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It's High Time to See that Your Business's Success Is Closely Tied to Transportation

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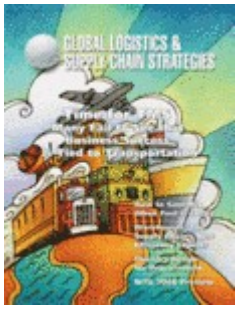
Despite skyrocketing fuel costs and rising transportation rates, the majority of manufacturers and retailers have failed to invest in transportation management systems that can save money and optimize supply chains.



If there is one complaint shared by every manager at every company today, it is the impact that high fuel and transportation costs are having on their businesses. Budgets and bottom lines have been gutted by these costs that increase every day.

So if these costs are such a critical issue, why do nearly two out of three companies across every industry lack the technology or processes to manage its transportation efficiently?

"It is amazing to me that more companies do not appreciate the deep connection between their transportation operations and the rest of their business," says Brad Wyland, a senior researcher at the Aberdeen Group, who just published a report examining this question. "Best-in-class companies certainly make the connection and have invested in transportation management solutions that help manage their businesses and leverage the information to collaborate better internally and externally. Laggard companies are just beginning to look at TMS opportunities, but they are at least two or three years behind the curve. They are paying a high price in the meantime."

Wyland's report, entitled No Excuses! Why Optimizing Transportation Management is Within the Reach of Every Company, examines what transportation managers are doing--and not doing--to deal with the rising cost of fuel and surcharges while trying to provide better visibility to freight and cost status to internal and external partners. Based on a global survey of transportation and logistics professionals, the Aberdeen report reveals that only 39 percent of companies are using any kind of TMS technology and that most companies still rely on manual processes and spreadsheets to handle all day-to-day shipping operations, contract negotiation, carrier performance measurement and other aspects of transportation management. It is not a coincidence that 40 percent of the companies reported poor transportation service.

The price of failing to invest in TMS technology is high, according to the Aberdeen study. So-called laggard companies that usually have manual systems and poor processes must expedite 27 percent of their shipments to meet customer requirements. They also experience less than 90 percent on-time deliveries.

Very clearly, manual systems are no longer capable of controlling transportation costs or service quality let alone support information sharing and visibility among departments. Information that is reported weekly, monthly or quarterly--the norm with manual systems--is not actionable. TMS technology not only helps optimize transportation operations, but the near real-time information provided allows better decision making.

"If managers have information about their shipments and orders at the point of decision making, they have much more flexibility in finding ways to lower costs in the warehouse or elsewhere in the business," says Wyland. "With manual systems, you are flying blind."

The Aberdeen report clearly makes the case that best-in-class companies that have TMS or similar capabilities and good processes report that they are able to control shipping costs and often decrease inventory carrying costs. These best-in-class companies enjoy:

- On-time performance of 95 percent or higher
- Savings on transportation spend management averaging 8.8 percent
- Expedited shipments of no more than three percent

So why have so many companies failed to implement the technology or processes that have proven to be so effective? According to the Aberdeen survey, companies give the following four reasons for not investing in TMS technology:

1. We don't know enough about the available solutions
2. We cannot get executive level support for these initiatives
3. Software integration is too difficult/expensive
4. Upfront cost of the solutions is too high.

Given the vast amount of information about TMS that exists in print and electronic form and that is presented at seminars and conferences, claiming lack of information is rather perplexing. As for gaining management support, the oil shock that has hit the world's economies in the last year should certainly have been a wakeup call to even the most disengaged boardrooms. Nor do the last two reasons hold much water given the many deployment options that exist for TMS technology that can surely meet every company's budget and resources.

Large software companies such as Oracle, RedPrairie and Manhattan Associates offer powerful TMS modules as part of their much broader supply chain suites, which many companies have in place. Best-of-breed software companies specializing in transportation, such as LeanLogistics and Management Dynamics, offer innovative TMS solutions. Even 3PLs are becoming sources of solutions that provide all the capabilities that their customers need for their transportation management.

"Deployment options are so varied that just about any company should be able to find TMS capabilities that will show significant improvement," says Wyland. He points out that transportation management is especially suited to software as a service (SaaS), which allows carriers, shippers, 3PLs, suppliers, customers and other parties to easily link to the same application and data with only a browser. Just as important, this on-demand approach minimizes the cost and IT support issues because the solutions are often pay-as-you-go with little long-term commitment.

"With SaaS, there is very little out-of-pocket cost and a tiny footprint in the corporate IT structure," says Wyland.

