

## Driving Innovation

Written by Jon Lundstedt



Trade globalization today is advancing at a rapid pace. It has become imperative for shippers across the world to market and supply products globally to sustain a competitive market.

Being the cheapest and safest option, container transportation has evolved as the largest mode of transportation for shippers to transport their goods across the globe. However, managing containers in the supply chain is becoming a challenge, resulting in high detention costs, rising inventories, vessel misses, and rejection of cargo by the buyers. These in turn result in significant losses for manufacturers, export houses, logistic service providers and other partners in the supply chain.

There are many solutions available in the market for container management, but each one addresses only specific processes in the supply chain, such as a solution for container booking or for tracking. Shippers are looking for an integrated container management solution that can cover end-to-end container processes like container planning, booking, drayage, tracking, costing, metrics/reporting and integration with other applications such as ERPs, liners or INTTRA.

### HURDLES IN CONTAINER MANAGEMENT

On-time delivery of goods to the customer and adhering to promised SLAs are key factors to sustain and grow in business. When it comes to container management, lack of proper visibility and management leads to failure in delivery promises as well as additional detention cost. Shippers take empty containers from shipping lines and hand over loaded containers to them for shipping overseas. Shipping lines provide a fixed time for these containers to be handed over back to them, which because of supply chain inefficiencies and lack of visibility are difficult to meet. Liners charge per-day detention in such a case, and this incurs significant additional cost for the exporter.

Some of the key challenges include:

**Cargo visibility** – Once the cargo leaves the premises of the shipper, there is no real-time visibility on the status of the cargo available to the buyer during the transit. The buyer can only follow up with various intermediaries involved. This can lead to transit delays and, if the goods transported are perishable items, the supplier incurs significant losses in case the goods are spoiled and returned by the buyer.

**Meeting vessel cut-offs** – If the vessel schedules are updated at the last moment and the trader is not apprised of the changes, the container can miss the cut-off loading of a vessel and be detained until the next vessel arrives. In such cases, demurrage charges may also be applicable on the container if it is lying at port waiting to be scheduled for the next vessel.

**Non-visibility of the available containers** – Shippers often pick containers in bulk (especially specialized containers like temperature-controlled containers), and monitoring of all the containers is needed for efficient utilization to avoid detention. Owing to the non-visibility of the entire inventory of the available containers at different depots, many times containers that are approaching the end of their free period or are already in the detention period are not used for transportation. However, those containers having highest detention or risk of detention should move out first. This results in further increase in the detention charges.

### SINGLE SOLUTION

Detention charges can be minimized if the shipper has end-to-end visibility of the container and/or cargo right from the time an empty container is ordered until the time final delivery is made to the customer. To achieve this, a solution is required which can be integrated with shipping lines in terms of arranging online bookings, schedules, vessel planning, receiving event updates and more.

Further, the solution should be able to achieve seamless integration with the ERP system so that the shipper can have complete visibility of all the available containers at all their container depots and the transit status of those containers. It should also be able to provide real-time tracking of the container position to facilitate estimation of detentions in advance.

### END-TO-END

Few solutions exist in the market to address some problem areas in container management while also covering the broader aspect of allied issues. In view of this pressing need, KPIT developed an integrated container management solution using a leading TMS as the foundation. This solution was deployed recently at one of its customers with great success. The customer uses a large number of containers, refrigerated and dry, for exporting various food items. The customer was facing the problem of rising container inventory at their inland container depot and was incurring significant losses owing to detention charges.

The container management solution provided end-to-end visibility of all available containers at different container depots and factory locations across the country, facilitating easy tracking of existing containers in transit and allocation of correct containers for stuffing new cargo. Furthermore, it was altered to incorporate a customized algorithm, which helped with the assignment of best container based on various factors such as cargo type, cargo requirement, container condition and container free period.

Integration with the existing systems of an organization and with other important information portals is the key attribute of a successful solution. KPIT's solution is integrated with the shipping lines to receive vessel schedules, book container requests and to receive event updates. It also is integrated with the existing ERP of the customers to handle the complete process, from procurement to delivery, and is equipped with a user-friendly dashboard that provides all details of container transit on a single screen.

Various reports to track the container history and events that happened throughout a container lifecycle are also available.

**REAPING THE BENEFITS**

The container management solution proved to be extremely beneficial to this customer. The detention costs that were being incurred due to lack of visibility and improper assignment of containers reduced substantially in first two quarters after the solution was implemented. The solution provided container tracking and detention management at the customer's fingertips on a daily basis, resulting in increased productivity levels.

This solution was enabled with an integrated platform for receiving vessel schedules from various liners, resulting in almost no vessel misses. The real-time visibility of the cargo/container ensured there were no delays in transit. And if there were any, the customer could at least be informed on time.

For an existing solution to keep working, it is imperative that the problem areas of the container transportation system remain constant. However, the ingredients of a perfect container management solution cannot always be predicted. The perfect container management solution is one that is built using a robust logic, enabling it to be so flexible that it can be molded and customized to suit all the requirements of a specific export house, manufacturer, LSP or any other beneficiary across the value chain.

*Jon Lundstedt is KPIT's senior director of e-business and value chain execution practice. He has worked with large global IT companies and has years of experience with one of the world's largest food companies.*