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DNA

Tue, 19 June, 2018

We expect 11% CAGR for next couple of years, Says Madhu S Nair

Cochin Shipyard Ltd, which made a stellar market debut last year with its initial public offering subscribed 76 times, is in the process of expanding capacity. Its chairman and managing director **Madhu S Nair**, in an interview with Ateeq Shaikh, talks about the market, various opportunities, projects, and plans, among other things.

What is the size of shipbuilding and ship repair sector in India? What is Cochin Shipyard's market share?

Based on the types of ships built, the Indian shipbuilding industry can be broadly categorised as: Large ocean-going vessels catering to overseas as well as coastal trade; medium-sized specialised vessels such as port crafts, fishing trawlers, offshore vessels, inland and other smaller crafts; and defence/naval crafts and vessels for the coast guard. It is difficult to quantify the size of the sector, especially in the commercial shipbuilding sector, as it would depend on various factors such as the state of the global economy and trade, government of India policies, etc. Presently, the company has shipbuilding order book of roughly Rs 8,000 crore (without considering the phase-III construction of indigenous aircraft carrier). In the ship repair sector, the total potential market size in India as per some published report is about Rs 2,500 to Rs 3,000 crore. Of this, the repair market which is presently tapped is in the range of Rs 1,000 to Rs 1,500 crore. Cochin Shipyards's present ship repair order book is about Rs 800 crore.

According to you, what is more important for business - shipbuilding or ship repair?

Though shipbuilding and ship repairing businesses are by nature very different from the approach and work content point of view, both are complementary and create synergy. Shipbuilding gives the volumes for use of the infrastructure whereas ship repair gives the margins to sustain. Therefore, we believe both shipbuilding and ship repairing are equally important to the company to maintain the performance levels.

In the next few years, what would the ratio or mix between shipbuilding and ship repair?

At present, the revenue mix is 82% shipbuilding and around 16% of ship repair. The company is in the process of setting up additional shipbuilding and ship repair capacity by way of a new dry dock and also International Ship Repair Facility (ISRF) at the Cochin Port Trust area. The dry dock with dimensions of 310 metre in length and 60/75 metre in width is being set up to augment CSL's shipbuilding/ship repair capacity required to tap the market potential of building/repairing specialised and technologically-advanced large vessels such as liquefied natural gas (LNG) vessels, indigenous aircraft carriers of higher capacity, jack-up rigs, drill ships, large dredgers and repairing of offshore platforms and larger vessels. The ISRF envisages the construction of a ship lift for vessels, a transfer system, six workstations, approximately eight afloat berths (depending on the availability and size of vessels for repair), jetties, administrative buildings and allied facilities and upgradation of the existing workshops. The envisaged ship lift would be designed for vessels up to a length of 130 metre with a lifting capacity of 6,000 tonne. Additionally, the company is in the process of setting up ship repair facilities at Mumbai Port and Kolkata Port. All these capacity additions would improve the overall volume of operations both in shipbuilding and ship repair. However, the component of shipbuilding and ship repair in the overall revenue is by and large expected to remain similar for few upcoming years.

Will Cochin Shipyard continue to rely on business from government and defence sector or will you try and increase business from the commercial segment?

The company strategy would depend on the opportunities available in the various segments and the industry prospects. Our company has the capability to tap opportunities in both commercial (public sector and private) as well as defence segments.

Going forward, in which countries will you look to increase your commercial business share?

Cochin Shipyard has, in the past, worked with owners based out of different regions such as Bahamas, Germany, the USA, Netherlands, Norway, Saudi Arabia, etc. Therefore, depending on the availability of opportunities, CSL will be looking to work with owners from all over the globe.

Cochin Shipyard has been building and repairing defence and cargo vessels. Any plans to venture into other segments of shipbuilding?

CSL has built varied types of vessels in the past, that is, oil tankers, bulk carriers, offshore support vessels, tugs, etc. With the creation of the additional dry-dock, the company will be looking for opportunities of building larger ships in the commercial and defence segment.

