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Case Study:

Fourth Party Logistics (4PL): It's Impact And Benefits to End Customers

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SCHOOL OF MANAGEMENT

DECLARATION

I hereby declare that this project is based on my original work except for quotations, citations & references which have been duly acknowledged. I also declare that it has not been previously, or concurrently, submitted for any other degree at USM or any other higher learning institution.

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DATE: 24 OCTOBER 2011

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ABSTRAK

Di era perniagan meluas ini, konsep Logistik Parti Keempat mempunyai kepentingan tersendiri. Ia dilihat sebagai progressi terhadap pemberi Logistik Parti Ketiga pada masa kini yang memberikan servis korporat antarabangsa di seluruh dunia. Sebagai firma bukan aset, pemberi Logistik Parti Keempat boleh memberikan penyelesaian yang mantap kepada pelanggan, terutamanya disebabkan kebolehannya untuk memberikan integrasi rantai bekalan. Ini seterusnya membolehkan pelanggan memfokus sepenuhnya terhadap keupayaan teras perniagaannya, tanpa keperluan untuk mengalih perhatian terhadap hal-hal logistik dan gudang yang timbul. Kajian kes ini adalah untuk meneroka bagaimana konsep Logistik Parti Keempat boleh memberi manfaat kepada pelanggan dan rakan niaga yang berpotensi. Kunci kejayaan konsep ini ialah keupayaan untuk membolehkan pelanggan menumpukan perhatian terhadap apa yang mereka boleh lakukan paling baik, dengan memberikan mereka platfom sistem informasi yang menggabungkan semua aspek penting integrasi rantai bekalan untuk aliran operasi yang lancar. Dengan ini, konsep Logistik Parti Keempat dapat memanfaat pelanggan peniaga untuk mencapai tahap yang lebih tinggi.

ABSTRACT

In today's borderless business world, the Fourth Party Logistics concept is a sound one. It is seen as a natural progression from the current Third Party Logistics providers which service multinational corporations around the globe. As firms which have little or no physical assets, Fourth Party Logistics providers can provide unparalleled solutions to their clients, primarily due to their ability of being able to provide the ultimate supply chain integration. This in turn leaves the client corporations to fully focus on their core business capabilities, without needing to divert attention to the logistics & warehousing concerns which exist. This case study aims to explore how this concept of Fourth Party Logistics could be a beneficial one to potential clients & business partners. The key to the success of this concept is to enable clients to concentrate on what they do best, by providing an information system platform which harnesses all the key aspects of the integrated supply chain for a smooth operational flow. Hence, the Fourth Party Logistics concept can indeed take their customers' businesses to the next level.

CHAPTER 1

1.0 INTRODUCTION

Over the last few decades, the role of supply chain management has widely been recognized as an extremely important aspect of the overall business strategy. Due to the increasingly complex nature of logistics management, many companies have begun to outsource important supply chain related activities to consultants who take a bird‟s-eye view of the entire supply chain and provide management with a holistic master plan for the logistics of the operation. These supply chain services companies, referred to as 4th Party Logistics Operators (4PLs) by Accenture, take over a wide range of supply chain activities on behalf of their customers – allowing the client to focus their attention on core capabilities, for example, developing and marketing its brand.

The 4PL industry has been extremely varied in the types of services it provides on behalf of its clients. At one end 4PLs manage conventional freight movers involved in transportation of shipments from one location to another. Generally, these services are restricted within a geographical area and use limited modes of transportation.

At the other end 4PLs manage 3PLs that are capable of executing complex end-to-end supply chain projects involving multiple countries and multiple modes of transport. 4PLs may or may not own their own transporters (air, land, rail, ocean) and warehouses. Accordingly, they are classified as asset based and non-asset based 4PLs and 3PLs. In other words, logistics management companies that own limited assets (or none) are classified as 4PLs. Those with large asset bases are classified as 3PLs.

1.1 FOURTH PARTY LOGISTICS (4PL)

What is fourth party logistics (4PL)? A fourth party logistics provider delivers a total supply chain solution to its client by offering a unique business process integration expertise (information technology, overall supply chain management etc), coordinating and managing the resources, capabilities, infrastructure, and technology of complementary (3PL) service providers. It brings a value added dimension to the supply chain which is normally not able to be provided by the 3PL service providers.

A standard 4PL supply chain solution involves four distinct steps:

Step I: Reinvention

At this level, the overall business strategy is aligned with supply chain strategy to reengineer the supply of the participants.

