

SUPPLY CHAIN NETWORK EVALUATION: ASSESSING THE HEALTH OF YOUR SUPPLY CHAIN

Is your business the same as it was five years ago, or even three years ago? If your company is like most, your suppliers, customers and even your product offering have changed over time.

As a result, your supply chain probably had to react quickly to keep pace with these business changes. This has most likely left gaps, blind spots or redundancies in your logistics network.

If you were to take a 40,000-foot view of your supply chain and pause to reflect on how to best optimize your network, what would you see? Is your network operating effectively? Are your total landed costs moving in the wrong direction? Are facility infrastructure costs increasing as a percentage of overall supply chain costs? Is customer service still competitive or is it costing you sales? Do you know where to find answers to these and similar questions?

WHAT IS A NETWORK EVALUATION?

A network evaluation is a 360-degree review, enabling you to assess the health of your supply chain and logistics management practices. The evaluation identifies strengths, weakness and opportunities, charting a path to achieving optimal performance from your supply chain. Deploying the recommendations of a network evaluation will benefit your business through increased supply chain savings and efficiencies. It also will create a framework for scalable future growth.



WHEN TO CONDUCT A NETWORK EVALUATION

In a survey of 124 chief supply chain officers, when asked about their top business pressures, the respondents revealed supply chains in flux:

- Rising costs of supply chain management (50 percent)
- Growing complexity of the supply chain (36 percent)
- Escalating demand for service from customers (31 percent) ¹

These pressures often are associated with five key symptoms common to most supply chains over time. Consider these symptoms as red flags, waving the need for a closer examination of your logistics management practices.

1 Something new: Whether it's a new product launch, markets, or customer demands, it's likely your current practices and processes will not be as effective going forward. Align your logistics network to the new processes with a network evaluation to review your sourcing, product offering, and distribution patterns, and identify greater supply chain efficiencies going forward.

2 Transportation costs on the rise: When reviewing transportation costs, are you relying more on expensive expedited services? Are costs up due to longer lengths of haul? Both conditions may indicate the need to review your supplier base, buying criteria and purchase-order processes. It is likely that optimization and mode-shifting opportunities exist in your network.

3 Shifts in sourcing: A shift in sourcing can have a significant impact on your supply chain. Whether it is shorter lead times or greater length of haul, lower raw-materials costs can quickly be offset by higher logistics and distribution costs. A network evaluation provides you the analytics to evaluate the total landed costs of your products, determine available inventory needs and help guide your procurement practices.

4 Divestiture or acquisition: 1 + 1 does not always equal 2, or vice versa. Logistics strategies that work for a business with a product offering often undergo major supply chain adjustments when increasing or reducing the number of products due to a divestiture or acquisition. The network evaluation will help identify synergies in your new supply chain, such as the location of your distribution centers, opportunities to leverage freight volume and density, and carrier selection.

5 Infrastructure costs on the rise: Where are your distribution centers in relation to your suppliers and customers? If your infrastructure costs are increasing as a percentage of overall supply chain costs, then an analysis may reveal cost savings through a modification in the number and locations of your distribution centers or inventory replenishment policies in your distribution network.

WHAT IS INCLUDED IN A NETWORK EVALUATION

At a high level, a supply chain network evaluation considers inventory positioning, distribution facility footprint, and the transportation that links facilities, suppliers and customers. At a deeper level, a network evaluation examines your supply chain with a thorough review of these elements.

- **Shipment Optimization:** Identifies opportunities to reduce overall shipping costs by combining shipments or changing modes to best fit the business needs. Included is a review of the current transportation strategy along with a future-state consolidation strategy which aligns with your company objectives.
- **Mode-Shift Analysis:** Finds opportunities to lower transportation costs and improve service by shifting modes based on supplier density, shipping frequency and shipment characteristics.

¹ Aberdeen Group: Transportation Procure to Pay. © 2012.

