
INTERVIEW
Rajiv Agarwal
CEO&MD, Essar Ports Ltd


INTERVIEW
Poroma Munshi Rebello
Commercial Director, IndiaLinx


INTERVIEW
Jayyannt Lapsiaa
President, AILBIEA

INDO-BANGLA COASTAL SHIPPING
A new lease of life

India's premier maritime business magazine

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DIGITALIZATION IS COMING
IMAD DRIDI, HEAD OF STRATEGY UNIT HAROPA PORTS

Technology transforms trucking

Trucking industry is coming out of age and changing business models by adapting technology

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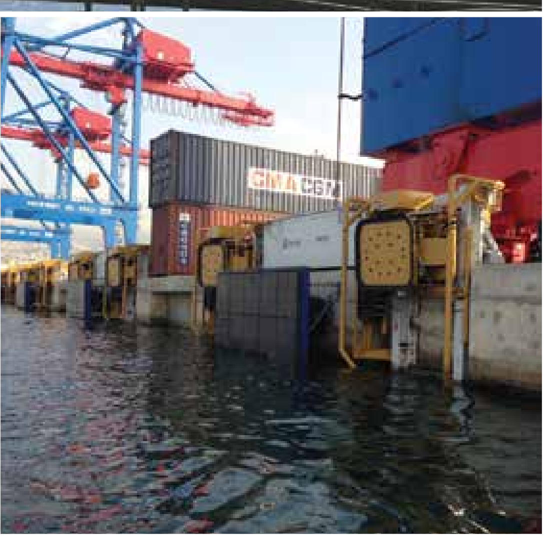

Watch out, Winter is coming

The Shipping business is about to be disrupted.

It was last year towards the end of our annual conference, Containers India, Capt Deepak Tewari, Chairman, Container Shipping Lines Association (CSLA) walked up to me and said that we should introduce a complete session on use of technology in container business. Ever since my quest began to know how technology could change the way shipping business is done.

Most of us by now understand the fact that the global business environment will undergo greater change over the next ten years than it did over the last one hundred. These changes will precipitate a radical shift in the business operations of global firms, especially with regard to the role of logistics.

The expansion of satellite and cellular networks has unleashed a tidal wave of opportunities for tracking containers in transport. As a result, technology investments have increased from 2014 to 2016, with IoT (Internet of Things), sensor and monitoring technology posting the biggest increase at 19 percent. While most of this investment has focused on ground transport, interest in air and ocean transport have also made progress in recent years.

Ocean carriers, in particular, have made significant investments in recent years, with some of the largest carriers investing in "intelligent" containers. Couple of years ago French liner CMA CGM has made significant capital investment in the TRAXENS startup as it strives to introduce the industry's first containers equipped with tracking sensors.

Consider this: In every domain, technology-based start-ups dominate as the drivers of digital disruption. Last year, venture capitalists have backed more than 245 startups in shipping and supply chain management, a record number worth at least $4 billion.

Disruption comes fast and at a high price. This will create a wide divide between those companies that embrace technology and those that don't. Maersk announced last year that "everything that can be digitized will be digitized". Maersk embarked on an internal reorganization to prioritize digital solutions, and plans to experiment with selling container slots to Alibaba, building new software and probably acquiring technology startups.

Cloud-based solutions will displace shipping and logistics companies SAP and Oracle. In this issue, we have featured few articles on how technology solutions are rapidly changing the business models in transport sector.

Welcome to the new digital and tech-driven shipping world.

R Ramprasad
Editor and Publisher
ramprasad@gatewaymedia.in

Last year, venture capitalists have backed more than 245 startups in shipping and supply chain management, a record number worth at least $4 billion

India's premier maritime business magazine
maritime gateway

Editor and Publisher
R Ramprasad
ramprasad@gatewaymedia.in

Associate Editors
Omer Ahmed Siddiqui
omer@gatewaymedia.in
Sisir Pradhan
sisir@gatewaymedia.in

Design Team
Sr Designer
Vijay Masa
Designers
Nagaraju N S
Nadeem Ahammad

Digital Media
Mounika
mounika@gatewaymedia.in

Conferences
Meenakshi
meenakshi@gatewaymedia.in

Research
Rakesh Oruganti
rakesh.oruganti@gatewaymedia.in

Marketing & Sales
National
Satish Shetti, Manager – Sales
satish@gatewaymedia.in
+91 99207 05534

South & International
Vinod G, Sr Manager – MarCom
vinod@gatewaymedia.in
+91 99498 69349

East
Nikhil Doshi, GM – Sales
nikhil@gatewaymedia.in
+91 98369 96293

Client Relations
Santosh – Executive
santosh@gatewaymedia.in
+91 96665 86476

Event Manager
Praveen
praveen@gatewaymedia.in

Administration
Madhukar – Manager
madhukar@gatewaymedia.in
+91 93937 68383
Sharmine Moss
Kishore P

Finance
C K Rao – General Manager
Rakesh U

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Editor: R Ramprasad

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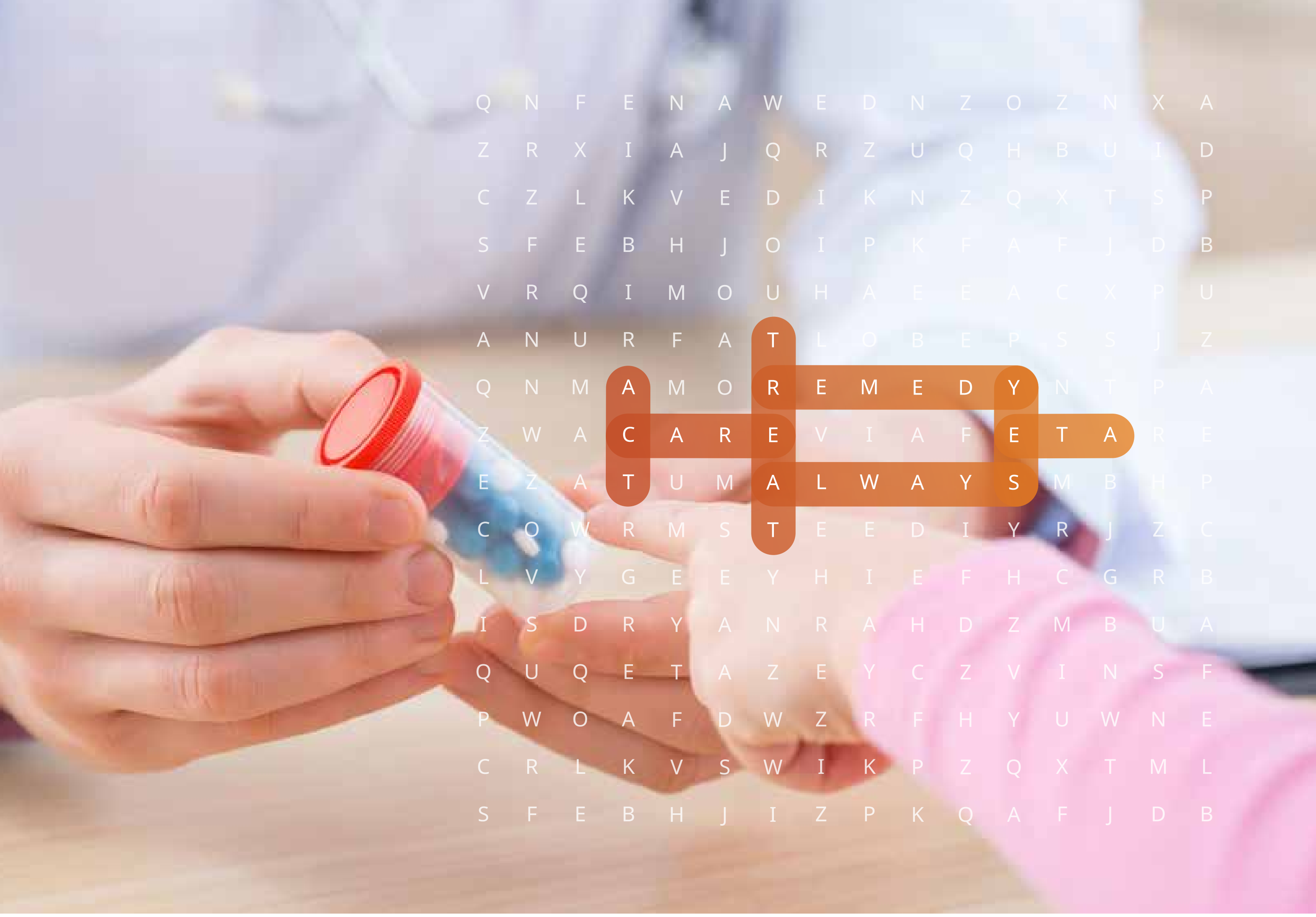

ACT
TREAT
REMEDY
CARE
ETA
YES
ALWAYS

The birth of India's first sailors' union

A narrow lane deep in Dongri, Mumbai is the birthplace of India's first and largest union of sailors. Formerly Old Nagpada Road, it was renamed Mohamed Ebrahim Serang Marg in 1975, 12 years after the powerful trade union leader and elected member of the municipal corporation passed away.

Serang was the first to protest for a raise in crew salaries in 1915, when Britain was fighting the First World War. His agitation on board the Anchor Line ship *Elysia* led the British government to raise salaries by 5 per cent. He also led the first ever strike by Indian sailors on board the *Kaiser-e-Hind*, docked in Bombay, demanding that basic pay of lower-rung sailors be raised to ₹30 per month and that of serangs to ₹60 per month.

In the 1920s, Serang led an agitation demanding that the British government pay war compensation to families of several thousand Indian sailors who had participated in the First World War. Throughout that decade, as he led seafarers towards an organised union, he held regular meetings in Dongri. The National Union of Seafarers of India (NUSI) was registered in 1926 and moved later to its present premises at Goa Street in Ballard Pier.

NMPT offers on arrival e-Visa facility

On arrival e-Visa stamping facility has been extended to cruise tourists calling at New Mangalore Port Trust. The Bureau of Immigration for the first time has issued e-Visa to six guests from UK, USA and Australia who have visited Mangalore on board the vessel *M S SEABOURN ENCORE* on April 8, 2017.

J M Baxi orders 3 cranes from GENMA

GENMA received a new order from J M Baxi Group to supply 3 units of GHC100 for Paradip Port. Several competitors were involved in this project, including some top players. After several rounds of coordination and on-site performance checking on our several references, GENMA stood out from the competition with the proof of high efficiency and customizability. 3 units of GHC100, with capacity of 100t and working radius of 10-48m were provided to JM Baxi.

(www.genmabulk.com)

Indian exports on the rise

India's overseas container trade volumes doubled in 2016 to 10 per cent as compared to the previous year, showing signs of revival in global economic activity. India's exports to Saudi Arabia showed highest growth at 16 per cent on the back of strong demand for ceramics and tiles, which grew by 80 per cent in 2016. Spain has shifted its sourcing base to India, which resulted in increased supply from India. Concor has loaded approximately 36 million tonnes (MT) of traffic in 2016-17, registering growth of 7.8 per cent over 33.39 MT.

Mundra registers double-digit container traffic growth in 2016

The top 100 container ports in the world handled 555.6 million teus in 2016, a marginal increase of 1.8 per cent in volume over the previous year. In 2015, throughput had grown by 1.4 per cent. The 2016 figure was led by a number of ports registering double-digit growth. Among them were Port Klang (10.8 per cent), Colombo (10.6 per cent), Manila (11.3 per cent), Piraeus (10.4 per cent), Mundra (18.7 per cent), Salalah (29.4 per cent), Incheon (12.6 per cent), Fuzhou (10 per cent), Chittagong (15.9 per cent), Barcelona (14.5 per cent), Bandar Abbas (23.6 per cent) and Cai Mep (35.3 per cent).

Essar wins bid for LNG terminal at Haldia port

Essar Ports emerged the highest bidder for an LNG terminal and storage facility at Haldia port, in West Bengal. The tender was floated by the Kolkata Port authorities who run the Haldia dock complex.

Haldia being a low-draft river port, the 1 million-tonne terminal will serve as a daughter facility to sea port-based LNG terminals. In the absence of a pipeline, LNG will be distributed in tankers to the industries in the hinterland, replacing use of costlier liquid fuel. Other bidders for the tender were Petronet LNG and V Energy.

Indian Railways bags order from Sri Lanka

Indian Railways has bagged ₹680-crore export order to supply modern locomotives and train sets to Sri Lanka. It is among the largest such orders for a public transporter. The contract is for the supply of 10 broad gauge diesel locomotives and 6 diesel multiple units train sets equipped with state-of-the-art technology, over the next two years. It will be funded under the Indian Line of Credit to Sri Lanka announced in 2011. RITES has been facilitating rail infrastructure development in neighbouring countries like Bangladesh, Myanmar and Sri Lanka.

Major ports may raise ₹50,000 cr loans

India's 12 major ports, as well as some shipping entities, may raise loans amounting to ₹50,000 crore in US dollars at nominal interest rates to provide a fillip to infrastructure. After JNPT's $400 million foreign denominated loan, another major Port Kamrajar is in the process of raising $100 million. This is for the first time that the Centre-owned major ports are raising foreign denominated loans; so far the practice has been followed only by private players. This mode of financing at low-interest rates and natural hedging has been followed in the major ports for their infrastructure development for the first time. Kandla Port Trust is also planning to soon raise $150 million through external commercial borrowing.

Maiden Ro-Ro vessel at Kandla Port

On April 13, 2016, the first Ro-Ro vessel - *MV DRESDEN* called at Kandla Port's Berth No. 1 which has been newly developed for handling such vessels. It was also the first Ro-Ro vessel to berth in the new financial year 2017-18. Kandla Port has developed a parking area of about 50,000 sq. metres opposite to the new berth for parking the vehicles. Coastal Ro-Ro vessels have been calling at Kandla Port since September 2016. In 2016-17, it handled 13,432 cars at berth no. 15. Sical Logistics Ltd was the vessel agent/logistics solutions provider, picking up the vehicles from the factory and delivering them at site.

DMIDC and APSEZ ink pact

Delhi-Mumbai Industrial Corridor Development Corporation (DMIDC) has signed an agreement with Adani Ports and Special Economic Zone (APSEZ) to introduce its logistics data bank services at Hazira and Mundra terminals from May 1. With the introduction of the logistics data bank (LDB) services at the two terminals, nearly 70 per cent of container volume will come under online tracking system.

The LDB, which is operated by the DMICDC Logistics Data Services Limited (DLDS), uses RFID technology to track containers along the western corridor of India, starting from the ports and covering their entire movement through rail or road until the ICD and CFS.

DPD further expanded at JN Port

Jawaharlal Nehru Custom House, Nhava Sheva has decided to consider Direct Port Delivery permission for all such importers who are manufacturers, registered IPR holders provided their bulk of import is in full container load and is being facilitated by RMS, i.e. no examination, no assessment. This follows the assessment that DPD has considerably reduced the time and cost for importers. Accordingly, manufacturers and registered IPR holders have been requested to apply for DPD facility at JNCH immediately.

First phase of Wadhavan Port likely to be awarded in Sept

The award of work for JNPT's satellite port at Wadhavan is likely to be given by September 2017, with Phase 1 expected to be commissioned by 2022-23. It will have a draught of 20 metres. The port will have access to NH-8 at a distance of 30 km and to the Western rail line at 12 km. There is no major need for land acquisition as the area required for the port will be reclaimed. Land acquisition is required only for rail and road connectivity. The pre-feasibility study of the port, a joint project of JNPT and Maharashtra Maritime Board, with JNPT having 74 per cent stake, was completed in 2014. The Detailed Project Report was completed in March 2017.

APM Terminals Pipavav handles 100,000th auto unit

APM Terminals Pipavav has reached a milestone of 100,000 automobiles handled at the port's Ro-Ro facility, 20 months after commencing auto-loading and discharging. RoRo services were introduced at the port in August 2015 after NYK Auto Logistics India invested in a state-of-the-art stockyard and pre-delivery inspection facility. The Pipavav car terminal includes an 80,000 sq. m automotive Ro-Ro stockyard, and a 4,400 sq. m staging area.

"The government is now looking for new consumers for the surplus coal. We are open to the idea of exporting coal; however to export we have to address the issue of quality . . . as pollution generated from Indian coal is higher."

– Piyush Goyal
Minister for Power, Coal and Mines

"Challenge for railways is to run passenger and cargo train on same track and maintain the punctuality. Our traffic has grown 65 times and handling capacity has just grown to four times. To maintain punctuality is a challenge, we are working for it.

– Suresh Prabhu
Railway Minister

"Until September-October last year, there was not a single vessel getting loaded for China. But in the last few weeks, about 8-10 vessels have been loaded at Goa to get shipped to China. Given the thrust China has placed on developing its infrastructure, we expect the country's demand for iron ore to rise in coming months."

– Capt Kiran Kamat,
MD, Link Shipping and Management Systems

"With the growing focus on e-commerce and digital solutions, SMEs and consumers who were not directly linked to the global supply chains, now have the opportunity to connect, giving companies the opportunity to address consumer needs in a more direct and efficient way than ever before."

