



A ChemLogix White Paper

THE TIME HAS COME

Visibility into the Transportation Process
is Now Affordable and Soon to be Expected

by Michael Skinner

With the increased use of technology to follow shipments in transit, it is no longer a novelty for our orders to be tracked from the time we place them to the moment they are delivered. In fact, we might even be surprised when this level of visibility is *not* available.

When I bought a book online yesterday, I expected—and received—an email providing me with a tracking number that allows me to see when my item ships and where it is in transit. They even let me know if I am going to receive it before I leave town on Thursday.

When The Home Depot orders ten pallets of cordless drills from Black & Decker for a large weekend promotion, they expect—and receive—status notification upon shipment, while in transit and upon delivery. If anything were to happen that might cause those drills to be late, The Home Depot expects to be armed immediately with the information they need to adjust their plans for the weekend promotion.

This kind of visibility into the transportation process is not leading edge. It's not even new. In many markets, like those referenced above, it is expected.

But this is not true for many industries, especially chemicals. Not even for most shipments of hazardous materials—now more than six years after 9-11.

There Are Exceptions.

Certain divisions of a few of the largest chemical manufacturers have implemented transportation management systems (TMS) in order to automatically plan and track their outbound shipments, receive alerts when a shipment is going to be late to a customer and proactively alert the customer that there might be a problem. Additionally, when incidents occur in transportation that will have an impact on operating costs, these technology-enabled shippers are immediately made aware of cost variances that will impact their budgets.

However, the substantial majority of chemical shippers have yet to make the investment in transportation management technology. This is not due to lack of interest or vision. The reason is simple: For most chemical shippers, evaluating the cost/benefit tradeoffs of sophisticated transportation technology and the high cost of buying and implementing these solutions has far outweighed the savings required to fund them.

For large packaged goods shippers like Black & Decker and Nabisco, substantial transportation cost reductions are enabled by TMS solutions that more than offset the technology investment. The most significant cost reductions are driven by complex algorithms that consolidate small, expensive less-than-truckload (LTL) shipments into less expensive truckload shipments with multiple drop-off points. Using TMS technology, large shippers of laundry detergent, cookies and cordless drills are able to save as much as 15-25 percent on their freight bills.

However, chemical manufacturers, shipping tank-trucks and rail cars full of chemicals, and few, if any, LTL shipments, are not able to tie substantial, direct, hard-dollar savings to the investment in transportation technology. Therefore, chemical transportation managers are lobbying for technology to provide shipment visibility to their customers, as well as improved transportation controls and reporting, and drive cost savings (2-5 percent versus 15-25 percent) to their companies. Previously, they were not able to build a business case that paid for itself.

The Past Is Behind Us.

Historically, technology solutions for optimizing and managing transportation required an initial investment of as much as a million dollars for the software alone, with substantial ongoing annual maintenance fees. Now it is possible to get the same or even better technology for substantially less, and to pay for it by the click.

Fees for implementing and integrating these applications typically ran as much as double or triple the cost of the software purchase, but now start below \$50,000.

Moreover, real-time visibility requires electronic communication with each of a shipper's transportation providers. Establishing these connections used to be the responsibility of the shipper, requiring weeks of development and testing with each carrier to implement electronic interfaces and processes.

This, too, is changing. It is now common for the TMS providers to manage and maintain connections to a network of carriers. In fact, shippers are beginning to find that a significant number of their existing carriers are already connected to a number of the web-based TMS networks. Connecting to their carrier community is therefore as simple as using a web browser.

Take A Fresh Approach to TMS.

TMS applications on the market five to 10 years ago boasted powerful, complex optimization engines capable of evaluating every possible combination of orders and all available modes of transportation to solve the lowest-cost transportation solution. However, working with complicated algorithms comes with a price, namely a cumbersome and labor-intensive implementation and configuration effort, as well as a lack of attention to some of the most basic transportation activities. This would include booking a load with the carrier and communicating with carriers to track the shipment en-route.

Fortunately, there are solutions now available that were built entirely with these capabilities in mind. Solutions have been designed for those shippers who would otherwise be without opportunities for substantial optimization-driven savings, but have a need for other technology-based capabilities like shipment visibility, proactive notification on potential customer service issues, robust cost and service reporting and better control over the freight management process.

For most chemical manufacturers, the true benefits of TMS can be summarized as follows:

- **Automation** of the entire freight execution and payment process;
- **Centralized control** over transportation, even at remote locations;
- **Notification and alerts** when primary carriers decline shipment tenders;
- **Alerts** regarding late pickup and delivery, and other service issues;
- **Detailed tracking/reporting** of carrier costs and service performance;
- **Streamlined and centralized** load management and freight payment.

Clearly, savings—maybe substantial savings—can be realized through gaining this kind of control over the transportation process. Even for those companies for which the savings are limited, there are now proven solutions on the market that do not require major capital and upfront investments.

Getting Started Has Never Been Easier.

It has been said that the one good thing about banging your head against the wall is that it feels so good when you stop. The same is true of technology implementations, if, and only if, they do in fact come to an end and are somewhere close to budget (in terms of timing and money). However, there are countless stories about technology implementations that go on and on, cost two times budget or deliver half the expected functionality.

This, too, has changed for TMS technology. My first TMS implementation ten years ago involved 12 people (five full time and seven part time) and took nine months to complete. My most recent TMS implementation delivered twice the functionality and required only five part-time people 90 days to complete.

Because the newer TMS applications require less intense focus on the technical details of integration and configuration, we are able to spend more time where the rubber meets the road, with the people who are using the technology to change the way they do their jobs. With a more intuitive, user-friendly system, transportation planners are able to quickly grasp the benefits of the technology, as well as how they can use it to make their jobs more effective. After all, isn't that the whole point?

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