

**LOGISTICS OUTSOURCING AND RESPONSIVENESS OF NON-  
GOVERNMENTAL ORGANISATIONS IN NAIROBI**

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## DECLARATION

This is my original work and has not been submitted to any other university for an academic award.

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## **DEDICATION**

I dedicate this research proposal to my beloved wife, my son and daughter.

## **ACKNOWLEDGEMENT**

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## **ACRONYMS AND ABBREVIATIONS**

<b>MH</b>	-	Material Handling
<b>NGO</b>	-	Non-governmental organizations
<b>NGO</b>	-	Non -Governmental Organizations
<b>SC</b>	-	Supply Chain
<b>TCE</b>	-	Transactional Cost Economics

## **ABSTRACT**

The study was aimed at establishing the extent of logistics outsourcing in International Non-governmental organizations in Nairobi. It was specifically aimed to establish how, transportation management, inventory management; warehouse management and distribution management affect responsiveness of NGO in Nairobi. The study used descriptive research design in its methodology. The study was anchored on the Resource based view Theory and strategic choice theory. Data was collected using structured questionnaires. Procurement managers and the equivalent were the targeted population from the 64 NGO's in Nairobi. These questionnaires were issued through drop and pick method, coded, keyed and analyzed using both descriptive and regression analysis. Transportation management, inventory management, warehouse management and distribution management were the dependent variables while responsiveness was the independent variable. The study findings indicated that logistics outsourcing practices have been implemented by the NGO's in Nairobi and they have a positive impact on responsiveness in NGO's in Nairobi. Lack of adequate training, resistance from employees, lack of skills among others was the challenges of implementation of logistics outsourcing by NGO's in Nairobi. The major study limitations of is that the study was on NGO's in Nairobi. Other future academicians should research on logistics outsourcing in other firms rather than NGO's in Nairobi.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Research

Over the years, there has been an increase in competitiveness in the business environment. This requires various players and stakeholders to be more efficient and be competitive in the market. There is need for customer value delivery through the product or service they provide in aspects such as low prices, superior quality and improved service as an important ingredient in the global market. To take advantage of global opportunities, firms acquire capabilities in logistics to significantly improve customer service and facilitate the firm's ability to focus on core competencies, (Prescott, 2011). This has been facilitated by modern technology which has resulted to firms having the urge to capture these opportunities from their business environment. Firms have been forced to adopt various strategies to make use of these opportunities. Logistics outsourcing has become an important strategic tool where organizations are leveraging on it in order to remain competitive. Logistic processes are outsourced to vendor companies that specialize in the outsourced logistic activities leaving organizations to focus on their core activities (Stock & Lambert, 2001).

Firms consider various strategic options in their quest to effectively handle logistics activities effectively, it may consider a number of strategic options namely providing the service in-house, own logistics subsidiaries through purchase or setting up one or out rightly outsource the function and buy the service (Stock & Lambert, 2009). Because of enhanced information and communication technology (ICT), logistics has incorporated all types of business. Logistics is hence a wellspring of center competence and a

connecting apparatus for achieving upper hand (Muller, 1999). Assist concentrates likewise demonstrate that managing logistics has moved from the conventional back-end operations to the key meeting room action (Stock & Lambert, 2009).

Outsourcing allows a company to focus on its core business, facilitates increased savings, more flexibility and managing effectiveness in growth. Once the non-core activities are given to the experts to manage, the company is left with the task of managing its core activities. If successfully managed, outsourcing will also help in the reduction of the costs of doing business and benefit from the use of knowledge and technical resources of another organization to achieve organizations' goals (Saffi, 2000). According to Stock and Lambert (2009) there is need for firms to carry out an analysis on whether they are likely to attain any benefits from the process of outsourcing. Switching costs, losing degree of control tuning logistics service to the needs of the channel members, degree and the legal aspects of outsourcing are the various challenges that firms face in the process of outsourcing their logistics (Sople, 2009).

### **1.1.1 Logistics Outsourcing**

Logistics plays a key role in a lot of organizations. Its impact extends to performance, sustainability, competitiveness and profitability of a company (Jacobs, 2009). Companies are under increased pressure from customers and shareholders to find ways to minimize costs while improving performance. This aims to ensure that their operations are efficient and effective. Outsourcing facilitates improvement in capacity management, services and innovation management by the firms. This is due to the fact that risk of inadequate capacity bearing done by the suppliers (Quinn, 2006). There are many activities in an organization which can be outsourced. The specific activities that can be outsourced by

Non-Governmental Organizations (NGOs) in Nairobi include: human resource management, cleaning services, information technology, sales and marketing and finance (Bradley, 2004).

Jacobs, Chase and Aquilano (2009) aver that, outsourcing involves transferring some internal processes and decision to some other external providers. They state that outsourcing, involves the transfer of activities and the resources that make the activities take place namely, manpower, infrastructure, technology and any other assets. Making decisions about some the activities is also transferred. The reasons for outsourcing vary, but most importantly, it allows firms to focus on their core functions enabling the companies create competitive advantage while reducing costs (Jacob et al., 2009). Outsourcing helps organizations focus on their core competencies, thus enabling the companies develop competitiveness and rationalize costs Warehousing, distribution, transport, customs clearing and forwarding are the commonly outsourced logistics activities . Organizations have opted to outsource their logistics function to third party service providers through strategic alliances and partnerships. Logistics outsourcing has been adopted due to competitive pressures, shrinking budgets, downsizing of staff, cost reduction and quest to improve customer service levels.

### **1.1.2 Responsiveness**

Responsiveness is the deliberate and timely customer-focused way of operating (Griffith et al., 2000). It involves providing linkage to an organization, suppliers and the customers to provide an opportunity to continuously enhance a firm's internal operations (Rungtisanatham et al., 2003). According to Catalan and Kotzab (2003), responsiveness means real-time understanding of market behavior indicators. Responsiveness can take

the form of a firm's focus on short lead times, timely deliver, and longer customer service hours. Short lead times relating to the speed of delivery are viewed as capabilities of a market (Vikery et al., 1999) and create a competitive edge in a global business environment.

In launching a product or a service (Jayaram et al., 1999) opines that, the capacity to deliver faster than your competition is very important in determining competitiveness (Handfield and Pannesi, 2000). Timely delivery is concerned with deciding on operations and pricing which are related (So and Song, 2001). Short lead times, timely deliveries, and extended service are all based on time measures of customer's satisfaction. Goyal (2012) noted that where information systems and business processes are integrated closely for example Enterprise resource plans electronic data interchange improved improve the internet responsiveness of supply chains (Gunuskarn et al., 2008). A responsive supply chain helps a firm improve its ability to reduce logistical costs by supplying the right product in a timely manner and at the right place.

### **1.1.3 Non- Governmental Organizations in Nairobi**

Non-governmental organizations are defined as private voluntary groupings which are made up of individuals or associations that are operated for other purposes rather than commercial or profit. The various non-governmental organizations in Kenya are grouped broadly into: NGO'S which operate within Kenya based on certificate of registration they possess but have been incorporated in other countries rather than Kenya and the national NGOs which operate in their local countries. The NGO's were first started in 1839. Most of NGO's are donor driven and different donors vary in terms of how they want their

resources to be managed and this inevitably affects the kind of activities the NGO's engage in and even provision of funds for career development activities, (Oster,2004).

