



## **3<sup>RD</sup> PARTY LOGISTICS (3PL) OVERVIEW**

Dirk Stammnitz / August 2015



# Contents

- **Transportation industry segments and 3PL overview**
- **Performance, key players and factors critical for success**
- **Several major trends impacting the industry**
- **Technology as an enabler of SCM**

# 3PLs offer more complex and wider value chain coverage than basic service providers

ESTIMATES

**Global logistics market by subsector, 2014**  
Market share (%)

Complexity of service/value chain coverage

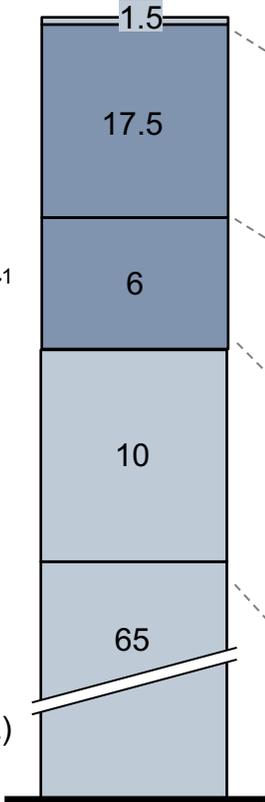
Lead Logistics (LLP / 4PL)

Third Party Logistics (3PL)

Freight Forwarder<sup>1</sup>

Integrators (many now also offer 3PL serv.)

Providers of Basic Services in Transport / Warehousing (2PL)



**Characteristics**

**Value drivers**

- Supply chain manager– typically asset free
- Can manage several 3PLs for a shipper
- Broad scope; 3+ years contract with management/transactional fees or gain sharing models

- Integrated logistics mgmt. in the form of dedicated contract carriage, warehousing, transport management, IT, and VAWD
- 2-7 year contracts, sometimes involving own assets/executional activities

- Logistics service providers for single/multimode transportation, typically in international markets involving air and/or ocean modes
- Spot market or shorter, 1 - 2 year contracts

- Extensive fleet network (ie. truck, aircraft, etc) providing door-to-door solutions through completely “integrated” modes
- Historically limited to large providers like UPS, DHL, and FedEx, with a strong focus on courier, express, and parcel (CEP)

- Operators of a single transport mode – truck carriers, railroads, couriers
- Often act as subcontractors to 3PLs

- Broad end-to-end supply chain expertise OR...
- Deep knowledge within a specific vertical (ie – automotive)

- Sophisticated yield mgmt
- Scale economies for purchasing

- Global reach
- Fleet/network size
- IT – mobile apps
- E-commerce

- Operational efficiency
- Asset utilization

<sup>1</sup> Typically accounted for under 3PL in market sizing

# The 3PL space is typically segmented into four major categories

		<u>Description</u>	<u>Value proposition</u>
<b>Asset-light &amp; Non-Asset</b>	<b>Global Freight Forwarders (LSPs)</b>	<ul style="list-style-type: none"> <li>FF's purchase capacity with air cargo or ocean shipping carriers, and resell that capacity to shippers</li> <li>FF's see higher profitability and ROIC than asset-heavy 3PLs</li> </ul>	<ul style="list-style-type: none"> <li>International expertise</li> <li>Buying power/ logistics, inventory cost reduction</li> <li>Global customs &amp; trade compliance</li> <li>Vendor management</li> </ul>
	<b>Domestic Transportation Management (Brokers)</b>	<ul style="list-style-type: none"> <li>DTM's are non-asset based 3PLs focusing on truck brokerage, intermodal marketing, and transportation/freight under management</li> <li>Similar to freight forwarding, this segment enjoys higher profitability and ROIC than its asset-heavy counterparts</li> </ul>	<ul style="list-style-type: none"> <li>Flexible capacity/ solutions across all modes and lanes</li> <li>Mode agnostic</li> <li>Seamless integration of multiple partners/carriers</li> </ul>
<b>Asset-intensive</b>	<b>Warehouse management (contract logistics)</b>	<ul style="list-style-type: none"> <li>Value-added warehousing &amp; distribution (VAWD) companies often manage inventory and provide value-add services such as kitting, pick and pack, cross-docking, and reverse logistics</li> <li>This segment faces the lowest margins of the four 3PL segments</li> </ul>	<ul style="list-style-type: none"> <li>Variable vs fixed</li> <li>Strategically located</li> <li>Highly configurable</li> <li>Local presence and relationships</li> </ul>
	<b>Dedicated contract carriage</b>	<ul style="list-style-type: none"> <li>DCC's provide a shipper with equipment, drivers, and/or management staff to provide dedicated capacity.</li> <li>This segment is experiencing more growth as capacity becomes more constrained</li> </ul>	<ul style="list-style-type: none"> <li>Guaranteed capacity</li> <li>Fleet management &amp; maintenance</li> <li>Customized equipment and driver training</li> </ul>

