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MATERIALS MANAGEMENT REVIEW

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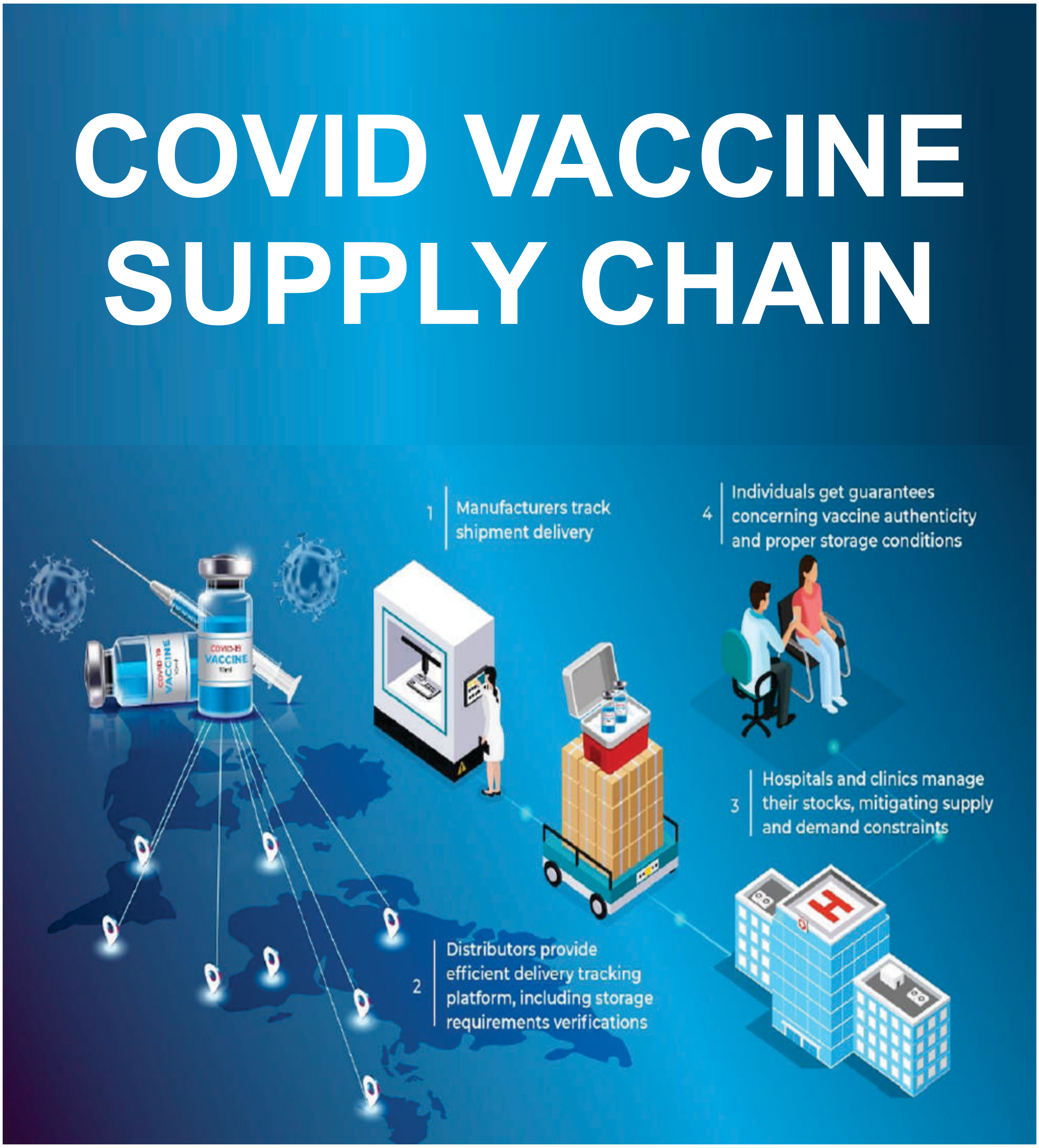

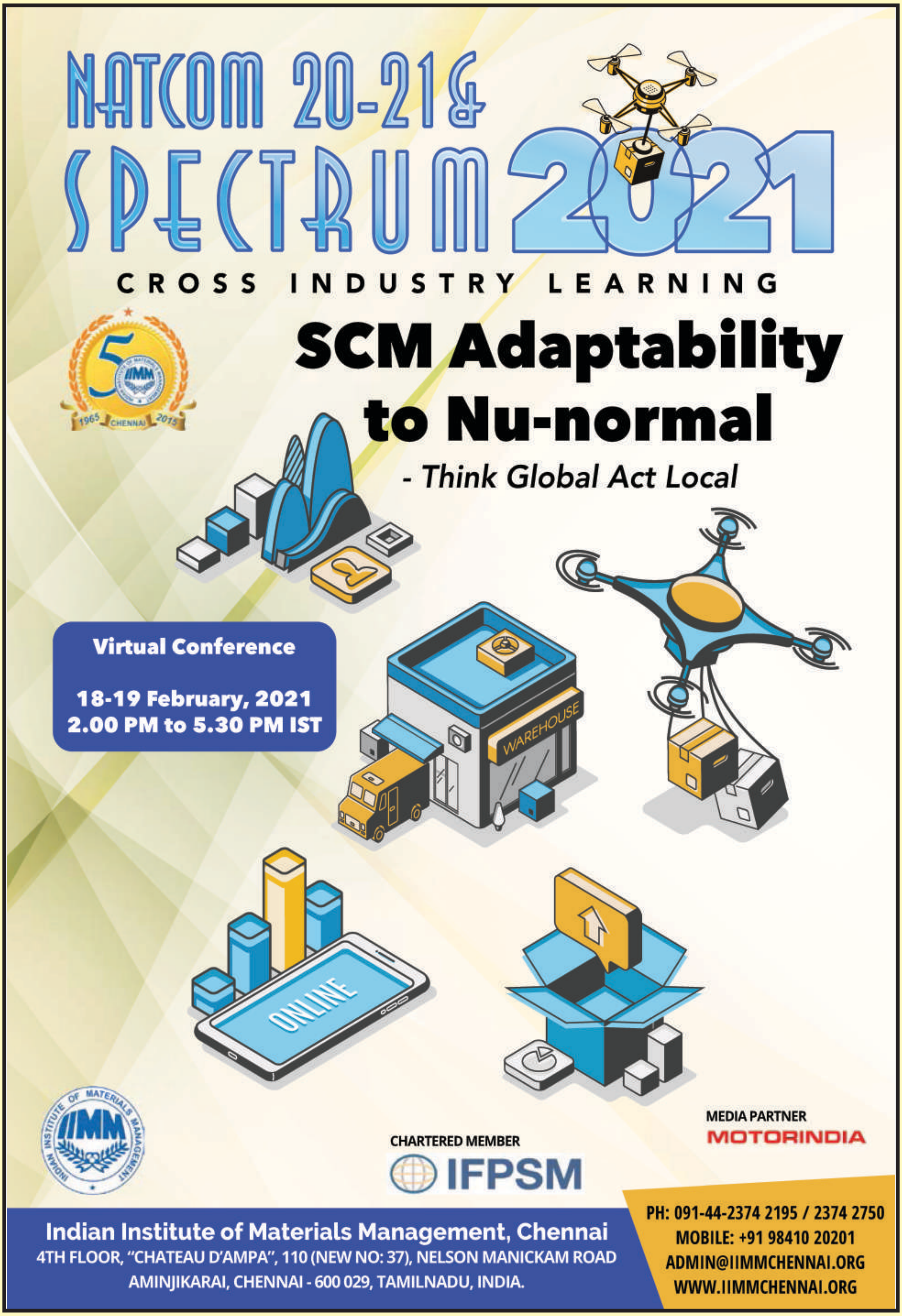
NATCOM 20-21&
SPECTRUM 2021
CROSS INDUSTRY LEARNING
SCM Adaptability to Nu-normal
- Think Global Act Local
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From the Desk of The National President

Dear Members,

Greetings from National President!!

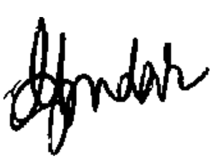
As we stepped into the new year 2021, hope and aspirations have started building up. India is among very few countries in the world who has successfully fought the war against COVID-19. Thanks to the strong leadership at the top and dedicated workforce which has successfully maneuvered the country through the crisis period. Today we are at a comfortable position. We are not only protecting our own people with the successful launch of massive vaccination programme nationwide from 16th January 2021 but we are also supporting our neighbouring countries by sending them Vaccine manufactured in India. Not only neighbours, we are also exporting the vaccine to several developed economies worldwide. As Indians, this is a moment of great pride and it gives us a deep sense of satisfaction when the world is looking on India as a nation who can be relied upon and our leadership is standing upto their expectations. On the economic front, we had a higher GST collection in December 2020 as compared to December 2019 which is one of the indicator of growth. Recently, IMF has projected a GDP growth of 11.5% in 2021 which means from a down of -8% the GDP will grow by 11.5%, a net positive growth.

Several important decisions were taken on the education front during last month. We have already started the Jan. – June 2021 admission session. Examinations for the end semester examinations for both GDMM and AICTE approved courses as well as re-examinations are announced. To take care about the safety of the students as well as maintain transparency, we will be conducting online examination through google form with specially developed software with auto protector. The students of intermediate semesters will be promoted based on the marking of their assignments and the average marks of their previous examinations. This will give ample time to the students to immediately begin the next semester. Since now all the study material is completely developed, the study material will be made available to the students in a time bound manner after fee payment. Kolkatta and Vadodara have already registered over 25 admissions each in the GDMM courses. We are also expecting a good number of enrolment in PGDMM and PGDSCM&L. I take this opportunity to request all branches, course coordinators and everyone involved to put maximum effort to get as many admissions as possible. The annual account finalization of branches is in full swing. A close coordination is done by NST on a day today basis along with the NHQ Finance team to ensure timely completion of the audit and account finalization.

IIMM Chennai will be conducting their Signature event SPECTRUM on the **theme SCM Adaptability to Nu-normal – Think Global Act Local.** The event is scheduled on 18th& 19th Feb. 2021 on virtual platform. Based on our request to branches to conduct virtual NATCOM, Chennai Branch has concurred to host NATCOM along with their signature event. I take this opportunity to request all branches to extend all possible support to the event by sending at least 5 paid delegates to attend the event on virtual platform.

My wishes to all IIMMites and their family members "Á Very good health, wealth and prosperity in this new year 2021".

With Warm Personal Regards



MALAY MAZUMDAR
National President, IIMM
Email: Malay_mazumdar@yahoo.co.in

From the Desk of Chief Editor

Dear Members,

Two pieces of good news have come this month. One from IMF, projecting the growth of Indian Economy at healthy rate of 11.5% in 2021-22 and other pertaining to rolling out of Covid-19 Vaccination program by GOI. Both aspects will have great involvement of Supply Chain Professionals.

The development and approval of COVID-19 vaccines by GOI, has given a great relief of sigh and motivation to stand tall against the Covid 19 Crisis, butsecuring and distributing the vaccines across the length and breadth of the country is a humongous task for healthcare fraternity. Developing vaccine and acquiring sufficient quantity is just the start, the vaccines must then be transported safely to multiple destinations, maintained at the right temperature, and tracked at all times to avoid tampering and assure product integrity and delivery.

This is where, role of effective Cold Supply Chain, becomes critical. Good planning is obviously inevitable to understand the load bearing capacity of existing infrastructure, however, handling of large number of vaccines along with other products like syringes& needles etc. further adds to complexity of Cold Supply Chain (as different products have different storage conditions and expiry dates)and it require critical analysis of Cold Supply Chain.

As per the various reports from different agencies, Cold Chain Market with 37 Million Tonne capacity in India is highly fragmented and we do not have a single cold chain Operator with a capacity of over 5000 Tonne. Not only this, the estimated cost of transporting a single vaccine is around Rs 600 and assuming that for 400 million Indians, the overall logistics market cost come at Rs 21000 Crore.

Complexity will get further increased over coming months as Government and Medical Fraternity will betransporting 400 million doses of COVID-19 vaccines to numerous destinations (possibly to every nook and corner of the country), which requires 30,000 tonne of transportation capacity, which is about 11,500 vehicles. Availability of Cold storage options and end to end visibility of inventory is vital for Success of COVID-19 vaccination derive.

The amount of vaccines being produced and transported, could expose limitations in refrigerated capacity in warehouses, vehicles and healthcare facilities. The last-mile delivery vehicles must possess cold chain storage and precious cargo facilities, driven by licensed drivers and integrated track &trace systems to assure 24/7 visibility.In addition to this, supply chain managers need end-to-end temperature logging, real-time monitoring & reporting of temperature, shock and moisture alerts to maintain warehouse integrity. This will provide us a time slot for remedial action to prevent damage, spoilage, and compromised goods in transit from reaching the customer.

Given the situation and demand for the vaccine, it will not be easy to ramp up the existing infrastructure and suitable vehicles with cold storage and fragile stock facilities. Here is what we can expect from 3PL and 4 PL companies to fill the gap. Despite the high priority of vaccines, we should explore different avenues to bring down the logistics cost to make it a more cost effective and efficient affair. I huge challenge for Supply Chain Professionals is on hand and I am sure India will be proud of Supply Chain Fraternity involved in this gigantic task.

Covid 19 Pandemic and resulting work from conditions have brought some depressing thoughts among many of us. One nice way to get over it would be to look for inspirations from the success of fellow professionals. With this objective in view, I intend to start a column highlighting achievements of SCM Professionals in other than SCM Areas. I request readers to forward details of such high achievements to me for publication in future issues.

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MATERIALS MANAGEMENT REVIEW

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DELIVERY OF ROBUST END-TO-END COOLING SOLUTIONS

CHANDRAKANT P. PATEL, CEO AND MD
ICE MAKE REFRIGERATION LTD.

"The current transport and workforce bottlenecks encountered are boosting the use of cold supply chain and temperature-controlled warehouses utilized for handling pharmaceuticals, perishable foods, agro produce and dairy products.."

Over the past few years, the Indian refrigeration equipment market is witnessing an upward growth trajectory. The rising demand for Dairy, frozen & chilled products among consumers, evolving lifestyle, rapid urbanization and growth in the retail sector including an increasing number of hypermarkets and supermarkets are some of the factors projected to create a significant growth backdrop for this market.

While most businesses have been experiencing a lull, massively impacting the economy, with the onset of the Coronavirus pandemic which is unlikely to disappear soon, this domain is experiencing a surge. The current transport and workforce bottlenecks encountered are boosting the use of cold supply chain and temperature-controlled warehouses utilized for handling pharmaceuticals, perishable foods, agro produce and dairy products.

While the market continues to maintain its fluidity, there are various market segments and user types that have their own set of unique requirements. Customers demand high performance while simultaneously seeking service that transcends their expectations. A highly skilled cooling solutions provider that can meet every client's expectations and seamlessly align themselves with the current/ future trends is the need of the hour.

Carving a niche for itself in this domain with over three decades of in-depth experience is Gujarat headquartered Ice Make Refrigeration Limited with its comprehensive and highly customizable suite of cooling products and accessories. "Our diverse range of product portfolio makes us a one-stop cooling solutions provider for our customers. We have expertise in equipment manufacturing, project engineering and project management to meet the temperature-specific requirements of our end-users," says Chandrakant P. Patel, Chairman and MD, Ice Make Refrigeration Limited.

Achieving Superior Client Satisfaction

Commanding quite the market presence, the company has already established a wide network of distribution channels with its dedicated sales force team and a presence across domestic and international markets. This has enabled the company to enhance its customer reach. The company boasts of its state-of-the-art facilities that are equipped with cutting-edge technologies to ensure high-quality output in a cost-efficient manner. "We offer the industry's most comprehensive range of design, installation, compliance and aftermarket capabilities," adds Chandrakant.

With a strong focus on forging a long-term relationship with its customers, the company has a dedicated team of experts allocated for the day-to-day operations and after-sales services. They are strategically placed across the nation thus positioned to reach the clients' premises within 24 hours of placing the service call. "Our success is largely attributed to the experience and expertise of our leadership team. It is under their guidance and stewardship that the Company has grown to become one of the leading manufacturers and suppliers of cooling solutions equipment in India," informs Chandrakant.

He strongly believes this market holds massive unexplored potential and Ice Make has equipped itself to explore these opportunities. The company envisions penetrating the interiors of the country as rural connectivity and electricity improve. The company aims to bolster its sales network in the domestic market and increase its footprint across the southern and eastern regions of the country. In conjunction with this, the company is also exploring opportunities to make its products available across regions through franchise-based models (OEM). Striving to continue delivering innovative solutions and services, Chandrakant concludes, "With our integrated capacities in place, we shall be focussing on expanding our export pie substantially."

Source: coldchainmanagement.org

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RAMPING UP COLD STORAGE FACILITIES CRITICAL AS INDIA PREPS FOR COVID-19 VACCINE: EXPERTS

Union Health Minister Harsh Vardhan said earlier this week that the government expects to receive and utilise 400-500 million vaccine doses for COVID-19, and cover approximately 20-25 crore people by July 2021. The safe delivery of vaccines for mass immunisation against COVID-19 is a massive challenge and India will need to significantly ramp up its cold chain facilities, say experts as the world's second most populous nation moves into the next stage of management of the disease and looks towards a preventive. With most frontrunner vaccine candidates likely to require extra cold' storage, the private sector could also be roped in for effective delivery of a preventive when it is available, suggest several experts and industry insiders.

Some vaccine frontrunners are in advanced stages of trial and could hit the market by early next year, making the task of securing last mile connectivity and ensuring that nothing goes wrong before the shot is administered more urgent. Union Health Minister Harsh Vardhan said earlier this week that the government expects to receive and utilise 400-500 million vaccine doses for COVID-19, and cover approximately 20-25 crore people by July 2021.

The Centre has also reportedly directed states to make a robust plan for vaccine storage and distribution by October 15. Most if not all the current frontrunners require extremely stringent cold chains, making them immensely challenging for India to implement, said SatyajitRath from New Delhi's National Institute of Immunology (NII).

The immunologist noted that some COVID-19 vaccines will need storage temperatures that simply cannot be realistically managed in any large-scale Indian campaign. He said the real problems will arise once vaccines are ready to go into the market. Vaccine candidates by Moderna and Pfizer will require stringent standards for refrigeration that may hamper how they are distributed to millions of people across India's length and breadth, according to scientists.

Unlike drugs, virtually all vaccines need to be transported at cold temperatures, usually between 2 and 8 degrees Celsius, said RaghavanVaradarajan, professor at the Indian Institute of Science (IISc) in Bengaluru. The necessity is to keep the vaccine product cold, either refrigerated or frozen.

This is a constraint especially with large numbers of doses, Varadarajan told PTI, explaining the particular problems of India that has a population of 1.3 billion, second only to China. Many vaccines lose potency when exposed to higher temperatures, he said, and re-cooling does not help.

Thus we need what is called the cold chain of handling before use, said Varadarajan whose team at IISc is working on a warm vaccine that can be stored for over a month at 37 degrees Celsius, and needs no cold chain for storage. PawanexhKohli, the founding CEO of India's National Centre for Cold-Chain Development (NCCD), agreed that protocols will require COVID-19 vaccines to be kept between 2 and 8 degrees Celsius, while in transport and storage until delivery. The Moderna vaccine candidate is shipped in minus 20 degrees Celsius and held at 2-4 degrees for seven days. The Pfizer (vaccine) that requires minus 70 degrees temperatures, Kohli, honorary professor of post-harvest Logistics at the University of Birmingham in the UK, told PTI.

Both the Moderna and Pfizer vaccines use a synthetic version of genetic material from part of the coronavirus. The genetic material called messenger RNA (mRNA) then prompts the cells to make a tiny piece of the virus, which the immune system recognises as foreign. If the person is later exposed to the real virus, the immune system will attack it.

Noting that RNA vaccines have never been used on humans, DrVardhan said it is possible high temperatures can affect these structures and thus affect the efficacy of the formulation.

While a bulk of the vaccines will be distributed through the Centre's Universal Immunization Programme (UIP) mechanism, experts also suggest that the government rope in private cold chain operators.

The vast scale of India's UIP is supported by more than 27,000 functional cold chain points of which 750 (3 per cent) are located at the district level and above. The rest are located below the district level, according to the government's comprehensive multi-year UIP plan for 2018-22. This includes 76,000 cold chain 'equipment', 2.5 million health workers, and 55,000 cold chain staff, the plan report said.

Cold chain logistics involves many moving parts, including cold storage facilities that store products waiting to be transported, cooling systems to keep it at an appropriate temperature during all aspects of the supply chain such as storing and transporting. Gel packsarealsooften used for medical and pharmaceutical shipments.

Approximately 390 million doses are administered annually at nine million sessions held across the country to immunise 26 million children and 30 million pregnant women, it said. Noting that cold storage protocols are well established in India, MrKohli said the public health network is limited in capacity.

Luckily, the food cold chain has synergistic use for this purpose and should assist in this battle. Existing cold chain enterprises may need to allocate specific resources in their network, noted MrKohli.

He added that the food cold chain has the maximum reach, with extensive last mile connectivity, and will require minor redesign to designate storage space and transport load for this purpose. Almost every cold chain owner I have spoken to is willing to contribute space and assets towards this, should the need arise, MrKohli added. MrKohli also believes that India must restructure with purpose to start and finish the immunisationprogramme within a short time period to be effective.

Even if the vaccine is ready, the programme should not be commenced until the last mile for administering the vaccine is prepared, he said. According to the World HeatlhOrganisation, at the higher levels of the cold chain, i.e. at primary and regional intermediate stores, the oral polio vaccine must be kept frozen between minus 15 degrees Celsius and minus 25 degrees Celsius. At other levels of the cold chain, the vaccines should be stored between 2 degrees Celsius and 8 degrees Celsius.

Source: PTI

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COVID-19 VACCINE TO HELP COLD CHAIN MARKET JUMP 17% TO RS 1.7 TRN IN CY21

Growth next year comes on the back of robust 16% estimated annual growth over past five years with volume growth in the period pegged at 4.4%

T E NARASIMHAN

An increase in demand for cold storage solutions from pharma and other segments is expected to help the Indian cold chain market to post a 17 per cent growth in 2021 to Rs 1.7 trillion, according to market research firm IMARC Services. In addition to the demand for cold storage to house Covid-19 vaccines, cold chain service providers and logistics players are witnessing a surge in demand from pharma and allied industries.

Growth next year comes on the back of robust 16 per cent estimated annual growth over the last five years (2015-2020) with volume growth in the period pegged at 4.4 per cent. By the end of 2020, the cold chain market is expected to have a volume capacity of about 41 million tonnes. While the growth this year is expected to come from the rolling out of the Covid-19 vaccines (advance orders), the wider reach of the government immunisationprogramme and the increasing requirement from online grocery platforms aided the growth of the sector over the last few years.

Currently, healthcare products account for a share of 3.6 per cent in the overall Indian cold chain market, which is expected to grow by two thirds to around 6 per cent by the end of next year, estimates IMARC Services. Ratings and research advisory firm Crisil said the cold chain industry is expected to see a growth of 9-11 per cent in FY22 in value. This growth will be led by an optical recovery in segments such as meat and seafood. Moreover, pharma segment will continue its growth trajectory aided by Covid-19 vaccine deliveries.

India will require about two billion doses to vaccinate a billion people going by the 2-dose regime that is to be followed.

Companies have said that India has created a very good infrastructure to handle vaccines, which need temperatures between 2-8 degrees and -20 degrees. Since June this year many of the state governments and some in the private sector have started placing orders with cold chain equipment developers. According to industry sources, India has 225 Walk-In Coolers, 57 Walk-In Freezer, 44,000 Icelined Refrigerators, 38,000 Deep Freezers, 79,000 Cold Boxes, 1.4 million vaccine carriers and 700 vans. Around 520 million Universal ImmunisationProgrammes (UIP) and 1.32 billion non-UIP vaccinations are done annually.

Blue Star Managing Director B Thiagarajan said states have been adding capacity since July to fill the gaps as required. During the past three months, the company, which claims 70 per cent market share in pharma and pharmacy segments, has got orders for 320 cold rooms, 470 medical refrigerators and 1,200 deep freezers and expects few more tenders to come.