- **Current-Carrier Analysis:** Seeks to lower your transportation spend and improve service by evaluating your current-carrier mix, rate structures, service metrics, and asset availability.
- **Supplier Compliance:** Evaluates whether your suppliers are filling your purchase orders on-time and without unnecessary shipments, utilizing the most cost effective mode of transportation based on your business rules and carrier mix.
- **Freight Audit and Payment:** Analyzes electronic or manual invoice processing systems and procedures to ensure your shipment invoices are rated correctly with appropriate discounts.
- **Carbon-Footprint Analysis:** Reviews your current carrier mix, modes and practices to identify ways to reduce carbon emissions and fuel usage, while capturing associated federal and state financial incentives.
- **Distribution-Network Analysis:** Considers the transportation-cost impact to relocating or closing facilities in your current network.
- **Headcount Allocation:** Determines whether there are opportunities to reduce the number of full-time employees or reallocate them to other jobs or locations.

WHERE TO START

A network evaluation doesn't need to be an overwhelming proposition. Most companies have a product offering, supplier base, and distribution network which allows its own personnel to monitor day-to-day logistics and supply chain activities. The challenge for these employees may be too little time and too many data sources, resulting in information overload and disconnects. As its supply chain becomes more complex, the company often struggles to identify and capture critical data necessary for informed logistics decisions.

An alternative to conducting the analysis internally is to use a third-party logistics (3PL) services provider. A 3PL can support the network evaluation in two ways. First, it has experience in logistics-network modeling to examine the supply chain from many different perspectives and provide a new and unbiased view of the current network.

The second way a 3PL can support a network evaluation is by helping customers gather, filter and identify the data. This will lead to the most effective supply chain decisions. A partnership of internal and external resources ensures an in-depth understanding of your business network, while providing the objectivity and experience of supply chain professionals. This saves internal resource expenses and prioritizes the most important areas of opportunity in the supply chain.

BENEFITS OF NETWORK EVALUATION

Typically, a company initiates a network evaluation with the goal of operating and managing a healthier supply chain, one that better aligns with its business goals and direction. The output of a network evaluation includes data that identifies areas of improvement, a roadmap to implement the improvements, and direction on how to benchmark and track progress. As the changes are implemented, your business can expect benefits such as cost savings, process efficiencies, and improved customer service.

As an example, a 2010 Government Transportation Management Study cited documented savings in government and commercial organizations resulting from:

- Shipment consolidation (20-30 percent)
- Mode conversion (6-8 percent)
- Sourcing and transportation rates (10-15 percent)

- Accessorial management (8-10 percent)
- Utilization (15-20 percent) ²

Similarly, companies implementing centralized transportation functions at a network level achieved savings in:

- Process improvement/administrative cost reduction (20-40 percent)
- Shipment optimization (5-20 percent)
- Carrier management (5-15 percent)
- Continuous moves (1-5 percent) ³

Other benefits include a decreased carbon footprint, lower inventory and infrastructure costs, reduction in delivery days, and greater compliance from suppliers, which helps with customer demands.

SUMMARY

Taking the time to evaluate the health of your supply chain network can be very rewarding. By adding the resources of a trusted 3PL, you can leverage its experience and expertise, which can affect your bottom line and support the decision-making process for strategic business planning. Is it time for a supply chain check-up?

NEED MORE INFORMATION?

MIQ Logistics has conducted supply chain network analysis for numerous companies in a variety of industries including: industrial manufacturing, retail, life sciences, consumer goods, high tech, mining and energy, and others.

[Request a Supply Chain Analysis](#)

ABOUT MIQ LOGISTICS

MIQ Logistics is a global logistics company headquartered in Overland Park, Kan., and with offices in North America, Asia, Europe and Latin America. MIQ Logistics enables companies to improve their transportation network and overall supply chain efficiency by offering flexible logistics solutions supported by Web-native technology and global logistics management capabilities.

² PRTM. Government Transportation Management Study Summary of Findings and Recommendations. January 2010. Available at <http://www.gsa.gov/graphics/ogp/TransportationManagementStudy.pdf>. Accessed May 12, 2013.

³ RedPrairie. Achieving Transportation Excellence—Driving Out Costs and Increasing Customer Service Through Advanced Transportation Management. Available at http://www.redprairie.com/uploadedFiles/ResourceCenter/Resources/Whitepapers/WP_TransportExcel.pdf. Accessed May 12, 2013.

