THE EFFECT OF INVENTORY MANAGEMENT ON PERFORMANCE OF MANUFACTURING FIRMS

CASE STUDY: CROWN BEVERAGES LIMITED

A DISSERTATION SUBMITTED TO THE FACULTY OF BUSINESS ADMINISTRATION AND MANAGEMENT IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BUSINESS ADMINISTRATION AND MANAGEMENT

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DEDICATION

This academic work is dedicated to my parents Mr. Kawere Richard and Mrs. Kawere Geraldine for all the time, money and effort they put into my studies. Without your support, this course may never have been a reality for me. So thank you very much dad and mum.

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I thank the Almighty God the provider of knowledge and wisdom for seeing me through my studies and for enabling me to undertake my research successfully, without His grace I would not have made it.

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Thanks go to my classmates and my close friends for all the time they afforded to give me despite their busy schedules.

May the Almighty Lord bless you abundantly!!

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List of Abbreviations

CBL: Crown Beverages limited

DV: Dependent Variable

ECR: Efficient consumer response

IMS: Inventory Management Systems

IV: Independent Variable

JIT: Just In Time

MRO: Maintenance, Repair and Operations

MRP: Materials Requirements Planning

VMI: Vendor Managed Industry

W.I.P: work in progress

Abstract

This study considered inventory management as the independent variable and organizational performance as the dependent variable. The specific objectives of the study were; To identify inventory management systems used at Crown Beverages Ltd. Company Uganda, To examine the effect of inventory planning on performance of Crown Beverages Ltd. Company Uganda, To determine the effect of inventory management systems on performance of Crown Beverages Ltd. Company Uganda and To examine the effect of inventory turnover on performance of Crown Beverages Ltd. Company Uganda

The study used a case study research design with quantitative and qualitative research techniques using a total sample size of 70 respondents. Data was collected using self-administered questionnaires and face to face interviews.

It was observed that the Crown Beverages Limited uses vendor managed inventory, Fixed Order Quantity, Limited uses Just in Time, ABC method and Fixed Period Ordering as inventory management systems in order to minimize losses and maximize profits. It was also exposed that inventory planning has encouraged optimal quantity and timing of inventory, it has created forecasts to determine how much inventory should be on hand to meet consumer demand and it has also been used to generate higher profits and manage cash flow. From the study it was also discovered inventory management systems have increased on the efficiency, productivity, manage inventory levels and they have made everything from inputting information to taking inventory. It was also observed that inventory turnover has enabled the company to effectively measure the number of times inventory sold or used in a time period such as a year and it has brought decreased operating expenses, and increased asset turnover.

Finally, it is recommended that The Management of Crown Beverages Limited-Pepsi should appoint a team of qualified employees to conduct inventory management. This will help the organization to avoid inefficiencies, damages and issues of overstocking. Inventory management should also be given priority as it is influential in relation to performance of the company. This means that policies and procedures should be set which are supposed to be followed by the company employees

CHAPTER ONE:INTRODUCTION

1.0 Introduction

The study focuses on the effect of inventory management on performance of manufacturing firms. According to Garrett & Rendon, (2005) Inventory management constitutes the most significant part of majority of manufacturing firms. Because of the huge inventories maintained by most firms, a considerable sum of an organization's fund is being committed to them. Thus it becomes absolutely imperative to manage inventories efficiently so as to avoid the costs of changing production rates, overtime, sub-contracting, unnecessary cost of sales and back order penalties during periods of peak demand. This chapter specifically covers the background to the study,statement of the problem, purpose of the study, research objectives, research questions, scope of the study , significance of the study, justification, definition of key terms and the conceptual frame work.

1.1 Background of the Study

Globally, inventory management is pivotal in effective and efficient organization. It is also vital in the control of materials and goods that have to be held (or stored) for later use in the case of production or later exchange activities in the case of services (Peter and Walter 2004). The principal goal of inventory management involves having to balance the conflicting economics of not wanting to hold too much stock. Inventory problems of too great or too small quantities on hand can cause business failures. If a manufacturer experiences stock-out of a critical inventory item, production halts could result. Moreover, a shopper expects the retailer to carry the item wanted. If an item is not stocked when the customer thinks it should be, the retailer loses a

customer not only on that item but also on many other items in the future (Peter and Walter 2004).

According to Dimitrios and Koumanakos, (2008), effective inventory management can make a significant contribution to company's profit as well as increased return on total assets. It is thus the management of this economics of stockholding, that is appropriately being refers to as inventory management. The reason for greater attention to inventory management, for many firms, is the largest item appearing on the asset side of the balance sheet. Yang et al (2014) has argued that supply chains have evolved from traditional forecast-driven push to demand driven pull systems over time, and that postponement is playing an increasingly important role in a supply chain.

Wanke (2010) states that inventory management approaches are a "function of product, operational and demand related variables such as delivery time, obsolescence, coefficient of variation of sales and inventory turnover" and that logistics managers are more likely to decentralize inventory in order to stock product close to the customer's facility if the customers demand a reduced delivery time. This implies that inventory management is among the backbones of any manufacturing business operations.

For instance, with the development of technology and availability of process driven software applications, inventory management has undergone revolutionary changes. In the last decade or so organizations have started managing and holding inventory on behalf of the customers which has enhanced just in time deliveries as pointed out by Dimitrios & Koumanakos, (2008).Manufacturing companies like computer manufacturing or mobile phone manufacturers call the model by name VMI - Vendor Managed Industry while Automobile industry uses the

term JIT - Just In Time whereas apparel industry calls such a model by name - ECR - Efficient consumer response. However, according to Yang *et al* (2014), the basic underlying model of inventory management remains the same.

Graman (2002) argued that today's rapidly changing markets, there are high costs of holding inventory, extensive product proliferation and the risk of obsolescence. In many organizations, it is expensive to keep very-low demand items as compared to high demand items. This implies that companies must now provide good service while maintaining minimal inventories. Therefore, inventory management approaches are essential aspects of any organization.

In traditional settings, inventories of raw materials, work-in-progress components and finished goods were kept as a buffer against the possibility of running out of needed items. However, large buffer inventories consume valuable resources and generate hidden costs. Consequently, many companies have changed their approach to production and inventory management t (Kolias et al., 2011)

Since the early 1980s, inventory management leading to inventory reduction has become the primary target, as is often the case in just-in-time (JIT) systems, where raw materials and parts are purchased or produced just in time to be used at each stage of the production process. This approach to inventory management brings considerable cost savings from reduced inventory levels. As a result, inventories have been decreasing in many firms (Chen et al., 2005), although evidence of improved firm performance is mixed (Kolias et al., 2011). This implies that examining the effect of inventory management on performance of manufacturing firms is necessary so as to be able to achieve cost reduction.

In Uganda, inventory constitutes the most significant part of current assets of larger majority of manufacturing industries (Alinaitwe, & Mwakali, 2009). However, because of the relative largeness of inventories maintained by most firms, a considerable sum of an organization's fund is being committed to inventory. It thus becomes absolutely imperative to identify better ways to manage inventories efficiently so as to avoid the costs of changing production rates, overtime, sub-contracting, and unnecessary cost of sales and back order penalties during periods of peak demand. In general, efficient or inefficient management of inventories is only one factor that may influence firm performance. This study therefore, sought to investigate the effect of inventory management on performance of manufacturing firms using Crown Beverages as a case study in Uganda.

1.1.1 Background to the Case Study

Crown Beverages limited (CBL) was founded as Lake Victoria Bottling Company on 29th March 1950. Then, the Uganda government owned the majority shares while a few elite indigenous Ugandans owned the minority share. Crown Beverages Limited is a blue chip beverage company manufacturing premium carbonated soft drinks including; Pepsi, Mirinda, Mountain Dew, 7UP, and Evervess. The organization operates a highly efficient distribution network and delivers top of the range products to the customers in markets including; Uganda, South Sudan, Democratic Republic of Congo, Rwanda and Burundi. Their mission is to produce and distribute refreshments to delight their consumers and provide a buoyant return to the stakeholders through continual process improvement (CBL Annual Report, 2014).

Crown Beverages Company Ltd (CBL) is among the leading manufacturing and distribution companies of soft drinks. CBL needs their consumers for its strength and survival. The company

makes an effort to manage inventory and control costs effectively and efficiently in order to avoid unnecessary investment and minimize the costs associated with stock such as carrying costs, ordering costs and stock out costs. Inventory Management involves material control systems, proper and systematic recording of inventory and storage of the right amount of inventory by organizations. Too much inventory creates mounting storage and kinds of carrying costs. Too much inventory on the other hand can lead to interruptions in the production and leads to losses in an organization. This study aimed at investigating the role of inventory management on organizational performance.

1.2 Problem Statement

Dimitrios and Koumanakos (2008) indicated that effective inventory management can make a significant contribution to company's profit as well as increased return on total assets. At Crown Beverages Company Ltd plant, Inventory management is seen through arrangement of crates at the plant, packing bottles, buying of raw materials, and supply of goods to customers, issuing of raw materials for process and producing soft drinks at Crown Beverages Company Ltd (CBL).

Much as CBL are trying hard to improve on inventory management in order to control costs, in many cases inventory management has turned into a major cash flow constraint which is associated with so many hardships in form of costs such as stock out costs, high inventory security costs, insurance costs, falling victim of the "Bull whip effect;" to much distasted stock in inventory and items in stock get misplaced as agreed by Graman (2002). This is coupled with delays in deliveries, which has posed a challenged to the performance of the firms leading to declining sales revenues and profitability. This has posed a challenged to the performance of the firms leading to declining sales revenues and profitability. Therefore, this research was prompted

to investigate the effect of inventory management on performance of manufacturing firms using a case study of Crown Beverages limited.

1.3 Objectives of the Study

1.3.1 General Objective

To examine the effect of inventory management on performance of manufacturing firms

1.3.2 Specific Objectives

i. To identify inventory management systems used at Crown Beverages Ltd. Company Uganda.
ii. To examine the effect of inventory planning on performance of Crown Beverages Ltd. Company Uganda.
iii. To determine the effect of inventory management systems on performance of Crown Beverages Ltd. Company Uganda.
iv. To examine the effect of inventory turnover on performance of Crown Beverages Ltd. Company Uganda.

1.4 Research Questions

i. What are the inventory management systems used at Crown Beverages Ltd. Company Uganda?
ii. What is the effect of inventory planning on performance of Crown Beverages Ltd. Company Uganda?
iii. What is the effect of inventory management systems on performance of Crown Beverages Ltd. Company Uganda?

iv. What is the effect of inventory turnover on performance of Crown Beverages Ltd. Company Uganda?