Step II: Transformation

Here the focus is on coordinating specific supply chain functions such as sales and operations planning, distribution management, procurement strategy, customer support and supply chain technology, with the aid of process and organizational changes, T&D, information technology, etc. as applicable.

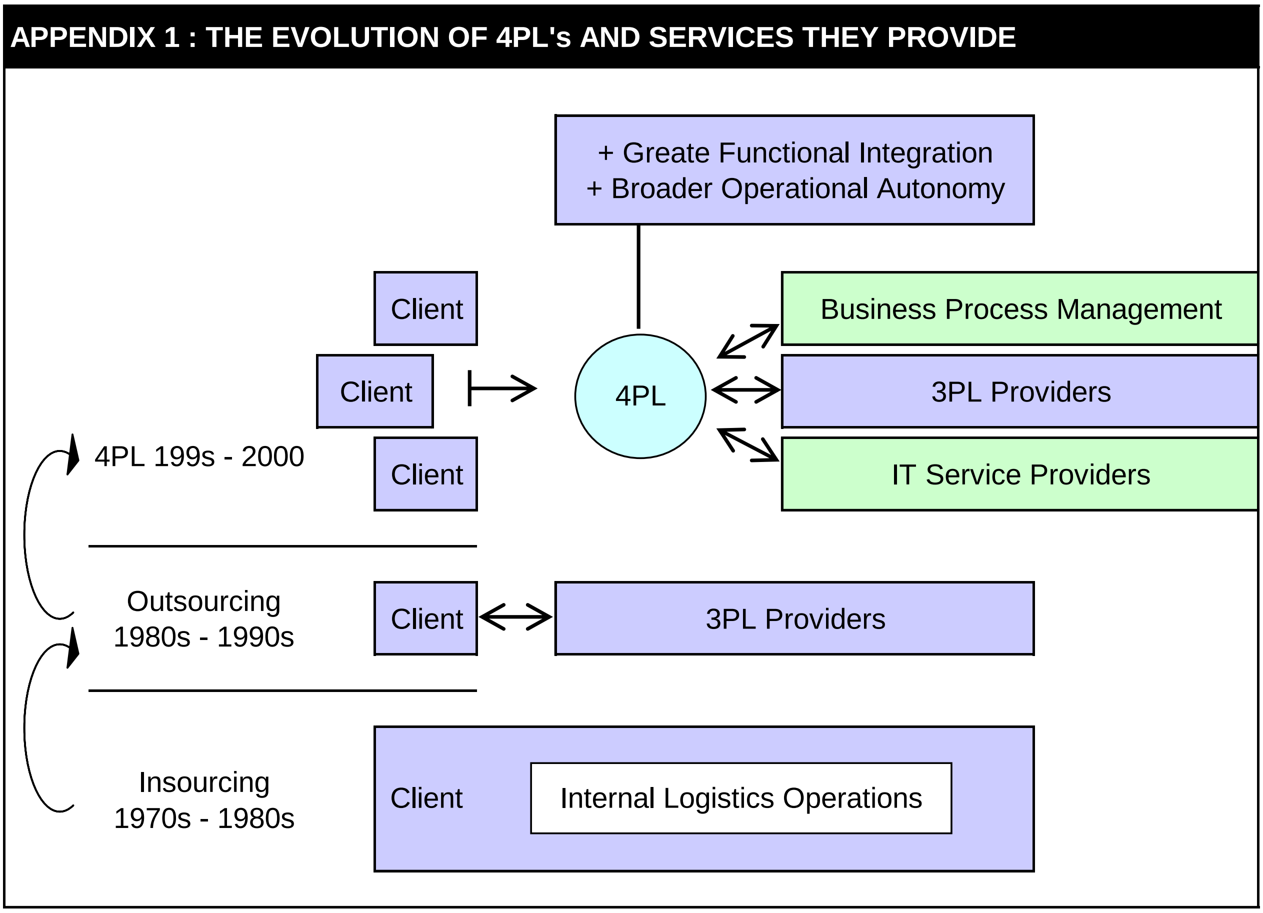
Step III: Implementation

The implementation is done on the basis of recommendations made at the earlier two levels and the transition is put across to the 4PL delivery team, taking special care to consider the dimension of human resources and organizational change.

Step IV: Execution

A 4PL provider‟s scope of responsibility also includes operational responsibility for numerous supply chain functions, besides the traditional transportation management and warehousing operations logistics outsourcing.

