

**LOGISTICS OUTSOURCING PRACTICES AND
PERFORMANCE OF LARGE MANUFACTURING FIRMS IN
NAIROBI, KENYA**

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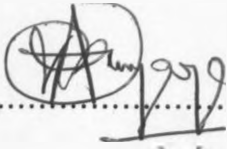
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October, 2012

DECLARATION

I declare this is my original work and has not been presented for a degree in any other university.

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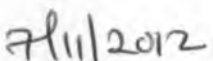
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DEDICATION

This project paper is dedicated to my family for their inspiration, encouragement, understanding and prayers towards the successful completion of this course. I pay glowing tribute and gratitude to the Almighty God who has given me the wisdom to undertake this course.

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God bless all of you.

ABSTRACT

In globalized and highly competitive markets, organizations strive to be innovative and agile to meet customer demands. Competitiveness, based on organizational capabilities and production strategies, may lead to quality, efficiency and flexibility. The highly competitive environments along with customers' demands for tailored products and services has forced companies to continuously evaluate, improve and reengineer their logistics operations. These operations have a noticeable contribution in companies' efforts to meet customers' expectations. Their outcomes, such as place convenience, waiting time convenience, delivery time convenience, and after sales convenience, are easily visible and assessable by the final customer and consequently delineating purchasing behavior.

The objective of the study was to determine logistics outsourcing practices and performance of large manufacturing firms in Nairobi Kenya. The research was a cross sectional survey of the large manufacturing companies operating in Nairobi, Kenya. The study used primary data which was collected through a self-administered questionnaire that consisted of both open and closed ended questions. The data was analyzed using descriptive statistics.

The finding of the study was that the outsourcing services adopted by the firms were transportation management, warehouse management, material handling management, information management and inventory management. The outsourcing practices being adopted by the firms resulted in increased productivity, organizational effectiveness, increased profits, continuous improvement, improved quality and improved quality of work life and thus outsourcing of these processes was an ideal solution that helps the firm expand internationally and operate on a much larger scale. At the same time, outsourcing resulted in decreased operating costs, improved customer satisfaction, increased productivity, timely delivery of services to clients, reduced lead time, improved profits and faster response to customer demands. It was an indication that the performance of the firms was influenced by the outsourcing practices adopted by the firms.

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CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

In globalised and highly competitive markets, organizations strive to be innovative and agile to meet customer demands. Competitiveness, based on organizational capabilities and production strategies, may lead to quality, efficiency and flexibility (Momme, 2002). In the pursuit of 'mass customization', flexibility and scale, economies are followed simultaneously and a such for a system's flexibility, responsiveness and reliability on the one hand, and low costs on the other, has led to the reconfiguration of the design and production activities and thus advocated the changes in the overall supply chain management (Suri, 2008). As a result, he observes that, the reality of competing in a global supply chain environment has caused many organizations to focus on strategic renewal and creative solutions to manage and mitigate the risks of operating in today's dynamic marketplace including outsourcing of services. Outsourcing has been defined by Chase et al., (2004, p. 372) as an "act of moving some of a firm's internal activities and decision responsibilities to outside providers".

The outsourcing of logistics functions has become the obvious choice with companies eyeing for cost reduction and value enhancement while distributing and transporting products. 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. As per Muller (1991), an improvement in the delivery process, resulting from the outsourcing process, can also contribute towards competitive advantages, as contributed by the product. Further, he observes that 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. The highly competitive environments along with customers' demands for tailored products and services has forced companies to continuously evaluate, improve and reengineer their transport operations. These operations have a noticeable contribution in companies' efforts to meet customers' expectations. Their outcomes, such as place convenience, waiting time convenience, delivery time convenience, and after sales convenience, are easily visible and

assessable by the final customer and consequently delineating its purchasing behavior. The close relationship between transportation and customer service dictate that companies handle their transport services function prudently so as to receive full potential benefits (Razzaque and Sheng, 2008).

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 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 important relieving the management to deal with more strategic issues by ceding the non core functions to specialized firms.

1.1.1 Logistics outsourcing practices

Outsourcing has been defined as the transfer of the production or transfer of goods and services that have been carried out internally to an external provider (Domberger, 1998). Logistics outsourcing has grown rapidly to impact many activities of organisations and can cover many areas, including the outsourcing of manufacturing as well as services. Abraham and Taylor (2006) provide evidence of rising outsourcing of business services in 13 US industries and Helper (2008) documents the increased outsourcing of parts in the US automobile sector. A survey in 2007 of more than 600 large companies by the American Management Association finds that substantial numbers of companies are now outsourcing in many areas.

In the face of increasingly intensified competition in the emerging global economy, manufacturing firms are progressively turning to outsourcing of their logistics functions. Outsourcing is a viable business strategy because turning non-core functions over to external suppliers enables companies to leverage their resources, spread risks and concentrate on issues critical to survival and future growth. One of the most important reasons why companies

outsource their logistics functions is the need to decrease the number of warehouses, vehicles and excess inventories and to reduce shrinkage, and labor costs.

The concept of logistics outsourcing practices basically focuses on inbound logistics which concentrates on purchasing and arranging inbound movement of materials, parts and or finished inventory from suppliers to manufacturing or assembly plants, warehouses or retail stores. On the other hand outbound logistics is relates to the storage and movement of the final product and the related information flows from the end of the production line to the end user. In a study by Laugen *et al.* (2005) on British manufacturing firms, he found a correlation between outsourcing best practice and high performing companies and this therefore goes to show that in most cases, outsourcing of logistics services increases a firms competitiveness.

Logistics outsourcing practices include information management, transportation management, warehouse management, material handling management and inventory management. Half of the manufacturing companies now outsource (part) of their production process (Bruce and Useem, 2008). One way of extending the logistics organization beyond the boundaries of the company is through the use of a third party supplier or contract logistics services (3PL).

1.1.2 Firm performance

Effective logistics services have become a critical issue for companies' performance. The highly competitive environment along with customers' demands for tailored products and services has forced companies to continuously evaluate, improve and reengineer their logistics operations. These operations have a noticeable contribution in companies' efforts to meet customers' expectations. Their outcomes, such as place convenience, waiting time convenience, delivery time convenience, and after sales convenience, are easily visible and assessable by the final customer and consequently delineating its purchasing behavior. The close relationship between logistics and customer service dictate that companies handle their logistics function prudently so as to receive its full potential benefits (Razzaque and Sheng, 1998).

Because of resource limitations, few firms have the ability to apply world-class resources to all areas of competition. Thus, in order to gain competitive advantage they must select areas in

which they will concentrate their resources. By outsourcing to specialist organizations services not generated by core competences, companies can see an improvement in their organizational performance. Gilley and Rasheed (2000) state that there are three reasons for this, the acquisition of non-strategic services allows the organization to centre on what it really can do well, that is, on the services whose resources have a high strategic value (Gilley, et. al. 2004). Such a focusing on services not included in the core competences can increase performance and allow the company to be more flexible. Increasing the outsourcing of nonstrategic services can improve both the quality and the service, and lastly, the outsourcing of services of low strategic value enables the company to reduce costs and improve its competitive position (Gilley and Rasheed, 2000).

Logistics outsourcing is attractive to senior management because it improves some of the dimensions of organizational performance. According to Gilley *et al.*, (2004) outsourcers who know how to manage the process can enhance their company's performance and achieve a high level of satisfaction with the results Outsourcing not only results in a shift of profitability but also exacerbates the productivity differential between outsourcing firms and vendors. Kotabe et al. (1998) identifies three types of performance measures as necessary components in any outsourcing performance measurement system: strategic measures; financial measures; and quality measures while other studies use additional dimensions of market performance such as costs savings, cycle time, customer satisfaction, and productivity to measure the effectiveness of outsourcing practices.

1.1.3 Large manufacturing firms in Nairobi, Kenya

Manufacturing is to make or process (a raw material) into a finished product, especially by means of a large-scale industrial operation. According to Awino (2011) manufacturing is an important sector in Kenya and it makes a substantial contribution to the country's economic development. It has the potential to generate foreign exchange earnings through exports and diversify the country's economy. This sector has grown over time both in terms of its contribution to the country's gross domestic product and employment. The average size of this sector for tropical Africa is 8 per cent. Despite the importance and size of this sector in Kenya, it

is still very small when compared to that of the industrialized nations United Nations Industrial Development Organization ((UNIDO) 1987). Kenya's manufacturing sector is going through a major transition period largely due to the structural reform process, which the Kenya Government has been implementing since the mid-eighties with a view to improving the economic and social environment of the country.

Manufacturing firms fall under the umbrella of Kenya Association of Manufacturers (2002). Kenya association of manufacturers posits that removal of price controls, foreign exchange controls and introduction of investment incentives have, however, not resulted in major changes in the overall economy, in particular, they have not improved the manufacturing performance. Therefore, to build a self-sustaining industrial sector, it is necessary to establish strategic linkages within the domestic economy. The growth in manufacturing sector has mainly been attributed to rise in output of the agro-processing industries. These included sugar, milk, grain milling, fish, tea, oils and fats processing sub-sectors. Other key sub-sectors of manufacturing that perform well are: manufacture of cigarettes, cement production, batteries (both motor vehicles and dry cells), motor vehicle assembly and production of galvanized sheets.

The Kenya Government has always been committed to developing a mixed economy where both public and private sector companies are present (Kenya Government, Development Plan 1989-1993). Public sector participation in manufacturing is much smaller than the private sector and is still decreasing due to government's change of policy; the emphasis is now being given to privatization of the industrial sector.

1.2 Statement of the Problem

Logistics outsourcing involves a relationship between a company and an LSP (Logistic Service Provider) which, compared with basic logistics services, has more customized offerings, encompasses a broad number of service activities, is characterized by a long-term orientation, and, thus, is rather strategic nature. Logistics is an emerging business area in many countries. Despite the growth in the outsourcing sector, Jiang and Qureshi (2006), point out that the results

of logistics outsourcing is still vague and an unexplained puzzle hence the basis of the this study.

