aximizing software value often takes more elbow grease than today's companies are willing to put into it, yet these efforts frequently yield results that are hard to overlook in an era where every penny counts. Frequently run in a barebones manner and relied upon for just a handful of functions, transportation management systems (TMS) fall into a supply chain software category that's particularly ripe for optimization.

"In many cases, corporations try to find the low-hanging fruit of the TMS, in search of functions that will provide the most value," says Greg Aimi, research director of supply chain at Gartner. "They then integrate those functions as 'phase one' of their TMS implementation and never go beyond that point."

Over the next few pages, we'll help shippers break out of that TMS shell, determine where the gaps are in their current systems, and come up with a plan of action to fill them on the way to effectively optimizing their purchase-and-install or on-demand TMS investment.

FILLING THE GAPS

Whether a TMS' capabilities are fully optimized depends on three factors, according to Aimi: The amount of time the system has been in place; the strength, involvement, and expertise of the team that's running it; and the level of sophistication of the software itself. These three factors have the most impact on a firm's ability to optimize a TMS.

A sophisticated TMS that's been in place for five years and has been largely left to run on its own, for example, is probably not being leveraged to its full capacity.

Another factor that prevents companies from squeezing the most from their TMS investments is a lack of regular maintenance. Rates, routes, carriers, customers, fuel costs, and other variables more out of your BY BRIDGET MCCREA. CONTRIBUTING EDITOR

Your transportation management system (TMS) is installed and running, but are you getting the most out of it? Our technology correspondent helps shippers determine where the utilization gaps exist and formulates a plan to

are in constant flux, and the TMS that's optimized today won't necessarily be fully leveraged a year from now.

"Your TMS today is reflective of your firm's current operating environment," explains Adrian Gonzalez, director of Logistics Viewpoints, a blog focused

on logistics trends, technology, and services. "Fast forward one or two years. Without current, accurate modeling, you end up with a classic garbage-in, garbage-out problem." Even worse, says Gonzalez, you may have resorted to faxes and spreadsheets, assuming

effectively optimize a TMS investment.



that the TMS is "broken" and no longer making sense.

"In most cases, it's not the TMS that's broken," says Gonzalez. "The problem is that you set it up two years ago, and the same conditions no longer apply." So, how does a company avoid this trap and

ensure that its TMS is optimized not only today, but in the future?

SQUEEZING THE LEMON

One of the easiest ways to determine if your new or existing TMS is running on all cylinders is to simply pick up the product brochure to see exactly what features are included with your specific setup. "Look at all of the pieces and parts, and see if you're using all of them," Aimi suggests. It sounds simple enough, but how often do you really go back and review product guides *after* the systems are up, running, and managing the basics functions as promised?

If the brochure turns up interesting features that you haven't seen used in your own operations, it's time to talk to your software vendor or systems integrator to find out why those features weren't mobilized. A shipper that hires a third-party provider to pay its freight bills, for example, would benefit financially by folding that function into its TMS and using the system's auto-pay feature. "That's a pretty simple example that could lead to some significant savings," says Aimi.

Jim Davis, senior manager at the consulting firm Capgemini, says shippers should also ask themselves whether their installed or hosted TMS has lived up to its initial vision. Is it performing the functions that you thought it would? Has it automated tasks that were previously handled manually? Has it helped reduce paper, phone calls, and faxes? Is it saving the company money, time, and hassle?

If the answer to any of those questions is "no," then Davis says it's time to revisit the scope of the project—that initial vision—and whether or not you're leveraging the toolset to its fullest capacity. Davis states that the latter is often to blame, and the problem is fairly easy to solve. "It's really just a matter of learning what your TMS really has to offer, including new releases and versions," says Davis, "and adding the missing functionalities to your own lineup."

Take dashboards, for example. Used to retrieve and review metrics and analytics on the fly, TMS dashboards are often left by the wayside when the software is rolled out. "Being able to quickly measure how well you're doing, and what your TMS is doing for you," says Aimi, "can be a valuable addition that helps squeeze out a few more percentage points of savings."

Maintaining close ties with TMS vendors and/or developers (for homegrown systems) can also go a long way in helping a shipper get the most out of its TMS. This holds true not only during installation and implementation, but also in the months and years that follow. "Your vendor can clue you into upcoming releases and new functionalities that you might not otherwise hear about," says Davis.

Aimi, whose firm expects the TMS market to experience double-digit growth in 2011 and a five-year compound annual growth rate of 9.4 percent, also advises shippers to turn to their vendors for help conducting TMS audits that very often turn up "missing links" in the software's value stream.

"Software vendors usually have very good examples of customers that are leveraging their products to their fullest potential," says Aimi. "In many cases, a quick meeting with the vendor can help you detect any gaps and help you prioritize your next optimization moves."

Outside consultants can also help. For example, Aimi points to Chainalytics as one of several firms that specializes in supply chain performance improvement, and that offers a TMS audit service. "They'll come out and help you understand what you're getting from your TMS," says Aimi, "and what more you could be gleaning from it."

GETTING WITH THE PROGRAM

In today's business environment it's easy to get caught up in the day-to-day tasks and forget about the software engines that are driving productivity and savings. But you wouldn't drive an automobile for years without regular oil changes, tire rotations, and brake fluid flushes—so why would you allow your TMS investment to languish?

"A TMS is not something that you set up once and forget about," Gonzalez says. "It's a living, breathing solution that needs to be maintained regularly in order to perform at optimal capacity." Gonzalez advises shippers to take

TMS cost reduction opportunities

TMS operation / capability	Typical savings potential
Rate negotiations and compliance	4-15%
Route and mode optimization	5-25%
Carrier assignment optimization	4-8%
Electronic communications w/ supply chain partners	2-6%
Continuous moves and dedicated fleets	3-5%
More efficient and automated operations	1-5%

*Based on approximately 10 years of evidence from various customers of TMS systems, starting point proficiency/ efficiency greatly determines the magnitude of savings from each of the areas. Source: Gartner

quarterly "snapshots" of their TMS to see how they're performing and what adjustments need to be made. Also consider the new software releases, upgrades, and/or patches that have been released recently, and determine

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whether they should be integrated into your existing setup.

And don't forget that freight rates and other charges change regularly—a fact that should be reflected in the TMS. "To maintain data quality," Gonzalez suggests, "the content regarding carriers, rates, and ship to and from locations should be validated at least once a year, if not more regularly."

Gonzalez, who recently attended a TMS conference hosted by vendor MercuryGate, says shippers looking to optimize their transportation operations should keep an eye on concepts like "embedded analytics" and "competitive intelligence." Put simply, Gonzalez says these features will allow shippers to use real-time data points such as carrier lead times and create rules in their TMS—which in turn will make automatic adjustments when the "trigger points" are reached.

"There's definitely a push to help automate more processes and keep TMS up to date and aligned with what's happening in real-time," says Gonzalez. For example: Let's say preferred carrier Y has been missing on-time delivery deadlines or rejecting loads for no apparent reason for the last month. Using a pre-determined trigger point, the TMS will automatically generate an alert to the problem, thus allowing for quick action—such as an e-mail or call to the carrier, or a switch to another provider—on the shipper's part.

These and other advanced features blend well with transportation management systems' inherent mission of automating the transportation component of the supply chain. Shippers that realize this—and that continue to work on optimizing their hosted and installed software on a regular basis—will be well positioned to squeeze maximum ROI from their investments. "Just like a car," says Gonzalez, "a TMS needs to be regularly reviewed and tweaked in order to run at its fullest potential."

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