THE ROLE OF SUPPLY CHAIN MANAGEMENT PRACTICES ON THE PERFORMANCE OF SMALLANDMEDIUM ENTERPRISES: A CASE STUDY OF SELECTED ENTERPRISES IN KATWE BUSINESS CENTER

SSENABULYA JONATHAN

2012-B021-10234

A RESEARCH PROPOSAL SUBMITTED TO THE FACULTY OF BUSINESS

ADMINISTRATION AND MANAGEMENT IN PARTIAL FULFILLMENT

OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR'S

DEGREE IN BUSINESS ADMINISTRATION

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DEDICATION

I dedicate this work to my parents Mr. Kavuma Paulino and Mrs. Kavuma Christine, my brothers

and sisters for their encouragement, attention, patience and support through this entire research.

ACKNOWLEDGEMENT

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ABSTRACT

The study was to examine the role of supply chain management on the performance of small and medium enterprises in Uganda: a case study of Katwe business centre. The objectives were; to find out the relationship between inventory management and the performance of small and medium enterprises in Katwe, to establish the relationship between transportation and the performance of small and medium enterprises in Katwe and to determine the relationship between distribution management and the performance of small and medium enterprises in Katwe. The study population was 65 where a sample size of 56 was selected for the study. Out of these, 48 responded making a response rate of (85.7%).

Data was collected using the questionnaire and documentary review. . The findings revealed that transportation management, inventory management and distribution management were significantly associated with the productivity of SMES. The findings indicated that SMEs in Katwe had practiced transportation management at a rate of 69.7%, and practiced inventory management at a rate of 32.5% and lastly distribution management that stood at a rate of 45%.

The study recommends that enterprises need to acquire their own transport vehicles to reduce the risk and costs associated with outsourcing the transportation function. The study also recommends that inventory management practices like regular stock taking, inventory budgets, should be emphasized in all enterprises.

CHAPTER ONE

GENERAL INTRODUCTION

1.0 Introduction

This research was set to investigate the relationship between supply chain management and the performance of small and medium enterprises in Katwe. This chapter presents the background of the study, Problem statement, Broad objectives, Specific objectives, Research questions, Research Hypotheses, Significance of the study, Justification of the study, Scope of the work and Conceptual Frame work.

This research also aimed at giving some insight on the role and importance of supply chain management on the performance of small and medium enterprises by undertaking a conceptual synthesis of relevant literatures relating to the increasing importance of managing knowledge in supply chains.

1.1 Background of the study

According to the Council of Supply Chain Management (2009), supply chain management, plans, implements, and controls the efficient flow and storage of goods, services, and related information from the point of origin to the point of consumption in order to meet the end user or retail customers' requirements. This is in line with the Global Supply Chain Forum (GSCF) which defines Supply Chain Management as the integration of key business processes from end user through original suppliers that provides products, services, and information that add value for customers and other stakeholders, Terry(1995) describes supply chain management as a network of facilities and distribution options that performs the functions of procurement of

materials, transformation of these materials into intermediate and finished products, and the distribution of these finished products to customers.

Various studies have indicated that supply chain management is one of the core functions of an organisation for both production and service oriented, this is why the supply chain management concept has evolved over the years from being simply a focus on purchasing to encompassing other related areas including the ultimate supply to the end users. Kopczak and Johnson (2003).Supply chain management has in modern times received a new a different dimensional approach in which it has been perceived by authors, such as Chopra and Meindl (2001) who broke down the Supply chain management principle as one that includes a set of approaches and practices to effectively integrate suppliers, manufacturers, distributors and customers for improving the long-term performance of the individual firms and the supply chain as a whole in a cohesive and high- performing business model.

Burt et al. (2003) in his analysis of the growing importance of SCM suggested that a future focus would be on continuous improvement on the supply chain, because this is being recognised as one of the core functions of corporate importance.

In tracking the history of SCM, Monczka et al. (2002) suggested that the greatest development of purchasing occurred after the 1850s when the American railroad went through a growth phase. This lead to the recognition of purchasing as a distinct corporate function, which makes a contribution to overall company profitability, whereas different literature suggests that the essential elements of the modern purchasing functions of the supply chain developed in the period from 1900 to 1939 were it was applied in World War I to purchase of war materials, with a particular focus on procuring raw materials. As cited by (Rasheda H. Keane, John Herbohn and

Geoff Slaughter), in the pre-globalized world report, poor transportation technology meant that each community produced most of what it consumed. The steam revolution, which powered railways and steamships, reduced trade costs dramatically, thereby making it feasible to spatially separate production and consumption (Bairoch 1990).

The supply chain concept is theorized from the formation of a value chain network consisting of individual functional entities committed to providing resources and information to achieve the objectives of efficient management of suppliers as well as the flow of parts (Lau and Lee, 2000).

The World Bank defines 'Small and Medium Enterprises' as those enterprises with a maximum of 300 employees, $15 million in annual revenue, and $15 million in assets, whereas in Uganda (Kasekende and Opondo 2003) define a small and medium enterprise as an enterprise or a firm employing not less than 5 but with a maximum of 50, with the value of assets, excluding land, buildings and working capital of not less than Ugx Shs 50 million (US$ 30,000), and an annual income turnover of between Ugx. Shs. 10-50 million (US$ 6,000-30,000). Uganda Investment Authority put this figure at US$50,000 Ministry Of Finance Planning And Economic Development (MOFPED, 2008) indicated a figure of over 80% of Uganda's manufacturing output is by small scale enterprises.

Small businesses are generally regarded as the driving force of economic growth, job creation, and poverty reduction in developing countries. They have been the means through which accelerated economic growth and rapid industrialization have been achieved (Harris and Gibson, 2006). They account for more than half of the employment and added value in most countries (UNCTAD, 1993). Katwe alone in the out skirts of the Kampala city accommodates more than 700 traders directly, (Uganda revenue authority November 2010).

1.2 Statement of the problem

In recent years, supply chain management has come to be universally recognised as a critical backbone to many Business Organizations, where effective market coverage, availability of products at locations which hold the key to revenue recognition all depend upon the effectiveness of the Supply Chain management. The Supply Chain Management principle deals with having the right products at the right place, at the right price, at the right time and in the right quantity. (Roger Blackwell 1998). However it is evident that a lot of research has been written about supply chain but there is still greater need to look deeper in to some of the inefficiencies in the supply chain that do not permit all the supply chain principle elements to all be present at the same time. Given that supply chain inefficiencies have led to situations such as failure to maintain stock levels, instances of stock outs, and expiry of some stock at the store leading to shortages in supplies, delayed delivery and defective stock which are out dated Chopra (2004). Among the supply chain inefficiencies faced by the enterprises, the researcher is to focus more on the long order to delivery cycle time among the selected enterprises in Katwe. Order to delivery cycle time is the duration between when the client makes an order for a product and the time when he receives it (Fred N. Horning, John McCannand 2003). Long order to delivery cycle times have been identified among some of the small and medium enterprises in Katwe like art print enterprises Ltd, Luse metal workshop and many more other enterprises. Long order to delivery cycle times mainly affect the enterprise clients who do not receive their ordered goods in time as ordered from the enterprises. If the order to delivery cycle time is not reduced to fit with the expectations of the clients then enterprises may face the possibility of losing a great number of their clients because manufacturers that can't deliver on time won't keep their customers happy or keep them at all. (Fred N. Horning, John McCannand 2003). This reality is

all the more reason as to why small and mid-sized manufacturers need to get their products into customers' hands as quickly as possible. (Fred Horning, John McCannand 2003).

1.3 Objectives of the study

1.3.1 Broad objective

To establish the relationship between supply chain management and the performance of small and medium enterprises in Katwe.

1.3.2 Specific objectives

To find out the relationship between inventory management and the performance of small and medium enterprises in Katwe.

To establish the relationship between transportation and the performance of small and medium enterprises in Katwe.

To determine the relationship between distribution management and the performance of small and medium enterprises in Katwe.

1.4 Research questions

What is the relationship between inventory management and the performance of small medium enterprises?

What is the relationship between transportation and the performance of small medium enterprises?

What is the relationship between distribution management and the performance of small medium enterprises?

1.5 Hypothesis

There is a strong significant relationship between inventory management and the performance of small and medium enterprises.

There is a significant relationship between transportation and the performance of small and medium enterprises.

There is a significant between supply chain management and the performance of small and medium enterprises.

1.6 Scope of the study

Geographical Scope

The study focused on selected enterprises in Katwe business center.

The research was conducted in selected enterprises in Katwe business center which is located in the outskirts of Kampala and cuts across both Central and Makindye division consisting of small scale and large scale firms.

Content Scope

Under the content scope the research study was limited to cover the relationship between supply chain management and the performance of small and medium enterprises, where focus was put on the role of transportation management on the performance of small and medium enterprises, the role of distribution management on the performance of small and medium enterprises, the role of inventory management and the performance of small and medium enterprises.

Time Scope

The time scope of the study was focused on Katwe zone for the period of ten years between 2005-2015 because it was believed that that was the time when supply chain management was cropping up in the Katwe business center, and also the researcher to take into custody of the past and recent information and data to ensure legitimacy of the of the present findings.

1.7 Significance of the study

The findings and recommendations of this study will be of significant help in improving the performance of small and medium enterprises in Katwe business centre by embracing the role of supply chain management.

The findings of the study are to help make policy makers come up with more appropriate policies to help the small and medium enterprises in Katwe business centre have better supply chain management strategies and objectives.

To the scholars and researchers, the findings of the study will fill the gap on the role of supply chain management on the performance of SMES in Katwe in Uganda. This will help those who will be researching in future in similar field and guide the entrepreneurs in making decisions on the kind of business they should venture in basing on the flow of goods to the final consumer. It will also contribute to the existing literature about supply chain management and its contribution to business sustainability.

1.8 Justification of the study

There is need by stakeholders who believe that a company should not only stop at delivery of quality goods to the customers but also to ensure accurate timely delivery to their clients as initially arranged between the parties hence there is need to bridge the knowledge gap on the role of supply chain management on the performance of small and medium enterprises in Uganda.

1.9 Definition of key terms

A Supply chain: this is a system of organizations, people, activities, information, and resources involved in moving a product or service from supplier to the end customer.

Supply chain management: this is the design and management of seamless, value added processes across organisational boundaries to meet real needs of the end customer

Viable: this is the firm's capability of working successfully.

Logistics: the commercial activity of moving goods and services to their customers.

Lead time: the time between the initiation and completion of a product process.

