

## Preface

The competitive environment is changing. Globalization has changed the world's economic landscape, forcing countries to reduce disparities in the competitiveness of their respective national environments.

The recent trends of vertical disintegration, global sourcing, new information technologies and increasing pressure from customers on responsiveness and reliability of logistics networks have had an effect on the way companies view their core business. Indeed, many companies now view logistics as a key component of their core business strategy, enabling them to meet the challenges of rising global networks. Global Supply Chain Management strategies have become at once challenge and an opportunity. (Baumgarten, et. al., 1999)

## Introduction

The logistics industry might never be the same again. The often rigid and military influenced business - the word logistics has its origins in military operations - is likely to be revolutionized by the new concept of fourth-party logistics (4PL).

(Mthimkhulu, 2000, p.1)

Fourth Party Logistics, is the next generation of supply chain outsourcing. Supply chain activities are information rich, complex and increasingly global. At the same time, technology and e-enabled capabilities are racing ahead. To enable a firm to capture all the benefits of supply chain collaboration and synchrony, a new generation of integration must be deployed which is currently beyond the capabilities of traditional sourcing methods.

A 4PL arrangement has the potential to provide an organization with break through supply chain performance. It is distinct from current approaches to supply chain outsourcing because it delivers measurable, sustainable value across the full breadth of the supply chain. (Bauknight, et al., 1999, p.5) evtl. nicht zitieren

mehr intro

## Third Party Logistics

Outsourcing, listed by Harvard Business Review as one of the most important management concepts of the past 75 years, has become a readily accepted means of increasing performance of non-core supply chain activities. Outsourcing allowed organizations to focus on their core competencies, to provide a differentiated level of customer service, and to take advantage of greater operational flexibility. (Bauknight, et al., 1999, p.1)

Classical distribution functions such as transportation and warehousing are most likely to be outsourced. Cost savings are comparatively easy while control over product, supply chain management and customer service activities remain within the own company. Financial advantages play a key role when a company considers outsourcing classical distribution functions. 73% of all companies<sup>1</sup> expect to reduce their operating costs by taking advantage of economies of scale obtained by third party logistics companies (3PL).

A large portion of companies, especially in Asia, outsources additional logistics functions like inhouse transports, production planning & control, and order processing. Reasons given for outsourcing other logistics functions differ widely. Chief advantages are seen in the professional expertise 3PLs can provide. People and assets can be managed more effectively and capital funds can be preserved which make the return on investment (ROI) and therefore the shareholder value look better. Outsourcing allows companies to concentrate on their core business activities and achieve higher customer service levels. The intention to outsource a larger portion of logistics functions in the future reflects the expectations companies have concerning the advantages of strategic partnerships with capable logistics service providers. (Baumgarten, 1999, p. 48)

In addition to basic logistics services such as kitting, label compliance, and transport, many 3PLs now offer supply chain management (SCM) and customer relationship management (CRM), e-business and trading exchange platforms, application service provider (ASP) functionality, and value-added expertise in a variety of languages and cultures. "Value-added services are increasingly informational, rather than physical," said Dan Gilmore, vice president of marketing at McHugh Software, a provider of logistics execution solutions.

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<sup>1</sup> Survey conducted on behalf of the Bundesvereinigung Logistik, TU Berlin and ZLU GmbH Berlin. Comparative study of the most successful companies in North America, Asia and Europe.

Also according to interBiz's Mr. Mackie, many 3PLs are in fact 4PLs, focusing on applications hosting and relationship management and partnering with other 3PLs to handle the actual logistics piece. (Navas, 2001, p. 2, 4)

The outsourcing decision is one of the most critical managers have to make. While contact logistics can offer expertise and cost advantages, it also means a big risk when a company hands over control of its logistic operations – the critical point of contact with customers. (Baumgarten, 1999, p. 50)

## **What is Fourth Party Logistics?**

In today's market place corporations will need to provide substantially increased levels of service that will include e-procurement, configure to order capabilities, complete supply chain visibility, virtual inventory management, as well as the requisite integrating technologies. (Bade, 1999, p. 1)

The investment necessary to procure these technologies and develop the skills to meet these new expectations will make most corporations look hard for other possible options before making major investments in capital, yet they must provide the services demanded. As one potential option, many corporations have turned to traditional third-party outsourcing. At times, some corporations find that third party service providers lack the broad set of skills, integrating technologies, strategies and global reach that are now being required to meet their needs.

As companies increasingly hand over more and more logistical functions to service providers, they rely on fourth party logistic providers as supply chain integrators to assemble and manage resources, capabilities, and technologies of their own organization with those of complementary service providers. (Baumgarten, 1999, p. 48) To rectify that situation, certain third-party service providers are taking steps to enhance their skills through alliances with complimentary service providers. The best positioned of these alliances are with leading edge consulting firms and technology providers.

