

**LOGISTICS CONTROL SYSTEMS AND SERVICE EFFECIENCY AMONG
ORGANISATIONS.**

A CASE STUDY OF MUKWANO GROUP OF COMPANIES

BY

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DECLARATION

I, Nambiro Racheal hereby declare that this submission is my own work towards the award of bachelors of supplies and procurement management of KIU and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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Student


Sign

Date

APPROVAL

I certify that this study is carried out and wrote under my supervision. The research has been presented for examination with my approval as a University supervisor.

Sign 

..... 

Mr. Pule Samuel
(Academic Supervisor)

Date

DEDICATION

I dedicate this work to my parents Senyengo Samuel and Mulo Fatuma and family members for their moral support and the encouragement that they gave me during the study; it is your committed efforts that enable me reach this level.

ACKNOWLEDGEMENTS

I wish to acknowledge and be grateful to God for enabling me to reach this point in my academic life and I am so thankful for His unconditional protection.

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I have to acknowledge my relatives who devoted their time and energy towards the accomplishment of this research project. The moral support they gave me too was overwhelming and came in handy at times when I was being challenged by various issues in the field.

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ABSTRACT

The purpose of the study was to explore the relationship between logistics control systems and service efficiency in mukwano group of companies. The study was to assess the effect of Vehicle tracking system on service efficiency in Mukwano group of companies and to examine the effect fleet management system and service efficiency in Mukwano group of companies. The study was conducted based on a descriptive research design where the data collected was through questionnaires, the data was collected from 40 respondents who were employees of Mukwano group of companies. The study analysis was through use of linear regression to establish the effect of the vehicle tracking and fleet management on service efficiency. The study findings reveal that vehicle tracking and fleet management have a significant effect on service efficiency in Mukwano group of companies.

The study concludes that the avenues of vehicle tracking in an improved version have a considerably improved effect for service efficiency in the organizations. The study concludes that vehicle tracking with weaknesses need enhancement for improved service efficiency in the organizations. On the second objective of examining the effect fleet management system and service efficiency in Mukwano group of companies, the study conclude that fleet management if improved can enhance the efficiency of Mukwano group of companies. The study implies that fleet management is a fundamental avenue for service efficiency, even with challenges if improved can lead to service efficiency in the organizations.

The study recommend that vehicle tracking systems that were found to be used but not very well, the researcher recommend that there is need for revolution of logistics operations. Further more in the process of vehicle tracking few vehicles are tracked hence the need for a comprehensive vehicle tracking especially around the areas that consume much cost. The study further recommends that, for a warehouse to function efficiently, the facility must be properly managed. There is need for enhanced organizational operation as means to improve the performance value of the warehouse. The measures should range from the handling of inventory to the management of the capacity concerning the prevalence of the inventory. Fleet management can be improved therefore by enhancing the management of the warehousing in the process of moving the fleet in the organization.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter presents the background of the study, problem statement, purpose of the study, objective of the study, research questions, scope of the study, and significance of the study and Conceptual frame work.

1.1 Background of the Study

In a global economy, competitive and dynamic environment, logistics control systems are important strategic factor for increasing competitiveness and service efficiency (Sezhiyan & Nambirajan, 2010). The performance of logistics systems was typically related to delivery service, logistics cost and tied up capital. The developed countries of China, USA, Britain and Japan have a well developed economy because of employee logistics control systems in their manufacturing industries that results in service efficiency for effective production of the required goods and services. World Bank report on logistics performance states that a competitive network of global logistics would be the backbone of international trade and the importance of efficient logistics for trade and growth would be widely acknowledged (World Bank, 2010). The World Bank acknowledged the importance of logistics performance and initiated a study to measure the logistics competitiveness of countries. The first study was conducted in 2007 and was repeated in 2010 (World Bank 2007 and 2010). The second edition of this report, based on a new dataset for 2010, compared the logistics profiles of 155 countries. The Logistics Performance Index (LPI), which was calculated for each country, was an assessment of logistics performance (ranked on a scale of 1 to 5, with 5 being the best and 1 the worst) and was based on surveys conducted with nearly 1000 global freight forwarders and express carriers, the developed countries with a high logistics control systems experience service efficiency in their operations.

World bank (2010) report provide that the Africa continent was not performing well in logistics controls systems compared to other continents as the report confirmed that the top four countries were from Europe, the fifth one was from Asia however, the bottom five were all from Africa. The bottom five was Somalia (1.34), Eritrea (1.70), Sierra Leone (1.97), Namibia (2.02) and Rwanda (2.04). Shippers Council of Eastern Africa (SCEA) in their Annual Publication of 2013 confirmed that, a country's ability to trade globally could highly depend on the extent to which

its international traders have access to competent and high quality logistics services. The limited degree of logistics control systems in Africa explains the low level of service efficiency in the organizations. The system of the efficiency in logistics provides a determined efficiency direction that most African countries have not attained.

Concerning East Africa, majority of the international trader's respondents ranked the quality of logistics services in eastern Africa as average (SCEA, 2013). A survey done by SCEA in 2012, revealed an array of factors that were responsible for the efficiency and cost structure of Kenya and Tanzania logistics chain. They included: logistics cost and efficiency indicator; time indicators related to deliver goods; truck turnaround time; complexity indicators which measured the level of complexity in undertaking trade transactions and customer perception indicators. The East African countries presence of average logistics efficiency is derived from the low level of the undertakings that exist in the service level systems management accompanied by the cost line access by the many manufacturing countries (SCEA, 2013). Service efficiency in the organizations is fundamental for the operations of the organizations and logistics control systems facilitate the adoption of the system of effective operation that though constraints exist can be handled in the organizations.

Many manufacturers and merchants in Uganda have embraced the issues of logistics control systems encompassing service efficiency in planning and management of all activities involved in sourcing and procurement, conversion and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers and customers. In essence, supply chain management companies like Mukwano group of companies have integrated supply and demand management within and across their company. To improve product development, quality and delivery goals, and to eliminate waste (World Bank report, 2012). Mukwano group of companies has established mechanisms for strengthening technologies to support new product development efforts and seamlessly integrate logistics functions with transportation partners to deliver directly to the point of use. Logistics control systems has extended the traditional internal activities by embracing an inter-enterprise scope, bringing trading partners together with the common goal of optimization and efficiency. By involving suppliers early in the design stage, manufacturers are

able to develop alternative conceptual solutions, select the best components and technologies, and help in design assessment (UMA, 2014)

1.2 Problem Statement

The organizations have adopted logistics control systems of fleet management and vehicle tracking in their operations in tended to generate value for the organization. The organizations despite establishing the mechanisms for logistics control. The organizations in Uganda are faced with fierce challenges in the logistics control even to deliver their finished product to their ultimate customers in the organization (World bank, 2012). The state of the organization is coupled with service inefficiency in transportation, organizations incapacity, inventory value reductions and errors in logistics operations in the organization (Balland & Sobhi, 2014). There is notably low level of performance of the organization with challenges that have hindered the operations of the organization, these if not well addressed will lead to worsened service efficiency in the organization and therefore reduce the value and benefit of the organization. It was based on these that the research is set to evaluate the effect of logistics control systems on the service efficiency in Mukwano group of companies.