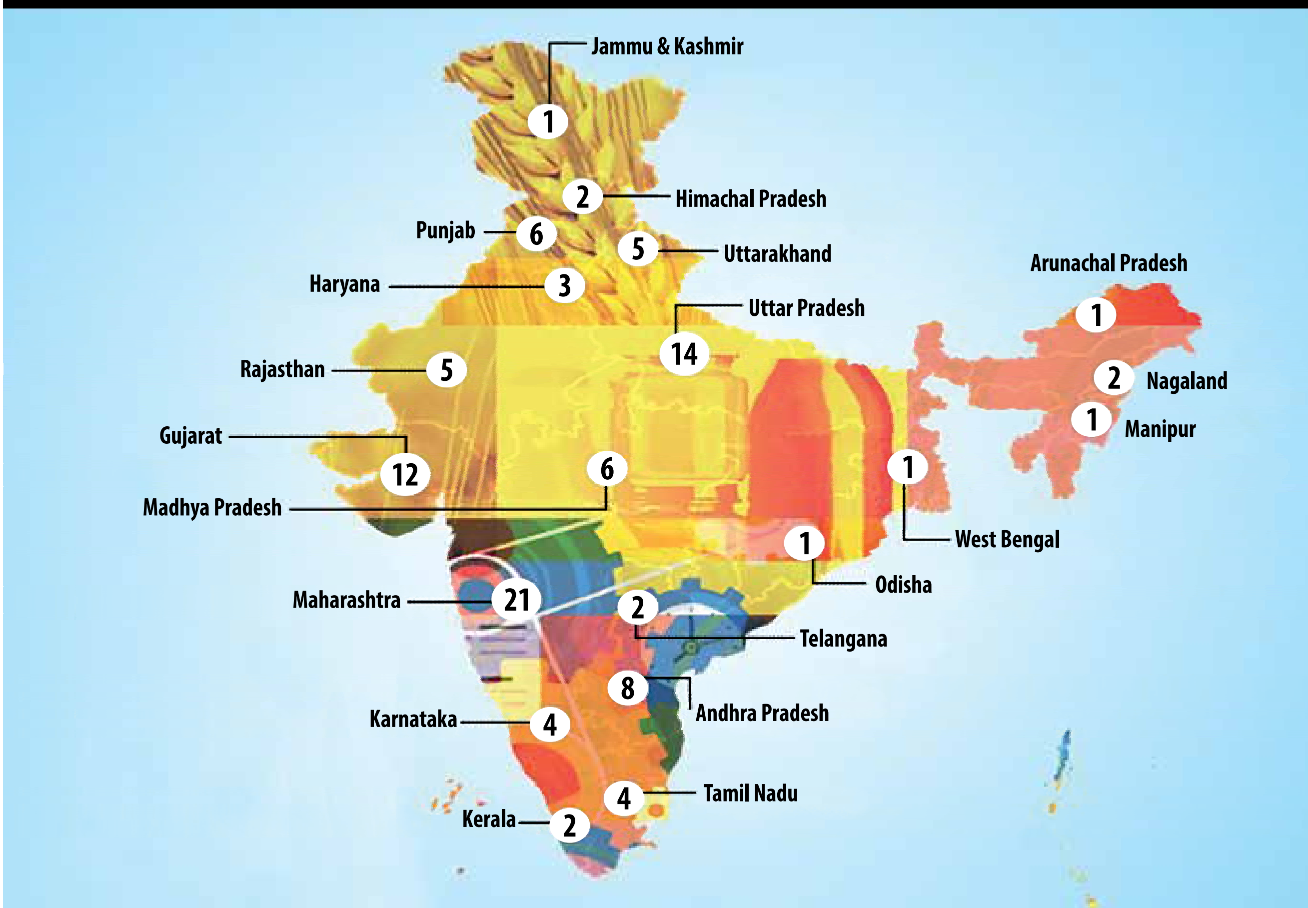
– René Piil Pedersen
Group representative Asia Pacific & MD, Maersk Group

"We had given numerous warnings to financial institutions that the shipping industry is in crisis, but the response we get is that we are overreacting. The institutions actually had no knowledge of the shipping industry."

– Kim Young-moo
Vice President of Korea Shipowners' Association

101 NEW COLD CHAIN (STATE WISE DISTRIBUTION)

Set to synergize food processing in India



TRANSFORMING
FOOD PROCESSING SECTOR

101 new integrated cold chain projects sanctioned across the nation

Total investment of Rs. 3100 crore to transform food processing sector

Capacity Added

2.76 lakh MT of cold storage, Controlled Atmosphere, Frozen Storage

115 MT per hour of Individual Quick Freezing

629 Refrigerated, Insulated vehicles

56 lakh litres per day of Milk Processing

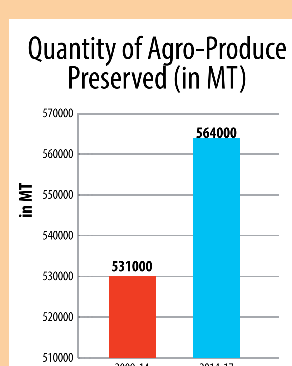
210 MT per batch of Blast Freezing

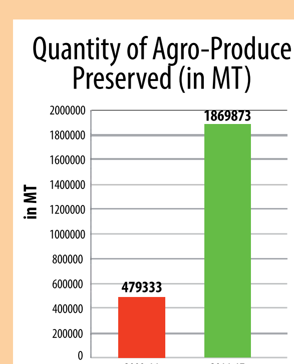
↓ WASTAGE ↑ FARMER INCOMES ↑ EMPLOYMENT ↑ YEAR ROUND AVAILABILITY

COLD CHAIN PROJECTS

Sustaining farm to consumer structures

Quantity of agro-produce covered





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LOGISTICS

Naya Raipur inviting investment for cold storages

Cold storage units are planned in Naya Raipur that will transform the city into 'food supply chain hub' of the state. Chief Minister Raman Singh said these units would be created in Chhattisgarh after identifying all the vegetable growing pockets of the state. Singh had called upon the district collectors to prepare a blue print for the far-flung regions of state in the next 24 months. The cold chain capacity created by the Union Ministry of Food Processing Industries in Chhattisgarh stood at 8500 metric tonnes till April 2015. The Ministry has spelled out its plans of taking up a total of 500 integrated cold chain projects as per the modified pattern of the Central assistance during the next five years across the country to create capacity of 2.5 million tonnes.

Enhancing skills of CHAs

Indian Institute of Logistics (IIL) and Chennai Customs Brokers' Association (CCBA) have signed an MoU to empower and encourage youth working in CHA companies to undergo an undergraduate programme at IIL. The MoU particularly addresses the youth from economically weaker sections of society.

LNG bunkering facility at Dharamtar Creek

Ministry of Shipping has plans to develop a LNG bunkering facility at Dharamtar Creek near Mumbai. "Discussions are going on with Indian Oil Corporation and Bharat Petroleum Corporation. Soon, one of the them will be provided with land on lease to have an LNG bunker," Atul Patne, CEO, Maharashtra Maritime Board revealed. It is reported that the project will likely take the form of a joint venture between one of the two OMCs and a private player.

Some international firms will be permitted to develop retrofitting facilities next to the LNG bunker facility at Dharamtar Creek, as they are said to be able to provide related expertise that is not currently available within India.

Cabinet approves Rail Development Authority

The Union Cabinet has approved the setting up of an overarching Rail Development Authority (RDA), an independent regulatory body. The RDA will have powers for tariff determination, to set efficiency and performance standards for the railways, and ensure fair play in the sector for stakeholder investments, including private players.

Indian Oil to go ahead with LPG unit near Kochi

In a major boost to the stalled prime infrastructure project of Indian Oil in Kerala, the National Green Tribunal has reconfirmed its order dated August 2, 2016, permitting Indian Oil to go ahead with its LPG Import terminal project at Puthuvypeen.

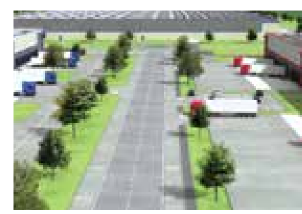
IOCL is constructing an LPG Terminal of six lakh tonne capacity per year in Puthuvypeen SEZ of the Cochin Port Trust. The project also includes laying of a pipeline from the jetty to Kochi Refinery via IOCL's LPG plant at Kochi. This pipeline would be hooked to the Kochi-Salem pipeline which is also under construction. The entire project which also includes a LPG Terminal being constructed at Palakkad is expected to cost around ₹2200 crore. The pipeline is being constructed jointly by IOCL and BPCL.

Private firms may run own freight trains

Under the special freight train operations scheme of the railways, cement, steel, auto, logistics, grain and fertiliser firms have shown interest in having their own fleet. Indian Railways will soon allow private companies to run freight trains from their own private terminals.

For the current year, railways has decided to allow 55 private freight terminals in the country at an investment of ₹5,000 crore. Under the freight train operations scheme, companies can lease rakes from the Indian Railways or have their own rakes manufactured as per their specifications and run them entirely as per their convenience on the existing rail network from their own private freight terminals.

Adani Logistics opens new MMLP at Kila Raipur



Adani Logistics Ltd has setup a MMLP at Kila Raipur of Ludhiana district in Punjab. The facility will support double stack train services to gateway port of Mundra and Pipavav. The ICD encompasses 125 acre of land and 50 per cent of it is already developed. The warehouse is already constructed, with warehouse space spanning appx. 50,000 square feet. For now, two handling lines are available for container handling, out of which one rail line is operational.

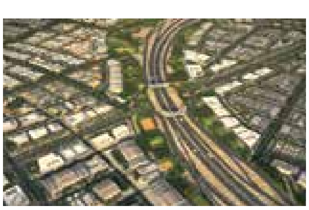
Once this multimodal logistics park becomes fully operation, then it can give tough competition to nearby facilities such as that of CONCOR facility at Ludhiana, B2B facility at Kanech, GRFL ICD at Shanewal, and probably the Prinstine Logistics Park at Chawa Pawal near Mandi Govindgarh.

IIFF to start second batch for logistics course

After successfully completing the first batch of distance learning programme for logistics including shipping and freight forwarding course, Indian Institute of Freight Forwarding (IIFF) has announced the second batch for the same course.

Commenting on the crucial role being played by IIFF in respect of skill development, Mr Tej Contractor, President, IIFF observed, "There is an urgent need of starting massive skill development initiatives from all quarters. FFFAI participates in skill development within the industry through its training arm IIFF to upgrade skill within the industry and enable new participants from outside of the Industry to gain domain knowledge. This is done through work shops; diploma course in Logistics, shipping and freight forwarding – classroom and diploma course in logistics, shipping and freight forwarding – distance learning."

Pithampur SEZ records rise in exports



Exports from Indore SEZ in Pithampur surged 45 per cent in the financial year 2016-2017 led by growth in pharmaceutical products. The SEZ recorded an export of ₹8,428 crore in the fiscal year 2016-2017 as against ₹5,800 a year ago. Of the 49 registered companies in SEZ, Pithampur, 42 are operational. The exports from Crystal IT Park also rose by over nine per cent in FY 2016-17 to ₹200 crore. The Crystal IT Park under the SEZ scheme is spread over 7.99 hectares and over 20 information technology units have been allotted land. As of now 12 units are operational in the Crystal IT Park.

Indian railways losing out on cement cargo

Indian Railways is losing out in the race to transport cement. Cement moved by rail has declined in the past year, with road transport gaining. Railway freight charges are the main reason for this. Although they have moderated from their peak, they remain elevated. In January 2016, seven million tonnes of cement was transported through the railways, which has fallen by nearly 15 per cent to six million tonnes in January 2017.

To remedy the situation, the ministry of railways announced long-term tariff contracts with consumers in cement, steel and fertilizer sectors. The railways will provide a minimum guaranteed volume-linked discount on the basis of incremental growth in gross freight revenue, and the discounts will range from 1.5 per cent to 35 per cent.

JNPT appoints transporters for faster DPD

JNPT authorities will appoint road transporters to improve DPD efficiency. The move will help importers in Ahmedabad, Nagpur, Hyderabad, Pune, Goa and Mumbai Metropolitan Region as these six routes have been identified for DPD.

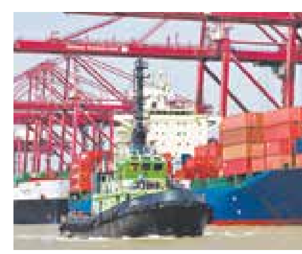
The transporter will be required to work in a time-bound manner in order to clear the cargo within a duration of 48 hours, failing which the container will be shifted to the designated CFS. The cost due to the delay will be recovered from the transporter. There are 33 CFS and 40 ICD at JNPT. A total of 778 importers have been permitted to avail DPD. Transporters will be appointed on per kilometre, per teu basis and one transporter per route will be selected.

Ascendas to acquire six Arshiya warehouses at Panvel

Arshiya Ltd has entered into a binding term sheet with Ascendas Property Fund Trustee Pte Ltd (APFT), Singapore whereby APFT, in its capacity as Trustee-Manager of Ascendas India Trust, has agreed to acquire 6 warehouses (totalling 8,32,000 sq. ft) of Arshiya at its FTWZ located at Panvel, near Mumbai.

The intended objective of Arshiya is to achieve an asset-light model going forward, while Ascendas will potentially be getting a portfolio of income yielding free trade warehouses. The term sheet also envisages the financing of the future development on the available surplus land which has development potential of approx. 4 million sq. ft within the existing notified area.

India Gateway Terminal achieves breakthrough in container traffic



India Gateway Terminal has achieved a breakthrough in container traffic by handling a volume of half million teu in 372 days. Registering a 17 per cent increase in volume in FY17, the terminal also handled the highest monthly volume of more than 45,000 teu in March.

In FY17, the terminal witnessed an increase of over 60 per cent in coir exports, along with a major jump of over 200 per cent in apple and orange imports. IGT has established a stellar role on the global transhipment route. Raw cashews from East Africa were shipped to IGT and then transhipped to other South Indian ports, including Mangalore and Tuticorin.

Automated gates at NSIGT

Nhava Sheva (India) Gateway Terminal (NSIGT) introduced automated gates powered by Optical Character Recognition technology for the first time in India's Ports Sector. This futuristic technology can establish single transaction in less than three seconds and will enable NSIGT to have a faster gate turnaround time from the current five minutes to less than sixty seconds. The automated gates will further enhance operational efficiency and productivity and ensure seamless movement of cargo by eliminating man and machine interface.

The terminal is equipped with remote-operated quay cranes capable to handle the next-generation large size vessels. Also, for the first time at JNPT, revolutionary Electrical Rubber-Tyred Gantry cranes are being deployed in the container yard.

APM Terminal liquid cargo business booming

The liquid cargo business of APM Terminal Pipavav is seeing huge growth. After handling 4.64 million tonnes for the 15-month period ended March 31, 2015, bulk handling volume has declined to 2.47 million tonnes in 2015-16. Container business volume has plunged from 980,689 teus during the 15-month period ended March 31, 2015, to 694,614 teus in 2015-16. Liquid cargo volume, on the other hand, has jumped by 133 per cent to 700,000 during 2015-16 from 300,000 tonnes for 15 months ended March 31, 2015.

Cochin Port records 13.2 per cent cargo growth

During 2015-16 the Port handled a total traffic of 22.10 MMT. Traffic during 2016-17 is 25.01 MMT with the growth of 13.2per cent. The total number of containers handled during 2015-16 is 4.20 lakhs teus and during 2016-17 is 4.91 lakh teus with the growth of 17.0 per cent. Containers for the month of March, 2017 at 45,346 teus is an all-time record at ICTT. Total POL handled during 2015-16 is 13.77 MMT and during 2016-17 is 15.79 MMT.

Coastal Car carriers have started calling at Cochin Port from September 2016 onwards. The Port has offered 80 per cent rebates in port charges towards attracting the business. This arrangement ultimately benefits the end user a minimum of ₹3000.

Teamglobal begins operations at Globicon Terminals

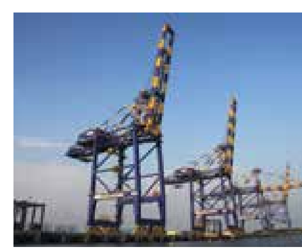
Globicon Terminals is the first green cargo terminal with a CFS that has commenced operations at Nhava Sheva. The terminal has many firsts to its credit: green cargo terminal under IGBC norms, captive solar plant in service from day one, a dedicated Haz Warehouse with heat reflecting exteriors, 100 per cent natural light and ventilation as per green norms, green admin building with heat protection facade, 100 per cent water recycling, sewage treatment plant, paperless work environment with advanced IT systems.

NRL to import crude oil through Paradip Port

Numaligarh Refinery Limited (NRL) signed an MoU with Paradip Port Trust and Indian Oil Corporation for import of crude oil at Paradip Port, paving way for its proposed refinery expansion. NRL in Assam has proposed expansion from existing 3 MMTPA to 9 MMTPA.

Under NRL's proposed refinery expansion project, a 28 inch diameter 1400 Km long crude oil pipeline of one MMTPA capacity will be laid for transporting 6.0 MMTPA of imported crude oil from Paradip Port to Numaligarh. "With the pipelines, the cost of petroleum products will be reduced as it would decrease transportation cost drastically. Besides, we can supply petroleum products to Bangladesh, Bhutan and Myanmar," Union Minister for road transport, highways and shipping, Nitin Gadkari said.

Vallarpadam terminal handles five lakh teu



The ICTT Vallarpadam has handled five lakh teu in 372 days. The terminal handled the highest monthly volume of more than 45,000 teu in March 2017. It recorded a 17 per cent increase in volumes in 2016-17.

During FY 2016-17, the terminal recorded an increase of over 60 per cent in coir exports, along with a 200 per cent plus jump in apple and orange imports. Vallarpadam also facilitated the direct imports of East African raw cashew. The cashew was further transshipped to the other ports, including Mangaluru and Tuticorin. The terminal handled 8.5 per cent more vessels, compared to the previous year.

Old berths at Visakhapatnam Port to be replaced

The old berths at Vizag Port that handled 1.3 lakh tonnes of cargo during initial years of operation will be replaced with new berths which are designated to receive Panamax ships carrying 2 lakh tonnes of dead weight. East dock 2 and 5 are being partially converted, while dock 3 and 4 will get a full revamp, converting them to 14.5 meters from the initial 11 meters draft for handling more cargo. The two berths built near Jubilee Gates will be of world class standards. Scheduled to finish by 2018 September, this operation has been awarded to ITD Cementation Ltd with a deal of ₹1,920 million for the construction of two large berths.

Major ports outperform private ones

The 12 major ports outperformed private ports for the second consecutive year in 2016-17, registering a traffic growth of 6.79 per cent, an official statement said. In comparison, the private ports registered a traffic growth rate of 4 per cent this year. Altogether, the 12 major ports handled a record 647.43 million tonnes of cargo in 2016-17.