The core business of large manufacturing firms is basically to manufacture though they still need to procure materials for production, warehouse, manage inventory and transports manufactured products to the end users. In the researchers view, all this logistics functions are non core and can be outsourced so that large manufacturing firms are left to handle their core function which is manufacturing. This study hence wishes to establish logistics outsourcing practices and their impact on the performance of private large manufacturing firms in Nairobi.

A number of studies have been done in the area of outsourcing: 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 and found out among others for an organization to realize the competitiveness resulting from logistics outsourcing , then it should be able to develop a cordial relationship with all the supplier of goods and services which will facilitate efficient and effective delivery of services.

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.

From above studies there has been no research on how logistics outsourcing practices affect the performance of large manufacturing firms in Kenya hence the gap this study intends to fill. This study therefore seeks to answer the following research questions: what are the logistics outsourcing practices employed by large manufacturing firms in Nairobi, Kenya? Does logistics outsourcing practices affect the performance of large manufacturing firms in Kenya?

1.3 Research Objectives

The study objectives include:

- i) To establish the logistics outsourcing practices employed by large manufacturing firms in Nairobi, Kenya
- ii) To establish the relationship between logistics outsourcing practices and the performance of large manufacturing firms in Nairobi, Kenya.

1.4 Significance of the Study

The study will be beneficial to various stakeholders; it will be a source of information to the large scale manufacturing firms as it will be able to evaluate the logistics practices vis a vis firms performance.

The study will enable policy makers obtain knowledge of manufacturing industry dynamics and the appropriate strategies to be applied to enhance performance and therefore obtain guidance from this study in designing appropriate policies that will regulate the industry.

To the academicians the study will contribute to the existing literature in the field of outsourcing practices vis a vis performance of large manufacturing firms. It should also act as a stimulus for further research to refine and extend the present study especially in Kenya.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter highlights the major issues relating to the outsourcing of services by various organizations and will cover the theory of outsourcing, organizational levels of outsourcing, outsourcing practices and the performance of firms. The chapter will also discuss empirical studies in the research area and conclude with a summary of the chapter.

2.2 The Theory of Outsourcing

The outsourcing process is a complex structure consisting of numerous activities and sub activities, carrying many managerial dilemmas. It is no wonder that many theories have been utilized to help the academics to understand the nature of those activities, and to help practitioners successfully manage the process. It is common knowledge that each phenomenon can be described by several frameworks that are embedded in various theoretical approaches. From its occurrence, the outsourcing has been approached by different theories. This creates confusion among the researchers of the outsourcing phenomenon. Various authors identified significant number of theories that could explain the outsourcing phenomenon (Gotttschalk and Solli-Saether, 2005).

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. 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 application of agency theory provides a justification for the establishment of alliances between organizations and their service providers (Blancero and 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 Levels of logistics Outsourcing

The levels of logistics outsourcing employed by an organization can be categorized as tactical, strategic and transformational outsourcing. According to Brown and Wilson (2005) tactical logistics outsourcing is used by organizations to resolve specific problems being experienced by a firm, viz. a lack of financial resources to make capital investments, inadequate in-house managerial competence or a desire to downsize, etc. Tactical outsourcing is a form of traditional outsourcing and is based on cost comparison and the make-or-buy decision. The tactical outsourcing results in visible benefits in the form of enhanced cash savings, minimizing the need for future investments and resolving staffing issues. It involves execution of a business process following the existing rules.

Tactical outsourcing can also extend to outsourcing peripheral activities enabling the management to acquire industry specific capabilities by partnering with a chosen vendor (Hussey and Jenster, 2003). This is a common method used by large mature corporations for handling high-volume repetitive tasks like manufacturing, payroll transactions, human resource administration and procurement.

Strategic outsourcing is used as part of the process of redefining the organization and results in freeing the management staff to refocus on the core business functions. Strategic outsourcing relationships build long-term value resulting from the client working with a fewer number of best-in-class integrated service providers. The use of outsourcing for strategic reasons enables companies to strengthen their resources in order to reinforce their competitive advantage. McIvor (2000) consider that the concept of outsourcing has changed from a tactical approach seeking short-term results, especially cost reduction, to a more strategic approach that aims to achieve and maintain competitive advantage. From this more strategic perspective, the analysis of the value chain, the core competencies and the strategic risks of outsourcing must all be taken into account when deciding to outsource any of the firm's different activities (Lonsdale and Cox, 1997). Firms are increasingly opting for an outsourcing strategy, which has become fashionable, both because of its advantages and its possible influence on organizational performance, as it enables the firm to focus on its core competencies, that is, on what it really can do well.

Cheon et al. (1995) state that the resources of a given activity can be more or less strategic, depending, on the one hand, the attributes that enable them to meet the conditions by which competitive advantage can be achieved (valuable, rare, inimitable and non-substitutable) and, on the other hand, the resources allocated to the activity, based on their availability, or on the firm's interest in developing and strengthening those resources to attain a position of leadership.

Transformational outsourcing is commonly used to redefine the business (Linder, 2004). It is a collaborative, risk- and gain-sharing relationship among the organization and its service providers to drive enterprise transformation and achieve significant business process improvements. It enables an organization to retain leadership position, build sustainable competitive advantage and generate highest value for an organization. Some issues addressed by

transformational outsourcing are good governance and maturity of business process knowledge. The levels of risk in strategic and transformational outsourcing are higher than tactical form, but are commonly shared with the outsourcing partner. Tested risk mitigation plans, high-security levels, mature project management skills and proven business continuity plans need to be put in place before an arrangement can begin in this direction.

2.4 Logistics Outsourcing Practices

Logistics is the management of the flow of resources, between the point of origin and the point of destination in order to meet some requirements, i.e. of customers or corporations. The resources managed in logistics can include physical items as food, materials, equipment, liquids and staff as well as abstract items as information, particles and energy. The logistics of physical items usually involves the integration of information flow, material handling, production, packaging, inventory, transportation, warehousing and oftentimes security.

2.4.1 Inventory Management Practices

Inventory management practices lead to firms maintaining lean inventory. Inventory should not be too much or too little. Review Inventory periodically and revise stocking patterns and norms; Inventory is dependant upon the demand as well as the supply chain delivery time. Often companies follow one stocking policy for all items. For example, all A, B & C categories may be stocking inventory of 15 days, which may not be the right thing that is required. While some items may have a longer lead-time thus affecting the inventory holding, the demand pattern and the hit frequency in terms of past data may show up differently for each of the inventory items. Therefore one standard norm does not suit all and can lead to over stocking of inventory as well as in efficiencies in the system.

Cycle counting practice is an inventory accuracy audit technique where inventory is counted on a cyclic schedule rather than once a year. A cycle inventory count is usually taken on a regular, defined basis (often more frequently for high-value or fast moving items and less frequently for low-value or slow moving items). Most effective cycle counting systems require the counting of a certain number of items every work day with each item counted at a prescribed frequency. The

key purpose of cycle counting is to identify items in error, thus triggering research, identification, and elimination of the cause of the errors. Inventory categorization; understanding the inventory types and their specific characteristics then building inventory stocking parameters taking into account the unique characteristics of the particular inventory. Catalogue management; studying inventory demand patterns, movement patterns and cycles to build suitable inventory norms for different categories of inventory; Companies which are into retail segments and dealing with huge inventories in terms of number of parts as well as value will necessarily need to ensure they practice review of inventory list and clean up operations on ongoing basis. Use of FIFO and FEFO should be practiced when issuing out stocks from inventory. Segregate inventory on basis of whether its obsolete hazardous or expired. Carry out quality checks before receiving commodities into inventory.

2.4.2 Warehouse Management Practices

When considering the level of effort involved in warehouse operations, the greatest expenditure of effort is in the picking process. To gain efficiencies in picking the labor time to pick orders needs to be reduced and this can be achieved in a number of ways. Companies with the most efficient warehouses have the most frequently picked items closest to the shipping areas to minimize picking time. These companies achieve their competitive advantage by constantly reviewing their sales data to ensure that the items are stored close to the shipping area are still the most frequently picked.

Warehouse layout is also important in achieving greater efficiencies. Minimizing travel time between picking locations can greatly improve productivity. However, to achieve this increase in efficiency, companies must develop processes to regularly monitor picking travel times and storage locations. Warehouse operations that still use hard copy pick tickets find that it is not very efficient and prone to human errors. To combat this and to maximize efficiency, world class warehouse operations have adopted hand-held RF readers and printers. Companies are also introducing pick-to-light and voice recognition technology.

2.4.3 Information Management Practices

Information management in can be defined as "managing and controlling information handling processes optimally with respect to time (flow time and capacity), storage, distribution and presentation in such a way that it contributes to company results in concurrence with the costs of capturing (creation, searching, maintenance etc).Best practices that logistics firms would employ include the analysis of the information demanded, intelligent information storage, the optimization of the flow of information and securing technical and organizational flexibility

2.4.4 Material Handling Management Practices

Cold Chain & Refrigeration management is an important element of the transport and logistics industry. Industries from pharmaceuticals to food manufacturing require controlled-temperature transport to keep their products in top shape. Constant improvements in forklift, stacker and loader design ensure safer materials handling and better use of warehouse space. They are emerging trend of hybrid forklifts, i.e. the use of LPG driven forklifts.

Some items such as flammable material, chemicals, acids and so forth, obviously require more care and attention than other items. The characteristics of the material being stowed will dictate the care and attention necessary to avoid risks and potential hazards. Personnel handling hazardous materials must have a knowledge of all potential dangers or hazards associated with those materials. Employing RF terminals in lift trucks and portable RF devices, which can be carried by employees, will boost productivity while reducing data entry errors. These devices when integrated with the warehouse management system (WMS) can send employees product move tasks and give information about the product that needs to be moved. Typically, this systems are designed to work with bar coded labels or RFID tags. An automated conveyor system with sorters and diverters will route product to the appropriate put-away zones, reducing travel time and handling. Productivity and labor costs can be significantly improved by automation if the transit time from receiving areas to storage zones is considerable short , or when the product are moved and stored in case-size lots.