1.3 Purposes of the Study

The purpose of the study was to explore the relationship between logistics control systems and service efficiency in mukwano group of companies.

1.3.1 Specific Objectives of the Study

- i. To assess the effect of Vehicle tracking system on service efficiency in Mukwano group of companies.
- ii. To examine the effect fleet management system and service efficiency in Mukwano group of companies.

1.4 Research Questions

- i. What is the effect of Vehicle tracking system on service efficiency in Mukwano group of companies?
- ii. What is the effect fleet management system and service efficiency in Mukwano group of companies?

1.5 Scope of the Study

1.5.1 Content Scope

The study was based on logistics control systems on service efficiency. Major concentration was based on vehicle tracking system fleet management system and service efficiency in the organization.

1.5.2 Geographical Scope

The study was conducted at Mukwano group of companies located in Kampala city centre in industrial area. The Group's headquarters are located on Mukwano Road (Bypass Road), in the Central Division of Kampala, Uganda's capital and largest city. The company is located in on Plot 30 Mukwano Road, Kampala-Uganda The coordinates of the company headquarters are: 0°18'45.0"N, 32°35'27.0"E (Latitude:0.312500; Longitude: 32.590840). The area is chosen because of having a high stream of logistics control systems and service efficiency in the organization.

1.5.3 Time Scope

The study was conducted for a period of 5 months that is to say February to July, 2018. The study time chosen is because of less academic activity in the period and the fact that the time chosen gives ample time for data research.

1.6 Significance of the Study

The finding and the recommendations of this study should be useful for decision makers of logistics activities and the developers of strategic growth of those organizations because they will rely on concrete knowledge of understanding their logistics decisions to service efficiency of their respective firm.

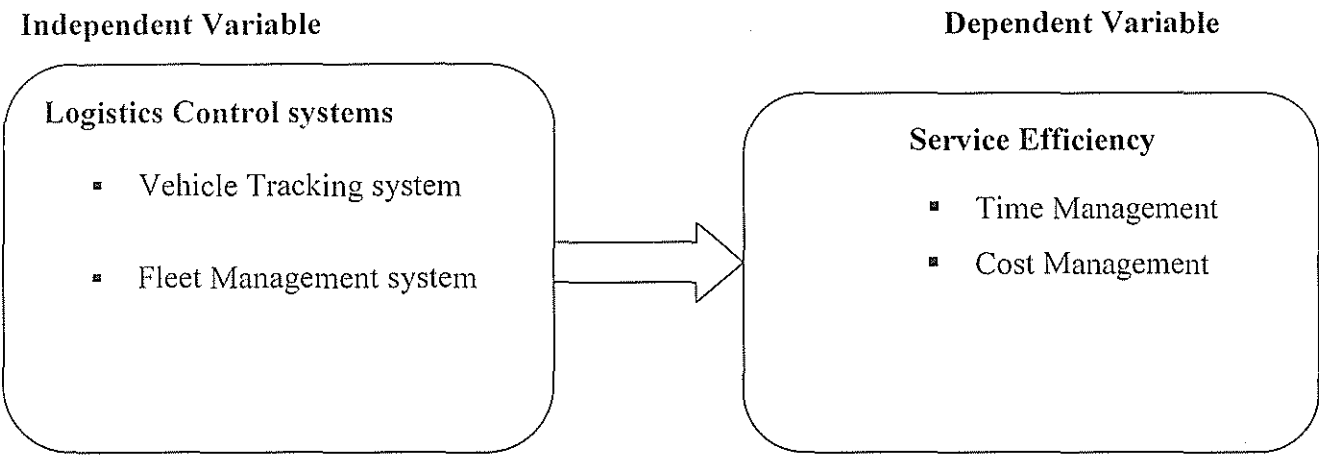
To the government, the study may provide greater insight into the relationship between logistics management and service efficiency of manufacturing sector. This may aid in formulation of policies and regulations that can help improve efficiencies and effectiveness in the sector and improved manufacturing sector. Improved logistics management possibly will boast flow of trade and reduction of cost in exports creating export incentives, improved prices of goods and services, and reliable supply chain.

The study could also benefit the academic community as it may contribute to the increasing body of literature on logistics. It may possibly provide a framework of logistics management dimensions which may be used as a test base for further research. Due to the limited study on logistics in researcher's knowledge that has been carried out in developing world, the researchers in the field may be interested in reviewing the findings of this project and more so those based in Uganda.

The researcher also hopes that the study will be benefited by other researchers to get a basis for further research on impact of logistics control on service efficiency in organizations. This would lead to the generation of ideas for better understanding of logistics decisions and service efficiency in the organizations.

1.7 Conceptual Frame work

Figure 1.7 Conceptual frameworks showing the relationship between Logistics control systems and service efficiency in organizations.



Source: Adapted from CSCMP (2007) and modified by the Researcher

Explanation of the Conceptual Framework

The figure above indicates researcher’s conceptualization of variables, their linkages and how each related to one another. The independent variable presents logistics control systems which

the researcher views as vehicle tracking system and fleet management system. On the other hand service efficiency is measured through efficiency in work, product chain efficiency and lead time efficiency. The presence of positive logistics control systems will enhance the service efficiency while the reverse is true.

1.8 Operational Definitions of Key Terms

According to CSCMP (2007) logistics control systems is that part which implements, and controls the efficient, effective forward and reverses flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customers' requirements.

Kenyon and Meixell (2011) defined vehicle tracking. Monitoring the location of a truck, car or any moving vehicle using the GPS system. Widely deployed to keep track of truck fleets, vehicle tracking ensures that the vehicles are being used properly and that they can be recovered in the event they are stolen.

Fleet Management is a function which allows companies which rely on transportation in business to remove or minimize the risks associated with vehicle investment, improving efficiency, productivity and reducing their overall transportation and staff costs, providing 100% compliance with government legislation.

Service efficiency is the knowhow and the competency of the company's employees to deal with the logistical operations, to solve any potential logistical pressures and to maintain smooth flow of work, to bargain about freight fee and setting strategies for the company's future logistics system.

Cost management is the process of planning and controlling the budget of a business. Cost management is a form of management accounting that allows a business to predict impending expenditures to help reduce the chance of going over budget.

Time management " is the process of organizing and planning how to divide your time between specific activities. Good time management enables you to work smarter not harder so that you get more done in less time, even when time is tight and pressures are high.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter gives an elaborate explanation of what other authors have written about the subject of study. It is the review of literature majorly concentrating on the objectives of the study.

2.1 Logistics Control System

Logistics control system refers to the art of system designed with an intention of managing the flow of materials and products from the source to the user. The logistics system includes the total flow of materials, from the acquisition of raw materials, to the delivery of the finished product, to the ultimate users, and the related counter-flows of information that both control and record material movement (Ballou, (2008). Another tool for the design of logistic systems is services (Evers, 2007). Evers introduces the concept of service-oriented agile logistics and presents a generic tool for the design of such systems. The logistic system is conceived as a society of interacting, self-responsible, intelligent service-producing actors. This modeling framework is applied to a high-performance deep-sea container terminal. The concept of services is rather similar to the LMF, in the sense that control is explicitly modeled. The logistic activities are performed by a “society” of interacting “autonomous actors”. Another aspect these methods share is that they both favor distributed control.