The illustration below beautifully sums up the "The evolution of 4PL‟s and services they provide". (Appendix 1) by Dow N. Bauknight and John R. Miller http://www.infochain.org/quarterly/Smr99/Fourth.html.



1.2 REASON FOR OUTSOURCING

Outsourcing is a viable option for companies. Business outsource for many and varied reasons-increase shareholder value, reduce costs, business transformation, improve operations, overcome lack of internal capabilities, keep up with competitors, gain competitive advantage, improve capabilities, increase sales, improve service, reduce inventory, increase inventory velocity and turns, mitigate capital investment, improve cash flow, turn fixed costs into variable costs and other benefits, both tangible and intangible.

It is used for almost every part of the business-mostly what a company defines as non-core functions – accounting, legal, human resources, information technology, manufacturing, sales, sourcing and logistics / supply chain management. Note, non-core versus core differs by company and industry. Non-core can be important and critical to a company, but does not define the company and set it apart from competitors. To the maximum, and if done correctly, outsourcing and business process outsourcing can be used to create a viable virtual corporation.

1.3 BUSINESS PROCESS OUTSOURCING AND 4PL

Business process outsourcing is traditional outsourcing and more. Outsourcing is often taking a set of work, tasks, responsibilities or functions and transferring them to an outside service provider. Business Processing Outsourcing (BPO) involves that and more. A BPO service provider brings 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 and 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.

Into the service vacuum created by 3PLs, the 4PL has emerged. Using a 4PL, fourth party logistics service provider, is different than the traditional 3PL. The 4PL is a BPO provider. This lead logistics provider will bring value and a reengineered approach to the customer‟s need. A 4PL is neutral and will manage the logistics process, regardless of what carriers, forwarders or warehouses are used. The 4PL can and will even manage 3PLs that a customer uses.

This new international logistics service 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 4PL will have the shipper perspective and experience in that 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.

The firm sees the relationship, not a chunk of freight. Instead the BPO provider seeks incentives and metrics to define the relationship and collaborates with each customer as to goals and outcomes. A 4PL wants to position itself as an extension of and part of its customer. This BPO provider recognizes the role of and need for information technology in managing the process.

1.4 PROBLEM STATEMENT

A 4PL, with real world experience dealing in Asia, can present a way for customers to take control of their inbound supply chains. It will provide each customer with the technology, the people and the process to manage purchase orders, suppliers and shipments in Asia. They can structure the relationship and the process in a way that best meets the requirements of the customer, rather than the customer having to accept what the outsourcing provider has to offer.

Carriers and some forwarders and 3PLs offer online portals to track shipments. Portals are nice, but they require that the shipper know the container number or bill of lading number. The shipper is trying to manage the purchase order; that is what must be traced and the status and progress known. The logistics or sourcing person does not want to flip-flop and deal with container or bill of lading numbers. Besides, dealing with containers is an after fact. It is a result of managing the order and the supplier; it is the effect, not the cause.

Portals or similar do not meet the specific needs of customers; they meet the needs of the carriers or forwards/3PLs. Carriers and forwarders focus on the shipment, the container. Filling vessels, fulfilling service contracts and revenue maximization are what carriers and forwarders look at. None of those help the customer to manage purchase orders. Now there is an unsatisfied customer need for a 4PL to meet.

Asia to the U.S. is the dominant trade lane. One of the more troublesome, complex logistics issues is the inbound supply chain from Asia. How do you manage the critical supply chain and suppliers who are thousands of miles away, in different countries and in different time zones ?

Managing this vital part of the supply chain can be frustrating and time consuming. Vendors shipping dates, expediting and changing orders, giving direction to consolidators or 3PLs as to delivery requirement are just some of the challenges dealt with. It is hardly a seamless process. It can be more of dealing with a series of fires rather than a process.

Asian suppliers often look for cheap freight rates without necessarily understanding the supply chain and order-to-delivery time demands of customers. This is a difficult situation for U.S. companies with such a critical, complex and dynamic part of their business. The time difference limits communications to emails, faxes and brief phone calls made at night by one of the two parties.

Pulling inventory, tracking purchase orders and managing distant suppliers as well as ocean carriers or freight forwarders of distant 3PLs, can be difficult at best. Emails and faxes are awkward ways to manage and to track purchase orders, to manage suppliers and to manage a vital part of the total supply chain. Delays and supply chain failures can create chaos for companies.

1.5 RESEARCH OBJECTIVE

The objective of this study is to:

1. Understand the feasibility of implementing 4PL in the Malaysian logistics industry, since most logistics service providers in Malaysia are essentially Third Party Logistics (3PL) service providers.

