



“Selling Up” a TMS

Crafting an ROI Analysis that will
Improve Your Chances

By Chris McAvoy, June 2011

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Introduction

Today’s transportation environment is definitely a challenging one for shippers, particularly for transportation managers. Transportation costs are increasing due to a rise in energy costs, a growing driver shortage, increasing carrier regulations, improving freight volumes, and a limited investment in transportation infrastructure. Executives are putting pressure on their transportation managers to reduce these shipping costs while at the same time improving or maintaining customer service levels. The first area where those in charge of shipping place their focus is on carrier pricing—the belief being that if they can just get lower rates out of their carriers, then everything will be fine.

But what happens when the call to action for carriers to reduce their rates results in the same pricing that has been in place all along? Or worse yet, the carriers actually respond with an *increase* to their freight rates? Unfortunately, this is the reality that most shippers are currently facing. Savvy transportation managers know that if they are to reduce their logistics costs, then they need to take a more holistic view of their supply chain. When attempts to reduce carrier rates fail, it’s time to implement transportation process improvement strategies that lead to long-term cost savings. In order to supplement the effort towards these process improvements, a growing trend is to invest in a transportation management system (TMS). In order to justify the investment in a TMS, transportation managers must present a detailed analysis of the return on investment (ROI) that a TMS can provide. This paper describes how those in charge of transportation can compile a formal ROI analysis, as well as “sell up” the proposition of a TMS to upper management.

Identifying your TMS needs:

Where Do You Fall?

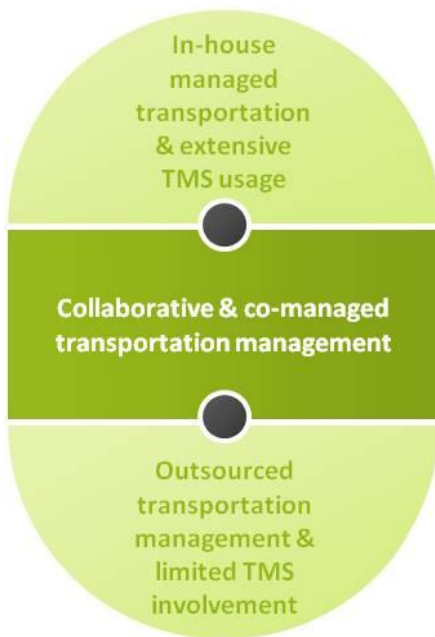


Fig. 1. Typical TMS/Transportation Management Solutions

Identifying your needs

Before you begin conducting a detailed cost/savings analysis, you must first identify your needs as they relate to a transportation management system. Do you plan to use the TMS to manage every mode that you ship? Do you want to automate as many processes as possible or only specific areas of your logistics process? This will factor into the level of capability that you require out of a potential TMS solution.

An additional consideration is your required level of control over your current transportation processes and degree of interaction with the potential TMS solution. Do you want to maintain complete control over your processes and have the deepest level of interaction with the TMS as possible, or would you prefer an outsource of your transportation operations to a third-party logistics provider, needing little direct interaction with the actual TMS? Maybe your preference falls somewhere in the middle of both of these options. Regardless, it is important to decide which approach is best

for your company, as this decision will factor into the level of return you'll experience with a TMS.

After you've identified the scope of capability of the system and determined your level of involvement, the next step is to clearly define your criteria for selecting a transportation management system. Taking the time to define your criteria up front ensures that you select the best solution to fit your company's needs. This in turn helps guarantee that the subsequent ROI analysis that you present to upper management is both realistic and accurate.

don't go it alone

Oftentimes it can be difficult determining the required scope of capability of the potential TMS solution, as well as establishing your desired future level of involvement in the system and in your processes. This is where the help of a third party logistics provider or transportation consultant can be key. Based on an analysis of your business and current transportation processes, 3PL providers or consultants can quickly identify which areas require the most focus.

In some cases, transportation chores can distract company personnel from focusing on their primary job functions. A 3PL or consultant can examine the role that current employees are playing in the management of transportation, then determine whether that role falls in line with their current primary responsibilities. This comparison will rapidly uncover whether your company requires little direct involvement with a TMS (and therefore a potential outsource of transportation management functions), or whether it would benefit from a higher degree of involvement with the TMS, requiring little to no outsourcing of transportation management functions.

Perhaps the biggest benefit to involving a 3PL or consultant in the ROI analysis stage is their knowledge of potential areas for cost savings through TMS implementation. While you as a shipper may have a general idea where reductions in cost may be realized, a third party will be able to use their experience to dig deeper into your processes and uncover otherwise hidden opportunities for additional cost savings. This is usually based on experience with other vendors of similar size, shipment volumes, and transportation processes. Pairing this experience with industry analytics and current market knowledge can greatly enhance the ROI analysis that you propose to upper management.

When the potential solution is ready to be presented to upper management, be prepared to address the one thing that is on the top of their minds—money.

show me the money

When the potential solution is ready to be presented to upper management, be prepared to address the one thing that is on the top of their mind—money. Upper management's main concerns are:

- How much will it cost the company?
- How much will we save?
- How long will it take to realize those savings?