2.4.5 Transport Management Practices

The mantra for all transportation professionals is simple: reduce costs and increase customer satisfaction levels. However, market forces such as higher fuel costs and decreased capacity work to undermine these goals.

There are three primary segments of motor freight, or modes—less-than-truckload (LTL), full truckload (FTL) and small package or parcel modes. Certainly time and service requirements dictate that some freight moves via an expedited or time-definite ground move. However, the largest percentage of ground transportation shipments move via one of the three primary modes. The goal of managing shipments in each of these designated modes is maximizing asset utilization. This is accomplished by shifting from one mode to a more cost effective mode, building larger, more economical shipments within any of the three modes etc.

Transport managements practices optimize freight and in turn, achieve cost savings without reducing service levels to customers. Some of the best practices are straight Pooling whereby shippers that use LTL as a primary mode have a significant number of LTL sized orders that are destined for the same geographic area. Using a pooling strategy, shipments can be combined to create a full truckload shipment out to a pool distribution facility that serves the geographic area. Shipment Aggregation on the other hand creates a single shipment of multiple orders, originating from the same shipper to the same destination on the same day that would have otherwise have been released as separate shipments. Shipment Consolidation is an option when multiple LTL orders can be combined with a truckload sized order that is not at full capacity, if they can be part of a stop-off in route to the final truckload destination. Continuous Moves solutions allow for minimizing empty miles. To deploy this strategy, individual shipments are combined into legs of a continuous move.

2.5 Firms performance

A logistics outsourcing performance is usually defined as the mutual logistics activities of both partners involved in long-term relationships. It is influenced by the performance of logistics processes performed in-house and those affected by the performance of outsourcing arrangements provided by LSPs. By joining forces, both partners improve efficiency,

profitability and customer service. Firm performance varies according to various elements of the organization, including strategy, structure, environment, organizational learning, and resource (Cho et al. 2007). Accordingly, different measurements have been adopted by different researchers for measuring performance. Jiang and Qureshi (2006) measure performance as operational performance, which include cost efficiency, profitability and productivity. Morash et al. (1996) classified their measurement based on demand-oriented capabilities (i.e. delivery reliability, responsiveness to target market, and post-sale customer service) and supply-oriented capabilities (i.e. geographical coverage and reduction in total distribution cost).

2.5.1 Benefits of logistics outsourcing to firms performance

Keeping track of orders, shipping, inventory and returns, along with various other supply chain functions can be extremely time-consuming and expensive for many companies. Outsourcing these processes can be the ideal solution. Logistics outsourcing helps the firm expand internationally and operate on a much larger scale. You can do business wherever the opportunity presents itself by setting up delivery operations in another country within a relatively short time frame.

Logistics outsourcing reduces a firms risk when it starts doing business in new regions. Logistics outsourcing enables a firm to concentration on the basic activity (core competence) and use best methods and experiences. It also Increase the firms competitiveness in that the firm can react more quickly and effectively to changing client needs. Cost-cutting and application of high technologies is also a benefit of outsourcing to many firms

2.5.2 Performance Measures

Measurement of performance of large firms is based on both quantitative and qualitative performance indicators Awino (2011). Performance Measures are quantitative or qualitative ways to characterize and define performance. They provide a tool for organizations to manage progress towards achieving predetermined goals, defining key indicators of organizational performance and Customer satisfaction. It is the process of assessing the progress made (actual)

towards achieving the predetermined performance goals (baseline). Measurement is managed using output measures and outcome measures.

Strategic, performance measurement-based management systems allow an organization to align its business activities to its strategy, and to monitor performance toward strategic goals over time. High-performing enterprises actively identify “key performance indicators,” and measure their progress against established target values for those indicators, as a way of measuring their effectiveness. This is performance management, and the key indicators are the Performance Measures (or metrics) of the enterprise. Performance management is used to track an organization’s progress against its strategic plan and specific performance goals.

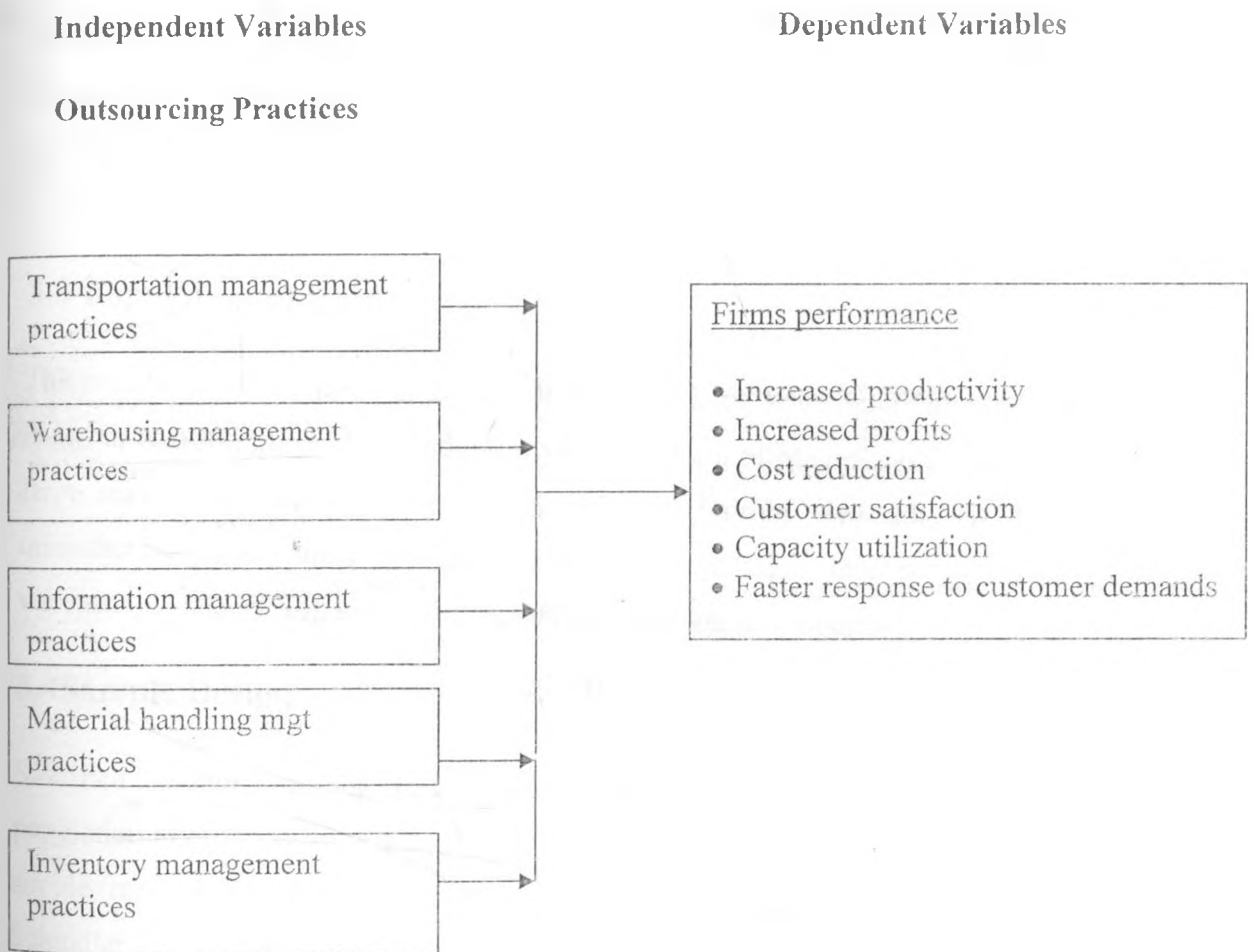
There are many different measurement frameworks, including the balanced scorecard, activity based costing, competitive benchmarking, and shareholder value added. Each of these provides a unique and different lens through which to view an organization’s performance. Most frameworks tend to be one-dimensional in perspective. For example, benchmarking tends to involve taking a largely external perspective, often comparing performance with that of competitors or other best of breed practitioners or business processes. This kind of activity is frequently pursued as an exercise to generate ideas for or obtain commitment to short term improvement initiatives rather than to design a formalized performance measurement system. However, the balanced scorecard is a measurement framework which integrates multiple perspectives. The balanced scorecard integrates four sets of measurements, complementing traditional financial measures with those driving future performance. An organization using this framework is encouraged to develop metrics that facilitate collection and analysis of information from the following perspectives; financial , Customer , Learning and Growth, Internal Business Processes.

2.6 Knowledge Gap and Theoretical Framework

The concept of outsourcing of services has been expounded both in the literature as well as from the empirical studies done on the subject area. It was found out that outsourcing of services has become a common practice among large manufacturing firms worldwide and this is due to the various benefits that accrue to a firm as a result of outsourcing. Firms evaluate outsourcing to

determine if current operation costs can be reduced and if saved resources can be reinvested in more competitive processes. Contracting out production of goods and services to a firm with competitive advantages in terms of reliability, quality and cost was found out to be the main driver of outsourcing. However the various studies covered have not extensively delved into logistics outsourcing practices in relation to the performance of large scale manufacturing firms. As a result, this study will wish to explore outsourcing practices viz a viz the performance of large manufacturing firms Nairobi, Kenya.

Fig. 2.1 Schematic diagram showing variable relationships



Source: Researcher 2012

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The chapter describes the proposed research design, the target population, sampling design, data collection instruments and procedures, and the techniques for data analysis.

3.2 Research Design

This research involved a cross sectional survey of the large manufacturing companies operating in Kenya. The study adopted a descriptive approach in trying focus on large manufacturing firms in Nairobi. According to Emory (1995), a survey is feasible when the population is small and variable hence the researcher was able to cover all the elements of the population. Therefore the survey was considered to be more efficient and economical.

3.3 Population of the Study

The population of the study in this research was of large scale manufacturing companies that are based in Nairobi. According to the Kenya Association of Manufacturers, there are a total of 455 large scale manufacturing companies operating in Nairobi (Appendix II). The 455 large scale manufacturing companies represented the study population. Due to their high numbers; they were sampled according to various sectors under which they operate.