On-Demand TMS

For example, LeanLogistics was among the first technology companies to offer a comprehensive on-demand TMS at the beginning of this decade, and it has been enhancing its offerings ever since to meet the needs of its customers. More recently, LeanLogistics was the first TMS software vendor to offer managed transportation services using their on-demand TMS solution. The company essentially acts as a 3PL for the customers that want to outsource non-core functions but still retain oversight of their transportation operations and strategic carrier relationships.

Barilla America is one of the early users of LeanLogistics On-Demand TMS, and it has adapted its use of the technology to meet its growing supply chain needs and the available technology. Headquartered in Bannockburn, Ill., Barilla America is the U.S. division of the well-known Italian food company known for its pasta. It has manufacturing facilities in Iowa and upstate New York, and both plants have attached distribution centers. Three DCs in Chicago, Atlanta and Southern California that primarily handle LTL orders and customer pickups are operated by third-party logistics providers. Barilla also owns the Wasa brand of crisp breads, which are imported from Germany and Sweden and distributed from a DC in New Jersey. Most of the pasta product is shipped via truckload from plant DCs to customer DCs. To save on transportation costs, the pasta manufacturer is planning to ship more customer deliveries by intermodal, which now is primarily used for intra-company transfers.

According to Barilla America's vice president of supply chain Sandra Evett, the biggest transportation challenge right now is rising transportation cost driven by fuel surcharges. The company is also starting to experience issues related to tightening capacity. Both fuel and capacity have an impact on the flow of goods and the cost of the flow of goods.

"Transportation has become a much more visible business expense at the corporate level, and fuel is the driver," says Evett. "Even with oil prices going down in recent weeks, diesel pricing has not followed and we have seen little reduction in fuel surcharges, so transportation costs remain very high."

Despite these transportation challenges, Evett believes that her company is well positioned to deal with

them in part because of its commitment to constantly improving transportation technology and processes. For the past five years, Barilla has run its domestic transportation network using LeanLogistics On-Demand TMS. It implemented the software as a service solution in mid-2003. By the end of that year, it had all facilities operating with nearly all of the functionality available at the time, including planning, rating, routing and freight payment. From the beginning, Barilla was able to monitor carrier performance, optimize transportation rates and routes, find consolidation opportunities and settle its transportation bills.

"One of the main reasons we selected LeanLogistics is that five years ago, they were the only technology that offered a true end-to-end solution," says Evett.

Barilla managed its transportation in-house with the LeanLogistics solution until mid-2007, when the company decided to outsource the day-to-day transportation planning to LeanLogistics. Barilla has recently increased this outsourcing arrangement, so LeanLogistics has become Barilla's managed transportation service. Barilla still has complete visibility to pricing, capacity and shipment status, but LeanLogistics personnel are handling the day-to-day operations.

According to Evett, Barilla made the shift because its small team of internal resources limited its ability to keep up with the new technology and functionality of the LeanLogistics system.

"We think we can leverage the full capabilities of the technology better as an outsourced service," she says. The provider is better able to identify empty miles in their network and then match shippers up to carrier capacity to take empty miles out of the system.

While in some ways this outsourcing arrangement resembles the services of a 3PL, Evett points out that the provider is a neutral party.

"LeanLogistics makes no money by linking us with any carriers, nor does it make any percent of the contract rates we negotiate," she says. "LeanLogistics benefits by uncovering capacity opportunities and then being able to market their managed services to more and more shippers."

An important part of its managed service is LeanLogistics' TMS network, which is a community of many companies across a variety of industries that promotes collaboration and knowledge sharing among its members. Services include network-wide benchmarking and performance reporting. By modeling complementary networks, LeanLogistics can determine opportunities for inter-corporate continuous movements. By benchmarking network-wide coverage, rates and performance, it helps clients get the best possible service and costs from carriers.

"We are able to improve the carriers' utilization, while we are also able to reduce the shipper's rates and improve its service," says Chris Timmer, vice president of sales and marketing for LeanLogistics.

Before the relationship began, Barilla had a totally manual system for everything from contract negotiation and administration to day-to-day rating and routing. Based on the negotiated contracts, each of Barilla's DCs and 3PLs worked off of Excel spreadsheets that served as routing guides. At each location, a transportation planner and an appointment clerk did all of the phoning and faxing to carriers to tender the freight and schedule the appointments. During the transition to the LeanLogistics TMS, transportation continued to be decentralized, but within a year all transportation planning was centralized at its Illinois headquarters.

While the managed service handles day-to-day operations, Barilla continues to negotiate its own contracts with carriers.

"We want to maintain direct relationships with our carriers," says Evett. "LeanLogistics has become our arms and legs. They execute the requests for proposal, enter all of the rates and routings into the TMS and administer the contracts. That gives us the time to focus on the relationship with the carriers. However, we expect that our negotiations with the carriers will now be three-party—Barilla, the carrier and LeanLogistics."

