3PL Landscape & Selection Strategies

Presented by:
Bryan Jensen – Chairman/EVP
Agenda

- Major Challenges in 3PLs
- Cost and Revenues
- Trends
- Value
- Selection Thoughts
Our 3PL Practice Clients Include

- GlaxoSmithKline
- BD
- Crescent
- Master Lock
- Procter & Gamble
- Ethicon, a Johnson & Johnson company
- Johnson & Johnson Health Care Systems Inc.
- Bayer HealthCare
- Tenneco Automotive
- OHL
- Kenco
- Heinz
- Quaker
- Ralcorp
- Worley
- Reckitt Benckiser
- Hess
- Hershey Foods Corporation
- GATX
- Saddle Creek Corporation
- Arnold Industries, Inc.
- Unilever
- Unilever Bestfoods North America
- MHI
- The Container Store
- Dell
MAJOR CHALLENGES FOR 3PLS
Major Challenges in 3PLs

- Finding New Talent
  - Major complaint from 3PLs
  - Continues to be a high turnover industry

- Need for better reporting
  - Many 3PLs continue to use “home grown” reporting systems which have limitations
  - Increased requirements from Shippers for custom reporting

- Increased requirements from shippers
  - Shippers are often disappointed with factors such as special packaging, on-time deliveries, and expedited delivery
  - 3PLs become frustrated with frequent changes from shippers
Major Challenges in 3PLs

- Increased emphases on Rules and Regulations
  - Different countries have different shipping rules which increases complexity
  - Need to update systems with rule changes is time consuming
  - Finding a subject matter expert on specific country rules and regulations is challenging and time consuming
  - Cosmetics and drugs are particular challenging

- Lack of Collaboration
  - Getting 3PLs and shippers in-sync is an ongoing challenge
  - 3PLs are often viewed as another vendor not as a partner by the shipper
Major Challenges in 3PLs

• Lack of Infrastructure
  • This is especially true in developing countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Rank by 2016 GDP Size* (US$ Billions)</th>
<th>Roadways Rank</th>
<th>Roadways km</th>
<th>Railways Rank</th>
<th>Railways km</th>
<th>Waterways Rank</th>
<th>Waterways km</th>
<th>Pipelines Gas km</th>
<th>2016 3PL Revenue (US$ Billions)</th>
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<td>14,500</td>
<td>13,581</td>
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<td>487,700</td>
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<td>110,000**</td>
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<td>10,481</td>
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<tr>
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<td>20</td>
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<td>18</td>
<td>15,389</td>
<td>33</td>
<td>2,900</td>
<td>18,074</td>
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<tr>
<td>Indonesia</td>
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<td>14</td>
<td>496,607</td>
<td>27</td>
<td>8,159</td>
<td>7</td>
<td>21,579</td>
<td>11,702</td>
<td>16.3</td>
</tr>
</tbody>
</table>

Source: Armstrong & Associates
COST AND REVENUES
Cost and Revenues

- What Shippers Outsource

### Percentage of Respondents

- Domestic transportation: 83%
- Warehousing: 66%
- International transportation: 63%
- Customs brokerage: 46%
- Freight forwarding: 46%
- Freight bill auditing and payment: 34%
- Reverse logistics (defective, repair, return): 31%
- Cross-docking: 29%
- Product labeling, packaging, assembly, kitting: 29%
- Information technology (IT) services: 27%
- Transportation planning and management: 25%
- Order management and fulfillment: 20%
- Service parts logistics: 18%
- Inventory management: 17%
- Supply chain consultancy services provided by 3PLs: 15%
- Customer service: 11%
- LLP (Lead Logistics Provider) / 4PL services: 11%
- Fleet management: 10%

Source: 2018 22nd Annual Third-Party Logistics Study.
Cost and Revenues

• Key Drivers of 3PL Market Growth

Source: Armstrong & Associates
Cost and Revenues

- Global Logistics Cost and 3PL Revenues

**Figure 2. Global Logistics Costs and Third-Party Logistics Revenues (US$ Billions)**

*Based on current U.S. dollars.

