The growth and complexity of today’s end-to-end supply chain is driving renewed focus on optimizing transportation cost and service for North American Domestic Shippers. Up to 92% of Chief Supply Chain Officers indicate that they have or will be looking for cloud-based collaborative solutions. This represents a call to action. We examine the pressures, capabilities and best practices in Cloud-based Dock and Transportation Optimization.
The Business Case

Our most recent supply chain visibility report, “Supply Chain Intelligence: Descriptive, Prescriptive, and Predictive Optimization,” (February 2015) reveals that the pressure from growing inbound to outbound operations / complexity was the top business driver for the CSCO of the responses of 113 companies. This new insight will take a look at a specific segment of users, focused on a sample of 98 North American Domestic Shippers with the largest majority of their shipment and transportation volume occurring domestically. Up to 92% of these North American shippers have, or are now considering, cloud-based transportation execution and dock management solutions together with process improvements to optimize transportation and procure-to-pay processes.

As the transportation requirements continue to expand, supply chains will require systemic transformational change and complexity. The top 30% of companies are more successful, based on their ranking on five key metrics. They are also more cloud-based and cloud-ready. These Cloud Leaders are answering the call by integrating order-to-financial settlement activities across the end-to-end demand / supply network. With more control and visibility from dock to delivery events and freight cost, they can embark on changes that move beyond just reporting cost and constitute a framework for supply network prescriptive optimization.

Top Pressures for Domestic North American Shippers

Transportation cost for the domestic North American respondent companies is a top concern. Transportation fuel and overall costs were found to have the highest impact on supply chain execution (cited by 69% of respondents). With the fuel volatility up and trucking
capacity tight, enterprises are reducing the excess inventory both in storage and in transit and are placing an increasing awareness (cited by 54%) on the cost and service impact of transportation.

**Figure 1: Competing Pressures Driving a Focus on Transportation Management**

- Volatility of freight costs and/or fuel cost surcharges: 69%
- Increasing awareness of the cost and service impact of transportation: 54%
- Customers demanding faster and more frequent deliveries: 33%
- Supply chain sourcing complexity due to increased globalization: 33%
- Carrier service-related challenges: 31%

Percent of Respondents, n = 98
Aberdeen Group, July 2015

**Top-Performing Companies Collaborate to Deliver a Balance of Cost and Service**

When we look at the performance, we can see across five different KPIs, both cost- and service-related, the Cloud Leaders (the top 30%, see sidebar on page 4) are doing a better job.

Whether it’s regarding time to pay an invoice, or the high volume of electronic presentment on their freight invoices, the Cloud Leaders, from our sample of 98 North American Domestic Shippers, are leading the way and delivering a better balance of cost and service.

Transportation cost / service excellence and speed of freight payments require a unique combination of business strategies, process capabilities, and automation. The gaps in performance and
the optimization required to deliver Best-in-Class results is not achieved without a focus on transportation analytics, prescriptive control tower processes, and a closed-loop collaboration strategy (see sidebar, Closed-loop Multiparty Collaboration, on pg. 3).

**Optimization is Key – Addressing Cost and Service Pressures in a Balanced Way**

Once again, from Figure 1, we see that the logistics executive is faced with balancing competing pressures - both cost and service must be balanced in today's end-to-end supply chain. And we see them leaning toward dynamic cloud-based dock and transportation optimization (synchronization) to drive down the fundamental costs of doing business (Figure 2).

**Cost Pressures and Corresponding Actions**

The top two cost pressures in Figure 1 and the key responses in Figure 2 include:

- **Fuel Pressures** – 69% of companies are concerned with fuel cost and volatility under pressure to compete and control the daily fluctuations in fuel cost.

- **Increased overall transportation cost awareness** – 54% of respondents cite increased awareness of the cost and service impact of transportation as a key pressure. Among transportation executives, it’s clear that the focus is on improving the role of transportation in the supply chain. We have been tracking this metric for over three years and it has consistently been the top pressure (ranging from 54% to as high as 65%).

- **In response, leaders are leaning toward end-to-end dock and transportation dynamic cloud-based collaborative optimization to drive down the fundamental costs of doing**

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**Five Key Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Cloud Leaders</th>
<th>Followers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in baseline freight spend year over year:</td>
<td>-3.1% decrease</td>
<td>+10% increase</td>
</tr>
<tr>
<td>Percentage of your carriers compliant in contract:</td>
<td>90.6%</td>
<td>70.6%</td>
</tr>
<tr>
<td>Percentage of your carriers meeting their service-level and routing compliance needs:</td>
<td>89%</td>
<td>62%</td>
</tr>
<tr>
<td>Average time to process and pay a freight invoice:</td>
<td>5.2 days</td>
<td>17.3 days%</td>
</tr>
<tr>
<td>Percent of transportation invoices currently audited:</td>
<td>79%</td>
<td>40%</td>
</tr>
</tbody>
</table>

n=98 Domestic NA Shippers
Source Aberdeen: July, 2015

Of the above five metrics, Leaders Emerge

- Cloud Leaders (the top 30%) all cite “current usage” of cloud-based dock or Transport solutions
- Followers– others that fall into the bottom 70% of metrics
business. Three of the optimization actions of Leaders versus Followers, circled in green in Figure 2, are summarized below:

- **Overall total cost optimization.** 69% of the Cloud Leaders are tracking total freight and accessories vs. 57%.

