In association with R L Institute of Nautical Sciences, Madurai, Tamil Nadu. RNI No. TNENG/2012/41759

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Three Sri Lankan boats carrying drugs....

DIGITALIZATION IN SHIPPING-Capt. Sivaraman Krishnamurthi, Founder and CEO of TrimSail Digital Solutions, India and Past President of The Nautical Institute, London.

(Interview with Sagar Sandesh)



Krishnamurthi

Welcome to SagarSandesh, Capt. Krish. Can you walk us through an easy understanding of what exactly are Digital technologies and their potential to make the world a better place?

Well, the history of technology has always been about enhancing economic productivity in ways not done before. Mechanisation, Electricity, Electronics, automation, IT revolution and the internet are milestones in this journey since the 18th century.

The 4th Industrial Revolution is essentially anchored around data. The way the data is harnessed by the technology is unique. It is invasive. Like measuring vibrations or minute changes in temperature of components of running machinery. It is granular. Unlike manual record-keeping, time difference of measurements can be rendered extremely small. It is real-time. The data is streamed to and processed at a central cloud instantly. Machine Learning algorithms analysehuge volumes of such data to find predictable patterns in what seems like a noisy and chaotic beehive.

If we think of social media as a huge digital forest that can track behavioral signature of mankind, Internet of Things does the same to the world of machines and instruments.

performance Computing still obeys Moore's Law. It began with Cloud computing. With the explosion of traffic on the internet expressway, edge computing is decentralizing Analytics all the way down to the data source. And now, quantum computing holds the potential to make supercomputers feel grossly inadequate and inept.

At the far end of the spectrum, applications range from Genome mapping, Pandemic patterns, climate change and astrophysics. At the near end, Digital solutions include energy efficiency, smart cities, engineering reliability and operational safety.

Which industries have taken the lead in the application of Digital Tech?

Process industry for sure. Oil & Gas have invested early in digitalization beginning with SCADA (Supervisory Control and Data Acquisition) and have done well in areas like failure predictions, production automation and optimisation. But early starts are not necessarily an advantage in a world where technology is evolving at a breathtaking pace.

How far behind is shipping compared to other industries?

Marine is by far the most efficient form of transport of goods. Which begs the question - how much more can we squeeze out of this fruit? Surprisingly, the answer is – quite a bit more. Until a few years ago, satellite communication costs and bandwidth restrictions did not permit digitalization in a big way. But that has changed a lot. Shipping has access to newgen digi-tech and therefore does not have legacy issues to contend with. The worry is not about technological backwardness. It is about the ability of shipowners, managers, operators and charterers to lead this story rather than be unwillingly led. don't their

blame skepticism.Recent big-ticket initiatives have not yielded noteworthy results so far. There is a natural reluctance to play the role of guinea pig. This leads to a chicken and egg situation. natural inclinationof decision makers is to tie up with big brands. As the saying went during the 3rd industrial revolution, you don't get fired for choosing IBM machines. What they are missing is the fact that there are no leaders yet in this frontier tech. The 'established' players havesome history in 2nd and 3rd revolution technologies, with all the attendant baggage, complicated solutions and the high costs they bring to the table. In the absence of real leaders, this remains a level playing field.

Which are the priority areas of application of digitalization in shipping?

Given the decarbonization chant in the Old World that is reaching near-religious fervor, I should think energy efficiency is the first cherry to pick. Followed by navigational safety, predictive maintenance and cargo custody transfer. The current metrics and analytics we use for these operations are rather primitive, to put it bluntly.

Block chain technology is already making inroads into document security process brining greater efficiencies. There is a huge scope for applying Digital Tech in the seaport & terminal segment. Bathymetry, tidal and littoral patterns, optimising ship and cargo traffic environmental impact modeling are some of the areas that are screaming for help.

What in your view, are the roadblocks and pitfalls to the digitalization of shipping services?

Despite the skepticism I spoke about earlier, there has been much progress made globally. At first glance, technology leadership appears to emanate from the Scandinavian region. The truth is that much of these efforts are related to noninvasive tech to pull real-time data. This approach has serious flaws, but this is too technical to explain in a short interview. The other major challenge is Tech's approach to domain expertise. Put simply, digitalization design can only be led by end users or domain experts with technology serving as a tool to deliver functionality. Currently, it is happening the other way around and that is

where the bottleneck is. It is not easy to find such expertise,

Shipping is an old and timetested business. It is not easily dazzled by tech toys.Performance is assessed on value rather than glitter. Unlike other businesses, shipping has no margin in their books to indulge in flights of

Tell us about TrimSail's product line - what is your differentiator? Is this an **Atmanirbhar story?**

Oh! At TrimSail, we prefer to be modest about our products but ambitious about our future. We are hopefully just a few months away from completing and testing an integrated, customised solution package for Fleet Voyage Performance Optimisation, with available data and specs. We have developed three tech arms, so to speak. A simple and elegant IoThardware configuration to acquire and stream performance-critical data. A state-of-the-art fluid dynamics simulation package that delivers fuel and speed performance benchmarks for every combination of hull condition and weather vector. And finally, a machine learning algorithm raised on inputs from IoT, virtual simulation benchmarks, weather forecasts and high-quality domain inputs.