Source: Armstrong & Associates
Cost and Revenues

- 3PL Revenue by Industry

Source: Armstrong & Associates
Cost and Revenues

- Revenue by Region

**Figure 12. 3PL Revenues by Major Geographic Region (US$ Billions)**

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Asia Pacific</td>
<td>$218.2</td>
<td>$253.3</td>
<td>$271.6</td>
<td>$278.2</td>
<td>$289.0</td>
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<td>$377.6</td>
<td>$409.6</td>
<td>$444.5</td>
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<td>North America</td>
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<td>$178.3</td>
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<td>$195.7</td>
<td>$195.5</td>
<td>$199.6</td>
<td>$208.4</td>
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<td>$232.4</td>
<td>$245.6</td>
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<td>Europe</td>
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<td>$190.2</td>
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<td>$171.6</td>
<td>$172.3</td>
<td>$174.6</td>
<td>$179.7</td>
<td>$186.7</td>
<td>$194.1</td>
<td>$201.9</td>
<td>$210.1</td>
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<tr>
<td>Middle East</td>
<td>$34.8</td>
<td>$41.6</td>
<td>$42.1</td>
<td>$44.2</td>
<td>$45.2</td>
<td>$40.5</td>
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<td>$42.2</td>
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<td>$46.5</td>
<td>$49.4</td>
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<td>$55.4</td>
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<tr>
<td>South America</td>
<td>$38.8</td>
<td>$45.9</td>
<td>$45.8</td>
<td>$46.0</td>
<td>$45.0</td>
<td>$37.9</td>
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<td>$45.1</td>
<td>$47.1</td>
<td>$50.1</td>
<td>$53.3</td>
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<td>Africa</td>
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<td>$26.3</td>
<td>$27.8</td>
<td>$29.1</td>
<td>$29.8</td>
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<td>$32.2</td>
<td>$35.0</td>
<td>$38.2</td>
<td>$41.0</td>
</tr>
<tr>
<td>CIS/Russia</td>
<td>$26.5</td>
<td>$32.7</td>
<td>$34.9</td>
<td>$36.4</td>
<td>$33.7</td>
<td>$23.4</td>
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<td>$27.3</td>
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<td>$30.4</td>
<td>$32.3</td>
<td>$34.4</td>
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</tbody>
</table>

Source: Armstrong & Associates
Cost and Revenues

- Asia Pacific 3PL Revenue by Country

Source: Armstrong & Associates
**Cost and Revenues**

- E-commerce Logistics Cost, 3PL Revenue, and Growth Rates

<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Asia Pacific</td>
<td>$215.4</td>
<td>$406.4</td>
<td>$22.0</td>
<td>$40.2</td>
<td>17.2%</td>
<td>16.4%</td>
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<td>China</td>
<td>$165.9</td>
<td>$311.5</td>
<td>$17.0</td>
<td>$31.2</td>
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<td>16.3%</td>
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<td>North America</td>
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<td>19.8%</td>
<td>19.1%</td>
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<td>U.S.</td>
<td>$79.7</td>
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<td>$17.6</td>
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<td>19.1%</td>
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<td>Europe</td>
<td>$75.8</td>
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<td>$8.0</td>
<td>$11.3</td>
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<td>9.2%</td>
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<tr>
<td>South America</td>
<td>$6.8</td>
<td>$12.1</td>
<td>$0.6</td>
<td>$1.1</td>
<td>15.5%</td>
<td>15.5%</td>
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<tr>
<td>CIS/Russia</td>
<td>$5.1</td>
<td>$9.0</td>
<td>$0.4</td>
<td>$0.7</td>
<td>15.3%</td>
<td>15.2%</td>
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<tr>
<td>Middle East</td>
<td>$2.1</td>
<td>$4.0</td>
<td>$0.2</td>
<td>$0.4</td>
<td>17.1%</td>
<td>17.1%</td>
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<tr>
<td><strong>Grand Total</strong></td>
<td><strong>$392.2</strong></td>
<td><strong>$718.7</strong></td>
<td><strong>$40.6</strong></td>
<td><strong>$72.8</strong></td>
<td><strong>16.3%</strong></td>
<td><strong>15.7%</strong></td>
</tr>
</tbody>
</table>

Source: Armstrong & Associates
TRENDS – 3PL
Increased supply chain globalization

Increased collaboration between Shipper and 3PL
  - Technology dependent
  - Electronic data used for performance and speed of change
  - Vendor Managed Inventories (VMI) more common even in the smallest 3PLs
  - Increased use of web-based portals for information exchange

Increased use of mobile applications
  - Decrease in paper records
  - Increased use of technology (RFID) that allows data to be carried with items
Trends - 3PL Relationships

- Increased Dedicated Technology
  - Smarter IT and software that provides a better return on investment
  - Improved speech recognition software

- Increased use of Big Data
  - Increased use in cloud-based technology
  - Improved traceability of items in the supply chain
### Trends - Acquisitions

- Continued Acquisitions – Will Amazon or Home Depot acquire a 3PL?

