The Role of Logistics Service Providers in the Logistics Firms’ Supply Chain

Master Thesis within Business Administration
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Abstract

Competition amongst companies in the global market has resulted in increased production of goods and services. Enterprises are now faced with the challenges of shipments of raw materials, spare parts from vendors, and the finished goods to consumers. Logistics companies are springing up to tackle transportation and other logistics problems. There are various logistics companies such as logistics intermediaries, carriers and third party logistics service providers in the market which are in one way or the other competing and at the same time cooperating within the supply chain in order to fulfill their assignments to their customers. Third party logistics service providers are experiencing rapid growth because of the advanced demand of services such as the desire to reduce lead time, inventory management, outsourcing, and a host of other functions. Not much has been written on the logistics firms. Besides, most studies on logistics firms and the third-party logistics providers focus more on such aspects like their skills, services, and their relationships with their customers.

The purpose of this thesis is to analyze the logistics service providers’ roles within the logistics firms’ supply chain by identifying how the expected roles are performed. In the frame of reference, the author searched several books and articles that are relevant within the scope of the thesis topic. Both qualitative and explorative data collection methods are used in the thesis and these involve conducting interviews, and reading the accounts of other people concerning the thesis topic.

The conclusion shows that logistics service providers are able to perform their roles through vertical and horizontal cooperation with other firms and with other logistics firms respectively. Besides, logistics firms do live up to their roles. Carriers and the logistics intermediary now perform more roles than what people think they do, because networks connection and the urge to remain competitive make them to take up value-added services. Third-party logistics service providers add values for their customers through their value-added services in various ways such as time and place utility including tracking and tracing the goods to ensure that they are delivered.
Abbreviations

ARA: Actors, Resource and Activity

CRM: Customer Relationship Management

DHL: (DHL is derived from the first letter of the surnames of each of the three founders: Dalsey Hillblom Lynn).

DSC: Dry Storage Corporation

FCL: Full Container Load

IT: Information Technology

JIT: Just-in-time

KNPS: Kuehne + Nagel Production System

LCL: Less Container Load

LSI: Logistics Service Intermediaries

LSP: Logistics Service Provider

LTL: Less-than-Truckload

R&S: Rohde and Liesenfeld

PoD: Proof of delivery

SDR: Svensk Direktreklam

TNT: Thomas Nationwide Transport

TPL: Third Party Logistics

UPS: United Parcel Service

3PL: Third-party Logistics
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1 INTRODUCTION

This is the introductory chapter of this thesis, and it contains the background, problem discussion, the purpose, research questions and delimitation.

1.1 Background

Opportunities are created for all enterprises because of new markets and sources of supplies that are opened up. In spite of these opportunities in the global markets, industries are also faced with the challenges of shipments of raw materials, spare parts from vendors, and finished goods to customers. This therefore implies that the distance factor has imposed serious challenges on logistics and supply chain managers. They think of how best to obtain high levels of efficiency, reliability, and reduced cycle times (Coyle, Bardi & Langley, 2003).

The logistics industry is a vital industry experiencing growth as a result of factors such as deregulation, mergers and alliances, including growth in logistics firms (Cui & Hertz, 2011). There has been a rapid growth in Third Party Logistics service providers owning to the emergence of advanced demand of logistics services which includes the urge to shorten lead time, customers demand and outsourcing. Various firms belonging to other fields have now penetrated into the logistics market to compete with the firms whose traditional roles have been transportation and warehousing (Hertz & Alfredsson, 2003). The traditional ways of developing and structuring logistics and the supply chain are now obsolete to sustaining emerging organizations because of globalization, increasing competition, the desire to enhance reduced order cycle time as well as inventory levels (Bolumole, 2001). Coyle et al. (2003) claim that the term logistics became universally recognized over twenty years ago, and described logistics as a series of integrated enterprises that have to share information, coordinate physical execution to make sure there is a smooth flow of goods, services. Logistics is in charge of the movement and storage of materials as they are moving through the supply chain channels (Waters, 2003).

The success of a business emanates from superior performance of a product offered at a leveraged price, having extraordinary services and convincing values (Hughes, Ralf & Michels, 1999). Form utility, place utility, time utility, and possession utility are the types of economic utility that basically add value to a product or service (Coyle et al., 2003). Value is created only when goods reach the market and are sold to those that demanded them (Toney, 2004). Logistics will be seen as part of management in the twenty-first century, and can be categorized into four groups – business logistics, military logistics, event logistics, and service logistics (Coyle et al., 2003).

1.2 Problem discussion

In the past, organizations were mainly interested in the production perspective of materials while less attention was given to their movement (Tseng, Yue, & Taylor, 2005; Waters, 2003). Although managers realized the need for the logistics perspective of materials, they thought it to be a mere technical issue that deserved less attention. Management then regarded logistics as an unavoidable cost usually associated with
businesses (Waters, 2003). Transportation of finished goods began to receive attention in the 1920s. Also, until 1962, logistics was described as the most neglected but promising perspective of a business. The surveys carried out in the 1970s and 80s suggested that logistics was expensive and accounted for 15-20 percent of revenue; and that organizations would be able to make significant savings if appropriate attention was given to it (Waters, 2003). According to Waters (2003) logistics is essential for every organization including those that supply intangible services; it has a strategic role to play.

For a firm to achieve its objective a greater cooperation is needed amongst the various value-added functions. The United States and European firms, for instance, are facing a lot of competitive problems because of their failure to manage their firms as unified value-added systems. When a firm sticks to its traditional inward-looking measures only, it could result in service-gaps and thereby pave the way for competitors to enter into the market and possibly capture some of the customers. It is of great importance for managers to realize that a firm’s value-adding ability emanates from the entire flows and processes of the firm. Furthermore, a firm through its marketing research has to source information regarding its customers’ requirements and how best to add values that can help their customers to become successful in their businesses. Value-added activities of manufacturing, logistics and purchasing are responsible for the provision of form, place, time and possession utilities (Fawcett & Fawcett, 1995).

Despite the importance and the rapid growth of the logistics industry, much has not been written on logistics firms per se (Cui & Hertz, 2011). Most studies on logistics firms and logistics service providers centered on their services, skills, and the extent of their integration and relationships with customers (Cui and Hertz, 2011; Andersson, 1997). Besides, Fabbe-Costes, Jahre and Roussat (2008) state that studies on third party logistics concentrate more on firm and shipper-provider relationship. The author observed that not much has been done on how the third party logistics provider operates within the logistics firm supply chain. It is not only the gap in this aspect that is a motivating factor to the author, but his interest in knowing the role of the third party service providers in the logistics firms supply chain is another factor.

1.3 Purpose

The purpose of this thesis is to analyze the logistics service providers’ roles within the logistics firms’ supply chain by identifying how the purported roles are performed.

1.4 Research questions

Three research questions are formulated in a bid to carry out this study:

Through which network can the third party logistics service providers perform their expected roles?

How do the logistics firms fulfill their expected roles?

How do the third-party logistics service providers add value for their customers through value-added services?
Delimitation: Owing to the restricted time frame for this thesis and especially, as logistics firms is a broad perspective in logistics, the author focuses on the roles of logistics service providers in the logistics firms’ supply chain. Furthermore, the connectivity (network) of the third party logistics service providers with the other logistics firms (such as carrier and logistics intermediary firm) will be treated generally without discussing the downstreams and upstreams differently. The author has no intention to compare the networks of the interviewed companies.
2 FRAME OF REFERENCE

In the frame of reference, the author explains the terms that make up the title of the thesis and are also essential for its understanding. The Actors, Resources and Activities model, and logistics firms’ network of interaction model are explained, and of course serve as a foundation that enables the author to answer the research questions. Here, the classifications of logistics firms by three authors are presented. This is done to clarify the assertion that logistics firms can be classified in various ways. However, the author of this thesis categorizes logistics firms into three: Carriers; logistics intermediaries, and third party logistics service providers.

2.1 What is role?

According to the American Heritage Dictionary of English Language, (2000) the word “role” was first used as an English word in the year 1606, and it originated from the old French word (Rolle) meaning “a part one has to play” especially in the theater. The theatrical meaning of the word was later generalized to include parts played outside the theatre stage (off stage). The dictionary further refers to role as the actions and activities assigned to or required or expected of a person or group. Also, the Shorter Oxford English Dictionary, states that role refers to “the characteristics or expected function of a person or thing in a particular setting or environment” (Shorter Oxford English Dictionary, 2002).

The structuralist sees role in terms of playing activity which means that the one occupying a position is required to live up to the expectation of other people. The interactionist does not only see role as playing activity but views role as the product of actors. They conclude that role and position cannot be separated. Role therefore means the ability of one in a position to be able to interpret situations, and being able to make meaningful use of that situation by being creative and innovative. Using role in a sense of relationship or network, it implies that whatever happens in a relationship or network depends on the activities or the roles of the actors. Besides, they believe the subsequent activities in a network or relationship depends on the interpretations of those in positions and the ability to make meaningful use of the situation (Aderson, Havila, Andersen & Halinen, 1998).

The author of the thesis sees role as the activities that are expected of the logistics service providers. These include services they render to their customers and their connectivity (networks) or vertical and horizontal cooperation that enable them to function.

2.2 Third party logistics and the supply chain

The term supply chain has been defined by several authors (Mentzer, 2004). Supply chain involves myriad activities and organizations through which materials flow from the suppliers to the consumers. In the practical world organizations work together but each could perform different function at a point in time to make the flow of goods and services possible (Waters, 2003). In line with Waters (2003), Mentzer (2004) sees supply chain as a set of different entities (organizations or individuals) that are involved in the upstream and downstream flows of products, services, finances, and or infor-
mation right from a source to the customers. By implication, many companies are participants in the supply chain from the raw materials stage to the ultimate consumer, and a set of companies like producers, wholesalers, retailers, third party logistics and transportation companies, etc. are referred to here. Lambert (2008) explains that when a company such as goods manufacturing company is placed in the middle of a supply chain, the supply chain can be likened to an uprooted tree whereby the roots represent the supplier network while the branches of the tree stand for customer network. However, in this study, the topic centers on third party logistics service provider and it will be taken as the focal company.

Increasing competition and complex business conditions compel organizations to look out for competitive advantages. Outsourcing some logistics activities to third party logistics service providers is seen as a good way through which companies can achieve high service performance and also cut down on costs (Kotzab, Seuring & Muller, 2005).

There are many definitions of third party logistics service providers. The concept changes from time to time just as the practice itself develops. Third party logistics service provider is the external supplier who discharges the whole or some of the logistics functions of a company. The definition embraces services such as transport, warehousing, financial services and a host of others. In short, it includes multiple logistics activities that could be managed together to bring solutions to logistics and supply chain problems (Coyle et al, 2003). Third party logistics service provider refers to employment of outside companies who specialize in logistics functions to take care of a firm’s logistical processes. The idea behind this is that when logistics functions are outsourced to the third party logistics providers, companies will be able to focus on their core activities. Hertz and Alfredsson (2003 p. 140) define third party logistics service provider as “an external provider who manages, controls, and delivers logistics activities on behalf of a shipper”. Throwing more light on the definition, the authors state that the relationship between the external service provider and the shipper could be formal or informal, and has to be the type that is continuous and beneficial to both parties. Besides, the activities should include nothing less than “management and execution of transport and warehousing”. However, the authors argue that there is a need for a strategic alliance between the third party logistics service provider and the client as this can lead to quality performance and ample advantages such as economies of scale and efficiency (Hertz & Alfredsson, 2003).