The increasingly complex provider-manufacturer relationships and the required investment in technology have led to the emergence of fourth party logistics providers. They leverage the capabilities of third party providers, IT service providers and business process managers to deliver operational solutions through a single

point of contract. As fourth party logistics providers implement and run supply chain solutions for various clients the required investment in technology can be minimized. As alliances and teaming relationships continue to grow and expand, a new outsourcing alternative is emerging.

Corporations are outsourcing their entire set of supply chain processes to a single organization that will assess, design, build, and run integrated comprehensive supply chain solutions. This evolution in supply chain outsourcing is known as Fourth Party Logistics or 4PL. (Bade, 1999, p. 1f)

But inadequate planning and management of outsourcing activities can easily destroy promising partnerships. The careful selection of an outsourcing contractor and contract specificity are critical for successful alliances. Each party's role and responsibilities must be clearly defined. Penalty agreements are one possible way to avoid conflicts and failure. (Baumgarten, 1999, p. 50)

The term "fourth-party logistics provider" is a trademarked term owned by Andersen Consulting (now Accenture). Five years ago, this term was introduced into the supply chain to convey that deep informational technology skills and deeper analytical skills were required to achieve supply chain leadership.

Unlike other logistics companies, 4PL suppliers don't have asset bases: they own only computers and intellectual capital. (Mthimkhulu, 2000, p.1)

By definition, a 4PL or lead-logistics provider in a super-large global contract will be responsible for multiple facilities in many countries and, in some cases, overseeing other 3PL providers.

In essence, the Fourth Party Logistics provider is a supply chain integrator that assembles and manages the resources, capabilities, and technology of its own organization with those of complementary service providers to deliver a comprehensive supply chain solution. (Morrison, 2001, Art. 4)

Briefly, it involves a company, a 3PL or another, who acts as the integrator of multiple 3PLs all working for a company which requires multiple 3PL services, no 3PL having the ability to provide all of the required services itself. The multiple 3PLs work through the integrator to the company itself. In a classic case the Integrator will manage a facilities provider, a transport company, a foreign freight forwarder, an overnight air carrier, a provider of returns management and the list can go on and on. The 4PL, integrator is the direct contact to the company. (Roeser (1), 2001, p.1)

The providers of the various services (and the Integrator itself can be one of these providers in its own field of expertise) work through the Integrator to the client. Providers send their bills to the Integrator who forwards all bills to the client and in turn pays the various providers. (Roeser (2), 2001, p.2)

Two key distinctions make the concept of 4PL unique and set it apart from other supply chain outsourcing options available to the market today:

1. A 4PL delivers a comprehensive supply chain solution, and
2. A 4PL **delivers value** through the ability to impact the entire supply chain.

(Bauknight, et al., 1999, p.2) dazu gibt es auch noch andere meinungen

## 1. Comprehensive Supply Chain Solutions

For a 4PL to respond effectively to the broad, complicated needs of today's organizations, the 4PL needs to deliver comprehensive supply chain solutions focused on all elements of supply chain management, yet tailored to specific client needs.

A 4PL provider takes on operational responsibility for multiple supply chain functions and processes. The scope goes well beyond traditional transportation management and warehouse operations logistics outsourcing.

An organization can outsource the entire range of its supply chain activities to a 4PL provider; however, a 4PL solution can be a subset of supply chain functions or processes drawn from the full "menu" of execution offerings.