The registered non-governmental organizations in Kenya are broadly categorized into two; international and national. Non- Governmental Organizations are those that are incorporated in other countries other than Kenya but operates within Kenya under a certificate of registration. The non- governmental organizations coordination board (NGO directory, 2017) reports indicates that it has cumulatively registered over 5,000 non-governmental organizations out of which 1500 are non- governmental organizations. The board adds that the globalization and the growth of democracy space in Kenya has further contributed to an increase in the nongovernmental organizations sector activities in the country. According to the Non- Governmental Organization Coordination board, Non- Governmental Organizations can be distinguished from the local/national nongovernmental organizations with the following characteristics; has international presence; voluntary-formed by individual people , groups or organizations. They are voluntarily formed, self-regulating. Meaning that they have their own internal governance mechanisms .However they operate within a framework of accepted societal norms. These are not for profit sharing or profit making organizations, where profit is made , it is given back to the society through the community through the organization(NGO directory, 2017)

## **1.2 Research Problem**

Over the years firms have resorted to adopting outsourcing of non-core activities. This is a trend that organizations will continue to pursue into the foreseeable future. The assumption is that logistics outsourcing has become popular for good and rational

business reasons like economies of scale and which enables managers to concentrate on core business activities. The strongest group of reasons given regarding outsourcing pertains to cost reduction and enhancement of responsiveness, and access to skills and resources not available in the (Beaumont & Sohal, 2004). Outsourcing of logistics is today seen as one of the ways of reducing costs, a tool to drive competitiveness, a risk mitigation, competitive tool and a means to for synergistic partnering and strategic alliances among firms (Stock & Lambert, 2009). Recently various firms both public and private have adopted outsourcing of their operations especially in non-core functions, NGO's have not been left behind in this move. In order to attain cost savings and gain customer satisfaction, reduce risk and as a strategic competitive tool they are outsourcing most of their non-core activities such as, transportation, logistics, human resource, garbage disposal among others in order to concentrate on their core mandate of saving lives, (Mogere, 2014).

Many previous researches have been done on the Logistics outsourcing and responsiveness, in the modern business world many businesses are focusing on delivering customer value by providing products and services that are more valuable than what competitors offer. To obtain competitiveness, business organizations must endeavor to respond to customers' needs better than competition. Lambert (2014) did a study on the responsiveness of supply chains in China. He says that competitiveness only occurs to those business firms that are responsive to the needs of their customers. He goes on to argue that if organizations desire to drive competitiveness and indeed compete with others in the chain they must understand their supply chains responsiveness to their customers' demands. He avers that developing the supply chains responsiveness is today

becoming a source of competitive advantage. Vickery et al (1999) did a study on supply chains responsiveness of Malaysian firms. He emphasized that the reduction of lead time is prerequisite for a responsive supply chain and such a responsive supply chain is a source of competitive advantage. According to them average companies needed more time to react to changes in market demand compared to the world class manufacturing firms, in fact they take them eight times longer compared.

Operational responsiveness enables organizations to compete on costs, timeliness, speed and quality, dependability by delivery and responsiveness of a company's logistics. This enables an organization to introduce new product offers faster than competitors and be able to timely offer the type and quantity of a product customers need.

Rungtusanathan (2003) studied who argued the responsiveness of an organization's network of suppliers improves capacity to launch new products into the market as well as enhance its ability to ensure timely deliveries since it is endowed with responsive suppliers. This enables it to compete on innovation and delivery dependability. This point of view is further supported by Ndegwa (2017) who did a study on the responsiveness of supply chains of hydropower generating firms in Kenya argued that a supply chain that responds quickly to customers' demands will compete on time and quality. Mnimod (2013) studied managing supply chains in humanitarian and peacekeeping: Anticipation capacity for high responsiveness. The study findings indicated that responsiveness by various humanitarian supply chains facilitates the organization's ability to meet victim's requirements timely. Haji (2014) carried out a research on outsourcing logistics activities in Turkey. The findings of the research ascertained that logistics outsourcing leads to improved performance of the firms.

However, the research failed to address the effect of logistics outsourcing on responsiveness in NGO'S in Nairobi. Liu, Hao and Zhao (2016), researched on impact of information sharing and coordination of processes on logistics outsourcing of logistic. The study findings indicated information sharing leads to customization and advancement of outsourcing, but do not have significant impact on outsourcing. In comparison, process coordination enhances outsourcing, but drastically influences customized outsourcing. Each type of logistics outsourcing has different impacts on 3PL users' performances. However, the research failed to address the effect of logistics outsourcing on responsiveness in NGO'S in Nairobi.

Locally, in a study on supply chains responsiveness of the agricultural supply chains in Kenya Haji (2014) said that Organizations with better supply chain responsiveness are better positioned to adapt to fluctuation in demand and can easily overcome the environmental uncertainties at relatively lower costs since they have short lead times. He stated that lean production constitutes responsiveness over and above cost effectiveness though according to him agile manufacturing places equal weight on responsiveness and costs. In a consensus, Nyokabi(2014) concurred that a successful business firm needs both responsiveness and costs. According to them responsiveness, without cost effectiveness is not a good competitive strategy. Indeed according to supply chain responsiveness and a firm's competitive advantage have a positive correlation in his study found a positive correlation between supply chain responsiveness, reliability, timeliness, innovativeness and quality.

Githinji (2012) conducted on outsourcing of logistics and SC responsiveness case of universities domiciled in Nairobi County. The research findings indicated that, there

logistics outsourcing improves SC performance. However, the research was solely focused on universities and failed to tackle effect of logistics outsourcing of responsiveness of NGO's in Nairobi. Gathungu (2013) studied logistics outsourcing and the SC responsiveness of mobile phone service providers in Kenya. The findings indicated that there is a positive impact on performance due to adoption of logistics outsourcing. However, the research was solely focused on mobile phone providers. Nyokabi (2015) researched on evaluation of the impact of outsourcing the logistical function on firm performance. The findings of the research indicated that adoption of outsourcing by firms facilitates reduction in institutional costs and increase in service delivery efficiency. Owuor (2016) studied on logistics outsource and performance of sugar factories in western Kenya.

The research findings indicated that outsourcing of transportation, maintenance and repairs, cane harvesting, security and legal services led to increased customer satisfaction, increased productivity, timely delivery, costs minimization and improved profits. Alkhabit (2017), researched on Strategic logistics outsourcing: A comparison of upstream-downstream SC. The findings of the research indicated that strategic logistical outsourcing can help firms to perform a better. Based on the previous studies carried out both locally and globally, it is evident that there exists a research gap in knowledge since, no research has been carried out on outsourcing of logistics and responsiveness of NGO'S in Nairobi. Therefore, this research intends to address the gap by answering the following research questions: What is the impact of logistics outsourcing on responsiveness of NGO's in Nairobi? What are the challenges faced in the implementation of logistics outsourcing in NGO's in Nairobi?

### **1.3 Research objectives**

- i. To establish the extent of implementation of logistics outsourcing in NGO'S in Nairobi.
- ii. To find out impact of logistics outsourcing on responsiveness in NGO'S in Nairobi.
- iii. To find out challenges facing implementation of logistics outsourcing in NGO'S in Nairobi.

### **1.4 Value of the research**

Various stakeholders in the NGO's will benefit from this research. The SC managers will understand the benefits of adopting outsourcing of their logistics function in order to focus on their core functions. By understanding what impact logistics has on responsiveness, this will help management in the planning for future. This will in the long run facilitate their competitiveness in the market. This will increase the levels of meeting customer requirements of firms and cut on operational costs.

Other firms rather than NGO's will also benefit from the research based on the fact that they will use these research findings to ascertain the impact of logistics outsourcing on responsiveness. They will also ascertain what challenges that are likely to be experienced in adopting logistics outsourcing. Future studies will be made with the use of this research as the reference material. Academicians and other scholars will also benefit from this research since they will use it a reference for future studies in the logistics outsourcing and responsiveness. Policy makers will also benefit from this research on the

areas of the logistics that require policy interventions for the purpose of providing an efficient SC.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The theoretical review, existing literature on the outsourcing of logistics and the effect on responsiveness of non-governmental organizations in Nairobi plus conceptual framework is what makes up this chapter.