The shift to a managed service has also allowed Barilla to quickly add an appointment scheduling function, which had been deferred because of a lack of internal resources to implement.

"As soon as we implemented the appointment scheduling module, we found much greater value than we expected," says Evett. "We are looking forward to some of the other new functionality in the LeanLogistics solution."

Greatly increased visibility has been the best value of the relationship, Evett says. Barilla not only has a better view of its carrier performance and costs, but it has gained visibility of every shipment in the supply chain.

"When we make an intra-company transfer from a plant to one of our DCs, we are able to see customer orders that are waiting for that stock to arrive," says Evett. "We have internet visibility into the status of both the inbound shipment and the order waiting to be built, so it can be created as soon as the stock arrives."

Blended Solutions

While LeanLogistics entered the managed services market as an expansion of its technology offering, some 3PLs that have always provided managed services have also made technology an important component of their offerings.

For example, Transplace is a blend of technology and 3PL services. It fills an increasingly common void in the TMS marketplace, according to George A. Abernathy, executive vice president and chief operating officer for Transplace.

"While most firms can fund a TMS investment, fewer firms have the ability to hire, train and retain the right talent to fully utilize and realize the potential value of the solution," says Abernathy. Without the proper personnel to use the TMS, the promise of the functionality can fail to materialize. With a managed service like Transplace a shipper doesn't merely acquire a TMS, but also receives the professional staffing to apply the technology to the business on a 24/7 basis."

According to Abernathy, Transplace's customer base includes many large companies, but it also leverages its technology and resources for creating services and products that are available to small to medium-sized businesses. These SMBs gain the same transportation visibility, access to a vast network of carriers and lower costs that large-scale businesses receive. Including the SMBs in the network is also a good long-term strategy for Transplace.

"Transplace gains a special opportunity to cultivate long-term relationships with customers while assisting them as they evolve from SMBs and develop into larger businesses," says Abernathy. "Transplace already offers best-in-class technology to our large-scale customers, and now we're going to make these products and services available to SMBs in a user-friendly way, tailored to meet their specific needs."

Complex Supply Chains

For companies with more complex supply chains, multiple divisions and many locations, selecting the right TMS requires a great deal of advanced analysis of its information needs and processes.

For example, a corporate staff may decide it wants to measure on-time delivery performance across the network, but what does that mean? The company might find out that some facilities want deliveries within one hour, plus or minus, of a set appointment while others consider loads on time as long as the freight shows up during the correct shift. Appointment-setting procedures are another area that notoriously vary from facility to facility, and certainly between business units.

Complex transportation networks also get very unwieldy in the area of rate and accessorial charge management. For example, rate-per-mile reports can be skewed if fuel surcharge programs are not standardized. Additionally, negotiations with transportation service providers are more effective when companies can go to market with a network-wide view of their transportation spend.

Before a company facing such complex issues makes a commitment to any TMS solution, Abernathy suggests that it engage a consultant with the expertise to do a thorough analysis of its current model and future needs. Transplace recently added a consulting division to provide such services.

"We provide insights on complex supply chains in an evolving environment that has reached a new tipping point in terms of cost to serve and supply chain trade-offs," says Abernathy. "Transplace Consulting helps quantify our full suite of value opportunities for new and prospective customers. Our supply chain analysis ultimately leads to TMS configuration that drives daily value. Since we are a 3PL, service and cost-based auditing are a given in our business. Often, value comes simply from the process of working through a TMS

implementation."

International TMS

While adoption of TMS for domestic operations is low, adoption of transportation solutions for international operations lags even more. With international transportation costs often exceeding 10 percent of sales revenue as compared with two or three percent for domestic transportation, the need for better global transportation control should be a high priority.

"There is a misconception in the marketplace that the functionality and flexibility is not there," says Brad Wyland. He adds that there are many good international TMS systems, and many are also tied in with visibility, collaborative tools and regulatory compliance that is important for importing and exporting.

According to Nathan Pieri, senior vice president of marketing and product management for Management Dynamics, companies have restructured their businesses to take advantage of low-cost manufacturing and supply around the world, but they have failed to pay enough attention to the logistics costs of these extended supply chains.

"Companies have been caught off guard," says Pieri. "Transportation has become a major cost area, and they do not have systems to manage it."

According to Pieri, many importers and exports have their ocean contracts in paper or spreadsheet form. They are almost always out of date, so the wrong rates are often applied. Since international moves can be complicated, many companies get lazy and tend to use the same provider over and over again, regardless of the possible alternatives.

"These companies do not use the full range of options that they have, so they are unlikely to use the best combination of service, transit time and cost," he says.

