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**EFFECT OF OUTSOURCING ON PERFORMANCE OF
LOGISTICS INDUSTRY IN KENYA**



Zachary Brian Kipchirchir Kogoh

Master of Business Administration (MBA)

2015

**EFFECT OF OUTSOURCING ON PERFORMANCE OF
LOGISTICS INDUSTRY IN KENYA**

Zachary Brian Kipchirchir Kogoh

**Submitted in partial fulfillment of the requirements for the Degree of Master of
Business Administration (MBA) at Strathmore University**



**Strathmore Business School
Strathmore University
Nairobi, Kenya**

June, 2015

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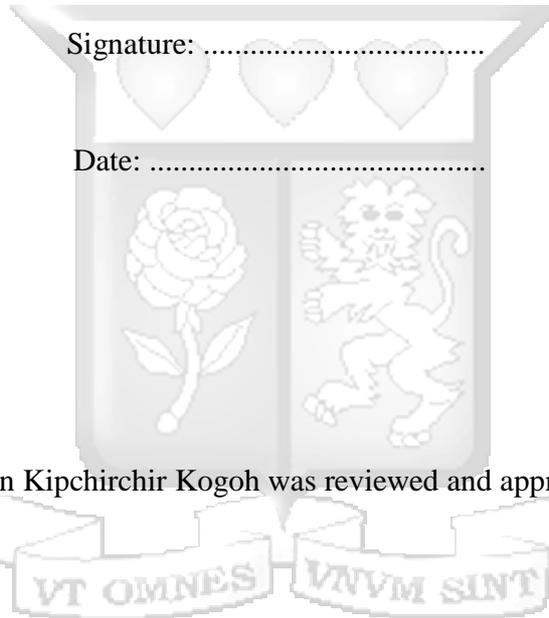
DECLARATION

I declare that this work has not been previously submitted and approved for the award of the degree by this or any other university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made on the thesis itself.

Zachary Brian Kipchirchir Kogoh

Signature:

Date:



Approval

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ABSTRACT

The research was undertaken to explore the extent of outsourcing of the logistics function within the logistics industry. The research included a study of the effect of order processing, warehousing, packaging and transport logistics outsourcing on the performance of the logistics in Kenya. The population of the study were logistics companies in Kenya. Taking logistics companies based in Nairobi to be representative of the rest of the country, the study employed random sampling to arrive at a sample of 96 companies. Data was collected by means of in-depth questionnaires with senior management staff representing the players in logistics industry. The response rate was 73%. The findings of the research demonstrated that the industry players outsourced order processing, warehousing, packaging and transport logistics albeit partially. Order processing, warehousing and transport logistics outsourcing were found to have a statistically positive effect on the performance of the logistics industry in Kenya.

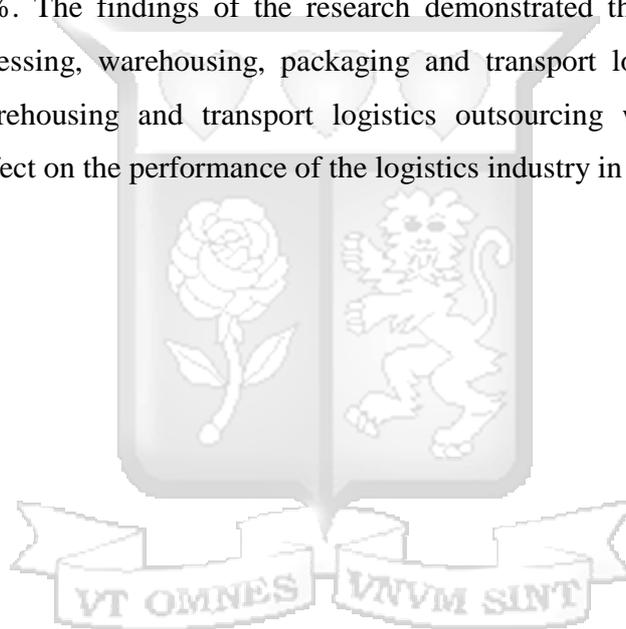


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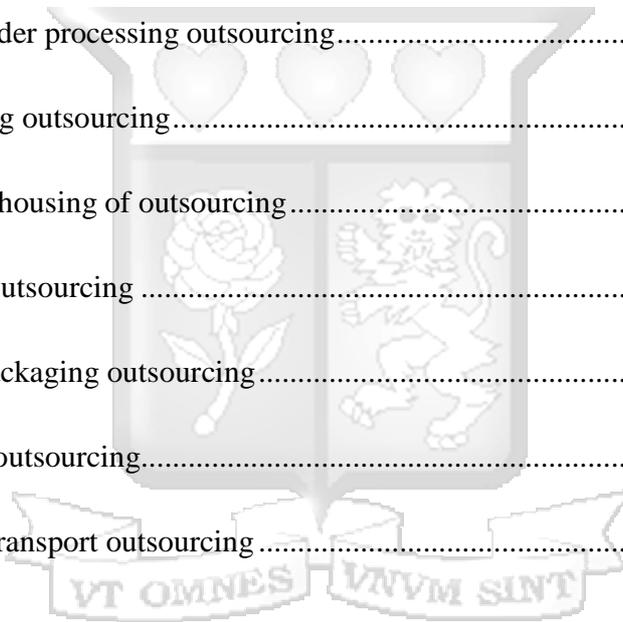


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LIST OF ABBREVIATIONS

LSP – Logistics Service Provider

ILO – International Labour Organisation

EPC – Export Promotion Council

KES – Kenya Shillings

3PLs – Third Party Logistics Providers

TCE – Transaction Cost Economies

RBV – Resource Based View

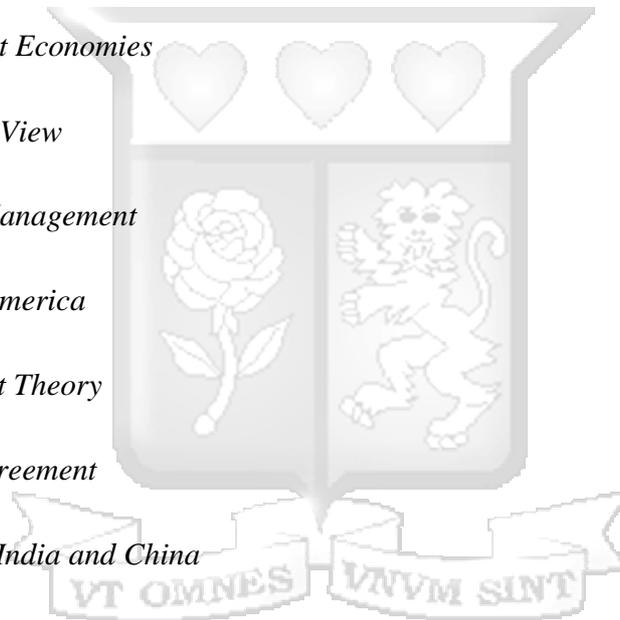
SCM – Supply Chain Management

US – United States of America

TCT – Transaction Cost Theory

SLA – Service Level Agreement

BRIC – Brazil, Russia, India and China



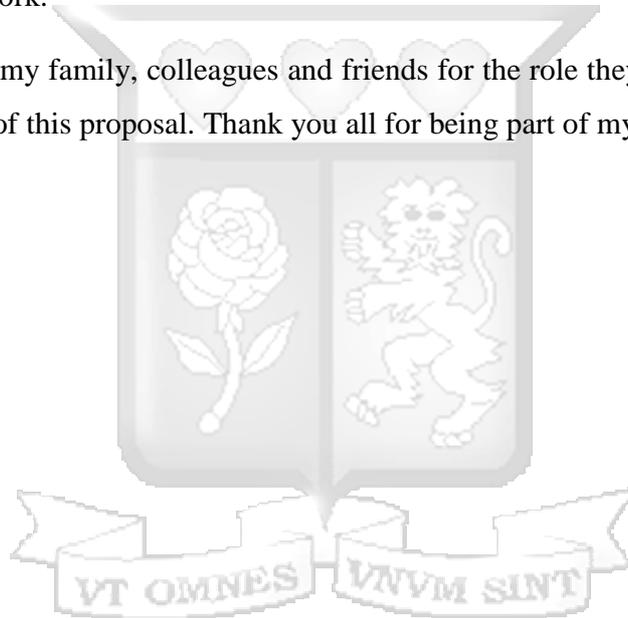
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CHAPTER ONE: INTRODUCTION

1.1 Introduction

The overriding theme of this study is to establish the effect of outsourcing on the performance of the logistics industry in Kenya. This chapter outlines the background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, and significance of the study, scope of the study, limitations of the study and definition of terms

1.2 Background to the study

The world of business has been changing rapidly over the recent times forcing organizations to recognize the importance of strategically re-looking at their business processes. Outsourcing has become an important strategic tool where organizations are leveraging on it in order to remain competitive. An important aspect of logistics strategy was developed by Porter (1985) based on the concept of a value chain. If a firm wants to gain a competitive advantage over its rivals, it must increase its value to its customer(s) through performing activities more efficiently than its competitors. Jacobs, Chase and Aquilano (2009) have defined outsourcing as the act of moving some of a firm's internal activities and decision responsibility to other outside providers.

Outsourcing has increasingly become an effective way of reducing costs and spreading risks for traditional, vertically integrated firms (Wang & Reagan, 2003). As a result, outsourcing all or part of logistics function in a logistical supply chain to logistics service providers (LSPs) has now become the norm across the industry. Through outsourcing, organizations are able to move towards a business structure where it is able to make more focused investments in the areas that provide its unique competitive advantage (Aldo & Mitja, 2012). Logistics outsourcing has also been instrumental in turn around cases in many companies, wherein shippers incurred loss; hence it has taken its place in strategic boardroom agendas. Many managers view outsourcing as the only way to keep a business competitive into the twenty-first century. This suggests that, more than ever, understanding of outsourcing process is important to fully capturing the role and value of logistics in corporate strategy and competition.

In the past large organizations, both public and private, were able to achieve significant cost and differentiation advantages (Porter, 1980) through complex organizational structures, systems, and processes. However, this has changed and now majority of organizations outsource. A company normally keeps control over any process that is necessary and core and outsources a process that is necessary but not core. Outsourcing has become one of the major strategies that companies are adapting to remain competitive in the current dynamic environment.

In the US, 92 percent of logistics service providers surveyed in *Inbound Logistics' 2014 3PL Perspectives* market research said they grew their client base by at least five percent over the past year. This compares with 90 percent in 2013, 88 percent in 2012, and 73 percent four years ago. By the year 2008, the proportion of the third-party logistics in the whole logistics market was nearly as high as 76 percent in Europe and is nearly 80 percent in Japan (Xu & Li, 2008). In China, enterprises lack the concept of modern logistics, in addition to some of the emerging private enterprises, most of state-owned enterprises still adopt the previous mode of operation of logistics management to meet their demands by the way of self-sufficiency. Up to now, about 70 percent of Chinese enterprises actualize self-logistics. Among these enterprises, most have their own transport, warehousing and other departments or companies, they usually spend large amounts of money to establish their own logistics subsidiaries regardless of whether they are capable of logistics management, thus competitiveness for these enterprises is reduced greatly (Xu *et al.*, 2008). If all countries were to improve their logistics performance and reduce supply chain barriers to just half the level observed in the best-performing country in their respective regions, global GDP could increase by 2.6% (World Economic Forum, 2013).

A substantial portion of business costs in developing countries can be traced to inefficiencies in their supply chains, limitations created by physical bottlenecks and the lack of streamlined administrative procedures. Most logistics services are undertaken in-house in developing countries due to shallow markets for such services (Nordås, Pinali & Grosso, 2006). This limits the quality of the services since most firms cannot afford to employ specialists in each of the services mentioned. However, in South Africa, many manufacturing companies have increasingly turned to third party logistics providers owing to the highly competitive

environment under which they operate (Kujawa & Walters, 2004). Furthermore, South African organisations are geographically far removed from most of their international suppliers and customers, making their logistics more complex and costly. They are thus being forced to seek innovative ways in which to increase their competitive advantage and improve their profitability

In Kenya, many organizations and institutions have adopted outsourcing of services and goods from third parties due to the benefits resulting from this; such as lower cost to the organization, satisfied customers and most importantly relieving the management to deal with more strategic issues by ceding the non-core functions to specialized firms. British American Tobacco (BAT) Kenya was among the first few companies in the country to have successfully outsourced its non-core logistics activities to a professional logistics company. In the banking sector, the most outsourced practice is the Automated Teller Machine (Barako & Gatere, 2008). Banks cite cost reduction, focus on core competencies and improved services as the main benefits of outsourcing.

Neemeka (2011) studied the implementation of the business process outsourcing strategy in Standard Chartered Bank Kenya Limited and found that the bank outsources information systems, accounting, auditing, archiving, cash sorting, product design, security personnel, transport, training, market probe services, facilities management, card transaction monitoring, network services outsourcing and payroll. Another study by Ichoho (2013) looked at implementation of outsourcing strategy at the Nairobi Hospital, Kenya. The study revealed that the organization considered the need to reduce and control operating cost, improving the focus of the hospital, gaining access to world class capability, freeing resources for other purposes, lack of resources internally, the need to accelerate re-engineering benefits, the need to efficiently provide functions that are too complex to manage and to share risks in making the decision of whether or not to outsource. King'ori (2013) studied strategic outsourcing at Airtel Kenya and concluded that besides the influence by its parent company, Bharti Airtel India, macroeconomic and competitive environment drove the decision to outsource. Kaveke (2014) investigated the factors that influenced the decision to outsource in the shipping industry.

Importance of the logistics industry to the Kenyan economy

According to the Kenya Economic Survey 2013 Transport and Logistics has a direct effect on each and every sector of the economy as well as a great potential on promoting economic growth in Kenya. The logistics industry accounts for 5 to 10% of the Gross Domestic Product (GDP) in Kenya (GoK, 2012). It is estimated that about 5 million jobs are involved in logistics in Kenya. Logistics service providers (LSP) are facilitators that help an organization to provide timely delivery of the raw material, semi-finished and finished goods, whether externally or internally, using different modes of transportation such as sea, land or air (Ochido & Ochiri, 2014).

1.3 Problem Definition

The worldwide usage and importance of outsourcing in logistics is on the rise in most economies of the world. The ability of Logistics Service Providers to remain relevant in their role of chain supply is anchored on their ability to provide value to their clients. Outsourcing of all or some of the operations is vital in logistics management for these providers. Hence outsourcing has a direct bearing on the performance of the logistic industry

Just like other businesses, logistics service providers (LSPs) are faced with increasing competitive pressures that forces them to concentrate not only on operational business processes, but also on an efficient and effective customer management. One way to meet this challenge of rapid growth and expansion, according to Langley, Pals and Ortt (2005) is to focus on establishing, maintaining, and developing relationships with customers. This is achieved through efficient service delivery.

Statistics show there is an increase in the usage of third party logistics in Kenya (KIPPRA, 2010), hence the need for enhanced customer loyalty to support the third party relationships. However there was hardly any empirical study that was conducted to determine the effect of outsourcing on the performance of the logistics industry. Studies in the area include those by Neemeka (2011), Ichoho (2013), King'ori (2013) and Kaveke (2014). None of the aforementioned studies touched on the logistics industry except for Kaveke (2014) albeit partially. Hence this study sought to fill this knowledge by evaluating how outsourcing of

various processes influence performance of the logistics industry. This study will also explore the significance of logistics within the Kenyan economy and identify the viability of outsourcing of the logistics function within the value chain.

