

Declaration

and has not been submitted for a degree in any other University

**OUTSOURCING OF LOGISTICS: A SURVEY OF THE
PRACTICES OF MEDIUM AND LARGE KENYAN
MANUFACTURING FIRMS**

BY

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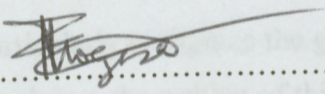
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Declaration

This project is my original work and has not been submitted for a degree in any other University

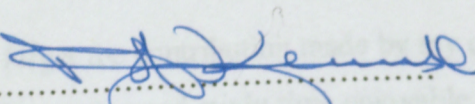
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Dedication

To my parents who had to forego so much and work so hard to see me through school. More especially my father for encouraging me to strive to ameliorate my education.

Abstract

The tough economic times in the country have endeared firms to reconsider their options in order to acquire and sustain competitive advantage. To ensure this, they have adopted a number of strategies. There has been a move to strategically manage the operations of the business unit that demands the evaluation of the core activities and competencies so as to stay in what the firm does best or what is the 'raison d'etre' of the firm. However the other activities found to be either non-core or that the firm does not do well still have to be done. This has led to the outsourcing of these activities to other firms in the industry that could do these activities better and contribute positively in the value addition function of the organisation. Logistics has been identified as one of the functions that are very frequently outsourced by firms. Indeed the study found that about 80% of the firms surveyed outsourced at least one activity in the logistics function.

The study found that both medium and large sized firms equally outsource logistics services and the ownership of the firm does not have a significant influence on the prevalence of outsourcing of logistics services in Kenyan firms. Firms quoted three reasons as being most influential in outsourcing of the logistical activities. The first one is the need to avail time for other crucial activities for managers. The second is the need to reduce overall cost and the third, the need to make use of the expertise of service providers. The triggers found to lead to outsourcing were the need to improve overall efficiency, need to focus on the core business and the demand from customers for a higher service level. The study found that staff resistance to change was the factor that was an obstacle to the implementation of outsourcing of logistical services. The surveyed firms did not identify any serious pitfalls in the outsourcing of logistical services in Kenya.

The evidence for a partnership relationship is not very strong; hence, Kenyan firms need to strengthen their relationship with suppliers for optimal realisation of benefits and value addition for customers. The area of e-logistics is not well developed in Kenya hence investment in the sector could boost trading and enhance operational effectiveness.

Outsourcing of logistics if carried out properly is a very important practice for firms in Kenya that may want to maintain competitive advantage in the industry.

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CHAPTER ONE

1 INTRODUCTION

1.1 Background

The advent of globalisation and subsequent increase in competition, as well as the high level of dynamism in the environment has led to many uncertainties and myriads of problems for organizations. In Kenya, the opening up of the market to competition through liberalisation and breakdown of infrastructure for various reasons, have created a particularly challenging operating environment for existing and start-up firms. This has led to the closing shop of a number of firms in Kenya and relocation of the manufacturing element of others.

Porter (1985) advanced the concept of the value chain, which disaggregates a firm into its strategically relevant activities in order to understand the behaviour of costs and the existing potential causes of differentiation. He contends that a firm gains competitive advantage by performing these strategically important activities better or more cheaply than its competitors.

In order to do this, firms have had to undergo some form of organisational restructuring. Those that were in need of substantial change have had to ensure the right focus through the application of Business Process Re-engineering (BPR). This entails the analysis of oneself, strategy, staff, other people you work with, technology used, procedures and processes employed to do the job and so on with a view of eliminating unnecessary procedures and improving the necessary ones (Rothary and Robinson 1995). The target is flexibility, which is the ability to adjust quickly to changing market conditions. The firm should therefore structure itself to be lean enough to beat the competitor's price, innovative enough to keep its products and services technologically fresh and dedicated enough to deliver maximum quality and customer service.

BPR facilitates the clear identification of core activities and taking of appropriate action to ensure the most effective application of resources to the activity or activities. It also identifies the activities that can be best performed by an outside firm. This is what is referred to as outsourcing which is the employment of an outside agency to manage a function formerly carried out by the company.

McKinnon (1999) contends that logistics is often regarded as a supporting rather than mainstream function; hence, it has been an obvious candidate for externalisation

Electronic commerce and the development of the internet have also had an impact on the increase of outsourcing logistics particularly in Europe and North America.. Waller (2002) contends that web-enabled technology has put the 'e' into logistics – new concepts have developed as companies are increasingly using the Web to:

- Exchange and share information, e.g. forecast data, inventory levels and order status;
- Buy and sell products; and
- Develop new channels to market.

He further contends that though business-to-consumer (B2C) trading has received most press attention, it is business-to-business (B2B) activity that is the growth area. It will open up new opportunities for organizations of all sizes to trade globally and simultaneously optimize supply chain processes and inter-company relationships.

B2B and B2C have led to the transactions on the internet involving customers to satisfy their needs through the internet dubbed “e-fulfillment” (Waller, 2002). The term e-fulfillment came about with the dotcom start-ups and the rush by retailers to establish their position in this new market, but it is essentially about electronically managing the order-to-cash process. The basic e-fulfillment logistics model, whether for B2B or B2C, is customer-focused, giving the purchaser (whether business or individual) the ability to:

- Electronically place and pay for orders;
- Track orders from source to delivery; and
- Select an appropriate delivery time window.

The model also combines bricks-and-clicks in the fulfillment process, which includes order confirmation, picking, packing and dispatch, customer help lines and the goods return process.

In addition, demand-driven secondary production activities, such as final assembly and servicing, are likely to increase with B2B and B2C Web transactions. UK logistics service providers have expanded their services to cover every aspect of e-fulfillment, from website design to delivery to the end-consumer.

Logistics refers to the time related positioning or physical movement of resources such as raw materials, work in progress, manufacturing capability, finished goods inventory, physical assets, people and information.

Morrison (2001) contends that one-third of the world's traffic flow is global and best guestimates of total logistics costs run in excess of \$2 trillion annually. This is supported by McKinnon (1999) who also contends that outsourcing has resulted in growth in the level and variety of external expenditure on logistics. This has induced important changes in the way these services are purchased. Fewer carriers are being used; more of the work is being performed on a contractual basis; contractors are being given greater say in the design of logistical systems and greater emphasis is being placed on the development of longer term, co-operative relationships.

Outsourcing research in other parts of the world, notably Europe and North America has come up with various motives and reasons for outsourcing. Much of the specialist logistics research such as that of LaLonde and Maltz (1992) identified the demand for higher service standards as the main motive for outsourcing. Other surveys (Peters, et al 1998) suggest that similar importance is attached to cost savings, service improvement and flexibility in the decision to outsource logistics.

Another highly rated factor is the desire to avoid investing in logistical facilities. This was frequently advanced as the main advantage of outsourcing in the 1980s, particularly in the UK where a change in the system of corporate taxation in 1984 redirected tax incentives away from owning assets towards maximising their contribution to profit (McKinnon, 1999). This encouraged firms to concentrate capital on those core activities, which earned the highest rates of return and exploited their main competitive strengths (Peters et al 1998). The use of outside contractors not only reduces the need for new investment in logistical facilities; it can also release some of the capital already tied up in warehousing and vehicle fleets for more productive use elsewhere in the business.

Outsourcing also gives companies access to specialist expertise in firms whose core skill is logistics management. Contracting out can also help firms overcome internal labour problems that have traditionally impaired the efficiency of own-account operations. Operating parallel in-house and third party systems has also reduced the risk of the supply system being paralysed by industrial action.

Growing confidence in the way that contract logistics operations are managed and advances in information technology (IT) have made it possible for firms to monitor and control contract distribution operations at least as closely as in-house systems. Indeed, 50% of the firms surveyed by PE Consulting in 1996 actually advanced the need to improve control of logistics as a reason for outsourcing (PE consulting in McKinnon 1999).

Other reasons include structural change in the retail supply system promoting the use of contractors (Macbeath, 1985). Widespread just-in-time sourcing in industrial sectors, such as automotive and electronics has increased demand for third-party load consolidation services. International heavy reliance on contractors both for international transport and for the distribution of their products within foreign markets has also been a major reason for outsourcing of logistics. The steep upward trend in global sourcing and distribution is therefore inflating the demand for contract services at both the international and national levels (McKinnon, 1999).

In Kenya, several researches have been undertaken in recent times pioneered by that of Kinyua (2000). He undertook a study covering the outsourcing of financial activities for firms quoted in the Nairobi stock exchange. His findings indicate that the smaller firms were less likely to be doing outsourcing than the larger ones. He also found that locally owned firms were less likely to use outsourcing compared to jointly (foreign and locally) owned firms.

Kinyua (2000)'s study found that the most common motives for outsourcing were:

- the desire for the firm to improve overall efficiency;
- free up management time for other more productive duties, and
- to enable the firm focus on its core business

The study identified the following as difficulties in outsourcing

- identification of the financial services to outsource.
- staff resistance to change
- cost evaluation whether to outsource or not
- selection of outsourcing vendor

Kinyua (2000) also identified a number of risks related to outsourcing that include:

- Loss of control in decision making

- Loss of command on outsourced services
- Information leakage
- Over-reliance on the supplier.

