An Overview of Third Party Logistics Industry

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Overview

- Introduction
  - Definition of Third Party Logistics (TPL)
  - A Brief History of TPL Evolution
    - A Snapshot of the Current TPL Market
- Types of TPL Providers
  - By Services
  - By Operations
  - By Contract Type
- Role of Third Party Logistics in Supply Chain & Company Performance
  - Logistics Outsourcing
  - Selection Criteria for TPL Selection
  - TPL Relationships
- Current TPL Challenges
- Discussion & Questions
TPL Definition
Several TPL Definitions...

- “Third-party Logistics is simply the use of an outside company to perform all or part of the firm’s materials management and product distribution function.” (Simchi-Levi, 2000)

- “A relationship between a shipper and third party which, compared with the basic services, has more customized offerings, encompasses a broad number of service functions and is characterized by a long-term, more mutually beneficial relationship.” (Murphy & Poist, 1998)
Definition of TPL

“Third party logistics providers are independent companies providing single or multiple logistics services to a purchasing company. Third party logistics providers, although they do not hold ownership of the product for distribution, are legally bound and responsible to perform the requested logistics activities of the purchasing company. The relationship between the two parties is long-term and beneficial.”

(Papadopoulou, 2001)
A Brief History of TPL Evolution
6 Phases of TPL Evolution

- **Introduction**
- **Awareness**
- **Necessity**
- **Integration**
- **Differentiation**
- **Incorporation**

Time:
- 1900
- 1960
- 1970
- 1980
- 1990
- 2000

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Service Classification of TPL
## A Few Historical Facts…

<table>
<thead>
<tr>
<th>Phase Period</th>
<th>Phase Name</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early 1900s - Late 1950s</td>
<td>Introductory Period</td>
<td>Single Services</td>
</tr>
<tr>
<td>Late 1950s - Mid 1960s</td>
<td>Awareness Period</td>
<td>Separate Services</td>
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<tr>
<td>Mid 1960s - Late 1970s</td>
<td>Necessity Period</td>
<td>Integrated Services</td>
</tr>
<tr>
<td>Late 1970s - Late 1980s</td>
<td>Integration Period</td>
<td>Combined Services</td>
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<tr>
<td>Late 1980s - Late 1990s</td>
<td>Differentiation Period</td>
<td>Incorporate Services</td>
</tr>
<tr>
<td>Late 1990s - Today</td>
<td>Corporate Period</td>
<td>Corporate Services</td>
</tr>
</tbody>
</table>
Factors Influencing TPL Development

New Phenomena
- Internationalization
- Virtual Organizations
- Time & Cost Competition
- High Customer Awareness

TPL

PLESaNT

Economic

Legal

Political

Technological

Social

Natural
The TPL Survival Guide

- Cost efficiency of services
  - Low but flexible costing
- Company control maintenance over the TPL services
  - Compatible information technology
- Operational efficiency
  - Technological development
- Specialization (service or industry)
  - Consistency & reliability of services
- Maintenance of long-term contracts
Current TPL Market
TPL Industry is Growing

Total logistics activities make up 15-20% of finished product costs (International Warehouse Logistics Association).

Inventory is expensive: U.S. companies spend $4 billion a year on inventory interest, $8 billion on taxes, obsolescence, depreciation and insurance, and $2 billion on warehousing (Cass Information Systems).

Nearly 75 percent of U.S. manufacturers and suppliers are either using or considering a contract logistics service, and that figure is growing (Ernst & Young LLP, 2000).

About 60 percent of 123 companies surveyed using a third-party logistics firm said logistics was a core competency, and almost 80 percent thought that logistics represented a key competitive advantage (Ernst & Young LLP, 2000).

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Top TPL by Excellence

1. Ryder
2. FedEx Supply Chain Services (tie)
3. UPS Logistics
4. Menlo Logistics
5. C.H. Robinson
6. Exel (tie)
7. Schneider Logistics
8. TLC