1.4 Research Objectives

The main objective of the study was to establish the effect of outsourcing on the performance of the logistics industry in Kenya.

1.4.1 Specific Objectives

The specific objectives of this research were to:

1. To identify the functions or operations outsourced in the logistics industry in Kenya.
2. To determine the effect of outsourcing on the performance of the logistics industry in Kenya.
3. To recommend best practices in outsourcing in the logistics industry in Kenya

1.5 Research Questions

1. What functions or operations are outsourced by logistics companies in Kenya?
2. What is the effect of outsourcing functions on the performance of logistics companies in Kenya?
3. What are best practices in outsourcing in the logistics industry in Kenya?

1.6 Scope of the Study

The study concentrated on the logistics industry players in Kenya. The logistics industry in Kenya consists of companies offering transport, packaging, order processing and warehousing services. The study encompassed the clearing and forwarding industry, the transport industry, the container freight station industry, the warehousing services industry and packaging services industry. The unit of the study were the licensed logistics companies operating in Kenya.

1.7 Significance of the Study

The study provides valuable insights into the benefits associated with the outsourcing of the functions of logistics management within the logistics industry. A number of factors that affect the outsourcing of logistics function determine the extent to which the success of the function as a business venture constitutes a business opportunity and an investment avenue for entrepreneurs and existing logistics firms. The study also gives academicians a better understanding of logistics function, outsourcing and how the function can create business opportunities. Further, it adds to existing literature and body of knowledge on outsourcing and performance.



CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter explored the literature that focuses on the effect logistics outsourcing on performance of the logistics industry in Kenya. It also entails conceptual framework and theoretical framework. The empirical review addressed the various studies that have been done on the area.

2.2 Theoretical Review

This section reviewed theoretical foundations that discuss and explain logistics outsourcing. The theories discussed were the resource based theory, transaction cost theory and agency theory.

2.2.1 Resource Based View (RBV) Theory

Discussions on RBV of the firm begin with Wernerfelt's (1984) "A resource-based view of the firm", by analyzing firms from the resource side rather than from the product side. According to this theory, organizations wish to maintain a distinctive product (competitive advantage) and will plug gaps in the resources and capabilities in the most cost effective manner (Krim, 2003).

The theory emphasizes that resources internal to the firm are the principle driver of a firm's profitability and strategic advantage (Barney, 1991). The theory rejects the traditional economic assumptions that resources are homogeneous and perfectly mobile, and instead, argues that resources are heterogeneously distributed across firms and are imperfectly transferred between firms (Barney, 1991). In a subsequent development, Barney (2007) argues that firm resources are controlled by a firm and that enables the firm to conceive and implement strategies designed to improve its efficiency and effectiveness.

In espousing this theory, Barney (1991) categorised resources into three groups: physical resources such as plant, human resources and organizational resources. Resources enable a firm to conceive of, and implement strategies to improve efficiency and effectiveness (Daft & Lengel, 1983). In his argument, organizations can obtain above normal returns if they can use their

existing resources to sustain competitive advantage by exploiting opportunities in the market or neutralising threats from competitors' strategic resources. Thus, organizations can retain strategic resources internally that enable them to sustain competitive advantage (Mahoney & Pandian, 1992).

The RBV of the firm provides one of the most powerful frameworks for explaining the reasons for outsourcing (Gilley, Greer & Rahseed, 2004). This approach suggests that an organization must invest in the activities comprising its core competencies and outsource the rest (McIvor, 2005). The exchange of organizational routines and skills between the company and the specialist can give it the competitive advantage since their combined capabilities can generate an additional rent.

As the RBV of the firm developed, scholars have started a series of discussions on boundary choices, core competencies and competitive advantages. The study identifies two main determinant factors for outsourcing: core competences and value of human assets for specific business activities.

2.2.2 Transaction Cost Theory

Transaction cost theory is generally accepted as a useful framework for analyzing logistics and outsourcing decisions (Hobbs 1996; Andersson 1997). The transaction costs reduced by outsourcing logistics include, for example, decentralized order processing, assets, working capital, and overhead. This theory was first explored by Williamson's (1975). Accordingly, the transaction cost theory is a combination of economic theory and management theory.

According to this theory, transaction costs are the reason behind different forms of organizing economic activities. The two ends of a continuum regarding how to administrate business are markets and hierarchies. Transactions and transactional costs differ between different governance structures in business relationships (McIvor, 2005).

Geyskens et al. (2006) provide evidence for this theory by their analysis of other primary studies and state that the make-or-buy decision is mostly related to uncertainty. Others have focused on methods for decision making. Examples of previous logistics research that have linked

transaction cost analysis with logistics strategy include Ellram (1991) with regard to supply chain and operational performance; Aertsen (1993) with regard to physical distribution decisions; Ellram and Maltz (1995) with regard to modeling the outsourcing decision; Cox (1996) with regard to procurement strategy; Hobbs (1996) with regard to supply chain management design; Andersson (1997) with regard to third-party partnerships; Skjoett-Larsen (2000) with regard to third-party logistics; Steensma and Corley (2002) with regard to technology sourcing; Mikkola and Skjoett-Larsen (2003) with regard to supplier involvement and new product development; and Mahnke, Overby, and Vang (2005) with regard to outsourcing and information technology services.

The studies mentioned serve as examples for those that deploy transaction cost theory for setting out approaches to decision making on outsourcing. Transaction cost theory at its core focuses on the costs of completing transactions by one institutional mode rather than another (Williamson, 1975). The transaction, a transfer of a good or service, is the unit of analysis. The primary assumptions are bounded rationality and opportunism which cause transactional difficulties.

Transaction costs represent “friction in the market” or “cost of using the price mechanism”. Aubert et al. (2004) basic rule states that when marginal costs of using markets (transaction cost) are higher than the costs of running a firm (management cost), then transaction cost should be organized within the firm and vice versa. The theory and empirical studies claim that transaction difficulties and associated cost increase when transactions are characterized by a number of attributes, two main attributes being asset specificity and uncertainty.

2.2.3 Other Theories

The application of agency theory provides a justification for the establishment of alliances between organizations and their service providers (Blancero & Ellram 1997; Stock 1997; Logan 2000).

It should be noted that the resource profile of organizations has a tendency to influence the extent to which all or part of the logistics process is outsourced, as Gilley and Rasheed (2000) discuss

with respect to outsourcing of information technology from a manufacturer's perspective. The network theory of the firm focuses on the formation of external (i.e., outside the firm) relationships, organizational structures, and alliances required to support integration processes. That interaction raises the challenges of understanding and managing both internal and external activities. In other words, if general systems theory provides the "why" to view a relationship(s) as a system, then network theory provides the "how" to facilitate the formation of external relationship structure to improve system performance. Other examples of research linking the network perspective with logistics strategy include Harland (1996) and Skjoett-Larsen (1999; 2000), which provide a conceptual illustration of its application to third-party logistics, in which many firms provide logistics outsourcing services.

2.3 Empirical Literature

This section reviewed literature from prior scholars regarding logistics outsourcing and its effect on the performance of the logistics industry in Kenya.

Bardhan, Mithas and Lin (2007) examined the effect of business processes outsourcing on the performance of US manufacturing plants. The study also developed a model for role of outsourcing strategies and plant-level information technology (IT) application infrastructure in the outsourcing of production and support business processes, as well as their subsequent effect on overall plant performance. The study was undertaken empirically using cross-sectional survey data from U.S. manufacturing plants. The study found that plants with a low-cost outsourcing strategy are more likely to outsource support processes than plants with a competency-focused outsourcing strategy. In both accounts, the study concluded that cost- and competency-based strategies have a positive and similar effect on the outsourcing of production processes. In terms of implications for plant performance, they indicated that the outsourcing of production and support processes is associated with higher gross margins.

Hsiao et al. (2010) examined the classification of outsourcing activities and their impact on service performance in the food industry in the Netherlands. The study empirically examined if outsourcing different logistics activities resulted in differences in logistics service performance.

They analyzed outsourcing of four levels of logistics activities: transportation, packaging, transportation management and distribution network management. A research framework was formulated to discuss the effect of the outsourcing decision of different levels on perceived logistics service performance taking to account the moderating role that supply chain complexity in the proposed relationships. The study results of the study indicated that outsourcing has no direct effect on service performance (delivery reliability, flexibility and lead-time) in any of the four levels. Gorzig and Stephan (2002) used firm level panel data from the German cost structure survey to model the benefits accruing from outsourcing. The study found that firms that increased external services relative to internal labor costs performed worse. The study concluded that outsourcing benefits tend to be overestimated; outsourcing does not result in improved performance.

Ogusanmi (2013) sought to determine the effect of outsourcing on the performance of telephone service providers in Nigeria. Using survey research design on mobile telephone engineers, technicians, project managers and customers to as the focus of the study; the study found that positively affected the performance of the firms. However, the study indicated that, outsourcing practices contribute to high unemployment and downsizing for mobile providers firms and consequently contributes to Nigeria's unemployment problem. Thongoane (2011) investigated the effect of outsourcing IT operations on the performance of parastatals in South Africa. The study was anchored activity theory and focused on the outsourcing on activities such as service desk, IT applications and the management of networks and servers. The study found that IT outsourcing positively affected the performance of the organizations. Tukamuhabwa et al. (2012) sought to explain the outsourcing performance of Uganda's commercial banks. The study analyzed the role outsourcing as a competitive strategy in achieving efficiency. The study found that outsourcing accounts for a significant portion of enhanced performance.

Wambui (2010) who researched on the analysis of logistics outsourcing at Kenya Armed forces found out that the concept of outsourcing in the Kenyan armed forces is so much limited due to the secretive nature of their work such that adoption of the strategy is on supply of non-essential services such as stationery. She observed that in the developed world maintenance of military hardware is in some cases outsourced. On his part Kamuri (2010) undertook a research on

challenges facing the implementation of logistics outsourcing strategy at the Kenyatta National Hospital. This study also sought to determine the services that could be outsourced at KNH. To achieve the stated objectives a case study research method was used where primary data was collected. A structured questionnaire was administered to twenty senior managers in the hospital. The study found out that for an organization to realize the competitiveness resulting from logistics outsourcing, it should be able to develop a cordial relationship with all the suppliers of goods and services which will facilitate efficient and effective delivery of services.

Gichuru (2011) carried out a study on the critical success factors of Business process outsourcing among logistics companies in Kenya. A census was carried out of all the logistics companies operating in Nairobi. Data was collected through a questionnaire and factor analysis was conducted to establish the main factors and challenges in BPO outsourcing. The study established that investment of international companies in the local economy; internet connectivity; top management support; creation/expansion of a potential niche and necessary expertise affected the decision to outsource. The study also came up with five main challenges that affect the success of BPO among logistics companies in Nairobi. They included difficulty of assessing savings gained through outsourcing; non-competitive physical structures; coordinating different suppliers; unrealistic expectations from outsourcing providers and communication barriers with supplier. Among the processes outsourced were material handling, warehousing and transport.

Bosire (2011) researched on the Impact of logistics outsourcing on lead time and customer service among supermarkets in Nairobi. He found out that outsourcing of logistics services in supermarkets has a direct effect with the lead times of product delivery and that among those supermarkets that have outsourced procurement of products from the suppliers; time taken to deliver the same products to their warehouses has tremendously reduced. Kangaru (2011) while researching on challenges of business outsourcing at the Kenya Power found out that third party logistics providers are ahead of manufacturing companies that operate logistics departments on quality implementation and improvement issues in logistics services.

Mugo (2013) sought to determine logistics outsourcing and the supply chain performance of mobile phone service providers in Kenya. The study looked into logistics outsourcing and the performance of the supply chain by collecting primary data through the use of an interview guide. The study revealed that there was a relationship between logistics outsourcing and supply chain performance in the mobile phone service providers. The study surveyed the four mobile phone companies in Kenya and found that they outsourced most of their logistics functions. Frequently outsourced activities included clearing, forwarding, transport, warehousing and distribution. The study concluded that the advantages of logistics outsourcing cannot be ignored and its effect on the performance of the supply chain far more supersedes the challenges faced in the implementation of the same.

Magutu, Chirchir and Mulama (2013) examined the effect of logistics outsourcing practices on the performance of large manufacturing firms in Nairobi, Kenya. The study explored outsourcing practices viz a viz the performance of large manufacturing firms Nairobi, Kenya. The sample of the study consisted of 46 large manufacturing firms operating in Nairobi selected through stratified sampling. The results established that the firms were outsourcing transportation management, warehouse management and material handling management. The firms opted to outsource their services due to its advantages and its possible influence on organizational performance, as it enables the firms to focus on its core competencies. The outsourcing practices adopted by the large manufacturing firms will in the long run determine their survival as they would seek to reduce operating costs, improved customer satisfaction and timely delivery of services to clients which in turn increase productivity and reduce lead time and improved profits. The study confined itself to large manufacturing firms in Nairobi and the findings are therefore not be applicable in other sectors as a result of uniqueness of the manufacturing firms.

Kaveke (2014) explored the application of outsourcing strategy among shipping firms in Kenya. The overall aim of the study was to assess the application of outsourcing strategy among shipping companies in Kenya. The specific objectives were to establish the extent to which shipping companies use outsourcing practices and determine which strategies they use. The study also aimed to establish which factors influence outsourcing decisions by the firms. The research used a cross-sectional survey research design which aimed at assessing the application

of outsourcing strategy among the shipping firms in Kenya. Using open ended questionnaires, the study collected data from senior management in charge of outsourcing. The study revealed that the shipping companies in Kenya use similar outsourcing strategy with a greater emphasis on cost reduction in order to increase their competitiveness. The study also established that outsourcing is regarded as an important element of the corporate strategy of most shipping firms in Kenya. The companies mainly outsourced cargo transport services requiring road transport. This implies that shipping firms in Kenya apply outsourcing strategy and prefer to outsource non-core activities.

Anyango (2014) sought to establish the effect of outsourcing and the performance of state corporations in Kenya. The main objective of the study was to establish the extent of outsourcing, to establish the performance levels and to determine the relationship between outsourcing and performance of state corporations in Kenya. The study adopted a descriptive research design with a population of 94 state corporations in Nairobi County. Primary data was collected from the Head of procurement or supply chain department of each of the state corporations using structured questionnaire. Data analysis was done using Statistical Package for Social Sciences (SPSS) with the main analysis tools being frequencies, mean and standard deviation and multivariate linear regression.

The research study results indicated that outsourcing of all the practices was generally low in exception of real estate and physical plants which were outsourced at an average level. Real estate and physical plants was greatly outsourced, followed by finance, logistics and transport, whereas IT, HR, customer support and sales and marketing were the least outsourced practice among the state corporations. She found that outsourcing led to an overall performance of above the average among the state corporations. Good image impacted greatly on performance, followed by quality of products, innovative practices, customer satisfaction, efficient operations, and staff turnover. The study established that the relationship between outsourcing and performance differed among the firms.

The study recommended that the top management be in the forefront in support of outsourcing since this would spur the performance of the firms by enabling them to concentrate on their basic competency. The study also recommended that firms seeking to enhance business performance must complete a strategic analysis that will enable them to outsource the functions that other firms or individuals can do for them better at a cheaper cost.

