

CENTRE

NAME OF THE PROGRAMME

**PROGRAM CODE** 

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**SEMESTER** 

**FACULTY NAME** 

**DESIGNATION** 

**TOPIC** 

: DDU KAUSHAL KENDRA

: B.VOC(LOGISTICS AND

**SUPPLY CHAIN MANAGEMENT)** 

: 3UABVOC(LSCM)

: LSCM17205

: LOGISTICS MANAGEMENT

: 11

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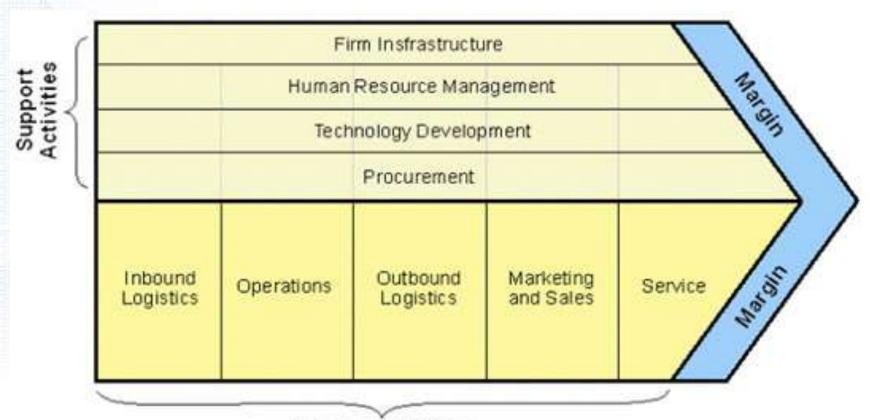
: ASSISTANT PROFESSOR

:THIRD PARTY LOGISTICS



# Introduction –Why Focus on 3PL

Organizations are seeking ways of creating value

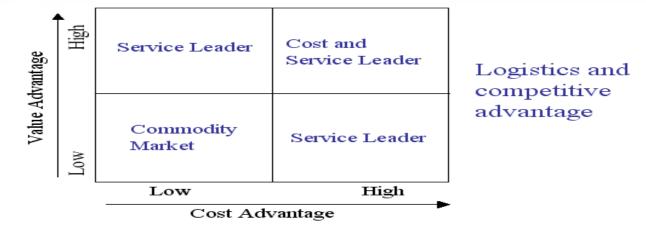


**Primary Activities** 

Value is created through competitive advantage Cost advantage & Differentiation advantage are two types of competitive advantage



# Introduction – Cost and Value leadership



- For companies who find themselves in the bottom left hand corner of competitive advantage matrix the world is an uncomfortable place, concerning sustainable competitive advantage.
- In many industries, logistics costs represent such a significant proportion of total costs that it is possible to make major cost reductions through fundamentally re-engineering logistics processes, in order to achieve sustainable competitive advantage.
- goal is to achieve sustainable competitive advantage through both cost reduction and service enhancement.



## Introduction

Terms such as "Logistics outsourcing " "Logistics alliances " "
 third party Logistics " "contract Logistics " and "contract
 distribution " have been used inter-changeably to describe
 organisational practice of contracting-out part of or all logistics
 activities that were previously performed in-house

## 1PL, 2PL, 3PL

- Anyone having goods moved from their place of origin to their new place is considered to be first party logistics provider.
- A second-party logistics provider (2PL) is an asset-based carrier, which actually owns the means of transportation. Typical 2PLs would be shipping lines which own, lease or charter their ships; airlines which own, lease or charter their planes and truck companies which own or lease their trucks



## **Definitions**

- Third Party Logistics (3PL): Outsourcing all or much of a companies logistics operations to a specialized company
- Third Party Logistics Provider: A firm which provides multiple logistics services for use by customers. Preferably, these services are integrated or "bundled" together by the provider. These firms facilitate the movement of parts and materials from suppliers to manufacturers and finished products from manufacturers to distributors and retailers. Among the services which they provide are transportation, warehousing, cross-docking, inventory management, packaging and freight forwarding.

# Logistics Profile: UPS Logistics Group



UPS Logistics Group signed a five-year \$150 million deal to manage National Semiconductor's global supply chain distribution center in Singapore. The DC uses radio frequency, bar-code scanning, and web-based technology. Fills >450K orders per year; receives 12 million inbound chips daily; and ships four billion products per year on sales of \$2.1 billion.