#### **2.2 Theoretical Framework**

Various theories that make up a basis of this research are what are referred to as the theoretical framework. It is made of not only principles, theories but also the various findings that were obtained. This research is guided by: resource dependency theory and transaction cost economics theory.

##### **2.2.1 Transaction Cost Economics Theory (TCE)**

The theory asserts that production economics determine transactions. According to this theory, firms are economic factors which make use of the most effective mechanism for transactions (Handfield & Pannessi, 2002). This theory brings out an analytical framework which is used in making comparison between acquiring services from third parties and in house services (Lacity & Hirschheim, 1995). This theory facilitates the determination of outsourcing success in terms of economic benefits. TCE provides the sound decision making basis to help firms to decide what to outsource and all preparations required. Regularity of outsourcing, uncertainty of relationships are some of the major determinants of the amount of the costs of outsourcing, hence decisions can be made whether or not to outsource.

TCE deals with not only experiences but also outcomes of outsourcing. Asset specificity, small numbers bargaining, and imperfect information are the experiences to outsourcing of which they have a negative relationship to outsourcing. This theory is related to the topic of research bases on the fact that in the decision making process on whether to outsource or not, there is need for firms to evaluate the cost implications involved, (Ackman, 2000).

### **2.2.2 Resource-Dependence Theory**

Developed in the 1978 by Pfeffer and Salancik, this theory states that firms are affected and constrained by environments and based on this fact, firms act in order to control dependencies on resources by setting various forms of inter-organizational arrangements. This theory clearly brings out how the availability and the amount of resources firms have effect on the behavior of the firm. The sourcing of external resources is an important aspect for not only the strategic management but also the tactical management of any firm (Holdon et al., 2015).

This theory is important as it explains ways that firms strategize themselves and adopt various actions like adopting logistics outsourcing, in all attempts to overcome dependencies in terms of resource acquisition and improve an organizational performance. Most organizations are not self-sufficient hence the need to come up with strategies like adoption of logistics outsourcing in order to facilitate good performance to meet the market demand and hence customer satisfaction (Halldorson, Kotzab, Mikkola & Larsen 2007).

## **2.3 Logistics Outsourcing**

The various logistics outsourcing activities are as discussed below:

### **2.3.1 Warehousing Management**

A warehouse is a facility used in the storage of raw materials, work in progress or finished goods to help in hedging against fluctuations in the levels of demand (Cole, 2003). Lambert & Stock (2003), state that a warehouse facilitates movement of goods, storage and transferring of information which forms a basis of logistics outsourcing. Proper material handling and inventory procedures are facilitated by adoption of a good warehousing system, (Ronald 2009). It facilitates storage and movement of goods within a warehouse. Management of processing of distribution, unloading, storing and selection. Smooth flow and movement of goods is attained through warehousing management system. Warehousing management entails the manner in which a layout of a warehouse is set, and how efficient communication is facilitated through good communication networks which help track inventories (Piasecki, 2005).

### **2.3.2 Inventory Management**

Also referred to as stock management is concerned with ensuring inventories are always available when required, providing satisfactory endowment for uncertainties surrounding economy optimization and reduction of waste through storage, procurement and handling inventory usage (Mather, 2010). The main reason for a need of an effective inventory control system achieves a balance between large and small inventory what the major purpose of inventory management is (Mukharji, 2011). A firms' agility is attained through effective stock management (Ackerman, 2000). A firm's performance is improved through outsourcing of inventory management function with (Mulinge, 2014)

Good inventory management practices facilitates the firm's ability to attain, accurate inventory recording, sound housekeeping practices and inventory flow. Inventory categorization through identifying the inventory types and also their specific features are the major activities of outsourcing (Ozment & Sink, 2008). There is need for categorization of inventory based on whether inventory is a hazardous or not, inventory demand patterns, movement patterns among others. Besides there is need for conducting quality checks whenever a firm needs to receive goods in their inventory system and this can effectively achieved through adoption of technology (Simchi & Kaminsky, 2005).

### **2.3.3 Transportation Management**

Transportation management is among the critical economic activities of logistics systems. The greatest percentage component of a firm's logistics costs is transportation costs (Carbone & Soifer, 2009). Through use of transportation, a firm is able to move goods along the supply chain either upstream or downstream through provision of efficacy both regionally and timely that in the long run enhance value addition. A good transportation system provides efficiency in logistics which results to lower costs of operation and higher service levels (Carbone & Soifer, 2009). Through transportation management, a firm is able to ship for various items at low costs which affect the levels of service delivery to the consumers and this enhances improved performance (Tseng, 2005). It acts as an intermediary function which helps in the transformation of inputs into finished products for purposes of the customer. There is need for effective and efficient management of a transportation management system once it is established (Fair, 2011).

### **2.3.4 Distribution Management**

Distribution management is the logistical activity in a SC which entails movement of material and physical products through the supply chain (Mulinge, 2014). In a distribution management system, there exists a procurement delivery systems and logistics (Githinji, 2010).Minimization of space and time through storing and transporting, shipment, order processing and supplying logistics, is the major aim of a distribution of management system. According to Alkhabit(2017) there is need or understanding of what various customers' need and through what channels are relevant to meeting their needs on-time for effective SC. For a firm to expand its distribution network and attain competitive advantage, there is need he needs to select a service provider who has global network (Gathungu, 2013).

Various offers given to a firm by the third party service providers offers an avenue to a firm to gain an effective distribution system. This can be achieved through adoption of a distribution network that changes to meet the dynamic market needs for example use of 3PLs which helps a firm attain SC agility. High flexibility of logistics services offers an increased level of networks which translate to improved service delivery during demand spikes, faster time-to-market and smoother product introductions (Piasecki, 2005).

### **2.4 Logistics Outsourcing and Responsiveness**

Responsiveness is the deliberate and timely customer-focused way of operating (Griffith et al., 2000). It involves providing linkage to an organization, suppliers and the customers to provide an opportunity to continuously enhance a firm's internal operations (Rungtananatham et al., 2003).

Alkhabit (2017), Competitiveness only occurs to those business firms that are responsive to the needs of their customers. He goes on to argue that if organizations desire to drive competitiveness and indeed compete with others in the chain they must understand their supply chains responsiveness to their customers' demands. He avers that developing the supply chains responsiveness is today becoming a source of competitive advantage (Lambert, 2014).

According to Vickery et al (1999) reduction of lead time is prerequisite for a responsive supply chain and such a responsive supply chain is a source of competitive advantage. According to them average companies needed more time to react to changes in market demand compared to the world class manufacturing firms, in fact they take them eight times longer compared. Operational responsiveness enables organizations to compete on costs, timeliness, speed and quality, dependability by delivery and responsiveness of a company's logistics. This enables an organization to introduce new product offers faster than competitors and be able to timely offer the type and quantity of a product customers need.

Rungtusanathan (2003) argued that the responsiveness of an organization's network of suppliers improves capacity to launch new products into the market as well as enhance its ability to ensure timely deliveries since it is endowed with responsive suppliers. This enables it to compete on innovation and delivery dependability. This point of view is further supported by Ndegwa (2017) who did a study on the responsiveness of supply chains of hydropower generating firms in Kenya argued that a supply chain that responds quickly to customers' demands will compete on time and quality.

