-hours method of determining the overhead cost of a finished product (Kaplan, 2008).

According to Shaw (2010), the Purpose of ABC Analysis is to allows inventory/purchasing managers to segregate and manage the overall inventory/suppliers into three major groups. This allows different inventory/supplier management techniques to be applied to different segments of the inventory/suppliers in order to increase revenue and decrease costs.

"A" Category items generally represent approximately 15%-20% of an overall inventory by item, but represent 80% of value of an inventory. By paying close attention in real-time to the optimization of these items in inventory, a great positive impact is possible with minimal increase in inventory management costs.

"B" Category items represent 30%-35% of inventory items by item type, and about 15% of the value. These items can generally be managed through period inventory and should be managed with a formal inventory system.

"C" Category items represent 50% of actual items but only 5% of the inventory value. Most organizations can afford a relatively relaxed inventory process surrounding these items.

There are six basic steps to do ABC Analysis and these are; First, identify the objective for the analysis. Determine success criteria. An ABC analysis can accomplish one of two primary goals: to reduce procurement costs or to increase cash flow by having the right items available for production or direct to customer sales.

Second, collect data on the inventory under analysis. The most common data, generally available from standard accounting already in place, is annual spend per item. This can be in terms of raw purchase dollars, or weighted cost including all ordering costs and carrying costs, if those can be readily calculated.

Third, sort inventory in decreasing order of impact. From most to least, rank order each inventory item by cost.

Fourth, calculate accumulated impact. Using a spreadsheet tool, calculate the cumulative impact of the list of inventory items by dividing item annual cost by total inventory annual spend, then adding that amount to the cumulative total of percentage spent.

Fifth, divide inventory into buy classes. This may not be a precise 80/20 characterization. Take a holistic view and do not concern yourself with an exact 80/20 rule. The goal is to find areas where renegotiating contracts, consolidating vendors, changing strategic sourcing methodology or implementing e procurement may deliver significant savings or ensure in-stock availability of high-volume items.

Sixth, analyze classes and make appropriate decisions. The key to this step is follow-up and tracking. Once strategic cost management is in place based on categories, periodic review is critical to monitoring the success or failure of the decisions.

ABC analysis is a valuable tool to enable companies dedicated to strategic cost management to measure the current status for their materials management system and look for the "low hanging fruit", the simple changes that can yield the largest cost management's benefits in the near and middle term periods leading to improved sales performances (Conies, 1994).

Which model to apply is determined by several factors: order repetitiveness (i.e., single order vs. repeat order), order quantity (i.e., fixed quantity vs. variable quantity), knowledge of demand (i.e., constant demand vs. variable demand, independent demand vs. dependent demand), inventory review frequency (i.e., periodic vs. continuous review), and knowledge of lead time (i.e., constant lead time vs. variable lead time) (Donselaar, 1996). The models are built to answer the basic questions: when to place a reorder and how large an amount to order.

An order can be placed only once if the item is a high fashion item with a very short life cycle. For many products, most items are basic goods and are restocked through repeat orders. When repeating orders, a fixed quantity can be ordered whenever the inventory level drops below a certain point (simple EOQ model). Different quantities can be ordered to raise the inventory to a certain level every constant unit of time ((S, T) models).

If an item is a raw material or a component of which demand is dependent upon finished goods, the order quantity and order timing is determined by the production schedule of the finished goods (MRP). The production schedule is based on a company's own demand forecasting

23

method or demand from customers' orders. Newsboy model and (Q, R) model take uncertainties in demand and lead-time into consideration.

The inventory control models mentioned above help to eliminate wastes, expiry and high holding costs, it is through this that sales growth and profits are generated hence leading to good sales performance.

2.3 Sales Performance.

Kotler, (2009) asserts that the performance of small businesses can be measured using sales volume, profitability and productivity.

Successful sales performance is anchored in the collection and analysis of measurable results and provides effective management and reporting capabilities. This means solutions must provide meaningful metrics tied to the business of sales, allowing sales management to quickly assess the proficiency of individuals, regions, or teams and take rapid, targeted, and effective remedial actions (Adayana, 2010). Fast, accurate sales analytics and measurable results enable a sales force to understand achievement metrics and better align continuous training and collaborative learning resources to desired outcomes. For a sales organization like Lyalabisi Farm Supply Limited, measurable results should clearly describe sales results and enable rapid analysis of program ROI.

According to Admap (2013), the achievement of high levels of sales performance and marketing effectiveness depend on the identification and implementation of customer management practices where outcomes are not immediately or quantitatively measurable. Yet, stakeholders' demands often lead organizations to implement a plethora of sales measures without recognising the limitations they may have.

2.3.1 Sales Volume

According to Longenecker, (2008) sales volume is the quantity or number of goods sold or service rendered in the normal operation of the firm in a specific period of time.

Collins (2013) defines sales volume as the number or quantity of products sold and can be expressed in either shillings or percentage terms. He further argues that sales are the life hood of any successful business and that an increase in sales, all other things equal, usually translates into higher profitability.

A firm needs to consider the method used to calculate sales volume, whether or not the calculation will be based on revenue or the number of units sold as the time period over which it plans on measuring the sales volume.

2.3.2 Profitability

Profitability is the measure of the difference between the purchase price and the costs of bringing to market i.e. the revenue a company derives from its operations, less all explicit costs (LaSalle, 1950).

Investopedia (2013) defines profit as a financial benefit that is realized when the amount of revenue gained from a business activity exceeds the expenses, costs and taxes needed to sustain the activity. Any profit that is gained goes to the business's owners, who may or may not decide to spend it on the business. Profit is Calculated as: Total Revenue-Total Expenses.

For example, if a company's revenue is 1 million shillings and its total overhead is 750,000 shillings, its accounting profit is 250,000 shillings. Unlike economic profits, accounting profits do not consider an activity's opportunity cost.

25

2.3.3 Productivity

Steve (2005), defines productivity as the value created by inventory divided by the time taken to create that value. By this definition there are two primary ways of increasing productivity: increase the value created and decrease time required creating the value.

Objectives of productivity measurement include; First, technology. A frequently stated objective of measuring productivity growth is to trace technical change. Technology has been described as "the currently known ways of converting resources into outputs desired by the economy" (Griliches, 1987) and appears either in its disembodied form (such as new blueprints, scientific results, new organizational techniques) or embodied in new products (advances in the design and quality of new vintages of capital goods and intermediate inputs).

Second, efficiency. The quest for identifying changes in efficiency is conceptually different from identifying technical change. Full efficiency in an engineering sense means that a production process has achieved the maximum amount of output that is physically achievable with current technology, and given a fixed amount of inputs (Diewert , 1999).

