Optimizing Transportation's Spend and Impact

Four Fundamental Steps for Managing a Vital Corporate Function

WHITEPAPER

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Four Fundamental Steps for Managing a Vital Corporate Function

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INTRODUCTION

The complexities of transportation cause many companies to treat this segment of the supply chain as an afterthought. Even very sophisticated operations sometimes address transportation in a silo, inadvertently neglecting the significant cost savings and performance improvement they could achieve with a broader perspective. In this paper, we explore why managing transportation holistically is critical to overall business performance and review four key actions companies can take to get the most from this critical area of the business.

In many organizations, transportation is an isolated entity in the supply chain. Often, efforts to optimize transportation are unwittingly made at the expense of other supply chain components, and vice versa.

Inventory and the number of facilities are the classic trade-offs. A company could opt to deploy multiple facilities to reduce shipping distances to its customers. However, it will incur higher fixed costs for those additional assets and higher inventory costs to keep product available at numerous locations.

Conversely, the company could run all its distribution from a single facility, which would provide the lowest fixed facility costs and the lowest inventory costs. But it would undermine those savings with higher transportation costs due to extended travel distances and more expensive modes of transportation to achieve promised customer service levels.

The simple fact is that a company can't address any aspect of its supply chain in a vacuum. Rather, it must maintain a careful balance so it doesn't end up robbing Peter to pay Paul. And striking that balance requires shippers to more proactively and holistically manage their transportation function.

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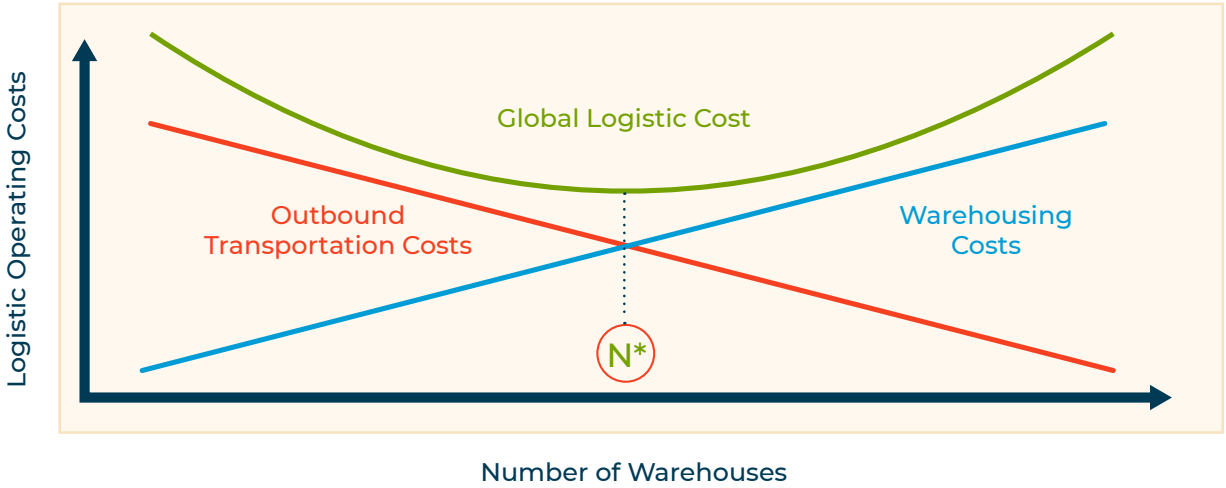

THE TRANSPORTATION MANAGEMENT CHALLENGE

For many shippers today, management of transportation simply isn't, and never has been, a core competency. Perhaps that's not surprising given most shippers' roots. These companies often began life as entrepreneurial ventures dedicated to developing, manufacturing, marketing and selling their ideas and products, and doing so as creatively and quickly as possible. Moving goods from one place to another always took a back seat, as shippers relied on the carrier community to "get my stuff where it has to be."