What kind of growth is the company looking at in the next couple of years?

We expect a compounded annual growth rate of around 11% in the next couple of years.

Other than Mumbai and Kolkata, is there any other location Cochin Shipyard is contemplating for expansion?

We are also examining the possibility of ship repair operations at Andaman and Nicobar Islands.

What is the order book position?

We have an order book in shipbuilding of around Rs 8,000 crore including ASW corvette for the Indian Navy and the Coastal Security Boat for Ministry of Home Affairs, in which CSL has emerged L1 (lowest bidder) but the order is yet to be executed. This does not include the Phase-III contract of the indigenous aircraft carrier (IAC).

By when will INS Vikrant get commissioned? What stage of construction is it at?

INS Vikrant is in the outfitting stage and is to be delivered by CSL to the Indian Navy by the end of 2020.

Any other projects that the CSL is working on?

Apart from IAC, Cochin Shipyard is working on the following shipbuilding projects - one technology demonstration vessel for DRDO (Defence Research and Development Organisation), two 500 PAX cum 150 tonne cargo vessels and two 1200 PAX cum 1000 tonne cargo vessels for A&N Administration. Other small vessel projects include 10 inland water vessels, three marine boat ambulances and 16 fishing vessels.

What are the capital expenditure plans? What is the existing capex?

Total capital expenditure outlay planned for the next year is Rs 495 crore. This will be expended on modernisation of the existing infrastructure and also for investing in the new dry dock and ISRF facility. The company's capital expenditure plans are generally on schedule. Over the next three years, the total capital expenditure will be above Rs 3,000 crore.

Will we see any more fundraising? If yes, how much would it be, when would the funds be raised and for what projects?

Currently, there are no such plans.

http://www.dnaindia.com/business/interview-we-expect-11-cagr-for-next-couple-of-years-says-madhu-s-nair-2626440

THE ECONOMIC TIMES
WWW.ECONOMICTIMES.COM

Tue, 19 June, 2018

India, Russia Weigh rupee-rouble trade for Defence deals

Efforts to break the logjam over Russian defence deals because of US sanctions have zeroed in on a rupee-rouble transfer as the only way out but both sides are finding it difficult to find banking institutions through which such payments can be routed. Financial sanctions by the US have hit India's arms trade with Russia hard, with payments for weapons and equipment worth over $2 billion getting stuck, including those for critical projects such as the repair of leased nuclear attack submarine INS Chakra. Senior officials told ET that after several rounds of consultations, it has become evident that a rupee-rouble transfer-–pegged on the

exchange rate of an international currency—is the solution. As of now, India signs defence contracts with Russia for which payments are made in US dollars. With US sanctions making this impossible, contract payments have been frozen since April. A top official said that a foreign currency-—say the Singapore dollar-—could be used as the benchmark and contract payments would be conducted directly. However, the two nations are still struggling to find banks that would run the risk of facing US sanctions for transferring the money. Sources said that on the Indian side, the banks being talked to include Vijaya Bank and Indian Bank. On the Russian side, its largest banking entity in India, Sberbank, was involved in talks. However, the Russian bank has not given any commitment on making the payments. A decision is still to be taken but the idea is to involve banks with the least exposure to American sanctions.

Other options that were looked at included payments to non-sanctioned entities in Russia after its flagship arms trading company Rosoboron export came under sanctions by the US Office of Foreign Assets Control (OFAC). "This option was decided against as it would have opened up a lot of legal and audit issues, especially as defence deals are looked at very closely. No one wanted to take a chance," a top official involved in talks to resolve the issue told ET. US sanctions ban business ties with entities designated as Specially Designated Nationals (SDN). After fresh notifications in April named Rosoboronexport, Indian banks were pressured into freezing all lines of credit (LoCs) to Russian arms companies, resulting in all deals coming to a halt.