1.5 Scope of the Study

1.5.1 Content Scope

The researcher studied the role of inventory management on the performance of manufacturing industries with a focus on Crown Beverages Ltd Company Uganda. The study was confined to the effect of inventory planning, inventory management systems and inventory turnover on performance of manufacturing firms.

1.5.2 Time Scope

The research was completed in a period of one year ending 2016. This period was considered because it had enough relevant information and data relevant to the topic under investigation.

1.5.3 Geographical Scope

Geographically, the study was confined to Crown Beverages which located along Kampala Jinja Highway in Kampala Uganda. This is because the headquarters of this company is based here therefore, this gave the researcher opportunity to collect enough relevant information in relation to topic researched.

1.6 Significance of the Study

The findings of this study will help other researchers in further research into all aspects of inventory management.The study is also intended to help the researcher get to discover answers to the question through the application of procedures of inventory management and to gain familiarity about inventory management and performance of manufacturing firms.

The study results will be helpful and beneficial to other upcoming researchers to investigate further about the impact of inventory management on performance of other organizations other than crown beverages Limited.

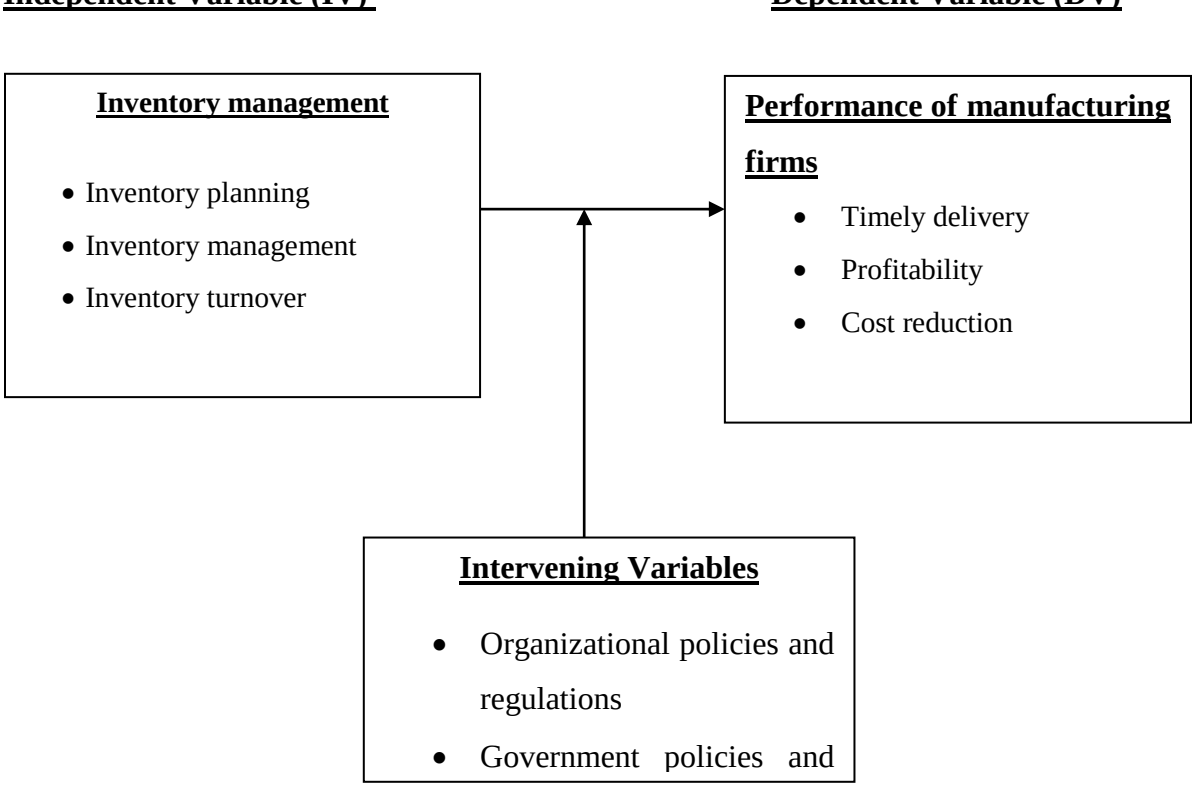
The research process will be of great importance to the researcher because she will acquire research skills which can be applied to conduct research in other subjects and will also act as a requirement for the attainment of a bachelor's degree for the researcher.

1.7 Justification of the Study

With the development of technology and availability of process driven software applications, inventory management has undergone revolutionary changes (Dimitrios & Koumanakos, 2008). This study attempts to discover and understand how the techniques embedded in inventory management are pertinent and beneficial to performance of manufacturing firms. However, performance of these firms is surrounded with various problems regarding the inventories are managed which the previous studies had left out. And thus this study is justified in the sense that it highlights the how vital inventory management is in enhancing performance of organizations in this case Crown Beverages Ltd Co. as a case study.

1.8 Conceptual Frame work

Figure 1: 1: showing conceptual frame work on the role of inventory management on performance of manufacturing firms.



The conceptual framework describes the relationship between the independent variable and the dependent variable. In this conceptual framework, inventory management is the independent variable while performance of manufacturing firms is the dependent variable. In this study, it is assumed that inventory management has a significant contribution on performance of manufacturing firms. In the conceptual frame work, inventory management is operationalized into Inventory planning, Inventory management and Inventory turnover. On the other hand performance of manufacturing firms is considered as the dependent variable and characterised by timely delivery, Profitability and cost reduction. However, the relationship can also be affected

by a number of intervening variables, such as organizational policies and regulations, and government policies and regulations.

1.9 Definition of Key Terms

Inventory: - is the amount of goods, materials or parts carried out in stock or store house for example, work in progress (W.I.P), raw materials, financial goods resale MRO items (Graman, 2002).

Inventory management involves the planning, ordering and scheduling of the materials used in the manufacturing process. It exercises control over three types of inventories i.e. raw materials, work in progress, and finished goods. Purchasing is primary concerned with control over the raw materials inventory, which includes; raw materials or semi-processed materials, fabricated parts and MRO items (Maintenance, Repair And Operations) (Garry, 1997).

Inventory management systems and process is the science-based art of controlling the amount of stock held in various forms, within a business to meet economically the demands placed up one that business (Halachmi and Bouckart, 2005)

Inventory planning refers to the process of determining the optimal quantity and timing of inventory for the purpose of aligning it with sales and production capacity. Inventory planning has a direct impact a company's cash flow and profit margins especially for smaller businesses that rely upon a quick turnover of goods or materials (Halachmi and Bouckart, 2005)

Inventory turnover is a measure of the number of times inventory is sold or used in a time period such as a year (Malcom and Saundrers, 2005).

Performance: This refers to the ability a firm to accomplish given tasks and objectives measured against present known standards of accuracy, completeness, cost and speed. It is also deemed to comprise the actual output or results of a business as measured against its intended outputs (or goals and objectives (Alvesson, 2001).

Application; these are methods used to improve on inventory management or control in an organization (Graman, 2002).

1.10 Conclusions

Conclusively, it has been pointed out that inventory management is important and vital in enhancing the performance of organizations as agreed by Dimitrios & Koumanakos, (2008). This study therefore continues to investigate the effect of Inventory planning, Inventory management and inventory turnover on performance of organizations as will be seen in chapter two.

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

This chapter reviewed literature on to examine the effect of inventory management on performance of manufacturing firms. This chapter focuses on the major themes of the study which are: To examine the effect of inventory planning on performance; to find out the effect of inventory management systems on performance and to examine the effect of inventory turnover on performance.

2.1 Inventory Management

Inventory management is a science primarily about specifying the shape and percentage of stocked goods. It is required at different locations within a facility or within many locations of a supply network to precede the regular and planned course of production and stock of materials/ Inventory in organization is always changing and therefore requires constant and careful evaluation of external and internal factors and control through planning and review (Alvesson, 2001).

Michaud and Grant (2005) pointed out inventory management as stock items which are taken into store and held until required or as deliveries to the point of consumption. The control of these materials is known as inventory management. They emphasize that the function of inventory management is to obtain the maximum materials turnover consistence with the maintenance of sufficient materials to meet the organization's requirements in terms of production. Firms hold from 14% – 50% of their capital invested in inventories. New Vision of 14th April 2003 page 23 shows many companies listing inventory management as their first

priority. Inventory management becomes one of the purchasing goals; it involves the planning, ordering and scheduling of materials used in the manufacturing process. It exercises control over the three types of inventories like Raw materials, Work in progress and finished goods. Usually operational managers have an ambivalent attitude towards inventories. On the other hand, they provide security in a complex and uncertain environment knowing that you have items in stock whenever customers or production schedule demand for them.

Most of the organizations have a separate department or job function called inventory planners who continuously monitor, control and review inventory and interface with production, procurement and finance departments. Inventory management is a very important function that determines the health of the supply chain as well as the impacts the financial health of the balance sheet (Alvesson, 2001). Every organization constantly strives to maintain optimum inventory to be able to meet its requirements and avoid over or under inventory that can impact the financial figure. This implies that a lack of optimum inventory can negatively affect the performance of the firm.

Inventory constitutes the most significant part of current assets of larger majority of manufacturing industries. Because of the relative largeness of inventories maintained by most firms, a considerable sum of an organization's fund is being committed to inventory management. It thus becomes absolutely imperative to manage inventories efficiently so as to avoid the costs of changing production rates, overtime, sub-contracting, unnecessary cost of sales and back order penalties during periods of peak demand (Alvesson, 2001). This implies that Inventory management should be to ensure that inventories needed to sustain operations are available at all times but to hold costs of ordering and carrying the inventories to the lowest

possible levels. Therefore, there should be a systematic control and regulation of purchase, storage and usage of material in such a way so as to maintain an even flow of production and excessive investment in inventory.

2.2 Concept of Performance

Performance is a measure of the results achieved. Performance efficiency is the ratio between effort extended and results achieved. The difference between current performance and the theoretical performance limit is the performance improvement zone. Performance assumes an actor of some kind but the actor could be an individual person or a group of people acting in concert. The performance platform is the infrastructure or devices used in the performance act (Malcom, 2005). In this case, organizations are exploring ways of enhancing performance in response to constantly changing demands and adoption of inventory management systems has been revealed to be one of the ways of achieving good organizational performance.