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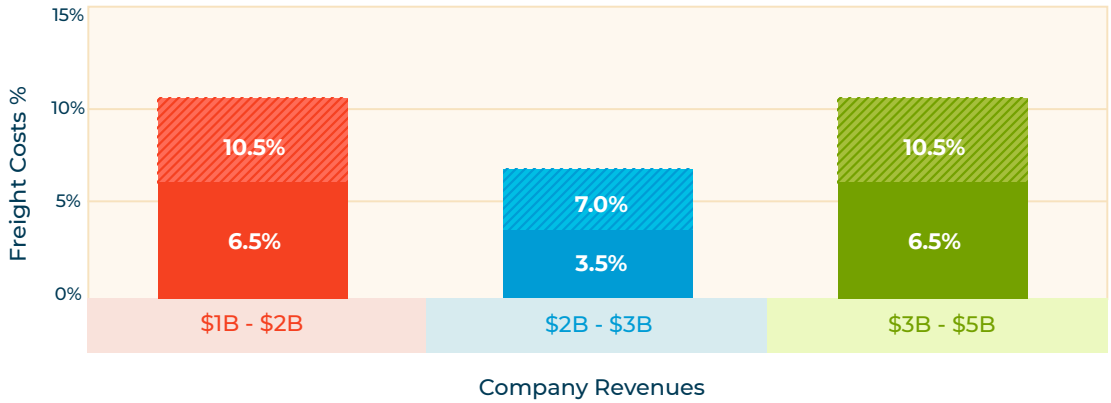
Exacerbating the problem is the fact that some companies just don't have the resources to commit to managing transportation internally, so they rely on vendors or customers to direct freight movement.

The trouble is, transportation is not an insignificant function. To the contrary, if it's not well managed, transportation can erode a shipper's profitability and overall business performance.

Take costs, for example. The average transportation spend as a percentage of sales for many companies skyrocketed over the last eight to ten years. To put some perspective around this, freight costs (as a percentage of sales) jumped from approximately 6.5 percent to 10.5 percent for $1 billion to $2 billion companies; 3.5 percent to 7.0 percent for $2 billion to $3 billion organizations; and 6.5 percent to over 10 percent for $3 billion to $5 billion enterprises. Those increased costs have a direct impact on margins and make companies less competitive.

THE AVERAGE TRANSPORTATION SPEND INCREASE OVER THE LAST 8-10 YEARS



With cost and service pressures intensifying for most companies today, managing transportation in a more formal, integrated, and sophisticated way should be a priority. Shippers that ignore this element of the supply chain and the impact it can have on the business run the risk of doing everything else right and still not meeting their business objectives around customer service, cost containment, and profit margin.

FOUR ACTIONS TO OPTIMIZING TRANSPORTATION'S SPEND & IMPACT

The good news is that transportation doesn't have to be a black hole of cost that a shipper, regardless of size, feels compelled to accept.

Shippers have a number of options at their disposal for gaining a deeper understanding of the critical role that transportation plays in the supply chain and making targeted changes to how they manage the function to improve its performance.

The following four actions, in particular, should be at the top of the list for any shipper seeking to gain a holistic view of transportation to enhance transportation's contribution to overall enterprise performance and profitability.

#1: GET THE RIGHT DATA

Any company, whether it's spending $10 million or $500 million or more, can realize incremental cost savings just by maintaining process discipline. However, generating truly significant savings requires rigorous analysis—and that, in turn, requires the right data.

For example, a thorough review of all of a shipper's freight data can uncover a gold mine of money that's being frittered away as well as opportunities to boost performance. The problem is, many companies have little or no such data. Sure, they have a budget, invoices and expense reports, but they lack a true understanding of the details or the history that contributes to them.

The biggest deficit is a shipper's freight history. When companies lack historical freight data and performance metrics (which, at minimum, should cover the past year to account for variability in business cycles or seasons), they're paying dearly for that lack of visibility.

- They may be using 200 carriers when they should be using only 20.
- They may have been paying inaccurate freight invoices because the Logistics or Accounting doesn't have the knowledge to do otherwise.
- They may be missing out on aggregation opportunities or mode shifts or better rates.

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The point is, whether the data is on paper or electronic, it's critical for shippers to compile and analyze it to understand their current situation and identify opportunities for improvement.

Here's a simple example of the impact better data can have.

One shipper was working with a third-party logistics provider in Memphis. Why Memphis? The shipper had its reasons, but none was related to transportation.

A quick (two-hour) analysis of the company's freight data revealed the shipper could save 5 percent on transportation if it used a similarly priced and capable 3PL in another city about five hours away.

Simply shifting distribution closer to its customers could result in better rates, more optimal mode shifts, improved accessorials, and better service to customers. The key was the shipper had historical freight data from its Transportation Management System (TMS), knew the expected changes to come, and was able to make a fact-based analysis.

#2: USE THE RIGHT TECHNOLOGY

Having vital data is half the battle. Making sense of it is the other half. One way to deal with all that data is to implement a TMS. A TMS can be worth its weight in gold.

According to recent research[1], shippers using a TMS reduced freight costs on average by 8.5 percent because they could use preferred carriers more often, negotiate procurement more effectively, and take advantage of lower-cost modes.

