Whitepaper

5 Key Ways Transportation Management Systems Can Rapidly Reduce Costs by up to 30%

HighJump™ SOFTWARE

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Introduction

Maintaining competitive advantage in today's demanding business environment requires continual process improvement and cost reduction. Many companies focus on transportation in an effort to control supply chain costs and help ensure timely shipments. Recently, however, effective transportation management has become more complex due to several industry trends:

- The rise in cost for fuel, insurance and drivers
- The capacity shortage in truck-based transportation that has led to an environment in which companies have to get "service at any cost"
- Consolidation/attrition in transportation provider industry
- Increasing customer service pressure
- Regulation and security changes

Given these trends, companies involved in distribution often look to transportation management systems (TMS) to automate processes and reduce the costs associated with getting products to their destination. According to industry analysts' reports, it is generally accepted in the marketplace that TMS systems can reduce costs by up to 30 percent. Up to 15 percent of this number is typically derived through optimization.

The Five Key Ways Transportation Management Systems Can Rapidly Reduce Costs by up to 30 Percent

AN IMPORTANT CAVEAT: ONE SIZE DOES NOT FIT ALL

The amount a company spends annually on transportation determines the type of system it requires, as well as the savings it can expect to generate. The estimated reductions described below will vary by company depending on how the TMS system is leveraged within your unique environment. Not all companies will necessarily achieve the estimated reductions in all five areas. As you read this report, you will learn the different types of TMS systems available and what you should focus on as you evaluate the offerings. For example, some systems are batch based and create plans that cannot be manipulated or rerun. Some are overly complex and costly to implement and configure as requirements change. Others lack integrated supply chain execution solutions (i.e., warehouse management or supplier enablement) that give you the ability to achieve additional savings across your business. And some simply have too much functionality and exorbitant price tags. You'll learn how to differentiate these options as you read "Choosing a TMS Vendor" later in the report.

1 Contract Management

(Estimated 10% reduction in current administrative cost)

Contract management gives you the ability to accurately record all transportation service provider contracts in a single, central repository and easily access and incorporate updated rates. This is a foundational element that should not be overlooked as a required step in achieving transportation savings. Contract management is also an administrative function where accuracy shows positive downstream results. Maintaining accurate rates prevents many costly errors in subsequent processes from carrier selection to freight payment. Simple to use, accurate administration of contract rates with a full audit trail of all activities translates into the ability to accurately calculate the charges for each shipment.

Implementing a new TMS application is a great opportunity to "get your house in order." As one step in this process, freight contracts should be rationalized across your carrier base. Having a standard format for contracts will provide the ability to better negotiate and evaluate the results of negotiations across your carrier base. The process of rationalization should standardize linehaul rates. This is possible by using common definitions of geography for traffic lanes across all contracts. It is typical to standardize traffic lane definitions on a point-to-state or point-to-three-digit zip code format.

In general, point-to-point lanes should only be used for inter-plant traffic or for situations where a few customer locations represent the majority of traffic shipped. For all contracts, a single mileage authority should be identified by product name and release level. This mileage authority should serve as the single source of mileage for all per-mile linehaul charges and all accessorials computed on a per-mile basis.

Complex accessorials such as fuel surcharges should be defined once and standardized across all contracts. The rates for a fuel surcharge can be the subject of negotiation with individual carriers. However, the same calculation method should apply across the board. This includes terms such as the update process for recording weekly U.S. Department of Energy fuel prices.

Timely and accurate maintenance of rates is also critical in preventing downstream errors. Updates to contract rates should be recorded in the system as soon as the negotiation of changes is complete. The ability to enter rate changes today that become effective at a future date is key to help ensure all rate changes are captured and implemented as negotiated. This ability to enter future effective rates enables a new rate to be in place for use on the appropriate date, preventing miss-rating of affected shipments. The ability to keep an online audit trail of all rate changes is also important in speeding the process of reviewing freight charges and determining the correct amount for completed shipments.