2. Understand the challenges faced by the Malaysian logistics industry in adopting 4PL.

3. The benefits of adopting the concept of 4PL.

1.6 SIGNIFICANCE OF STUDY

This study is significant because there is a growing demand internationally for 4PL integrated solutions providers for end customers to focus on their core businesses. It will only be a matter of time before similar demands will potentially be made of logistics companies operating in Malaysia, as a lot of headquarters of international 3PL providers are situated in Europe, the United States and other First World countries. Parent company practices & structures will eventually spill down to their regional & worldwide operations.

Thus, logistics companies in Malaysia may need to embrace the 4PL concept sooner rather than later, due to the below factors:

1. Increasing international emergence and competition from 4PL providers.

2. Customer requirements for an integrated supply chain solution rather than the traditional single service provided (air, ocean or land/rail).

This study also aims to understand the situation of the Malaysian logistics industry so that 4PL can be promoted as a viable solution in the long term. With this information, it can also be used provide recommendations to the relevant authorities to improve the infrastructure of the logistics industry in Malaysia.

1.7 SUMMARY

The 4PL has a clear advantage in controlling the total logistical process, which enables them to optimize and gain efficiency from a total holistic approach. This has also been met well in practice. In all of the studied examples the 4PLs run and/or coordinate the total logistical operation of their clients.

The long-term gain of the 4PL solutions are through continuous improvements to make the operation more efficient, which benefits clients in a high degree since of the customized client set-ups in these solutions. Many of the existing 4PL structures that were studied have come in place because of the client needed a change in their existing way of working.

The 4PL has also an advantage in focusing on industry segments and working with the “best of breed” sub contractors to support the special requirements of their clients. The 4PL is seen to be the central point of a logistics network, and it can therefore become very competitive by focusing on their “core” market.

CHAPTER 2

2.0 LITERATURE REVIEW

Outsourcing is a viable option for companies. Business outsource for many and varied reasons-increase shareholder value, reduce costs, business transformation, improve operations, overcome lack of internal capabilities, keep up with competitors, gain competitive advantage, improve capabilities, increase sales, improve service, reduce inventory, increase inventory velocity and turns, mitigate capital investment, improve cash flow, turn fixed costs into variable costs and other benefits, both tangible and intangible. To the maximum, and if done correctly, outsourcing and business process outsourcing can be used to create viable virtual corporation.

2.1 UNDERSTANDING 4PL

A fourth party logistics provider delivers a total supply chain solution to its client by coordinating and managing the resources, capabilities, infrastructure, and technology of complementary (3PL) service providers. Many of these unique services cannot be provided by the 3PL service providers alone.

4PL is emerging as a path to achieve more than the one time operating cost reductions and asset transfers of a traditional outsourcing arrangement. Through alliances between best-of-breed third party service providers, technology providers and management consultants.

4PL organizations can create unique and comprehensive supply chain solutions that cannot be achieved by any single 3PL provider. According to John Gatorna, “While outsourcing third party logistics is now an accepted business practice, Fourth Party Logistics is emerging as a breakthrough solution to modern supply chain challenges to provide maximum overall benefits to clients.”

4PL can be described as the complete outsourcing of the logistics function, including the procurement of 3PL service providers. 4PL companies are suppliers which have the expertise to manage resources, value delivery processes and technology for their clients in order to allow their clients to totally outsource their logistics management activity. The 4PLs do not compete with 3PLs as they have superior expertise in their respective fields by virtue of their investment and specialization.

In general, 4PL providers do not have their own assets for transportation or warehousing, but rather leverage those of 3PL providers, in order to identify and provide `best in class‟ services to their clients. There are many variations of the 4PL model that are practiced.

Three different models are summarized as under:

A) Lead logistics provider: The 4PL provider acts as an in house freight management company, it might or might not have a role in the selection of 3PL partners. It takes care of transport invoicing and the monitoring of the performance of the 3PLs.

B) Solution Integrator: In this variant of the model, the 4PL acts as the integrator of various 3PLS and as a single window for freight negotiations, 3PL selection and freight management on behalf of its client.

C) Industry innovator: Under this model the 4PL uses its expertise and resources to create a solution not for any single client, but for offering 4PL services to a number of clients in an industry.