Third, real cost savings. A pragmatic way to describe the essence of measured productivity change. Although it is conceptually possible to isolate different types of efficiency changes, technical change and economies of scale, this remains a difficult task in practice. Productivity is typically measured residually and this residual captures not only the above-mentioned factors but also changes in capacity utilisation, learning-by-doing and measurement errors of all kinds. Harberger (1998) re-stated the point that there is a myriad of sources behind productivity growth and labelled it the real cost savings. In this sense, productivity measurement in practice could be

seen as a quest to identify real cost savings in production. describe the essence of measured productivity change.

2.4 The effects of material Stock levels on sales performance

According to Glazier (2001), store control is based on predetermining for each item of material four critical levels which include; maximum, minimum re order and re order quantity. Since these levels are used for control purposes, they are expected to be monitored regularly. However, these levels are not fixed once and for all, they need to be adjusted as circumstances demand.

2.4.1 Reorder level

This is that level of materials at which a new order for supply of materials is to be placed. In other words, at this level a purchase requisition is made out. This level is fixed somewhere between maximum and minimum levels (Kotler, 2000). Order points are based on usage during time necessary to requisition order, and receive materials, plus an allowance for protection against stock out. Pandey (2000) asserts that the order point is reached when inventory on hand and quantities due in are equal to the lead time usage quantity plus the safety stock quantity. The following two formulas are used for the calculation of reorder level or point. Ordering point or re-order level = Maximum daily or weekly or monthly usage × Lead time.

The above formula is used when usage and lead time are known with certainty; therefore, no safety stock is provided. When safety stock is provided then the following formula will be applicable: Ordering point or re-order level = Maximum daily or weekly or monthly usage × Lead time + Safety stock.

2.4.2 Minimum stock Level or safety stock

According to Jordan (1997), Safety stock is normally required by companies to ensure that they have sufficient quantities of material in stock. The safety stock is there to provide coverage for unexpected customer demand, damage in the warehouse or required due to quality issues found in production. However, there are situations where companies do not require inventory to be in stock. These "out of stock" situations should not be confused with the highly undesirable "stock-out" predicament where customer's orders cannot be shipped or production is halted due to lack of components. The "out of stock" situation is beneficial to companies when the company has no demand for certain items and zero inventory means a no warehouse costs (Duclos, 2003).

Minimum stock level/ safety stock=Re order level-(average rate of consumption*average lead time) OR Minimum stock level/ safety stock= (maximum rate of consumption-average rate of consumption) *Lead time

2.4.3 Maximum stock Level

The amount of inventory which should not be exceeded. The limit is normally determined after considering storage space of the facilities, how quickly inventory is sold or used, cost of insurance on inventory, and the risk of inventory becoming outdated before it is used. Some businesses use a formula to calculate the maximum stock level:

Maximum limit or level = Re-order level or ordering point - Minimum usage * Minimum re-order period + Economic order quantity.

28

When reorder , minimum stock and maximum stock levels are managed well by the inventory managers, there will be enough stocks to satisfy customers hence leading to improved sales growth, profitability and good sales performance in the organization.

2.5 The effects of inventory management on sale performance.

Inventory flexibility as a part of sales volume flexibility, is defined as the ability to effectively increase or decrease aggregate production in response to customer demand (Cleveland, 1989), which requires close coordination between a manufacturer and its suppliers, especially in the face of increasing demand. Inventory flexibility directly impacts on a supply chain's performance by avoiding out of stock situations for products that are suddenly in high demand or by maintaining high inventory levels (Sanchez, 2005). Therefore, inventory flexibility should be examined from an integrative perspective. In addition, inventory management should be implemented and achieved through distinctions between internal competences and external capabilities. Company efforts that reflect internal competence are not observable to customers, while customers could see and value external capabilities (Zhang, 2005). Therefore, the internal management competences and customer service capabilities that reflect inventory flexibility and inventory management level respectively should be explained and the relationships among them should be examined.

Flexibility is a complex, multidimensional concept that is difficult to define. As for the extant literature, there are various types of flexibility. In their reviews, Sethi (1990) identified more than fifty different terms covering various aspects of flexibility, which can be classified into three levels; components (or basic), systems, and aggregates. Koste (1999) developed a similar model for supply chain flexibility and agility. Vickery (1999) defined five supply chain

flexibilities, which include product, volume, launch, access, and responsiveness flexibility. In these diversified types of flexibilities, inventory management flexibility is considered as a part of volume flexibility alongside adjustment capability and process flexibility (Taps 2005). Inventory management flexibility is the integrative ability to vary point of use or warehouse inventory levels to respond to changing needs, and this flexibility is most likely affected by machine and capacity flexibility (Taylor, 1995).

Previously, inventory management flexibility was regarded only as a sort of individual basic shop level issue, which does not belong to the aggregate chain level element, or it can be treated as occurring within the area of managerial competence. But from a supply chain perspective, inventory management could be viewed as happening within and outside the process of how resources and activities are leveraged, based on environmental demands. As Fredericks (2005) pointed out, a business to business model may infuse flexibility throughout its organizations by developing close inter and intra firm relationships so that effective and alternate strategies and structures emerge that address environmental dynamism. In business to business markets, intra firm inventory management may be involved with cross functional coordination, as well as engineering, finance, and internal interfaces. Inter firm inventory management represents finance, and internal interfaces. Inter firm inventory management represents coordination and cooperation with outsiders, including suppliers or customers to achieve high inventory performance with low total costs. Therefore, inventory management flexibility is defined as a systematic competence to manage and take responsibility for two or more functions along the supply chain, whether within or outside the firm.

Intra firm inventory management flexibility refers to an inventory managerial ability to align appropriate internal systems and procedures to achieve high levels of customer service; its

resource utilization and coordination occur at the functional level. Intra firm inventory managerial flexibility can be achieved only when three conditions joint management, information sharing between cross functional units, and a low level of internal conflict are satisfied. On intra firm inventory managerial flexibility, two important aspects were considered as effective ways to keep reasonable inventory; inventory control and reactive methods (Bowersox, 2002).

Inventory control is the managerial procedure for implementing an inventory policy. The inventory level is likely to go up as demand increases, especially point of use inventory, which should increase as a function of mix size and demand to support setup flexibility. With ramping inventory levels, strict adherence to inventory management techniques or policies is essential, so that inventory record integrity and traceability can be maintained to the appropriate level (Taylor, 1995). In order to keep inventory record integrity and traceability, companies should not only have clear and integrated bills of materials or dynamic products lists but also have cross functional team responsible for inventory performance management, because the achievement of inventory management can be accomplished only by process/outcome control mechanisms, and by organizational safeguard mechanisms. A true inventory management process might require a functional area within a firm to sub optimize its performance to benefit the firm as a whole. This might result in conflict from the sub optimized function. For example, achieving the desired availability might require warehouse to increase its expenditure, resulting in unfavorable inventory carrying costs.