- **Dock and load scheduling optimization.** The top performers are 3.10x as likely to leverage driver mobile apps for dock-to-deliver status. They are 3.31x as likely to leverage a cloud-based dock appointment scheduling collaboration portal.

- **Multi-party Portal for optimizing dock and load efficiency.** The Leaders are 3.31x times more likely.

Figure 2: Dynamic Cloud-based Optimization and Multi-party Collaboration

Not only does one have to coordinate across each node and mode in a growing transportation network, they must collaborate tightly with their customers, suppliers and carriers to truly be successful during execution.
Stakeholder Servicing Pressures and Corresponding Actions

Indeed, cost and service-based pressures are not only rising but must be balanced across external stakeholders and parties. Two of these external stakeholders and parties are circled in red in Figure 1:

➔ Customers – 33% of respondents report that their customers are demanding faster, more frequent delivery. As we have identified in recent studies, shipping direct to the store or customer — bypassing the traditional DC — is now the most frequent shipment/logistics format (now at 62% up from 45% just two years ago). In response, shippers are relying on device-to-cloud connectivity that is customer-centric. For instance, from Figure 2:

Up to 69% are leveraging web-based customer centric tracking, shipment tracking, and payment tracking for in-flight, or in transit customer orders.

53% of top-performing shippers collaborate and optimize systems and portal connectivity for dock scheduling to and from customer sites (only 16% of Followers can do this today).

➔ Carriers – 31% of respondents cite carrier service-related challenges as a key pressure (Figure 1). In response, carrier to shipper collaborative optimization is up. For instance:

As we saw in the last section, what is demanded by the customer in terms of track and trace impacts the overall level and complexity of the dock to delivery process driving collaboration with carriers and shippers during shipment execution.
In addition, the need for cloud-based process collaboration for Procure-to-Pay is way up. The top cloud-based performers have an advantage (Figure 3) where they are, and are 1.19x to 1.68x as likely to optimize bidding, analytics, invoicing and payment as the Followers.

Advanced Analytics to Link Rates and Events

The new logistics formats require understanding of new cloud-based requirements. It involves linking financial and cost-to-serve components with visibility events.

Leaders are 1.54x as likely to capture actuals and accrue Landed Cost updates as an order or shipment progresses.

Key Recommendations and Takeaways

Over 75% of responding companies indicated that internal/external collaboration was integral to optimizing dock and transport processes for today’s more demanding customers and stakeholders.
When it comes to process, companies of all classes have begun moving to a synchronized technology and are closing the loop in a collaborative fashion. But the Cloud Leaders are doing a superior job, primarily in the area of tendering bids and doing electronic assessments or allocations with their carriers. By focusing on some of the stakeholder-specific, cloud-based process collaboration gaps, the following observations and recommendations can be made:

**Collaborate to obtain and track true cost.** The top performers are 1.2x as likely to track actual costs and accessorials (69% versus 57% All Others). Without true costs, the ability to audit and measure 1) compliance to plan, 2) variances in fuel surcharges, and 3) accessorials in particular, cannot be achieved. For those that are tracking these costs, ensure that monitoring is taking place in a collaborative, near real-time, or control tower fashion.

**Collaborate and examine bundled and unbundled costs.** At 75%, the top performers are 50% more likely than All Others to practice collaborative multi-round bidding. Without this capability, it is difficult to secure your best overall rates and to analyze the potential savings of bundling several low volume lanes. Failure to consider bundling these lanes or surcharges into a base contract can cost as much as 20% more for the associated volumes.

**Complete the collaborative closed-loop bidding cycle:**

**Start with selection and end with electronic bid assistance.** The leaders are anywhere from 1.18 to 1.68x as likely as All Others to be able to optimize the collaborative bid and selection process — whether performing expressive bidding, strategic carrier allocations, or electronically assisting the bid process.

Process is void in the absence of organization, and the cloud-based top performers in domestic shipping are doing a better job in terms of collaboration. Not only do you need to have the capability, but your organization needs to be designed to align. For instance, 56% of the top performers have an organization design / structure that allows...
carriers to actually suggest alternate routing — versus only 38% for Followers.

**The key takeaway** – A minimum level of visibility, communication, and collaborative dock/transportation optimization is required to balance all these competing costs and stakeholder servicing demands. As this report concludes, this balance is critical. Today's leaders, more than ever, have mandates to reduce transportation spend while improving the frequency of delivery without diminishing the accuracy of shipments and customer service.

For more information on this or other research topics, please visit [www.aberdeen.com](http://www.aberdeen.com).

### Related Research

- **Strategic Sourcing and Segmentation Prescriptive Control Tower Approach**, April 2015
- **Supply Chain Intelligence: Descriptive, Prescriptive, and Predictive Optimization**, March 2015
- **Supply Chain Visibility and Segmentation: Control Tower Approach**, August 2014
- **E-commerce Supply Chain: Follow the Leader to Success**, September 2013
- **CSCO 2014: Top Three Supply Chain Execution Priorities**, December 2013
- **CSCO Priorities under Globalization: Cross-Border Transportation Strategies**, August 2013
- **The Outside-in Approach to Order Fulfillment: Providing a Seamless Customer Experience**, April 2013

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