3.4 Sample Design

Stratified random sampling method was applied to come up with the sample size. since the population in different large manufacturing firms was considered heterogeneous, implying that a simple random sample would have been unrepresentative. This according to Cooper and Schindler (2006) ensured that each manufacturing subsector was represented. According to Mugenda and Mugenda (2003) at least 10% of the target population was important for the study. The study therefore involved 46 large manufacturing companies Nairobi. Table 3.1 shows how

the sample size was arrived at. The study picked head of logistics department from each of the manufacturing firms.

Table 3.1: Sample Size

| Sector | No. of Firms | % | Respondents |
|------------------|--------------|------------|-------------|
| Building | 6 | 1.3 | 1 |
| Food, Beverages | 100 | 22 | 10 |
| Chemical | 62 | 13.6 | 6 |
| Energy | 42 | 9.2 | 4 |
| Plastics | 54 | 11.9 | 5 |
| Textile | 38 | 8.4 | 4 |
| Wood Products | 22 | 4.8 | 2 |
| Pharmaceutical | 20 | 4.4 | 2 |
| Metal and Allied | 38 | 8.4 | 4 |
| Leather | 8 | 1.8 | 1 |
| Motor | 17 | 3.7 | 2 |
| Paper | 48 | 10.5 | 5 |
| Total | 455 | 100 | 46 |

Source: Researcher, 2012

3.5 Data Collection

The study used primary data that was collected through a self-administered questionnaire that consisted of both open and closed ended questions that were designed to elicit specific responses for qualitative and quantitative analysis respectively. The questionnaires had three sections. The first section contained questions on the bio data of the manufacturing firms, the second part on the other hand answered questions on objective one, while the third answered questions on objective two. The questionnaires were administered by drop and pick method

3.1 Data Analysis

The data was analyzed by the use of descriptive statistics. Two methods of data analysis were therefore adopted to enable the researcher conduct a comprehensive analysis. Objective one was analyzed using frequencies and percentages obtained from Statistical Packages for Social Sciences (SPSS); Objective two was analyzed by conducting by the use of frequencies and percentages. The data was classified, tabulated and summarized using descriptive measures, percentages and frequency distribution tables, while tables and graphs were used for presentation of findings.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

The research objective was to establish the logistics outsourcing practices and performance of large manufacturing firms in Nairobi. This chapter presents the analysis, findings and discussion of the same. The findings are presented in percentages and frequency distributions, mean and standard deviations. A total of 46 questionnaires were issued out and 38 were returned. This represented a response rate of 83%.

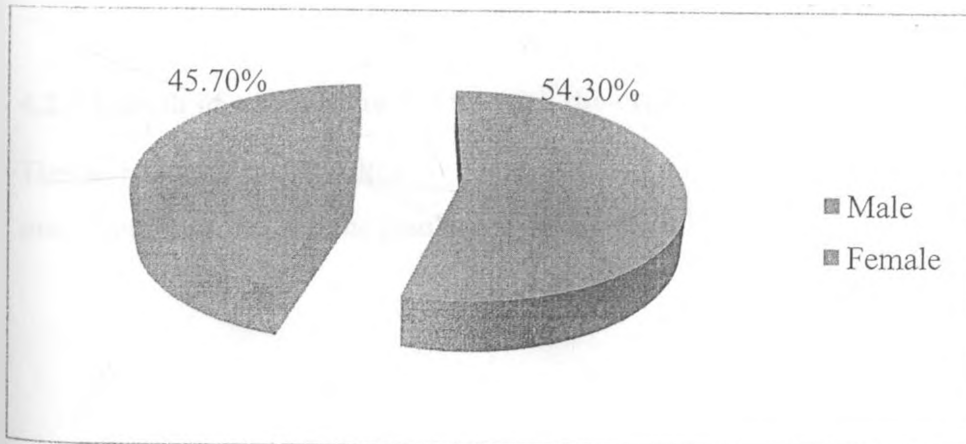
4.2 Organizational and Personal Profile

The demographic information considered in this study included gender of the respondents, age bracket, length of continuous service with the organization and the duration the organization has been in existence.

4.2.1 Respondents Gender

The respondents were asked to indicate their gender and of the 38 respondents, 59.5 percent were female while 40.5% were male. (Fig 4.1)

Figure 4.1: Respondents Gender



4.2.2 Respondents age bracket

The respondents were asked to indicate their age bracket and the findings are presented in Table 4.1.

Table 4.1: Respondents age bracket

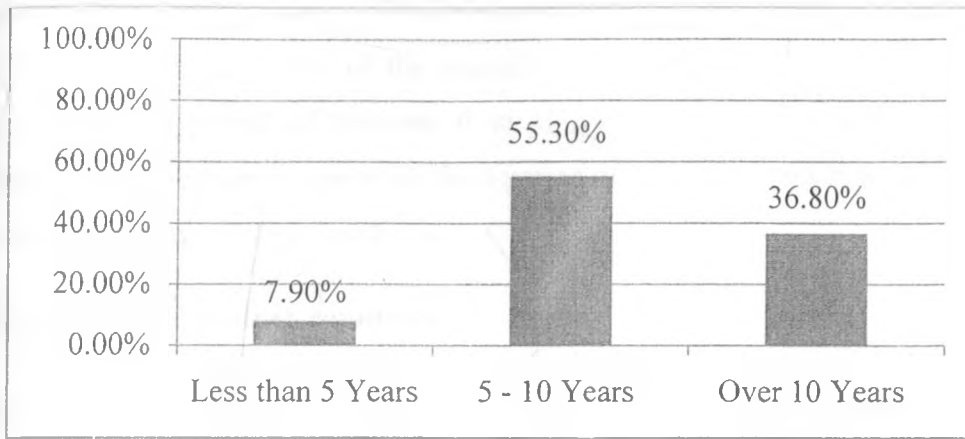
| Years | Frequency | Percent | Cumulative Percent |
|--------------|-----------|--------------|--------------------|
| Less than 30 | 2 | 5.3 | 5.3 |
| 31-40 | 15 | 39.5 | 44.7 |
| 41-50 | 17 | 44.7 | 89.5 |
| Over 50 | 4 | 10.5 | 100.0 |
| Total | 38 | 100.0 | |

The findings in Table 4.1 indicates that 44.7% of the respondents were 41 to 50 years of age, 39.5% of the respondents indicated that they were 31 to 40 years old while 10.5% of the respondents indicated that they were over 50 years old and the other 5.3% indicated that they were less than 30 years. The results indicated that majority of the respondents were above 30 years.

4.2.3 Length of continuous service with the organization

The respondents were asked to indicate the duration they have continuously worked in the manufacturing firm and the results are presented in Figure 4.1.

Figure 4.2: Length of continuous service with the organization



The results in Figure 4.2 show that 55.3% of the respondents had worked in their respective organizations for 5 to 10 years, 36.8% of the respondents indicated that they had worked in the organization for over 10 years while 7.9% of the respondents said they have worked in the organization for less than 5 years. The results indicates that majority of the respondents have worked in their organization for more than 5 years an indication that they understand the effect of outsourcing logistics practices on performance.

4.2.4 Duration of manufacturing company existence

The respondents were to indicate the duration the manufacturing companies have been in existence. The results are presented in Table 4.2.

Table 4.2: Duration of manufacturing company existence

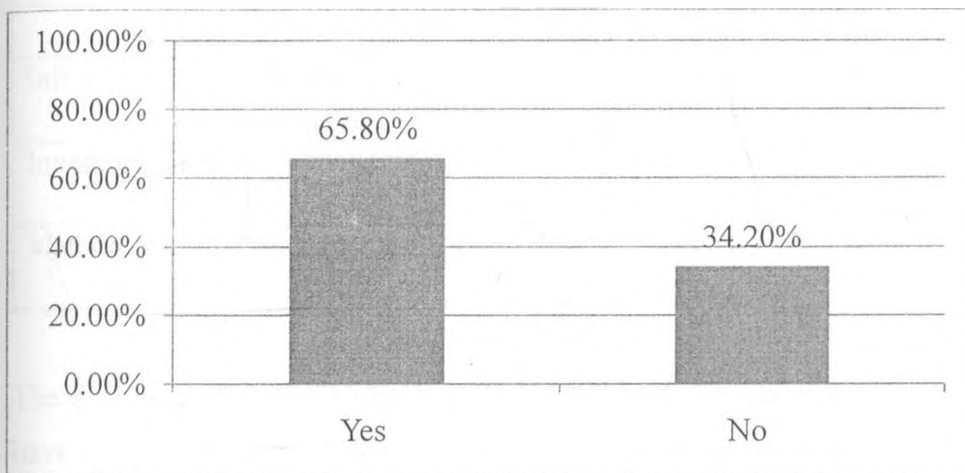
| Years | Frequency | Percent |
|--------------|-----------|--------------|
| 6-10 | 2 | 5.3 |
| 11-15 | 6 | 15.8 |
| Over 16 | 30 | 78.9 |
| Total | 38 | 100.0 |

The results presented in Table 4.2 was that 78.9% of the manufacturing companies have been in operation for over 16 years, 15.8% of the manufacturing companies have been in operation for 11 to 15 years while 5.3% of the manufacturing companies indicated that they have been in operation for a period of between 6 to 10 years. The results indicate that majority of the respondents have been in operation for a period of more than 16 years and thus the need for them to outsource some of their functions.

4.2.5 Operation in other countries

The respondents were to indicate whether their companies operate in other countries. The results are presented in Figure 4.3.

Figure 4.3: Operation in other countries



The results presented in Figure 4.2 were that 65.8% of the manufacturing companies operate in other countries while 34.2% do not operate in other countries. The result indicates that majority of the manufacturing companies operate in other countries and thus the need to outsource non-core functions in order to concentrate on the core functions.

4.3 Outsourcing practices adopted by large manufacturing firms

Logistics outsourcing practices basically focuses on inbound logistics which concentrates on purchasing and arranging inbound movement of materials, parts and or finished inventory from suppliers to manufacturing or assembly plants, warehouses or retail stores. Logistics outsourcing

practices include information management, transportation management, warehouse management, material handling management and inventory management.