A properly implemented TMS also has been proven to enhance customer satisfaction and improve service levels.[2] Yet despite this strong business case, shippers have not embraced TMS en masse.

In fact, only 26 percent of shippers in a recent survey[3] said they're currently using one, which only reinforces the fact that most companies still don't consider transportation a priority.

A TMS supports four key transportation processes:

- planning and decision making
- transportation execution
- transport follow-up (track, trace, settlement)
- performance measurement

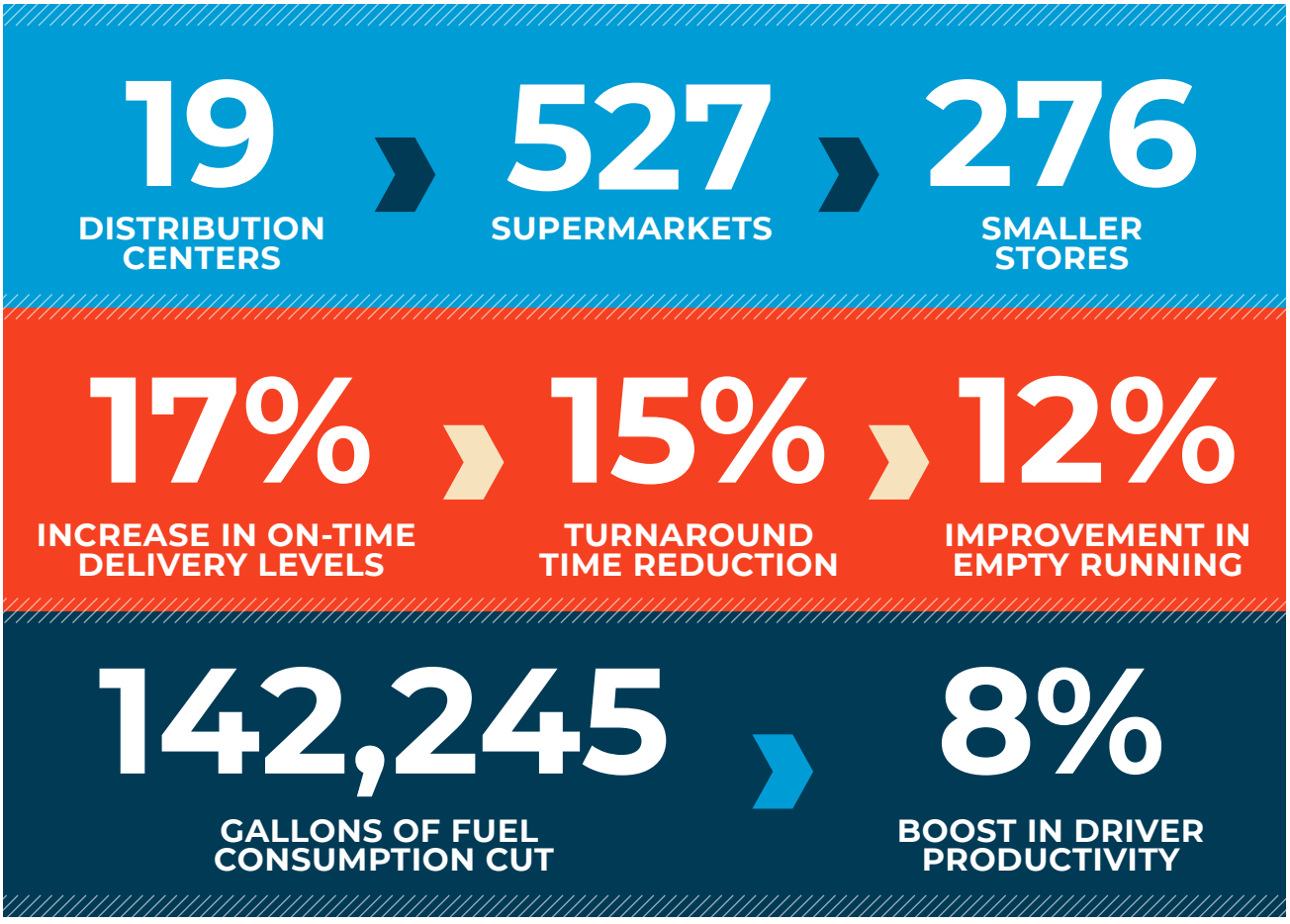
At its essence, a TMS analyzes all of the requirements for transportation and all of the opportunities, and identifies ways to make improvements.

For instance, it can enable a shipper to aggregate shipments, track orders, cross-check invoices, generate performance metrics, and prevent waste. The savvy shipper will become self-educated in its transportation trends, and actual results will force behavior changes that will drive continuous improvement.