#### Small Sample

<table>
<thead>
<tr>
<th>Acquirer Company</th>
<th>Target Company</th>
<th>Acquisition Date</th>
<th>Purchase Price</th>
<th>Target Company Value</th>
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<td>XPO Logistics</td>
<td>Unicorn Logistics</td>
<td>12/20/2015</td>
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<td>IBM</td>
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<td>6/20/2016</td>
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<td>$5.0 billion</td>
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<td>UPS</td>
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<td>FedEx</td>
<td>Agility Logistics</td>
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<td>$3.0 billion</td>
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<td>Amazon</td>
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<td>$1.5 billion</td>
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Source: Armstrong & Associates
Trends – IT Needs

- IT Needs

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<tr>
<th>Information Technology</th>
<th>Percentage Reported by Shippers</th>
<th>Percentage Reported by Providers</th>
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<tbody>
<tr>
<td>Warehouse/distribution center management</td>
<td>70%</td>
<td>72%</td>
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<tr>
<td>Transportation management (Planning)</td>
<td>63%</td>
<td>79%</td>
</tr>
<tr>
<td>Visibility (Order, shipment, inventory, etc.)</td>
<td>61%</td>
<td>80%</td>
</tr>
<tr>
<td>Transportation management (Scheduling)</td>
<td>59%</td>
<td>75%</td>
</tr>
<tr>
<td>EDI data interchange (Orders, advanced shipment notices, updates, invoicing)</td>
<td>59%</td>
<td>81%</td>
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<tr>
<td>Web portals for booking, order tracking, inventory management and billing</td>
<td>47%</td>
<td>68%</td>
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<tr>
<td>Bar coding</td>
<td>41%</td>
<td>50%</td>
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<tr>
<td>Network modeling and optimization</td>
<td>39%</td>
<td>62%</td>
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<tr>
<td>Supply chain planning</td>
<td>39%</td>
<td>61%</td>
</tr>
<tr>
<td>Transportation sourcing</td>
<td>38%</td>
<td>59%</td>
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<tr>
<td>Global trade management tools (e.g., Customs processing and document mgmt)</td>
<td>35%</td>
<td>37%</td>
</tr>
<tr>
<td>CRM (Customer relationship management)</td>
<td>31%</td>
<td>60%</td>
</tr>
<tr>
<td>Customer order management</td>
<td>28%</td>
<td>53%</td>
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<tr>
<td>Yard management</td>
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<td>35%</td>
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<tr>
<td>Advanced analytics and data mining tools</td>
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<td>54%</td>
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<tr>
<td>Cloud-based systems</td>
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<tr>
<td>Distributed order management</td>
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<tr>
<td>RFID</td>
<td>16%</td>
<td>23%</td>
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</tbody>
</table>

Source: 2018 22nd Annual Third-Party Logistics Study.
Trends – IT Needs

- IT Gap

Source: 2018 22nd Annual Third-Party Logistics Study.
Trends - Automation

- Automation

Source: 2018 22nd Annual Third-Party Logistics Study.
Trends - Automation

- Reasons for Automation

**Reasons for Automation:**
- **Meeting Customer Service Needs:**
  - 3PLs: 18%
  - Shippers: 23%
- **Increased Efficiencies (Delivery Time):**
  - 3PLs: 13%
  - Shippers: 18%
- **Decreased Operating Costs:**
  - 3PLs: 7%
  - Shippers: 21%
- **Industry Competition:**
  - 3PLs: 33%
  - Shippers: 17%

Source: 2018 22nd Annual Third-Party Logistics Study.
Levels of Investment in Automation

Source: 2018 22nd Annual Third-Party Logistics Study.
Trends - Automation

- Roadblocks to Automation

Source: 2018 22nd Annual Third-Party Logistics Study.
Trends - Blockchain

- Blockchain
  - A file – data structure
  - Shared ledger technology allowing users to see data
  - A time-stamped, non-repudiable database that contains the entire logged history of transactions on the system
  - Smart Contracts – computer protocol intended to facilitate, verify, or enforce the negotiation or performance or a contract
  - Decentralized
  - Permissionless
  - Unchangeable
  - Irrevocable