Most of the single logistics company focus on the reduced span of tracking and tracing, which offers easier accessibility of information and maintain the proprietary tracking codes and information architectures (Van Dorp, 2008). Independent providers of logistics service such as Savi Technologies and EURO-LOG offer the development underline the importance of customers being able to locate shipments in-transit through planning and monitoring their operations. The existing tracking systems are suitable for use when goods are handled by one company and are not suitable for multi-company networks. These company specific tracking services utilize service provider specific coding for consignments, which resulted increase the complexity of retrieving tracking information for the potential customers. Mukwano group of companies and other manufacturing organizations in Uganda like Roofing’s Uganda limited that logistic control mechanisms have attained work efficiency and performance improvements.

2.2 Service Efficiency

Service efficiency is described as the capability of producing a specific, desired effect, or in other words “getting the right things done” in time (Druker, 2011). In a services management context, service delivery system is defined as “the structure (facilities, equipment, etc.), infrastructure (job design, skills, etc.) and processes for delivering a service” (Goldstein et al. 2002, p. 132). From these definitions it becomes apparent that organization’s effectiveness is related to the degree to which a system’s objectives have been achieved and therefore, an effective service delivery is the one that is capable of delivering the outcomes for which it was originally designed and developed. Service delivery systems normally should be able to produce several positive outcomes, ranging from reduced costs.

Service efficiency of employees, both the ones working in the front line and those who support them in the back office, are an inseparable part of the service efficiency and their performance is crucial for the success of the service delivery (Lovelock, 2009). In order to perform well, front line employees must enact their role in the service delivery both efficiently and effectively. Organizations such as Mukwano that have embraced logistics control, their role in the organization is either provided by their supervisors or described in a formal job description, blueprint etc. and it reflects customer needs, and standards set by management and service level agreements. Hence, the organizations like Bidco that have embraced logistics controls have registered appropriate performance in their work by effectively performing their predefined role, service employees can contribute to the achievement of the company’s quality standards and bridge the gap between service delivery and customer expectations.

2.3 Logistics Control Systems and Service Efficiency

Liu & Lyons (2011) examined the effect of logistics capabilities on the manufacturing firm’s performance in China. They classified logistics capabilities as customer-focused capabilities and information-focused capabilities. The study indicated that customer-focused capabilities and information-focused capabilities respectively significantly affected firm performance directly and indirectly. In their study Vijayaraghavan and Raju, (2008), examined the relationship existing among logistics capabilities, logistics performance and firm financial performance in India. The results were positive that, both logistics capability and performance had a direct

influence on the finance performance. Zhang, Zhang, and Lim, (2005), examined the impact of logistics flexibility on manufacturing firm's customer satisfaction. This was done through a survey of 273 manufacturing firms in USA and the results indicated that logistics flexibility had significant, positive and direct impact on the customer satisfaction. This confirmed that, firms could achieve customer satisfaction by developing logistics flexibility which enabled quick replenishment of incoming materials and rapid delivery of finished products to customers (Zhang, et al, 2005).

Wisner 2003; Tontini & Zanchett, 2010) empirically investigated the link between logistics performance and organizational performance in US manufacturing sector. Evidence collectively revealed that the logistics function as a whole strived to minimize the ratio of resources utilized against derived results (efficiency), accomplish pre-defined objectives (effectiveness), gain superiority when compared to competitors (differentiation) Fugate, et al, (2010) and ability to meet customer satisfaction (quality). All this confirmed influence logistics had on firm performance. In recent days, a number of researchers had confirmed that improved information exchange could have a substantial impact on overall firm performance and efficiency. A study carried out by Tim (2007) confirmed that through the use of communication tools, such as the web sites, industrial organizations could build value in their supply chain relationships. A study done by Hyvönen (2007), on information technology and logistics management in Finland confirmed that information technology innovations when applied to logistics/supply chain management led to increased customer satisfaction. Sa'nchez, and Pe'rez, (2005), did an Empirical survey of a representative sample of 126 Spanish automotive suppliers during the months of September and October 2003 to analyze the relationship between logistics flexibility dimensions and firm performance dimensions, and between logistics flexibility dimensions and environmental uncertainty dimensions. A multivariate analysis studied the determinants of logistics flexibility.

2.3.1 Effect of vehicle tracking system on service Efficiency

With the introduction of mobile, vehicle, laptop, wildlife and personal tracking, it is now easier than ever to recover stolen goods (Karen, 2010:1). Undoubtedly, car tracking has become one of the most common gadgets used for vehicle location and monitoring due to the great number of car break-ins and thefts. For example, according to police records, more than 600 vehicles were

stolen in 2008. This has resulted in many of the motor vehicle owners installing tracking devices in their vehicles (Karen, 2010:1). According to a fleet management consultancy in Kenya, the GPS/GSM system is cheaper than satellite-based technology because it requires that a single payment only be paid in order to gain access to all the information that is generated (Okuttah, 2009:1). Nevertheless, its main advantage is that it is able to detect vehicles in buildings or even vehicles which are hidden underground. The satellite system, on the other hand, uses satellite phones, the price of which is beyond the reach of most potential users such as individual, public service vehicle operators. Nevertheless, its main benefit is in the fact that it is able to locate or track a vehicle in any part of the world (Okuttah, 2009:1). "Fleet companies running on tracking system have gained a reputation for reliability and predictability from their clients. Now, one can clearly see where the vehicle is, how fast it's travelling and work out when exactly it should arrive at its destination" (Warungu, 2007).

The advantage of the satellite system is that the system is able to track a vehicle globally as it is not limited to any one local GSM receiver (Okuttah, 2009:1). The system offers detailed information, including the exact location of either motor cars or items. In view of the fact that the GSM modem incorporates a SIM card which is provided by the various mobile providers at a cost, its use is, therefore, limited to the network signal coverage and it is not able to deliver real-time information outside the network coverage area. The radio frequency system (RFS), on the other hand, runs on the masts mounted by the service provider. According to Durr and Giannopoulos (2011:175), the application of vehicle track system is aimed at improving infrastructure and traffic and fleet management, facilitating the effective tracking of goods across the transport networks and also improved businesses and administrations connections. Radio frequency identification (RFID) has proven to be an efficient, automatic identification and data capture technology. De Jong, Algers, Papola and Burg (2006) conducted a survey on the perceptions of users of the impacts of new technologies on urban distribution systems performance. The survey found that the use of vehicle track system is expected to reduce the share of empty and not fully loaded vehicles.