There are several reasons attributed to the rapid growth of the third party logistics service providers in the global market arena. For instance, companies feel it is necessary to outsource their non-core services to the third party logistics service providers so that they can focus on their core competencies. Besides, logistics service providers are experienced and competent enough to satisfy their clients by providing them with expertise services (Kotzab et al., 2005). Cost saving advantage is provided by the third party logistics service providers as they consolidate businesses from different companies such as various pickups and deliveries, and render services to their clients by using their own (providers’) assets (Kotzab et al., 2005). This therefore allows companies to invest less in equipment and facilities. There are a host of other reasons for outsourcing services to the third party logistics service providers.
2.3 Logistics firms’ Supply Chain

According to Waters (2003) supply chain involves various activities and organizations through which materials flow from the suppliers to the consumers. The author goes further to explain that logistics is responsible for the flow and storage of materials as they journey through the supply chain (Waters, 2003). Nemoto and Tezuka (2002) state that third party logistics service providers are capable of making the flows of goods across the supply chain to become very effective because they possess the know-how to coordinate logistics affairs. Cui and Hertz (2011) describe logistics firms as networking firms because their ways of doing business depend on connecting organizations, coordinating activities, as well as bringing together resources of various organizations. The authors point out that there is logistics service supply chain because the logistics service providers do cooperate with each other horizontally and vertically with customers and customers’ customers (Cui and Hertz, 2011). In line with Cui and Hertz (2012), Nemoto and Tezuka (2002) explain that whenever logistics activities are contracted out to the third party logistics service providers, other firms like supplier, manufacturer and retailers are usually involved by the third party logistics service providers (vertical cooperation). Besides, they can outsource some of the logistics activities e.g. transportation to another logistics firms such as carrier (horizontal cooperation). From the various contributions above, we can infer that logistics firms supply chain is the connectivity or network amongst the logistics firms that enable them to function cooperatively in the supply chain.

2.4 The growth and types of logistics service providers

There are different ways logistics service providers can be classified. Various types of names have been used to signify logistics service providers and there is confusion concerning the types of logistics firms in research (Fabbe-Costes et al. 2008, cited in Hertz & Cui, 2011). The author of this thesis will deal with various classifications as presented by different authors such as Hertz and Alfredsson, (2003); Skjott-Larsen, Schary, Mikkola & Kotzab, (2007); Coyle et al., (2003).

Skjott-Larsen et al. (2007) deal with the growth and types of third party logistics firms in the following way:

Asset-based logistics providers: The origin of the group can be traced to early 1980s, and is regarded as the first wave. This group of operators either owned the logistics assets like trucks, airplanes, warehouses, terminals and container themselves or leases them from other sources. For instance, transport management, distribution centers, and information services may be provided by a transport and freight forwarding company to a shipper (Skjott-Larsen et al., 2007). Falling profits margin and tough competition in the traditional transport market sector are some of the reasons propelling these companies into third party logistics business. Besides, some companies embark on third party logistics service business to increase the volume of their services, while others are into the business because of its higher profit margin and customer loyalty. Examples of companies that belong to this category are Schenker and Panalpina (Skjott-Larsen et al., 2007).
Network logistics providers: This group of providers commenced as couriers and express parcels companies in the 1990s, but had to get involved in global transportation and communication networks for effective discharge of duties. Examples of companies in this group are DHL and Maersk logistics. The group concentrates more on time-sensitive and high value products such as electronics, pharmaceutical and spare parts as the perspective of third party logistics services it offers. Companies in this group do offer services that provide-proof of delivery, track and trace of goods on transit, and so on (Skjott-Larsen et al., 2007).

Skill-based logistics: This is the third wave and it started towards the end of the 1990s. The group has not got its own physical logistics assets but engages in the provision of services in the areas such as consultancy and finance, information technology, management skills, and so on. These service providers do go into joint efforts with players from other waves or engage them as subcontractors. An example is Maersk logistics which provides customized solutions for supply chain management, warehousing and distribution, as well as sea and airfreight transport (Skjott-Larsen et al., 2007).

The authors, Hertz and Alfredsson (2003) agree with Skjott-Larsen et al. (2007) on the categorization of the growth of the third party logistics service providers into three waves. According to the authors, the first wave which covers the period of 1980s was when the traditional firms metamorphosed into third party logistics service providers. The second wave started from early 1990s and was the period firms like DHL, TNT, FedEx entered into third party logistics business, while the third and the present wave account for the emergence of financial, IT and consultants firms.

Hertz and Alfredsson (2003) also categorize third party logistics providers based on their ability to adapt to individual customers and their general ability to provide solutions to problems.

The standard TPL provider: This group supplies the standardized third party logistics services such as warehousing, distribution, pick and pack, etc. to their customers.

The TPL as service developer: This category provides advanced value-added services which are differentiated depending on the need or demand of each customer. Thus the services are in the form of specific packaging, cross-docking, pick and pack, special security systems, and so on with the aim of creating economies of scale and scope.

The customer adapter: This is referred to as the type of third party logistics firm that is seen as the part of the customer organization, and totally committed to developing solution of basic services for respective customer. For instance, the third party logistics firm can take over customer warehouses and logistics activities. Moreover, they do have few but close customers.

The customer developer: This is regarded as the most advanced TPL firm which has to do with developing advanced customer solution for every customer. It also concerns high integration with its customer, and ready to take over its whole logistics activities (Hertz & Alfredsson, 2003).
Figure 2.1 Problem-solving abilities-TPL provider positions (Hertz & Alfredsson 2003, P. 141).

Despite the fact that most firms claim to be providers of varieties of logistics services, they can still be categorized in several ways (Coyle et al., 2003).

Transportation based: As the name implies, the major activity of this category is transportation. However, some firms in this category could operate on leverage, utilizing the assets that belong to different companies, while others are non-leveraged in that they have their own assets or use the transportation based-assets of their parent companies. It should be realized too that some firms are subsidiaries or large divisions of well-established large transportation firms. Examples of the transportation –based firms are Schneider Logistics, FedEx Logistics, and UPS logistics. However, these transportation firms also engage in other logistics services apart from the transportation services (Coyle et al., 2003).

Warehouse/ Distribution-based: The traditional functions of the firms in this group are inventory management, warehousing, distribution and so on. Although, most warehouse/ distribution based logistics suppliers are engaged in public or contract warehousing business, they extend their services to include broader range of logistics services. Examples are DSC Logistics, USCO, and Exel. For instance, in 2000, Exel logistics (a warehousing/ distribution-based firm) and MSAS (good in forwarding and ocean shipping areas) decided to merge (Coyle et al., 2003).

Forwarder based: Firms in this category are non-asset owners. They carry out a range of supplies of logistics services in order to satisfy their customers’ needs. Examples of companies in this group include Fritz, and Hub Group. These companies are again engaged in other logistics services different from their original roles as forwarders and / or brokers (Coyle et al., 2003).

Financial based: The firms in this group offer services like freight payment and auditing, cost accounting and control. Such firms can as well engage themselves in other logistics services like providing logistics tools used for managing inventory, monitoring shipment on transit, tracking and tracing, and so on. Examples of companies belonging
to this group are Cass information systems and Commercial traffic Corporations (Coyle et al., 2003).

Information based: Firms in this group could be regarded as innovative form of logistics service providers, especially as they form alternative means for those who purchase transportation and logistics services. The following are examples of firms in this category. Transplace Company is a web-enabled platform which aims at bringing together shippers and carriers in the entire world so that they can collaborate in transportation perspectives for effective and efficient operations. Nistevo is an internet based logistics network which also enables shipper and carriers to collaborate for the same purpose of efficient and profitable performance via online (Coyle et al., 2003).

2.4.1 Third party logistics firm compared to other logistics firms
Stefansson (2006) categorizes logistics service providers into three groups which are Sub-contract carriers, logistics service providers, and logistics service intermediaries, cited in (Cui & Hertz, 2011). Cui and Hertz (2011) regard all the firms that deliver logistics services (i.e. carriers, logistics intermediary firms, and third party logistics providers) as logistics service providers.

Carriers: There are different modes of carriers. They render transport services and move materials or products physically from one point to another (Coyle, Bard & Novak 2000, cited in Hertz & Cui, 2011). Stefansson (2006) enumerates some services carriers provide based on empirical evidence and these include inbound and outbound transportation; door-to-door transportation service; contract delivery; transportation administration; documentation handling; transport scheduling; tracking and tracing information; and customized services. Also, the author describes carriers as asset-based operators being that they more often than not own most parts of their assets or lease trucks or equipment required to enable them functions properly. Time and place utility are achieved in the process of moving products from point to point (Stefansson, 2006). Cui and Hertz (2011) state that carriers invest much in various means of transport, transport equipments and infrastructures that have to do with transportation, and also very efficient in operating them. Examples of carriers are shipping lines, airline and trucking firms (Cui & Hertz, 2011).

Logistics intermediaries: Logistics intermediaries are responsible for consolidating products, connecting carriers and clients. They are engaged in freight forwarding roles, and in most cases are non-asset based service providers. However, they do invest mostly in IT systems as well as building representative offices in various locations so that they will be able to coordinate their numerous clients and carriers (Cui & Hertz, 2011). A freight forwarder is a trade specialist that performs various functions for the sake of facilitating shipments (Murphy & Daley, 2001). The core business of a freight forwarder is to secure transport services as well as consolidating smaller shipments from various shippers into a larger type and then ship them to respective destinations at a reasonable price (Lai & Cheng, 2004). Stefansson (2006) sees logistics service intermediaries as a group that focus on administrating logistics activities, which do not physically handle the goods by themselves but rather look for the right carriers or third-party logistics service providers to handle such services.
Third party logistics service providers: Third party logistics service providers coordinate the carriers, logistics intermediary firms, and other service suppliers. These service providers play the role of a middleman between the seller and the buyer, render transportation, warehousing services and engage in performing other services such as consolidation and deconsolidation; cross-docking; picking and packing; custom clearance; track and trace information; insurance services; payment services; tendering and contracting carriers; and forwarding services (Stefansson, 2006).

2.4.2 Selecting a third party logistics service provider

Today, the global business environment is expanding and becoming more complex. All companies that need the services of third party logistics service providers have become very careful in their selection so that they can select the type that will be able to meet their requirements. There are several factors that can influence a company’s decision on this issue of selecting a third party logistics service provider, but this depends on what the individual company needs. Amongst the factors that often influence the decision of a firm on this subject are costs reduction, network of the company, company infrastructure/technology, services offered, quality, location, history of the company and ease of doing business (Cakir, 2009; Fitzgerald, 2007).

One of the major reasons firms generally embark on outsourcing is to reduce the amount of capital committed on investment. In spite of the fact that there are many other reasons such as service or quality improvement, the desire for flexibility, the desire to focus on core competences, customer satisfaction, etc, cost reduction is ranked as an important factor and as a process that can be used on deciding upon a provider. The simple logic here is that when cost is minimized, a firm will also be able to reduce the price of its product or service for its customers. This can as well bring about customer satisfaction as long as they are comfortable and happy with the price of the products. Furthermore, it has a positive effect on the profit margin of a company. It is therefore pertinent to use cost reduction as a yardstick or criterion for selecting service providers, (Cakir, 2009; Fitzgerald, 2007).

Another essential factor which has to be taken into consideration when taking a decision on the selection of the third party logistics service provider is the providers’ network. A provider that develops network with other firms has a relationship with such firms. It implies that there could be economic, physical, technological, legal knowledge and social exchange between such firms provided that there is trust and communication amongst them. “In the network approach, firms can be both directly and indirectly related to other firms and they develop through such relationships with other firms” (Hertz & Alfredsson 2003, P. 142).

