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Logistics Services Provider Opportunities
CTC Worldwide Logistics Case Study

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Summary

This thesis project includes an overview of services provided by logistics services providers. It explains the characteristics of third- and fourth- party logistics providers, and the opportunities for logistics services providers to change the amount and/or type of services in order to respond to market demand. The main research question is 'To what trends and developments can logistics services providers respond and how?'. The sub questions are 'What services do logistics services providers provide?', 'What other services could logistics services providers provide?' and 'What are the trends and developments in the logistics services market?'. Answers to these questions are acquired through a literature review and a market analysis including a case company analysis and benchmarking in Cape Town, South Africa.

Logistics outsourcing can be done on several levels. Some companies only outsource a few basic functions from second- party logistics providers, others decide to outsource more integrated services and value added services to third- party logistics providers, and nowadays companies decide to outsource the management and complete logistics processes to fourth- party logistics providers. The logistics services industry is developing rapidly, the range and amount of logistics services is growing. The competitiveness in the market is increasing as clients have a wide choice of logistics services providers, it is very important for the logistics services providers to achieve and remain high client satisfaction levels. Clients are looking for high service levels and information technology capabilities, relatively low cost, flexibility and trust. Logistics services providers need to provide more than just standardised services, customised and value-added services are necessary, clients want unique solutions and customer loyalty.

The possibility of changing the amount and/or type of services is not applicable to the industry since logistics services providers are flexible and able to provide a wide range of services according to the need of the client. Non of the companies approached are considering changing the way or scope of services they are currently providing since they try their best to provide whatever service the client requests. Instead of the quantity of services, the industry needs to focus on the quality of the services and the relationship with their clients. The case company along with its competitors in Cape Town will try its best to provide customised solutions for its customers and create a close relationship through building trust and reliability.

The logistics services market faces higher customers' expectations of services and products, increased globalisation of business, and increased competition. Opportunities from the literature review and market analysis include developing and improving relationships with clients and third-party logistics providers, increasing global presence by expanding agent network, improving the service level, improving information technology, increasing flexibility and providing a unique solution for each client, focusing on existing customers, and acquiring expertise and contacts in new markets as China and the new wine markets in Eastern Europe.

Overall it seems that logistics services providers should take the opportunity to build close relationships with their clients by providing excellent personal services.

Preface

This master thesis is the result of a final graduation project for the master degree programme in management of logistics and innovation at the University of Gävle in Sweden during the school year of 2009/2010. This master thesis project has been carried out from March until June 2010 on the services provided by third- and fourth- party logistics providers and on opportunities for case company CTC Worldwide Logistics in Cape Town, South Africa, to respond to current developments in the industry. This thesis includes a literature review on the services provided by the third- and fourth- party logistics providers and on current trends in the logistics services provider industry, a study on the opportunities for the case company, and an overview of the overall conclusions and findings for the logistics services provider industry.

I would like to thank the people who have supported and helped me with the project. Robin von Haartman and Lars Bengtsson from the University of Gävle in Sweden have encouraged me during the start of the project and have been helpful with ideas, suggestions, and feedback. CTC Worldwide Logistics managing director Hans Duncker has been extremely kind to take me in the company as a practical intern to learn from the processes within the freight forwarding industry and has provided me the space and time to work on my thesis. He has been very helpful and supportive during my research. Also the other CTC Worldwide Logistics staff including Luigi Maree, Vileen Sepkit, Mogamet Diedericks, Desmond Vlotman, Angelo Viljoen, Hayley Noble, Fadwa Diedericks, Denise Guastella, Cathy-Ann Barnes, Anthea Arendson, and Mirjam Schubert have kindly accepted me into the office and been supportive and helpful at all times. Even CTC Worldwide Logistics' competitors and clients have assisted me with helpful information during my research. This thesis would not have been without all of these people, and I very much appreciate all the support.

The focus of this research has been on the logistics services providers industry in South Africa where strategic management is not a main focus and the business is still very operational. It would be very interesting to compare the situation with other countries as the global industries could learn from each other.

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1. Introduction

The importance of logistics activities in conducting efficient business has been recognized worldwide and various research has been completed on the possibilities to improve the logistics performance including the different options of outsourcing the logistics services to external parties.

This chapter provides an overview of these recent trends in logistics services outsourcing and it provides information about the purpose and methodology of this thesis project.

1.1 Background

The globalisation of business, the demand for tailored products and services, the constant look for lower lead times and higher frequency of delivery, the call for flexibility and responsiveness, and competitive pressures require effective and efficient logistics processes and a coordinated and integrated supply chain. Logistics has become a strategic tool to improve efficiencies, products' added value, and competitive advantage. Hum (2000) even refers to the logistics system as 'the last frontier' for the development of strategic competitive advantage. Agility has become a competitive weapon for capturing market share in a global market using improved technologies and international partnerships. To gain a competitive advantage many organisations are seeking to manage their logistics operations strategically, but realize that they lack the core competencies and are increasingly seeking to outsource their logistics activities.

Logistics services are offered in many forms all over the world. In the annual report 'State of Logistics Outsourcing' published by Dr. John Langley from the Georgia Institute of Technology, Langley et al. (2006) explain that the recent economic recession offers opportunities for the logistics services provider industry because companies are mainly focusing on operating in a more efficient way.

Most literature seems to focus on outsourcing logistics services from a buyer point of view instead of focusing on the opportunities for the providers. In order to be able to respond to the changes in demand it is important that logistics services providers are aware of trends and changes in demand and have knowledge of different ways they could respond to these changes.

1.2 Purpose

The purpose of this thesis project is to study the different services provided by third- and fourth-party logistics providers, and the opportunities for logistics providers to change the amount and/or type of services in order to respond to market demand. The study forms a base to consider opportunities for the case company CTC Worldwide Logistics in Cape Town, South Africa, to develop its current services and respond to current trends and developments in the industry. This thesis will finish with an overview of the overall conclusions and findings for the logistics services provider industry. The main research question is 'To what trends and developments can logistics services providers respond and how?'. The sub questions are 'What services do logistics services providers provide?', 'What other services could logistics services providers provide?' and 'What are the trends and developments in the logistics services market?'.

1.3 Methodology

This thesis project is divided into three parts namely the literature review, the case company analysis, and the overall analysis and conclusion.

The literature review of scientific articles on the topic of logistics outsourcing provides information on the characteristics of third- party logistics providers and the services they offer, the characteristics of fourth- party logistics providers and the services they offer, and the opportunities for the logistics services providers arising from the current trends and developments in demand in the logistics services market. Recent scientific articles are used for this literature review as well as current publications from industry associations and industry news. This literature review will answer most of the sub questions.

The analysis of case company CTC Worldwide Logistics in Cape Town, South Africa, includes an analysis of the range of services the company currently provides, other services the company could offer, and the opportunities from the current trends and developments in demand in the logistics market the company could respond to.

In order to assess the quality level a service quality survey and a SWOT analysis have been carried out. The service quality is analysed through a survey which has been sent to eighty clients of the case company with the request to fill in an online survey on the service level provided by the case company, twelve surveys were completed and returned. The results of the service quality survey have been used for the SWOT analysis along with results from interviews with freight forwarders in Cape Town.

In order to be aware of possibilities and learn from similar business' experiences and skills, comparable international freight forwarders in Cape Town have been contacted. Eight companies have shared their industry experiences, challenges and business strategy. This benchmarking is used to compare different strategies and businesses in order to get a better view of the industry and its market.

The industry opportunities are taken from literature and industry publications, but mostly from the conclusions of the interviews with local companies and clients. Industry associations and networks as the South African Association of Freight Forwarders (SAAFF) have been interviewed about trends and developments and several logistics companies in Cape Town have been asked for their opinion on the topic.

The final phase of analysis and conclusion provides a comparison of the case company situation with the conclusions from the literature review. Overall conclusions and findings on how the case company could develop and respond to trends and developments, the overall opportunities for the logistics services provider industry, and overall conclusions and findings from the literature review and case company analysis will be presented in this part.

This research has only been carried out in Cape Town, South Africa. Therefore the outcomes might not apply globally and it would be interesting to research possible differences. Additionally the market research is not based on scientific publications but based on personal experience and opinions of the case company, other companies, and key persons from industry associations. Conclusions are based on personal experiences in Cape Town, South Africa, and might therefore not be viable and applicable to other parts in the world.

2. Literature Review

According to the work by Lu and Su (2002) a first- party logistics (1PL) provider is a company that executes its own logistics activities and a second- party logistics (2PL) provider is a provider of simple logistics services, such as storage or transportation. They define a third- party (3PL) logistics provider as a logistics operator that offers a broad range of services and management, and its natural evolution is the fourth- party logistics (4PL) provider, which is the single connection between a customer and the logistics operators, being responsible for hiring other 2PL and 3PL, and managing the logistics process end-to-end (Lu and Su, 2002).

This literature review of recent scientific articles on the topic of logistics outsourcing provides information on the characteristics of third- party logistics providers and the services they offer, the characteristics of fourth- party logistics providers and the services they offer, and the opportunities for the logistics services providers arising from the current trends and developments in demand in the logistics services market.

2.1 Third- Party Logistics

Logistics outsourcing, third- party logistics services and contract logistics generally mean the same thing (Lieb et al., 1993). Other terms found in literature are logistics alliances and contract distribution. This chapter provides a summary of literature on the characteristics of third- party logistics, the reasons for outsourcing logistics activities, and the different services provided by third- party logistics providers.

2.1.1 What is Third- Party Logistics?

“Third- party logistics involves the use of external companies to perform logistics functions which have traditionally been performed within an organisation. The functions performed by the third- party can encompass the entire logistics process or selected activities within that process” (Dapiran et al., 1996).

“Third- party logistics is sometimes referred to as contract logistics which is a process whereby the shipper and third- parties enter into an agreement for specific services at specific costs over some identifiable time horizon” (La Londe and Cooper, 1988).

“Third- party logistics is when a third- party is brought in to help manage the logistics management functions of transportation management, inventory management, and value added services. A third- party logistics provider is an independent economic entity that creates value for its client. A trucking company, a warehouse operator, and a contract manufacturer can all be considered third- parties” (Aghazadeh, 2003).

“Third- party logistics services are multiple distribution activities provided by an external party, assuming no ownership of inventory, to accomplish related functions that are not desired to be rendered and/or managed by the purchasing organisation” (Sink et al., 1996).

Thomas Craig, president of LTD Management, summarizes the concept of third- party logistics in the study ‘4PL versus 3PL – A business process outsourcing option for international supply chain

management' by concluding that third- party logistics providers have led the way in logistics outsourcing. According to Craig (2001) "drawing on its core business, whether it be forwarding, trucking or warehousing, third- party logistics providers moved into providing other services for customers and presented a way for a commodity service logistics provider to move into higher margin, bundled services". Delaney (1994) describes third- party logistics providers as "interested in investing in assets, dedicating capacity and personnel, customising information systems and communications in order to improve the productivity and customer satisfaction of their manufacturing and distributing clients".

Aghazadeh (2003) and Berglund et al. (1999) describe the history of the third- party logistics industry which started in the 1970s with traditional logistics services as transportation and warehousing. The warehouse services started when warehouses began to sell space to other companies when they ran out of space during busy seasons. The services were expanded in the 1980s by distribution managers improving the customer service. In the early 1990s parcel and express companies such as DHL (started in 1992) and UPS (started in 1994) started their logistics services. During the last decade of the 20th century logistics providers started to offer logistics and supply chain support services which are nowadays offered as complete customised solutions. In the second half of the 1990s, the Internet was 'discovered' by industry and commerce, and a whole plethora of new software companies emerged to launch the e-commerce era. Performance expectations of third- party logistics providers went up a few more notches (Gattorna, 2003).

Sahay and Mohan (2006) explain that good logistics performance requires a trade-off between the need to reduce overall supply chain inventory and lead times, while simultaneously capturing economies of scale and improving customer service for enhanced business performance. According to Aghazadeh (2003), third- party logistics can be implemented and useful in nearly every industry, whether it is retail, service, or manufacturing. It is also possible for a company to use more than one third- party logistics provider. "Third- party logistics differs from industry to industry and therefore each industry has to look at its specific needs when choosing a third- party logistics provider" (Aghazadeh, 2003). Sink et al. (1996) interviewed experienced third- party logistics buyers and found that industrial buyers want their logistical outsourcing to be unique. Therefore, suppliers must tailor their offerings to each potential client. In the eyes of the interviewed third- party logistics buyers it is more important for providers to develop long term, mutually beneficial solutions than to provide quick fixes that do not address real needs or generate reasonable returns.