3PL	4PL
• Provides logistics services to customers for a fee • Customers need to negotiate with multiple 3PL providers (land, air, ocean, rail etc) in order to ensure supply chain continuity • Generally have their own assets (warehouses, freight carriers etc)	• Provides a unique business process expertise to effectively & efficiently manage the supply chain • Provides functional intergration of all supply chain activities • Single point of contact for customers • Procures and/or manages 3PLs & their activities • Generally non asset based

Table 1: Differentiation Between 3PLs & 4PLs

2.1.1 The 4PL Concept

The 4PL concept was initially a response to problems arising between shippers and 3PLs. While shippers make ruthless, cost-based outsourcing decisions, they are dissatisfied if a 3PL fails to provide value added services. Meanwhile 3PLs, operating to these tightly closed contracts, are struggling to maintain narrowing margins let alone finding time to optimize and develop creative solutions. Competition is leaving no room for change.

Leading supply chain thinker, speaker and author John Gattorna was one of a team from Andersen Consultants (now Accenture) who jotted the initial 4PL idea on the back of a napkin in 1995. The 4PL concept was intended to replace contracts with a relationship based on collaboration and partnership between the supplier and the client.

“You can‟t tender for a 4PL in the original concept. There‟s no such thing as a 4PL provider,” Gattorna says. “A company that still has contractual relationships can‟t function like a true 4PL, because if difficulties arise, finger-pointing begins rather than an attempt to pull together.”

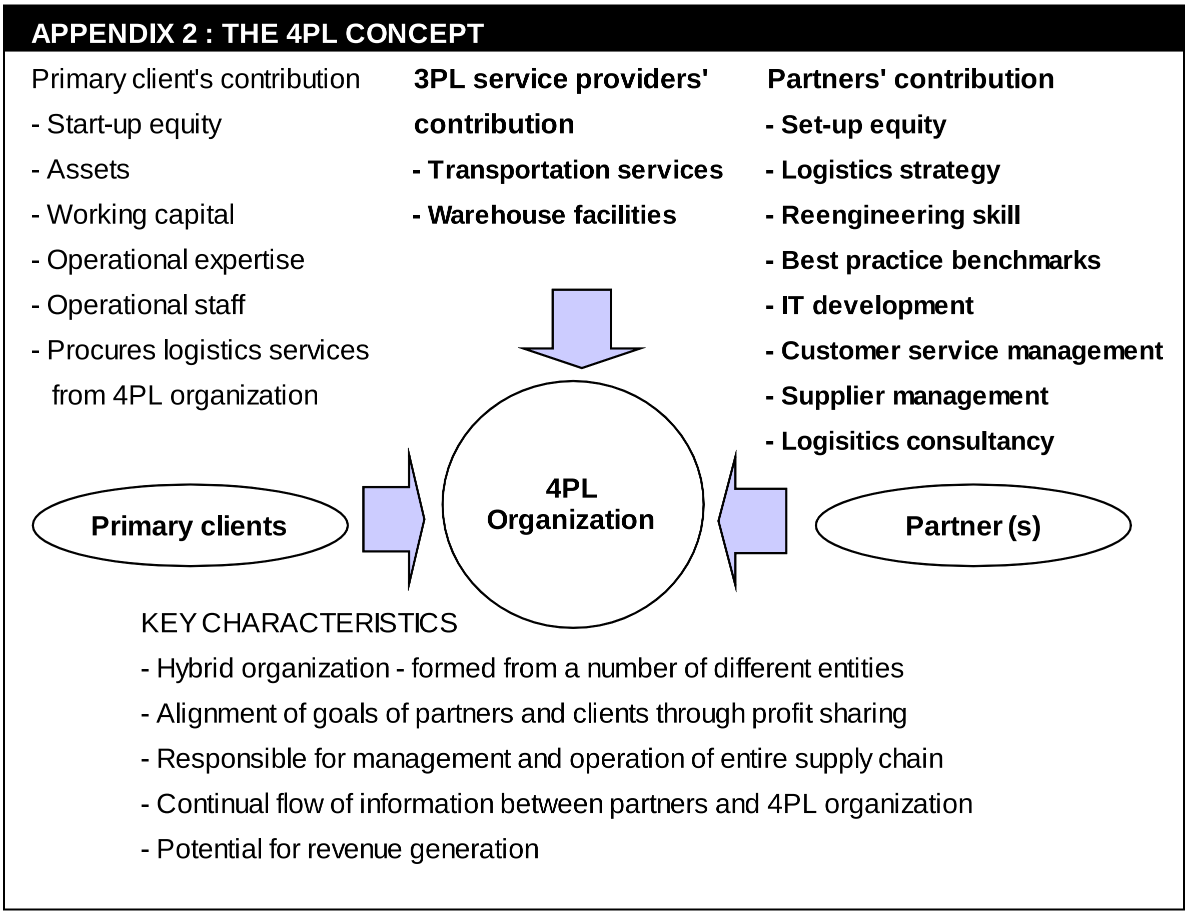
According to Gattorna the true 4PL, or Joint Services Company (JSC) as he prefers to call it, is a joint venture between a group of companies, initiated by two or more shippers as the owners and ultimately controllers of the business. The shippers might be competitors or have dissimilar markets, but they must share a compatible culture and vision.