2.6 Conclusion

According to Bowersox, (2002) inventory management flexibility increases production of the business, inventory flexibility improves the supply chain management of the business; inventory management supports the future sales thus increasing the sales performance, inventory management improves customer satisfaction, inventory management bases on the environmental demands, inventory management flexibility leads to achieving of high levels of customer service thus promoting the sales performance of the business. Basing on the findings inventory management affects sales performances.

CHAPTER THREE

METHODOLOGY

3.1 Introduction.

This section discusses the process of the research used. It includes research design, where the study was carried out, study population, sample size, research instruments used, data collection methods, how data was analyzed and measurements of the variables related to the effects of inventory management on sales performance.

3.2 Research design.

The researcher used a case research designs. Case study research design is descriptive research that involves describing and interpreting events, conditions, circumstances or situations that are occurring in the present (Brewer, 2000). Case study seeks to engage with and report the complexities of social activity in order to represent the meanings that individual social actors bring to their social settings. It excels at bringing us to an understanding of a complex issue or object and can extend experience or add strength to what is already known through previous research. Case studies emphasize detailed contextual analysis of a limited number of events or conditions and their relationships (Creswell, 2002).

Case study research design was used because of its ability to describe results from questionnaires and interviews and it also employs both quantitative and qualitative approaches which are generally quite flexible. It also uses survey for related literature experience and analysis of insight and thus unleashing examples from existing records in this regard; it was on inventory management and sales performance (Picciano, 2004).

3.3 Study population

In this study, the target population was drawn from the firm and included those involved in or with knowledge about inventory management. These included; inventory managers (8), department managers (12), authorized persons (150), clients/buyers (80),and total target population (250)

3.4 Sample size and selection

The respondents comprised of both sexes but of different marital statuses and age groups and the study used 130 respondents and selected basing on a simple random sampling for authorized persons and clients/buyers, and census for inventory and department managers.

This was intended in order to get a variety of views and unbiased response which made the study a reality. Also the sample size selected since, Sutton and David, (2004); states that a sample size should not be less than 30. Beyond basic description it was difficult for the researcher to undertake more complex statistical analysis, as most of these analyses require a minimum sample of 30.

Table 1: Category, target population, sample size and sampling techniques that was used in the study

Category	Target Population	Sample size	Sampling Techniques
Inventory Managers	08	8	Census
Department Managers	12	12	Census
Authorized persons	150	70	Simple random sampling
Clients/Buyers	80	40	Simple random sampling
Total	**250**	**130**	

From table 1, a randomly sample 70 authorized persons and 40 clients/ buyers was selected from 150 authorized persons and 80 clients/ buyers of the target population, giving all the individuals in the target population an equal chance to be chosen. In a simple random sample, individuals are chosen at random and not more than once to prevent a bias that would negatively affect the validity of the result of the experiment. Table 1 also shows that all the target population of 8 Inventory managers and 12 department managers were taken by census.

3.5 Data collection instruments

Data for the research was collected using three methods. These included self administered questionnaires, Interviews and documentary review.

3.5.1 Questionnaire survey

A self administered questionnaire was used in the study and targeted all respondents. Mugenda and Mugenda (2005) states that questionnaires are used to obtain vital information about the population and ensure a wide coverage of the population in a short time. In addition, Sekaran (2003) states that questionnaires are an efficient data collection mechanisms where the researcher knows exactly what is required and how to measure the variables of interest. He further asserts that administering questionnaires to number of interest simultaneously is less expensive and time consuming and does not require much skill to administer as compared to conducting interviews. Closed-ended questions were used with detailed guiding instructions as regards the manner in which respondents were required to fill them independently with minimal supervision. This was made possible due to the fact that majority of the respondents are able to read and write and in instances where the respondents were illiterate, a research trained by the researcher was used to translate questionnaires into the local language and fill them according to the responses provided

35

by the respondents. Closed ended questionnaires were pre-coded answers according to themes from which respondents were asked to choose the appropriate responses.

3.5.2 Interviews

Interviews were used because they enable the researcher to obtain first hand information from the field from the key informants. Data was obtained from respondent categories indicated. The type of data included social demographic characteristics of the respondents (age, gender, level of education), and perceptions about the study variables.

3.5.3 Documentary review

Documentary review enabled the researcher obtain information on already existing literature about the effects of inventory management on sales performances. This information was collected from reports, internet, journals and magazines.

3.6 Research procedure in data collection.

After the research proposal was approved and passed together with the research data collection tools, the researcher obtained a letter from the University, granting permission to proceed with data collection and presented it to Lyalabbisi Farm Supply Limited authorities, for acceptance and authorization to undertake the study in their farm.

The authorities' permission to the researcher was of great significance in clarifying and averting suspicion about the study and helped to elicit increased willingness on the part of respondents to be objective and honest while responding to questions posed to them. The letter introduced the researcher as a participant of Kyambogo University and explained the importance and purpose of the research. In addition the letter requested for assistance to be offered to the researcher. The

researcher recruited one research assistant to ensure that the influence of personal factors of the research during data collection are minimized by bringing on board a person who is neutral about the research variable relationship and the selected organization of the study. The research assistant also helped in translating the questionnaires into the local language especially among other authorized persons respondent category with low level of education. The researcher trained the assistant for three days before going to the field to ensure quality work. The researcher made contact with the various authorities where the study was carried out and together they made appointments when to carry out the study. This approach enabled proper planning and mobilization of resources on the agreed dates. The researcher together with the assistant went to the respondents and collected data.

3.7 Data quality control.

3.7.1 Validity.

Validity refers to the degree to which results obtained from analysis of the data actually represent the phenomenon under study. The validity of the research instrument was determined by pretesting. Mugenda and Mugenda (2005) assert that pre testing ensures clarity and accuracy of results so that data collected gives meaningful, reliable results representing variable in the study. Pre-testing helped to estimate the time needed to take, to fill the questionnaires, pre-testing was done by administering questionnaires to ten (10) respondents within the study population but outside the sample. Questionnaires were scrutinized by five colleagues at School of Management and Entrepreneurship for their peer opinion on content and accuracy. Results from the field and opinion of colleagues helped identify gaps and made modifications to the instruments where necessary.

In calculating validity, the researcher ensured that questions are relevant in order to ensure that data collected give meaningful and reliable results represented by variables in the study (Mugenda and Mugenda, 1999). The researcher used the following formula to establish validity of the research instruments as seen below.

Content validity Index (CVI)　　= $\underline{\text{Agreed items by all judges as suitable}}$

Total number of items judged.