# Why 3PL

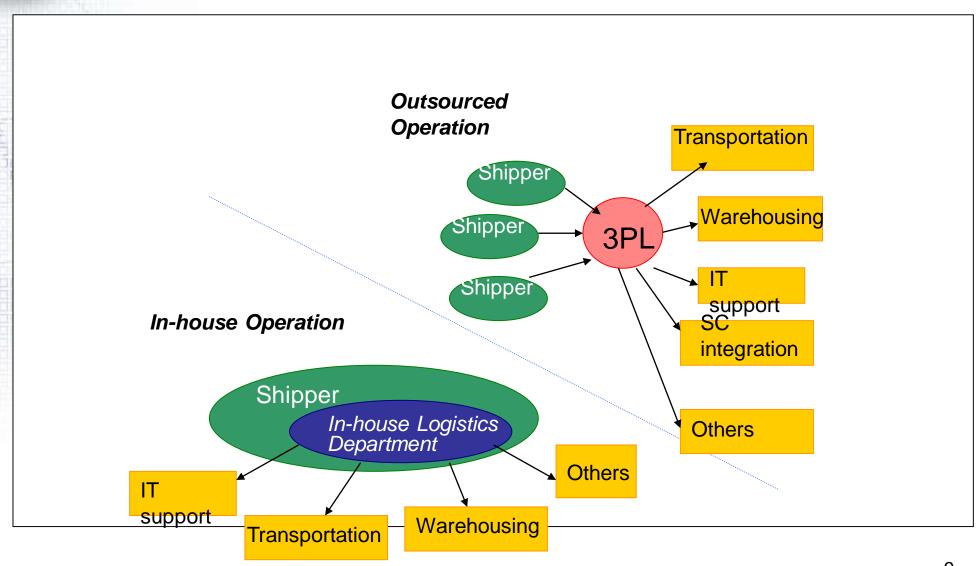
- Providing better quality service
- Limiting investment opportunities
- Cost reduction > Control
- Political considerations
- Focus on core competences
- Customers demand order accuracy, excellent service and time compression



## WHY 3PL

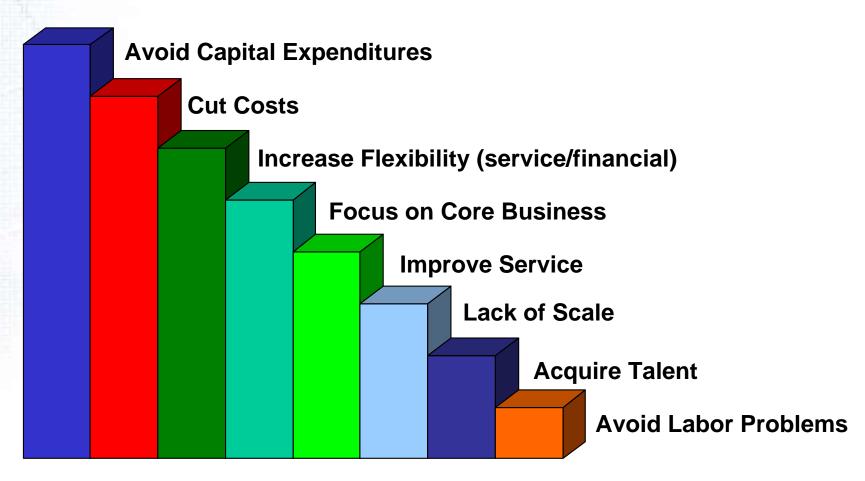
From the previous slide, it is clear that the effectiveness and the efficiency of the logistics process, together with a coordinated and integrated supply chain management, plays a key strategic role in a time-shrunk, world wide market place. In this competitive scenario, where financial resources are limited, many manufacturers have also understood that their core competences are not in the logistics-field, and have therefore progressively sought to buy logistics services and functions from third party service providers.