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DIGITALIZATION IN SHIPPING- Capt. Sivaraman..... FROM PAGE: 1

At the downstream end, the performance model delivers predictive and prescriptive optimization of voyage voyage performance.

India's start-up ecosystem is not as mature or well supported as in say, the Silicon Valley. Yet, this is certainly an Atmanirbhar story for the simple reason that

the best talent pool can only be found in this incredible nation. At sensible costs which is so important to a highly competitive industry like shipping.

Much like the Covid vaccine, we make in India for the world. It is not an easy story to sell,

given the cynical way the world sees India's promise and potential. Then again, the marine industry has been relatively free of prejudices and has historically cultivated talent from India. So, we have reasons to be hopeful and optimistic.

Straits Orient Lines Singapore acquires two Container Vessels



Together with these additions to our fleet, Straits Orient Lines will remain competitive, relevant and provide the best services to our partners and customers: Mr. Mahesh Sivaswamy, Chairman of Transworld Group Singapore

NEW DELHI Sagar Sandesh News Service

he Straits Orient Lines Singapore, part Transworld Group Singapore, has taken delivery of its next Container vessel named M.V SOL PROMISE on 4th March 2021 at Singapore, the company announced recently.

SOL Promise is the biggest and the youngest vessel in

its fleet

This takeover is the first of its 2 vessels being acquired in the month of March, with the total combined investment of USD 15 million. The second vessel will be delivered by end March. We will continue to look for more opportunities in the future, said a company release. Mr. Mahesh Sivaswamy, Chairman of Transworld Group Singapore, maintains that together with

these additions to our fleet Straits Orient Lines will remain competitive, relevant and provide the best services to our partners and customers.

Further, Mahesh acknowledges the efforts put in by the owners, Straits Orient Lines and its managers, Providence Ship Management and thanks all our customers, banks, ports and other vendors for their continued support to Straits Orient Lines for last 22 years.

Maitri Sethu the bridge between India and Bangladesh commissioned by Prime Minister

NEW DELHI Sagar Sandesh News Bureau

Prime Minister Narendra Modi said efforts are underway to connect Chittagong port of Bangladesh with North-East through an alternative route via the river. He said the Inland container depot in Sabroom will work like a full-fledged logistic hub with warehouses

and container trans-shipment facilities.

Sabroom is a small town in south Tripura on the banks of Feni river which separates India with Bangladesh

The Prime Minister said now people will not have to depend only on the road for any kind of supply to the North-East.

Modi inaugurated 'Maitri Setu' on March 9

Mr Modi inaugurated 'Maitri Setu' the bridge across Feni river between India and Bangladesh on March 9th through a video conference. He also inaugurated and laid the foundation stone of multiple infrastructure projects in Tripura.

He emphasized that the rail and water connectivity projects that have been realized in the recent years have been strengthened by this bridge. This will improve connectivity of South Assam, Mizoram and Manipur along with Tripura with Bangladesh and South-East Asia.

The bridge will give an to the economic impetus opportunity in Bangladesh also. He thanked the Bangladesh Government and the Prime Minister of Bangladesh for the cooperation in the completion of the bridge project. The Prime Minister said that the foundation stone of the bridge was laid during his visit to Bangladesh a few years ago.

terms of volume have in-

ease of doing business has come in place in Tripura in place of the earlier culture of strikes. New investments are changing the earlier scenario of closure of industry. He said exports from Tripura in terms of volume have

The connectivity is not only strengthening the friendship between India and Bangladesh



PM Narendra Modi inaugurates 'Maitri Setu' between India and Bangladesh

Exports from Tripura in creased 5 times

He said the environment of increased 5 times.

of this bridge over Feni River, Agartala will become the nearest city to an international sea port of Chittagong in India. Projects related to broadening of NH-08 and NH-208 which were dedicated and for which

but also proving to be a strong

link of business too. He informed

that the entire region is being

developed as a trade corridor

between Northeast India and

Because of this bridge,

will

the nearest city to an in-

ternational sea port of

Due to the commissioning

Chittagong in India.

become

Bangladesh. .

Agartala

foundation stone was laid will strengthen the connectivity of the Northeast with the port.

Inauguration of several projects

The Prime Minister said the inauguration of several projects is efforts to make Agartala a better city. Newly integrated command center will provide technical support to prevent traffic related problems and crime. He said similarly, multi level parking, commercial complex widening of the road connecting the airport inaugurated today will improve the Ease of Living and Ease of Doing Business in Agartala a lot.

₩ Sagar Sandesh

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