One example of the far-reaching impacts a TMS can have is the experience of a large UK-based food retailer. With, at the time, 19 distribution centers, 527 supermarkets, and 276 smaller stores, the company needed a way to more accurately and efficiently execute its complex transportation plans on a daily basis.

By implementing a TMS, the retailer cut fuel consumption by 142,245 gallons and store turnaround times by 15 percent. It also has boosted driver productivity by 8 percent, improved empty running by 12 percent, and increased on-time delivery levels by 17 percent.[4]

AFTER TMS IMPLEMENTATION



There are numerous TMS's on the market, each with varying capabilities and functionality. They range from home-grown proprietary ones, to those from midmarket specialty vendors, to 3PL offerings, to large-scale vendor-provided applications (sometimes standalone, sometimes as modular elements of Enterprise Resource Planning ERPs). Some are on-premise models and others are cloud-based solutions. The actual technology used is less important than identifying a shipper's *specific requirements* and selecting the best fit for now and the foreseeable future.

In addition to implementing a TMS, shippers may also be able to modify their warehouse or order management system (WMS/OMS) to aggregate orders before they reach the shipping point. Doing so will enable them to more easily take advantage of mode shifting to optimize cost, time, level of service or reliability.

#3: OPTIMIZE THE NETWORK

Moving products efficiently and effectively can be a complex undertaking, especially for large companies. It's far from easy for a shipper to ensure it consistently achieves the optimal balance across cost, time, and service levels.

A shipper could focus too much on keeping logistics costs down but, in the process, fail to meet customers' delivery expectations. Or it could go the opposite route, doggedly improving customer service levels but ending up with a network whose costs are killing the bottom line.

That's where a network design study can help. Such an effort explores a company's supply chain, from suppliers to customers, to identify the optimal type, number, size and location of assets across the network. Transportation is almost always the biggest driver, and often the tipping point, in network optimization.

It's key to answering the question: *Where should my facilities (manufacturing, cross docks, warehouses, distribution centers, 3PLs, etc.) be located to best serve my customers at the lowest acceptable cost?*

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A comprehensive network study can generate significant transportation insights that can be used to help optimize freight activity.

For instance, it's intuitive that locating distribution facilities closer to customers can reduce costs. But there can also be advantages to locating a facility near the point of origin, whether that's near a port to reduce drayage costs, or near a rail intermodal facility to combine the efficiencies of rail and truck transport.

Another example: A shipper's business in one geography might be very attractive to a carrier, but if the shipper moved that business to another region, it might not have the same appeal. The carrier is in the business of balancing its network—it doesn't want to have a lot of inbound to one part of the country and no outbound because that means assets are moving empty. By moving its business to a new region, the shipper, in effect, is asking the carrier to eat the return leg, and that's a losing proposition. By understanding its network better, a shipper can more easily find carriers in certain areas that want its business and will offer better rates and capacity.

The bottom line: In addition to creating a more productive, cost-effective overall network, network design efforts have been instrumental in reducing transportation expenses—to the tune of 7 percent to 15 percent, in our experience.

#4: GET HELP FROM CARRIERS

Shippers looking to their carriers to help them manage transportation costs by cutting their rates will find it tough going, at least for the foreseeable future. A shortage of truck drivers—estimated by the American Trucking Association to be in the 60,000 range and growing[5]—has put truck capacity at near 100 percent utilization. Throw in the events of 2020 and it is easy to see in such an environment, carriers have little incentive to negotiate base rates.

But that doesn't mean carriers can't help in other ways. If a shipper is willing to do some work on its end to become a better customer to its carriers, its carriers could be more receptive to at least holding the line on general rate increases (GRI). Some simple and obvious things a shipper could do include:

- guaranteeing loads
- reducing dock waiting time
- making freight more loadable by palletizing or stretch wrapping
- providing truck unloading/loading
- using scanning technology to reduce paperwork

One big-box retailer we know works very hard with its carriers to review past performance to eliminate waste or unprofitable lanes, but almost always refuses general GRIs. The approach works because both sides understand the dynamic nature of the business and want to maintain the relationship. Critical to the retailer's success is knowing the freight flows and characteristics better than the carrier, and having a defined strategy to meet function and business objectives.

The underlying message is, of course, one that's been preached for years: Shippers will do best over the long run if they strive to create mutually beneficial relationships with their carriers—not one that's based on strong-arming and aggressive tactics to drive down rates to the point they barely cover carriers' costs.