The Management Dynamics Global Trade Management suite includes four modules: TMS, visibility, trade compliance and trade content. Companies may have a specific need just for one or two, or they can implement them as a stack.

"The value is greater when they come together because of touch points throughout the supply chain," says Pieri. "The visibility network connects with hundreds of logistics companies, so it also allows the user to send the booking requests. The visibility network also allows the user to collect invoices from carriers to do freight audits and to provide a database for future planning. TMS and visibility work closely together."

Many companies start with supply chain visibility because it provides an invaluable baseline of information to understand a company's own network and how it connects with service providers, Pieri says. Visibility also helps clarify key inventory planning assumptions and distribution requirements.

"A company can confirm transit times by mode of service as well as analyze distribution requirements and identify premium ocean freight services to offset all or part of current airfreight," he says. "Often the decision to ship air is an exception that becomes more of a permanent procedure."

The end-to-end visibility information can be good, but it is not free. Data quality management is the key success factor in a visibility implementation. Aberdeen reports that less than 10 percent of all visibility implementations have data quality rates greater than 90 percent. That means that only 1 in 10 companies is regularly using and getting value from their visibility solution.

"The reason most visibility implementations fail is not investing in data quality," says Pieri. "We do not allow that to happen."

Armed with quality visibility data, Pieri enumerates the uses that it provides. An importer or exporter is able to:

- Monitor supplier ship windows
- Send triggers to pick up goods
- Identify bottlenecks and resolve delivery issues
- Expedite promotional or "hot goods"
- Monitor transit through customs

- Divert inventory or support DC bypass strategies
- Help DCs plan inbound receipts
- Automate the POD delivery process
- Collect foundation data to scorecard trading partners

The visibility module can be configured to a customer's specific business problem because data can be pulled from hundreds of connections already set up with carriers, logistics providers and customs brokers, or from a company's specific trading partners. For example, Apple uses the Management Dynamics visibility module to monitor its suppliers. GlaxoSmithKline uses it for visibility with over 70 of its trading partners.

"Many users want visibility to their suppliers, but all want to monitor in-transit shipments, especially the handoffs between modes and the passage through Customs," says Pieri.

Managing Global Supply Chains

Once a good transportation plan is defined for airfreight and ocean freight, the Management Dynamics TMS manages the contracted rates, performs routing and carrier selection and audits the freight bills. By centralizing this solution, companies can work off of an approved vendor list, always use the latest and best rate, see the impact of forward-filed charges, compare services side by side to find the best combination of cost and service and fully audit freight bills to avoid overpaying.

On the back end, the TMS will audit all the freight bills based on the invoices from the carriers. Without a TMS that collects all the freight costs, there is no good way of properly auditing freight bills even using an outside audit company.

When Management Dynamics took on the apparel firm Perry Ellis as a TMS client, one of the first tasks was to rerun all of the freight bills through the audit function even though a freight audit company had checked them. According to Pieri, the audit company had not been able to handle the complexity of the contracts. When Perry Ellis implemented the TMS, it found $220,000 savings that had been missed.

Managing a global supply chain always requires multiple handoffs, so collaboration with service providers is critical. Management Dynamics provides portals for each major player to organize the collaboration. For example, the supplier portal allows the buyer to post orders, so suppliers can accept the order and build the shipping documents from that same information. The buyer has complete visibility and can do approval through the entire workflow. The supplier can then coordinate with the logistics provider to pick up the goods. The forwarder portal allows exporters to post its shipments when the goods are ready for pickup. The forwarder will update all of the shipping documents through the portal and close out the order. On the inbound side, a portal allows customs brokers to pick up the pre-entry information that already includes 80 or 90 percent of the data that is required to enter the product. The broker takes the file and loads it into its system to finish the entry.

"The portals are a huge area of growth for us," says Pieri. "The information is in our system for all the partners to use. We are making it more available and extending the processes to trading partners. Electronically extending processes to trading partners eliminates the re-keying of information and keeps everyone informed and aware of what they need to do next."

As Wyland's report suggests in its title, there are "no excuses" for any company not to optimize its transportation with TMS capabilities. Deployment options abound for domestic and international supply chains at costs that can quickly be recaptured with transportation savings.

According to Wyland, there is some good news among the laggard companies that still greatly outnumber the best-in-class companies. More than half of these laggard companies plan on investing in a TMS solution in the near future.

"We are probably still two or three years away from the level of technology adoption for TMS that we have seen with other supply chain applications," says Wyland, "but at least the awareness of the need is there."

RESOURCE LINKS:

Aberdeen, www.aberdeen.com
LeanLogistics, www.leanlogistics.com
Management Dynamics, www.managementdynamics.com

Transplace, www.transplace.com
Oracle, www.oracle.com
RedPrairie, www.redprairie.com