4.3.1 Logistics services outsourced

The respondents were to indicate the logistic services outsourced by the companies. The results are presented in table 4.3.

Table 4.3: Logistics services outsourced

| Services | Yes | No |
|-------------------------------|------|------|
| Transport management | 78.9 | 21.1 |
| Warehouse management | 89.5 | 10.5 |
| Information management | 50.0 | 50.0 |
| Inventory handling management | 50.0 | 50.0 |
| Material handling management | 73.7 | 26.3 |

The finding in Table 4.3 was that 78.9% of the large manufacturing firms indicated that they have outsourced transport management while 21.1% indicated that they have not outsourced. On the other hand 89.5% of the firms indicated that they have outsourced warehouse management while 10.5% of the firms have not outsourced warehouse management. 50% of the firms have outsourced information management and inventory handling management while an equal proportion (50%) has not outsourced the same. Regarding material handling management, 73.7% of the firms indicated that they have outsourced the management while 26.3% of the firms indicated that they have not outsourced material handling management. The results indicate that the logistics services outsourced by majority of the firms were transport, warehouse and material handling management.

4.3.2 Logistic outsourcing practices

The respondents were requested to indicate the effect of outsourcing logistic practices in a five point Likert scale. The range was 'Not at all (1)' to 'very great extent' (5). The scores of not at all and little extent have been taken to represent a variable which had a mean score of 0 to 2.5 on the continuous Likert scale; ($0 \leq S.E < 2.4$). The scores of 'moderate extent' have been taken to represent a variable with a mean score of 2.5 to 3.4 on the continuous Likert scale: ($2.5 \leq M.E. < 3.4$) and the score of both great extent and very great extent have been taken to represent a variable which had a mean score of 3.5 to 5.0 on a continuous likert scale; ($3.5 \leq L.E. < 5.0$). A standard deviation of > 0.9 implies a significant difference on the impact of the variable among respondents. The results are shown in Table 4.6.

Table 4.4: Logistic outsourcing practices

| | Mean | Std. Deviation |
|--|--------|----------------|
| Transportation management practices | | |
| Improved vehicle scheduling | 3.5012 | .8929 |
| Route optimization | 3.8158 | .6516 |
| Increased vehicle visibility due to fleet track tools | 3.8421 | .8861 |
| Warehouse management practices | | |
| Good housekeeping practices | 3.8216 | .8005 |
| Proper receipt procedures | 3.7368 | .9496 |
| Less damages to commodities due to proper storage | 3.6842 | .6197 |
| Staff welfare has been achieved due to implementation of health and safety | 3.6316 | .8517 |
| Information management practices | | |
| Visibility between various departments | 3.7368 | .7235 |
| Paperless operation | 3.7895 | .9051 |
| Availability and proper flow of information | 3.6842 | .7747 |
| Coordination of activities though information technology | 3.6579 | .7807 |
| Inventory management practices | | |

| | | |
|---|--------|-------|
| Proper inventory flow | 3.8158 | .8654 |
| Inventory accuracy | 3.7105 | .9560 |
| Good inventory turns/proper space utilization | 3.5263 | .8617 |
| Material handling practices | | |
| Quality checks on raw materials (quality raw material) | 3.8947 | .8633 |
| Efficiency due to the use of modern material handling equipment | 3.9768 | .8864 |
| Efficiency and less damage to products due to adoption of modern storage infrastructure i.e cold rooms and racking system | 3.7105 | .8353 |
| Enhanced quality of products delivered | 3.8421 | .8550 |
| Procurement practices | | |
| Transparent sourcing of suppliers | 3.7105 | .8670 |
| Maintenance of good supplier relations | 3.6737 | .8538 |
| Maintenance of effective information delivery with suppliers of services and products | 3.7632 | .8521 |
| Benchmarking to determine whether the company meets targets | 3.6526 | .8036 |

The results in Table 4.4 on the effect of outsourcing transport management practices was that it results in increased vehicle visibility due to fleet track tools (mean 3.8421), route optimization (mean 3.8158) and improved vehicle scheduling (mean 3.5012). The results indicate that outsourcing of transport management had enabled the firms to optimize freight and in turn, achieve cost savings without reducing service levels to customers.

On the effect of outsourcing warehouse management practices, the findings was that it results in good housekeeping practices (mean 3.8216), proper receipt procedures (mean 3.7368), less damages to commodities due to proper storage (mean 3.6842) and staff welfare has been achieved due to implementation of health and safety (mean 3.6316). The result indicates that the companies will have the most efficient warehouses.

The findings on the effect of information management practices was that it results in paperless operation (mean 3.7895), visibility between various departments (mean 3.7368), availability and proper flow of information (mean 3.6842) and coordination of activities through information technology (mean 3.6579). Outsourcing of the practices would ensure that the information is available when needed and this contributes to the firm's results in concurrence with the costs of capturing.

The effect of outsourcing inventory management was that it results in proper inventory flow (mean 3.8158), inventory accuracy (3.7105) and good inventory turns/proper space utilization (mean 3.5263). The results indicate that the firm would be able to maintain lean inventory. Outsourcing of material handling practices in the firm was found to have resulted in efficiency due to the use of modern material handling equipment (mean 3.9768), the quality of checks on raw materials (quality raw material) (mean 3.8947), enhanced quality of products delivered (mean 3.8421) and efficiency and less damage to products due to adoption of modern storage infrastructure i.e cold rooms and racking system (mean 3.7105).

The findings on the effect of outsourcing of procurement practices was found to be maintenance of effective information delivery with suppliers of services and products (mean 3.7632), transparent sourcing of suppliers (mean 3.7105), maintenance of good supplier relations (mean 3.6737) and benchmarking to determine whether the company meets targets (mean 3.6526). The low variation of the standard deviation indicates that the firm was unanimous on the effect of outsourcing the practices.

4.3.3 Effect of outsourcing practices on firm's performance

The large manufacturing firms were to indicate the effect of outsourcing practices on performance aspects in a five point Likert scale. The range was 'very low (1)' to 'very high' (5). The scores of very low and low have been taken to represent a variable which had a mean score of 0 to 2.5 on the continuous Likert scale; ($0 \leq S.E < 2.4$). The scores of 'moderate' have been taken to represent a variable with a mean score of 2.5 to 3.4 on the continuous Likert scale: ($2.5 \leq M.E. < 3.4$) and the score of both high and very high have been taken to represent a variable

which had a mean score of 3.5 to 5.0 on a continuous likert scale; ($3.5 \leq L.E. < 5.0$). A standard deviation of >1.0 implies a significant difference on the impact of the variable among respondents. The results are shown in Table 4.5.

Table 4.5: Effect of outsourcing practices on firms' performance

| Effect of outsourcing practices on firms' performance | Mean | Std. Deviation |
|---|--------|----------------|
| Organizational effectiveness | 3.9474 | .9284 |
| Increased productivity | 4.0548 | .9004 |
| Increased profits | 3.8158 | .8335 |
| Improved quality | 3.5263 | .9223 |
| Continuous improvement | 3.7368 | .8600 |
| Improved quality of work life | 3.4474 | 1.0318 |
| Social responsibility | 3.2368 | 1.1953 |

The findings in Table 4.5 was that outsourcing practices led to the firms performance improvement as it resulted in increased productivity (mean 4.0548), organizational effectiveness (mean 3.9474), increased profits (mean 3.8158), continuous improvement (mean 3.7368), improved quality (mean 3.5263) and improved quality of work life (mean 3.4474). The firms were however moderate on the effect of social responsibility (mean 3.2368). The results indicate that outsourcing practices has an effect on firms' performance.

4.3.4 Firms performance in relation to outsourced practices

The respondents were asked to indicate the effect of outsourcing practices on the firms' performance. The results are presented in Table 4.6.

Table 4.6: Firms performance in relation to outsourced practices

| Firms performance in relation to outsourced practices | Mean | Std. Deviation |
|---|--------|----------------|
| Decreased operating costs | 4.1263 | .71610 |
| Increased productivity | 3.9474 | .83658 |
| Reduced lead time | 3.8684 | .90557 |

| | | |
|--|--------|--------|
| Timely delivery of services to clients | 3.8756 | .81111 |
| Use of modern technology in offering of services | 3.5789 | .82631 |
| Improved profits | 3.8573 | .82286 |
| Improved customer satisfaction | 4.0789 | .78436 |
| Faster response to customer demands | 3.8421 | .82286 |

The result in Table 4.6 was that outsourcing of logistics practices by the large manufacturing firms would result in decreased operating costs (mean 4.1263), improved customer satisfaction (mean 4.0789), increased productivity (mean 3.9474), timely delivery of services to clients (mean 3.8756), reduced lead time (mean 3.8684), improved profits (mean 3.8573), faster response to customer demands (mean 3.8421) and use of modern technology in offering of services (mean 3.5789). The findings indicate that outsourcing of logistic practices influences the performance of the firms’.

CHAPTER FIVE: SUMMARY, CONCLUSION, RECOMMENDATIONS, LIMITATIONS AND AREAS FOR FURTHER RESEARCH

5.1 Introduction

Chapter five will cover the summary of study, conclusion, recommendations, limitations and areas for further research.

5.2 Summary

The studies found out that majority of the large manufacturing firms were outsourcing the transportation management, warehouse management and material handling management. On the other hand, half of the firms indicated that they had outsourced information management and inventory handling management. The study showed that outsourcing logistic practices resulted in increased vehicle visibility due to fleet track tools, route optimization, improved vehicle scheduling, good housekeeping practices, proper receipt procedures, less damages to commodities due to proper storage, staff welfare has been achieved due to implementation of health and safety, paperless operation, visibility between various departments, availability and proper flow of information, coordination of activities through information technology, proper inventory flow, inventory accuracy, good inventory turns/proper space utilization, efficiency due to the use of modern material handling equipment, the quality of checks on raw materials (quality raw material), enhanced quality of products delivered and efficiency and less damage to products due to adoption of modern storage infrastructure i.e. cold rooms and racking system, 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.