9. UPS Logistics
10. FedEx Supply Chain Services (tie)

Inbound Logistics, 2001
## Top 30 3PLs in 1998

<table>
<thead>
<tr>
<th>3PL</th>
<th>Profitability Ratios</th>
<th>Net Revenue ($millions)</th>
<th>Net Income ($millions)</th>
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<tbody>
<tr>
<td>AEI</td>
<td>89.6</td>
<td>$490</td>
<td>$51</td>
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<td>CH Robinson</td>
<td>82.4</td>
<td>$237</td>
<td>$42</td>
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<td>Caliber</td>
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<td>$310</td>
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<td>Cat Logistics</td>
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<td>Circle</td>
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<td>$281</td>
<td>$24</td>
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<td>CTI</td>
<td>95.6</td>
<td>$337</td>
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<tr>
<td>DSC</td>
<td>97.7</td>
<td>$215</td>
<td>$5</td>
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<td>Exel</td>
<td>98.2</td>
<td>$441</td>
<td>$8</td>
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<td>Expeditors</td>
<td>89.7</td>
<td>$303</td>
<td>$31</td>
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<td>FedEx</td>
<td>94.3</td>
<td>$104</td>
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<td>Fritz</td>
<td>97.9</td>
<td>$558</td>
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<tr>
<td>GATX</td>
<td>100.5</td>
<td>$246</td>
<td>($1)</td>
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<tr>
<td>Hunt Dedicated</td>
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<td>Swift</td>
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<td>$12</td>
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<td>Tibbett &amp; Britten</td>
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<td>90</td>
<td>$140</td>
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<td><strong>Total</strong></td>
<td><strong>95.0s</strong></td>
<td><strong>$8,721</strong></td>
<td><strong>$439</strong></td>
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</table>

*(Estimated Profitability and Revenues)*

Armstrong & Associates, 2001
## Top 40 Largest TPL per Revenue (2000)

<table>
<thead>
<tr>
<th>Provider</th>
<th>Largest 40 Providers</th>
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<tbody>
<tr>
<td></td>
<td>$(m)</td>
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<tr>
<td></td>
<td>Net Logistics Revenue</td>
</tr>
<tr>
<td></td>
<td>Gross Logistics Revenue</td>
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<tr>
<td>Danzas/AEI</td>
<td>3,624</td>
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<tr>
<td>Ryder</td>
<td>1,728</td>
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<tr>
<td>Exel Americas</td>
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<tr>
<td>Penske Logistics</td>
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<tr>
<td>Schneider Dedicated</td>
<td>1,035</td>
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<tr>
<td>NorthAmerican</td>
<td>845</td>
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<tr>
<td>UPS Logistics</td>
<td>815</td>
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<tr>
<td>T &amp; B</td>
<td>766</td>
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<tr>
<td>EGL</td>
<td>720</td>
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<tr>
<td>APL</td>
<td>714</td>
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<tr>
<td>Americold</td>
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<td>Fritz</td>
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<td>TNT NA</td>
<td>602</td>
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<tr>
<td>Expeditors</td>
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<tr>
<td>USF Logistcs</td>
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<tr>
<td>JB Hunt Dedicated</td>
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<td>Menlo</td>
<td>445</td>
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<td>C. H. Robinson</td>
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<td>Cat Logistics</td>
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<td>FedEx</td>
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<td>Ruan</td>
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<td>BAX</td>
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<td>IM-Logistics</td>
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<td>Airborne</td>
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<td>USCO</td>
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<td>DSC</td>
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<td>Werner Dedicated</td>
<td>204</td>
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<tr>
<td>Hub</td>
<td>173</td>
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<tr>
<td>Swift</td>
<td>167</td>
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<tr>
<td>Kenco</td>
<td>145</td>
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<td>Logistics Insights</td>
<td>134</td>
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<td>NDC</td>
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<td>Standard</td>
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<td>Cardinal</td>
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<td>TLC</td>
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<td>Pacer</td>
<td>93</td>
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<tr>
<td>CCW</td>
<td>60</td>
</tr>
<tr>
<td>NFI</td>
<td>60</td>
</tr>
</tbody>
</table>
Which TPL is the Oldest?

- APL
- C.H.Robinson Worldwide
- UPS
- Caterpillar
- Ryder
- Tibbett & Britten (UK)
- Penske
- FedEx
- EGL
- Exel Logistics (UK)
- Menlo Worldwide Logistics
- 1846 (but named APL 1953)
- 1905
- 1907
- 1915
- 1933
- 1958
- 1969
- 1971 (Roberts Cartage 1947 Ohio & Viking Freight 1966 Cal)
- 1984
- 1989 (NFCo 1982 NFC acquires Merchants Home Delivery & Dauphin Distribution Services)
- 1990 by CNF Inc.
Types of TPL Providers (TPLP)
Classification of TPLP

