American Shipper

Special Report

From Siloed Cost Reduction to Enterprise Value Creation

Transforming Transportation Management in the Global Supply Chain



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Introduction

By now, most companies moving freight internationally understand the vital role that transportation management technology can play in their supply chains. Many of these companies are already leveraging systems to plan, optimize, and automate shipping processes that were previously handled by spreadsheet, email, and phone.

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There is still a significant difference in how this technology is benefiting outbound supply chain activities versus inbound, global logistics. Transportation management software, commonly known as TMS, has been demonstrated to drive efficiency, data accuracy, and in most cases, freight spend reduction when adopted by an organization that previously relied on manual systems and spreadsheets to organize shipping operations.

Yet to date, most of these systems have been deployed for domestic transportation needs, implemented at plant or distribution center locations to optimize the consolidation of multiple orders and shipments along with mode selections. The primary goals of TMS implementations have been to achieve a lower total cost for outbound freight while still satisfying customer service level commitments.

In contrast, international freight movement, or the inbound portion of the supply chain, is largely outsourced to logistics service providers or freight forwarders because of the increased complexity of global shipping. Those complexities include: management of ocean sailing schedules, compliance with customs regulations, ground transportation activities at origin, and myriad export/import paperwork requirements.

International freight movement, or the "inbound" portion of the supply chain, is largely outsourced due to complexity.

Third party logistics providers are vital in international supply chains, but companies may be sacrificing critical visibility when they outsource logistics functions. Sometimes, that lack of visibility translates to a loss of both agility and control. It's important for companies to consider how they'll build global supply chain visibility when third party service providers own the execution data around shipment status, carrier performance, and freight costs within their own systems.

Figure 1: Conventional TMS Addresses Issues in Isolation



Take, for example, the recent case of ocean carrier Hanjin Shipping filing for bankruptcy. A global enterprise lacking end-to-end visibility across all its logistics providers and carriers would have been significantly affected if it was using Hanjin when the carrier abruptly halted operations. External disruptions are difficult to avoid, but having insight into potential problems and being able to adjust transportation plans across the network accordingly can mitigate the effect of those unforeseen disruptions.

What opportunities can the enterprise miss in merging freight flows, shifting to lower cost modes or driving more business to preferred carriers when they surrender supply chain visibility to suppliers that include door-to-door delivery in their goods invoice?

Logistics Providers are Part of the Network

For multinational shippers with global supply chains, 3PLs offer vital services like container stuffing and ocean freight planning from overseas suppliers that can't be readily managed by an organization's own transportation management department. The goal should be to improve visibility across the entire supply chain, including inbound and outbound transportation activities, across all partners, in order to identify and act on opportunities for performance improvement.

The ability to adapt shipment plans and execution more quickly in response to unforeseen demand fluctuations or supply disruptions depends entirely on gaining improved visibility to the supply chain.

Companies need information to visualize and understand transportation activity at a global, enterprise-wide level, and know the impact that certain transportation decisions will have on strategic and tactical goals.

It's a general principal of industrial engineering—any complex system that is optimized to obtain the best results locally, or at the final component level, will be sub-optimized globally, or system-wide. For the enterprise, this means that leaving transportation planning, optimization and execution at divisional or regional levels in the organization almost guarantees that significant cost-savings opportunities are being missed because enterprise-wide improvements aren't visible—or even relevant—to local managers.

There's little doubt that implementing a TMS at key transportation centers across your organization is a tactic that can generate freight cost savings. But what if transportation management technology is instead used as part of a strategic control layer, informing global supply chain visibility or a control tower solution? Could it help the enterprise drive value creation and market differentiation?

The Limits of Traditional TMS Thinking

Here's the reality: most transportation and logistics departments have a lot of day-to-day operational challenges. They face pressure to accurately forecast their annual freight costs, pressure to keep their actual costs at or below budget, pressure to ensure the service level metrics from their carriers and 3PLs are met or exceeded, and pressure from the litany of unexpected external dynamics that plague supply chains every year.