The outsourcing practices being adopted by the large manufacturing firms resulted in increased productivity, organizational effectiveness, increased profits, continuous improvement, improved quality and improved quality of work life and thus outsourcing of these processes was an ideal solution that helps the firm expand internationally and operate on a much larger scale. At the same time, outsourcing resulted in decreased operating costs, improved customer satisfaction,

increased productivity, timely delivery of services to clients, reduced lead time and improved profits, faster response to customer demands and use of modern technology in offering of services. This would spur the performance of the firms as it would enable the firm to concentrate on the basic activity (core competence) and use best methods and experiences.

5.3 Conclusion and Recommendations

Outsourcing of logistics services by large manufacturing firms would strengthen their resources in order to reinforce their competitive advantage. The results established that the firms were outsourcing transportation management, warehouse management and material handling management. The firms opted to outsource these services due to their advantages and possible influence on organizational performance, thus enabling the firms to focus on their 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 improves profits. Thus, in order to gain competitive advantage they must select areas in which they will concentrate their resources. By outsourcing to specialist organizations services not generated by core competences, companies can see an improvement in their organizational performance.

The study found out that the large manufacturing firms had adopted transportation management, warehouse management, material handling management, information management and inventory management. It is recommended that the firms outsource these practices in that they would guarantee them competitive advantage over other firms in the competitive environment of today and at the same time enable them achieve the desired objectives.

The study also found out that outsourcing of processes by the firms has influenced performance and therefore it is recommended that the manufacturing firms should continue outsourcing services which they do not have competitive advantage so that they can continue improving performance.

5.4 Limitations

The focus of study was on large manufacturing firms and therefore did not cover small manufacturing firms. The study further focused on large manufacturing firms in Nairobi and not the entire country and the region as a whole. The researcher also faced challenges in that some of the respondents were hard to reach due to their tight schedules while others were unwilling to cooperate due to organizational policies on divulgence of information.

5.5 Areas for further research

The study confined itself to large manufacturing firms in Nairobi and the findings may not be applicable in other sectors as a result of uniqueness of these manufacturing firms. It is therefore recommended that the study is replicated in other service sectors to establish logistics outsourcing practices and performance of firms. A study should also be carried out on small manufacturing firms.

REFERENCES

- Aubert, B.A., Rivard, S., and Patry, M. (1996), "A transaction cost approach to outsourcing behaviour: some empirical evidence", *Information & Management*, Vol. 30 pp.51-64.
- Barney, J.B. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, Vol. 17 No.1, pp.99-120.
- Bosire, G (2011), Impact of Outsourcing on Lead time and customer service among supermarkets in Nairobi, *Unpublished MBA Project*, University of Nairobi
- Brown, D., and Wilson, S. (2005), *The Black Book of Outsourcing – How to Manage the Changes, Challenges, and Opportunities*, Windley, Hoboken, NJ, pp.19-43
- Bruce, D.J.and Useem, K (2008), "A resource-based analysis of global competition: the case of the bearings industry", *Strategic Management Journal*, Vol. 12.
- Bryce, D.J., Useem, M. (2008), "The impact of corporate outsourcing on company value", *European Management Journal*, Vol. 16 No.6, pp.635-43
- Chung, S., Meindl, P. (2010), *Supply Chain Management: Strategy, Planning and Operation*, Pearson/Prentice Hall, Upper Saddle River, NJ, .
- Chase, R.B., Jacobs, F.R., Aquilano, N.J. (2004), *Operations Management for Competitive Advantage*, 10th ed., Irwin/McGraw-Hill, Boston, MA,
- De Boer, L., Gaytan, J., Arroyo, P. (2006), "A satisficing model of outsourcing", *Supply Chain Management: An international Journal*, Vol. 11 No.5, pp.444-55.
- Eisenhardt, K.M. (1985), "Control: organizational and economic approaches", *Management Science*, Vol. 31 pp.134-49.

- Hauser, L.M. (2003), "Risk-adjusted supply chain management", *Supply Chain Management Review*, pp.64-71
- Hussey, D., and Jenster, P., (2003), "Outsourcing: the supplier viewpoint", *Strategic Change*, Vol. 2 No.1, pp.7-20.
- Jiang, H and Qureshi, B. (2005), "A production-distribution coordinating model for third party logistics partnership", *Proceedings of the 2005 IEEE International Conference on Automation Science and Engineering, Edmonton, Canada, August 1 & 2*, pp.99-104.
- Kamuri, J (2010), Challenges facing the Implementation of Outsourcing strategy at the Kenyatta National Hospital, *Unpublished MBA Project*, University of Nairobi
- Kangaru, M (2011), Challenges of business outsourcing at the Kenya Power, *Unpublished MBA Project*, University of Nairobi
- Krim, J. (2003), "Intel chairman says US is losing edge", *The Washington Post*, No. October, .
- Kulmala, H.I. (2003), "Cost management in firm networks", Publication 418, Tampere University of Technology, Tampere, .
- Laugen, L.B., Berger, P., Zeng, A.,and Gerstenfeld, A. (2008), "Applying the analytic hierarchy process to the offshore outsourcing location decision", *Supply Chain Management: An International Journal*, Vol. 13 No.6, pp.435-49.
- Mahoney, J.T., Pandian, R.J. (1992), "The resource based view within the conversation of strategic management", *Strategic Management Journal*, Vol. 13 No.5, pp.363-80.
- Maiga, A.S., Jacobs, F.A. (2004), "The association between benchmarking and organizational performance: an empirical investigation", *Managerial Finance*, Vol. 30 No.8, pp.13-33.
- McIvor, R. (2005). "A practical framework for understanding the outsourcing process". *Supply Chain Management: An international Journal*, 5(1), 22-36.

- Momme, J. (2002), "Framework for outsourcing manufacturing: strategic and operational implications", *Computers in Industry*, Vol. 49 No.1, pp.59-75.
- Muller, V. (1991), "Fast, global, and entrepreneurial: supply chain management, Hong Kong style – an interview with Victor Fung", *Harvard Business Review*, Vol. 76 No.5, pp.102-14.
- Overby A.L. (2007), "Economic clusters and the supply chain: a case study", *Supply Chain Management: An International Journal*, Vol. 11 No.3, pp.266-70.
- Porter, M. E., (1980), *Competitive Strategy: Techniques for Analyzing Industries and Competitors*, Free Press, New York, NY., .
- Razzaque, M.A., Sheng, C.C. (2008), "Outsourcing of logistics functions: a literature survey", *International Journal of Physical Distribution and Logistics Management*, Vol. 28 No.2, pp.89-107.
- Saunders, C., (1994), "Achieving success in information systems outsourcing", *California Management Review*, Vol. 39 pp.63-79
- Suri A. (2008), "Meeting the challenge of outsourcing", *Engineering Management Journal*, Vol. 14 No.3, pp.34-7.
- Taylor, L. (2006), "What does evidence tell us about fragmentation and outsourcing?", *International Review of Economics & Finance*, Vol. 14 No.3, pp.305-16.
- Wambui M. (2010), Analysis of Outsourcing at Kenya Armed Forces, *Unpublished MBA Project*, University of Nairobi

COVER LETTER

Oliver A. Mulama

P.O. Box 3423-00200

NAIROBI

August 27th 2012

Dear Respondent,

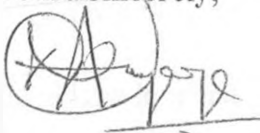
RE: RESEARCH QUESTIONNAIRE

This questionnaire (attached) is designed to gather information on logistics outsourcing practices and performance of private large scale manufacturing firms in Nairobi Kenya. This study is being carried out for a management project paper as a requirement in partial fulfillment of the Master of Business Administration, University of Nairobi

Please note that this is strictly an academic exercise towards the attainment of the above purpose. You are hereby assured that the information will be treated with the strictest confidence. Your co-operation will be highly appreciated.

Thank you for your anticipated kind response.

Yours Sincerely,



Oliver A. Mulama

APPENDIX I

QUESTIONNAIRE

Please give answers in the spaces provided and tick (√) in the box that matches your response to the questions where applicable.

PART A: DEMOGRAPHIC AND RESPONDENTS PROFILE

- 1) Name of the company:.....
2. What is your designation at the organization.....
3. Gender: male () Female ()
4. What is your age bracket? (Tick as applicable)
 - a) Under 30 years ()
 - b) 31 – 40 years ()
 - c) 41 – 50 years ()
 - d) Over 50 years ()
5. Length of continuous service with the organization?
 - a) Less than five years ()
 - b) 5-10 years ()
 - c) Over 10 years ()
6. For how long has your company been in operation?
 - a) Under 5 years ()
 - b) 6 – 10 years ()
 - c) 11 – 15 years ()

d) Over 16 years ()

7.) Do you operate in other countries outside Kenya? Yes () No ()

If yes, please give the countries that you operate in.....

.....

.....

.....

PART B: Outsourcing Practices adopted by large manufacturing firms

8.) Please indicate whether your organization has outsourced the following logistics services?