When a firm wants to outsource some activities to a third party logistics provider they could consider the types and the standard of resources possessed by the service provider. Competitive advantage as well depends on the resources accumulated by the firm (Bolumole, Frankel & Naslund, 2007). The services of logistics service providers enable the outsourcing firm to have access to resources that are not theirs (Bolumole et al., 2007). For example, the development and the uses of IT can enhance integration and aids visibility along supply chain systems. It thus helps to reduce the level of un-
certainties. IT compatibility has become very important for the provision of some logistics services such as shipment documentation, purchase order visibility, cross-docking, inventory replenishment, and a host of other services, (Cakir, 2009; Fitzgerald, 2007).

The factors considered most important for the selection of freight forwarders are expertise and reliability according to Murphy and Daley, (1997) cited in Aguezzoul, (2008). Shippers are definitely facing challenges on how to control international supply visibility, lead times, customer service and inventory carrying cost. Shippers have to carefully select third party logistics providers that can both operationally and culturally cater for their specific and unique global distribution needs (Fitzgerald, 2007).

For the sake of developing a theoretical framework to support factors a firm can consider before outsourcing some of its activities to third party logistics service providers, the author of the thesis briefly discusses transaction cost analysis, resource base theory and network theory. The transaction cost analysis simply refers to the cost of physical and human resources incurred in the course of exchange of goods and services (Bolumole et al., 2007; Zacharia, Sanders & Nix, 2011). According to the transaction cost theory, firms do exist to maximize profit by reducing their transaction costs; outsourcing to third party logistics service providers helps to minimize a firm’s costs because as they grow in their capability they offer services at lower costs to their clients (Bolumole, et al., 2007). It is generally accepted that transaction cost analysis is useful for assessing and taking a decision concerning outsourcing in logistics (Andersson, 1997). According to Zacharia et al. (2011) resource-based theory refers to both physical assets such as plants, equipment, location, and intangible assets such as knowledge and expertise. Firms need resources to be able to survive and improve their operations, and resources give a competitive advantage to them (Bolumole, et al., 2007; Zacharia et al., 2011). Resource-based theory is good for assessing outsourcing in logistics, and it serves as a strategy for the firm to have access to valuable resources possessed by the third party logistics service providers (Hakansson & Snehota, 1995; Zacharia et al., 2011). As the third party logistics service providers grow they are able to offer more resources to their customers (Zacharia, et al., 2011). With regards to network theory, outsourcing firm’s supply chain can be managed as a single entity via relationship and network coordination (Hakansson & Snehota, 1995). According to network theory, through interaction with other firms, a firm can enjoy the efficiency of the entire network. As third party logistics service provider is growing, and rendering services to more members of the supply chain, it increases its ability to offer greater network interactions (Zacharia et al., 2011).

2.4.3 Network of third party logistics service providers

Generally, logistics service providers do contribute to the improvement of their clients performances in various ways such as optimization of logistics or supply chain, costs savings, creation of value, growth and strategy development (Fabbe-Costes et al., 2008). Although there are different logistics firms with different roles, they cooperate with each other (horizontal) and with other firms (vertical) so that they can function better and satisfy their customers’ requirements or demands. Nemoto and Tezuka
(2002) in their report, explain that a third party logistics provider can cooperate vertically with other firms and horizontally with other logistics firm in the supply chain when logistics activities are contracted out to them. They explain that if a focal firm (manufacturing firm) contracts out logistics activities to the third party logistics provider, the service provider can establish transactions and inventory management systems involving other firms such as supplier, manufacturer and retailer in the supply chain. Besides, the third party logistics provider has to outsource some activities to other logistics firm- a subcontractor (e.g. a carrier) since it cannot provide all the logistics activities alone. Cui and Hertz (2011) have also demonstrated in their article how a third party logistics firm, logistics intermediary firm and a carrier can work cooperatively in order to satisfy their various clients such as suppliers, suppliers’ suppliers, and customers, customers’ customers. For instance, when a focal firm outsources to a third party logistics firms, the third party logistics firm can also outsource some of the activities to the logistics intermediary and a carrier (Cui & Hertz, 2011). See the figure below for more clarification.

![Industrial supply chains and the logistics firms’ network of interaction (Cui & Hertz, 2011 p. 4).](image)

From the various contributions above, we can understand that logistics firms’ supply chain is the connectivity or network amongst the logistics firms that enable them to function cooperatively in the supply chain. Apart from showing how the various logistics firms cooperate, Cui and Hertz (2011) explain their differences in three networks. The first network in which the three firms are different is the network of actors which is also referred to as local, international or global network of organizations. Carriers’ horizontal network of actors is wide as they usually represent each other in different locations. The logistics intermediary firms, on the other hand, have a wider geographical coverage area and horizontal network of actors than the carriers because they usually set up representative offices or go into alliances with local partners. The third party logistics firms have relatively narrow horizontal network of actor for they do not have a wide geographical coverage but with a high capability in the management of vertical network of actors since they have numerous clients to serve along the supply chain, and have to coordinate logistics intermediaries and carriers as well. This is unlike carriers and logistics intermediary firms that have
low capabilities and medium capabilities respectively in the management of vertical networks.

Apart from the network of actors, the logistics firms mentioned above are still different in the network of systems, which also mean resources. Carriers invest much into the means of transport, transport equipment, other related infrastructures, and staff so that they can perform their services effectively (Cui & Hertz, 2011). Carriers have the expert skills of operating their physical systems and transport equipment in highly efficient manner, and are having high capability with regards to managing network of systems.

It is a common feature among logistics intermediaries not to have investments in assets like trucks, traditional handling equipments, warehousing, etc. (they are non-asset-based). However, as forwarders, they do invest in information system so that they can support their operations with it (Stefansson, 2005). Logistics intermediaries invest in IT systems and representative offices to enhance their operations but their capability in the aspect of managing network of systems is not as high as that of the carriers (Cui & Hertz, 2011).

The third party logistics providers takes up the design of the distribution setup, locate the competent contractors, carriers or logistics service providers, uses the appointed contractor in order to execute the setup. They invest in resources as well as IT systems so that they will be able to provide integrated solutions to their customers (Stefansson, 2005; Cui & Hertz, 2011). The capability of the third party logistics service providers in managing their network of systems is lower than that of the carriers and logistics intermediaries (Stefansson, 2005).

Logistics firms are also different in their supply chain networks of the customers and the material flows of the supply chain. Carriers and logistics intermediary firms do have numerous clients and thus belong to many supply chain networks. It is rare for them to focus on a particular supply chain, and their major concern is about moving goods from one point to another most efficiently. They thus have low capabilities in managing physical flows of a particular supply chain compared with third-party logistics firms. The third-party logistics firms assume control of activities and spend money on resources that are needed to enable the customers’ physical flows along the supply chain Bolumole, (2011) cited in Cui & Hertz, (2011). Third party logistics firms have small number of clients compared to carriers and logistics intermediary firms, especially as it is not easy for them to develop new clients owning to the requirements of dedicated resources and specialized knowledge (Cui & Hertz, 2011).
2.4.4 The role of third party logistics service providers in the supply chains

The role of the third party logistics services provider was limited in the 80s because at that time third party logistics was still an infant industry. From that period onwards, its growth became rapid, and contributes to the effectiveness of the supply chain (Maloni & Carter, 2006). There have been changes in its role in accordance with the growth in logistics services. For instance, it evolved from offering only traditional services (e.g. transportation and warehousing) to include other services such as inventory management, cross docking, technology management, and a host of other services. Presently, the role has evolved into a leadership role of orchestrator in order to facilitate supply chain best practices (Maloni & Carter, 2006).

Third party logistics providers are getting more involved when we talk of managing, coordinating and controlling of the firms in supply chains in order to be able to take care of the needs of their clients (Zacharia, et al., 2011). Furthermore, the authors likened the third party logistics providers to glue that ties the individual supply chain actors together, and managers who eliminate uncertainty in the supply chain. They claim that because the third party logistics providers are working with many supply chain partners, it is possible for them to standardize data and processes across firms that belong to the supply chain and make visibility along the chain to be possible (Zacharia, et al., 2011). Third party logistics service providers are actors who provide integrated services or solutions for their clients, integrate vertically with them, and horizontally with other logistics service providers (Makukha & Gray, 2004). They help their customers to cut down on transaction costs through the efficient use of assets; integrating clients supply chains; and consolidation of overhead costs (Zacharia, et al., 2011; Banomyong, 2010).

The third party logistics providers manage the supply chain in ways that tangible materials can be moved to respective destinations, and on time, as requested by their clients (Banomyong, 2010; Waters, 2003).
2.5 **Actors, Resources and Activities (ARA) model / networks**

The ARA model is a useful framework that can be used to describe the content of business relationships. Its three basic elements are activities, resources and actors. In order to understand how a certain business is developing, for instance, it is important to look into the connectivity of the three elements or layers of activities, resources, and actors of that business (La Rocca, 2011). Thus the relationships can be assessed through Activity links, Resource ties and Actors bonds. It is generally a common practice in logistics and supply chain, influenced by the desire to obtain efficient flows, to first of all point out activities to be done, followed by the identification of actors that will perform those activities, and finally the selection of the required resources needed for the activities (Fabbe-Costes et al., 2008). Resources are considered as tools; and it is upon this claim that a supply chain or a logistics network is a set of resources that are more or less closely connected (Fabbe-Costes et al., 2008).

For the readers to be able to understand the application of the ARA model in this thesis, each of the three elements including their connectedness (network) will be explained. Besides, the use of the ARA model in the thesis will make it easier to discuss the roles of logistics firms, and how the third party logistics services providers can add values for their clients via services they render.

**2.5.1 Activity links:** An activity takes place whenever one or more actors combine, develop, exchange, or create resources by using other resources (Hakansson & Johansson, 1992). The connection between the different activities of two companies for instance, is referred to as activity links. For example, the activities of production, logistics, administration, deliveries and information handling could be linked together and coordinated (La Rocca, 2011). Activity links are created when firms are interacting through a relationship or network by performing a task for the purpose of achieving their common goals.

**2.5.2 Resource ties:** The means which actors use when they perform activities are referred to as resources; and the resource ties in the model explain how resources of different businesses are connected together. Resource ties is said to take place when there is mutual adaptation of tangible resources (e.g. plant or equipment) or intangible resources (e.g. knowledge) of two organizations. It can lead to cost efficiency advantage, and the emergence of new knowledge that brings in developments in both organizations. Activities of companies are sustained by resources (Hakansson & Johansson, 1992). Better integration (closer adaptation) of resources and flexibility (adaptability or capacity to adapt) makes possible coordination of activities and efficient processes, and being able to tackle challenges in future (Fabbe-Costes et al., 2008).

**2.5.3 Actor bonds:** Actors can be individuals, groups of individuals, firms, and groups of firms. Actors are responsible for controlling activities, deciding on the resources to be used, and belong to various levels in organizations (Hakansson & Johansson, 1992).

Actors possess some characteristics: Actors perform and control activities, and decide on the resources to be used when activities are performed.
As actors interact, engage in exchange, relationship is developed with each other. This allows actors to have access to the resources of other actors.

Actors’ activities depend on their control over resource which might be direct or indirect control.

Actors have goals. Despite the goals of specific actors, their common goal is the desire to have more control over the network than others. This is borne out of the belief that control can be used to realize other goals.