Payments worth over $100 million were blocked in less than a month with payments of over $2 billion facing uncertainty. This includes a payment of over $15 million to Russia that would have been used to repair the damaged INS Chakra nuclear submarine that met with an accident in late 2016. Also impacted are ongoing submarine repairs besides purchases of missiles and ammunition. The signing of a $5-billion deal to purchase the S400 air defence system from Russia is also under a cloud. The US has imposed sanctions against Russia for interfering in the 2016 presidential election and its actions in Crimea, Ukraine and Syria.

THE ASIAN AGE

Tue, 19 June, 2018

China moots trilateral talks with India, Pakistan

Observers say that China is nudging the Pakistan Army subtly to drop its hostile attitude towards India and adopt a more conciliatory approach.

By Sridhar Kumaraswami

Chinese ambassador Luo Zhaohui on Monday said Sino-Indian ties cannot take the strain of "another" Doklam and mooted a "trilateral" China-India-Pakistan dialogue, on the sidelines of a Shanghai Cooperation Organisation (SCO) conference, to resolve regional issues and maintain peace. Mr Luo floated the idea of trilateral, with China playing the mediator's role between India and Pakistan, at a seminar organised by the Chinese embassy on "Beyond Wuhan: How far and fast can China-India relations go". Last year, the Indian and Chinese Armies were engaged in a face-off at Doklam in Bhutanese territory for more than two months before the issue was resolved. China regards Doklam as its territory, but Bhutan claims it to be within its boundary. Referring to the precedence of a China-Russia-Mongolia trilateral, the Chinese envoy said, "Why not Pakistan, China and India together hold another trilateral summit?" He said that the trilateral suggestion had been made by "some Indian friends" and that it was a "constructive idea".

Indian government sources reacted cautiously to the trilateral dialogue suggestion while an official said it was the personal view of the Chinese envoy. Mr Luo's comment is also being seen as an attempt by China to play a more balanced and even-handed approach while dealing with India and Pakistan. Yet, it also makes is clear that Beijing cannot abandon Islamabad just to further ties with New Delhi. Observers say that China is nudging the Pakistan Army subtly to drop its hostile attitude towards India and adopt a more conciliatory approach. Any offer of trilateral dialogue with both China and Pakistan will have its benefits and pitfalls.

China could act as a moderating influence on Pakistan and encourage stopping hostilities against India at the Line of Control (LoC) but India may come under pressure from the two all-weather friends on issues such

as the China-Pakistan Economic Corridor (CPEC) which New Delhi has been resolutely opposing since it passes through Pakistan-occupied-Kashmir. "To the best of our knowledge, this is a personal view of the Chinese ambassador. We have no knowledge that this is an official Chinese proposal," said a Indian official source. Referring to last year's border flareup, the Chinese envoy said that bilateral ties between India and China can't take the strain of another Doklam episode and emphasised the need to find a "mutually acceptable solution" on the boundary issue. "We cannot imagine what would have happened to the bilateral relations if the Donglang (Doklam) issue had escalated last year. We (the Sino-Indian relationship) cannot stand another Donglang incident," he said. The two countries "need to narrow differences" but "this does not mean that differences will be ignored", he said. Mr Luo also suggested that India and China should think about signing a treaty of friendship and cooperation whose draft was given to the Indian side about 10 years ago.

Chinese President Xi Jinping and Prime Minister Narendra Modi had held consultations at an informal summit in the central Chinese city of Wuhan a few weeks ago, in an effort to repair the post-Doklam ties. The Chinese envoy said Mr Modi and Mr Xi are also likely to meet on the sidelines of the Brics Summit and G20 Summit later this year. Mr Luo's comments on Doklam are being seen as a message from Beijing that ties may not be repaired again if there is a similar military stand-off in future. Both India and Pakistan had become members of the SCO last year, a central Asian regional grouping, and attended their first meeting as members of the grouping in the Chinese city of Qingdao recently. The suggestion on the trilateral dialogue is being seen as an effort by China to broker peace between India and Pakistan whose bilateral ties have deteriorated sharply over the past two years.

