



Swings and roundabouts.

How ports can capitalize on the ups and downs of the logistics industry.

Volatile yet potentially very profitable, the logistics industry is full of opportunities to seize, and threats to overcome.

In this white paper we examine some of the current trends to consider and the challenges that these present to port operators in their quest to become more efficient.

The lay of the land

Consolidation via mergers and acquisitions appears to be the new normal, at least within the shipping line sector as the industry reacts and adjusts to overcapacity and a drop in trade. However, it will not be too long before we witness similar trends in the port sector who are struggling to remain efficient. New modalities such as rail and road and trade routes are emerging and currently being explored for long haul cross-continental trading.

Rapidly developing economies in the Asian region, together with the prospect of Free Trade Agreements in key markets, are driving strong growth in the global container shipping industry. As a result, port operators of all sizes are on the hunt for ways to improve efficiencies and lower costs.

The much publicized increase of larger vessels has changed the economies of scale for shipping operators and offers new alternatives for manufacturers keen to boost their distribution capacity.

Information and communications technology solution providers face unprecedented challenges and opportunities in the logistics space.

Such increases in capacity also bring challenges for port operators. For the largest ports, loading and unloading must be completed as quickly and effectively as possible. Even relatively minor delays in turning such large ships around can have significant knock-on effects further along the supply chain.

There are flow-on effects too for smaller ports. Vessels that have been displaced from the largest facilities by the new mega ships are then redirected onto routes that they traditionally have not served. This means smaller ports now have to deal with much larger ships than was previously the case. In turn, this puts pressure on everything from loading equipment to control systems.

The challenge for operators

To meet these challenges, smaller port operators must also find ways to make their facilities more efficient. Traditional methods must be examined and new approaches introduced. Any failure to take these steps will inevitably result in rising operational costs and an inability to compete with more nimble competitors.

There are a range of key areas in which port operators can find efficiencies:

Ship movement planning:

Effective scheduling of vessels can ensure the port maintains a constant level of operation, rather than oscillating from quiet periods to times of frenetic activity. Such planning will also aid the shipping companies themselves as they will be able to forward plan arrivals and departures much more accurately. The last thing a firm wants is for its freight vessels to have to anchor nearby and wait for a berth to become available.



Labor management:

Some industry estimates put the cost of labor at between 40 and 60 per cent of total port operational expenses. This means careful attention must be given at all times to how it is deployed.

Operators cannot afford to have staff rostered on when there are no ships in dock, but at the same time must ensure they are available as soon as loads need to be handled. They also need the ability to change rosters quickly if ship movements are altered. Adverse weather conditions and delays at other ports can mean ships arrive much earlier or later than planned. Port operators need to have the mechanisms in place to alert staff and ensure they are available when required.

Warehouse management:

Many port operators have traditionally relied on paper-based systems or spreadsheets to track the movement of goods into and out of their facilities. While this may have worked in the past, as volumes increase they cannot be scaled to match demands.

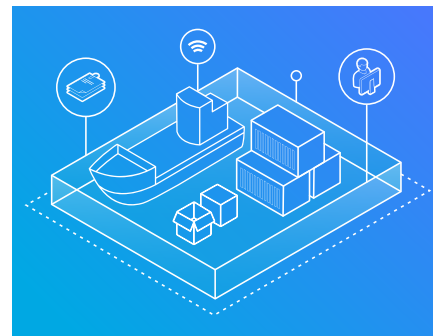
Instead operators need to deploy electronic cargo management tools designed specifically for the shipping and logistics sector. These tools can readily handle everything from whole container movements to break-bulk shipments.

Accessed either via traditional PCs or the growing range of wireless mobile devices, the tools can significantly streamline the flow of goods through the facility. Ship turnaround times can be reduced and bottom-line profits increased.

Reporting:

Having a real-time view of what is happening within every port is critical. Vessel arrivals and departures, staffing rosters and freight movements all need to be constantly monitored to insure that any issues can be solved before they have a significant impact on operations.

Real-time reporting tools need to be linked to systems throughout the facility, ensuring they can access data and provide port operators with a clear view of exactly what is going on at all times.



Invoicing: At the end of the day, port operators of all sizes need to generate profits. Having an efficient invoicing and client management system in place is therefore critical to ensure revenue is received as swiftly as possible.

An effective invoicing and financial system will also remove many of the manual processes that may exist, freeing up staff to focus on more value-adding business activities.

Paradigm shift

By focusing on these key areas, large port operators will be able to meet the demands created by new massive ships while their smaller counterparts will also be well placed to deal with the changes this means for them.

Overall, shifting from manual, paper-based workflows to digital tools will drive efficiency and boost customer service levels.

Information and communications technology (ICT) solution providers face unprecedented challenges and opportunities in the maritime logistics space and these are not just simply about 'automation' or even 'digitization' — the latest buzz.

The growing democratization in ICT calls for a rapid paradigm shift in the way ICT is produced, delivered and consumed in our industry.

In the near future, innovations will be largely driven on the basis of a shared economy. Platform models will dominate the marketplace more than the traditional "pipe businesses" where firms simply create a product and sell it. It will be a more distributed, trusted, shared and hence more innovative environment.

About Master Terminal from Jade Logistics Group

Designed to handle all cargo types in one integrated system, Master Terminal is the world's leading terminal operating system (TOS) for mixed cargo ports.

Master Terminal is licensed at over 120 terminals worldwide, from vehicle terminals in Italy to steel terminals in North America.

Implementation is the key to success, and our implementation record is second to none in the industry. Our proven and robust methodology, partnership approach, thorough training and unrivaled implementation timeframes deliver tangible results fast.

Jade Logistics has been designing, building, and supporting innovative logistics software since 1993. Our experienced people understand the global logistics industry and are the foundation on which we build long-term relationships with our customers.

We have offices in New Zealand, Australia, USA, the Netherlands, the United Arab Emirates, and Indonesia.

*For more information, visit us at **jadelogistics.com***