2 Optimal Load & Route

(Estimated 5 - 17% reduction in annual freight spend)

In today's market where capacity is at a premium, reducing transportation cost requires finding greater efficiencies rather than simply working to extract deeper discounts from transportation providers. The creation of an optimal transportation plan is a sure way to generate savings without causing disruption in your carrier base. As optimization technology has advanced, it has become accessible to a much broader market than ever before. This means even smaller shippers can now take advantage of the savings created through optimization.

In the past, creation of a manual transportation plan relied on individual knowledge and experience to combine orders into shipments. Because of the time-consuming nature of reviewing the many potential combinations of orders, a simpler solution based on generalization was always preferred. The process of manually building loads often sends far too much freight LTL and overlooks the savings potential in creating cost-efficient, multi-stop truckloads. Additionally, automated optimization can free valuable resources from the time-consuming process of manually building and adjusting loads. This time can be spent on value added activities such as reviewing carrier performance and proactively working toward higher levels of customer satisfaction.

The opportunity for optimization-based savings is also available for shippers outside of the traditional LTL to TL consolidation model. Optimal load and route planners now provide planning support for zoneskipping as well as pooling and cross-docking operations. The current demand for smaller, more frequent shipments has increased the reliance on parcel and LTL shipments to meet customer demands. This has also had an adverse impact on transportation costs. The TMS system's ability to efficiently plan and execute a zone skipping or pooling strategy allows you to meet the need for cost-effective transportation required by your customers and your organization.

Optimal load and route planning coupled with accurate rates allows you to quickly review the financial impact of a transportation plan. Even in the best environments plans change frequently. A TMS system should not only allow you to see the financial results of an optimal transportation plan but should also allow you to review the impact of changes to the plan. What is the impact of delivering the inevitable late, but urgent order? Can this order be cost-effectively combined with a currently planned outbound shipment, or should it be sent LTL? The ability to see the financial impact of this type of scenario will help ensure savings generated in the creation of an optimal plan are not eroded by the inevitable exceptions that occur.

3 Least-Cost Mode/Carrier Selection

(Estimated 2 - 7% reduction in annual freight spend)

The selection of a least-cost carrier can yield savings without adversely affecting customer service. Selection of a least-cost carrier does not mean lowering service standards. It often means being more aware of service requirements as well as historical carrier performance. The development of a carrier price/performance ranking is key in implementing an effective least-cost carrier selection process. The carrier base should be reviewed by each major traffic lane and a ranking developed

that clearly expresses the order of preference for the carriers in each traffic lane.

When first implementing a TMS application, the carrier performance ranking may be entirely subjective. In any case, a ranking should be developed and periodically reviewed as empirical data becomes available on carrier performance. Common practice in this area is to place carriers into Primary, Secondary and Back-up categories and then numerically rank each within the categories.

Using this ranking as a guide in the tendering process is only half the battle. Key performance metrics should be gathered to help ensure the effectiveness of a least-cost carrier selection program. Internal and external performance need to be clearly understood to be able to correctly evaluate a least-cost carrier selection program's success. Internal conformance to the program must be measured and monitored. When a leastcost carrier is not selected as the first carrier for a candidate load, it's important that this is recorded, and the reasons for the non-conformance understood. Often, simple corrective actions can be taken to further the success of a program, such as tuning trailer pool sizes.

External metrics must also be measured (i.e., the tender acceptance rate for carriers). Carriers not able to deliver capacity at contracted rates should be noted and appropriate actions taken. Creating savings through a least-cost carrier program requires monitoring and measurement often difficult in a manual environment but easily accomplished with current TMS capabilities.

Another area of potential savings that is sometimes overlooked is the competition across modes for the same shipments. Traditional hard lines between modes need to be reviewed and adjusted to the current environment. Shipments should no longer be categorized as simply falling into a single mode; multiple modes should be reviewed for cost/performance when shipments are in a "grey area" where multiple modes apply. Opening the carrier selection process to take advantage of current areas of competition between service providers can be a great way to create savings in a capacity-constrained market.

