

# FINDING YOUR TMS

Different companies have different levels of transportation requirements, and it is careful analysis of these needs that should drive selection of the right transportation management system (TMS), says **TORSTEN MALLÉE**.

**M**any articles have been published about transportation management (and transportation management systems, or TMS). Mostly, they offer good advice on how to tackle the last 10 percent of optimization potential. But there are many companies, especially in the Asian market, still in the process of working through the first 90 percent.

This is one major difference between fast-developing Asia and the more mature markets of Europe and North America. In other words, there is quite a decent potential for optimization that can be realized with comparatively little effort.

When asked about the main challenge of transportation management, supply chain executives will most often reply that it is striking the right balance between costs and service (or quality of service). But how can both interlinked parameters be driven further toward their optimum?

Looking at the diverse status quos of transportation management and its requirements, this question becomes rather generic. What is an overly simple approach in one company may be overkill in another.

The main target group of this article is “the rest of us”– companies that still have great potential for improvement in the way they control transportation management. And taking a pragmatic approach and with proven tools there are concrete measures that these companies can take to get started in this area.

To examine the aforementioned differences, let’s divide transportation management requirements into three main categories and look at some of the characteristics and typical processes that exist in companies.

## LEVEL 1:

### **Small regional businesses with low transportation management requirements**

- These companies have a low volume of transports – mainly local and regional.
- The products of such companies are typically not time-critical to their customers, and order cycles are rather long. All the products are stored in one central warehouse.
- Incoming orders are handled according to standard delivery terms. This allows enough time for staging and packing – processes that are triggered by the shipment’s only relevant accompanying document, i.e. a standard invoice from the company.
- As soon as the order is packed, the transport service provider is contacted and asked to pick it up.
- Usually, this transport service provider is one of a small range of transport service providers with which the company has long relationships.
- Given all this, incoming freight invoices do not vary much in their structure.

## LEVEL 2:

### **Companies on the threshold of international success with medium transportation management requirements**

- Companies in this category are in frequent contact with their suppliers and customers.
- Orders, even from the same customer, may come in up to several times a week.

- The products are critical for the customers and often need to be shipped within short response times.
- The resources needed to run the transportation management can vary to quite some extent. Priorities for staging and shipping specific orders must be revised a few times a day.
- As the company is one of the key suppliers for many of its customers, it needs to comply with customer-specific requirements for labelling the packages and the accompanying documents.
- Both labels and documents show customer data (customer product numbers, etc.) used only for the processes of the customer when receiving the goods.
- The majority of shipments are shipped with a wider variety of international logistics service providers. Only a few with customer-appointed service providers
- The incoming freight invoices are rather diverse and complex, about a few hundred a month.

## LEVEL 3:

### **Fully integrated global suppliers with high transportation management requirements**

- These companies are strategic suppliers to their customers, and most of the communication is electronic (EDI-based).
- Shipments are time-critical and often involve a wider range of products.
- The supply chain of is complex, as it involves different production sites and warehouses/distribution centers.





[ More companies in Asia are beginning to supplement a low labor cost strategy with effective IT. ]

- Goods are received and sent internationally; shift operation in the warehouse, staging and packing area may be necessary.
- Due to the information policy of the customers, most shipments are planned, but there is often a need for urgent, short-term shipments.
- Besides customer-specific labelling and documents containing customer-specific data, the processes for staging, packing and consolidation cannot be standardized across all customers. (The customer requirements are too specific.)
- Aside from some customer-appointed transport service providers, the majority of shipments are sent through a handful of selected international transport logistics providers.
- The amount of transports exceeds 1000 per month, as do incoming freight invoices.
- It is the company's policy that every invoice be checked and the costs reallocated to the relevant cost centres.
- In the absence of clear law enforcement in many Asian countries, companies in this category are at least obliged to fully comply with the rules of international trade – such as export control laws, including the checks against the Denied Persons List. This becomes imperative when customers are US-based.

### SITUATION IN ASIA

Compared to the mature markets in Europe and North America, labor is rather affordable in most parts of Asia. As a consequence, many Asian companies still rely on manual processes instead of investing in their IT. They try to improve the service level by optimizing the

**[ With today's complex requirements, largely manual transportation management processes soon reach their limit... the service suffers and customers complain about deliveries ]**

internal manual processes. If this is not feasible with existing staff, sometimes even more staff is hired. Such companies typically use spreadsheets, have countless work instructions on paper and communicate mainly by fax and phone. This scenario applies to most of the aforementioned level 1 companies, which hardly use any IT.

It is important to bear in mind that low labor costs are still a distinguishing factor for Asian companies in global competition. This was one of the first



[ With today's complex requirements and customer service expectations, largely manual transportation management processes soon reach their limit.]

lessons AEB learned 15 years ago when stepping into Asia. As a global software and service provider coming from Germany, we learned a lot from our local colleagues and customers. We still do.

In recent years, however, we have observed the trend of many companies that have found their "Asian strategy" by combining a low labor cost structure with the punctual, pragmatic support of very effective IT tools – i.e. adopting their own way by investing in IT and their labour force.