Kirui (2001) followed up with a case study on the competitive advantage gained by BAT (K) Ltd's outsourcing of non-core logistical activities. His findings indicate that the triggers that made BAT embark on the outsourcing project were:

- The ideas of the new CEO to focus on core business,
- The disorganisation of logistical activities,
- Need for improved service delivery
- Need for cost savings.

In addition to the need to focus on the core business of the firm as identified by Kinyua (2000), the study by Kirui (2001) also identified cost savings and need for improved service delivery as motives for outsourcing.

1.2 Statement of the problem

Logistics outsourcing and management has been touted as the panacea to a number of problems in organizations. This has however not been achieved by many firms as some research results have shown (Telfer, 2000).

Liberalisation and privatisation policies put in place by the government in 1992 set the ground for globalisation of the Kenyan economy (Aseto and Akelo, 1996). This heralded many challenges for organisations that had become used to protectionist policies to maintain profit margins and market share with increased competition. McKinnon (1999) contends that with the globalisation and externalisation of world markets, logistics outsourcing has had an increasingly significant role in the profitability and cost structure of organisations all over the world.

From literature, we see that as firms restructure and realign their operations into their core business they resort to outsourcing of non-core functions or activities. Among the functions outsourced by organisations is logistics. We however do not have this documented in the Kenyan scene. Researches in the outsourcing of the functions of finance (Kinyua 2000), and human resources (Kaur 2001) have

been done in Kenya. However, the logistics outsourcing research done is a case study on BAT (K) Ltd by Kirui in 2001.

The study done by Kinyua (2000) focussed only on the large businesses. Even most of the studies done elsewhere in the world have also concentrated on large businesses (MacKinnon, 1999). A study covering outsourcing of logistics for large and medium-sized firms has not been conducted in Kenya.

Further, from the literature there is a big increase in businesses that are involved in third party logistics, (3PL) and fourth party logistics (4PL). This has also not been documented in the Kenyan environment.

Kirui (2001) states that the triggers for outsourcing in BAT (K) Ltd differ from those for other companies in the world. He also states that BAT (K) Ltd outsourced the physical logistics part of its operations to one firm with a partnering relationship. There is need therefore, to do a comparative and cross sectional study to find out whether the findings are unique to BAT (K) Ltd or they are generalizable to the firms that outsource in Kenya.

MacKinnon (1999) contends that despite attempts by logistics providers to differentiate through value added services, doubts remain about the long-term stability of many contractor-client relationships. Tri-annual surveys by PE-Consulting during the 1990s have found that around 56-58% of firms change at least some of their logistics contractors over a three-year period (PE consulting in MacKinnon 1999). Roughly 70% of users regularly claim that they are seriously considering changing contractors when the existing contract expires. This has not been explored and documented for firms in Kenya.

This study sought to document the practices of outsourcing of logistics in Kenya. It is an area that has been attracting increasing outsourcing in other parts of the world. It also sought to find out whether there exists a significant difference between the outsourcing of logistics for large organisations and those of medium-sized organisations. The findings of Kirui (2001) as a case study of BAT (K) Ltd were also investigated in relation to other organisations in Kenya.

1.3 Objectives of the study

This study therefore sought:

- i) To document the logistics outsourcing practices of firms in Kenya
- ii) To establish the triggers, benefits, risks and problems in implementing and operating the outsourcing of logistical services in Kenya.
- iii) To test whether there is a significant difference in the prevalence to resort to outsourcing between large firms and medium-sized firms.

1.4 Importance of the study

The study will be important for the following groups

- i) Academics will benefit from the documentation of the issues as contributing to and enriching the existing body of knowledge.
- ii) Firms will be able to have a documented record of outsourcing practices and benefits and risks or problems in outsourcing of logistical activities to facilitate successful use of the practice.
- iii) The research will act as a base for further research in the area

1.5 Hypotheses

The following were the hypotheses for the study.

- i) H_0 : There exists no association between industrial category and the practice of outsourcing of logistical services
 H_a : There exists an association between industrial category and the practice of outsourcing of logistical services
- ii) H_0 : there is no significant difference between logistics outsourcing in medium-sized firms and that of large-sized firms in Kenya.
 H_a : there is a significant difference between logistics outsourcing in medium-sized firms and that of large-sized firms in Kenya.
- iii) H_0 : There exists no association between company ownership and the practice of logistical services in Kenya
 H_a : There exists an association between company ownership and the practice of outsourcing of logistical services in Kenya.

CHAPTER TWO

2 LITERATURE REVIEW

2.1 Definitions

Outsourcing is the practise of handing over the planning, management and operation of a certain function to an independent third party (Paul Neale in Rothary and Robinson 1995). It is the finding of new suppliers and new ways to secure the delivery of raw materials, goods and components, and services (Rothary and Robinson 1995). It entails the use of knowledge, experience and creativity of new suppliers that you did not use previously.

Chase et al (2001) define outsourcing as the act of moving some of a firm's activities and decisions responsibility to outside providers. It goes beyond more common purchasing and consulting contracts because not only are the activities transferred but also resources that make the activities occur including people facilities, equipment, technology, and other assets.

Drucker, (1962) proposed that "*Distribution is the last frontier in business. It is the dark continent where managerial results of great magnitude can still be achieved.*" It was not, however, until the 1980s that the term 'logistics' was used to describe the integration of physical distribution with materials management (Waller, 2002).

Logistics has also been defined as the process of planning, implementing and controlling the efficient and effective forward and backward flow and storage of raw materials, in-process inventory, finished goods and related information from the point of origin to the point of consumption, for the purpose of conforming to customer requirements (Council of Logistics Management-USA).

To identify the integral relationship between the relatively new concepts of logistics and supply chains, the Institute of Logistics & Transport (UK) defined logistics in 1993 as "the time-related positioning of resources" – defining resources as raw materials, work in progress, manufacturing capability, finished goods inventory, physical assets, people and information (Waller, 2002).

Chase et al (2001) define logistics as a term that refers to the management functions that support the complete cycle of materials flow from the purchase and internal control of work in progress to the purchasing, shipping and distribution of the finished products.

Third Party Logistics is coined simply because a third part(y) is involved in the relationship between a supplier and a customer, and handles logistical activities such as transport, warehousing, clearing, repacking and so on. It embodies the action that logistical activities have been outsourced. Fourth party logistics (4PL) is the role of an organization, which plans and manages a company's logistical system but is not directly involved in its operation (McKinnon, 1999).

2.0 Activities to outsource

Since the early 1980s, the management of logistics has been radically reorganised (McKinnon 1999). An important feature of this reorganization has been the outsourcing of many logistical activities previously performed in-house. Christopher (1992) contends that it is supply chains that compete and not just companies, a view that McKinnon (1999) puts forward as being the current position.

Writers on outsourcing have expressed differing views on what activities to be outsourced. Some authors (e.g., Saunders et al. 1997, Lacity et al. 1994, and Tampoe 1994) recommend that companies outsource only "non-core" activities, that is, activities that do not provide a sustainable competitive advantage to the firm. Tampoe (1994) defines core competencies as the mix of skills, resources and processes that offer capability that the organization can sustain over time and are unique to an organization. Porter (1985) advanced the concept of the value chain, which disaggregates a firm into its strategically relevant activities in order to understand the behaviour of costs and the existing potential causes of differentiation. He contends that a firm gains competitive advantage by performing these strategically important activities better or more cheaply than its competitors.

An organization should hence evaluate the core skills or critical capabilities it possesses that are then developed to give the organization unique competitive advantage (Tampoe 1994). Since logistics is often regarded as a supporting rather than mainstream function, it has been an obvious candidate for externalisation (McKinnon 1999).

Jathanna (1992) contends that it is not possible for an organization to be an expert in all the activities that it performs. Hence he argues that the activities that organization is inefficient in, or that require

specialised skills that the organization does not possess should be outsourced. He however notes that the core activities should not be outsourced.

Another author Burton (2000) argues that for a firm to be efficient in the provision of some services such as warehousing it has to have overcapacity. This is undesirable however, hence the need to outsource where the outsource firm can combine the needs of more than one firm in a complementary way.

Saunders et al. (1997) however qualify their earlier contention by proposing that core activities may be outsourced when, for example, a firm lacks the ability to become competent at an activity that the market has judged to be essential to competition in an industry. This seems to merge with the views of Jathanna.

Newer research suggests that, instead of outsourcing activities, firms should outsource *clusters* of non-core activities that share highly specialized operational skills, physical assets, processes, technologies, and transactional information enabling the achievement of economies of scale or processes to streamline flows of goods and information. There is evidence that firms outsource "groups of logistics activities which share common transactional elements and information flows and logistics activities which share complementary flows of goods" (Rabinovich et al. 1999)

The relationships between logistics service providers and their clients are evolving in a similar way to the links between suppliers and customers of material goods. McKinnon (1999) argues that more needs to be done, however, to ensure the longer-term stability of these relationships and to exploit more fully the potential contribution of third-party logistics firms to improved supply chain management.