# **Third Party Logistics**



# **Outsourcing - Industry Trends**

### Findings of a Survey: Why company's Outsource



Source: A.T. Kearney



# IS 3PL ONLY CONCERNED WITH TRANSPORTATION ACTIVITES ?



# **Outsourced Logistics services**

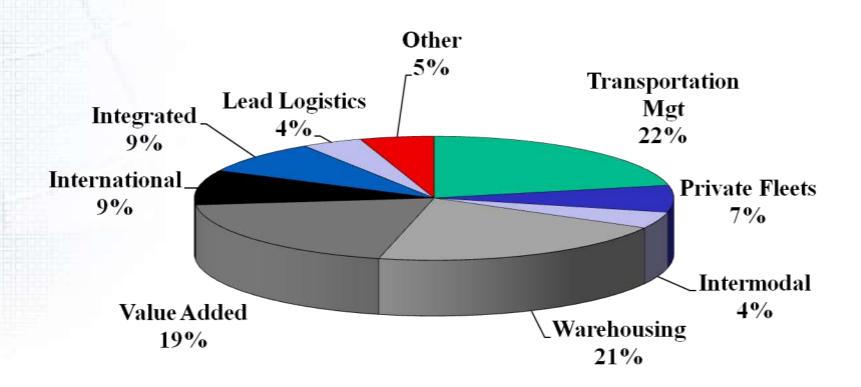
### **SOME OF THE MAJOR OUTSOURCED ACTIVITES**

Logistics activities	North America			Europe			Asia Pacific		
	2006 (%)	2007 (%)	2008	2006 (%)	2007 (%)	2008 (%)	2006 (%)	2007	2008 (%)
Domestic transportation	83	77	78	95	91	92	95	85	91
International transportation	83	68	69	95	87	89	95	89	89
Warehousing	74	71	70	76	68	73	77	73	75
Customs clearance and brokerage	71	65	66	59	58	57	83	78	81
Forwarding	55	51	48	54	51	44	66	60	70
Shipment consolidation	44	44	46	50	44	43	53	45	55
Reverse logistics (defective, repair, return)	28	32	31	44	33	42	36	29	41
Cross-docking	36	36	37	40	35	43	30	26	35
Transportation management	27	33	39	36	41	38	48	27	36
Product labeling, packaging, assembly, kitting	26	31	29	45	33	42	33	34	37
Freight bill auditing and payment	55	51	54	22	18	20	18	14	21
Supply chain consultancy by 3PL provider	21	18	21	16	11	15	16	11	14
Order entry, processing and fulfillment	14	13	12	10	7	14	14	15	21
Fleet management	13	11	9	20	21	15	21	12	14
LLP/4PL services	12	13	11	13	11	13	6	10	14
Customer service	8	10	11	9	10	10	13	17	12

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# Services Provided By 3PL's





# 3PL- Externalization of Logistics activates

 3PL includes any form of externalization of logistics activities previously performed "inhouse". If, for example, a company with its own transport facilities, decides to employ external transporters, this would, be an example of third party logistics. The same applies to a company which closes its warehouse and instead uses an external warehouse.



- 3PLs are external suppliers that perform all or part of a company's logistics functions, including:
  - Transportation
  - Warehousing
  - Distribution
  - Financial services
- Terms <u>contract logistics</u> and <u>outsourcing</u> are sometimes used in place of 3PL.



### Transportation-Based

- Services extend beyond transportation to offer a comprehensive set of logistics offerings.
- <u>Leveraged</u> 3PLs use assets of other firms.
- Nonleveraged 3PLs use assets belonging solely to the parent firm.
- Ryder, Schneider Logistics, FedEx Logistics, and UPS Logistics are examples of 3PLs.



- Warehouse/Distribution-Based
  - Many, but not all, have former warehouse and/or distribution experience.
  - Transition to integrated logistics has been less complex than for the transportation based providers.
  - DSC Logistics, USCO, Exel\*, Caterpillar Logistics, and IBM are examples of warehouse/distribution-based 3PLs.
  - \* Exel regained their position as the world's largest after an acquisition, recently purchased by DHL\*\*



## WMS / TMS

### Objectives Integrated Reduce inventory WMS/TMS Pull replenishment Flow through WMS Open Questions Inventory Visibility What are bottlenecks?