Thiagarajan expects incremental revenue of Rs 100-150 crore if the vaccination is stored between 2°C and 8°C, and if it is going to be -20 degree, he expects incremental revenue of about Rs 500 crore in the next 18-24 months. The other segment which sees good opportunity is logistics solution providers, who have begun ramping up capacity to distribute Covid-19 vaccines. According to a Credit Suisse report, the largest private player – SnowmanLogistics – has a capacity to store 650 million doses. But this assumes that all of the capacity will be used only for vaccine storage. Capacity available for vaccine distribution will be only 10-15 per cent of this or about 100 million doses for Snowman. TCI Express management said it has entered the cold chain segment recently and is in talks with agencies and government for the distribution of Covid vaccines. The company has said it has won contracts from the state governments, without naming the states and said its network will give the company an edge. The company has 900 branches, 50,000 pick-up and drop points and caters to 720 districts. "Even if we establish one cold box in each of these networks, it is a great network addition that we can give the government", said the management in an interview.

For the organised private cold chain storage sector, total vaccine storage capacity would be 250-300 million doses.

Demand for refrigerated vans has also started picking up.

V Seethapathi, vice president, Product Line, I&LCV, Tata Motors, country's largest CV maker, said during the pandemic, the overall last-mile delivery segment saw considerable growth on the back of high demand in the e-commerce sector, which was triggered by the pandemic and the lockdown. Demand for intermediate and light commercial vehicle reefer trucks is yet to reach its true potential post the lockdown, he says.

The reefer truck segment has seen de-growth in H1 FY21 compared to the same period last year. But the interest levels in the segment have seen an uptick of about 15 per cent during the past two months. As the nation awaits a concrete plan from the Centre on vaccine distribution, the demand for reefer trucks is expected to increase in Q4.

Reefer trucks will play a huge part in dispatching the vaccine. Transportation of vaccines will require a high level of expertise and reefer trucks will have to follow set protocols by the pharma industry, to ensure safe delivery across the country. Demand for ultra-cold storage vehicles is expected to rise as hundreds of thousands of vaccine doses at sub-zero temperatures will have to be transported at a spoke-to-spoke level as well as last-mile delivery.

The organised sector does not have reach extending to the hinterlands in the country and for those regions, it is likely that the government may utilise existing fruit and vegetable cold storage to achieve the purpose.

RampraveenSwaminathan, MD & CEO, Mahindra Logistics added, they are in talks with the company's business partners for scaling up cold-chain requirements. "We are also in the process of talking to multiple pharma companies to evolve a support mechanism. Additionally, a strong chain of right technology infrastructure to support the vaccine data is being mapped across the supply chain. We are working with technology partners (within the Mahindra Group) to evolve a strong platform to support the programme," he said.

There has been a steady rise of cold-chain solutions with our consumer clients over the years. With more and more clients going the e-commerce way, we have created bespoke temperature-controlled facilities for their customers in the last few quarters.

Source: Business Standards

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GOVERNMENT ELECTRONIC MARKETPLACE (GEM)

A.K. SRIVASTAV, DY. REGISTRAR
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE, ROORKEE

INTRODUCTION : The Indian Government's E-Marketplace (GeM) platform is a great initiative started by the Government of India to promote an era of e-governance in the nation.It was launched on 9th August, 2016 as an online, end to end solution for facilitating online procurement (selling and buying) of Goods and Services by Govt. Ministries Departments / Organizations / Public Sector Units (PSUs), affiliated autonomous bodies etc from the authorized manufacturers at reasonable rates, specifications& quality with better delivery period under real time conditions.

The Directorate General of Supplies and Disposals (DGS&D) has developed the GeM as the public procurement system of goods and services in India that is worth more than Rs. 5 lakh crore annually which is needed to be carried out through the online platform.GeM promotes transparency& eliminates delayed process with corruption by minimization of Government human transactional interface due to which GeM has been made mandatory by the Ministry of Finance through Rule No.149 in the General Financial Rules, 2017.

IMPACTS OF GEM

- GeM relieved public offices from tedious and time consuming tendering process by cutting down the administrative and transaction costs.
- It has helped in online registration of suppliers and government buyers using self-certification and authentication through Aadhar, PAN, MCA21and emudhracreating all transactions in GeM completely secure.
- GeMhas facilitated seamless process flow and standardized specifications with complete audit trail thereby registering a total transaction value of INR 79,280 Cr with an average saving of around 15-25%.
- Number of sellers and service providers registered on GeM portal stands at 9,81,914 with 21,47,946 products and 108+ service categories till date as on 21 Jan 2021.
- Besides large traders and other players selling their products and services on the government's online marketplace, MSMEs and startups are also adding value to the platform.
- During the covid scenario, GeM has played a vital role in online purchasing of essentialmedical products and services between buyers and sellers at a greater convenience with minimum bidding time period of 3 days.

PROCESS : All the buyers and sellers can register themselves online on GeM portal. Buyers need to request their secondary user ID creation with the help of Primary User allotted by their respective Institute or Government Body. GeM has offered different modes of procurement for products and services with the help of Direct Purchase upto Rs.25,000 with no comparison, L1 Purchase with purchase above Rs. 50,000 and upto Rs. 5 lakhs with comparison between three different Original Equipment Manufacturer (OEM), Bid creation and Reverse Auction above Rs.5 lakhs and above in a minimum time period of 10 days with Proprietary Article Certificate (PAC) buying option for purchasing item of single OEM by the approval of Competent Authority. Also bunch bid feature is available for procuring many items from a single seller offering better price and quality.

Anyone can view the process step by step in the TRAINING MODULE option in TRAINING section on GeM webpage without even LOGIN on GeM portal.

After order placement buyers need to generate Provisional Receipt Certificate (PRC) and Consignee Receipt and Acceptance Certificate (CRAC) on their portal and then after bill processing by buyer, PAO (Payment Authority Officer) approves the bill for payment by various payment options available on GeM portal.

DRAWBACKS : After so much advancement in technology, many Indian sellers who are lacking in technical skills are not able to get on board in online procurement till today. Also the GeM user interface has been a challenge for many buyers and sellers through their complex steps and server issues.

Sellers have been reported by buyers for supplying low quality items or either declining the orders after coming L1 in purchase thus delaying the procurement process for buyers.

Incident raising feature is introduced on GeM for creating complaints for sellers providing wrong material or declining orders and buyers who are delaying the payments of the sellers.

DEVELOPMENTS IN GEM : With all the advancements occurring in GeM, it has finally integrated itself with CPPP (Central Public Procurement Portal) of Government of India.

Also, GeM availability report is needed to be submitted for procurement outside GeM on CPPP else "Custom Item" based bidding feature is launched recently for getting sellers notified for the requirement of buyers by providing Custom Item catalogue with technical specifications and images of items required to be uploaded after generating the GeM Availability Report marking the item category which is not available on GeM portal.

Buyers can now add five additional specification parameters in bidding process thus giving them the freedom and flexibility for getting a validation response from the sellers.All bids which were being floated on CPPP or any other e-procurement portal for procurement ofgoods and services can now be created on GeM directly.

This is in accordance with para 48 of the budget speech for FY 2020-21 which states, inter alia, "Government e-Marketplace (GeM) is moving ahead for creating a Unified Procurement System in the country".

GeM 4.0, the latest version of the platform, is "offering a **Unified Procurement System** that is smarter, better, more intelligent and inclusive. This involves a technology roadmap that enhances each and every step of the user experience on the portal – creating unified and seamless user journeys for buyers and sellers.

GeM 4.0 represents one of the largest uses of advanced technology on any government platform in the world," GeM CEO Talleen Kumar told a national public procurement conclave organised by GeM and leading industry body, the Confederation of Indian Industry (CII) recently. GeM has recently customized dashboard for buyers to track the product orders, purchase analysis etc. with lead time for dispatch by mentioning the days in which the item is needed to be delivered for L1 purchase.

Buyers can now invite sellers through their e-mail ID on GeM who are offering better prices other than GeM portal so that their participation declines the traditional buying of goods by buyers after comparing rates from other e-commerce websites outside GeM.

CONCLUSION

GeM is currently facing a wide diversification for getting everything for procurement online by making the process faster, easier and transparent. Overall feedback of buyers and sellers have increased the hope of a great future of Government e-Marketplace in India as the system needed reform for development of our country consolidating all government procurement onto a single platform leading to economies scale, better price discovery and sharing of best practices. It is also being said that "**GeM has the potential of becoming the Indian government's answer to other giant E-Commerce platforms in near future".**

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NEW EXPORT PROMOTION SCHEME RODTEP – IMPLEMENTED WITHOUT RATE FIXATION

SN PANIGRAHI, PMP, PROJECTS, LEAN SIX SIGMA, GST & FOREIGN TRADE CONSULTANT & TRAINER
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For Promotion of Exports India has Framed various types of Schemes to Rebate or Refund the Taxes. Currently available Schemes are Advance Authorization Scheme, Export Promotion Capital Goods Scheme (EPCG), Duty Drawback, EOU Scheme & SEZ Scheme.

All these **Export Promotion Schemes were framed under premise of Neutralizing Incidence of Taxes based on Universally Accepted cardinal Principles of trade is that Goods or Services can be Exported, but Taxes should Not be Exported. O**therwise, it may adverselyInfluence the commodity Prices and may lead to un-competitiveness in the Global Market**.**

Merchandise Export from India Scheme (MEIS), is a scheme designed to provide rewards to exporters to offset **infrastructural inefficiencies and associated costs but it is not a Tax Neutralization Scheme**.

Certain Taxes / Duties / Levies Not Being Refunded:

At present, GST Taxes and Import / Customs Duties for Inputs Required to Manufacture Exported Products are either Exempted or Refunded through Various Schemes Like Advance Authorization, DFIA, Duty Drawback etc.

However, **there are certain taxes / duties / levies, at different stages at the central, state and local level, which are incurred in the process of manufacture and distribution of exported pro-ducts but are not being refunded under any mechanism currently in practice.**

Moreover, in the wake of complaints filed by USA against India to discontinue export incentive scheme (like **MEIS**) citing these schemes tantamount to subsidy, which is **not in compliance with WTO guidelines,** and subsequent ruling of Dispute Resolution Panel (DRP) of World Trade Organisation (WTO) that India's export subsidy schemes **violate global trade norms** and therefore **asked to withdraw**.

Abiding by the Ruling, **the Government scraped MEIS Scheme which was ended by 31st Dec'2020.**

New Scheme Remission of Duties or Taxes on Export Products' (RoDTEP) Introduced

The Government is now formulated a new Scheme to cover **all the export sectors** to **refundun-refunded taxes or duties/ levies, not exempted or rebated at present by any other mechanism currently in practice.**

Remission of Duties or Taxes on Export Products (RoDTEP) is a scheme for the Exporters to make Indian products cost-competitive and create a level playing field for them in the Global Market by **Refund un-refunded Taxes or Duties / Levies, not Exempted or Rebated at Present by any other Mechanism.**

Under the WTO rules, certain Taxes & Duties like state taxes on power, oil, water, transportation, and other cesses and local levies are allowed to be refunded.

This Scheme will Not only Replace the Current Merchandise Exports from India Scheme (MEIS), which is not in compliance with WTO norms and rules,but goes beyond it to **Refund un-refunded Taxes or Duties / Levies** as discussed above.

The new RoDTEP is a well-Conceived& Intended Scheme - fully WTO compliant and need of the hour in this critical juncture in view of Exit of MEIS.

Salient features of the RoDTEP Scheme:

- Benefit would be provided on certain taxes / duties / levies (other than GST) levies at the central, state and local level, which are not refunded for exports, such as:

State Levies

- VAT on fuel used in transportation; VAT on fuel used in generation of captive power; VAT on fuel used in farm sector (for farm products only); Mandi Tax; Duty on electricity charges; Stamp duty on export documents; Embedded SGST paid on inputs such as pesticides, fertilizers etc. used in production of agriculture goods; Embedded SGST in purchases from unregistered dealers; Embedded SGST on coal used in production of electricity; Embedded SGST on inputs for transport sector;

Central Levies

- Central Excise duty on fuel used in transportation; Embedded CGST paid on inputs such as pesticides, fertilizer etc. used in production of required raw materials; Embedded CGST in purchases from unregistered dealers; Embedded CGST and Compensation Cess on coal used in production of electricity; Embedded CGST on inputs for transport sector

- New scheme aims at creating an Electronic Credit Ledger in the customs ICEGATE which enables Digital Refund to Exporters.
- The Refund would be claimed as a percentage of the Freight on Board (FOB) value of exports.

Advisory for RoDTEP (Remission of Duties and Taxes on ExportedProducts) Incentive Scheme

Government Issued an Advisory on 1st Jan'2021

A new scheme, RoDTEP (Remission of Duties and Taxes on Exported Products) has beenlaunched by the government for exporters. The scheme provides for rebate of Central, State andLocal duties/taxes/ levies which are not refunded under any other duty remission schemes. Thebroad provisions are as under:

I. To avail the scheme exporter shall make a claim for RoDTEP in the shipping bill by making adeclaration.

II. Once EGM is filed, claim will be processed by Customs.

III. Once processed a scroll with all individual Shipping Bills for admissible amount would begenerated and made available in the users account at ICEGATE,

IV. User can create RoDTEP credit ledger account under Credit Ledger tab. This can be done byIECs who have registered on ICEGATE with a DSC.

V. Exporter can log in into his account and generate scrip after selecting the relevant shippingbills.

As of now the users can log into their ICEGATE account and create the RoDEP Credit LedgerAccount, as scrip generation provision will be made functional on the issuance correspondingnotification by the department and availability of the budget. Implementation of scheme in CustomAutomated System has been developed.

- **W.e.f. 01.01.2021, it is mandatory for the exporters to indicate in their Shipping Bill whetheror not they intend to claim RoDTEP on the export items.** This claim is mandatory for theitems (RITC codes) notified under the new scheme. Since the final list of RITC codes eligiblefor RoDTEP scheme and the corresponding rates are yet to be notified by the Government,this declaration has been made mandatory for all items in the Shipping Bill starting01.01.2021.
- Unlike Drawback, there is no separate serial numbers based on a schedule for claimingRoDTEP. RoDTEP rates will be notified as per the RITC Code and therefore, there will be noneed to declare any separate code or schedule serial number for RoDTEP.

No Specific Claim in Shipping Bill – No RoDTEP

It may be noted that if RODTEPY is not specifically claimed in the Shipping Bill, no RoDTEPwould accrue to the exporter. Even though the items and rates are not notified theGovernment for RoDTEP yet, the exporters must indicate their intent for claim at the time ofShipping Bill filing itself. Once the rates are notified, System would automatically calculatethe RoDTEP amounts for all the items where RODTEPY was claimed. No changes in the claimwill be allowed after the filing of the EGM.

Checks on RoDTEP : No Benefit for Advance Authorization, EOU, Jobbing, SEZ etc

There are some checks built in the System to disallow RoDTEP benefit where the benefit ofcertain other schemes like Advance Authorization, EOU, Jobbing etc. has been availed. Whilesome checks have been built in within the System at the time of filing the Shipping Bill, it isassumed that if the exporter (or the authorized Customs Broker) has submitted thestatement as mentioned in para 2(b) with the Shipping Bill, the claim to RoDTEP has beenmade with the undertaking that no undue benefit would be availed.

Issues & Suggestions:

Issue – 1: The Scheme is Introduced without announcing Rates. Generally, Exporters Factor all Export Benefits, while working Export Prices to be Competitive in the International Market.

Suggestion: Therefore, without knowing RoDTEP Rates Exporters are finding it Difficult to workout Export Prices. Government should come out with the Proposed Rates Immediately.

Issue – 2 : By putting some built in checks in the System to disallow RoDTEP benefit where the benefit of certain other schemes like Advance Authorization, EOU, Jobbing, SEZ etc. are illogical as the Objective of the scheme is to refund,all theun-refunded taxes or duties / levies, Embeddedin theEntire Value Chain, those are not exempted or rebated at present by any other mechanism currently in practice.

Suggestion: In the present under various schemes like Advance Authorization, EOU, Jobbing, SEZ etc. Taxes / Duties on only immediate (First Tier) Inputs are being Exempted and not other incidents of Taxes in the Entire Value Chain beyond First Tier. So the Rates proposed under RoDTEP are Mutually Exclusive basis with other Schemes, therefore the Benefits of RoDTEP should be allowed to Exporters availing Advance Authorization, EOU, Jobbing, SEZ etc.

Issue 3: The Scheme is **introduced without Prior issue of Gazette Notification** detailing the Objectives, Coverage & Procedures leading to Confusions. Only the Advisory & Press Notice were issued on 1st Jan'2021 without giving opportunity to trade to understand the Scheme & avail the benefit. **If the RODTEPY is not specifically claimed in the Shipping Bill, no RoDTEP would accrue to the exporter. Many Exporters missed to Claim, since no prior information.**

Suggestion : Therefore, those who are not claimed specifically in Shipping Bill wef 1st Jan'2021 also shall be allowed to Claim latter by amending the Shipping Bills.

Issue 4: It is not very clear about applicability of the Scheme for Supplies made by DTA unit to SEZ. In case of Duty Drawback, the remission is allowed only when the Consideration is Received in Foreign Convertible Currency.

Suggestion : To encourage domestic Sourcing, RoDTEP benefit must be extended to Supplies made by DTA unit to SEZ.

Disclaimer : The views and opinions; thoughts and assumptions; analysis and conclusions expressed in this article are those of the authors and do not necessarily reflect any legal standing.

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CAPACITY PLANNING – KEEPS YOUR PRODUCTS STOCKED AND CUSTOMERS HAPPY

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We are happy toannounce that Sourcing and Supply Chain has extended Content Partnership along with optimoroute.com. OptimoRoute is an online Route Planner for Delivery and Field Service. With OptimoRoute you can plan the most efficient routes and schedules with multiple stops per route.

In an ever-changing world, it might feel like you need a crystal ball to plan for your company's future. How could you know how much product you'll need to order in three months, six months, or a year if orders haven't come in yet? How do you adapt to evolving customer expectations? Or scale your business fast to avoid stock-outs if a surge of orders comes in?

The answers to these questions are simpler than you might think. Successful businesses of all types use capacity planning to answer similar questions every day.

What is Capacity Planning?

Capacity planning is the practice of planning production and workforce needs to make sure your supply chain is equipped to meet demand. Capacity planning lets businesses know how and when to scale, helps identify bottlenecks, and mitigates risk.

The 3 types of Capacity Planning

The three types of capacity planning make sure you have enough, but not too much, of three major resources for both the long- and short-term. You'll want to plan weeks, months, or even a year in advance.

1. Product capacity planning

Product capacity planning ensures you have enough products or ingredients for your deliverables. For a florist, this would be flowers, vases, and cards. For a pool maintenance company, this would be things like chlorine that are required to do the job.

2. Workforce capacity planning

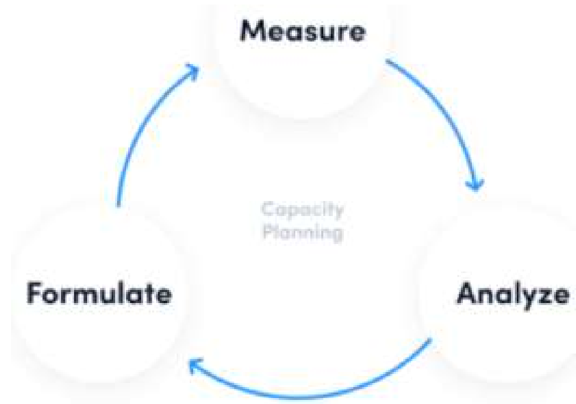
Workforce capacity planning ensures you have enough team members and work hours available to complete jobs. This type of planning will also show you when you need to hire more employees and help you determine how far in advance you need to start recruiting based on the length of your onboarding process.

3. Tool capacity planning

Tool capacity planning ensures you have enough tools to complete jobs. This includes any trucks, assembly line components, or machinery you need to manufacture and deliver your product.

How to start Capacity Planning

There are three basic steps to capacity planning.



3 steps for Capacity Planning

1. Measure : First, you'll need to measure the capacity of your resources. How many deliveries can each of your drivers make in a given period? How many orders can fit onto each of your trucks? How many hours does it take your fleet manager to plan 50 deliveries? It's important to answer these types of questions as accurately as possible because the rest of your plan will be based on these numbers.

2. Analyze : Once you have accurate measurements, you can spend time analyzing this information. Making graphs will help you understand the numbers and make demand forecasting easier.

3. Formulate : The final step is taking all of the information you've gathered and formulating a plan. You can make calculations to see how much it will cost to fund new projects or hire a full-time employee vs. bringing on seasonal part-time workers. You could also calculate the ROI for upgrading a piece of machinery or adding assembly lines to your production facilities. The formulation stage helps you see what the likely outcomes are for various options, so you can make the best decision.

How is Capacity Planning different from Resource Planning?

Resource and capacity planning sometimes get confused with one another, but they are different things – and you need both. Capacity planning is more high level and helps you determine what and how many resources you need to meet demand. Resource planning takes the number of resources available (as determined by your capacity planning) and allocates them to individual projects.

For example, let's say you run a flower shop like The Little Posy Co., and Valentine's Day is your busiest time of the year. You would use capacity planning to determine if you need to hire more employees, bring on seasonal workers, or increase your stock of flowers before February 14. Once you've determined how many workers and how much stock you'll have in February, you would use resource planning to allocate those resources. So, if most of your demand is for vases of red and pink posies, you could allocate the largest portion of your resources to creating those floral arrangements.

The Benefits of Capacity Planning for Modern Business: Capacity planning helps you deliver on the things that are important to your customers. Incorporating this type of strategic planning into your process will help you meet due dates, effectively scale your business, and increase your bottom line.

Reduces stock-outs : Customers don't like to wait, and if they don't have to, they won't. The internet has made it easy for consumers to find products somewhere else if you're out of stock, so you need to reduce stock-outs if you want to minimize customer churn.

In 2004, the Harvard Business Review published the results of a global study where they assessed the behaviors of more than 71,000 customers faced with stock-outs. Depending on the retail category, 21% to 43% of consumers went to another store to purchase an item if it was out of stock. You could lose a third of your potential sales for an item if it's out of stock and, worse yet, that customer may never come back.

Capacity planning can help you avoid stock-outs, and the more you do it, the better you will understand your unique demand. The capacity planning process will help you see how demand fluctuates during different seasons (such as holidays) or how it is affected by events (like kids going back to school). You'll be able to use this insight as a guide for overall decision making and supply chain management.

Increases delivery capacity : McKinsey and Company published a 104-page compendium that illustrates the importance of delivery capacity. Shoppers not only want to be able to have products and food delivered to their door; they want quick turnaround times, which means your delivery process needs to be operating at maximum efficiency. McKinsey's report explains that e-commerce has made up more than 40% of retail sales growth in the United States since 2016, and it isn't showing any signs of slowing down.

As online sales grow ever more popular, delivery capacity is becoming an essential component for many businesses. In another global consumer study conducted by Oracle Retail, 92% of retail shoppers said they would like or love "free one-day delivery by whatever means is most expedient." Capacity planning ensures you have the workers available to deliver products whenever needed, keeping your business competitive.

Identifies process inefficiencies : When you start capacity planning, you have to ask, "what is the maximum capacity of this resource?" Whether you're looking at people, equipment, or products, you'll gain insight into what factors limit capacity, and you'll be able to easily spot bottlenecks that can be fixed or improved.

For example, let's say you run a delivery business. Capacity planning reveals that the amount of time it takes your fleet manager to plan routes is preventing your business from being able to take on more deliveries. You realize that even though you have the trucks, drivers, and products to deliver more orders, your fleet manager requires a lot of lead time in order to effectively plan routes for new orders. You could use this insight to replace your manual planning system with route optimization software. In fact, one of our clients doubled their scheduling capacity by doing just that.

Southern Star is in charge of transporting natural gas to seven states in the U.S. In a single week, Southern Star's 250 technicians can perform up to 2,500 maintenance activities on pipelines that span 5,800 miles. Capacity planning helped Southern Star spot inefficiencies in their scheduling process. As a result, they started using OptimoRoute, and now they are able to fit 100% more tasks into pipeline maintenance and service schedules.

Facilitates risk management : At its core, capacity planning is a roadmap for your business. Both short- and long-term capacity planning help businesses understand their strengths, weaknesses, and limitations. You'll be able to make informed decisions about how fast you should scale your business, when is the best time to launch a new product, and when you need to hire new employees.