The top position was retained by Kandla Port that handled 105.44 million tonnes of cargo, registering a growth of 5.39 per cent over last year. This was followed by Paradip Port with 88.95 million tonnes of cargo and an impressive growth rate of 16.45 per cent. Iron-ore traffic attained the highest growth rate of 163.67 per cent while other miscellaneous and general cargo grew by 18.53 per cent. The major ports also recorded the highest-ever capacity addition of 100.37 million tonnes during the current fiscal bringing it to over 1,065 million tonnes per annum compared to 965.36 MPTA in 2015-16.

VOC Port achieves improved all-round performance in 2016-17

During the financial year 2016-17, V O Chidambaranar Port Trust handled an all-time record cargo traffic of 384.63 lakh tonnes, surpassing the previous year's achievement of 368.49 lakh tonnes, registering an increase of 4.38 per cent. Compared to the target set by the Ministry of Shipping at 395 lakh tonnes, this performance decreased by 2.63 per cent. The Port handled a record throughput of 6,42,098 teus in 2016-17 as compared to the previous year's container traffic of 6,11,714 teus (increase of 4.97 per cent). Imports accounted for 279.97 lakh tonnes, registering an increase of 2.30 per cent, and exports accounted for 104.66 lakh tonnes, registering an increase of 10.38 per cent compared to the previous year.

SHIPPING

Essar Shipping cargo handling up 22 per cent in FY17

Essar Shipping Ltd reported strong operational performance for the last financial year with 22 per cent growth in cargo handling to 11.5 million tonnes. The company's 14-vessel fleet also grew its capacity utilisation to 94 per cent during the period, up from 80 per cent in the previous financial year. In FY17, Essar Shipping carried dry bulk cargo of almost 11.5 MT, as against 9.4 MT in the previous financial year. A highlight of the FY17 fiscal was the doubling in coastal cargo movement triggered by the increased capacity utilisation at Essar Steel. The company also benefited from a considerable growth in back-haul cargo both on the east and west coasts of India because of the all-round growth in Essar Steel.

CMA CGM resumes Bijagos Shuttle service

To respond to the needs of its customers for a personalised and unique product during the seasonal export of cashew, the CMA CGM Group has announced the resumption of the Bijagos Shuttle service in addition to the current 26 direct Sub-Saharan Africa services. Starting May 25, 2017, the Bijagos Shuttle service, deploying two vessels of 1,100-teu nominal capacity, will serve every 15 days Bissau exports during the cashew season from May 2017 to August 2017. Indian ports will be reached in 45 days, Vietnam ports in 48 days.

Trans Asian Shipping connects east to west coast

The Trans Asian Shipping Services Pvt Ltd is starting a new fortnightly coastal shipping service linking Dharamtar in Maharashtra with Kozhikode, Cochin and Kollam in Kerala. Trans Asian Shipping Services will deploy *M V Karuthal* on this Service. Initially, it will be a fortnightly service with duration of 12-13 days for a round trip, but Trans Asian hopes to convert it into a weekly service depending on the demand and requirements of the trade/end users.

DB Schenker extends LANDbridge to Indian subcontinent

DB Schenker has launched its LANDbridge product in the Indian subcontinent. The international road service from the DB SCHENKER road portfolio in Asia Pacific has grown with the recent Bengaluru-Dhaka cross-border shipments piloted with Linde Gas India. This 2,000km road routing involved passage through three different Indian states and clearance procedures at the Petrapole-Benapole border to enter Dhaka.

Odisha government to revive 10 minor port projects

The Odisha government is set to renew the concession agreements as well as expedite the land acquisition process for 10 minor ports along its coast. According to Commerce Minister, Ramesh Majhi, the land acquisition process is in full swing. The Odisha government had proposed to set up 13 minor ports along its coastline. Of these, only two - Dhamra and Gopalpur are functional, one has been abandoned due to environmental concerns and no substantial development has taken place at 10 other locations due to several legal and other hurdles.

Bengaluru Airport launches bonded trucking service

Bangalore International Airport Ltd in collaboration with its cargo partners – Menzies Aviation Bobba Bangalore Pvt Ltd and Air India SATS Airport Services Pvt Ltd has opened a dedicated bonded trucking service from Tirupur to Kempegowda International Airport, as part of the KNITWORK CONNECT BLR project. KNITWORK CONNECT BLR will enable exporters from Tirupur and the surrounding areas to freight their consignments through BLR Airport via road transport.

A dedicated road feeder for connecting cargo will be introduced to maintain a minimum transhipment time. The cargo will be moved via purpose-built truck docks to achieve a quick turnaround.

Hafez Darya Arya shipping lines connects to KICT

Iran based Hafez Darya Arya Shipping Line has signed an agreement with Kandla International Container Terminal (KICT) to start the first direct main line vessel service connecting Iran, Iraq and Kandla.

This unique service connects Kandla with Bandar Abbas and Umm Qasr. The local trade in Gujarat will benefit directly due to lower THC and first mile transportation cost to Kandla, said Mahmoud Pishbin, India Representative of HDAS Line. HDAS Line has 2 vessels deployed on this service. The first vessel, *MV Arezoo,* sailed on April 17, 2017. It discharged 998 teus and loaded 607 teus for the rice exporters from Kandla to Iran and Iraq.

MV Arezoo operates on the IIX service connecting Nhava Sheva and Kandla direct to Bandar Abbas in Iran and Umm Qasr in Iraq; and through Bandar Abbas to other Iranian ports like Chabahar, Bushair, Asuliya and BIK.

More handicraft exports to China

Handicraft exports from India to China are likely to more than double from ₹308 crore in FY15 to ₹650 crore this year with China demanding more of metal-based craft and block printed items. Earlier, the Chinese would buy home and furnishing related products but now they are also buying products with high end embroidery and tie & dye work. While the US and EU have been the major destinations for Indian handicraft exports accounting for almost 65 per cent of the total, China is among the other new markets that are keen on Indian handicrafts.

Maersk now has the world's largest box ship

Maersk Line has taken delivery of the world's largest containership, dubbed the *Madrid Maersk*, surpassing the prior record set by *MOL Triumph*. While the *MOL Triumph* held the record at 20,179 teu, the *Madrid Maersk* now holds that record at 20,568 teu. The vessel is the first of 11 EEE Mark II class box ships due for delivery from Daewoo Shipbuilding Marine Engineering ordered at a total cost of $1.8 billion in 2015. The last of the deliveries will be completed by mid-2018. But just like the *MOL Triumph*, the *Madrid Maersk's* record will also be made null as the 21,200-teu *OOCL Hong Kong* is set to be delivered from Samsung Heavy Industries in next few weeks.

More cargo by rail to Bangladesh

India is keen on exporting more goods by rail to Bangladesh once infrastructure improves across the border. As of now, a little less than 4 rakes of freight moves across the Indo-Bangla border every day on an average. At around 2,800 tonnes per rake, this is a mere 9,800 tonnes per day. Most of this moves through Gede in North 24 Parganas and Singhabad in Malda. Petrapole handles 6-8 rakes every month.

India and Bangladesh have signed agreements to develop railway links, particularly for the movement of freight. Soon, movement of trains between Radhikapur and Birol are expected to resume.

NEPAL

Consulate General at Vizag Port

The Commerce Ministry of Nepal has moved to establish a consulate general at Visakhapatnam Port in India after traders expressed unwillingness to conduct trade through the port in the absence of a government office there. The Ministry has started the official process at the government level through the Ministry of Foreign Affairs for establishing the Consul General office.

Traders currently have to obtain a 'no objection letter' from the Consulate General in New Delhi. Similarly, problems related to cargo clearance and foreign exchange can be resolved in little time if there is a government representative at the port.

BANGLADESH

EXIM Bank to finance Rampal power plant

Bangladesh is installing a mega coal power plant at Rampal that will be financed by EXIM Bank. The construction of the plant was earlier scheduled to begin in March amid huge outcry by environmentalists and left parties as it is located close to the sunderbans. The plant will generate 1,320MW power once completed. Indian businesses have signed agreements and memoranda of understanding with their Bangladesh peers to invest $10 billion in power, energy, logistics, education and medical sectors. The special economic zones in Mongla, Bheramara and Mirsarai are exclusively dedicated to Indian investors.

MYANMAR

India revives border trade with Myanmar

Indian Ambassador to Myanmar Vikram Misri informed that the Government of India is going to re-activate the Border Haat to boost the border trade and cultural exchange programme between the people of Arunachal Pradesh and Myanmar. Accordingly, the visa issue to the people of Myanmar has already been taken up with the Government of India. The Pangsau Pass and Still Well Road need to be revived to facilitate the trade. A currency exchange office and trade center need to be established at the border point. The land custom station at Nampong built by India is lying defunct due to less trade activities from the Burmese side.

AFGHANISTAN

Iran named Afghanistan's largest trade partner in 2016

Afghanistan Chamber of Commerce and Industries has revealed that Iran has retained its position as the country's largest trade partner for 2016. Iran's trade value with Afghanistan for 2016 was $1.8 billion. Trade volumes between Afghanistan and Iran is estimated to total almost $2 billion, with Pakistan at $1.3 billion, China at $1 billion, Turkmenistan at $700 million and with Kazakhstan at $500 million.

SINGAPORE

Truck-to-ship LNG bunkering

Singapore is supplying LNG as marine fuel with the launch of its first truck-to-ship LNG loading facility at Singapore LNG Corporation's (SLNG) terminal. The single-bay facility allows small quantities of LNG to be transported overland to any location where it may be needed. Beyond the supply of LNG as bunker, the facility also provides for the super-chilled fuel to be transported to, for instance, gas-fuelled industrial plants that are not connected to the local gas pipeline network. The SLNG Terminal's design master plan provides for at least another four truck loading bays to be built.

SRI LANKA

World's largest car carrier calls Hambantota

The world's largest Pure Car and Truck Carrier (PCTC), the *mv Hoegh Trigger* arrived on her maiden call at the Port of Hambantota on March 31, 2017. Hoegh Autoliners have very well established their presence in the region by making Sri Lanka, especially the Port of Hambantota as one of their main ports for transshipment of vehicles to various other ports in the world. The *mv Hoegh Trigger* is deployed in the USA, Middle East, Asia (USME) service and has the capacity to carry 8,500 car equivalent units (CEU's) and has 14 cargo carrying decks.

MALAYSIA

Adani to study greenfield port project in Malaysia

Adani Ports and Special Economic Zone Ltd (APSEZ) said it will begin a feasibility study on building a greenfield container port mainly at Carey Island, Malaysia. The port, to be located about 50 kms southwest of capital Kuala Lumpur, would be an extension of the existing Port Klang. An MoU to that effect has been signed between APSEZ and MMC Port Holdings Sdn Bhd.

"Malaysia is very strategic to APSEZ's global strategy and with straits of Malacca being a global shipping route it helps us to drive our global transhipment strategy further. With Vizhinjam port on one side and Carey Island port on the other we will be able to give transhipment solutions to global shipping lines," said Karan Adani, CEO, APSEZ.

A new lease of life

Shonartori Nou Kalyan-1 revives hopes to boost coastal trade between India and Bangladesh

by Omer Ahmed Siddiqui

India and Bangladesh had signed the coastal shipping treaty in 2015 and just one year later the first ship *MV Harbour-1* had sailed amidst much hope and fanfare from Chittagong Port and reached Krishnapatnam Port in just five days. But later on not much activity was observed on the route due to various issues including profitability and return cargo that restrained the vessel operators. Again almost one year later the coastal movement seems to have got another lease of life last month as the first container ship from Kolkata Port arrived at Pangaon Terminal at Keraniganj. In her debut sailing the '*Shonartori Nou Kalyan-1*' carried 65 containers. The cargo mostly comprised of fabrics, cycle parts and pen. A grand function was organised to welcome the maiden vessel call where Commerce Minister of Bangladesh, Tofail Ahmed announced that cargo ships will now reach and depart from Pangaon to India every 15 days. The service will call both Pangaon and Chittagong Ports alternatively. The Shipping Ministry of Bangladesh is in the process of procuring 36 more ships to boost movement of vessels on this network.

Another vessel *M V Sri Joy* will sail under the India-Bangladesh river protocol and the route will be: Kolkata-Mongla-Pangaon-Narayanganj. The ship will carry 35 box containers and few steel coil as Neo bulk together. Containers will be discharged at Pangaon and steel coil will be discharged at Narayanganj. Usually the journey from Indian ports to Pangaon doesn't take more than 4days but if there is different cargo for different destinations and needed custom formalities then the travel duration may get a bit prolonged. The consistent availability of return cargo from Bangladesh to India is a major concern that impacts the viability of coastal shipping.

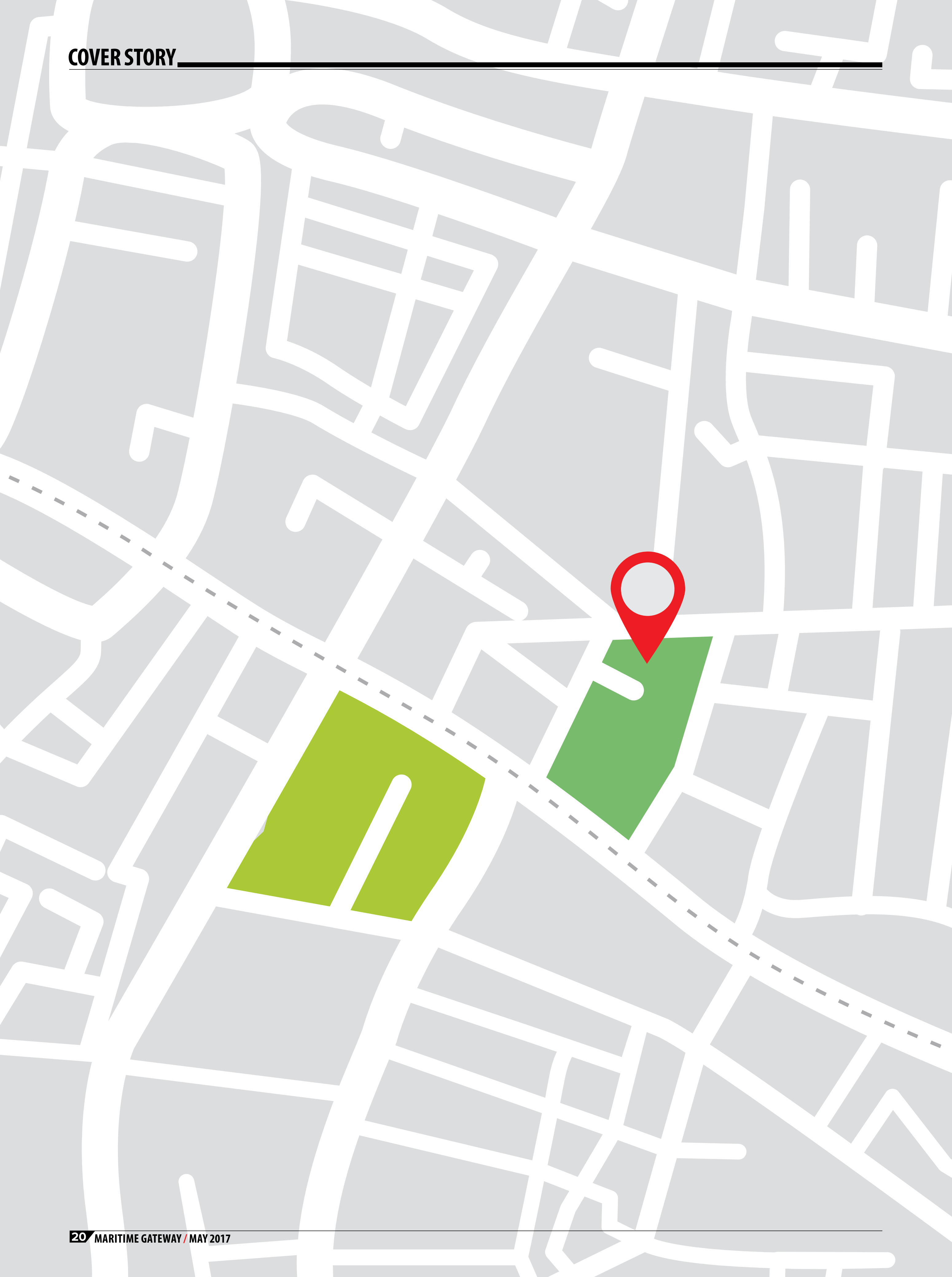
India-Bangladesh trade on an annual basis is valued at around $7 billion, of which, imports from India to Bangladesh is valued at around $6 billion. Half of these imports are coming through the Benapole-Petrapole route and comprise of various commodities such as; raw cotton, fabrics, iron and steel, sugar and cereal, glass and glassware, aluminium, plastic and copper articles, vehicle and agricultural equipment, medical and surgical equipment and utensils of base materials, tyres and lubricating oils.

Raw cotton is exported to Bangladesh from (Adilabad) Hyderabad and Gujarat. The cargo moves basically through east coast ports and Mumbai Port. In return Bangladesh can repo empty 20' boxes that are in surplus there, while the east coast ports are running short of 20' boxes. However, the Bangladesh government is also striving hard to increase the return cargo to India via the coastal route.

The trade community can significantly save on time through direct shipping service as it takes only 3.5 days for a ship to reach from Kolkata to Pangaon. Virtually no cargo losses happen at Pangaon Terminal, moreover it has a locational advantage as it is in close proximity to industrial clusters in Bangladesh.

The cost of shipping is determined by the competition and the number of ships moving boxes on the route. Right now few Indian NVOCCs are participating that's why transportation costs might be an issue, but still they are reasonably charging, informs **Ahamedul Karim Chowdhury, Terminal Manager (CEO) ICT, Pangaon**. If it is made an established and scheduled route then definitely cost will be competitive and might be brought down below the road transport cost.