But this has also brought new challenges still faced by a large number of the aforementioned level 2 companies, and it is probably here that the highest potential for optimization can be found. Though they may have smaller IT solutions for different functional areas in transportation management, these act as data (and process) silos and are too standard to help with specific requirements.

The true goal: order fulfilment  
With today's complex requirements, largely manual transportation management processes soon reach their limit. In many cases, the service suffers and customers complain about deliveries that are late, incomplete or just wrong. This leads to four major issues:

#### 1. High internal process costs

The result is relatively high costs compared to the attainable service level. Not only does this still require a lot of manual data entry, along with all the potential errors this entails, but you also have the jungle of freight quotes, the specific requirements for labelling and documenting certain customer shipments, rules relating to the destination country, etc.

#### 2. High dependency on skilled staff

It's simply too much to ensure the

needed high output quality. Executing all these tasks correctly relies heavily on the experience of the staff. Mistakes are common. It gets even worse when these all-important staff members are away.

### 3. Unutilized potential for costs saving

The costs of transportation become higher than necessary, since carriers are selected through very basic rules (carrier A for shipments above 100 kg, carrier B for shipments to the US, etc.) that inadequately reflect the complexity of freight quotes and the related decision for the best price.

### 4. Below the line: customer dissatisfaction

Companies cannot compromise on service. It is very important to customers that they receive the right quantity of goods at the right time. In an increasingly globalized market environment, customers increase pressure on suppliers to meet their expectations of flexibility and accuracy, so these abilities are becoming increasingly important for the vendor selection process.

## SO WHAT IS NEEDED?

When it comes to answering the question on what is needed for efficient transportation management, it is hard to provide specific steps for improvements in a magazine article. The reason is simply that each company's starting point is unknown. As explained above, not every company has the latest processes and IT systems in place and is just waiting to add the latest top-notch software modules. So the approach should be to describe what is needed for transportation management as businesses require it.

However, one common recommendation for achieving savings and/or improving services applicable to all transportation management levels can be mentioned up front: renegotiate with logistics service providers.

This does not require any IT investment and may result in some success. But the potential can be exhausted if the amount of partners is optimized to a reasonable level. Bundling volume among a few partners enables you to get better rates. However, even here, IT solutions can greatly facilitate preparing the necessary data and verifying what effect better rates will really have on the total freight costs.

## LEVEL 1 SOLUTION

Let's have a look back at the requirements of this level: academic excellence in transportation management is not the core concern. These companies just need to get shipments to their customers. So,

most of the internal processes can be done manually without too much risk.

There is one particular area where some IT could bring a big savings potential: IT-supported carrier selection, including label and document printing. The term "rate shopping" has become quite common to describe this task.

#### ■ Benefit 1: Always the 'best' carrier

Such solutions are available through affordable Web-based software-as-a-service (SaaS) models, which automatically select the least expensive carrier for every single shipment based on standard rates or the companies' individual rates as maintained in the system.

#### ■ Benefit 2: Faster processes

Entry of the consignee addresses can be completely eliminated or reduced to a one-time task by storing the addresses once they have been entered. This is possible through a system address book that can be built up gradually and re-used at any time or through a simple interface to the ERP/CRM software.

#### ■ Benefit 3: Reduced transportation costs

Experience shows that this facilitates huge savings compared to using the same carrier for all shipments or following simple decision-making rules.

#### ■ Benefit 4: Print the right label

As an added value, these systems automatically print the individual carrier-compliant labels and loading lists.

#### ■ Benefit 5: Scalability to the next level

As soon as companies use such IT support, it is very likely that they want to and will improve other operational branches – such as customs declaration or trade compliance. Some of the rate shopping tools also offer such functionalities – at least one tool known to the author of this article. Can you guess?

## LEVEL 2 SOLUTION

As mentioned above, these companies have rather complex requirements for their shipping processes and customers expect high reliability when receiving shipments. At level 2, the highest improvements and savings can be achieved if companies with these transportation management requirements invest in an adequate IT solution.

To effectively control their transportation management, such companies need to have a TMS in place – on-site, vendor-hosted or as a SaaS solution – but not as an isolated standalone system. But rather than just launching headlong into IT, the first step before beginning any improvement should always be an analysis of the current processes and results.

According to the recent (October 2009) Aberdeen Group study, *Integrated Transportation Management*, your company operates below industry average if less than 95.8 percent of your shipments get to customers on time and complete. Compared to that, the "best-in-class" companies manage an average shipment integrity of 98.6 percent. What is your score? Don't be sad if it's "only" 70 percent because this bad news is also good news in that the longer the path, the more effectively TMS IT can support you.



[ The basic TMS functionalities required to achieve acceptable delivery accuracy include the preparation of shipments in accordance with customer-specific requirements. ]

Indeed, a state-of-the-art TMS can provide the means and tools with which your staff can realize the biggest effect on the company's drive for a competitive edge.