The use of technological tools may increase the number of small vehicle trips in the cities. De Jong et al. (2006:286) developed a "4 steps" freight transport model incorporating the impacts of

ICT on the generation, attraction, modal shift or a change between transport modes and traffic assignment processes. Currently, there is rapid development in the use of Vehicle Track system in organizations. Vehicle Track system plays a crucial role in the present knowledge-based economy and, hence, organizations tend to rely heavily on Vehicle Track system solutions in order to develop and grow their businesses (Asgarkhani & Young, 2010). The revolution in the use of Vehicle Track system has profound implications for both economic and social development and has, in fact, pervaded every aspect of human life. The application of Vehicle Track system is widespread with ICT being regarded as an essential tool in the efficient administration of any organization and the delivery of services to clients.

Vehicle Track system has also led to increased transparency in organizations as it enables the networking and information sharing those results in demands for greater openness and transparency. Shanker, (2008) further argue that Vehicle Track system plays an important role in the acquisition, creation and management of knowledge as it enables the diffusion of the organizational data that may be crucial in effective decision making and control at all management levels. Similarly, Vehicle Track system helps in organizational planning and improves organizational communication and flexibility. Bloom, Garicano, Sadun and Reenen, (2009) ascertained that Vehicle Track systems play a major role in networking and communication as firms use these technologies in order to facilitate communication among employees and reduce coordination costs. Accordingly Vehicle Track system enhances the production process in organizations as monitoring technologies may be used to reduce the number of supervisors required in the process. In addition, Arvanitis and Loukis (2009:43) maintain that the use of Vehicle Track system has direct implications for firms, with Vehicle Track system playing a role in areas such as information gathering and dissemination, inventory control and quality control.

2.3.2 Effect of fleet management on service delivery

Fleet management helps organizations to choose transportation modes, manage freight consolidation operations and coordinate company shipments. In addition, they may be used as reporting tools by logistics managers who need to know vehicle travel times, service times and the delivery points that were visited. Supply chain management applications are designed to

manage and automate the flow of products through the entire transportation process and all its phases. Specifically, they support functions related to information exchange. The field force automation applications, enabled by mobile technology provide a significant opportunity for both savings in operational costs and improvements in customer satisfaction as a result of the higher integration between remote workforces and the corporate business processes (Marchet et al., 2006:785). Automating payment procedures can assist in reducing fleet costs and many organizations are focusing on centralizing transport procurement and payment in order to reduce costs. Such centralization ensures that the correct transport modes and hauliers are chosen and that they are paid the correct amounts. A vital, but often overlooked, benefit is the fact that accurate cost allocation information from a freight payment system can prevent a ripple effect in the form of incorrect decisions in pricing, product investment strategies, distribution network design and sourcing strategies. In transportation, the most important action for companies to take is to centralize transportation procurement (Levans, 2007).

Krishnaveni and Meenakumari (2010) assert that fleet management has played a major role in reducing operational inefficiency and improving decision making in many areas of governance. Hengst and Sol (200) affirm that vehicle track system enables organizations to decrease costs and increase organizational capabilities while also assisting in shaping inter-organizational coordination. Thus, the use of fleet management may help in lowering coordination costs and increasing outsourcing in organizations. In other words, the use of fleet management can assist both individuals and companies to access large markets at low cost. Alam and Noor (2009) argue that fleet management offers enterprises the opportunity to compete on a global scale with improved efficiency and closer customer and supplier relationships. In other words, fleet management should be regarded by businesses as an important strategy enabling them to remain competitive. Apulu and Latham (2010) claim that fleet management enables customers to receive immediate feedback and this, in turn, enables companies to react quickly to customer demands and recognize new market niches. This implies that organizations that are able to exploit the potential offered by fleet management are enabled to handle various types of innovative processes in their businesses, as fleet management influences the performance of an organization in multifaceted ways. Fleischmann, Gnutzmann and Sandvoss, (2010b:420) presented a dynamic routing system that dispatches a fleet of vehicles according to customer orders arriving at random

during the planning period. The system disposes of online information of travel times from a traffic management centre. Taniguchi and Shimamoto (2009:235) also presented an intelligent transportation system based on dynamic vehicle routing and scheduling with variable travel times. Results indicated that the total cost decreased by implementing the dynamic vehicle routing and scheduling model. The real-time information was based on variable travel times compared with those of the forecast model (i.e. the latter provides forecast travel times based on historical data).

2.4 Related Studies

In his study on the effects of logistics measurement capability on performance, Kuo-Chung Shang (2004) findings revealed that general measurement capability on logistics played a very critical role in not only facilitating firms' benchmarking capability but also enhancing firm's superior performance in Taiwan. (Ellinger, Daugherty, & Keller, 2000), Further confirmed in his empirical research that, logistics performance reflected a key success on firm financial performance, thus, logistics performance was seen to affect financial performance directly.

Keebler and Plank (2009) in their case study examined the impacts logistics performance had within the US firms and found seven factors that had demonstrated impact for manufacturing firms. Logistics performance on organization performance in supply chain context revealed that a success of logistics performance brought about manufacturing performance, future growth and new product introduction. Therefore, the competition in manufacturing industry was within the radius of supply chain competence which consisted of logistics strategy.

Rosenzweig (2009) examined the operational and logistical performance in measuring manufacturing performance in US firms which included the aspect of quality, cost of production, finish goods delivery and in addition considered the inventory level of work in production goods. In his study, he related supplier selection and involvement tactics impact and manufacturing performance. As a result, he confirmed that logistics performance had provided a significant influence in achieving manufacturing and business goals. The results were that logistics performance had positive link to financial performance of firms.

Tracey and Tan, (2001), examined the influence of supplier selection and involvement, customer satisfactory and firm performance. The study was based on the perspective of 53 manufacturing

firms across United States. Although their result confirmed that customer satisfaction and firm performance was directly and positively influenced by suppliers with ability to provide quality components and reliable delivery, 53 firms in United States which had such a large area of coverage and many industries were not appropriate to confirm such research. Tracey and Tan should have considered using a better sample to present their case. Keebler and Plank (2009) in their state on the logistics performance on corporate firm's base USA findings confirmed that there was positive impact on manufacturing firm performance. However, the self-reported survey completed by a single respondent from each firm introduced subjectivity and bias to the study. The sample frame of those organizations would not represent the universe of US companies nor could findings be generalized to other countries.

2.3 Chapter Summary

The chapter provides a review of the study on the logistics control system and service efficiency in organizations. The data the chapter review the literature in line with the objective of establishing the effect of transport, inventory and warehousing control systems on service efficiency in the organizations. The chapter reveals that several studies were conducted on the study topic (Logistics control systems and service efficiency in manufacturing organizations. The review reveals that the different studies that were reviewed were undertaken in the environment outside Uganda as several studies in the review are majorly from the European world.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter aims to explicate the methods applied in the data collection. These methods included the following; research design, population of the study, sample size, sampling techniques, sources of data, data collection methods, pre-test of research tool, data analysis, limitations of the study and ethical considerations.