2.3 Outsourcing Methodology

Many methodologies have been advanced by various authors to be the ideal for successful adoption of outsourcing. Telfer (2000) contends that there are many documented successes of outsourcing. He however also says that there exist many failures that have not been documented. He proposes the use

of the following process to ensure success in the implementation and adoption of outsourcing that covers seven key areas:

- baselining
- risk assessment
- benchmarking
- request for proposals
- contracting for value
- selection
- implementation

He however qualifies that the methodology is not the success but the detail behind the bullet points that gives them weight and value. In the end, they are really only as good as the experience, insight and creativity of the people who are leading their execution.

Tulip (1998) outlines six tips for successful outsourcing

- Never lose sight of the objective of the outsourcing.
- Early, thorough research into the market and the current internal operation is crucial.
- If consultancies are brought in, treat their appointment as a significant procurement in its own right.
- Specify, as far as possible, by quantifiable measures of output. Do not impose unnecessary constraints, and do not use vague and ambiguous language.
- Separate the service-level agreement (SLA) from the main contract. Expect to renegotiate and redefine the SLA on a continuing basis.
- Always maintain an exit strategy.

2.4 Reasons/drivers/motives of outsourcing

There are a number of authors that have advanced various reasons for outsourcing. Chase et al (2001) argue that the reasons can be divided into various distinct groups. This grouping is based on various propellers or motives as follows:

Organizationally driven reasons which include objectives of; enhancing effectiveness by focussing on what you do best; increasing flexibility to meet changing business conditions demand for products services and technology; transforming the organization and increasing product and service value, customer satisfaction and shareholder value.

Improvement driven reasons, such as to; improve operation performance (increase quality, shorten cycle times etc); obtain expertise, skills and technologies that are not otherwise available; improve management and control; acquire innovative ideas and Improve credibility and image by associating with superior providers

Financially driven reasons with the objectives of: reducing investments in assets, free up these resources for other uses and generating cash by transferring assets to the provider

Revenue driven reasons, such as to; gain market access and business opportunities through the providers network; accelerate expansion by tapping into the providers developed capacity processes and systems; expand sales and production capacity during periods when such expansion cannot be financed internally and commercially exploit existing skills

Cost driven reasons with the objectives of: reducing costs through superior provider performance and the providers lower cost structure and turning fixed assets into variable assets

Employee driven reasons, such as to; give employees a stronger career path and increase commitment and energy in non-core areas.

Kinyua (2000) and Kirui (2001) agree that the common motives for outsourcing are to enable a firm focus on its core business and free up management time for more productive work. Kinyua (2000) found the other common motive to be improving the overall efficiency of the firm. While Kirui (2001) found that other motives include enabling a firm achieve clarity of functions and process realignment, achieve cost savings, improve its service level to customers and reduce working capital.

Rothary and Robinson (1995) have also advanced various reasons or drivers for outsourcing that include the following:

Business Process Re-engineering (BPR)

This is an approach adopted when the firm is facing serious challenges in its business hence evaluating its processes to improve performance.

Organization restructuring

This has led to the flattening of structures in organizations to facilitate communication and faster decision making hence enhancing flexibility

Benchmarking

There have been success stories that have adopted these policies such as Xerox, IBM and so on hence calling for the adoption of the best practices to stay in business

Changing technology

This calls for investment in equipment that may be obsolete very fast hence the focus on core capabilities ensures that there are sufficient resources that are dedicated to this to stay at the cutting edge hence competitive advantage

Costs

One of the major drivers as companies strive to deliver more for less to customers hence giving better value and delighting the customer. The economies of scale and scope that can be offered by the outsource companies are able to ensure that costs are at a minimum. Other firms also take advantage of abundance in various areas of raw materials and cheap labour.

Strategic supplier partnering and new alliances

These afford concurrent development of products and components as well as synergistic relationships

Regulation

Employees are not employed for more than six months without being entitled to be employed on a permanent and pensionable basis hence they are expensive to maintain.

2.5 Triggers of outsourcing

Pierce and Robinson (1997) advance the following as triggers of outsourcing

- Increased competition
- More demanding market place
- Just in time production lines
- High service level expectation by customers
- Long supply lines in terms of supplier lead times
- Cost cutting needs
- Asset based reduction requirements
- Need to enhance logistics management information systems

In Kenya Kirui (2001) found the following to be the significant triggers of outsourcing in BAT (K) Ltd

- Improving service delivery
- Recognition of the need to focus on core competencies by the new chief executive officer
- Cost savings
- Drive to achieve clarity of functions and process realignment
- Dysfunction in the logistics activities in the company

Kinyua (2000) identified the following difficulties in outsourcing

- Identification of the financial services to outsource
- Staff resistance to change
- Cost evaluation whether to outsource or not
- Selection of outsourcing vendor
- Contract

There were a number of risks related to outsourcing such as; loss of control in decision making; loss of command on outsourced services; information leakage and reliance on the supplier. (Kinyua 2000).

2.6 Advantages of outsourcing

(Rothary and Robinson, 1995) give the following advantages of outsourcing

- Core demands are addressed or focussed upon

- Enhance creativity and innovation
- Healthy customer-supplier relationship
- Enhance development of firms and increase employment
- Reduces the power of unions and internal troublemakers
- Customer-supplier relationship better than the managers destructive competition
- Ability of an enterprise to function effectively beyond a certain size is questionable
- Paralysis of movement that is reduced creativity and inflexibility due to rules and procedures, controls balances out economies of scale

2.7 Pitfalls/risks of outsourcing

In spite of the many advantages and drivers of outsourcing there are in play various pitfalls that may make outsourcing unsuccessful. These pitfalls may also cause firms not to reap fully the benefits that accrue from outsourcing.

Rothary and Robinson (1995) contend that for outsourcing to be successful it must have a high status, project leader, top management authorisation and maybe an outside consultant. They also argue that care needs to be taken so that all costs for the outsourced activity are taken into account when deciding whether to outsource or not. Further hidden costs such as inflation, price escalation clause and so on need to be considered and evaluated.

They contend that business related pitfalls need to be guarded against. For instance firms must consider what to do if there is a new line of business, whether they will negotiate a new contract or extend the current one. Business changes such as downturns may leave a company in a bad spot if they were using fixed payment. In this age there are numerous mergers and acquisitions and de-mergers which pose challenges if unforeseen.

Another area that could lead to the failure of outsourcing is people related (Rothary and Robinson, 1995). The biggest problem is letting the most skilled workers that give the firm the competitive edge in the business go. There could also be morale loss due to uncertainty even for those who are remaining in the employ of the company. People legislation may prove costly if not considered. Other issues that arise include: early retirement or redundancy, managing the change in relationships, not involving users from the outset and so on

A study carried out by the Wyatt Corporation in the US revealed that more than half of surveyed companies in outsourcing refilled positions within one year of eliminating them (Rothary and Robinson, 1995). This means they did not fare well without them hence they either did not need to outsource or they poorly implemented the outsourcing project.

Firms must however be careful that they do not relinquish too much control and that confidentiality is maintained for their products and plans. Strategic planning and actions must not be outsourced, as they constitute the core area of operation in any business (Rothary and Robinson, 1995).

2.8 Recent and Emerging Trends in the Outsourcing/ Purchase of Logistical Services.

There have been major improvements in the nature of the third party logistical services on offer. Standards have undoubtedly risen and operations become more efficient. New types of service have been developed which are more closely tailored to clients' requirements. Consequently there exist new developments in the outsourcing of logistical services that include the following:

2.7.1 Value Added Services

By trading up into integrated distribution, the larger carriers have been able to add value to their services, create niche markets with much higher entry costs and secure longer-term contracts with clients. Table 2.1 below shows the range of value-added-logistics (VAL) services that some of the larger operators now provide.

Table 2.1 Value Added Logistics: Service Portfolio

Transport	Vehicle maintenance
Storage	Palletisation
Break-bulk	Packaging / repacking
Load consolidation	Return of packaging/handling equipment
Order picking	Labelling
Order processing	Quality control / product testing
Stock control	Customisation
Pick-and-pack	After sales service
Track-and-trace	Consultancy advice

Source : McKinnon, A.C (1999) *Global Logistics And Distribution Planning*, Edited By Donald Waters: Kogan Page, London

2.7.2 Increase in the proportion of logistical services bought on a contractual basis and reduction in the number of contractors used.

In order to ensure high delivery standards, and minimise transaction costs it is important to avoid dealing with a large number of competing service providers. Where firms demand more specialist services tailored to their particular requirements and often involving capital investment on the part of the carrier, they must be prepared to enter into longer-term contracts. For instance in the case of transport operations dedicated to a particular consignor, a contractor would like ideally to secure a contract at least as long as the working life of the vehicles, though, given the competitive conditions in the haulage industry, the typical duration of contracts is usually much shorter (Cunningham and Kettlewood 1976, La Londe and Cooper 1989). A substantial proportion of distribution contracts, nevertheless, does not have a fixed time limit and are simply considered to be 'ongoing'.