Capacity planning will better prepare you to overcome obstacles, too. No matter how much planning you do, you'll still need to be able to respond quickly when unexpected challenges arise. If your supplier suddenly goes out of business or three of your 10 drivers come down with the flu, you'll need to have high-level plans in place to use as a guide, so you can make smart adjustments quickly.

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REDEFINING THE PROCUREMENT SYSTEM FOR OPTIMIZED RESOURCE MANAGEMENT

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Having worked for over 36 years in the procurement and warehouse management, I had the feeling that the Indian businesses are not creative enough to take the risk and challenges of the modern supply chain demands in the procurement system. The conventional system is still followed with an ERP driving the work looks really laborious and unproductive. Procurement personnel still find sitting in front of the systems and do the clerical job that are time demanding and not very productive.

It is also a very funny feeling that the measurers are not made centered with growth and sustainability. The total number of orders placed and the number of orders received and executed, full or partial; the number of requisitions raised and converted to orders or fulfilled, the price reduction achieved etc are considered major activities of procurement. I generally feel that these measures are all monitoring measurers and not one for scaling to new heights of performance; but still the style and pattern we continue to follow in the business.

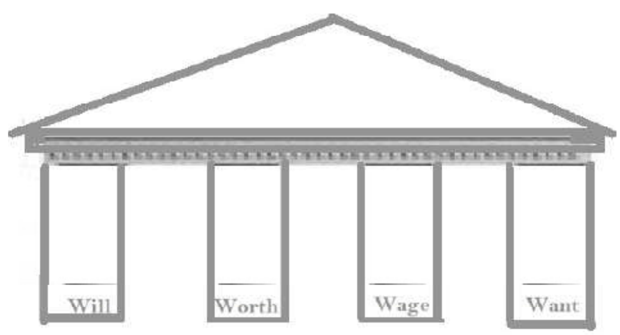
If any of the procurement person is interviewed about their work then the answer what one gets normally would be; he is too busy, negotiating, following up, tracking and tracing, computing the deviations, calculating the achievements, finding out the errors and ratifying, chasing logistics, ratifying contracts, explaining delays and cost, updating database, mitigating issues, chasing with finance for payments, carrying out auctioning process etc. One will surprise to think when this is going to an end and a smoothening will happen where the skill can be productively used for creativity in procurement. The activities hence seems to remain a mundane, repetitive activity without any passion and loyalty other than acting up on instigations.

Many procurement systems even loose its credibility due to the wrong practices by the staff. Industries who do not have the kind of ethics and conduct will create, sometimes even damaging harms too to the business. Suppliers are a little scary about these organizations and show reluctancy to supply or continue supplies. The personnel qualities along with adequate professional skills are very important for effective navigation of the procurement system to new destinations of growth, economy and values. Procurement targets are so stringently made, focusing on price reduction and many a times the system loses its values and providing overall economy to the end consumer. So, the question here is what and where should the procurement should focus on? Undoubtedly it is on the customer values and business values?

It is a fact, as everyone now knows; the customer is well informed and aware of the values of his purchase and he had the capacity to compare for his judicious acquisition process. It is also a fact that the demand from a customer is ever growing and increasing. Unless the procurement can't gear up and keep pace with the market changes then the business is not going to survive.

It is also sometimes depressing matter to see personnel spending a lot of time on ERP and work for it; exporting data and working outside to get some efficiency and productivity information. Sometimes the cost constrains are too much to provide any tradeoffs and the updating or integration of the systems will not take place handicapping the procurement to sacrifice its performance levels.

There is no Aladdin's lamp or any one single solution for this and it remains like the fancy tail of the peacock in the Aesop's fable. How to go about it and how one can redefine the system. Nothing less than the four **W's** can give you the answer; they are the **'Will'**, **'Worth'**, **'Wage'** and the **'Want'**. I love to call this as the '**pillars of change'**. In industries the 'resistance to change' still remains as a constrain as a big rock to break.



Redefining procurement the four pillars

We heard people including managers, speak odd about the demand of change, saying why should we change or do this when everything (according to them) work well? And the attitude towards the change demand get demoralized to give lesser in effectiveness in the process. Apart from this the important accelerators also get missed out in the process, reducing the efficiency of the project. So, basically there should be an open approach, a process of weighing and adapting attitude with resilience, is essential.

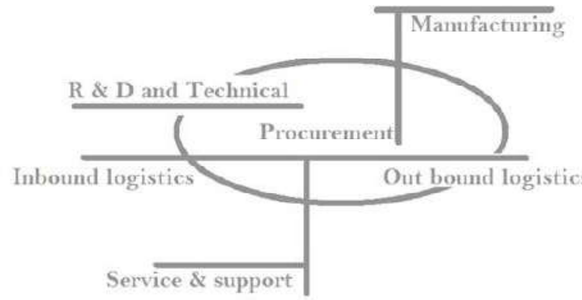
Here the "**will"** plays a very big role. How much the industry longs to have this change and how much the business is ready for this change? And how best the management is prepared for this change? This is in essence, linked with the business vision and how the vision is integrated in to the procurement system. The vision of any business is focused towards the end user; the markets and its growth. This need to be effectively translated in to the procurement operations. This can be achieved through the KPI's and the system refinements or re defining. In the world, nothing is stationary, the wheels are turning and the realization of this to the advantage of procurement is very important. So , changes are inevitable.

Analyzing the "**worth"** of procurement is playing a key role in the business. What is the 'as is worth' and where the procurement needs to take the industry to...? The worth is not about the fiscal aspect alone it is in a holistic manner; the entire procurement system as a whole in the supply chain. In general and in the conventional systems the measurement of the worth goes

generally with, how much reduction the procurement function creates in the business. Here the paradigm shift requirement required is the change from the 'cost to values. So, the exploration or the search should be for values rather than cost. It is a presumption that value includes cost too. Hence the driver should be "value buying".

Value buying or value procurement is not a simple thing. This system demands for; great a lot of efforts to identify the value in every processes and operations of the procurement function. One may have to use many tools also in this like value analysis, value engineering, value stream mapping etc to identify the waste elements. A good amount of research and analysis to identify the use, application and optimality of the task or activity in the procurement system is required for this. For example, the "requisitioning system or process and the various levels of authorizations". One can look in to it in a cost vs effectiveness angle to find out for eliminating those activities or processes which will not add any value. Similarly, vender selection, assessment, and evaluation, tendering, comparison and evaluation, review and ordering, follow up, logistics planning, receiving and inspection and reverse or return management, claims and mitigations, servicing and works etc. need to be reviewed.

It is important that one need to make a landscape of procurement value chain and how the links are performing or made to the give the best performance. How best it is tuned to gather and analyze the information's or data and create an effective information flow in the system.



Mapping the procurement value chain links

To get the best procurement optimization, this landscaping is very important. It is also important that the system identified all the links and connected effectively for creating a seamless flow of information and goods for optimal productivity. Time and place are very important considerations in this process and effective management of this will give the procurement system the velocity required for efficient performance.

The fundamental requirement of a procurement starts with properly identifying the needs; need in cognizance with the customer demands. Then the search starts with the best possible vendor; it can be anyone from one's own plant to near to faraway. How one pick; with what all risk or without any risk actually matters. This area calls for the best intelligence. It's like looking for a bride or groom for a sustainable marriage. In a marriage one review how many levels of ascents to pick the right person for the marriage; similarly, very cautious, calculated measurers should be there to the right supplier for a business too. Evolving a clear strategy for this is, one of the elements of determining the best procurement partner. According to me, suppliers are the asset of any procurement system and need to be considered and attended accordingly.

Picking from a multiple of suppliers and offers and having lot of look-alike requires extra skill to identify the right one, fitting to the business. Here what come best to one's support are your skills, experiences, and the **intelligence**. The negotiation process which one carry through the system gives the best leverage to the acquisition process.

How to negotiate is a question and my answer to this; is very simple and in one word it is all about **"fairness" and "transparency".** Negotiate in a fair manner and very transparent manner. I am sharing one of the incidents what I have seen in my carrier is "the practice of making or creating dummy offers with lower rates to reduce the price and make contracts with the most favoured vendor". I am totally against this and this is not an ethical practice.

Finalizing the order and making a lawful contract is another step which is also very important. Identifying the '**Risks'** and **'mitigatory'** measurers should not get omitted in the process. There should be clear cut transparency rules and discipline each one should have to follow should be spelt out clearly without any ambiguity.

Monitoring and control till the execution of the contract, receiving and inspecting and making all the operations in the most synchronized way without disruptions in the '**supply chain pipeline'** is what the procurement should concentrate and need to ensure. The process will get completed when the vendor gets his dues on time. The 'on time' requires greater significance as procurement system have to evolve in to a '**procure to pay'** mechanism. Choosing the right logistics both forward and reverse play a key role in the system. These are the wheels of one's procurement platform which optimizes, accelerates and make to achieve the goals of procurement.

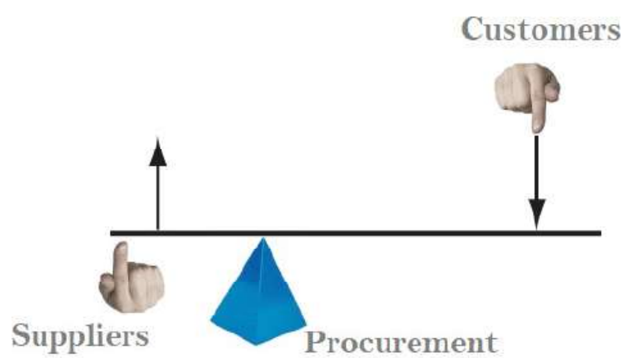
It is not easy to identify the tradeoffs and opportunities for innovations and creativity in the procurement. It is basically the **"wage"** determination or calculation that the system needs to do. How much gain and at the cost of what value need to be assessed.

So, the value propositions should be customer oriented or customer focused and should include, technical and commercial capabilities, strong relationships, innovation and creativity, and vulnerabilities and costs. Weighing of all these elements by algorithms can give one, the best solutions for wage decision. The value creation is then will be based on this wage and the tradeoffs. One need to look in to the optimization, economy and value gain of procurement based on this. Have a composite approach and automate with the right algorithms.

There will be and should be a "**want**" or desire for any procurement system. What are the desires of the procurement system? Is it reducing the cost or is it creating values? Here the most important thing is; identifying the position where one is and then benchmarking where one want to reach. I recollect an industry; where the procurement manager was asked reduce cost by 5% every year, and it was his KPI. The manager once asked me "when the cost is escalating every year, what the management expect from me to do? How the cost could be reduced. Most of the procurement people are in this dilemma. It sometimes become a burden for them to decelerate their performance levels. This is happening when the focus is going to the cost element only. When one start thinking out of the box to create values then one can really identify ways to improve up on cost. So, always consider the total cost of acquisition and compare this with the revenue. So, Frame your actions around the values and gains on a long-term basis.

Here in this want's the most important thing is how one create the best- in-class bench marks and key performance indicators. The KPI's and bench marks are pathways for excellence in creating economy and efficiency. Focus on values and the cost automatically will follow.

Compliance is the mantra and one need to check how much complied is the system; with the vision, mission and objectives, the standards and regulations, the social and environmental matters etc. Procurement system should able to face the customers rather than the vendors; means understanding the customer's needs and wants. This according to me is the real initiating point for procurement. So, I believe make your procurement more of 'customer centric'. I have found fruit in many negotiations when we had the sales personnel taking part, and this create value in the procurement system.



Procurement fulcrum concept

The '**fulcrum concept'** of procurement, demands more from the procurement team. This means that the procurement personnel need to understand; the needs and demands, the commercial risks, the velocity required for performance, the credibility, capacity and capability and the dearth of the suppliers, and also the internal customers; the design and planning, the quality, the manufacturing, the servicing, the finance, the marketing, the personnel, the QHSE etc. Business efficiency, economy and values to a greater extend rest with the procurement operations. So, understand procurement is not just a few transactions alone it is a more matured act of partnering or collaborating or living together with the suppliers.

Strategy for redefining procurement

How to go about with any change or how to innovate or how to be creative in procurement calls for greater understanding about the developments that are happening the supply chain ecosystem across globally. As a prelude what I can tell is **"engage and nurture"** with the suppliers and customers. This is the sign of life or sustainability and growth universally.

I have noticed that procurement failures are mainly due to two reasons one not identifying the risk properly and two not planning properly. Contingencies arise because of these situations created due to various deficiencies in the system. The question before us is then how to go about a redefining strategy.

I would like to explain this is a different manner as:

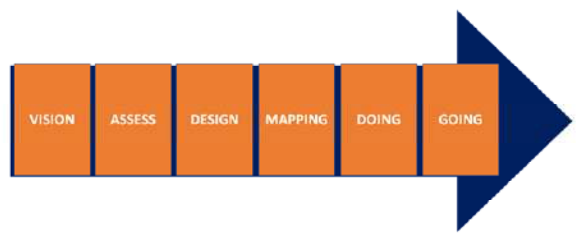
- Creating quality personnel- this process is building the necessary and adequate knowledge and skill in the person. Education and training. It is the culture perse of the business.
- Valuating your systems and processes- This is drafting what 'as is' and finding out the lacunas in the systems and process. It is an as is mapping
- Designing new process- make a landscape of the new 'to be processes. This gives the scheme of the new system that business visualizes.
- Consensus and estimations- this phase is important as one need to find the ways and means by 'wage'; the tradeoff mechanisms focusing on values on long term basis.
- Implementation – work out the systems implementation either in a phased manner or as a revamp. Change if you are fully rational in it.
- Read the scales – Watch the outcome and note the significant changes required. This will help for creating more values and economy.
- Review and modify- see the metamorphosis and what corrections required to make it more adaptable, acceptable and value creating.

There are lots of tools and techniques available in the modern world from RFID to robotics to Artificial intelligence to augmented reality. Also, a host of IoT and enablers, sensors and triggering systems, digitalization etc. The choice and decision lie with the business and how they want to perform in the highly competitive value-oriented markets.

As an example, for higher efficiency and returns in a multinational, multi locational business is to go with digitalized and centralized procurement system with a 'central tower of control'. This is one of the best redefining procurement process. Here everything will be handled digitally. Creating a paperless office and functioning the procurement in the most real time manner with artificial intelligence and algorithms for analysis and decision is one I think the best optimal procurement solution. Put system triggers in place for the best optimization of procurement and getting real time information.

Let's see how to create this environment. The below picture will explain a brief process flow. This of course is not a full ledged solution as the reasoning and flow will change depending on the nature and type of industry and its operations.

- Make the scope of digitalization
- Identify the technology
- Have a holistic outlook
- Do the mapping
- Put integration triggers
- Create working environment
- Going strong with review, control and monitoring.



Digital procurement designing flow

The prevailing procurement ideology; the conventional systems and procedures, the perception and attitude need to be changed. A redesigning of procurement systems is very essential in the modern world of creating sustainable supply chain ecosystems. Focusing on values and with quality personnel one can drive the systems to new heights. In the highly competitive global markets or may be in the future, the space markets one definitely can't survive the pressure of market demands unless not changed. The professionals need to be more innovative with lot of creativity in them. It is the demand of the system for creating a vibrant procurement system in place for future. Let's create the power in procurement by redefining to deliver real value to customers. I will conclude with a quote by Albert Einstein "Try not to become a man of success, but a man of value. Look around at how people want to get more out of life than they put in. A man of value will give more than he receives. Be creative, but make sure that what you create is not a curse for mankind".

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CONTRACTING STRATEGIES FOR PUBLIC AND PROJECT PROCUREMENT

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Success of Engineering & Construction Projects depends on joint working of and close collaboration & cooperation between public agencies or owners, designers, contractors, suppliers and financiers. The project design that captures owner and project goals & objectives to the maximum extent will serve as the guidance for the main prime contractor & other specialty or nominated contractors to build and operate the facility to maximum customer satisfaction levels.

Several types of contracting strategies are used by public andprivate companies to carry out engineering, procurement and construction of projects. Some of them are described below:

Design – Bid – Build: When this strategy is used, the roles of design architect or consultant and construction contractor are clearly separated and public agency has to enter into separate contracts with these 2 entities. Generally design work is completed first before starting tendering & bidding for the construction work and the completed design is the basis for obtaining bids. Whether public or private sector project, the contractual and procurement arrangements are similar and generally the winning contractor employs a selection of specialty contractors to execute the works as the main contractor may lack expertise in some specialty areas or this may be done for cost and in-house capacity reasons. Nominated contractors are specialty contractors recommended by the clients and generally their performance is also guaranteed by the clients and so this is one area less to worry about for the main contractors.

Separate contracts: This strategy is suitable for massive projects where they are split up into manageable sub – projects or packages so that contractors can bid for and execute these packages without financial and resource constraints and consequent delays. This strategy is generally used in massive investment & infrastructure projects like energy or metro etc..

Self-performance: This strategy is suitable for both bigger and smaller public and private sector companies that have a lot of in-house &under-utilized resources and expertise, where they decide to carry out the engineering & construction works by themselves.

Design - Build: In the design-build method, the public agency awards a single contract for both the design and construction of a project. The engineering &construction company needs to havehigh level of in-house design expertise to successfully execute the project or employ outside design agency with good track record and performance history in design of similar projects and good information technology capabilities.

Since the design evolves with construction input, it is understandable that fewer changes and contract modifications will be necessary during project execution and design errors will also be minimized. Moreover construction can commence after only a portion of the design is completed and need not wait for full design completion.

The design – build approach has become more popular now with several variants of this approach employed by companies. Design-Build-Operate contracti.e. DBO is a variation of this method where the contractor operates the project facility after completion for a fixed number of years, getting revenue to compensate for the investment and then turns over project to public agency.

This design-build approach is particularly attractive for large and technically complex projects and fast track construction is possible. Clients need to define the scope of works and project very clearly upfront to avoid changes down the line with this approach.

Design - Build – Finance i.e. DBF is another variation of this approach where project financing is fully or partially carried out by the contractor. Build – Operate – Transfer i.e. BOT could be another variation of this approach.

Design – Build with oversight by project management consultancy company i.e. PMC is another variation of this approach that is used when clients have inadequate in-house project management expertise &personnel.

When employing these strategies, the winning bids and contractors are generally selected using quality based selection approach i.e. QBS or quality and cost based selection approach i.e. QCBS where there are budgetary and financial constraints. So selection of proper contracting strategy is critically important for successful high-value multi-disciplinary project execution and completion, optimizing use of investment and resources, avoiding or minimizing budget & schedule over-runs, claims, delays & project failures. These strategies also ensure and guarantee optimum use of taxpayer money by public agencies with good return on investment and value addition.

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REPORT DISHA 2020

FOURTEENTH EDITION OF DISHA - ANNUAL SIGNATURE EVENT OF IIMM, MUMBAI, A VIRTUAL EVENT

Fourteenth edition of Disha - annual signature event of IIMM, Mumbai, a virtual event , was held from 10th to 12th in December 20,with the theme of “Supply Chain Management –Gearing up for the Next Normal- Indigenisation, Cost Optimisation, Risk Management, Digitalisation”

Disha 2020 was loaded with several exciting features, which would make it one of the most value-adding& memorable events in the history of IIMM.

The event was largest ever with 5 keynote addresses, 39 topic specific speakers,5 panel discussions with 23 panellists. Itwas heldon world class virtual platform with specialised software which provided world class experience and interactive experience .The platform also facilitated 4 simultaneous tracks; Main or general supplychain, EPC, health care & public procurement and access from anywhere across the world, for speakers as well as participants .In addition platform hosted audience opinion poll, exhibition booths and exciting Leader Board challenge with awards to most interactive participants

Disha 2020 had huge list of participants,with more than 1000 registrations from across the world.

The event,which was extremely well received by the delegates, was made possible by tieless efforts of Mumbai team for weeks before & during the event, shaped under constant guidance & motivation provided by Disha 20 convenor, past national president Mr Bala Iyer and Branch Chairman Satish Palekar.

Day one of DIsha20 started with national anthem, virtual lamp lightening & Ganesh prayer. Irrepressible **Surendra Deodhar** anchored the event unfolding on main track

Satish Palekar, **Chairman, Mumbai Branch**, set the context throughhis opening remark that Covid 19 has been a future changing event & Disha 2020 is following this change. He shared on how industry initially responded with cost reductionx3 & employee well-being amongst others and later on reinventing though virtualisation, automation, innovation,productivity improvements, costmanagement, supply chain risk reduction and focussing towards Atmanirbhar Bharat .He also gave overview of IIMM..

Bala Iyer ,Disha Convenor &Past National President shared how covid 19 emphasised need for supply chain rewiring& revival and the changes envisaged by executives like relooking at supplier base ,capacity management ,end to end SCM digitalisation &reskilling of work force to manage digitalisation.

IIMM National President, Mr Malay Mazumdar elaborated on how current crisis has taught us new lessons, emphasising on cost optimisation, to be cost competitive vs. avs. Chinese products .He urged participants to become IIMM members and to join IIMM education courses.

MR H. K. Sharma,Sr, Vice President of IIMM described Disha as an exceptional mega event, postCovid 19 lock down. He stressed on Policy changes made by GOI to support MSME and elaborated on many focus areas like infrastructure development etc.

Key Note addresses-

After inaugural speeches by IIMM fraternity, **Mr Vinay Sharma ,Director of solutions & innovations in Procurement ,Governance Global Practice ,World Bank** delivered his absorbing key note on “**Global Economy & Strategy for building Resilience** “.He elaborated on changing landscape of public procurement in relation to global economy. with supporting data and case studies. He alsodescribed how severe impact of pandemic on many countries ,MSME, many small businessesand how world bank responded to support them ,but lamented lack of timely information in most cases ,even when there was a need for fast response.While expressing need for flexible policy packages, to be able to adapt to changing environment .he showcased how public procurement is critical & strategic tool for development, efficiency, wastage reduction, capacity building & professionalism. As per him .in India 6% saving in public procurement is expected to positively impact GDP by 1%, with 3.5 trillion $ saving potential through productivity improvement alone.

Second Key note wasby Manoj Jain, chairman & MD of GAIL on ‘**Opportunities & Challenges in execution of the Atmanirbhar in Indian Industry’**. His superb speech outlined GOI‘s support initiatives for industry, especiallyMSME,Infrastructure ,ease of doing business, technology collaborations with other countries ,enhancing role of MSME for Atmanirbhar Bharat etc..The challenges felt are liquidity, low exports, reduced investment due to lack of demand, mobilisation of finance.

Mr B Narayan, Group President Projects & Procurement ,Reliance industries Ltd delivered brilliant keynote address on ‘**Supply chain Management -Gearing up for Next Normal’** in his inimitable style.Mr Narayan shared his Jamnagar refinery experience while stressing on resilience. RIL has learnt living with pandemic by strictly following social rules ,focussing on continuity ,advance material planning like pulling from sources at China etc. as soon as Covid 19 started exploding there, Deferred Capex, deferred Maintenance for diverting manpower to production and Digitisation. Digitisation helped manage most problems effectively, like people movement monitoring cameras for ensuring Covid Norms.He urged everyone to prepare for future, while stressing that. Digitisationis enabler for resilience.

Subramanian Sarma, CEO & Managing Director, L & T Hydrocarbon Engineering delivered hiscompelling key note ‘**Reshaping EPC for Next Normal** ‘on 2nd day .After describing impact of pandemic on their operations, he elaborated on actions taken to curtail it ,like remote working ,automation etc.. He further outlined potential focus areas for working towards next Normal as;1 GIG Economy, 2 Extensive Automation,.3Increased offsite construction through modular designs, 4 Risk Management,5 Strategic Partnerships& Alliance,5 More Competitiveness,6 Agile Organisation,8Vertical Integration 9Skill & Capability Building through Technology adoption.