There are differences in the knowledge actors have about activities, resources, and about other actors belonging to the network. Though knowledge is mainly developed through the experiences gotten from activities in the network, actors achieve a greater knowledge from the nearer parts of the network than from the distant parts (Hakansson & Johansson, 1992).

![ARA Model](image)

**Figure 2.3 ARA Model (Hakansson & Johansson, 1992, p. 28)**

**2.5.4 Network:** The three basic elements of the ARA-model are related to each other. Such relationships result in a structure we can call networks (Hakansson & Johansson, 1992). Actors do develop relationships with each other. Similarly, resources and activities can be related to each other in that order (Hakansson & Johansson, 1992). Cui and Hertz (2011) agree with the idea that the network model based on the three classes of variables (actors, activities and resources) explains the importance of networks in business relationships. The authors further describe logistics firms as networking firms.
because their ways of doing business depend on connecting organizations, coordinating activities, as well as bringing together resources of various organizations. The whole logistics service providers are part of three different networks which are network of actors, networks of service systems and networks of activities; there are differences in their focuses depending on the type of logistics service provider (Cui & Hertz, 2011). The level of interdependence in business network makes the entire relationships to be connected in a way that whatever takes place in one of the relationships also affects the other relationships in the network either in a positive or a negative way. This happens as most companies could be involved in many relationships. When relationships are connected, it can result in a consistent unity, a business network, that makes a company to depend on the network it belongs and other relationships it is not part of or which are further away (Dahlin & Thilenius, 2006). Examples of a business networks are illustrated below, so that readers will be able to grasp the exact picture of business networks.

Figure 2.4 Showing business network as connected relationships. Source: from (Dahlin & Thilenius 2006, p. 3).

The dark circles in the figure are showing the business relationship between the supplier and the customer (the starting point of the business relationship). And the figure shows vertical production flow of suppliers and customers (business relationships between these actors are shown in the network being that all of them are connected to the focal business relationships). The circles are of different sizes, demonstrating the characteristics of individual actors, as well as business relationships.

Holmen and Pedersen (2001) share the view that business network is made up of connected relationships to which firms in a network belong and other relationships and connections which they do not directly belong. In other words, firms in a dyadic relationship form a network, and those other connected relationships that are not directly involved are also parts of the network. Figure 2.5 shows connected relationship for firms in dyadic relationship. It again shows the supplier business unit and customer
business unit in a focal relationship, and finally other connections and relationships that are linked with both actors (supplier and the customers in the network).

Figure 2.5 Connected relations for firms in a dyadic relationship (Holmen & Pedersen 2001, P. 5)

2.6 Innovation and Value-added Services

The global economic activity of today seems dominated by the service industries, and one example of service-based industries is the logistics industry which has been transformed from its usual traditional activity of transportation to that of ‘servicing the entire logistical needs of customers’ (Chapman, Soosay & Kandampull, 2003, p.630). Firms do embark on innovation to be able to compete favourably within the global market place, especially, as customers patronize firms that can satisfy their desires and needs. Innovation in products brings different types of rewards such as profits maximization, popularity, and increased market share (Skojtt-Larsen, 2007). According to Chapman et al., 2003) innovation as a term could be used in various senses. He claims that in services, innovation could be regarded as value-creating activities which act as a driving force that makes the marketing sector to perform better, and it refers to services newly introduced and the extent of improvement in delivering them.

It is difficult to come up with a single generally accepted definition of value being that the term can be used in various senses based on different phenomena (Bowman & Abrosini, 2000). The perception of the customers concerning the value of a product depends on what they believe about the product, their needs, experiences and what
their expectations are (Bowman & Abrosini, 2000; Ots, 2010). Value has two major components: Perceived use value which is subjective because the judgment of the value of the good is solely based on the discretion of the consumer which also depends on their needs. Perceived use value when translated into monetary terms can also be explained to mean the price a consumer is prepared to pay for a product, while exchange value refers to the amount of money which the buyer finally pays to the producer for the perceived used value (Bowman & Abrosine, 2000). Rutner and Langley (2000) also have common idea with Bowman and Abrosine (2000) that the term ‘Value’ has definition problem being that it has different meanings to different individual, companies and organizations. Rutner and Langley (2000) claim that most logistics professionals and academics came to agreement that logistics is an important function within business, and that for the last few years logistics is being considered as a process which creates values.

Logistics value-added service means the provision of extra service(s) or to go beyond customer service requirements that again minimizes the supply chain costs, and increases the partners’ profits in order to gain competitive advantage. Logistics adds values to a product or service when performing its role which eventually results in four main economic utilities such as form, place, time and possession utility (Coyle et al., 2003; Rodrigue, et al., 2009). Value-adding services are also seen as various activities that are different from the traditional functions (transportation and warehousing based services) that are rendered by the third party logistics service provider. This means that they are the type of services that put in more features, forms or functions to the fundamental services. Furthermore, logistics generally add-value via place and time utility, and some services such as postponement, and building point-of-sales display or sending out promotional materials, which are carried out by the third party logistics service providers are connected with form utility and possession utility (Bowman & Abrosine, 2000).

2.7 Summary

The chapter began with the definition and explanation of the terms that make up the title of the thesis, and are also important for its understanding. The term supply chain as explained by Douglas and Cooper (2000); Mentzer et al., (2001); Waters (2003); Skjott-Larsen et al., (2007) is provided. Supply chain is a set of different entities that are involved in the upstream and downstream flows of products, services, finances, and or information right from a source to the customers (Mentzer et al., 2001). Logistics is seen to be responsible for the flow and storage of materials as they journey through the supply chain. There are several ways logistics firms can be categorized. Stefansson (2006) categorizes logistics firms into sub-contract carriers, logistics service providers, and logistics service intermediaries while Cui and Hertz (2011) take all logistics firms that deliver logistics services to be third party logistics providers and use the terms interchangeably. Third party logistics service provider is regarded as “an external provider who manages, controls, and delivers logistics activities on behalf of a shipper” (Cui & Hertz, 2011, p.140). Hertz and Alfredsson (2003); Coley et al., (2003); Skjott-Larsen et al., (2007) deal with the growth and types of the third party logistics providers as described in the chapter.
When companies outsource some activities or functions to the third party logistics providers or logistics firms, there are factors they have to consider before taking decision. Some of those factors are costs reductions, networks of the company, the types and standard of resources possessed by the service providers, expertise and reliability of the provider, etc. Transaction cost analysis, resource base theory, and network theory are parts of the factors firms do consider when taking decisions on outsourcing certain activities to logistics service providers. The ARA model / network are introduced in the chapter to explain business relationships. The ARA model has three elements which are actors, resources and activities. The network structure of a business consists of actors, organized activities and resources.

According to Chapman et al. (2003) service firms could possibly embark on innovation for the sake of upgrading their efficiency, and to benefit their customers. Logistics firms do add value to a product or service in the course of performing their duties and this could be through form, place, time and possession utility (Coyle et al., 2003). Finally, logistics-value added services simply mean the provision of extra services that can minimize the supply chain costs, and increase profits in order to gain competitive advantage.
Chapter 3 deals with various methods or approaches used by the author. The purpose of the study, the research question, and the contents of the study are taken into consideration in this section. Also given attention here are data collection methods, and the issues of validity and reliability.

3.1 The meaning of research

Davies (2007) describes research in three perspectives commonly employed in most projects: Research is seen as a process of gathering data in a manner that is strictly organized. The processes involved vary, and this could be simple description, reflection, interpretation, and so on. Research is also a process of testing the idea that has been stated (hypothesis), to verify if the evidence supports the idea or otherwise. The process could involve experimental practices and their comparisons with practices that are current. Finally, “research is a process of engaging in planned or unplanned interactions with or intervention, exploration in parts of the real world, and reporting on what happens and what they seem to mean. Field trials are one example of this approach; action research is another” (Davies, 2007, p. 17). Research methods can be described as rules, procedures, tools or ways through which problems are solved (Ghauri & Gronhaug, 2010).

3.2 Research Approach

According to Locke, Silverman and Spirduso (2010) research methods can be categorized into quantitative, qualitative and mixed method. Quantitative research method uses the traditions of science while qualitative research method is more of reflective and explanatory in its systems of approach (Davies, 2007). Mixed methods research is the combination of both quantitative and qualitative research methods while carrying out a study (Locke et al., 2010).

A researcher can use either deduction approach, induction approach, or the combination of both processes to reach a research outcome (Sekaran, 2003). Deduction approach is the means through which a conclusion can be reached based on logical generalization of the facts that are already known. On the other hand, induction approach is based on the observation of certain phenomena on which a conclusion can be reached. This infers a general proposition can be established based on those facts that have been observed (Sekaran, 2003). Depoy and Gitlin (2005) also write that deductive approach is a way of understanding a specific case from a general principle while inductive approach involves starting from a specific case to generalization. Inductive and deductive research approaches are used in this thesis. Findings are conducted in an exploratory manner to get more understanding of the topic under study, theories are used and conclusions reached are based on empirical findings. First, the author searched a lot of books, reports, journals/ magazine articles for the previous works of other people in order to get a deeper knowledge of the research topic. Besides, the author intends to base the conclusion of the study on empirical findings through interviews with logistics companies as well as the manufacturing company.
3.3 Research Design

The research design depicts the entire plans for the collection of data as well as its analysis, and the research design chosen shows the types of research which could be explanatory, exploratory, descriptive, etc, and the researcher’s priorities (Ghauri & Gronhaug, 2010). According to Davies (2007), the nature of the research question determines the research content, participants and the type of data required for the research or study. Furthermore, quantitative inquiries do involve the use of numerical and statistics when carrying out its findings, while qualitative findings involve obtaining data through interview, observation, etc instead of numerical means (Davies, 2007). It has been generally accepted that qualitative methods appear to be the best in terms of inductive and exploratory research since they can lead to hypothesis building and explanations (Ghauri & Gronhaug, 2010).

The strengths of qualitative method

Qualitative method has descriptive ability being that it is based on primary and unstructured data. A holistic view of the phenomena under study is possible. Besides, it has flexible ways to carry out data collection, analysis, and interpretation of information. In spite of the above strengths of the qualitative method, it has the problem of consistency and reliability as the personal characteristics of the researcher may influence result of the study (Matveev, 2002).

Qualitative and exploratory data collection methods are used in this study. The author collected data through interview with Logistics and manufacturing companies, and read both first-hand and second-hand accounts of other people concerning the topic under research. The interviews were face to face, via telephone and e mail because those were the interview methods chosen by the interviewees. On the other hand, the explorative nature of data collection allows the researcher (the author) to get more understanding of the topic at hand.

3.4 Primary data

This is the type of data or information collected directly from first-hand experience through sources such as observation, experiments, surveys or questionnaires, and interviews by the person doing the research (Ghauri & Gronhaug, 2010). Although primary data are costly and time consuming to collect, they still prove to be more consistent with the research at hand being that the information is collected directly for the specific purpose (Ghauri & Gronhaug, 2010). The author of this thesis used semi-structured interviews with open-ended questions. Mr. Jesper Axell—the sales manager, Mr. Tomas Hessel—the logistics manager, Mr. Daniel Sandberg—the logistics manager, Mr. Thomas Willgren—export operator, Mr. Bjorn Warell—a sole proprietor, and three other respondents (anonymous) from Kuehne +Nagel and Unus International manufacturing company were interviewed. Each face to face interview lasted for 25 minutes to 35 minutes, while each telephone interview lasted for about 20 minutes.
Semi-structured interview In semi-structured interviews, open-ended questions are prepared for the interview. Unstructured questions can also be asked. Questions are framed in a logical way to cover all that the researcher wants to know (Morse & Richards, 2002). The author considered it appropriate to use semi-structured interviews because the interviewees are given the freedom to express their views in their own terms. Besides, the interviewee is allowed to ask the interviewer questions, for instance, in order to clarify interview questions that are unclear, and in that process the researcher can gather more information. However, semi-structured interview could be time-consuming, and respondents might not be willing to participate. Before carrying out the interviews in this study, the author first of all, prepared some questions and presented them to the supervisors for necessary corrections. When the corrections were done, and the supervisors confirmed that the questions were appropriate, the author forwarded them to the interviewees. The interviews commenced after a week.