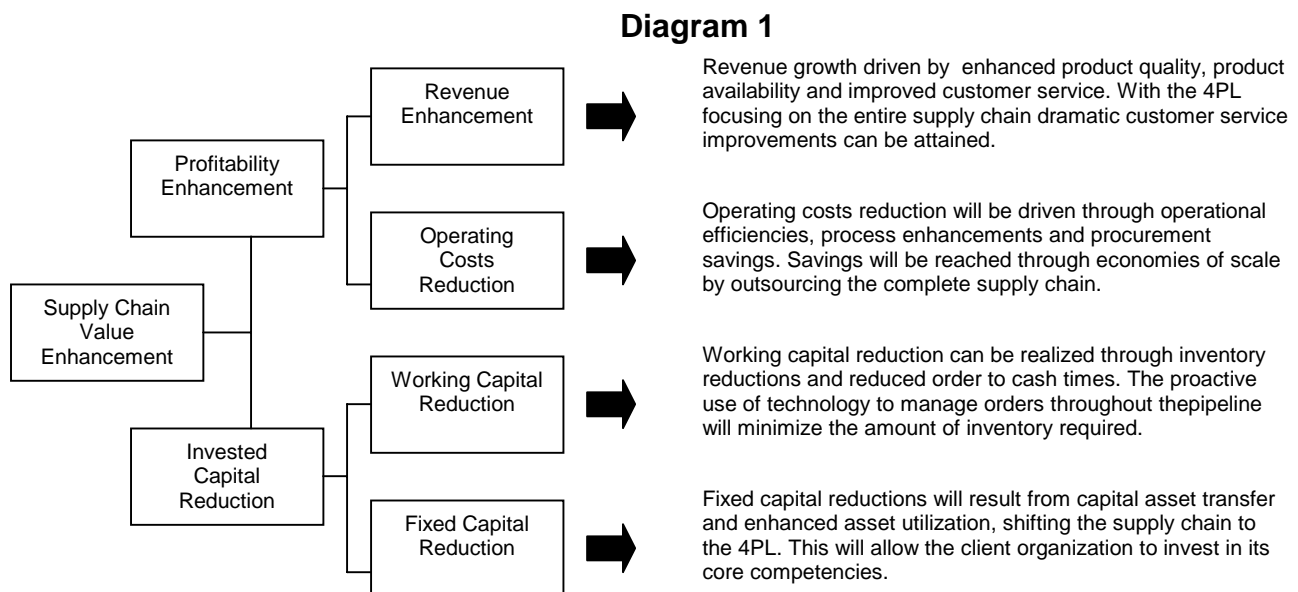
To be successful, a 4PL leverages a full range of services providers (3PLs, IT providers, contract logistics providers, call centers, etc.) along with the capabilities of the client and its supply chain partners. The 4PL acts as single point of interface with the client organization and provides the management of multiple service providers through a teaming partnership or an alliance. (Bauknight, et al., 1999, p.3)

Jim Fields of Menlo said it all when he is quoted as saying, "... the 4PL would be in a position to manage what many consider the most important aspect of the operation - the **customer relationship**." (Roeser (1), 2001, p.2)

## 2. Supply Chain Value Proposition

The second key distinction between 4PL and current approaches to supply chain outsourcing is a unique ability to deliver value to client organizations across the entire supply chain.

The 4PL approaches the concept of supply chain integration through four key drivers of shareholder value — increased revenue, operating cost reduction, working capital reduction, and fixed capital reduction (**Diagram 1**). Traditional approaches have tended to focus only on operating cost reduction and asset transfer.



(Bauknight, et al., 1999, p.3f)

## Technology in the next generation of supply chain outsourcing

"We all agree in this business that information has become as important and sometimes more important than the actual physical movement of the product."

(Hoffmann, 2000, p. 34)

"Unlike the old way of doing things, which was rigid and took a militarist approach, 4PL allows more flexibility and creativity," says Conradie, CEO of DNA an upcoming 4PL Provider. "We only work with brains and computers."

Conradie explains that DNA takes a bird's-eye view of the supply chain and seeks its integration, minimising inventory holding costs, improving efficiency and reducing lead times for moving goods around.

He says DNA designs systems to suit individual customers. "We do not even own a single software program as we are not married to a particular technology. What sets DNA apart from consultants is its ability to implement the systems it designs, sourcing the various services required. The fact that we can source services from various suppliers allows us flexibility to choose the best supplier to suit the needs of a particular client." DNA usually earns its revenue from sharing its clients' cost savings. The 4PL industry is likely to grow as more companies use e-commerce. "E-commerce requires that lead times be reduced, and 4PL is the tool to lower lead times." (Mthimkhulu, 2000, p.2)

The combination of technology and know-how has given birth to supply chain event management that goes beyond simple warehousing and distribution. These supply chain event management tools, important to the delivery of global logistics, enhance the value of warehouse and transportation systems by providing inventory and order status visibility at all levels — including proof of delivery, as well as providing the capacity to respond to exceptions and unplanned events. All of which contribute to reduced costs and lower inventory levels.

Inclusive in these services are critical functions that allow for integration with procurement, production, distribution and marketing, sales and finance.

Along with providing international trade services, freight forwarding and customs services, this new platform of will be the standard for delivery of global supply chain services. (Morrison, 2001, Art. 4)

"The name of the game in this business has been, is and always will be the movement of the product itself. How many e-retailers moved information as efficiently as the world goes round only to fail because they couldn't get the product to the customer?" (Roeser (1), 2001, p.2)

Even though we cannot deny the importance of the physical distribution, it remains a fact that outsourcing logistics functions requires intensified communication and information exchange between the parties involved. This virtual business environment enables companies to optimize forecasting, order processing,

production and distribution collaboratively with suppliers and service providers in the sense of integrated supply chain management.

US companies are forerunners in the use of business to business as well as business to consumer applications. Low telecommunication costs, high acceptance of the internet among consumers, and sufficient reinforcement by the government provide a supporting environment.