# Increasing consolidation is helping the big to get bigger

Followers

## Leaders vs. Followers

## Key Success Factors

**Global Logistics Service Providers**

Kuehne & Nagel  
 Expeditors International  
 Panalpina  
 UTi Worldwide

- Synergies from integrated logistics, incl. solution service offering, cross-selling to customers, high degree of operational efficiency and seamless integration across businesses
- Strategic positioning (e.g., Global LSP vs. focused niche provider)
- Single IT platform, vendor/order management
- Capacity planning and contracting (risk management) capabilities
- Channel management (agents, representations, own operations)
- Pricing discipline, sales force incentivizing, key account management

**Domestic transportation management**

CH Robinson  
 XPO Logistics  
 Hub Group  
 Landstar

- Technology infrastructure to provide greater automation, client access to key performance indicators and shipment tracking
- Longstanding relationships with a large network of carriers
- Technical capability in network and route optimization
- Discipline in project management and customer service
- Innovative and customized service models (e.g., shared dedicated fleets, co-loading)

**Warehouse management**

GENCO  
 Neovia (CAT Logistics)  
 CEVA

- Demonstrated expertise within specific industry or supply chain capabilities
- "Right" industry sector focus and business system setup (organization, mind-set, people, partnerships)
- Client mix/diversity for improved EOS and contract risk management
- Real-time integration of IT systems to achieve full visibility as basis for optimization
- Operational excellence in warehousing and distribution processes

**Dedicated contract carriage**

Schneider Dedicated  
 J.B. Hunt DCS  
 Werner Dedicated

- Expansion of value proposition to include broader range of the entire value chain (e.g., sourcing function, co-location)
- Fleet management/maintenance expertise as well as a flexible business model
- Surge capacity management
- Standardized driver training and certification programs

# Most successful 3PLs have similar business models

## Attributes of successful models

### Description

### Evidence

**Asset-light models that are reliable, flexible and scalable**

- Asset-light players are not constrained by capacity utilization nor burdened by warehouses and vehicles on their balance sheets
- Shippers place high value on dependable, on-time service with lower probability of damages

- Players such as CH Robinson and Expeditors are known as “best-in-class” in the industry.
- Similar successful players can extract high margins, demonstrating that clients are willing to pay for quality, reliable capacity, and that scale does matter

**Focus on SMB customers that possess less leverage**

- Small to medium sized customers are less likely to disaggregate the supply chain and demand the lowest price from each service provider
- Low volume customers lack leverage to negotiate pricing

- The highest-performing 3PLs – have large, highly fragmented customer bases, with no customers typically contributing >6% of revenues
- Referred often as “B” accounts, who demonstrate greater loyalty, volume consistency and predictability

**IT solutions that provide visibility into and control of supply chains**

- Customers are demanding visibility into the entire supply chain and prefer working with companies that allow them to control their freight from end-to-end
- Supply chain visibility provides large savings

- Global players can cut costs and offer clients better systems capabilities when entire network is running on the same platform
- 3PLs with superior technology also generates increased productivity and efficiency, along with industry best practices

**Increase switching costs by expanding relationships**

- 3PL’s that are deeply engrained with client systems making separation increasingly costly for the client
- 3PLs integrate with client systems through tools such as cloud-based SaaS, EDI, inventory management, tracking and bar coding, etc.