If the overall Content Validity Index (CVI) of the instrument is equal to the average acceptable Index of 0.7 or above, then the instrument would be accepted as valid (Amin, 2005)

3.7.2 Reliability

According to Mugenda and Mugenda (1999) reliability refers to the measure of the degree to which a research instrument yields consistent results or data after repeated trials. Cronbach's Alpha coefficient was used to measure reliability of the instruments.

Accordingly to Amin (2005), an alpha of 0.5 or higher is sufficient to show reliability; the closer it is to 1 the higher the internal consistency in reliability (Sekaran, 2003). The questionnaires were pre tested using (250) respondents within Lyalabbisi Farm Supply Limited and the reliability results were computed using the Statistical Package for Social Sciences (SPSS).

3.8 Data analysis

3.8.1 Quantitative data analysis

The quantitative data involved information from the questionnaires only. Data from the field was too raw for proper interpretation. It was therefore vital to put it into order and structure it, so as to give meaning and information from it. The raw data obtained from questionnaires was cleaned, sorted and coded. The coded data was entered into the Computer, checked and

statistically analyzed using the statistical package for social sciences (SPSS) soft ware package to generate descriptive and inferential statistics. Descriptive analysis was applied to describe the primary variable and associated indicator items related to the study objectives.

The Pearson product correlation Co-efficient analysis was used to test the relationship among the variables and regression coefficient models to determine the extent to which the independent variables influence the dependent variable. The results were presented in form of tables and charts then discussed in relation to existing literature. Conclusion and recommendations were drawn in relation to the set objectives of the study.

3.8.2 Qualitative data analysis

Qualitative data was analyzed and organized based on patterns, repetitions and commonalities into themes and the sub themes are based on the study variables. The data then was used to reinforce information got from questionnaires to draw conclusion and recommendations.

3.9 Measurement of variables

The variables of the study were measured using the five likert scale. Different variables were measured at different levels. Rensis Likert's scale statement having five category response continuum of 5 – 1 was used where I meant "strongly disagree", 2 meant "Disagree; 3 meant "No comment" 4 meant "Agree" and 5 meant "strongly agree". This was designed to establish the extent to which respondents are in agreement with statements and it was used to measure the variables under study. In using this, each respondent selected a response most suitable to him / her in describing each statement and the response categories were weighed from 5 – 1 and average for all items were computed accordingly.

The variables were measured at nominal and ordinal scale. The nominal scale measurement was used in the first part of the questionnaire (demographics) which comprised items with some common set such as sex, age, marital status, designation and level of education of respondents.

3.10 Ethical considerations

It is important during the process of research for the researcher to make respondents to understand that participation is voluntary and that participants are free to refuse to answer any question and to withdraw from participation any time they are chosen.

Another important consideration, involves getting the informed consent of those going to be met during the research process, which involved interviews and observations on issues that were delicate to some respondents. The researcher undertook to bear this seriously in mind.

Accuracy and honesty during the research process is very important for academic research to proceed. A researcher treated a research project with utmost care, in that there was no temptation to cheat and generate research results, since it jeopardizes the conception of the research.

Personal confidentiality and privacy were very important since the thesis was public. If individuals have been used to provide information, it is important for their privacy to be respected. If private information has been accessed then confidentiality has to be maintained (Stephen, P. 2002). All respondents were therefore re-assured of this before being involved.

CHAPTER FOUR

ANALYSIS, PRESENTATION AND INTERPRETATION OF THE RESEARCH

FINDINGS

4.0 Introduction

This chapter involves the analysis, presentation and interpretation of the findings in relation to the study objectives. This is evidenced below

4.1 Background information of respondents

Findings on the Background information of respondents were captured and results are evidenced below
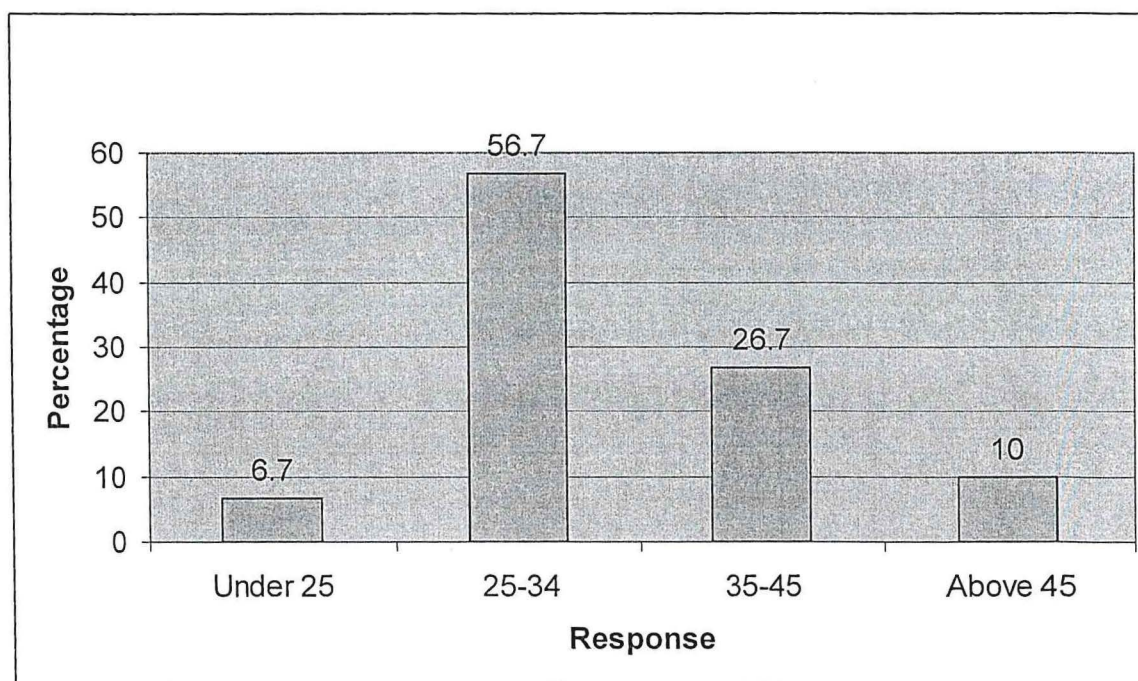
Figure 1: Age of respondents

From figure 1, 6.7% of the respondents were under 25years of age, 56.7% were between 25 to 34years, 26.7% were between 35 to 45years, and 10% were above 45years. This implies that most respondents were mature enough to answer questions in the questionnaires.

Table 2: Gender

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Male	60	50.0	50.0	50.0
Female	60	50.0	50.0	100.0
Total	120	100.0	100.0	

Source: Primary Data

From table 2, 50% were male and 50% female. Both the male and female were given equal chance of response, meaning that there is no gender bias in the study. These results for the research were answered by equal number of men to women.