Tick where appropriate between on YES or NO

| Services | YES | NO |
|-------------------------------|-----|----|
| Transportation management | | |
| Warehouse management | | |
| Information Management | | |
| Inventory Management | | |
| Material handling management. | | |

9.) Please indicate the extent to which your organization performance has been improved by outsourcing the following practices? Use the scale of: 1- Not at all, 2- Small extent, 3- Moderate extent, 4- Great extent, 5- Very great extent

| Practices | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Transportation management practices: | | | | | |
| 1. Vehicle scheduling has improved | | | | | |
| 2. Route optimization has been achieved | | | | | |
| 3. Fleet tracking tools have increased vehicle visibility | | | | | |
| Warehouse management practices | | | | | |

| | | | | | |
|---|--|--|--|--|--|
| 1. Good house keeping practices have been achieved by the organization | | | | | |
| 2. Proper receipt procedures have been undertaken by staff | | | | | |
| 3. Less damages to commodities due to proper storage | | | | | |
| 4. Staff welfare has been achieved due to implementation of health and safety | | | | | |
| Information Management practices | | | | | |
| 1. Visibility between various departments in the organization | | | | | |
| 2. Paper less operation in the organization. | | | | | |
| 3. Availibility and proper flow of information in the organization | | | | | |
| 4 My organization utilizes information technology in coordinating its activities with suppliers. | | | | | |
| Inventory Management practices | | | | | |
| 1. Proper inventory flows inventory | | | | | |
| 2. Inventory accuracy has been achieved | | | | | |
| 3. Good inventory turns / proper space utilization | | | | | |
| Material handling practices | | | | | |
| 1. Quality checks on raw materials (quality raw materials) | | | | | |
| 2. Adoption of modern storage infrastructure i.e. cold rooms and racking system. | | | | | |
| 3. Efficiency due to use of modern material handling equipment | | | | | |
| 4. Adoption of modern storage infrastructure i.e. cold rooms and racking system has led to efficiency and less damage to products | | | | | |
| 5. The suppliers to the organization show compliance with particular regulations such as emissions caps, hazardous material, labeling, product specifications and having environment-related documentation ,this has enhanced quality of products delivered | | | | | |
| Procurement practices | | | | | |
| 1. My organization practices transparent sourcing of suppliers | | | | | |
| 2. Good supplier relations is maintained by the organization | | | | | |
| 3. Effective information delivery is maintained with the suppliers of services and products | | | | | |
| 4. In assessing the potential outsourcing services, the organization benchmarks to determine whether the company meets your targets | | | | | |

10.) Kindly mention any other logistics outsourcing practice adapted by your organization

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 11.) What effect does outsourcing practices being used by the large manufacturing firms have on the following performance aspects? 1-Very low, 2- Low, 3- Moderate, 4- High, 5- Very high

| Performance aspects | 1 | 2 | 3 | 4 | 5 |
|---|----------|----------|----------|----------|----------|
| Outsourcing practices leads to organizational effectiveness | | | | | |
| Outsourcing practices results to increased productivity | | | | | |
| The organization profits increased as a result of outsourcing practices | | | | | |
| Outsourcing practices leads to improved quality | | | | | |
| Outsourcing practices results to continuous improvement (services being provided and innovations being performed during the service production process) | | | | | |
| The quality of work life (motivational level of personnel) is affected by outsourcing practices | | | | | |
| Social responsibility (companies level of fulfilling social responsibilities) | | | | | |

12.) State the extent to which you agree with the following statements concerning your organizations performance in relation to the outsourced practices you have adapted.

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

| Performance | 1 | 2 | 3 | 4 | 5 |
|---|----------|----------|----------|----------|----------|
| The outsourcing practice has led to a decrease in operating costs | | | | | |
| It has led to an increased productivity | | | | | |
| It has led to a reduction in lead time | | | | | |
| It has made the organization achieve timely delivery of services to clients | | | | | |
| The organization has as a result achieved use of modern technology in offering its services | | | | | |
| As a result of logistics outsourcing the organization profits has improved | | | | | |
| The practice has enabled the organization concentrate on its core business and therefore achieve improved customer satisfaction | | | | | |
| It has enabled faster response to customer demands | | | | | |

APPENDIX II

LARGE MANUFACTURING FIRMS IN NAIROBI, KENYA

| Energy Sector | | |
|-------------------------------------|--------------------------------------|--------------------------------------|
| A.I Records (Kenya) Ltd | Modulec Engineering Systems Ltd | Kenwestfal Works Ltd |
| Amedo Centre Kenya Ltd | Mustek East Africa | Kenya Power & Lighting Co. Ltd |
| Assa Abloy East Africa Ltd | Nationwide Electrical Industries | Kenya Scale Co. Ltd/ Avery Kenya Ltd |
| Aucma Digital Technology Africa Ltd | Nationwide Electrical Industries Ltd | Kenya Shell Ltd |
| Avery (East Africa) Ltd | Optimum Lubricants Ltd | Libya Oil Kenya Limited |
| Baumann Engineering Limited | PCTL Automation Ltd | Power Technics Ltd |
| Centurion Systems Limited | Pentagon Agencies | Reliable Electricals Engineers Ltd |
| Digitech East Africa Limited | Power Engineering International Ltd | Sanyo Armo (Kenya) Ltd |
| Manufacturers & Suppliers (K) Ltd | Eveready East Africa Limited | Socabelec East Africa |
| Marshall Fowler (Engineers) Ltd | Frigorex East Africa Ltd | Sollatek Electronics (Kenya) Limited |
| Mecer East Africa Ltd | Holman Brothers (E.A.) Ltd | Specialised Power Systems Ltd |
| Metlex Industries Ltd | IberaAfrica Power (EA) Ltd | Synergy-Pro |
| Metsec Ltd | International Energy Technik Ltd | Tea Vac Machinery Limited |
| East African Cables Ltd | Kenwest Cables Ltd | Virtual City Ltd |
| Chemical Sector | | |
| Anffi Kenya Ltd | Maroo Polymers Ltd | Imaging Solutions (K) Ltd |
| Basco Product (K) Ltd | Match Masters Ltd | Interconsumer Products Ltd |
| Bayer East Africa Ltd | United Chemical Industries Ltd | Odex Chemicals Ltd |
| Continental Products Ltd | Oasis Ltd | Osho Chemicals Industries Ltd |
| Cooper K- Brands Ltd | Rumorth EA Ltd | PolyChem East Africa Ltd |
| Cooper Kenya Limited | Rumorth East Africa Ltd | Procter & Gamble East Africa Ltd |
| Beiersdorf East Africa td | Sadolin Paints (E.A.) Ltd | PZ Cussons Ltd |
| Blue Ring Products Ltd | Sara Lee Kenya Limited | Royal Trading Co. Ltd |
| BOC Kenya Limited | Saroc Ltd | Reckitt Benckiser (E.A) Ltd |
| Buyline Industries Limited | Super Foam Ltd | Revolution Stores Co. Ltd |

| | | |
|--|--------------------------------------|-----------------------------------|
| Carbacid (CO2) Limited | Crown Berger Kenya Ltd | Soilex Chemical Ltd |
| Chemicals & Solvents E.A. Ltd | Crown Gases Ltd | Strategic Industries Limited |
| Chemicals and Solvents E.A. Ltd | Decase Chemical (Ltd) | Supa Brite Ltd |
| Coates Brothers (E.A.) Limited | Deluxe Inks Ltd | Unilever Kenya Ltd |
| Coil Products (K) Limited | Desbro Kenya Limited | Murphy Chemical E.A Ltd |
| Colgate Palmolive (E.A) Ltd | E. Africa Heavy Chemicals (1999) Ltd | Syngenta East Africa Ltd |
| Johnson Diversity East Africa Limited | Elex Products Ltd | Synresins Ltd |
| Kel Chemicals Limited | European Perfumes & Cosmetics Ltd | Tri-Clover Industries (K) Ltd |
| Kemia International Ltd | Galaxy Paints & Coating Co. Ltd | Twiga Chemical Industries Limited |
| Ken Nat Ink & Chemical Ltd | Grand Paints Ltd | Vitafoam Products Limited |
| Magadi Soda Company Ltd | Henkel Kenya Ltd | |
| Food Sector | | |
| Africa Spirits Ltd | Annum Trading Company Limited | Premier Flour Mills Ltd |
| Agriner Agricultural Development Limited | Aquamist Ltd | Premier Food Industries Limited |
| Belfast Millers Ltd | Brookside Dairy Ltd | Proctor & Allan (E.A.) Ltd |
| Bidco Oil Refineries Ltd | Candy Kenya Ltd | Promasidor (Kenya) Ltd |
| Bio Foods Products Limited | Capwelll Industries Ltd | Trufoods Ltd |
| Breakfast Cereal Company(K) Ltd | Carlton Products (EA) Ltd | UDV Kenya Ltd |
| British American Tobacco Kenya Ltd | Chirag Kenya Limited | Unga Group Ltd |
| Broadway Bakery Ltd | E & A Industries Ltd | Usafi Services Ltd |
| C. Czarnikow Sugar (EA) Ltd | Kakuzi Ltd | Uzuri foods Ltd |
| Cadbury Kenya Ltd | Erdemann Co. (K) Ltd | ValuePak Foods Ltd |
| Centrofood Industries Ltd | Excel Chemical Ltd | W.E. Tilley (Muthaiga) Ltd |
| Coca cola East Africa Ltd | Kenya Wine Agency Limited | Kevian Kenya Ltd |
| Confec Industries (E.A) Ltd | Highlands Canner Ltd | Koba Waters Ltd |
| Corn Products Kenya Ltd | Super Bakery Ltd | Kwality Candies & Sweets Ltd |
| Crown Foods Ltd | Sunny Processor Ltd | Lari Dairies Alliance Ltd |
| Cut Tobacco (K) Ltd | Spin Knit Dairy Ltd | London Distillers (K) Ltd |
| Deepa Industries Ltd | Highlands Mineral Water Co. Ltd | Mafuko Industries Ltd |
| Del Monte Kenya Ltd | Homeoil | Manji Food Industries Ltd |
| East African Breweries Ltd | Insta Products (EPZ) Ltd | Melvin Marsh International |
| East African Sea Food Ltd | Jambo Biscuits (K) Ltd | Kenya Tea Development |