- 3PL customers emphasize that integration with internal systems is a key factor in determining with whom they will partner for their global supply chain management
- Cloud-based solutions have generally made integration easier and therefore have mitigated some of the risk

**Talent Management**

- 3PLs agree that having the right talent in place in one key success driver for the next five years
- Mix of both hard and soft skills combining both leadership qualities and cross-functional competencies will be critical

- Estimates show that industry is facing a talent shortage – gap of 20 million hires for 2015 alone
- As a result many 3PLs are recruiting from outside their own industry, thus increasing their talent pool

# The 3PL industry is experiencing several trends for 2015 and beyond

- 1 Constraints in domestic freight capacity due to lack of equipment availability and driver shortages has lead many 3PLs and shippers to consider new strategies as well as seeking more dedicated capacity
- 2 At the forefront of logistics IT will be the continuing development and investment in more robust SCM software through improved Supply Chain Planning (SCP), including Customer Relationship Management (CRM) and Transportation Management Systems (TMS) with the ability to handle “big data” while delivering substantial ROI
- 3 Shift in transportation flows due in part to “Nearshoring” production being on the rise for several years as Mexico increases manufacturing capacity and capabilities as well as logistics infrastructure, continued USWC port strikes and disturbances, as well as the Panama Canal expansion creating additional all-water capacity to the USEC from Asia
- 4 Continuing industry consolidation through increased merger & acquisition activity helping large global logistics service providers and 3PLs get even bigger while offering an ever-expanding service portfolio
- 5 Supply chain participants and channel partners will have even greater visibility to / ability for shipper-3PL and shipper-shipper (horizontal) collaboration or co-loading opportunities

## Honorable mention!

- 6 Growing number of Omni-channel fulfillment options (retailers providing a seamless experience across all retail sales channels)
- 7 Increasing attention to corporate social responsibility measures, green initiatives and sustainable business practices (ie. modal conversion from truckload to rail, SmartWay transportation, etc)
- 8 Shippers as increasingly recognizing the inherent risks (ie. natural disasters, security, etc) in global supply chains and are working together with their supply chain partners to explore methods and practices to help mitigate that risk and become more resilient

# 1 Lack of equipment availability and driver shortages have lead many carriers, domestic brokers, 3PLs and shippers to consider new procurement strategies

## Core industry trend

- If projected freight demand growth comes in as expected, the driver shortage (currently 30,000–35,000 unfilled truck driver positions) could amount to nearly 240,000 by 2022
- Driver attrition due to an aging population and increased government legislation (ie. HOS, CSA 2010) are creating driver shortages across the industry
- Lack of new equipment orders following the last freight recession combined with carriers expanding their own brokerage operations
- Increased competition from new truck brokers and 3PLs
- Some modes and geographies - ocean shipping in particular - still have plenty of excess capacity in their networks, meaning 2015/16 could bring more supply/demand imbalance and continued margin pressure for 3PLs
- Shippers and LSPs alike are focusing on long-term trends and operations execution rather than extensive planning as there are often still too many unknowns in the macro economy

## Implications

**Three longer-term opportunities for 3PL expansion to hedge against general volume uncertainty:**

- 1) **Expand into new geographies:** Emerging markets, ie. India, Brazil, near-shoring, etc.
- 2) **Expand into adjacent services:** Development of business model into services with similar capability requirements, ie. transportation management and dedicated fleets
- 3) **New customer acquisition and retention:** Further penetration of existing contracts – defensive posturing

## 2 Robust mobile and cloud-based technology such as CRM and TMS with the ability to handle big data continues to be at the forefront of logistics technology in 2015

### Core industry trend

- **3PLs building out their Transportation Management Systems (TMS) to handle "Big Data":**
  - “Big Data” is defined as the datasets whose size is beyond the ability of typical database software tools to manage
  - TMS vendors are focusing on new systems that make valuable use of the “big supply chain data” that is collected and stored
  - By taking a hypothesis-driven approach (eg – analyzing transportation trends in specific regions or commodities) 3PLs can leverage the data stored in their TMS to make educated business decisions—such as the placement of new DCs or to anticipate future growth
- **Use of SaaS (Software as a Service) models:**
  - SaaS models allow smaller carriers the same level of integration into 3PL systems as larger carriers, opening up business opportunities and sometimes lower rates to 3PLs and shippers
  - Rate management, freight audit, delivery management, routing and scheduling and other services are available as part of SaaS modules

### Case examples



**C.H. Robinson's cloud** houses an immense amount of transportation data, based on transactions from more than 30,000 trading partners with ~9 million trades per month

- CHR has technologies that have helped define the TMS universe, including highly available storage area networks, internal log shipping, standby servers and server virtualization