Day three started with key note on '**Strategies for managing leadership position'**by **Mr Tarak Patel, Managing Director of GMM Pfadler Ltd**.In his riveting presentation, Mr Patel first explained, their own strategies for maintaining Leadership position ,like Lean Production Use of low Cost steel vessels, AdroitPortfoliocombinations ,Cross selling Synergies ,and operational Excellence .His suggestions on strategies for Industry are1 Operational Excellence ,2Cost Management 3End to end rolling plans 4 Quality Focus

5R & D Investments 6 Global supplier Base 7 Innovation Culture,8 User Friendly Equipment 9Technology& 10 Relationships Nurture

Fire Side Chat

Mr Manish Choksi, Vice Chairman of Asian Paints shared his excellent insights on supply chain during his chat on **'Digitisation of end to end Supply Chain Process'**with **Mr Ravindra Sharma ,Director Customer adoption, SAP ARIBAw**hile answering well designedquestions fielded by, MrSharma,

Mr Choksi elucidated on what makes Asian Paints one of the best supply chain.in India. He outlined .DNA of his company 1 Customer centric organisation with focus on supply chain 2 Effective logistics system arising out of Geographical spread of Indian markets 3 Agile & demand driven supply chain 4 Fairly local production systems through numerous (24Nos) factories ,contract partners 5 Continuous tracking of products through fully digitally mapped supply chain6 Investing little ahead of Time 7 Process Excellence 8 Partnering with Suppliers and Retailers 9 Process Excellence 10Nurturing Best supply chain ecosystem through capability building at suppliers and Retailers8 Proactive Planning 11Digital tech for resilience 12 Leveraging on existing capability, like their younger team. He showcased numerous case studies to elaborate on his prolific sharing. .He urged participants to invest in technology & Digitisationand continue Growing & Learning.

Main Auditorium presentations

Day 1

Gordon Donovan, Intelligent Spend Evangelist, SAP ARIBA & SAP filed glass, SAP Australiaexpounded on **'Building Resilience in Supply Chain through Digitisation'** through detailed, self-explanatory PPTs, he presented a survey findings which showed that 90% of respondents are planning to increase digitisation spend,with most focussed on cash and going Local or near shoring. .Also 80% of respondents planned to enter newer markets. Mr Donovan identified many areas or supply chain value drivers which could benefit through Digitisation like Transparency, Inventory & Capacity Management enabling real time supply synchronisation through multiple layers of suppliers having full visibility. His Mantra was 'Respond, Recover and Thrive towards new Normal '

'**VUCA world-Norm for Business'** was superbly shared by **Mr Ranjan Sinha, Director Raw Materials & IT Procurement of Tata Steel Europe.** Through use of well-designed PPTs,Mr Sen elaborated on how to.Manage Risk by moving beyond LX1 thinking and moving from L1, T1, and Q1 to R1 Buying. He also emphasised Power of Digitaland moving from Lean to Redundancy. Leveraging partner capabilities, Shared Information, on real time domain,End to End Visibility, Co-managingInventory etc. were some of more inputs for managing in VUCA world. He stressed need for ''Build to Adapt' in place of 'Build to last'

Nextfascinating Presentation was by **Siddhartha Jain, Partner, AT Kearney,** on cryptically titled topic '**Sense and Pivot'.** With adequateillustrativecases, he showcased how to build organisation to withstand though integration of AI &Human, Cognitive Sensing, Agile Squads instead of Departments, and Globalvs.Local

Flexible infrastructure required for Pivoting operating Model..Mr Jain enumerated 3 points for enabling agile supply chain; 1To have balance between cost, service & Risk2Making fact based decisions 3Greater ability to sense, react and respond.

Mr Amandeep Singh Bhan,Sr, VP, Moglix shared his brilliant thoughts on '**Tail Spend Aggregation-Concept of MSP**, He described how with lower overall spend on MROprocurement, it remains neglected in Sourcing. Challenges for tail spend are Poor Data Quality like vague & duplicate SKUs, Fragmented supplier base with majority having very few orders like less than even a order a month ,Spot Buying etc..

Mr Amandeep Singh highlighted through few case studies, on 'How to tame Tail Spend Tiger by digitised MRO Procurement' .through Cleaning Data, Spend Analytics,, and seamless flow through automated process.

Day 2

Dr. Roger Moser,Senior Lecturer, Department of Management, Macquarie University, Australia gave a different perspective on supply chain through interesting talk on 'little fascinating topic ,**Impact of satellite data analytics on future supply chains in India** - Focus on Agriculture and Infrastructure'.He enlightened participants on how Decision support intelligence from space satellites is helping farm produce supply chain planning as well as during natural calamities, through data driven fact based decisions. It alsoprovides intelligence on climate change & for financial industries. Through Geo spatial intelligence it helps in making accurate, preseason& post season forecasts to enable crop planning, likely Agriculture production /output for season for Inventory planning, for disaster operations like during Kerala Floods. Mr Roger stressed upon ethical considerations in all decision making .For Resilience in new Normal his suggestions were use of new material Technology, Digitisation & Biotech /Bio engineering.

Next marvellous sharing was by **Mr Ronan Sullivan,VP, Digital Lead - Energy Industries Division, IMEA (India, Middle East and Africa)ABB**on '**An evolved approach to project execution'**,

Mr Ronon enlightened on how to thrive in today'senvironment, thoughABBapproach on project execution. He explained ABB adaptive execution byusing modular design, & by combining technology and expertise to transform Capital Projects..He also highlighted on how ABB is adapting from nature on efficiency, effectiveness, collaboration, Agility & Vision. As per him, Technology, Methodologies, Infrastructure & capability were 4 pillars of Project Execution. To buttress his points, Ronon also presented some illustrative case studies Project Schedule compressions, reduction in Capex, Fewer hours for project starting

Mr MR Shankar, Director -Cross Category Sourcing, AkzoNobel, Singapore shared his thoughts on

'**Managing Innovation from Vendors'**

He enlightened on his experience on Supplier innovation strategy.. As per him five sources of innovation are start-ups, Academia, Colleagues, Customer and suppliers

Outstanding presentation by **Mr Rangarajan Vijayaraghavan,Practice Head, Chemicals, Infra and Operations, Tata Strategic Management Group** on "Operational excellence in new normal ".followed.

Mr Rangrajan explained his points efficiently using amusing ,but illustrative caricatures .He summed up present environment beautifully by saying 'Decades when nothing happens and there are weeks when everything happens '..After touching upon the challenges like rapid depletion of business margins ,& demands ,reduced supply scale , ,less cash etc. he enumerated opportunities like Digitisations of SMEs ,Growth in wellness & health industry ,integration of product solutions ,etc.As per him 6 key dimensions for New Normal are Operations efficiency for resilience , Everywhere, operations ,Digital control with autonomous nodes rather than central towers, Operational & Community Safety, Customer centricity & Service and Eco Systems or Plat form Business .He stressed importance of Glocal Network or Globally visible , but locally operating. .

Concluding Presentation for day 2 was by **Mr Jaydeep Sagare,Director – Purchasing India, Volvo CE India Private Limited on"Supplier Key requirements and Key measurements"**.He elegantly presented 3 Rs of supplier development at Volvo like right supplier, right relationships and 9 'stopping' requirements like CSR activities ,,clarity on ownership, Maintenance etc..He also enlightened on use of internal & external audits to drive continual improvements .As per him their focus is always on sustainable purchasing .

Day3

Dr.TAS Vijayraghavan, XLRI,Professor in Production, Operations & Decision Sciences. XLRI, Jamshedpurgave insights into "**Use of Data Analytics in SCM Decision Making**". After touching on business challenges like customer demand .expectations, cost pressures, global competition etc. Dr Vijay Raghavan, highlighted on challenges for data analytics like capabilities, Data capture etc.. He then touched upon various types & levels of analysis .Predictive analysis for future prediction based on past data, Prescriptiveor what to do in case of x possibilities and similarly cognitive analysis by mimicking human brain working for responding on supply chain virtualised data .He also enlightened on some decision support tools like AHP, TOPSIS for strategic decisions, MILP Formulations etc. fortactical decisions,& operational decisions .like dynamic lot sizing , TSP,VRD tools .

Next Delegates, got good understanding on**'Steering through E invoicing and E way Bill" throughMr Santosh Dalvi, Partner& Deputy Head-Indirect Tax, KPMG..**

Santosh explained in detail ,government initiatives to digitise back process on indirect taxation in order to ease & facilitate compliance ,like E invoicing .It is supposed to facilitate better tax payer service ,reduce tax evasion through 1 complete track of B2B invoicing 2 ensuring system level matching for Input Tax credit & Output Tax .He also enlightened on key points of E invoicing & E way Bill processes He also shared some key Government target dates for business ,like ERP readiness by 1st Jan , urging participants for making necessary changes in business processes and also keeping track of vendor compliance on E invoicing. As per him government objective is simplifiedcompliance. Phase out GST returns, Data Analytics, Information sharing for determining Income Tax & TDS.

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Lohit Bhatia,President: Workforce Management, Quess Corp Ltdgave brilliant exposition on

"**GiG Economy – Support in Cost Optimization**" "

He defined GIG worker as temporary, contractual or assignment based employees, and explained its benefits for both Hirer/Employer & GIG employee. For business it facilitates 1 Ease of Hiring 2 Availability of diversified pool of talent 3 ease of access to potential worker 4 On demand Availability 5 Timing benefit 6 Possibility of productivity based pay-out 7 Entrepreneurial Prospects. For GIG worker it is better pay out as assignment is out come based and not based on hours worked. Lohit highlighted how GIG population in India is increasing and ours is one of the first countries to offer social security to them.

Next sharing was by **Krishna Prasad, Sr GM(behalf of Mr Jay Kumar, VP Procurement), Bosch India** on "**Strategic Indigenisation and Next Normal"** .Krishna Prasadenlightened delegates on their suppler management through well designed presentation. During Pandemic their supplier support initiatives are, helping out from financial instability, managing work force shortages, production/ Delivery issues for production continuity. He also explained how 3 focused teams, 1 team to work on Supplier production readiness 2 Supplier risk management team, especially to work on supplier finances 3Digitistion like Phantom Tool fitment on supplier machines to track its output data, worked towards supplier support.

Mr Fawzi AlAlwan, General Manager, Rawabi Electric Company, Dammam, Saudi Arabiawhile presentingon"**Business Trends – Development and Future Preparedness for Industry in KSA**" gave excellent overview on Saudi Arabia economy ,its trend ,future plans including on renewable energy , ,opportunities for business Investments in the country. He also presented data showing India as No 2 partner for exports and No 4 on Imports. One of the key objective of Saudi Arabia's Vision is Fulfilling & Healthy life resting on pillars of intrinsic strengths like vibrant Society, Thriving Economy ,and Ambitious Nation.

EPC, Health & Public procurementStreams

Day1 EPC

Dr. Ajit Patwardhan, E&Y spoke on **'New Contracting Perspectives in Turbulent Times**,'

Dr Ajit was quite frank & open in sharing current Indian reality of one sided contracts with risk mostly passed on to contractors., with consequences such as project delays ,cost & Time overruns .As per GOI data, cost overruns are to the tune of 15-28% and Time over run of 25-65%..The Global practice in contrast is to have balanced risk sharing with risk passed on mostly to one who is doing well or better.

As per Dr Ajit Pandemic offers unique opportunity to change to global standards ,as Indian contracting law already has legal provision for .exiting from current contract

Another fascinating presentation was by**Mr Atul Paranjape,Vice President & Head IT & Digital, Larsen & Toubro Hydrocarbon Engineering**on"**Digital Transformation - Opportunities and Adoption Challenges in EPC**" sharing on Digital opportunities and Challenges. Though an interesting case study he, highlighted need for 'AND'' paradigm, insisting that we move away from Safety vs. Cost vs. Delivery to Safety & Cost & Delivery. He also stressed on Multi-dimensional collaboration with other 3 dimensions being Time, Resource Budget &Optimisation. He shared many possibilities through digitisation as everything can be connected, like Remote expert guidance, Virtual Bar Coding, Tracking of workers movements.

Mr Mahesh Joshi, Chief Executive Officer, L&T Valves talkspoke on **"Global Business – Supply Chains under Scanner'**Drawing upon history of democracies, hesuggested newdesign of business which is nimble, flexible& Innovative

Mr Adolph Colaco, Founder and CEO, e2log made a hard hitting case for digitisation through his speech on "**Digitalization of Logistics — Transform or Perish'**.

Drawing upon his experience as well, Albert in his suave & lucid manner emphasised Digitisation imperative. .

Day 1 ended with absorbing panel discussion on '**Digital Transformations in Logistics – Barriers to change and common pitfalls**' 'by high impact panel comprising of

Moderator - Mr Adolph Colaco - Founder and CEO,e2Log, USA

Distinguished Panellists:

Mr Sushil Rathi, COO, Mahindra Logistics

Mr Cyril Varghese, Global Logistics Director – Commercial, Fluor Corporation, USA

Mr Shailen Shukla, Chief Logistics Officer, WIZ Holdings, UAE

Mr Sanjay Rath, Vice President - Logistics Center of Excellence, JSW Steel Ltd,

The Panel discussed on various topics like how do we integrate many processes of internal and external participants in the supply chain in this digitalization

All agreed that Digitalization is in early stage of adoption in global logistics, and discussed on best approach to embark on digitalization journey now and detailed on the maturity level of current technology with thoughts on how the current technology will evolve in the coming times. They also discussed on the extra challenges posed for embracing digitalization in EPC logistics segment.

Mr Sushil Rathi elucidated on the point that why and how today the Logistics Service Providers are willing to invest in so many technologies to meet their different Customer's demand.

As a moderator Adolph was wonderfulwith brilliant, well worded questions for drawing upon panellist'sknowledge.

Day 2 EPC

Mr Giridhar Rajagopalan,Dy Managing Director, AFCONSdelivered talk on " **SCM Challenges in EPC Projects at High Altitudes - Chenab Bridge Project"**

Mr Giridhar explained vividly on every detail involved in building theWorld's Highest Railway Bridge in the most formidable terrain where the access to the site was most limited

He explained the philosophy of Logistics Management in building such a marvel with Integrated Approach with overall planning, methods, equipment deployed at site and proactive coordination with other agencies (within project site and Outside Project Sites). He shared actual site photographs during construction phase and shared the success Mantra as to what goes in in building Marvels.

Mr Mike Wheeler, Senior Vice President Supply Chain and Chief Procurement Officer, Fluor Corporation, USAeloquentlypresented on "**How Global Supply Chains transform Execution**"

Mr Mike explained about Flour Empire and its Global footprints, focussing on Project/Supply chain Execution strategy at Flour. He also shared how SCM Transformation, energy and chemicals vertical at Flour was shifting from Paramedical cost reimbursable to Lump sum cost execution model.. Few of his novel inputs were 1 Need for strong Global Category management organization,2 use of predictive data analytics tool – to predict price up to 12 months in advance (IBM Watson analytics) 3Appeal to all young SCM Professionals to use Data Analytics) 4Governance – Centric SCM Model.

It was now time for exciting**panel discussion on "Enterprise Risk, Resilience and Rebalancing the Global Supply Chain" by** panellist team comprising

Moderator: Mr Ganesh Iyer, CPO, Tata Projects

Distinguished Panellists

Mr Mauro Angeretti - Mega Fitting

Mr. Srivatsa Anchan -E&Y,

Mr. Mahesh Swaminathan, Vice President – Projects and Operations (APAC Region) - McDermott International

Mr Ganesh Iyer while very effective moderating sharedwhat steps his company took to get the migrant labours back to site. Mr Mauro explained how much the pandemic has brought new cost when he restarted his Plant production post lockdown. Mr Anchan emphasised that going digital is the vital push and the answers to mitigate the pandemic kind of risks. Mr Swaminathan lucidly explained what steps did his company take under his leadership to maintain the morale of his employees who were in offshore for an ever-extending period of time.

Day 3 EPC

Another rivetting**panel discussion was on "Navigating a Disruptive Business Landscape for EPC in the Next Normal" by Panel comprising**

Moderator: Mr. Sanjay Joshi- SVP Customer Management-APAC & Country Manager-India, Aker Solutions

Distinguished Panellists:

Mr. Alok Sinha, Head Reliance Project Management Group, Reliance Industries Ltd

Mr.L R Jain- Executive Director and CPO (Marketing) - BPCL,

Mr. Colin D'Abreo - Rhenus Logistics

Mr. Jaap Zwikker, Vice President Commercial Asia Pacific at Heerema Marine Contractors

Alok Sinha explained that With the limitation of resources at construction site & operating plants at RIL, how he ensured safety and quality control, and he threw light on the new SOP's prepared for continued Operations at RIL Jaap Zweekerillustrated that since Heerema have been and will be involved in offshore installation projects in India, he explained the business opportunities that his Company typically offers to Indian supply chain? Colin D'Abreo shared how Project Cargo Volumes were affected during 2020 due to the Pandemic, and the major restrictions he faced during execution

Mr. LR Jain explained the on ground major challenges faced by BPCL during negotiations in a virtual setting. He also lucidly threw light on what was the total estimated procurement by PSE's every year and who were the top five sectors in terms of Public Procurement

Sanjay Joshi conducted the panel discussions very efficiently

Day 1 Health

Mr. Daara PatelSecretary General, Indian Drugs Manufacturing Associationdelivered excellent over view on "**India - Pharmacy of the World**"

Few of his key points shared by him are 1.Indian Pharma industry is 3rd largest in the world by volume and 10th largest by value, which indicates the high competiveness of Indian products.

2. Total India pharma market is USD43Billion out of which USD25B is export.

3. India is the world's largest provider of generic drugs. Its prices are the lowest. E.g. HIV drugs mfd in india costs USD365 for annual treatment v/s USD36000 globally.

4. India caters to over 60% of global vaccine requirement.

Mr. Swapan Malpani, Joint President, Global Head - Procurement and Supply Chain, Cipla Ltdelucidated on "**SCM Strategies in Turbulent Times**"

He highlighted on Challenges at market place.like demand Volatility, working with touch less operations.

Manufacturing Cost escalations due to increased compliance,Logistics disruptions leading to resulting in freight increase of up to 400%

Elaborating on SCM strategies, he emphasised for paradigmshift. From cost centric to competitive advantage, from local optimisation to global optimisation, from reactive analytics to predictive analytics

Some of solutions suggested are - Analytics led decision making, Automation of work processes and Technology platform led scenarios based planning.

Mr. Rahul Agarwal, Managing Director, Kool-Ex Cold Chain Ltdspoke eloquently on**"Challenges in Transportation and storage of Vaccines"**

Rahul shared on details of vaccine and complexity of supply chain later on covid vaccines .

While explaining on challenges for Vaccine logistics he highlighted some facts like, PfizerCovid Vaccine requires a storage condition of -70 degrees,withAstraZeneca /Oxford needing 2-8 degrees. Another challenge will be disposal of Bio waste that will be created.

He stated that GOI has planned a platform for Covid for close monitoring and Involvement and use of Military is contemplated to carry out the vaccination drive in India.

Mr. Anurag Jain, President and CEO, Specialty Chemicals Business, SRF Ltd presented on

"**Competitiveness of India Contract Manufacturing Organisation as an alternate to LCC Sourcing"**

He insisted on Paradigm of cost effectiveness through waste elimination, operational excellence, GOI's initiatives like productivity linked incentives especially for manufacturing API like production linked incentives.

Day2 -Health

Panel Discussions on "Warehousing and IT Support for the Next Normal"

Moderator: Mr. Surendra Deodhar, VP Materials, Reliance Life Sciences

Distinguished Panelists:

Mr. Vikram Paul, Director, Business Development, Rhenus Logistics,

Mr. Biju Mathew, BASF

Mr. Sojwal Vora, Vice President & Group Head, Supply Chain & Procurement, Manipal Hospital

Surendra Deodhar conducted the discussions in very professional manner .Three were questions like, what is next Normal ,its specific factors ,the impact of these factors on industry ,industry response to this impact, and also what are the opportunities created by new normal

Panelists brought out different perspectives from Manufacturing, Hospital and Logistics Service Provider.

Dr. Satish Ravetkar, Executive Director, Serum Institute of Indiaenlightened on "**Life Cycle of a New Molecule – Support from SCM"**

Dr Satish explained that Life cycle of new molecule(e.g. Vaccine) begins with Development of molecule, followed by Pre clinical testing, experiment batches, clinical trial ohase1,2 &3 and finally marketing authorisation by Drug authorities and release of product to the market.

The SCM plays important role in the entire life cycle from arranging raw material, neededequipment, followed by logistics for distribution of the finished product. SCM also impacts the costing and profitability of the product.. He also elaborated on entire process cycle of vaccine development till its market release,

Ms Varsha Kaushal, Director (Supply Chain Management), P.D. Hinduja Hospitalshared her experience on "**Building Resilience in Hospital Supply Chains"**

Hospital industry has played a vital role in this pandemic. The challenges were also many and the biggest of them being major disruptions in supply, labour and workforce.

To maintain a resilient SCM some of the actions taken were,, setting up of covid war room ,creation of rapid response team for materials ,Inventory build-up,, Leveraging on SRM :etc.

Mr. Sanjeev Dharwadkar, Senior Director – Global External Manufacturing – Asia Pacific & Japan Region with Sanofi explained on changes in Pharma industry over past decade. .As per him Pharma industry has gone under tremendous cost pressures due to reduced global product prices ,back pressure from hospitals to reduce prices(to overcome their rising costs),competition from smaller players, and also reduced product life cycle drying up the R&D Pipe line. As companies find more value add from R&D &marketing, more companies are switching to outsourcing of manufacturing, contract Manufacturing.

Mr. D.C. Jain, Promoter and Chairman, Akums Drugs & Pharmaceuticals Limitedshared his thoughts on "**Contract manufacturing - Pharma Strategy for Business Sustainability"**

Currently contract manufacturers or CMOs as they are called, account for 58% of the total pharmaceutical products sold in India, accounting for investment of Rs 38000cr and employ over 3 lac people.

CMO is responsible for the development, DCGI approvals, manufacturing and delivery of quality final products. As per Mr Jain, CMO business is expected to achieve 20% growth with a revenue of USD20Billion by 2025.asCMO acts as a catalyst for business sustainability by offering products with reduced costs, improves efficiency and reduced timelines for launching the product by marketing companies.

Mr. Kunal Shah - Head Commodities and Currencies Research ,Multi Commodity Exchange of India – MCXpresented on "**Risk Mitigation in Supply Chain thru Futures and Contracts**"

Most of the commodities like metal have very high price volatility which impacts the business.

The best way to mitigate commodity price risks is hedging for better. Working capital management, better price discovery on the exchange due to volume & liquidity

Ms Kirti Attar, AssociateDirector, Partnership& external supplies- South Asia Janssen Pharma

Presented on**"Sourcing key Pharma Supplies form India for International Operations**"

He highlighted that Pharma industry is expected to reach USD1.3 Trillion by 2025.Export growth rate is 10.7%. India is a preferred Contract Manufacturing country with value contribution of USD9Bn which is expected to touch USD25Bn by 2025.Cost of manufacturing is 33% less than in US. The Quality and regulatory compliance is one of the best in the world.

Key Growth Drivers are Ageing and growing population, Emerging Medical Conditions& new diseases.

Key Inhibitors are, increasing cost controls, stricter Government Policies etc.

High risk areas being - Vertical integration inadequacy. Dependency on imports for Key raw materials @ 62%, Inventory management and Cost efficiencies.

Focus areas for improvement - Automation and digitalization, skill development, Data integrity Cyber security and safety.

Pharma presentations were anchored superbly by Animesh shah

Day 1 -Public Procurement

Mr. D.P. Sen, Executive Director (Retd), Gas Authority of India Ltdspoke on"Contract Management **and Dispute Resolution Mechanism in PSU Environment"**

He elaborated on entire dispute resolution mechanism drawing upon his GAIL experience. Starting from why disputes arise, how to minimise disputes, preventive mechanism to Indirect initiatives to curtail them..

Disputes arise mainly due to lack of contract clarity, communication Gaps etc. He touched upon GAIL .initiatives like SOP as a part of contract, Samadhan committee for Dispute escalation to corporate level, Vendor coaching program, Enhancing Procurement through GeM including for High Technical items Technical items

Next interesting presentation was by **Mr. Shailendra Singh, Chief Technical Officer, Central Vigilance Commission of India**on **"Evaluating Framework - Least cost to Maximising value - Contemporary perspective".** Actual delivery was done by CTE – Mr Dinesh Kumar on his behalf**.**

He touched upon most basic evaluation parameters and their evaluating parameters like least cost to maximising value. Hehighlighted onGFR Rule21 which insist 'To spend money as if your own money or with financial prudence and also be fair& transparent.. Many case studies were also shared to explain his points. He also shared on plan to issue a concept paper to address compromise in quality in Public Procurement. As per him appointment of consultant should be need based and on specialized jobs only as per directive issued in 2002.