The transportation function should be integrated within the broader strategic and tactical operations of a supply chain management organization, because a company can't cost-reduce its way to sustainable profitability.

So it's hard to fault those tasked with navigating those challenges if they may have developed some tunnel-vision around the expected capabilities of transportation management technology. Like most people, these practitioners are searching for solutions to their problems. And that's where conventional TMS technology can play a quick and satisfying role.

But can a TMS developed and implemented to drive regional or divisional cost reduction address the broader supply chain challenges confronting global shippers? It may address some of the domestic challenges, or some of the global ones, but it's likely that such a TMS is being used mostly to address a discrete set of local planning problems and one or two transportation modes. In other words, the results may be optimal for a part of the organization, but not optimal for the whole organization.

Transportation and logistics practitioners are under intense and continual pressure to cut costs, and this priority is unlikely to go away. The transportation function, however, should be integrated within the broader strategic and tactical operations of a supply chain management organization, because a company can't cost-reduce its way to sustainable profitability.

One of the challenges to integrating holistic transportation planning and visibility within global supply chain management activities lies in a lack of connectivity between departments, divisions and regional transportation operations within an organization. A similar disconnect can be found with the partners outside the organization that are stakeholders in the transportation process. Supply chains in the historical sense have been largely replaced by supply networks—a multi-enterprise, multinational, multi-modal ecosystem that must be managed to achieve enterprise goals.

When it comes to transportation, these networks are more likely to operate as autonomous nodes. They aren't synced effectively to deliver end-to-end visibility to inventory in transit, updated delivery ETAs or even freight costs tied to item or

SKU-level details for accurate cost-to-serve measurements. Ocean freight is managed by one team, airfreight handled by a freight forwarder, domestic trucking managed by even more teams on a variety of domestically-focused TMS platforms. That fragmented view splinters even further as the process extends across multiple geographic regions and operating divisions covered by the global enterprise.

This silo condition undermines any global supply chain visibility initiative. As goods move from factory to warehouse to stores or customers, data about those goods moves from enterprise systems (the purchase order) to manual processes (freight management at origin from factory to port) to third party systems (where the forwarder might handle ocean freight procurement and shipment milestones) to a black hole (drayage) to a domestic system (the TMS that manages truckload and less-than-truckload). Shipping orders and transportation plans across partners and service providers quickly lose context and data relationships with the actual goods being moved. That creates a corresponding lost opportunity in terms of business intelligence and insight into cost and supply chain performance, not to mention organizational responsiveness.

Figure 2: Transportation Management is Siloed but Supply Chains are Interdependent



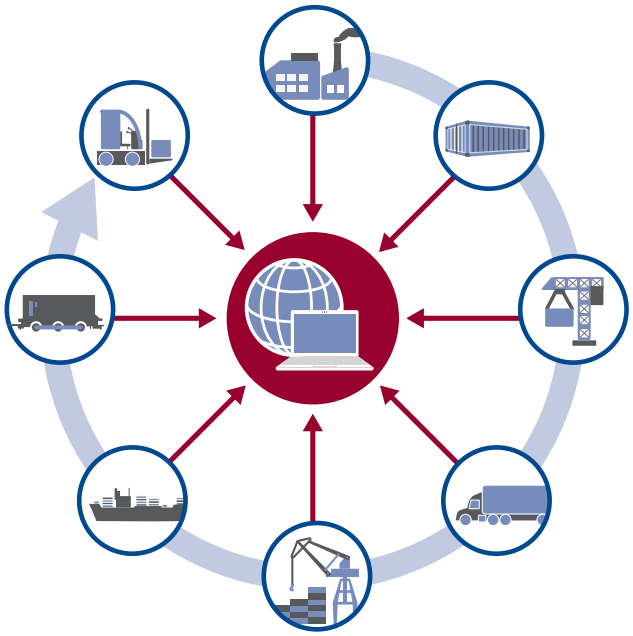
Consider a situation when a new customer comes on board and a major order is placed with critical delivery requirements. In a company lacking adequate visibility to their orders in transit, to normal replenishment versus urgent customer commitments, and to accurate ETAs for ocean shipments, most sales operations will default to rush orders and airfreight delivery commitments. In the conventional world of local TMS deployments, how long will it take the enterprise to understand the true costs to serve this new customer and put in motion the supply chain shifts necessary to generate an acceptable profit from them?