4 Shipment Execution

(Estimated 1 - 5 % reduction in annual freight spend)

Automation in the shipment execution process can yield significant savings in a variety of ways. Shipment execution is often the most time consuming area for traffic management staff. Freeing time in this area through the automation of repetitive tasks often helps drive greater savings in many areas.

Automating the tendering process will yield savings greater than a simple reduction in staff time spent "dialing for diesels." Automation of tendering helps ensure routine conformance to a least-cost carrier selection program. The automation of a tendering process also means carriers receive complete, accurate information on tendered shipments the first time, every time.

In the past, automated tendering was limited to large companies and large carriers where an EDI connection was available and cost-effective for both parties. Because of the variety of integration technologies now on the market, a cost-effective methodology can be used by even the smallest shippers and their entire carrier bases. EDI is still the mainstay for communication to the larger carriers. The EDI-formatted transactions do not necessarily need to be transmitted through an expensive EDI VAN (value-added network). With current integration technologies, the EDI formatted transactions can reliably and affordably be transmitted through a variety of direct

connections without the expense of a VAN. In many cases, this is not only possible with the larger carriers, it is preferable.

For smaller, less technologically enabled carriers, the Web provides the real-time connectivity needed to easily drive an automated tendering process. TMS applications can take advantage of the ubiquitous combination of the Web and e-mail communications. When a carrier is selected for tendering, the TMS system can send a notification of the tender either by e-mail, fax or pager, directing the carrier representative to a Web page to respond to the tender notification. This simple, reliable methodology can replace a myriad of phone calls attempting to reach the desired carrier representative. Additionally, the carrier receives a complete and accurate communication of the shipment detail without a time-consuming phone conversation. For many current TMS applications, appointment scheduling can follow a similar process. This further reduces time spent on the phone and the inevitable errors this introduces.

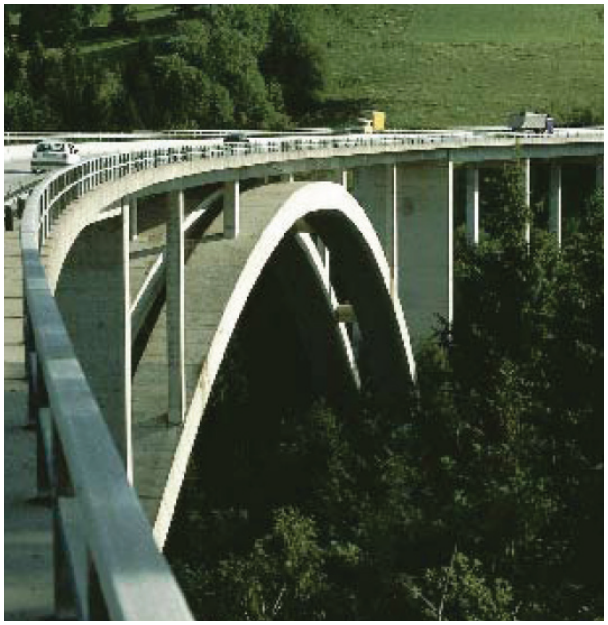
A manage by exception environment can extend well beyond the tendering process. Because of the ability to easily connect electronically to the entire carrier base, in-transit tracking can provide visibility to exceptions—often in advance of lapses in customer service requirements. The ability to monitor pick-up/delivery performance at each stop allows for proactive intervention when a shipment is falling off schedule. In many cases, this advance visibility to performance exceptions allows for proactive customer notification and avoidance of the perception of poor customer service due to exceptions in the fulfillment process. Web-native TMS applications also provide the benefit of making order status information, from schedule through delivery, available to all vested parties in your organization. Customer service and sales personnel can have self-service Web pages that allow them to easily inquire about order status without disruptive and time-consuming phone calls to the traffic department.