According to Likert (2003) there are two main ways to improve performance: improving the measured attribute by using the performance platform more effectively to be able to assess the extent to which inventory management has been effective, or by improving the measured attribute by modifying the performance platform, which in turn allows a given level of use to be more effective in producing the desired output. This implies that if the inventory management techniques are properly applied, the organization can achieve maximum outputs.

According to Ronald, (2010), performance involves the concept of organizational change in which the managers and governing body of an organization put into place and manage a program which measures the current level of performance of the organization like inventory management

and then generates ideas for modifying organizational behavior and infrastructure which are put into place to achieve higher output. The primary goals of organizational inventory management are to increase organizational effectiveness and efficiency to improve the ability of the organization to deliver goods and or services. This implies that that companies must be able to provide good services while maintaining minimal inventories. Therefore, inventory management approaches/techniques are essential aspects of any organization

Performance improvement at the operational or individual employee level usually involves processes such as statistical quality control. At the organizational level, performance improvement usually involves softer forms of measurement such as customer satisfaction surveys which are used to obtain qualitative information about performance from the viewpoint of customers. In the same vein, it inventory management is key to performance improvement since it can provide and maintain good customer service; smooth the floor of goods through the productive process, provide protection against the uncertainties of supply and demand and also ensure a reasonable utilization of people and equipment.

2.3 Inventory Management Systems used in Manufacturing Firms

Closs et al (2002) noted that Inventory Management Systems (IMS) is a key instrument for businesses when tracking their inventory. They continued to say that Inventory Management Systems are used by firms that either sell a product or manufacture a product for purposes of accounting for all the tangible goods that allow for a sale of a finished product, or parts for making a product. The size and volume of a firm help dictate whether or not a firm is in need of such a system as they can be quite extensive and costly.

Furthermore, Vries (2007) asserted that it is absolutely necessary to make sure that all employees have the proper training and knowledge of the inventory management system and all the aspects of how to successfully utilize all the features. Once the employees are confident with the software, this will help the business benefit and should help them reach all their goals and objectives. Technology and trends are constantly changing in today's market, and for this reason there are continuously new and improved systems available to firms

2.3.1 Inventory Management Systems

Two Bin System; the two-bin system involves the storage of each item in two storage bins. In case the first bin is emptied, an order must be placed for re- supply. The second bin will contain sufficient quantities to last until fresh delivery is made. However, since this is not based on any format analysis of stock usage, it may result in holding too much or too little stock.

Fixed Period Ordering: Chen & Simchi (2004) stressed that in this system there is fixed time interval between every order placed for the item. For example a vendor will visit the store in person and check the inventory of the respective products and resupply the products based on the sales for the time duration. This kind of ordering is done in small format stores like pharmacies and grocery stores.

Yang, J. S. (2002) pointed out the Just in Time system of managing inventory and mentioned that the objective of Just in Time method is to increase the inventory turnover and at the same time reduce the inventory holding cost. JIT inventory system also exposes the unwanted or the dead inventory held by the retailer/ manufacturer. This method is ideal for manufacturing

organization and it is not used in Retail industry in general. This will also involve usage of Kanban card to track inventory movement.

ABC-Analysis model; since most organizations maintain different types of materials with different value, minimum attention is devoted to different items with the highest value (Pandey 1995). The difference involves of the different classes of inventory leads to the inventory control model by importance and exception or ABC analysis (Rich mond 1969).The ABC analysis involves the following:-Classify the items of inventory determining the expected used in units and price per unit for each item, determine the total value of each item by price and units, rank items according to value, and determine Percentage (%) ratio or units of each item to total items and value. Therefore proper ABC analysis leads to better control lover materials and consequent reduction in cost associated with materials (Jordan 1997).

The optimum model: According to the van Horne (1989), a company should introduce policies to reduce lead time, regulate usage and thus minimize safety status. Therefore the finance manager should ensure that only an optimum amount is invented in inventory to achieve the trade of between profitability and liquidity (Pandey 1995). Materials management is there a managerial process of counting planning, coordinating, control, monitoring and motivation.

Trial and error technique; According to Pandey, this is the simplest method of material control. In this case, management determines the level of inventory basing on the prices, orders and value of items of inventory. Material controlling is accessing the need for material and then taking appropriate action to meet this need (Lau , and Snell, 2006)

Van Weele (2009) asserted preparation of Inventory Budgets as a technique of managing inventory and pointed out that organisations having huge material requirement normally prepare

purchase budgets well in advance. The budget for production and consumable material and for capital and maintenance material should be separately prepared. Sales budget generally provide the basis for preparation of production plans and therefore, the first step in the preparation of a purchase budget is the establishment of sales budget. As per the production plan, material schedule is prepared depending upon the amount and return contained in the plan. This means that to determine the net quantities to be procured, necessary adjustments for the stock already held is to be made.

Wang (2005) opined that Three Bin Method as a common method following in manufacturing where Kanban system is being followed and it is similar to two bins system with a third bin at the suppliers' location. The supplier will not manufacture spare parts for the manufacturer until the reserve bin is emptied. Three bins each with a Kanban card tracking movement of inventory is available, one at manufacturing/ shop floor, one at the shop/back store, one with the supplier. Once the inventory in manufacturing/shop floor bin/display is consumed/sold, it is replenished with the complete bin from the back store/shop

Zhao (2006) identified the Fixed Order Quantity as the method used to avoid ordering mistakes and ensure regular replenishment of existing products. Only a fixed quantity can be ordered at one time for the item. This type of ordering is usually used in auto replenishment of goods where in auto reordering point is set in system and when the product's inventory level hits the reordering point or minimum stock levels, an order is placed to the maximum stocking capacity of the product. To use this method the retailer should know the minimum and maximum stocking capacity of the product based on space allocated and the sales trend.

Vasileva et al (2013) suggested the use of Materials Requirements Planning (MRP) during inventory control. One of the assumptions behind the lotyizing models just described is that demands for the item belong purchased or mode is independent of all other demands. This situation is true for most manufacturers finished goods. However, sub-assemblies, raw materials and parts do not exhibit this independence. Demand for these items is dependent on the assembly schedule for finished goods. Similarly, many MRO items depend on maintenance schedule and recognition of the existence of demand dependence lies behind the techniques known as materials requirements planning.

Furman, (1998) quoted the inventory recording technique and noted that inventory recording is under taken to reduce the error relating to inventory accountability and accuracy in a firm's investment in inventories. Wood Frank (1996) also indicates the stock accounting is important in any firm as it registers the changes in the level of stock held to realize maximum value and avoid typing up funds. Inventory recording may take forms stock taking and sport checks which are process of physically counting, weighing or otherwise measuring the quality of each item in stock and recording system should reduce the discrepancies between stock in record and the physical stock

Optimal Order Quality also known as a classical economic order quantity formula, it is still an inventory control technique still applied today in inventory control management (Chen, 2007). This model makes certain assumptions in the application such as Demand is consistent and continuous, Ordering and holding costs are constant overtime, The batch quantity does not need to be an integer and the whole batch is delivered at the same time, No shortages are allowed. In

this model, equilibrium is achieved when holding costs and ordering quantities become exactly equal. However, this model doesn't hold up if the assumptions made are not valid.

Leeders et al (1997), points out purchasing systems as one of the techniques of controlling inventories. The terms stockless purchasing and systems contracting are often used inter changeably. Actually, stockless purchasing systems are a special sub set of systems contracts where the purchaser's stock is taken over by a supplier. The supplier's delivery system is so reliable and fast that there is no need for any safety stock on the purchaser's premises. Typical applications include, but are not limited to office, electrical, plumbing and building maintenance supplies of a relatively standard nature. Coupled with ADI and direct delivery to the place of use, the stockless systems not only help reduce inventory levels, but also purchasing, receiving, handling, invoicing, and payments costs

Trial and error technique; According to Pandey, this is the simplest method of material control. In this case, management determines the level of inventory basing on the prices, orders and value of items of inventory. Material controlling is accessing the need for material and then taking appropriate action to meet this need (Lau and Snell, 2006)

Since most organizations maintain different types of materials with different value, minimum attention is devoted to different items with the highest value (Pandey 1995). The difference involves of the different classes of inventory leads to the inventory control model by importance and exception or ABC analysis (Rich mond 1969).The ABC analysis involves the following:- Classify the items of inventory determining the expected used in units and price per unit for each item, determine the total value of each item by price and units, rank items according to value, and determine Percentage (%) ratio or units of each item to total items and value (Jordan 1997)..

Therefore proper ABC analysis leads to better control lover materials and consequent reduction in cost associated with materials

Dong & Xu (2002) recommended the use of Vendor Managed Inventory and as the name explains, it involved SKUs managed directly by the supplier. Inventory is replenished based on the sales on regular intervals by the vendor. The retailer provides shop floor space and the vendor is charged a consignment rate on every product sold at the location. The ownership of the items from receiving to sales and inventory loss if any will be with the supplier.

2.4 Inventory planning and performance of manufacturing firms

Inventory planning involves the process of determining the optimal quantity and timing of inventory for the purpose of aligning it with sales and production capacity. Inventory planning has a direct impact a company's cash flow and profit margins especially for smaller businesses that rely upon a quick turnover of goods or materials (Alvesson, 2001). This implies that inventories constitute most of the current assets in the balance sheet and because large inventories are maintained by firms, a considerable amount of funds is required to be committed to them.

Halachmi and Bouckart, (2005) pointed out that Inventory planning is a function relating to inventory management. Business owners pay close attention to inventory as it usually represents the second largest expense in their businesses. Inventory planning includes creating forecasts to determine how much inventory should be on hand to meet consumer demand. Inventory planning and control is the process by which managers count and maintain inventory items in the business.

Therefore inventory planning enhances the effectiveness of inventory management approaches in achieving organizational performance.

In the same vein, the owners of manufacturing firms usually create internal policies and procedures for inventory planning so that the employees can follow these polices so as to be able to achieve maximum performance. Managers and employees must follow these policies and procedures when handling the company's inventory (Gary & Zenz, 2007). In a bid to reduce poor inventory management, policies and procedures are normally outlined to ensure effective inventory flows, for example who can order inventory, how inventory flows through the company, and accounting policies for valuing inventory and procedures to deal with obsolete goods. Inventory planning has several benefits for companies and manufacturing that who derive the majority of their revenue sales from inventory. As pointed out by Alvesson, (2001) inventory policies and procedures prevent employee abuse of inventory, steal inventory items for personal use which may results in a financial loss for the manufacturing firm. Proper employee behavior is a significant factor relating to inventory cash flow and profitability and inventory management at large. This is because Poor inventory management had become an issue of great concern in many organizations which affected performance which is regarded as the main stream for development of organizations. Therefore, there is need for policies and procedures to ensure effectiveness in inventory management.