In both the 'spot' and 'contract' markets, the average number of contractors used has been declining. Surveys by PE Consulting in the UK reveal that the proportion of companies using six or more logistics providers declined from 21% to 14% between 1990 and 1996 (PE consulting in McKinnon, 1999). Concentrating purchases of logistical services in this way enables firms both to reduce transaction costs and to improve the standard of service. For instance the more hauliers a firm employs, the more time it must spend vetting them and monitoring their performance. Concentrating traffic on a smaller number of more reliable hauliers simplifies these tasks. It can also win a greater commitment from these hauliers to maintain or improve the quality of service. 'One-stop shipping'

services are provided by many of the 'third party logistics' firms that have emerged in the US since the early 1980s (Sheffi Y, 1990). These provide these services via subcontracting what they cannot provide themselves.

2.7.3 Closer involvement of contractors in the design of distribution systems

In recent years, electronic brokerages for motor carrier services have emerged in the US (McKinnon, 1999). These essentially create an electronic clearing house for trucking services within which firms can trade haulage capacity on particular routes at particular times. This has spread to Europe where electronic load matching services, which have been helping carriers find return loads, mainly on international hauls, exist.

2.7.3 The emergence of 'Fourth Party Logistics'.

McKinnon (1999) contends that other types of organization, such as consultancy companies, software houses and banks, are also assuming the role of intermediary in the logistics services market. This has been described as 'fourth party logistics'. The term 'fourth party logistics' has recently been used to describe the role of an organization, which plans and manages a company's logistical system but is not directly involved in its operation. The 'third-party' logistics company actually operates the service, while its planning, management and control is entrusted to a 'fourth party' agency. An early example of a Fourth Party Logistics (4PL) arrangement was that provided by Andersen Consulting, IBM and Ryder for Panasonic. Andersen Consulting designed the system, but unlike most consultants retained a continuing responsibility for its implementation and overall control. IBM set up and manages IT support, while Ryder handles the physical distribution operation.

2.7.4 More rigorous selection of contractors.

Numerous studies conducted over the past thirty years have shown that many firms opted for particular transport modes or carriers without fully appraising the available alternatives (Sharp, C 1970, Bayliss 1998). The observed deficiencies in the selection procedure may be partly explained by the fact that many firms' total expenditure on freight transport represented a small proportion of total costs and because differences in rates and quality of service, particularly among road hauliers, were perceived to be small. Now that firms are contracting out a broader range of logistics-related services, total external expenditure on these services has begun to figure more prominently in their budgets. This, combined with the increased strategic importance of logistics, the greater emphasis being placed on service quality, the reduction in carrier numbers and the shift to contractual

relationships, has made the choice of carrier a much higher-order decision, requiring a more thorough review of the market and more formal selection procedures.

2.7.5 *Closer involvement of contractors in the design of distribution systems.*

In purchasing component parts, many manufacturers are replacing the traditional 'design specification', which describes the required item in detail, with the more open 'performance' specification, which merely outlines the function the part has to perform (Ramsey, J 1991). This gives suppliers greater scope to innovate and develop parts that meet the customer's requirements more economically and effectively.

A similar development has occurred in the purchase of logistical services. It is now quite common for firms externalising their distribution operations to involve contractors in system design. The decision to externalise is often made at the same time as the decision to restructure the distribution system. Moreover, as one of the major reasons for using contractors is to exploit their specialist expertise, it is hardly surprising that firms should seek their advice when revising their distribution strategies. Outside contractors can also take a more objective view of firms' distribution needs than in-house managers.

2.7.6 *Greater emphasis on the development of longer-term partnerships.*

It can be just as important for a firm to develop close, mutually beneficial relationships with suppliers of logistical services as with suppliers of products. Many such relationships have already been established and go beyond the formal terms of the logistics contract.

These relationships are most likely to develop where logistical services are provided on a dedicated basis for the exclusive use of individual clients. As Cooper and Johnstone (1990) point out, *'...compartmentalisation of the contractor's capacity between clients means that the service needs of any one client will not be compromised by the conflicting needs of other clients, such as may occur when capacity is shared.'*

While this usually ensures a high standard of service, it also weakens one of the contractor's traditional roles, that of consolidating many clients' traffic and thus running distribution facilities at a lower unit cost than in-house operators. Many manufacturers and retailers are prepared to incur the

higher costs of dedicated services in order to maintain high levels of control and service quality. An increasing number of firms in the UK, however, have been relaxing the requirements of dedicated contracts to give service providers greater freedom to obtain backloads and consolidate loads. There has also been a sharp growth in demand for logistics services provided on a 'shared-user' basis. A survey conducted in 1991/2 suggested that British firms divided their expenditure on third-party transport and warehousing evenly between dedicated and shared-user services (Institute of Logistics and Distribution Management, 1992). Providers of shared user services are now trying to find ways of cultivating closer customer links in a 'multi-client' environment.

Recent developments have been conducive to the formation of closer partnerships between distribution contractors and their clients. These include the adoption of the Just-in-Time Principle, Increasing Specialisation of Logistical Equipment, and Change in the Degree of Interdependence.

2.7.7 Adoption of Electronic Data Interchange (EDI) and XML for the internet

Firms made huge investments in EDI to achieve quick and efficient communication for efficient and predictable logistics management. However according to Waller (2002) visibility across the supply chain – the ability to be able to take a holistic approach to managing supply chains – has, until the advent of the Internet, been more an academic discussion point than commercial reality.

He contends that e-logistics has developed due to web-enabled technology and XML (Waller, 2002). This has enabled the exchange and sharing of information, e.g., forecast data, inventory levels and order status, development of new channels to market and mushrooming of business-to-business (B2B) activity. It is predicted that global online trade is expected to reach US\$7 trillion by 2004. The cost effectiveness of the Internet warrants its use by smaller manufacturers and suppliers.

It will open up new opportunities for organizations of all sizes to trade globally and simultaneously optimize supply chain processes and inter-company relationships.

services include the following.

2.8.1 *More precise contract specification.*

To avoid misunderstanding and dissatisfaction attempts have been made to compile fairly comprehensive checklists of points that firms should bear in mind when drawing up distribution contracts (Farmer and Ploos 1991). Recent reports, however, suggest that some firms are now tending to 'over-specify' their contracts, making them too legalistic and relying too heavily on standard templates and clauses (MT Logistica 1997).

2.8.2 *Joint initiatives*

Recent evaluations of logistics service providers by samples of users indicate general satisfaction with service standards and operational efficiency, but concern that they are not sufficiently innovative and proactive. It has been observed in the UK that:

'Almost two in three providers are believed to be essentially reactive in their approach. Customers are highly critical of the passivity of their providers. Customers are looking to providers to challenge them, to introduce best practice and to find new ways to add value. Customers believe that too often they are providing the distribution expertise rather than having it provided by their third-party supplier.' (PE consulting in McKinnon 1999)

Logistics providers need to be given the freedom to innovate. This freedom may be curtailed by tightly specified contracts and a tendency for clients to manage contractors in a dictatorial manner. A healthy long-term relationship requires a regular injection of new ideas and vision from both sides as well as a joint willingness to innovate. Beier (1989), contends that Logistics providers should 'include problem solving and experience savings among their services'. He concludes that as 'carriers see the logistics flow from a different perspective from either consignor or consignee...their function should be to act as consultant-middlemen in synchronizing all phases of goods movement between consignor and consignee'.

2.8.3 Refinement of appraisal schemes:

Short-term auditing of contract distribution operations, using standard performance indices such as average transit times, adherence to delivery schedules and stock-out levels, does not provide an adequate basis for assessing the quality of longer term relationships. Qualitative as well as quantitative measures should be incorporated into the appraisals. Kleinsorge, Schary and Tanner (1991) contend that, in appraising this type of relationship, firms must take both a short-term/operational and a long-term/strategic perspective and supplement 'the "hard" and more tangible parameters of statistically measured operating dimensions' with 'less tangible measures of satisfaction.'

2.8.4 Adoption of open-book accounting.

McKinnon (1999) contends that open-book accounting is only appropriate in the case of dedicated operations, where the costs of serving individual clients can easily be isolated. One of the disadvantages of single-sourcing logistical services is that firms then have difficulty comparing contractors' rates. They, therefore, need frequent reassurance that they are getting value for money. Increasing numbers of contractors are offering this assurance by giving their clients detailed cost breakdowns and negotiating their management fee as a separate item. Even under these circumstances, it does not necessarily eliminate conflict between contractor and client. As Newson (1991) explains, conflict can still arise 'if improvements in operating efficiency which lead to substantial savings are claimed by one side as entirely due to its initiative, yet the open book contract states that such benefits shall be shared in preordained proportions'. To operate effectively, therefore, open book accounting must be accompanied by an arrangement whereby benefits are fairly divided in relation to the costs and risks that each party bears (La Londe and Cooper 1989).