“The 4PL is like a control tower or brain with all the information systems. The business form a consortium by joint venture where 3PLs continue to do the work such as warehousing, but the 4PL is the vehicle that managers them,” Gattorna says. “As well as 3PLs, junior equity partners might include consultants and finance companies.”

Along with equity in the vehicle, the relationship requires a “pre-nuptial” exit agreement stating how long the parties must commit before choosing to roll over or buy back capabilities to an agreed formula. Such an agreement would also contain incentives and rewards to encourage a strong working relationship. Companies place key staff with the business acumen, experience and know how into the vehicle to ensure proper functioning of the businesses. Gattorna believes that once working properly, parties would make returns on their capabilities and assets along with fees and dividends according to their equity in the management company. In an ideal form, companies would allow the vehicle to manage their assets and infrastructure until such time as they wished to buy back their capabilities.

The fundamental reasoning behind such a structure is to allow shippers to acquire instant capabilities. If capabilities are well chosen, including shared infrastructure and assets, shippers could substantially cut costs and improve the bottom line brought about by increased volumes.

"We"ve gone as far as we can go with operational excellence. Australia holds brilliant opportunities for such consortia to pool huge volume across industries and it may be the only way we can build scale to compete with the bigger companies overseas, "Gattorna says.



2.2 4PL: TURNING COST INTO A VALUE PROPOSITION

Most customers may be hesitant to outsource their core logistic activities to 4PL providers and prefer to keep the intellectual capital and control of certain supply chain components in-house. Conversely non-core activities requiring end-to-end outsourcing offer immense potential to 4PL providers.

Since the 4PL concept is in a relatively nascent stage of development, there has been ambiguity surrounding its definition, which in essence is its ability to deliver a one stop, value-added and cost-effective solution to the client.

The ultimate testimony of success will lie in the 4PL‟s competency in sustaining long-term investment and generating continuous benefits once initial cost savings are achieved. According to Frost & Sullivan‟s analysis, 95 percent of customers consider steady annual ROI integral to the supply chain agreement and, hence, 4PLs must ensure that the risk-reward scheme creates value for both parties.

Logistic service providers adopting a consultative collaborative approach to strengthen customer relationship have a distinct advantage over their competitors," notes Ms.Cabodi. "They must transition from a "cost plus" based approach to involving customers right from the start even prior to the bidding stage and chalk out realistic long-term objectives."

At the same time, complex customer requirements necessitate focused niche operations. While catering to a diverse customer group, expertise in that particular industry or sector enables 4PLs to furnish supply chain solutions tailored to meet customer-specific needs. Once they gain acceptance with an initial set of customers, they can augment their revenue and customer bases within that particular sector.

2.3 STRUCTURING AND MANAGING 4PL RELATIONSHIPS

With limited opportunities for increasing top-line growth, executives strive to reduce operational costs with outsourcing activities. Companies significantly minimize costs by outsourcing logistics to 3PL‟s. Fourth Party Logistics Providers (4PL‟s), vendors that provide enhanced logistics and supply chain services, such as 3PL management, offer an even greater opportunity for cost reduction. As 4PL‟s consolidate the logistics needs of multiple companies, 4PL‟s can leverage scale and negotiate cheaper rates with 3PL‟s. 4PLs also allow companies to reduce headcount by decreasing the number of employees required to manage logistics internally. As 4PL outsourcing continues to grow, executives realize the importance of establishing effective mechanisms for managing 4PLs. 4PL managers face challenges in maintaining control over service levels, ensuring 4PL shipment neutrality and continuous performance improvement.