Table 3: Marital status

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Single	36	30.0	30.0	30.0
Married	72	60.0	60.0	90.0
Divorced	8	6.7	6.7	96.7
Widowed	4	3.3	3.3	100.0
Total	120	100.0	100.0	

Source: Primary Data

From table 3, 30% of the respondents were single, 60% were married, 6.7% divorced, and 3.3% widowed. This implies that most respondents were stable in the work they do.

Table 4: Period spent working with Lyalabbisi Farm Supply Limited

Response	Frequency	Percent	Valid Percent	Cumulative Percent
0-3years	24	20.0	20.0	20.0
4-6years	28	23.3	23.3	43.3
7-9years	48	40.0	40.0	83.3
Over 9years	20	16.7	16.7	100.0
Total	120	100.0	100.0	

Source: Primary Data

From table 4, 20% of the respondents had spent between 0 to 3year working with Lyalabbisi Farm Supply Limited (U) ltd, 23.3% between 4 to 6years, 40% between 7 to 9years and 16.7% over 9years. This implies that respondents had experience with the study since all have been working for Lyalabbisi Farm Supply Limited for over three years.

Percent
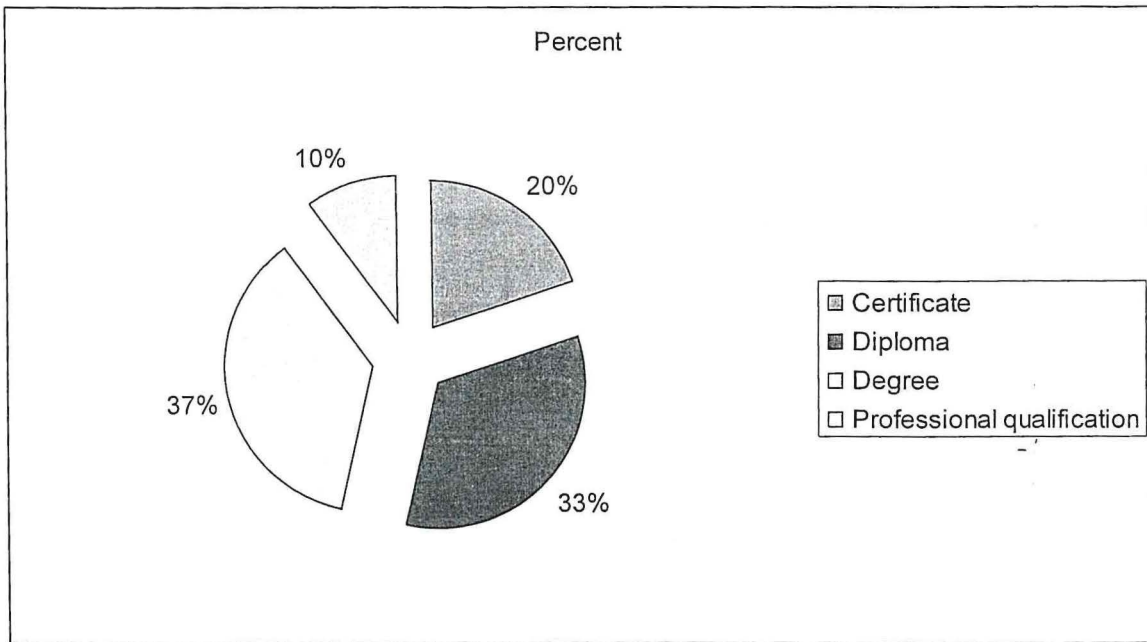
Figure 2: Highest level of education attained.

Source: Primary Data

From figure 2, 20% of the respondents were certificate holders, 33.3% diploma holders, 36.7% degree holders, and 10% had professional qualifications. This means that all the respondents are able to read and respond to the questions in the questionnaires.

4.2 Findings on the effects of material planning on sales performance in Lyalabbisi Farm Supply Limited

Table 5: Economic Order Quantity (EOQ) is determined in the company

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Strong agree	12	10.0	10.0	10.0
Agree	12	10.0	10.0	20.0
Not sure	12	10.0	10.0	30.0
Disagree	56	46.7	46.7	76.7
Strong disagree	28	23.3	23.3	100
Total	120	100	100	

Source: Primary Data

From table 5, 10% of the respondents strongly agreed that Economic Order Quantity (EOQ) is determined in the company, 10% agreed, 10% were not sure, 46.7% disagreed, and 23.3% strongly disagreed. This implies that a total percentage of 56.7% (10%+46.7%) of respondents disagree that Economic Order Quantity (EOQ) is determined in Lyalabbisi Farm Supply Limited.

Table 6: There is Material Requirement Planning in Lyalabbisi Farm Supply Limited

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Strong agree	56	46.7	46.7	46.7
Agree	40	33.3	33.3	80
Not sure	12	10	10	90
Disagree	8	6.7	6.7	96.7
Strong disagree	4	3.3	3.3	100
Total	120	100	100	

Source: Primary Data

From table 6, 46.7% strongly agreed that there is Material Requirement Planning in Lyalabbisi Farm Supply Limited, 33.3% agreed, 10% were not sure, 6.7% disagreed, 3.3% strongly disagreed. This implies that a total percentage of 80% (46.7%+33.3%) of respondents agree that there is Material Requirement Planning in Lyalabbisi Farm Supply Limited.

Table 7: There is ABC analysis in Lyalabbisi Farm Supply Limited

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Strong agree	16	13.3	13.3	13.3
Agree	12	10	10	23.3
Not sure	0	0	0	23.3
Disagree	28	23.3	23.3	46.6
Strong disagree	64	53.3	53.3	100
Total	120	100	100	

Source: Primary Data

From table 7, 13.3% of the respondents strongly agreed that there is ABC analysis in Lyalabbisi Farm Supply Limited, 10% agreed, 23.3% disagreed, and 53.3% strongly disagreed. 76.6% (23.3%+53.3%) of respondents disagree that there is ABC analysis in Lyalabbisi Farm Supply Limited.

Table 8: Lyalabbisi Farm Supply Limited inventory manager have been able to eliminate losses in inventory

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Strong agree	40	33.3	33.3	33.3
Agree	40	33.3	33.3	66.6
Not sure	4	3.3	3.3	69.9
Disagree	12	10	10	79.9
Strong disagree	24	20	20	100
Total	120	100	100	

Source: Primary Data

From table 8, 33.3% strongly agreed that Lyalabbisi Farm Supply Limited inventory manager have been able to eliminate losses in inventory, 33.3% agreed, 3.3% were not sure, 10% disagreed, and 20% strongly disagreed. 66.6% (33.3%+33.3%) of respondents agree that Lyalabbisi Farm Supply Limited inventory manager have been able to eliminate losses in inventory .