Another concern are the technical barriers to trade that hinder the movement of imports into India from Bangladesh. Removing these barriers can boost trade between the nations and also promote interest and awareness among the trade community to move via coastal route. mg



TECHNOLOGY TRANSFORMS TRUCKING

Current truck scene of India is no different from that of developed countries like the US or Japan had few decades back. Informational asymmetries have done wonders for those markets. While the intelligent transport structure were encouraged by the government in developed markets, in India it is more of private initiatives but it derives similar results of providing trucking companies and shippers with information on cargo awaiting trucks and vice versa.

by Sisir Pradhan

There are few companies that have pioneered the way IT is used to touch every day life and the evolution of trade and commerce around it. Who would disagree with the convenience that web-based taxi aggregators have brought in for mobility and then there are companies who used it on a bigger scale to aggregate buses, and a similar approach is fast catching up and being replicated to other transport sector. Years ago airlines across the globe had started code sharing model to maximize seat occupancy and leverage from network of partner airline. It has worked for many airlines, marred by competition and rising operation cost, and made them profitable.A similar transformation is slowly taking off in the segment of freight movement by road.

Stellar growth of road transport

Golden Quadrilateral project initiated a change to the entire dynamics of road transport in the country. And since then things have bettered and now with availability of higher capacity trucks, road transport sector is giving stiff competition to rail both on the fronts of cost and time efficiency. Drop in crude oil prices and a deregulated oil price regime have further cemented the road transport industry and Indian rail is already feeling the heat. Moreover, low volume shippers also prefer road transport for convenience.

As the railway is losing cargo to the trucking sector, and in the container segment also Concor is already under pressure to cut freight rates. Trucking industry which for ages operated on non-tech and non-innovative business model has a number of inherent issues that still makes them inefficient and leads to vehicle idling time much higher than average industry standard in other major economies. Traditionally, the trucking industry in India is more controlled through human intervention and an array of middle men involved in the process of truck booking not only add to the transport cost but it also eliminates any chances of reformation in the industry. The shipper doesn't complain as even his LCL cargo also gets a space for transit and transporters don't rue as they are assured of higher capacity utilization of their vehicles. But this business model is slowly moving to the web space. Presenting a strong case for road transport sector, **Raghav Himatsingka, Founder & CEO, Truckola** said, "With the number of manufacturers increasing, however, the cargo load became fragmented and thus, road transportation gained prominence. Even after the completion of the Dedicated Freight Corridor Project in 2019, road transportation will witness a significant rise. The extra costs of loading and unloading the cargo twice, known as handling costs, and the impossibility of providing door-to-door service via rail makes road the best option available. With 60-65 per cent increase in road construction in the next 5 years, implementation of the impending Goods and Services Tax and the drastic improvement in technology that facilitates tracking of vehicles, informatory messages at regular intervals and better quality of vehicles, India's logistics industry is set to grow twice as fast as its GDP."

Informational asymmetries

About 90 per cent of the trucking industry consists of entities that have less than five trucks, but contributing 80 per cent of gross revenue. The remaining 10 per cent of companies comprises the organised sector. As a result, the industry is essentially controlled by intermediaries, because a large number of truck owners themselves are too small as firms to acquire critical market information. Hence, web and app based business model have shown the way for aggregating vehicles on real time and put them to use based on available cargo. These technology platforms act as marketplace, similar to a stock exchange or a commodity exchange, to bring together customers and transport vendors.

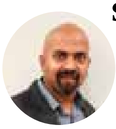
Notably, current truck scene of India is no different from that of developed countries like the US or Japan had few decades back. Informational asymmetries have done wonders for those markets. While the intelligent transport structure were encouraged by the government in developed markets, in India it is more of private initiatives but it derives similar results of providing trucking companies and shippers with information on cargo awaiting trucks and vice versa.

Companies like Truckola and Blackbuck offer inter-state transport service while companies like LetsTransport and ThePorter offer intra-city cargo movement. Then there are hyper local service providers like Grab which provide last mile connectivity from e-commerce companies to neighborhood store to deliver goods. More importantly, being asset light helps these tech-enabled e-logistics companies to scale up faster than traditional operators. For example, Truckola a tech-enabled intercity and interstate FTL transportation service provider that started operation in December, 2015 has currently aggregated nearly 50,000 trucks whereas one of the major organised transporters, VRL Logistics which is in operation since 1976, has a fleet of only 3,872 trucks. Moreover, in order to gain on economies of scale and to remain focused on the core business, many business houses are outsourcing their order management, logistics and fulfillment services to 3PL partners.

Grab, a company which banks on crowd-sourced logistics movement where two-wheeler riders complete the job of last mile delivery of goods, the company has contracts with the likes of McDonalds, Reliance Jio, Amazon and Myntra to generate cargo volume. Explaining the reason for clients outsourcing the last mile cargo delivery job to a specialist, **Pratish Sanghvi, Co-founder & Director, Grab** said that every sector has its own strengths and if companies start investing on logistics infrastructure then the cost of logistics will be higher. Hence they rely on last mile logistics service

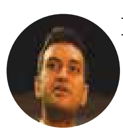
providers so that they can focus on their core business. The last mile connectivity is the most essential and pain point for any business. While companies like Ecom Express and Delhivery who are strong at first mile and long haul cargo movement, but last mile cargo delivery is a challenge for them as well. That's the reason even e-commerce logistics companies outsource the last mile service. Sanghvi stresses that wage of workers has increased in the last couple of years, hence a collaborative model works for all. Rising cost for self management of logistics has forced companies to relook at outsourcing model. That is the reason why the company has registered an average monthly growth of 15-20 per cent.

ReturnTrucks also works as a single point of contact between load owners, truck operators and agents thereby reducing lot of gaps, delays and costs on communication.



Sudhakar Vintha, CEO, ReturnTrucks stressing on the need for change said, that truckers will be more reliant on tech market places like Return Trucks for their business in the coming year and customers will be reaching out to larger number of service providers to get the best rate for their requirement. Tech adoption will further speed up invoicing and payment processes reducing financial burden for truckers. There is lot of scope for tech based startups to disrupt the market by aggregating the suppliers and improving their asset utilization as the largest players in this industry hold less than 2 per cent market share. Benefits of using online fleet aggregator platforms such as savings in terms of time and fuel attracts fleet owners. Traditionally, commercial fleet owners used to depend on their existing customer base for revenue but web-based fleet aggregators turn out beneficial to transport companies as they can further increase their revenue in terms of getting more orders.

One major challenge for e-logistic companies is to convince the trade which is averse to change from traditional mode of operation to a tech-enabled business model. Speaking on the acceptability of technology **Dhruvil Sanghvi, CEO,**



LogiNext, says, "Once the target audience is educated enough to accept technology as a benefactor, then the industry would evolve at a much higher pace."

Adding more value per Rupee

An estimated 5,00,000 commercial vehicles are being added every year, resulting in an annual requirement of the same number of commercial vehicle drivers. The transformation of the industry is, however, dependent on the transformation of the skill sets possessed by the current corps of freight transport professionals. By year 2020, there is likely to be requirement for over 5 million drivers and 1 lakh warehouse managers, hence a top down approach to serve all stake holders will be needed which may not be fulfilled without information management on real time.

Explaining the greater need for use of technology, **Anjani Mandal, Co-founder** and **CEO, 4TiGO** claims their platform is more of a fleet exchange with associated business services to facilitate the entire eco-system around logistics industry. While traditional transport companies have been using technology of some sort but on the ground the services are not technology-enabled. There is a need for integrated approach to the entire eco-system of logistics. "When there is higher amount of value addition to the platform it allows a sustainable business model. We ensure value proposition for all stakeholder in the ecosystem. For example, even the driver has the incentive of many supports like roadside assistance throughout the transit to tackle any eventuality," said Anjani Mandal. The company has integrated the oil marketing companies and banks onto the platform and as a result transporters attached to 4TiGO even have access to working capital.

Locus, which provides logistic automation platform to companies to bring efficiency into operation is getting enquiries from both new age and traditional transport companies to use its technology to plan better in terms of load and route management. Earlier companies which used to spend hours before preparing a shipment for dispatch are now able to release consignments within minutes.

Many times companies shy away to shift from manual mode to IT-enabled operation largely due to cost factor. Considering need of SMEs, companies like Locus have come up with innovative revenue model where the company instead of a licensing fee, charges its clients based on the number of transactions. The saving made by companies due to the use of tech-enabled logistic solutions varies from industry to industry. For example an online furniture and household goods company has improved its efficiency by 25 per cent, similarly online grocery retailers have become 15 per cent more productive, intra-city delivery companies have bettered service delivery by 100 per cent, an online medicine store has made a saving in fuel cost by about 25 per cent.

Rise of E-logistics start-ups

There were about 42 start-ups who had entered into e-logistics but currently about only handful of them are growing. Start-ups in e-logistics scene are largely divided into segments based on their clientele base: 1) Serving enterprises 2) Small & Medium Enterprises and operating in three segments which are intercity service, intra-city delivery and last mile delivery. These companies are focusing on service quality and value addition to differentiate. Anjani Mandal, Co-founder and CEO, 4TiGO claims their platform is more of a fleet exchange with associated business services to facilitate the entire eco-system around logistics industry. While traditional transport companies have been using technology of some sort but on the ground the services are not technology-enabled. "Our platform is more of a freight exchange where supply and demand requirements are fulfilled. Many existing transport companies reach out to us to become tech-enabled to compete in the market." Moreover, the platform is fully integrated with the expense elements such as fuel, toll, and driver remittance and the entire system is fully integrated to the banking network to ensure online payment.

4TiGO operates in the space of intercity industrial goods movement. The company works on optimum utilization and deployment of assets to improve customer service till the last mile to the receiver of the cargo. The receiver or the end client at his end can measure the service quality in terms of receipt of all documents, consignment and proof of delivery which helps him to reduce working capital cycle.

> **HANDLING COSTS AND THE IMPOSSIBILITY OF PROVIDING DOOR-TO-DOOR SERVICE VIA RAIL MAKES ROAD THE BEST OPTION. WITH 60-65 PER CENT INCREASE IN ROAD CONSTRUCTION IN THE NEXT 5 YEARS, IMPLEMENTATION OF GST, IMPROVEMENT IN VEHICLE TRACKING, INFORMATORY MESSAGES AND BETTER QUALITY OF VEHICLES, INDIA'S LOGISTICS INDUSTRY WILL GROW TWICE AS FAST AS ITS GDP.**

On the other hand, the trucker after delivery of the consignment also gets a return cargo. The company is hopeful that by September onwards it will add about 1,000 trucks per month.

Similarly, explaining how LetsTransport is helping companies, **Pushkar Singh, CEO & Co-founder, LetsTransport** said that usually companies maintain an excess stock of goods to meet their peak demand. While some FMCG companies have a peak demand on a week day, few other might have high orders on a week end. Hence, LetsTransport keeps leveraging on various demand cycle of clients from different segments. More than 75 per cent of fleet registered with LetsTransport serve exclusively to the company and remaining fleet owners keep shifting. On any given day, if a cargo owner requires 500 trucks, given the fragmented nature of the logistics industry, he had to contact several transporters or brokers to meet his requirement while the demand of 500 trucks is just about 10 per cent of the fleet size for a fleet aggregator like LetsTransport.

But how much traction these online fleet aggregators have when the competition is mounting and Pushkar Singh of LetsTransport highlights that in their case, the company has some of the top ten logistic companies who rely on them for fleet. Moreover, FMCG majors like Coca Cola, Bisleri and Big Bazaar including Future Chain are also their clients.

The traditional trucking sector is feeling the pinch of mounting competition. For example, a major listed transport company Coastal Roadways during FY2015-16 witnessed a fall of about 6 per cent in its turnover, and the company among other reasons, found the domestic truck freight market has become highly competitive with entry of truck-aggregators and start-up companies backed with huge foreign investments and high end technology platforms.

The data power

With the advancement in data mining and analysis of information, the next decade will witness a sea change in the way supply chain management is done. Even with the infrastructure and policy constrains, in an IT-enabled environment a better output from available resources will be possible through mapping of inefficiencies and offering a solution through automation.

Moreover, the vehicle aggregator model is a step towards big data analytics which further strengthens the value offered by transport industry. Entry of technology companies help in effective fleet management, price comparison, scheduling and tracking of vehicles, and availability of critical data for analysis. Additionally, over a period of time, the fleet aggregator data can be used by companies looking for launching a product or service for a specific region.

Embracing the change

The next phase of growth and product innovation in the logistics industry has just begun. Indian companies that offer tech solutions to Indian and overseas logistics firms are hopeful to track transport movement beyond the boundaries of India. The logistics sector is going to be optimized and the system of a warehouse manager will not just intimate about a logjam in transit but will also offer alternate escape route options. mg

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PROGRAMME

JUNE 09, 2017

13:30 hrs onwards	: Registrations
14:30 hrs – 15:30 hrs	: Inaugural Session
15:30 hrs – 16:30 hrs	: Business Session 1
16:30 hrs – 17:00 hrs	: Coffee Break
17:00 hrs – 18:30 hrs	: Business Session 2
18:30 hrs – 19:00 hrs	: Networking over Cocktails
19:00 hrs – 20:30 hrs	: Smart Logistics Awards
20:30 hrs onwards	: Cocktail Dinner

WHO SHOULD ATTEND?

- **Shippers:** Importers, Exporters, Retailers, Manufacturers
- **Ports:** Bulk Ports, Container Terminals and Dry Ports
- Ocean Carriers – Main Line Operators, Feeders
- Container Train Operators
- Trucking and Haulage Companies
- Distribution Centers / Warehouses
- Government Officials
- 3PLs / Freight Forwarders / CHAs
- Technology Providers
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Technology will disrupt surface transport

Pranav Goel, Co-founder and CEO, Porter

Technology is acting as an enabler in making surface transport more organised. **Pranav Goel**, Co-founder and CEO, Porter, provides a glimpse into how technology is transforming the trucking sector. For sure, one can expect a win-win situation for both shippers and the truckers with better supply – demand matching, decrease in logistics spend, better first mile and last mile connectivity, increased capacity utilisation and better earnings for truckers

by Sisir Pradhan

Q **Please provide a brief outline about Porter's proprietary service offerings and how is it redefining logistics industry in general and surface transport industry in particular in terms cost and time efficiency? How technology and innovation of business model is helping to bring efficiency in logistics industry? What kind of benefit that you translate to your customers?**

Porter is an online marketplace for logistics which aims to reduce the inefficiencies present in the existing market such as low capacity utilization of vehicles, supply-demand information asymmetry, vehicle availability etc using mobile technology. By addressing these concerns, the logistic spend of the customer will tremendously reduce and the driver's earning potential will increase. We provide minitrucks (LCVs) to businesses on demand as well as on fixed arrangement basis. Ondemand customers can book a vehicle either by using our mobile application or by calling our call centre. In fixed arrangement, we provide vehicles to industries for managing their first mile, last mile and interwarehouse movement of goods.

We have seen that customers end up saving 20 per cent on their logistics spend and earnings of our partners-drivers increasing by more than 50 per cent.

Q **In the coming years what role technology is going to playing as far as trucking and other surface transport sector is concerned?**

Technology is going to help improve convenience, reliability and efficiency in the logistics' space. Technology aids in better visibility and helps in enabling in matching demand-supply in a friction less manner. This has far reaching benefits in terms of costs, service level agreements (SLAs) and transparency.

Q **Information and technology, data, and real time mapping and analysis has changed peoples' movement in the country (refer Ola, Uber etc). Shall we expect a similar evolution to take place in the surface transport sector?**

Yes, the core problem remains the same – poor supply demand matching, lack of visibility and transparency. Technology is going to disrupt surface transportation in a similar fashion, though the means to achieve and business models may be different than passenger segment like OLA or Uber.

Q **What is your observation about the change that is taking place in the trucking industry after the**

advent of information & technology driven service providers like yours? How the trucking industry which was so far unorganized and unstructured is transforming to provide seamless first mile and last mile connectivity?

We have seen an increase in the capacity utilization of vehicles from 1 trip per day to 3 trips per day creating an economics surplus, and thus enables us to change the economic dynamics of the entire market. We are able to offer a saving of 20 to 25 per cent on logistics spend to our customers alongside a hassle free experience that a tech enabled service provider brings like better SLAs, structured pricing, product safety etc. Not just demand side, we effectively impact the supply side as well by exposing them to broader customer base. Our partner drivers get a stable platform (increase in 50 per cent revenue) reducing vulnerability in their business, thus helping them get respectable income and better lifestyle.

We are seeing majority of our transactions (70 per cent) already happening through app without any human intervention. This is as seamless as requesting a cab these days without calling, negotiating etc.

Q **Road transport sector is already giving stiff competition to rail, hence will it further disrupt other modes of transport? How the face of the trucking industry will be in future?Moreover, What is your vision for Porter?**

I think road transport is already much larger than rail and will remains so. The asset utilization is very poor as there is poor demand/supply matching. With the advent of technology, this will improve and will have a spillover effect on pricing, convenience and reliability. I think technology will be an enabler and will equip even the smaller unorganized players to create a supply chain which is much more convenient, reliable and efficient. Porter's vision is to become a one stop solution for logistics - if logistics is one of the worry for a business, it should no longer be after associating with Porter. We want to become a default option whenever a customer requires logistics support.

Q **In recent times lot of interest has been shown by investors for technology companies in the logistics space. What makes these logistics technology solution providers an interesting proposition to investors?**

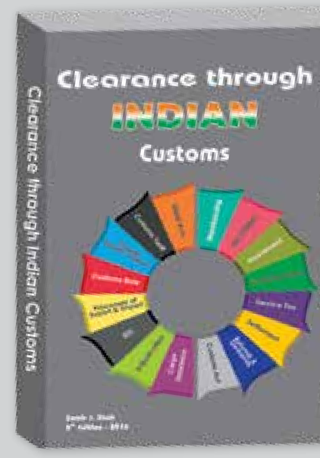
Indian logistics has as much as 13 per cent GDP contribution, where developed countries have a much higher share of 89 per cent. The main reason behind this are the inefficiencies in the market. By addressing these inefficiencies through technology, we can create an economic surplus and benefits of which can be distributed to all the stakeholders involved. This makes it a very exciting opportunity for investors.

Q **How is the market growth for technology enabled logistics companies? What kind of investment that you see surface transport industry is making on technology?**

I see technology enabled companies growing at 4-5x every year. The market size is very big and there is huge scope for optimization. I see a significant portion of investment happening in technology by these companies usually 20-25 per cent of the investment spend in a year on technology.