Moore (1998) describes that third- parties face many challenges in establishing successful logistics alliances, third- parties need to overcome corporate concerns of control over logistics operations and build trust and credibility. "Factors may be present that make outsourcing a good idea, but there is no guarantee that a relationship will be successful" (LaLonde and Cooper, 1989). "Many logistics managers are not accustomed to trusting third- parties, and many third- parties do not want to make the commitment necessary to form real alliances. Thus, the role of trust and commitment in logistics alliances becomes an important issue" (Moore, 1998). LaLonde and Cooper (1989) indicate that some outsourcing relationships evolve over time into alliances as mutual trust develops between buyers and third- parties. After researching the roles of trust and commitment in logistics alliances, Moore (1998) found that in most cases buyers perceive third- parties to be trustworthy and committed to maintaining alliance relationships and the third- party's equity behaviour appears to be an important factor affecting the development of trust in a relationship while conflict significantly hinders the

development of relationship commitment. Aghazadeh (2003) describes a successful third-party arrangement as one that consists of good communication, a commitment from both parties to succeed, a reward structure for the third-party and a corporate chemistry referring to two parties sharing common business beliefs and practices. Aghazadeh (2003) stresses the importance of a good relationship between a company and its logistics providers and the maintenance of this relationship. "Communication is the key component in any third-party logistics relationship, when looking for a third-party logistics provider companies should be up-front with their expectations and research a provider's ability to accomplish what the company wants". Van Laarhoven et al. (2000) summarizes the key success factors of a logistics alliance as well defined requirements, procedures and systems, close relationships, and top management involvement.

2.1.2 Reasons for Outsourcing Logistics Services

"A company can expect cost savings, productivity improvements, hassle free operation, and measurable service improvements when they find the right third-party logistics provider that works" (Aghazadeh, 2003). The most frequently cited benefits of outsourcing are cost reduction, improved expertise, and a reduction in capital requirements for the user firm (Dapiran et al., 1996). Other benefits mentioned in literature are the access to markets that would not have been accessible otherwise, the ability to offer services that would not have been possible otherwise, and the opportunity for the user firm to focus on its core business. Sohail and Sohal (2003) identified the reasons in making a final decision on outsourcing in Malaysia and reported these as cost savings, improved services, better transportation solutions and better professionalism. Sheffi (1990) researched the motives for the growth of logistics outsourcing in the United States and found reasons as the need to focus on core businesses, better transportation solutions, cost savings and improved services, development of necessary technological expertise and computerized systems, and need for more professional and better equipped logistics services. "Third-party logistics advantages include lower costs, improved expertise, market knowledge, and data access. Third-party logistics also improves operational efficiency, customer service, provides an ability to focus on core business objectives, and provides greater flexibility. Today, more than ever it is essential for a company to create a competitive advantage either locally or globally" (Aghazadeh, 2003). Cooke (1998) adds the benefits as reduced need for personnel, reduced transportation and distribution cost, improved customer service, improved cycle time and freed up capital in manufacturers and marketers non core areas. "Third-party logistics can leverage tremendous freight volumes in contract negotiations with carriers to receive rates lower than what an individual shipper could obtain" (Cooke, 1998). Aghazadeh (2003) adds that third-party logistics is also able to put money into warehouses and equipment and spread those costs throughout a group of customers. "This method can also be used when purchasing supply chain software that is used for distribution operations. Another benefit of outsourcing is that money is not spent on warehouse buildings, equipment like trucks and forklifts, and supply chain software" (Aghazadeh, 2003). "Third-party logistics firms can provide improved inventory and lead time performance while concurrently capturing economies of scale resulting from higher volumes obtained by aggregating demand across a large number of customers" (Bhatnagar and Millen, 1999). Vasiliauskas and Jakubauskas (2007) mention that the main advantage of using third-party logistics results from economies of scale and economies of scope, which encourage companies to increase net value by reducing costs. They add that competent third-party logistics providers possess high coordination ability, enabling them to search for reliable partners or subcontractors, and to manage efficiently the flow of goods.

Cooper (1993) explains the increase in outsourcing logistics services because of intensified globalisation of businesses. "During the last two decades, globalisation has emerged as a major force of shaping business strategies, leading firms to develop products designed for a global market and to source components globally. This has led to more complex supply chains requiring larger involvement of managers in logistics functions. Lack of specific knowledge of customs, tax regulations and infrastructure of destination countries has forced firms to acquire expertise of third-party logistics service providers" (Cooper, 1993).

"To gain a competitive advantage, many organisations are seeking to manage their logistics operations strategically, but realize that they lack the core competencies and are increasingly seeking to outsource their logistics activities" (Hum, 2000). An important development that is impacting the logistics industry is the increased emphasis on time based competition, the speed with which products can be manufactured, delivered to market, and serviced (Bhatnagar and Millen, 1999). Bhatnagar and Millen (1999) explain the increased emphasis on supply chain management as a source of competitive advantage. "In the last two decades, the quest for time based competence led initially to a rapid adoption of new manufacturing methods like just-in-time, flexible manufacturing systems, computer aided manufacturing and so on by organisations. These methods have brought about significant improvements in supply chain performance through their focus on compressed manufacturing lead times and improved quality" (Bhatnagar and Millen, 1999).

However most of the literature focuses on promotion of outsourcing the logistics activities, there are also some disadvantages about the concept. After studying the results of a survey about the use of third-party logistics by large American manufacturers Lieb (1992) found that 40 percent of the respondents reported a negative or very negative impact on employee morale. Lieb (1992) explains the negative impact "related to the downsizing of the logistics workforce that typically accompanies a decision to outsource logistics functions, and it may be that as the longer term users cut more deeply into the full time logistics workforce, the remaining workers are becoming more sceptical about their future with those companies". After studying the use of third-party logistics in Australia Dapiran et al. (1996) found that more than 60 percent of the respondents experienced significant impediments in bringing contract logistics firms on line, the most often cited implementation issues included teaching the contract logistics firm about the company's policies and business requirements and reaching agreement on service definitions. Bhatnagar and Millen (1999) studied the use of third-party logistics services in Singapore and found the most often mentioned difficulties teaching the contract logistics firm about the company's policies and business requirements, overcoming employees' resistance to changes, coordination and integration between the company and the contract logistics firm, price negotiations and billing problems, and the contract logistics firm's insufficient understanding about the company's operations. The incompatibility of information systems and the lack of trust in the contract firm were also mentioned by several respondents in the Singapore research. Sink et al. (1996) describes disadvantages as reduced control over activities, customer non-acceptance, loss of in-house logistics expertise, and increased supplier dependence. Szymankiewicz (1994) describes poor contractor management and insufficient controls as the principal causes of the problems encountered with current third-party contract arrangements. "The main actions which third-party providers can take to improve the service they provide mainly relate to partnership issues. They include being more proactive, improving communications, providing better information and enhancing systems" (Szymankiewicz, 1994). Szymankiewicz (1994) found that service failures and level of cost remain the two most likely reasons for companies to change

contractors. Lack of flexibility, insufficient management information and general management issues are other reasons given by many companies. Companies are starting to be concerned with more strategic and relationship issues, the lack of innovative thinking, the perceived inability to handle strategic growth and communications failures which put customer service at risk.

2.1.3 Third- Party Logistics Services

There are various articles on the third- party logistics services in different countries. This chapter summarizes the current outsourced logistics services by third- party logistics providers all over the world.

According to a strategic HR Study of the Supply Chain Industry by the Canadian Logistics Skill Committee and Deloitte Consulting (2005) third- party logistics providers in Canada mostly carry out physical logistics operations and manage systems to track shipments for their clients. The most common services provided by third- party logistics providers in Canada are warehousing, in- and outbound transportation, consulting services, shipment consolidation, cross docking and carrier selection. Very few third- party logistics providers offer all value added services such as customs brokerage, fourth- party logistics and fleet management services. The value added third- party logistics companies provide additional services including managing complex operational handling (co-manufacturing/ co-packing/ labelling), managing administrative operations (billing/ ordering), managing information management systems (tracking/ tracing), custom broker services, international freight forwarding and providing logistics and supply chain management consulting.

In the article 'The use of third- party logistics services by large American manufacturers', Lieb (1992) explains that large American manufacturers use a wide variety of third- party logistics services. "The typical user buys multiple logistics services from their provider(s). The most frequently outsourced logistics functions are direct transportation services, customs brokerage, freight payment services, freight forwarding, warehouse management, shipment consolidation, tracking/tracing, carrier selection, order fulfillment, reverse logistics, and cross-docking". Lieb (1992) notices that, "Interestingly, despite the extensive movement of many third- party logistics providers into non-traditional services during the past few years, very few respondents reported using their third- party logistics providers for contract manufacturing, purchasing or financial services. Similarly, only four respondents in the research reported using third- party logistics providers to operate call centers on their behalf, and no respondent reported using them for after sales services". The most commonly used third- party logistics services by American companies in China and India are direct transportation services, shipment consolidation, warehousing, customs brokerage, freight forwarding and contract manufacturing (Lieb, 1992).

Van Laarhoven et al. (2000) list the most common outsourced logistics services in Europe as line hauling, network based transport, emergency transport, storage, inventory admin, order picking, customisation, labelling, tracking and tracing, merge-in-transit, invoicing, assembly, forecasting, and order entry.

Dapiran et al. (1996) analysed the third- party logistics services usage in Australia and found that the use of contract logistics services in Australia is primarily focused on domestic operations. The large companies use a wide range of contract logistics services as fleet management, warehouse management, shipment consolidation, order fulfillment, and product returns (Millen et al., 1997).

Bhatnagar and Millen (1999) studied the third- party logistics services in Singapore and conclude that shipment consolidation is often outsourced and that most of the firms in Singapore outsource logistics functions such as order fulfilment, carrier selection and freight payment. The functions that are least outsourced include product assembly/ installation, order processing and inventory replenishment.

The logistics services most outsourced in Asia Pacific are transport, maintenance, warehousing, and information technology (McMullan, 1996). Value added services provided by carriers are shipment tracking, performance statistics, monthly invoicing, Electronic Data Interchange (EDI), and logistics consulting services (Millan and Sohal, 1996).

Companies surveyed in Malaysia use a wide range of contract logistics services, functions relating to shipment consolidation and fleet management have been outsourced by a majority of the firms. The most outsourced logistics functions include freight payment, carrier selection, rate negotiation and warehouse management (Sohail and Sohal, 2002).

Sohail and Al-Abdali (2005) studied the usage of third- party logistics in Saudi Arabia and found that functions relating to carrier selection and shipment consolidation activities have been outsourced by many companies. Other major logistics functions outsourced include freight payment, order fulfilment, and product assembly and installation.

Arroyo et al. (2006) conducted a survey of third- party logistics in Mexico and found that customs brokering, product delivery, fleet management and operations, supplier payment and auditing, and shipment planning and consolidation are often outsourced by firms. "The most popular outsourced functions in Mexico are of a supportive rather than a primary nature. Inventory management, logistics information systems, reverse logistics, warehousing and order processing are usually not considered yet" (Arroyo et al., 2006).

After reviewing the core competences and specialties of the logistics providers in China, Zhou et al. (2008) divided the most common Chinese logistics providers into three categories, namely port management (e.g. customs brokerage, import/ export documentation), transportation services (e.g. freight payment, shipment consolidation, freight forwarding, carrier selection, and rate negotiation), and warehousing services (order fulfilment, inventory control).

Kim (1996) studied the logistics in Korea and found that on average the number of logistics service providers utilized by the firms is increasing rapidly, transportation, warehousing, and information and consulting services providers are growing. "Part of the reason for the increase in the number of service providers is that the logistics service industry is not yet well developed in Korea. For example, the transportation industry consists of many fragmented, small carriers. Except for some large companies, it is not uncommon for a company's transportation department to deal with many individual truck owner-drivers" (Kim, 1996).