Objectives

- Dynamically handle changes
- Reduce LT and variability

#### Objectives

- Reduce empty space
- Reduce driver wait time

TMS

- · Keep in mind differences between planning / setup and execution
- How will transportation portals play? (provide more capacity)
- Enabling technologies

Transportation Capacity

Inbound Inventory

#### Open Questions

Information Fi

- How is capacity planned?
- Exploration of modal / inter-modal operations to save money
- What level of SKU, agreement?
- Visibility into actual ordering profile

RATHER THAN OFFERING WAREHOUSE AND TRANSPORTATION FACILITIES SEPERATELY, MANY 3PL PROVIDE INTEGRATED FACILITY

Open Questions

How is over flow handled?

but on varying days

. Pull : Order same amount,



### Forwarder-Based

- Essentially very independent middlemen extending forwarder roles.
- Non-asset owners that capably provide a wide range of logistics services.
- AEI, Kuehne & Nagle, Fritz, Circle, C. H. Robinson, and the Hub Group are examples of forwarder-based 3PLs.



### Financial-Based

- Provide freight payment and auditing, cost accounting and control, and tools for monitoring, booking, tracking, tracing, and managing inventory.
- Cass Information Systems, CTC, GE Information Services, and FleetBoston are examples of financialbased 3PLs.



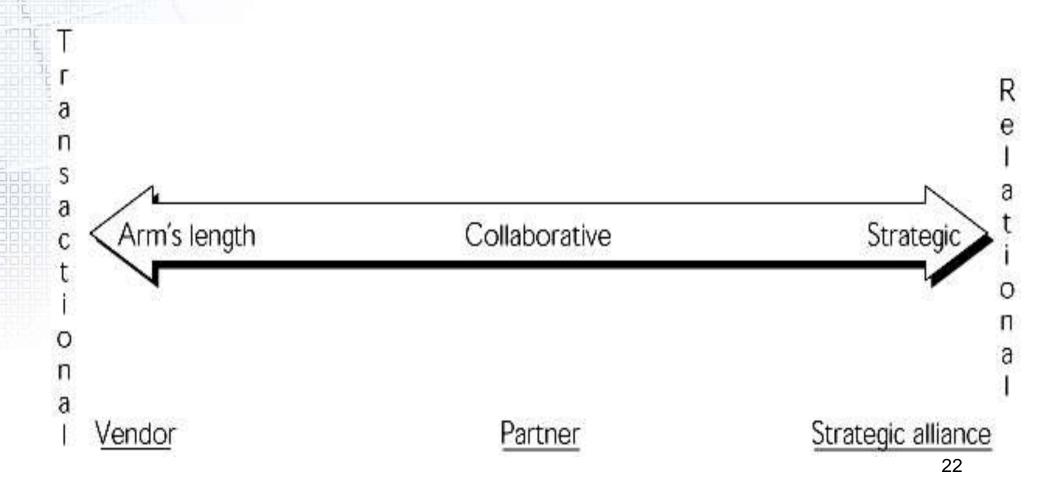
### Information-Based

- Significant growth and development in this alternative category of Internet-based, business-to-business, electronic markets for transportation and logistics services.
- Transplace and Nistevo are examples of informationbased 3PLs.



# Relationship Perspectives

AS A SC MANAGER CAN YOU AFFORD TO KEEP A 3PL AT ARMS LENGTH OR SHOULD YOU BUILD A CLOSE STRATEGIC PARTNERSHIP WITH YOUR 3PL PROVIDER?





### 3PL VS OTHER ACITIVITES

# WHY BULID A CLOSE STRATEGIC RELATIONSHIP WITH YOUR 3 PL PROVIDER

3PL is more complex than normal outsourcing of logistics activates. When speaking of 3PL a true partnership condition is usually assumed because

- Strategic nature of services purchased
- Buyer of 3PL realizes that synergies can be achieved by exploiting the logistics provider distinct competencies

# Services Offered by Third Party Logistics Providers

Standard	Advanced	Complete
Warehouse management Transportation Dispatching Delivery documentation Customs documentation	Assembly Packaging Returns Labeling Stock accounting	Order planning and processing IT management Invoicing Payment collection

THE TRADE OFF BETWEEN COST AND CONTROL WOULD DETERMINE WHAT LEVEL OF 3PL SERVICES AN ORGANIZATION ACQUIRES, THAT RANGE FROM STANDART TO COMPLETE



# Shifts of Logistical Operations in the Internet Economy

	Traditional logistics	E-logistics
Orders	Predictable	Variable
Order cycle time	Weekly	Daily or hourly
Customer	Strategic	Broader base
Customer service	Reactive, rigid	Responsive, flexible
Replenishment	Scheduled	Real-time
Distribution model	Supply-driven (push)	Demand-driven (pull)
Demand	Stable, consistent	More cyclical
Shipment type	Bulk	Smaller lots
Destinations	Concentrated	More dispersion
Warehouse reconfiguration	Weekly or monthly	Continual, rules-based
International trade compliance	Manual	Automated

## SERVICES OFFERD BY A TYPICAL 3PL PROVIDER

Hitachi Transport System

#### Services

**Procurement Logistics Services** 

We take care of everything from picking up and storing parts/materials to delivering them to production line.