Organizations with better supply chain responsiveness are better positioned to adopt to fluctuation in demand and can easily overcome the environmental uncertainties at relatively lower costs since they have short lead times (Haji, 2005). He stated that lean production constitutes responsiveness over and above cost effectiveness though according to him agile manufacturing places equal weight on responsiveness and costs. In a consensus, Muller (1999) concurred that a successful business firm needs both responsiveness and costs. According to them responsiveness, without cost effectiveness is not a good competitive strategy. Indeed accordingly supply chain responsiveness and a firm's competitive advantage have a positive correlation and that a positive correlation exists between supply chain responsiveness, reliability, timeliness, innovativeness and quality.

## **2.5 Empirical Literature Review**

Many studies have been carried out on logistics outsourcing: Gathungu (2013) researched about outsourcing of logistics and the SC performance of mobile phone service providers in Kenya. The aim of the research was to ascertain impact of logistics outsourcing on performance. The research used interview guides in data collection from the four mobile service providers. The findings indicated presence of positive impact on performance due to adoption of logistics outsourcing however, the research was solely focused on mobile phone providers. Haji (2014) carried out a research on Outsourcing logistics activities in Turkey. The aim of the research was to ascertain what the effect of logistics outsourcing on performance in Turkey. The research adopted use of surveys in data collection where data was collected from a sample size of 250 firms, from the chamber of commerce. The

findings of the research ascertained that logistics outsourcing leads to improved performance of the firms.

Nyokabi (2015) researched evaluation of the impact of outsourcing the logistical on firm performance. The objectives of the research were to investigate the impact of an institution outsourcing some of its logistical functions on performance, and the challenges faced. The research was a case research of Safaricom Ltd where a sample size of 100 employees was used. The findings of the research indicated that adoption of outsourcing by firms facilitates reduction in institutional costs and increase in service delivery efficiency. Liu, Hao and Zhao (2016), researched on impact that information has on process coordination on logistics outsourcing. The purpose of the research was test logistics outsourcing is influenced by integrative mechanisms of which information sharing is part of and its impact on performance. The researchers used questionnaires in data collection. The research findings indicated that to attain good levels of outsourcing, firms need to adopt information sharing and this leads to improved performance of the SC.

Williamson (1981), studied on outsourcing the logistics and performance of sugar companies in western Kenya. The aim of the research was to ascertain the outsourcing impact on performance of sugar companies in Kenya. The research used structured questionnaires in data collection. The research findings indicated that outsourcing of transportation, maintenance and repairs, cane harvesting, security and legal services led to increased customer satisfaction, increased productivity, timely delivery, costs minimization and improved profits.

Githinji (2012) carried out a research on the concepts surveying universities in Nairobi County. The researcher intended to ascertain the logistics outsourcing practices adopted by Nairobi County and their impact on SC performance. Questionnaires were used in collecting, where he collected data from all the universities in Nairobi County. The research findings indicated that, logistics outsourcing improves SC performance.

Alkhabit (2017), researched on logistics comparing outsourcing both up and downstream SC. The aim of the research was to ascertain what logistics independent factors are that facilitate a coordinated approach to strategic logistical outsourcing. Data was collected by use of interviews from the top management. The findings of the research indicated that firms can perform better by adopting strategic logistics outsourcing.

## **2.6 Challenges of Logistics Outsourcing**

Logistics outsourcing increases the level of a firm's liability by reducing the levels of a firms' control it has over various services delivered (Stock and Lambert, 2001). According to Gitaari (2011), the challenged faced were vendors not providing quality services as agreed, decreased company loyalty and lack of confidentiality on company matters. According to Haizer and Haji (2014), some drawbacks of outsourcing include lost control, increase in transportation costs if the distance from the outsourcing provider to a client firm and creating future competition.

Organizations face risks of being over reliant on external service providers and thus failing to realize the costs that could be saved from performing the services in-house .By outsourcing, firms tend to lose control over critical activities. Firms also face challenges of lowered self-esteem of internal employees and management of relationships that go

wrong Saffi(2000).A major challenge to logistics outsourcing is lose according to is based on the lack of advanced IT which is used in connecting various players in the sector. Outsourcing of logistics function faces a major challenge of proper selection of the right service providers of which at times these service providers fail to meet the promises given to the firms. The service providers at times are not able to meet changing requirements.

Firm's lack of confidence in the ability service provider's to offer various services that have been outsourced as per the expectations is a major challenge. Besides many top management of various firms fail to support logistics outsourcing of various firms hence making it a hindrance to outsourcing. When deciding whether to outsource a service or not, firms face challenges of evaluating the cost saving alternatives to outsourcing. Third party service providers lack adequate information on the various services that are to be provided by them hence making the outsourcing a challenge (Willcocks, 1997).

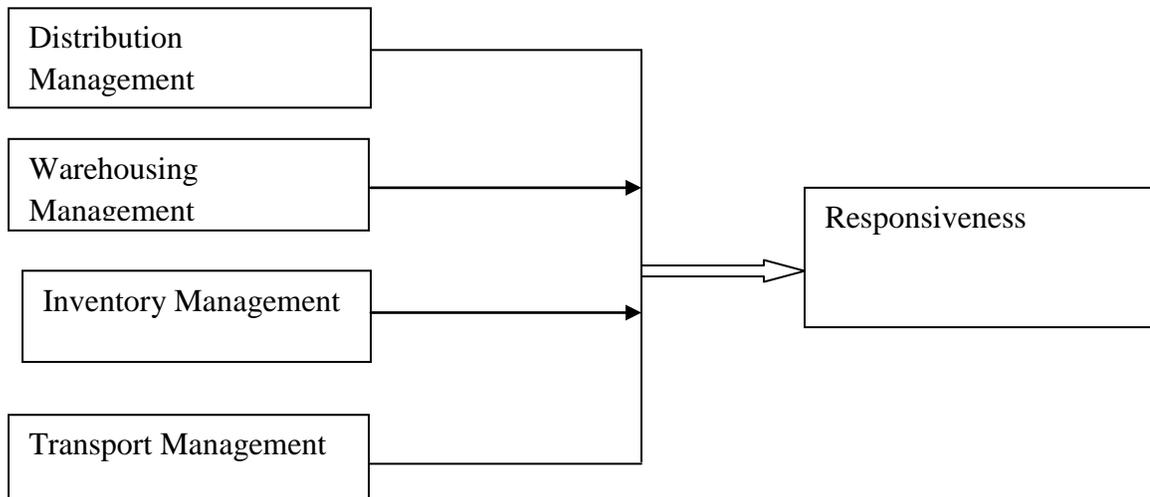
## **2.7 Conceptual Framework**

The conceptual framework outlined below shows logistics outsourcing effect on Responsiveness. The independent variable is Logistics outsourcing activities which include: transportation management, distribution management, and warehousing and inventory management. The dependent variable is responsiveness.

**Figure 2.1: Conceptual Framework**

**Independent variables**

**Dependent variable**



**Source: Research Data (2018)**

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The chapter contains information about the design of the research and population that was used for the research, the techniques that was used in data collection and analysis.

#### **3.2 Research Design**

This research used descriptive research design in meeting the research objectives. A research design is the data collection process which helps in answering the research objectives of the research (Mugenda & Mugenda, 2008). This design was adopted as the researcher has interest in establishing the extent of logistics outsourcing in NGO'S in Nairobi and its impact on SC performance. It facilitated the researcher's ability to meet the research objectives.

#### **3.3 Target Population**

The study population was the NGO'S in Nairobi. According to the NGO's coordination board, there are 64 NGO'S in Nairobi (NGO's board, 2017). The Researcher carried out a census on all the 64 firms since the population size is relatively small.