- Service
  - Simple service
  - Combined service
  - Added value services
- Industry
- Contract
  - Public
  - Private
TPL/Service Examples

- Warehousing
  - Exel
  - Tibbet & Britten
  - USCO

- Trucking
  - Frans Maas
  - J.B. Hunt
  - Logix
  - Penske Logistics (Leaseway)
  - Ryder Integrated Logistics
  - Schneider

- Ocean Carriers
  - APL
  - Nedlloyd

- Air Freight
  - DHL
  - FedEx LEC&C / Caliber
  - UPS - WWL

- Industry
  - Caterpillar Logistics
  - Fluor Daniel
  - GATX
  - W.W. Grainger

- Logistics Management
  - Menlo
  - TNT Logistics

- Value Added Logistics Services
  - C.H. Robinson
  - Danzas
  - Fritz
  - Hub Group
  - Kuehne & Nagel
  - Schenker

- Logistics Consulting
  - Andersen Consulting
  - GE Capital
Current Use of TPL by Industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage of 3PL use in different industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer</td>
<td>82.2</td>
</tr>
<tr>
<td>Consumer</td>
<td>75.9</td>
</tr>
<tr>
<td>Retail</td>
<td>71.1</td>
</tr>
<tr>
<td>Chemical</td>
<td>61.4</td>
</tr>
<tr>
<td>Medical</td>
<td>56.2</td>
</tr>
<tr>
<td>Auto</td>
<td>53.8</td>
</tr>
</tbody>
</table>

Modern Materials Handling., 2000
Classification by Contract

- Public Carriers
  - Common carriers
  - Contract carriers
  - Exempt carriers
- Private carriers
Role of TPL in Supply Chain & Company Performance
Logistics Chain

Supplier -> Transportation -> Sourcing -> Transportation -> Inventory I: Raw Material

Inventory II: Finished Product -> Transportation -> Production

Physical Distribution -> Transportation -> Customer/Buyer

Customer/Buyer -> Transportation -> Recycling
TPL Relations between Buyer-Supplier
The Participation of TPL in the Supply Chain of A Product

- What is the role of third party logistics providers in this virtual supply chain?
- Can you guess how many third party logistics providers participate in the manufacture of cotton trousers?

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Some Issues to Think About…

- How much logistical knowledge and coordination do you estimate that is needed?
- At which stages of the supply chain of the product would you recommend logistics outsourcing and why? What would be the criteria?
- How the current events would affect the logistics flow of the products? What would be the issues raised?
The Supply Chain of TPL…

Suppliers
- Resource Suppliers
- Asset Based
- Management Based
- Integrated Service

Product Suppliers
- Spare Parts
- Final Product

TPL Provider

Buyers

TPL Provider

Information Technology

Technology & Material Handling

Transportation Carriers

Warehousing & Property Brokerage

Human Resources

Banking

Exporting Arrangements

Legal Administration

Manufacturer I
(Spare Parts)

Wholesaler

Manufacturer II

Dealer or Intermediate

Final Customer

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Participation of TPL in Company Performance

- Strategic Planning
- Operations Efficiency
- Logistics Competencies
  - Speed
  - Know-how
  - Cost efficiency
Logistics Outsourcing
Definition

- Outsourcing is the contracting of the management & operational control of logistics functions to unrelated third party companies.

- Companies providing contractual Logistics services are referred to as Third Party Logistics Providers (TPLP).
Why Outsourcing?

- To acquire an expertise, talent and resources that don't exist internally, based on
  - competitive advantage
  - special resources
  - special knowledge
- To let the company focus on its core competencies
- To enhance operations and customer service
- To improve its processes by
  - cutting costs and avoiding capital expenditures
  - passing up labor problems
  - shun costs of regulations
4 out of 5 companies that outsource their logistics function are satisfied with their TPL performance.