Table 9: A responsible official authorizes purchase

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Strong agree	40	33.3	33.3	33.3
Agree	60	50	50	83.3
Not sure	0	0	0	83.3
Disagree	8	6.7	6.7	90
Strong disagree	12	10	10	100
Total	120	100	100	

Source: Primary Data

From table 9, 33.3% strongly agreed that a responsible official authorizes purchase, 50% agreed, 6.7% disagreed, and 10% strongly disagreed. 80% (33.3%+50%) of the respondents agree that in Lyalabbisi Farm Supply Limited there is a responsible official who authorizes purchase.

Table 10: There is Just In Time mode in Lyalabbisi Farm Supply Limited

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Strong agree	35	29.2	29.2	29.2
Agree	40	33.3	33.3	62.5
Not sure	2	1.7	1.7	64.2
Disagree	33	27.5	27.5	91.7
Strong disagree	10	8.3	8.3	100
Total	120	100	100	

Source: Primary Data

From table 10, 29.2% strongly agreed that there is Just In Time mode in Lyalabbisi Farm Supply Limited , 33.3% agreed, 1.7% were not sure, 27.5% disagreed, and 8.3% strongly disagreed. 62.5% (29.2%+33.3%) of respondents agreed that there is Just In Time model applied in Lyalabbisi Farm Supply Limited.

According to Conie (2003), the most reason as to why companies opt for inventory management is for inventory managers to apply Material Requirement Planning (MRP). This has however been strongly agreed upon by the employees of Lyalabbisi Farm Supply Limited. When there is MRP, stocks are in time leading to no stock out. This leads to sales growth and profitability.

4.3 Findings on the effects of stock levels on sales performance in Lyalabbisi Farm Supply Limited.

Table 11: Lyalabbisi Farm Supply Limited has a reorder level for inventory

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Strong agree	16	13.6	13.6	13.6
Agree	27	22.7	22.7	36.3
Not sure	22	18.2	18.2	54.5
Disagree	11	9.1	9.1	63.6
Strong disagree	44	36.4	36.4	100
Total	120	100	100	

Source: Primary Data

From table 11, 13.6% strongly agreed that Lyalabbisi Farm Supply Limited has a reorder level for inventory , 22.7% agreed, 18.2% were not sure, 9.1% disagreed, and 36.4% strongly disagreed. 45.5% (9.1%+36.4%) of respondents disagree that there is reorder level for inventory in Lyalabbisi Farm Supply Limited.

49

Table 12: Lyalabbisi Farm Supply Limited experiences under stock situations

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Strong agree	55	45.5	45.5	45.5
Agree	33	27.3	27.3	72.8
Not sure	22	18.2	18.2	91
Disagree	6	5	5	96
Strong disagree	4	4	4	100
Total	120	100	100	

Source: Primary Data

From table 12, 45.5% strongly agreed that Lyalabbisi Farm Supply Limited experiences under stock situations, 27.3% agreed, 18.2% were not sure, 5% disagreed, and 4% strongly disagreed. 72.8% (45.5%+27.3%) of the respondents agreed that Lyalabbisi Farm Supply Limited experiences under stock situation.

Table 13: There are safety stock levels in Lyalabbisi Farm Supply Limited

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Strong agree	33	27.3	27.3	27.3
Agree	22	18.2	18.2	45.5
Not sure	44	36.4	36.4	81.9
Disagree	11	9.1	9.1	91
Strong disagree	10	9	9	100
Total	120	100	100	

Source: Primary Data

From table 13, 27.3% strongly agreed that there are safety stock levels in Lyalabbisi Farm Supply Limited , 18.2% agreed, 36.4% were not sure, 9.1% disagreed, and 9% strongly disagreed. 36.4% of the respondents are not sure whether Lyalabbisi Farm Supply Limited has Safety Stock Levels.

Table 14: that there is sales timely delivery inventory in Lyalabbisi Farm Supply Limited.

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Strong agree	12	10	10	10
Agree	16	13.6	13.6	23.6
Not sure	27	22.7	22.7	46.3
Disagree	16	13.6	13.6	59.9
Strong disagree	49	40.1	40.1	100
Total	120	100	100	

Source: Primary Data

From table 14, 10% strongly agreed that there is sales timely delivery inventory in Lyalabbisi Farm Supply Limited, 13.6% agreed, 22.7% were not sure, 13.6% disagreed, and 40.1% strongly disagreed. 53.7% (13.6%+40.1%) of the respondents disagree there is timely delivery inventory in Lyalabbisi Farm Supply Limited.

Table 15: There is Maximum Stock Level in Lyalabbisi Farm Supply

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Strong agree	22	18.1	18.1	18.1
Agree	35	29.3	29.3	47.4
Not sure	1	1.1	1.1	48.5
Disagree	19	15.9	15.9	64.4
Strong disagree	44	35.6	35.6	100
Total	120	100	100	

Source: Primary Data

From table 15, 18.1% strongly agreed that there is Maximum Stock Level in Lyalabbisi Farm Supply, 29.3% agreed, 1.1% were not sure, 15.9% disagreed, and 35.6% strongly disagreed. 51.5% (15.6%+35.6%) of the respondents disagree that there is Maximum Stock Levels in Lyalabbisi Farm Supply Limited.

According to Robinson (2002), under stock situations and timely delivery should be considered for any company to raise its sales performance. These were therefore strongly agreed upon by the respondents in Lyalabbisi Farm Supply Limited.

4.4 Findings on the effects of inventory management on sale performance in Lyalabbisi Farm Supply Limited.

Table 16: Inventory management flexibility increases sales performance in Lyalabbisi Farm Supply Ltd

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Strong agree	16	13.6	13.6	13.6
Agree	27	22.7	22.7	36.3
Not sure	22	18.2	18.2	54.5
Disagree	11	9.1	9.1	63.6
Strong disagree	44	36.4	36.4	100
Total	120	100	100	

Source: Primary Data

From table 16, 13.6% strongly agreed that Inventory management flexibility increases sales performance in Lyalabbisi Farm Supply Ltd , 22.7% agreed, 18.2% were not sure, 9.1% disagreed, and 36.4% strongly disagreed. 45.5% (9.1%+36.4%) of the respondents disagree that Inventory management flexibility increases sales performance in Lyalabbisi Farm Supply Ltd.

Table 17: Lyalabbisi Farm Supply Ltd inventory flexibility improves the supply chain management

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Strong agree	49	40.9	40.9	40.9
Agree	27	22.7	22.7	63.6
Not sure	16	13.6	13.6	77.2
Disagree	16	13.6	13.6	90.8
Strong disagree	12	9.1	9.1	100
Total	120	100	100	

Source: Primary Data

From table 17, 40.9% strongly agreed that in Lyalabbisi Farm Supply Ltd inventory flexibility improves the supply chain management, 22.7% agreed, 13.6% were not sure, 13.6% disagreed, and 9.1% strongly disagreed. 63.6% (40.7%+22.7%) of the respondents agree that Lyalabbisi Farm Supply Limited inventory flexibility improves the supply chain management.