Sahay and Mohan (2006) found that the most common outsourced logistics services in India are customer service/ support, inventory management, rate negotiation, outbound transportation, distribution, custom clearing and warding, order fulfilment, selected manufacturing, order picking, outbound warehousing, labelling and packaging, import/ export management, inbound

transportation, inbound warehousing, fleet management and consolidation, marketing sales promotion, order processing, assembly/ installation and reverse logistics.

Logistics management consists of three core functions: transportation management, inventory management, and value added services (Aghazadeh, 2003). In their article 'Customer perceptions on logistics outsourcing in the European consumer goods industry', Wilding and Juriado (2004) expand this grouping and divide the logistics areas in four categories namely transport and shipment related services, warehousing and inventory related services, information systems related services, and other value added services. In order to create an overview of the complete assortment of services currently provided all over the world, this classification by Wilding and Juriado (2004) will be used to summarize the outsourced services mentioned in the reviewed literature.

Transport and Shipment Related Services:

Carrier Management/ Fleet Management/ Shipment Planning/ Intermodal Transportation: Carrier management involves planning, arranging, and buying transportation services needed to move a firm's freight. The expression 'mixed carrier transportation' refers to situations in which goods are carried to their final destination by two or more means of transport, such as road and sea or rail, sea, and air (Logistics, Encyclopaedia Britannica). This is comparable to Intermodal Transportation which is defined as involving transportation by more than one form of carrier during a single journey (Merriam Webster Dictionary). The Oxford English Dictionary defines intermodal of the conveyance of goods as making use of differing modes of transport during the journey between the place of dispatch and the destination. Therefore intermodal freight transport involves the transportation of freight using multiple modes of transportation without any handling of the freight when changing modes. Fleet management is the organisation of determination of the optimal routes used by a fleet of vehicles, based at one or more depots, to serve a set of customers (Crainic and Laporte, 2004).

Customs Management: Customs plays a key role in international trade, every international trade transaction involves customs intervention at export and at import. The manner in which customs conducts its business has a substantial impact on the movement of goods across international borders (United Nations Trade and Development Board, 1994). Customs management includes customs brokerage, the clearing of goods through customs barriers for importers and exporters involving the preparations of documents, calculation of taxes, duties and excises, and facilitating communication between the importer/exporter and governmental authorities, and customs clearance, the act of obtaining permission to import merchandise from another country into the importing nation.

Freight Consolidation: Freight consolidation means the assembling of many smaller shipments into a smaller number of large shipments. The reason for this is that the carriers charge less per pound for handling larger shipments, because less paperwork and individual handling is involved (logistics, Encyclopaedia Britannica). Consolidation can be applied to land freight, air freight, as well as sea freight.

Merge In Transit: Merge-in-transit is an efficient means for reducing both the need for warehousing and the number of customer receipts, it is a delivery model where shipments from multiple suppliers are consolidated into one customer delivery at merge points that operate without inventory (AlaRisku et al., 2003).

Distribution Management/ Direct Transportation Services/ Outbound Transportation/ Product Delivery/ Inbound Transportation: The Business Dictionary defines distribution as the movement of goods and services from the source through the distribution channel, right up to the final customer,

consumer, or user and the movement of payment in the opposite direction, right up to the original producer or supplier. The Merriam Webster Dictionary adds the function of spreading and delivering of goods to the definition.

The main areas of inbound transportation deal with the volume per transaction in terms of buying larger amounts of product per transaction in order to get the best transportation rate, the consolidation of carriers and movements in order to gain the best rate possible through negotiations with transportation companies, and the service requirements in terms of lead times and delivery requirements related to specific times and/or expedited movements for shorter cycle times. Inbound transportation is not often recognized as very important but the efficient management of inbound transportation can save the company costs.

Line Haul/ Transportation: Line Haul is the movement of cargo between two major cities or ports, especially those more than about 1,500 kilometres or 1,000 miles apart (Business Dictionary). The Merriam Webster Dictionary defines Line Haul as the transporting of items or persons between terminals. Therefore Line Haul is the actual transportation of cargo excluding the delivery and pick up service.

Network Based Transport: One of the advantages of using a transportation services provider is the ability to make use of the network of the provider. The provider is able to combine freight of its clients and that way provide transportation more efficiently.

Warehousing and Inventory Related Services:

Warehousing Management: The Business Dictionary defines warehousing as the performance of administrative and physical functions associated with storage of goods and materials. Warehouse management involves managing the facility, stock, technology and employees so that things run smoothly and profitably. Efficient warehousing management includes the optimization of time spent handling inventory, the careful assignment of storage locations, reducing order-picking time and associated labour costs, inventory accuracy, waste elimination, and operating efficiencies. The places chosen to store stock within the warehouse makes a huge difference in picking time, accuracy and safety.

Storage: The Business Dictionary defines storage as holding, leaving, or placement of goods or materials for a short or longer term, usually with the intention of retrieving them at a later time.

Order Fulfilment/ Order Processing: Order processing or fulfilment is the process or the work flow associated with the picking, packing and delivery of the packed items to a shipping carrier. This activity takes place in the warehouses and distribution centres and involves the activities of preparing an order after the order is placed by the customer (Business Dictionary).

Product Packing/ Repackaging/ Labelling: Value added services as product packaging, repacking and labelling are often offered by logistics providers in warehouse and distribution centres. Companies can inform the provider with requirements and specifications and the providers can prepare the goods for final distribution.

Product Assembly/ Installation/ Manufacturing: Value added services as the assembly, installation and final manufacturing of product components are available and mostly performed in distribution centres and warehouses. In today's global supply chain industry product components arrive in the distribution centres from all over the world and can be assembled into the final product before distribution.

Product Customisation: The Business Dictionary defines customisation as the production of personalised or custom-tailored goods or services to meet consumers' diverse and changing needs.

Product customisation involves just-in-time production to the customer's exact specifications and involves sending orders to the firm's warehouses and suppliers to deliver materials just in time for a custom-production run (Encyclopaedia Britannica).

Product Testing: The Business Dictionary defines testing as a quality control means by which the capability of a manufactured item to meet its specified requirements is determined and documented by subjecting the item to a set of operating conditions.

Order Picking: The Business Dictionary defines order picking as withdrawing items from inventory to fulfil an order. This activity takes place in the warehouse where the products are collected from the shelves according to a customer's order.

Inventory Management/ Inventory Control/ Inventory Administration: Inventory Control is the activity which organises the availability of items to the customers, it co-ordinates the purchasing, manufacturing and distribution functions to meet the marketing needs. This role includes the supply of current sales items, new products, consumables, spare parts, obsolescent items and all other supplies (Wild, 2004).

Inventory Replenishment: The Merriam Webster Dictionary defines replenishment as to fill or build up again. Inventory replenishment is relocating material from a bulk storage area to an order pick storage area, and documenting this relocation (Ballis, 2006).

Cross Docking: Cross docking is a warehousing strategy that involves movement of material directly from the receiving dock to the shipping dock with a minimum dwell time in between. Cross docking can effectively bring substantial reductions in the transportation cost without increasing the inventories while simultaneously maintaining the level of customer service. Cross docking can also lead to the reduction of order cycle time, thereby improving the flexibility and responsiveness of the distribution network (Apte and Viswanathan, 2000).

Information Systems Related Services:

Logistics Information Technology/ Information Systems/ Operation of Systems/ Selection of Software: The Oxford English Dictionary defines information technology as the branch of technology concerned with the dissemination, processing, and storage of information, especially by means of computers. An information system is an integrated set of components for collecting, storing, processing, and communicating information (Information system, Encyclopaedia Britannica). Business firms, other organisations, and individuals in contemporary society rely on information systems to manage their operations, compete in the marketplace, supply services, and augment personal lives.

Forecasting: The Business Dictionary defines forecasting as a planning tool which helps management in its attempts to cope with the uncertainty of the future. At the strategic or management level, companies lacking sophisticated information systems might look to outside sources for database management techniques used in forecasting or for handling the information flow loop (Richardson, 1990).

Order Entry: Order Entry is an application in computerized systems to perform placing orders in a more fast and efficient manner. Placing orders through computer systems makes use of the capability to process, store, and display large amounts of data representing part and product specifications (Automation, Encyclopaedia Britannica).

Tracking/ Tracing: Product tracking or tracing concerns a process of determining the current and past locations (and other information) of a unique item or property. New technologies as Radio Frequency Identification (RFID) and computer systems facilitate the tracking and tracing activities.

Other Value Added Services:

Consulting: That consults or asks advice, applied to a physician, engineer, etc., who makes a business of giving professional advice, either to the public or to those practically engaged in the profession (Oxford English Dictionary). Consulting engineers, specializing in new fields, are employed to study and recommend courses of action (Electrical and Electronics Engineering, Encyclopaedia Britannica).

Freight Brokering: Freight brokering is connecting a company in need of shipping services and an authorized motor carrier. Though a freight broker plays an important role in the movement of cargo, the broker doesn't function as a shipper or a carrier. Instead, a freight broker works to determine the needs of a shipper and connects that shipper with a carrier willing to transport the items at an acceptable price. The broker does not have a statutory freight claim liability and are not liable.

Freight Forwarding: Freight forwarding is a service used by companies that deal in international or multi-national import and export. While the freight forwarder doesn't actually move the freight itself, it acts as an intermediary between the client and various transportation services. Sending products from one international destination to another can involve a multitude of carriers, requirements and legalities. A freight forwarding service handles the considerable logistics of this task for the client, relieving what would otherwise be a formidable burden and takes responsibility for the transportation from the place of receipt to the place of destination.

Customer Service/ Support/ After Sales Service: Customer service involves an array of activities to keep existing customers satisfied. Servicing equipment in the field, training new users, and installing of delivered goods are examples of customer service (Logistics, Encyclopaedia Britannica).

Reverse Logistics/ Product Returns: Reverse logistics, unlike traditional forward logistics, is described as a manufacturing entity that retrieves previously shipped parts and products from the point-of-consumption to the manufacturing entity for possible recycling, remanufacturing, or disposal (Dowlatshahi, 2000).

Spare Parts Logistics: Spare parts logistics is supplying the customer with replacement parts as part of customer service or after-sales service. The requirements for planning the logistics of spare parts differ from those of other materials in several ways: service requirements are higher as the effects of stock-outs may be financially remarkable, the demand for parts may be extremely sporadic and difficult to forecast, and the prices of individual parts may be very high (Huiskonen, 2001).

Freight Payment/Invoicing: Outsourcing the payment of freight could include the negotiation of credit terms, freight auditing, information reporting for logistics, and work with a combination of both Electronic Data Interexchange, and paper freight bills. The freight payment providers offer services as verification of freight rates for compliance with the customers' contracts, checking of previous payment, checking of shipper's liability and other edits and validations to insure the bills meet the shipper's requirements for payment. A company outsourcing its freight payment will redirect the submission of freight invoices to the freight payment provider. The provider will have the capability of verifying the origin and destination in a variety of ways, including bill of lading matching, and obtaining a signed proof of delivery. Outsourcing the freight payment service will assure the correctness of a freight invoice because these services audit for freight rate, freight discount, and misapplied charges and will possible duplication of payment.

Procurement of Logistics Services: The Business Dictionary defines procurement as the complete process of acquisition of goods and services. Procurement involves finding the right partners for the right price and quality control.

Freight Auditing/ Suppliers Auditing/ Carrier Performance Auditing: Auditing is making an official systematic examination of accounts so as to ascertain their accuracy (Oxford English Dictionary).

Therefore a freight audit is one that examines, adjusts and verifies freight bills for accuracy. With the increase in global sourcing and logistical costs as a percentage of sales, freight costs are now a strategic focus for business. Traditional practices of ensuring that bills of lading are correct can be costly, but not auditing the bills can mean even greater financial loss. In order to check if suppliers are competent to deliver the expected and will continue to maintain a system that assures the continued ability audits can also be performed on suppliers. The carrier performance can be measured against service guarantees. It is important to evaluate and monitor bought in services, how the carrier provides or fails to provide the service that is required and expected.

Marketing/ Sales/ Promotion: The Encyclopaedia Britannica defines marketing as the sum of activities involved in directing the flow of goods and services from producers to consumers. Outsourcing the marketing, sales, and promotion activities to a specialized company provides the benefits of the use of competence and the ability to focus on core activities.

Integrated Logistics: The Business Dictionary defines Integrated Logistics as a system-wide management of entire logistics chain as a single entity, instead of separate management of individual logistical functions. Rabinovich et al. (1999) found that in deciding to contract the services of third-party logistics providers, firms bundle functional areas and activities in distinct patterns which might enable the achievement of efficiency gains reflected in the achievement of economies of scale, scope, and conjunction.