The ability to accurately record and access performance across the supply chain has taken on a higher value based on the current transportation environment. Detention and layover charges once considered trivial in the cost of transportation can now easily represent a significant element. Only the ability to track these events accurately as they occur by location will help you take appropriate steps in managing these costs. Detention costs must be dealt with by accurately allocating them to specific customer locations and the performance problems addressed, or by passing the costs on to the offending customer. In slim-margin industries, the profitability of a customer shipment may hang in the balance based on dock door performance and the resulting detention charges.

5 Performance Improvements

(Estimated 1 - 3% reduction in annual freight spend)

The ability to manage performance has always been dependent on the ability to measure performance. In the fast-paced, resource-constrained environment of today's businesses, too often performance measurement has fallen by the wayside as an activity too time-consuming to formalize as a process.



One of the major benefits of a TMS system is automation in the gathering of key performance metrics. The system records these metrics in real time as the shipping process takes place. The ability to measure both internal and external performance can provide a 360-degree perspective on performance required to ensure strong focus on correction and improvement activities. The ability to accurately access carrier performance requires an accurate measurement of the performance of locations in loading and unloading. The easily measured late shipment to a critical customer may be the result of poor carrier performance in-transit. But it can just as easily result from an up-stream location that has poor performance in loading/unloading. The ability to move these types of events out of subjective measurement and into a fact-based environment provides the ability to take meaningful and effective corrective action.

Accurate freight spend allocation is another measure of performance that a TMS system can provide. The ability to understand in detail the cost of servicing regions and specific customers can drive better strategic and tactical decisions. An accurate understanding of regional spend can drive improved network design in the location of DCs and other facilities. The ability to measure in detail the total cost of servicing customers allows for decisions that can maintain competitive position or help weed out unprofitable business.

The ability to gather and report on metrics creates the ability to do fact-based continuous improvement. Using a TMS system to move into a factbased environment where performance is continuously measured and monitored will pay dividends across your supply chain.

Choosing a TMS Vendor

As you begin to research TMS vendors, you'll discover that there is a variety of functionality available—at a variety of price points. You'll also find different options in terms of hosting. Best-of-breed systems will reside on your internal infrastructure, while application service provider (ASP) models are hosted off-site.

It is critical for you to fully understand your individual company's needs when it comes to functionality and system scope. You want to get the right amount of functionality for your needs—and there are many systems available that will go well beyond what you actually require, creating unnecessary complication and cost in implementation. An internal audit of your requirements is a good first step.

Another key area of concentration will be the system's ability to accommodate your changing business requirements and those of your customers. With the speed of change in today's distribution environment, the ability to configure your system in-house is essential to maintaining customer satisfaction. As you work with each vendor to evaluate functionality, request specific information and demonstration regarding their protocol for configuring business processes to meet your unique needs. Most vendors modify code to make your requested changes, a costly and timeconsuming process. Look for a vendor offering a flexible system that does not require code-based configuration. This ability to make changes, and how changes are carried forward during an upgrade, will be important to consider in determining your long-term total cost of ownership.

Another area of consideration is looking at a potential vendor's entire product offering. Some TMS companies offer just that—TMS solutions and nothing more. It's important to consider your supply chain operations as one entity that likely encompasses warehouse operations, manufacturing, suppliers and other trading partners, and your end customers. A vendor that offers a supply chain execution solution set built on a common platform will help you link a variety of elements in your operations spanning source to consumption processes.

Consider the involvement of an experienced consulting systems integrator during the vendor evaluation process. A consultant can help expedite this process and bring industry-leading information around potential software vendors to meet your specific functional needs, technology standards and price point. Consultants with system implementation and integration experience can also help you identify all project costs early, eliminating any surprise expenditures during the project.

Conclusion

Constantly finding new ways to optimize supply chain processes is a challenge facing all businesses today. Taking a close look at transportation and TMS is an important step toward driving measurable cost reductions. A robust, adaptable TMS helps ensure customer shipments leave your facility on time and on a path optimized with the lowest cost in mind. Ultimately, finding the right system and vendor will help you address your needs today and accommodate change quickly and cost-effectively tomorrow.