Day2 –Public Procurement

Mr. Vinay Ranjan Mishra, Additional Member Railway Stores, Railway Boardshared on**"Best Procurement Practices in Indian Railways"**

He also shared some Statistics like, 3lakh tenders per year with 75% on of Goods &Services, more than 2 lakh vendors, use of Hub & spoke concept with 250 depots across country, IRSS or dedicated procurement officers cadre, seamless payment system, Reverse auction for above 5 crs order, end to end digitisation solution, Vendor facilitation for bill monitoring and Public Private partnership for Technology..

Mr. Rajeev Kandpal,CFO, Government e Marketplace, Indiatalked eloquently on**"Challenges in Procurement of Goods & services through GeM portal"**

Mr Kandpal shared some history, facts & statistics on GeM.like it started in2016, complete digital platform ,48000 Buyers ,7000 start-ups ,3.5 Lakh MSME ,57000 women etc. .He also enlightened on Funding Scheme, Incubation scheme, Special Incentive, Sector, Element of market access etc.

Day 3 –Public Procurement

Mr. Sudhir Garg, Jt Secretary, Ministry of MSME, Government of Indiadelivered excellent overview on

"Challenges for MSME Post Covid and Government Measures to Mitigate Hardship"

Some of the MSME challenges shared were Payment stuck up during Pandemic breaking the chain, maintaining production without key persons, how to remain competitive in new business environment ,adoption of digitisation .etc. .Mr Garg enlightened participants,.

Look for Government schemes for financial support with CMIT providing80% funding, Facilitation centres set upby various ministry .MSME technology centres, Clusters for digitisation; .He also urged them for new growth areas. He shared some GOI interventions such as Financial packages announced, MSME definition revision, enhancement of Global tenders up to Rs 200 Crs, Focus on Atmanirbhar Bharat,

Finally there was gripping Panel Discussion on "Resilience in Procurement - Atmanirbhar Bharat" by the illustrious panel comprising of

Moderator: Mr. H K Sharma, Additional Secretary, (Retd), Government of India; Senior VP, IIMM

Distinguished Panelists:

Mr. Joideep Roy, Chief General Manager, HPCL

Mr. Ambika Prasad Tripathi, Executive Director - Chief of MM Services, ONGC

Mr. Sanjay Agarwal, Director (PPD), Department ofExpenditure, Ministry of Finance

Mr. Ujjal Datta, Executive Director, Nuclear Power Corporation of India Ltd

Rear Admiral Pradeep Joshi, Indian Navy (Retired)

The key points of discussions were

1GFR Amendment in 2017 to take care need of Atmanirbhar Bharat and incorporating best procurement practices in world.2Atmanirbhar Bharat is not looking totally inwards or being protectionist but idea is to be competitive in Global market.3 ender rules changes to bringthem in line with 'Make in India' objectives.

Panelalso identified 6 factors for procurement resilience: 1Availability, 2Discoverability, 3Operability, 4Responsiveness, 5Delivery, 6Product/Services Information

Mr. Sanjay Agarwal clarified that there is no banning of Global Tender below 200 Cr but approval is required from the Cabinet Secretary (CS) to control unregulated import. Also Registration of suppliers from the neighbouring is mainly from the security angle .Each Panellist shared actions, like Mr Tripathi on ONGC efforts on Indigenisation, while Rear Admiral Joshi outlinedIndian Navy drive including making of Nuclear submarine, with Ujawal Datta sharing on Indigenous Nuclear plant at NPCL.

Mr HK Sharma, Moderated discussions, superbly.

The event proceedings were anchored brilliantly by Surendra along with Animesh shah, Ms Simaran Matharu, Bala Iyer &Ganesh Apte to ensure event flowed as per schedule.. ..

Disha concluding session was in main auditorium, when Disha Souvenir was released at the hands of Mumbai Branch Chairman, Mr Satish Palekar, Bala Iyer and Surendra Deodhar. Announcements of leader Board awards were also made. Mr Satish Palekar profusely thanked all speakers, Panelists, Delegates, Sponsors, and IIMM Mumbai team

INDIAN INSTITUTE OF MATERIALS MANAGEMENT
MUMBAI BRANCH
ANNUAL SIGNATURE EVENT
VIRTUAL
DISHA DAY-2
2020
PHARMA DAY
FIRESIDE CHATS
EPC
PUBLIC PROCUREMENT

INDIAN INSTITUTE OF MATERIALS MANAGEMENT
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EPC
THANKS GIVING
PUBLIC PROCUREMENT

PACKAGING FOR COST OPTIMISATION:

HARSHVARDHAN SINGH

" The industrial revolutions can be characterized by four distinct phases of maturity and emphasis..."

INDIAN DOMESTIC AUTOMOTIVE MARKET FOR PACKAGING:

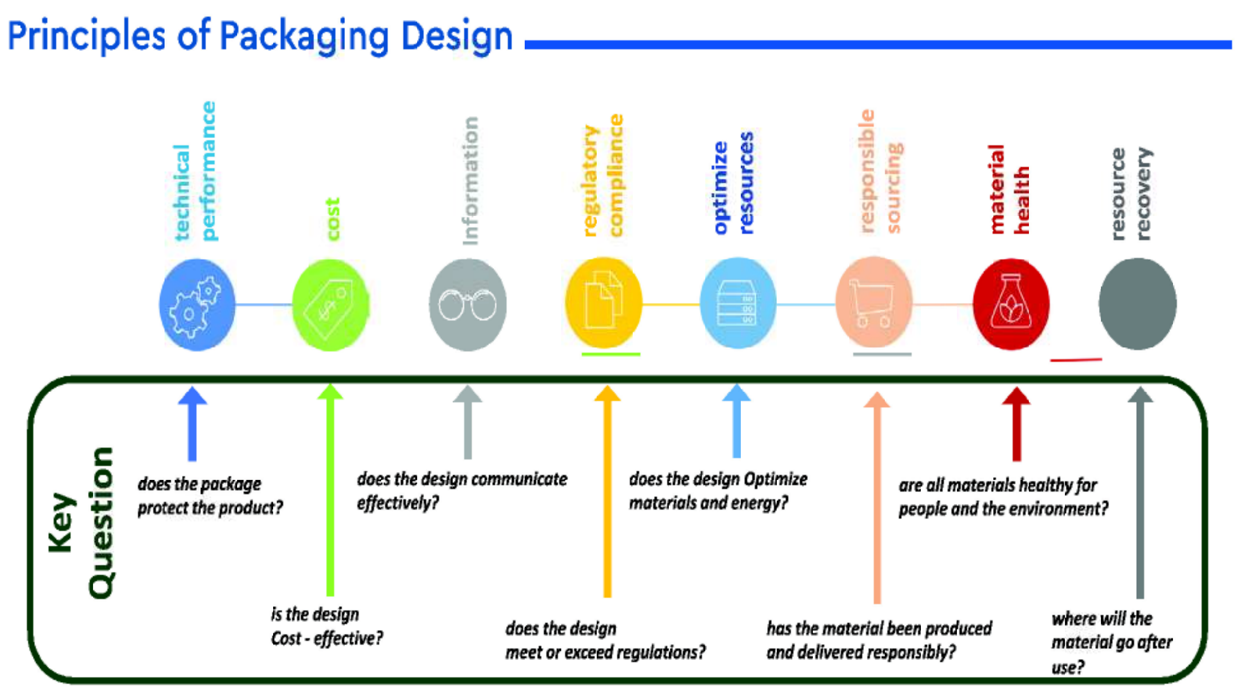
Key Market Trends - *Automotive Industries and its complex supply chain... :* The automotive industry has evolved into an industry of complex supply chains and networks, requiring many activities to be streamlined and error-free to avoid abnormalities. Returnable transport packaging is aiding supply chains in the automotive industry by providing secure and eco-friendly methods to manage the flow of materials and information. Gross Turnover of the Automobile Manufacturers in India for

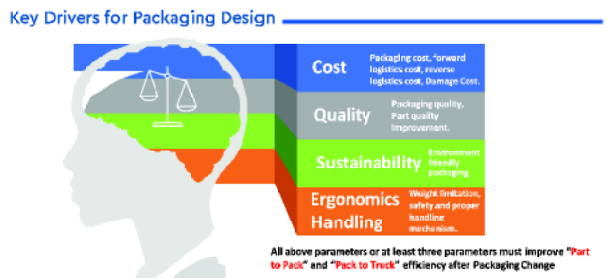
2016-17 was (In USD Million) 67,724.

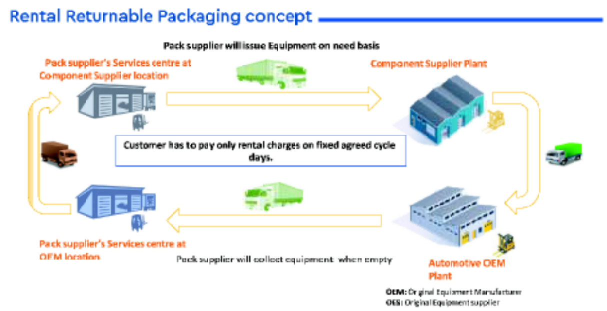
The Indian returnable transport packaging market was valued at **USD 531.4 million in 2018**, and it is expected to reach a value of **USD 846.5 million by 2024**.

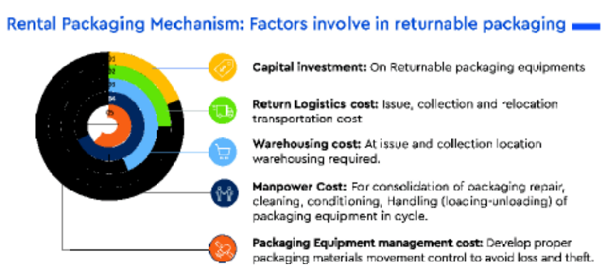
Due to increase of raw materials cost in expendable packaging like wood & paper, environmental pressures to eliminate waste from manufacturing as well as supply chain and government regulations are anticipated to make returnable transport packaging an attractive and profitable option in the region over the forecast period.

The rising cost of packaging, damage to goods in transit, availability of packaging material, and cost of disposing of the packaging material has now brought the attention of companies to sustainable packaging, and hence, businesses are realizing the importance of having a sustainable and low-cost packaging system in place.









Factors involve in returnable packaging

1. **Capital investment into packaging materials and reusable dunnage:** For any returnable packaging project, we need upfront investment on all packaging items included large foldable container, inner dunnage and layer pad. Quantity of packaging items will depend on no of box set required per day X no of cycle days of the specific project.

Factors to be considered in capital investment:

- Try to increase no of parts per pack to reduce no of packaging required per day.
- Try to reduce/optimise cycle days of flow to reduce no of packaging set required in system.
- Try to go with market available standard packaging to avoid project based sizes which will
- invite dedicated investment.
- Try to understand project life precisely to decide on packaging selection to avoid low or over life packaging selection for better packaging amortisation.
- Collapsible packaging box to be consider to optimise return logistics cost.

2. **Return management cost for empty packaging materials:**

a. Include logistics cost for issue of empty packaging to component manufacturer (T1),

b. Collection of empty packaging from end user (Oem's) to local warehouse

c. Relocation of all empty packaging materials to issue location service centre.

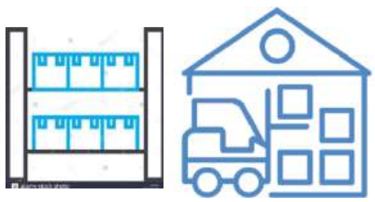
3. **Warehousing :** We required warehouse near issue location (e.g. T1 component manufacturer) and collection location (e.g. OEM's) to manage flow of packaging materials. This warehouse will enable us cleaning of packaging equipments running in pool, repairing of damage packaging equipments, protection of packaging equipments from open atmosphere like direct sun, rain, dirt etc, theft & missing.

2. **Man power cost :** Man power we required to manage these packaging equipments through supply chain.

- Try to design foldable, nestable or collapsible packaging to optimise return logistics cost and warehousing space cost.

- Try to go with full truck load return movement to reduce per packaging set return logistics cost - consolidation of packaging for full truck load.

It will also helps us in consolidation of empty packaging to achieve FTL movement of empty boxes to improve optimisation of transportation cost



For stock audit at each and every stages including customers as well as OEM's & reconciliation. For Loading and unloading of these packaging at issue, collection and relocation point.

Favorable Conditions for Reusable Packaging

Under What Conditions does Reusable Packaging offer the greatest advantage ?

When companies have conditions such as those listed below, they may be in a good position to take advantage of the savings offered by reusable packaging.

Such conditions include:

- High-volume shipments
- Frequent deliveries
- Shorter distances
- Dedicated delivery provider
- High volumes of solid waste
- Significant need for cleanliness/hygiene
- Frequent shrinkage or product damage
- Expensive expendable packaging
- Underutilized trailer space in transportation
- Inefficient storage/warehouse space
- Worker safety or ergonomic issues
- Need for unitization

Concerns about Reusable Packaging : Worldwide, the supply chain is still dominatedexpendable packaging. Reusable packaging is difficult to cost-justify

- Where return **logistics costs are high** due to long distance or low volumes.
- Another issue of concern in some applications is **pallet and container theft.**
- **Reusable packaging and pallet loss** is another barrier to success.
- Upfront **high capital investment** in returnable packaging by any company is also a challenge.
- Lack of **product life and volume visibility due to volatile market condition.**
- Diversion of focus of any manufacturing company from there **core activity** to return management of packaging
- Multiple delivery destination points

Precautions to be taken in returnable packaging

Avoid long inventory of packaging filled will materials: Returnable packaging will be efficient if we will keep on rotation the packaging. If we use these returnable packaging for storage, warehousing over and above agreed time, then it will affect flow badly like shortage of packaging materials at supplier location, incur premium logistics cost by fast movement of under utilised return transportation vehicle to fulfil packaging shortage in system.

Avoid sophisticated packaging design, as it will increase handling time and repair, replacement frequency due to increase in damage rate.

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ACCELERATING TO THE NEW NORMAL IN SUPPLY CHAIN MANAGEMENT

RTN N S GURJAR, PRESIDENT
CONSULTING CONNOISSEURS, MUMBAI

"The advantage that most locations posed, failed to continue post the GST implementation.

The most important development, post the outbreak of the pandemic, was in the field of supply chain. Right from agricultural and food supply, to manufacturing products, and a whole lot of services, all have transitioned into new supply chains and service chains. This was also expected, and some of the key drivers have been:

1. The sudden shock in the multiple waves of the lockdown implementation in India, which was triggered by a notice period of just 4 hours.
2. A sharp demand-supply gap, especially in the essential goods sector that required a lot of modifications in the way people had to access markets. The extreme constraints imposed by travel required a newer form of supply chain monitoring. These remained throughout the lockdown period in various forms, requiring quick innovations at every level.
3. The fast spreading pandemic that has been requiring minimal contact with persons and changing the marketplace.
4. A conscious dismantling of the existing agricultural supply chain infrastructure (notably the APMCs, etc.) to move to a free market economy.
5. A general shrinkage in the economy that has been deemed as the worst technical recession the country has every phased.

While these issues may sound provocatively negative, the impact has been profound and the plethora of opportunities that they brought in have been too many. The main aspect has been that they have been having a very positive impact on accelerating the concept of a newnormalinsupplychains.In my book titled Smart Supply Chains 3.0: Build, Manage and Upgrade key changes in the supplychain domain have been covered across a series of case studies. These outline the vast majority of advancements and the generic nature of supply chain problems.

In this article, we would touch upon a few of these changes to give a broad-based perspective to the 'new normal', as we call it.

COMPLETE REVAMP OF SUPPLY CHAINS : The implementation of GST had triggered a massive transformation in the ways organizations viewed on their warehousing strategy. The advantage that most locations posed, failed to continue post the GST implementation. However, the lack of proper infrastructure in terms of roads, buildings, etc. at alternate locations, followed by the availability of manpower, proved to be strong deterrants to the complete overhaul of the system. Hence, the impact wasn't as drastic as was expected. It continued on an ongoing basis.

With the pandemic, however, several issues were observed. There were breakages in supply chains, particularly those dependent on imports. Strong dependence on China came to the limelight. Plus, the cost of production was another major component. But with both explicit and tacit import curbs, several companies moved out of China to other alternative destinations. Further, the decision of in- house manufacturing vs. Outsourcing has received new focus and attention. Hence, one of the skillset for the budding supply chain management is to understand these strategic factors. With the implementation of a new trading block called RCEP, its going to be critical for the supply chain manager to understand its long-term repurcussions in the organizational supply chain. The pandemic and the policy gamut, together have proved that no business is immune and no problem is trivially solvable.

Complete revamp of supply chains requires a strong understanding of Modeling and Simulation based Techniques. While these techniques have been known, they are being used today in the context of new technologies, creating new boundary conditions, shifting bottlenecks and inclusive analysis. In fact, the transition from costs to resilience-centric approaches is a direct fallout of the modeling and simulation analyses.

CONTACTLESS SUPPLY CHAINS : A lot of organizations have used this opportunity to optimize the balance between man and technology. One of the direct fallouts has been in the area of contactless supply chains. With minimal human intervention, contactless supply chains are transforming the operational landscape with fast-tracked digitalization and automation. The key enabling technologies for these changes are in the areas of Machine Learning, Artificial Intelligence, Internet of Things, Robotics and, to a lesser extent, Artificial Neural Networks. Most of these technologies have become cost-effective over time and have shown a greater reliability with new generation sensors and transducers.

SUPPLY CHAIN PLANNING : At the operational level, Machine Learning and Internet of Things have made the digitalization enter a new generation by itself. Real Time Management, which has been a problem area in classical supply chains, has now become a relatively easy objective to achieve. While the digitalization is one of the pillars of moder supply chains, the decision making still relies on traditional approaches. In other words, modern technologies are unable to work around supply chains classical problems.

These problems stem from the queuing, modeling and simulations faculties. While modern technologies have a statistical approach, the problems of supply chain planning are better solved using causal approaches of modeling and simulation methods. In the current state-of-the-art technologies, causal approaches in supply chains are yet to be fully operationalized. These, therefore, are key areas for the modern practitioner to focus on.

CONTRACTUAL COMPLIANCE : New types of contracting have emerged recently. In the new normal, with the thrust on non-contact based management, trust enforcing systems are being experimented with. In this regard, BlockChains are being used in ensuring contractual compliance. The digitalization of contracts using BlockChains, helps both the buyer and the seller to come to a common denominator. With Internet of Things, the capture of data is relatively simple. And with BlockChains, the modeling of the data into contractual terms can be done on a real time basis.

That being said, challenges exist in the vast and complex variety of contracts that exist today. Not every contract or contractual clause can easily be translated into numerical and digitalized elements. A new genre of applications using Big Data are now being used for the same. Big Data, together with Machine Learning and Artificial Intelligence, are being used to assess the way contracts can be managed more efficiently, in digital format. Natural Language Processing is also another technology, a subset of AI, that is being leveraged for this purpose.

OPEN SOURCE SOLUTIONS : In the medium-term, open source platforms are replacing traditional ERP systems. The costs of ERP systems management are prohibitively high and Open Source typically speeds up the implementation. More importantly, they are easy to augment with new technologies. The modern day practitioner must try to get a good feel of open source systems like Ubuntu or Linux to ensure that he understands the open source technology layers first hand. Traditionally strong commercial software like Windows and MacOS aren't open source. Therefore, the understanding of the open source architecture and its functioning is possibly a necessary trait for the practitioners today. Moreover, a lot of Machine Learning software, Data Visualisation software, etc. run seamlessly on Linux and it would also give the practitioner a better application perspective.

PLATFORM-BASED INNOVATIONS : With ERP and Advanced Planning Systems, the entire supply chain management has been developed over a layered architecture. One of the popular architecture models has been the Purdue model for supply chain and operational IT systems. However, in the past 4-5 years, many drastic changes in technologies have forced people to move from the traditional ERP backbone based supply chain solutions, to newer platform based innovations. A platform- based solution enables that the organization can easily go for large changes in a short time. It also makes the in-house IT light, adaptable and compatible across a wider array of applications, devices and add-ons. More importantly, platforms also provide an equally robus alternative to data storage systems, that has been the key thrust area of ERP systems in the past. In other words, seamless integration, flexibility and a wide range of choices are key to supply chain solutions. The new normal is seeing a larger set of implementations in this area. Big changes: Light, Adaptable, Compatible, Data Storage Systems, etc.

OTHER FALLOUTS : Two other areas that have been impacted are also required to be understood. The first area is that of New Designs and Technologies for products. One is seeing an increased thrust on developing products that operate more on making the environments safer. These include sterile material for products, designs that ensure easy levels of sanitisation, etc. The material and the use of advanced robotic technologies are rampant.

The second are is that of the changing landscape when it comes to Education and its RoI. Traditional educational qualifications like the MBA are unable to justify their RoI today. With self assessing and self stabilizing technologies enabling supply chains, the need has increased for lower skill levels. A relatively large vacuum in the middle management is likely to take place. Manpower for logistics operations at the ground level would continue to be a requirement for the times to come, however, management personnel may be tapered significantly. The current requirements in most companies stem from the talent required to enable this transition. However, once transformed, the manpower is likely to be tapered significantly.

The new generation professional might be better-off with certifications that have a shorter term of applicability and are quicker to obtain than extensive programs that could compromise a lot of their parameters.

SUMMARY : The book on Smart Supply Chains 3.0: Build, Manage and Upgrade provides a comprehensive overview of the transitions that are coming into supply chains of the future. The new normal has accelerated some of these requirements and have given a new perspective to the direction of development. Several large companies have been working on these areas in the past few months and the requirements for practitioners who understand both the paradigms, the technologies that are going behind it and the business dynamics of the same, would be the ones who would ride the wave to success.

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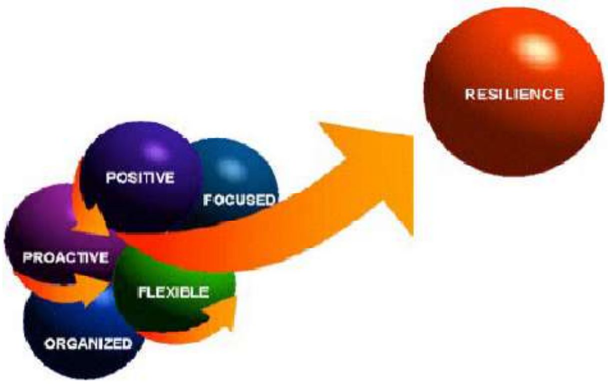
DEVELOPING PERSONAL RESILIENCE

RAVINDRA JAIN
SR. MANAGER (SBU-AFS SOURCING)

organizational change creates the same dynamics that life crises do.



Resilience is the 'rubber ball' factor: the ability to bounce back in the event of adversity.

Human energy is the currency of change. Mental, emotional, and physical energy are required to shift minds, hearts, and bodies into new patterns. Resilience—thriving in the midst of turbulence—ultimately comes down to how people use their energy when they encounter disruption.

People are fundamentally resilient. One way or another, we pick up and carry on after just about anything—natural disasters, broken hearts, even the Holocaust. Most organizational change is relatively small in comparison to the challenges that people have overcome in other arenas of life.

Why, then, do we sometimes struggle with it so?

In many ways, organizational change creates the same dynamics that life crises do. When people make decisions that affect us, we experience a loss of control. When those decisions require us to change established patterns of thinking and behaving, we grieve the loss of the familiar and we get frustrated when our mental models of how to operate no longer work. We expend energy to help us work through the emotions and build rational thinking skills, physical and mental health, and your relationships with those around you.

Resilience is not necessarily about overcoming huge challenges; each of us faces plenty of challenges on a daily basis for which we must draw on our reserves of resilience.

FOUR INGREDIENTS OF RESILIENCE

There are four basic ingredients to resilience: Awareness - noticing what is going on around you and inside your head;

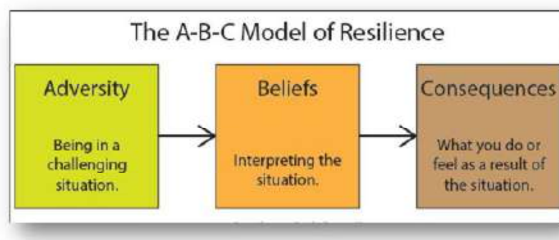
Thinking - being able to interpret the events that are going on in a rational way;

Reaching out - how we call upon others to help us meet the challenges that we face, because resilience is also about knowing when to ask for help; and

Fitness - our mental and physical ability to cope with the challenges without becoming ill.