3.5 Secondary Data

This is data or information collected by someone other than the researcher who is carrying out the current study. Secondary data play vital role in research studies such that they provide information for us to understand, explain, and solve our research problems (Ghauri & Gronhaug, 2010; Sekaran, 2003). Other benefits of sourcing secondary data are time and costs saving. Considering the benefits a researcher can derive from secondary data many scholars have therefore recommended that it is a good idea for all researches to begin with secondary data sources (Ghauri & Gronhaug, 2010).

3.6 Literatures Review

Literatures review “is a systematic, explicit, and reproducible method for identifying, evaluating, and interpreting the existing body of recorded work produced by researchers, scholars, and practitioners” (Fink, 1998 p.3). The author goes further to state that literature review could be done for personal or intellectual reasons or to enable one to understand what is already known about a specific topic (Fink, 1998). The purpose of literature review is to make sure that any important variable found to have had impacts repeatedly on a problem is not left out (Sekaran, 2003). Different methods can be applied while searching for literature. Examples are manual searches in the library, computerized or electronic bibliographic databases, and the internet/world wide web (Fink, 1998). The author searched through Jonkoping University Library catalogue in order to identify books that might be useful to the topic at hand. Thorough search was done by going through the contents and indexes of supply chain and logistics books for the same purpose. To improve on the literature search, the author made good use of databases such as Google, Google Scholar, and Diva Essays. In the process of carrying out the literature review several keywords such as “logistics service provider”, “third party logistics service provider”, “logistics firms” “supply chain”, “value-added services” and “innovation” were used. The search produced a good result since the author was able to discover several books and articles that are relevant within the scope of the thesis topic. Also, the relevant references gotten from the initial literature search were used for further search for articles and books.
3.7 Method of sampling

The two broad categories of sampling methods are probability sampling and non-probability sampling. In probability sampling every member of the population has a known probability to be included in the sample. In the case of non-probability sampling, each member of the population does not have a known probability of being included in the sample (Fink, 1998; Ghauri & Gronhaug, 2010; Sekaran, 2003).

Non-random sampling is used in this thesis. The interviewed companies and respondents were not selected at random. It was the discretion of the author to contact some well known logistics companies based on their services. The author selected respondent from each of the companies using judgment sampling method as this enables the author to get information from the appropriate persons occupying positions in the selected companies. According to Sekaran (2003) judgment sampling, enables the researcher to get the required information from a specific type of people (e.g. those that have expert knowledge. At the threshold of the empirical aspect of the study, the author first of all had to contact some logistics companies by e mail and requested for interviews with each of them. Not all the companies responded to the e mail, but each of the ten companies that responded demanded for a copy of the interview questions before an interview could be scheduled. The interview questions were sent to the ten companies as demanded, but only six companies responded positively and the interviews were face-to-face interviews, by telephone and e mail. Those companies that did not grant any interviews with the author came up with the excuse that they were too busy with their customers at that period. It has been stated under the research design that the author of thesis uses both qualitative and exploratory data collection methods. Data were collected through interview and literature review. Conclusion will be based on the findings.

The author initially contacted Geodiswilson by e-mail requesting an interview with Mr. Jesper Axell, the sales manager in Jonkoping. The follow-up contact was by telephone, and he agreed to a telephone interview. He requested that the questions be sent to him before the day of the interview. The questions were sent to him, and the interview was held later. Bring Cargo was also initially contacted via e-mail requesting an interview with the logistics department. The follow-up contact was via telephone, and fortunately, there was a positive response from Mr. Tomas Hessel, the logistics manager. His choice of interview was e-mail. The questions were forwarded to him for answers. Later, the author called him on phone to clarify some of the points that were not explicit enough, and also used the opportunity to ask him more questions. This means the author succeeded in having both e-mail and telephone interviews with the interviewee from Bring cargo logistics. He (the interviewee) also forwarded the company website to the author for further information. In the same way, the author sent questions to Mr. Daniel Sandberg—the logistics manager, Mr. Thomas Willgren—export operator, Mr. Björn Warell—CEO/MD before the face to face interviews were conducted.

All efforts made by the author to have an interview with at least, one customer of the logistics company (i.e. manufacturing company) in Sweden was to no avail as none of them agreed to be interviewed by the author. The author decided to contact some companies in Venice, Italy. He interviewed a manufacturing company, a customer to
third part Logistics Company. The respondents chose telephone interview, and prefer to remain anonymous.

Table 3.1 schedule of interview

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<th>Company</th>
<th>Names</th>
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<th>Date of interview</th>
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<tr>
<td>Geodis Wilson</td>
<td>Mr. Jesper Axell</td>
<td>Sales Manager</td>
<td>July 27th 2011</td>
</tr>
<tr>
<td>Bring</td>
<td>Mr. Tomas Hessel</td>
<td>Logistics Manager</td>
<td>June 20th 2011</td>
</tr>
<tr>
<td>United Parcel Service (UPS)</td>
<td>Mr. Thomas Willgren</td>
<td>Export Operator</td>
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</tr>
<tr>
<td>Jetpak</td>
<td>Mr. Daniel Sandberg</td>
<td>Logistics Manager</td>
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<tr>
<td>Kuehne + Nagel</td>
<td>Anonymous</td>
<td>Anonymous</td>
<td>May 8th 2012</td>
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<td>Unus International</td>
<td>Anonymous 1</td>
<td>Anonymous</td>
<td>Nov. 3rd 2011</td>
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<td>Unus International</td>
<td>Anonymous 2</td>
<td>anonymous</td>
<td>Nov. 3rd 2011</td>
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<td>Svensk (SDR)</td>
<td>Mr. Bjorn Warell</td>
<td>CEO / Managing Director</td>
<td>May 3rd 2012</td>
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</tbody>
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3.8 Validity and Reliability

According to Williamson (2000) “validity is the capacity of a measuring instrument to measure what it purports to measure, or to predict what it was designed to predict; or, the accuracy of observations” (Williamson 2000 p. 110). Validity determines whether the research actually measures what it is supposed to measure, or to what extent the research results are truthful. Validity is of various forms, but the types commonly accepted in traditional research are internal validity and external validity. Internal validity concerns the degree of causal relationships that exist between two or more variables, while external validity refers to the extent to which the results can be generalized to particular persons, settings, times, and population (Ghauri & Gronhaug, 2010). Reliability means the degree to which results are consistent over time and how accurate the entire population under study is represented; and if it is possible to reproduce the same result of the study using similar methodology. It simply refers to the stability of the measure (Depoy & Gitlin, 2005; Ghauri & Gronhaug, 2010). In order to ensure the validity of this thesis, the author decided to interview the right companies and persons (those that have expert knowledge in the field). On the aspect of the secondary data, literature search was done by carefully gathering necessary information within the scope of the study and also ensured that the sources of the information were verified and accurate. The interviewees are people with a wealth of experience in the field of the study. Besides, the respondents had the freedom to answer the questions in their own ways, and also ask questions from the interviewer when necessary to clarify questions they felt that were not explicit enough. The author tried as much as possible not to allow his characters to either influence the interviewees nor his decision or judgment.
4  EMPIRICAL STUDY

This is the chapter that presents the empirical study of this thesis. Seven companies were interviewed during the study and the results of the interviews are presented in this order:

Geodis Wilson (Logistics service provider)
Bring Group (Logistics service provider)
United Parcel Service (UPS)-logistics service provider
Jetpak (logistics service provider)
Kuehne + Nagel (Logistics service provider)
Unus International (manufacturing Company)
Svensk Direktreklam (SDR)-Distribution Company

4.1  Geodis Wilson

4.1.1  Brief history of the Company

Geodis Wilson came into being via the merging of Geodis overseas which was the freight forwarding department of Geodis with Wilson logistics which had its origin as shipping and trading company in Gothenburg, and was sold to Geodis group in 2007. Besides, Rohde and Liesenfeld (R&L) also Geodis’ strong strategic partner as far back as 2002 finally merged with Geodis group in 2008. The above summarizes the genesis of the name Geodis Wilson. Geodis Wilson is therefore administered by both the French and Swedish people. It has its representative offices in 56 countries and agents in the countries worldwide. Globally, it has 5,700 employees, and occupies the fifth position in the entire Europe per ranking, and the first position in Sweden.

Geodis occupies the first position amongst the freight forwarding logistics companies because of its various excellent performances. For effective operations and to be able to stay close to customers and to distinguish itself from its competitors Geodis Wilson decided to have 12 offices in Sweden. The freight forwarder has 330 employees with a turnover of 2.5 billion SEK, and a large market share of 70-90%. Geodis Wilson delivers 1600 containers per week, 4000 shipments per week, 1000 air freight per week, and is responsible for 25% of Sweden’s export and freight. It has many customers amongst viable companies like Tetra Laval, Allens, Electrolux and Volvo for years now, and this could be tied to its competency, efficiency, and constant improvement. Geodis Wilson is also present in Asia and plays important roles for all freight forwarders. For instance it has 12 offices in China, 800 employees, dedicated personnel in order to enhance its efficiency and satisfies the customers. The company moves with customers to whichever location they have chosen i.e. the coast and west of China. “The company has qualified and dedicated personnel who help clients find solutions to their various problems” (J. Axell, personal communication, 2011-7-27).
4.1.2 Company operations

Freight services are the core of Geodis Wilson’s businesses and this includes air, ocean, ground services, and sea-air combined services. The Company helps customers to take their cargos to any part of the world by air as it works with reliable partners and depends on international networks. Whenever customers’ goods are the types that require short lead time and top priority such goods are quickly sent with the available flight.

Worldwide range of sea freight services is offered by Geodis Wilson Company for its clients. The complete range of container transport i.e. full container load (FLC) and less container load (LCL) is offered from Sweden to all major markets around the world based on global network. Road and rail transport services are offered by the company as well. Being that global cargo flows are not easy tasks especially because of problems such as complexity, time consuming and risk associated with them, the company deems it necessary to put in place email services to enable control and transparency in the supply chain. See the E-mail Services below:

Freight Monitor: It is an online tool which makes tracking and tracing to be easy and efficient. Through freight monitor account it becomes possible to track all mailing or individual products; accessing and uploading various documents such as bills of landing and commercial invoices can be done.

Freight Planner: This is of course a web-based tool that shows information. With this all recent information about times, prices, electronics reservation confirmation, etc are displayed. It is also useful for logistics control whereby total logistics costs can be reduced by booking only the most effective transports.

Customer Portal: This concerns online tools for customers and the employees in charge of this. Through Customer portal access can be gained into all the documents that concern both the company and its customers. Examples of such documents are assembly protocol, agreements, statements and contact details.

Integrated solutions: Integrated solutions for clients are developed via the combination of shipping services, value-added services and email services. With these Geodis Wilson succeeds in making its customers to become more competitive.