2.10 Studies in outsourcing of logistics

A study was done by Anderson in 1997 by use of a combination of four case studies and surveys of 47 European shippers and 59 US shippers. The study found that the major driving forces for the outsourcing of logistics are expected positive cost and service effects. Linked to the cost aspects is also a desire to reduce investments. It could be a question of transforming fixed costs to variable, or to facilitate fast and radical restructuring of supply chains. Finally one of the single most important driving forces is the shipper's ambition to concentrate on core business.

Andersson (1997) further argues that logistics partnerships have been observed to have a positive effect on the following four areas at the shippers: cost, service, restructuring of supply chains, and control. The shippers believe that efficient operations, economies of scale and scope, and provider knowledge, have had positive effects on costs and service. A structural change could be achieved in a short time, as the shipper has to make only small investments in the distribution system, which can facilitate greater changes, also gaining the shipper flexibility in capacity. By outsourcing logistics activities it might also be possible to improve the measurability of cost and service performance.

The Outsourcing Institute in a survey of its members came up with the following activities that firms were outsourcing in 1998 and those that they were considering outsourcing.

Table 2.2 Services outsourced in distribution

Executives are currently outsourcing	Executives are considering outsourcing:
▪ Freight audit	▪ Warehousing
▪ Consulting and training	▪ Distribution and logistics
▪ Freight brokering	▪ Information systems
▪ Leasing	▪ Operations

Source: the outsourcing institute- www.outsourcingacademics.com

Table 2.3 Services outsourced in Transportation

Currently outsourcing	Considering outsourcing:
▪ Fleet management	▪ Fleet maintenance
▪ Fleet operations	▪ Fleet operations
▪ Fleet maintenance	▪ Fleet management

Source: the outsourcing institute- www.outsourcingacademics.com

3 RESEARCH METHODOLOGY

This study was a cross-sectional survey covering medium and large manufacturing firms in Kenya.

3.1 Population

The study was confined to medium and large manufacturing companies operating in Kenya. Where number of employees is used to define size, a firm with at least 50 employees is considered large (Mbeche & Yego, 1996 in Nyamwange 2001). The KIRDI directory has a classification that gives firms with 20-50 employees, that were considered medium-sized. Small firms are those with 1-19 employees. Firms considered small are likely to be informal, hence expected to have very little outsourcing activity if any.

The population of the study was hence composed of firms having 20 employees or more. The firms satisfying this criterion in the KIRDI directory of 1997 were 950 (See breakdown in table 3.1).

3.2 Sample and sample size

The sample for the study was drawn from medium and large manufacturing firms. It was made up of 100 firms drawn from the Kenya Industrial Research Development Institute (KIRDI)'s directory of manufacturing industries of 1997. Rosco (1975) proposes a rule of thumb that a sample of 30 – 500 is usually appropriate for most studies. Kinyua (2000) collected data from firms listed in the stock exchange. He got a response from 32 firms, 15 of which were in the industrial and allied sector. Out of the 32 firms that responded, 27 practiced outsourcing representing a proportion of 84.4%. A survey carried out in the Europe in 1996 showed that 59% of firms outsourced at least 20% of their logistics expenditure (Peters et al 1998). Proportionate stratified sampling was used to select the sample. Stratification was done by category and size of firms in the category. Within categories, the firms for the sample were randomly drawn as per table 3.1 below.

Table 3.1 Proportionate Stratified Sample

	Medium-sized firms		Large firms	
	No. of firms	No. to be sampled	No. of firms	No. to be sampled
Manufacturing Sector				
Food beverage, tobacco, textiles, wearing apparel and leather products	135	14	223	24
Wood and wood products, paper production, printing and publishing	67	7	75	8
Chemicals, petroleum, rubber and plastics	31	3	37	4
Non metallic mineral products except petroleum products	85	9	85	9
Metal industries, fabrication of metal products ,machinery and equipment	17	2	24	3
Other industries	67	7	104	11
Total	402	42	548	58

Source: KIRDI Directory 1997

3.3 Data Collection

Primary data was used for the study and was collected by way of a semi-structured questionnaire having both open-ended and close-ended questions. The questionnaire was divided into two sections A and B. Section A was used to collect information on the company profile. This addressed part of objective one by documenting the size and ownership of firms and their outsourcing practices. Section B was composed of questions addressing all objectives of the study and was tailored to issues of outsourcing of logistics. Drop and pick later method of data collection was applied and the researcher was available for any clarification required.

The target respondents were Operations / manufacturing managers and/or directors, logistics or procurement and supply managers or any other manager responsible for logistics in the firm.

3.4 Data Analysis

The data collected was edited for accuracy, uniformity, consistency, and completeness and arranged to enable coding and tabulation before final analysis as put forward by Cooper and Schindler, (1998). The data was then coded and cross-tabulated to enable the responses to be statistically analyzed.

Descriptive statistics were used to analyze data by way of percentages, mean scores and mode scores. The data collected was largely on the likert scale and was of the ordinal level. The respondents were

asked to rate various statements by choosing from strongly agree, fairly agree, agree, disagree, fairly disagree and strongly disagree. The ratings were coded with '1' representing strongly agree, '2'-fairly agree, '3'-agree, '4'-disagree, '5'-fairly disagree and '6'-strongly disagree.

Non-parametric tests were used to test the hypotheses as no form of distribution was assumed for the data analysis and because the data to be collected was of the ordinal scale of measurement (Arsham in Nyamwange 2001). To test for variability/consistency between the medium-sized companies and large companies with regard to outsourcing, the chi-square test of independence was used. The data collected as to the various attributes was cross-tabulated with the corresponding attributes. The column totals and the row totals were multiplied and divided by the grand total to get the expected values for each cell. These were then calculated using Microsoft excel to get the p-values that were used to test the hypotheses. A similar procedure was used to test the other hypotheses set out in chapter one.

SPSS 9.0 for windows was used to calculate the mean, mode and standard deviation values for determining the common reasons, triggers, difficulties risks and pitfalls attached to the practice of outsourcing.

Table 4.1 Breakdown of firms that responded

	Medium-sized firms		Large-sized firms	
	No	%	No	%
Food, beverages, tobacco, textile, wearing apparel and leather	2	6	7	21
Wood, wood products, paper production, printing and publishing	2	6	4	12
Chemical, petroleum, metal and electrical	1	3	2	6
Transportation, various products except petroleum products	1	3	3	9
Health services, production of metal products, air transport and transport	1	3	2	6
Other industries	2	6	4	12
Total	11	32	23	66

There were fewer respondents for the medium-sized firms than were targeted. The ratio of medium to large-sized respondents was not as set out in the research design though the data received was adequate to enable analysis and conclusions.

4 RESEARCH FINDINGS AND DISCUSSION

The study was carried out in August and September 2002.

4.1 General characteristics of the sample

4.1.1 Study response

A sample of 100 firms was selected as per table 3.1 in the research design. However, the questionnaires that were distributed to the respondent manufacturing companies were 65. This is because some of the selected firms had closed down, some had moved from the indicated premises hence could not be traced and others had merged with others in the industry.

Of the 65 questionnaires distributed, 34 were filled out and returned by the respondents, representing a response rate of 52%. These were considered adequate for the purposes of the study. Of the 34 that responded 11 were of medium size while the rest were large in size.

The table below gives a summary of the firms that responded and the categories they belong to as defined in the KIRDI directory of 1997.

Table 4.1 Breakdown of firms that responded

	Medium-sized firms		Large-sized firms	
	No.	%	No.	%
Manufacturing Sector	2	6	7	21
Food, beverage, tobacco, textile, wearing apparel and leather	2	6	4	12
Wood, wood products, paper production, printing and publishing	3	9	2	6
Chemicals, petroleum, rubber and plastics	1	3	3	9
Non-metallic mineral products except petroleum products	1	3	2	9
Metal industries, fabrication of metal products, machinery and equipment	2	6	4	12
Other industries	11	32	23	68
Totals				

There were fewer respondents for the medium-sized firms than were targeted. The ratio of medium to large-sized respondents was not as set out in the research design though the data received was adequate to enable analysis and conclusions.

4.1.2 Ownership

Most of the firms that responded (62 %) were wholly locally owned, 15% were foreign owned and the rest (23%) were jointly owned. The table below gives a summary of the ownership of the firms.

Table 4.2 Firm Ownership

Firm ownership	No. of firms	%
Local	21	62
Joint	8	23
Foreign	5	15
Total	34	100

4.2 Demographic Analysis of Respondent Firms

4.2.1 Industrial category

A chi-square test of independence was carried out to test the hypothesis that there is no relationship between industrial classification and the prevalence of outsourcing of logistical services.

H_0 : There exists no association between industrial category and the practice of outsourcing of logistical services

H_a : There exists an association between industrial category and the practice of outsourcing of logistical services

Table 4.3 below gives the observed and expected frequencies for the industrial categories and the practice of outsourcing.

H_0 : There exists no association in the prevalence of outsourcing of logistical services and the size of the firms (medium-sized or large-sized).