#### **3.4 Data Collection**

Primary data collection was through use of semi structured questionnaires. The questions were constructed in a manner that they were in a position to address the specific objectives and offer a variety of possible responses. The questionnaires were sent to the procurement managers or their equivalent in the NGO'S in Nairobi. Drop and pick

technique was used in administering the questionnaires Section A of the instrument contained the respondents' biodata, section B contained information on the extent of logistics outsourcing implementation, section C contained information on the impact of adopting logistics outsourcing on responsiveness of NGO'S in Nairobi and D was based on the challenges.

### **3.6 Data Analysis**

Data collected was screened for accuracy, consistency, uniformity and completeness in preparation for analysis. The data on objective one was analyzed by use of descriptive measures. Data on objective two was analyzed by use of regression analysis which was used to identify the impact of the adoption of logistics outsourcing on responsiveness.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where;

Y = Responsiveness

$\alpha$  – This is a constant

$\beta_1, \beta_2, \beta_3,$  and  $\beta_4$  – Are constants regression coefficients

$X_1$  – Distribution management

$X_2$  – Warehousing

$X_3$  – inventory management

$X_4$ . Transport management

$\epsilon$  – Stochastic term.

## **CHAPTER FOUR**

### **DATA ANALYSIS, FINDINGS AND DISCUSSIONS**

#### **4.1 Introduction**

This chapter is made up of data analysis, findings and interpretation. It contains the findings on the study.

#### **4.2 Response Rate**

The targeted population of the study was made up of all the NGO's in Nairobi. Out of 64 questionnaires that were issued, only 55 were dully filled and returned for data analysis and were checked for completeness. In data analysis, 50% a rate of response of is considered sufficient , 60% is considered good and greater than 70% is considered very good (Mugenda & Mugenda, 2003). This study had a 86% response rate where out of 64 questionnaires that were distributed, the 55 firms dully filled the questionnaires and were deemed fit for data analysis. Hence the researcher felt this was adequate to give out adequate information on the data sought.

#### **4.3 Biographic Information**

The researcher was interested in having knowledge of the biographic data of the respondents which was key in ascertaining the respondent's ability to give adequate information on logistics outsourcing and responsiveness in NGO's in Nairobi. Background checks were carried out to establish the relationship between the information gathered on their experience, education level and the knowledge sought. Background information was sough on:

### 4.3.1 Gender

The participants were required to indicate their gender; the results are as summarized in the table 4.1 below:

**Table 4.1: Gender**

	<b>Frequency</b>	<b>Percent</b>
Male	28	51
Female	27	49
<b>Total</b>	<b>55</b>	<b>100</b>

**Research Data, (2018)**

The findings indicated that that male comprised 51% of the respondents while females accounted for 49%. This indicated that there is equal distribution of staff in terms of gender in NGO's in Nairobi.

### 4.3.2 Education

The participants were asked to indicate their highest education attained. The table 4.2 below shows the findings.

**Table 4.2 : Education**

<b>Education level</b>	<b>Frequency</b>	<b>Percent</b>
Secondary	0	0
College	15	27
Undergraduate	29	53
Masters	11	20
<b>Total</b>	<b>55</b>	<b>100</b>

**Research Data, (2018)**

The study findings indicated that none of the respondents had secondary level education 15% of the respondents had college level education, 53% had undergraduate level education while 20% of the respondents has a masters' level education. From this finding we can conclude that the respondents had sufficiently knowledgeable about the subject of the study.

#### 4.3.4 Experience

The study sought to have knowledge on the professional experience of the respondents in the supply chain department. The table 4.4 below shows the findings.

**Table 4.3: Experience**

<b>Experience</b>	<b>Frequency</b>	<b>Percent</b>
less than 5 years	13	24
6-10 years	25	45
Over 10 years	17	31
<b>Total</b>	<b>55</b>	<b>100</b>

#### **Research data, (2018)**

The responses indicated that 24% of the respondents had worked for less than 5 years, 45% had working experience of 6-10 years and 31% had over 10 years working experience. These finding indicated that the respondents had adequate working experience in the data sought and they are in a position to provide data that will facilitate meeting of the study objectives.

#### 4.4 Adoption of Logistics Outsourcing

The first aim of the study was to ascertain the extent of adoption of logistics outsourcing in adopted in NGO's in Nairobi. To do this descriptive statics was used.

#### 4.4.1 Warehousing

The respondents were asked to show the extent to which green design as a warehousing as a logistics activity had been outsourced NGO's in Nairobi on a scale of 1-5 where (1) Not at all (2) Small extentt (3) Moderate extentt (4) Great extentt (5) Very great extentt.

The findings are as shown in the table 4.4 below.

**Table 4.4: Warehousing**

<b>Warehousing</b>	<b>Mean</b>	<b>Std. Deviation</b>
Use of external firms in protection of goods from damage in the warehouse	4.03	.77
Use external firms in storage of goods	3.92	.71
Use external firms in packaging and branding services	3.90	.76
Use external firms in assorting of goods before transportation to the customers	3.70	.57
Use of external firms in accumulating of goods before storage	3.99	.69
Use of external firms in sorting of goods in the warehouse	3.35	.62
Use of external firms to brand goods in the warehouse	3.28	.68

#### **Research Data,( 2018)**

From the findings it was ascertained that to a moderate extent NGO's in Nairobi had outsourced their warehousing function. This was ascertained from the findings which was indicated by mean values greater than 3.0 whereby: Use of external firms in protection of goods from damage in the warehouse ( $M= 4.03$ ),  $SD= 0.77$ ), Use external firms in storage of goods: ( $M= 3.92$ ,  $SD=.71$ ), Use external firms in packaging and branding services :( $M=3.90,SD=0.76$ ), you have cooperation with suppliers for eco-design of the raw materials supplied ( $M=3.70$ ,  $SD=0.57$ ), Use of external firms in accumulating of goods

before storage ( $M=3.99,SD=0.69$ ) and Use of external firms to brand goods in the warehouse ( $M=3.28,SD=0.68$ ).

From the results of the study findings it can be ascertained that NGO's outsource their storage services to the external services since the study findings hence indicated to a moderate extent that warehousing as a logistics activity had been outsourced to the external service providers has been adopted in the storage, branding and accumulating of products in NGO's in Nairobi.

#### 4.4.2 Transportation

The respondents were asked to show the extent to which transportation as a logistics activity had been outsourced NGO's in Nairobi on a scale of 1-5 where (1) Not at all (2) Small extent (3) Moderate extent (4) Great extent (5) Very great extent. The findings are as shown in the table 4.5 below:

**Table 4.5: Transportation**

<b>Transportation</b>	<b>Mean</b>	<b>Std Deviation</b>
Use external firms to transport goods to the customers	4.04	.78
Use external firms to transport raw materials to the firm for production	3.93	.70
Use of external firms to transport wastes to the disposing sections	3.70	.69
Use of external firms to provide transport services to the staff	3.69	.58
Use of external firms to provide system maintenance	3.31	.77

**Research Data, (2018)**

From the findings it was ascertained that to a moderate extent NGO's in Nairobi had outsourced their transportation function. This was ascertained from the findings which was indicated by mean values greater than 3.0 whereby: Use external firms to transport goods to the customers ( $M=4.03, SD=0.78$ ), Use external firms to transport raw materials to the firm for production: ( $M=3.93, SD=0.70$ ), Use of external firms to transport wastes to the disposing sections : ( $M=3.70, SD=0.69$ ), Use of external firms to provide transport services to the staff ( $M=3.69, SD=58$ ), and use of external firms to provide system maintenance ( $M=3.2, SD=0.77$ ). NGO's to a moderate extend use services of external service providers in the transportation of goods and services and hence they are in a position to focus on their core activities of provision of goods and services.