Sales Logistics Services

We offer high quality services including inventory control, entry and dispatching control as a total system.

Collaborative Logistics within the Same Industry

We offer cooperated storage and the delivery service for two or more companies in the same industry.

Production Logistics Services

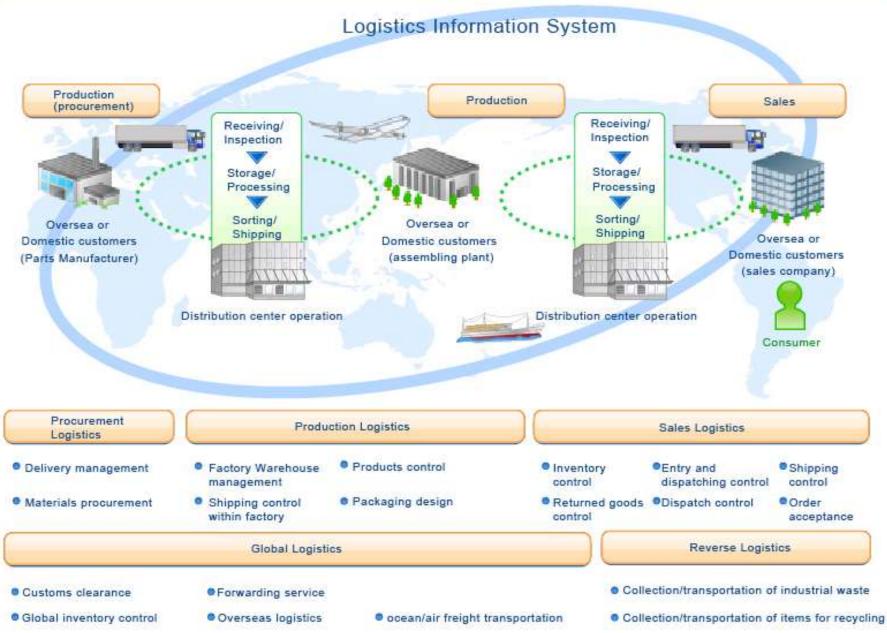
We offer human resource and know-how in factory logistics and shipping control to support customer's production.

Reverse Logistics Services

We support recovery, recycling and disposal as well as procurement, production and sales.

### WHAT SURVICES TO **PURCHASE?**

- 1. Cloth retailer
- 2. Computer Manufacturer 26
  - 3. Glass manufacturer



COMPANY WITH LIMITED RESORUCES WOULD FOCUS ON BENIFITIG FROM 27 BASIC LOGISTICS OPERATIONS OFFERD BY HITACHI i.e. GLOBAL LOGISTICS

# **Customers of 3PL's**

Industry	Global Costs	Domestic Costs (USA)
Automotive	\$98.2	\$37.4
Technology	\$156.4	\$77.4
Retailing	\$98.6	\$67.2
Consumer Products	\$13.6	\$13.3
Food and Grocery	\$32.2	\$27.8
Healthcare	\$38.4	\$34.0
Industrial and Elements	\$179.7	\$84
Other	\$63	\$25.3
Total Costs	\$678.3	\$366.3



# **Buyers of 3PL Services**

Customer	# of 3PL's Used
General Motors	37
Wal-Mart Stores	33
Ford Motor, HP	27
Procter & Gamble	20
General Electric	17
Georgia Pacific, IBM	16
PepsiCo, Sears	13
Coca-Cola, Sara Lee, Target, Xerox	12
General Mills	11
Delphi, Safeway	10

GREATER THE NUMER OF COMPONENTS INVOLVED IN MANUFACTURING MORE 3PL ACTIVITES WILL BE OUTSOURCED

# **Evolution of 3PL**

The evolution of 3PL market is explained with reference to three distinct phases

In 1980's many transportation and warehousing firms developed into 3PL providers

(e.g. Exel Logistics and Frans Maas)