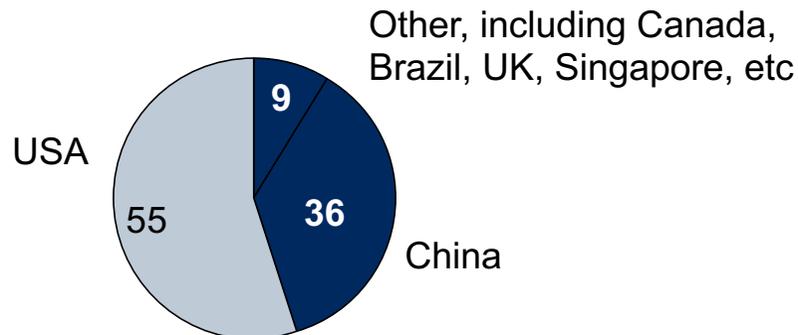
- **Transplace TMS** is delivered as SaaS via a cloud-based model
- Many shippers and LSPs want to retain their carrier base, but want access to more sophisticated TMS technology
- Web-native “Multi-Everything” systems allow for greater flexibility, easy integration and are highly configurable to individual client specifications

### ③ “Nearshoring” production has been a buzzword since the start of the downturn, but it is uncertain whether production shifts will materialize

#### Core industry trend

- Nearshoring has been a discussion topic since the start of the century, though initial attempts failed to materialize
- However, nearshoring has become a popular topic yet again as a potential solution to supply chain disruptions and increasing labor/input costs in China
- Mexico, long considered a top candidate of nearshoring movements, has seen considerable production relocate there from Asia, the US, and Canada, however continued security and violence concerns have also raised a sense of hesitancy from many manufacturers

#### Percentage of survey respondents moving Operations to Mexico (2015):



#### Implications

##### Reshoring makes more sense for products requiring less human labor and made in smaller batches:

- Appliances
- Construction equipment
- Furniture
- Computers and electronics

##### Improved “Speed-to-Market” helping companies to become more agile

For 3PLs, focusing on value creation in enabling production – whether the location is near or offshored – will be crucial in the coming years

## 4 Transportation sector investments have been driven by active ownership strategies & portfolio moves – expansion of services plays a key role

NOT EXHAUSTIVE

Acquirer	Target	Year	Deal Details
	<b>COYOTE</b>	2015	<ul style="list-style-type: none"> <li>UPS in talks as of July 22, to buy Coyote Logistics</li> <li>Seen as very favorable by the market</li> <li>Would give UPS a significant share of the US truck brokerage market</li> </ul>
	 <b>GENCO</b> Product Lifecycle Logistics®	2014	<ul style="list-style-type: none"> <li>PE firm Greenbriar invests in GENCO in 2011, NA 2<sup>nd</sup> largest 3PL at the time</li> <li>GENCO well established leader in “reverse logistics” (contract logistics/warehousing)</li> <li>FedEx acquires GENCO for \$1.4 billion</li> </ul>
	  <b>PACER International</b>	2015  2014	<ul style="list-style-type: none"> <li>Norbert Debtresearch acquired Jacobson Companies to establish a larger presence within North America</li> <li>XPO the acquires ND to enter the European market as well as more of a global presence</li> </ul>
	 	2013  2015	<ul style="list-style-type: none"> <li>PE firm Greenbriar with industry-specific focus on Transportation sector continues to add 3PLs to its portfolio</li> <li>Has invested in (3) top NA 3PLs within 4 years</li> </ul>
	 	2006  2007	<ul style="list-style-type: none"> <li>Acquisition of underperforming TNT Logistics after TNT decided that contract logistics would no longer be a core activity for them</li> <li>Added freight forwarder EAGLE and rebranded as CEVA Logistics – turned profitable in Q2 of 2007</li> </ul>

## 5 3PLs are increasing focus on horizontal (shipper-shipper) collaboration

### Core industry trend

#### “Gainsharing” between 3PLs and shippers

- Gainsharing agreements are often used as incentive for 3PLs and shippers to work together toward operational improvements in their supply chains
- In a 2012 3PL-shipper survey, 42% of shippers reported engaging in gainsharing agreements with their 3PL partners
- However, some shippers are averse to gainsharing agreements, believing that a basic agreement should fully cover a 3PL’s performance expectations