According to Halachmi and Bouckart, (2005), firms can use inventory planning to generate higher profits. Inventory planning can enable the firm to purchase the right type of inventory to meet consumer demand which leads to higher business performance and profits. Inventory planning and control procedures can also limit the amount of obsolete inventory in the company.

Obsolete inventory must be disposed of and written off by the company so that the remaining inventory can be properly managed so as to be able to achieve organizational performance.

More so Ronald and ballow, (2010) argued that the use of technology such as ERPs usually helps organizations to spend less time on inventory planning functions. This helps the organization to remain at the forefront of business sales in increasing their company's profitability. This means that organizations should consider implementing inventory management soft wares like ERP to help manage inventory. These inventory management software provides firms with electronic methods to order, receive, manage and sell inventory. This signifies that the use of information technology is an important approach to inventory management and control so that costs like holding costs, security costs, and storage costs are avoided which also promotes the performance of the firm.

As agreed by Malcom and Saundrers, (2005), iinventory planning can help companies manage cash flow because such firms do not have large capital balances for purchasing copious amounts of inventory. This in turn limits the amount of money spent on inventory since the firm can be able to purchase the lowest cost inventory available as noted by Chen *et al*., (2005). Therefore, inventory management is a good strategy for reducing expenses and costs on inventory purchase which boosts the performance of the organization.

2.5 Inventory management systems and performance of manufacturing firms

Halachmi and Bouckart, (2005) documented that Inventory management systems and process is the science-based art of controlling the amount of stock held in various forms, within a business to meet economically the demands placed up one that business. This implies that the use of

proper inventory management systems can help the organization achieve good performance. According to Wanke, (2010), the aim of inventory control system is to maintain the quantities of stock held by a business at a level which optimizes some management criteria such as minimizing the costs incurred by the whole business enterprise for improved performance. This implies that inventory management system will help the organization to reduce on its holding costs, handling costs, operational costs which results in profitability and better performance.

Furthermore, Graman (2002) documented that inventories are stockpiles of raw materials, supplies, components, work in process and finished goods that appear at numerous points throughout a firm's production and logistic channel. Inventories are frequently found in such places as warehouses, yards, shop floors, transportation equipment and on retail store shelves. Therefore, carefully managing inventory levels makes good economic sense in relation to the performance of the business organization. Even though many efforts have been made by organizations to reduce inventories through just in time, time compression and quick response purchases, the effective application of inventory management systems is key in enhancing the performance of these organizations.

According to Alvesson, (2001) speed and efficiency are some of the benefits of inventory management systems since these systems make everything from inputting information to taking inventory easier. The inventory management systems can reduce time taken in inventory control for example doing a hand count of inventory can take days, but with a computerized inventory management system, the same process can be done in a matter of hours. This implies that the organization can be able to achieve better performance as a result of improved speed and efficiency.

Document Generation is a very key aspect in inventory management. This is because paper work documents go hand in hand with the soft copies of documents used in inventory management systems such as purchase orders and checks, invoices and account statements among others; once the inventory management system is in place, managers and workers can use it to automatically generate all kinds of documents (Wanke, 2010) which achieves better performance for the organization.

Similarly, Kolias (2010) agreed that inventory management systems can enable organizations to receive accurate and timely Data regarding their stock control. This is because with a manual system, the data is only as accurate and up to date as the last hand count. With inventory management systems, the management team can pull a report and instantly see how many units are on the floor, how many have sold and which products are selling the fastest and this can also boast the performance of the organization..

Inventory management systems help to enhance accuracy issues in stock control. This can help a firm to reduce its levels of inventory without adverse effects on organizational costs which has a favorable impact on its operations (Wanke, 2010). Therefore, over investment in inventory should be avoided because funds are tied up leading to loss of returns and increase costs thereby affecting performance.

Inventory management systems can also increase on the efficiency and productivity of the firm. In most situations inventory management devices, such as barcode scanners and inventory management software, can help drastically improve the efficiency and productivity. These devices such as barcode scanners and inventory management software will help eliminate

manual processes so the employees can focus on other – more important – areas of the business (Alvesson, 2001). This implies that the organization will be able to achieve better performance with more efficient and effective operations

A good inventory management system can support an organized warehouse of firm. If the warehouse is not organized, managers can have a hard time managing the inventory. Many organizations choose to optimize their warehouses by putting the highest selling products together and in easily accessible places in the warehouse (Gary and Zenz, 2007. This, in turn, helps speed up the order fulfillment process and keeps customers happy.

In addition to the above, Wanke, (2010) agreed that inventory management systems are primarily about specifying the shape and percentage of stocked goods. Inventory management systems are required at different locations within a facility or within many locations of a supply network to precede the regular and planned course of production and stock of materials. Inventory management is normally done with the primary objective of determining/controlling stock levels within the physical distribution system so that the functions to balance the need for product availability against the need for minimizing stock holding and handling costs. Inventory management is a process which involves systems and processes that identify inventory requirements, set targets, provide replenishment techniques, report actual and projected inventory status, and handle all functions related to the tracking and management of material (Wanke, 2010). This means that organizational performance can be achieved because all of the practices lead to optimal product storage, helping minimize holding and handling costs in the organization.

2.6 Inventory turnover and performance of manufacturing firms

Inventory turnover is a measure of the number of times inventory is sold or used in a time period such as a year. The equation for inventory turnover equals the cost of goods sold or net sales divided by the average inventory (Graman, 2002). Basically, many manufacturing firms want inventory turnover that which changes steadily since it helps the organization achieve increased sales volume, less risk of obsolescence and markdowns, improved salesperson morale, and increased asset turnover which enhances the profitability and performance of the firm.

According to Gary and Zenz (2007) it is important to note that there are increased sales volume as a result of good sales turnover: A rapid inventory turnover increases sales volume since merchandise is selling better and faster. In line with Wanke, (2010) it implies that, inventory turnover rises since inventory investment falls, and sales climb since the retailer is out of stock less often.

Halachmi and Bouckart, (2005) argued that there is less risk of increased costs as a result of obsolescence and Markdowns which is an indicator of better organizational performance. When inventory is selling quickly, merchandise isn't in the store long enough to become obsolete. As a result, markdowns are reduced and gross margins increase.

Inventory turnover also enhances more money for market opportunities: this is because when inventory turnover is high, money previously tied up in inventory is freed to buy more merchandise. Having money available to buy merchandise late in a fashion season can open tremendous profit opportunities (Malcom and Saundrers, 2005). This implies that the more the market opportunities, the more the effectiveness of the organization

Increased Asset Turnover; since inventory is a current asset, and if assets decrease and sales stay the same or increase, then asset turnover increases. This directly affects return on assets, the key performance measure for top management of the manufacturing firm. It is worth noting that high inventory turnover means the organization efficiently sells product on hand and replace it with fresh products (Wanke, 2010). In general, a high turnover ratio means the firm is either selling a lot of products or it is not ordering enough to cover demand

Turning over inventory quickly helps the firm to maintain price stability. Since the firms don't have to hold regular sales promotions to get rid of excess inventory, the firms can be able to sell more items at regular prices. This helps the firms to get the best profit margins on sales and also helps the firms to maintain brand and product quality images. Customers get used to paying regular price and are less likely to expect a discount (Malcom and Saundrers, 2005). This implies that that the organization is able to retain its loyal customers due to price stability which is an indicator of improved organizational performance.

Buying Power is also attributed to investor turnover .selling through more inventory allows the manufacturing firm to negotiate better deals with suppliers in many cases. Michaud and Grant (2005) argued that distributors often offer volume discounts to companies that buy a lot of inventory at once. This means that if the organization consistently sells products in high volumes, they can order more on each purchase and get better rates. Therefore, this improves the inventory costs, which allows the organization to pass on savings to customers or pocket greater margins on sales.

2.7 Conclusion

It is important to note that Inventory management is pivotal in effective and efficient organization. It is also vital in the control of materials and goods that have to be held (or stored) for later use in the case of production or later exchange activities in the case of services. The study gives literature on how Inventory management affects performance of manufacturing firms through inventory planning, inventory management systems and inventory turnover.

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents the approaches that were used to make the study successful. It gives details on the research designs that were used by the researcher and the reasons for choosing it. The chapter also captures the area of the study, population and the sampling methods to be used during the study. Chapter three also describes the data collection methods and instruments, methods of processing and analysis of data that the researcher employed. This chapter also shows how quality control was guaranteed during the study.

3.1 Research Design and Methodology

The researcher used the case study design this is a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence. This is because case study design that is Crown Beverages Company limited allows collection of enough details. This research design also enables research experiments.

3.1.2 Study approach

The researcher used both quantitative and qualitative approach. Given, and Lisa, (2008) noted that quantitative research approach refers to the systematic empirical investigation of social phenomena via statistical, mathematical or numerical data or computational techniques. Qualitative research approach is used to collect non – numerical data. The researcher used qualitative approach to yield an unbiased result that can be generalized to some larger population. Under the qualitative method, the researcher avails information as given by the

respondents. The researcher was able to use this method to collect data from a wide sample of respondents at the same time and during analysis, the research instrument (questionnaire) was easy to use. Data was collected using mainly interviews and questionnaires and is a basic device in tapping participants attitudes and opinions. Closed form of questionnaire was used to generate responses and data for analysis on the contribution of inventory management on performance of manufacturing firms. Both qualitative and quantitative approaches were used. The study was conducted among the respondents in Crown Beverages Ltd and their opinions on the topic under investigation were taken into account.

3.1.2 Time dimension

The researcher used cross sectional, this is because the research was conducted in a short period of time this research study was conducted and completed in a period of one year that is in 2016.

3.2 Area of the Study

The study was confined to Crown Beverages Company Limited which is located along Kampala Jinja Highway in Kampala Uganda. The company had enough information relevant to the study since it handles and manages a lot of inventory in its operations**.**

3.3 Study Population

Cooper *et.al* (2003) states that population is the total collection of elements about which we made some inference. Population can also be defined as a group of individuals, objects, or items from which the items are taken for measurement. The current research study focused on a population of the management and employees of Crown Beverages Limited who were key respondents for the study.

3.4 Sample Size

A sample is comprised of members from a selected population. The researcher chose a sample size this enabled the researcher to get accurate results or information from the study.