From above studies it is clear that there is paucity of research on outsourcing in the Kenyan logistics industry. Barako and Gatere (2008) explored outsourcing practices in the Kenya banking sectors. They examined the perceived benefits and risks associated with outsourcing activities in the sector. Nyarandi (2002) did a survey of implementation of outsourcing in private hospitals within Nairobi whereas Chanzu (2002) did a survey of business outsourcing practices among manufacturing companies in Nairobi. The study by Kaveke (2014) touched on the logistics industry but only in part by analyzing the effect of outsourcing practices in the shipping industry. The study will therefore fill this academic gap and front recommendations that will inform policy making in the logistics industry in of Kenyan.

2.4 Conceptual Framework

According to Mugenda (2008), a conceptual framework is a hypothesized model portraying the relationship between variables graphically or diagrammatically. Conceptual framework helps in quickly seeing the proposed relationship and is put to test in order to establish the significance of the proposed relationship. The conceptual framework illustrates the dependent and independent variables.

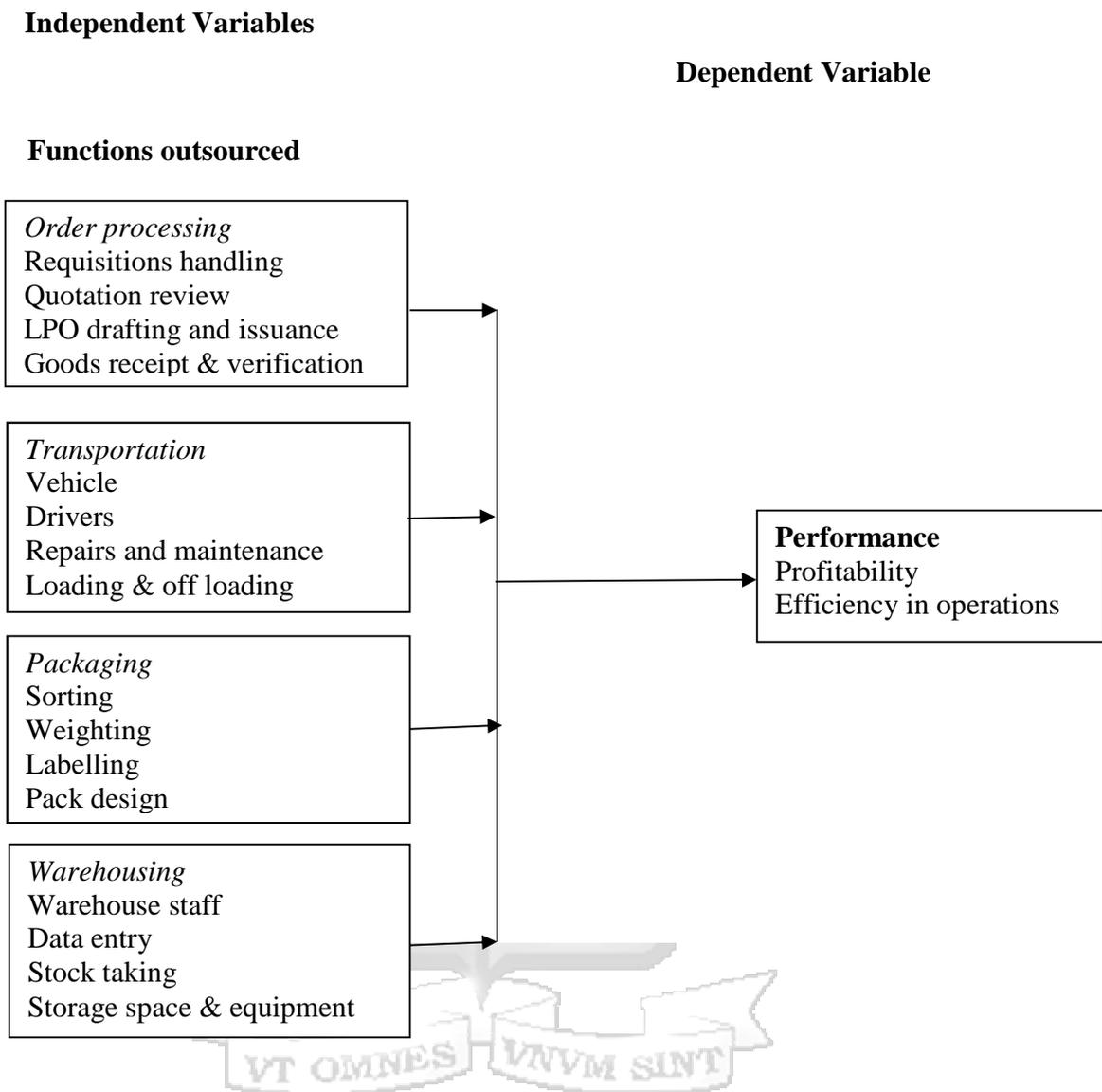


Figure 2.1: Conceptual Framework

Source: Author 2015

In this study, the independent variables were the components of logistics that were outsourced by logistics companies, which included; order processing, transportation, packaging and warehousing. The dependent variable was the performance of the logistics industry measured and represented by profitability.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter described the various methodologies that were used in gathering information, procedures adopted in conducting the research, the techniques used in analysis and the presentation of data collected. Specifically, it identified the research design, the target population, the sample design, the data collection instrument, pilot testing and methods of data analysis.

3.2 Research Design

A research design is the arrangement of conditions for data collection and analysis of data in a manner that aim to combine relevance to research purpose with economy in research procedure (Kothari, 2004).

This study employed descriptive research design. Descriptive research design is a process of collecting data in order to test hypothesis or to answer questions concerning the current status of the subjects in the study (Creswell, 2003). According to Kothari (2004), descriptive survey design includes surveys and fact finding enquiries of different kinds. The study sought to establish the effect of outsourcing the logistics function on the performance of the logistics industry. Specifically, the study investigated how order processing outsourcing, transport outsourcing, packaging outsourcing and warehousing outsourcing affect the logistics industry performance. Consequently, the study focused on logistics companies in Kenya.

3.3 Population and Sampling

Newing (2011) describes a population as the set of sampling units or cases that the researcher is interested in. According to Kothari (2004), a population refers to all items in any field of inquiry and is also known as the 'universe'. The study focused on the logistics companies in Kenya and

the various businesses that outsource logistics services from them. There are 820 logistics companies in Nairobi indicated in appendix II

Nairobi contributes about 60% to the Kenyan GDP every year (Africa Review, 2015). Nairobi also leads in road density and consequently is the centre of logistics industry in Kenya. Basing on the forgoing, it was assumed to be representative of the Kenyan logistics industry.

The logistics industry drives the Kenyan economy and has been identified as a key pillar in the achievement of the Kenya Vision 2030 whose theme on the economic front is to have a vibrant and globally competitive manufacturing sector (Vision 2030).

The sample estimate was calculated using the formula below recommended by Mugenda and Mugenda (2003). The formula yielded a sample of 96 respondents. This represents 11.7% of the population. According to Mugenda and Mugenda (2003) a sample size of 10% is or more of a population is adequate for a survey.

$$n = p(1 - p) \left(\frac{Z}{e}\right)^2$$

Where,

n = the desired sample size

Z = the standard normal deviate at the required confidence level

p = the proportion in the target population estimated to have characteristics being measured

q = 1 - p

e = Margin of error

The sample size will therefore be,

$$= 0.5(1 - 0.5) \left(\frac{1.96}{0.1}\right)^2 = 96$$

A sample design is a definite plan for obtaining a sample from a given population (Kothari, 2004). The reason for sampling in this study was to lower cost, accessibility of study population and the greater speed of data collection. This study used random sampling method on sample frame consisting of logistics companies in Nairobi. Simple random sampling was done to identify individual respondents who were issued with a questionnaire to respond to research statements.

3.5 Data Collection Methods

This study used primary data which was collected through use of a self reporting questionnaire (SRQ). For practical purposes, the senior management of the selected logistics companies were the preferred respondents as they had more knowledge standing of their companies. The data collected was both qualitative and quantitative. The data was then coded and qualitative data was quantified so as to present the findings in a way that it could be analyzed statistically.

3.6 Pilot Test

According to Holloway and Wheeler (2002), pilot studies also known as pre-test exercises are not usually used in qualitative studies but are used by novice researchers who often conduct interviews to get used to the type of data collection for their research. The purpose of pilot testing was to establish the accuracy and appropriateness of the research design and instrumentation (Saunders, Lewis & Thornhill, 2009). Newing (2011) states that the importance of field piloting cannot be overemphasized; you will almost always find that there are questions that people fail to understand or interpret in different ways, places in the questionnaire where they are not sure where to go next, and questions that turn out simply not to elicit useful information. Cooper and Schindler (2006) concur that the purpose of pilot test is to detect weaknesses in design and implementation and to provide proxy for data collection of a probability sample. Sekaran (2008) reinforces that pilot test is necessary for testing the reliability of instruments and the validity of a study.

3.6.1 Reliability of the Data Collection Instrument

Reliability refers to the repeatability, stability or internal consistency of a questionnaire (Jack & Clarke, 2008). Cronbach's alpha was used to test the reliability of the measures in the questionnaire (Cronbach, 1951). Using inter-item correlation matrix as a guide, items that were not strongly contribute to alpha, those that were be too similar, and those whose content were not critical, were eliminated. According to Sekaran (2003), Cooper and Schindler (2006), Cronbach's alpha has the most utility for multi-item scales at the interval level of measurement, requires only a single administration and provides a unique, quantitative estimate of the internal consistency of a scale. To increase the reliability of the questionnaire, this study used Cronbach alpha for separate domains of the questionnaire rather than the entire questionnaire.

Baker (1988) states that the size of a sample to be used for reliability testing varies depending on time, costs and practicality, but the same would tend to be 5- 10 per cent of the main survey. According to Cooper and Schindler (2006) the respondents in a reliability pilot test do not have to be statistically selected when testing the validity and reliability of the instruments. In this study, the data collection instrument, which was a questionnaire, was tested on 5% of the sample of the questionnaires to ensure that it is relevant and effective.

3.6.2 Validity of Data Collection Instrument

Validity refers to whether a questionnaire is measuring what it purports to measure (Bryman & Cramer 1997). McMillan and Schumacher (2006) describe validity as the degree of congruence between the explanations of the phenomena and the realities of the world. While absolute validity is difficult to establish, demonstrating the validity of a developing measure is very important in research (Bowling, 1997). The most straightforward way of testing reliability is to replicate; either by administering the same questions to the same respondents at different times and assessing the degree of correlation, or by asking the same question in different ways at different points in the questionnaire (John & Johnson, 2002). This study used both construct validity and content validity. For construct validity, the questionnaire was divided into several sections to ensure that each section assesses information for a specific objective, and also ensure

that the same closely ties to the conceptual framework for this study. To ensure content validity, the questionnaire was subjected to thorough examination by two independent resource persons, who were randomly selected among the management of logistics companies. The two individuals were asked to evaluate the statements in the questionnaire for relevance and whether they were meaningful, clear, loaded or offensive. On the basis of the evaluation, the instrument was adjusted appropriately before subjecting it to the final data collection exercise. Their review comments were used to ensure that content validity is enhanced.

3.7 Data Analysis and Presentation

Data Analysis is the processing of data collected to make meaningful information out of them (Saunders, Lewis & Thornhill, 2009). After data was obtained through questionnaires, interviews, observations and through secondary sources, it was prepared in readiness for analysis by editing, handling blank responses, coding, categorizing and keyed in using SPSS statistical package (version 20).

The descriptive statistics included frequency distribution tables, pie charts and percentages. In addition, cross tabulation for the demographic characteristics was used to show their effect on the dependent variable. The aim of using descriptive statistics was because it enables a researcher to meaningfully describe a distribution of scores or measurement using statistics/indices. The data collected was aligned with the research questions and objectives so that inference was drawn from comprehensive observations and discussion that led to useful conclusions and recommendations for the research study. The inferential statistics included the Pearsons' correlation and regression analysis. The dependent variable was correlated against the independent variables to show the relationship between the variables.

In order to establish the statistical significance of the independent variables on the dependent variable multivariate ordinary least squares regression was employed. The regression equation took the following form.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where: Y = Performance (profitability) of logistics industry;

X_1 = Order processing outsourcing

X_2 = Transportation outsourcing

X_3 = Packaging outsourcing

X_4 = Warehousing outsourcing

In the model, β_0 = the constant term while the coefficient β_i $i = 1 \dots 4$ was used to measure the sensitivity of the dependent variables (Y) to unit change in the predictor variables. e is the error term which captures the unexplained variations in the model.

3.8 Ethical Considerations

Due care was given to strict adherence of research procedures particularly those involving human subjects. Since the study involved human participants, care was taken to ensure that they are not affected negatively in any way and the research was not undertaken for personal gain (Mugenda & Mugenda, 2003). In this research, three principles of ethics were used namely; beneficence, respect for human dignity as well as justice (Polit et al., 2001). Following the three principles, sensitivity to the participants' emotions was observed when probing questions that could have psychologically harmed the participants as well as protect the participants from adverse situations. The participants were informed that the information they provided would not be used in any way to harm the participants or exploited for commercial and selfish personal gain, but only for academic purposes. Full disclosure, fair treatment and privacy was also practiced.

CHAPTER 4: ANALYSIS

4.1: Introduction

This chapter comprises of data analysis, findings and interpretation. Results are presented in tables and diagrams. The analyzed data was arranged under themes that reflect the research objectives.

4.2: Response rate

96 questionnaires were administered to the respondents. A total of 70 questionnaires were properly filled and returned from the respondents. This represented an overall successful response rate of 73%. According to Mugenda and Mugenda (2003), a response rate of 50% or more is adequate. Babbie (2015) also asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good.

Table 4.1: Response rate

Response	Total	Percent
Returned	70	73%
Unreturned	26	27%
Total	96	100%

Source: Author 2015

4.3 Organizational Profile

This section presented the general organizational profile of logistics companies that were selected as respondents in terms of their ownership type, areas of operation and core activity.

4.3.1: Ownership type

Majority of the logistics companies are multinational companies as represented by 53% while 46% are private owned.

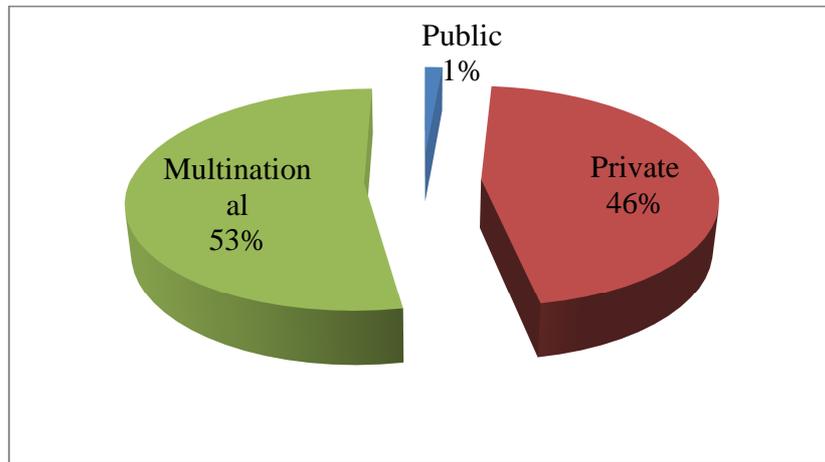


Figure 4.1: Ownership type

4.3.2: Areas of operation

According to the study, 53% of the logistics companies operate in more than one country while 29% operate all over the country.