#### Collaboration between shippers – even competitors – for cost savings and service improvements

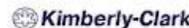
- To mitigate risk and decreased freight volumes, shippers and 3PLs alike are getting more creative with ways to fill their fixed warehouse and vehicle capacity
- Recently, 68% of shippers and 80% of 3PLs expressed interest in these collaboration strategies

### Case examples:

#### 3PLs and shippers are finding creative ways to collaborate:



- 3PLs have a built-in network of shippers and carriers executing logistics transactions through the 3PL’s operating platform
- 3PLs can use this network data— public load boards, benchmark rates, carrier performance, and transit times—for intelligence that gives visibility to trends
- DAT Solutions has built this type of business intelligence with its “DAT RateView Index”



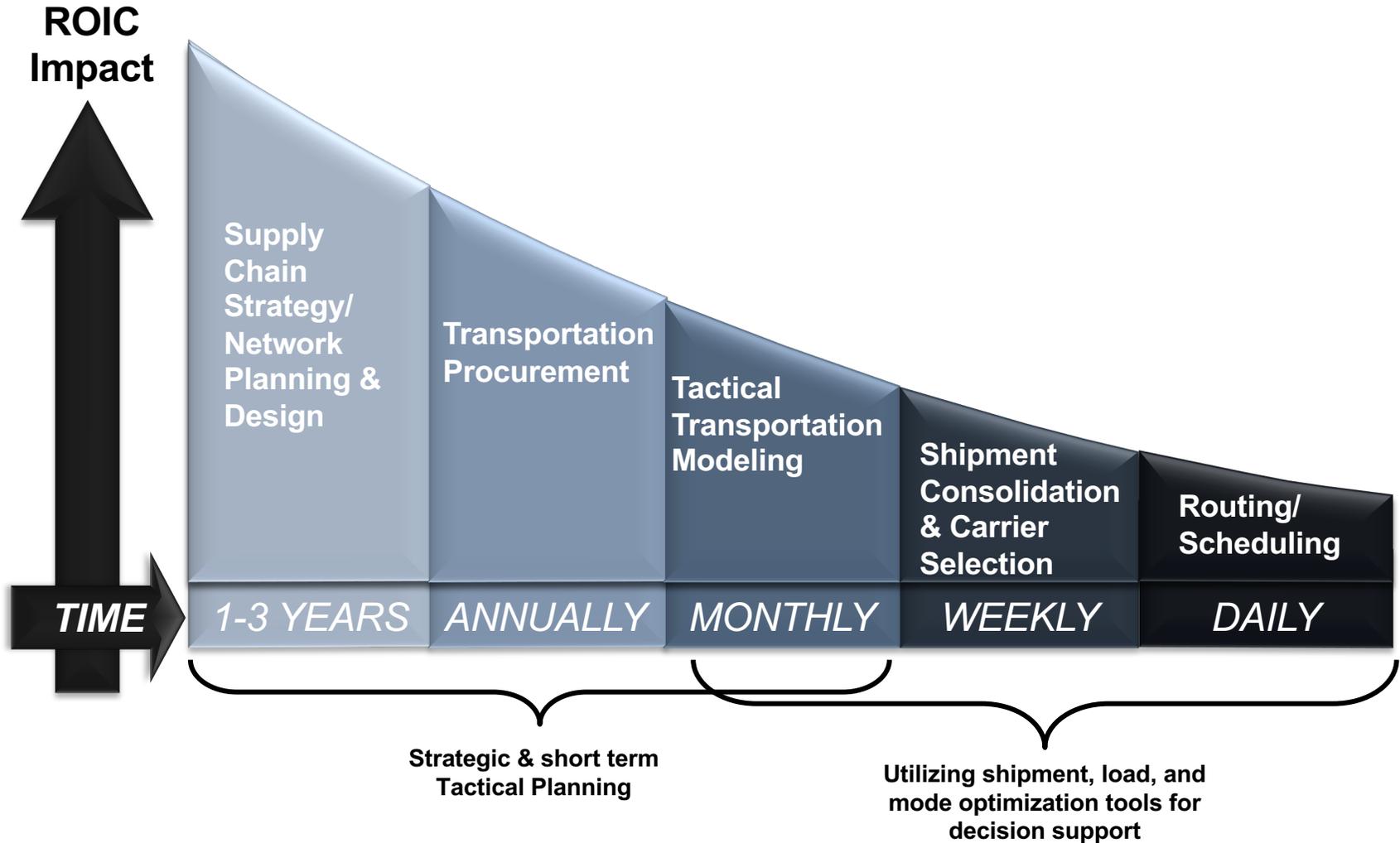
- KC has pursued a “collaborative logistics” approach by partnering with its retail customers
- In one case, KC combined light freight that “cubes out” (physically fills the trailer) with its customer’s heavy freight that “weighs out” (meets the maximum legal weight limit) in the same trucks
- Result was reduced empty miles, transportation costs, and fewer trucks