1.10 Conceptual frame work

Fig 1.0: A Conceptual framework for the understanding of supply chain management and the performance of SMEs

INDEPENDENT VARIABLES	DEPENDENT VARIABLES
SUPPLYCHAIN MGT	**PERFORMANCE OF SME's**
• TRANSPORTATION MGT	• EFFECTIVENESS
• INVENTORY MGT	• REVENUE LEVELS
• DISTRIBUTION MGT	• CUSTOMER SATISFACTION

INTERVENING VARIABLES

• WELL TRAINED STAF

• AVAILABILITY OF RESOURCES
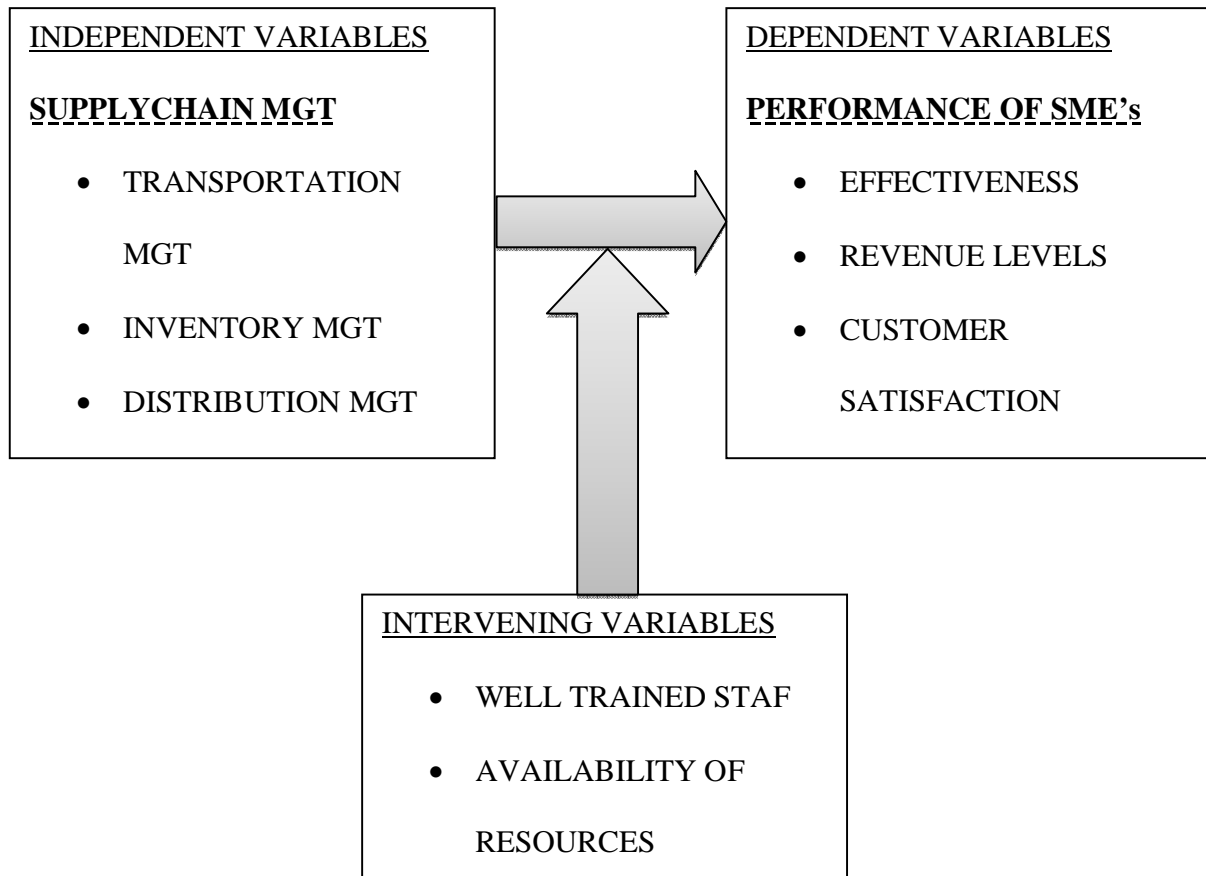
Source: adopted and modified by the researcher from Ganesh Iyer (2009)

The conceptual frame work illustrates the relationship between the supply chain management variables and how they influence the performance of small medium, for instance how transportation, inventory and distribution management influences the effectiveness, efficiency and growth of an enterprise.

<center>**CHAPTER TWO**</center>

<center>**LITERATURE REVIEW**</center>

2.0 Introduction

In this chapter, the researcher reviews the literature from previous studies and the works of other scholars. It is arranged according to the study objectives and variables which describes how supply chain management is related to the performance of SMEs, the chapter focused on how transportation, inventory management and distribution management influences the performance of SMEs. This was used to compare with the findings of this research and establish the variations and similarities between the study findings and what the existing literature exactly says.

2.1 Review of the main concepts of the study

2.1.1 Supply chain management practices

Supply chain management is a vital, yet often underappreciated facilitator of trade that fosters customer convenience, business success, and societal development. Supply chain management practices are operational activities that occur behind the scenes to complete a customer transaction, that's why companies such as Amazon.com, McDonald's, and Unilever recognize the importance of supply chain management and make it a strategic priority. They understand that it is impossible to compete effectively in isolation of their suppliers, customers, and other entities in the supply chain (Lummus & Vokura, 1999).

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2.1.2 Performance of small and medium enterprises

Performance is referred to as the extent to which an investment is profitable the oxford dictionary (2007) hence performance of small and medium enterprises is the degree to which they are profitable. For an enterprise to be profitable, it has to adopt a certain set of activities and procedures that are meant to guide it throughout its transactions, and the current study will determine the performance of the enterprises on the basis of revenue turn over, efficiency, and customer satisfaction.

2.2 Actual review

2.2.1 Transportation and the performance of Small and medium enterprises

The Oxford dictionary 2007 defines transport as a means to take or carry something or somebody from one location to another by means of a vehicle, air craft or train. Transport is referred to as one of the major activities within supply chain management, where a creation of time and place utility is performed (Coyle et al., 1996).This is also supported by chopra and meidl (2007) who described Transportation as to the movement of products from one location to another as it makes its way from the beginning of a supply chain to the customer.

Transport system has been referred to as the most important economic activity among the components of business systems. Around one third to two thirds of the expenses of enterprises' logistics costs are spent on transportation. As proved by the investigation of National Council of Physical Distribution Management (NCPDM) in 1982 (Chang, 1988), which is reflected in the statement that emphasizes how Transportation plays a connective role among the several steps that result in the conversion of resources into useful goods in the name of the ultimate consumer. Currently, transportation accounts for approximately 62.8% of every dollar spent on logistics in

the United States—that is equivalent to 5.2% of United States GPD (CSCMP 2011). As cited by (Kenneth Roberts 2012). It is the planning of all these functions and sub-functions into a system of goods movement in order to minimize cost maximize service to the customers that constitutes the concept of business logistics. Hence the system, once put in place, must be effectively managed. (Fair *et al.*, 1981)

Transportation is one of the major promoters of globalization and as such is one that is to be given high attention to ensure efficiency of the supply chain management of enterprises.

This is in line with (Srinivas. T 2004) who argued that a good transport system performing in logistics activities brings benefits not only to service quality but also to company's competitiveness. This is to some extent contradictory to (Nedelescu-Ionescu and Rujan) who to argued that it's only for those products with small volume, low weight and high value, that transportation cost simply occupies a very small part of sales and is less regarded; whereas for those big, heavy and low-valued products, transportation occupies a very big part of sale and affects profits more, and therefore it is more regarded. Though it is still un deniable fact that transportation also adds value to products by allowing them to reach customers exactly when they are wanted. This is especially valuable to products that may be time-sensitive, such as perishables or seasonable items. However, not only must the items get to the right place at the right time, but they must also be in the right quantity. (Kenneth Roberts 2012).

Transportation in a company is driven by factors that are both internal and external for instance fuel prices, nature of the infrastructure, government regulations, location of the suppliers from the enterprise are some of the external factors whereas the location of the enterprise from its

market, privatization of the transportation means are some of the internal factors that may influence transportation in an enterprise.

Transport indicators like infrastructure development of the transport system of a country play an important role in the order to delivery cycle times of an enterprise as backed by the KPMG report on transportation on Africa that stated that transport infrastructure facilitates trade by reducing the cost and time of moving goods to where there is a market for them KPMG report on transport in Africa 2013. This implies that where a country has a poor infrastructural developments like poor roads, there is a possibility of having a relatively high order to delivery cycle time since goods and services may be delayed on the way to the final consumer or even supplies to the manufacturing enterprise.

There are different ways in which products and services can be moved from one place to another this can be done through a variety of transportation modes, with each mode having its unique characteristics, its gains and setbacks. Chase, R., Aguilano, N. and Jacobs, F. (2001) identified the five basic modes of transportation, their advantages and limitations as: **- Highway (Trucking)** transportation, it is basically characterised by flexibility because items can be delivered to almost any location in a continent. Transit times are good, and rates are usually reasonable for small quantities and over short distances, though despite the good performance of the road transport mode, it still suffers from public policy shortcomings for instance, the government of India's planning commission's report shows that the expansion of the road infrastructure has not kept pace with demand, where there has been a robust increase in the number of motor vehicles but the roads have not been widened to accommodate more traffic flow of motor vehicles creating long vehicle queues in the major towns of India hence a great deal of time is wasted in the movement of resources from one location to another by road.

Government of India's planning commission. This mode of transportation is the most commonly used transportation for the delivery of goods and services because of its low costs and flexibility in movement since it can deliver bulky and light goods to almost any location of one's convenience on land. Hence efficiency in the performance of business enterprises.

Railway transportation mode is characterised by low cost, but transit times are long and may be subject to variability. - Water transportation mode is also characterised very high capacity and very low cost; but slow transit times, and large areas of the world are not directly accessible to water carriers. - Pipeline transport mode is characterised by a highly specialized system that is only limited to firms dealing in huge quantities of liquids, gases, or solids in slurry form. No packaging needed, though the costs per mile are low. The initial cost to build the pipeline is very high. - Air transport mode: Fast but most expensive. Trade-Offs in Transportation Design As we can see, all transportation modes have their pros and cons which make the decision of selecting the ideal transportation mode a difficult one. For the procurement officer.

Various factors have to be taken into consideration when choosing the most appropriate transportation mode. Also, the effect of a transportation mode on a supply chain also aids in the decision making process; for instance, does one transportation mode make the supply chain more customer responsive than the other even though it is quite expensive, or is there a cheaper mode that responds a lot more slower to customer demands than another. Here is where a manager has to make the appropriate decision and it is most likely based on factors like

Cost; this is one of the most important factors in this decision making. "Basic transportation and distribution functions are the largest activity cost buckets in the supply chain. International

shippers spend about 7% of total sales on transport." (Tyndall, G., Gopal, C., Partsch, W., Kamauff, J., (1998)

The product: Another factor that often is left out of discussions on transportation selection is looking at the actual physical characteristics of what is being transported for instance it would be very uneconomical to transport twenty tons of a chemical via truck when the origin and destination both have rail sidings. This is a very simple concept, yet extremely important when getting past the first level of making a modal decision. This idea of looking at the physical characteristics and needs of a product is what creates the first threshold for modal selection, making it the primary factor taken into consideration. (Kenneth Roberts 2012)

Security: Transportation security is an issue that has been given more attention over the years.

In October of 2010, two packages coming from Yemen in route to Chicago were intercepted and found to contain bombs; one was shipped via FedEx, the other by UPS (Cole, 2010) as cited by (Kenneth Roberts 2012). This then sparked an outcry for tighter regulations on cargo screening and more attention to be paid to freight transportation in addition to passenger transportation.

Depending on the product being transported, security has a varying level of importance to different

Enterprises For example, for a company that ships hazardous chemicals, the company has to pay special attention to security and the carrier's ability to maintain the highest levels of compliance when transporting their products. Although, on the other end of the spectrum, for a company that ships canned food products with tamper evident seals that automatically notify them if a product's security has been compromised, security may not be given an extreme degree of

attention hence a much more regulated security criteria is sought for to ensure that the products reach to their designated customer.