Table 18: Inventory management in Lyalabbisi Farm Supply Ltd supports the future sales

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Strong agree	55	45.5	45.5	45.5
Agree	22	18.2	18.2	63.7
Not sure	16	13.6	13.6	77.3
Disagree	11	9.1	9.1	86.4
Strong disagree	16	13.6	13.6	100
Total	120	100	100	

Source: Primary Data

From table 18, 45.5% strongly agreed that Inventory management in Lyalabbisi Farm Supply Ltd supports the future sales, 18.2% agreed, 13.6% were not sure, 9.1% disagreed, and 13.6% strongly disagreed. 63.7% (45.5%+18.2%) of the respondents agree that Lyalabbisi Farm Supply Limited inventory management supports the future sales.

Table 19: Inventory management improves customer satisfaction in Lyalabbisi Farm Supply Ltd

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Strong agree	55	45.5	45.5	45.5
Agree	33	27.3	27.3	72.8
Not sure	0	0	0	72.8
Disagree	16	13.6	13.6	86.4
Strong disagree	16	13.6	13.6	100
Total	120	100	100	

Source: Primary Data

From table 19, 45.5% strongly agreed that Inventory management improves customer satisfaction in Lyalabbisi Farm Supply Ltd, 27.3% agreed, 13.6% disagreed, and 13.6% strongly disagreed. 72.8% (45.5%+27.3%) of the respondents agree that Inventory management improves customer satisfaction in the company.

Table 20: The sales performance of Lyalabbisi Farm Supply Ltd is as a result of inventory control measures

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Strong agree	55	45.5	45.5	45.5
Agree	22	18.2	18.2	63.7
Not sure	16	13.6	13.6	77.3
Disagree	11	9.1	9.1	86.4
Strong disagree	16	13.6	13.6	100
Total	120	100	100	

Source: Primary Data

From table 20, 45.5% strongly agreed that the sales performance of Lyalabbisi Farm Supply Ltd is as a result of inventory control measures, 18.2% agreed, 13.6% were not sure, 9.1% disagreed, and 13.6% strongly disagreed. 63.7% (45.5%+18.2%) of the respondents agree that sales performance is as a result of inventory control measures.

The researcher therefore deduced that the inventory management supports the future sales, inventory management improves customer satisfaction and also inventory management achieves high levels of customer service.

Table 21: The effects of Inventory management on Sales Performance in Lyalabbisi Farm Supply Limited using Pearson correlation.

		Inventory Management	Sales Performance
Inventory Management	Pearson Correlation	1	.794 **
	Sig. (2-tailed)	.	.000
	N	30	30
Sales Performance	Pearson Correlation	.794 **	1
	Sig. (2-tailed)	.000	.
	N	30	30

**. Correlation is significant at the 0.01 level (2-tailed).

From table 21, findings indicate that there are strong positive effects of Inventory management on sales Performance as Pearson correlation coefficient r= 0.794. This implies that Inventory management affect Sales Performance by 79.4% and 20.6% by other factors.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter involves the summary of the findings in relation to the study objectives, conclusion based on the problem statement and recommendations based on the conclusion.

5.1 Discussion of research findings

5.1.1 The effects of material planning on sales performance in Lyalabbisi Farm Supply Limited.

Findings revealed 20% (10%+10%) of the respondents agreed that Lyalabbisi Farm Supply Limited applies EOQ, 70% (46.7%+23.3%) disagreed and 10% are not sure This means that in the firm there is no Economic Order Quantity (EOQ). For ABC analysis 23.3% (13.3%+10%) of respondents agreed, 76.6% (23.3%+%53.3) disagreed and 3.3% are not sure meaning that in the company ABC analysis not applied. The failure to apply EOQ and ABC analysis leads to shortages, delay in delivery and expiry of some inventory in the store (Kaplan, 2000).

Findings also revealed 61.1% (29.2+33.3%) of respondents agreed that Lyalabbisi Farm Supply Limited applies Just In Time (JIT) model, 35.8% (27.5%+8.3%) disagreed, 1.7% are not sure. For Material Requirement Planning (MRP) 80% (46.7%+33.3%) of respondents agreed 10% (6.7%+3.3%) disagreed and 10% are not sure. According to Stank (2001), these models have helped the firm eliminate losses in inventory leading to sales growth, and good profits.

Findings also revealed that 83.3% (33.3%+50%) of respondents agreed that Lyalabbisi Farm Supply Limited also has an inventory manager who is responsible authorization of purchases

58

and 16.3% disagreed. This has helped to improve inventory safety, eliminating losses and further leading to good sales performance (Kotler, 2000).

5.1.2 The effects of stock levels on sales performance in Lyalabbisi Farm Supply Limited

Findings revealed 36.3% (13.6%+22.7%) of respondents agreed that there is no reorder level in Lyalabbisi Farm Supply Limited 45.5% (9.1%+36.4%) disagreed and 18.2% are not sure. For the firm experiences under stock situation 73.8% (45.5%+27.3%) of respondents agreed, 27.3% (9.1%+18.2%) disagreed and 18.2% are not sure. This has led to stock out, delays in delivery, customer dissatisfaction, poor sales performance and fall in profitability (Cosker 2002).

Findings further show that 36.4% of the respondents are not sure whether Lyalabbisi Farm Supply Limited has Safety Stock Levels,54.5% (27.3%+18.2%) agreed and 18.1% (9.1%+9%) disagreed. In the firm there is no Maximum Stock Levels, these are also some of the reasons why there are delays in delivery (Glazier, 2001).

5.1.3 The effects of inventory management on sales performance of Lyalabbisi Farm Supply Limited.

Findings show that inventory management flexibility doesn't increase sales performance in Lyalabbisi Farm Supply Ltd (49.5%), inventory flexibility improves the supply chain management, inventory management supports the future sales (63.6%); Inventory management improves customer satisfaction (63.7%) and sales performance is as a result of inventory control measures (63.7%).

Basing on Pearson correlation coefficient, findings indicated that there are strong positive effects of Inventory management on sales Performance at Pearson correlation coefficient r= 0.794. This implies that Inventory management affects Sales Performance by 79.4% and 20.6% by other

59

factors. This implies that inventory should be managed very well to achieve good sales in small and medium enterprises.

5.2 Conclusion

Therefore inventory management must be emphasized in Lyalabbisi Farm Supply Limited as a way of improving sales performance of the company and raising its profitability. This should be done by sensitizing inventory management in the company that is to say making sure all employees understand inventory management and its importance to the company.