4.1.3 Value added services

Amongst the value-added services offered by Geodis Wilson are custom clearance; distribution and cross docking; warehousing and storage; packaging, sorting and labeling; loading and unloading containers; insurance services, etc.

4.2 Bring Group

4.2.1 Brief history of the Company

Bring group is a young company owned by Norwegian post, and it came into being in the year 2008 through the acquisitions of specialized companies. It took up the name Bring. Bring is rated as one of the largest mail and logistics operators in the Nordic
countries. Today, Bring Group is in Sweden, and the company’s business is made up of nine specialist areas in the postal, logistics and communications. Each of the nine specialist areas is summarized below.

Freight: Bring Cargo as a specialist group is to ensure efficient flow of products by offering national and international transport services through various modes of transports such as road, rail, sea and air.

Heated logistics: Bring Frigo specializes in thermally-regulated logistics for fresh, chilled and frozen food.

Supply Service (Fourth Party Logistics): Bring Supply Services group has to do with advanced fourth party logistics (4PL) solutions. This group of specialists helps companies to develop and operates complete supply chain. In other words, it develops and operates throughout the supply chains of companies.

Courier and express: Concerning express logistics and courier services, it is the Bring express that is responsible for that. This group creates flexibility in terms of deliveries as both unforeseen and scheduled deliveries can be carried out.

Package: Bring Parcels is a group which specializes in the handling of packages which might be to and from companies as well as individuals.

Warehousing: Bring warehousing specializes in warehousing services for various products. It has very large warehouses and distribution centers with advanced technologies.

Communication via the mailbox: Bring City Mail is responsible for the distribution of industrial post to business customers. This could be delivering mails from businesses to businesses or individuals. This group of specialist is very efficient in the distribution of mails for Swedish companies.

Post and mails advertising: With the aid of Bring Mail specialist group, companies are able to carry out their distribution of letters, goods and direct marketing to foreign countries in any part of the world. The group works in conjunction with their international partners to make their services more efficient.

Customer dialogue and CRM: It is the responsibility of Bring Dialogue specialist group to assist its customer to grow and to safeguard them. This is done by monitoring individual customer through various means which could be physical, electronic, mobile postboxes and CRM as communication channels.

4.2.2 Company operations

These specialist areas put together enable Bring to become more competitive as they successfully increase its range of services and products. It is worth nothing that each of these specialist groups tries to come up with the best solutions for tasks in their re-
spective areas. Since specialist are allowed to concentrate on what they can do best, they thus have the opportunity to gain more knowledge, ability, and time to come up with new ideas. To be able to perform efficiently and meet the various demands by the customers Bring logistics has offices in Stockholm, Gothenburg, Halmstad, Jonkoping and Linkoping.

Transportation: Bring logistics undertakes shipments of goods by road, rail, air and sea for its customers. This includes general cargo and transportation of special goods with unique requirements. For instance, it ensures that such special goods are specially handled as required and delivered in accordance with the schedules. It allows some elements of flexibility in terms of deliveries so that both unforeseen and scheduled deliveries can be carried out. Besides, Bring, with its knowledgeable staff is able to support its clients in its imports and exports processes by assisting them with customs clearance. “We are taking care of the shipment from the producer to the end customer and that includes customs clearance and sorting” (T. Hessel, personal communication, 2011-6-20).

The caliber of staff Bring has is one of the factors that ultimately lead the company to achieve its goals. The staff members are old and young men and women who work together in unity. Although the staff comprises people with unique talent and knowledge, the company further encourages their development by giving them the opportunities for further education and training. Bring does not rely on the strength of its staff alone, it cooperates with the other groups of specialists in Bring, and some other organization to be able to achieve its goals. Bring builds good relationship with its customers via communication in the form of direct mail, customer magazines, and invoices shipped, and so on. According to the respondent, the company manages relationship with its clients by having meetings with them two, three or more times a year.

4.2.3 Value-added services

Bring does offer value added services for their customers according to customers demand. The official motto of the company is “Finding new ways”. Even though Bring is without a research and development department, it has qualified, experienced and innovative personnel who know how best to improve on value added services and thus provide better solutions for their clients. The company does help their customers to develop by assisting them to find solutions that can make them successful in their businesses. “We can offer services that are in one way or the other connected with the transportation of their shipments, nothing else. We listen to each one of them and produce our services according to their demands” (T. Hessel, personal communication, 2011-6-20).

Bring ensures that the project team takes care of all logistics in connection with Project Management and Forwarding which includes, planning, transporting, reporting, customs clearance, packaging loading and unloading containers, sorting and labeling, etc. Since specialist are allowed to concentrate on what they can do best, they thus have the opportunity to gain more knowledge, ability, and time to come up with new ideas. Tracking and tracing services are available, and customers are able to track their
goods right from the time they are picked up till they are delivered. Special fast shipping services with priority delivery can be offered by the company as well. Other value added services are offered by the firm.

4.3 United Parcel Service (UPS)

4.3.1 Brief history of the company

United Parcel Service (UPS) originally designated to be a messenger company was founded in 1907 in the United States of America. It has developed into a global and world’s largest delivery company. It specializes in the provision of transportation and other logistics services in over 200 countries and regions worldwide. In 1997, the company expanded into Europe with its headquarters in Brussels, Belgium. UPS was established in Sweden in 1991 with a total of 40 employees. Presently, it operates in Stockholm, Goteborg, Malmo, Jonkoping, Vasteras, and Bollnas and the number of its employees has increased to 700.

4.3.2 Company operations

UPS in Sweden takes the problems of its customers with concern and try as much as possible to find solutions to them. UPS serves categories of customers such as personal shippers, businesses and healthcare. Its solutions to problems cover different aspects of services such as shipping, tracking, billing, international trade, and contract logistics. UPS customer centres are staffed locations on-site at the company and provide customers with qualified services.

The core of UPS business in Sweden is transportation. The Company renders transportation services for its customers by helping them to get their goods to the right places, at the right time and at reasonable prices. Each customer can get the desired shipping services such as shipping packages across towns or the country and international shipments of any size. UPS offers the customers the opportunities to make choices as regards freights services and timing such as early morning, night and Saturday deliveries. According to Mr. Thomas Willgren “the company offers express services for its customers, embarks on door-to-door delivery of packages, also delivers at early morning hours and on Saturdays in order to bring about customers satisfaction. We actually cooperate with other logistics companies like Jetpak, MZ Transport Company, Flyg trakt transport to get our services to customers done” (interview on 23rd April 2012).

UPS is able to track the movements of shipments right from the beginning to the final destination. It is therefore possible for the clients, vendors, shippers, etc to monitor the movements of goods with the aid of UPS tracking technologies. Customers are happy with this service as it makes them to be aware of all that happen with their goods on transit, helps to erase doubt and have peace of mind. For instance, inbound and outbound shipments are tracked and traced along the supply chain.

Apart from the transportation and visibility of services explained above UPS in Sweden is capable of taking over some logistics activities (contract logistics) for any customer, if so desired, so that such customers will be able to concentrate on its core competences (capabilities) and its customers. This type of service by UPS for customers covers end-
to-end global solution for service parts supply chain, management of overseas suppliers and vendors, and distribution which include inbound and outbound deliveries.

One of the UPS services that are attractive to its customers is the speed /accuracy with which the company delivers shipments to the expected destinations. Customers enjoy on time delivery and reduced costs in the process. Some of the factors that make this service a possibility is networks of transport systems, visibility, and cooperation amongst the logistics service providers. During the interview, Mr. Thomas Willgren states that “our customers have confidence in us because they are well aware of our expert visibility, speed and accuracy of delivery” (T. Willgren, personal communication, 2012-4-23rd).

4.3.3 Value-added services

According to the respondent, UPS offers some value-added services in order to create value for the customers’ products, and to make them more competitive in the market. These services include:

- Early morning deliveries
- Saturday deliveries
- Cost reductions
- Door-to-door collection of shipments and deliveries
- Taking customers signature whenever delivery is done
- Delivery alert
- Provision of customs clearance
- Advice on proper packages
- Lift gate services e.g. lifting devices to lift vehicles having mechanical faults.

4.4 JETPAK GROUP

4.4.1 Brief history of the company

Jetpak is a Nordic transportation company owned by Accent Equity partner, Polaris private Equity and its management, with its headquarters in Stockholm, Sweden. The Company has 225 employees but works with over 1,500 persons based on network of franchisees and agents. In order to enhance its operations in the Nordic region Jetpak is available in over 140 locations, uses 700 vehicles, and has access to 3,800 flight departures every day. Besides, it carries on its business through its organization, franchisees and agents in the Nordic region-Sweden, Denmark, Norway and Finland. The services it provides include fast ground and air transports, systemized distribution and logistics solutions.

4.4.2 Company operations

The company’s core business is transportation, and this includes both ground and air transports. It offers door-to-door express deliveries irrespective of the distance involved. The company’s operation is not limited to the Nordic region but also involves to and fro Europe. A lot of effort is made by Jetpak to add value to the customers supply chain through on time, night and early morning deliveries of customers’ products.
In fact, the company claims to add value to customers’ businesses through cutting down on transportation cost by 15-30%. In other words, the mission of the company is to “create value for customers by providing suitable time-critical express logistics solutions” (Jetpak website).

Transport insurance for all consignments is offered by Jetpak, and this is 1% premium of the value of the goods. Jetpak also advises customers on the advantages of using suitable packages for their goods.

Out of office hours services such as Saturdays, Sundays, public holidays and weekdays are offered by the company.

**4.4.3 Value-added services**

These services include track information; cost reduction by cutting transport time from 15%-30%; flexibility; technical services e.g. phone, medical equipment, etc.

**4.5 KUEHNE + NAGEL**

**4.5.1 Brief history of the company**

Kuehne + Nagel, a global logistics provider company, was founded by August Kuehne and Friedrich Nagel in Bremen, Germany in 1890. It has over 60,000 employees and 900 offices in more than 100 countries. The company’s logistics services include road and rail transportation, air freight, sea freight, contract logistics as well as lead logistics. Besides, its contract logistics (third party logistics) services deals with the supply chain of various industries such as aerospace, automotive, high tech, beverage and food, drinks, oil and gas, health, hotel and retail.

**4.5.2 Company operations**

Kuehne + Nagel contract logistics (third party logistics) services are of different categories which include inbound logistics, in-house logistics, outbound logistics, and after sales logistics.

**Contract logistics (third party logistics) services**

**(1). Inbound logistics:** The inbound logistics services include activities needed to bring goods from the location where they are sourced to a warehouse, a value-added storage facility or production plant, as well as the management as soon as they arrive on-site. The company’s inbound activities include:

*Supplier management:* This takes care of the supplier inbound activities on behalf of their customers.

*Order management:* Order release management services are provided to customers who want their inbound shipment of goods to be controlled depending on consumption of products or the schedules of production. Order-release management has to do
with call-off services, demand management and replenishment services and other similar services that require timed shipments of goods.

**Vendor-managed inventory services:** These services geared towards lowering inventory levels, increased efficiency, flexibility, and predictability for vendor and end-customers as well. For instance, the company works in conjunction with their clients and client’s suppliers to automate forecast management process. The automated forecast management systems can provide visibility so that actual demand can be compared against inventory in transit and those in storage. Besides, the vendor managed inventory system can alert both the clients and their suppliers as soon as the inventory falls below the pre-determined level. It gives advanced shipping notices (ANS) revealing detail information on in-time transit inventory from suppliers.