Whatever decision is taken must be one that best meets the interest of the consumer whilst retaining profitability of the firm through ensuring that whichever means used will provide the inventory procured at the appropriate time needed and required which will reduce short falls in inventory hence improving the performance of the firm as will be evidenced with the increase in sales due to availability of inventory. The design task is to trade-off these characteristics to best meet the demands of the marketplace" (Meredith, J.R., and Shafer, S.M., (1999).

2.2.2 Inventory management and the performance of small and medium enterprises

A number of researchers have analyzed different Inventory Management practices and performances and these studies have amassed an enormous knowledge related to Inventory Management and operational performance of SMEs. While Inventory Management is defined in several different ways, the concept simply implies the establishment of strategic objectives and the positioning for inventories (Sprague and Wacker, 1996). As cited by N. Rajeev. (2008)

Inventory management can be defined as the overseeing and controlling of the ordering, storage and use of components that a company will use in the production of its products as well as the overseeing and controlling of the quantities of finished products for sale (chase and Jacobs 2006).

Kruger(2005) as cited by n. Rajeev (2008) Stated that Inventories are a significant portion of the current assets of any business enterprise, this is in line with (Sprague and Wacker 2006). Who also further emphasized its importance by stating that Inventory Management and control are crucial to a firm because mismanagement of inventory threatens a firm's viability? Thus the

management of inventories influences a firm's financial strength and competitive position because the approach taken to Inventory Management directly affects working capital, production and customer service (Ng et al., 1993; Vergin, 1998), which directly affects the order to delivery cycle time of any enterprise. (Sunil and peter Meindl 2007) raised a case that Inventory exists because of a miss match between the supply and demand; they further argue that the mismatch is intentional in retail stores and steel manufacturers because inventory is held in anticipation of future demand and sales. Hence inventory playing an important role in the performance of any enterprise due to the availability of stock during a demand outburst.

Mantho (1994) classified Inventory Management into three broad areas: inventory record keeping, inventory decision making and material requirement planning system.

(1) Inventory record keeping: due to the availability of computers at a reasonable price, SMEs have found it appropriate to automate their inventory records through computerization.

(2) Inventory decision-making: many models can be integrated into computer based inventory systems.

(3) Material requirement planning (MRP) system: MRP is an Inventory Management information system concerned with getting the right materials to the right place at the right time.

Successful inventory management involves creating a purchasing plan that will ensure that items are available when they are needed (but that neither too much nor too little is purchased) and keeping track of existing inventory and its use. A business's inventory may be one of its greatest major assets and represents an investment that is tied up until the item is used or sold. Mismanaged inventories can create significant financial problems for a small medium enterprise.

Inventory management indicators such as inventory turnover, lead time, service levels and stock covers have to be strictly monitored by enterprises to effectively manage their inventory. Kell (2007). He further defined inventory turnover as a measure of the number of times inventory is sold or used in a time period such as a year, where he argues further that a low turnover rate may point to overstocking, obsolescence, or deficiencies in the product line or marketing effort, and yet Kieso (2008) conversely suggests that in some instances a low rate may be appropriate, such as where higher inventory levels occur in anticipation of rapidly rising prices or expected market shortages.

Inventory management plays a decisive role in the enhancement of efficiency and competitiveness of small medium enterprises. Therefore major small and medium enterprises are following inventory management practices as a strategy to improve efficiency and achieve competitiveness however the spread of inventory management culture among SMEs is limited due to lack of initiation, expertise and financial backdrop.

The Inventory Management practices of SMEs in Finland and Greece were studied by Chikan and Whybark (1990) to identify the experiences of managers concerning Inventory Management. In Finland, 15 case studies of Inventory Management were undertaken, including examining the role of Inventory Management in corporate planning, inventory decision-making and performance measurement. The findings revealed that Inventory Management decisions are made at the operational level with minimal guidance from the top. Furthermore, the study showed that lack of accurate, real-time and suitable aggregate information of material flows and stock levels prevented these enterprises from setting precise quantitative goals for Inventory Management. Hence, financial pressures forcing the enterprises to reduce their inventories,

which eventually led to internal as well as external stock outs (Chikan andWhybark (1990). As cited by N. Rajeev (2008)

The second study included observations of 30 SMEs in northern Greece. A principal finding was that while all firms had computerized information systems for the purposes of inventory record keeping and accounting, no decision-making models were applied in the process. The use of an integrated decision support system (DSS) was not even considered by these Greek entrepreneurs this was seen as being both unnecessary and costly. The major restraint of the use of computers was not their cost or the availability of software but rather, the attitudes and knowledge of managers and workers (Chikan and Whybark, 1990).

Palmer and Dean (2000) stated that selection of right Inventory management practice is a must for a company's operational performance. That is why writers like Chandra and Grabis (2005) argue that a reduction in the inventory replenishment Lead-time allows reducing safety stock and improving customer service. This is also supported by supported by Elorantha and Raisanen (1988) who stated that one of the reasons for keeping large amount of inventory items has been related to customer service. Another reason is that smaller purchasing lots imply more work in the purchasing department. However, Toelle and Tersine (1989) argue that excess inventory is an operational liability, because it uses valuable storage space, increases inventory costs. Raw material ordering frequency is identified as an important factor contributing to inventory cost. Frequent ordering in small quantity is considered as an important strategy. This is very relevant in the context of the SMEs. This is because SMEs generally don't get the benefits of quantity discount. Their purchase requirement quantity of material is normally less to enable them to get these benefits.

A project to improve Inventory Management in a UK based SME found the importance of categorizing stock and setting ordering policies. A scheme developed for the above purpose found it useful in optimizing inventory costs (Flores, Wang, & Burgess, 2003). The management of SME study viewed the need for a more formal procedure to calculate its inventory policy parameters (maximum and minimum inventory level). In their own words, the growing investment in inventory combined with an increasing number of backorders and lost sales lead to lower profitability. Therefore it was decided to follow a more scientific approach than the currently used rules of thumb to establish inventory policy parameters with the objective of optimizing their inventory cost.

Competent inventory management seeks to control the costs associated with inventory both from the perspective of the total value of the goods to the included to the tax burden generated by the cumulative value of the inventory (Beranek, W. (1963). Balancing the various tasks of inventory management means paying attention to three key aspects of an inventory, the first being an aspect of time. In terms of materials acquired for inclusion in the total inventory, this means understanding how long it takes for a supplier to process an order and execute a delivery. In addition to maintaining control of the volume and movement of various inventories, inventory management also makes it possible to prepare accurate records that are used for accessing any taxes due on each inventory type. Without precise data regarding unit volumes within each phase of the overall operation, the company cannot accurately calculate the tax amounts. This could lead to underpaying the taxes due and possibly incurring stiff penalties in the event of an independent audit. (Beranek, W. (1963)

Inventory includes all materials and goods that are purchased, partially completed materials and component parts and the finished goods produced inventory can be in terms of raw materials,

work in progress, finished goods or maintenance, repair and operating supplies, inventory management involves managing information flows and establishing operational design of the physical flow of the goods and services (purchasing and supply chain management ; Leenders Johnson Flynn fearson McGraw hill 2006)

Business firms usually believe that if too high an inventory level is maintained then they would have to bear a very high inventory carrying cost and also a high risk of obsolesce. On the other hand if too low an inventory is maintained then it would result in high restocking and production cost as balance between the two extremes need to be achieved. (Satish k. kapoor, purva kansal pg. 12 'basics of distribution management, a logistics approach') this can be done by related factors like movement and storage. This function of physical distribution is called inventory control. It deals with the determination of optimal producers for procuring stocks of commodities to meet future demand (Vivian Brownstein, 1984) as cited in the book of basics of distribution management, a logistics approach

The decision of 'how much to acquire' and 'when' logically follow clarification of what is required. For instance the machine tool SMEs are inventory-intensive in nature with a significant portion of their production cost involving material and inventory related cost, it is likely that the entrepreneurs recognize its due importance. (Kenneth hamlet 2005) It is with the above backdrop that understanding the present perception of SMEs about the importance of Inventory Management is appropriate. Various inventory control methods exist and for the small businesses the type of inventory control method used has a major impact on the business in terms of cash flow and operational costs. Whatever inventory control method used the goals for managing inventory hold true regardless of industry or product. These goals include maximising

customer service, lowering operational costs and minimising inventory investment (Kenneth hamlet 2005)

(Donald j. bowersox, David j. Closs and m. Bixby cooper 2007) supply chain logistics management 2nd edition) identified a few different ways in which inventory can be managed and these include:

ABC control method; this involves classifying and controlling inventory according to its level of importance. Firms focus on reducing the on hand inventory of one class of items. This reduction increases inventory turns and thus reduces the carrying costs associated with holding the inventory.

Aggregate control: another inventory control method involving groups is the aggregate control method using this method a firm categorises its inventory into separate groups, each receiving a different level of inventory control. For example a bakeshop might use three different classifications i.e. ingredients such as flour, sugar and cream compromise the second classification and finished goods or items ready to sell make the third classification the way the baker shop controls each class of inventory depends on the rules established for that class. For example, all ingredient inventories might use a minimum/ maximum policy, whenever the inventory reaches a minimum level the bakeshop orders more inventory to reach its maximum inventory level.

Safety stock: some companies use a very basic method of inventory control called safety stock, companies use safety stock because of the uncertainty of consumer demand. Uncertainty of consumer demand, uncertainty of supplier performance or uncertainty of product available safety stock represents an amount over and above the average use or demand of a product. For example,

a bakeshop uses a special process to procure flour; it always keeps an additionasl50pounds on hand to hand cover the uncertainty of supply. Using safety stock to control inventory increases a company's cash layout plus it increases the carrying cost associated with owing inventory.

2.2.3 Distribution management and the performance of small and medium enterprises

The online business dictionary defines Distribution management as the process used to deliver a product from a product location to the point of sale including storage, at ware housing locations or delivery to retail distribution points. It also involves determination of optimal quantities of a product for delivery to particular warehouses or points of sale in order to achieve the most efficient delivery to customers.

Distribution Management can be defined as that arm of management which serves as a link between procurement, manufacturing, marketing/sales, and finance, proper functioning of which synergizes the effects of all the activities, and absence of which cannot only reduce efficiencies but can lead to chaos in the organization Introduction to Logistics

Distribution refers to the range of activities which are to ensure that customers have access to goods of required quality and quantity, in the place and at the time which meet their expectations (polish journal of management studies Wojicik Mazur 2006) This is in line with (Etzel J.E.1997) who described distribution as the arrangement necessary to transfer ownership of a product and transport the product from where it is produced to where it is finally consumed. Wojik mazur (2006) further goes on to summarize Distribution management as the sum of physical distribution and distribution channels.

Distribution is also the process through which marketers circulate products so that they are available to the in the quantities that target the customers desire them at the place and time they want to buy them. (Marketing contemporary concepts and practices by William F. Schoell)

Distribution is categorized into two main strategies namely; push and pull strategy (Olver and Farris, 1989) as cited by Dr. Frances Brassington and Dr. Stephen Pettitt (principles of marketing).

They further state that under the push strategy, the manufacturer chooses to concentrate communication on the member of the distribution channel immediately below. That is to say the wholesaler in this example will have a ware house full of products and must make an effort to sell the items to the retailer who in turn prompts it to the final consumer, the product is therefore pushed down the distribution channel hence there is little or no communication between the consumer and the manufacturer.