Wilding and Juriado (2004) found that almost any logistics activity can be outsourced. For any logistics activity that researchers have included in their surveys, there has always been at least one company outsourcing that function.

Vasiliauskas and Jakubauskas (2007) categorize the third-party logistics providers into four groups according to the services they provide. The first group are the standard third-party logistics providers, basic providers offering the most basic functions as pick and pack and warehousing. The second group are the service developers, the type of third-party logistics providers who will offer their customers advanced value-added services such as tracking and tracing, cross-docking, specific packaging, or providing a unique security system. The third group are the customer adapters, the type of providers who will come in at the request of the customer and essentially take over complete control of the company's logistics activities. The last group are the customer developers, Vasiliauskas and Jakubauskas (2007) describes this group as the highest level of service providers with respect to its processes and activities, as these providers will have few customers but will perform extensive and detailed tasks for them.

Bottani and Rizzi (2006) describe three different levels of outsourcing, namely transactional outsourcing which they describe as "based on transactions, with no long term contracts and no bonding between the third-party logistics provider and the outsourcing company". Tactical outsourcing is outsourcing on a long term basis with negotiated contacts and integrated information technology systems to facilitate free information flow and create supply chain visibility, and strategic outsourcing which is based on long-term relationships with successful outcomes and providers become partners in supply chain management and establish transactional transparency.

Africk and Calkins (1994) classify third-party service providers into three groups. The asset based providers are providers owning specific assets through which logistics services are offered as by example warehouses and truck fleets. The management based providers are providers who do not

own assets but tend to supply management consulting services. The integrated vendors are providers who differ from asset based ones because they contract with other vendors on an “as needed basis”, and the administration based providers focus mainly on logistics administration services as by example freight billing.

2.2 Fourth- Party Logistics

The outsourced logistics activities to multiple logistics providers need control and management which could also be outsourced to an external organisation. This external organisation can oversee and take the responsibility for all the outsourced operations which has become known as fourth-party logistics (4PL) or sometimes referred to as Lead Logistics Provider (LLP), introduced in 1996 by the consulting company Accenture Inc. and defined by this company as: ‘A supply chain integrator who assembles and manages the resources, capabilities, and technology of its own organisation with those of complementary service providers to deliver a comprehensive supply chain solution’ (Bade and Mueller, 1999).

Ling Li (2007) explains a fourth- party logistics provider as “a strategic partner instead of a tactical transportation service provider such as the third- party logistics provider”.

“Fourth- party logistics refers to a company that manages a network of logistics operators in order to increase the efficiency of its clients. It is focused on management attributions more than on operational ones” (Krakovics et al., 2008).

Büyüközkan et al. (2009) summarize these definitions with the definition of fourth- party logistics as “a supply chain solution which combines the capabilities of management consulting, information technology and third- party logistics services providers”.

“The rise of fourth- party logistics stems in part from the fact that outsourcing is now a global endeavour. The management and integration of dispersed logistics players, each bound by local variation in language, currency, trade law, and so on, is an enormous undertaking. In hiring a fourth-party logistics provider, an enterprise must find a partner that understands its special logistics needs, one that can share in the risks and rewards of reinventing a significant portion of its business” (Schwartz, 2003).

Thomas Craig, president of LTD Management, explains fourth- party outsourcing as business process outsourcing which is more than just traditional outsourcing. “Business process outsourcing providers bring a different perspective, knowledge, experience and technology to the existing function and can and will work with the firm to reengineer it into an improved or new process. It is an outcome-based result, not just a pure cost reduction issue. The new process will interact or be integrated into the company in a way that can bring value, even bottom line and shareholder benefits, to the client” (Craig, 2001). The fourth- party logistics provider will bring value and a reengineered approach to the customer's need, the provider is neutral and will manage the logistics process, regardless of what carriers, forwarders or warehouses are used. The logistics services provider will develop solutions tailored to meet the unique and special needs of each customer, without regard to a parent company's service offerings and operations. The firm understands the key to success with process, people and technology. “A good fourth- party logistics provider will have the shipper perspective and experience in what he does and offers to prospective customers. That means a better understanding

of the complexity of the customer's requirements, present viable solutions and to have customer satisfaction and retention" (Craig, 2001).

2.3 Logistics Services Provider Industry Trends and Opportunities

According to Aghazadeh (2003) the range of services logistics service providers offer today has changed dramatically in recent years. Global industry consolidation, technology integration, industry specialization, and industry alliance networks have driven this change.

Langley et al. (2006) describe several other trends in the industry as the growth and consolidation of the industry because of mergers, acquisitions and consolidation as regional expansions, broadening service lines, and industry specialization. "The world's largest logistics service providers expand their offerings and continue to enlarge their businesses through acquisitions, geographic expansion, and organic growth, as well as good old-fashioned price increases" (Foster and Armstrong, 2005). Langley et al. (2006) add that providers should consider carefully if these consolidations make strategic and economic sense because they found that not all third- party users are convinced they are benefiting from these consolidations.

Another trend is the changing relationship between providers and users of logistics services. Most of the logistics providers desire to move their customers from a conventional customer supplier relationship to a true partnership. Trust, flexibility, and responsiveness are essential attributes for both sides of the third- party logistics provider-user relationship to move forward. At any rate, the growing complexity of the logistics business will continue to place significant emphasis on improving these relationships between users and providers of third- party logistics services.

Langley et al. (2006) present findings of annual third- party logistics studies from 1996 to 2006 in industries all over the world and find that the traditional third- party logistics services as transportation, warehousing, and customs clearance remain popular services to buy in. "The overall satisfaction with third- party logistics providers remains high but third- party logistics users clearly expect continual improvements in service levels and information technology capabilities. As with provider selection, price of third- party logistics services is the factor of greatest importance in evaluating third- party success, followed closely by quality of tactical, operational logistics services" (Langley et al., 2006). Lieb et al. (1993), Dapiran et al. (1996) and Bhatnagar et al. (1999) have observed that the future usage of third- party logistics services is a function of the current level of satisfaction of the firm with the logistics services provider. The authors have also explored the changes in the level and the nature of outsourcing of logistics services by the user firms. All the above studies indicate high levels of satisfaction with third- party logistics services providers, which will translate in increased outsourcing in the future. Typically, firms start with the outsourcing of few logistics services, moving over to activities which have maximum impact on logistics performance and then increase scope of usage of logistics services with perceived and quantifiable impact on overall business performance.

Vasiliauskas and Jakubauskas (2007) list the main challenges for third- party logistics services providers as maintaining profits under price pressures from customers, relationship with customers, the globalisation of the third- party logistics services market and delivering services in new geographical regions, consistently delivering the latest cutting edge technology to customers,

competing with giant global third- party logistics providers, and the emergence of fourth- party logistics providers. Langley et al. (2006) does not see the fourth- party logistics concept as a significant trend yet, users still focus on the more tactical services instead of the more strategic and information technology focused services. Gattorna (2003) believes there is a continuing and vital role for third- party logistics providers despite the emergence of the fourth- party logistics business model. Gattorna (2003) says that the better third- party logistics services providers are those players who are strategically positioned within the industry landscape and who excel in operations and customer management. These providers will be the third- party logistics providers who will increase their market value. Gunasekarana and Ngaib (2005) add that the logistics providers have to compete based on multiple competitive performance objectives such as quality, price, responsiveness, flexibility, and dependability. Other important considerations for customers to choose a logistics services provider mentioned in literature include compatibility, financial stability, performance, physical equipment and information systems, strategic attitude, and trust and fairness. Sink et al. (1996) interviewed experienced third- party logistics buyers and found that the most critical variable in the supplier evaluation process is the provider's core competences. Confidence and trust in a supplier are crucial in the purchase of third-party logistics services. Issues of expertise, reputation, experience and reliability were often mentioned by participants in relation to their emphases on supplier core competences. Most of the group indicated that price was used as a tie-breaker, or considered a secondary issue to service, in their evaluation of potential providers. When the group was asked about essential capabilities and/or characteristics required by industrial buyers in their acquisition of third-party logistics services Sink et al. (1996) found that the participants were in strong agreement that financial strength, compatibility of information systems, technical competence, price, credible client references and capacity were very influential provider-evaluation factors. Other important attributes were flexibility, responsiveness, direct or transferable expertise, a knowledgeable sales force and experience within a particular industry. After interviewing the group of experienced third- party logistics buyers Sink et al. (1996) found that the consensus of the group was that too many third- party suppliers claim to be experts in all areas of logistics, though few, if any, can actually provide truly integrated services effectively. The participants also indicated that the concept of "one-stop shopping" often created a level of uncertainty and suspicion. Providers were advised to concentrate on their core competences and not try to be "all things to all people". Credibility and trust were noted to be imperatives in the selection of third- party providers. According to those purchasing the services, these attributes come from experience, operational capabilities and an understanding of logistics costs.

Szymankiewicz (1994) finds that customers are becoming more sophisticated in their approach and needs and are more demanding and critical, they expect better service and more flexibility. This means that to achieve satisfaction levels close to 100 percent the distribution industry must become more responsive and sophisticated. These trends are reflected in the call for greater flexibility, linked with concerns about the lack of management information. Costs and service levels are still important but no longer at the top of the list of reasons for outsourcing distribution. Szymankiewicz (1994) also asked the third- party logistics services buyers to name the single most important step that service providers could take to improve their offerings and service. Most of the suggestions were partnership related issues, namely to be more proactive, to improve communications, to provide better information, and to improve systems. The main problems could also be solved by closer partnerships. Insufficient controls, poor management on both sides, badly specified contracts and

lack of information are all issues which need to be jointly resolved. With a high proportion of companies once more seriously thinking about changing their outsourcing arrangements and an increasing number of manufacturers looking to contract out, those distribution service providers who succeed in developing close partnerships will be the winners.

According to Thomas Craig, president of LTD Management, there is a bright future for logistics service providers. Craig (2001) believes that the growth of logistics providers will be significant. "The market will evolve as competitors come and go, it will evolve as shippers define and redefine their needs, but they will grow" (Craig, 2001). According to Craig (2001) the providers need to assess the market and decide whether they can compete and how they will compete in it. "Success means having a viable logistics provider strategy as to market and how to penetrate it. Inherently that means having the capability to look at each shipper and his individual requirements and developing a unique solution logistics program for that particular customer, if the program is not tailored to each customer, the provider is not being a true logistics provider and is providing a generic commodity service" (Craig, 2001). Logistics providers should define their strengths and weaknesses, from their internal view, customers and market view and competitors view. "Perception can be stronger than reality and it is fundamental to know what they can and cannot do presently and what is demanded to change. The provider should assess their reason for being or wanting to be a logistics provider. If they want to move into other arenas they must understand what practices exist and why which is important for assessing and defining market opportunities" (Craig, 2001).

Langley et al. (2006) explains that as industries extend their supply chains globally, the resulting complexity will require management to focus more on the enabling technologies in supply chain management as information technology. Most of the respondents in the survey agree that information technology capabilities are a necessary element of overall third-party logistics expertise. A great part of the respondents specify that they assess a third party logistics provider specifically on the provider's information technology capabilities when selecting a provider. One of the technologies expected to become more prevalent is Radio Frequency Identification (RFID). Foster and Armstrong (2005) also find that if third-party logistics providers want to be effective, information technology capabilities including web-based capabilities are important so that they can manage each logistics participant throughout the supply chain, as well as control inventory and shipments. Lead third-party logistics providers have excellent systems, the web-based track-and-trace interfaces and the event management capability needed to manage long, risky supply chains. Vasiliauskas and Jakubauskas (2007) found growth opportunities for the third-party logistics industry in management, technology, management solutions and consultancy, these were identified as greater growth opportunities than physical services such as freight carriage or warehousing. Providing technology and information technology solutions were rated as good or best growth opportunities by most respondents in their 2006 research. Other most promising opportunities were seen to be supply chain consultancy and design, reverse logistics and global freight management.