The gap that exists between the US and other countries is shrinking as companies in other countries move up the learning curve. However, a number of external factors might slow this development, such as high telecommunication costs, lack of interest on the part of governments and authorities, lack of technology standards and interfaces, and a variety of language and cultural differences. (Baumgarten, 1999, p. 52)

## **How Does 4PL Work?**

Supply chain management aims for the optimization of all information, material, and value flows including the customers' customers and the suppliers' suppliers. In future, it will not be enough to optimize subprocesses only but it will be important to optimize the entire value chain and to analyze cause-and-effect relationships in order to create an overall optimum.

An integrated supply chain structure seeks to minimize inefficient logistics activities and to avoid a waste of resources. Furthermore, effective supply chain management realizes a flexible and cost conscious balance between supply and demand and assures an optimum fulfilment of customer wishes taking the deployment of invested capital into consideration. (Baumgarten, 1999, p. 54)

Although 4PL solutions will likely be customized to suit the needs of a particular client or situation, the following operating models conceptually portray how 4PL relationships are configured.

A Synergy Plus operating model relies on a working relationship between the 4PL organization and a third party service provider. In this model, a 4PL and 3PL partner to market supply chain solutions which capitalize on the capabilities and market reach of both organizations. The 4PL could provide a broad range of services to the



third party logistics provider including: technology, supply chain strategy skills, capability to go to market, and program management expertise.

The core 4PL model is known as Solution Integrator. In this operating model, the 4PL operates - and manages a comprehensive supply chain solution for a single client. The Solution Integrator arrangement will encompass the resources, capabilities, and technology of the 4PL with complementary service providers to provide a comprehensive integrated supply chain solution that delivers value throughout the a single client organization's supply chain components.

The final and most complex operating model is termed Industry Innovator. Within this model, a 4PL organization develops and runs a supply chain solution for multiple industry players with a focus on synchronization and collaboration . The formation of industry solutions will provide the greatest benefits, however it is complex and can challenge the most competent organizations.

(Bauknight, et al., 1999, p.4f)

### **Who can deliver a 4PL solution?**

The 4PL provider needs to possess a comprehensive set of skills to effectively deliver a 4PL solution. The depth of skills and knowledge will be critical to the success of the arrangement. We have identified the following criteria to evaluate a 4PL provider:

- Availability of a large body of trained supply chain professionals
- If applicable, global capabilities, reach and resources
- Ability to manage multiple service providers
- Ability to transition your employees and other assets smoothly to the new 4PL organization
- Strong relationship and teaming skills
- Delivery of world class supply chain strategy formulation and business process redesign
- Leader in integrating supply chain technologies and outsourcing capabilities
- Understanding of organizational change issues

(Bauknight, et al., 1999, p.5)

### **Schluss:**

As logistics services continue consolidating to provide global scale service, the pressure to emerge as a true 4PL will increase.

Only those companies with an authentic global footprint and the technology to bind a growing number of disparate trading partners together will emerge with such an international nomenclature and the global supply chain solutions now demanded by the global economy.

(Morrison, 2001, Art. 4)

### **Potentials and constrains**

Logistics leaders continuously measure their performance by surveying their customers but also by comparison with leading logistics performers. Sharing information with competitors creates new internal standards for best practice. .

(Baumgarten, 1999, p. 58)

Many companies make use of contract logistics (3PL) in search for new sources of cost reduction and service performance. While manufacturers expect third parties to enter into more sophisticated operations than originally structured, logistic providers offer more than they can manage.

In addition, while handing over more and more functions to outside providers, it is possible to lose sight of the original core-concept of supply chain management, to “deliver what the customer wants when they want it” due to loss of control. The importance of true and lasting customer relationships should not be easily dismissed on the basis of efficiency.

Most significantly, resistance to change – among logistics professionals as well as elsewhere – is the biggest obstacle to the implementation of new approaches.

Logistics managers often battle alone when attempting to improve supply chain performance. The strict functional organizational structure that is still common in many companies hinders attempts to achieve an integrated supply chain. The

purpose of logistics as an integrator between internal functions and external supply chain partners is rarely effective in strictly functional organizations.

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In an article in the August 2000, issue of Global Logistics & Supply Chain Strategies, the Associate Editor Kurt C. Hoffman says that "...consultants take umbrage to the charge that they have attempted to manufacture a market by coining, trade marking, and then relentlessly flogging the future of the 4PL."

(Hoffmann, 2000, p. 34)

Already used in the US and Europe, 4PL involves the use of computer software and intellectual skills to manage a customer's supply chain in an integrated way.

"If international industry can be said to have a heart, it is a giant distribution hub through which goods flow via air, sea, and land."

There are actually a vast number of hearts, often located near port cities, all operated by third-party logistics providers (3PLs). In Europe and in other locations around the world, the outsourcing of logistics services is an established practice.

While outsourcing third-party logistics is now accepted business practice, Fourth Party Logistics is emerging as a breakthrough solution to modern supply chain challenge to provide maximum overall benefit. (Gattorna, 1999, p. 14)