In the early 1990's firms that specialised in express parcel deliveries entered the markets (e.g. DHL, TNT, UPS and FedEx)

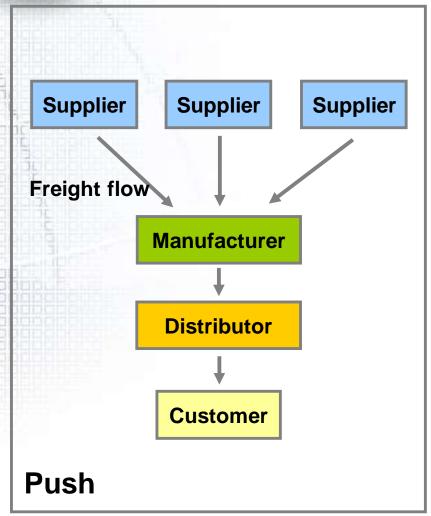


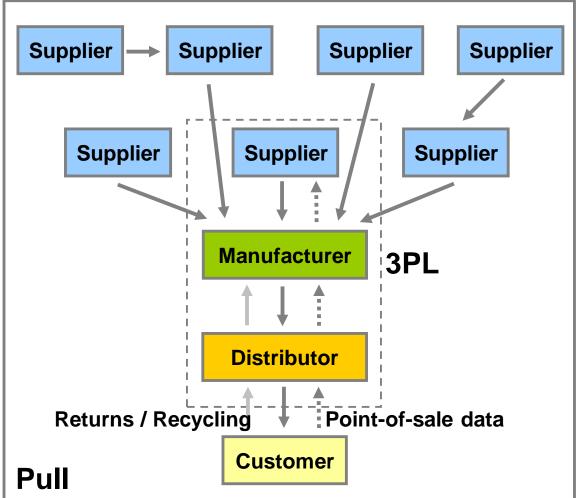
In the late 1990's, companies originally specializing in financial services, I.T. services and management consulting entered the market by developing competence in information systems and supply chain planning



## **ACTIVITY NUMBER 1**

# From Push to Pull Logistics







# Advantages and Disadvantages of 3PL

Advantages	Disadvantages
Cost reduction	Loss of control over the logistics function
Improved efficiency, service and flexibility	Impact on in-house workforce
Focus on core competency	More distance from clients- loss of personal touch
Freeing up resources	Discontinuity of services of a 3PL provider
Elimination of infrastructure resources	Differences of opinion or perception of the service level of
	the 3PL provider
Risk- sharing	
Better cash flow	
Access to resources not available at one's own organization	

CAN YOU THINK OF ANY OTHER ADVANTAGE OR DISADVANTAGE?

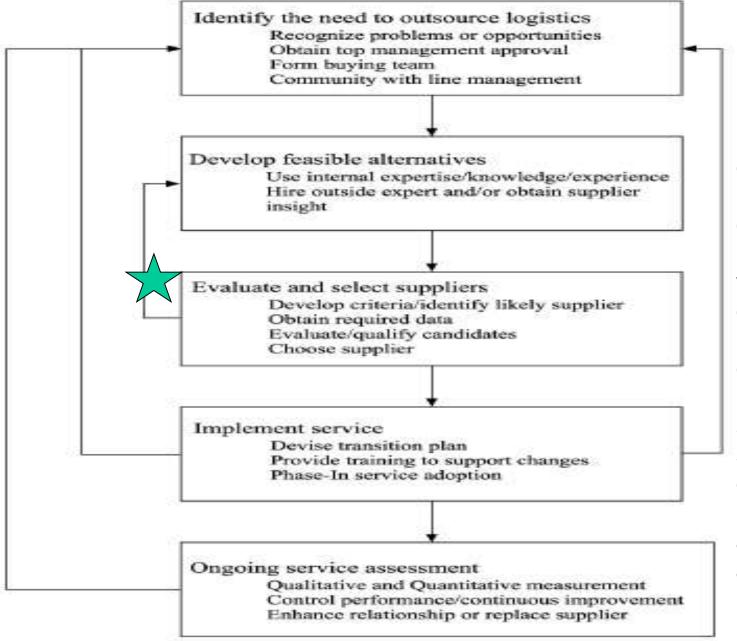


# **3PL BUYING PROCESS**

3PL buying processes comprises of 5 steps

- (1) identify the need to outsource logistics,
- (2) develop feasible alternatives,
- (3) evaluate and select a supplier \*
- (4) implement service
- (5) assess ongoing service performance.