2.3.1 Key Finding

The three key points below indicate that leading firms implement the following strategies to effectively manage 4PL relationships:

- **Carefully select 4PL tasks and establish systems to ensure neutral shipment allocations:** As 4PLs offer a variety of supply chain services, companies must appropriately select which activities to maintain in-house and which to outsource to 4PLs. As most 4PL"s act as Lead Logistics Providers (LLPs) that maintain their own transportation and warehouse assets, outsourcing executives are concerned about 4PL neutrality in assigning shipment loads and storage capacity. To prevent 4PL"s from favoring their own assets, executives assign 3PL quotas and assign teams to monitor 4PL shipment and storage allocations.

- **Systematically transfer supply chain activities to 4PLs to prevent service lapses:** Leading companies do not fully surrender logistics management activities and maintain involvement in 3PL selection and contract negotiation to prevent service lapses. Executives evaluate regional logistics resources and assess 4PL competencies before finally selecting supply chain activities to be migrated to the 4PL"s. Companies transfer supply chain activities in stages to ensure that the transfer receives enough support from appropriate resources. The initial transfer of activities also acts as a testing ground, providing best practices fro transferring additional activities to 4PL‟s.

- **Define expectations and create payment structures that drive 4PL performance:** Best-in-class organizations outline 4PL performance metrics and goals at the outset of the relationship by creating Service Level Agreements (SLAs). 4PL managers also develop gainsharing agreements that align 4PL incentives with the goals of the outsourcing company.

2.3.2 Clearly Outline 4PL Responsibilities

As a total supply chain management provider, most 4PL‟s offer the following services:

- **3PL management:** 3PL management includes coordinating shipments and storage to all third party providers. 4PL‟s provide online tracking tools and call center services to enable shipment visibility. 4PLs also manage 3PL payments and claims.

- **Distribution services:** Distribution services primarily include using 3PL owned assets to ship goods to customers. Some 4PL‟s also offer contract manufacturing services, such as packaging and assembling.

- **Supply chain consulting services:** 4PL‟s offer to analyze supply chain processes and information flow and redesign the network for efficiencies. Consulting services include identifying the optimal transportation modes, sourcing locations, delivery frequency and business processes. 4PL‟s also provide supply chain technology, along with system implementation and integration services.

While the types of activities outsourced to a 4PL depend on specific company needs, the most common 4PL service is 3PL management. As 3PL managers, 4PL‟s are responsible for assigning shipment loads and storage to the most efficient and lowest-cost carrier and warehouse providers. Many companies employ 4PL‟s as Lead Logistics Providers (LLP‟s), who manage 3PLs in addition to their own transportation and warehouse assets. Leading companies, such as telecommunications firm, **Nortel Networks,** have already achieved significant benefits from LLP relationships. The Company appointed Kuehne & Nagel‟s LLP services. Contracting with the 4PL allowed Nortel to avoid structural costs, gain access to specialized resources, rapidly develop and deploy the latest logistics software and technology. Acting as a single point of contact for logistics accountability, the 4PL allowed Nortel to manage logistics with more ease. The 4PL reduced Nortel‟s transportation costs by 10 percent in one year and dropped warehousing space by 35 percent.

Companies employing 4PL‟s as LLP‟s are often concerned about shipment neutrality. Without clear guidelines in place, 4PL‟s may unfairly assign shipments to their own carrier and warehouse subsidiaries. To ensure 4PL neutrality, executives implement the following practices:

- **Assign 3PL quotas:** To avoid 4PL‟s from favoring their own assets, leading companies, such as **Company BCD** an apparel and footwear manufacturer, allocate shipment quotas to each contracted carrier. The system prevents 4PL‟s from assigning shipments and storage allocations to themselves and ensures fair distribution of loads to all contracted carriers.

- **Establish a 4PL management group:** To prevent4Pl"s from assigning loads to themselves, companies, such as **Lucent Technologies** create groups responsible for monitoring 4PL neutrality. Lucent"s Supplier Management Group (SMG) compares actual 4PL shipment and storage assignment with the targeted amounts established in the contract. The group identifies any instances where the 4PL does not comply with the 3PL quota, understands the reasons behind the violation, analyzes whether shipments are assigned to benefit the 4PL, and works with the 4PL to ensure contract compliance.

2.3.3 Phase the Transfer of activities to 4PLs

Many companies are reluctant to outsource supply chain activities to 4PL"s for fear of losing control over 3PL performance, and jeopardizing delivery timeliness and customer service. Companies that continue to monitor 3PL activity after handing over 3PL management activities to 4PL"s have generated cost savings without reducing customer service levels. To maintain control over delivery performance and customer service, best-in-class companies implement the following practices:

- **Continue oversight of 3PL selection and contract negotiations:** Best-in-class companies, such as Company BCD and Lucent Technologies, maintain direct involvement in 3PL selection and contract negotiations to monitor delivery and service performance. The two companies assess 3PL capabilities and require 4PL"s to contract only with pre-approved 3PLs. Company BCD selects carriers and warehouse service providers based on costs, transit times and cycle counts. Lucent Technology chose Optum"s Trade-Stream logistics software for assigning and tracing shipments, and required 4PL"s to deploy the software prior to signing on with them.