Key Market/Key Customer Study, 1997

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Outsourcing Trends in US

Currently Outsourcing
Expect to Outsource
No Longer Outsourcing

Inventory Management
All Supply Chain Functions
Order Processing & Fulfillment
Product Returns
Packaging
Fleet Management
Shipment Planning
Information Systems
Carrier Selection & Rate Negotiation
W/H Operations
Freight Payments & Auditing

0 50 100 150 200 250 300
What to Consider (1)

**Purpose & Scope**
- Level of outsourcing
- Type of operations for outsourcing
- Specifications of company logistics operations
- Fixed and variable of costs of the operation to be outsourced
- Strengths and limitations
- Customers requirements of each of their own supply chain specifications
- Impact on customer service
- Implications of potential outsourcing problems on the company service
- Company’s expectations from the TPL
- Company and TPL compatibility level
What to Consider (2)

★ **Operational Issues**
- Management responsibility of the TPL introduction
- Transition outsourcing analysis
- Impact of potential failure on business and my customers

★ **Potential Barriers & Issues**
- Open discussions on TPL past experience on the specific industry or services to be outsourced
- Current customer evaluation and issues that have been encountered in the past while setting up the TPL outsourcing
What to Consider (3)

- **Financial & Time Implications**
  - Cost requirements
  - Operations requirements
  - Required time to set up and have running properly the outsourcing operations

- **Requirements & Processes**
  - Feasibility of making necessary changes and/or requiring new technology
  - Level of compatibility

- **Potential Benefits**
  - Why do you want my business?
  - Why should I select you?
Selection Criteria for TPL
TPL Selection

- What is the best way to choose a third party logistics provider?

It DEPENDS on the COMPANY SITUATION!!!
Some Selection Criteria (1)

- Technology, quality, expertise, leverage
  - Is this function or business their core competency?
- Responsiveness, delivery, cost, price
  - Can this firm improve our performance (e.g., customer support &/or our bottom line?)
- Reputation, references, track record
  - Is this firm already expertly performing this function for other firms?
- Balance sheet, access to capital, resources
  - Does this firm have the wherewithal & drive to invest in itself & the partnership over the long term?
Some Selection Criteria (2)

- Corporate culture fit, prospects for partnership, commitment & flexibility
  - Can we work comfortably & smoothly with this firm to achieve our joint strategic objectives?
- Reputation & recommendations
  - Customer level satisfaction
  - Customer turnover rate
- Area of service coverage
- Added value services
- Order processing
- Financial stability and punctuality
Successful TPL Contracts
Logistics Contracts

- Scope of services – Removing the Barriers
  - Must consider both the functions (i.e. W/H) and the geographical region involved (i.e.: North America)
  - One technique is to divide the total scope into function/region pairs

- Supply chain alignment
- Business & provider communication alignment
- Level of data sharing
- International issues & contract barriers

Berzon, M., 1999
Total participants = 110 (40% shippers, 60% TPL), with 40% < $10 million, 25% < $30 million revenues, and 44% < 3 contracts/year, 21% >10 contracts/year

Spira, R. 1999
Successful Contracts (1)

- **Focus on performance and value**
  - employ specific measures
  - specify performance objectives based on the measure (the what - not the how) & value

- **Emphasize flexibility**
  - written cooperative to balance risk
  - contain contract adjustment mechanisms
  - often provide rewards & penalties tied to performance
  - incentive contracts
Successful Contracts (2)

Also look at…

- Fair allocation of revenue and costs
- Open flow of information
- Long-term view
- Contacts on several levels of the organisation
  i.e. from transactions based to partnership business arrangement
A Checklist for Logistics Contracts (1)

- Financial Strength
  - Total annual revenues
  - Annual revenues in contract
  - Logistics services
  - Total assets
  - Assets employed contract
  - Logistics services
  - Financial rating

- Business experience
  - Years providing contract logistic services
  - Depth of management experience
  - Strength of operating management
  - Quality of workforce
  - Labor/management relations

- Business development
  - Corporate commitment to contract logistics
  - Overall corporate strategy

- Leading accounts
- Trends in business development
- Accounts lost

- Support services
  - Can human resources be phased in & out?
  - Is the insurance program adequate?
  - Does the safety program support the insurance strategy?
  - Are information systems robust?
  - Are communications state of the art?

- Business arrangements
  - Open book cost disclosure
  - Incentives for performance
  - Recapture of excess profits
  - Provisions for replacement
  - Independent financial audits

Delaney, R., Cass Logistics, 1996
TPL Relationship Management
Secrets to Success

- Communications
- Flexibility
- Innovation
- Integrity
- Personal service
- Productivity

- Relationship management
- Responsiveness
- Technical competence
- Value
Current TPL Challenges
Current TPL Challenges

- Industrial Dynamics
- Logistics Flexibility
- Technological Advancements
- Anticipation of Future Trends
Looking for the Future....

So the bottom line is:

- Real-Time and Real-Cost Competition
- Customer Service
- Vision & Diversification
Discussion & Questions