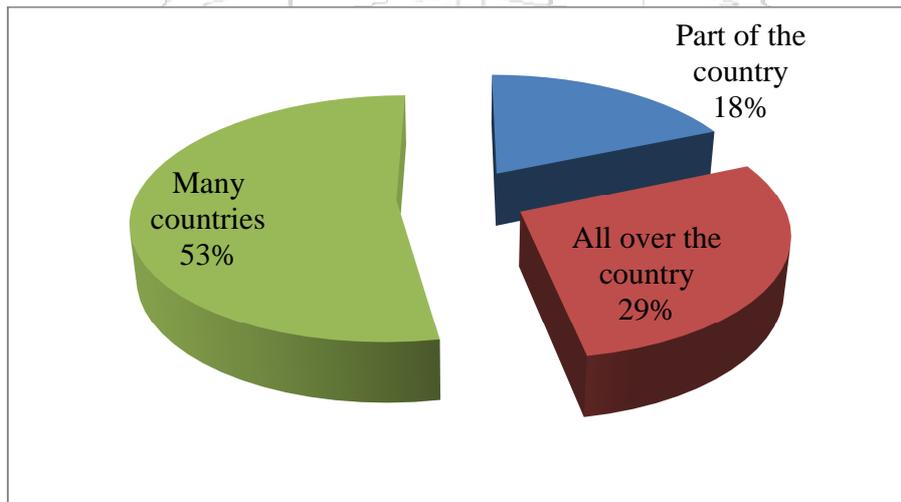


Figure 4.2: Areas of operation

Source: Author 2015

4.3.3: Core activity

Majority of the logistics companies engage in transport logistics as represented by 43% while 33% of them deal in warehousing logistics. This implies that the logistics industry in Kenya is transport dominated.

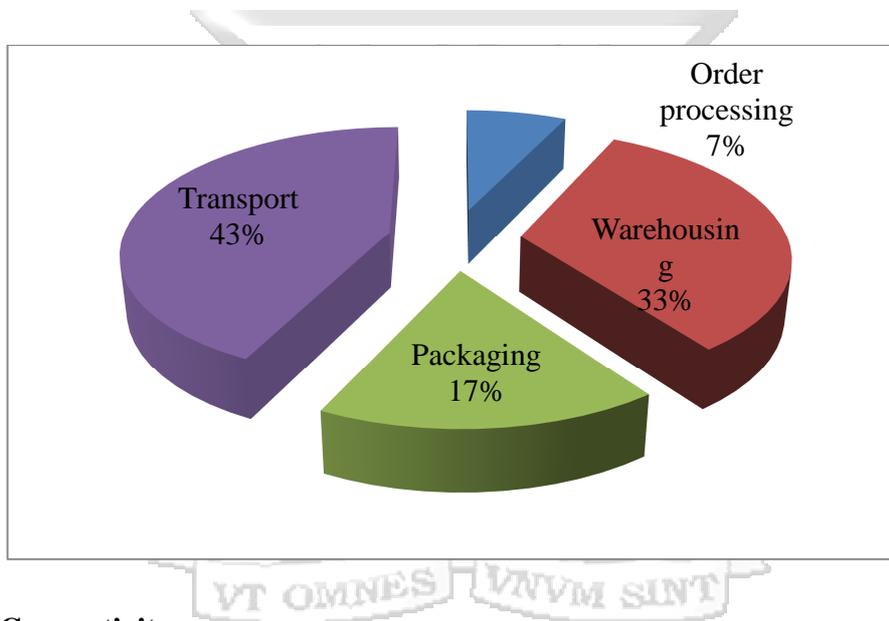


Figure 4.3: Core activity

Source: Author 2015

4.4: Functions outsourced by logistics companies

The study sought to establish the processes outsourced by logistics companies in Kenya. The study focused on four constructs of logistics functions.

4.4.1: Order processing logistics outsourcing

The study sought to determine the level of order processing outsourcing in the logistics industry. Majority of the logistics companies outsourced order processing activities as indicated by 93% of the respondents who said yes.

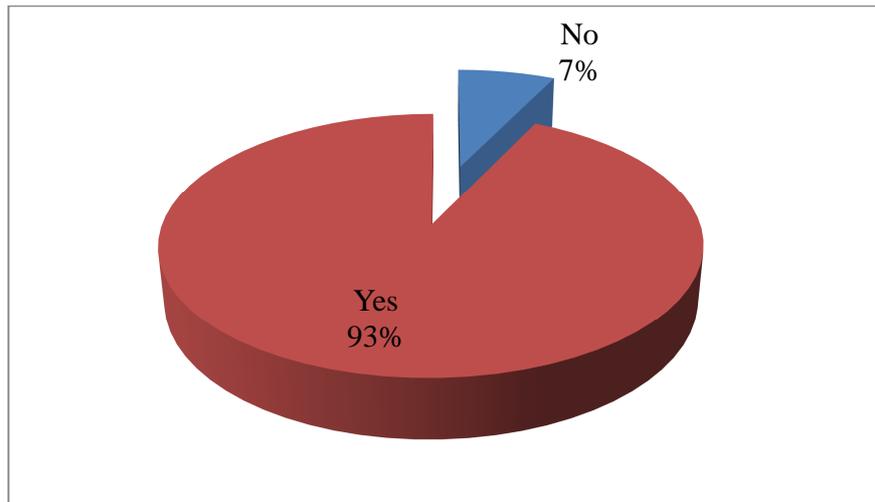


Figure 4.4: Order processing outsourcing

Source: Author 2015

68% of those who agreed outsourced order processing activities indicated that they fully outsourced the activity.

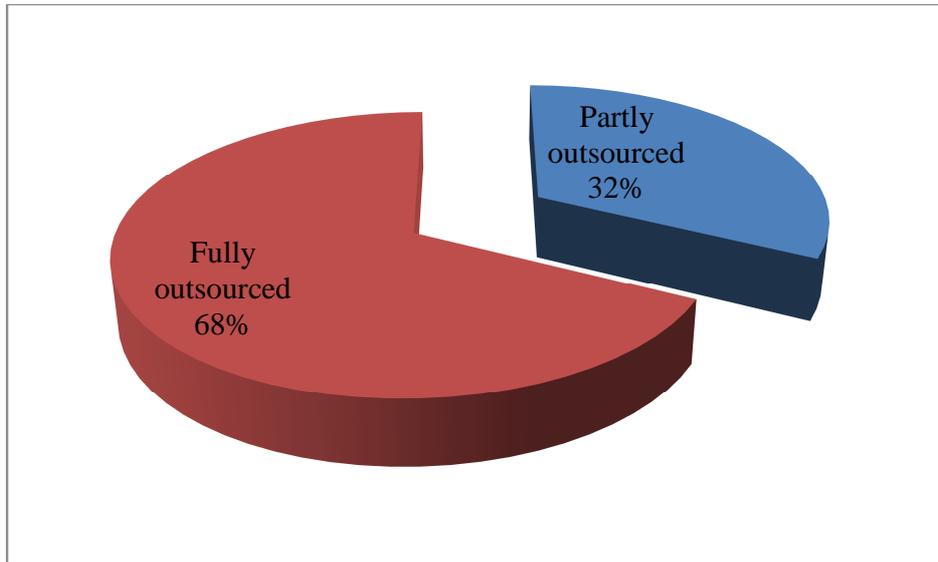


Figure 4.5: Extent of order processing outsourcing

Source: Author 2015

The respondents were asked to respond to a series of questions on order processing outsourcing. The results are presented in table 4.2 below. Majority of the respondents agreed when asked whether their organizations requisition handling services as indicated by 56.9% of the respondents. When asked whether their organizations outsource quotations review activities, 76.9% of the respondents agreed. 72.3% of the respondents indicated that their organizations outsource for local purchase orders drafting and issuance. Further, 80% of the respondents agreed when asked whether their organizations outsource goods receipt and verification. 41.6% of the respondents believed that order processing outsourcing had a positive effect on the performance of their organization.

Table 4.2: Order processing logistics

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My organization outsources requisition handling	1.50%	9.20%	32.30%	41.50%	15.40%
My organization outsources quotations review	0.00%	3.10%	20.00%	33.80%	43.10%
My organization outsources local purchase orders (LPO) drafting and issuance	0.00%	1.50%	26.20%	55.40%	16.90%
My organization subcontracts the receipt and verification of goods	0.00%	0.00%	20.00%	55.40%	24.60%
Order processing outsourcing has positively affected our performance	7.70%	13.80%	36.90%	33.80%	7.70%

Source: Author 2015

4.4.2: Warehousing logistics outsourcing

The study sought to determine the level of warehousing outsourcing in the logistics industry. 80% of the respondents said yes when asked whether their organizations outsourced warehousing logistics. This implies that majority of the logistics companies outsourced warehousing activities.

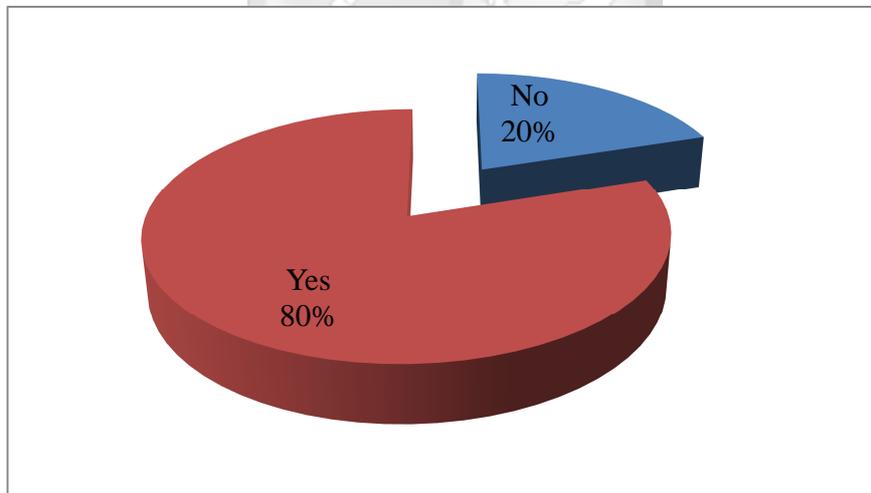


Figure 4.6: Warehousing outsourcing

Source: Author 2015

Majority of the firms that outsourced warehousing logistics did so fully as indicated by 66% of the respondents.

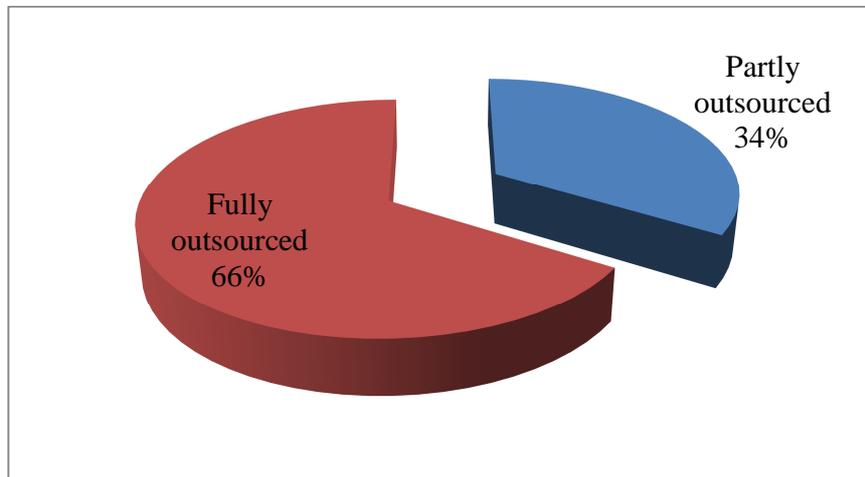


Figure 4.7: Extent warehousing of outsourcing

Source: Author 2015

To ascertain the extent of warehousing logistics outsourcing, respondent were presented with various statements. The results are presented in table 4.3 below. 96.9% of the respondents agreed indicated that their organizations outsourced warehousing stuff. 58.5% indicated that their organizations outsourced data entry while 93.9% indicated that their organizations outsourced stock taking activities. Majority of the logistics companies outsource storage spaces and equipment as evidenced by 69.2% of the respondents who agreed with the statement on whether their organizations subcontracted storage spaces and equipment. The respondents believed that warehousing outsourcing positively affected the performance of their organizations represented by 55.4% of the respondents

Table 4.3: Warehousing logistics

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My organization outsources warehouse staff	0.00%	1.50%	1.50%	41.50%	55.40%
My organization subcontracts data entry	10.80%	23.10%	7.70%	32.30%	26.20%
My organization outsources stock taking	0.00%	3.10%	3.10%	47.70%	46.20%
My organization subcontracts storage spaces and equipment	7.70%	10.80%	12.30%	53.80%	15.40%
Warehousing outsourcing has positively affected our performance	1.50%	16.90%	26.20%	55.40%	0.00%

Source: Author 2015

4.4.3: Packaging logistics outsourcing

The study sought to determine the level of packaging outsourcing in the logistics industry. Majority of the logistics companies had outsourced packaging activities as indicated by 86% of the respondents who said yes.

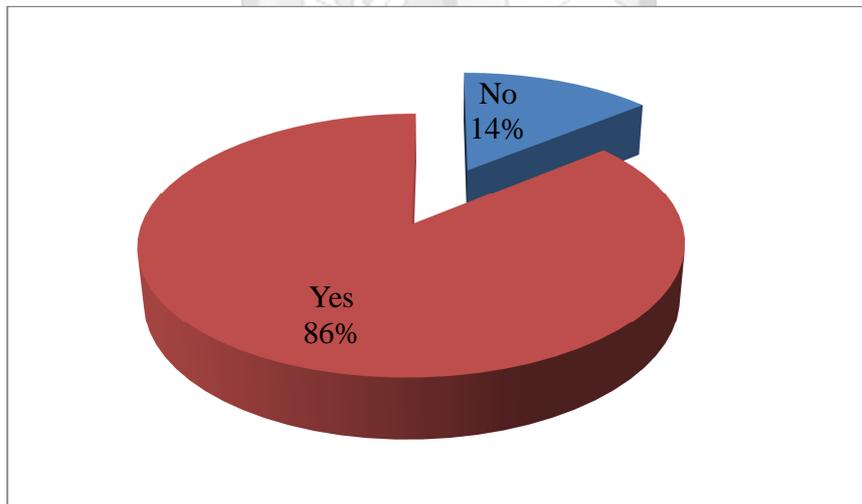


Figure 4.8: Packaging outsourcing

Source: Author 2015

The organizations that outsourced packaging logistics did so fully. This was indicated by 54% of the respondents.