The study used a sample size of 70 respondents from a population of 85 employees of the Crown Beverages Ltd as estimated using the Sloven formulae

$$n = \frac{N}{1 + Ne^2}.$$

Whereby; n=sample size, N=Population, e=confidence level (0.05).

$$n = \frac{N}{1 + N(0.05^2)}$$

$$n = \frac{85}{1 + 85(0.05^2)}$$

= 70 Respondents

3.5 Sampling Technique and Procedure

The purposive sampling technique was used in the sampling process of the population of this research mostly when sampling the management Crown Beverages Ltd. Amin (2005) argued that purposive sampling is a non-probability sampling in which the decision concerning the individuals to be included in the sample was taken by the researcher basing on the fact that these individuals have been around long enough to have knowledge of the research issue and also the willingness to participate in this research. The study used purposive sampling techniques because

it was assumed to allow the researcher to select a sample with experience and knowledge about the study variables

The study also used random sampling techniques to select the respondents from the other employees of Crown Beverages Ltd. The researcher obtained the lists of the employees presently and randomly selected the respondents to participate in the study. The method reduced the cases of biasness thus use of representative sample. The technique was adopted on the assumption that the selected respondents gave the adequate information required by the study therefore they were given equal opportunity for being selected

3.6 Data sources

The researcher used both primary and secondary sources of data collection. Primary sources of data collection are sources which are being used for the first time that is first occurrence of the piece of work these sources include respondents that is responses from the questionnaires and interviews from staff at Crown Beverages Company Ltd. Secondary sources are publications aimed at wide audiences these include books, online journals, newspapers.

3.7 Data collection Methods and Instruments

The researcher used questionnaire and interviewing method when carrying out research. This is because these methods are easy and provide firsthand information.

3.7.1 Questionnaire

This is a research instrument or document which consists of a series of questions which are aimed at gathering information from respondents. The researcher send out questionnaires to

respondents who answered the questions and then send back the questionnaires with answers to the researcher.

3.7.2 Interview

This is a conversation between two or more people where questions are asked by the interviewer so as to gather information from the interviewee. Here the researcher asked questions or meet face to face with the interviewee so as to gather the information needed to carry out the research by the researcher.

3.8 Data analysis, presentation and management

The researcher compiled all the data collected and first arrange the data in topical and chronological order so that it was presented in a descriptive manner. The researcher also classified the data into categories, and themes to enable her use quantitative method in analyzing data collected. Qualitative data which was collected from interviews and documentary analysis was processed in the following stages namely; screening, coding and tabulation. These helped whereby; similar views and responses were screened and identified then coded according to the codes in the questionnaires in order to derive tables. On the other hand, quantitative data was processed by obtaining the ·filled-in questionnaires and entering them in Statistical Package for Social Scientists (SPSS) which was analyzed. In recording of results and reporting, the researcher used tables, pie-charts and graphs to represents the views of respondents on the study. The researcher preferred to use these means of recording and reporting of results because they provide easy comparison of responses to the questionnaires.

3.8 Quality Control (Validity and Reliability)

3.8.1 Reliability test

Reliability of measure according to Neuman (2012) is the extent to which the instrument being used is without bias and also ensures consistent measure thus when one's results are 0.6 and above they are reliable. Therefore both interview and questionnaire methods ought to be reliable hence the test retest was used. Test retest is where people who answered the questionnaires or have been interviewed are tested again to ensure that the information they have presented is reliable.

3.8.2 Validity test

Validity is the ability of a scale to measure the intended concept. The extent to which the test chosen accurately measures what it is intended to measure (Mugenda and Mugenda, 2005). The researcher used expert review approach that is experts will be consulted by the researcher.

3.9 Measurement of variables

The variables were measured by operationally defining concepts. These were channeled into observable and measureable elements to enable the development of an index of the concept. A five - (5) strongly agree, (4) agree, (3) not sure (2) disagree, (1) strongly disagree were used to measure the variables under study.

A variable is an empirically applicable concept that takes on two or more values. The researcher used independent, dependent and intervening variables. Independent variable is one that influences the dependent variable either in a negative or positive way that is the independent variable is inventory management and its dimensions are inventory planning, Inventory

management systems and Inventory turnover. Dependent variable is that which the researcher wished to explain that is the dependent variable is performance of manufacturing firms whereas intervening variable is one which affects both the independent and dependent variable.

3.10 Ethical considerations

Ethical research are the ethics of the planning, conduct, and reporting of research as noted by Given, and Lisa, (2008). It is clear that research ethics should include acknowledgment of all the works of other people used in the study that is work were clearly cited and acknowledged.

Voluntary participation that is for the case of interview and questionnaire no respondent were forced to take part in the research exercise.

A formal introduction made by the researcher to the organization where the research were carried out that is together with authority from the university the researcher is from that is university that authorizes the operation of data collection

3.11 Limitation of the Study

The study was limited by the respondents who seem to be busy most of the time that is the heartaches and teachers especially. This was limited the researcher in planning in time but the researcher overcome this by making appointments first with the respondents and for the questionnaires were delivered in time and picked at a later date.

Time**;** the researcher experienced time constraint in data collection, analysing of data and in final presentation of the report., However, the researcher overcame this problem by ensuring that the

time element is put into consideration and that all appointments agreed upon with respondents were fully met.

Some of the respondents may withhold back some of the information and thus the researcher were not get the right information. However, the researcher assured the respondents of the confidentiality of the information that they gave and that it was only be used for academic purposes.

3.12 Conclusion

The chapter is basically the backbone of the research, because it sought for information about the inventory management and performance of firms, by using different data collection methods, within the respondents from Crown Beverages Ltd and the available documents about the inventory management. The findings were later on be analyzed and presented in the next chapter four.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF THE FINDINGS

4.0. Introduction

This chapter presents the findings of this study. It highlights the characteristics of the respondents and presents the findings that were generated from interactions the findings on Inventory Management and Performance of Manufacturing Firms with specific reference to Crown Beverages Limited - Pepsi. The study was based on the objectives and the following results were established;

4.1 Response rate

The study administered the following instruments for the collection of the data: interviews and questionnaire**.**

Table 4.1 Showing the response rate of the respondents

Instruments administered	**Frequency (F)**	**Percentage (%)**
Questionnaires Returned	60	85.7s
Questionnaires returned	0	0.0
Interviews carried out	10	14.3
Total Sample	**70**	100.0

Source: Primary data

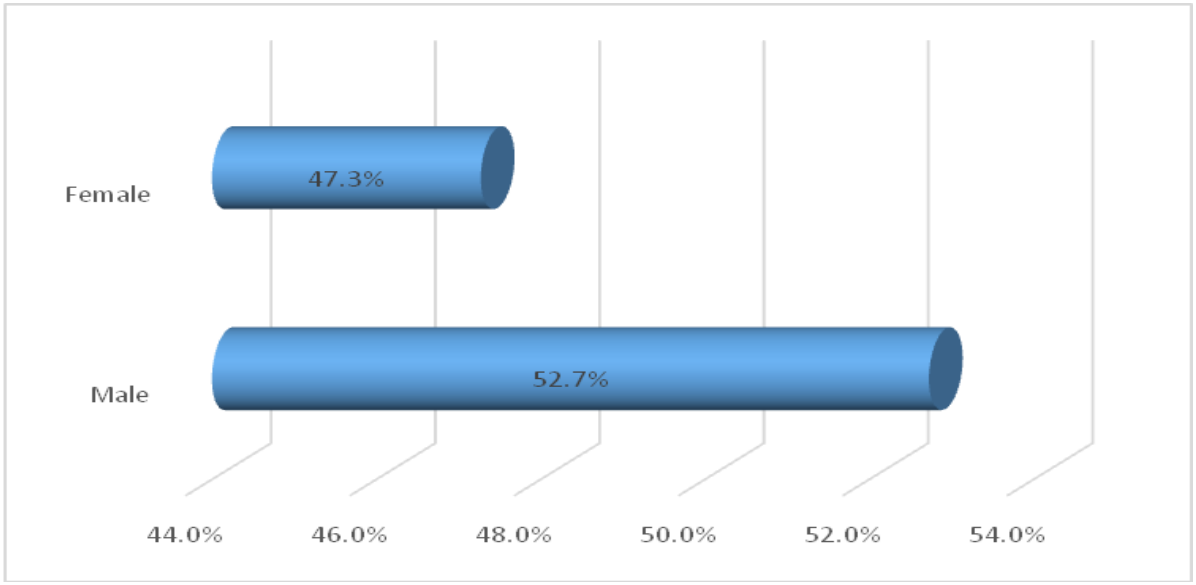
Table 4.1 has demonstrated the distribution of the respondents according to the instruments used by the researcher that, (85.7%) of the targeted respondents participated by answering the questionnaires whereas (14.3%) participated by giving responses during the interview. The outcome from the table shows an effective and influential participation that depicted a successful data collection leading to compilation of a report with enough information.

4.2 General information

General characteristics of the respondents were explored as shown in tables and figures below. They included Gender, Age group, Marital status and Education qualification.

4.2.1 Gender of the Respondents

Figure 4: 1: showing the Gender of the Respondents



Source: Primary data

Results from figure 4.1 presented that the majority (52.7%) of the respondents were males while the minority (47.3%) of the respondents were females. This implied that there was gender

imbalance as observed from the percentage of men involved compared to the percentage of women involved. This also assisted the study to obtain information from distinct sides thus acquiring unbiased data.