THE LINK BETWEEN THOUGHT AND EMOTION

Our page on **Recognising and Managing Emotions** talks about the importance of applying reason to emotion to support your decision-making. But how you think can be affected by your emotional response to the situation, and part of being aware is understanding this and recognising it when it happens.



Psychologist Albert Ellis created a simple model for this, which he called A-B-C for Adversity - Beliefs - Consequences. This model sets out a process:

As our page on **Managing Emotions** makes clear, sometimes an emotion is so visceral that there is no time to go through this process rationally: you simply react immediately to the situation by running away, screaming, or similar. But your brain has almost certainly gone through the process subconsciously.

It is also important to recognise that certain thoughts lead to certain emotions.

The benefit of understanding that these thoughts lead to these particular emotions is that by identifying the emotion we feel, we can understand what our subconscious thought processes may be. This may not be obvious otherwise, and it will help us to take the right action to address the problem.

THINKING TRAPS

So-called '*thinking traps*' are traps into which we can fall in our thinking, usually at the 'B' stage of the A-B-C model above.

Thinking traps are effectively assumptions about ourselves or the situation, made without examining the evidence, and are usually unhelpful.

The signs that you are falling into one of the thinking traps include the use of phrases like 'never', 'always', and

'I...they...', for example:

"I just can't do maths"

"I've never been able to do things like that" "They've taken it away from me"

If you're thinking that this language sounds very childish, you're right. Take a look at our page on **Transactional Analysis** to understand more.

You need to be alert to falling into one or more of these thinking traps when you are developing your beliefs about a situation because it could prevent you from acting effectively: in other words, thinking traps can prevent you from acting with resilience.

IMPROVING RESILIENCE THROUGH THINKING

Having considered the elements of resilience, and the process of responding to situations, it may now be helpful to talk about what we can do to help develop resilience.

There are quite a number of useful techniques here, including:

1. Gathering More Information

You want to engage the rational part of your brain in your decision-making about the situation. One of the best ways to do so is to actively gather more information on which to base your decision. (See our pages on by asking questions of others or looking something up, will help to ensure that you react appropriately to the situation.

2. Alternative Scenarios

We're all prone to imagining the worst.

Your boss asks to speak to you, and you immediately imagine that you're about to be fired. You get ready to defend your recent performance...

...but when you enter her office, it turns out that she wants you to know that she's pregnant and you're in line to take over her responsibilities while she's on maternity leave, with a consequent pay rise.

Decision Making advice).

for more general tips and Your child's teacher asks for a quick word after school. You immediately assume that the child is in trouble ...

Example :

Suppose that you see a snake by the side of the path. Your immediate reaction might be fear:

"A snake! It must be poisonous! I'd better run away!" [A-B-C]

But pause for a moment and gather more information. It might be dead. It might not be poisonous. It might be cold, and therefore only capable of moving very slowly.

There are all kinds of reasons why you might not need to run away.

...but no, they just fell and cut a knee at lunchtime. No harm done, but the school has to let you know.

Imagining the worst is also called catastrophizing, and it is surprisingly common.

There is a very easy way to deal with it, which involves generating alternative scenarios in your head:

1. **Imagine the worst - let your imagination run riot. What could have gone wrong? What might have happened?**

A crucial aspect of gathering more information is to think about alternative explanations for the situation.

Your brain, based on your experience and your belief system, will present you with what it considers to be the most obvious explanation.

But it may not be correct!

Thinking about alternatives, and then checking those against reality, perhaps

2. Now think about the best possible outcomes. How good could it get?

3. Finally, think about the most likely outcomes - probably somewhere between the two. Make a plan for how you will respond to that.

These two strategies, gathering more information and looking for alternative scenarios, will help you to develop your resilience.

You will become more aware of what is going on around you, and inside your head (awareness). They will also help you to apply rational thinking to the situation, climbing out of any thinking traps into which you have fallen, and understanding and rationalising your emotional response to a situation.

IMPROVING RESILIENCE THROUGH REACHING OUT

No man is an island, entire of itself. Every man is a piece of the continent, a part of the main...

-John Donne (English Poet)

There is no shame in asking for help. We all need help now and again, and many of us function much better when we are working with others.

A good part of resilience is knowing when and how to ask others for help, reaching out to those with whom we have relationships to resolve the problems with support.

Take a look at our page on **Transactional Analysis** to explore how you can ask for help as an adult, rather than feeling that you are returning to 'child' status by doing so.

IMPROVING FITNESS AND HEALTH

The final element of resilience is physical and mental health.

CONCLUSION

Resilience is a multi-faceted capability.

To face challenges and respond appropriately can require us to draw on all our resources, both internal and external, including our personal relationships.

The good news is that improving our resources can help to develop resilience, and there are many ways in which we can do that.

(Compiled from Google Articles)

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INITIAL PROVISIONING OF MRO ITEMS (SPARES, CONSUMABLES & SUPPORT ITEMS)

Part One – Introduction

CL ROY, CSCP[LIFE TIME DESIGNATION], LIFE MEMBER - IIMM (BANGALORE)
CHIEF CONSULTANT, RA CONSULTING, BANGALORE
roycl@raconsulting.co.in

1.0. Introduction : It is an established fact that for any man made End Item (Equipment, System, etc.), to carry out its intended function throughout the life span at the designed performance level, within the constraints of the operating environment, has to be maintained properly. {"End Item: Final product and / or combination of component parts which is ready for its intended use". #4 Bhardwaj MK, 2002, Pg 93}. To conduct proper maintenance, the genuine spares of the end item have to be made available when needed, in the required quantity, at the place of maintenance execution. This is accomplished by procuring the Spares, Consumables and other Support items (MRO Items) as needed, based on timely placed Purchase Orders (PO) on the approved vendors, taking into consideration of the relevant Lead Times (LT).

The procurement of MRO Items is carried out in three types of purchasing depending on the particular stage of the life cycle of the End Item. The three types are:

1. Initial Provisioning (Initial Sparing Provision or First Time Buy [FTB])
2. Regular Replenishment and
3. Last Time Buy[LTB] due to End Item being declared Obsolete by Original Equipment Manufacturer [OEM].

This article introduces and explains the concept of Initial Provisioning with respect to Spares only, as example, because all Parts, Unique, Standard and Commercial, Consumables and Support Items related to the End Item also follow the same Procurement processes.

2.0. Types of Procurement of MRO (Maintenance, Repair and Operations) Items

2.1. Definitions of Key Terms Used in this Article

MRO Items are those Spares, Consumables and Support Items needed for the Proper and Safe Operation and Maintenance of Production Facility consisting of End Items such as Plant, Equipment and System and its Auxiliaries. These Items are needed for Running Maintenance, Preventive Maintenance, Corrective Maintenance and Operation of End Items and also required for facilitating and or accelerating the Chemical Manufacturing processes, directly supporting and or aiding Production Operations.

In this article, to describe the concept of Initial Procurement, the case is limited to Spares only as it has all the characteristics relevant to the concept. Moreover, all are aware of the uniqueness of Spares and their importance in running the production facilities. A definition of Spare at this juncture is quite essential:

Spares can be the Items such as individual Parts, Modules, Subassemblies, Assemblies, Functional Units or Equipment Unitsthemselves and uniquely identified as per the Bill of Materials (where used type) of the Actual Equipment or Systems (End Items) in service, and kept in Stock for future replacement of the originally installed Item removed during Maintenance and Repair of Equipment, Systems or Spares themselvesdue to Life Expiry, Worn out, Weakening, Damage or Malfunctioning. The Spare should be Form, Fit and Function interchangeable completely with like Item removed, without any attachment or modification of the Item, Equipment or Systems and compatible to be integral with the Equipment or Systems in which the Spare is to be installed. Further the Spare may be repairable or non-repairable. Spares can be either Unique Captive Parts or Standard Parts or Commercial Parts. Spare Part, Spare Item, Service Part, Repair Part and Maintenance Part are synonyms of Spare.

Support Item: Any Itemother than Spares (i.e., tools, test equipment, support equipment, sundry materials etc.) required for anEnd Item'sproper and safeOperation and Maintenance which includes Running maintenance, Servicing, Repairing and Overhauling.

"Consumables: Supplies such as fuel, lubricants, paper, printer ribbons, cleaning materials and forms that are exhausted during use in Operation and Maintenance" (#3 Joseph D. Patton, Jr. 1984, Pg 2).

2.2. Three Types of MRO Procurement

An equipment (End Item) for example, has three distinct stages in its life cycle when it is in use in the premises of an End User. And they are Initial Operations Period (after Installation and Commissioning), Normal Operations Period and the Retirement Period. Retirement can happen on two counts:

- Declaring the Equipment as Obsolescent by End User for being replaced with another **Type** and

- Declaring the Equipment as Obsolete by the Original Equipment Manufacturer.

  In case of the second situation, the End User has to procure Spares for a period during which a new Equipment has to be procured and installed. This type of purchase is termed Last Time Buy (LTB). This duration can be several years. In this article, this situation is considered for explaining the types of Procurement of MRO Items.

The three types of Procurement, are explained and depicted in the below figure 2.1.a.which is self- explanatory.

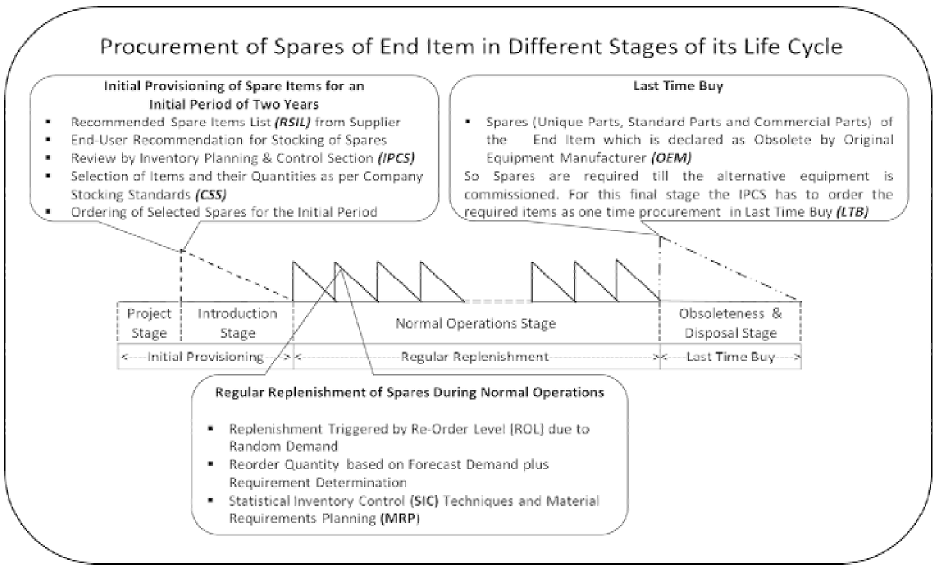

Figure: 2.1.a.

2.3. Initial Provisioning of Spares

Initial Provisioning is also known as "Initial Sparing Provision" and "First Time Buy (FTB)". These spares are normally required in the initial period "to support the installation, commissioning, and transition to operation of that equipment" and this period is normally considered to be two (2) years. (#2 Philip Slater, 2017, pages 100 and 101). Several definitions of Initial Provisioning aregiven by #1 Douglas K. Orsburn, 1991, Pg 318; #4 Bhardwaj MK, 2002, Pg 135; and #5 James F. Cox III and John H. Blackstone Jr., 1998, Pg 77).But the definition given by #3 Joseph D. Patton, Jr. 1984, Pg 11, is comprehensive and is comparable with that of US Department of Defense. The definition is as follows:

"Provisioning: Process of determining and selecting the varieties and quantities of repair parts, spares, special tools, and test and support equipment that should be procured and stocked to sustain and maintain equipment for specified periods of time. It includes identification of items of supply; establishing data for catalogs, technical manuals, and allowance lists; and providing instructions and schedules for delivery of provisioned items" (#3 Joseph D. Patton, Jr. 1984, Pg 11).This definition of the highly critical business process has several constituent sub processes which are shown below to attract special attention:

- Identification of items of Initial Provisioning
- Selecting the varieties and quantities of Items for Initial provisioning:
  - Spares,
  - Special Tools,
  - Test Equipment
  - Support Items
- Establishing complete, accurate and consistent data for:
  - Material Catalogues
  - Technical Manuals
  - Initial Inventory Control Parameters for two years
- Providing instructions and schedules for packaging, transporting and delivery of provisioned items.

3.0. Process of Initial Provisioning of Spares

New Spares are introduced into User's inventory by Initial Provisioning only. Ideally the required spares should be made available along with the arrival of new End Item (Equipment / System). Then only it can be ensured that new End Item will be Operated, Serviced and Maintained properly so that the intended benefit can be obtained from the beginning itself. The need for spares can occur at any point of time after the installation of the new End Item – immediately or at a very later time. This is because of the very fact that any man-made End Item needs Spares to replace worn out or failed or damaged parts. The effort for Data collection for Initial Provisioning of End Items especially in the case of Projects, has to be conducted from design stage itself between Customer and Supplier as it is "an iterative processthat should start in the concept phase of the product development and continue throughout its development into the postproduction phase" (#1 Douglas K. Orsburn, 1991, Pg 194). Manufacturer's Design Engineering has the responsibility to address and incorporate the required level of Reliability and Maintainability into the Equipment / System, as demanded by Customer, if it is Made-To-Order.Of course, the End User has the responsibility to provide all the required data to the Contractor / Manufacturer with respect to the requirements, operating scenario, government regulations and the environmental conditions. However this practice is achievable only in the case of Projects in which the Customer and the Manufacturer participate in unison.

The processes of Initial Provisioning of Spares are shown in figure 3.0.a. The departments / sections involved in this crucial process include Projects, Maintenance, Material Control, Purchase and Warehouse. The participation of all these departments / sections is made mandatory to ensure the procurement of only those items which are expected to be consumed. And even then, there is no guarantee to achieve the objective fully. Philip Slater has observed in his book Spare Parts Inventory Management, that "It is common in storerooms and warehouses all over the world that parts that are written off as obsolete were purchased as part of the first-time buy and then never used" (#2 Philip Slater, 2017, Pg 102). He continues to write that "This is not to suggest that all two-year spares packages are wrong or are oversupply, but companies do need to spend an appropriate amount of time and resources to ensure that they purchase what they need for when they need it".

This author had opportunity to observe the same scenario narrated by Philip Slater when Inventory Analysis and Review were conducted under his leadership, in Oil and Gas companies in the Middle-East and South-East Asian countries. In one instance, it was observed that there existed 14% of items which had not moved for more than ten (10) years. On detailed examination, it was gathered that 92% of these non-moving items had been procured along with various equipments. At the end of the analysis, 76% of the non-moving items were declared unwanted in consultation with the End Users and scrapped as these itemswere unique spares of equipmentsalready removed from service.

The above fact establishes the importance of proper implementation of Initial Provisioning of Spares and other MRO Items. Strict compliance with the Standard Operating Procedures (SOP) laid out in this regard, will ensure the prevention of unwanted items creeping into the MRO Items Storeroom which in turn should reduce the Non-moving and Obsolete Items at a later stage.In this regard, #3 Joseph D. Patton, Jr. 1984, Pg 71, warns "Remember that over a product's life cycle, replacement parts may add up to a large percentage of the total cost. The time to pay attention is during the early phase of design or before the product is purchased". In this scenario, the Customer is strictly advised to prevent unwanted items from finding place in the storeroom when acquiring either Made-To-Order or Made-To-Stock End Item.

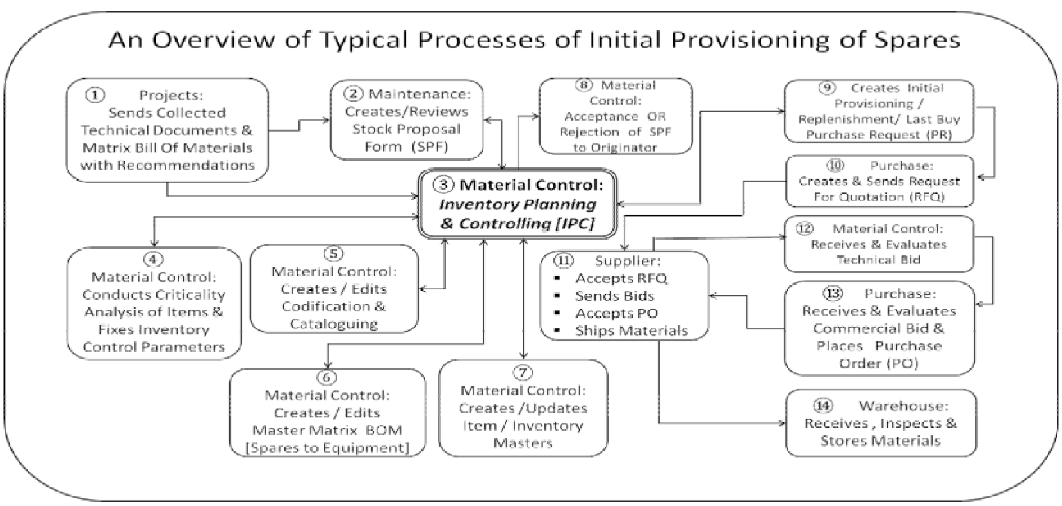

Figure: 3.0.a.

4.0. The Typical Constituent Processes of Initial Provisioning of Spares

The typical integral processes of Initial Provisioning are explained in short in the following:

Projects: Sends Collected Technical Documents & Matrix Bill Of Materials with Recommendations

Project department has to conduct several meetings with the EPC Contractors, Sub Contractors, Manufacturers, Suppliers etc. as the case may be, at different stages of the Project or Procurement of Equipment to collect the Complete and Accurate Technical Documents, Manuals, PO wise Matrix Bill of Materials (M-BoM) of the actually supplied End Itemsetc. These should be gathered in line with requirements of Maintenance, Operations, Materials (Material Control) and Purchase departments for the Initial as well as Future procurements of MRO Items. M-BoM will have Manufacturers' recommendation showing Items and their Quantitiesfor Commissioning (optional) and Initial Period of Operation etc. to facilitate Identification of MRO Items to be stocked. SPIR (Spare Parts List and Interchangeability Record) is the SHELL Petroleum's version of M-BoM. Then Projects department has to send these documents to Maintenance and Materials departments for further processing. M-BoM is defined below:

"Matrix Bill of Material – A chart made up from the bills of material for a number of products in the same or similar families. It is arranged in a matrix with components in columns and parents in rows (or vice versa) so that requirements for common components can be summarized conveniently (#5 James F. Cox III and John H. Blackstone Jr., 1998,Pg 56).

Maintenance: Creates/Reviews Stock Proposal Form (SPF)

Maintenance department creates SPF showing the selected Items with required quantities and sends to Materials department. Maintenance and Materials departments have to exchange opinions and ideas to improve the quality of SPF with respect to Item Selection and Order Quantity Fixing so as to be the basis for creating the Inventory of MRO Items.

Material Control: Inventory Planning & Controlling [IPC]

IPC is the core function of Materials Control department which is actually the Control Centre of MRO Supply Chain. And IPC comprises of the following, but not limited to:

- Review of Stock Proposal Form (SPM)
- Identify Equipment-wise Spares being consumed using Noun Nomenclature analysis
- Consumption Analysis of Spares
- Demand Forecasting of Spares
- Fixing and Updating of Inventory Control Parameters etc.
- **Material Control:** Conducts Criticality Analysis of Items & Fixes Inventory Control Parameters

Criticality or Essentiality Analysis is carried out based on the criteria of '$ Severity of Failure (Production Loss), a$ Frequency of Failure and b$ Detectability of Failure, to categorize the Items into various categories to apply Selective Inventory Control. The general categories that can be created in this stage are:

- Insurance Item
- Extremely Critical Item
- Critical Item
- Normal Item
- User Controlled Stock / Non-stock Item – (Programme)
- Material Control: Creates / Edits Codification & Cataloguing

A 10-digit all Numeric Structured Intelligent Code divided into Major Group, Sub Group, Sub Sub Group and Item Code is quite suitable in majority of cases. The Buying Description is presented in Noun-Modifier Structure while the Short Description is created with Standardized Short Words arranged in predefined sequence for preserving consistency under each Noun.

e$Material Control: Creates / Edits Master Matrix BOM [Spares linked to Equipment]

Master Matrix BoM (MM-BoM) contains all the Assets (End Items) in the Company with appropriate linking of their Spares so that Spares Lists can be generated by Explosion or Implosion as required.

f$Material Control: Creates /Updates Item / Inventory Masters

g$Material Control: Acceptance OR Rejection of SPF to Originator

h$Creating Initial Provisioning / Replenishment/ Last Buy Purchase Request (PR)

i$Purchase: Creates Request For Quotation (RFQ)

j$Supplier: Accepts RFQ, Sends Bids, Accepts PO and Ships Materials

k$Material Control: Receives & Evaluates Technical Bid

l$Purchase: Receives &Evaluates Commercial Bid & Places Purchase Order (PO)

m$Warehouse: Receives, Inspects & Stores Materials

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#4 Bhardwaj MK, 2002, Glossary of Purchasing and Materials Management, 2nd Ed, Indian Institute of Materials Management.
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LOGISTICS EXPERIENCING A SUPERCHARGED EVOLUTION

SOPHIE MITCHELL

Adaptation at speed has been critical to flow of goods and finding the opportunities in this period of massive peaks say webinar participants

With the peak season upon us, and intense demand in the transportation industry, Reuters Events sat down with three industry leaders in the transportation and logistics sector, to hear from them about the impact of the pandemic on their corporations, and how it has altered their operations looking forward.

Handling a shockwave : According to contributors, they felt they had worked through three key stages in the wake of COVID-19, starting with a state of reaction and coping, through to adaptation, and finally to a period of maximising opportunities.

"We went through various phases of our journey through COVID-19, the first one was complete chaos. Everything that was being thrown at us every day was brand new, and you have to work out a brand-new operation every single day," said Charles Brewer, COO of Canada Post. "We saw a shock wave of disruption across the globe" added Jamie Lansdell, Regional Manager Automotive & Mobility at Expeditors, "within Wuhan, and then greater China, and then we saw parts of the US and Europe go on to lock, and we've seen this gently migrate into different areas'.

We haven't built an infrastructure for barbecues and kayaks :

"Everybody, to their credit, was very quick to react to the COVID situation, and try and make the best of a bad situation," said Alan Edwards, Client Executive (UK and Northern Europe) at Tradeshift, speaking of how the next stage logistics and transportation corporations have worked through was a time of adaptation. As Brewer stated, "you get to a position of 'I get it' and you start to work in that new environment."

As demand picked up again at the end of Q2, companies had to work in a new set of rules and regulations. This was particularly noted by Brewer, who spoke of how Canada Post became more used to the health and safety regulations for the time, but found themselves dealing with goods that didn't fit into their current infrastructure. "[We've been] handling huge volumes and also some rather bizarre volumes like kayaks and barbecue sets" said Brewer, "operators are having to deal with this increased demand and also this increased shape and size.... We haven't built an infrastructure for barbecues and kayaks."

Peak-on-peak :

This period of adaptation has continued as peak season began, and all three guests spoke about the intense demand they were facing, which they referred to as "peak-on-peak'.

We delivered the same amount of parcels ... that we had forecasted we would do in 2029

"About four or five Mondays ago we delivered the same amount of parcels ... that we had forecasted we would do in 2029," said Brewer, "we're nine years ahead in terms of the volumes that we're handling, with pretty much the same infrastructure."

As this peak demand continues to grow, power has shifted from the buyer to the carrier, with capacity waning, and demand sky-rocketing. "The infrastructure is under stress," said Lansdell, "I'm sure over time that we will come through this, and as we come out the other side, we'll all get to assert some of that power back, but for the moment I think that is the nature of the world."

Foot on the accelerator

This is clearly a time of intense acceleration, challenging transportation services in particular. It's "a tipping point in terms of how we operate" noted Brewer. "I tend to be an optimist. I think there's a flip side to Covid.... It's helped us to realise that we need to invest at an accelerated rate in our infrastructure, and whether that be physical or digital or anything else, we now have our foot firmly placed on the accelerator."

Covid has been an enabler to move things faster, and to bring through technology or to break through bottlenecks into actually capitalising on some opportunities

Lansdell agreed: "Covid has been an enabler to move things faster, and to bring through technology or to break through bottlenecks into actually capitalising on some opportunities."