(Olver and Farris.1989) further states that under the pull strategy, the manufacturer creates demand for the product through direct communication with the consumer, the retailers will perceive this demand and in the interest of serving their customers will demand the product from their wholesaler, who in turn will demand it from the manufacturer this bottom up approach pulls the product down the distribution channel.

A channel of distribution is the whole series of marketing intermediaries who join together to transport and store goods in their path from producers to consumers. (202013/literature on distribution management/Benefits Offered by Channel Members KnowThis.com.htm) which is also defined as one that consists of the of the set of people and firms involved in the transfer of

title to a product as the product moves from producer to ultimate consumer or business user (Etzel M. J 1997).

The distribution channel is an essential element of the process of distribution and, as part of it; it is defined as "a path" which determines the way goods' flow with the help of intermediaries,

There are two basic types of distribution channels that is the direct and indirect distribution channels;

Direct channel, this structure is characterised by the fact that the supplier has and manages all the goods in the chain and delivers them directly to the final customer. Mazur A. and Wieczorek K. (2012), this is in line with the (frank G. Bingham, Jr. and Roger Gomes 2001)business marketing) who emphasizes that a direct channel is one that involves the direct selling without the use of sales branches. (No external intermediaries involved) for instance the internet or the electronic commerce which is also referred to as on line transactions. This also in agreement with Kimbrell G. and Woloszk C. A (2003) who had had categorized the distribution channels into five major channels placed it under the channel B category where the manufacturer handles all the physical distribution of the products most especially products that need servicing such as the chain stores, auto mobiles and fashion apparels.

Indirect channel, this is a distribution method that involves selling to the final user through an external intermediary (frank G. Bingham, Jr. and Roger Gomes 2001) business marketing) these usually apply when the market is widely scattered, when goods are usually made for inventory purposes other than specific orders, and when orders are small and these include sales agents sales branches, distributors. Etc. (frank G. Bingham, Jr. and Roger Gomes 2001) business marketing)

Mazur A. and Wieczorek K. (2012) further categorized the distribution channels as below;

Level one channel, this structure has a single intermediary between the manufacturer and a consumer so that it can be possible to expand the area of the served market and provide more specialised goods in order to meet customers' needs, this is also referred to as the producer – user channel which accounts for greater volume of business products than any other distribution channel structure which involves larger installations such as jet engines, air conditioning system, Etzel M. J (1997).

Level two channel, it requires two intermediaries in supplying the recipient with the final product. These middlemen are able to deal with a much larger market than in the direct or level one channel; which is similar with what Etzel M. J (1997) described as the producer –agent – user channel, this kind of channel is mainly used by enterprises that want to penetrate into new markets or produce a new product and so may prefer to use agents other than their own sales force.

Multi-level channel, it has the same structure as a level two channel but it uses more levels of intermediaries.

An OEM channel, it refers to the situation in which one supplier (OEM - manufacturer) produces goods which are products or components reused or incorporated into a new product with a new brand name (Frank G. Bingham, Jr. and Roger Gomes 2001) further explains that distribution channels have what is termed as a channel width which they continue to term as the number of independent members at any stage of the distribution. The channel width is further broken down into three degree namely **the intensive distribution** which (Frank G. Bingham, Jr. and Roger Gomes 2001) explain it as a strategy by firms to gain access to as many resellers as

possible within a particular geographical area. **The selective distribution** which (Frank G. Bingham, Jr. and Roger Gomes 2001) describe as a strategy where firms distribute their products to a limited number of resellers in a particular geographical area or region, and **the exclusive distribution** which (Frank G. Bingham, Jr. and Roger Gomes 2001) describe as strategy where only one channel member can sell a firms products in a given geographical area.

Distribution network refers to a set of physical functions such as storage facilities and transportation systems. It also includes commercial records and distribution logistics management with a significant role of information flow [Wojcik-Mazur A., Wieczorek K. (2012)].

2.4 Conclusion

According to the views of the scholars above it has been shown that there exists a relationship between the different supply chain management practices and performance of small and medium enterprises and the literature also reveals the big gap between transport provided by the clients and performance of small and medium enterprises. Business men in Katwe should put more emphasis on inventory management where customer's requirements are always met, and being located strategically, they should emphasize proper distribution channels to supply to all Ugandan markets. The Sales Officers can be assisted by other stakeholders in the business value chains to identify and provide technical assistance to clients and these include installation, training and servicing.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

Research methodology is a way to systematically solve the research problem. This chapter presents the methodology that was used in the study. It covers the research design, study population, sample population, size, sampling procedures, data collection methods and their corresponding data collection instruments, data management and analysis procedures, reliability and validity and the ethical considerations.

3.1 Research design

The research study was descriptive in nature thus giving an opportunity to study in depth the research on the role of supply chain management on the performance of small and medium enterprises. The study adopted both quantitative and quantitative approaches. Under the quantitative methods the researcher used questionnaires that he used to analyze the data using proceedings and then presented the data in narrative quotations. Cross sectional survey where data is to be collected on the variables of interest to the selected sample size. The qualitative method focused on collecting descriptive information where data was collected using open ended questions, Analyzed using Microsoft excel and then presented in a table or in figures.

3.1.1 Descriptive research

Amin, (2003) argues that this type of design does not only restrict itself to fact findings but rather paves way for the formation of important principles of knowledge. It also leads to the generation of solutions to the research problems. The researcher used this research design for effectiveness by constructing questions to solicit the desired information. During the research study, the

researcher identified those individuals that would objectively give the required information needed.

3.2 Study area

The study was conducted from selected enterprises in Katwe, located in Makindye Division, and is bordered by Nakasero to the north, Nsambya to the east, Kibuye and Makindye to the southeast, Ndeeba to the south and Mengo to the west. It's located about two kilometers from the city center Kampala. The study was set up to investigate relationship between supply chain management and the performance of small and medium enterprises in Katwe.

3.3 Study population

According to Abel and Olive (2003) population refers to an entire group of individuals, events or objects having a common observable characteristic. This section of the research portrayed the particular group of population that the researcher was interested in the field of the study.

The researcher used a population of 65 people in the selected enterprises in Katwe that is to mention Luse metal works, Bakuru metal works, Kyaterekera metal works and Kaka investment limited.

3.4 Sample size

According to Abel and Olive (2003) a population sample is a small group obtained from the accessible population in a given area. Out of the population of 65 people the researcher used a sample size of 56 respondents. The researcher used the Krejice and Morgan table to establish the sample size.

S/N	Category	Population	Sample size	Sampling techniques
1	Luse metal workshop	14	12	Purposive sampling
2	Bakuru metal works	12	11	Purposive sampling
3	Kyaterekera hard ware and metal works	21	18	Convenience sampling
4	Kaka investments	18	15	Convenience sampling
	Total	**65**	**56**	

Primary data 2015

3.5 Sampling techniques

The researcher used a non-probability sampling technique, the Convenience or accidental sampling technique, this is where members of the population are chosen based on their relative ease of access, involves the sample being drawn from that part of the population which is close to hand. That is, a population is selected because it is readily available and convenient. It may be through meeting the person or including a person in the sample when one meets them. This is due because the population study per the selected enterprise is small. To sample friends, co-workers, or shoppers at a single mall, are all examples of convenience sampling.

The researcher also used the Judgmental sampling or purposive sampling this is where the researcher chose the sample based on who they thought was appropriate for the study. This was used primarily because there were a limited number of people that had expertise in the area being researched.

3.6 Data collection method

3.6.1 Questionnaire

This method was the main method used in collection of data; it was used by designing appropriate questionnaires which were distributed to respondents. These questions were both closed and open ended so as to invite concise and free responses this is because they are relatively easy to analyze, simple to administer, it is relatively costly and the information collected was in a standardized way. And besides that, large amount of information was collected from a large number of people in a short period of time. Open ended questions were used to explore more about the relationship between supply chain management practices and performance of small and medium enterprises.

3.6.2 Interviews

Interviews were another method of data collection that was employed during this study, this method involved presentation of oral stimuli, seeking oral responses. The researcher used this method to get in-depth and clearer information on the issues of institution factors and access to agricultural loans. The interviewer was in control and in position to seek clarity on certain issues which seemed not clear. These interviews included face to face interviews and telephone interviews for interviewing very busy people; I pre-arranged a suitable time to ring the respondents. It was also convenient for managers who were too busy to fill the questionnaires.

3.6.3 Document review and analysis

This method of data collection comprised of capturing secondary data on the relationship between supply chain management practices and performance of small and medium enterprises. Secondary data from various sources were obtained and it complemented the data from

interviews and questionnaires to produce a research report which is comprehensively. Accordingly, the researcher assembled the relevant documents including; annual reports, papers presented at various workshops and, reports from various institutions such as articles about small and medium scale businesses, journals of different scholars. All the documents were thoroughly reviewed and collated to produce this research.

3.7 Research instruments

3.7.1 Questionnaires

Questionnaires were distributed to respondents and the format which was used was easily understood by the respondents. Questionnaires were in English. The questionnaires generally involved a set of selected questions addressed to respondents ranging from objectives of the study to the intervening factors. The questionnaires had different sub section for the different variables of the study.

3.7.2 Interview guides

Interview guides were used because they save time for the researcher and the respondents since asking questions and filling in information is at the same time when interviewing the respondent. The researcher had the information from the respondents own words though it was time consuming.

3.7.3 Documentary review check lists

This instrument was used to ensure consistency and completeness in carrying out a task. Documents relating to the study topic were reviewed to compensate for potential limits of human memory and attention. Documents were reviewed after the collection of data using the questionnaires and interview.

3.8 Validity and reliability

3.8.1 Validity

Validity means that correct procedures have been applied to find answers to a question (Catherine, 2002).Validity was established through the average Content Validity Index (CVI) formula. This is a tool used to gauge the content validity of items on an empirical measure. It was applied using the formula shown below;

Content Validity Index (CVI) = $\dfrac{\text{Number of items declared valid}}{\text{Total number of items}}$

In this approach, a panel of 4 (four) experts from Kikuubo business centre, Kampala Central, where I conducted my pre-test of the instrument to establish whether it was valid were used. The researcher used Sekarani (2003), who recommends that for an instrument to be valid, its content validity index has to be 0.7 and above.

Using formula

That is; CVI =n/N

Where; CVI stands for Content Validity Index, n stands for number of items rated valid by all judges and N stands for number of items in the instrument. The instruments for this study were valid to be used since they had a C.V.I of 0.81 which is above 0.7.

Using the formula;

Judge1. = 29/34= 0.85

Judge2. = 28/34= 0.82

Judge3. = 26/34= 0.76

Judge4. = 28/34= 0.82

Therefore the total= 0.85+0.82+0.76+0.82 = 3.25/4 = **0.81**

33

3.8.2 Reliability

The researcher prepared the questionnaires which were approved by the lecturer. Suitable questions were technically designed for each category of the study. For clarity questionnaires to be distributed to farmers were in the same language and so simple to avoid ambiguity. The researcher used the questionnaires and an interview guide which were related to the conceptual frame work. Reliability is also a measure of the degree to which a research instrument yields consistent results data after repeated results (Chronbach 1953). To ensure the reliability of data, the researcher used the test-retest method where similar instruments are used by the same people at different times, calculating for alpha was also done so as to get clear data

3.9 Data collection procedure

After the approval of the research proposal, the researcher obtained a recommendation letter from the Faculty of Business Administration and Management to carry out a research in Mawokota County. The letter helped the researcher gain the confidence of the respondents in the study.