Q **What is the major challenge before the companies like yours? Why a number of tech-driven logistics start-ups have not been able to sustain?**

The technology is very complicated to build and the difficulty is compounded by the nuances that exist in the market. It is very difficult to create a product which fits all requirements and yet is simple to use. There are multiple structural issues arising out of poor infrastructure in the country such as poor telecom network, poor mapping of cities and highways digitally, number of entry issues, POD issues, poor adoption of tech in supply and demand, shadow economy, vehicle overloading and oversizing etc. This business model works on network effects and one needs to invest in creating networks effects. Many companies have not been fortunate enough to be able to create these. mg



"Clearance through Indian Customs"

JBS Academy Pvt Ltd has recently rolled out the fifth edition of "Clearance through Indian Customs," written and edited by Samir J Shah, Chief Mentor and Director. Hailed as the ultimate handy-guide for professionals belonging to the logistics sector in India and abroad, the book has come to be in huge demand. The encyclopedia of logistics has been acclaimed especially for its comprehensive illustration of all customs clearance regulations.

Exasperated over meagre availability of literature in the subject, Shah felt the need to create textual content that will enable not just experienced professionals, but also the general public to easily understand the technicalities of the sector. His curiosity and perseverance helped him to finally create a book that could successfully achieve all this with a mere 451 pages and 46 chapters.

AUTHOR: SAMIR J. SHAH

PUBLISHER: JBS ACADEMY PVT. LTD.

PAGES: 451 PAGES

Expect highest level of technology integration in surface transport

In the near future, more of the merchandise would be on the road, rather than in warehouses. Technology will act as the enabler in lean-management, on-time deliveries and logistics management

by Sisir Pradhan

Q **Please provide a brief outline about LogiNext's proprietary service offerings and how is it redefining logistics industry in general and surface transport industry in particular in terms of cost and time efficiency? How technology and innovation of business model is helping to bring efficiency in logistics industry? What are the benefits to your customers?**

LogiNext has been transforming the logistics and field service management through our patented 'self-learning' algorithms that make sure that the intelligence gained while conducting logistics and resource management activities is not lost for the client. The learning is absorbed back into the system and is integrated in future planning algorithms, increasing their overall efficiency. Surface transport industry may seem stationary and unmoving at face value; however, the industry is continuously evolving at a very high speed. In our latest white paper on 'Industry Trends in Field Service Optimization', our simulation models predicted the industry would require the highest level of technology integration to stay ahead of the growth curve. Fleet and field management products such as LogiNextForce™, Mile™, Haul™, On-demand™ and Reverse™ have already set high industry benchmarks in terms of business value directed, with high cost savings across industrial domains. Clients have experienced a reduction in resources utilized by more than 20 per cent.

Q **In the coming year what role technology is going to play as far as trucking and other surface transport sector is concerned?**

Aggregation of freight services have seen many players jump in for a slice. It is the next level of resource utilization and optimization. Companies such as FretLink have entered the market with heavy investment backing from big players like Daphni, Breega Capital, and Elaia Partners. As the freight forwarding industry moves ahead in the aggregation model, real-time tracking and route optimization would be the technology integrations first on the list. LogiNext has already partnered with such companies in the Middle-East and South Asia. As we substantiate our position in Europe, we would extend our success into more global markets, with a target of establishing ourselves in more than 100 countries within the next decade.

Q **How will information technology, data, and real time mapping and analysis influence the surface transport sector?**

With public transport companies like Uber and Ola, there was a learning period for the user, a training or 'educating' period where they were getting used to the ease of ride bookings. Once they familiarized themselves with the concepts, their expectations increased to better and quicker service standards. This expectation has driven the growth in the industry with a renewed focus on technology backed consumer features. Real-time tracking, constant in-transit alerts, and total end-to-end visibility have become a basic requirement. Such a concept has been underlined in our last white paper, The BISTA Analysis, which identifies the expectation stage of the average consumer, and its growth chart within the industry. To put it simply, if a consumer finds something thrilling today,

Dhruvil Sanghvi, CEO, LogiNext

then tomorrow, the same thing might seem basic and a given. The same concept can be extended to the commercial surface transport sector. Once the target audience is educated enough to accept technology as a benefactor, then the industry would evolve at a much higher pace.

Q **Road transport sector is already giving stiff competition to rail, hence will it further disrupt other modes of transport?How the face of the trucking industry will be in future?Moreover, What is your vision for LogiNext?**

With increased investment in the roads and highways, governments' interest in infrastructure development has been well received across multiple industries. People are planning their future logistics with an added concentration on on-road logistics. There would always be a positon for a rail and in-land waterways and maritime shipments. However, when the cost benefit derived and the merchandise being transferred doesn't justify the investment in traditional long-haul carriers (rail and waterways), then road transport would stand as the favored carrier. As we know that much of the merchandise transferred falls in the category where traditional carriers aren't justified, road-transport would continue to thrive and grow in the future.

Q **In recent times lot of interest has been shown by investors in technology companies in the logistics space. What makes these logistics technology solution providers an interesting proposition to investors?**

In the near future, in any average company, more of its merchandise would be on the road, rather than in warehouses. With an added concentration on lean-management, on-time deliveries and logistics management, technology companies are destined to occupy a much bigger margin in the investment column. As more and more investment flows in logistics management, the logical industry development would be optimised to better the returns on these investments. Real-time tracking, field workforce management and automation, route optimization, fleet management software, and in general, logistics management software would be in-demand for many years from now.

Q **How is the market growth for technology enabled logistics companies? What kind of investment that you see surface transport industry is making on technology?**

As per 'Industry Trends in Field Service Optimization', surface transport industry is set to invest heavily in technology, bringing about a digital age within the industry which was previously unheard of. This would push market growth up, but due to the ideological resistance stemming from the philosophy, 'this-is-how-we-used-to-do-it', the change would take a little longer to take hold. However, in the next decade, the surface transport industry would see an awakening of sorts as far as technology acceptance and integration is concerned.

Q **What is the major challenge before the companies like yours? Why a number of tech-driven logistics start-ups have not been able to sustain?**

Being a tech-driven logistics solution provider is one thing, however, knowing the market, the industry, the client's pain-areas, and the perfect solution to each such pain-area is the real differentiator. Being tech-driven is not the solution, enabling technology to function as a tool to solve the client's problems is the real solution. LogiNext leverages technology, with the extended flexibility of being SaaS centered, to provide the best products which integrate with the client's system and process all logistics bottlenecks and in-efficiencies and turn them around in, not just cost saving, but profit generating entities. This is why we are the fastest growing SaaS enterprise in Field Service and Logistics Management. mg

Freight transport - Exploring the potential in data

In future information has a greater role to play, and **Sudhakar Vintha, CEO, ReturnTrucks** believes data science is the key focus area to empower customers as IOT devices will provide a wealth of data related to truck tracking, truck health monitoring, fuel consumption, speed monitoring etc useful to vehicle manufacturing companies, fuel companies, insurance companies and others

by Sisir Pradhan

Q **Please provide a brief outline about your service offerings and how is it redefining logistics industry in general and surface transport industry in particular in-terms cost and time efficiency? How technology and innovation of business model is helping to bring efficiency in logistics industry? What are the benefits to your customer?**

ReturnTrucks vision is to build a logistic eco-system in India to improve truck efficiency, bring visibility and assurance to the shipment through innovative logistic solutions that cater to the small and medium transporters. Our online platform connects truck and load owners for an effective, timely and economic engagement. Our platform helps the load owners post their requirements and truck owners post their availability for free of cost. ReturnTrucks also works as a single point of contact between load owners, truck operators and agents there by reducing lot of gaps, delays and costs on communication. Our team has built multiple solutions on ReturnTrucks platform to support our vision of building logistics eco-system.

Q **In the coming year what role technology is going to playing as far as trucking and other surface transport sector is concerned?**

In the coming year technology is going to change the traditional nature of transport business. There are lot of inefficiencies in this sector today, right from the way a truck is sourced to final settlement of bills which result in wastage of time and money for all the stakeholders involved. Truckers will be more reliant on tech market places like Return Trucks for their business in the coming year and customers will be reaching out to larger number of service providers through our platform to get the best rate for their requirement. Tech adoption will further speed up invoicing and payment processes reducing financial burden for truckers. We will see a new breed of tech transporters replacing the current setup and bigger industry players will also adopt technology.

Q **Information and technology, data, and real time mapping and analysis has changed people movement in the country. Shall we expect a similar evolution to take place in the surface transport sector?**

Definitely. The power of data has not been used to its full potential in freight transport sector today. Most of the decisions are experience or gut based. B2B freight sector being more cost conscious with thin margins, data analysis and accurate forecasting is required to identify seasonal changes and for price prediction. Being able to identify pricing fluctuations and quote accurately is the key to success in the business. Further IOT devices will provide a wealth of data related to truck tracking, truck health monitoring, fuel consumption, speed monitoring etc useful to vehicle manufacturing companies, fuel companies, insurance companies and others. Data science is the key focus area for Return Trucks to empower our customers.

Q **What is your observation about the change that is taking place in the trucking industry after the advent of information & technology driven service providers like yours? How the trucking industry which was so far unorganized and**

A WIN-WIN SITUATION

The largest players in this industry hold less than 2 per cent market share. 80 per cent of the service providers are small players with a low average asset utilization. So there is lot of scope for tech based startups to disrupt the market.

Only tech adoption can bring structure to this industry and organize smaller players. The experience for the customers is now seamless as they can track status of any order from booking to payment online, check and give reviews for service providers and resolve issues with click of a button.

unstructured is transforming to provide seamless first mile and last mile connectivity?

There is lot of opaqueness in this industry which prevents customers and truckers from realizing actual supply demand available in any market. This also prevents new entrants into this business. With the support of tech players, this is now changing. Before, a customer would reach out to only a few truckers everyday for their requirement, but now they are able to reach out to large number of service providers and receive competitive price. More people are now able to buy trucks and get into this business due to our market place. Only tech adoption can bring structure to this industry and organize smaller players. The experience for the customers is now seamless as they can track status of any order from booking to payment online, check and give reviews for service providers and resolve issues with click of a button.

Q **Road transport sector is already giving stiff competition to rail, hence will it further disrupt other modes of transport? How the face of the trucking industry will be in future? Moreover, What is your vision for the company?**

Road transport will be organized for better utilization over the years and will be connected well with various stake holders in the eco-system. It will continue to dominate the overall transport sector in the future. ReturnTrucks vision is to build a logistic eco-system in India to improve truck efficiency, bring visibility and assurance to the shipment through innovative logistic solutions that cater to the small and medium transporters. In our effort to build an eco-system, we partnered with different industry players related to logistics – be it insurance players, manufacturing organizations, e-commerce and highway stoppe players.

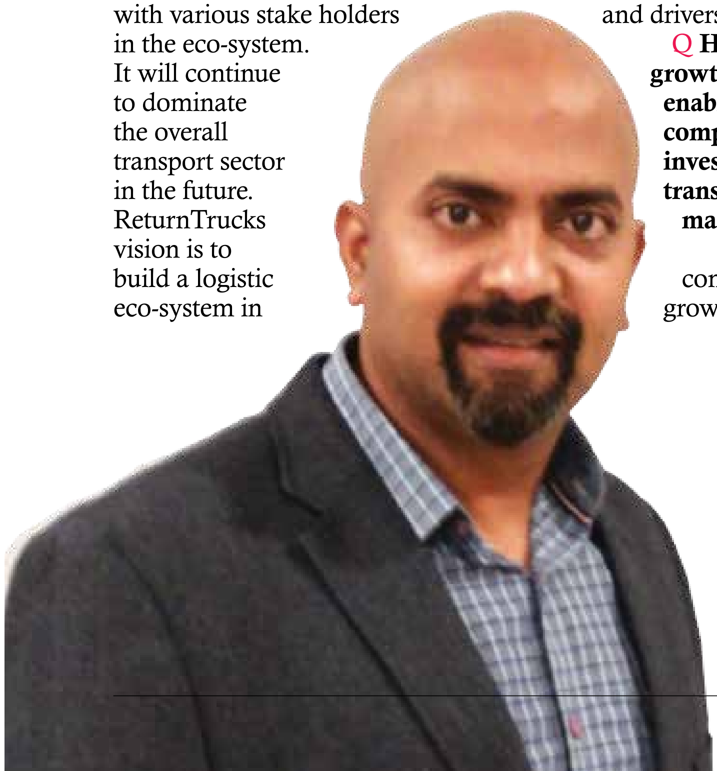
Q **In recent times lot of interest has been shown by investors for technology companies in the logistics space. What makes these logistics technology solution providers an interesting proposition to investors?**

The size of the opportunity. It is touted to be a $300 B industry by 2020 and is yet largely unorganized. Also note that the largest players in this industry hold less than 2 per cent market share. 80 per cent of the service providers are small players with a low average asset utilization. So there is lot of scope for tech based startups to disrupt the market by aggregating the suppliers and improving their asset utilization.

Investors see a high RoI in this sector since tech based market places can scale up rapidly in this sector and they are now more confident than before due to availability of smartphones and internet at very affordable rates for truck providers and drivers.

Q **How is the market growth for technology enabled logistics companies? What kind of investment you see surface transport industry is making on technology?**

Tech enabled companies are able to grow rapidly by automating manual intensive processes and reduce payment cycles. Many of the large players have been taken by surprise with growth of the new age startups in this space and we see a willingness in them to now invest in technology. Further the space is too large for just few players to dominate, there is enough scope for multiple models to co exist and flourish. With efforts from government to encourage online transactions and GST implementation, investors feel optimistic and hence we will see more money flowing into this space from existing and new players alike.



Sudhakar Vintha, CEO, ReturnTrucks

Q **What is the major challenge before the companies like yours? Why a number of tech-driven logistics start-ups have not been able to sustain?**

Changing the mindset of the traditional players to learn and adopt technology is a major challenge in this space. Tech adoption in this sector needs persistent long term efforts and just having platform in place does not ensure traction and business. Some of the startups that could not sustain, failed at the implementation stage. Till market achieves a significant tech adoption, online market has to co exist with the offline market and lot of startups have not been able to handle uncertainty arising in such scenario. Having said that, logistics is also like any other business, lot of factors external and internal have contributed to success or failure of the startups in this space.

Kausalya Nandakumar, CEO, SmartShift by Mahindra

Load booking in a flick

With the convenience factor like 3-minute load booking, price transparency and live tracking of vehicles, the web based fleet aggregator model has gained thousands of customers

by Sisir Pradhan

Q **How are your services redefining logistics industry in general and surface transport in particular? How technology and innovation of business model is helping to bring efficiency in logistics industry?**

Launched in October 2015, SmartShift is the first digital mobility start-up seeded within the $17.8 billion Mahindra Group. It is a technology-enabled marketplace for intra-city logistics that enables cargo owners to find suitable transporters. Users can find each other, negotiate and close the deal through a mobile application, website or a dedicated call center. SmartShift's value proposition for its customers are delivering transporters the control on pricing in an innovative way; eliminating entry barriers; intelligent adaptation of the existing ecosystem to deliver zero NPA payment system; and unique pricing model to drive adoption and profitability. Currently, the service is operational in Mumbai, Hyderabad and Bengaluru, with more than three thousand drivers enrolled on the platform, and it benefits around two hundred cargo owners on a daily basis.

Q **How will technology disrupt the trucking sector in the coming years?**

The advent of Industry 4.0 and the IoT shall transform the logistics industry. Location and tracking itself, which is the crux of the transportation industry, shall undergo major changes. With the advent of digital maps, we have dynamic maps which show us traffic in real time. We have slowly started moving into the location intelligence space, an area that is currently dominated by ride sharing apps, google now, etc. The next wave shall be predictive where machine learning techniques will take the billions of connected devices that are present in the ecosystem and location intelligence to offer predictive and assistive insights.

Q **What is the change taking place in the trucking industry after the advent of IT driven service providers like you?**

For SmartShift, the target audience is the rapidly growing close to 50 million SMEs in India, with frequent requirements of adhoc cargo transportation (local furniture shops, fruits & vegetable and distributors etc). We are working towards building a strong customer centric culture that aims to help SMEs to tackle logistics related hassles, and focus solely on growing their business. The platform, with its 3-minute load booking algorithms, price transparency, curated transporters and live tracking of vehicles, has gained thousands of customers.

The platform allows transporters to decide their working hours, fix tariff for the cargo movement and also decline the job.

Q **What makes these logistics technology solution providers an interesting proposition to investors?**

Knowledge, information and finally, data is the new oil. The power of digital aggregators in logistics is not restricted to merely digitizing this sector but also collecting invaluable information that will impact multiple stakeholders across various ecosystems. For instance, we are currently sitting on a goldmine of SME database which any NBFC would be happy to leverage. Our vast transporter database is extremely attractive for all major oil companies. Thus, our data is what makes us powerful and invaluable for investors.

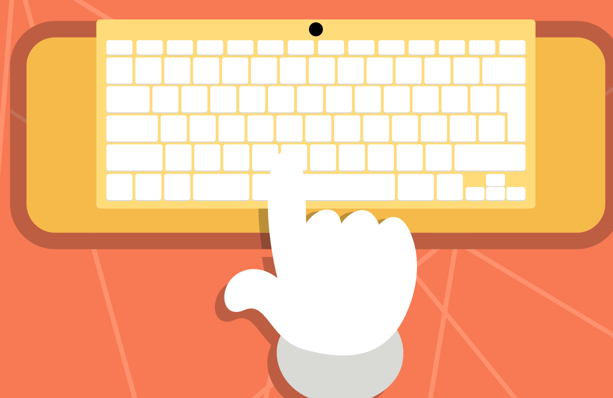
Q **How is the market growth in this sector?**

Technology-enabled companies are the future of the logistics industry. The sheer number of player competing in this space alone is proof of how lucrative it is. Consolidation may happen in the future but there is no doubt that the need for an organized player to bring efficiencies to this unorganized industry is real. With great digital penetration, this sector will continue to evolve and improve.

Q **What is the major challenge before the companies like yours? Why a number of tech-driven logistics start-ups have not been able to sustain?**

Our primary challenge is of digital education and access to data. Logistics is an industry that is still relatively new to the digital wave and when data becomes accessible, the transformation to efficient operations will be swifter. Our other big struggle is in ensuring that both the transporter and the customer who is transporting his goods consistently get value, and it could be a major reason for the failure of many other start-ups in this space.