4.2.2 Age group of the Respondents

Table 4.2: **Age group of the Respondents**

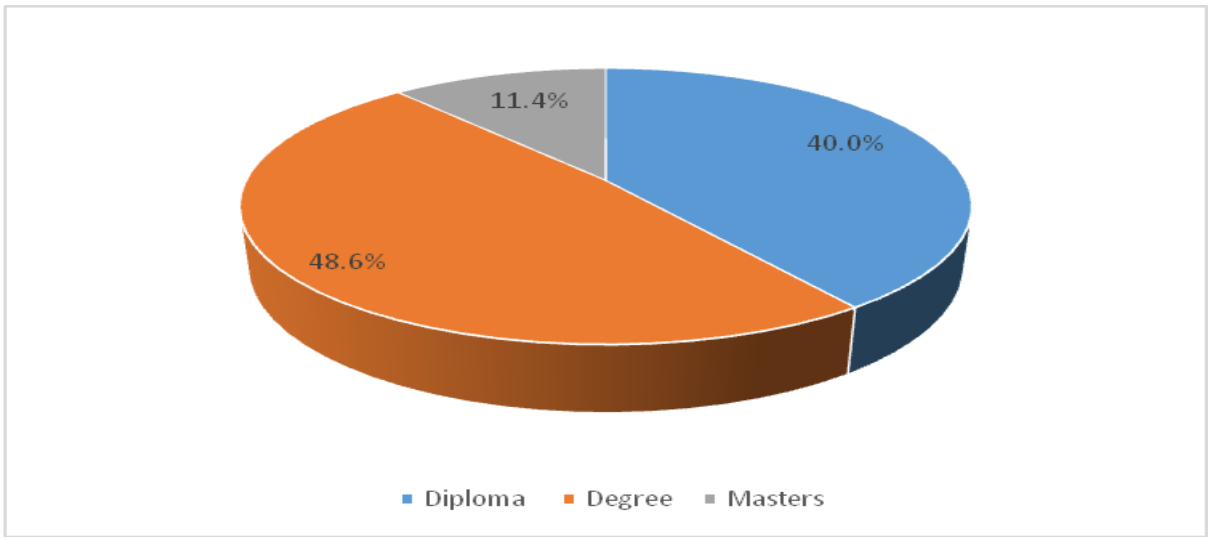
Instruments	Frequency (F)	Percentage (%)	Valid Percent (%)	Cumulative Percent
18-30	28	40	40	40
31-40	21	30	30	70
41-50	15	21.4	21.4	91.4
Above 50	6	8.6	8.6	100
Total	**70**	**100**	**100**	

Source: Primary data

Results from table 4.2 showed that the majority (40.0%) of the respondents had 18-30 years, these were followed by (30.0%) who had years ranging from 31 – 40years, then (21.4%) of the respondents were between 41-50, whereas the minority (8.6%) of the respondents had years above 50. This implied that the largest portion of the respondents were still at youth stages and also depicted that the most workers were youths. This also assisted the researcher to acquire varying views from distinct age groups.

4.2.3 Education Qualification of Respondents

Figure 4: 2: Education Qualification of Respondents



Source: Primary data

According to the results from figure 4.2 above, it is presented that the most respondents that is (48.6%) were degree holders, these were followed by (40.0%) of them who had attained a diploma only while the minority (11.4%) were having a Master's degree. The educational attainment of respondents is an important indicator of their knowledge about the relationship between Inventory Management and Performance of Manufacturing Firms. Therefore, the different levels of education were so prominent to this study in order to gather all these different views about the relationship between inventory management and performance of manufacturing firms.

4.2.4 Marital status of Respondents

Table 4. 3: Marital Status of Respondents

Marital Status	Frequency (F)	Percentage (%)	Valid Percent (%)	Cumulative Percent
Single	24	34.3	34.3	34.3
Married	34	48.6	48.6	82.9
Divorced	8	11.4	11.4	94.3
Separated	4	5.7	5.7	100.0
Total	**70**	**100.0**	**100.0**	

Source: Primary data

From table 4.3 above, results indicated that the majority (48.6%) of the respondents were married, those were followed by (34.3%) who were single, then (11.4%) were divorced while the minority (5.7%) of the respondents separated. These results imply that married respondents were more involved in inventory management. This could be because most employees in manufacturing companies are above the age of 18, which is a prime age for marriage in Uganda hence the statistics were right to confirm that they are more married respondents who were working in crown Beverages Limited – Pepsi than any other marital status.

4.3 Inventory management systems

The first objective of the study was to identify inventory management systems used at Crown Beverages Ltd. Company Uganda. The findings were presented, analysed and interpreted in percentages and frequencies as indicated below. The results are categorized on how the respondents strongly agree, (5), agree (4), not sure (3), disagree (2) and strongly disagree (1) and Standard Deviation (STD).

Table 4.4: Inventory Management Systems

Inventory Management Systems	5		4		3		2		1		Mean	STD
we use vendor Managed Inventory	(F)	(%)	(F)	(%)	(F)	(%)	(F)	(%)	(F)	(%)	(F)	(%)
	31	51.7%	21	35.0%	5	8.3%	2	3.3%	1	1.7%	3.55	1.230
Fixed Order Quantity	25	41.7%	33	55.0%	0	0.0%	2	3.3%	0	0.0%	3.45	0.784
Just In Time agreement is one of the techniques that we use	41	68.3%	15	25.0%	2	3.3%	1	1.7%	1	1.7%	4.24	0.927
we also use ABC method	21	35.0%	28	46.7%	8	13.3%	3	5.0%	0	0.0%	3.35	1.203
Fixed Period Ordering is among the inventory management system	39	65.0%	15	25.0%	2	3.3%	3	5.0%	1	1.7%	4.21	0.674

Source: Primary data

Results from the findings provided in Table 4.4 show that the majority (51.7%) strongly agreed that Crown Beverages Limited uses vendor managed inventory as an inventory management systems, (35.0%) agreed (8.3%) of the respondents were not sure whether vendor Managed Inventory is used while (3.3%) and (1.7%) disagreed and strongly disagreed respectively. The mean of 3.55 and standard deviation of 1.230 presented the (51.7%) of the respondents who strongly agreed. This implies that the Company management pays attention to the inventory managed inventory systems of material in the store to a higher extent. This also means that the

use of vendor managed inventory has improved Company's performance. This was in agreement with Dong & Xu (2002) who recommended the use of Vendor Managed Inventory where inventory is replenished based on the sales on regular intervals by the vendor.

According to the study findings, it was also found that the majority (55.0%) agreed that Crown Beverages Limited uses Fixed Order Quantity as an inventory management systems**,** (41.7%) strongly agreed whereas the minority (3.3%) of the respondents disagreed. The mean of 3.45 and standard deviation of 0.784 presented the (55.0%) of the respondents who agreed. This shows that the company is able to benefit from the fixed time interval between every order placed for the item whereby the company can be able to check the inventory of the respective products and resupply the products based on the sales for the time duration. This was supported by the interview findings where a respondent mentioned that;

> "*Fixed Order Quantity has been adopted due to its ability to avoid ordering mistakes and ensure regular replenishment of existing products*"

With consideration to the use of Just in Time (JIT) agreement as one of the techniques in inventory management**,** study findings revealed that the majority (68.3%) strongly agreed that Crown Beverages Limited uses Just In Time agreement as one of the techniques in inventory management**,** (25.0%) agreed, (3.3%) were not sure while the (1.7%) and (1.7%) disagreed and strongly disagreed respectively. The mean of 4.24 and standard deviation of 0.927represented the majority (68.3%) of the respondents who strongly agreed. This implies the organization has been able to use JIT which has increased the inventory turnover and at the same time reduce the inventory holding cost.

In relation to the study findings, it was presented that the majority (46.7%) agreed that Crown Beverages Limited uses ABC method as one of the inventory management systems**,** (35.0%) strongly agreed, (13.3%) were not sure whether ABC method is used in inventory management while the minority (5.0%) disagreed and strongly disagreed respectively. The mean of 3.35 and standard deviation of 1.203 represented the majority (46.7%) of the respondents who agreed. The indicates that through inventory management, the company has gained a better control over materials and consequent reduction in cost associated with materials as a result of use of proper ABC method. This was in line with Jordan (1997) who stated that ABC analysis leads to better control lover materials and consequent reduction in cost associated with materials. The previous researcher also asserted that ABC analysis helps to classify the items of inventory determining the expected used in units and price per unit for each item. This implies that the company is able to rank items according to value, and determine Percentage (%) ratio or units of each item to total items and value,

In relation to the study findings provided in table 4.4, it was found that the majority (65.0%) agreed that Crown Beverages Limited uses Fixed Period Ordering as one of the inventory management techniques**,** (25.0%) agreed, (3.3%) were not sure whether Fixed Period Ordering is used in inventory management while the minority (5.0%) disagreed and strongly disagreed respectively. The mean of 4.21 and standard deviation of 0.674 represented the majority (65.0%) of the respondents who agreed to using fixed period ordering. Fixed Period Ordering was recommended by Chen & Simchi (2004) who stressed that in the use of fixed period ordering there is fixed time interval between every order placed for the item. This implies that the

company has been able to avoid ordering mistakes and ensure regular replenishment of existing products which has improved their performance.

4.4 Effect of Inventory Planning on Performance

The second objective of the study was to examine the effect of inventory planning on performance of Crown Beverages Ltd. Company Uganda. The findings were presented, analysed and interpreted in percentages and frequencies as indicated below. They are categorized on how the respondents strongly agree, (5), agree (4), not sure (3), disagree (2) and strongly disagree (1) and Standard Deviation (STD).

Table 4. 5: Effect of inventory planning on performance

Effect of Inventory Planning on Performance	**5**		**4**		**3**		**2**		**1**		**Mean**	**STD**
Inventory planning encourages optimal quantity and timing of inventory for the purpose of aligning it	**(F)**	**(%)**	**(F)**	**(%)**	**(F)**	**(%)**	**(F)**	**(%)**	**(F)**	**(%)**		
	32	53.3%	26	43.3%	1	1.7%	0	0.0%	1	1.7%	3.53	0.592
it helps in creating forecasts to determine how much inventory should be on hand to meet consumer demand	27	45.0%	27	45.0%	2	3.3%	3	5.0%	1	1.7%	3.50	0.773
we use inventory planning to generate higher profits	38	63.3%	18	30.0%	1	1.7%	2	3.3%	1	1.7%	4.23	1.310
it also allows organizations to remain at the forefront of business sales in increasing their company's profitability	41	68.3%	14	23.3%	2	3.3%	3	5.0%	0	0.0%	4.28	1.025

Inventory planning can help our company to manage cash flow	23	38.3%	37	61.7%	0	0.0%	0	0.0%	0	0.0%	3.25	0.926

Source: Primary data

Results from the findings provided in table 4.5 shows that the majority (53.3%) strongly agreed that inventory planning encourages optimal quantity and timing of inventory for the purpose of aligning it**,** (43.3%) agreed (1.7%) of the respondents were not sure whether inventory planning encourages optimal quantity and timing of inventory while (1.7%) strongly disagreed respectively. The mean of 3.53 and standard deviation of 0.592 presented the (53.3%) of the respondents who strongly agreed. This means that inventory planning has been used to maximize inventory investment and increase profitability which has also led to improved performance of the organization. This was supported by the interview findings where a respondent noted that;

> "*Inventory planning has a direct impact a company's cash flow and profit margins and if inventory planning is conduced efficiently, profits will be maximised*"

Another respondent also said that:

> "*Planning for inventory in our organization is key because it helps us to ensure markdowns due to overstock and lost sales due to stock outs are minimized"*

According to the study findings, it was show that (45.0%) agreed thatinventory planning helps in creating forecasts to determine how much inventory should be on hand to meet consumer demand**,** (45.0%) strongly agreed (3.3%) were not sure about this (5.0%) disagreed whereas the minority (1.7%) of the respondents strongly disagreed. The mean of 3.50 and standard deviation of 0.773implied that inventory planning plays a great role in creating forecasts. This implies that

inventory planning has enabled the company to forecast demand thereby determining the optimal quantity and timing of inventory for the purpose of aligning it with sales and production capacity. This has enhanced the performance of the organization. This was in line with Halachmi and Bouckart, (2005) who accentuated that inventory planning and control is the process by which managers count and maintain inventory items in the business.