Globalisation is a major opportunity for the logistics services industry, especially the continued growth of the third-party logistics industry in China and other emerging markets is a great opportunity for the industry. Respondents in the research by Langley et al. (2006) generally have plans to develop a wide spectrum of logistics activities in China, the most popular being the importing and exporting of finished goods. Currently, transportation and customs brokerage services by third-party logistics providers in China appear to be the most prevalent, while services such as

cross-docking and information technology use are not as widespread as in other regions surveyed. The emergence of the global third- party logistics provider, the pursuit of a global presence is a major objective for many third- party logistics providers. Langley et al. (2006) found that users are sometimes frustrated with apparent differences in doing business with specific third party logistics providers from one region to another.

Cui et al. (2009) note that providing standardised services in a cheaper way is no longer sufficient for third- party logistics providers. They explain that with more entrants in the industry the price for standardised services become commoditized and the profit margin is smaller. Also, with the constant shift in client business, more customised and value-added services are required. Cui et al. (2009) argue that third- party logistics firms need to provide more than standardised services, innovation and new service development is vital. Different clients have different needs, differentiating logistics services is essential for a third- party logistics provider's business. Cui et al. (2009) explored innovation and new service development for regional third- party logistics firms and found that the three case companies used emphasize what clients demand and create differentiated services, rather than just providing standard services. Each provider is also unique, with its own features based on the type of clients and the region it serves. Langley et al. (2006) also concludes that users of third- party logistics services have a great interest in services that are responsive to their supply chain needs. They found that customers generally perceive a lack of consistency in core services among third party logistics providers, both between providers and in what service levels are available from individual providers across the regions they serve. Although size and geographic coverage are important, so is the consistency of location expertise and global service.

Wallenburg (2009) explains that an effective strategy for third- party logistics providers seems to be to focus on existing customers and sustaining or even extending business with them as it is cheaper than acquiring new customers and a cost-efficient means of increasing overall profitability by increasing revenues and return on investment. With this in mind, companies operating in competitive environments have realized the necessity of enhancing customer loyalty. Logistics service providers interested in improving their market success should focus less on the small share of customers that have not yet outsourced any logistics activities, and instead enhance their efforts to nurture relationships within their existing customer base. Wallenburg (2009) describes the importance of proactive improvement, customer oriented relationship specific innovations by a logistics services provider will be beneficial to the customer. The logistics services provider should focus on the current customer needs and how they may develop as external market changes may lead to changes in terms of what a customer values most.

Wallenburg (2009) explains the challenges for logistics services providers in terms of improving their innovativeness and enhancing customer relations. Customers seem to have a strong cost focus but are also interested in performance and service quality. Wallenburg (2009) studied what aspect of innovation logistics services providers should focus more on, reducing costs or improving performance, or whether both are of equal importance. The general results of the present study show a picture wherein proactive cost improvement and proactive performance improvement are of almost equal importance in their ability to generate customer loyalty. The logistics services provider should focus on providing the agreed upon service level at lowest possible costs.

2.4 Conclusion

Logistics outsourcing, or the use of external companies to perform logistics functions, can be done on several levels. Some companies only outsource a few basic functions from second- party logistics providers, others decide to outsource more integrated services and value added services to third-party logistics providers, and nowadays companies decide to outsource the management and complete logistics processes to fourth- party logistics providers.

Various literature describes the importance for logistics services providers to tailor their offerings and offer a personalised solution for each client. Outsourcing relationships evolve over time into alliances as mutual trust develops between clients and their logistics services providers, trust and commitment in logistics alliances becomes an important issue. A successful relationship consists of good communication and a corporate chemistry between the parties sharing common business beliefs and practices.

The logistics services industry is developing rapidly, the range and amount of logistics services is growing. The competitiveness in the market is increasing as clients have a wide choice of logistics services providers, it is very important for the logistics services providers to achieve and remain high client satisfaction levels. Clients are looking for high service levels and information technology capabilities, relatively low cost, flexibility and trust. Logistics service providers need to provide more than just standardised services, customised and value-added services are necessary, clients want unique solutions and customer loyalty.

A current trend is the changing relationship between providers and users of logistics services, from a conventional customer supplier relationship to a true partnership. Closer partnerships enable better communication, trust and better control. Another trend comes with globalisation offering opportunities for the logistics services industry in expanding their networks into upcoming markets as China.

3. CTC Worldwide Logistics

CTC, or Cargo Transport Company, is a fourth-party logistics provider, an international freight forwarding company offering import and export management services to and from Cape Town, South Africa, without owning assets. CTC Worldwide Logistics is mainly focused on the management of containerized cargo by sea with about 60% imports and 40% exports for a total of some 7 500 TEU (Twenty-foot Equivalent Unit) a year.

This chapter provides information on the freight forwarding industry and the case company CTC Worldwide Logistics in Cape Town, South Africa.

3.1 Freight Forwarding

The International Federation of Freight Forwarders Associations (FIATA) and the European Association for Forwarding, Transport, Logistic and Customs Services (CLECAT), have adopted an official description for freight forwarding as ‘The services of any kind relating to the carriage performed by single mode or multimodal transport means, consolidation, storage, handling, packing or distribution of the goods as well as ancillary and advisory services in connection therewith, including but not limited to customs and fiscal matters, declaring the goods for official purposes, procuring insurance of the goods and collecting or procuring payment or documents relating to the goods. Freight forwarding services also include logistical services with modern information and communication technology in connection with the carriage, handling or storage of the goods, and de facto total supply chain management. These services can be tailored to meet the flexible application of the services provided’. International trade involves many parties, the main actors involved in the freight forwarding industry are mapped in figure 1 below.

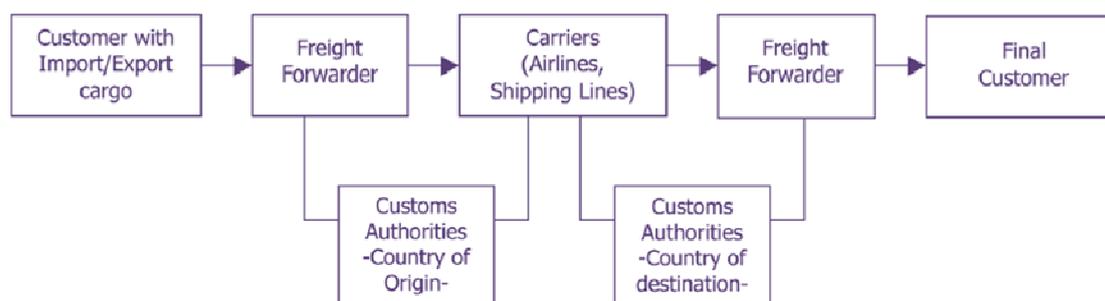


Figure 1 International trade parties

Internationally importing and exporting of goods and international transactions requires a variety of documentation. Different parties are involved as the supplier, the transportation company, the warehouse company, custom authorities, the carrier, ports, forwarders, managing agents, and the consignee. All these parties require enquiry, instruction, transport, insurance, customs, exchange, and payment documents. Countries around the world have different regulations, procedures, and trade conditions which often creates barriers that delay goods and increase costs for the customer. A freight forwarder can help to remove these barriers and speed up movement of goods. Another barrier for some companies is the cost of investing in the latest technology which the freight forwarder has often already made. Forwarders continually update their systems and are able to

deliver data to a variety of organisations including banks, carriers and customs authorities around the world.

Murphy and Daley (2001) forecasted that the demand for international freight forwarding would increase with the increase of the amount of cross-border trade. Markides and Holweg (2006) explain the shifting market trends because of the globalisation of production, the deregulation and dismantling of institutional obstacles to competition, increased competition between transport modes, technological change, and the outsourcing of the logistics function. According to the Global Freight Forwarding report 2009 by the Market Intelligence for the Transport and Logistics Industry, Transport Intelligence (TI), the global freight forwarding industry went through a setback. "Up until 2008 sea and air freight volumes were increasing at double digit rates, with forwarders, air cargo carriers and shipping lines enjoying a 'golden era'. However in the second half of 2008 the global economy came to a grinding halt, with immediate consequences to the international freight industries." The demand for forwarding services decreased enormously but the 2009 report by Transport Intelligence five-year market forecast shows slow growth for the global freight forwarding market. According to John Manners-Bell from Transport Intelligence, some companies are simply better run than others. "Freight forwarding remains a people-led business, and if staff are managed well and are good at their jobs, company performance will shine," he says.

Bernal, Burr, and Johnsen (2002) explain that forwarders can easily react to changing market conditions as they do not own or operate fixed transportation assets, they could purchase less space from their carrier partners. Forwarders are flexible and able to offer a wide range of services because of their broad network of carriers and agents. Networking is very important to access and share information, learn from the experiences of others, enter new markets, or pool resources together to gain greater force and power in their networks. Networking will enable forwarders to offer worldwide coverage of international forwarding services and local knowledge which offers clients the opportunity to outsource the complete export or import services with one company.

Kokkinis, Mihiotis, and Pappis (2006) researched the criteria on which clients choose their freight forwarder and found the most important criteria to be reliability, personal treatment, safety of transport, total cost, flexibility to possible changes of requirements, and experience/time of operation. Markides and Holweg (2006) also found that customer service ranks as the most important consideration in acquiring competitive advantage in the industry. The second most important is cost leadership, then range of services and last niche expertise. This is comparable to the conclusion from the literature review, clients value personal attention and customised services and want to be able to rely and trust their freight forwarder with their cargo.

Murphy and Daley (2001) claimed that forwarders should develop new techniques to add customer value, "clients are becoming more knowledgeable about international trade and are demanding more than traditional services". They address a number of different value-added techniques as developing distinctive competencies in terms of geography and specific commodities, merging with third-party logistics providers, or increasing the number of services available to customers. According to Murphy and Daley (2001) it is important to develop a formal marketing planning process as there is not a lot of differentiation between different freight forwarders starting with an environmental analysis, identification of appropriate market segments, and conducting a competitive analysis. Markides and Holweg (2006) suggest diversifying into a logistics provider in order to achieve

competitive advantage. They emphasize the importance of information technology by example through the implementation of a track and trace control software and online presence, strategic partnerships within the supply chain through building strong relationships with carriers, agents, partners and customers, and to provide an extended geographical coverage, service offerings and value-added services.

3.2 Organisation

CTC Worldwide Logistics is a freight forwarding company offering import and export expertise, the contacts for custom clearance and delivery, and personal service to assist suppliers and consignees to move their cargo in an efficient and effective manner to and from Cape Town, South Africa by sea and air.

Sea freight is moved from and to the port of Cape Town which is strategically placed on the main sea route around the African continent. The port offers a full range of services and is able to handle all types of general break-bulk and containerised cargo via its specialised terminals. Air freight leaves and arrives at Cape Town international airport, an international hub to the rest of the world and Africa's third largest airport.



Figure 2 Cape Town Port and Airport

CTC Worldwide Logistics was started in 2005 by managing director Hans Duncker and general manager Luigi Maree under the motto of providing 'minimum hassle and a personal touch with a global reach'. "Our customers want minimum problems with maximum expertise at competitive prices, which we are able to achieve as we run a tight ship with a small, dedicated end experienced team," says managing director Hans Duncker.

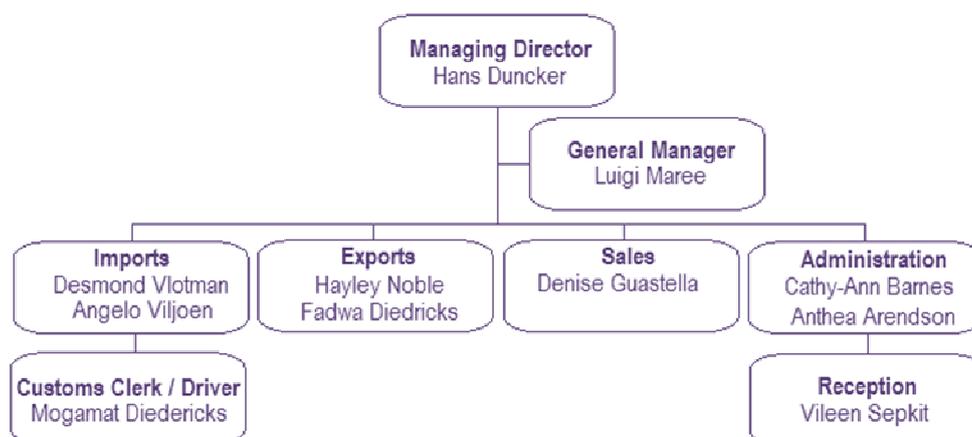


Figure 3 Organisational Chart

The organisational chart in figure 3 shows the structure of the company and the different departments. The small scale enables CTC Worldwide Logistics staff to provide personal service

which is valued by the clients. Table 1 below gives an overview of services provided by International freight forwarders. CTC Worldwide Logistics is flexible and able to offer most of the services clients request from them.