Imad Dridi
Head of strategy unit , HAROPA Ports



DIGITALIZATION IS COMING

Disruptive technologies have been developed in the past and will continue to emerge in the future as and where the need arises to make logistics smart

The Shipping and logistics sector is undergoing massive transformation with digitisation stepping in at a larger scale.

For a watcher outside our industry, it could be seen as if a revolution is taking place these days.

I wanted in this paper to demystify the transformations that we are living now.

Should we fear these changes? What do they bring to the industry?

Freight Exchange

They are inspired by the tradition of Freight Offices. It is places that match the demand and offer of freight. The formal organization of Freight Offices in France, as an example, dates back to 1939.

Since 1985, the electronic freight exchange platform Teleroute appeared in France. At that time already, it was possible to pay the transaction online. It was working on the Minitel - a French competitor to the Internet that has disappeared now.

Today, with the Internet, there are a multitude of platforms. None of them has been able yet to impose itself all around the world, as the platforms do not have the same success in all the continents and a local solution maybe stronger than a global one for this kind of services, which are more focused in local needs.

As an actor here, we can cite Uship, a company founded in 2003, which has a strong presence in the USA and in Europe.

Online freight marketplaces

Finding rates online and booking is not new in the industry. Since 2006, Maersk Line developed its e-commerce platform, which allows checking the rates online, booking and issuing the documentation.

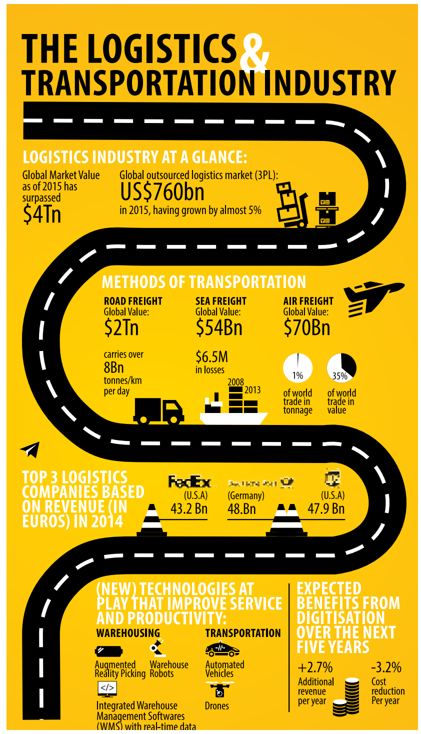
Today's e-rates solutions allow comparing between carriers and between shipping modes.

The most known actor here today is Freightos, a portal founded in 2012 that allows calculating door-to-door rates and book with the carriers.

Xeneta, a start-up founded in 2012, is another actor here, which allows benchmarking the ocean freight rates.

The Shipping portals

The shipping portals appeared between 2000 and 2003. A shipping portal allows checking the shipping



schedules, booking the cargo, issuing the documentation - i.e. the bill of lading and the vessels certificates- tracking and tracing the cargo.

Tracking a shipment answers the question "what routing did my cargo take?"

Tracing a shipment answers the question "where is my cargo now?"

The four main actors here are INTTRA, GT Nexus, CargoSmart and Elane. There is no single portal today that links the 250 shipping container carriers.

Online Slot selling

It is the possibility of selling the surplus of space online. It is coming from the airline industry.

In 2008, Maersk was the first to introduce this concept when it launched youship.com. This site oriented to small clients wanted to make "shipping as easy as ordering a pizza online". With this solution, the user was able to check the space, check the price, book and to issue the e-documentation. The sooner the booking was made, the less expensive was the cost. This experience lasted only one year, it seems that clients were not ready to this kind of solutions.

The New York Shipping Exchange

> "DUE TO TRADE IMBALANCE BETWEEN IMPORTS AND EXPORTS IN THE MAJORITY OF THE PORTS, THE SHIPPING LINES NEED TO TRANSPORT EMPTY CONTAINERS FROM ONE PORT TO ANOTHER.
>
> THE ONLINE CONTAINER EXCHANGE PLATFORMS ALLOW THE DIFFERENT CARRIERS AND ALSO CONTAINER LEASING COMPANIES TO MATCH THEIR OFFER AND DEMAND OF EMPTY CONTAINERS."

(NYSE), founded in 2014, allows the different shipping lines to sell online their allocations at a fixed rate. The buyers have the option of reselling the freight to other parties.

Online Supply Chain Management and Online Freight Forwarders

Let's suppose that I'm an importer of marble, and that I have 10 product references from 3 providers. Following my shipments by container number may not be a difficult matter for me, as usually I have only one or two references by container, so I do not request more visibility to my carrier.

Let's suppose now that I'm a trader of clothes and that I have imports and exports. I have a lot of products references as I have clothes for men, women and children. In one container, I can have a lot of products loaded together. If I have big shipment volumes, I can be easily lost with my supply chain, so I need a supply chain management solution. This solution will allow me to follow my shipments by Purchase Order (PO) number and by Stock Keeping Unit.

To identify my blue canvas pant - size L, model 2016, from my vendor ABC – I'll assign it a specific number; that is the Stock Keeping Unit (SKU). This number will be useful for me to communicate with my vendor, to follow my supply chain and to make my inventory.

In the past, the shipments monitoring by PO and SKU were reserved to large companies. They had to make an agreement with a large logistics company, to sign an agreement, to agree on operational procedures, etc. Now it has changed with the apparition of new actors.

FLEXPORT, a company founded in 2013, is one of them. They have democratized the supply chain management to the SMEs.

These days, we hear a lot also about the famous Alibaba which is penetrating the logistics market. The solution developed by Alibaba is called OneTouch, it offers online customs clearance, logistics services; it allows also to book by different modes of transport. All those services are quite standards on the market. Why does Alibaba cause quite a stir in the logistics industry these days? Its weight: 423 million active buyers in 2016.

The Automatic Identification System (AIS)

The Automatic Identification System solution was developed in 1990s. It was originally created to avoid collision between vessels. It contains information like vessel identification number – known as IMO Number-, the vessel position, the speed, the itinerary etc. Since 2008, the AIS is using the satellite technology which is giving real time data and a better reliability.

Since 2007, the AIS is connected to the Internet and many vessels data are freely accessible to the public. This work is developed mainly by volunteers. Some of the actors known here are MarineTraffic and VesselTracker.

Online container exchange between carriers

Due to trade imbalance between imports and exports in the majority of the ports, the shipping lines need to transport empty containers from one port to another.

The global cost of this inefficiency operation is estimated around USD 15 billion per year, as per the Boston Consulting group.

The online container exchange platforms allow the different carriers

> **“AMAZON HAS DEVELOPED THE “CHAOTIC STORAGE”. THIS METHOD, BEYOND ITS SCARY NAME IS VERY EFFICIENT. NOW EACH PRODUCT CAN BE STORED ALMOST ANYWHERE. WITH THE RFID TECHNOLOGY, EVERY PRODUCT HAS A UNIQUE CODE”**

and also container leasing companies to match their offer and demand of empty containers.

One amongst the actors positioned here is the BCG Xchange, which belongs to the Boston Consulting Group.

The Blockchain solutions

Today in the supply chain, we have multitude of systems which are working separately, even if bridges are created between some of them. In one single transaction, i.e. delivering a Purchase order, each actor which intervenes has its own system: the vendor, the brokers at the origin and destination, the forwarder, the customs at the origin and destination, the carrier, the port operators, the buyer, etc. A lot of information is inserted manually many times in this process. A “Blockchain is a distributed database that maintains a continuously growing list of data records, chained together against revision and tampering.” That means that once a data is inserted in the process, it is not possible to revise it in the middle without notifying all the other parties.

In the transport and logistics industry, as per my knowledge, there are more projects developed here than finalized products for the moment.

Cassandra is a project financed by the EU commission in 2014. It is a supply chain tool that allows an extended assessment of risks by both business and government. “The CASSANDRA concept improves supply chain visibility, efficiency of trade compliance and effectiveness of border control and supervision by combining E-Freight and E-Customs.” That means for example that the packing list prepared by the vendor at the origin will be accessible online by the consignee, the customs broker, the carrier, the customs authority; that will secure the supply chain by reducing the fraud and the lack of accuracy.

Another project more oriented to the ports and vessels operations is Sea Traffic Management, formerly known as Monalisa project. This project started in 2015, is also financed by the EU commission. It combines data from the ports, the vessels, the shipping companies, and all the stakeholders in the vessels operations. Example: if one vessel has delay in the port A, the port B and the other vessel in the area will be notified automatically which will allow better planning and improves the operations and the coordination.

The chaotic storage

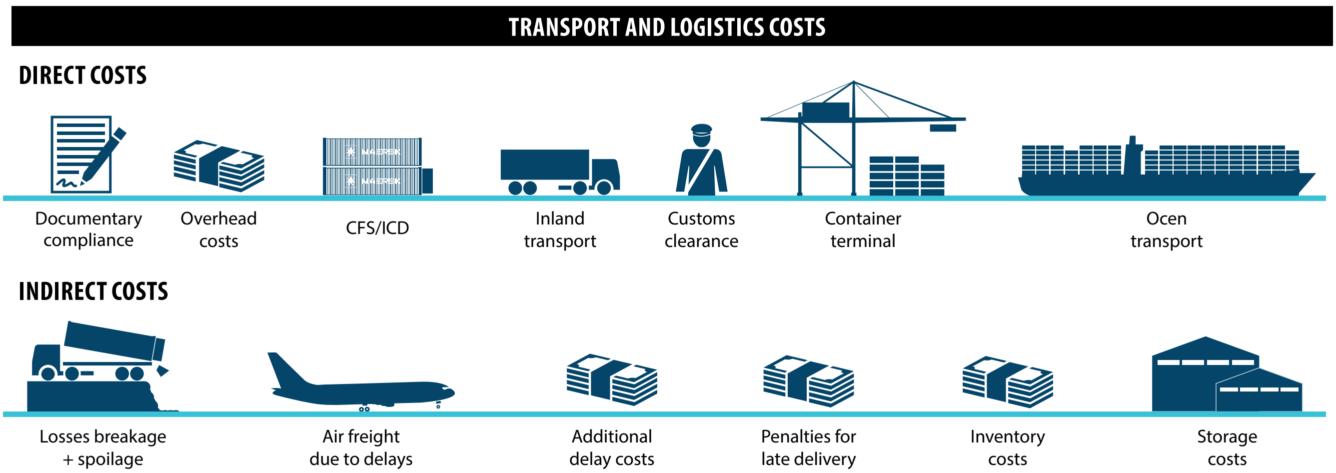
What we know in warehousing normally is that the products should be stored by SKU. It means that in my warehouse, I’ll store all the same books of The Three Musketeersper volume and characteristics in the same area, my televisions by brand and model in another area, etc. This is the classic storage as we know it and practice it today in approximatively all the warehouses: same product, same area.

This storage has its limits as it leads to inefficient utilization of space: If I have a half pallet of The Three Musketeers volume 1 and another of volume 2, I’ll prefer not to mix both, so I’ll be using 2 locations in the warehouse instead of 1. If I have a large number of SKUs in my warehouse, there is a strong chance that I’m losing space with this method.

Amazon has developed the “chaotic storage”. This method, beyond its scary name is very efficient. Now each product can be stored almost anywhere. With the RFID technology, every product has a unique code; in my example, each single book of The Three Musketeers volume 1 will be identified separately. So now, I’ll be able to store where I have space, so I’ll be able to store my book of The Three Musketeers with a TV plasma and a spoon. mg

The devil is in the detail

A recent study by Maersk Group brings to the fore the significance of indirect costs which often go unnoticed in the total logistics costs. Cutting down on these can bring significant benefits to the exim community



While there is often much debate about the direct logistics costs, such as terminal rates, freight rates and inland transport costs, the most significant costs can be the indirect costs stemming from delays and inefficiencies. Reducing these costs is a significant source of potential savings and improved competitiveness.

Long and unreliable lead times

The time it takes to ship the goods from the supplier to the buyer add significantly to the costs of trading for importers and exporters in India. If an importer is not sure about the arrival time of his cargo, he will need to keep higher inventory in order to prevent interruptions in production and/or in the supply to customers. Higher inventory is expensive, particular for middle to high-end manufacturing sectors in which many Indian exporters are positioned today. Thus, for high value goods, hedging inventory to avoid out-of-stock situations can be the single most important cost item.

For exporters, long and unreliable lead times give rise to higher inventory for their customers or their distributors abroad, making them less attractive as a sourcing partner and/or their products less competitive. In addition, late delivery of their products often give rise to penalties, while delays cause loss from spoilage.

A recent study by Maersk across four sectors – pharmaceuticals, garments, electronics, and auto components – finds that the indirect costs of trade accruing from delays and unreliable transportation services amounts to as much as 38 – 47 per cent of total logistics costs. For each container transported to and from India, there is a high variation in lead times of 38 – 66 hours. Reducing the costs of trade by 10 per cent has the potential to generate additional exports of up to 5 – 8 per cent. This means that within each of the four sectors, making trade 10 per cent more efficient could potentially generate between $0.2 billion to $3.1 billion in extra exports per sector.

Garments

The main challenge for garment manufacturers is inland transportation: From Shanghai to Delhi can take up to 25 days with inland delays. In case of prolonged delays, the only option for the manufacturer to retain the customer can be to switch from shipping to airfreight. In the garments sector average logistics cost for exporting a 40 foot container is $7,463, of which 62 per cent is direct cost and 38 per cent is indirect cost. If the logistics cost are reduced by 10 per cent to around $6,716, it can trigger the exports currently valued at $38.6 billion to rise by 5-8 per cent, reaching approximately $ 40.5-$41.7 billion.

Pharmaceuticals

Average logistics cost for exporting a 40ft container is $8,409, of which, 53 per cent is direct cost and 47 per cent is indirect cost. If the logistics cost is brought down by 10 per cent to $7,565, the sector's exports that are currently valued at $11.7 billion have the potential to grow by 5-8 per cent reaching $12.2-12.6 billion.

Electronics

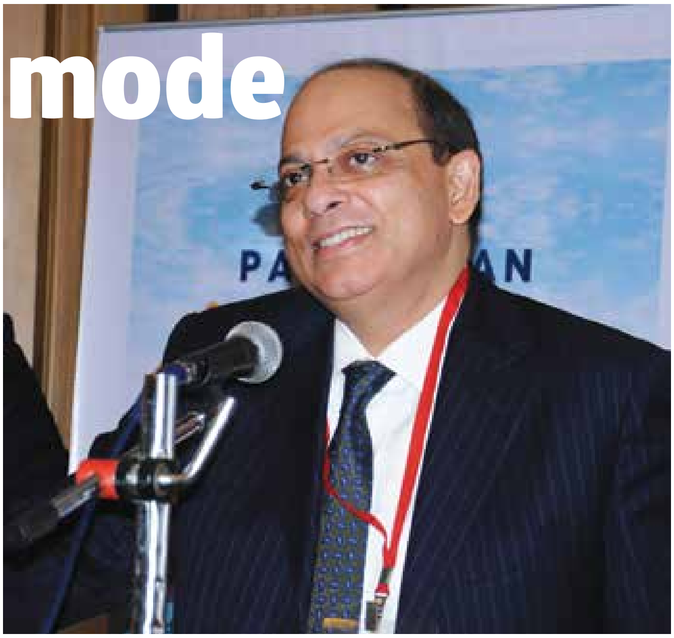
The average logistics cost for exporting a 40ft container is $6,833, of which, 37 per cent is direct cost and 63 per cent is indirect cost. If the logistics cost is brought down by 10 per cent to $6,151, the exports currently valued at $9 billion can be increased by 5-8 per cent to $9.5-10.2 billion.

Auto components

The average cost for exporting a 40 foot container is $6,410, of which, 58 per cent is direct cost and 42 per cent is indirect cost. If the logistics cost is reduced by 10 per cent to $5,768, then the sector's exports currently valued at $4 billion can increase by 5-8 per cent to $4.2-4.3 billion.

In expansion mode

The pioneer and leader in coastal shipping is going full throttle on expansions to boost its bulk handling capacity. **Rajiv Agarwal**, CEO&MD, Essar Ports Ltd in a one-to-one with **Ramprasad**, Editor-in-Chief, *Maritime Gateway* details on the business growth and expansion in progress on either coasts



Rajiv Agarwal, CEO&MD, Essar Ports Ltd

Q How has been the business in the previous year?

Business was good in FY2016-17, on the bulk side the throughput increased by 50 per cent. Cargo has grown at all our ports be it Vizag, Hazira or Paradip. On the liquid side the business increased by about 10 per cent. Overall growth in cargo was about 25 per cent, which is much higher than the national average. Total volume handled by our ports was 73 million tonnes.

Q What are your plans for the next year?

We expect Vizag Port to get operational after modernisation and Port Salaya will be fully operational. We are also expanding at Hazira Port. Together these ports will be handling about 56 million tonnes. From 34 million tonnes last year, the bulk operations will go up to 56 million tonnes.

Q Tell us about your upcoming projects?

The Haldia Port had come out with a tender for some land for joining a jetty for LNG. We have won the tender and are putting up an LNG terminal there. We will bring LNG in small parcels because larger ships cannot come there due to draft issues. It will have a capacity of about 2 million TPH. With these expansions, our capacity will go up to 140 million tonnes excluding the liquids.

Q Where do you see the growth happening more?

We expect 50 per cent growth in Vizag because with the completion of the renovation efficiency will go up multiple times. It will be around 7,500 TPH. About 100,000 tonnes per day will be handled at the terminal, whereas today with a lot of effort we are able to do only 50,000 tonnes.

In Hazira we expect cargo to go up by 30-40 per cent. At Paradip also the growth will be around 30 per cent. In a port project location is the key and then having some base cargo is very important. Companies that have a base cargo of their own can only sustain a port. Again liquid cargo volumes cannot be that high except in locations where crude is being imported. 70 per cent of India's oil is imported at a single location Vadinar.