The administration of questionnaires and interviews to the selected business men was done in their places of work. They were assured of treating their responses confidential thus this maximized the information to be collected from the traders.

Key informants were selected purposively to help the researcher in conducting interviews with the selected business men. Information from the respondents was recorded by the researcher and then after it was summarized at the end of the session into what is required in the research study and compiled a report of the findings on the current provision of supply chain management and performance of small and medium enterprises.

3.10 Data management and analysis

3.10.1 Quantitative data analysis

Statistical techniques were used to analyze data. Data was edited by the researcher using Microsoft word. Data was coded and tabulated using frequencies and percentages by the use of Excel and work sheets. Using Excel and work sheets gave me a comprehensive picture of what the data that had been collected looked like and assisted in identifying patterns. This was done by constructing frequency, percent distributions and descriptive statistics: A frequency distribution was an organized tabulation of the number of individuals or scores located in each category and a percent distribution displayed the proportion of participants who are represented within each category and After tabulating the data, l continued to explore the data by disaggregating it across different variables and subcategories of variables.

I created a series of statements about outcomes and asked respondents to respond on a five-point Likert-type scale, with responses ranging from "Disagree Strongly" to "Agree Strongly," then obtained the descriptive statistics of the different.

3.10.2 Qualitative data analysis

The researcher analyzed the data with the guidance of the supervisor; the data collected was typed and edited using Microsoft word making use of the spelling and grammar options. It involved organizing material, taking text data. The information was categorized according to the research variables of the study, the findings were used directly in the study and the final interpretation was obtained from comparison of the findings and to enhance accuracy got different members to do the reviewing and they asked me questions about the qualitative data.

3.11 Ethical considerations

A lot of care, honesty and sincerity were exhibited during the study. Information from the respondents was handled technically and professionally with confidence and it was also kept confidential. I avoided unfair, and usurping other people's work and knowledge. I never invaded the respondents privacy, l was sensitive to issues of privacy, fairness, consent, safety, impartiality, avoided sexism neither did l hurt their feelings. I usually asked for permission to question respondents and usually allowed refusal to participate. I did not deliberately choose the respondents, I was just and fair.

I informed the participants why l asked them questions and for honesty replies l ensured that the respondents would remain anonymous and a request was made to be allowed to quote particular views. I was always punctual for the appointments which were made, and lastly l usually gave thanks after any assistance that was rendered to me.

3.12 Limitations

The period of study was too short. Therefore it may not be possible for the researcher to cover all the specific objectives that were intended to be studied in addition to that; the relevant information may not be able to be provided from the suggested sources. However this can be solved by using the multi method.

The researcher also had constraints of inadequate finances for like; transport that is to be used to go into different fields in order to get the required information. This limits the study as lack of enough finances may lead to getting little information as compared to what is needed due to failure to access some other enterprises in the field.

The enterprise management was so busy to fix time for my research questions. In addition, the Katwe is a very busy place where information might not be fully provided due to the busy schedule that the different enterprises may be having.

The respondents did not know how to read and write English hence the researcher had to help the respondents fill in the questions as he asked them what was in the questionnaire.

3.13 Conclusion

To sum it up, various and useful techniques or various forms were used to make sure that information was collected, analyzed, processed and interpreted to yield meaningful information to the researcher and the SMEs.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

4.0 Introduction

This chapter presents the research findings, analysis and interpretation of data collected, concerning the roles of supply chain management and the performance of small and medium enterprises. The information lies on data collected by use of the research methods mentioned in chapter three. Reference was made to the literature review in chapter two in order to make comparisons. The data is from proprietors of the organisation and staff who constituted the subject of this study. Questionnaires were designed to collect data and they were administered to the above mentioned individuals in their respective places of work. In the results presentation, Microsoft excel were used to obtain quantitative results and the statistical tests used include; frequency tables, bar graphs and pie charts.

4.1 Presentation and analysis

This part is presented according to the following objectives of the research study;

- To establish the relationship between transportation and the productivity of small and medium enterprises.

- To establish the relationship between inventory management and the productivity of small and medium enterprises.

- To establish the relationship between distribution management and the productivity of small and medium enterprises.

4.2 Background information of respondents

Out of 56 questionnaires issued to respondents, only 48 were returned fully filed making the response rate of 85.7%. The respondents were comprised of entirely males from the different enterprises. The respondents were purposively chosen with regard to the research topic which is the role of supply chain management and the performance of SMEs.

The table below gives us the explanation on the frequency and percentages of the different respondents in their various capacities and enterprises that they worked in.

Table 4.1 List of the frequency of the respondents and percentages

S/N	Category	Frequency	Percentage
1	Luse metal workshop	10	20.8
2	Bakuru metal works	10	20.8
3	Kyaterekera hard ware and metal works	14	29.2
4	Bukeerere metal works	14	29.2
	Total	48	100

Source: primary data 2015

Table 4.2 Frequency distribution for level of academic qualification of respondents

	Frequency	Percentage
Certificate	15	31.3
Diploma	4	8.3
Degree	5	10.4
Others	24	50
Total	**48**	**100**

Source: primary data 2015

Results shown in table, show that over 50% of the respondents have other qualifications such skills acquired from work place, and 31% of the respondents are educated up to the certificate level and 8.3% up to diploma level. This is an indication that majority of the respondents did not

receive an advanced education from the university hence limiting their knowledge on the topic of supply chain management and its role on the performance of small and medium enterprises.

Table 4.3 Frequency distribution for the duration for respondent's duration at work place

Years	Frequency	Percentage
0-1	16	33.3
1-3	20	41.7
4-5	8	16.7
6 and above	4	8.3
Total	**48**	**100**

Source: primary data 2015

Results shown in table 4.3 reveal that a majority of the respondents (16) (33.3%) have worked with their enterprises for less than a year, and (20) 41.7% of the respondents have spent at least3 years at their respective enterprises, (8) 16.7% of the respondents have spent at least 5 years with their respective enterprises and only (4) 8.3% of the respondents have worked for 6 years and beyond which is an indicator that SMEs must be having a high labour turnover amongst hence information gathered may be varying in nature.

4.3 TRANSPORTATION MANAGEMENT AND PERFORMANCE OF SMES

Table 4.4 Katwe SMES use road transport as the main type of transport

name	strongly disagree	disagree	not sure	agree	strongly agree
LUSE M.W					10
KYATEREKERA					14
BAKURU M. W					10
KAKA INVESTMENT					14
Total					48

Source: primary data 2015

The table above, indicates that the all of the respondents from the different enterprises agreed that their enterprises use road transport as their main type of transportation. This is represented by all the 48(100%) of the respondents who strongly agreed to that fact. This is attributed to the fact that Katwe is fully equipped with proper road infrastructural development which is cheaper, affordable and more convenient for heavy stock like metallic poles and other components for the manufacturing enterprises hence having the road transport as the main type of transportation to use.

4.3.1 Katwe SMEs have an alternative means of transportation

Table 4.5 showing that SMEs have an alternative means of transport

name	strongly disagree	disagree	not sure	agree	strongly agree
LUSE M.W					10
KYATEREKERA					14
BAKURU M. W					10
KAKA INVESTMENT					14
Total					48

Source: primary data 2015

From the research findings, over 100 % of the respondents from the different enterprises strongly agreed that Katwe SMEs don't have an alternative type of transportation besides the road transportation, this is mainly due to the limited infrastructure developments in the region where by most of the enterprises are more closer to the road and given the fact that there are no railway lines or water bodies or air stripes in Katwe around the Katwe area hence making road transportation the only dominant type of transportation.

4.3.2 Katwe SME's face long transit times before goods are availed to their customers

Table 4.6 Table showing the SMEs that face long transit times

Name	Strongly disagree	disagree	not sure	agree	Strongly .agree
Luse M.W		3	4	3	
Kyaterekera		6	3	5	
Bakuru M. W		7	3		
Kaka investment		8	4	2	
Total		24	14	10	

Source: primary data

In analyzing the data about the case in point, out of 48 respondents, 21 (43.7%) disagreed to the fact that Katwe SMEs face long transit times before goods are availed to their customers, where 14(29.7%) respondents were not sure and 10(20.8) respondents agreed to the long transit times. As presented in the table above, there is a clear indication that most of the SMEs in Katwe incur short transit times, as per the findings where by at least 46 % (24) of the respondents disagree with having long transit times, 31.1% (14) are not sure and 22.2% (10) agree with having long transit times before good are availed to their customers. This proves Jacobs (2007)'s characteristic of road transport where he emphasized that "Transit times are good, and rates are usually reasonable for small quantities and over short distances", just as one of the staff members of Luse metal workshops had commented, that "some of the clients are within a reasonable distance and come from nearby areas like Kabalaga, Nsambya and Katwe outskirts"

4.3.3 SMEs in Katwe incur high transportation costs to deliver their products to their clients

Table 4.7 Showing the number of responses from each enterprise in Katwe that incur high transportation costs

Name	Strongly disagree	disagree	neutral	agree	Strongly agree
Luse M.W		8	2		
Kyaterekera		10	4		
Bakuru M. W		3		7	
Kaka investment		4	2	8	
TOTAL		**25**	**8**	**15**	

Source: primary data

According to the findings as per the table 4.5a total of 25 (52.0 %) respondents disagreed with incurring high transportation costs in the enterprise, 8 (16.7 %) respondents were not sure if their enterprises where incurring high costs or not and a total of 15 (31.25 %) respondents agreed that they incurred high transport costs. Kamauff (2008) statement is put to the test in Katwe where it states that basic transportation and distribution functions are the largest activity cost buckets in the supply chain and yet it is not be the case with the enterprises in Katwe where transportation of the product to the client is in most cases left to the clients to devise their own means of transporting their product to their premises.

4.3.4 Katwe SME's have their own means of transport like an enterprise vehicle to transport their products.

Table 4.8 Table showing the response rate from the respondents

Name	Strongly disagree	disagree	neutral	agree	Strongly agree
Luse M.W		10			
Kyaterekera				14	
Bakuru M. W		10			
Kaka investment		14			
Total		34		14	

Source: primary *data 2015*

According to the findings 70.8% (34) of the respondents disagreed that their enterprises had a motor vehicle while 29.2% (14) agree to their enterprise having a motor vehicle as showed in table above

It has been discovered that most of the enterprises in Katwe don't own their transportation means like pickup trucks or Lorries to help them ferry goods and services to their clients and also carrying the supplies or stock to their premises. It was realised that of the 4 selected enterprises that were visited, only 1 had a motor vehicle which happened to be a second hand short chassis pickup that carries less than a ton worth of goods, this indicated that most of the small and medium enterprises in Katwe don't sufficient capital funds to purchase a means of transport like a vehicle to help them ferry goods to their clients, this was mainly attributed to the enterprises leaving the transportation to the client to sort out, this was discovered as per the comments written on the questioners of the staff three enterprises that did not possess any personalized vehicles, whereas the enterprise that owned a vehicle, as per their staff's comments of

"Kyaterekera metal works and hardware", they informed the researcher that they offered free transportation for bulk purchases only for instance orders like 20 beds, 12 metallic window frames and so on.