THE ASIAN AGE

Tue, 19 June, 2018

■ Russia and US reduced their nuclear arsenal, UK & France kept it static

India, Pak stack nuclear arms

SANJIB KR BARUAH
NEW DELHI, JUNE 18

Amid a belligerent bilateral relationship of rancour and a legacy of wars between them, India and Pakistan are bucking a global trend by increasing the number of nuclear weapons in their arsenal.

Of the world's nine nuclear weaponised nations, India, Pakistan and China increased their stockpile of nuclear weapons in the year from the beginning of 2017 to January 2018.

While the leading nuclear countries US and Russia reduced their nuclear arsenal, UK, France and Israel kept the numbers static. North Korea's figures were not available. According to the findings of the Stockholm International Peace Research Institute (SIPRI) put out in its SIPRI Yearbook 2018 released on Monday, India's stock of nuclear weapons went up from 120-130 in 2017 to 130-140 in 2018 while Pakistan's stockpile increased from 130-140 in 2017 to 140-150 in 2018. China increased its nuke arsenal from 270 in 2017 to 280 in 2018.

These numbers actually bucked the global trend of a more than 3 per cent decrease in the number of nuclear weapons, from 14,935 to 14,465 due to cutbacks by the US and Russia in keeping with the provisions of the implementation of the 2010 treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START).

NUCLEAR ARM RACE

■ India's stock of nuclear weapons went up from 120-130 in 2017 to 130-140 in 2018 while Pakistan's stockpile increased from 130-140 in 2017 to 140-150 in 2018. China increased its nuke arsenal from 270 in 2017 to 280 in 2018

But Russia and the US still maintained huge stockpiles of 6,450 and 6,850, respectively.

Another facet of the increasing arsenal in India, Pakistan and China is also the concomitant development of land, sea, and air-based missile delivery systems that can carry nuclear payloads as also the development of missiles with greater ranges. A factor contributing to the need for deadly strategic weapons is the peculiarity of the security situation in South Asia. While India perceives a challenge from a rising China, Pakistan's India-centric policy, a legacy of a perceived existential threat from India, results in it resorting to state-supported terrorism especially in the troubled Kashmir valley. The SIPRI Yearbook said, "Pakistan has prioritised the development of nuclear-capable short-range missiles that appear to be intended for tactical nuclear roles and missions.

In pursuing its 'full-spectrum deterrence' posture, Pakistan's defence planners have given particular attention to nuclear options for responding to an Indian military doctrine that envisages carrying out rapid but limited conventional attacks on Pakistani territory using forward-deployed forces."

However, the international order continues to be haunted by a likely scenario in Pakistan that could arise if terrorists seize and gain control of the nuclear arsenal.

THE HINDU

Tue, 19 June, 2018

Govt. to set up fifth national data centre

Centre planning to expand BPO promotion scheme to 1 lakh seats, says Prasad

The Centre will set up the country's biggest data centre in Bhopal with a capacity to host five lakh virtual servers, Electronics and IT Minister Ravi Shankar Prasad said on Monday. The data centre, which will take about two years to come up, will be set up by the National Informatics Centre (NIC), under the Ministry of Electronics and Information Technology (MeitY). This will be the fifth National Data Centre after the ones at Bhubaneswar, Delhi, Hyderabad and Pune. These National Data Centres host government websites, services and applications. "India's digital ecosystem has got a momentum of its own and this process is going to be irreversible. As far as data privacy is concerned, we have always said that data must be protected, and India should become a good centre of data analysis," the Minister said. Replying to a query on data mining by firms in the context of the general elections in 2019, Mr. Prasad said, "Any attempt to influence India's elections in a covert or overt manner by abuse of data will not be tolerated. People can campaign on social networking sites, but misuse and abuse of data is not acceptable." He added that the government planned to expand its BPO promotion scheme to one lakh seats from the "current 48,000 seats." Under the initiative, which had an outlay of ₹493 crore, 91 BPOs had been set up in small towns and rural areas till now.