3.1 Research Design

Study design is a plan, structure and strategy of investigation conceived so as to obtain answers to the research questions (Amin, 2004, Mugenda 1999). The study considered a descriptive design involving qualitative and quantitative approaches from primary and secondary sources of data, to make valid conclusions. Descriptive research design is a valid method for researching specific subjects and as a precursor to more quantitative studies (Kombo and Tromp, 2007). Whilst there are some valid concerns about the statistical validity, as long as the limitations are understood by the researcher, this type of study is an invaluable scientific tool (Attuja, 2001). The study is cross-sectional in that, the data was collected from many categories of respondents and at different times. The research is descriptive in nature where information was presented describing the situational logistics control system and its influence on service efficiency. The data was presented quantitative through means and standard deviation and qualitative data was presented in form of expressions given in means and standard deviations.

3.2 Study Population

Population is the complete collection of all the elements that are of interest in a particular investigation (Amin, 2004). The researcher target a population of 45 people, this perspective will include respondents selected from the procurement department (7), Logistics department (25) administrative staff (13) who were requested to gather information from the respondents. Therefore a population of 45 was the respondents who gave information. The information is courtesy of Human resource manual for Mukwano on the employee category mentioned above for 2017 November.

3.2.1 Sample Size

The sample in this study was restricted to the information required and for the purpose of this study; a sample size was determined using Slovene's Formula to come up with appropriate sample size to be used in the study.

Sloven (1961) formula states that, given a population, the minimum Sample size is given by: The sample size was calculated mathematically using the formula below;

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

Where; n = the sample size

N = total population of respondents.

α = the level of significance, that is 0.05

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

$$n = \frac{45}{1 + 45 (0.05) (0.05)}$$

$$n = \frac{45}{1 + 45 * 0.0025}$$

$$n = \frac{45}{1.112}$$

$$n = 40.43$$

Therefore n= 40

A sample size of 40 respondents was selected to participate in the study.

3.2.2 Sampling Procedure

In selecting samples to be included in the study, both probability and non-probability sampling techniques were used. Particularly the purposive sampling technique which is a non-probability sampling technique was used to select the administrators. This is because it was believed that all the officials are not of procurement positions so those sought to have information was sought for data collection. Simple random sampling was used in the choice of procurement and logistics staff to provide chance to all the respondents without bias.

Table showing sample size and sampling techniques

| No | Category | Population | Sample size | Sampling technique |
|----|------------------------|------------|-------------|--------------------|
| 1 | Procurement department | 7 | 6 | Simple random |
| 2 | Logistics | 25 | 22 | Simple random |
| 3 | Administrators | 13 | 12 | Purposive Sampling |
| | Total | 45 | 40 | |

Source: *Primary Data (2017) Sampling Using Slovene (1961) Sample Size determination Method*

3.3 Sources of Data

Both primary and secondary sources of data were obtained for the study.

3.3.1 Primary Data

This is first hand information chosen a fresh from the field. The primary data was obtained directly from respondents through the administration of questionnaires and structured interviews. The primary data was provided on a reliable and accurate first hand information relevant to this study about logistics control systems and service efficiency. The questionnaires were used to collect the data from the appropriate respondents.

3.3.2 Secondary Data

According to Attuja (2001) secondary information is obtained from the library, internet, journal articles, news papers and research reports. The idea of secondary data was used to gather

necessary information to guide the conduct of the research project in order to confirm or reject the primary data.

3.4 Data Collection Tool

3.4.1 Data Collection Instrument

Questionnaires were the main data collection instrument used for the study. The questionnaires were appropriate for the collection of data from all the respondents. Questionnaires facilitated the collection of data that ensured the best matching of concepts with reality. The closed ended questionnaires based on the Likert scale measure of 1:5 provided the same responses from a given set of respondents and helped reduce inconvenience caused by unfavorable interview times and busy schedules. According to Saunders, (2007), questionnaires were used for explanatory research which enabled the study to examine and explain relationships between variables, in particular cause-and-effect relationships.

3.5 Data Collection Procedure

The data collection procedures were undertaken three phases that included pre data gathering, actual data gathering and post data gathering

Pre data gathering

- i. An introductory letter was attained from the University to conduct the study after which permission from the organizations were sought to distribute questionnaire to their respondents.
- ii. The researcher oriented and brief his research assistants on the sampling and data gathering procedures.
- iii. The questionnaires for actual distribution were prepared and code accordingly.
- iv. The non-standardized instruments were tested for validity and reliability.

Actual data gathering

- The respondents were requested to answer the questionnaires as objectively as possible and not to leave any option unanswered.

Post Data Gathering

- The data was collected, organized and entered into the Excel Microsoft package for data processing and analysis in order to prepare the final report for submission to the college of economics and management

3.6 Data Analysis Techniques

Quantitative data and information collected closed ended questionnaires was coded appropriately), and entered and analyzed statistically using specially designed computer based packages for data analysis known as Statistical Package for Social Scientists (SPSS). The data was presented inform of descriptive analysis for assessing the level of the logistics control constructs and service efficiency while Pearson correlation analysis was used in analyzing the relationship between fleet management and vehicle tracking on service efficiency in Mukwano group of companies.

3.7 Ethical Considerations

In every research study, it is very important to take seriously the ethical considerations which included the following;

The purpose of the research was explained to the respondents. For purposes of proper and adequate data collection, there is need to explain the whole purpose of the research to the respondents so that they are well informed about the purpose of the study.

Confidentiality during and after data collection was maintained at all times, this ensured professionalism in the research and also treat the views of the respondents with confidentiality.

The researcher reported what was actually found and not manufacture and publish dream up data and also giving due recognition to any one whose work may have been used in this research and not try to pass it as the researchers original work

3.8 Limitations of the study

Long distance from the institution to the area of the study is one of the anticipated limitations the researcher faced. This hindered free movement during data collection. However, the researcher tried as much as possible to move to the area to collect the data in phases to ease on transport charges.

Non-response to certain questions and providing of false information is another anticipated limitation to the study. This was due to the fear by some respondents that the researcher exposed

confidentiality to public. However, the researcher used logical questions so that the respondents could be able to release such information needed by the researcher.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS

4.0 Introduction

This chapter presents the findings from the study with specific focus on assessing the effect of logistics controls on service efficiency in Mukwano group of companies. The presentation of the findings, analysis and interpretation is based on the research objectives that set to establish the effect of vehicle tracking system, fleet management and their effect on service efficiency in Mukwano group companies. This chapter is organized based on the demographic traits of respondents, following by the analysis as per the research objectives presented objective by objective. The data is presented, analyzed and interpreted as shown in the sub-chapters below

4.1 Profile of respondents

Respondents were asked to provide information regarding their gender, age, education level n marital status their responses were summarized using frequencies and percentage distributions as indicated in table 4.1 below;

Table 4.1: Profile of respondents

| Category | Frequency | Percent |
|--|-----------|--------------|
| Gender | | |
| Male | 31 | 77.5 |
| Female | 9 | 22.5 |
| Total | 40 | 100.0 |
| Position in the company | | |
| Top Mgt Position | 8 | 19.5 |
| Middle Mgt Position | 17 | 41.5 |
| Lower Mgt Position | 15 | 39.0 |
| Total | 40 | 100 |
| Highest Education Qualification | | |
| Phd | 8 | 20.0 |
| Masters | 5 | 12.5 |
| Bachelors | 4 | 10.0 |

| | | |
|----------------------------|-----------|------------|
| Diploma | 7 | 17.5 |
| Certificate | 7 | 17.5 |
| Professional Course | 9 | 22.5 |
| Total | 40 | 100 |
| Level of experience | | |
| 1 -4 Years | 8 | 20.0 |
| 5 -9 Years | 10 | 25.0 |
| 10 – 14 Years | 7 | 17.5 |
| 15 – 19 Years | 9 | 22.5 |
| 20 & above | 6 | 15.0 |
| Total | 40 | 100 |

Source: Primary data, 2018

Table 4.1 revealed that majority of the respondents in this sample were male 31(77.5%) as compared to 9(22.5%) who were female, hence observing a big gender gap among the respondents in this sample.