The basic TMS functionalities required to achieve acceptable delivery accuracy while tapping into cost savings potential are listed below:

- The TMS should allow a seamless flow of orders from the ERP system into the TMS. This should allow it to help forecast the shipping volume for effective transport and human resources planning.

- Packing functionality must enable qualified packing (allocation of items to packages) when customers require it. Customer/forwarder/destination country-specific rules for the shipment must also be part of the system, so that all documents and labels are printed correctly – independent of the experience of the respective staff members.

- Preparation of shipments must follow customer-specific requirements. This may consist of transport optimization, i.e. consolidating by delivery time frames and service types, managing several delivery addresses for the same customer, etc.

- The integration of partners in the supply chain must be enabled – this includes automatically sending advanced shipment notes to customers or forwarding instructions (IFTMIN, etc) to forwarders.

- Freight management functionalities not only need to support selection of the least expensive carrier, they must also optimize routes and multi-leg transports (consolidate goods only for the first leg(s) and separate shipping for the last leg, etc).

- Shipping control functionality can help ensure that the right goods are ultimately loaded onto the right transport.

- Finally, the integration into the ERP system must enable post-goods issue messages to be sent.

In addition to these “hard” technical criteria, there are quite a few equally important “soft” factors, such as usability and the accompanying services a vendor provides.

Most important, however, is the scalability of the TMS of your choice. This means not only varying shipping volumes but, more important, the ability to extend the system functionality, whether adjacent, upstream or downstream (customs declaration, trade compliance, etc). This is the important pre-condition to further potential improvement without

the need to reinvest.

There should also be scope for implementing your own corporate best practices. In a company with a lot of exports into different markets, for example, it can be very effective to incorporate customs declarations into the TMS process. So the system can automatically provide the right documents and electronic messages depending on whether the destination is e.g. in the EU, the US, or Brazil.

Or in a trading company with a large number of items, it could be very effective to extend IT support into the warehouse. Good vendors provide “SCM suites” in which TMS is only one – albeit a very important – discipline.

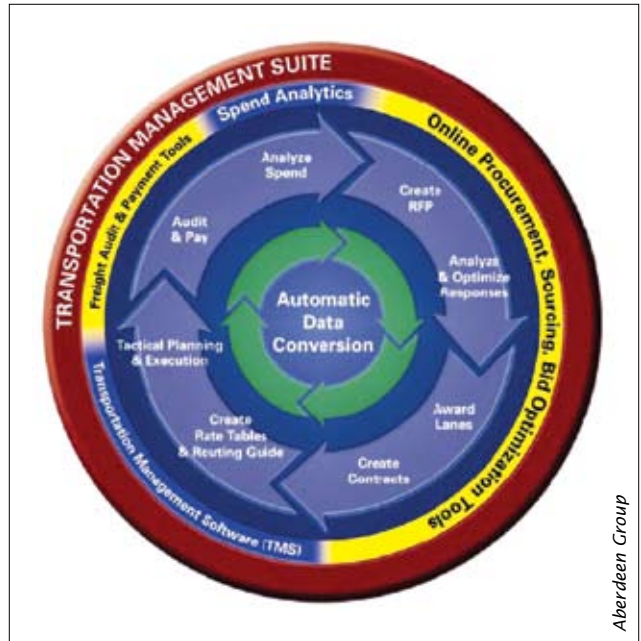
### LEVEL 3 SOLUTION

While this article is primarily aimed at companies in Asia currently at levels 1 and 2, maybe your company is heading toward level 3, perhaps through adopting a state-of-the-art IT strategy and combining it with the strength of Asian business principles and structures. So it's worth a short glimpse into this area.

Companies with such high requirements for their transportation management as described for level 3 will already have a TMS in place. The way to further improve is by enhancing it through better integration of upstream and downstream processes and through better visibility (see diagram above).

Key benefits of such integration include the opportunities to control and manage transportation procurement and settlement. Or more specifically, the ability to:

- Monitor, reduce and control contracted freight rates and spending.
- Track and control non-contracted freight rates and accessory charges.
- Reduce labour required to convert bid data into contracts and then into rate tables and to support invoicing/auditing.
- Measure and control carriers' compliance



[ For level 3 companies that already have a TMS in place, improvement comes through integration of upstream and downstream processes in the form of a transportation management suite. ]

with contract costs and service level agreements.

- Improve spending data visibility and analysis for more effective bid management and the negotiation of new/updated contracts.

- Improve ability to manage information and enforce rules for carriers to adhere to contracts.

- Reduce amount of over-billing from carriers.

- Enable closed-loop monitoring/auditing of budgets, contracts and actual charges.

But whether you're starting from level 1, 2 or 3, a modern TMS can play a key role in your corporate strategy for better results, higher quality and reduced cost structures. Indeed, the best step toward a better TMS is your own next step. So start. Here. ■

**[ A modern TMS can play a key role in your corporate strategy for better results. ]**

Dr Torsten Mallée is General Manager, AEB (Asia Pacific).