H_a : There exists an association in the prevalence of outsourcing of logistical services and the size of the firms (medium-sized or large-sized).

Table 4.4 gives the observed and calculated expected values obtained from the data.

Table 4.3 Chi-Square scores for industrial category

Category	Actual			Expected		
	Outsource	Do not outsource	Sub total	Outsource	Do not outsource	Sub total
Food, beverage, tobacco, textile, wearing apparel and leather	7	2	9	7.15	1.85	9
Manufacture of wood, wood products, paper, publishing and printing	5	1	6	4.76	1.24	6
Manufacture of non-metallic mineral products except petroleum products	4	1	5	3.18	0.82	5
Manufacture of chemicals, petroleum, rubber and plastic products	2	2	4	3.97	1.03	4
Manufacture and fabrication of metal products, machinery and equipment	3	1	4	3.18	0.82	4
Other industries	6	0	6	4.76	1.24	6
Total	27	7	34	27	7	34

The p value is 0.58; hence, we fail to reject the null hypothesis at 95% since the value is larger than α , which is 0.05. This means that there is no association between the type of industry and the outsourcing of logistics in Kenya. The firms that outsource logistics traverse all categories of manufacturing enterprises. Hence, logistics is a pervasive function that is important in all industries. This result indicates that many firms in Kenya are reaping benefits from the outsourcing of logistical services.

4.2.2 Size of the firm

A chi-square test of independence was carried out to test the hypothesis that no significant relationship exists in the prevalence of outsourcing of logistics between medium-sized and large-sized firms

H_0 : There exists no association in the prevalence of outsourcing of logistical services and the size of the firms (medium-sized or large-sized).

H_a : There exists an association in the prevalence of outsourcing of logistical services and the size of the firms (medium-sized or large-sized).

Tale 4.4 gives the observed and calculated expected values obtained from the data.

Table 4.5 Chi-square scores for ownership of the firm

Table 4.4 Chi-square scores for the size of the firm

	Outsource	Do not outsource	Total	Expected	Do not outsource	Total
Local	15	10	25	16.68	8.32	25
Foreign	7	4	11	8.74	2.26	11
Medium-sized	20	3	23	18.26	4.74	23
Large	27	7	34	27	7	34
Total	49	24	73	49	24	73
Calculated chi square probability				0.115659		

The results indicate that since the probability of the test statistic being greater than the calculated chi-square value is 0.116 we fail to reject the null hypothesis at 95% confidence level and conclude that there is no significant difference in the outsourcing of logistical services between medium-sized firms and large-sized ones.

The implication is that both medium-sized and large-sized firms appreciate the role of third party logistics service providers in relation to firm performance. This could be attributed to the challenging environment that firms have had to work in; forcing managers to become more focused on their core business hence letting others do work that is considered non-core. In addition, the high level of skilled labour in the Kenyan market means that managers are qualified and up to date in trends in operations management, leading to widespread adoption of logistics outsourcing.

4.2.3 Ownership of the firm

A chi-square test of independence was carried out to establish if any relationship exists between companies' ownership and the practice of outsourcing of logistical activities.

H_0 : There exists no association between company ownership and the practice of outsourcing of logistical services

H_a : There exists an association between company ownership and the practice of outsourcing of logistical services

The table below gives chi-square results of observed and expected frequencies.

This study found that 79 % of the surveyed firms outsource at least one activity in logistics. All the firms surveyed that practice outsourcing of logistics have been outsourcing for five years or more, meaning that they started outsourcing on or before 1997. Hence, the practice of outsourcing of logistics has been in place in Kenya for at least five years. Other parts of the world notably Europe and North America began outsourcing of logistics in earnest in the late 80's and early 90's

Table 4.5 Chi-square scores for ownership of the firm

Firm ownership	Actual		Total	Expected		Total
Local	15	6	10	16.68	4.32	10
Foreign	5	0	3	3.97	1.03	3
Joint	7	1	4	6.35	1.65	4
Total	14	3	17	14	3	17
Calculated chi square probability				0.29597		

Since the calculated chi-square probability (0.29597) is more than the α of 0.05 at 95% level of confidence, we fail to reject the null hypothesis. There is therefore no significant relationship between ownership of the firms and the prevalence of outsourcing of logistics in the firm. This means that any differences in the adoption of logistics among different ownership structures are attributable to chance or random variation.

Kinyua (2000) found that for the finance function, outsourcing was more prevalent for jointly owned firms than in locally owned firms (his survey did not have foreign owned firms). For logistics however, there is no significant difference in prevalence of outsourcing among the locally, foreign and jointly owned firms. The implication is that logistics may be regarded to be more of a support function than a core or mainstream activity, hence leading to a higher likelihood of outsourcing by firms regardless of ownership.

4.3 The outsourcing of logistics practice in Kenya

This section captures the main objectives of this study that is the extent, reasons, risks, and benefits of outsourcing of logistics in Kenya.

4.3.1 The extent of outsourcing

This study found that 79 % of the surveyed firms outsource at least one activity in logistics. All the firms surveyed that practise outsourcing of logistics have been outsourcing for five years or more, meaning that they started outsourcing on or before 1997. Hence, the practice of outsourcing of logistics has been in place in Kenya for at least five years. Other parts of the world notably Europe and North America began outsourcing of logistics in earnest in the late 80's and early 90's

(McKinnon 1999). Therefore, Kenya appears to be keeping pace with the innovative management practices as they occur in the area of logistics.

4.3.2 The logistical activities outsourced

Clearing of goods at the port of entry or exit is the most outsourced logistical activity. 96 % of the companies in the survey use an outside agency to perform this activity. The other two activities that are outsourced by a high percentage of the firms surveyed are transportation of goods by road (85%) and shipping of goods to and from abroad (74%). A summary of the responses concerning what services are outsourced is as per the following table.

Table 4.6 Logistical activities outsourced

Logistical activity	No of respondent firms outsourcing it	% of firms
Clearing	26	96
Transportation	23	85
Shipping	20	74
Documentation	9	33
Warehousing	8	29
Management of logistics	3	11

4.3.3 Reasons for outsourcing

The results of the survey indicate that the most common reasons for outsourcing of logistical activities are to reduce overall cost, lack of internal expertise and to avail time for performing other more productive activities. These are the reasons that the respondents fairly agreed with. Those that the surveyed firms marginally agreed with are the low cost of outsourcing, the high internal cost of outsourcing, and the volume of logistical activities being low. The surveyed firms generally disagreed with the contention that the activities outsourced were not strategic and that they lacked internal expertise to perform the activities. Table 4.7 below gives a summary of the reasons as per the respondent firms. The rankings in table 4.7 to 4.10 and 4.13 are from 1 – 6 with '1' representing strongly agree, '2'-fairly agree, '3'-agree, '4'-disagree, '5'-fairly disagree and '6'-strongly disagree.

4.3.4 Triggers of outsourcing

The following table summarizes what the respondents gave as the triggers for embarking on outsourcing of logistics.

Table 4.7 Reasons for Outsourcing

	Mean	Ranking
External expertise	1.64	Fairly agree
Reduces overall cost	1.73	Fairly agree
Avail time for other activities	1.82	Fairly agree
High internal cost	2.55	Agree
Low cost of outsourcing	2.73	Agree
Volume of activities to outsource is low	3.73	Disagree
Lack internal expertise	4.00	Disagree
Services not strategic	4.64	Fairly disagree

Since the challenges facing the firms in Kenya entail how to be competitive in a diversified and liberalized environment, the cost element is a very vital consideration for firms. Other researches show that logistics expenditure is increasing in proportion to the overall costs of firms due to globalization and development of communication capability. Kenyan firms reflect this contention by contending that logistics outsourcing reduces overall costs. It is also affirmed by the contention that external suppliers have developed competence in their fields of operation. This implies that they perform the functions or activities more efficiently and cost effectively. The respondent firms strongly agree that one of the reasons for outsourcing of logistical activities is to avail more time for other activities. This supports the paradigm shift towards concentration of firms on core activities all over the world and strategically managing operations in order to maximize value addition to the customer.

The firms also contend that the volume of activities outsourced is not low. This means that the respondent firms could develop competence in the carrying out of the logistical activities outsourced. This however would be limited by reduced variety and experience which the service providers possess. The firms surveyed generally disagree that the logistics function is not strategic. The reasons indicated above however outweigh the shortcomings as a larger proportion still outsource the activities to external parties.

4.3.4 Triggers of outsourcing

The following table summarizes what the respondents gave as the triggers for embarking on outsourcing of logistics.