4.3.5 Katwe SME's are located a distance near their market.

Table 4.9 showing the SMEs in Katwe that are located near the market

name	strongly disagree	disagree	neutral	agree	strongly agree
Luse m.w		4	3	3	
Kyaterekera		4	2	8	
Bakuru m. w		3	2	5	
Kaka investment		4	2	8	
total		15	9	24	

Source: Primary data 2015

As per the research findings, 24(50%) respondents out of the 48 agreed to be near their customer market base within the out skirts of Kampala within Katwe areas, 9 (18.7%) of the 48 total respondents were not sure because they were not so much directly involved with knowing the specifics of their clients. And 15 (31.2%) of the respondents insisted that they were not near their customer market, in that some of their clients come from distant places as far as Wakiso, Mukono, Seeta and Entebbe. Statistical data has been arranged below in form of a graph to portray the findings of the research.

4.3.6 Katwe SMEs have the right fleet size.

Table 4.10 showing the response rate from the different respondents in the case study

Name	Strongly disagree	disagree	neutral	agree	Strongly agree
Luse M.W		10			
Kyaterekera			4	10	
Bakuru M. W		10			
Kaka investment		14			
		34	4	10	

Source: Primary data 2015

The research data showed that majority of the respondents disagree with their enterprises having the right fleet size, the research established that over 70.8 % (34) of the population does not agree with having the right fleet size for the transportation of goods to the final consumers or clients, 8.3% (4) of the respondents were not sure and 29.2% (10) This is mainly because the selected enterprises like Luse metal works, Bakuru metal works, and kaka investments were not directly delivering the goods to their customers after the final work has been done. Whereas the Kyaterekera metal works was the only enterprise with a vehicle that agreed to have the right fleet size this is because the number of orders it took on average were did not necessitate having so many vehicles hence one vehicle was enough to move all the orders since they are not all meant to be transported at the same time.

4.4 Inventory management and the productivity of small and medium enterprises.

The aim of the objective stated above is to examine the relationship between inventory management and the productivity of small and medium enterprises. Inventory management was defined as the overseeing and controlling of the ordering, storage and use of components that a company will use in the production of its products as well as the overseeing and controlling of the quantities of finished products for sale (chase and Jacobs 2006). Therefore, there is need to know whether there is a relationship between inventory management and the productivity of small and medium enterprises.

4.4.1 Are Katwe SMEs using the most cost efficient logistics for procurement of inventory?

Table 4.11 Katwe SMEs using the most cost efficient logistics for procurement of inventory

name	strongly disagree	disagree	neutral	agree	strongly agree
Luse M.W	4	6			
Kyaterekera	2	2	2	3	5
Bakuru M. W		2	2	6	
Kaka investment	2	2	3	7	
TOTAL	8	12	7	16	5

The data analysis carried out indicated that over (5) 10.4 % of the respondents from Kyaterekera metal works strongly agree that they are using the most cost efficient logistics for procurement, (16) 33.3% of the respondents agree to the dimension, (7) 14.6 % of the respondents from the different enterprises are not sure whether their enterprises are using the most cost efficient means of logistics and (12) 25% of the other respondents are in disagreement and (8) 16.7% of the rest of the respondents totally disagree. Therefore 10.4% + 33.3% of the respondents from different

selected enterprises acknowledge that they are using the most cost efficient logistics for procurement of inventory which is paramount for any enterprise to be effective in their production.

4.4.2 Do Katwe SMEs have a narrow lead time

Table 4.12 Katwe SMEs that have a narrow lead time

name	strongly disagree	Disagree	Neutral	agree	strongly agree
Luse M.W	4	2	2	2	
Kyaterekera	2	5	3	4	
Bakuru M. W	5	3	2		
Kaka investment	3	5	4	2	
Total	14	15	11	8	

Source: primary data 2015

The data analysis carried out indicated that over 16.7 % (8) of the population agree to have a narrow lead time, 22.9 % (11) of the respondents are not sure whether they have a narrow lead time or not, 31.25 % (15) of the respondents disagree with having a narrow lead time, and29% (14) of the respondents strongly disagree to having a narrow lead time. This indicates that most small and medium enterprises have a relatively long process to complete the manufacturing of one product, hence need to devise means of reducing the lead time of the enterprises as suggested by Kell (2007) Inventory management indicators such as inventory turnover, lead time, service levels and stock covers have to be strictly monitored by enterprises to effectively manage their inventory which is far from the reality among the SMEs in Katwe.

4.4.3 Katwe SMEs use computer assisted software in managing their inventory stock levels

Table 4.13 Katwe SMEs use computer assisted software in managing their inventory stock levels

Name	Strongly disagree	disagree	neutral	agree	Strongly agree
Luse M.W	6	4			
Kyaterekera	9	4	1		
Bakuru M. W	4	6			
Kaka investment	8	6			
TOTAL	27	20	1		

Source: primary data 2015

The data analysis carried out indicated that over 2 % (1) of the respondents were neutral or not sure as to whether their enterprises used computer assisted software to track their inventory, 41.6% (27) of the respondents disagreed to their enterprises having computer assisted software to help them track their inventory. 56% (20) of the respondents strongly disagree with using a computer assisted software in managing their inventory stock levels. Mantho (1994) stated that due to the availability of computers at a reasonable price, SMEs have found it appropriate to automate their inventory records through computerization, yet this is far different from the picture on ground where an over whelming majority of the respondents 56% (20) disagreed to the use of computers for tracking their inventory despite the low costs of acquiring one.

4.4.5 Katwe enterprises have a purchasing plan for procuring their stock

Table 4.14 showing enterprises with a purchasing plan

Name	strongly disagree	Disagree	neutral	agree	strongly agree
Luse M.W	2	4	1	3	
Kyaterekera	4	3	1	2	
Bakuru m. w		4	2	4	
Kaka investment	5	4	2	3	
TOTAL	11	15	6	12	

Source: primary data 2015

The data analysis carried out indicated that over 25 % (12) of the respondents agree to the fact that enterprises have a purchasing plan for procuring their goods and service, 12.5 % (6)of the respondents are not sure whether enterprises are have a purchasing plan for their stock, 31.25% (15) of the enterprises do not agree that enterprises in Katwe have a purchasing plan, 22.9% (15) of the respondents strongly disagree that Katwe enterprises have a purchasing plan for procuring their stock. The findings show that SMEs in Katwe do not have a proper purchasing plan for the stock which is contrary to Mantho (2004) who stated that Successful inventory management involves creating a purchasing plan that will ensure that items are available when they are needed (but that neither too much nor too little is purchased) and keeping track of existing inventory and its use. This clearly shows that inventory management among Katwe SMEs has not been fully successful which indicates that they are at risks of having continues stock shortages which creates a disruption in the production process of the enterprises hence leading to failure to meet the deadlines for clients.

4.4.6 Katwe SMEs inventory management decisions are carried out by top level management

Table 4.15 Katwe SMEs inventory management decisions are carried out by top level management

Name	Strongly disagree	disagree	neutral	agree	Strongly agree
Luse M.W		2		3	5
Kyaterekera		3	1	4	6
Bakuru M. W	1	3		4	2
Kaka investment		1	3	4	6
TOTAL	1	9	4	15	19

Source: primary data 2015

The responses got from the research about this issue showed that 39.5 % (19) of the respondents strongly agreed that inventory management decisions come from top management, 31.25 % (15) of the respondents agree that inventory management decisions are carried out by top level management, 8.3 % (4) of the respondents are not sure as to whether the inventory management decisions are carried out by top level management or not, 18.75 % (9) of the respondents disagree that inventory management decisions are carried out by top level management where as 2.1 % (1) strongly disagree to it too. The findings as per the respondents reveal that decisions are carried out by top level management but as per the observations made by the researcher, Katwe SMEs are not structured organizationally, they are owned by individuals and the owner of the enterprise controls each and every decision of the enterprise, hence being referred to as management by the staff members this was realised as per the comments of one of staff members

who holds a degree in business administration from Makerere university who emphasized that Katwe SMEs lack an organisational structure hence decisions are made by the owner of the enterprise with consultations from the staff.

4.4.7 Katwe SMEs calculate their safety stock levels on a regular basis to ensure that they are up to date

Table 4.16 Katwe SMEs calculate their safety stock levels on a regular basis to ensure that they are up to date

Name	Strongly disagree	disagree	neutral	agree	Strongly agree
Luse M.W	6	2		2	
Kyaterekera	7	5	2		
Bakuru M. W	5	2		1	
Kaka investment	7	6	1		
TOTAL	25	15	3	3	

Source: primary data 2015

The responses got from the research about this issue showed that 6.25 % (3) of the respondents agreed that their safety stock levels are calculated on a regular basis to ensure that they are up to date, 10.4%(3) are not sure whether their stock is calculated regularly. 31.25 % (15) are in disagreement with the fact that safety stock levels are regularly calculated to ensure that they are up to date, and 52 .1% (25) strongly disagree that inventory stock levels are regularly calculated. Inventory management indicators such as inventory turnover, lead time, service levels and stock covers have to be strictly monitored by enterprises to effectively manage their inventory. Kell (2007).The findings of the research are far from what the scholar stated, the findings show that

Katwe SMEs have no proper record keeping systems for their inventory hence stock is not monitored in most of the enterprises.

4.4.8 Katwe SMEs prepare inventory budgets which help them to forecast its inventory needs of the enterprise

Table 4.17 below is a table showing the frequencies of the respondents to the issue

Name	Strongly disagree	disagree	neutral	agree	Strongly agree
Luse M.W	4	3		3	
Kyaterekera	5	6	3		
Bakuru M. W	3	4	2	1	
Kaka investment	5	5	2	2	
Total	17	18	7	6	

Source: primary data 2015

The responses got from the research about this issue showed that 35.4 % (17) strongly disagree that Katwe SMEs prepare inventory budgets, 37.5% (18) disagree that Katwe SMEs prepare inventory budgets, 10.4 % (6) are not sure whether Katwe SMEs prepare inventory budgets where as 12.5 % (7) agree that Katwe SMEs prepare inventory budgets. The findings indicate that most of the enterprises in Katwe do not prepare inventory budgets which indicates that most SMEs in Katwe operate without forecasting their inventory needs implying that Katwe SMEs do not have improper inventory planning system which risks the financial viability of the enterprises in Katwe, this is proved by Vergin, (2008) who stated that the management of inventories influences a firm's financial strength and competitive position because the approach taken to Inventory Management directly affects working capital, production and customer service .

4.5 Distribution management and the productivity of small and medium enterprises

The aim of the objective stated above is to examine the relationship between distribution and the productivity of small and medium enterprises. Distribution management is the process used to deliver a product from its location to the point of sale.