#### **4.4.3 Inventory management**

The participants were asked to show the extent to which inventory management as a logistics activity had been outsourced NGO's in Nairobi on a scale of 1-5 where (1) Not at all (2) Small extent (3) Moderate extent (4) Great extent (5) Very great extent. The study results are presented in the table 4.6 below.

**Table 4.6 : Inventory Management**

<b>Inventory Management</b>	<b>Mean</b>	<b>Std. Deviation</b>
Use of third party service providers in provision of management of stored goods in the warehouse	4.38	.71
Use of third party service providers in ensuring that the customer orders are met at all times	4.03	.79
Use of third party service providers in the provision of information on the stock levels in case there are stock outs	3.69	.59
Use of third party service providers in the management of inventory management technologies	3.57	.86
Use of third party service providers in provision of management of stored goods in the warehouse	3.64	.56

**Research Data, (2018)**

From the findings it was ascertained that to a moderate extent NGO's in Nairobi had outsourced their inventory management function. This was ascertained from the findings which was indicated by mean values greater than 3.0 whereby: Use of external service providers in provision of management of stored goods in the warehouse ( $M=4.38, SD=.71$ ), Use of external service providers in the provision of information on the stock levels in case there are stock outs: ( $M=4.03, SD=.79$ ), Use of external service providers in the management of inventory management technologies : ( $M=3.69, SD=.59$ ), Use of external service providers in provision of management of stored goods in the warehouse ( $M=3.57, SD=.86$ ) . NGO's in Nairobi are able to cut on costs of operations to a great extent based on the fact that they are in a position to manage their inventory adequately due to the outsourcing of their inventory management to external service providers to a moderate extent as per the study findings.

#### 4.4.4 Distribution management

The participants were requested the extent distribution management as a logistics activity had been outsourced NGO's in Nairobi on a scale of 1-5 where (1) Not at all (2) Small extentt (3) Moderate extentt (4) Great extentt (5) Very great extentt. The findings are as shown in the table 4.7 below:

**Table 4.7 : Distribution Management**

<b>Distribution Management</b>	<b>Mean</b>	<b>Std. Deviation</b>
Use of outside service providers in management of distribution of products within the firm	4.37	.71
Use of third party service providers in the movement of goods to the final consumers	4.24	.58
Use of third service providers in the transportation of products from the suppliers	3.69	.57
Use of third party service providers in management of distribution of products within the firm	3.57	.86

**Research Data, (2018)**

From the findings it was ascertained that to a moderate extent NGO's in Nairobi had outsourced their distribution management function. This was ascertained from the findings which was indicated by mean values greater than 3.0 whereby: use of external service providers in management of distribution of products within the firm ( $M=4.37,SD=0.71$ ), use of external service providers in the movement of goods to the final consumers:( $M=4.24,SD=0.58$ ), Use of external service providers in the transportation of products from the suppliers :( $M=3.69,SD=0.57$ ), Use of external service providers in management of distribution of products within the firm ( $M=3.57,SD=0.86$ ). These findings hence indicated to a moderately extent that distribution management as a

logistics activity had been sourced to a third party service has been adopted in the production of products in NGO's in Nairobi. The NGO's are in a position to adequately distribute products to their clients in all parts of the country.

#### 4.5 Summary of Descriptive Statics

The table below shows the summary of the descriptive statics on the extent of logistics outsourcing in NGO's in Nairobi.

**Table 4.8 : Summary of Descriptive Statistics**

<b>Logistics activities</b>	<b>Mean</b>	<b>Std. Deviation</b>
Transportation	4.23	.60
Inventory Management	3.94	.64
Warehousing	3.80	.58
Distribution management	3.87	.58

**Source, Research Data (2018)**

The findings of the study indicated that transportation as a logistics function had been adopted to a large extent as indicated by a mean value of 4.0, Inventory management as a logistics activity indicated had been outsourced by manufacturing firms to a moderate extent as indicated by a mean value of 3.9 while Warehousing had been outsourced to a moderate extent as indicated by a mean value of 3.8. This is an indication that the logistics function of manufacturing firms have been outsourced to a large extent as indicated by the findings where all logistics activities indicated a mean value and outsource their non-core activities of which logistics is part of. These study findings agree with the study findings by Owour, (2016) who found that logistics outsourcing by sugar millers in west Kenya was, adapted to a great extent. Haji (2014) in his study on

logistics outsourcing and performance in Turkey established that it had been adapted to a large extent.

#### 4.6 Relationship between Logistics Outsourcing and Responsiveness

To determine the correlation of logistics outsourcing and responsiveness in NGO's, the study adopted use of regression analysis. The independent variables were: Transportation, distribution, warehousing and inventory management while the independent variables were: supply chain performance.

##### 4.6.1 Model Summary

**Table 4.9: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.805 <sup>a</sup>	.648	.595	.54741

a. Predictors: (Constant), warehousing, transportation, material handling, distribution management, inventory management

b. Responsiveness

The findings indicated generally this is a good model whereby 64% of changes in responsiveness is explained by logistics outsourcing in NGO's while the rest which is 36% is explained by other variables which are not in the model. This is an indication that the ability of NGO's to deliver as per the customer requirements are determined by the extent to which they outsource their logistics function.

#### 4.6.2 ANOVA

The findings on ANOVA are as indicated below.

**Table 4.10: ANOVA<sup>a</sup>**

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1 Regression	27.885	6	4.648	5.092	.000 <sup>b</sup>
Residual	35.986	47	.766		
Total	63.870	53			

a. Dependent Variable: Responsiveness

b. Predictors: (Constant), warehousing, transportation, material handling, distribution management, inventory management

From the study findings it indicates that the various logistics activities are statically significant at 95% confidence level based on the fact that the significance level indicated was 0.000. Hence this is an indication that the model was generally statically significant since the p-value was less than 5%.

#### 4.6.3 Coefficients

The table below shows the coefficients got from the study.

**Table 4.11: Coefficients**

<b>Model</b>	<b>Unstandardized</b>		<b>Standardized</b>	<b>T</b>	<b>Sig.</b>
	<b>Coefficients</b>		<b>Coefficients</b>		
	<b>B</b>	<b>Std. Error</b>	<b>Beta</b>		
(Constant)	6.736	1.995		3.376	.002
warehousing	.211	.315	.129	.671	.506
Distribution management	.432	.339	.375	.452	.033
Inventory management	.201	.235	.163	.858	.395
Transportation	.787	.659	.556	.193	.023

a. Dependent Variable: Responsiveness

b. Predictors: (Constant), warehousing, transportation, distribution management, inventory management. Warehousing and responsiveness are positively and insignificantly related  $r=(0.211), p=0.506$ . This indicates that an increase in the level of adoption of outsourcing of warehousing by NGO's in Nairobi by one unit, results to related increase in the level of their responsiveness by 0.506. Besides warehousing had 0.560 t test value an indication that warehousing outsourcing is insignificant at 0.05 critical value since it is greater than 0.05. From the findings: transportation and responsiveness are positively and significantly related ( $r=0.787$ ),  $p=0.023$ . This indicates that an increase in the level of adoption of outsourcing of transportation by one unit, results to related increase in the level of responsiveness by 0.787. Besides transportation had 0.023 t test value an indication that outsourcing of transportation by NGO's in Nairobi is significant at 0.05 critical values since it is less than 0.05. Distribution management and responsiveness are positively and significantly related ( $r=0.432$ ),  $p=0.033$ . This indicates that an increase in the level of adoption of distribution

management by one unit, results to related increase in the level of supply chain responsiveness by 0.432. Besides reverse logistics had 0.033 t- test value an indication that outsourcing of distribution management is significant at 0.05 critical values since it is less than 0.05. Inventory management and supply chain responsiveness is positively and insignificantly related ( $r=0.201$ ), $p=0.395$ . This indicates that an increase in the level of adoption of outsourcing of inventory management by one unit, results to related increase in the level of supply chain responsiveness by 0.395. Besides outsourcing of inventory management had 0.395 t test value an indication that inventory management outsourcing as a logistics activity is statically insignificant at 0.05 critical values since it is more than 0.05.