| | | |
|----------------------------------|-------------------------------|--------------------------------|
| | | Agency |
| Eastern Produce Kenya Ltd | Jetlak Foods Ltd | Mini Bakeries (Nbi) Ltd |
| Farmers Choice Ltd | Karirana Estate Ltd | Miritini Kenya Ltd |
| Frigoken Ltd | Kenafric Industries Limited | Mount Kenya Bottlers Ltd |
| Giloil Company Limited | Kenblest Limited | Nairobi Bottlers Ltd |
| Glacier Products Ltd | Kenya Breweries Ltd | Nairobi Flour Mills Ltd |
| Global Allied Industries Ltd | Kenya Nut Company Ltd | NAS Airport Services Ltd |
| Global Beverages Ltd | Kenya Sweets Ltd | Rafiki Millers Ltd |
| Global Fresh Ltd | Nestle Kenya Ltd | Razco Ltd |
| Gonas Best Ltd | Nicola Farms Ltd | Re-Suns Spices Limited |
| Hail & Cotton Distillers Ltd | Palmhouse Dairies Ltd | Smash Industries Ltd |
| Al-Mahra Industries Ltd | Patco Industries Limited | Softa Bottling Co. Ltd |
| Alliance One Tobacco Kenya Ltd | Pearl Industries Ltd | Spice World Ltd |
| Alpha Fine Foods Ltd | Pembe Flour Mills Ltd | Wrigley Company (E.A.) Ltd |
| Alpine Coolers Ltd | | |
| Plastics and Rubber | | |
| Betatrad (K) Ltd | Prestige Packaging Ltd | Haco Industries Kenya Ltd |
| Blowplast Ltd | Prosel Ltd | Hi-Plast Ltd |
| Bobmil Industries Ltd | Qplast Industries | Jamlam Industries Ltd |
| Complast Industries Limited | Sumaria Industries Ltd | Kamba Manufacturing (1986) Ltd |
| Kenpoly Manufacturers Ltd | Super Manufacturers Ltd | Keci Rubber Industries |
| Kentainers Ltd | Techpak Industries Ltd | Nairobi Plastics Industries |
| King Plastic Industries Ltd | Treadsetters Tyres Ltd | Nav Plastics Limited |
| Kingway Tyres & Automart Ltd | Uni-Plastcis Ltd | Ombi Rubber |
| L.G. Harris & Co. Ltd | Wonderpac Industries Ltd | Packaging Masters Limited |
| Laneeb Plastics Industries Ltd | ACME Containers Ltd | Plastic Electricons |
| Metro Plastics Kenya Limited | Afro Plastics (K) Ltd | Raffia Bags (K) Ltd |
| Ombi Rubber Rollers Ltd | Alankar Industries Ltd | Rubber Products Ltd |
| Packaging Industries Ltd | Dune Packaging Ltd | Safepak Limited |
| Plastics & Rubber Industries Ltd | Elgitread (Kenya) Ltd | Sameer Africa Ltd |
| Polyblend Limited | Elgon Kenya Ltd | Sanpac Africa Ltd |
| Polyflex Industries Ltd | Eslon Plastics of Kenya Ltd | Silpack Industries Limited |
| Polythene Industries Ltd | Five Star Industries Ltd | Solvochem East Africa Ltd |
| Premier Industries Ltd | General Plastics Limited | Springbox Kenya Ltd |
| Building sector | | |
| Central Glass Industries Ltd | Kenbro Industries Ltd | Manson Hart Kenya Ltd |
| Karsan Murji & Company Limited | Kenya Builders & Concrete Ltd | Mombasa Cement Ltd |
| Paper Sector | | |
| Ajit Clothing Factory Ltd | Paper House of Kenya Ltd | General Printers Limited |

| | | |
|-------------------------------------|--|--------------------------------------|
| Associated Papers & Stationery Ltd | Paperbags Limited | Graphics & Allied Ltd |
| Autolitho Ltd | Primex Printers Ltd | Guaca Stationers Ltd |
| Bag and Envelope Converters Ltd | Print Exchange Ltd | Icons Printers Ltd |
| Bags & Balers Manufacturers (K) Ltd | Printpak Multi Packaging Ltd | Interlabels Africa Ltd |
| Brand Printers | Printwell Industries Ltd | Jomo Kenyatta Foundation |
| Business Forms & Systems Ltd | Prudential Printers Ltd | Kartasi Industries Ltd |
| Carton Manufacturers Ltd | Punchlines Ltd | Kenafic Diaries Manufacturers Ltd |
| Cempack Ltd | Conventual Franciscan Friars-Kolbe Press | Kitabu Industries Ltd |
| Chandaria Industries Limited | Creative Print House | Kul Graphics Ltd |
| Colour Labels Ltd | D.L. Patel Press (Kenya) Limited | Label Converters |
| Colour Packaging Ltd | Dodhia Packaging Limited | Modern Lithographic (K) Ltd |
| Colour Print Ltd | East Africa Packaging Industries Ltd | Pan African Paper Mills (EA) Limited |
| Kenya Stationers Ltd | Elite Offset Ltd | Ramco Printing Works Ltd |
| Kim-Fay East Africa Ltd | Ellams Products Ltd | Regal Press Kenya Ltd |
| Paper Converters (Kenya) Ltd | English Press Limited | SIG Combibloc Obeikan Kenya |
| Textile Sector | | |
| Africa Apparels EPZ Ltd | Kenya Trading EPZ Ltd | Spinners & Spinners Ltd |
| Fulchand Manek & Bros Ltd | Kikoy Co. Ltd | Storm Apparel Manufacturers Co. Ltd |
| Image Apparels Ltd | Le-Stud Limited | Straightline Enterprises Ltd |
| Alltex EPZ Ltd | Metro Impex Ltd | Sunflag Textile & Knitwear Mills Ltd |
| Alpha Knits Limited | Midco Textiles (EA) Ltd | Tarpo Industries Limited |
| Apex Appaels (EPZ) Ltd | Mirage Fashionwear EPZ Ltd | Teita Estate Ltd |
| Baraka Apparels (EPZ) Ltd | MRC Nairobi (EPZ) Ltd | Thika Cloth Mills Ltd |
| Bhupco Textile Mills Limited | Ngecha Industries Ltd | United Aryan (EPZ) Ltd |
| Blue Plus Limited | Premier Knitwear Ltd | Upan Wasana (EPZ) Ltd |
| Bogani Industries Ltd | Protex Kenya (EPZ) Ltd | Vaja Manufacturers Limited |
| Brother Shirts Factory Ltd | Riziki Manufacturers Ltd | Yoochan Kenya EPZ Company Ltd |
| Embalishments Ltd | Rolex Garments EPZ Ltd | YU-UN Kenya EPZ Company Ltd |
| J.A.R Kenya (EPZ) Ltd | Silver Star Manufacturers Ltd | |
| Timber Sector | | |
| Economic Housing Group Ltd | Transpaper Kenya Ltd | Wood Makers Kenya Ltd |
| Eldema (Kenya) Limited | Twiga Stationers & Printers | Woodtex Kenya Ltd |

| | | |
|---|-------------------------------------|-----------------------------------|
| | Ltd | |
| Fine Wood Works Ltd | Uchumi Quick Suppliers Ltd | United Bags Manufacturers Ltd |
| Furniture International Limited | Rosewood Office Systems Ltd | Statpack Industries Ltd |
| Hwan Sung Industries (K) Ltd | Shah Timber Mart Ltd | Taws Limited |
| Kenya Wood Ltd | Shamco Industries Ltd | Tetra Pak Ltd |
| Newline Ltd | Slumberland Kenya Limited | |
| PG Bison Ltd | Timsales Ltd | |
| Motor Vehicle Assembly and Accessories | | |
| Auto Ancillaries Ltd | General Motor East Africa Limited | Megh Cushion industries Ltd |
| Varsani Brakelining Ltd | Impala Glass Industries Ltd | Mutsimoto Motor Company Ltd |
| Bhachu Industries Ltd | Kenya Grange Vehicle Industries Ltd | Pipe Manufacturers Ltd |
| Chui Auto Spring Industries Ltd | Kenya Vehicle Manufacturers Limited | Sohansons Ltd |
| Toyota East Africa Ltd | Labh Singh Harnam Singh Ltd | Theevan Enterprises Ltd |
| Unifilters Kenya Ltd | Mann Manufacturing Co. Ltd | |
| Metal and Allied | | |
| Allied Metal Services Ltd | Morris & Co. Limited | Khetshi Dharamshi & Co. Ltd |
| Alloy Street Castings Ltd | Nails & Steel Products Ltd | Nampak Kenya Ltd |
| Apex Street Ltd Rolling Mill Division | Orbit Engineering Ltd | Napro Industries Limited |
| ASL Ltd | Rolmil Kenya Ltd | Specialized Engineer Co. (EA) Ltd |
| ASP Company Ltd | Sandvik Kenya Ltd | Steel Structures Limited |
| East Africa Foundry Works (K) Ltd | Sheffield Steel Systems Ltd | Steelmakers Ltd |
| Elite Tools Ltd | Booth Extrusions Limited | Steelwool (Africa) Ltd |
| Friendship Container Manufacturers | City Engineering Works Ltd | Tononoka Steel Ltd |
| General Aluminum Fabricators Ltd | Crystal Industries Ltd | Welding Alloys Ltd |
| Gopitech (Kenya) Ltd | Davis & Shirliff Ltd | Wire Products Limited |
| Heavy Engineering Ltd | Devki Steel Mills Ltd | Viking Industries Ltd |
| Insteel Limited | East Africa Spectre Limited | Warren Enterprises Ltd |
| Metal Crown Limited | Kens Metal Industries Ltd | |
| Pharmaceutical and Medical Equipment | | |
| Alpha Medical Manufacturers Ltd | Madivet Products Ltd | KAM Industries Ltd |
| Beta Healthcare International Limited | Novelty Manufacturing Ltd | KAM Pharmacy Limited |

| | | |
|--------------------------------------|----------------------------|-------------------------------------|
| Biodeal Laboratories Ltd | Oss. Chemie (K) | Pharmaceutical Manufacturing Co. |
| Bulks Medical Ltd | Dawa Limited | Regals Pharmaceuticals |
| Cosmos Limited | Elys Chemical Industries | Universal Corporation Limited |
| Laboratory & Allied Limited | Gesto Pharmaceutical Ltd | Pharm Access Africa Ltd |
| Manhar Brothers (K) Ltd | Glaxo Smithkline Kenya Ltd | |
| Leather Products and Footwear | | |
| Alpharama Ltd | C & P Shoe Industries Ltd | East Africa Tanners (K) Ltd |
| Bata Shoe Co. (K) Ltd | CP Shoes | Leather Industries of Kenya Limited |
| New Market Leather Factory Ltd | Dogbones Ltd | |

Source: Kenya Association of Manufacturers (KAM) Directory. June, 2011