4.5.1 Do Katwe SMEs distribute by order to their clients

Table 4.18 Katwe SMEs that distribute by order to their clients

name	Strongly disagree	disagree	neutral	agree	Strongly agree
Luse M.W		2		3	5
Kyaterekera				1	12
Bakuru M. W			1	4	5
Kaka investment		2	3	4	5
Total		5	4	12	27

Source: primary data 2015

The responses got from the research about this issue showed that over 8.3% (5)of the respondents disagreed, 8.3% (4) of the other respondents were not sure, 25% (12) of them agreed to distribute by order and 56.25 % (27) of the respondents agreed to distribute by order, the research study indicates that most of the enterprises in Katwe distribute by order to their customers, where by most of the clients to these enterprises only get what they order for, hence most of the SMEs in Katwe use the direct channel distribution which Mazur A. and Wieczorek K. (2012), referred to as one that involves the direct selling without the use of sales branches. (No external intermediaries involved)

4.5.2 Katwe SMEs have distribution centers

Table 4.19 Katwe SMEs have distribution centers

Name	Strongly disagree	disagree	neutral	agree	Strongly agree
Luse M.W				2	8
Kyaterekera	8	6			
Bakuru M. W	3	7			
Kaka investment				5	9
TOTAL	11	13		7	17

Source: primary data 2015

As per the research findings 22.9 % (11) of the respondents strongly disagree to having distribution centers 27.1% (13) disagree to having distribution centers 14.6% (7) of the respondents agreed to have distribution centers and 35.4% (17) of the respondents agreed to have be having distribution centers the findings indicate that some of the enterprises in Katwe do not have distribution centers and others do have distribution centers, this is shared equally as per the statistics that show a 50% share as per the respondents in the case study.

4.5.3 Katwe SMEs forecast their sales before production

Table 4.20 Katwe SMEs forecast their sales before production

Name	Strongly disagree	disagree	neutral	agree	Strongly agree
Luse M.W	1	6	3		
Kyaterekera	5	7	2		
Bakuru M. W	3	5	2		
Kaka investment	4	9	1		
Total	13	27	8		

Source: primary data 2015

The data analysis carried out indicated that over 27.1 % (13) of the respondents are strongly disagreed with their enterprises having a sales forecast before production, 56.3 % (27) of the respondents disagreed, and 16.7% (8) of them agreed to having forecasts. The findings indicate that there is evidence of a low turnover rate among Katwe SMEs where more is produced but not sold out grooming a breeding for overstocking or deficiencies in the product line as. Kell (2007). Had put it that a low turnover rate may point to overstocking, obsolescence, or deficiencies in the product line or marketing effort,

4.5.4 Katwe SMEs distribute their products by help of agents

Table 4.21 Katwe SMEs distribute their products by help of agents

Name	Strongly disagree	disagree	neutral	agree	Strongly agree
Luse M.W	4	5	1		
Kyaterekera	6	7	1		
Bakuru M. W	5	3	2		
Kaka investment	4	8	2		
Total	19	23	6		

Source: primary data 2015

The data analysis carried out indicated that over 39.6 % (19) of the respondents strongly disagreed to distribute their products by help of agents, 47.9% (23) disagree and 12.5 % (6) where not sure the findings indicate that majority of the SMEs distribute their products by direct channel where the enterprises sell their goods directly to the customers. This is in agreement with Etzel M. J (1997) who described it as the producer – agent – user channel: who described it as one that requires two intermediaries in supplying the recipient with the final product. These middlemen are able to deal with a much larger market.

4.5.5 Katwe SMEs have the right technology to operate efficiently

Table 4.22 Katwe SMEs have the right technology to operate efficiently

Name	Strongly disagree	disagree	neutral	agree	Strongly agree
Luse M.W		2	1	6	1
Kyaterekera			2	5	7
Bakuru M. W			1	5	4
Kaka investment		2	1	5	6
Total		4	5	21	18

Source: primary data 2015

The data analysis carried out indicated that over 4.3 % (4) of the respondents disagree that they have the right technology to operate efficiently, 10.9% (5) where not sure whether they had the right technology or not , 45.7% (21) agreed that they used the right technology and 39.1 (18) strongly agreed to have the right technology. This indicated that insufficiency in products fails to guarantee timely delivery of goods as ordered by the client.

4.5.6 Katwe SMEs distribute their products on time

Table 4.23 Katwe SMEs distribute their products on time

Name	Strongly disagree	disagree	neutral	agree	Strongly agree
Luse M.W	1	3	2	4	
Kyaterekera	2	4	3	5	
Bakuru M. W		2	3	2	3
Kaka investment		2	2	4	6
Total	3	11	10	15	9

Source: primary data 2015

The data analysis carried out indicated that over 6.25 % (3) strongly disagreed with distributing there products on time, 22.9% (11) disagreed, 20.8% (10) where not sure, 31.25% (15) agreed and 18.75% (9) strongly agreed to distribute their products on time, the findings indicated that the enterprises produced the goods on time but failed to provide the goods in the clients possession on time as per agreed hence customer satisfaction is not fully realised.

4.6 Performance of Katwe SMEs

This section of the research is to help analyse the state at which the SMEs in Katwe are performing currently

4.6.1 Improved inventory utilization has ensured that Customers receive their goods on time

Table 4.24 Improved inventory utilization has ensured that customers receive their goods on time

Name	Strongly disagree	disagree	Neutral	agree	Strongly agree
Luse M.W	2	2	2	1	3
Kyaterekera		6	7	1	
Bakuru M. W			2	4	
Kaka investment		5	3	6	
Total	2	13	14	12	3

Source: primary data 2015

The data analysis carried out indicated that over 4.5 % (2) of the respondents strongly disagreed that their enterprises inventory utilization had ensured that their customers received their goods on time, 27% (13) of the respondents had disagreed, 29.7% (14) of the respondents were not sure, 25% (12) of the respondents had agreed, and 14.5% (3) of the respondents had strongly agreed.

4.6.2 Customers get their products as per their specifications and quantity requested

Table 4.25 Customers get their products as per their specifications and quantity requested

Name	strongly disagree	disagree	Neutral	agree	strongly agree
Luse M.W		2	1	4	3
Kyaterekera		3	2	6	3
Bakuru M. W		3	1	4	2
Kaka investment		1	2	8	3
Total		9	6	21	11

Source: primary data 2015

The data analysis carried out indicated that over 18.7 % (9) of the respondents disagreed that customers got their goods as per their specifications and quantity requested, 12.5 % (6) were not sure, 45% (21) of the respondents had agreed that it was true, and 22.9 % (11) of the respondents strongly agreed that the customers got what they wanted in the exact quantity as requested.

4.6.3 Timely deliveries have ensured a high customer loyalty base.

Table 4.26 Timely deliveries have ensured a high customer loyalty base

name	strongly disagree	disagree	neutral	agree	strongly agree
Luse M.W		1	4	3	2
Kyaterekera		1	6	7	
Bakuru M. W		1	3	4	2
Kaka investment		2	2	6	4
Total		5	15	20	8

Source: primary data 2015

The data analysis carried out indicated that over 10.4 % (5) of the respondents disagreed, 31.2 % (15) of the respondents were not sure, 41.7% (20) of the respondents agreed and 16.6% (8) of the respondents strongly agreed that timely deliveries have ensured high customer loyalty base. The above findings indicate that majority of the respondents agreed to the fact that time is an important factor that adds value to the final product hence guaranteeing customer loyalty as a reward to the enterprises.

4.6.4 Inventory management through budget preparations and forecasts has ensured efficiency and effectiveness of the enterprise operations

Table 4.27 Inventory management through budget preparations and forecasts has ensured efficiency and effectiveness of the enterprise operations

Name	Strongly disagree	disagree	neutral	agree
Luse M.W		1	4	5
Kyaterekera	3	6	3	2
Bakuru M. W	3	4	3	
Kaka investment	7	4	3	
Total	13	15	13	7

Source: primary data 2015

The data analysis carried out indicated that over 27 % (13) of the respondents strongly disagreed, 31.25 % (15) of the respondents disagreed, 27.1 % (13) of the respondents were not sure, and 14.6% (7) of the respondents agreed that budget preparations and forecasts ensured efficiency and effectiveness of the enterprise. The above issue indicates that most of the respondents disagree with the with a majority of them disagreeing with using budget preparations and forecasts as a tool which proves that SMEs still have an ignorant perceptive about inventory

management hence need for managers to recognize their importance, just as Kenneth (2005) had stated that the machine tool SMEs are inventory-intensive in nature with a significant portion of their production cost involving material and inventory related cost, it is likely that the entrepreneurs recognize its due importance. It is with the above backdrop that understanding the present perception of SMEs about the importance of Inventory Management is appropriate.

4.6.5 Inventory practices such as inventory controls have ensured a high business turnover as well as profitability

Table 4.28 below is a table showing the frequencies of the respondents

Name	Strongly disagree	disagree	neutral	agree	Strongly agree
Luse M.W		3	3	4	
Kyaterekera		2	3	6	4
Bakuru M. W			4	4	2
Kaka investment		3	3	8	
Total		8	13	22	6

Source: primary data 2015

The data analysis carried out indicated that over 27 % (8) of the respondents strongly disagreed, 31.2 %(13) disagreed, 27% (22) were not sure and 14.5 % (6) of the respondents agreed that inventory practices have ensured a high business turnover. The above issue indicates that most of the respondents disagree with the with a majority of 56.2 % disagreeing with using inventory controls which proves (Kenneth hamlet 2005) statement who stated that the spread of inventory management culture among SMEs is limited due to lack of initiation, expertise and financial backdrop among SMEs.

4.6.6 Efficient distribution practices have brought about company growth and expansion.

Table 4.29 Efficient distribution practices have brought about company growth and expansion

Name	Strongly disagree	disagree	neutral	agree	Strongly agree
Luse M.W		3	3	4	
Kyaterekera		2	3	6	4
Bakuru M. W			4	4	2
Kaka investment		3	3	8	
Total		8	13	22	6

Source: primary data 2015

The data analysis carried out indicated that over 16.6% (8) of the respondents disagreed, 27% (13) of the respondents were not sure, 45.8% (22) of the respondents had agreed, and 12.5% (6) of the respondents strongly agreed that effective distribution practices have brought about company growth and expansion. As per the table below**.**

4.7 Conclusion

From the above presentations of graphs, and tables it can be concluded that minority of the respondents were in agreement with practice of supply chain management in areas of transportation management and to a small extent inventory management though there were to a greater extent more disagreements in areas of inventory practices and use of computers in business. This means that the use of inventory practices and computers for supply chain management in SMEs is still lacking. Further explanation and summary of findings is presented in chapter five.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATION

5.0 Introduction

The chapter presents the summary of the main findings from the study, the conclusions and the recommendations which are based on the conclusions made by the study. The major objective of the study was to examine the role of supply chain management and the productivity of small and medium enterprises.

5.1 Summary of major findings

5.1.1 Transportation

The study revealed that the majority of the respondent 69% agreed to be using the most appropriate transportation management techniques in their respective enterprises, majority agreed that they used road transport as the major type of transportation without any other alternative type alternative, the study also revealed that transportation is mainly used for transporting inventory to the enterprise premises and not to distribute the final product to their clients, this is mainly because The study also revealed that most of the enterprises do not have their own vehicles, the enterprises leave the clients to transport the goods by themselves to their premises by themselves.

5.1.2 Inventory management

The study revealed that only 32.5% of the respondents agreed to be caring out inventory management practices which was way below average. Which indicated that very few SMEs practice inventory management like inventory budgets, calculating stock levels and also book keeping is relatively poor as commented by one of the staff members of Luse metal works, the findings also showed that there is a strong positive relationship between inventory management and the productivity of small and medium enterprises in that proper inventory management would ensure better inventory control and right target service levels. This showed that inventory management still has to be given urgent attention by the small and medium enterprises in Katwe.

5.1.3 Distribution management

The research revealed that only 45 % of the enterprises carried out proper distribution management practices. The findings revealed that the most of the enterprises in Katwe distribute their products by order and also few do have distribution centers, most of the enterprises do not forecast their sales before production, though most of the enterprises in Katwe have the right technology to operate efficiently. The study also discovered that most of the enterprises do not distribute their products to clients by use of agents. This is an indication that that distribution management still need to be improved upon by the small and medium enterprises In Katwe.