Regression equation  $Y = 6.736 + 0.211 X_1 + 0.432 X_2 + 0.477 X_3 + 0.201X_4 + 0.787X_4 \epsilon$

Y = Responsiveness

$\alpha$  – This is a constant

$\beta_1, \beta_2, \beta_3$  and  $\beta_4$ – Are constants regression coefficients

$X_1$  – Distribution management

$X_2$  – Warehousing

$X_3$  – inventory management

$X_4$ .Transport management

$\epsilon$  – Stochastic term.

#### 4.7 Challenges in Adoption of Logistics Outsourcing

The third objective of the study was to ascertain the challenges faced in the adoption of logistics outsourcing by the NGO's in Nairobi. The study findings indicated that to a small extent, they faced a challenge of Selecting the right service provider which was indicated by a mean value of ( $M=2.00,SD= 0.68$ ) budget allocation with a mean value of ( $M =2.9,SD=0.48$ ), loss of control of outsourced functions indicated a mean value of ( $M=3.9,SD=0.61$ ) the challenge of many stakeholders as indicated by a mean value of ( $M=2.8,SD=0.70$ )lack of clear benefits of outsourcing as indicated by a mean value of ( $M=2.8,SD=0.53$ ) resistance to change indicated a mean value of 3.6 and costs and profits allocation challenge with a mean value of ( $M=2.54,SD=0.42$ ) as indicated below: This is an indication that manufacturing firms face various challenges in their quest to adoption of logistics outsourcing.

**Table 4.12: Descriptive Statistics**

<b>Challenge</b>	<b>Mean</b>	<b>Std. Deviation</b>
Loss of control of outsourced functions	3.9143	.61220
Resistance to change	3.6857	.47101
Budget allocation	2.9429	.48159
Many stakeholders	2.8286	.70651
Lack of clear benefits of outsourcing	2.8000	.53137
Cost and profits allocation	2.5429	.42376
Selecting the right service provider	2.0000	.68599

#### **4.8 Discussion of Regression Analysis Results**

This study's main purpose was to establish the extent of adoption of logistics outsourcing in NGO's in Nairobi and its effect on responsiveness. The findings of the study as indicated above ascertained that to a large extent, NGO's in Nairobi have adopted outsourcing of their logistics function. This was indicated as per the results whereby descriptive analysis carried out on each and every variable, indicated that all the five logistics outsourcing variables. From the findings, transportation indicated a mean value of 4.2, inventory management gave mean value of 3.9, warehousing outsourcing indicated a mean value of 3.8, and management of distribution t showed average value of 3.8. These findings indicated that outsourcing of logistics had been adopted in the NGO's in Nairobi.

The second objective of the study was to establish the effect of logistics outsourcing on responsiveness of NGO's in Nairobi. To get this the study used regression analysis. From the findings it was ascertained that logistics outsourcing had a positive impact on performance whereby: transportation had a positive effect on SC responsiveness: 0.078, inventory management: 0.201, warehousing: 0.354 and distribution management 0.432, MH: 0.201, hence all the logistics outsourcing activities in the study affect positively responsiveness in NGO's Nairobi.

The regression analysis established that 64 % of the responsiveness of NGO's in Nairobi is affected by outsourcing of logistics function. This showed that the logistics outsourcing had significant influence on the level of responsiveness of NGO's in Nairobi. The ANOVA analysis indicated a 0.000 value as the significance level showing that the model used was significant with the value less than 0.005 at 95% confidence level an

indication that logistics outsourcing has impact on responsiveness of the NGO's in Nairobi.

This research concurs with one carried out by Haji (2014) in Turkey firms, whereby he ascertained that implementation of logistics outsourcing had a positive impact on performance. Besides this study is in line with a study by Owouri (2016) who studied on the logistics outsourcing on sugar millers in Kenya. The findings indicated that implementation of the outsourcing of logistics positively impacted on performance of sugar millers'. Gathungu, (2013) ascertained that adoption of logistics outsourcing has impacts positively on performance.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter comprises the study summary, conclusions and recommendations and study limitations.

#### **5.2 Summary**

The objectives of the study were: to ascertain the extent implementation of logistics outsourcing in NGO's in Nairobi, to determine the correlation of logistics outsourcing and performance of manufacturing firms in Nairobi and the impediments encountered in implementing of the logistics outsourcing by NGO's in Nairobi. The biographic information indicated that both male and female participated in the study. Based on academic qualifications, the study ascertained that all the respondents had adequate knowledge on the data sought based on the fact they all had adequate educational background. In addition, all the respondents had the right professional knowledge in terms of experience of over one year in the area of their work. An indication that most of the respondents had adverse education that enabled them to effectively carry out their duties and were well informed about the study subject

The first aim of the study was to determine the extent of implementation of various logistics activities in NGO's in Nairobi. From the findings on descriptive statics were that it was ascertained that to a moderate extent all the logistics activities looked at under this study had been implemented in the NGO's in Nairobi. This was based on the study findings which indicated a mean value greater than three. The various logistics activities

investigated were: transportation, inventory management, distribution management and warehousing. The second study objective was to establish the impact of logistics outsourcing on responsiveness of NGO's in Nairobi. The study findings indicated that there existed a positive correlation of the study variables. The results ascertained that logistics outsourcing had a positive impact on SC responsiveness which as measure \d by timeliness, flexibility, cost and quality. The results further indicated that a large portion of the level of responsiveness of the NGO's in Nairobi is affected by the level of implementation of logistics outsourcing in NGO's in Nairobi.

### **5.3 Conclusion**

Kenya is a third world country which highly depends on donor funds for support of its major projects. NGO's are key in Kenya based on their roles in society. They play a key role in the provision of healthcare, education, and support during calamities, among other activities. The objective of the study was to ascertain the extent of implementation of logistics outsourcing by NGO's in Nairobi, their implementation impact on responsiveness and the challenges faced in the implementation of the various logistics activities in the NGO's activities.

Based on objective one, the findings indicated that to a moderate extent all the logistics activities had been implemented in NGO's in Nairobi based on the results from the descriptive statics which indicated a mean value greater than three. From this it can be concluded that NGO's majorly focus on their core activities based on their roles and mandated based on the donor funds and their objectives and outsource their logistics activities which are non-core to their existence. Based on the second objective, the findings indicated that logistics outsourcing affects responsiveness in the NGO's to a

large extent based on the positive coefficient values in the coefficient tables and a significant level which was less than five percent. Besides sixty-four percent of responsiveness in the NGO's was affected by implementation of logistics outsourcing.

#### **5.4 Recommendations**

Despite the fact the study was based on logistics outsourcing in NGO's in Nairobi, there is need for the NGO's to invest more on skill and knowledge acquisition on the managing the of the They can also try investing more on research and development of long term partnerships logistics third party service providers. The NGO's need to come up with measures that will help them curb the various challenges that the NGO's experience in their quest to outsource their logistics function to attained improved responsiveness to customer requirements. If progressively monitored and used as corrective benchmarks, implementation this logistics outsourcing practices and management of challenges will enable the NGO's to achieve great responsiveness to customer requirements.