If the savings don't justify the costs, or the time to realize those cost savings isn't short enough, then investment in the needed solution will be shot down without much discussion. After you've identified your needs and decided upon the best provider that will fit those needs, it's time to get down to the numbers. This involves an analysis of three main areas:

1. Your current transportation costs.
2. Estimated savings with the potential solution.
3. Estimated cost of the potential solution.

Uncovering Current Transportation Costs

One of the most time-consuming parts of the ROI analysis is the compilation of current transportation costs. For most shippers without a TMS, this information is not stored in a central location or standard format. Typically it exists in multiple spreadsheets and files, across more than one location or division. To get an accurate picture of transportation costs, at least 3 months of this data must be collected. This includes all inbound vendor routed freight costs (if the data is readily available), inbound orders that you as the customer routed, and all outbound freight costs for orders that were routed by your company. Usually the best sources for determining your freight cost are your actual carrier invoices. Although it may take time to gather this data from your accounting department, the invoices will contain the clearest and most accurate breakdown of your freight charges.

After you've identified your actual transportation spend, it's time to analyze your soft costs as they relate to your logistics processes. This involves looking at each one of your employees that are involved in transportation in one form or another. What are their current salaries? What are their current responsibilities as they relate to transportation? How much time are the spending per shipment on order processing, compiling/comparing carrier rates, creating necessary documentation, obtaining shipment status updates, etc.? Assign a quantitative cost figure to these tasks based on their salary and time spent. Also identify the opportunity cost/s of them focusing on transportation-related tasks. In other

words, what could they be doing that adds value to the organization if you had a TMS in place? For example, could he/she be focusing on generating additional sales instead of managing shipping processes? Other departments or personnel that may have some level of involvement in your transportation process include the following:

- Accounting. The cost of auditing and processing carrier invoices can be a major cost area. Is it being handled in-house, or by a third party? How much is this costing you in either scenario?
- Sales. How much time is being spent on obtaining status updates and obtaining freight quotes on orders? What kind of effect is this having on their level of sales success?
- Warehouse personnel. How much time are they spending on carrier selection, scheduling pickups, and compiling/printing necessary shipping documents? Is this preventing shipments from being properly staged, leading to an increase in detention or other accessorial costs?

determining estimated savings

How much could you be saving?

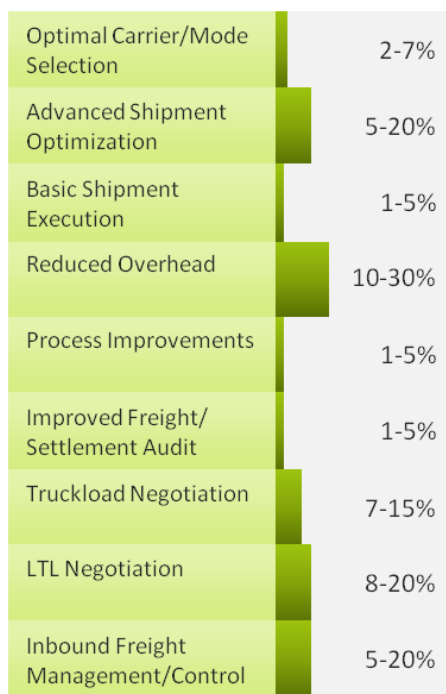


Fig. 2. Typical TMS/3PL Implementation Savings

Determining Estimated Savings

Once you've identified your costs, then you can estimate the savings you'll experience with a TMS. As previously stated, this is where the input from a 3PL or consultant can prove to be valuable. A main area for cost savings is shipment optimization. This can be as simple as determining the least cost carrier for a single point to point lane, or can involve a more complex analysis of all potential combinations of shipments that lead to the least cost shipping option. Ask your potential TMS provider to take a snapshot of your historical shipments and conduct a sample optimization - this will give you a clear idea of the percentage of savings you may realistically experience if you had this type of optimization tool in place.

Another way that a TMS can lead to cost reductions is invoice audit. By quickly and accurately comparing invoiced charges to contracted rates, a TMS can minimize the chance of overpayment to carriers. This can also facilitate a parcel shipper's ability to obtain guaranteed service refunds (GSR's) from their carriers. For those that are outsourcing the freight audit and payment function to a third-party provider, implementation of a TMS allows a shipper to take back control of this responsibility in-house, eliminating the need to pay a third party.

If a shipper is investing in a TMS through a third-party logistics provider, they may experience additional areas for cost savings that are typically not available through utilization of a "technology-only" provider. The biggest opportunity for cost savings in this case is an outsource of transportation management to the 3PL. This can lead to a significant reduction in

If you are unclear on which services the provider is charging versus waiving, be sure to clarify this with the provider before submitting a completed ROI analysis.

personnel overhead costs, or allow those involved in transportation to focus on other value-added activities. Also, a 3PL can assist shippers in developing an inbound freight management program, drastically reducing inbound freight costs by changing vendor shipments from prepaid to collect terms.