Table 1 – Freight Forwarding Services	
International import and export freight forwarding including sea, air, road, and rail	Customs clearing documentation for import and export
Export and import permits and certification documentation from controlling authority	Customs clearing through paperless EDI system for import and export
Container/vessel booking	Shipping instruction (SI) documentation
Bill of lading and Bill of entry documentation	Collect invoice and airway bill or bill of lading
Container cartage management and documentation	Payment of import and export customs duties + VAT
Tariff determinations	Land transport management by rail and road
Consolidation management	Bond and duty paid storage
Letter of credit documentation for reserve bank	Container packing/unpacking
Payment of freight charges	Distribution and couriers delivery
Order tracking and progress reporting	Time definite service from door to door
Marine insurance arrangement	Remittance of funds for payment of overseas suppliers
Evaluation of Logistics Services Providers	Project management
International Supply Chain Assessments	Auditing services

CTC Worldwide Logistics organises transportation of sea and air freight, they organise LCL (Less than Container Load), FCL (Full Container Load) cargo, and special cargo as flexi containers. LCL cargo is consolidated in warehouses before loading. Transport from and to the terminal is organised, all needed documentation is provided, and custom dues are paid. CTC Worldwide Logistics works with exporters, importers, and forwarders from all over the world as well as overseas agents.

One of the main clients includes the wine industry in the Western Cape of South Africa exporting products all over the world, the niche market of CTC Worldwide Logistics. Other clients include printing company Paarl Media on the basis of an annual tendering program, Southern Canned Products, Sonic Informed, Cornucopia Communications, and Kubu Textiles. CTC Worldwide Logistics keeps informal contractual relationships with their clients, no official contracts or partnerships have been established. In order to keep good relationships with clients and identify demand and requirements, CTC Worldwide Logistics keeps in close contact with its clients and organises frequent meetings.

3.3 Quality Management

As customer value and service is essential in the industry, it is important for CTC Worldwide Logistics to be aware of current perceived levels of satisfaction and possibilities to improve.

Service Quality Survey

Eighty of CTC Worldwide Logistics' clients have been emailed with the request to fill in an online survey on the service level provided by CTC Worldwide Logistics, twelve surveys were completed.

The complete results of the survey can be found in Appendix 1. Most of the respondents answered that the reason for choosing CTC Worldwide Logistics is price consideration and personal attention.

Three clients answered that CTC Worldwide Logistics does not offer all services they expect from a forwarding company as by example warehousing logistics and representation in Johannesburg and Durban.

Eight respondents do notice some differences between CTC Worldwide Logistics and similar companies. "Welcoming, extremely friendly and goes the extra mile", "Personal attention, advise and service much better than others we have used", "Hayley is always prepared to assist with a problem, to follow up, send you the required info that you need when shipping an order for overseas", "Better prices, and personal service as other companies are so big they lose personal service".

Positive reactions about the service level by CTC Worldwide Logistics include "Good service", "They always give us the service we require and go the extra mile", "friendliness and helpfulness", "Their one on one policy and quick response times to information requests", "Efficiency and professionalism", "The personal touch and communication", "Personal relationship to individuals of the company".

Less positive reactions include "When quotes are needed for airfreight, time frame for feedback is a bit long, CTC could work on being more prompt", "Maybe sometimes a bit slow with info, but understandable that they also need to wait for answers from other co-loading parties", "Long time to deliver quotes for services", "Lack of representation at other major SA ports", and "The website does not enable us to do tracking ourselves like we currently can do with competitors' websites".

Reactions on what the clients would like to see improved in the services CTC Worldwide Logistics offers are "Quicker turn around on quoting", "A website where I can do my own tracking", and "Feedback on the status of a shipment without having to phone".

The respondents seem to be happy with the level of customised and personal service but two respondents think CTC could improve the updating process on progress of orders and shipments. Additional comments from the respondents include; "A small percentage of times I am not kept informed of the status or progress of the shipments", and "Even if CTC has negative feedback on a shipment they should advise the client promptly. This does happen, but not often".

Overall the result of the service quality survey seems to be positive on the level of personalised service and helpfulness. The outcome is not representative for the complete client base but does offer some helpful feedback as by example the time of delivering quotes and the request for an accessible track/trace system. As most clients seem to have chosen CTC Worldwide Logistics on the base of price consideration and personal attention it is important for the company to keep up the price advantage and level of personal service.

SWOT Analysis

CTC Worldwide Logistics' strengths include the flexible and personalised services by the experienced and friendly staff that is in close contact with clients and logistics providers. The team assists each other when necessary which is made possible because of the informal flat organisational structure. CTC Worldwide Logistics works with agents abroad and has an international network of clients and suppliers.

The Black Economic Empowerment (BEE) is a South African policy with the purpose to increase the number of black people that manage, own and control the country's economy and as a result, to reduce income inequalities and to contribute to the South African economy. Companies have to apply the codes if they want to do business with any government enterprise or organ of state - that is, to tender for business, apply for licences and concessions, enter into public-private partnerships, or buy state-owned assets. CTC Worldwide Logistics is BEE certified and is therefore able to tender to public companies.

South Africa has a free trade agreement with Europe. For the export CTC Worldwide Logistics is able to assist its clients to use the EUR1 form for international commodity traffic with Europe in order to apply to cheaper rates of duty. Exporters need to be registered and certified in order for the forwarder to apply for the duty free rates.

One of CTC Worldwide Logistics' weaknesses is that they do not offer an accessible track and trace system for their clients. Clients often have to call in themselves in order to check the status of their shipment. Most larger freight forwarding companies do offer this service, but CTC Worldwide Logistics has limited financial resources which also prevents them from taking on large clients. Large clients often request complete integrated logistics solutions but CTC Worldwide Logistics does not own all necessary resources as by example warehouses and fleet.

Fourth- party logistics providers are dependent on the services provided by third- party logistics providers and therefore dependent on the level of services by these providers and the amount of space on the ships. As a freight forwarder CTC often has to wait for the shipping lines and therefore delay their response to the client as well.

Opportunities in the logistics provider industry include the constant introduction of new technologies as by example the track and trace systems accessible online for clients. It is also possible for freight forwarders to organise customs and payments online.

Because of international anti apartheid protests many countries took trade and financial sanctions on South Africa, and most foreign investment was withdrawn from South Africa. South Africa's ability to trade was very limited until in 1990 President de Klerk released Nelson Mandela after twenty-seven years of imprisonment, opened negotiations with the ANC and scrapped most of the apartheid laws. International trade has expanded significantly and South Africa entered formal trade relationships with various countries through treaties, trade agreements, and memberships in international trade institutions. Foreign investment is still not confident because of the unstable South African political system and negative international media on safety and political stability. However, South Africa is developing and the international market starts to realize the investment opportunities with South Africa.

Business Monitor International (BMI) published the report 'Emerging Markets Take Centre Stage: A Dramatic Shift in Purchasing Power', about the relative value of opportunities present in emerging markets around the world. BMI found that spending power in China, India and Russia will treble by 2018, with Brazil not far behind. CEO of Crystal Group Andrew Lo says that while China will continue as the dominant exporter for the next ten years, "it will be looking over its shoulder at the likes of Vietnam, Indonesia and Bangladesh, the most favourable country at this point is definitely Bangladesh".

Emerging wine markets include Eastern Europe and India. SAWIS (South Africa Wine Industry Information & Systems) publishes production and market estimates for the South African wine industry. SAWIS estimates that the export of natural wine will annually increase by an average of rate of 6.7% from 2008 up until 2012. SAWIS' publication 'South African Wine Industry Statistics 2009' shows the main export countries United Kingdom, Germany, the Netherlands and Sweden. Major markets to record strong growth in packaged South African wine volumes last year were Sweden (18%) and Canada (11%). Japan, Nigeria, Angola and China are increasing markets as well.

Threats in the industry include the competition with better prices, global set up, and financial resources. Recession, further down turn in world economies, natural disasters, unstable political situations, and strikes could also influence the industry. Recent strikes in the South African ports have been delaying shipments and clients all over the world will have to wait for their orders.

Strengths	Weaknesses
<ul style="list-style-type: none"> - Experienced and friendly staff assisting each other when necessary - Personal contact with clients - Good prices - Flexible and personalised services - Agency agreements abroad - Team has worked together even before start of CTC - Opportunities for individual growth within the company - High level of staff motivation - Open door policy: flat organisational structure - International communication - Good reputation with suppliers - BEE certified 	<ul style="list-style-type: none"> - Limited financial resources prevents taking on large clients - Depending on third- party logistics providers and space on ships - Working with agents around the world instead of own offices - Not a lot of information on the website, there is no accessible track/trace system, clients have to contact CTC about progress of shipping
Opportunities	Threats
<ul style="list-style-type: none"> - New technologies - BEE empowerment offers opportunity to tender for public companies as clients - Western Cape focus on renewable energy, opportunity to import equipment - Preferred logistics provider for German companies involved in renewable energy - Oversees agents network - Trade agreements, better rates - World is beginning to trust SA - Global reach - New markets as China, Russia, Eastern Europe - International wine market is growing 	<ul style="list-style-type: none"> - Competitors offering better prices, solutions, services, conditions - Competitors with better global set up and financial resources - Recession - Poor service from third- party logistics providers - Further down turn in world economies - Natural disaster as volcano eruption and ash cloud in Iceland - Constant changing rates from suppliers/providers - Quotation from opposition shipping agents - Political insecure and negative media threat to foreign investment - Strikes - Usually not using contracts with clients and providers, free to change

3.4 Competitor Analysis

In order to be aware of possibilities and learn from similar business' experiences and skills, comparable international freight forwarders in Cape Town have been contacted. Eight companies have shared their industry experiences, challenges and business strategy.

The logistics services providers offer a wide range of services, they will all adapt to the customer needs and requests. The logistics services providers try their best to make everything work for the customer, they can organise the complete supply chain services from the manufacturing plant to final delivery by using their range of international based contacts and agents to create a solution for their customers. All the contacted logistics services providers claim that they will go the extra mile to keep their customers satisfied.

Cilliers and Nagel (1994) explain that the concept of integrated logistics is fairly new to South Africa and that the focus is mostly on functional logistics activities, there are opportunities for logistics services providers to differentiate themselves by offering value added services to satisfy clients and develop their business from transactions to relationships. Nowadays the logistics services providers realize the importance of the personalised services and the personal contacts, trust and reliability. Companies start seeing their logistics services provider as an extension to their business, when the level of trust is established they trust them with complete parts of their supply chain.

Neil Robertson of Robertson Freight explained their business with the oil and mining industry in Western Africa. These businesses often require spare parts or deliveries as soon as possible as it could delay production which will involve significant costs. Robertson Freight will do their outmost best to deliver the part as soon as possible and the company trusts Robertson Freight with this service as they have realized they can rely on them. The mining company will phone Robertson Freight to deliver a certain part from by example Houston, Texas, as soon as possible, and Robertson freight will use their international based contacts to deliver the part by the next day. Airplanes, trucks, delivery vans, speedboats, or helicopters; all necessary modes will be applied in order to provide quick delivery. Costs are not important in these deals as the costs for not operating the plants are normally considerably higher. By keeping business and rates in line customers know what they can expect and will only have to call in to place the order, they trust their logistics provider with the complete process of delivering the cargo in time. The logistics services provider will try everything to make it work for their customer. It is important for the logistics provider to be flexible and find ways around any obstacles and keep close relationships with their clients, if 1 out of 100 shipments goes wrong, the customer will be disappointed, even though 99 out of 100 shipments were good.