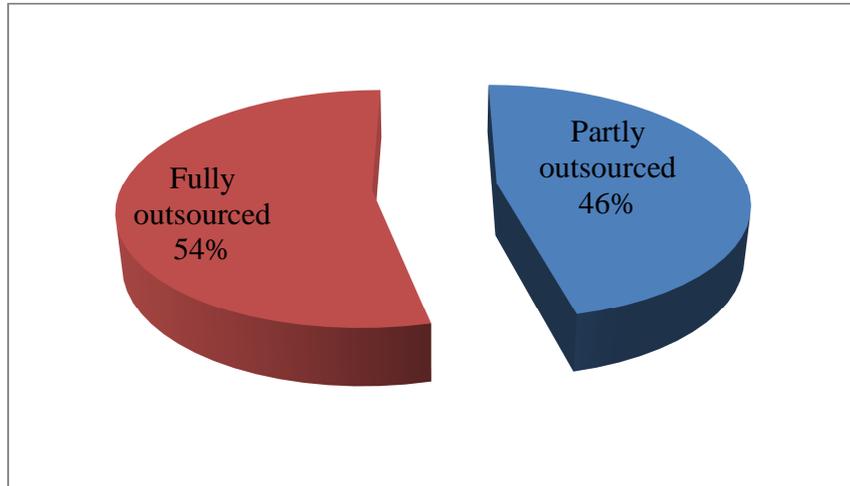


Figure 4.9: Extent of packaging outsourcing

Source: Author 2015

Using a series of statements, the study sought to determine the extent of packaging logistics outsourcing in the logistics industry. Table 4.4 revealed that 76.9% of the respondents agreed with the statement of on whether their organizations outsource packaging logistics. When asked whether their organizations outsource weighing activities, 89.2% of the respondents agreed. Regarding labelling activities, 90.7% of the respondent agreed that their organizations outsourced these activities. Majority of logistics outsource pack designing activities to external parties. This is evidenced by 98.4% of the respondents who agreed with the statement. 70.8% of believed that packaging outsourcing positively affected the performance of their organization.

Table 4.4: Packaging logistics

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My organization outsources sorting activities	1.50%	13.80%	7.70%	36.90%	40.00%
My organization subcontracts weighing activities	7.70%	3.10%	0.00%	53.80%	35.40%
My organization subcontracts labelling activities	3.10%	0.00%	6.20%	81.50%	9.20%
My organization outsources pack designing to external parties	0.00%	0.00%	1.50%	84.60%	13.80%
Packaging outsourcing has positively affected our performance	0.00%	3.10%	26.20%	70.80%	0.00%

Source: Author 2015

4.4.4: Transport logistics outsourcing

The study sought to determine the level of transport outsourcing in the logistics industry. 83% of the respondents said their organizations outsourced transport logistics. This implies that majority of the logistics companies outsourced order processing activities.

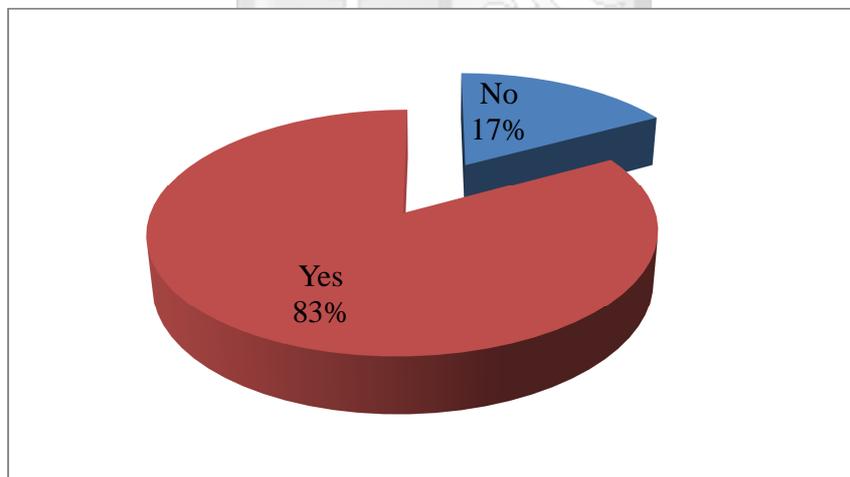


Figure 4.10: Transport outsourcing

Source: Author 2015

Transport logistics was fully outsourced in majority of the organizations that outsourced transport logistics. This evidenced by 55% of the respondents that agreed with the statement.

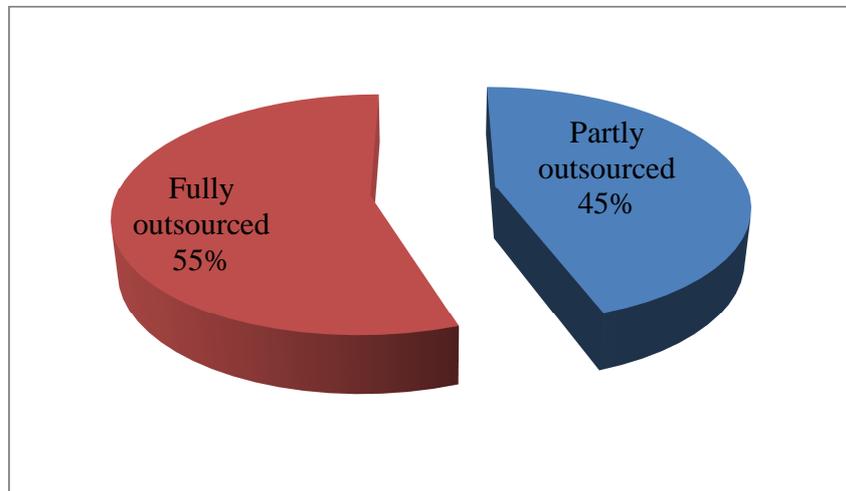


Figure 4.11: Extent of transport outsourcing

Source: Author 2015

Table 4.5 below shows the results on statements that sought to ascertain the extent of transport logistics outsourcing. 66.1% of the respondents indicated that their organizations subcontracted for vehicles used in transport. 86.2% indicated that their organizations outsourced for drivers. When asked whether their organizations outsourced vehicle repairs and maintenance, 98.5% of the respondent agreed. Majority of the respondents indicated that their organizations subcontracted loading and off loading man power as represented by 98.4%. 72.3% of the respondents believed that transport logistics outsourcing had a positive effect on the organization's performance.

Table 4.5: Transport logistics

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My organization subcontracts for transportation vehicles	6.20%	18.50%	9.20%	56.90%	9.20%
My organization outsources drivers	0.00%	10.80%	3.10%	75.40%	10.80%
My organization outsources vehicle repairs and maintenance	0.00%	0.00%	1.50%	43.10%	55.40%
My organization subcontracts loading and offloading man power	0.00%	0.00%	1.50%	53.80%	44.60%
Transport outsourcing has positively affected our performance	3.10%	7.70%	16.90%	43.10%	29.20%

Source: Author 2015

4.4: The effect of outsourcing functions on the performance of the logistics industry

The study sought to establish the effect of outsourcing various functions by logistics companies on the performance of the logistics industry. This section contains correlation analyses between various processes of logistics and performance of the logistics industry.

4.4.1 Pearson's Bivariate Correlation

Bivariate correlation indicates the association between two variables. It ranges from 1 to -1 where 1 indicates a strong positive correlation and a -1 indicates a strong negative correlation and a zero indicates lack of association between the two variables. Pearson's correlation was used to establish the relationship between various constructs of logistics function and performance of the logistics industry.

4.4.1.1: Order processing outsourcing and performance

Pearson's correlation test was conducted to determine the association between order processing outsourcing and performance. The results indicated that there is a moderate positive association between order processing logistics outsourcing and the performance of the logistics industry in Kenya. This is indicated by a correlation coefficient of 0.537. The correlation is significant as evidenced by the p-value of 0.000.

Table 4.6: Order processing outsourcing and performance

		Order processing	Performance
Order processing	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	65	
Performance	Pearson Correlation	.536**	1
	Sig. (2-tailed)	0	
	N	65	70

Source: Author 2015

4.4.1.2: Warehousing outsourcing and performance

Pearson's correlation test was conducted to determine the association between warehousing outsourcing and performance of the logistics industry. The results indicated that there is a strong significant positive association between warehousing logistics outsourcing and the performance of the logistics industry in Kenya. This is indicated by a correlation coefficient of 0.725 and a p-value of 0.000.

Table 4.7: Warehousing outsourcing and performance

		Performance	Warehousing
Performance	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	70	
Warehousing	Pearson Correlation	.725**	1
	Sig. (2-tailed)	0	
	N	65	65

Source: Author 2015

4.4.1.3: Packaging outsourcing and performance

Pearson's correlation test was conducted to determine the association between packaging outsourcing and performance of the logistics industry. The results indicated that there is a weak significant positive association between packaging logistics outsourcing and the performance of

the logistics industry in Kenya. This is indicated by a correlation coefficient of 0.426 and a p-value of 0.000.

Table 4.8: Packaging outsourcing and performance

		Performance	Packaging
Performance	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	70	
Packaging	Pearson Correlation	.426**	1
	Sig. (2-tailed)	0	
	N	65	65

Source: Author 2015

4.4.1.4: Transport outsourcing and performance

Pearson's correlation test was conducted to determine the association between transport outsourcing and performance of the logistics industry. The results indicated that there is a strong significant positive association between warehousing logistics outsourcing and the performance of the logistics industry in Kenya. This is indicated by a correlation coefficient of 0.682 and a p-value of 0.000.

Table 4.9: Transport outsourcing and performance

		Performance	Transport
Performance	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	70	
Transport	Pearson Correlation	.682**	1
	Sig. (2-tailed)	0	
	N	65	65

Source: Author 2015

4.5 Best practices for outsourcing functions

Regression analysis was undertaken to recommend best practices for outsourcing in the logistics industry.

Diagnostic tests

Multicollinearity results

The rule of the thumb in testing for correlation is that a correlation of more than 0.8 is an indicator of serious multicollinearity (Gliem and Gliem, 2003). The correlation between the processes of logistics were less than 0.8, hence multicollinearity was not a serious problem for this.

Normality tests

Normality tests are designed to determine the asymmetry of the probability distribution of random variable about its mean (GoodData, 2007). The skewness value of -1.366 indicates that the data is moderately normally distributed (Stein, 1981).

Table 4.10: Normality tests

Measure	Value
Skewness	-1.366
Kurtosis	1.221
Std. Error of Kurtosis	0.566

Source: Author 2015

Regression results

Table 4.10 displays the regression output of the predictor variables. Results indicate that three of the four of the variables are statistically significant. The beta coefficient indicates the direction and degree of influence of the predictor variable on the dependent variable. A beta coefficient of 0.524 of order processing outsourcing means that a unit change in order processing outsourcing

leads to a change in the performance of the logistics industry by 0.524. A unit increase in warehousing logistics outsourcing leads to an increase in the performance of the logistics industry by 0.700. It also follows that a unit increase in transport logistics outsourcing leads to a positive change by 0.769 in the performance of the logistics industry. Order processing, warehousing and transport logistics outsourcing have a statistically significant effect on the performance of the logistics industry. This is evidenced by their p values ($p < 0.05$).

Table 4.11: Regression Coefficients

	Beta	Std. Error	t	Sig.
Constant)	-4.298	0.858	-5.01	0.000
Order processing	0.524	0.177	2.959	0.004
Warehousing	0.700	0.141	4.957	0.000
Packaging	0.138	0.193	0.715	0.477
Transport	0.769	0.204	3.769	0.000

Source: Author 2015

Outsourcing best practices

Logistics industry performance = $-4.298 + 0.524$ Order processing outsourcing + 0.700 Warehousing outsourcing + 0.769 Transport outsourcing

Table 4.12 shows the model goodness of fit. The model goodness of fit indicates the overall influence of the predictor variable on the dependent variable. The results indicate that the regression model goodness of fit was satisfactory. This is supported by a composite strong and positive correlation of 0.835 and a coefficient of determination (R Square) of 0.697. This means that the predictor variables of the study can explain at least 69.7% of the variation in performance of the logistics industry. The standard error of estimate (0.45657) is negligible which shows that the sample is a close representative of the study population.

Table 4.12: Model goodness of fit

Indicator	Coefficient
R	0.835
R Square	0.697
Adjusted R Square	0.676
Std. Error of the Estimate	0.45657

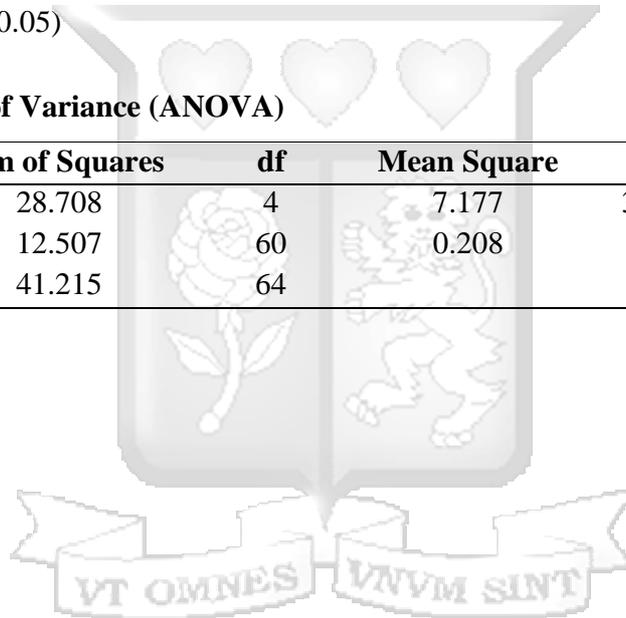
Source: Author 2015

Analysis of Variance (ANOVA) indicates the combined effect of the predictor variables on the dependent variable. Table 4.13 shows that the predictor variables significantly influence the dependent variable ($p < 0.05$)

Table 4.13: Analysis of Variance (ANOVA)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	28.708	4	7.177	34.429	.000
Residual	12.507	60	0.208		
Total	41.215	64			

Source: Author 2015



CHAPTER 5: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter deals with the summary of the findings, the recommendations of the study, the conclusions, suggested areas of further research and the study limitations.

5.2 Summary of Findings

The general objective of this study was to establish the effect of outsourcing on the performance of logistics industry in Kenya.

The study findings revealed that 53% of logistics companies are franchises owned by multinational companies, 46% are privately owned only while only 1% are public- listed at the Nairobi Securities Exchange. Consequently, 53% operate in more than one country, 29% operate in all parts of the country while 18% operate only in some parts of the country. Majority of the logistics companies undertake transport logistics as represented by 43%, 33% engage in warehousing logistics, 17% in packaging logistics and only 7% engage in order processing logistics.

Majority of the respondents agreed that their organizations outsourced order processing logistics. Of those that agreed, most indicated that their organizations partially outsourced the activities. Most organizations outsource requisition handling, quotations review, LPO drafting and issuance as well as receipt and verification of goods ordered. Most of the respondents also agreed that order processing outsourcing had a positive effect on the performance of their organization.

Results indicate that most of the respondents agreed that their organizations outsourced warehousing logistics but only partially. They agreed that their organizations outsourced warehouse staff, data entry, stock taking and leased storage spaces and equipment. Most of the respondents also agreed that warehousing outsourcing had a positive effect on the performance of their organization.

According to the study, most logistics companies outsourced packaging but only partially. The respondents agreed that their organizations outsourced sorting, weighing, labelling and pack design activities. They also indicated that outsourcing packaging logistics had a positive effect on the performance of their organization.

Findings indicate that logistics companies outsource transport logistics but not fully. Responds agreed that their organizations outsourced transportation vehicles, drivers, loaders and off loaders. They also believed that outsourcing transport logistics had a positive effect on the performance of their organizations.