As with the analysis of your current transportation costs, the last step in measuring potential savings is determining estimated reductions in soft costs. After the TMS has been implemented, how much can you expect to save in terms of shipment processing, carrier rate comparison, obtaining shipment status updates, filing paperwork, auditing invoices, etc.? How much additional business do you expect to generate as a result of less time spent on transportation? These soft cost savings are an important part in your ROI analysis.

Calculating System Costs

After you've uncovered your current transportation costs and determined your estimated savings, the third step in "showing management the money" is to calculate the costs associated with the TMS. First, identify the base charge for the system - is it a per transaction (per shipment) pricing model, a subscription charge per month, a flat yearly fee, or a single up-front cost?

Next, determine total implementation charges. These may relate to things like basic system set-up, user configuration, and systems integration. Once implementation charges have been identified, pinpoint any other charges laid out in the proposal. These can include custom programming charges, monthly or annual system maintenance fees, system enhancement charges, travel expenses, charges for customer support, additional user set-up fees, etc. If you are unclear on which services the provider is charging versus waiving, be sure to clarify this with the provider before submitting a completed ROI analysis.

The final costs you should take into account are those related to additional services provided by a 3PL in conjunction with TMS implementation. If you are outsourcing the management of your transportation, is there an additional cost for these outsourcing services on top of the costs you've already identified? Is the 3PL helping you put together an inbound freight management program, or will they be compiling and distributing a yearly RFP (request for pricing) on your behalf? If so, be sure to take into account the costs associated with those types of services as well.

putting it all together

After you've uncovered your current transportation costs, estimated the savings, and identified the total cost of the TMS, it's time to put it all together and develop the finalized ROI analysis. You will have to determine

whether you want to provide management with an ROI for the initial year of TMS implementation, or extend the ROI analysis out over a multi-year period. The length of the contract will typically influence this decision.

When compiling the analysis, be sure to provide management with separate ROI figures for hard cost savings and soft cost savings, and then provide an overall figure that combines the two types. This is important for executives such as CFO's, since they place more of a focus on hard cost savings. Also, be sure to detail all the individual areas where savings will be realized; such as shipment optimization, freight audit, shipping process improvements, etc. Be sure to approach the system costs in the same way, breaking down all variable costs (such as transaction fees or system support) and fixed costs (systems integration or system maintenance fees) into separate categories.

In simplest terms, the breakdown of savings and costs may look like the following:

Estimated Hard Cost Savings	
Shipment optimization	\$ _____
Improved freight audit	\$ _____
Reduced overhead	+ \$ _____
<hr/>	
TOTAL HARD COST SAVINGS	\$ _____
Estimated Soft Cost Savings	
Improved order processing	\$ _____
Enhanced shipment visibility	\$ _____
Improved customer service	+ \$ _____
<hr/>	
TOTAL SOFT COST SAVINGS	\$ _____
Variable System Costs	
Transaction fees	\$ _____
System support	+ \$ _____
<hr/>	
TOTAL VARIABLE SYSTEM COSTS	\$ _____
Fixed System Costs	
Systems integration	\$ _____
Maintenance fees	+ \$ _____
<hr/>	
TOTAL FIXED SYSTEM COSTS	\$ _____

Now take all of the savings and costs you've compiled and calculate the ROI. The formula for ROI can be calculated as follows:

$$\text{ROI} = \frac{(\text{Gain from Investment} - \text{Cost of Investment})}{\text{Cost of Investment}} * (100)$$

presenting your analysis to upper management

After the ROI has been completed, it's time to present it to the decision-makers within your organization. After it has been presented, it may not be approved right away. Management may have to discuss whether the ROI meets or exceeds their required rate of return (ROR), assuming one has been established. Also, they may need to work with your organization's finance department to calculate the net present value (NPV) of any potential future savings. In order to get your proposal approved as quickly as possible, it will be advantageous to describe how your proposal is more beneficial to the organization than others under consideration. In terms of a TMS, some of the benefits may include the following:

- Rapid implementation. Can the system be up and running in a matter of weeks versus months or years?
- Accessibility. Can the system be accessed by anyone in the organization? Can customized user access be set up for any internal personnel?
- Limited IT involvement. Is the system web-based versus needing installation on local company servers? Can system support be provided by the system vendor instead of relying on internal resources?
- Cost. Is there little or no major capital investment required?

In addition to these benefits, it may be useful to describe how the proposed solution has benefited other companies of the same size or with similar goals. Also, be sure to explain how the solution will benefit other organizational departments. For example, will customer service personnel be better equipped to handle inquiries from customers needing shipment status updates? Will sales be better able to promise SKU availability and on-time delivery? The more you demonstrate how the solution impacts other areas of your organization, the higher your probability becomes for getting immediate approval of your project.

summing it up

As transportation costs continue to rise, a transportation management system continues to be a viable option to combat those costs. Once you've identified your company's need for a TMS, it's important to take the necessary steps before proposing the solution to upper management. Through the involvement of third party, accurately identifying all potential areas for cost/savings, and compiling a formal return-on-investment analysis, you're well on your way to answering the question asked by many transportation managers: How can I "sell up" the proposition of a TMS to upper management?