A New Way of Thinking: Global Transportation Management for Visibility

Let's consider a different model. What if the shipping order for goods flowed straight into a global transportation planning and execution solution with a single and consistent version of each line item or SKU across communications and transactions with every party (both externally and internally) in the journey to the final customer? Such a design empowers far more than an answer to "Where's my stuff?"

The organization now has far more valuable information: "Is my stuff going to be where it needs to be on time and at the cost I am expecting? And if not, what are my best options to mitigate negative impact on the business and especially on my customer?"

Figure 3: A Shared View of the Supply Chain is Needed



A shared view of shipping data based on harmonized and normalized data exchange with supply chain partners also fosters the important collaboration that reduces freight costs and transport time. It also avoids the "hot potato" scenario, where the physical shipment and the accompanying shipment data are being thrown at logistics partners at the same time and at the last minute.

That scenario isn't good for service or cost.



Cooperation over Confrontation (with Service Providers and Suppliers)

This is where the idea of networked, value-focused transportation management can really shine. By integrating for supply chain visibility benefits instead of targeting local transportation execution, every party involved in the shipment is united by data. Transportation plans can be optimized from global levels down to local deliveries in order to capture successive cost reduction and streamlining efficiencies.

It is the discovery and activation of these new streamlining opportunities that are now yielding significant financial benefits in complex supply chains, not incremental carrier rate reductions. History has repeatedly showed that the pendulum of economic cycles and pricing power swings both ways between shippers and carriers.

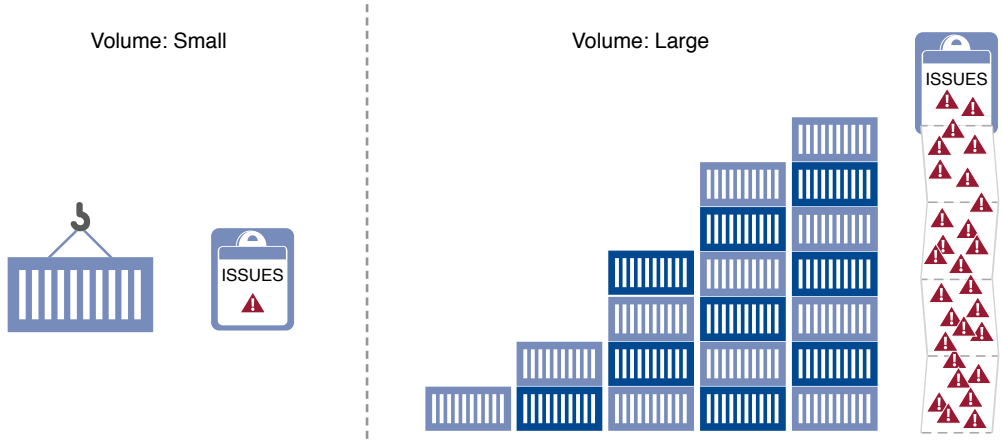
A relentless focus on pursuing lower rates from carriers to the exclusion of building smarter, more agile supply chain operations will leave the enterprise poorly prepared when capacity again dries up and customers begin to leave because delivery service and experience have deteriorated.

How Holistic Transportation Management Drives Value Creation

The end game is this: holistic, networked transportation management is based on a platform that ties all parties, modes and geographies together. But the greatest enterprise benefits don't come from optimizing on a shipment-by-shipment basis.