Technology and AI coupled to frontline data are clearly at the front of the agenda for transportation services. "It's about being smart, using automation and technology as best we can to create incremental capacity," said Brewer. Lansdell agreed, "Data is the lifeblood of making decisions of how businesses can move forward.... Now these walls have broken down, how can organisations really look forward to preparing themselves better for events that are coming up?" Services must be able to procure the correct systems to make themselves future-proof and agile, and give themselves a strategic advantage at present. "Specifically, I think we'll see a lot more AI capability coming," commented Edwards.

The rules of the game are still changing every single day

"The rules of the game are still changing every single day" remarked Brewer but the breakdown of those long-established rules is also leading to a time of opportunity in logistics, despite the headaches it may cause. "Volatility is the new normal' said Lansdell, and whatever the post pandemic world may look like, transportation services are learning, at an accelerated speed, how to handle the fluctuations and, critically, how to create an adaptable business model that can handle the peaks and troughs of the coming years.

Source:www.reutersevents.com

Focus on supply chain flexibility in the tough times of COVID-19

Sophie Mitchell on **Dec 1, 2020**

Experts weigh in on their new priorities when managing their supply chains in an unprecedented climate

As sourcing is disrupted and demand fluctuates, corporations are having to adapt their supply chains now more than ever before. Reuters Events: Supply Chain sat down with experts to hear about their experiences in keeping a degree of business continuity in the current climate – and saw differences in the necessary adaptations between younger and more established corporations.

Reshoring rules over nearshoring : The COVID-19 outbreak has brought forward discussions around sourcing and the best strategy to balance competing needs for cost-effectiveness, shipping speed, reliability and resilience. Brands are evaluating where to base production and are finding that the pull of the typical manufacturing hubs is difficult to escape from, and indeed, may not even be the best decision.

"We started to shift our mentality" said Jason Glover, Director of Global Sourcing at Harry's, an e-commerce start-up for men's grooming products. "We're finding ourselves actually going back to the offshoring, if you will, back to Asia to get what we think is probably quicker lead times, and just a little more reactive," He noted, illustrating the journey that brands are undergoing as they try to figure out the optimal configuration for supply chains after the pandemic flipped the conversation. "We've flip-flopped to what we were trying to get away from".

I actually think you have to look at it across the spectrum – [dual sourcing] is something you do to have a dynamic supply chain

Yuki Khurana, Senior VP Sourcing and Quality Assurance at United Legwear & Underwear Co., a global manufacturer working with multiple brands, including Puma, agreed that the choice is complex. With suppliers in Asia, he spoke of how their pre-existing partners and substantial supply chain infrastructure limited the capability to onshore or nearshore – "if we're going to be moving that supply chain to nearshoring, who do we have? Where's the partner? If we would nearshore, it would be actually bringing in Asian partners with the local partner and creating an entity which basically is fluid."

This emphasis on fluidity ran through the conversation, with MikkelSøndergaard Rasmussen, EU Director Supply Chain Solution at Maersk, agreeing that the answers are likely to lie in a greater range of partners in manufacturing hubs. "I actually think you have to look at it across the spectrum – [dual sourcing] is something you do to have a dynamic supply chain … dual sourcing is about making sure that if you have disruptions in one place, you can then cope with that in other parts of the system. I don't see the conversation as being one dimensional."

This need for multiple sources was emphasised when Khurana mentioned the struggles they, as a multi-brand supplier, have faced not just with manufacturing capacity but also transportation. "Case in point, six months ago COVID hit – where's your supply? Oh, all the factories in the world are shutting down…. China opened up … [and] they saw everybody going back into China. In a matter of three months we don't have containers to ship out of China".

When I see factories in Germany, Turkey…they are basically not scalable, or not scalable for the size we need them

Despite this, the proximity to suppliers or their location were not the only component at the forefront of the conversation, with other variables coming to play for all companies. "I can't emphasise enough that opportunity for finding the right size for what works for your strategy" said Glover, who stated that they "rely a great deal on our contract manufacturers … what gives us that instantaneous capacity, because we're still in that moment of growth."

Despite fluctuating demand at these times, it was clear that scalability is also a major focus when working with suppliers, as Suriano stated, "When I see factories in Germany, Turkey…they are basically not scalable, or not scalable for the size we need them." This was echoed by Khurana – "it goes back to the point, scalability. Can a factory scale to the level we need?"

A flexible or a robust supply chain?

As a mature start-up, Glover made it clear that Harry's has less substantial infrastructure in their supply chain, giving from for manoeuvre: "Harry's is a new brand, so we don't have that same infrastructure that our competitors have…. We're really trying to make sure that we can be agile." The flexibility of suppliers is essential, firstly when you're in an unprecedented climate, but also as a growing corporation. "We really need suppliers that are just flexible, we need suppliers who can take the punches, who can expand or contrast…. We're really trying to partner with those suppliers that can be agile, those suppliers that can negotiate in tight time frames"

It's going to be easier and faster to produce from Asia, where everything is integrated rather than have it in your backyard but in a very old setup way

This was in stark comparison to United Legwear & Underwear, whose supply chain infrastructure in Asia gave great rewards, but didn't allow for changing suppliers in the same way. "We've built a supply chain in Asia which is robust, which is ever evolving…. You don't want to disrupt, you don't want to go through an onboarding process, which may take 12 to 18 months for any new factory", stated Khurana. "You're not getting the return in the short term."

Suriano agreed, "It's going to be easier and faster to produce from Asia, where everything is integrated rather than have it in your backyard but in a very old setup way."

Suriano spoke about their focus on regional suppliers, and the essential input of risk mitigation in challenging times such as these. "Our strategies have to be a little bit more consistent", said Suriano, "we want to stick to a global approach, so have been talking about being regional and being able to serve regions for a very long time. It's not the first time that [an issue like] COVID hit and we have to change the approach.... Now it's more a conversation of risk mitigation."

You have to have partners that understand your need and understand how you operate

Glover agreed that as they move forward and mature, these relationships are even more critical and have to be a part of the conversation. "Whether it's COVID or tariffs increasing, or whatever it is, you really see the difference in these suppliers versus those who are not so willing to help you navigate the challenges".

This was echoed by Søndergaard Rasmussen, "It is much more a matter of strategic partnerships, longer term partnerships, it's much more around making it a win-win situation for both parties...you have to have partners that understand your need and understand how you operate."

Vectoring in visibility

Visibility is a huge component of risk mitigation and partner evaluation, and understanding where the risk lies is at the top of the agenda for supply chain management.

"We have internal intelligence that is working constantly," said Suriano. "We're looking at commodity prices changing, we're looking at political [changes], scenarios changing, we're looking at demand changing. All of those aspects get digested from different parts of the internal business.... We are basically then mitigating with the tactics we have in our operating model, and we're able to adjust and keep driving towards our goals."

This year alone, we've grown probably 10 to 15 new global retailers, so that right there is stressing our supply chain

In comparison, Glover's agenda is less focused on forecasting data at this point and instead on supplier visibility – "Every single year previously does not look like the year before, so historical data is completely out the window. This year alone, we've grown probably 10 to 15 new global retailers, so that right there is stressing our supply chain."

Søndersgaard Rasmussen also cautioned that "The change that you're talking about is not only on the technical side, but it's as much on the organisational side", and that "at least the way we see many of our customers being organised doesn't facilitate that end-to-end thinking".

The 'enabler of growth'

"Today for me it's around thinking of the supply chain as an enabler of growth", said Søndergaard Rasmussen, "It's a mindset.

"Look at how much money is moved into the last mile...some of the conversations that we need to have now and bring to the table are that we have almost under-invested in the international supply chain, the visibility that companies and retailers have on the last mile...and then compare that and contrast that to the investment that is going into the international society."

I've always said we need to make sourcing sexy, and when you think about it – I compare it to marketing ... we should have a seat at the table, and it should be a strategic muscle that the company relies on, on a daily basis

Glover echoed the need to bring forward sourcing to the forefront of the organisation, more so than ever at these times, saying "I've always said we need to make sourcing sexy, and when you think about it – I compare it to marketing ... we should have a seat at the table, and it should be a strategic muscle that the company relies on, on a daily basis."

Looking at how marketing and the supply chain can intertwine and work together, and cause growth, was a prominent part of the conversation, with a focus on visibility and sustainability, both being tools that can be utilised by the sales teams as readily as they can the supply chain, and pushing technology forward as a major focus of supply chain management at this time. Currently, when demand is fluctuating, the importance of bringing the back-end of the business to the forefront is top of the agenda.

"We start thinking of the supply chain as an end-to-end enabler, and we today see how much digital is helping to overcome those hiccups and those bottlenecks," explained Suriano, who argued that we should be advocating for more investment.

Have one ideology, one goal in mind – to service that customer in a timely manner

Glover agreed and said that he found "Tracking lost revenue has been a great way to get leadership in line.... You're already presenting a clear picture with those metrics" said Glover. Further visibility and breaking internal silos are at the forefront of supply chain management at present. As Suriano queried – "how do we make this mechanism of supply chain working more integrated to the front end of the business?"

"You sit on the table, you collaborate with the sales team, the marketing team, the logistics team, bring everybody together" said Khurana, "and have one ideology, one goal in mind – to service that customer in a timely manner".

Whether the companies were growing their supply chains, or working within their already established infrastructure, it was clear from the conversation that flexibility is the focus of the supply chain for business continuity. For the more mature corporations, data and technology are essential in making the most out of their already formed supply chain, whereas the ability to manoeuvre and a focus on building scalable partnerships was at the forefront for developing the supply chain at Harry's.

These changes may be difficult, with shifting aims, a push on visibility, and a fight to be seen at the front-end of the organisation, but perhaps, as Søndergaard Rasmussen remarked, this makes it "exciting to be in sourcing, today more than ever before"

Source: Reuters

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WHAT'S NEXT: IMPLEMENTING "TOUCHLESS" DCS THROUGH ADVANCED WAREHOUSE SYSTEMS

MARK NEWBERRY, DEANNA RAINWATER, ANDY CRANE, & KAREN RAUCH, TATA CONSULTANCY SERVICES

The ability to automate DC operations by employing AI technologies that include a closer convergence of WCS, WES and WMS solutions is on the horizon. Designing touchless operations that reduce the dependence on traditional labor sources will better position supply chains in their quest to provide an uninterrupted flow of goods and improved resiliency.

Brown cartons whisk by at breakneck speeds as the sound of pneumatic triggers divert the cartons onto a separate path or down a chute. Red laser light beams sparkle and scan shiny white labels on the cartons checking their contents and determining their destination.

Okay, we'll admit that it's a little difficult to romanticize warehouse automation, but it's amazing to watch in action. All these cartons, conveyors and laser lights are part of a highly sophisticated system that continues to advance into the realm of autonomy and artificial intelligence (AI).

At the heart of this automation are two types of system working together to execute the seemingly choreographed performance: the warehouse management system (WMS) and the warehouse control system (WCS). While these systems have existed since the 1990s, a revolution is afoot to increase the level of sophisticated autonomy through a warehouse execution system, or WES.

COVID-19 and warehouse automation

The impact of COVID-19 on warehousing and distribution could well outlast the pandemic itself, as labor health concerns, hampered supply chains and a new wave of automated warehouses and distribution centers continue to emerge. Warehouses, distribution and fulfillmentcenters were crippled, as health and safety issues became top of mind, especially as cases spread in high-profile operations like Amazon. However, the impact of the pandemic has also prompted renewed assessments of DC operations on everything from the degree of automation and advanced software necessary in a warehouse today to the importance of building size, work area design and location.

The pandemic underscored the growing prevalence of e-commerce fulfillment and the increasing need to mitigate labor and productivity risks through providing a safer, less congested work environment largely enabled through increased automation.

It's important to keep in mind that systems and automation capabilities were developing rapidly before the pandemic. However, COVID-19 brought an accelerated awareness and actuated bringing those changes to light. In short: It's been a wakeup call for some, an affirmation for others. What's more, experts agree, when the pandemic finally moves on, its impact on warehouses and distribution centers certainly won't dissipate any time soon.

The rise of warehouse execution systems

A traditional fulfillment warehouse employs a WMS to receive inventory, locate and track its movement within the warehouse. When fulfillment orders are sent from the ERP or OMS, the WMS creates a "wave" of work based on the available inventory and resources to pick, pack and ship the orders within the committed order cycle time.

WES key function benefits:

Dynamic labor balancing

- Provides real-time, system-directed labor balancing across multiple work zones
- Bases decisions on current priorities and workload demands
- Synchronizes the operation of all work zones
- Accounts for "zone transfer" penalties in excessive worker movements

Sorting machine optimization

- Real-time optimized decision item sortation

- Increases sortation capacity by 28%
- Reduces "problem orders" by 75%
- Reduces processing and material handling labor
- Allows workers to work to their own capacity

Next-order optimization

- Makes real-time decision of the next order to release
- Bases decisions on order priority, ship requirements, order ages, picker locations and available inventory
- Allows nearly immediate processing of priority orders
- Determines what orders are "not picked" in resource-limited operating conditions

Revolving batch picking

- Eliminates low productivity wave transition periods
- Maximizes continuous resource utilization
- Levels processes, eliminating harmonic peaks and valleys behavior

The WMS is a passive system that requires input from users indicating tasks have been completed. Optimization of the inbound/outbound processes is typically engineered into the operations and not through the WMS.

Fulfillment warehouses that utilize automation—such as conveyors, sorters, and pick/put to light—employ warehouse control systems. The WMS sends information to the WCS regarding the objective of the automation, and then the WCS utilizes the information from the WMS to control the automation to move or route product to a destination or turn on a light in a pick-to-light rack.

Both WMS and WCS work in relative isolation. These systems are unable to react to changes in production, bottlenecks, service-level commitments or emergencies. They require human intervention to re-prioritize, re-route or expedite an order or process.

A warehouse execution system, on the other hand, can coordinate and direct all resources: labor and material handling equipment in real time. The reactive WES moves production in a continuous flow to optimize service levels and can react to production issues and reprioritize workload such as the ability to drop a high priority order to the warehouse without creating a new wave (waveless picking) or disrupting the current production flow.

WES can also work to improve production and service beyond the four walls of the warehouse to prioritize an inbound receipt for an emergency order. Using predictive analytics and complex algorithms, a WES can detect issues and prescribe a solution without human interaction.

WES in action

Here's an example of how a WES can function within a fulfillmentcenter to coordinate the expedition of a last minute, high priority order.

A next-day air delivery order for multiple items is dropped on a warehouse. The WES can prioritize a receipt of an inbound shipment containing the necessary inventory and can allocate receiving resources and assign available dock doors and automation. Upon scan of the inbound carton, the WES coordinates with the WMS to send the carton to replenishment.

The WMS/WES issues a task to replenish the inventory. A pick command is generated without a wave to pickers within the zones containing the inventory, the units are picked into multiple bins, and then the bins are routed by the WCS to be expedited.

To further explain the value of WES, let's use a pouch sortation system such as SDI's Joey sorter. Individual items are scanned and placed into pouches. Using advanced algorithms, the pouches are sorted and shuffled until the items on the order are next to one another and advance to the beginning of the line for packing.

The pouches are then routed to a packing station where they're cartonized and sent by the WCS to the overnight shipping lane in time for next day air pick-up.

Resource visibility

A WES has visibility to all available resources and can coordinate activities to meet committed service levels. Integrated with wearable devices and scanners, a WES has visibility to individual activities and can identify production delays. Based on these shifts in production, the WES can re-assign tasks to available resources to increase efficiency and throughput.

The IoT (Internet of Things) revolution will provide a greater number of devices and equipment for which the WES can utilize in the optimization of the fulfillment workflow. Wearable devices can be tracked for location, productivity and feedback, while driverless trucks can be deployed to pick a pallet for replenishment. Inbound trailers can be geofenced and assigned a dock door with allocated resources to unload the merchandise.

Incorporating WES functionality to advance automation

For larger, complex operations that include a high degree of automation, both a WCS and WMS are going to be needed. WES is not usually going to be a replacement for WMS; but rather will work in combination with it. And, in the future, it's foreseen that WMS will include enough intelligence so that WCS/ WES can be rolled into the WMS solution.

This integration could relieve some pressure from implementation and will reduce the costs of running multiple "warehouse management oriented" systems in one facility. For heavily automated solutions, approximately 20% of the implementation effort will be required to manage the integration of the warehouse systems.

Looking to the future

In the future, there may be standard messaging systems developed that will allow for simpler integration of warehouse automation and their management systems.

The warehouse execution of the future will likely include increased use of autonomous mobile robots and artificial intelligence capabilities such as cognitive computing and machine learning and may also contain automation control knowledge in larger amounts than they do currently.

Many WES vendors are building modular solutions to alleviate the need to integrate across all processes. Companies can select which aspect of their fulfillment process needs WES functionality and purchase a purpose-built module. Applying these "NextGen" technologies, WES proves to be much more flexible in nature compared to a WMS or WCS that must encompass all aspects of the fulfillment process and automation.

AI and warehouse execution

In the past, fulfillment warehouse decisions were based on historical data analysis. However, the impact of COVID-19 is causing consumption behavior to bullwhip in more sporadic ways than ever before, and no one really knows what to expect for day-to-day operations. Companies are guessing as to which patterns will remain and which are temporary.

Artificial intelligence can help solve these unforeseen challenges. Looking to the future, predicting customer demand requirements will utilize significant amounts of data from new sources, such as the IoT and external partner collaboration to determine the next optimal move in a fulfillmentcenter. AI transforms an overwhelming amount of data into usable insights to support a multitude of decisions in the fulfillmentcenter.

WES application landscape

Companies are rushing to develop fulfillment execution systems to enable the advanced features and increased automation opportunities. The solutions are currently being developed by WMS and WCS software providers, material handling and automation vendors as well as standalone WES developers.

At this point in time, one solution does not typically meet all requirements. Companies are challenged to find the right combination of WMS, WES, and WCS that works best for their future requirements—in more automated facilities that are designed to mitigate labor and productivity risks.

It's now more challenging than ever to identify the right partners to implement warehouse solutions. And, it begs the question of having a single software solution or multiple software solutions in place to plan, manage, control and optimize a fulfillment distribution center.

Touchless fulfillment is right around the corner

With the disruption of normal routines and standard business practices due to COVID-19, organizations are now looking for emerging digital technologies to ensure they're better prepared for the future. The leaders are seizing the opportunity to advance competitively.

The pandemic taught our supply chain teams a hard lesson to look beyond the current technologies and traditional ways to setup, organize and operate DC Operations. Historically, warehouse design and technologies were deployed and implemented with the primary focus of maximizing space utilization, throughput and productivity. Other than a few ergonomic considerations, little was done to design facilities in a way that also mitigated labor and productivity risks due to previously unknown threats such as disease spread.

Automating DC operations and employing AI technologies that include a closer convergence of WCS, WES and WMS solutions is on the horizon. Designing touchless fulfillmentcenters that reduce the dependence on traditional labor sources through innovative technologies will better position supply chains in their quest to provide an uninterrupted flow of goods and resiliency to its customers regardless of the circumstances.

Source: Logistics Management

THE WORLD TRADE ORGANISATION IS HAVING A MIDLIFE CRISIS

FIXING THE GLOBAL TRADING SYSTEM MEANS FIRST COMING TO GRIPS WITH WHY IT IS BROKEN FARAH STOCKMAN

If the World Trade Organization were a person, it would be that dude at the bar drinking the afternoon away in his business suit and wondering where it all went wrong. He used to be a big shot.

When the W.T.O. was created in 1995 to write the rule book for international trade and to referee disputes between countries, it was popular and powerful. Unlike most international bodies, it has a dispute-resolution mechanism that was widely used. Its decisions had teeth. If W.T.O. judges decided that a country wasn't playing by the rules, judges could authorize retaliatory tariffs so that victims could recoup their losses. Even a superpower like the United States generally obeyed the rulings of its seven-member Appellate Body. If a member nation had a law that ran afoul of the W.T.O. treaty, then that law had to go.

But now the W.T.O. is all washed up. Like Rodney Dangerfield, it gets no respect. Its two biggest economies — China and the United States — are in a trade war, issuing tit-for-tat tariffs that violate its rules. No one fears the wrath of its Appellate Body anymore because that body has ceased to function. No new judges have been appointed to replace the old ones whose terms expired. Member states are actively floating alternatives. Its director general resigned in frustration a year before his term was up.

It's tempting to believe that Mr. W.T.O. ended up drunk at this bar because he got punched in the nose by President Trump. There's some truth to that. Mr. Trump did cripple the W.T.O. when he refused to appoint new judges so he could get out of having to abide by decisions he didn't like. But the W.T.O. was on a downward spiral long before it got beaten up by Mr. Trump.

If President-elect Joe Biden is going to help fix the W.T.O., he can't just roll back what Mr. Trump has done. Real recovery requires soul-searching about what went wrong.

When the W.T.O. was born in the 1990s, faith in free markets was at a record high. The Soviet Union had just collapsed. The United States, the world's sole superpower, embraced an almost messianic belief in the ability of unfettered capitalism to improve lives around the world. Americans pushed more than 100 nations to join together to create a strong international body to remove barriers to international trade and protect investors.

Weaker countries agreed because, in theory, it meant they would no longer be at the mercy of the strong. They could get W.T.O. judges on their side.

But the power of the W.T.O. became a problem pretty quickly. Domestic laws and programs that got in the way of "free trade" were swatted aside like cobwebs. The W.T.O. has ordered countries to gut programs that encouraged renewable energy and laws that protected workers from unfair foreign competition, as if international commerce were more important than climate change and workers' rights.

The W.T.O. wasn't just powerful. It was ambitious. Unlike the previous trade regulator, known as the General Agreement on Tariffs and Trade, which dealt primarily with tariffs, the W.T.O. aimed to tackle a whole host of things that had little to do with traditional trade. That's partly because of corporations, which lobbied their governments behind closed doors to rewrite the rules of trade to their advantage.

Investment banks pushed for financial deregulation around the world, rolling back laws like Glass-Steagall, which kept Wall Street from recklessly gambling away pension funds. Pharmaceutical companies pushed to extend their patents, complicating the efforts in developing countries to get access to generic, affordable drugs. Big agriculture companies pushed to lift bans on genetically modified food. People began to grumble that the W.T.O. had fallen in with a bad crowd of bullies or that it had gotten too big for its britches.

The W.T.O.'s decision-making looked even more questionable after the body turned a blind eye to China's bad behavior. Its judges ruled against government subsidies for locally produced solar panels in the United States and India, on the grounds that they were unfair to foreign producers. But a smorgasbord of subsidies in China were deemed no problem at all.

People began to complain that the W.T.O. just wasn't up to the task of regulating the world economy. It didn't help that it took years to render decisions, an eternity in the world of business.

The W.T.O. looked tardy and incompetent.

Now, as the world economy is in tatters from a pandemic and as a future crisis of climate change looms, the W.T.O. is drunk at a bar, waiting to see whether Joe Biden will come to its rescue.

There are some quick fixes that the Biden administration should support, such as the appointment of a new director general. Everyone but Mr. Trump seems to like Ngozi Okonjo-Iweala of Nigeria, who would become the first woman and first African to serve in that post. Removing American opposition to her candidacy might go a long way to building back trust and good will after the Trump era.

But Mr. Biden shouldn't rush to fill the seats of the Appellate Body just yet.

The world has a historic opportunity to change the direction of international trade rules and carve out more space for countries to experiment with solutions to climate change and income inequality. Countries around the world could use economic stimulus funding to make strategic investments in green energy with subsidies. That's what Mr. Biden's Build Back Better plan is all about. But so much of the plan — from subsidies for green energy infrastructure to strong "Buy American" provisions — risks running afoul of W.T.O. rules.

That's why the incoming administration should use this moment to try to get agreement on some of the deep-seated issues that brought us here in the first place. One reason the world has avoided those tough conversations for so long is that litigation is easier than negotiation. Now that that's no longer an option, maybe W.T.O. member states will be able to forge an agreement to meet the moment.

There are hopeful signs that Mr. Biden intends to do just that. One of his veteran economic advisers, Jared Bernstein, has long argued that the rules of global trade should be revamped to meet the needs of ordinary people, not just corporations. The appointment of Katherine Tai as U.S. trade representative is an inspired choice. In her many years of experience working on U.S. trade policy, she stands out for her commitment to figuring how to balance the interests of corporations with the needs of American society, including workers' rights, environmental protection and racial justice.