5.3 Discussion of Findings

This section presents the discussion of the key findings of the study based on the already reported research questions.

5.3.1: Functions outsourced by logistics industry

The first objective of the study was to establish the processes outsourced by the logistics industry in Kenya. Results revealed that 56.9% of the respondents agreed that their organizations outsourced requisition handling; 76.9% agreed that their organizations outsourced quotation review activities; 72.3% agreed that that their organizations outsourced local purchase orders drafting and issuance; 80% of the respondents agreed that their organizations outsourced goods receipt and verification. 41.6% of the respondents believed that order processing outsourcing had a positive effect on the performance of their organization. Collins (2007), however, found that many organizations are reluctant in outsourcing procurement activities for fear of losing control and for perceived business risk.

Results revealed that 96.9% of the respondents agreed that their organizations outsourced warehousing staff; 58.5% agreed that their organizations outsourced data entry; 93.9% agreed that that their organizations outsourced stock taking activities; 69.2% of the respondents agreed that their organizations outsourced storage spaces and equipment. 55.4% of the respondents believed that warehousing outsourcing had a positive effect on the performance of their

organization. These findings are in agreement with those of Mulama (2012) who found that manufacturing firms outsourced warehousing services to optimize freight and in turn, achieve cost savings without reducing service levels to customers. According to the study outsourcing warehousing services resulted in good housekeeping activities. Maltz and Elram (1999) in investigating economic and strategic considerations in outsourcing warehousing found that the likelihood of outsourcing increased with firm size.

Results revealed that 76.9% of the respondents agreed that their organizations outsourced sorting activities; 89.2% agreed that their organizations outsourced weighing activities; 90.7% agreed that that their organizations outsourced labelling activities; 98.4% of the respondents agreed that their organizations outsourced pack designing activities. 41.6% of the respondents believed that packaging logistics outsourcing had a positive effect on the performance of their organization. Singh et al. (2011) indicated that organizations outsource packaging components, such as bottle closures, pressure sensitive labels, strapping, pallets and reusable crates in bottle based milk packaging.

Results revealed that 66.1% of the respondents agreed that their organizations outsourced transport vehicles; 86.2% agreed that their organizations outsourced drivers; 98.5% agreed that that their organizations outsourced vehicle repairs and maintenance; 98.4% of the respondents agreed that their organizations outsourced loading and offloading man power. 72.3% of the respondents believed that transport logistics outsourcing had a positive effect on the performance of their organization. Wafula (2014) in investigating transport outsourcing in private school in Kitengela and Kajiado found that the schools were reluctant in outsourcing transport activities. They perceived outsourcing as risky and that it would raise their operational costs, inconsistent and that they would lose control.

5.3.2: Effect of outsourcing on the performance of the logistics industry

The second objective of the study was to establish the effect of outsourcing on the performance of the logistics industry in Kenya. Pearson's correlation and regression analysis was conducted

between order processing outsourcing, warehousing outsourcing, packaging outsourcing and transport outsourcing logistics on the performance of the logistics industry.

Pearson's correlation indicated a positive significant association between order processing logistics outsourcing and the performance of the logistics industry in Kenya. The results were further backed by the regression analysis that indicated a statistically significant relationship between order processing logistics outsourcing and the performance of the logistics industry. These findings agree with those of Lieb et al. (1996) who found out that there are many companies that offer purchasing functions implying that there are also many firms that prefer to outsource order processing functions. The findings are further supported by those of Magutu et al. (2014) who found that outsourcing procurement practices resulted in maintenance of effective information delivery with suppliers of services and products; transparent sourcing of suppliers; maintenance of good supplier relations and benchmarking to determine whether the company meets targets.

Pearson's correlation revealed that there exist a positive significant association between warehousing logistics outsourcing and the performance of the logistics industry in Kenya. The results were further backed by the regression analysis that indicated a statistically significant relationship between warehousing logistics outsourcing and the performance of the logistics industry. These findings are in line with the arguments of Magutu et al., (2013) who said outsourcing warehouse management results in good housekeeping practices, proper receipt procedures, less damage to commodities due to proper storage and staff welfare has been achieved due to implementation of health and safety. This in turn results in more efficient warehouses and improved performance.

Pearson's correlation indicated there exists a positive significant association between packaging logistics outsourcing and the performance of the logistics industry in Kenya. However, the regression analysis that indicated a statistically significant relationship does not between packaging logistics outsourcing and the performance of the logistics industry. The findings concur with those of Kinyanjui (2014) who found that organizations outsourced packaging of finished goods in outsourced warehouses.

Pearson's correlation indicated that there exists a positive significant association between transport logistics outsourcing and the performance of the logistics industry in Kenya. The results were further backed by the regression analysis that indicated a statistically significant relationship between transport logistics outsourcing and the performance of the logistics industry. These findings are in line with those Magutu et al. (2013) who found that outsourcing management enabled the firms to optimize freight and in turn, achieve cost savings without reducing service levels to customers.

5.3.3 Best practices in outsourcing

Regression analysis indicated that order processing, warehousing and transport outsourcing significantly influenced the performance of the logistics industry. They recommended structure for outsourcing was found to be as follows:

Logistics industry performance = $-4.298 + 0.524$ Order processing outsourcing + 0.700 Warehousing outsourcing + 0.769 Transport outsourcing

The study proposes outsourcing of the three processes concurrently as opposed to in isolation. Gathe and Hulthen (2009) recommend a holistic approach when outsourcing to improve performance. Lau and Zhang (2006) recommend that firms should take to account economic and strategic implications of their outsourcing decisions for optimal results. According to the study, outsourcing decisions should be fully integrated to the business planning process to achieve long term success.

5.4 Conclusion

The study made the following conclusion based on the key findings:

The study arrived at the conclusion that most logistics companies in Kenya outsource order processing activities but partially. The most outsourced component of order processing logistics was goods receipt and verification. The least outsourced component was requisitions handling.

The study also concluded that order processing had a significant positive effect on the performance of the logistics industry in Kenya.

The study also led to the conclusion that logistics companies outsourced warehousing logistics partially. Warehouse staff and stock taking activities were the most outsourced activities. Data entry activities were the least outsourced component of warehousing logistics. The study arrived at the conclusion that outsourcing warehousing logistics had a positive effect on the performance of the logistics industry.

The study also led to the conclusion that packaging logistics, albeit partially, were outsourced by logistics companies in Kenya. The most outsourced component of packaging logistics was pack design activities while the least outsourced component was sorting activities. Packaging logistics outsourcing did not have a significant effect on the performance of the logistics industry in Kenya.

The study also arrived at the conclusion that logistics companies outsourced transport activities albeit partially. The most outsourced activities included drivers as well as loading and offloading man power. The least outsourced component of transport logistics was transport vehicles. It's also noteworthy that the logistics industry is dominated by transport logistics. Transport logistics outsourcing had a significant positive effect on the performance of the logistics industry in Kenya.

The study finally arrived at the conclusion that logistics companies should outsource order processing warehousing and transport simultaneously and not in isolation for optimal results.

5.5 Recommendations

This study recommends the following measures to ensure continued improvement in the logistics industry as a result of logistics outsourcing: the top management of logistics companies should be in the forefront in support of business by increasing the extent of outsourcing since this would spur the performance of the companies by enabling them to concentrate on the activities they have that they have the capability of doing well and outsourcing the functions that other firms or individuals can do for them better than themselves.

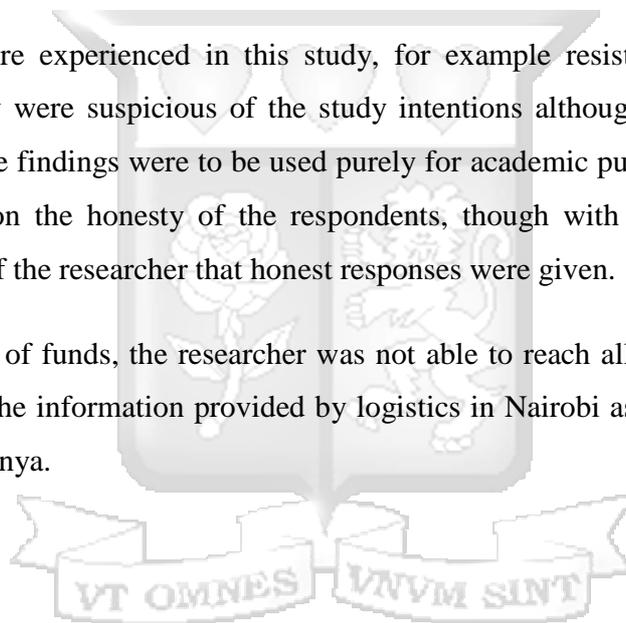
The study further recommends that the logistics companies in Kenya should endeavor to fully understand the risks involved in logistics outsourcing as a means of enabling them to come up with strategies aimed at improving the overall logistics industry performance.

The study also recommends that the management of the manufacturing firms should carry out a benchmarking activity against the best players in the market as a way of improving their logistics outsourcing practices. This would enable them to achieve undisputed performance of their supply chains

5.6 Limitations of the Study

Several limitations were experienced in this study, for example resistance from respondents primarily because they were suspicious of the study intentions although they were assured of their anonymity and the findings were to be used purely for academic purposes. The accuracy of the results depended on the honesty of the respondents, though with the assurance given to officers it is the hope of the researcher that honest responses were given.

Due to the inadequacy of funds, the researcher was not able to reach all logistics in Kenya and was forced to rely on the information provided by logistics in Nairobi as a representative of the logistics industry in Kenya.



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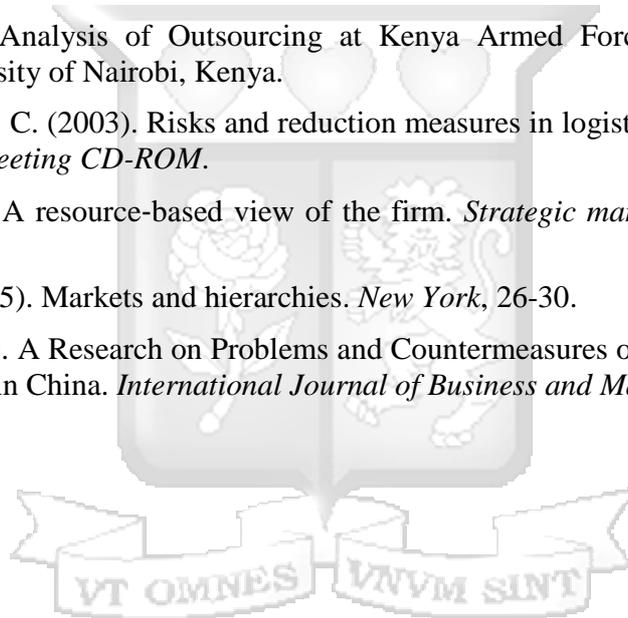
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APPENDICES

APPENDIX I: RESEARCH QUESTIONNAIRE

Section A: Organizational profile

1. Name.....

2. Ownership type

a) Public

b) Private

c) Multinational

3. Areas the organization operates in

a. Part of the country

b. All parts of the country

c. Many countries

4. Which of the following would best describe your core activity?

a) Order processing logistics

b) Warehousing logistics

c) Packaging logistics

d) Transport logistics

Section B: Extent of outsourcing in the logistics industry

i. Order processing outsourcing

2 Has the activity above been undertaken/subcontracted to an external party?

a) Yes

b) No

3 If yes, to what extent was the activity outsourced?

Fully undertaken by an external party

Partially Outsourced

4 Please indicate your agreement or otherwise with the following statements using the following likert scale. **Key: 1=strongly disagree, 2= disagree; 3=neutral; 4= agree; 5= strongly agree**

No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	My organization outsources requisition handling					
2	My organization outsources quotations review					
3	My organization outsources local purchase orders (LPO) drafting and issuance					
4	My organization subcontracts the receipt and verification of goods					
5	Order processing outsourcing has positively affected our performance					

ii. Order warehousing outsourcing

5 Have any of these activities been undertaken/subcontracted to an external party?

c) Yes

d) No

6 If yes, to what extent was the activity outsourced?

Fully undertaken by an external party

Partially Outsourced

7 Please indicate your agreement or otherwise with the following statements using the following likert scale. **Key: 1=strongly disagree, 2= disagree; 3=neutral; 4= agree; 5= strongly agree**

No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	My organization outsources warehouse staff					
2	My organization subcontracts data entry					
3	My organization outsources stock taking					
4	My organization subcontracts storage spaces and equipment					
5	Warehousing outsourcing has positively affected our performance					

iii. packaging outsourcing

8 Have any of these activities been undertaken/subcontracted to an external party?

e) Yes

f) No

9 If yes, to what extent was the activity outsourced?

Fully undertaken by an external party

Partially Outsourced

10 Please indicate your agreement or otherwise with the following statements using the following likert scale. **Key: 1=strongly disagree, 2= disagree; 3=neutral; 4= agree; 5= strongly agree**

No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	My organization outsources sorting activities					
2	My organization subcontracts weighing activities					
3	My organization subcontracts labelling activities					
4	My organization outsources pack designing to external parties					
5	Packaging outsourcing has positively affected our performance					

iv. transport outsourcing

11 Have any of these activities been undertaken internally or by an external party?

g) Yes

h) No

12 If yes, to what extent was the activity outsourced?

Fully undertaken by an external party

Partially Outsourced

13 Please indicate your agreement or otherwise with the following statements using the following likert scale. **Key: 1=strongly disagree, 2= disagree; 3=neutral; 4= agree; 5= strongly agree**

No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	My organization subcontracts for transportation vehicles					
2	My organization outsources drivers					
3	My organization outsources vehicle repairs and maintenance					
4	My organization subcontracts loading and offloading man power					
5	Transport outsourcing has positively affected our performance					

Section F: Effect of outsourcing on the performance of the logistics industry

This section aims at exploring performance of the logistics industry in Kenya. Please indicate your agreement or otherwise with the following statements using the following likert scale. **Key: 1=strongly disagree, 2= disagree; 3=neutral; 4= agree; 5= strongly agree**

No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	My firm profitability has increased over the last five years due to outsourcing					
2	My customer service has increased owing to outsourcing					
3	My firm has experienced a reduction in employee turnover in the recent past					
4	My organization has experienced improved processes due to outsourcing					

APPENDIX II: LOGISTICS COMPANIES IN KENYA

- 1 Abaadila Enterprises Ltd
- 2 ABA Freight Logistics
- 3 Abexims Freight Masters Ltd
- 4 Absolute Freight Services and Logistics Ltd.
- 5 Acacia Systems Ltd
- 6 Access Shipping & Logistics Ltd
- 7 Action Business Systems Ltd
- 8 Action Freight Ltd.
- 9 Active Line Ltd
- 10 Act Kenya Agencies
- 11 Adair Cargo Services Ltd
- 12 Adex Kenya Ltd
- 13 Aditest Agencies
- 14 Advent Logistics Services
- 15 Aela Co Ltd
- 16 Aero Marine Cargo Services Ltd
- 17 Aeromarine Logistics(K) Ltd
- 18 Aeropath Kenya Ltd
- 19 Aerospace Consortium
- 20 African Salihiya Cargo & Clearing Ltd
- 21 Afri Global Ltd
- 22 Afrilog Ltd
- 23 Afrique Freight Services Ltd
- 24 Afro Freight Forwarders Ltd
- 25 Afrofreight Forwarders Ltd
- 26 Afro Sea Link (K) Ltd
- 27 Agility Logistics
- 28 Agility Logistics Ltd
- 29 Ahero Freight Forwarders
- 30 Aircom Cargo Logistics Ltd
- 31 Air Maritime (K) Ltd
- 32 Airspeed Cargo Services Ltd
- 33 Airwings Ltd
- 34 Akarim Agencies Co Ltd
- 35 Akiba Air Cargo Ltd
- 36 Al-Afif Global Agencies
- 37 Al-Ashraf Trading Co Ltd