**Transport and Transportation management:** The inbound transport management of Kuehen + Nagel usually makes arrangement concerning shipping, air, or land-based transport in order to move client’s goods from various remote destinations to local warehouses or operating facilities. This transport service covers most forwarding and in-country freight movements.

**Customs clearance:** This covers required customs clearance services that the company provides their customer to enable them move their goods across international borders. These services comprise customs document preparation and delivery, management of actual clearance process, import document preparation, and so on.

**Warehousing:** Two types of warehousing solutions (Multi-user warehousing and client dedicated warehousing solutions) are put in place by the company. Both warehouses have facilities and equipment, and all materials entrusted to Kuehne + Nagel are adequately stored and taken care of.

Kuehne + Nagel production system (KNPS): This is based on the principles that ensures waste elimination in the entire aspects of the service delivery process, workers empowerment, management through visual controls, and a commitment to total quality control.

**Visibility, monitoring and reporting:** This service by the company enables the visibility of inventory at any time irrespective of wherever they are e.g. either in transit or storage, etc.

**Customer service management:** This service management involves on-site desk services, customer care centre operations, as well as field service support activities.

(2.) In-house Logistics: These involve logistics activities rendered by Kuehne + Nagel within their customers’ storage and production facilities such as receiving, inspection, storage, picking, kitting, transportation / transport management, customer service management, sequencing and Just-in-time (JIT) solutions, etc.

(3.) Outbound Logistics: The outbound logistics services of the company contain some of the services already explained in the inbound logistics services such as warehousing, transportation and transport management, vendor-managed inventory services, cus-
tom clearance, customer service management, etc. The outbound logistics include **Proof of delivery (PoD) management service**: These services are offered by the company to the customers in order to give them the evidence whenever delivery is done. Thus, PoD services include, collection of signature during delivery, reporting of delivery, scanning of delivery document, etc.

**4. After Sales Logistics**: After-sales services are offered by Kuehne + Nagel. The services include the following:

*Order management*: These services involve the investigation, handling of the requests made by customers, the authorization of a return of items, and the tracking of the items or materials that are returned.

*Warehouse/Pick up/Drop off (PUDO) Depot Management*: These services comprise stock management, local pick up and drop off, and the handling of forward-deployed customer inventory.

*Screening/ Repair/ Refurbishment*: These services include the screening of the returned item or material in order to determine exactly what to do about it e.g. whether they are to be repaired, scrapped, etc.

*Transportation Management*: Transportation services are carried out in this case in order to replenish national warehouses, depots, and so on.

*Customer Service Management*: This service is put in place to take care of all on-site support desk and customer response activities.

Relationships: On the aspect relationship, Kuehne + Nagel have close relationship with their clients.

**4.5.3 Value-added services**

Value-added such as unloading, labeling, testing, repacking, buffering, etc are offered by the company.

**4.6 Unus International Company**

**4.6.1 Brief history of the Company**

This is an international company founded in the 70s in Padova, Italy. It started its operation in Padova but later moved to Venice in 1995. The company produces automotive appliance motors and gear motors which are meant for windows, sunroofs, sunshades, mechanisms for the movement and adjustment of seats; steering column and implemented automatic gearbox. Apart from the products listed above, the company also produces other industrial equipments that use motors and this includes sliding doors, gates, etc. over 2,000,000 of these items are produced in a year and supplied to its customers worldwide—Germany, Japan, Hungary, Bulgaria, China, etc.
4.6.2 Company Operations

The company embarks on research and development in order to bring about customer satisfaction through the production of quality products. To ensure the effective distribution of the products to its respective customers and on time delivery the company relies on the services of logistics transport companies.

During the interview with the manufacturing company, the interviewees were asked about the company’s criteria for selecting a third party logistics service provider. One of the respondents said that selecting a third party logistics provider is a key issue in the company which the management never wants to rush about because if a wrong choice is made it will affect the business activities of the company. To avoid making mistakes, the management has to properly screen the company’s prospective third party logistics companies shortlisted for interview. The two respondents in this interview mentioned the same criteria the company usually takes into consideration when selecting a third party logistics provider. Reputation of the company is one of the factors taken into consideration. According to one of the respondents, it is very important to go into the past history of any of the prospective third party logistics provider. Through this, they will be able to identify those that do keep their words without breaching their contract with other companies, their culture in terms of responding to the demand of their clients, if they have got bad records in the past, etc. Knowing the past of a company is a way of exposing the reputation of the company. They also talked about the assets of the company. This is about whether the company has the assets such as trucks, warehouses, equipment, personnel, etc. with which to successfully carry out the logistics functions for their clients. Their belief is that if a company has all necessary assets, its operational performance will be high as well. The respondents claim that knowing the financial strength of the logistics service provider is of advantage to the manufacturing company. If the financial position of the third party logistics provider is strong, the manufacturing company will have the confidence that the third party logistics provider will not shy away from performing its duty effectively but if on the other hand, the financial position is weak the company may not select the third party logistics provider as its client. One of the respondents from the company said that the company is interested in having close relationships with its customers. He stressed that the management believes having a good rapport with your client is a good way of working together and finding solutions to the company’s problems. This is the main reason why the company is able to maintain or do business with its clients for years. Two other criteria the respondents talked about are cost reduction and the importance of IT. They believe that high costs will reduce the profit margin of a company while reduced costs will on the other hand increase the company’s profits. IT has a very big advantage in the company. He went further to say that IT makes visibility to be possible along the entire supply chain.

4.6.3 Value-added services

The respondents agree that their clients-3pl help them to add value to products through some value added- services, and on time delivery of products to their respective customers at various places.
4.7 Svensk Direktreklam (SDR)

4.7.1 Brief history of the company
Svensk Direktreklam is a private distribution company founded in 1976 in Jonkoping. It has been a well known company especially as it is doing business with many reputable companies-helping them to distribute advertising fliers within and beyond the region of Jonkoping. It serves about nine communities: Jonkoping, Habo, Mullsjö, Aneby, Vaggeryd, Eksjo, Nossjo, Sovsjo, and Vetlanda.

4.7.2 Company operations
The business has grown to the extent that the proprietor is not only dependent on owned vehicles but has to outsource part of the distribution activities (e.g. transportation) to a logistics company. According to Mr. Bjorn Warell, the proprietor of the company, he is actually enjoying the good quality of work being done by Jetpak Transport Company. The fliers are taken to the right places at the right time. Taken the role or activity of the company into consideration, it is seen as a logistics company. The employees are made to physically take fliers to every household and drop them into their mail boxes in those communities it serves. There is good rapport between the company and customers on the one hand, and the logistics company on the other hand.


5 ANALYSIS

The analysis is presented in this chapter, and thus includes the theoretical framework and the empirical findings. The presentation is divided into classification of logistics companies, selecting a third-party logistics provider, network, evolving roles and adding value for customers.

5.1 Classification of logistics companies

In the frame of reference, it was stated that Cui and Hertz (2011) regard all the firms that deliver logistics services as logistics service providers (LSPs) and also use the term interchangeably with logistics firms, while Stefansson (2006) categorizes logistics service providers into three groups of Sub-contract carriers, logistics service providers, and logistics service intermediaries. The logistics companies contacted during the empirical part of the study also belong to different categories: Geodis Wilson is a logistics intermediary firm, Bring Group and Kuehne + Nagel are third part logistics firms, while UPS and Jetpak are carriers. The third party logistics providers can again be classified based on the classification by (Hertz & Alfredsson, 2003). Bring a third-party logistics provider which helps customers find solutions to their problems, and at the same time assists them to grow can be said to have customer adapted services. However, to classify Bring based on Hertz and Alfredsson (2003) matrix, it cannot be placed at the higher end of “the customer adaptation matrix” (Hertz and Alfredsson 2003) as it does not belong to the organization of its customers. Kuehne + Nagel logistics fall into the group of customer developer, going by the (Hertz & Alfredsson, 2003) classification. This is because they carry out services that involve taking over the control of the logistics operation of their customers and their level of integration is high being that they buy shares in their business.

5.2 Selecting a third party logistics service provider

From the same empirical finding, it was realized that though outsourcing of some logistics functions to the third party logistics service providers is necessary being that they are experts in that field, the outsourcing company takes time to screen the third party logistics provider before the outsourcing is done. When Unus International, a manufacturing company was contacted during the interview, the respondents claimed that the issue of outsourcing logistics activities to service providers is a key issue in the company and as such is always treated with care. Fitzgerald (2007) sees the decision to outsource logistical functions to a third party logistics provider as a complex issue which has to be done with much care because there are many criteria or factors to be considered when selecting a third party logistics service provider. However, it depends on the outsourcing company to decide on its own criteria. Unus International considers factors such as the reputation of the company, assets of the company, financial strength, networks, IT, etc, when selecting a third party logistics provider. This agrees with (Aguezzoul 2008) who claims that though there are various factors to be considered, some criteria are only for specific needs while others could be for all circumstances. Through IT firms and their clients, the third party logistics service providers are able to communicate and map out their plans as if they are under the same roof.
The development and the uses of IT can enhance integration and aids visibility along the supply chain system. It thus helps to reduce the level of uncertainties (Fitzgerald, 2007; Cakir, 2009). Mr. Bjorn Warell, the proprietor of Svensk Direktreklam (SDR) also considered factors such as quality of work, assets and cost reduction before employing the services of Jetpak.

5.3 Network

Network analysis in this study will be more understandable using the ARA model and the logistics firms’ network of interaction presented in the frame of reference. The three basic elements of the ARA-model which are actors, resources and activities are related to each other in a structure we can call network (Hakansson & Johansson, 1992). In other words, the network has to do with the network of actors or firms that are interconnected via their business activities and resources, all working towards satisfying the final consumers. According to Hakansson and Snehota (1995) companies usually involve themselves in different activities such as developing products, producing and processing information, transporting goods, purchasing, supplying, etc. Through activity links, the activities of a particular company can be seen as a part of larger sequence of activities spreading across several companies (Hakansson & Snehota, 1995). There is no one company that can do all things without connecting the activities of some other companies. Activity links between companies enable the companies involved to achieve their objectives. For example, the activities of production, logistics, administration, deliveries and information handling could be linked together and coordinated (La Rocca, 2011). Taking the companies interviewed into consideration, SDR a distribution company has to employ the services of Jetpark Transport Company for efficient transportation of its products. In the same way, Unus International company (a manufacturing company employs the services of Fercam logistics and Bartolini Express Transport to transport its products to its customers. Besides, the logistics companies interviewed-Geodis Wilson, Bring, Kuehne + Nagel, United Parcel Service, and Jetpak all engage in activities of freight forwarding, transportation, contract logistics, warehousing, tracking and tracing picking and packaging, and a host of other activities.