Concerning position of respondents in company, results in table 4.1 indicated that majority of respondents were Middle Mgt Position with 17(41.5%), Lower Mgt Position respondents were represented by 15(39.0%) and finally followed by Top Mgt Position respondents were 8(19.5%). This implies that the information was collected from different department.

With respect to education qualification; the study further showed that Professional Course 9(22.5%) dominated the study, Phd holders had 8(20%), diploma and certificate holders were represented by 7(17.5%) respectively, Masters had 5(12.5%) and finally followed by Bachelors with 4(10%), hence observing that majority of respondents were educated.

With respect to level of experience of the respondents; majority of the respondents were between 5 -9 Years with 10(25%) 15 – 19 Years were represented with the percent of 9(22.5)%, 1 -4 Years was presented with 8(20%) and finally followed by 20 & above who were respondents with 6(15%). This implies that the data was collected from people who had stayed in the company and therefore had the required information by the researcher.

4.2 Logistics control system in organizations

The independent variable in this study was Logistics control system and was broken into two parts namely: Fleet management system and Vehicle tracking system and set with guiding questions. Each of these questions was based on the five point Likert scale where by respondents were asked to rate the mode of Logistics control system by indicating the extent to which they agree or disagree with each question and their responses were analyzed using SPSS and summarized using means and rank as indicated in table 4.2;

Table 4.2: Logistics control system in Mukwano Group of companies

| Items on Vehicle tracking System | Mean | Std | Interpretation |
|---|-------------|-------------|------------------|
| The company has a computerized vehicle systems that manages fuel | 3.07 | 1.52 | Fairly Good |
| There is a tracking system on our vehicles for location of the cars | 3.42 | 1.31 | Fairly Good |
| The company has a specialized staff that handles tracking in the organization | 2.67 | 1.42 | Fairly Good |
| There is an effective maintenance tracking system for the company vehicles | 4.20 | 1.26 | good |
| There is usage of tracking for the organization vehicles for quality management | 3.87 | 1.55 | Fairly Good |
| The vehicle tracking systems detects and reduce vehicle over use by the drivers | 3.72 | 1.44 | Very good |
| Vehicle tracking is undertaken by the organization in management inventory | 4.47 | .81 | Very good |
| Average mean | 3.63 | 1.33 | Very good |
| Fleet management system | | | |
| There is a system for the management of fleet in the organization | 1.97 | 1.14 | Poor |
| There is automated systems for inventory | 2.97 | 1.60 | Fairly Good |

| | | | |
|--|-------------|-------------|--------------------|
| replenishment in the company | | | |
| We use computerized systems to management the organization's fleet | 2.57 | 1.39 | Fairly Good |
| There is a proper routing system for the organization operations | 3.02 | 1.36 | Fairly Good |
| We have a system for managing the scheduling of the inventory to customers | 1.82 | .90 | Poor |
| There fleet management ensures effective feed back of the employees | 3.35 | 1.61 | Fairly Good |
| The management systems of the organization ensure proper deliveries as required. | 2.40 | 1.25 | Poor |
| Average mean | 2.58 | 1.32 | Poor |
| Overall mean | 3.10 | 1.31 | Fairly good |

Source: Primary data, 2018

| Mean range | Respondent | Interpretation |
|-------------|-------------------|----------------|
| 4.22- 5.00 | Strongly agree | Very Good |
| 3.42 - 4.22 | Agree | Good |
| 2.62 – 3.41 | Not Sure | Fairly Good |
| 1.81 - 2.61 | Disagree | Poor |
| 1.00 - 1.80 | Strongly disagree | Very poor |

Results in table 4.2 revealed that the Logistics control system in the organization were generally rated as good and this was indicated by the overall mean of 3.10, the results imply that logistics control was fairly good.

With respect to Vehicle tracking system; this variable was measured by 7 items and respondents were asked whether they agreed with the statements under investigation. Responses revealed that Vehicle tracking system was rated as fairly good (average mean=3.63 and SD= 1.33), implying

that Vehicle tracking system helps the company to monitor its trucks hence making it easy for transport management.

According to findings on vehicle tracking system with 7 questions: The company has a computerized vehicle systems that manages fuel was presented by ($M=3.07$ and $Std=1.52$) and was interpreted as fairly good, There is a tracking system on our vehicles for location of the cars had (mean=3.42, $Std=1.31$) interpreted as very good. The company has a specialized staff that handles tracking in the organization had (mean=2.67, $Std=1.42$) was interpreted as fairly good, There is an effective maintenance tracking system for the company vehicles was presented with (mean= 4.20, $Std = 1.26$) interpreted as good, There is usage of tracking for the organization vehicles for quality management (mean=3.87, $Std= 1.55$) interpreted as fairly good, The vehicle tracking systems detects and reduce vehicle over use by the drivers was presented with (mean= 3.72, $Std = 1.44$) interpreted as very good. Vehicle tracking is undertaken by the organization in management inventory was presented with (mean= 4.47, $Std= .81$) interpreted as very good. Looking at the findings it is concluded that the respondents were in support that the logistics control systems are available.

Analysis of the findings on fleet management systems -7 items were used to measure this service and respondents were asked whether they agreed with the statements. Responses indicated that the fleet management systems were rated as good (average mean=2.58, $Std= 1.32$), implying that fleet management systems has played a great role.

Findings on fleet management systems with 7 questions: Mean=1.97 and $Std=1.14$ was on There is a system for the management of fleet in the organization and was interpreted as poor, There is automated systems for inventory replenishment in the company had (mean=2.97, $Std=1.60$) interpreted as good, we use computerized systems to management the organization's fleet had (mean=2.57, $Std=1.39$) was interpreted as fairly good, There is a proper routing system for the organization operations was presented with (mean= 3.02, $Std = 1.36$) interpreted as fairly good, We have a system for managing the scheduling of the inventory to customers had (mean=1.82, $Std= .90$) interpreted as poor. There fleet management ensures effective feed back of the employees was presented with (mean= 3.35, $Std = 1.61$) interpreted as fairly good, The management systems of the organization ensure proper deliveries as required had (mean=2.40,

Std= 1.25) interpreted as fairly good. This absolutely implies that the responses were not in agreement that the management systems of the organization ensure proper deliveries as required.