38	Alexandria FF Ltd
39	Al Heelam Clearing and Forwarding
40	Al Heelam Travel/Tours Ltd
41	Alitgan Clearing & Forwarding
42	Al-Itgan Clearing & Forwarding Co Ltd
43	Alkasum Freighters
44	Allcliff Agencies
45	Alliance Cargo Forwarders Ltd
46	Alliance Logistics Centre
47	Allports Forwarders Ltd
48	Al-Mubarak Forwarders
49	Almug (K) Ltd
50	Aloys & Roy Freight Systems Co Ltd
51	Alpha Logistics (K) Ltd
52	Alpine Swift Services (K) Ltd
53	Al – Sea Forwarders
54	Alvine Forwarders Co Ltd
55	Amal Freighters & Forwarders Ltd
56	Amazon Freight Ltd
57	Ameritrans Freight International Ltd
58	Amer Traders Ltd
59	Ammona forwarders
60	Ammona Forwarders Limited
61	Andy Forwarders Services
62	Andy Forwarders Services Ltd
63	Ankester Logistics Limited
64	Annoited Freighters
65	Anthill Freight Ltd
66	Anytime Clearing & Forwarding
67	Aquaero Cargo Co Ltd
68	Archon Marine Shipping and Logistics Ltd
69	Arepro Logistics Ltd
70	Armstrong Clearing & Forwarding Agency Ltd
71	Aro Cargo Clearing & Forwarding
72	Around The World Merchandise
73	Asfaw Trading Co Ltd
74	Asiafrique Logistics
75	Ask Cargo Ltd

76	Associated lines ltd
77	Australian Unitech Freighters (K) Ltd
78	Azusa Ltd
79	Bahari Forwarders Ltd
80	Bajaber Freighters Ltd
81	Bakriz Holdings Ltd
82	Baphilda Kenya Ltd
83	Bario Exim Services
84	Bayland Freight Agencies
85	Beacon Movers Kenya Ltd
86	Beacon Movers (K) Ltd
87	Beana Trade Agents
88	Beeline Enterprises Ltd
89	Bemacy Freighters Ltd
90	Bemm Importers & Exporters Ltd
91	BenAfrica Kenya Ltd
92	Beneli Freighters Limited
93	Benjo Cargo Services
94	Benlloyd Holdings Ltd
95	Bestfast Cargo (K) Ltd
96	Bestfreight Conveyors Ltd
97	Best Freighters Ltd
98	Bestlines Express (K) Ltd
99	Better Best Services Ltd
100	Beyond Africa Freighters Ltd
101	Bigmack Agency
102	Bikha Agencies Ltd
103	Bin Zain Logistics Ltd
104	Blaze Cargo Ltd
105	Bluewave Logistics Services Ltd
106	Bluewave LogisticsServices Ltd
107	Bolfa Cargo Logistics Ltd
108	Bondeni Kaya Ltd
109	Bonfide C & F Co Ltd
110	Bonne Freight Ltd
111	Borborei Freighters Ltd
112	Borderlink Agencies
113	Bosco Group of Companies



- 114 Bosmac Clearing & Forwarding
- 115 Box Clever (K) Ltd
- 116 Bretty Agencies Ltd
- 117 Bright & Best Ltd
- 118 Bright Field Cargo Ltd
- 119 Brightways Air Services Ltd
- 120 Bristish Airways World Cargo
- 121 Brits Freighters Ltd
- 122 Broadfields Ltd
- 123 Broadway Express
- 124 B T A Bigtimer Agencies Ltd
- 125 Call Fast Services Ltd
- 126 Call Fast Services Ltd
- 127 Calofrona Clearing & Forwarding
- 128 Care Freight Clearing
- 129 Cargill Kenya Ltd
- 130 Cargo Commercial Winds
- 131 Cargolux (Kenya) Ltd
- 132 Cargomart Ltd
- 133 Cargostars Kenya Limited
- 134 Cargo World Aviation Ltd
- 135 Casements (A) Ltd
- 136 Castle Freight Co Ltd
- 137 Catesam Enterprises
- 138 C B F Ltd
- 139 Certis Co Ltd
- 140 Chada Freight
- 141 Chaiso Agencies Ltd
- 142 Challenger Cargo Carriers Ltd
- 143 Channel Enterprises Ltd
- 144 Chapet Cargo Services
- 145 Charities Logistics Ltd
- 146 Charmael Freighters
- 147 Chasefast Logistics Ltd
- 148 Chershire Freight Ltd
- 149 Chorua Co Ltd
- 150 Chris Cargo Handling
- 151 Chromel Freighters Ltd



152	Cien Freight Forwarders Ltd
153	Circle Freight Services
154	Circlelines Agency Ltd
155	Citizen Clearing
156	City Cartech Enterprises
157	Clamexim Company Ltd
158	Clearing & Forwarding Agencies
159	Clearing Master
160	Clearpack Freight Services Ltd
161	Clever (K) Ltd
162	Clique Agencies Ltd
163	CMA CGM Kenya Ltd
164	Coastal Clearing Co
165	COIMEX S.A.R.L
166	Collect Handling Services Ltd
167	Commercial Forwarders Ltd
168	Concise Freighters Limited
169	Condor Maritime Services (K) Ltd
170	Conken Cargo Forwarding Ltd
171	Consolidated Warehouses Ltd
172	Contilogic Forwarders Ltd
173	Continental Logistics Network Ltd
174	Conventional Cargo Conveyors Ltd
175	Conventional Cargo Conveyors Ltd
176	Corner Garage Transport Ltd
177	Cornerstone Limited
178	Cornwall Traders
179	Corporate Aviation Ltd
180	Cosag Trading Co Ltd
181	Creative Freight Handling Ltd
182	Crescent Transportation Co Ltd
183	Crossland
184	Cross Ocean Ltd
185	Crystal Freight Ltd
186	CYKA Shipping & Logistics (EA) Ltd
187	Daima Cargo Forwarders Ltd
188	Dalex freighters ltd
189	Dallas Holdings Ltd



190	Dalsan Freighters Ltd
191	Dart Express Kenya (PVT) Ltd
192	Daveair Carriers Ltd
193	DB Schenker
194	DB Schenker
195	Dean Logistics Ltd
196	Dear Cargo Forwarders Ltd
197	Decoship Services Ltd
198	Deepmark Cargo
199	Dejas Enterprises Ltd
200	Demael Enterprises
201	Destiny Cargo Handling Ltd
202	Deugro East Africa Ltd
203	Development Initiative, The (TDI)
204	DHL Global Forwarding (K) Ltd
205	Diamond Acres Ltd
206	Difam Freight (K) Ltd
207	Digeta Agencies Ltd
208	Dilole Enterprises
209	Diverse Cargo Marine Air C & F Service
210	Dock Suppliers
211	Dolphin Cargo Ltd
212	Dominion Freight (Kenya) Ltd
213	Donwell Technical Services Ltd
214	Doric Enterprises Ltd
215	Duke International Ltd
216	Dunguni Agencies
217	Duniya Forwarders
218	Dynamic Cargo – Link International
219	Dynamic Cargo – Link International
220	Eagles General Enterprises
221	Earth Link Freighters Ltd
222	East African Express Ltd
223	Eastern Global Ltd
224	Echken Agencies
225	Economic Carriers Ltd
226	Edga Services Ltd
227	Eldocon Forwarders Ltd



- 228 Eldom Shippers Ltd
229 Elimara Cargo Freighters
230 Elka Cargo (K) Ltd
231 Ellite Freight Forwarders Ltd
232 Emasa Kenya Clearing & Forwarding Ltd
233 Emeraldfreight International Limited
234 Em-Lel Freight Forwarders
235 Emmarn Ltd
236 Endip Freighters Co Ltd
237 Enfiel Forwarders Ltd
238 Epic Freight Ltd
239 Equatorial Cargo Services
240 Eremo Stores Ltd
241 Eridos Company
242 Esidende Freight Agency
243 Eston Cargo Links
244 Etako Freighters Ltd
245 Eurasian Freight Forwarders
246 Eurolink Services Ltd
247 Everlast Enterprises Ltd
248 Export Consolidation Services (K) Ltd
249 Express Kenya Ltd
250 Express Kenya Ltd
251 Faيدا Cargo Services Ltd
252 Faima Ventures Ltd
253 Fairways Consolidators Ltd
254 Family Priorities Ltd
255 Famo Forwarders Ltd
256 Fast Freight Services Ltd
257 Fastlane Logistics Systems Ltd
258 Fastnet Ltd
259 Federal Freight & Transport Inc
260 Feederlink Logistics Ltd
261 Femco International Ltd
262 Filiken Transit Forwarders Ltd
263 Filmline Ltd
264 Finavest Enterprises
265 First Africa Freight Conveyors Ltd (FAFCO)

266	Flamingo House Holdings Co
267	Flightnet Forwarders
268	Fliway Kenya Ltd
269	Floatways Forwarders
270	Focus Initiative Import & Export Co. Ltd
271	Forester Forwarders Ltd
272	forrester forwarders
273	Four Angels Forwarders Ltd
274	Franato Enterprises Ltd
275	Frank General Agencies
276	Free States Enterprise Ltd
277	Freetrade Enterprises Ltd
278	Freightcare Logistics Ltd
279	Freight Care Ltd
280	Freight Dispatchers & Forwarding Ltd
281	Freight Forwarders Kenya Ltd
282	Freight Logistics
283	Freight Point Ltd
284	Freight & Transporters
285	Freightways Agencies Ltd
286	Freightways Mombasa Ltd
287	FreightWell Express Ltd
288	Freightwings Cargo Systems Ltd
289	Fringerhot Enterprises
290	Frontline Cargo Ltd
291	Full Circle Clearing & Forwarding
292	Future Freight Co Ltd
293	Futureline Freight Forwarders Clearing & Forwa
294	F Y Simba Shipping Agents
295	Gaeva Services
296	Galactic Ltd
297	Gamma Villa Ltd
298	Geeways Ltd
299	Geke Enterprises Ltd
300	Gem Logistics Ltd
301	Gemwil International Ltd
302	General Cargo Services Ltd
303	General Freighters Ltd

304	Genius Clearing & Forwarding Co Ltd
305	Genuine Movers E A Ltd
306	Geoanne Enterprises Ltd
307	Geomar Agencies
308	Geomiko Agencies
309	Geoque Techtrade Services
310	Georine Agencies Ltd
311	Georman Cargo Services Ltd
312	Geotrade Ltd
313	Get Way Clearing Hse Ltd
314	Gilfreight Cargo Services Ltd
315	Gimbco Freight Ltd
316	Global Freight Logistics Ltd (formerly MarkFirst Kenya Ltd)
317	Global Merc East Africa Ltd
318	Global Nvocc Lines Ltd
319	Global Traders Ltd
320	Globeflight Worldwide Express (K) Limited
321	Globeflight Worldwide Express (K) Limited
322	Globe Forwarders Ltd
323	Globus Freighters Ltd
324	Globus Freighters Ltd
325	G M & Nazareth Ltd
326	Goal Clearing & Forwarding
327	Goal Clearing & Forwarding
328	Goemwa Cargo Services
329	Goemwa Cargo Services
330	Golden Gulf Forwarders Ltd
331	Golden Gulf Forwarders Ltd
332	Golden Ray Freighters Ltd
333	Golden Sea Jewellers
334	Golden West Forwarders Ltd
335	Goldmark International Co Ltd
336	Gold Well Forwarders
337	Gold Well Forwarders
338	Goodrich Trading Co Ltd
339	Goodwinds (M F R T F) Ltd
340	Gordhandas Dharamshi & Bros Ltd
341	Goshen INTL Ltd

342 Grainbulk Hauliers Ltd
343 Great Lakes Auto Tech Int'l Ltd-Greatlakes Group
344 Greatspan Maritime Services Ltd
345 Ground Logistics Ltd
346 Gulf Stream Investments Ltd
347 HABO AGENCIES LTD
348 Habo Group Of Companies
349 Hambufreight Services Ltd
350 Harbour Help (K) Ltd
351 Harvard Trading Co Ltd
352 Hasa Agencies
353 Hasmad Cargo Ltd
354 Haste Line Clearing & Forwarding Ltd
355 Hatimy Group Ltd
356 Hazaline Import & Export Ltd
357 Hellmann Worldwide Logistics
358 H H Mody & Co Ltd
359 Highlands Forwarders Ltd
360 Highlands Fowarders Ltd
361 High Tech Freight Movers Ltd
362 Hollywood Freight Agencies
363 Homebase Enterprises Co Ltd
364 Homeline Consolidation Services Ltd
365 Homenet Clearing & Forwarding Logistics Limited
366 Horiken Freighters
367 Horizon (KENYA) Express Ltd
368 I A Barkadle Enterprises Ltd
369 Ichiban Freighters Ltd
370 IFRA Services Ltd
371 Ilongo Agencies Ltd
372 IMA (Kenya) Ltd
373 I M C L
374 Imprex Freight Ltd
375 Inland Services
376 Insight Cargo Ltd
377 Instra Ship Clearing & Forwarding
378 Intelligent Logistics Solutions Ltd
379 Interborder Express Agencies

380 Interocean (EA) Ltd
381 Interworld Freight Consultants
382 Intra Speed Ltd
383 Iris Forwarders Ltd
384 Island Freighters Ltd
385 Isom Agencies Ltd
386 Ital Afri Investments Ltd
387 Itarome Agencies Ltd
388 Jim Cab Services – Just In A Minute Cab
389 Keihin Maritime Services Ltd
390 Kenkal Ship & General Contractors Ltd
391 Kenkal Ship & General Contractors Ltd
392 Kenomar International Ltd
393 Kensco Business Solutions Ltd
394 Kenscope Shipping Company Ltd
395 Kenshade Trading Agencies Ltd
396 Kentur Clearing & Forwarding Ltd
397 Kenuga Enterprises
398 Kenya Cargo Handling Services Ltd
399 Kenya Haulage Agency Ltd
400 Kesomfreight International Ltd
401 Kesomfreight International Ltd
402 Kwanjeteka Enterprises
403 Kyales Investments
404 Lagtec Ltd
405 Lake Trawling Co Ltd
406 Land Bridge Freighters
407 Lanhydrock Enterprises
408 Lantern Freight Ltd
409 Laureate Cargo Expeditors
410 Leighnicks Company Limited
411 Leinads Cargo Ltd
412 Lemco Freight Forwarders Ltd
413 Lesh-La Investment Ltd
414 Liberty Freighters Ltd
415 Libet Forwarders (K) Ltd
416 Libra Express Cargo
417 Lidan Enterprises Ltd