- In Europe, P&G sells excess private fleet capacity to other shippers, (after the company realized trucks travelling from France to the UK were only half-full)
- In 2010, P&G’s fleet moved goods from non-competing brands such as Baxter, Nike, Toyota and Ikea

# Technology as an enabler of the SCM process

Can couple M&A activity or optimize an existing supply chain



# The major technology segments for Logistics & Transportation

These are commonly used tools/applications to allow Logistics and Transportation executives to manage day-to-day operations as well as critical events and decisions in real-time

## Transportation Mgmt. Systems

... provides **cross-functional** transparency

... **technology infrastructure** provides greater automation and client access to shipment tracking and **key performance indicators** with some level of customization

## Fleet / Asset Mgmt. Systems

...efficiently manage assets by increasing **utilization** as well as improving **service levels**

...**minimize risks** associated with investment in vehicles or equipment  
...**improved tracking and inventory** control and reallocation

## Warehouse & Inventory Mgmt.

... operational excellence in **warehousing and distribution** processes

... **inventory simulation** to optimize inventory and service levels along the entire supply chain by stock type and production step based on historic data

## Freight Audit & Financials

...consistent and **accurate processing and reconciling** of freight invoices

...**automated and scalable** with complete visibility and timely reporting  
... **managing the exceptions** while eliminating endless paper streams

## Cargo Security and Risk Mgmt.

...model **impact of SC risks** across the transportation network by assessing individual routes and sourcing locations

... once risk profile has been determined, **proper mitigation measures** must be developed and evaluated

## Network Design & Optimization

... to evaluate the network by **diagnosing system-wide** supply chain requirements from a total-cost-perspective

...capturing consolidation effects and **network efficiencies** where ever possible

**Customer ERP:** Managing supply chain performance across the enterprise while harnessing the data from all relevant SC partners

# 3PL Management Solutions (1/2)

Function	What does it solve?	Value proposition	Players (GR estimate \$MM)
<b>Network Design &amp; Optimization</b>	How do develop a blueprint of my transportation network?	<ul style="list-style-type: none"> <li>Identify cost-savings and service level improvement</li> <li>Constraint modeling of complex integrated processes</li> <li>Generate scenarios based on detailed sensitivity analysis</li> <li>Quick solve times with clear visualization of transportation routings and physical flows</li> </ul>	<ul style="list-style-type: none"> <li>Llamasoft (16)</li> <li>Chainalytics (10)</li> </ul>
<b>Transportation Management (TMS)</b>	Managing large amounts of transportation data "Big Data"	<ul style="list-style-type: none"> <li>Optimize transportation spend, routes</li> <li>Analyzing transportation trends in specific regions or with certain commodities</li> <li>Rate and contract management</li> </ul>	<ul style="list-style-type: none"> <li>MIQ Logistics (170)</li> <li>Coyote Logistics</li> <li>DSC Logistics (141)</li> <li>Transplace</li> <li>Odyssey Logistics &amp; Tech (60)</li> <li>CTSI Global (40)</li> <li>nVision Global (25)</li> <li>Trilogy Enterprises (25)</li> <li>Blue Grace Logistics (100)</li> <li>TranzAct Technologies (20)</li> <li>Amber Road (8)</li> <li>Lean Logistics (7)</li> </ul>
	Improved visibility	<ul style="list-style-type: none"> <li>Complete end-to-end visibility of the entire order, including multi-leg shipments and international</li> <li>Model product flow and network costs/performance and propose alternative/better logistics configurations</li> </ul>	
	Make more informed business decisions	<ul style="list-style-type: none"> <li>Coordinate, upgrade, and monitor performance of carriers and SC partners</li> </ul>	
	Integration with existing systems/ERP platforms	<ul style="list-style-type: none"> <li>Web connectivity, standby servers, and storage area networks</li> </ul>	
<b>Warehouse Management (WMS)</b>	Optimize distribution operations	<ul style="list-style-type: none"> <li>Improve facility throughput and efficiency with proper warehouse configuration for storage and movement</li> </ul>	<ul style="list-style-type: none"> <li>Kenco Group (325)</li> <li>HighJump (43)</li> <li>ODW Logistics (40)</li> <li>Saddle Creek (35)</li> <li>Accellos (30)</li> </ul>
	Improve service levels	<ul style="list-style-type: none"> <li>Provide shipping options across all demand patterns</li> <li>Improve pick efficiency (ie. JIT, LIFO, etc)</li> </ul>	
	Maintain appropriate inventory levels	<ul style="list-style-type: none"> <li>Determine appropriate level of technology in combination with processes for improved efficiency</li> </ul>	
<b>Freight Audit</b>	Transportation expense management	<ul style="list-style-type: none"> <li>Complete visibility into invoice status and payment information</li> <li>Maximize cash flow</li> <li>Automated and centralized invoicing to reduce a multiple systems for reduced cost</li> </ul>	<ul style="list-style-type: none"> <li>Data 2 Logistics (20)</li> </ul>
	Utilities and waste management	<ul style="list-style-type: none"> <li>Reduce paper handling and manage only exception invoices</li> <li>Operational metrics and reporting</li> </ul>	