5.3 Recommendations

Lyalabbisi Farm Supply Limited should forecast market for its products so that it stocks enough inventories to avoid under stocks and reduce on damaged inventory.

The company should also fix the stock levels that is, maximum, minimum, and reorder levels for all items in stock in order to avoid inadequate stocks or stock outs suffered by the company.

Lyalabbisi Farm Supply Limited should minimize its inventory expenses by using skilled labour and also increase its sales by widening market for its products.

Lyalabbisi Farm Supply Limited should identify the order quantity that minimizes total cost of stock holding, stock ordering and purchase costs in order to maximize profits.

Lyalabbisi Farm Supply Limited should put into consideration inventory management models like Economic Order Quantity (EOQ), Material Requirement planning (MRP), Just In Time (JIT) and ABC analysis when planning for better profits in the coming years and should also minimize the cost of production.

5.4 Area for further research

This study is not conclusive in itself. It does not cover all areas of the study about the subject due to limited resources. Therefore further research should be carried out on examining the effects of inventory management on improvement of customer service. This will help to determine whether product availability in small and medium enterprises meet customers' level of expectation, to determine if inventory management policies enable small and medium enterprises to respond to customers' needs and to determine whether internal customer service impact on external customer service (satisfaction).

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APPENDICES

APPENDIX I

QUESTIONNAIRE FOR STAFF MEMBERS AT LYALABBISI

FARM SUPPLY LIMITED.

Dear respondent!

I am a student of Kyambogo University pursuing a Masters Degree of Business Administration Final Year. This questionnaire is designed to collect information aimed at evaluating the **effects of inventory management on sales performance in Small and Medium Enterprises using Lyalabbisi Farm Supply Limited as a case study** in Uganda. The information obtained will be strictly for academic purposes and it will be treated with at most confidentiality. I kindly request you to fill this questionnaire. Thank you very much for your time and co-operation

Section A: Personal data

(Tick in the appropriate box provided)

1. Your age

Under 25	25-34	35-45	Above 45

2. Gender

Male	Female

3. Marital status

Single	Married	Divorced	Widowed

4. For how long have you been working with Lyalabbisi Farm Supply Ltd?

0-3years	4-6years	7-9years	Over 9years

5. What highest level of education you have attained?

Certificate	Diploma	Degree	Professional qualification	Masters	PHD

Section B; Effect of Material Planning on Sales Performance in Small and Medium Firms (SMEs).

SA- Strongly Agree, A -Agree, NS – Not Sure, DA, Disagree, SD- Strongly Disagree

(Tick in the appropriate box provided)

	Statement	SA	A	NS	DA	SD
1	There is determination of Economic Order Quantity (EOQ) in the firm.					
2	There is Material Requirement Planning(MRP) in Lyalabbisi Farm Supply Limited.					
3	There is ABC analysis in Lyalabbisi Farm Supply Limited.					
4	Lyalabbisi Farm Supply Limited inventory manager have been able to eliminate losses in inventory.					
5	There is Just In Time mode in Lyalabbisi Farm Supply Limited					
6	A responsible official authorizes purchase.					

Section C; Relationship between Stock Levels and Sales Performance in SMEs.

SA- Strongly Agree, A -Agree, NS – Not Sure, DA, Disagree, SD- Strongly Disagree

(Tick in the appropriate box provided)

	Statement	SA	A	NS	DA	SD
1	Lyalabbisi Farm Supply Limited has a reorder level for inventory.					
2	In Lyalabbisi Farm Supply Limited under stock situations.					
3	There is safety stock levels in Lyalabbisi Farm Supply Limited.					
4	There is sales timely delivery inventory in Lyalabbisi Farm Supply Limited.					
5	There is Maximum Stock Levels in Lyalabbisi Farm Supply					

Section D; The relationship between inventory management and sale performance in (SMEs).

SA- Strongly Agree, A -Agree, NS – Not Sure, DA, Disagree, SD- Strongly Disagree

(Tick in the appropriate box provided)

	Statement	SA	A	NS	DA	SD
1	The sales performance of Lyalabbisi Farm Supply Ltd is as a result of a responsible official who authorizes purchase.					
2	The sales performance of Lyalabbisi Farm Supply Ltd is as a result of Goods inventory flexibility.					
3	The sales performance of Lyalabbisi Farm Supply Ltd is as a result of maximum attention paid to those inventories whose value is highest.					
4	The sales performance of Lyalabbisi Farm Supply Ltd is as a result of the skills of store staffs					
5	The sales performance of Lyalabbisi Farm Supply Ltd is as a result of inventory control measures					
6	The profitability of Lyalabbisi Farm Supply Limited has improved over the last 3 years.					
7	Over the last 3 years the market share of Lyalabbisi Farm Supply Limited have increased					
8	There share grow of firm has over the last 3 years					
9	The return on investments of the Lyalabbisi Farm Supply Limited is good					

10	In our company the total cost of distribution, including transportation and handling costs is low compared to competitors					
11	In our company the total cost of manufacturing, including labor, maintenance and re-work costs is low					
12	In our company the costs associated with held inventory are low					

Thanking you for your participation.

AN INTERVIEW GUIDE FOR MANAGERS (KEY INFORMANTS) OF LYALABBISI

FARM SUPPLY LIMITED.

Dear respondent!

I am a student of Kyambogo University pursuing a Masters Degree of Business Administration Final Year. This questionnaire is designed to collect information aimed at evaluating the *effects of inventory management on sales performance in Small and Medium Enterprises using Lyalabbisi Farm Supply Limited as a case study* in Uganda. The information obtained will be strictly for academic purposes and it will be treated with at most confidentiality. I kindly request you to fill this questionnaire. Thank you very much for your time and co-operation

Section A: Background Information

1. Your age ....

2. Gender ....

3. Marital status ....

4. Academic qualifications...

5. Field of professional qualification ....

6. Your working experience ....

Section B: Give relevant answers as precisely as possible

7) "An effective inventory system ensures that the farm holds just enough inventories; not excessive and not too little".

(a) In light of the statement above, how do you describe inventory management of Lyalabbisi Farm Supply Limited?

Very effective……..   Effective……….

Less effective……..   Not effective……..

Not sure……

8. a) Lyalabbisi Farm Supply Limited is profit making company. Do you agree?

Yes……………………….No…………………….Not sure

b) If yes, how do you explain the profitability of the Farm?

Very good ……..   Good……..   Poor………..

Very Poor………

c) Support your answer given 8(b) above……………………………………………………...

………………………………………………………………………………………………

………………………………………………………………………………

9) Fill in the table below the profit / loss figure of farm as per the following years;

Year	2001	2002	2003	2004	2005
Profit figure					
Loss figure					

10.a) Do you agree that inventory management has any significant effect on an organization's profitability?

14. Suggest any possible improvement to such weaknesses

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