'121 cr. Aadhaar issued'

On Aadhaar, the Minister said that while only 61 crore Aadhaar numbers had been generated up to 2014. The numbers had jumped to more than 121 crore as on June 16, 2018. "The difference between Narendra Modi Government's Aadhaar and that of Manmohan Singh... the old Aadhaar was Niradhar [without basis]...there was no legislative support to that platform. Today, Aadhaar has a robust parliamentary law," Mr. Prasad said. Asked about the government's action plan in case the Supreme Court's decision was not in favour of Aadhaar, the Minister said, "The question is hypothetical... the judgment [in the case] is reserved but I believe our Aadhaar team lawyers have argued it with proof, and Aadhaar has already established its benefits for the public."

THE HINDU

Tue, 19 June, 2018

Is data science the same as statistics?

The confusion continues till date

By Atanu Biswas

The growth of data has been exponential. According to an IBM report, 2.5 quintillion bytes of data are created per day. This has created a new class of professionals — data scientists. The question is, is data science another 'hot' job or a new form of science? In the Hollywood movie 21, six students, brilliant with numbers, make money at the blackjack tables of Las Vegas casinos by using numbers, codes, and hand gestures. Can we call them data scientists?

The 'fourth paradigm'

In 2009, pioneering computer scientist Jim Gray argued that data science is the "fourth paradigm" of science, the other three being empirical, theoretical and computational paradigms. In terms of the volume of data to be handled nowadays, it certainly sounds sensible. However, data have always played a major role in scientific developments and the growth of knowledge, not just now. About two centuries ago, Charles Darwin's theory of natural selection was largely based on observational data that he collected during his voyages around the world. About 150 years back, Gregor Mendel developed the laws of Mendelian inheritance

from the the data he collected from his experiments on peas. So, historically, science has been data-driven. What has changed is that with the Internet, there is more data available now.

Statistics, according to the American Statistical Association, is the "science of learning from data". So there is huge scope of confusing data science with statistics. Statistics is a data-driven science, but it focusses on developing theories based on data insights. In the early 1900s, William Gosset, under the pseudonym Student, used the Guinness brewery data to develop the famous Student's t-distribution. Was he a data scientist? Important theories of statistics were developed by small data quite often. Take an interesting example from the 1930s. A woman colleague of the legendary statistician R.A. Fisher claimed that she could identify whether tea or milk was added first to a cup. In order to verify this, Fisher prepared eight cups of tea, of which milk was added first in four cups. The woman could correctly identify six cups, three from each group. Fisher analysed the data by his newly developed Fisher's exact test. Half a century on, this 'Lady Tasting Tea' experiment would be treated as one of the two supporting pillars of the randomisation analysis of experimental data. There is no doubt that statistics was primarily data-driven. In 1997, C.F. Jeff Wu gave a famous lecture entitled "Statistics=Data Science?" at the University of Michigan. The confusion somewhat continues till date.

Incidentally, the term data science was used initially as a substitute for computer science by Peter Naur in 1960. His book Concise Survey of Computer Methods defines data science as "the science of dealing with data." 'Dealing' certainly includes cleaning, processing, storing and manipulating data, and the subsequent analyses of data. Today, people expect a data scientist to know mathematics and algorithms, experimental design, engineering chops, and communication and management skills. A jack of all trades cannot be the master of anything. Yet people struggle to decide whether data science is statistics on a high capacity computer or not. More importantly, is a data scientist someone who is better in statistics than any software engineer, and better in software engineering than any statistician? Does data lead to "the end of theory"?

