

## Aurigo Media Coverage

Name of online publisher / website	<a href="http://www.constructionweekonline.in">constructionweekonline</a>
Date of feature	Dec 12, 2010
Original URL	<a href="http://www.constructionweekonline.in/article-6952-it_in_infrastructure__a_new_berth/">http://www.constructionweekonline.in/article-6952-it_in_infrastructure__a_new_berth/</a>

## IT in Infrastructure - A new 'berth'

IT applications will enhance efficiency of ports and also fetch rewards in terms of avoiding revenue pilferage and tax evasion, writes Balaji Sreenivasan

India is located much closer to China than top iron ore-exporting nations Australia and Brazil, but Indian suppliers have been unable to take advantage of the geographical proximity to enhance their overseas sales. The reason attributed by top Indian iron ore exporters for this setback is the poor infrastructure of the Indian ports where ships, particularly Very Large Container Carriers (VLCC), have to anchor for a longer duration in deep waters to find a berth for loading.

Surprisingly, this scenario has not changed in the last one decade while exporters continue to suffer. Upgrading of ports may be one of the major impediments for sea trade from India, but clearly, non-adoption of Information Technology applications and solutions at ports, both major and minor, has forced Indian exporters to sit back and watch other countries overtake them.

According to the experience of one of the leading iron ore exporters from private sector, Rizhao port, the top iron ore port in China, takes less than one day to provide berthing and unloading of 30,000 metric tonnes iron ore. On the contrary, the ports on the western coast of India take 3-4 days for providing berthing facility and loading of iron ore stock. The turn-around time of shipments to China is far less when compared to that of India.

A majority of the Indian ports continue to rely on manual data entry for operations like berthing, logistics, cargo handling and management though the country is emerging in the global arena as a leading IT solutions provider for a variety of problems for various sectors.

Many industrial sectors in India, including automotive, bio-tech, pharmacy and manufacturing, have discovered IT as an enabler. But ports have a long way to go in adopting IT for their operations. The fact that several minor ports have been shut in Karnataka by the state government on account of illegal exports of iron ore is an indicator for the potential of IT adoption in maritime activities, including port management.

There are 13 major ports and 187 minor / intermediate ports along the 7,517 km-long coastline of the country accounting for 90% of foreign trade. While the major ports come

under the ambit of the Union government, the minor / intermediate ports are managed by the respective state governments and Union Territories.

The Indian government's plan is to double cargo handling capacity at the ports to 1.5 billion metric tonnes by 2012. Though the government has made a steady beginning, the target can be reached only if there is an all-round effort, including adoption of IT among other enablers. According to government statistics, the container cargo represents about 30% of the country's external trade in terms of value whereas the global average figure is between 70% and 75%. In other words, it means, Indian ports are extremely poor in managing container shipments, primarily due to the lack of IT intervention.

Ports can make a huge difference to their operations by adopting IT at various levels. Some of the top ports in the world like those located in Singapore, Hong Kong and Melbourne, have taken giant steps in adopting and integrating IT with non-port operations to absorb the trade growth and cater to the needs of exporters and importers.

For instance, the Melbourne port receives data of a shipment, including the cargo details and number of containers being carried, a week ahead of the arrival date of the ship. This helps the port authorities to determine the equipment to be deployed to unload the containers in a short span of time at a selected berth. The entire process requires minimum human intervention as it has been computerised. This not only significantly reduces the service time of the ship at the berth, but also optimises the operational efficiency of the port.

The Singapore port, one of the busiest in Asia, has computerised all of its operations reducing the dependence of manual intervention. Most of the shipper's service can be conducted online and container tracking is one of the most advanced involving RFID (Radio Frequency Identification) tagging-technology.

Ports in India like Mumbai and Vizag have started replicating the global models. But they are still to catch up with the pioneering IT adoption by ports in western countries. In developed countries, ports are managed by private firms or through a public-private-partnership model. In India, this trend is picking pace. Recently, the Indian government announced guidelines for private sector participation in ports through joint ventures and foreign collaborations. As a consequence, a number of infrastructure firms have already started building private ports in the country. These ports have the first mover advantage and can implement IT applications from day one to optimise efficiency.

Adoption of IT as an enabler could be slow in ports owned by government organisations considering the bureaucratic set-up, but it is the opposite in the private ports, which can be trend-setters in IT adoption.

There are several firms that specialise in providing customised and tailor-made IT solutions for operations in India. Some firms provide end-to-end IT solutions for Port Operations (berth planning, optimisation of berthing and shifting movements), Marine Operations (marine survey, dredging, maintenance); Rail Operations (rake requisition, management and tracking), EXIM operation and Leasing Services.

Though the onus is on firms providing such tailor-made solutions to penetrate the government-owned ports to extend the benefits of IT applications to port users, there is a need for a paradigm shift at the government level to adopt IT for change. The use of IT applications will not just enhance the operational efficiency of the ports but fetch momentous rewards in terms of avoiding revenue pilferage and tax evasion.

IT adoption can also help ports gain the trust of exporters and increase the number of patrons as it has happened in the case of Singapore and Hong Kong ports in the post-modernization period. The key to this success is enhancing the satisfaction level of an exporter who need not worry about the status of the cargo or the delay in shipments. Tracking cargo movement and maintaining the deadline of the shipment are critical to the success of any exporter. Their efforts have to be suitably complemented by a port that has adopted and implemented the best practices in the industry.