Table 4.8 Triggers of Outsourcing

	Mean	Ranking
Improve overall efficiency	1.55	Fairly agree
Need to focus on core business	1.73	Fairly agree
Need to free management time	2.00	Fairly agree
Need to reduce overall costs	2.27	Fairly agree
Acclaimed performance of vendor	2.27	Fairly agree
High service level	2.36	Fairly agree
Asset base reduction needs	2.45	Agree
Just in time production line	2.82	Agree
Long supplier lead time	2.82	Agree
Demanding market place	2.91	Agree
Enhance management information systems	2.91	Agree
Need to reduce number of staff	3.18	Agree
Increased competition	3.18	Agree
Low volume of outsourced services	3.55	Disagree

From the results above the most proximate triggers or motivations that led the firms to outsource the logistical activities are to improve overall efficiency, the need for the firms to focus on their core business and the need to free management time. Factors rated as important as the three aforementioned are the need to reduce overall costs, the acclaimed performance of the vendor and demand by customers for a high service level. The surveyed firms agree that most of the factors cited played a role in their decision to outsource except for the low volume of services to outsource.

Kirui (2001) contended that the triggers in BAT (K) Ltd differed from those that the literature stated to be the triggers for outsourcing as researched in other parts of the world. However, the results obtained in this research suggest that the triggers in literature are supported as being the same as those indicated by the respondents in the survey.

It is however surprising that the respondents did not indicate competition as one of the main triggers of outsourcing. Literature indicates that it is one of the main triggers that have made firms adopt outsourcing of logistics. Given the scenario of liberalization and globalization leading to increased competition, it would have been expected to be a leading trigger.

4.3.5 Difficulties encountered in implementing the outsourcing decision.

The most agreed upon difficulty was that of staff resistance to change where the mean is lowest. The results of the questions on difficulties are summarized in the following table.

Table 4.9 Difficulties in Outsourcing

	Mean	Ranking
Staff resistance to change	2.55	Agree
Identification of activities to outsource	3.00	Agree
Drawing the contract with the vendor	3.36	Agree
Difficulty in cost evaluation for the outsourcing decision	3.45	Agree
Selection of outsourcing vendor	3.55	Disagree

Staff resistance to change is a very common reason for failure of implementation of projects. The culture of the organization is often difficult to change and firms have to be very careful when implementing the outsource decision and take care of the interests of any affected employees. Loss of morale can be very damaging due to the perception that there is no security. Evaluating the relevant costs for the outsourcing decision is usually a daunting task. This is because it is difficult to exhaustively determine costs for the current situation given the overlapping nature of logistical activities. For instance the costs of follow up and expediting are often not included in the evaluation. This may have been easily assumed by the respondents to be not inclusive.

Other than the factors that were indicated in the questionnaire, the firms also identified several factors as being difficulties encountered in implementation of the outsourcing of logistics. They include such factors as changing a partner once selected, the limited capacity and number of vendors, the high management cost of the change, high cost of overseas suppliers, failure of vendors to honor contractual obligations and complexity of international laws.

4.3.6 Risks or pitfalls in undertaking the practice of outsourcing of logistics

The study identified various risks or pitfalls as perceived by the respondents to apply to their respective firms. In the various statements given in the questionnaire

Table 4.10 Risks or pitfalls of outsourcing

	Mean	Ranking
Information leakage	3.09	Agree
Loss of control	3.45	Agree
Loss of command	3.64	Disagree
Selection of vendor	3.73	Disagree
Drawing contract with vendor	3.73	Disagree

The respondents agreed that there was loss of control of the function and leakage of the information through the vendor after adopting outsourcing of logistics

Other risks or pitfalls that firms identified as applying that were not in the questionnaire include vendors misinterpreting the relative importance of activities, possible changes in the vendor such as internal wrangles, poor service levels and reduced consistency in delivery and quality.

4.3.7 Expectations of firms for service providers

The table below gives a summary of the responses obtained regarding the expectations that firms hold for their service providers. The percentage based on the 27 firms that outsourced logistics.

Table 4.11 Expectations of Outsource Firms on Service Providers

	No. of firms	%
Strict adherence to service level	25	93
Value added services	23	86
Real time communication	21	79
Certain level of cost reduction	15	57
Product innovation	14	50
Integration of IS with that of the organization	11	42
Sharing of accruing benefits	8	28

From table 4.11 above, the most common expectations for service providers are the strict adherence to service level; value added services and real time communication. The others are less prevalent in Kenya.

There are other expectations that firms indicated to having for their service providers that were not in the questionnaire that respondents indicated also had on their service providers. These include the following, Maintain agreed quality standards, advice on changes in their industry

(taxes, quality, and innovation); doing better than the firm did before outsourcing and show benefit. They also indicated timely delivery, adoption of open book accounting, honesty in communication, partnership in planning and problem solving (current and unforeseen).

The expectations indicated above imply that firms in Kenya do not have a purely partnership relationship with their suppliers. The characteristics of a partnership relationship are participatory and continuous development, involvement in product development and design of systems, sharing of accruing benefits and commitment from the top managers among others. The expectations found to hold most sway are those that are concerned with standards and set goals.

4.3.8 Duration of the outsourcing contract

Firms in the survey indicated that they have a running contract with most of the service providers. Some of those that had implemented outsourcing in a wide range of activities had entered into much longer-term contracts than those that had undertaken just a few activities. Table 4.12 below gives a breakdown of the length of outsourcing.

Table 4.12 Average duration of contracts between service providers and outsource firms

No. of years	No. of firms	%
More than five years	12	44
Between one and five years	8	30
Less than one year	7	26
Total	27	100

The highest percentage of firms (44%) had contracts running for more than five years. Most of the remaining firms (30%) had contracts running between one and five years. This shows that there had developed some trust and partnership relationships, which usually develop from long term contracts. However the expectations have to be conducive to the development of the relationship, hence since the expectations are partially supportive of a partnership relationship, we can conclude that the majority of firms do not have a partnering relationship with their outsource service suppliers. This is arguably not the most fruitful relationship for the firms in Kenya. A shift towards having more partnership oriented logistics outsourcing relationships could be more fruitful for both parties.

4.3.9 Reasons for not adopting outsourcing

The firms that did not outsource any logistics activity were merely 20.6 % of the total number of firms that responded. The respondent firms that did not outsource indicated that they could best perform the services in house. The vendors that were available in the market could not therefore match the requirements that the firms needed to outsource the logistical services. Another reason the firms considered of importance was that the logistical activities were deemed too strategic for the firms to outsource to external parties. The respondent firms that did not outsource considered the cost of outsourcing to be higher than performing the service in house. The results are summarized in table 4.13 below.

Table 4.13 Reasons for firms not adopting outsourcing

	Mean	Ranking
Outsourcing is more expensive	1.67	Fairly agree
The firm can perform these activities best	2.00	Fairly agree
All logistical activities are considered strategic	2.33	Fairly agree
There is no suitable vendor in the market	3.00	Agree
The firm is not aware of what outsourcing is	3.00	Agree

The indication that outsourcing the service is expensive may be misleading. This is because some of the factors that relate to the costs of in-sourcing may not have been taken into account. Factors such as the maintenance of a certain agreed service level that is usually higher than that formerly achieved in house may be difficult to quantify as the results are seldom instantaneous.

5 SUMMARY AND RECOMMENDATIONS

5.1 Summary

The preceding chapter analyzed the findings and generally indicates that firms in Kenya outsource their logistics services. The activities most outsourced in logistics are clearing, shipping and transport. This could be attributed to the high cost of some of the elements of logistics such as maintaining a fleet of trucks for transport. Another reason is the expertise that is needed to perform some of the activities such as clearing goods at the port of entry or exit. This needs a lot of knowledge of customs procedures, a grasp of changes as they occur and a good rapport with the people who one is to work with at the port.

What comes out in the findings is that most of the areas of logistics are so pervasive that they affect every manufacturing enterprise. It is also clear that some of the areas are elitist and need some kind of specialist attention. For instance, 93% of the respondents outsource clearing services. Most of the respondents also gauge logistics as strategic for business performance. They however still outsource the services. This is directly attributable to the other aspects that they give as the main reasons for outsourcing. Namely, the overwhelming need to reduce the overall costs of doing business, take advantage of external expertise and to free the management's time for other activities.

With the advent of liberalization, there has arisen a strong need to counter the competition by being competitive in terms of cost. Hence, though a number of the firms do not lack internal expertise, the service providers can perform logistical services better and more cheaply. Most of the firms that employ outsourcing have a long-term contract. This ensures that there is continuity and partnership relationship to encourage the collective effort hence synergy.

Some firms do not outsource any logistical activity. These firms did not do so mainly because of three reasons. The first is that, they considered that outsourcing the activities was expensive, the second, they thought they could perform the activities best and the third, they considered the activities to be too strategic to be entrusted to an outside firm.

5.2 Recommendations

Firms in Kenya have been keeping pace with the developments in managerial practices in other parts of the world. The adoption of outsourcing of logistics is not too old a phenomenon in the world, yet most of the firms surveyed have been outsourcing logistics for more than five years. This is an indication of the aggressiveness and continuous education of management in Kenya. Outsourcing of logistics has been identified in Kenya to have a number of benefits that are commensurate to findings in other parts of the world. The strong need to improve overall efficiency of the firm has been quoted as a major benefit alongside cost reduction. This has been also found to be so in researches in other parts of the world such as that of La Londe and Maltz (1992).