Source: 2018 22nd Annual Third-Party Logistics Study.
Trends - Blockchain

- Blockchain Expectations

Source: 2018 22nd Annual Third-Party Logistics Study.
Trends - Blockchain

- Seeking or Using Blockchain

Source: 2018 22nd Annual Third-Party Logistics Study.
Trends - Blockchain

- Level of Interest in Blockchain

Source: 2018 22nd Annual Third-Party Logistics Study.
Trends - Blockchain

- Blockchain Benefits
  - Reduce or eliminate fraud and errors
  - Improve inventory management
  - Minimize courier costs
  - Reduce delays from paperwork
  - Identify issues faster
  - Increase consumer and partner trust

Source: 2018 22nd Annual Third-Party Logistics Study.
Trends – Big Data

- Big Data Collaboration

<table>
<thead>
<tr>
<th>Statement</th>
<th>Shippers</th>
<th>3PL Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, 3PLs Can Support Our Big Data Initiatives</td>
<td>41%</td>
<td>34%</td>
</tr>
<tr>
<td>3PLs Have Access To the Heterogeneous Data Elements That Are Needed To</td>
<td>18</td>
<td>26</td>
</tr>
<tr>
<td>Drive the Most Effective Use Of Big Data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3PLs Do Not Currently Have Big Data Capabilities, But We Assume They Will</td>
<td>24</td>
<td>31</td>
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<tr>
<td>Develop Them In the Future</td>
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<td></td>
</tr>
<tr>
<td>3PLs Cannot Manage the Complexity Of the Data Elements Needed To</td>
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<td>12</td>
</tr>
<tr>
<td>Effectively Use Big Data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our Data Is Proprietary and We Would Not Share It With 3PLs</td>
<td>22</td>
<td>32</td>
</tr>
</tbody>
</table>

“Big Data” is high-volume, - velocity and –variety information assets that demand cost-effective, innovative forms of information processing for enhanced insight and decision making. (Gartner, The Importance of ‘Big Data’: A Definition, 2012)
Trends – Big Data

• Opportunities for Big Data

Trends – Big Data

- Big Data Initiatives

VALUE – HOW DO I SELECT THE OPTIMAL PROVIDER?
How do I know a 3PL can provide my organization value?

• They should respond to the areas of greatest concern
  – Simplify Complexity
  – Demonstrate IT Capability
  – Prove a Material Handling Technology Evaluation (more equipment is not always better but they should demonstrate they have evaluated that)
  – Establish their ability to lead to logistically
  – Start with Cost Plus but ensure they can support gain sharing or alternative “share the benefit” plans
  – Stand on their ability to support continuous improvement processes
How do I know a 3PL can provide my organization value?

• Simplify Complexity
  – Show previous success in perceived complex areas (co-pack, kitting, direct to consumer operations, multi-channel)

• Demonstrate IT Capability
  – Internal WMS
  – Prove success with client’s WMS
  – Demonstrate interfacing capability

• Prove a Material Handling Technology Evaluation (more equipment is not always better but demonstrate they have evaluated that)
How do I know a 3PL can provide my organization value?

- Establish their ability to lead to logistically
  - Share the details of their pricing methods
  - Can they support location analysis? (Logistics Leadership)
  - Innovative Design (with corresponding investment)
  - Can they meet emerging service requirements (Big Data)?
How do I know a 3PL can provide my organization value?

- Start with Cost Plus (or Activity Based Costing) but ensure they can support either pricing approach along with gain sharing or other approaches you may be comfortable with

- Stand on their ability to support continuous improvement processes supported by previous successes
  - Coupled with gain share drives a potential win/win situation with a partner who desires long term partnerships

- Clearly define impacts to cost across the relationship
  - Volume, Inventory Turn Shifts, Storage Profile Shifts, Order Profile Shifts
How do I know a 3PL can provide my organization value?

• The best providers realize while cost is always a consideration, and customers can be won on cost, they are kept through:
  – Exceeding Client Expectations (even as they change)
  – Frequent meaningful communications
  – Clear vision of business requirements & their impact

• Commitment by Supplier & Client is paramount

“When my customer puts their head on their pillow at night, the last worry they should have is their distribution partner’s ability, performance and cost.”
For More Information:

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