Leveraging external independent viewpoints (such as those from consultants, industry peer groups, and research outlets) can bring best practices into the mix to maximize these relationships.

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CONCLUSION

It's critical for companies to pay attention to transportation as an integrated part of the supply chain. But this is difficult for many companies to do because transportation is rarely viewed—and managed—as the critical function it is.

A rule of thumb in transportation is to plan centrally for scale, and execute locally to fulfill unique requirements. The company needs a central view of all of its transportation—operating units, locations, customers, shipments, carriers, and contracts—to be able to aggregate shipments, select the most cost-effective modes, and negotiate around volumes. Then various operating entities can execute on a daily basis by aggregating, dispatching, and processing activities. One operating unit might see higher costs, but another may achieve significantly lower costs. And that's okay.

A rule of thumb in transportation is to plan centrally for scale, and execute locally to fulfill unique requirements.

The ultimate goal is to manage transportation in a way that most benefits the company overall through the optimal balance between cost savings and better customer service. Taking a comprehensive view requires shippers to ask a number of key questions:

- Who is managing the transportation (inbound, inter-facility, and outbound) process and how?
- Is our network structured to meet "best service/least cost" objectives?
- Do we have a system to track and audit every detail of every freight movement?
- How about the auditing and freight bill processing systems?
- Which shipment quantities are most economical?
- Are we a good customer to our carriers?
- What is our carrier strategy—cheap and mediocre service; expensive and top quality; or the best combination of each dynamically selected for each shipment?

The answers to these questions will enable a shipper to begin to get at the essence of true transportation management.

It's not sexy and doesn't grab headlines. But the payoffs can be significant in terms of cost reduction and improved customer experience. And for shippers feeling the pressure to enhance both aspects of their business, optimizing transportation is an operational necessity.

REFERENCES

[1] "Making the case for TMS implementation" Published: 11 March 2019: Brian Straight
https://www.freightwaves.com/news/high-tech-high-touch/tms-advancements-boost-shipper-productivity#:~:text=Those%20using%20a%20TMS%20can,and%2015%20percent%20yearly%20savings

[2] "How to Calculate the ROI for a Transportation Management System Project" Published: 15 December 2017: Bart De Muynck, Brock Johns
https://www.gartner.com/en/documents/3838864/how-to-calculate-the-roi-for-a-transportation-management

[3] "The State Of The TMS Market" Published: 03 February 2020: Mercury Gate
https://mercurygate.com/blog-posts/the-state-of-the-tms-market-2020/

[4] "Sainsbury's cuts transport costs with integrated Paragon system," Published: Paragon Software Systems LLC case study
http://www.paragonrouting.com/case-studies/sainsburys-cuts-transport-costs-integrated-paragon-system

[5] "Outlook 2021: Latest US driver shortage requires long-term solutions" Published: 20 January 2021: William B. Cassidy: Journal of Commerce Annual Review and Outlook
https://www.joc.com/trucking-logistics/labor/outlook-2021-latest-us-driver-shortage-requires-long-term-solutions_20210120.html

ADDITIONAL READING:

What is Transportation Spend Management (TSM)?
https://www.traxtech.com/blog/what-is-transportation-spend-management-tsm

Smart Strategies for Logistics Cost Optimization
https://www.industryweek.com/supply-chain/logistics/article/21959350/smart-strategies-for-logistics-cost-optimization

Reducing Supply Chain Transportation Logistics Costs
https://www.thebalancesmb.com/reducing-transportation-costs-2221049

Roadblocks in Transformational Technology Implementations
https://jbf-consulting.com/roadblocks-in-transformational-technology-implementations-for-supply-chain/

The Essence of Managing Transportation
https://jbf-consulting.com/the-essence-of-managing-transportation/

Does Your Transportation Management System Need More Horsepower?
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Dennis Heppner is a Principal at JBF Consulting. Dennis' expertise in transportation, logistics and supply chain operations, and third-party providers spans 25+ years. His experience is broad-based, spanning entire supply chains, including business process redesign, sourcing, distribution network design, transportation management, distribution operations, outsourcing selection, and business strategy for major manufacturers, distributors, retailers including eCommerce, and service organizations.

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Since 2003, **JBF Consulting** has been helping shippers of all sizes and across many industries select, implement and squeeze as much value as possible out of their logistics systems. We speak your language — not consultant-speak – and we get to know you. Our leadership team has over 70 years of logistics and TMS implementation experience. Because we operate in a niche — we're not all things to all people — our team members have a very specialized skill set: logistics operations experience + transportation technology + communication and problem-solving skills + a bunch of other cool stuff.

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