With consideration to the study findings, it was indicated that the majority (63.3%) strongly agreed that Crown Beverages Limited use inventory planning to generate higher profits**,** (30.0%) agreed, (1.7%) were not sure while the (3.3%) and (1.7%) disagreed and strongly disagreed respectively. The mean of 4.23 and standard deviation of 1.310 represented the majority (63.3%) of the respondents who strongly agreed. This implies that planning and ppurchasing the right type of inventory to meet consumer demand often leads to higher business profits which also improves the performance of the organization

In relation to the study findings, it was presented that the majority (68.3%) strongly agreed that inventory planning allows organizations to remain at the fore front of business sales in increasing their company's profitability**,** (23.3%) agreed, (5.0%) disagreed whereas the minority (3.3%) of the respondents were not sure about this. The mean of 4.28 and standard deviation of 1.025 represented the majority (68.3%) of the respondents who agreed. This implies that inventory management helps business owners to spend less time on inventory planning and control functions which allows the business to remain at the forefront of business sales in increasing their company's profitability. In line with the stated effect, Ronald and Ballow (2010) suggested that that organizations should consider implementing business technology to help manage inventory.

In relation to the study findings, it was presented that the majority (61.7%) agreed that inventory planning helps the company to manage cash flow while the minority (38.3%) of the respondents agreed. The mean of 3.25and standard deviation of 0.926 represented the majority (61.7%) of the respondents who agreed. This implies that Cash flow improvements also come from purchasing the lowest cost inventory available in the business environment as a result of inventory management. This was supported by the interview findings where a respondents noted that;

> "*Sometimes the company does not have large capital balances for purchasing copious amounts of inventory therefore inventory planning helps in implementing policies and procedures to limit the amount of money spent on inventory*"

4.5 Effect of inventory management systems on performance

The third objective of the study was to determine the effect of inventory management systems on performance of Crown Beverages Ltd. Company Uganda. The findings were presented, analysed and interpreted in percentages and frequencies as indicated below. They are categorized on how the respondents strongly agree, (5), agree (4), not sure (3), disagree (2) and strongly disagree (1)

Table 4. 6: Effect of inventory management systems on performance

Inventory management systems on performance	**5**		**4**		**3**		**2**		**1**		**Mean**	**STD**
Inventory management systems have increased on the efficiency and productivity	**(F)**	**(%)**	**(F)**	**(%)**	**(F)**	**(%)**	**(F)**	**(%)**	**(F)**	**(%)**		
	40	66.7%	17	28.3%	2	3.3%	0	0.0%	1	1.7%	4.36	0.792

Inventory management systems have helped us to carefully manage inventory levels	23	38.3%	31	51.7%	1	1.7%	3	5.0%	2	3.3%	3.45	0.619
Inventory management systems have enabled us to reduce inventories through just in time	26	43.3%	28	46.7%	3	5.0%	2	3.3%	1	1.7%	3.41	1.312
Inventory management system makes everything from inputting information to taking inventory easier	45	75.0%	15	25.0%	0	0.0%	0	0.0%	0	0.0%	4.55	1.043
With inventory management system in place, managers and workers can use it to automatically generate all kinds of documents	31	51.7%	26	43.3%	2	3.3%	1	1.7%	0	0.0%	3.65	0.957

Source: Primary data

Results from the findings show that the majority (66.7%) strongly agreed that inventory management systems have increased on the efficiency and productivity**,** (28.3%) agreed,(3.3%) of the respondents were not sure whether inventory management systems have increased on the efficiency and productivity while (1.7%) strongly disagreed respectively. The mean of 4.36 and standard deviation of 0.792 presented the (66.7%) of the respondents who strongly agreed. This implies that the organization has been able to use devices such as barcode, scanners which has helped eliminate manual processes so the employees can focus on other – more important – areas of the business. This was in agreement with Alvesson (2001) who propounded that in most situations inventory management devices, such as barcode scanners and inventory management software, can help drastically improve the efficiency and productivity.

According to the study findings, it was show that (51.7%) agreed inventory management systems have helped Crown beverages limited to carefully manage inventory levels**,** (38.3%) strongly agreed (3.3%) were not sure about this (5.0%) disagreed, (3.3%) strongly agreed whereas the minority (1.7%) of the respondents were not sure about this. The mean of 3.45 and standard deviation of 0.619 represented the majority (51.7%) agreed. This implies that carefully managing inventory levels makes good economic sense in relation to the performance of the business organization, This also depicted the company has been to avoid overstocking and understocking through use of inventory management systems.

With consideration to the study findings, it was indicated that the majority (43.3%) strongly agreed that inventory management systems have enabled us to reduce inventories through just in time**,** (30.0%) agreed, (5.7%) were not sure about this while the (3.3%) and (1.7%) disagreed and strongly disagreed respectively. The mean of 3.41 and standard deviation of 1.312 represented the majority (46.7%) of the respondents who strongly agreed. This shows that through JIT, the company is able to get quick response purchases applied throughout the supply channel.

In relation to the study findings, it was presented that the majority (75.0%) strongly agreed that Inventory management system makes everything from inputting information to taking inventory easier whereas the minority (25.0%) of the respondents agreed. The mean of 4.55and standard deviation of 1.043 represented the majority (75.0%) of the respondents who agreed. This shows that the company is able to use inventory management system to automatically generate all kinds of documents, from purchase orders and checks to invoices and account statements. This was in agreement with Alvesson (2001) who stressed that doing a hand count of inventory can take

days, but with a computerized inventory management system, the same process can be done in a matter of hours

In relation to the study findings, it was presented that the majority (51.7%) agreed that with inventory management system in place, managers and workers can use it to automatically generate all kinds of documents while the minority (43.3%) of the respondents agreed, (3.3%) were not sure about this while the minority (1.7%) of the respondents disagreed. The mean of 3.65 and standard deviation of 0.957 represented the majority (51.7%) of the respondents who agreed. This implies that managers of the organization can also use the system to automatically order products when they run low. This was supported by the interview findings where one of the respondents noted that;

> "*Inventory management systems has enabled the organization to obtain inventory reports and other documents at any time they are needed*"

4.6 Effect of Inventory Turnover on Performance

The fourth objective of the study was to examine the effect of inventory turnover on performance of Crown Beverages Ltd. Company Uganda. The findings were presented, analysed and interpreted in percentages and frequencies as indicated below. They are categorized on how the respondents strongly agree (5), agree (4), not sure (3), disagree (2) and strongly disagree (1) and Standard Deviation (STD).

Table 4.7: Effect of inventory turnover on performance

	5		**4**		**3**		**2**		**1**		**Mean**	**STD**
Inventory turnover has enabled us to	**(F)**	**(%)**	**(F)**	**(%)**	**(F)**	**(%)**	**(F)**	**(%)**	**(F)**	**(%)**		

effectively measure the number of times inventory sold or used in a time period such as a year.	32	53.3%	20	33.3%	4	6.7%	3	5.0%	1	1.7%	3.53	0.872
It has also brought decreased operating expenses, and increased asset turnover	35	58.3%	21	35.0%	0	0.0%	2	3.3%	2	3.3%	3.58	0.746
Inventory turnover has reduced risk of obsolescence and Markdowns:	29	48.3%	30	50.0%	0	0.0%	0	0.0%	1	1.7%	3.41	1.205
We have achieved a good increased sales volume as a result of inventory management	28	46.7%	28	46.7%	3	5.0%	1	1.7%	0	0.0%	3.50	1.223
With a good inventory management there is less capital tired up in inventory ,	33	55.0%	21	35.0%	4	6.7%	1	1.7%	1	1.7%	3.85	0.942

Source: Primary data

Results from the findings show that the majority (53.3%) strongly agreed that inventory turnover has enabled the company to effectively measure the number of times inventory sold or used in a time period such as a year**,** (33.3%) agreed, (6.7%) of the respondents were not sure about this, (5.0%) disagreed while the minority (1.7%) of the respondents strongly disagreed respectively. The mean of 3.53 and standard deviation of 0.872 presented the (53.73%) of the respondents who strongly agreed. This implies that the company has been able to achieve rapid inventory turnover which has led to increased sales volume, less risk of obsolescence and markdowns, This was in agreement with Malcom and Saundrers (2005) who noted that inventory turnover is a ratio showing how many times a company's inventory is sold and replaced over a period

According to the study findings, it was show that (58.3%) agreedinventory turnover has brought decreased operating expenses, and increased asset turnover**,** (35.0%) strongly agreed whereas (3.3%) disagreed and only (3.3%) strongly disagreed. The mean of 3.58 and standard deviation of 0.746 represented the majority (58.3%) agreed. This implies that inventory turnover increases sales volume since fresh merchandise is available to customers, and fresh merchandise sells better and faster than old.

With consideration to the study findings, it was indicated that the majority (50.0%) agreed thatinventory turnover has reduced risk of obsolescence and Markdowns**,** (48.3%) strongly agreed, while the minority (1.7%) strongly disagreed. The mean of 3.41 and standard deviation of 1.205 represented the majority (50.0%) of the respondents who agreed. This implies that when inventory is selling quickly, merchandise isn't in the store long enough to become obsolete. As a result, markdowns are reduced and gross margins increase.