There are myriad ways to leverage this new way of thinking about transportation in supply chain operations. The problems created by transportation silos (data latency and inaccuracy) only magnify as the volume of shipments and the number of geographies grows. A connected or networked enterprise can grow as large and as fast as market demand takes it, because the network can expand at a similar pace.

Figure 4: Small Problems Become Exponentially Bigger When Volume Grows



Second, there are opportunities to drive value in a networked transportation environment that just don't exist when companies manage the transportation function in silos. There are new ways to service the customer, for instance through multiple order and fulfillment channels, with tiers of delivery speed tied to cost. There are new ways of orchestrating the movement of data and goods to benefit all parties. That could mean sharing purchase order information with downstream logistics and transportation partners for better planning, or sharing ocean freight capacity constraint information or demand planning with suppliers upstream so that production can be throttled back or shipments re-routed to to avoid delays at the origin port.

It could mean creating backhaul opportunities for trucking partners to limit deadhead miles, or providing a distribution center with visibility into incoming shipments to properly plan workforce deployment.

This isn't about eliminating left-hand turns. It's about looking at the big picture. Transportation connects and enables literally every element in a supply chain network.

Conclusion

The broader message is that using networked transportation management technology to drive supply chain visibility at the enterprise level creates opportunities that just don't exist in siloed organizations.

Visibility enables multi-enterprise orchestration—not by replacing local or individual systems—but by creating a powerful network that can't be replicated with the conventional approach to TMS that perpetuates fragmented transportation activities.

And that creates value and differentiation.

As global shippers of goods struggle to meet the new imperatives of e-commerce orders, omni-channel fulfillment, an avalanche of data, and incessant disruptions, companies that are literally on the same page as their suppliers, logistics partners, carriers and customers will gain the upper hand.

A networked approach to transportation management can help deliver the supply chain visibility and optimization that sets winners apart.

Appendix A: About Our Sponsor



GT Nexus

GT Nexus operates the world's largest cloud-based business network and execution platform for global trade and supply chain management. More than $100 billion in trade flows through the GT Nexus network annually. Over 25,000 businesses across industry verticals share GT Nexus as their standard, multi-enterprise collaboration platform. Customers include adidas, Caterpillar, Coach, DHL, Electrolux, HP, Levi Strauss & Co., Kohl's, Nestlé, Patagonia, Pfizer and Weyerhaeuser.

All GT Nexus network participants operate against a core, real-time and always on set of information across multiple supply chain functions, allowing them to optimize the flow of goods, funds and trade information, from the point of order through final payment.

Appendix B: About *American Shipper* Research

Background

Since our first edition in May 1974, *American Shipper* has provided U.S.-based logistics practitioners with accurate, timely and actionable news and analysis. The company is widely recognized as the voice of the international transportation community.

In 2008 *American Shipper* launched its first formal, independent research initiative focused on the state of transportation management systems in the logistics service provider market. Since that time the company has published dozens of reports on subjects ranging from regulatory compliance to transportation management to sustainability.

Scope

American Shipper research initiatives typically address international or global supply chain issues from a U.S.-centric point of view. The research will be most relevant to those readers managing large volumes of airfreight, containerized ocean and domestic intermodal freight. *American Shipper* readers are tasked with managing large volumes of freight moving into and out of the country so the research scope reflects those interests.

Methodology

American Shipper benchmark studies are based upon responses from a pool of approximately 40,000 readers accessible by e-mail invitation. Generally each benchmarking project is based on 200-500 qualified responses to a 25-35 question survey depending on the nature and complexity of the topic.

American Shipper reports compare readers from key market segments defined by industry vertical, company size, and other variables, in an effort to call out trends and ultimate best practices. Segments created for comparisons always consist of 30 or more responses.

Library

American Shipper's complete library of research is available on our Website: AmericanShipper.com/Research.

Annual studies include:

- Global Trade Management Report
- Global Transportation Procurement Benchmark
- Global Transportation Management Benchmark
- Global Transportation Payment Benchmark
- Import Operations & Compliance Benchmark
- Export Operations & Compliance Benchmark

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