5.1.4 Performance of small and medium enterprises

The study revealed that the majority of the respondents accepted that inventory utilization ensured timely delivery of goods and services and also that clients received their goods in the right quantity and as per their specifications. The research also pointed out that timely deliveries have ensured customer loyalty hence supply chain practices such as inventory management,

distribution and transportation management are key in the productivity of small and medium enterprises

5.2 Conclusions

5.2.1 The role of supply chain management and the productivity of small and medium enterprises

The study revealed that the majority of the SMEs in Katwe have tried to do some basic simple supply chain practices like using the most cost efficient means of availing inventory to their premises, simple inventory practices such as drawing up budgets for inventory for particular orders, this is an indication that there is still chance for them to improve on their efficiency to reduce the cycle time in the production of goods for their clients, the study also revealed that most SMEs in Katwe leave the transportation function to their clients to devise their own means of transporting the product, this increases on the time with in which the customers gets to have the product at their disposal and also inconveniences the client to look for other personal means for transporting the product yet this could still be offered by the enterprises and would ensure higher revenue turnovers, increase their efficiency and also satisfy the clients For computer facilities; the world is moving at a fast pace of technology and also the demand for goods in such businesses keeps growing though it is such facilities that can support business growth as well as managing business to perform better through proper record keeping of sales, inventory and facilitates in forecasting of sales too for the enterprises.

5.3 Implications of the study

The study results in the area of inventory of inventory management that there is need to encourage small and medium enterprises engage in inventory management practices since they experience inventory constraints to deliver specific orders, this will help them be more effective and efficient in the running of their enterprises with the production and delivery of goods on time which guarantees customer satisfaction. This is in line with (Sunil and peter Meindl 2007) who stated that inventory plays an important role in the performance of any enterprise due to the availability of stock during a demand outburst thus influencing a firm's financial strength and competitive position. The study findings in the area of inventory management bookkeeping and use of computers also implies that there is need to improve inventory record keeping practices as well as using more of computers systems in private schools so as to perform better in terms of tracking inventory for specific materials and also forecast the inventory needs of an enterprise hence improving upon time delivery of goods to clients for any orders that may be made. This is as per the statistical findings of the research.

Some Katwe SMEs do not so much engage in the transportation of goods for their clients and if done so, they incur huge transportation costs due to the alternative of hiring from other transportation service providers who charge highly for their services. This affects the distribution of their products to a number of potential market places since they cannot deliver their products on time and always have to depend on some other enterprises for the transportation of their products with no guarantee of security or insurance of the client's products.

From the discussion and findings above it was established that there is a strong relationship between supply chain management and the performance small and medium enterprises therefore

supply chain management an important function in enterprises that can be used to ensure there is improvement in the productivity of enterprises due to improved customer service delivery.

5.4 Recommendations

The findings of the study showed that there is more need for small and medium enterprises to improve their productivity through proper supply chain management practices, although supply chain management may not be the only contributing factor to SMEs performance, it is imperative that SMEs review their existing supply chain management systems in order to strengthen their weak supply chain points accordingly as this directly affects their efficiency and effectiveness.

Based on the findings made in the course of this study, the following recommendations are hereby suggested:

5.4.1 The role of transportation on the productivity of SMEs

There is a need to procure enterprise transportation vehicles, based on the findings where by 70% of the respondents disagreed that their enterprises had vehicles, enterprise vehicles would help to harmonize transportation costs of the enterprises and also to improve upon their efficiency with delivery of goods on time to their clients, this will add value to their products and also ensure a proper and much more a customer relations atmosphere with clients which guarantees customer loyalty and also improved time delivery due to reduced cycle time in the transportation sectors of the enterprises, enterprises should always include it as an after sales service but have a harmonized billing system to their clients so as not to over charge them on goods produced. Transportation of goods by the enterprise itself will guarantee security and safety of the goods other than hiring an external firm to transport goods on the enterprise's behalf where they may come with incapacitated vehicles and over load it with goods to cut costs risking

the good to be damaged due to over loading or delay in delivery of goods due to damages caused by the enterprise outsources to deliver goods to the clients.

5.4.2 The role of inventory management on the productivity of SMEs

Enterprises should ensure that complete and accurate safety stock levels for inventory, given the statistical figures of only 32.5% of enterprises practicing proper inventory management practices, this would guide the enterprises in the inventory budgets aiding in knowing the available stoke at hand and also determining the inventory needs of the enterprises during inventory forecasts and also budgeting. There is need for proper and regular stock taking practices amongst the SMEs in Uganda so as to keep an update knowledge on the current stock levels that will help determine the inventory turn over the enterprise to ensure the enterprise's re order purchase levels and also know the minimum stock levels of the enterprise so as to have adequate inventory all the time. There is need for acquisition of computers by SMEs in order to help have a proper simplified inventory management systems that will help in the decision making for the enterprise inventory requirements hence this will improve on the availability of inventory when it is needed and also timely delivery of products with reduced cycle and lead time in the enterprise.

5.4.3 The role of distribution management on the productivity of SMEs

At least 45 % of the respondents agreed to be practicing distribution management practices hence enterprises should at least make sure that they make sales forecasts basing on the previous sales made by the enterprise, this can only be possible with proper record keeping system of the sales, this will aid the enterprises in knowing the required needs of the inventory so as to have an average inventory turnover rate that will aide in the proper timely distribution of the products to clients, there is need for having some distribution centers across the major market areas like

major towns within the out skirts of the city and also have proper locations of the clients so as not to take long delivery durations to reach their clients premises.

5.5 Suggestions for further research

Further research should be made in the area of supply chain management and the productivity of SMEs more emphasis given to the transportation management, inventory management control systems, and distribution management for manufacturing firms.

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APPENDIX I

QUESTIONAIRE

UGANDA MARTYRS UNIVERSITY NKOZI

This questionnaire is for a research study on supply chain management and the performance of SMEs in terms of transportation, inventory management and distribution in Katwe

Dear Respondent,

I am by Ssenabulya Jonathan an undergraduate student of Uganda Martyrs University in the faculty of Business administration and Management. I am conducting a research about the role of supply chain management on the performance of Small and Medium sized Enterprises (SMEs) in Katwe. This research is a requirement for the award of the degree of Bachelors in Business Administration and Management. Your response will contribute greatly contribute to the achievement of the research objectives and will be treated with utmost confidentiality, anonymity and used only for the academic purposes.

Thank you very much for your cooperation.

SECTION A:

Background information about the respondents (please tick where appropriate in the box)

1. Ownership

Sole Proprietorship ☐ Partnership ☐ Joint stock company ☐

2. Age group

18-27 ☐ 28-37 ☐ 38-47 ☐ 48-57 ☐ 58+ ☐

3. For how long has the business been in operation?

Less than 1 year ☐   1-3 years ☐   4-5 years ☐   6 years and above

4 .Type of business

Manufacturing ☐   business ☐   service ☐

Others (Specify) ………………………………….

5. What is the level of education for the employees?

Certificate graduates ☐   diploma graduates ☐   degree graduates ☐

Others (specify) ………………………………………

SECTION B

Below, it is important that you evaluate the statements honestly. Please tick the statements appropriately basing on your level of agreement.

1   Strongly Disagree

2   Disagree

3   Not sure

4   Agree

5   Strongly agree

SECTION B

TRANSPORTATION AND THE PRODUCTIVITY OF SMES

		1	2	3	4	5
1	Katwe SME's use the road as their main means of transportation.					
2	Katwe SME's have an alternative means of transportation.					
3	Katwe SME's face long transit times before goods are availed to their premises.					
4	Katwe SME's incur high transportation costs to deliver their products to their clients.					
5	Katwe SME's have their own means of transport like an enterprise vehicle to transport their products.					
6	Katwe SME's are located a distance near their market.					
7	Katwe SMEs have the right fleet size.					

Do you have any other comment(s) you would advise about transportation management and performance of SMEs

………………………………………………………………………………………….

………………………………………………………………………………………….

SECTION C:

INVENTORY MANAGEMENT AND THE PRODUCTIVITY OF SMES

		1	2	3	4	5
1	Are Katwe SME's using the most cost efficient logistics for procurement and delivery?					
2	Do Katwe SME's have a narrow lead time variability?					
3	Katwe SME's use computer assisted software in managing their inventory stock levels.					
5	Katwe enterprises have a purchasing plan for procuring their stock.					
6	Katwe SME's Inventory management decisions are carried out by the top level management.					
7	Katwe SME's calculate their safety stock levels on a regular basis to ensure that they are up to date.					
8	Katwe SME's prepares an inventory budget which helps to forecast its inventory needs of the business.					

Do you have any other comment(s) you would advise about inventory management and performance of SMEs

…………………………………………………………………………………………………

…………………………………………………………………………………………………

SECTION D

DISTRIBUTION MANAGEMENT

		1	2	3	4	5
1	Do the Katwe SME's distribute by order to their clients.					
2	Katwe SME's have distribution centers.					
3	Katwe SME's forecasts their sales before production.					
4	Katwe SME's distributes the product by the help of agents.					
5	Katwe SME's have the right technology to operate efficiently.					
6	Katwe SME's distribute their products on time.					

Do you have any other comment(s) you would advise about distribution management and performance of SMEs

…………………………………………………………………………………………….

…………………………………………………………………………………………….

SECTION E:

PERFORMANCE OF KATWE SMEs

		1	2	3	4	5
1.	Improved inventory utilization has ensured that Customers receive their goods on time.					
2.	Customers get their products as per their specifications and quantity requested.					
3.	Timely deliveries have ensured a high customer loyalty base.					
4.	Inventory management through budget preparations and forecasts has ensured efficiency and effectiveness of the enterprise operations.					
5.	Inventory practices such as inventory controls have ensured a high business turnover as well as profitability.					
6.	Efficient distribution practices have brought about company growth and expansion.					

Do you have any other comment(s) you would advise about how supply chain management has affected the performance of SMEs.

………………………………………………………………………………………………

………………………………………………………………………………………………

APPENDIX III:

TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Source: Krejice& Morgan (1970, as cited by Amin, 2005)

Note.—*N* is population size.

S is sample size.

APPENDIX III:

INTRODUCTORY LETTER

Uganda
Martyrs
University

making a difference

Office of the Dean
Faculty of Business Administration and Management

Your ref.:
Our ref.:

Nkozi, 25ᵗʰ March, 2015

To Whom it may Concern

Dear Sir/Madam,

Re: Assistance for Research:

Greetings and best wishes from Uganda Martyrs University.

This is to introduce to you _____ who is a student of Uganda Martyrs University. As part of the requirements for the award of the Degree of Bachelor of Business Administration and Management of the University, the student is required to submit a dissertation which involves a field research on a selected case study such as a firm, governmental or non governmental organization, financial or other institutions.

The purpose of this letter is to request you permit and facilitate the student in this survey. Your support will be greatly appreciated.

Thank you in advance.

Yours Sincerely,

Moses Kibrai
Dean

UGANDA MARTYRS
UNIVERSITY
OFFICE OF THE DEAN
2 5 MAR 2015
FACULTY OF BUSINESS
ADMINISTRATION & DEVELOPMENT
SIGN:...........................

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