# 3PL Management solutions (2/2)

Function	What does it solve?	Value proposition	Players (GR estimate \$MM)
Fleet/Asset Management	Fleet Management	<ul style="list-style-type: none"> <li>Coordinate, upgrade, and monitor performance of fleet equipment</li> <li>Fleet safety, productivity, and efficiency analysis</li> <li>Driver performance monitoring</li> <li>Fuel management, maintenance and insurance costs</li> </ul>	<ul style="list-style-type: none"> <li>Telogis (43)</li> <li>Fleetmatics (15)</li> <li>Smart Drive (15)</li> <li>Omnitracs</li> <li>Mix Telematics</li> </ul>
	Asset Tracking	<ul style="list-style-type: none"> <li>Real-time tracking</li> <li>Sensors for “sensitive” cargo (ie. temp-controlled)</li> <li>Chain of custody supervision for improved freight protection</li> </ul>	<ul style="list-style-type: none"> <li>OnAsset (5)</li> <li>SynchroNet (1)</li> <li>Intellitrans</li> </ul>
	Yard Management	<ul style="list-style-type: none"> <li>Dock door scheduling and optimization while increasing throughput</li> <li>Visibility of yard assets and shipments</li> <li>Reduce dock congestion and detention costs</li> </ul>	<ul style="list-style-type: none"> <li>PINC Solutions (20)</li> </ul>
Cloud-based SC mgmt & TMS solutions	SC management and optimization	<ul style="list-style-type: none"> <li>Produce and update sales and operations planning</li> <li>Supplier collaboration</li> <li>Order promise and inventory management</li> </ul>	<ul style="list-style-type: none"> <li>Adexa (40)</li> <li>CDC Supply Chain (30)</li> <li>GT Nexus (15)</li> </ul>
Site / Project Logistics	Job site set-up	<ul style="list-style-type: none"> <li>Management of materials on-site to ensure vendor compliance</li> <li>Improve plant performance along with lean manufacturing</li> </ul>	<ul style="list-style-type: none"> <li>HAL Inc.</li> <li>Shoplogix</li> </ul>
Sales & Operations Planning	S&OP collaboration	<ul style="list-style-type: none"> <li>Demand and capacity planning and balancing as well as scheduling</li> </ul>	<ul style="list-style-type: none"> <li>Kinaxis (25)</li> <li>Quintiq (20)</li> <li>Steelwedge (10)</li> <li>SmartOps (8)</li> <li>Terra Technology (5)</li> </ul>
SC Risk & Security	Logistics and transportation security services	<ul style="list-style-type: none"> <li>Active monitoring as part of command and control center</li> <li>Embedded cargo tracking and covert surveillance</li> <li>Loss prevention and recovery</li> <li>Serialization for increased regulatory compliance</li> <li>Uniform enterprise data for improved visibility and control</li> <li>Tracking for Returns (RTIs)</li> <li>Inter-modal services</li> </ul>	<ul style="list-style-type: none"> <li>FreightWatch Intl (12)</li> <li>Inmar</li> <li>ACSIS</li> </ul>

**Questions?**