## **3PL BUYING PROCESS**



Multi criteria decision making (MCDM) process in which a decision maker chooses, under several selection criteria, the best option among alternatives.



# A typical 3PL contract includes

Contract terms ( number of years )

Cost per activity

Service and activities description

Service levels

**Bonus payment for excellent performance** 

Penalty clause for service failure

Allocation of roles and responsibilities, risks and insurance costs

**Contract termination clause** 



# 3PL example

The partnership between Ryder Dedicated Logistics and GM Saturn division is a good example of 3PL. Saturn focuses on automobile manufacturing and Ryder manages most of Saturn other logistics considerations. Ryder deals vendors, delivers parts to the Saturn factory in Spring Hill, Tennessee; and delivers finished vehicles to the dealers. Saturn Orders parts using Electronic Data Interchange (EDI) and sends same information to Ryder. Ryder makes all the necessary pickups from 300 different suppliers in the U.S., Canada and Mexico using special decision-support software to effectively plan routes to minimize transportation costs.





# Leading 3PL Technology & Tools





# Get the Power to Move Your Inventory Instantly--By Email

Inefficiency is the arch enemy of every warehouse manager. Make an extra phone call here, write a few redundant memos and faxes there: Suddenly, your whole operation is off track, plagued by confusion, delays and inaccuracy.

When you trust your inventory to Power Freight Systems, you can stop worrying about the productivity gremlins. Our online inventory system gives you real-time reporting 24 hours a day, from any web browser. But that's just the beginning. You can ship out goods, too, with just a few mouse clicks. Choose the parts and quantities you want, select a consignee and you're done. Power Freight's warehouse personnel are alerted instantly by email, and your goods are on their way.

# Leading 3PL Technology & Tools





#### Welcome to the Wireless Revolution

Track your shipments everywhere you go—with our exclusive new Mobile Tracking system. You can use any web-enabled cell phone or handheld computer, and your business' mission-critical information will always be close at hand. To get started with Mobile Tracking, check out the full details.



# The Route From Point A to Point B Just Got A Whole Lot Faster

If you don't know where you're going, you'll probably end up somewhere else. It's a funny enough thought--unless your business depends on not ending up somewhere else.

# Leading 3PL Technology & Tools





### Discover The Next Generation of Online Shipping

You've seen online tracking programs before. But we guarantee that you've never seen anything like this. Imagine a web application custom built to actually solve your real-world problems—and help save you money.

So, for instance, you can set up Power ShipIt! access for all your vendors and have them fill out their own airbills online.

Then, you can monitor all those shipments, instantly. No more sending out stacks of airbills or calling around to check on the latest shipments. Power ShipIt! also makes filling out consignee information easier than ever, because it remembers where you've shipped in the past. Just type the first few characters, and the program automatically fills in the rest for you.





### What If Your Shipment Could Check In From The Road?

A lot of things can happen between pickup and delivery. Wouldn't it be nice if your goods could check in from the road to tell you how everything's going?

With our exclusive PowerAlert system, that's exactly what happens. You receive immediate email notifications to update you on each shipment's location. Got a few restless bosses

whose jobs ride on your shipping prowess? Relax, you can put the bigwigs at ease by signing them up for notification, too.

It all happens automatically, in real time. So, you can leave the shipping to us and get on with more pressing business--like actually running your business.



### PowerHouse: Raising the Bar(code) for Reliability

With our exclusive Warehouse Management Systems (WMS), you won't have to think twice about inventory accuracy. Every shipment is safeguarded by the following components:



(4PL)



# 4<sup>th</sup> Party Logistics

Fourth-party logistics (FPL or 4PL) is an emerging new outsourcing concept. Andersen Consulting has defined FPL as: "A supply chain integrator who assembles and manages the resources, capabilities, and technology of its organization with those of complementary service providers to deliver a comprehensive supply chain solution". FPL can be considered as a comprehensive supply chain solution which combines the capabilities of management consulting, IT technology and TPL-providers.



# Thank you