Sum and Teo (2001) studied the strategic side of logistics management and found that strategic companies compete on being customer-centric, they use product/service quality and design as the major basis to gain customer loyalty. Sum and Teo (2001) found low cost not to be a major business objective, the focus is on meeting customer specifications, meeting customer due dates, offering good product/service design and performance, offering services at low cost, and offering short delivery lead times. Wang (2006) adds some logistics business objectives as providing reliable and consistent service, providing a wide range of services, being flexible in accommodating changes, maximizing value-added to products of clients, introducing new services rapidly, having modern information systems, having modern automation equipments, or improving employee's service

attitude. Maintaining flexibility and responsiveness is important since it can be used to generate higher customer satisfaction, the key business objective. According to Sum and Teo (2001), many companies have started implementing customer relationship management (CRM) systems to seek the voice of the customers and design new products and services to meet an exceed customer expectations. Berry & Donaldson have introduced customer teams to monitor the processes and keep close relationships with their customers. The company sends out reports to their customers every Friday with an overview of the shipments and progress. Clients can also access an online track and trace system however the personal contact is still valued as not all companies know how to work with the new technology systems and prefer to talk with someone directly about the location or progress of their cargo. Berry & Donaldson believes they need to keep up with the technology developments and give their customers options but will always be in close personal contact as well.

None of the benchmarked companies have an official business strategy in place. Persson and Virum (2001) also note that there is little tradition for strategic thinking, the industry has an operational focus. The industry is not strategically organised, no formal contract and evaluation processes are in place but mostly trials and personal informal relationships. According to FIATA (Freight Forwarders Associations), in most trading countries freight forwarders use Standard Trading Conditions (STC) as the basis of their contract with the customer. They are an essential authority to support the forwarder and clarify the role and responsibilities of the parties to the contract. Custom clearing certificates need to be signed but it is not common to have formal contracts as customers want to be flexible and if they are not satisfied with service levels they can easily switch to another provider. Close relationships and working experience for years together are more common in the industry. Service level agreements are not used formally but often used when introducing a new third- party in order to let them know the way of working. Evaluation or appraisal of third- parties is done informally as well, if the experience with suppliers is not satisfactory, a warning will be given or another third- party will be found.

According to Persson and Virum (2001), the changes in customer needs are forcing the logistics service providers to address several new strategic issues; "They have to develop strategies to improve performance and profitability in their existing business; and, they have to develop strategies for further growth, making choices related to their products, markets and market segments, resources, and relationships and alliances." Robertson Freight has decided to selectively choose their client base and become more productive with these clients. They have reduced their client base and only remain in business with the 'good' clients with who they establish close relationships and where there is trust and understanding. Some of the logistics providers are still focusing on expanding their client base but more and more companies start to realize the importance of close relationships and the value of their ability to provide personal service.

The logistics services provider industry is challenging as it is very competitive. The logistics services providers compete on service levels and specialize in a certain niche markets as by example the wine export, perishables, or the mining industry. Even if there are providers offering cheaper services, customers value the personal relationships. Meihuizen Freight invites customers over to their company to explain their way of working, and sends staff over to the clients in order for them to completely understand the business and processes. Kerrigan Berry from Berry & Donaldson explains that the experience of staff is very important in the logistics services provider industry. The staff has the knowledge and contacts in the industry, they recognize the needs of clients, and know what tariff

codes they should apply. The logistics services provider companies regularly send their staff to take courses at by example the TETA, the Training of staff Transport Education and Training Authority. This way they do not only work on an operational level but can understand the industry better and not only provide a better service but share ideas and contribute to the business.

80% of the larger freight forwarders are member of SAAFF, the South African Association of Freight Forwarders. SAAFF has a total amount of about 250 members across South Africa and enables its members to network, share information, and join forces to approach the government with improvement suggestions or requests. Also the smaller freight forwarding companies in Cape Town value their membership as they can get feedback and information about the industry news and background information on suppliers, as by example information on suppliers with bad credit will be shared. Networking is mostly done through relationships with agents abroad. A wide range of international agents enables the freight forwarders to manage transportation all over the world and make use of local expertise and contacts.

4. Analysis & Conclusion

This chapter compares the market research including the case company analysis with the conclusions from the literature review. Overall conclusions and findings on how the case company could develop and respond to trends and developments, the overall opportunities for the logistics services provider industry, and overall conclusions and findings from the literature review and case company analysis will be presented in this part.

Following the main research question and sub questions will be summarised.

4.1 What services do logistics services providers provide?

Logistics services providers provide a variety of services including asset based services as warehousing and transportation, as well as management of logistics services. Companies outsource their logistics activities to external companies in order to benefit from expertise, cost savings, and time savings. Some companies decide to only outsource a few basic functions from second- party logistics providers, others decide to outsource more integrated services and value added services to third- party logistics providers, and nowadays companies decide to outsource the management and complete logistics processes to fourth- party logistics providers. Logistics services providers offer their services according to the availability of their resources, fourth- party logistics providers commonly do not own assets and mostly provide management and consulting services. These providers are flexible and provide personalised customised services according to their clients' needs. They make use of the services of third- party logistics providers and manage the different contracts on behalf of their client.

4.2 What other services could logistics services providers provide?

The possibility of changing the amount and/or type of services is not applicable to the industry since logistics services providers are flexible and able to provide a wide range of services according to the need of the client. Non of the companies approached are considering changing the way or scope of services they are currently providing since they try their best to provide whatever service the client requests. Instead of the quantity of services, the industry needs to focus on the quality of the services and the relationship with their clients. The case company along with its competitors in Cape Town will try its best to provide customised solutions for its customers and create a close relationship through building trust and reliability.

The focus of the logistics services provider industry in Cape Town is customer service and building close relationships. Differentiation between companies is the focus on niche markets and the personal relationships between the logistics services provider and its client. CTC Worldwide Logistics' niche market is the wine export from the Western Cape, which they should continue to focus on because this is the market they differentiate themselves with from their competitors. Next to their niche market CTC Worldwide Logistics needs to focus on the service level with their clients and continuously trying to improve the service level and client satisfaction level. In order to be able to be flexible and provide the best and fastest services it is important for CTC Worldwide Logistics to keep and increase the amount of international relations with agents abroad. An opportunity for CTC

Worldwide Logistics includes the interest of the Western Cape in renewable energy. CTC has contacts with German companies involved which could open business and a second niche market specialization.

Speedy and efficient responses to an enquiry could give the lead on other potential suppliers. CTC Worldwide Logistics should evaluate how they are competing with their competitors and how they can strengthen their strengths and minimize their weaknesses. Clients can easily change their logistics service provider and CTC Worldwide Logistics needs to give them a reason to stay in business with them.

4.3 What are the trends and developments in the logistics services market?

Sum and Teo (2001) summarize the issues affecting future logistics management as higher customers' expectations of services and products, increased globalisation of business, increased global competition, lack of qualified logistics personnel, rapid technological advancement, increased emphasis on ISO 9000 and other quality standards, downsizing of firms, and increased environmental concerns.

Opportunities from the literature review and market analysis include developing and improving relationships with clients and third-party logistics providers, increasing global presence by expanding agent network, improving the service level, improving information technology, increasing flexibility and providing a unique solution for each client, focusing on existing customers, and acquiring expertise and contacts in new markets as China and the new wine markets in Eastern Europe.

According to Wang (2006), the areas emphasized for improving competitiveness in the next two years include improving productivity of operations, improving service quality, improving customer service, seeking new regional and global markets, reducing response time to customers' requests, increasing variety of services, reducing product/service cost, training employees, using more advanced technology, improving capacity/space utilization, increasing marketing efforts, and obtaining ISO9000 and other quality standards. Wang (2006) provides strategies to reduce competitive pressures including providing better service facilities, providing comprehensive and integrated services, investing in warehouse, logistics centres, and vehicles, building better information systems to meet customer's information request, improving asset utilization as vehicle and warehouse, training employees, improving marketing and build better company image, and enhancing company's central management.

Overall it seems that logistics services providers should take the opportunity to build close relationships with their clients by providing excellent personal services.

References

- Africk, J.M., Calkins, C.S., 1994, Does assets ownership means a better service?, *Transportation and Distribution*, Vol. 35, pp. 49 – 61.
- Aghazadeh, S., 2003, How to choose an effective third party logistics provider, *Management Research News*, Vol. 26, No. 7, pp. 50 – 58.
- Alarisku, T., Kärkkäinen, M., Holmström, J., 2003, Evaluating the Applicability of Merge-in-transit, *International Journal of Logistics*, Vol. 14, No. 2, pp. 67 – 81.
- Apte, U.M., Viswanathan, S., 2000, Effective Cross Docking for Improving Distribution Efficiencies, *International Journal of Logistics Research and Applications*, Vol. 3, No. 3, pp. 291 – 302.
- Arroyo, P., Gaytan, J., de Boer, L., 2006, A survey of third- party logistics in Mexico and a comparison with reports on Europe and USA, *International Journal of Operations and Production Management*, Vol. 26, No. 6, pp. 639 – 667.
- Bade, D.J., Mueller, J.K., 1999, New for the millennium: 4PL, *Transportation and Distribution*, Vol. 40, pp. 78 – 80.
- Ballis, A., 2006, Freight Villages: Warehouse Design and Rail Link Aspects, *Transportation Research Record*, Journal of the Transportation Research Board, Vol. 2006, pp. 27 – 33.
- Berglund, M., 1997, Third party logistics providers - towards a conceptual strategic model, *Licenciate Thesis No. 642*, Linköping University, Linköping Studies in Management and Economics, 1997.
- Berglund, M., Laarhoven, P., Sharman, G., Wandel, S., 1999, Third party logistics: is there a future?, *International Journal of Logistics Management*, Vol. 10, No. 1, pp. 59 – 70.
- Bernal, Burr, Johnsen, 2002, Competitor networks: International competitiveness through collaboration: The case of small freight forwarders in the High-Tech Forwarder Network, *International Journal of Entrepreneurial Behaviour and Research*, Vol. 8, Iss. 5, pp. 239 – 253.
- Bhatnagar, R., Millen, R., 1999, Third party logistics services: a Singapore perspective, *International Journal of Physical Distribution and Logistics Management*, Vol. 29, No. 9, pp. 569 – 587.
- Bottani, E., Rizzi, A., 2006, Fuzzy TOPSIS methodology to support outsourcing of logistics services, *Supply Chain Management International Journal*, Vol. 11, No. 4, pp. 294 – 308.
- Büyükköçkan, G., Feyzioglu, O., Ersoy, M.S., 2009, Evaluation of 4PL operating models: A decision making approach based on 2-additive Choquet integral, *International Journal Production Economics*, No. 121, pp. 112 – 120.
- Canadian Logistics Skills, 2005, Strategic Human Resources Study of the Supply Chain Industry, Final Report Fall 2005, Ontario.
- Cilliers, W.W., Nagel, P.J.A., 1994, Logistics Trends in South Africa, *International Journal of Physical Distribution and Logistics Management*, Vol. 24, No. 7, pp. 4 – 14.
- Cooper, J.C., 1993, Logistics strategies for global businesses, *International Journal of Physical Distribution and Logistics Management*, Vol. 23, No. 4, pp. 12 – 23.
- Craig, T., 2001, 4PL versus 3PL – A business process outsourcing option for international supply chain management, *World Wide Shipping*, December/January 2001.
- Crainic, T.G., Laporte, G., 2004, *Fleet Management and Logistics*, Kluwer Academic Publishers, USA.