418 Lifeline Ltd
419 Lifeline Ltd
420 Limutti Holdings Ltd
421 Linfield Institute
422 Lions Export & Import Agency Ltd
423 Lit Logistics Systems
424 Little King Bookshop
425 Livercot Impex Ltd
426 Lloyd Cruise International Limited
427 Lloyd Cruise International Limited
428 Lockwell Merchandise Ltd
429 Logistic Freight
430 Logistics Centre Services
431 Low Sea International Agencies
432 Luckam Freight Services
433 Lulu Ltd
434 Lyndalian Airfreighters & Fowarders Ltd
435 Lyndalian Airfreighters & Fowarders Ltd
436 Maalox Agencies Ltd
437 Macfreight Forwarders Co
438 Machews Providers
439 Magot Freight Services
440 Mainkam Ltd
441 Mairika Ltd
442 Makclears Forwarders
443 Makion Cargo Forwarders
444 Maksam Pioneer Services Ltd
445 Malford Courier Services
446 Malindi Freight Link-Up Ltd
447 Mamaja Afrique International Ltd
448 Mamba Trade Links Service Station
449 Maps Investments Services Ltd
450 Maraca Enterprises
451 Mara Shabba (K) Ltd
452 Marflo Freight Forwarders Ltd
453 Marger Transnational Ltd
454 Master Conveyors Ltd
455 Masud Mwinyi Hijja



456 Matrix Freight Logistic
457 Matsingberg Clearing & Forwarding Agencies Co
458 Maua Clearing and Forwarding Agency Co Ltd
459 Mayoo JN Enterprises Ltd
460 Mbamuls Freight Services
461 Mbeji General Agencies
462 Mecasor (K) Ltd
463 Mechanised Cargo Systems Ltd
464 Meckan Holdings Ltd
465 Megafast Enterprises Ltd
466 Mega Flicks
467 Megafreight International Co. Ltd
468 Menhir Ltd
469 Mepro Trade Ltd
470 Mercantile Freighters
471 Mercantile Freighters
472 Metalink International Ltd
473 Meteor Freight Forwarders Co Ltd
474 Mfanco Agencies Ltd
475 Micco Ltd
476 Mid-Town Cargo Agencies Ltd
477 Milestone Consultants Ltd
478 Milleage Enterprises Ltd
479 Miron Enterprises Ltd
480 Misana Clearing & Forwarding Co Ltd
481 Mistry Balubhai C
482 Mitchell Cotts Freight Kenya Ltd
483 Mitchell Cotts Kenya
484 Mizpah Total Solution Ltd
485 MNET Stars Ltd
486 Modern Logistics Ltd
487 Mona Consolidated Ltd
488 Moniks Agencies Ltd
489 Monsoon Movers Ent Ltd
490 Motorways Logistics Ltd
491 Mountain Freight Ltd
492 Mris Agencies Ltd
493 Ms Marther Ltd



494 Mtapanga Agencies Ltd
495 Muchfreight Enterprises
496 Nairobi Clearing House
497 Nairobi Clearing House, The
498 Neptune Forwarders Ltd
499 New Clearing & Forwarding
500 Nguni Swift Forwarders Ltd
501 Nibal Frieghters Ltd
502 Noah's Ark Enterprises, The
503 Northern Corridor Transit Services Ltd
504 Northwood Freighters
505 Nothcorr Enterprises Ltd
506 Nyota Freighters Ltd
507 Oak Lines Freight Agencies Ltd
508 Oceanair Services Ltd
509 Ocean Atlantic Services Ltd
510 Oceanic Cargo Agency Ltd
511 Offshore Clearing & Forwarding
512 Olendo General Supplies Co Ltd
513 Olmoti Freight Ltd
514 Olympic Forwarders Ltd
515 One Earth Freighters
516 One Link Ltd
517 Onetouch Cargo Services
518 Online Authenticity & Logistics Services Ltd
519 On Time Logistics Ltd
520 Onymond Enterprises
521 Oppenheiner Cargo Ltd
522 Optimax Agencies Ltd
523 Orbit Express Ltd
524 Orient Group of Companies
525 Osaka Freighters Ltd
526 Otasons F P G M Ltd
527 Outer Freight (K) Ltd
528 Outspan Forwarders (K) Ltd
529 Ozam Maritime Services Ltd
530 Pabast Freighters Ltd
531 Pabon Cargo Ltd

532 Palm Freighters Ltd
 533 Pamol Connections Services
 534 Panal Freighters Ltd
 535 Panalpina Kenya Ltd
 536 Pavlax (K) Ltd
 537 Pearl Forwarders
 538 Peck Transport Services Ltd
 539 Pegesi Freighters
 540 Pejon Freight Movers Ltd
 541 Pentagon Freight Forwarders Co Ltd
 542 Perles Solutions
 543 Petrosa General Contractors Ltd
 544 Philsam Agencies Ltd (EA)
 545 Pil (K) Ltd
 546 Plainlands Exporters Ltd
 547 PlanFreight Ltd
 548 P & O Nedlloyd E A Ltd
 549 Power Forwarders Ltd
 550 Practer Enterprises
 551 Prafulla Enterprises Ltd
 552 Precise Logistics Ltd
 553 Prilscot Co
 554 Primcargo Agencies Ltd
 555 Prime – Spur F Ltd
 556 Principal Forwarders Ltd
 557 Priority Logistics Ltd
 558 Project Forwarding Services Ltd
 559 Prompt Logistics Ltd (Prolog)
 560 Puffin Agencies
 561 Quantum Bunkering Ltd
 562 Quick Cargo Services Ltd
 563 Radiant Logistics Ltd
 564 Raising Freight Co Ltd
 565 Rakai Clearing & Forwarding Co Ltd
 566 Ramco Cargo
 567 Ramisi Maritime Freight Ltd
 568 Rapid Kate Services Ltd
 569 Rapid Response Transport Clearing & Forwardin



570 Ravi Clearing & Forwarding Co Ltd
571 Rayan Freight Forwarders Ltd
572 Ray Cargo Services Ltd
573 Red Anchor Freight Forwarders Ltd
574 Red Impex Clearing & Forwarding Ltd
575 Red Scorpion Ltd
576 Refco Forwarders Ltd
577 Reflex International Forwarders Ltd
578 Regent Freight Systems Ltd
579 Regional Freight Services Ltd
580 Relay Cargo Services
581 Releable Fright Services Ltd
582 Reliable Freight Services Ltd
583 Ricur Freighters Ltd
584 Ridgeways Forwarders
585 Rising Freight Ltd
586 Rising Sun Agencies Ltd
587 Rocham Enterprises Ltd
588 Romark Commercial Enterprises Ltd
589 Romark Freighters
590 Romark Freighters Ltd.
591 Romco Freighters & Forwarders Ltd
592 Ronter Clearing & Forwarding Agents
593 Rorene Ltd
594 Roseline Enterprises
595 Royal Intertrade Ltd
596 Roy Transmotors Ltd
597 Ruatech Trading Co (E A) Ltd
598 Rudolf Enterprises (K) Ltd
599 Runway Motors
600 Rusinga International Freight Ltd
601 Sabuna Clearing and Forwarding
602 Safmarine
603 Safreight Limited
604 Sagoma Agencies Ltd
605 Saha Freighters Co Ltd
606 Sahel Freighters Ltd
607 Salimond Freight Services Ltd



- 608 Salmir Clearing & Forwarding Co. Ltd.
609 Sam-Cargo Prompt Ltd
610 Same Day Cargo Forwarders Ltd
611 Sanako Co
612 Saroman Freight Contractor Ltd
613 Saroman Freight Contractor Ltd
614 Satisfy Clearing & Forwarding Kenya
615 Savoy Cargo Enterprises
616 Sawjani Clearing Co
617 Scanfreight Ltd
618 Scan-Sped Freighters Ltd
619 Schenker Ltd
620 S D V Transami (K) Ltd
621 Sea Air Forwarders International Ltd (S A F I)
622 Sea Air Gate Services
623 Sea Horse Freighters Ltd
624 Sea Sky Express Clearing & Forwarding Co
625 Seaworld Express Ltd
626 Seedcol Global Shipping E A
627 See & Sea Freight Services Ltd
628 Segafreight Services Ltd
629 Sentratek Kenya Ltd
630 Seven Eighty Six Freighters
631 Shaheen Clearing Enterprises
632 Shah & Partners Ltd
633 Sharis Logistics Ltd
634 Shelter Conveyors Ltd
635 Shipperside & General Services
636 Shuttle Air Services Ltd
637 Signon Eldoret Cargo Centre
638 Signon Freight Ltd
639 Signet Forwarders Co. Ltd
640 Silvershine Cleaning Services
641 Simcon Freight Ltd
642 Simjud Enterprises Co Ltd
643 Simpet Global Logistics
644 Site Forwarders Ltd
645 Sixty Four Cargo Service Ltd

646 S K Amin Ltd
 647 Skyland Logistics Ltd
 648 Sky Lift Cargo Ltd
 649 Skylift Cargo Ltd
 650 Skyline Global Services LtdSkyline Global Services Ltd
 651 Sky-Screen Express Ltd
 652 Sky & Sea Cargo Track
 653 Skytrain Ltd
 654 Sky Way Express Cargo
 655 Smartmail Communications
 656 sofitra Ltd
 657 Solid Freighters Ltd
 658 Solomons Trading Company Ltd
 659 Sommerset Impex
 660 Soneva Enterprises
 661 Sonic Air Ltd
 662 Sony Freight Forwarder
 663 Sopa Cargo Services
 664 Sosare Freight Ltd
 665 Space Freighters International Ltd
 666 Sparrow Freighters (K) Ltd
 667 Spartan Forwarders Ltd
 668 Spedag Spedition (K) Ltd
 669 Speed Cargo Conveyors
 670 Speedex Logistics Ltd
 671 Spick & Span Services
 672 SS Freight Ltd
 673 Standard Conveyors Ltd
 674 Stankev Freight Ltd
 675 Starex Freighters Ltd
 676 Star Freight Forwarders Ltd
 677 Starhose Co Ltd
 678 Starter Forward Transport
 679 Startrek Universe Ltd
 680 Statix Systems
 681 Steaker Freight Systems Ltd
 682 Steja General Agencies
 683 Stejan Freight Forwarders (K) Ltd

684 Steka Investment Co Ltd
685 Sterac Consultants Ltd
686 Storm Clearing & Forwarding (K) Ltd
687 Straight Line Cargo
688 Suba Agencies
689 Summer Freight Ltd
690 Summit Forwarders
691 Sundton Clearing & Forwarding & Co
692 Sun & Fun Ltd
693 Super First Forwarders Ltd
694 Superfreight Ltd
695 Supermart Freighters Ltd
696 Superquick Freighters (K) Ltd
697 Supersonic Clearing And Forwarding Ltd
698 Swiftlink Freight Services Ltd
699 Systematic Forwarders
700 Tabaki Freight Services International Ltd
701 Tal Group Of Companies
702 Tamani Jua Agency
703 Tana Freighters Ltd
704 Tasara Forwarders Ltd
705 Tasck Holdings Ltd
706 Tawab Agencies Ltd
707 Tawakal Freight Services Ltd
708 Temi Agencies Ltd
709 Tens Clearing & Forwarding
710 Teo's Co Ltd
711 Teos Company Limited.
712 Terestus Clearing & Forwarding
713 Termcotank Kenya Ltd
714 Territorial Enterprises
715 Thaka Ltd
716 The Main Maritime Shipping Ltd
717 Thompson Logistics Services Ltd
718 Tiba Freight Forwarders Ltd
719 Til Logistics
720 Time Fast Freight Forwarders Ltd
721 Tohel Agencies



722 Topaz Transport Co Ltd
723 Topaz Transport Co Ltd
724 Torch Ltd
725 Total Plus Bureau Co Ltd
726 Total Plus Clearing and Forwarding Agency
727 Towering Agencies Ltd
728 Tradewise Logistics (K) Ltd
729 Transhelsa Universal Agencies
730 Transmac Freighters Ltd
731 Transnet Freighters Ltd
732 Transouth Conveyors
733 Transrapid Express Cargo
734 Transvista Freight Ltd
735 Transworld Freight Conveyors
736 Treasure Cargo Services Ltd
737 Triastic General Services Ltd
738 Tribertoo (K) Ltd
739 Tricon Clearing & Forwarding
740 Trident Logistics Ltd
741 Trinity Clearing & Forwarding Co Ltd
742 Triostar Agencies (K) Ltd
743 Triple M Enterprises Ltd
744 Tropical Sky Cargo Ltd
745 Tropical Sky Cargo Ltd
746 Tropics Sun Travels Ltd
747 Tullalink International Ltd
748 Tumuyu International Ltd
749 Tuna Inspiration
750 Turner Freighters Ltd
751 Tuzo Freight Services
752 Twiga Freight Investment
753 Two Way Freighters
754 Tyrone Freight Forwarders Ltd
755 UCHL International
756 Ufanisi Freighters (K) Ltd
757 Ultum Mega Ltd
758 Uncle Riverside Investment Ltd
759 Uniexco Agencies Ltd



760 Unified Cargo Handling Ltd
761 Unimark Freighters Ltd
762 Union Logistics Ltd
763 United Clearing Co Ltd
764 United (E A) Warehouses Ltd
765 United (E A) Warehouses Ltd
766 Universal Freight & Logistics (K) Ltd
767 Uplands Cargo Conveyors Ltd
768 Uplift Express (Kenya) Ltd
769 Urgent Cargo Handling Ltd
770 Valmo Ltd
771 Venture Africa Co Ltd
772 Venus Maritime (K) Ltd
773 Verity Cargo Services Ltd
774 Vibrasi Enterprises Ltd
775 Victoria Aquatics & Mercantile Ltd
776 Victoria International Logistics Ltd
777 Vinbush Enterprises Ltd
778 Vinep Forwarders Ltd
779 Vintage Warehouse Agencies
780 Virchand Virpal & Sons Ltd
781 Voyage Services Ltd
782 Waki Clearing & Forwarding Agent
783 Walford Meadows Ltd
784 Walmo Clearing & Forwarding Co Ltd
785 Walsord Meadows
786 Wandey Freight Services
787 Wansar Kenya Ltd
788 Warentokil (K) Ltd
789 Warton Agencies
790 Waru Enterprises Ltd
791 Washline Agencies Ltd
792 Waterwaves Agencies Ltd
793 Wayto Associates Ltd
794 Wem Freight Consultants Co Ltd
795 Westgate Cargo Marketing
796 Westin Enterprises Ltd
797 Weston Logistics Ltd

798 Westwinds Freight Services Ltd
799 Whispers Investments (K) Ltd
800 Wilkesy & MacGeorge Ltd
801 Willfield Freighters Co Ltd
802 Willing Freight Services
803 Wilsaki Freight Forwarders Ltd
804 Wings Of Good Hope
805 World Cargo Logistics Ltd
806 World Link Logistics
807 World Net Freight Ltd
808 Worldwide C Frieght Ltd
809 Wrap & Pack Cargo (K) Ltd
810 Yara East Africa Ltd
811 Year 2000 Freighters Ltd
812 Yorkstar Enterprises
813 Yuston Cargo Ltd
814 Zafora Investments
815 Zeft Freighters
816 Zein Freight Services
817 Zilphique Enterprises
818 Ziofreight Clearing & Forwarding Co
819 zouhaiza kenya ltd
820 Zounhaize(k)ltd