Small and big data

To me, data science appears to be a technology rather than a science, at least in its present form. Should we then call it data technology? A Harvard Business Review article of 2012 concludes that a hybrid of data hacker, analyst, communicator and trusted adviser makes a successful data scientist. A considerable part of the work of a data scientist is data cleansing. That is surely not the description of a statistician. With the ocean of data at hand, the scope of data science might look limitless. However, due to the very nature of the expertise, over time, softwares will invariably take up much of the work of data scientists. For example, existing tools like Tableau have already eased the task of data visualisation. In response to the new technological demand, statistics, the subject, did not completely surrender to the new hype of handling waves of data, and thus paved the way for developing a new set of experts. Many types of small data are of great challenge, even in this era of big data. Thankfully, statistics did not detract itself from the principle of theorising from data, big or small. We are possibly heading towards an era of softwares and algorithms. A shade of uncertainty remains with the advent of data science.

Business Standard

Google trains machines to predict death of patients

A woman with late-stage breast cancer came to a city hospital, fluids already flooding her lungs. She saw two doctors and got a radiology scan. The hospital's computers read her vital signs and estimated a 9.3 percent chance she would die during her stay. Then came Google's turn. An new type of algorithm created by the company read up on the woman -- 175,639 data points -- and rendered its assessment of her death risk: 19.9 percent. She passed away in a matter of days. The harrowing account of the unidentified woman's death was published by Google in May in research highlighting the health-care potential of neural networks, a form of artificial intelligence software that's particularly good at using data to automatically learn and improve. Google had created a tool that could forecast a host of patient outcomes, including how long people may stay in hospitals, their odds of re-admission and chances they will soon die.

What impressed medical experts most was Google's ability to sift through data previously out of reach: notes buried in PDFs or scribbled on old charts. The neural net gobbled up all this unruly information then spat out predictions. And it did it far faster and more accurately than existing techniques. Google's system even showed which records led it to conclusions. Hospitals, doctors and other health-care providers have been trying for years to better use stockpiles of electronic health records and other patient data. More information shared and highlighted at the right time could save lives -- and at the very least help medical workers spend less time on paperwork and more time on patient care. But current methods of mining health data are costly, cumbersome and time consuming. As much as 80 percent of the time spent on today's predictive models goes to the "scut work" of making the data presentable, said Nigam Shah, an associate professor at Stanford University, who co-authored Google's research paper, published in the journal Nature. Google's approach avoids this. "You can throw in the kitchen sink and not have to worry about it," Shah said. Google's next step is moving this predictive system into clinics, AI chief Jeff Dean told Bloomberg News in May.

THE ASIAN AGE

Tue, 19 June, 2018

Explosive volcanoes spawned mysterious Mars rock formations

A mysterious rock formation on Mars may have been caused by explosive volcanic eruptions that shot jets of hot ash, rock and gas skyward, a study has found. The finding, published in the Journal of Geophysical Research: Planets, could add to scientists' understanding of Mars's interior and its past potential for abitability, The Medusae Fossae Formation is a massive, unusual deposit of soft rock near Mars's equator, with undulating hills and abrupt mesas. Scientists first observed the Medusae Fossae with NASA's Mariner spacecraft in the 1960s but were perplexed as to how it formed. Researchers suggest that the formation was deposited during explosive volcanic eruptions on the red planet more than 3 billion years ago. The formation is about one-fifth as large as the continental US and 100 times more massive than the largest explosive volcanic deposit on Earth, making it the largest known explosive volcanic deposit in the solar system, researchers said."This is a massive deposit, not only on a Martian scale, but also in terms of the solar system, because we do not know of any other deposit that is like this," said Lujendra Ojha, a planetary scientist at Johns Hopkins University in the US. Formation of the Medusae Fossae would have marked a pivotal point in Mars's history, researchers said. The eruptions that created the deposit could have spewed massive amounts of climate-altering gases into Mars's atmosphere and ejected enough water to cover Mars in a global ocean more than 4 inches thick, Ojha said.