4.3 Service Efficiency in Mukwano group of companies

The dependent variable in this study was the Service Efficiency; this variable was broken into two constructs namely: time management and cost management. Each of these items were presented by questions respectively for which respondents were required to ascertain the extent to which they agree or disagree with the items or statements by indicating the number which best describes their perceptions. This variable was measured using questions with response rate ranging between strongly agree and strongly disagree. The responses were analyzed and described using means as summarized below in table 4.3;

Table 4.3: Service efficiency in Mukwano group of companies

| Items on time management | Mean | Std | Interpretation |
|--|-------------|-------------|----------------|
| There is efficiency in time required to transport raw materials to the organization | 2.67 | 1.43 | Fairly good |
| The company operations in delivering products to customers has increased overtime | 2.05 | 1.13 | Poor |
| There is efficiency in the products processing time by the organization | 2.92 | 1.28 | Fairly Good |
| The time for order making and processing has been effectively reduced by the organization | 2.60 | 1.35 | Fairly Good |
| Average mean | 2.56 | 1.29 | Poor |
| Cost management | | | |
| We have always improved on our logistical control as company and this has lower operating costs. | 3.07 | 1.30 | Fairly Good |
| The company costs of operations have reduced over the past three years | 1.77 | .69 | Very Poor |
| The company costs of staff has reduced in regard to logistics control | 3.12 | 1.45 | Fairly Good |
| There organization costs on logistics management | 2.72 | 1.46 | Fairly Good |

| | | | |
|-------------------------|-------------|-------------|--------------------|
| are effectively handled | | | |
| Average mean | 2.67 | 1.22 | Fairly Good |
| Overall mean | 2.61 | 1.25 | Fairly Good |

Source: Primary data, 2018

Results in Table 4.3 revealed that the service efficiency in Mukwano group of companies fairly good (overall mean=2.61), hence implying that the organization has tried to maintain and provide better services.

Findings on time management, this variable was measured by 4 items and respondents were asked whether they agreed with the statements under investigation. Responses indicate that time management was rated as good (average mean=2.56 and SD= 1.29), implying that time management helps the company to improve its service delivery.

Concerning the Findings on There is efficiency in time required to transport raw materials to the organization 2.67 was presented for mean with SD=1.43 and was interpreted as good, The company operations in delivering products to customers has increased overtime had (M=2.05, SD=1.13) interpreted as poor. There is efficiency in the products processing time by the organization had (mean=2.92, Std=1.28) was interpreted as good, The time for order making and processing has been effectively reduced by the organization was presented with (mean= 2.60, Std = 1.36) interpreted as fairly good, This implies that the responses were in agreement that time management improves on service efficiency of the organization.

With respect to cost management; this variable was measured by 4 items and respondents were asked whether they agreed with the statements under investigation. Responses revealed that cost management was rated as fairly good (overall mean=2.67 and SD= 1.25), implying that cost management helps the company to reduce the losses

According to findings on cost management with 4 questions: We have always improved on our logistical control as company and this has lower operating costs was presented by (M=3.07 and Std=1.30) and was interpreted as fairly good, The company costs of operations have reduced over the past three years had (mean=1.77, Std=.69) interpreted as very poor. The company costs

of staff has reduced in regard to logistics control had (mean=3.12, Std=1.45) was interpreted as good, There organization costs on logistics management are effectively handled was presented with (mean= 2.72, Std= 1.46) interpreted as good. This implies that the respondents were in support that cost management has played a great role on the service efficiency in Mukwano group of companies.

4.4 Effect of Vehicle tracking system on service efficiency in Mukwano group of companies.

The first research objective was to establish the effect of Vehicle tracking system on service efficiency in Mukwano group of companies. In order to establish this, a simple linear regression on coefficients was run to establish the effect as provided

Table 4.4.1: Coefficients of regression analysis between vehicle tracking system and service efficiency in Mukwano group of companies (At 0.05 level of significance)

| Coefficients | | | | | | |
|---|-------------------------|-----------------------------|------------|---------------------------|-------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 16.988 | 6.539 | | 2.598 | .032 |
| | Vehicle tracking system | .067 | .028 | .435 | 1.900 | .044 |
| a. Dependent Variable: Service efficiency | | | | | | |

Source: Primary data, 2018

The table above illustrates the regression analysis between vehicle tracking system and service efficiency in Mukwano group of companies. The level of significance between vehicle tracking and service efficiency is 0.32 and 0.44. These values are less than 0.05 implying that there exists a significant effect of vehicle tracking system on service efficiency, the study findings imply that vehicle tracking highly influence service efficiency in the organization.

4.4.2 Fleet management system and service efficiency in Mukwano group of companies.

The second research objective was to establish the effect of fleet management system on service efficiency in Mukwano group of companies. In order to establish this, a simple linear regression on coefficients was run to establish the effect as provided

Table 4.4.2: Coefficients of regression analysis between fleet management system and service efficiency in Mukwano group of companies at a 0.05 level of significance)

| Coefficients | | | | | |
|-------------------------|-----------------------------|------------|---------------------------|-------|------|
| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | B | Std. Error | Beta | | |
| (Constant) | 13.766 | 7.212 | | 1.909 | .033 |
| Fleet management system | -.336 | .366 | -.309 | -.920 | .045 |

Source: Primary data, 2018

Results in table 4.4.2 show the regression analysis between fleet management system and service efficiency in Mukwano group of companies. The regression value that service efficiency depends on fleet management is 13.766. The rate of change of service efficiency to fleet management is $\beta = -0.336$. The t values for the constant and β are (1.909 and -0.920) respectively with their respective levels of significances as (0.033 and .045) respectively. Since the points of significance 0.33 and 0.045 are more than 0.05, the researcher confirms that a significant effect exist between fleet management system and service efficiency in Mukwano group of companies. It implies that the state of company efficiency can be improved through effective fleet management.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

The study was carried out with the view to assess the relationship between logistics control systems and service efficiency in Mukwano group of companies. This chapter is concerned with summary, conclusion, recommendations and areas of further study.

5.1 Summary of the Findings

5.1.1 Effect of Vehicle tracking system on service efficiency in Mukwano group of companies

On the effect of vehicle tracking on service efficiency, the study results reveal that a significant effect was established between vehicle tracking and service efficiency. Vehicle tracking system and service efficiency in Mukwano group of companies. The level of significance between vehicle tracking and service efficiency is 0.32 and 0.44. These values are less than 0.05 implying that there exists a significant effect of vehicle tracking system on service efficiency; the study findings imply that vehicle tracking highly influence service efficiency in the organization

5.1.2 Effect fleet management system and service efficiency in Mukwano group of companies

The study findings reveal that fleet management system affect service efficiency in Mukwano group of companies. Therefore fleet management is $\beta = -0.336$). The t values for the constant and β are (1.909 and -0.920) respectively with their respective levels of significances as (0.033 and .045) respectively. Since the points of significance 0.33 and 0.045 are more than 0.05, the researcher confirms that a significant effect exist between fleet management system and service efficiency in Mukwano group of companies. It implies that the state of company efficiency can be improved through effective fleet management.