In relation to the study findings, it was presented that (46.7%) strongly agreed that a good increased sales volume has been achieved as a result of inventory management, (46.7%) of the respondents agreed, (5.0%) were not sure whether a good increased sales volume has been achieved as a result of inventory management whereas the minority (1.7%) of the respondents disagreed. The mean of 3.50 and standard deviation of 1.223depicted that inventory management has played a big role in sales increase. This implies that as a result, inventory turnover rises since inventory investment falls, and sales volume increase since the retailer is out of stock less often

In relation to the study findings, it was presented that the majority (55.0%) strongly agreed thatwith a good inventory management there is less capital tired up in inventory, (35.0%) of the

respondents agreed, (6.7%) were not sure about this while (1.7%) and (1.7%) of the respondents disagreed and strongly disagreed respectively. The mean of 3.85 and standard deviation of 0.942represented the majority (55.0%) of the respondents who agreed. this implies that if the items in inventory do not get sold, the company's money will not become available to pay its employees, suppliers, lenders,

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter draws the summary of the findings and conclusions from the study based on the findings presented in data analysis in relation to the study objectives. The chapter also advances the recommendations, as well as identifying the areas for further studies.

5.1 Summary of the findings

5.1.1 Inventory management systems used at Crown Beverages Ltd. Company Uganda

The findings revealed that the majority of the respondents agreed that Crown Beverages Limited uses vendor managed inventory and Fixed Order Quantity inventory management systems. It was also reported that Crown Beverages Limited uses Just in Time agreement as one of the techniques in inventory management. Closs et al (2002) noted that Inventory Management Systems such as vendor managed inventory and Fixed Order Quantity and Just in Time are key instruments for businesses when tracking their inventory. They continued to say that Inventory Management Systems are used by firms that either sell a product or manufacture a product for purposes of accounting for all the tangible goods that allow for a sale of a finished product, or parts for making a product.

The findings also revealed that the majority of the respondents agreed and strongly agreed Crown Beverages Limited uses ABC method and Fixed Period Ordering as inventory management systems in order to minimize losses and maximize profits. Pandey (1995)

documented that with the use of inventory management system like ABC-Analysis model is important since most organizations maintain different types of materials with different value, minimum attention is devoted to different items with the highest value.

5.1.2 Effect of inventory planning on performance of Crown Beverages Ltd. Company Uganda

The study revealed that majority of the respondents strongly agreed that inventory planning has encouraged optimal quantity and timing of inventory for the purpose of aligning it and more to that it has helped in creating forecasts to determine how much inventory should be on hand to meet consumer demand. Disney, (2009) said that inventory planning process of determining the optimal quantity and timing of inventory for the purpose of aligning it with sales and production capacity.

In addition to the above the study also indicated that majority of the respondents agreed and strongly agreed that Crown Beverages Limited has used inventory planning to generate higher profits, manage cash flow and furthermore, inventory planning has allowed organizations to remain at the forefront of business sales in increasing their company's profitability. Halachmi and Bouckart, (2005) argued that the firms can use inventory planning to generate higher profits. Purchasing the right type of inventory to meet consumer demand often leads to higher business profits.

5.1.3 Effect of inventory management systems on performance of Crown Beverages Ltd.

The study revealed that the majority of the respondents strongly agreed that inventory management systems have increased on the efficiency, productivity and they have helped Crown beverages limited to carefully manage inventory levels. Alvesson, (2001) documented that

Inventory management systems can also increase on the efficiency and productivity of the firm. In most situations inventory management devices, such as barcode scanners and inventory management software, can help drastically improve the efficiency and productivity.

The study revealed that the majority of the respondents strongly agreed that inventory management systems have enabled the company to reduce inventories through just in time and that Inventory management system has made everything from inputting information to taking inventory. It was also reported that because the inventory management system is in place, managers and workers have used it to automatically generate all kinds of documents. Wanke, (2010) pointed out that once the inventory management system is in place, managers and workers can use it to automatically generate all kinds of documents, from purchase orders and checks to invoices and account statements. Managers can also use the system to automatically order products when they run low.

5.1.4 Effect of inventory turnover on performance of Crown Beverages Ltd.

The study revealed that the majority of the respondents strongly agreed that inventory turnover has enabled the company to effectively measure the number of times inventory sold or used in a time period such as a year and it has brought decreased operating expenses, and increased asset turnover. The study revealed that the majority of the respondents agreed and strongly agreed that inventory turnover has reduced risk of obsolescence and Markdowns. It was also identified that a good increased sales volume has been achieved as a result of inventory management, and there is less capital tired up in inventory. In agreement with the study findings, Malcom and Saundrers, (2005), many manufacturing firms want rapid inventory turnover-but not too rapid. The advantages of rapid inventory turnover include increased sales volume, less risk of obsolescence

and markdowns, improved salesperson morale, mote money for market opportunities, decreased operating expenses, and increased asset turnover.

5.2 Conclusions

In conclusion it was observed that the Crown Beverages Limited uses vendor managed inventory, Fixed Order Quantity, Limited uses Just in Time, ABC method and Fixed Period Ordering as inventory management systems in order to minimize losses and maximize profits. It was also exposed that inventory planning has encouraged optimal quantity and timing of inventory, it has created forecasts to determine how much inventory should be on hand to meet consumer demand and it has also been used to generate higher profits and manage cash flow.

From the study it was also discovered inventory management systems have increased on the efficiency, productivity, manage inventory levels and they have made everything from inputting information to taking inventory. It was also observed that inventory turnover has enabled the company to effectively measure the number of times inventory sold or used in a time period such as a year and it has brought decreased operating expenses, and increased asset turnover.

5.3 Recommendations

Based on this study, the researcher made the following recommendations;

The Management of Crown Beverages Limited-Pepsi should appoint a team of qualified employees to conduct inventory management. This will help the organisation to avoid inefficiencies, damages and issues of overstocking.

Inventory management should be given priority as it is influential in relation to performance of the company. This means that policies and procedures should be set which are supposed to be followed by the company employees.

The company management should hold training sessions through which all the company employees can be highlighted about the importance of inventory management and how that ensure that inventories are in good state.

Crown Beverages Limitedmanagement should set the company targets, objectives and goals in line with maintenance and control of inventory. Furthermore, other employees should also be allowed to actively participate in the processes of inventory management.

5.4 Areas for further study

During the study, there were areas that were beyond the scope of the study that called for further investigation: Future studies should concentrate on other factors that influence the performance of the Crown Beverages Limited since this study did not focus on other factors are affect performance of organization like the, awareness & acceptance of technology in inventory management systems and issues related with the policies regulation of the government among others.

Due to the limitation of time the same study could be conducted a few years from now in order to establish if there are any changes in the effect of inventory management on the performance of organizational within this environment.

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APPENDIX 1: QUESTIONNAIRES

Dear respondent,

I am called **KAREN KAWERE** a student of Uganda Martyrs University. I am carrying out a research study on the topic of **"Inventory Management and Financial Performance of Manufacturing Firms** using a case study of **"Crown Beverages Limited".** This questionnaire is therefore intended to seek information on the above subject matter. The information is purely for academic purposes and all the answers will be handled with utmost confidentiality. I therefore humbly request that you complete this questionnaire correctly in the spaces provided or options given (Please, tick the appropriate answers where options are given).

Section A: Background Information

1. Age Group

a) Below 18 years ☐ b) 18 – 30 years ☐ c) 31-40 years ☐ d) 41-50 years ☐

g) Above 50 years ☐

2. `Sex

a) Male ☐ b) Female ☐

3. Education Level

a) Diploma ☐ b) Degree ☐ c) Masters ☐

d) Others (Specify)…….

4. Marital Status

a) Single ☐ b) Married ☐ c) Divorced ☐

d) Separated ☐

Please use the scale above to tick under the appropriate box your view on the following statements below;

5	4	3	2	1
strongly agree	Agree	Not sure	disagree	strongly disagree

Section B: inventory management systems

5. Do you use the inventory management systems in your organization?

	inventory management systems	**5**	**4**	**3**	**2**	**1**
A	we use vendor Managed Inventory					
B	Fixed Order Quantity					
C	Just In Time agreement is one of the techniques that we use					
D	we also use ABC method					
E	Fixed Period Ordering is among the inventory management system					

SECTION C: effect of inventory planning on performance

5. To what extent do you agree with the following statements with regards to inventory planning on performance of organization?

	Inventory Planning on Performance	**5**	**4**	**3**	**2**	**1**
a	Inventory planning encourages optimal quantity and timing of inventory for the purpose of aligning it					
b	it helps in creating forecasts to determine how much inventory should be on hand to meet consumer demand					

c	we use inventory planning to generate higher profits					
d	it also allows organizations to remain at the forefront of business sales in increasing their company's profitability					
e	Inventory planning can help our company to manage cash flow					

SECTION D: effect inventory management systems on performance

6. To what extent do you agree with the following statements with regards to the effect of inventory management systems on performance?

	Inventory management systems and performance	**5**	**4**	**3**	**2**	**1**
a	Inventory management systems have increased on the efficiency and productivity					
b	**Inventory management systems** have helped us to carefully manage inventory levels					
c	Inventory management systems have enabled us to reduce inventories through just in time					
d	Inventory management system makes everything from inputting information to taking inventory easier					
e	With inventory management system in place, managers and workers can use it to automatically generate all kinds of documents					

SECTION E: inventory turnover on performance

6. To what extent do you agree with the following statements with regards to inventory turnover on performance?

	Inventory turnover	**5**	**4**	**3**	**2**	**1**
A	Inventory turnover has enabled us to effectively measure the number of times inventory sold or used in a time period such as a year.					
B	It has also brought decreased operating expenses, and increased asset turnover					
C	Inventory turnover has reduced risk of obsolescence and Markdowns:					
D	We have achieved a good increased sales volume as a result of inventory management systems.					
E	With a good inventory management there is less capital tired up in inventory					

8. Do you have any recommendations that you would like to give?

……

……

Thank you for your time

APPENDIX II: INTERVIEW GUIDE

Dear Respondent,

I am called **KAREN KAWERE** a student of Uganda Martyrs University. I am carrying out a research study on the topic of **"Inventory Management and Financial Performance of Manufacturing Firms** using a case study of **"Crown Beverages Limited".** You have been selected to share with us your experience and make this study successful. The Interview I am conducting is basically aimed at obtaining qualitative information to compliment the quantitative information which I am also collecting. Information given will be treated with utmost confidentiality.

1. Do you use inventory management systems in your organization?
2. What are the various inventory management systems used at Crown Beverages Ltd. Company Uganda
3. In what ways has inventory planning affected performance of your company?
4. In your view, to what extent has inventory management systems improved the performance of Crown Beverages Ltd?
5. Explain, how has inventory turnover improved the performance of Crown Beverages Ltd. Company Uganda?
6. What are some of the challenges that you have faced in the use of inventory management systems in your organization?
7. How have you been able to overcome some of these challenges?
8. What recommendations can you give with regards to this topic under investigation?

THANKS FOR YOUR TIME