Currently the government is trying to link up industries with ports. Industries are being developed near to ports. This does not mean that the states that do not have a seacoast will not develop, but the states closer to the coast have a better chance.

The government has a plan to develop ports along the coast line. There can be small ports and a hub and spoke model can be developed, but all ports cannot be deep draft. Bigger vessels can be brought at deep draft ports and from there in smaller vessels cargo can move to smaller ports. This structure will not put pressure on the infrastructure of any single port and usage of sea routes can be made maximum.

Q What is the cargo you move through coastal route?

Inland waterways and coastal shipping are conceptually very strong ideas but in the first place infrastructure has to be erected. In coastal movement, Essar is a pioneer and we are the first to start movement of cargo from Vizag to Hazira and Paradip to Hazira. Essar moves around 40-45 million tonnes on the coastal routes. Crude oil is imported and then moved through coast. Coal and limestone is imported at Hazira, about 50 million tonnes of iron ore and 4-5 million tonnes of finished steel is moved through coastal shipping. Essar is so far the largest coastal player. mg

MAKING IT FUTURE PROOF

Don't be surprised to see vale max and similar giant vessels heading to the west coast of India, for Jaigarh port is putting in place the infrastructure bit-by-bit to handle bigger vessels and the bulk cargo they carry

by Omer Ahmed Siddiqui

Dedication of Jaigarh Port to the nation

We are developing the Jaigarh Port for the future. We are now working to receive the vale max, the largest ever 400,000 tonnes iron ore carrier and also 350,000 tonnes very large crude carriers in the county. We have already done the master planning," revealed Sajjan Jindal, Chairman, JSW Group, hinting at the expansion planned at their flagship port to make it future proof. The valte max carriers call only at 10 ports around the world and Jaigarh Port will be the eleventh and the first in India.

The port's readiness to welcome giant vessels can be gauged by the recent call of *MV China Enterprise* that brought over 2,00,000 MT of coking coal from Australia. This marks a major milestone as it is the largest dry bulk parcel ever serviced by an Indian Port. A mechanised coastal berth has been inaugurated for facilitating movement of coastal cargo through capsize vessels.

Liquid bulk

The port is being developed for dual purpose – to berth very large crude carriers for captive use and also to export refined petroleum products. JSW Infrastructure has also tied up with the Hiranandani Group, which is investing around ₹4,000 crore to construct an LNG terminal at Jaigarh port.

A master plan has been prepared to make Jaigarh one of India's biggest ports that could receive big bulk carriers, LNG, LPG and oil tankers. The port is bound to witness more activity as its capacity will be increased from 15 MTPA currently to 80 MTPA by 2020. A total investment of ₹4000 crore is planned which includes providing seamless road and rail connectivity. A 42km long road connects the port to Nivali for cargo evacuation.

Jaigarh Digni rail project

Being implemented on a PPP mode in collaboration with the Indian Railways, on the Konkan Railway network, the Jaigarh Digni railway line project involves an investment of ₹777 crore. Currently, the nearest railway link to the port is at Ratnagiri, a distance of 55 km on the Konkan Railway network. Cargo such as oil and iron ore that were brought by trucks will be carried through rail, once the project is complete. The railway line is expected to handle 12 million tonnes per annum of cargo from the port to Konkan Railways. Jaigarh Port plans to increase this capacity to 65 million tonnes per annum by 2020.

> WE ARE DEVELOPING THE JAIGARH PORT FOR THE FUTURE. WE ARE NOW WORKING TO RECEIVE THE VALE MAX, THE LARGEST EVER 400,000 TONNES IRON ORE CARRIER AND ALSO 350,000 TONNES VERY LARGE CRUDE CARRIERS IN THE COUNTY. WE HAVE ALREADY DONE THE MASTER PLANNING.
>
> **Sajjan Jindal**
> Chairman, JSW Group

A captive jetty in Maharashtra

A greenfield multi-cargo captive jetty is being developed in Nandgaon village in Thane district, which will handle 8.4 million tonnes of cargo in the next five years and about 16.7 million tonnes in the next 10 years. The project cost is estimated at 1,175 crore. The jetty is being designed to initially handle panamax sized vessels and in the final stage even cape size carriers can be berthed.

In addition to captive use, the jetty will also cater to local demands of Maharashtra Industrial Development Corporation and the container traffic that will arise after the dedicated freight corridor is operational.

Exploring unchartered territories

Rail operators have to look beyond being mere transporters to actually being a key link in the non-linear web of the entire supply chain. We have the opportunity to create a sustainable, non-linear logistics platform, which can take inter-modalism into unchartered territory.

by Omer Ahmed Siddiqui

Poroma Munshi Rebello
Commercial Director, IndiaLinx

Q You had a long career in shipping with a global carrier? Now you are involved with container rail operations- How did this shift happen?

Yes I had a wonderful and memorable shipping career with APL for almost 27 years; I always found the shipping industry to be dynamic and interesting. However, since 2006 till couple of years back, I became deeply involved in linking our Ocean product with key hinterland ICDS through APL/NOL's major Rail investment in India – brand name IndiaLinx, a Container Train Operator company under License I category. As Director, North & West India, I was given responsibility to expand APL's hinterland footprint, and create density and synergy around different LOBs, of which Rail was an important part.

As I spent time selling both Ocean and Rail services, I became fascinated with the complexity and challenges of inland logistics operations in India. The domain is vast and solutions are unending. We're lucky in a way since much of India's logistics infrastructure is yet to be conceived and constructed. So we have the opportunity to create a sustainable, non-linear logistics platform, which can take inter-modalism into unchartered territory. Eventually, planning, policy and execution must ensure that freight moves in the most suitable mode, be that rail, road, air, inland waterways, coastal movement …keeping in mind demographic needs, cost, efficiency and environmental protection.

Moving from pure ocean to container rail operations gives me immense bandwidth to conceptualize and create solutions for complex modal movements, both EXIM and Domestic. Being part of APL Logistics, which is a member of the KWE Group, IndiaLinx is well positioned to be part of the entire spectrum of supply chain in India's rapidly transitioning Logistics space. It's an exciting time to be part of this change and journey!

Q **What is your role and responsibility as Commercial Director at IndiaLinx?**

Other than responsibility for the overall Commercial performance of the company, the role of Commercial Director, IndiaLinx, is to create and build Value around the company's core business model and make it a leading landside logistics solutions provider. This involves development & execution of unique supply chain models which straddle geographies and commodities, both international & domestic. Another key aspect of the job is to strategize and implement entry of IndiaLinx into non-core, non-commoditised sectors in high cost/high return specialised industries.

Q **Container Train Operations in the private domain has not been a happy journey for many operators? What is your view on current business prospects and what is IndiaLinx's strategy?**

Interestingly, despite the many odds faced by private rail operators, you will find that almost every CTO continues to operate in the market. Most CTOs have started their own ICDs, and some ICD operators are now CTOs! Clearly, there's some merit to being in this business after all!

The challenges to being an ICD or rail operator today are the shrinking size of the cargo pie and fragmentation of the market. The premise on which so many companies bought rail licenses has somewhat changed, forcing CTOs and ICDs to change their business models mid-stream. What has changed? First, freight which traditionally moved by rail has shifted to road, primarily for three reasons – cost, transit and service reliability. Movement of cargo by road continues to rise sharply. Second, some shipping lines have systematically defocussed from ICD business and choose to operate more on port CY model. Third, in anticipation of brisk volume growth through increased industrialisation and manufacturing, investment poured into creation of additional terminal capacity. Net result is slower demand as compared to increased capacity. Obviously this puts pressure on rates, and some companies are forced to compete on wafer thin margins.

Current and future business prospects for our sector look good. The reason takes me back to my first answer – 2PL, 3PL, 4PL inland logistics in India is almost unchartered territory. Our sector has to look beyond being mere transporters to actually being a key link in the non-linear web of the entire supply chain.

Q **Which are the regions and hinterland in your view that will be driving cargo growth?**

Demographics of population, high consumption areas, adequate power supply, law & order, political stability, availability of labour, friendly tax regimes, etc, are some of the factors which determine the location where EOUs, industry and manufacturing hubs will set up base. And what better example of Government and market confidence than the rapidly growing Japanese Industrial Corridor coming up in Neemrana region in the NCR? Coupled with the upcoming Dedicated Freight Corridors and Delhi Mumbai Industrial Corridor – it seems to me that North & Central India, with a link to Gujarat and JNPT, will be crucial regions to drive cargo growth in the coming years. In some ways, it's good to create supply before demand, or else 'supply' is always playing catch-up, thereby forcing 'demand' to move somewhere else.

“

THE CHALLENGES TO BEING AN ICD OR RAIL OPERATOR TODAY ARE THE SHRINKING SIZE OF THE CARGO PIE AND FRAGMENTATION OF THE MARKET. THE PREMISE ON WHICH SO MANY COMPANIES BOUGHT RAIL LICENSES HAS SOMEWHAT CHANGED, FORCING CTOS AND ICDS TO CHANGE THEIR BUSINESS MODELS MID-STREAM.

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Q **Under the special freight train operations scheme of the railways, private companies will be able to run freight trains. How do you see this scheme transform the rail logistics landscape?**

In my view, companies should focus on their own core competencies. Even though private companies will be able to run freight trains, why would they want to be in the rail operating business? It's not just about getting a license and buying rolling stock, or even getting a rail siding in your factory. It's about running a completely new business model, which is costly, time consuming and complex – it's like starting a completely new company! Sure some private companies will be tempted to avail of this scheme, but they may simply end up becoming one of the pack, a common-user transporter, competing with well entrenched players in the market. The focus for such policies should be to attract 3PL and other logistics players to invest and provide better services.

Q How do you intend to leverage on the National Investment and Manufacturing Zones proposed along the Delhi Mumbai Industrial Corridor?

With the global presence, strength and expertise of the KWE Group and APL Logistics, we expect to be one of the front runners to provide high end logistics services in the upcoming mega industrial and manufacturing zones along the DMIC.

Q What are the key concerns and challenges of Container Train Operators today?

The idea of privatisation in the freight rail sector was to incentivise private investment, create multiple options for customers, offer cargo clearance facilities near catchment areas, and give better service at lower costs. All of these good things have happened – but almost entirely at the cost of CTO profitability. Reason is the very high cost of rail services paid by CTOs to Indian Railways, leaving a small margin to cover other costs. Over supply & competition have ensured the remaining small margin shrinks even further. Another important point is CTOs have to deal with Indian Railways, both as operator and regulator. Such a model obviously reduces flexibility of CTOs to change their product according to market needs, which in turn, reduces their ability to serve customers who have more defined demands today than ever before.

Q The road transport sector is getting more and more organised, efficient and cost-effective giving stiff competition to rail. What needs to be done to bring modal shift in diverting more cargo from road to rail?

At the current rate of plans and investments, road transport may account for almost 70 per cent of freight movement by 2020! Yes, the road sector is certainly gaining more traction, getting more organised, and also receiving investments to improve service deliverables. That said, any planned economic model has to channelize cargo into the most suitable modal network to maximise efficiency, reliability and avoid massive environmental degradation. Ideally, rail is the right mode for medium and long distances, and road should be used for expressways, and to act as connectors to rail corridors and mega logistics parks.

> **"DOUBLE STACK IS PERHAPS THE PROVERBIAL LIGHT AT THE END OF THE TUNNEL! DOUBLE STACK IS ALREADY A GAME CHANGER; IN FUTURE IT WILL SIGNIFICANTLY CHANGE THE AGGREGATION, SPEED AND COST OF FREIGHT MOVEMENT BY RAIL."**

In the present scenario, road and rail freight rates are vastly different, this needs to be addressed and rationalised on a war footing. We also need a uniform taxation policy for rail and road, along with carbon credit benefits to rail transporters.

Q What are your plans on the east coast?

Both east and south belts are throwing up a number of interesting opportunities in the past few months. Much of it is domestic logistics, but the complexity of the business model will provide opportunities for unique solutions – certainly something worth waiting for; as they say, watch this space …

Q Repositioning of empty rakes remains a concern. How do you plan to tackle this problem?

Importance of this matter cannot be overlooked anymore; it must be seriously addressed by the authorities. Railways must immediately consider differential pricing for movement of empties, and focus on loaded costs instead. Far better to change the entire pricing model by substantially reducing empty haulage rates for CTOs to position empties to locations which have high laden movement. Without this, certain ICDs will simply shrink to nothing because they predominantly attract export laden volume, but shipping lines and CTOs shy away from empty positioning due to high costs.

Q Do you see more double-stacked trains operational in future?

Double stack is perhaps the proverbial light at the end of the tunnel! Double stack is already a game changer; in future it will significantly change the aggregation, speed and cost of freight movement by rail, to benefit all stakeholders in the supply chain, especially the consignor or consignee.

Q What are your expectations from the Rail Development Authority being formed? Will it be of any help for the industry or is it another act of overregulation?

Several Railway Committees have suggested the need for a central regulatory body like the Rail Development Authority, latest being Bibek Debroy's committee in 2015. It appears the RDA will take a comprehensive and holistic approach to recommend tariffs and guidelines, keeping in view the principles of social service obligations and market competitiveness. It is encouraging to note that the RDA will be responsible to set up global levels of efficiency and performance standards, including non-discriminatory open access to the Dedicated Freight Corridor infrastructure framework.

Based on the stated profile and responsibilities, the Rail Development Authority is an idea whose time has come! A welcome move by the Government, the RDA is expected to create more transparency, encourage market development and create a positive environment for investment. If the RDA can achieve these significant milestones, I believe industry will be a major beneficiary of this regulatory authority.

NO MORE VESSEL GROUNDING

The Dynamic Underkeel Clearance technology enables ports to confidently call bigger ships requiring deep draft

The majority of regulatory authorities in the world use static rules to determine the minimum required UKC of a vessel. These traditional rules were devised when vessels were smaller, their speeds lower, ship/shore communications poor and technology generally unavailable to determine ship motions accurately. They often use the vessel's draught as the baseline to determine the UKC.

The most recent PIANC guidelines for UKC management promote the need for ports to assess all factors relevant to UKC management, including water level factors, ship related factors and bottom related factors.

A Static UKC rule tries to capture all these UKC factors in a single allowance but this method can be problematic because it is based on the assumption that the clearance so calculated is sufficient regardless of the prevailing environmental conditions. Therefore, where depths are critical and environmental conditions are more variable, there may be times when the allowance is marginal or even unsafe.

The actual net clearance is dependent upon the environmental and load state conditions, but static UKC rules are unresponsive to change in these conditions. This means an authority cannot maximise efficiency when conditions allow. Of more concern, an authority will not be aware when conditions are actually unsafe, because when static rules are used, the level of risk is variable and the net UKC on any particular transit is unknown.

In practice, the actual safety clearance is determined by the conditions on the day, and under static rules, the clearance for a vessel varies for every transit.

The 2014 PIANC guidelines for channel design state that there are six factors that need to be considered as components of Gross UKC, one being the Net UKC which defines a minimum safety limit that must not be breached. This factor provides the basis for development of a much better methodology than using a Gross UKC approach. Maintaining a net UKC at all times ensures that, no matter what the environmental or ship loading conditions, the risk for a touch bottom incident is fixed (constant) because the required water level must be calculated as sufficient to ensure a safe transit is maintained.

A net regime allows for real-time inputs and the associated dynamic assessment of UKC components; these are natural consequences which follow from adoption of a Net UKC methodology.

A dynamic UKC system calculates the required UKC in near real time, depending on the prevailing environmental and vessel conditions which ensures every transit satisfies appropriate risk standards. With safety assured, economic and efficiency benefits are realised when conditions allow deeper draughts and/or extended tidal windows.

The improved certainty and information that a dynamic system can deliver has seen international bodies such as IHO and IALA support such systems.

Dynamic systems are seen as an effective mitigation control for grounding hazards.

DUKC® is a proven safety and risk management technology and is a recognised core e-Navigation concept, which is available and operational today. OMC has installed the technology in more than 25 ports worldwide and has ensured the safety of more than 150,000 deep-draught transits to date.

The core functions of DUKC® systems have always been to provide ports and users with dynamic passage planning advice on:

- maximum draught for tides
- earliest and latest sailing times
- UKC for specific transits

Due to the dynamic nature of DUKC® systems, OMC provides 24/7 support for each system, with a guaranteed uptime greater than 99.8 per cent. mg

Jayyannt Lapsiaa, President, AILBIEA

CREATE INFRASTRUCTURE FOR LIQUID BULK

India's dependence on imports of POL and petrochemicals is only going to increase in the future. Importers will favour the ports that can assure quick turnaround of liquid bulk vessels and provide seamless connectivity to the hinterland

by Omer Ahmed Siddiqui

Q How do you see India's trade in liquid bulk cargo perform in the near future?

India's dependence on liquid bulk cargoes will keep on increasing in the next five years, particularly, that of Petroleum, Oils, edible oils and other Petrochemicals. With increase in liquid bulk volumes in the next five years, liquid bulk trade will be a significant contributor to the Customs and Port Revenue.

Q Apart from coal which are the other bulk commodities that will provide sustainable volumes to Indian ports?

Apart from coal, other bulk commodities that will provide sustainable volumes to the Customs are undoubtedly liquid cargoes. With increasing volumes and growing dependence on Petroleum Oils and Edible Oils there is bound to be a significant surge in imports. Hence, liquid bulk volumes are certain to provide sustainable volumes to Indian Ports in future.

Q Do we have sufficient infrastructure for import and storage of liquid bulk on either coasts of India? How can ports on the east coast capitalise on emerging opportunities?

a.We do not have sufficient infrastructure for import and storage of liquid bulk on either coasts of India. There is an acute shortage of storage of liquid bulk coupled with not so satisfactory infrastructure in many of the ports.

b. Ports on the eastern coast can certainly capitalize by creating adequate infrastructure for storage of liquid bulk with direct pipeline facility from the port to the installation. They can attract cargos by ensuring quick turnaround of liquid bulk vessels and proper evacuation processes, in the form of good road and railway network from the installation to the hinterland. This will reduce cost and will certainly tempt Importers to explore the possibility of utilizing Eastern Coast.