It should be noted as well that resources are needed by firms to perform these functions or activities. Activities of companies are sustained by resources (Hakansson & Johansson, 1992). The means which actors use when they perform activities are referred to as resources; and the resource ties in the model explain how resources of different businesses are connected together. Resource could be tangible (equipment and plants) or intangible (knowledge). From the empirical study of the thesis it was realized that all the companies interviewed do spend on resources. For instance, Bring spends on human and material resources so that it can perform its role efficiently. It has employees who are specialists in their own fields. The firm employs both old and young men and women who work together in unity. Apart from investing on employees, the firm also spends a lot of money on physical resources such as means of transportation, transport and warehousing equipment, and so on. Whereby the company lacks a resource to carry out a particular function, it can buy the service of another company, or hire the resource where possible. Besides, through relationship or networks it can as
well have access to resources of some other companies. This is in line with what Hakansson and Snehota (1995) say about resources, that a combination of resources is needed in enterprises, but there is no company that has all the resources needed. While some companies acquire resources from others, the products and services of a company also serve as a resource to other companies. Also, business relationship between companies can lead to the connection of their resources - they can use the resources of each other (Hakansson & Snehota, 1995). The respondent from Geodis Wilson claims that the firm has no major assets of its own, apart from employees, computers and offices, but rather buys the services from other firms or hires trucks, vessels, etc. It relies on partners and international networks to carry out services for its customers. Bring, belongs to networks and cooperates with some other organizations to be able to achieve its goals. When resources are properly integrated, and are flexible it will therefore be possible to coordinate them and tackle problems (Jahre & Fabbe-Costes, 2003). UPS for instance, sometimes uses the resources of other logistics companies like Jetpak, MZ Transport Company, Flyg trakt by outsourcing transportation activities to them.

The individuals (actors) make a business network to exist, and their intentions and behaviours influence all that happens in such a relationship. Whatever that is done in a network also depends on the structure of activity links and resource ties. In other words, the entire network structure of a business is made up of an organized web of conscious and goal-seeking actors, organized activities, and organized constellation of resources (Hakansson & Snehota, 1995). Actors can be individuals, groups of individuals, firms, or groups of firms. Actors are responsible for controlling activities, deciding on the resources to be used, and belong to various levels in organizations (Hakansson & Johansson, 1992). The respondents in all the logistics firms and the manufacturing company claim that they have dedicated employees and management who are experts in their fields. They attributed this to be one of the reasons why they are able to satisfy their customers in spite of their numerous demands. These workers based on their skills and experiences are able to perform their functions or carry out the different activities in the companies using the required resources. Employees, the management as well as the companies can be seen as actors. This agrees with Hakansson and Johansson (1992) statement that firms, group of firms, individuals, group of individuals are actors. To be precise, GeodisWilson, Bring group, UPS, Kuehne + Nagel, Jetpak and June Express, Unus International Company and SDR, including all the people working with the firms mentioned are actors. The network of the actors, resources and activities enabled the satisfaction of customers.

It has been stated in this thesis that Cui and Hertz (2011) describe logistics firms as networking firms because their ways of doing business depend on connecting organizations, coordinating activities, as well as bringing together resources of various organizations. Apparently, a third party logistics provider uses its networks to play its roles. For Instance, UPS cooperates with Jetpak, MZ Transport Company, and Flyg trakt transport companies to execute its contracts. Bring logistics and DHL sometimes outsource transportation activities to the UPS. Furthermore, Jetpak and June Express cooperate with Geodis Wilson, Skyways airline, SOS airline and Nordic airline. Jetpak also cooperates with UPS and DHL. According to Cui and Hertz (2011) when a focal firm
outsources to a third party logistics firms, the third party logistics firm can also outsource some of the activities to the logistics intermediary and a carrier. See the figure below for more clarification.

Figure 5.1 Industrial supply chains and the logistics firm’s network of interaction.

Note that as logistics firms cooperate with one another, they also cooperate with other firms in the chain. Thus with both horizontal and vertical cooperation third party firms use that network to execute its role to customers. This is the type of relationship or networks the logistics firms- GeodisWilson, Bring, UPS, Kuehne + Nagel, and Jetpak, do involve themselves in. They can cooperate with one another and other firms in the chain.

5.4 Evolving roles

The logistics firms- third party logistics service providers, logistics intermediaries and carriers are known for the following basic services as presented in the table below. Stefansson (2005); Cui and Hertz (2011) share the same opinion about their services as summarized below:

Table 5.2 Logistics firms

<table>
<thead>
<tr>
<th>Freight forwarder</th>
<th>Carrier</th>
<th>Third-party logistics provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidates freights.</td>
<td>Transportation-move products from one point: A to another: B</td>
<td>Coordinates clients, carriers, logistics intermediaries and other service suppliers.</td>
</tr>
<tr>
<td>Connecting carriers and clients.</td>
<td></td>
<td>Transportation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Warehousing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Value added services.</td>
</tr>
</tbody>
</table>

Apparently, logistics firms can function properly if they cooperate with one another. For instance freight forwarder has no asset of its own but is able to deliver goods to
the client’s customers by buying the services of a TPL service providers or carriers. Carriers too cooperate with other logistics firms to enable them carry out their services to customers. Through network they use the resources of each other so that they can carry out their roles. Whereby a firm lacks the resource to carry out a particular function, it can buy the service of another company, or hire the resource where possible. Business relationship between companies can lead to the connection of their resources (Hakansson & Snehota, 1995). The respondent from Geodis Wilson states that the firm has no major assets of its own, apart from employees, computers and offices, but rather buys the services from other firms or hires trucks, vessels, etc. Thus it relies on partners and international networks to carry out services for its customers. However, when the author contacted and interviewed some logistics companies he found out the various roles performed by the different logistics firms. These roles are presented in chapter 4 of this thesis.

5.5 Adding value for customers

Logistics value-added services refers to the provision of extra services that minimise supply chain costs, and increase partners’ profits in order to gain competitive advantage. Besides, Logistics adds values to a product or service when performing its role which eventually results in four main economic utility such as form, place, time and possession utility (Coyle et al., 2003 ; Rodrigue, et al., 2009). The offering of value added services by logistics companies to other companies e.g. manufacturing and distribution Companies is important because, it makes companies to become more competitive as it adds value to the products. This can be seen from the on time delivery of the company’s goods to the right receivers of the goods at various destinations. Apart from these, other value-added services such as tracking and tracing, cross-docking, and temporary warehousing are offered by logistics firms. Rutner and Langley (2000) agree that logistics extra services have minimized the supply chain costs, and increased partners’ profits.

According to Mr. Bjorn Warell, the proprietor of the distribution company (SDR), factors like costs reduction, infrastructure and quality of service made him to outsource part of the distribution activity of his company to the transport company. He said, he now enjoys costs reduction, good quality of work, time and place utility from JETPAK-the logistics company.

During the interview the author found out that the services a company may regard as value added services may be different from what another company tags as value added services. For instance, Bring does offer value added services for their customer according to customer’s demand. “We listen to each one of them and produce our services according to their demand” (T. Hessel, personal communication, 2011-6-20). The respondent from UPS states that through on time and accurate delivery, the company is able to reduce costs for customers and thus add value to their products. Also, Kuehne + Nagel offer some value added services such as unloading, labeling, testing, repacking, buffering, etc. Through business relationships and networks with other logistics companies, third party logistics providers can offer a lot of value added services for their customers.
According to Chapman et al. (2003) innovation in service sector is a value-creating activity that enhances performance in the marketing sector, and thus gives a competitive advantage to the firm. In Sweden, Bring has no research and development laboratory but that does not discourage the idea of carrying out value added services. It has qualified, experienced and innovative personnel who know how best to improve on value-added services and thus provide better solutions for their clients. United Parcel Service (UPS) describes value added services as extra services that can be added to shipping selection in order to meet a complete range of shipping needs. Examples of such services are delivery confirmation, notification services, return services, and tracking services. Therefore, value-added services depend on what the provider and the customer accept to be extra services that can add value for their products. This varies from one company to another. The logistics companies agree that adding value for customers is a good way to make them happy and become more competitive.
6 CONCLUSION

This chapter deals with the main findings from the study. It is based on analysing the empirical materials in relation to the frame of reference. The research questions are answered in the chapter.

The purpose of the study was to analyse the logistics service providers’ roles within the logistics firms’ supply chain by identifying how the purported roles are performed. Three research questions were formulated in order to achieve the purpose of the study.

Through which network can the third party logistics service providers perform their expected roles?

How do the logistics firms fulfill their expected roles?

How do the third party logistics service providers add value for their customers through value-added services?

The author discussed the usefulness of the ARA model which presents the network of actors (actor bonds) that are interconnected through their business activities (activity links) and resources (resource ties) all working together towards satisfying the final consumer. Another model discussed is the logistics firms’ network of interaction by Cui and Hertz (2011). Both models are useful in explaining how the third party logistics provider effectively discharges its expected role.

Various activities are taking place in different firms and in logistics firms participating in the supply. These activities are done by people working in them as actors who are using various resources of the firms to achieve their aim of production in order to satisfy their customers. None of these firms can perform all the activities alone without cooperating or connecting with other firms. There is network of actors (firms and workers) using resources to get the activities done. The respondents in all the logistics firms and the manufacturing company claim that they have dedicated employees and management who are experts in their fields. The third party logistics providers cooperate with other logistics firms such as carriers and freight forwarders, and other firms in the supply chain to be able to function. This means through the network of firms, workers, activities and resources the third party logistics provider can carry out its roles (activities) effectively.

Logistics firm are easily distinguished by their traditional roles which authors like Cui and Hertz (2011); Murphy and Daley (2001); Lai and Cheng (2004) have written about; that carriers are to move products from one point to another; logistics intermediary firms consolidate products and also connect clients and carriers while third party logistics service providers coordinate, clients, carriers as well as logistics intermediary firms for the sake of providing integrated services. The respondents from each logistics firms especially carrier and freight forwarder claim more roles (services) than people say they do. This is possible because cooperation amongst firms, network, and the urge to remain competitive in the market result in taking up more value-added services.
The respondents from all the firms have a similar idea that a value-added service is a way costs can be reduced for customers through extra services. Cost can be reduced for customers through shorter lead time, accurate delivery, tracking and tracing proper packages, delivery confirmation, notification services, etc. Any extra services a third party logistics service provider can offer that can bring about reduction of costs for the customers can add value for their products. This is applicable to other logistics firms.

**Future research**

However, further research in this area of study should address the types of logistics firms and their roles. The idea that carrier only move products from point A to point B while the freight forwarder consolidates shipments, connects client and carrier does not portray their actual position. They perform more roles than people think about them. Their roles are evolving. They belong to various networks and cooperate with other firms in order to remain competitive in the market. More research is needed in this area so that logistics firm can be properly categorised according to how they function. It is no longer clear to pinpoint the exact role each logistics firm is playing because they use each other to achieve their goals. Besides, this study is more of exploratory type, and based on the small size sampled few companies interviewed, the conclusion reached cannot be generalized. Future research with a larger sample size is necessary.
List of references


Online Resources


UPS, about us (2012). Available at: 

UPS, Solutions (2012). Available at: 
Appendix 1

Appendix 1 Interview questions for logistics companies

General Question

1. I would like you to tell me about your position and responsibilities in the company.

Activities

2. What are the roles of your company for its customers as a third party logistics service provider?
3. Apart from your traditional roles as a third party logistics service provider, what other additional or extra services does your company render to its customers?

Value-added services

4. What does your company do in order to satisfy its various customers’ demands?
5. Does your company render specific services for specific customers?
6. Does your company take on more advanced services for its customers?

Relationships

7. What types of customers does your company have?
8. How does your company manage relationship with its clients?
9. In which ways does your company cooperate with other logistics companies?
10. What do you do in order to improve your services for your customers?

Interviews for customers to logistics service provider

General question

1. I would like you to tell me about your position and responsibilities in the company.

Activities

2. What roles do logistics service providers perform for your company as their customer?
3. Apart from the traditional roles, what other additional or extra services do the logistics service providers offer your company?
Value-added services

4. Is there any specific extra service your company usually asks of the logistics provider?

Relationships

5. How does your company manage its relationship with the third party logistics service provider companies?

6. What are your company’s criteria for selecting third party logistics service providers as its customers?