#### **5.5 Limitations of the Study**

Unwillingness by some of the respondents in filling in the questionnaires was a major hindrance to the success of this study with a basis that this research may be used for other basis. The study aimed to determine the extent of implementation of logistics outsourcing on responsiveness in NGO's in Nairobi. Besides the study was aimed at establishing the relationship between logistics outsourcing and responsiveness NGO's in Nairobi. The study was based on the NGO's in Nairobi and hence the findings would not be used to generalize on the impact of logistics outsourcing on SC responsiveness in all the NGO's in Nairobi. In addition, the study was based on the NGO's and not the NGO's as a whole which may be local and international too. The study was based on the level of

responsiveness affected by implementation of logistics outsourcing, it needed to focus generally on SC as a whole rather than responsiveness alone.

### **5.6 Suggestions for Further Research**

The study was based on ascertaining the impact of logistics outsourcing on responsiveness of NGO's in Nairobi, challenges faced in the implementation of logistics outsourcing in the NGO's in Nairobi and the extent of implementation of logistics outsourcing in NGO's in Nairobi. Future studies need to be carried out on logistics outsourcing in other sectors other than the NGO's in Nairobi. The study solely focused on the NGO's in Nairobi. A further study needs to be carried out on the NGO's in the whole country rather than Nairobi alone. Further studies need to be based on the supply chain as a whole rather than responsiveness as a measure of performance. The study was on logistics outsourcing; other wider studies need to be based on outsourcing as a whole rather than logistics alone.

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## APPENDICES

### Appendix 1: Questionnaire

This questionnaire is intended to provide information for the research on logistics outsourcing and Performance of non -governmental organizations in Kenya. Please note that the information provided will be used for academic purpose only and will be treated with utmost confidentiality.

Please answer the following questions by ticking (√) in the appropriate box or by giving the necessary details in the spaces provided.

#### SECTION A: GENERAL INFORMATION

1. Kindly indicate your gender:

Male..... [ ]      Female.....[ ]

2. Kindly indicate your level of Education Attained

Secondary..... [ ]      Technical / Vocational [ ] Undergraduate.....[ ]  
Postgraduate...[ ]      If any other (Specify).....

3. Kindly indicate your professional experience e.g CIPS, CPA,CPS) (Years)

Less than 5 years... [ ]      5-10 years.....[ ]      Over 10 years.....[ ]

#### SECTION B: THE EXTENT OF LOGISTICS OUTSOURCING

Please indicate the extent to which your firm outsourced the following activities, by using the scaling method.

**1- Not at all    2-Small extend    3-Moderate extend    4-Great extend    5-Very great extend**

<b>PRACTICE</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Warehousing</b>					
Use of external firms in protection of goods from damage in the warehouse					
Use external firms in storage of goods					

Use external firms in packaging and branding services					
Use external firms in assorting of goods before transportation to the customers					
Use of external firms in accumulating of goods before storage					
Use of external firms in sorting of goods in the warehouse					
Use of external firms to brand goods in the warehouse					
<b>Transportation</b>					
Use external firms to transport goods to the customers					
Use external firms to transport raw materials to the firm for production					
Use of external firms to transport wastes to the disposing sections					
Use of external firms to provide transport services to the staff					
Use of external firms to provide system maintenance					
<b>Inventory management</b>					
Use of external service providers in provision of management of stored goods in the warehouse					
Use of external service providers in ensuring that the customer orders are met at all times					
Use of external service providers in the provision of information on the stock levels in case there are stock outs					
Use of external service providers in the management of inventory management technologies					

<b>Distribution management</b>					
Use of external service providers in management of distribution of products within the firm					
Use of external service providers in the movement of goods to the final consumers					
Use of external service providers in the transportation of products from the suppliers					
<b>Material handling</b>					
Use of external service providers in the provision of material handling services					
Use of external service providers in the management of movements of goods within the warehouse					
Use of external service providers in the provision tools for handling of goods and services					

### SECTION C: RESPONSIVENESS

Indicate the extent to which your firm has improved its responsiveness due to logistics outsourcing implementation based each of the following responsiveness indicators

**Key 1-Not at all    2-Small extent    3-Moderate extent    4-Great extent    5-Very great extent**

<b>Responsiveness indicators</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Cost</b>					
To what extent has outsourcing of transportation function led to reduction in costs to satisfy customer needs					
To what extent has outsourcing of warehousing function led to reduced costs of warehouse maintenance and storage costs to satisfy customer needs					

To what extent has outsourcing reduced distribution costs of your firm as per the customer needs					
<b>Flexibility</b>					
To what extent has outsourcing of the transportation function improved flexibility of the firm in provision of goods as per the customer needs.					
To what extent has outsourcing of distribution management has facilitated the firm's ability to improve delivery of goods as per the customer needs					
To what extent has outsourcing of the inventory management facilitated the firm's ability to provide multiple goods to varying demands at any time.					
<b>Reliability</b>					
To what extent has outsourcing of transportation function improved the reliability of the firm in the manner that it produces goods as per the customer needs					
To what extent has outsourcing of warehousing function improved the reliability of the firm in its operations.					
To what extent has outsourcing of the distribution function facilitated increased reliability of the firm					
<b>Timeliness</b>					
To what extent has outsourcing of transportation function facilitated improved timeliness in delivery of goods to consumers, as per the customer needs					
To what extent has outsourcing of distribution management facilitated the firm's ability to deliver goods to consumers on time, as per the customer needs					

To what extent has outsourcing of logistics facilitated the firm's ability to meet customer on time					
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**SECTION D: CHALLENGES OF LOGISTICS OUTSOURCING**

**Key: (1) Not at all (2) Small extent (3) Moderate extent (4) Great extent (5) Very great extent**

<b>CHALLENGES</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Selecting the right service provider					
Budget allocation					
Loss of control of outsourced functions					
Risk of conflict in firms' culture					
Lack of clear benefits of outsourcing					
Resistance to change					
Cost and profits allocation					
Unrealistic expectations					

## Appendix II: List of Non-Governmental Organizations Based in Nairobi

### Organization Name

1	ADESO	34	Lutheran World Federation
2	ICRC	35	Merlin
3	IFRC	36	Norwegian Refugee Council
4	ILRI	37	Oxfam GB
5	IOM	38	Oxfam Novib
6	ACTED	39	People in Aid
7	Action against Hunger	40	Plan International
8	Action Aid	41	Practical Action
9	AMREF	42	Samaritan's Pulse Int'l Relief.
10	CAFOD	43	Save the Children
11	Care International	44	Solidarities
12	Caritas Switzerland	45	Tearfund
13	Catholic Relief Services	46	Transparency International
14	Child Fund Kenya	47	Trocaire Kenya
15	Christian AID	48	World Concern
16	Christian Blind Mission	49	World Vision International
17	Christian Children Fund	50	FAO ROEA
18	Christian Mission Aid	51	FAO Kenya
19	Concern Worldwide	52	OCHA
20	Danish Refugee council	53	UN Habitat
21	Feed the children	54	UNAIDS
22	Food for the Hungry	55	UNDP Kenya
23	German Agro Action	56	UNEP
24	Goal (K)	57	UNFPA
25	Handicap International	58	UNHCR Ken
26	Helpage International	59	UNHCR RSB
27	Hijra-Kenya Programme	60	UNICEF ESARO
28	Horn Relief	61	UNICEF Kenya
29	International Institute of Rural Reconstruction (IIRR)	62	UNWOMEN
30	International medical corps	63	WFP
31	International Rescue Committee	64	WHO
32	Islamic Relief		
33	Kenya Red Cross		

**Source: NGO BOARD, (2018)**