Firms in Kenya now need to move to the next level of outsourcing, which is the partnership with suppliers to achieve even greater cost reduction and added value. This is also very relevant to acquire and sustain competitive advantage; as such, firms can be very instrumental in product innovation and development as well as market information. Some firms are already employing the vendors to acquire market information as it came out in the expectations from the outsourcing firms to the vendor firms.

Firms in other parts of the world have outsourced far more activities than have been done in Kenya. Of particular mention are outsourcing related activities in a group such as clearing of goods at the port of entry and exit, shipping, warehousing, documentation and others. This was found to be the case in a research carried out in Wall Street firms (Rabinovich et al, 1999). Hence there is a benefit in employing outsourcing of logistics for a group of related activities. Another area that has emerged and could be adopted by firms in Kenya for competitive advantage is that of fourth party logistics and the area of consolidation firms for backhauls. In Kenya, more firms need to adopt the outsourcing of logistics for the reasons indicated that firms have adopted it.

Kenyans have not ubiquitously adopted electronic trading. This therefore curtails the development of e-logistics. However firms and the service providers can be drivers to champion the adoption of e-commerce. If the infrastructure is in place more and more customers and general public would embrace e-commerce. Hence the 3PL's, 4PL's, manufacturing firms, information technology firms, and other stakeholders should team up with the government to promote the proliferation of e-commerce so as to increase service delivery and reduce costs of delivery hence add more value to the consumer.

5.3 Limitations of the study

- a) The study involved the collection of primary data. There was a low response rate that is related to collection of primary data. Some of the respondents claimed to be too busy to take time to participate, while others contended that the information sought was confidential. This was in spite of the assurance that the research was for academic purposes only and efforts to make the questionnaire short.
- b) There was no available comprehensive and up to date listing or directory of the manufacturing firms in the industry in Kenya. The directory that was eventually used is the KIRDI directory of 1997. This had the shortcoming of listing some firms that had since closed down, others that had since moved to other locations and others that had merged with other firms in the industry.
- c) Since the measurement scale of the data collected was ordinal, it did not lend itself to the more robust methods of data analysis.

5.4 Suggestions for future research

- a) This research was conducted for firms in the manufacturing sector. It could be done for firms in the service industry to get a full picture of the prevailing scenario.
- b) This research was done from the point of view of those firms that are outsourcing the logistics services. A research could be done to look at outsourcing from the point of view of the third party logistics service providers (3PL or 4PL) firms.
- c) Research could be done looking at the area of the relationships between firms that outsource services and the service providers in terms of its impact on service delivery, cost, enhancement of the competitiveness of the firms and value addition to stakeholders

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APPENDICES

Appendix I List of Respondent Firms

1. Firestone East Africa
2. Lab & Allied Ltd
3. Dunlop Industries
4. Reckitt and Benckiser
5. Cussons & Co.
6. Pembe Flour Mills
7. Highland Cannery
8. UDV (K) Ltd
9. Wrigley Co.EA Ltd
10. BAT (K) Ltd
11. Kenya Breweries Ltd
12. Unga Ltd
13. Kenya Wine Agencies Ltd
14. Patco Industries
15. Davis & Shirtliff
16. Baumann Engineering
17. Associated Battery Mfrs
18. E. A Metal Works
19. Hussein Glassware
20. Ceramic Industries
21. Mareba Enterprises
22. Central Glass Industries
23. Iberafrica Power
24. Bayer EA Ltd
25. Brush Manufacturers
26. Megh Cushion Industries
27. Sana Industries(K) Ltd
28. Atlas Fire Security
29. Woodmakers (K) Ltd
30. Paper Bags Ltd
31. Silentnight (K) Ltd
32. Dodhia Packaging Ltd
33. Longhorn (K) Ltd
34. Furniture International Ltd

Appendix II

Questionnaire for firms requiring outsourcing services

SECTION A

Name of company _____

Position of officer (respondent) in the company _____

1. Please tick the option that best describes the ownership of the company

i. Local

ii. Foreign

iii. Jointly owned (foreign and local)

2. Please tick one of the following statements that best describes your company's annual turnover in Kshs

i. Up to 50 million

ii. 51 million to 100million

iii. 101 million to 200million

iv. 201 million to 300million

v. 301 million to 400million

vi. 401million to 500million

vii. Over 500million

SECTION B

1. Do you practice outsourcing of logistics (please tick the relevant answer below)

Yes No

If you outsource logistics please continue with question 2. Otherwise go to question 10.

2. Kindly tick the date that best describes when you first outsourced any logistics services.

- i. Before or in 1998
- ii. in 1999
- iii. in 2000
- iv. in 2001
- v. in 2002

3. What are the logistical services that you are currently outsourcing? (Please tick all that apply to your firm)

- i. Transport
- ii. Clearing
- iii. Shipping
- iv. Documentation
- v. Warehousing
- vi. Management of logistics
- Others (please specify)
- vii. _____
- viii. _____

4. Kindly tick the average length of the outsourcing contract (please tick the relevant period)

- i. less than one year
- ii. between one and two years
- iii. between two and three years
- iv. between three and four years
- v. between four and five years
- vi. more than five years

Use the following KEY for questions 5-8

SA - Strongly Agree FA - Fairly Agree A - Agree
 SD - Strongly Disagree FD - Fairly Disagree D - Disagree

5. To what extent do you agree or disagree with the following factors as reasons for your company's outsourcing

- | | SA | FA | A | D | FD | SD |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| i. Outsourced services are not strategic | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ii. Outsourcing reduces overall costs | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| iii. To take advantage of external expertise and experience | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| iv. Lack of internal expertise to perform outsourced services | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| v. The cost of outsourcing is low | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| vi. The cost of performing outsourced services internally is high | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| vii. To avail more time for other activities | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| viii. The volume of outsourced services is low | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Others (please specify) | | | | | | |

- | | | | | | | |
|-----------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| ix. _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| x. _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| xi. _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

6. Please indicate the extent to which you agree/disagree to the following factors triggering or motivating you to start outsourcing the logistical services

- | | SA | FA | A | D | FD | SD |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| i. Perceived need to focus on your core business | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ii. Desire to reduce overall costs | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| iii. Perceived need to reduce the number of staff | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| iv. Need to free management time to perform other functions | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| v. Need to improve overall efficiency | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| vi. Acclaimed performance of the outsourcing vendor. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| vii. Low volume of outsourced services | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| viii. Increased competition | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ix. More demanding market place | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| x. Just in time production line | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| xi. High service level expectations by customers | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| xii. Long supply lines (supplier lead time) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| xiii. Asset base reduction requirements | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| xiv. Need to enhance logistics information systems | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Others (please specify) | | | | | | |
| xv. _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| xvi. _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| xvii. _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

7. To what extent do you agree or disagree with the following in relation to difficulties that you encountered in implementation of the outsourcing practice

- | | SA | FA | A | D | FD | SD |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| i. Identification of the logistical activities to Outsource | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ii. Staff resistance to change | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| iii. Difficulty in cost evaluation on whether to outsource or not | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| iv. Selection of outsourcing vendor | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| v. Drawing contract with the vendor | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Others (please specify) | | | | | | |
| vi. _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| vii. _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

8. To what extent do you agree with the following in regard to the risks or pitfalls you encountered as a result of outsourcing (Kindly rate them as to the level of difficulty)

- | | SA | FA | A | D | FD | SD |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| i. There is loss of control of the decision making process | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ii. Information leakage occurs from the vendor | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| iii. There is loss of command on the outsource service | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| iv. Selection of outsourcing vendor | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| v. Drawing contract with the vendor | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Others (please specify) | | | | | | |

- vi. _____ [] [] [] [] [] []
 vii. _____ [] [] [] [] [] []

9. Please tick the expectations you hold for your outsourced service providers firms

- i. Strict adherence to service level []
 ii. Certain level of cost reduction per period (month, week etc) []
 iii. Product innovation []
 iv. Value added services []
 v. Real time communication []
 vi. Integration of Information system with that of the firm []
 vii. Sharing of accruing benefits []
 Others (please specify)
 viii. _____ []
 ix. _____ []

Answer question 10 **only** if you do not outsource logistical services.

10. To what extent do you agree or disagree with the following factors as reasons for your company's not outsourcing

- | | SA | FA | A | D | FD | SD |
|---|-----|-----|-----|-----|-----|-----|
| i. The firm is not aware of what outsourcing is | [] | [] | [] | [] | [] | [] |
| ii. Outsourcing is more expensive | [] | [] | [] | [] | [] | [] |
| iii. There is no suitable vendor in the market | [] | [] | [] | [] | [] | [] |
| iv. All logistical activities are considered strategic | [] | [] | [] | [] | [] | [] |
| v. The firm considers it can perform the activities best. | [] | [] | [] | [] | [] | [] |
| Others (please specify) | | | | | | |
| vi. _____ | [] | [] | [] | [] | [] | [] |
| vii. _____ | [] | [] | [] | [] | [] | [] |
| viii. _____ | [] | [] | [] | [] | [] | [] |

Thank you for your assistance and cooperation