- **Assign regional 4PL management teams:** Leading companies, such as Lucent Technologies, create regional teams responsible for managing the 4PL relationship and monitoring all 4PL activities. The regional teams create efficiencies by providing global standard practices, while at the same time allowing enough process customization to respond to regional supply chain requirements.

- **Create a phased transition plan:** A full transition of supply chain activities to 4PL"s poses risks of supply chain disruption. Lack of process development and technology readiness, as well as communication gaps may impede the success of full transition. To prevent service lapses, companies transfer activities to 4PL"s using a phased approach as outlined below. The phase transition allows the company to test readiness. Companies can then redesign processes according to lessons learned from the initial transfer.

    - **Transfer activities that align with 4PL core competencies:** To ensure smooth transition, executives first transfer activities that correspond to 4PL core competencies. Lucent Technologies evaluated 4PL capabilities and discovered that the selected 4PL‟s are best-equipped to support warehousing operations. Executives at Lucent decided to hand over warehousing activities first and take advantage of existing 4PL abilities. By transferring core activities first, the company minimizes risk of failure.

- **Transfer activities located in main logistics center:** Companies also phase transition by geography. Companies normally transfer activities located in the company‟s primary region first. The main region often is the company‟s central location for logistics expertise. By focusing on the primary region, executives leverage the company‟s best logistics resources.

General Motors (GM) aspired to enhance supply chain visibility and speed network modeling capability, aiming to achieve 100 percent delivery date reliability and reduce the 60 day cycle by tow thirds. GM‟s dedicated logistics division, GM Global Logistics, lacked technological sophistication to achieve these goals. I December 2000, GM began employing Vector, a 4PL joint venture with logistics provider, CNF. GM began the 4PL transition by handing over supply chain activities in North America. The initial transfer generated significant cost savings through inbound freight optimization and reduced finished goods transit time. Within the first nine months, the 4PL supported seven GM projects, while meeting financial and operational targets. The North American 4PL deployment set the strategic success of the 4PL transition in Europe in October 2001.

2.3.4 Create Incentives for 4PL Improvement

To boost 4PL performance level and increase cost savings, companies that outsource to 4PL"s use the following contract management tools to enhance the relationship:

- **Agree on metrics and performance tracking methodology:** To ensure that 4PL"s meet contract requirements, companies establish 4PL metrics and measure performance regularly against internal or industry standards. *Logistics managers at leading companies use metrics in the categories listed in the table below to monitor 4PL's logistic management performance.*

Organizations assess 4PL performance in the following categories:

Performance Categories	Metrics
Operational performance	- On-time pick-up - On-time delivery - Lead times - Inventory turns
Customer service	- Customer complaints - Rejection rates
Administrative quality	- On-time payment ot carriers and warehouse providers - Claims processing time
System capability	- Inventory accuracy
Costs	- Total delivered cost - Total variable cost - Margin mark-up

Table 2: 4PL Performance Metrics

Company BCD measures 4PL performance against targets established at the beginning of the relationship. The company‟s logistic managers monitor 4PL‟s timeliness in booking orders, delivery times, frequency of damage claims and error-free shipment rates. Managers also conduct customer satisfaction surveys to evaluate 4PL customer service performance.

Logistics managers hold annual, semi-annual or quarterly reviews with4PL providers to review the following activities:

- Performance evaluation against already agreed upon targets
- Reassessment of metric viability
- Development of cost or productivity improvement initiatives

- **Implement service level agreements (SLAs) to align goals:** Best-in-class companies, such as Lucent Technologies, create SLAs to document 4PL performance expectations. Developing the SLAs allows the outsourcing company and the 4PL to align goals, develop service frameworks and agree on performance metrics and targets.

- **Drive cost savings and improve performance using gainsharing agreements:** Companies, such as Lucent Technologies, implement gainsharing agreements to drive savings through shared targets aimed at mutual benefit. Lucent‟s pay-for-performance structure allows outsourcing companies to provide bonuses to 4PL‟s that meet or exceed expectation, while administering penalties to 4PL‟s that fail to meet targets.