- Cui, L., Shong-Lee, I.S., Hertz, S., 2009, How Do Regional Third- Party Logistics Firms Innovate? A Cross-Regional Study, *Transportation Journal*, Summer 2009, pp. 44 – 50.
- Dapiran, P., Lieb, R., Millen, R. and Sohal, A., 1996, Third party logistics services usage by large Australian firms, *International Journal of Physical Distribution and Logistics Management*, Vol. 26, No. 10, pp. 36 – 45.
- Delaney, R., 1994, Contract logistics services: the promises and the pitfalls, *Cass Logistics*, June 1994, pp. 6.
- Dowlatshahi, S., 2000, Reverse logistics systems and inbound and outbound transportation systems, University of Missouri, Kansas City, USA.
- FIATA, A Guide to Logistics Agreements, Switzerland, April 2008.
- Foster, T.A., Armstrong, R., 2005, Top 25 Third-Party Logistics Providers: Bigger and Broader, *Supply Chain Brain*, May 01, 2005.
- Gattorna, J.L., 2003, *Gower handbook of supply chain management*, Gower Publishing, England.
- Gunasekarana, A., Ngaib, E.W.T., 2005, Build-to-order supply chain management: a literature review and framework for development, *Journal of Operations Management*, Vol. 23, pp. 423 – 451.
- Herrera Bernal, S.M., Burr, C., Johnsen, R.E., 2002, Competitors networks: international competitiveness through collaboration, *International Journal of Entrepreneurial Behaviour and Research*, Vol. 8, No. 5, pp.239 – 253.
- Huiskonen, J., 2001, Maintenance spare parts logistics: Special characteristics and strategic choices, *International Journal of Production Economics*, Vol. 71, pp. 125 – 133.
- Hum, S.H., 2000, A Hayes-Wheelwright framework approach for strategic management of third- party logistics service, *Integrated Manufacturing Systems*, Vol. 11, No. 2, pp 132 – 137.
- Kim, Jae-II, 1996, Logistics in Korea: current state and future directions, *International Journal of Physical Distribution and Logistics Management*, Vol. 26, No. 10, pp. 6 – 21.
- Kokkinis, G., Mihiotis, A., Pappis, C.P., 2006, Freight forwarding in Greece: Services provided and choice criteria, *Euromed Journal of Business*, Vol. 1, No. 2, pp. 64 – 81.
- Krakovics, F., Leal, J.E., Mendes, P., Santos, R.L., 2008, Defining and calibrating performance indicators of a 4PL in the chemical industry in Brazil, *International Journal Production Economics*, No. 115, pp. 502 – 514.
- La Londe, B.J., Cooper, M.C., 1988, *Partnerships in Providing Customer Service: A Third Party Perspective*, Council of Logistics Management, Oak Brook, IL.
- Langley, C.J., van Dort, E., Topp, U., Sykes, S.R., 2006, *Third- Party Logistics – Results and Findings of the 11th Annual Study*, sponsored by Georgia Institute of Technology, Capgemini, DHL, and SAP, 2006.
- Lieb, R.C., 1992, The use of third party logistics services by large American manufacturers, *Journal of Business Logistics*, Vol. 13, No. 2, pp. 29 – 42.
- Lieb, R.C., Miller, R.A. and Wassenhove, L.N.V. (1993), “Third- party logistics services: a comparison of experienced American and European manufacturers”, *International Journal of Physical Distribution and Logistics Management*, Vol. 23 No. 6, pp. 35 – 44.
- Ling Li, 2007, *Supply Chain Management, Concepts, Techniques and Practices, Enhancing Value Through Collaboration*, Old Dominion University, USA, World Scientific Publishing Co.
- Lu, H., Su, Y., 2002, An approach towards overall supply chain efficiency, Master Thesis, School of Economics and Commercial Law, Goteborg University.

- Markides, V., Holweg, M., 2006, On the diversification of international freight forwarders - A UK perspective, *International Journal of Physical Distribution and Logistics Management*, Vol. 36, No. 5, pp. 336 – 359.
- McMullan, A., 1996, Supply chain management practices in Asia Pacific today, *International Journal of Physical Distribution and Logistics Management*, Vol. 26, No.10, pp.79 – 95.
- Millen, R., Sohal, A., 1996, Current logistics practices in the Asia Pacific region, *International Journal of Physical Distribution and Logistics Management*, Vol. 26, No. 10.
- Millen, R., Sohal, A., Dapiran, P., Lieb, R., Van Wassenhove, L.N., 1997, Benchmarking Australian firms' usage of contract logistics services: A comparison with American and Western European practice, *Benchmarking for Quality Management and Technology*, Vol. 4, No. 1, pp. 34 – 46.
- Moore, K.R., 1998, Trust and Relationship Commitment in Logistics Alliances: A Buyer Perspective, *International Journal of Purchasing and Materials Management*, winter 1998, pp. 24 – 37.
- Murphy, P.R., Daley, J.M., 2001, Profiling international freight forwarders: an update, *International Journal of Physical Distribution and Logistics Management*, Vol. 31, No. 3, pp. 152 – 168.
- Persson, G., Virum, H., 2001, Growth Strategies for Logistics Service Providers: A Case Study, *The international Journal of Logistics Management*, Vol. 12, No. 1, pp. 53- 64.
- Rabinovich, E., Windle, R., Dresner, M., Corsi, T., 1999, Outsourcing of integrated logistics functions - An examination of industry practices, *International Journal of Physical Distribution and Logistics Management*, Vol. 29, No. 6, pp. 353 – 374.
- Richardson, H.L. (1990), Explore outsourcing, *Transportation and Distribution*, pp.17 – 20.
- Sahay, B.S., Mohan, R., 2006, 3PL practices: an Indian perspective, *International Journal of Physical Distribution and Logistics Management*, Vol. 36, No. 9, pp. 666 – 689.
- Schwartz, E., 2003, The Logistics Handoff, *Infoworld.com*, October 2003, pp. 53 – 58.
- Sheffi, Y., 1990, Third party logistics: present and future prospects, *Journal of Business Logistics*, Vol. 11, No. 2, pp. 27 – 39.
- Sink, H.L., Langley, C.J., Gibson, B.J., 1996, Buyer observations of the US third- party logistics market, *International Journal of Physical Distribution and Logistics Management*, Vol. 26, No. 3, pp. 38 – 46.
- Sohail, M.S., Sohal, A.S., 2002, The use of third party logistics services: a Malaysian perspective, *Technovation* 23, 2003, pp. 401 – 408.
- Sohail, M.S., Al-Abdali, O.S., 2005, The usage of third party logistics in Saudi Arabia: Current position and future prospects, *International Journal of Physical Distribution and Logistics Management*, Vol. 35, No. 9, pp. 637 – 653.
- Strategic HR Study of the Supply Chain Industry, Canadian Logistics Skill Committee and Deloitte Consulting, July 2005.
- Sum, C., Teo, C., 2001, Strategic logistics management in Singapore, *International Journal of Operations and Production Management*, Vol. 21, No. 9, pp. 1239 – 1260.
- Szymankiewicz, J., 1994, Contracting Out or Selling Out? Survey into the Current Issues Concerning the Outsourcing of Distribution, *Logistics Information Management*, Vol. 7, No. 1, pp. 28 – 35.
- United Nations Trade and Development Board, 1994, Guidelines on key industrys for trade efficiency: customs, Customs Co-operation Council.

- Van Laarhoven, P., Berglund, M., Peters, M., 2000, Third-party logistics in Europe – Five years later, *International Journal of Physical Distribution and Logistics Management*, Vol. 30, No. 5, pp. 425 – 442.
- Vasiliauskas, A.V., Jakubauskas, G., 2007, Principle and Benefits of third- party logistics approach when managing logistics supply chain, *Transport Journal*, Vol. 22, No. 2, pp. 68 – 72.
- Wang, Q., 2006, Strategic postures of third- party logistics providers in mainland China, *International Journal of Physical Distribution and Logistics Management*, Vol. 36, No. 10, pp. 793 – 819.
- Wallenburg, C.M., 2009, Innovation in logistics outsourcing relationships: proactive improvement by logistics service providers as a driver of customer loyalty, *Journal of Supply Chain Management*, Vol. 45, No. 2, pp. 75 – 93.
- Wild, T., 2004, *Best Practice in Inventory Management*, Elsevier Science Ltd, Great Britain.
- Wilding, R., Juriado, R., 2004, Customer perceptions on logistics outsourcing in the European consumer goods industry, *International Journal of Physical Distribution and Logistics Management*, Vol. 34, No. 8, pp. 628 – 644.
- Zhou, G., Min, H., Xu, C., Cao, Z., 2008, Evaluating the comparative efficiency of Chinese third- party logistics providers using data envelopment analysis, *International Journal of Physical Distribution and Logistics Management*, Vol. 38, No. 4, pp. 262 – 279.

Appendix 1

CTC Worldwide Logistics Service Quality Survey

Eighty emails have been sent out to CTC Worldwide Logistics' clients with the request to fill in an online survey on the service level provided by CTC Worldwide Logistics, twelve surveys were completed and returned.

1. How long do you have experience with the services provided by CTC?

		Percentage	Responses
< 1 year		33.3	4
> 1 year		66.7	8
Total responses:			12

2. What services do you use from CTC?

		Percentage	Responses
Sea Freight Export forwarding		19.4	6
Air Freight Export forwarding		9.7	3
Sea Freight Import forwarding		22.6	7
Air Freight Import forwarding		12.9	4
Order tracking and progress reporting		6.5	2
Warehousing		9.7	3
Consolidation management		3.2	1
Insurance services		0.0	0
National distribution		9.7	3
Supply chain analysis and evaluation		0.0	0
Other		6.5	2

Other: - Clearing and delivery for both sea freight import and export
- Customs clearing, import and export

3. Why did you choose CTC as your logistics forwarder?

		Percentage	Responses
Price consideration		43.8	7
Personal attention		37.5	6
Small scale		0.0	0
Agency agreement		6.3	1
Other		12.5	2

Other: - Preferred by my client. And provided best quotes for certain services.
- Preferred by client

4. Does CTC offer all services you expect from a freight forwarding company?

		Percentage	Responses
Yes		75.0%	9
No		25.0%	3
Total responses:			12

If no: What services do you miss at CTC?

- They could not assist with my queries related to documentation required for supplying wine to cruise ships in CT port.
- Warehousing logistics. Also, representation in Johannesburg and Durban.

5. Do you notice any differences between CTC and similar companies?

		Percentage	Responses
Yes		66.7%	8
No		33.3%	4
Total responses:			12

If yes: how do you find CTC different from similar companies?

- CTC is welcoming, extremely friendly and goes the extra mile
- Personal attention, advice and service much better than others we have used. Also always available
- They are always prepared (Hayley) to assist with a problem, to follow up, send you the required info that you need when shipping an order for overseas.
- Better prices. I work mostly with Hayley and feel that she knows who I am when I call. Certain other companies are so big they lose personal service.
- More information received when requested also quicker response on requests
- CTC level of service is poor.
- Communicates more with us regards to our shipment.

6. What do you find positive about CTC?

- Good service
- CTC has a friendly nature and this makes it easier to communicate problem/urgent matters when needed to
- They always give us the service we require (and demand) and go the extra mile
- Friendliness and helpfulness
- I find Hayley very effective and calm under pressure and when we make mistakes, she does not blame us, but solves the problem without getting upset. Prices also good.
- Their one on one policy and quick response times to information requests
- Efficiency and professionalism
- The personal touch and communication once again.
- Personal relationship to individuals of the company.
- Staff

7. What do you find negative about CTC?

- When quotes are needed for airfreight, time frame for feedback is bit long and CTC logistics department must work on being more prompt
- hmmm difficult to say maybe sometimes a bit slow with info but also understands that they also need to wait for answers from other co-loading parties
- Take very long to deliver quotes for services.
- Nothing yet
- Nothing
- Poor response times. Poor quality of service. Lack of industry knowledge. Lack of representation at other major SA ports.
- Price
- Website, does the website enable us to do tracking ourselves like we currently can do with UTI's website

8. What would you like to see improved in the services CTC offers?

- Prompt response only when quotes are requested
- More sufficient people like Hayley Noble, they had someone Suzanne but she left
- Quicker turn around on quoting.
- A website that I can do my own tracking
- Feedback on the status of a shipment without me having to phone
- Website

9.

a: CTC is flexible and able to offer customised and personal service:



b: CTC keeps me updated on progress of my orders:



c: CTC is never too busy to respond to my requests:



d: CTC is always available and reachable if I have a question or request:

		Percentage	Responses
True		100.0%	12
False		0.0%	0
		Total responses:	12

e: CTC has the knowledge to answer my questions:

		Percentage	Responses
True		91.7%	11
False		8.3%	1
		Total responses:	12

f: CTC provides prompt service:

		Percentage	Responses
True		75.0%	9
False		25.0%	3
		Total responses:	12

g: CTC handles my complaints constructively:

		Percentage	Responses
True		91.7%	11
False		8.3%	1
		Total responses:	12

h: CTC staff is always polite and courteous with me:

		Percentage	Responses
True		91.7%	11
False		8.3%	1
		Total responses:	12

Comments:

- Where stated 'False' above, needs improvement
- We have only been using CTC for a short while. I hope their service level remains constant
- Although all the above is true in my opinion there is a small % of times when I am not kept informed of the status or progress of the shipments.

10. Critique, feedback, and/or suggestions on services provided by CTC Worldwide Logistics:

- Even if CTC has negative feedback on a shipment they should advise the client promptly. This does happen, but not often.