5.2 Conclusions

The purpose of the study was to explore the relationship between logistics control systems and service efficiency in Mukwano group of companies. The studies conclude that there existed a significant effect of vehicle tracking system on service efficiency in Mukwano group of companies. The study concludes that the avenues of vehicle tracking in an improved version

have a considerably improved effect for service efficiency in the organizations. The study concludes that vehicle tracking with weaknesses need enhancement for improved service efficiency in the organizations. On the second objective of examining the effect fleet management system and service efficiency in Mukwano group of companies, the study conclude that fleet management if improved can enhance the efficiency of Mukwano group of companies. The study implies that fleet management is a fundamental avenue for service efficiency, even with challenges if improved can lead to service efficiency in the organizations.

5.3 Recommendations

Regarding vehicle tracking systems that were found to be used but not very well, the researcher recommend that there is need for revolution of logistics operations. IT techniques and its products bring efficiency and fluency to the logistics systems. Radio Frequency ID (RFID) is one of these techniques. To improve transportation further, there is need for improved high-tech facilities and systems, e.g. ITS, could bring more possibilities and advantages to logistics. For example, the improvement of related facilities, e.g. Forklift Trucks, is necessary for transport efficiency. In the future, factory automation is the main target for the whole supply-chain procedures. It could help to improve efficiency and also reduce the operation costs. Further more in the process of vehicle tracking few vehicles are tracked hence the need for a comprehensive vehicle tracking especially around the areas that consume much cost.

On the second research objective, the study recommends that, for a warehouse to function efficiently, the facility must be properly managed. There is need for enhanced organizational operation as means to improve the performance value of the warehouse. The measures should range from the handling of inventory to the management of the capacity concerning the prevalence of the inventory. Fleet management can be improved therefore by enhancing the management of the warehousing in the process of moving the fleet in the organization.

5.4 Areas of further Study

The results presented in this report may not be conclusive and should be treated as being preliminary. Further analysis of the survey data on logistics control and service efficiency to the organization need to be further assessed on the following.

- Forward logistics and organizational performance
- The management competency and performance of the logistics

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APPENDIX A: QUESTIONNAIRES

Dear Respondent;

I am by the names Nambiro Racheal, a student of Kampala International University conducting a study title: *'Logistics Control systems and service efficiency among organization*. You are kindly requested to respond to this questionnaire that has been sent to you. Information given shall be treated with ultimate confidentiality. Thank You!

Section A: Profile of Respondents

Please fill and use a tick (✓) to indicate your responses, (where applicable)

1. Gender of respondents

| | |
|------|--------|
| Male | Female |
| | |

2. Position in the Company

| | | |
|------------------|---------------------|--------------------|
| Top Mgt Position | Middle Mgt Position | Lower Mgt Position |
| | | |

3. Highest Education Qualification

| | | | | | |
|-----|---------|-----------|---------|-------------|---------------------|
| PhD | Masters | Bachelors | Diploma | Certificate | Professional Course |
| | | | | | |

4. Level of Experience in Current Field of Work

| | | | | |
|---------------|------------|---------------|---------------|------------|
| 1 -4 Years | 5 -9 Years | 10 – 14 Years | 15 – 19 Years | 20 & above |
| | | | | |

Section B: Logistics control system in organizations

This section aims at assessing the extent of Logistics systems and service efficiency among organizations. Logistics control is dimensioned into two major constructs namely; Fleet management system and Vehicle tracking system.

Please rate /indicate/ tick (✓) appropriately your response with respect to the importance of the statements below:

| | | | | |
|--------------------------------|-----------------------|-----------------------|--------------------|-----------------------------|
| 1. <i>Strongly Disagree</i> | 2. <i>Disagree</i> | 3. <i>Not Sure</i> | 4. <i>Agree</i> | 5. <i>Strongly Agree</i> |
|--------------------------------|-----------------------|-----------------------|--------------------|-----------------------------|

| Vehicle tracking System | | | | | | |
|-------------------------|--|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 1. | The company has a computerized vehicle systems that manages fuel | | | | | |
| 2. | There is a tracking system on our vehicles for location of the cars | | | | | |
| 3. | The company has a specialized staff that handles tracking in the organization | | | | | |
| 4. | There is an effective maintenance tracking system for the company vehicles | | | | | |
| 5. | There is usage of tracking for the organization vehicles for quality management | | | | | |
| 6. | The vehicle tracking systems detects and reduce vehicle over use by the drivers | | | | | |
| 7. | Vehicle tracking is undertaken by the organization in management inventory | | | | | |
| Fleet Management System | | | | | | |
| | | 1 | 2 | 3 | 4 | 5 |
| 1. | There is a system for the management of fleet in the organization | | | | | |
| 2. | There is automated systems for inventory replenishment in the company | | | | | |
| 3. | We use computerized systems to management the organization's fleet | | | | | |
| 4. | There is a proper routing system for the organization operations | | | | | |
| 5. | We have a system for managing the scheduling of the inventory to customers | | | | | |
| 6. | There fleet management ensures effective feed back of the employees | | | | | |
| 7. | The management systems of the organization ensure proper deliveries as required. | | | | | |

Section C: Service Efficiency

This section is the dependent variable of the study and it present statements aims at analyzing the level of service efficiency in organizations.

| Service Efficiency | | | | | | |
|--------------------|--|---|---|---|---|---|
| | Time management | | | | | |
| 1. | There is efficiency in time required to transport raw materials to the organization | 1 | 2 | 3 | 4 | 5 |
| 2. | The company operations in delivering products to customers has increased overtime | | | | | |
| 3. | There is efficiency in the products processing time by the organization | | | | | |
| 4. | The time for order making and processing has been effectively reduced by the organization | | | | | |
| | Cost management | | | | | |
| 5. | We have always improved on our logistical control as company and this has lower operating costs. | | | | | |
| 6. | The company costs of operations have reduced over the past three years | | | | | |
| 7. | The company costs of staff has reduced in regard to logistics control | | | | | |
| 8. | There organization costs on logistics management are effectively handled | | | | | |



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**COLLEGE OF ECONOMICS AND MANAGEMENT
DEPARTMENT OF HUMAN RESOURCE AND SUPPLIES
MANAGEMENT**

July, 27th 2018

To whom it may concern.

Dear Sir/Madam,

**RE: INTRODUCTORY LETTER FOR NAMBIRO RACHEAL
REG NO 1153-05084-02890**

This is to introduce to you the above named student, who is a bonafide student of Kampala International University pursuing a Bachelor's Degree in Supplies and Procurement Management, Third year Second semester.

The purpose of this letter is to request you to avail her with all the necessary assistance regarding her research.

**Topic: - LOGISTICS CONTROL SYSTEM AND SERVICE
EFFECIENCY AMONG ORGANISATIONS.**

Case Study: - MUKWANO GROUP OF COMPANIES.

Any information shared with her from your organization shall be treated with utmost confidentiality.

We shall be grateful for your positive response.

Yours truly,


MR. MUGUME TOM
HOD, HR & SUPPLIES MANAGEMENT
0777295599