Q Chemical import/export requires specialised handling at ports. Are the major/private ports equipped with the right facilities

for handling chemical cargo?

Not many of the major ports are equipped with right facility for handling chemical cargo, save and except, major ports like Mumbai which is well equipped for handling chemical cargo. Due to lack of infrastructure and shortage of storage space, not much of significant importance has been attached to specialized handling of chemical cargos at many ports.

Q What are the major challenges in liquid bulk cargo transportation?

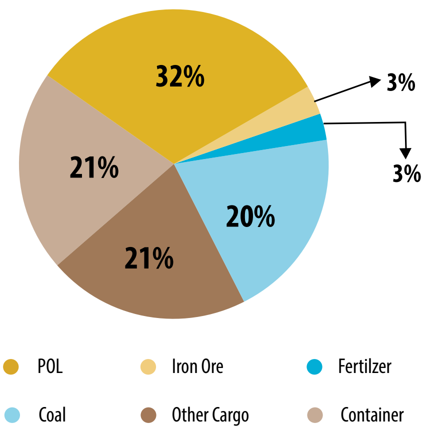
The foremost challenge in liquid bulk transportation is availability of good motorable roads, which are free from traffic and encumbrance. Besides, there are other major challenges in the form of hurdles at the respective State Borders in processing of Interstate Transport Permits, yet another major deterrent is the security concern in form of pilferage and theft, which are rampant.

Q For moving hazardous chemicals - rail is said to be the preferred and safe mode. Do we have the required rail infrastructure for moving chemicals?

Yes, undoubtedly, Rail is a very safe mode of transport of hazardous chemicals but unfortunately, we do not have the required rail infrastructure due to acute shortage of wagons and other technical and rail traffic issues.

Q The coastal regulatory zone (CRZ) notification by the Ministry of Environment and Forests does not allow for storage of chemicals and petrochemicals in CRZ zones. How does this impact the export/ import of petrochemicals?

COMPOSITION OF CARGO AT MAJOR INDIAN PORTS - FY 2015



Source: Indian Ports Association

Due to CRZ notifications which prevent storage of chemicals in CRZ Zones will certainly impact export and import of Petrochemicals forcing them to shift their operations to other ports which have installations beyond 500 meters from the Sea. This may entail higher cost by pushing up the transportation cost for the importer.

Q AILBIEA recently has celebrated its 17th Anniversary. What are the major achievements of the association and what challenges you still see to be overcome?

The major achievements of AILBIEA are:

a. Made significant in-road in the Finance Ministry by having regular interactions and meetings with the CBEC to discuss various issues concerning Liquid Bulk Trade.

b. The significant achievement of AILBIEA has been the conferment of World Custom Organisation (WCO) Certificate of Merit on President, Jayyannt Lapsiaa, by the Finance Ministry thru' CBEC which itself is a testimony to AILBIEA's tremendous recognition at the Finance Ministry and CBEC levels.

c. AILBIEA's representation at the Commissionerate levels and also with that of Port authorities has been well accepted and appreciated by the Commissioners and Port Chairman.

d. Challenges still to be overcome are the receipt of quick response from the CBEC to various representations made. Another major challenge is to bring about tremendous change in attitude and mindset of officers at lower level in (Customs and Excise departments)

Q One of your remark is that Government (read customs) is progressing well on implementing ease of doing business it is only trade that has to change mindset and adapt? What is your advice to your members?

Advise to our members would be to take part in association meetings regularly and also respond to various trade meetings called by the Customs and Port departments to attach more importance in focussing of various notifications issued by the department from time to time by ensuring that their officers are well equipped in reading and understanding of such notifications.

Q You have recently won World's Customs Organisation Award? What is the significance of that award?

The conferment of WCO Certificate of Merit is immensely significant and prestigious because it is the testimony to one's dedication, commitment and sincere approach and interaction in Customs related matters and issues regularly. It also is recognition for ones dedicated efforts in providing useful inputs to the departments on various procedural issues and matters. It also enhances the credibility and reputation of the Association to greater heights. mg

EXPECTED CAPACITY ADDITIONS

Port	Capacity Addition	Capacity	Expected Commissioning Date
JNPT	Liquid Bulk Terminal	15 MMTPA (Phase-I) 11.6 MMTPA (Phase-II)	2017-18 (Phase-I) 2025-26 (Phase-II)
Cochin	Multi-user liquid bulk terminal	4.1 MMTPA	2015-16
Ennore	LNG Import Terminal	5 MMTPA	2016-17
Dahej	Two liquid across two phases have been announced by Gujarat Maritime Board		

Celebrations and bonhomie

AILBIEA brings together key dignitaries from industry, ports and the government to honour top performers at its anniversary celebrations

The anniversary celebrations of AILBIEA was a gala affair which saw the participation of key dignitaries from industry, Customs and ports. Jayyannt Lapsiaa, President, AILBIEA, welcomed the gathering as he highlighted some of the recent achievements of the association with respect to addressing the operational issues faced by importers and exporters. He urged the authorities to trust the members of the association, members who are generally known to uphold ethical standards. He sounded optimistic and pointed at better days ahead with India's liquid bulk trade, covering crude oil, vegetable oil, chemicals and others forecast to expand in the wake of the strong GDP growth and demand.

G. Chandrasekhar, Chief Advisor to the Association, began the proceedings with his lucid remarks on the liquid bulk scenario. He was buoyant on the imports of liquid bulk cargoes, particularly of POL and edible oils. Chandrasekhar said that liquid bulk import and export trade was all set to expand in the coming five years.

The Mumbai Port Trust seems to be all set to cash on this growth as the port's Chairman, Sanjay Bhatia, commented, "Liquid bulk cargoes are on top of Mumbai Port's attention and all efforts will be made to expand the volume of import and export trade through the Port."

Rajiv Tandon, Chief Commissioner of Customs, Mumbai, highlighted the various initiatives of his department to promote, facilitate and expedite clearance. This included deferred payment of Customs duty and the Authorised Economic Operator scheme. He also referred to the proactive role of AILBIEA, particularly that of the President, Jayyannt Lapsiaa, in working closely with the department.

The highlight of the event was the awards ceremony. The Lifetime Achievement Award was conferred to M P Taparia, Chairman, Supreme Petrochem Ltd and Managing Director, Supreme Industries Ltd. The honours were done by Nadir Godrej, who presented the citation. Rajiv Tandon and Dr John Joseph, Chief Commissioner of Customs, Jawahar Customs, Nhava Sheva presented a silver lamp, while Sanjay Bhatia and Rupesh Agrawal, Director, HUL adorned a shawl on Taparia.

AILBIEA Stellar Awards were conferred on:-

- Haresh Petrochem Ltd for significant contribution in promoting exim trade.
- Jai Hind Oil Mills Co. for being a vibrant liquid bulk installation in the hinterland.
- Prakash Hiranandani, VP-Marketing, Aegis Logistics, for being an Outstanding Executive Officer in the liquid bulk trade.
- Pramod Pardale, AGM, V.V.F. India Ltd, for being an Outstanding Executive Officer in the liquid bulk trade.
- Dushyant Mulani, Hon. Secretary, BCHAA, for Outstanding Personality in Exim Trade for the year 2016-17.

Jayyannt Lapsiaa was honoured with a special citation and a silver lamp for being the recipient of the World Customs Organization's Certificate of Merit by the Finance Ministry through CBEC. mg

Challenging times, disruptive opportunities

As the Indian logistics industry shifts from unorganized to organized, the need for supply chain performance improvement and logistics companies that serve as supply chain partners will help advance investment opportunities

The Indian logistics industry is rife with fragmentation, inefficiencies and – hence, the opportunities for disruption. Inferior management practices, a high level of waste, losses due to transit damages and limited adoption of technology pose significant challenges. At the same time, change and disruption across the logistics landscape are generating attractive investment prospects. As the Indian logistics industry shifts from unorganized to organized, the need for supply chain performance improvement and logistics companies that serve as supply chain partners will help advance investment opportunities. By 2025 organized logistics could be a $50 billion opportunity in India.

The Indian logistics market was estimated at ₹8.1trillion in FY16. It is expected to grow at a CAGR of 10.5 per cent to ₹20 trillion in FY20.

Unorganized companies still dominate the industry, accounting for 80 per cent of the total logistics market.

Transformation in road transport

Evolving customer mind set and availability of technological solutions is driving the road transport market from unorganized to organised.

This segment is witnessing significant innovations related to tech-enablement to reduce inefficiencies. New age companies have emerged and attained market leadership scale and are expected to grow. As issues, such as driver shortages, high intermediation costs and low truck utilization are addressed, we anticipate that penetration in organized road transport will increase to 20-25 per cent by FY25. Companies driven by innovation in technology and indigenous operating models to address inefficiencies are likely to drive this growth.

Private investment in railways

Rising domestic freight volumes and a consistent decline in rail freight traffic have resulted in significant inefficiencies. Government initiatives will spur private participation in rail freight transport, CAGR of 20-25 per cent in the next 10 years, and will help stimulate investments.

Emergence of multi modal logistics parks

Warehousing accounts for 11 per cent of the total logistics market in India and faces the challenges of predominately small-size facilities that function primarily as covered storage, lack of automation, inventory management and value-added services. Improving multi-modal connectivity, along with rising domestic consumption and increasing export/import volumes is transforming warehousing from unorganized to organized.

Emergence of B2C omni channel ecosystem

Logistics helps drive growth for organized B2B and B2C online retail. India's e-commerce logistics model will focus on value added services as expanding technology adoption and customer focused approaches enhance e-commerce logistics growth. The evolving organized Omni channel B2C logistics combined with e-commerce could create a market opportunity of $5 billion by 2025.

Cold chain market

Key consumer focused industries account for 84 per cent of the organized cold chain market. Demand from these segments is expected to grow at CAGR of 35 per cent over the next five years. Organized logistics service providers will find opportunities via increased consumption patterns and end-user penetration along with increasing scale of imports/exports.

Source: Alvarez & Marsal

SETTING RIGHT THE DIRECTION

Maritime Gateway brings together the Editorial Advisory Board once every year to pick up key issues and valuable insights from industry experts and put them to use for the industry through the stories we publish

The second Annual Advisory Board meeting of Maritime Gateway organised at the Lalit Mumbai was nothing less than a brain storming session. The distinguished board members shared new ideas, issues, trends and suggestions for setting the direction and to plan topical and insightful stories in the issues to come.

At the outset, Ramprasad, Editor-in-Chief of Maritime Gateway thanked the board members for participating in the editorial content by way of advice and providing their valuable guidance. A quick recap of the activities in the past year was followed by a flashback into the milestones achieved in the past couple of years.

Some of the milestones:

1. In 2008 Maritime Gateway started the first ever six episode television series on CNBC. This provided instant access to the industry and put the publication in a different league altogether.
2. In 2009 we were the first Indian shipping publication to be launched in Singapore.
3. In 2010 the first debut maritime conference was organised in Kolkata. These regional conferences helped in understanding the regional landscape.
4. In 2011 a supply chain event was organised in Delhi.
5. The India Maritime Week - a large format first of its kind event in Indian maritime history was organised in 2014.
6. Trade meets organised within India and abroad have extended our reach to Shanghai, Dubai, Hamburg, and Hong Kong. This helped in understanding the industry in South East Asia.
7. In 2016 the publication reached out to neighbouring countries like Nepal, Myanmar, Bangladesh and Sri Lanka.
8. Smart Logistics Summit organised in Karnataka

The new initiatives started this year include the South Asia Maritime Logistics Forum, Smart Logistics Summit in Hyderabad and Bhubaneswar.

Following the opening remarks, a very insightful discussion touched on various aspects including skill building, logistics, warehousing, infrastructure, regulations and technology.

Capt Deepak Tewari, Chairman, CSLA was quick to point at the need for skill development and digitisation in the maritime sector. Federation of Indian Logistics Association (FILA) aims to create in India a common electronic platform or a cargo community system which will bring on-board government authorities, terminals, shipping lines, exim community and logistics service providers. The government is planning for Port Community System 2.0 on the lines that FILA has suggested. FILA will also focus on skill development in the logistics industry. The government's support to logistics sector is evident as the cabinet committee has cleared a proposal for establishing a special committee to oversee the issues in logistics sector.

Raising a major concern in the logistics sector, Julian Michael Bevis, Senior Director, Group Relations, South Asia, AP Moller Maersk said, the logistics industry is very poor in representing itself to the government. There needs to be a mechanism so that the government policies can be restructured and FILA can take up this initiative. FILA can also significantly contribute in bringing digitisation in the logistics sector.

Shardul Thacker, Partner, Mulla & Mulla, shared the views of Capt. Tewari and Julian in totality and suggested for a regular feature on skill development in the magazine. He also noted the need for reduction in transaction cost to boost exim trade. Technology can play a significant role in reducing the cost and it is making inroads into the logistics sector. Technology can aid in solving age old issues of relocating empty containers or empty rakes, said Shardul. A significant trend Julian mentioned is the growing focus on logistics and shipping becoming a subset of it.

Domestic trade is 40 times bigger than exim trade, but is highly fragmented and is marred with various inefficiencies like poor governance, noted Manish Saigal, MD, Alvarez & Marsal. For a supply chain manager the biggest issue today is reliability and cost. Pilferage and loss during transit is a significant issue, especially when logistics cost is around 3 per cent of the goods value and loss during transit is sometimes more than that 3 per cent. Hence, many manufacturers are leaving the logistics part to 3PL companies that specialise in their domain.

A lot of FDI is coming into the logistics sector in India, most of which is going into road transport. Spending in road transport is value at $75 billion annually. A lot of new age technology enabled trucking models have come up and have grown tremendously over the past two year causing serious disruption in surface transport.

With GST coming in, companies are investing in larger warehouses, but the real challenge for these warehouses will be to manage the network around them and deliver goods in-time, remarked Julian. Responding to this challenge are 3PLs. 3PLs basically want to remain asset light, so they are not investing in large warehouses, instead they are hiring large warehouses and offering logistics service.

Businesses are investing in larger and few warehouses, as a result their primary logistics (movement from factory to warehouses) has come down along with the cost of maintaining inventory in multiple warehouses. Multi-branding will be the game changer in warehousing, said Shardul, when multiple brands will share a common space.

Sharing the views of Manish, Shardul said, the domestic trade is struggling today due to lack of investments. Be it Sagarmala or coastal shipping investments are not coming because there is an uncertainty on the ROI.

The maritime sector is being slowly relegated behind and logistics is taking over, averred Capt Dinesh Gautama, President, Navkar Corporation. Commenting on the pace of development of waterways he said, an industry can develop its captive rail line quicker than waiting for water side infrastructure to be developed by the government. This is changing the preference to logistics through land than through waterways.

Infrastructure for coastal shipping and inland waterways is being erected due to the support from the government, but the fiscal policy has not changed which makes it unviable, remarked Capt. Tewari. In Europe ports have distribution centres that enable dispatching goods to the customer directly from the port. Such a delivery mechanism should be implemented in India as well.

A Janardhana Rao, MD, Indian Ports Association, elaborated on ease of doing business initiatives of the government. The government has put into action about 42 initiatives, which include installation of container scanners and RFID technology at major ports and ERP based Cloud systems are being developed at six major ports. Smart cities are planned at Kandla and Paradip, while MMLPs will come up at Kandla and Vizag. Port community systems are being transformed into cargo community systems. mg

Embracing digital change

Disruptive technologies and innovative apps developed by digital startups will resolve the complex supply chain and logistics problems large organisations face

by Deepika Amirapu

India's dredging companies will have to step up their efforts in participating in the inland water ways expansion and help make them operable, speakers at the conference organised by the Eastern Dredging Association said. The conference highlighted the huge quantum of investment required jointly by Indian companies to develop the waterways.

To ensure development of the fairways, the dredging responsibilities of the IWAI are expected to increase rapidly in the next few years. While the Dredging Corporation of India is expected to supplement the asset base of IWAI by purchasing or leasing shallow depth dredgers and operating them in National Waterways, many other Indian and foreign firms have been encouraged to leverage their strengths.

The conference had representatives from dredgers all over the country. Experts from the industry, academicians discussed various issues plaguing the sector. A curtain raiser was also organised to showcase the potential for dredging companies in the back of new Major Ports Act that allows greater autonomy for major ports to undertake maintenance dredging on their own without seeking the approval of the Ministry of Shipping. The conference also provided an opportunity for industrial – academic interaction to interface the recent research work to keep abreast of the developments in dredging sector. Indian and International experts presented their technical papers speaking of the new technological advancements in dredging.

The important one day workshop was organised by the Eastern Dredging Association (India) in the light of huge quantum of dredging projects in India. This workshop aimed to develop, amongst contracting partners, a constructive approach for planning, design and execution of dredging and maritime construction projects. It highlighted the capital intensive nature of maritime construction, in contrast with other civil works that are predominately labour intensive, and considered certain key issues in the preparation phase of such projects including site characterisation, feasibility study, preliminary and detailed design, and financing. Project administration and dispute resolution were among the key points raised by the panelists during the discussions. With the initiatives undertaken by the Government of India, 106 rivers have been declared as national waterways along in addition to the existing five National Waterways. This give firms a huge opportunity in interlinking of rivers, river basins, desilting of dams, reservoirs and catchment areas shall increase the dredging activities in India.

The conference also focused on the Prime Minister initiatives for "Blue Revolution". The workshop was divided into lectures by invited specialist from Indian marine and dredging industry. They were followed by workshop sessions, led by facilitators and senior industry professionals, in which aspects of the key topics were examined in more detail and example problems were addressed by the participants. Speakers also had the chance to address lessons learned from past experience and drivers the opportunities for successful future projects.

The conference called for redoubling the focus of the industry in making inland water ways a priority so the sea transportation system in the country can be developed with the help of dredging firm.

The EADA (India) is a national chapter of EADA and functions independent, non-profit, non-governmental, professional society for all those involved in activities, related to dredging and who live or work in India, it encompasses a wide range of disciplines and activities. EADA (India) provides a forum dedicated to the exchange of quality knowledge and information related to on dredging, navigation, hydraulic engineering and marine construction techniques, technology and dredged material management, and for the development of good practice guidance.