She strikes me as the perfect person to stage an intervention.

Source : Business Standard

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Indian Institute of Materials Management

MISSION

- To promote professional excellence in Materials Management towards National Prosperity through sustainable development.

OBJECTIVE

- To secure a wider recognition of and promote the importance of efficient materials management in commercial and industrial undertakings.
- To safe guard and elevate the professional status of individuals engaged in materials management faculty.
- To constantly impart advanced professional knowledge and thus improve the skill of the person engaged in the materials management function.
- Propagate and promote among the members strict adherence to IIMM code and ethics.

CODE OF ETHICS

- To consider first the total interest of one's organisation in all transactions without impairing the dignity and responsibility of one's office :
- To buy without prejudice, seeking to obtain the maximum ultimate value for each rupee of expenditure.
- To subscribe and work for honesty and truth in buying and selling; to denounce all forms and manifestations of commercial bribery and to eschew anti-social practices.
- To accord a prompt and courteous reception so far as conditions will permit, to all who call up on legitimate business mission.
- To respect one's obligations and those of one's organisation consistent with good business practices.

A GLOBALIZED WORLD – LOCALIZING GLOBAL SUPPLY CHAINS

PRIYESH MISHRA

Many nations around the world have built vast industrial empires that together manufacture over a quarter of the world's products. When we think of making goods, one particular country comes to mind: China. Take a look at your clothing tag, the engraving on your mobile devices, or your dinnerware's imprint. You're likely to see the words "Made in China" looking right back at you a memorial to their manufacturing capacity etched in silk, ceramic, and steel covering the entire globe.

In fact, China alone accounted for 28 percent of the manufactured products in the world in 2018. China has become the world's manufacturing hub for a number of reasons, some of which are low labor rates, low taxes, lack of legislation, business innovation, and plain and simple hard work. Countries and businesses have recently begun to rethink their globalized approach to manufacturing, and we are seeing a slight revival in companies and governments relocating their supply chain in some cases.

Why is China not as appealing as before?

The low labor costs were the original advantage of exporting output to countries like China, but as economic development continues, so will the demand for higher wages. In Shanghai, for instance, the monthly minimum wage is 2480 CNY, compared to 690 CNY in 2007. That is a leap of 72 percent in just 13 years.

But not being able to produce the goods as easily as before is not the only reason why businesses and policymakers are trying to return manufacturing to their local markets, there is also a drive to minimize environmental effects, reduce product delivery delays, and recently, increased consumer interest in locally sourced products. Such variables are among those that have led to the shift of supply chains to more local regions and markets.

The climate and its effect on globalized chains of supply

Over the past decade, the environmental effect of a global supply chain has been addressed at a rising frequency. Although the expense of manufacturing products in a low-cost labor market could be advantageous to the bottom line of the business, the environmental effect of globalized procurement does not reflect well on the brand of a company.

In general, carrying goods from abroad takes more energy than domestic manufacturing, and more than 3 percent of global carbon dioxide emissions are due to the shipping industry. Ocean shipping emits the least quantity of carbon dioxide of any form of logistics. Nevertheless, it could be argued that a regional supply chain would also minimize emissions of carbon dioxide as businesses rely solely on domestic logistics and negate the need for ocean shipping.

Responding and juggling the supply with demand

People get what they want now today, and not later. Localized supply chains allow businesses to adapt more quickly to shifts in demand because they do not have to rely on products and services that take time to arrive from several thousand miles away.

When responding to consumer demand, a globalized supply chain will generate extra risks. Next, lead time increases. It can reduce costs by relying on shipping parts or goods from China to the United States, but shipping overseas may take months. Furthermore, due to incorrect paperwork, the import costs need to be considered as well as the possible risk of goods being kept at the border or port. Misidentified items can cause significant delays as well.

In order to respond to unexpected shifts in demand, these risks can be mitigated by storing required goods in local warehouses. However, warehousing comes with added costs and there is still a possible chance of the demand surpassing the storage of the warehouse. If this occurs, a delay in product distribution to consumers is the only consequence. Warehousing requirements are minimized in a regional supply chain because the supply chain length can be shortened by weeks and months to allow companies and businesses to handle costs efficiently and adapt to changes in demand from their consumer base.

Local Demand for Local Product

Consumers are finally increasing their appetite for local products. On the television, on the radio, and in your neighborhood, you've probably heard the expression 'Buy Local' or "Be Vocal for Local." Locally, the drive to the source is mostly addressed when talking about food, but there is also an interest in items produced locally.

Local purchasing ensures that the money remains in the community and encourages employment, local growth, and increases local residents' future buying power. It makes people feel good to think that by purchasing locally sourced products, they help their communities. That feeling is an amazing marketing instrument that increases demand and growth, so if a supply chain is localized, it adds more to the brand recognition of a business.

Thoughts in Conclusion

It is a difficult decision to globalize or localize a supply chain because it depends heavily on the industry. Many other considerations, including tax consequences, free trade deals or tariffs, and the political environment of the day, may also affect one's decision to localize a supply chain. The aim is to realize that focusing on local is equally important as globalized Supply Chains

Source: www.sourcingandsupplychain.com

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THIRD PARTY EXPORT AND THIRD PARTY IMPORT

ALOK KUMAR GHOSH

Introduction: It is my effort to share concept of Third-party exports and Third-party imports. This article explains meaning of third-party along with requirement to be followed for third-party exports and third party imports, GST provision on the same, customs guideline and finally RBI requirement to fulfill the conditions for third-party exports and third-party import.

Liberalization of Third-party exports and Third-party imports: Earlier, payment for exports was to be received from the overseas buyer named in the Export Declaration Form (EDF) and currency of such payment should be as per the final destination of the goods/ services irrespective of residential status of the buyer.

Similarly, payments for import should be made to the original overseas seller of the goods and importer needs to satisfy that goods equivalent to remittance have been imported.

With a view to liberalize the procedure relating to payments for exports/imports and taking into account evolving international trade practices, Reserve Bank of India has incorporated third-party exports and third-party imports vide circular A. P. (DIR Series) **Circular No.70/ RBI/2013-14/364 dated November 8 ,2013**.

What is third-Party: A **third party** is someone who is not one of the main people involved in a business agreement or legal case, but who is involved in it in a minor role. Any individual who does not have a direct connection with a legal transaction but who might be affected by it. A **third**–**party** beneficiary is an individual for whose benefit a contract is created even though that person is a stranger to both the agreement and the consideration.

Understanding of Third-Party transactions: When a buyer and seller enter into a business deal, they may decide to use the services of an intermediary or third party who manages the transaction between both parties. For example, if a company X sells inventory to its subsidiary, company Y, a third-party transaction occurs when company Y sells those final goods to company Z. A third-party transaction often involves a seller, a buyer, and an additional party not connected to the others.

Third-Party Imports: When an individual or entity (importer) imports goods on behalf of another individual or entity and make payment to third-party on behalf of seller, it is called the third-party imports. For example X has imported books from Y, USA, worth CIF value of USD 25,000. Y requested X to remit the amount to Z on behalf of Y. Here consignee would be X and buyer is Z and in AWB/BL consignee would be X and Notify would be Z.

Third-Party Exports: Whenever an individual or entity (exporter) makes an export on the behalf of another individual entity or individual (exporter or manufacturer), it is called third-party exports. In such cases, export documents such as shipping bills shall indicate name of both exporter and third-party exporter. BRC, GR declaration, export order and invoice should be in the name of third-party exporter.

Foreign Inward Remittance Certificate (FIRC) is the legal document that shows that a certain individual or entity has received a remittance from outside the country. During third-party exports, the FIRC is furnished in the name of the said exporter instead of the actual manufacturer/exporter of the shipment.

An assessee who supplies goods and services may not have the infrastructure to undertake the export. Hence, the assessee may utilise the services of an intermediary for carrying out the export transaction. The intermediary is known as the third party exporter. The supplier of the exported goods and services is known as the manufacturer exporter.

Advantages of Third-Party Exports : In case of third-party exports manufacturer need not register with Reserve Bank of India because the third party who are obtaining foreign exchange receipts should register with the Reserve Bank of India (RBI).

Under a third-party export, the foreign inward remittance from the customer is received by the third party explorer. The inward remittance is received in foreign currency. However, the settlement between the third party exporter and the manufacturer exporter is made in rupees. Hence, the manufacturer explorer need not undertake the procedure for conversion of foreign exchange.

By making use of the services of the third party exporter, the manufacturer exporter can concentrate on the core business.

The manufacturer exporter can make use of the expertise of the third party explorer.

The third-party explorer helps the manufacturer exporter to procure orders from customers.

What is the difference between Deemed Export and Third-Party Exports: "Deemed Exports" refers to those transactions in which the goods supplied do not leave the country and the payment for such supplies is received either in Indian rupees or in free foreign exchange.

"Third Party Exports" means exports made by an exporter or manufacturer on behalf of another exporter. In such cases, export documents such as shipping bills etc. shall indicate the name of both the manufacturing exporter/ manufacturer and third-party exporter.

How Third-Party export works:

1. The third-party exporter obtains export order from final buyer(importer).
2. After obtaining a purchase order from an overseas buyer, a third-party exporter provides a purchase order to the manufacturer exporter at a lesser price.
3. Manufacturer exporter despatch goods to third-party exporter.
4. The third-party exporter then pays the value of goods to the manufacturer exporter as per agreement and the value of goods is then paid in foreign currency to the manufacturer exporter.
5. After getting delivery of goods from manufacturer exporter exports those goods in his name and obtains foreign exchange from overseas buyer(importer).

How Third-Party import works:

1. The final buyer/importer places order to manufacturer (seller).
2. After obtaining a purchase order from importer, manufacturer (seller) despatch goods to buyer (importer).
3. On the basis of instruction importer remit fund to the third-party in foreign currency.
4. After receiving payment from the buyer , third party remits fund to the seller.

Reserve Bank of India guideline on third party imports:

Circular A.P. (DIR Series) Circular No.100/ RBI/2013-14/479 dated February 4, 2014

AD category I banks are allowed to make payments to a third party for import of goods, subject to conditions as under:

1. Firm irrevocable purchase order / tripartite agreement should be in place. However this requirement may not be insisted upon in case where documentary evidence for circumstances leading to third party payments / name of the third party being mentioned in the irrevocable order / invoice has been produced.
2. AD bank should be satisfied with the bonafides of the transactions and should consider the Financial Action Task Force (FATF) Statement before handling the transactions;
3. The Invoice should contain a narration that the related payment has to be made to the (named) third party;
4. Bill of Entry should mention the name of the shipper as also the narration that the related payment has to be made to the (named) third party;
5. Importer should comply with the related extant instructions relating to imports including those on advance payment being made for import of goods.

Reserve Bank of India guideline on third party exports:

Master Circular No.14/2015-16 RBI/2015-16/83 dated July 01, 2015

a) Firm irrevocable order backed by a tripartite agreement should be in place. However, it may not be insisted upon in cases where documentary evidence for circumstances leading to third party payments / name of the third party being mentioned in the irrevocable order/ invoice has been produced subject to:

(i) AD bank should be satisfied with the bona-fides of the transaction and export documents, such as, invoice / FIRC.

(ii) AD bank should consider the FATF statements while handling such transaction.

b) Third party payment should be routed through the banking channel only;

c) The exporter should declare the third-party remittance in the Export Declaration Form and it would be responsibility of the Exporter to realize and repatriate the export proceeds from such third party named in the EDF;

d) It would be responsibility of the Exporter to realize and repatriate the export proceeds from such third party named in the EDF.

What is Firm irrevocable purchase order?

Irrevocable Corporate **Purchase Order** (ICPO) is a document drawn up by commercial buyers. It contains: the quantities of products required. the type of products required. other conditions that the buyer wants the sale to proceed under. Once the **ICPO** is issued, it must be honoured by both parties; the buyer and supplier. If either party does not honour this commitment, this will be considered as a major offense. An **ICPO** is a **legally BINDING** document. We can differentiate purchase order from the irrevocable purchase order on the basis of content. I am giving you one sample of content of irrevocable purchase order:

"We, (name of the buyer), hereby state and represent that it is our intention to purchase and we hereby confirm that we are ready, willing and able to purchase the following commodity as per the specification and in the quantity and for the price as specified in the terms and conditions as stated below."

The irrevocable purchase order should contain , name of the commodity, name of the third-party in case of third-party transaction, quality, quantity, contract term, price, commission, loading port, delivery term, packaging, payment method ,inspection, etc.

What is Financial Action Task Force (FATF) Statement?

The Financial Action Task Force (FATF) is the global money laundering and terrorist financing watchdog. It's aim is to protect the global **financial** system against **money laundering**, terrorism financing and other related threats to the integrity of the international **financial** systems. Authorised dealers should set up their own KYC to maintain FATF guideline.

Commercial invoice term: Apart from the usual content in commercial invoice the seller should mention the third-party name i.e. beneficiary name in commercial invoice under the heading " NOTIFY". This field is usually only required if it's different from the party listed in the consignee field. The notify party can be the buyer himself, the shipping agent, or any other entity. The notify party is usually also responsible for arranging customs clearance at destination.

Bill of Entry: Separate disclosure is required at the time of filling BE i.e. related payment has to be made to the (named) third party.

Export Declaration form (EDF): An **export declaration** is a type of **form** submitted at the port, providing details about the goods that are bound for **export**. The **export declaration** is required each time goods are **exported** to a country outside the EU, and the document is used by the **customs** authority to control **exports**. The exporter should declare the third-party remittance in the Export Declaration Form and it would be responsibility of the Exporter to realize and repatriate the export proceeds from such third party named in the EDF.

GST on Third-Party Exports : A third party export is a transaction in which the manufacturer makes an export through another person. Third-party exports are eligible for concessional rates of GST.

The concessional rates were introduced by the Central Board of Indirect Taxes and Customs (CBIC). The manufacturer who supplies goods and services may not have the infrastructure to undertake the export. Hence, the manufacturer may utilise the services of an intermediary for carrying out the export transaction. The intermediary is known as the third- party exporter.

The supplier of the exported goods and services is known as the manufacturer exporter. In the export documents, the name of the manufacturer exporter and the third-party exporter are mentioned. Hence, both the manufacturer exporter and the third-party exporter are understood to be making the export jointly.

As per the notifications provided by the CBIC, the concessional rates can be availed by manufacturer who fulfil the specified conditions.

Conditions of Third-party Exports:

1. The manufacturer exporter and third-party exporter both should be resident of India.
2. The exports needs to be completed within 90 (ninety) days from the date of GST invoice.
3. In export documents the manufacturer and the third-party exporter should be mentioned jointly.
4. The concessional rates of GST are available on the export of goods only. Exporters of services cannot make use of the concessional rates.
5. Both the third party exporter and the manufacturer exporter should have a valid GST Registration.
6. The third-party exporter and the manufacturer exporter should not have made a consecutive default in filing GST returns. The condition should be satisfied for the preceding six months.
7. The supply of goods from the manufacturer exporter to the third party exporter should take place through a GST invoice.
8. The GST registration particulars of both the third party explorer and the manufacturer explorer should be available in the shipping bill.
9. The third-party exporter should be registered with an Export Promotion Council (EPC).The registration should be approved by Department of Commerce.
10. The third-party exporter should move the goods from the premises of the manufacturer exporter to any of the following places:

a) The port, airport, land customs station or inland container depot from which the export is scheduled to take place

b) A registered warehouse as a temporary transit point before the goods are moved to a port, land customs station, inland container depot or airport from which the export is scheduled to take place

11. A third party explorer may aggregate supplies from several manufacturer exporters. The combined goods may be exported in a single or multiple shipments.
12. The third-party exporter should endorse the receipt of goods on the GST invoice. The third-party explorer should also obtain an acknowledgement from warehouse operator for receiving the goods in the registered warehouse.
13. The proof that the export was carried out should be provided to the manufacturer exporter.
14. The registered supplier shall not be eligible for exemption if the registered recipient fails to export the aid goods within a period of ninety days from the date of issue of Tax invoice.

GST Rate for Third-Party Exports:

The concessional GST rate which is available for third party exports is available in **Notification No. 41/2017-IT(R)** and **Notification No. 40/2017-CT(R) dated 23rd October 2017**. The applicable rates are the following:

- For intra-State supply, GST should be applied at the rate of 0.05 per cent.
- For inter-State supply, GST should be applied at the rate of 0.1 per cent.

Requirement to be fulfilled for third-party imports as per Customs Law:

All payments actually made or to be made as a condition of sale of the imported goods, by the buyer to the seller, or by the buyer to a third party must assure that such payments are not included in the price actually paid or payable.

Points for consideration regarding Price actually paid or payable :

The price actually paid or payable is the total payment made or to be made by the buyer to or for the benefit of the seller for the imported goods. The payment need not necessarily take the form of a transfer of money. Payment may be made by way of letters of credit or negotiable instruments. Payment may be made directly or indirectly. The costs of such activities shall not, therefore, be added to the price actually paid or payable in determining the value of imported goods. The value of imported goods shall not include the following charges or costs

- the cost of transport of the imported goods to the place of importation;
- loading, unloading and handling charges associated with the delivery of the imported goods at the place of importation;
- the cost of insurance actually incurred
- duties and taxes paid etc..

The following points shall also be considered while determining the assessable value:

(i) Where the cost of transport is not ascertainable, such cost shall be 20% of the free on board value of the goods. In the case of goods imported by air, even where the cost of transportation is ascertainable, such cost shall not exceed 20% of free on board value of the goods.

(ii) where the cost of insurance is not ascertainable, such cost shall be 1.125% of free on board (FOB) value of the goods;

(iii) loading, unloading and handling charges shall be 1% of the free on board (FOB) value of the goods + the cost of transport + cost of insurance .Where the free on board value of the goods is not ascertainable, then a) Costs of transportation shall be 20% of the FOB value of the goods + cost of insurance and b) Cost of insurance shall be 1.125% of the free on board value of the goods + cost of transport.

Requirement to be fulfilled for Third party exports as per GDFT:

As per chapter 9.62 of DGFT guideline , third-party exports means exports made by an exporter or manufacturer on behalf of another person. In such cases export documents such as shipping bills shall indicate name of both manufacturing exorter/manufacturer and third party exporter. Bank realisation certificate (BRC), GR declaration, export order and invoice should be in the name of third- party exporter.

Acceptance of Third Party Exports under various Export Promotion Schemes

POLICY CIRCULAR NO. 16/2002-2007 dated 24th December, 2002

Third party exports are intended to service the manufacturer exporters who may not be able to export directly and would therefore avail of the services of a third party namely merchant exporters. The third party thus in effect acts a marketing wing in the entire export transaction and the intention of policy is to remit/ exempt duty on the inputs used in the export product.

Both the provisions under para 2.34 and 9.55 of the Exim Policy clearly imply that third party exports are applicable for all the export promotion schemes of the Exim Policy provided the name of the manufacturer and the third party are mentioned on the shipping bill.

Source: taxguru.in

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TOP CHALLENGES AND SOLUTIONS FOR OPTIMIZING PROCUREMENT & INBOUND SUPPLY PROCESSES

How to improve resilience, lower costs, and optimize operations with demand-driven inbound supply management.

Optimizing Direct Procurement

Optimizing direct procurement and inbound supply means much more than just streamlining your "procure-to-pay" processes for purchasing and accounting.

In the paper, "Optimizing Direct Procurement" we describe how real-time business network platforms enable a new collaborative relationship between manufacturers, their suppliers, co-manufacturers, logistics providers, and customers. It's one that operates in real-time to optimize decision making, increase resilience, and unlock enormous business value for all parties.

The following is an abbreviated version of the paper, "Optimizing Direct Procurement."

Inbound Supply Challenges : When it comes to direct materials – the products that go into your finished goods - many manufacturers struggle on the one hand with increasing costs due to high inventory levels, and on the other with critical out-of-stock situations that at times result in lost production time, costly plant issues (such as unplanned overtime, production line setups, and teardowns), and high logistics costs. Inventory costs rise when you're carrying excess inventory in some areas and not enough inventory of the right materials in others. High transportation costs result when expedites are required to cover inventory shortages.

Another problem is long information lead times with suppliers that impact responsiveness. Even when companies send weekly or daily communications to suppliers, communications can lag dramatically the further down the supply chain you go, known as the "bullwhip effect". Companies need to be agile to get information to all suppliers with close to zero time lags to ensure that replenishment needs are met with desired service levels.

Most importantly in today's environment, you'll want to ensure a resilient supply process is in place, one that provides for continuity of supply and minimizes disruptions to operations and your customers. Part of this includes a streamlined and highly efficient process for rapidly on-boarding qualified suppliers worldwide and the ability to quickly ramp your supply network up or down in response to demand or supply shifts, regulatory, geopolitical changes, or natural disasters, such as the recent pandemic.

In a win-win process, your company may be judged on the quality of your order forecast to suppliers, and you'll need a way to evaluate suppliers and hold them accountable on supplier delivery performance, with a consistent and accurate way to measure and record this performance, which both parties can see.

Finally, let's acknowledge that for many companies, a key barrier to optimizing inbound supply processes is the state of your own systems. Companies can have dozens – even a hundred or more – separate, siloed enterprise systems or ERP/MRP instances. How can you expect to put in place standards for replenishing components and raw materials, along with consistent processes for your many suppliers, without also addressing the fundamental issues of your IT landscape?

Requirements for World-Class Inbound Supply Chain Management

What does it take to reach world-class performance? As you look to optimize your direct procurement processes, you'll need to ensure that your platform provides these essential capabilities.

Orchestrate All Inbound Supply: Your business will require a comprehensive platform for managing the flow of raw materials, intermediates, parts, and components from supply to assembly or manufacturing to final assembly and packaging across your business. Your supply platform must also include workflows well beyond basic ordering, including forecasting, planning, collaboration, executing, and delivering material orders. You'll also need early detection alerts for material and logistics issues, as well as ways to identify, resolve, and automate issue resolution to the greatest extent possible.

Correlate Each Transaction Beginning to End: You'll need control and visibility over the entire life cycle of each transaction with full insight into cash flow and financial commitments. Procure-to-Pay services will also need to integrate purchasing, logistics, and financial operations into a single environment, so you can track each order from beginning to end, shipment for the order, invoice, etc. Services should include supply management, requisition, sourcing, order management, logistics tracking, invoice management, and data feeds to payables (external payment systems).

Propagate Demand to Upstream Tiers: Can your system effectively propagate demand from finished goods all the way back to the n-level vendor tier in near real-time? The answer will need to be "yes", precisely computing net requirements based on stock on-hand, on-order, and your replenishment policy to generate accurate order forecasts (i.e. inbound supply requirements). Distributors and vendors will need the ability to view and operate with accurate long-term forecasts so they can plan their capacity and distribution accordingly.

Automatically Reallocate Inbound Materials: You may need to dynamically plan and execute "milk runs" - where consumed materials or parts are replenished on a regular basis - according to real-time data. You'll be able to reduce the risk of shortages by autonomously matching demand and supply around the clock. As demand across each facility changes, you'll want intelligent agents to automatically reallocate materials in transit accordingly.

High Precision Matching of Deliveries with Requirements, and Greater Accountability: Most companies have heavily invested in their MRP systems. These create forecasts and firm orders where suppliers ship according to shipping instructions, typically specified on a weekly basis. Suppliers can have leeway to ship any time during the week. So, suppliers can ship to deliver on Monday even though the real need is in the latter part of the week, say Thursday or Friday. The result is that you may have a maximum inventory violation at the beginning of the week! In addition, supplier performance is often loosely measured, where as long as supplier ships in the specified week, they ship on time. Ideally, you would like to instruct suppliers to ship and arrive at the time your factories actually need it, such that supplier performance is measured at the exact required ship date or request date. Suppliers may think their performance is greater than 90% based on loosely-defined delivery dates, while the actual performance could be only at 70% when measured on the exact required ship or delivery date. You'll require greater precision in your instructions to suppliers, as well as improved tracking mechanisms for greater accountability.

Integrate Transportation Too: You'll need a highly responsive real-time platform to make sure material supply meets fluctuating demand – while at the same time reducing transportation costs by maximizing container and shipment use, right-sizing the container, consolidating deliveries into a run, and driving out expediting costs. This will require the ability to aggregate demand, source materials, and transportation requirements across the supply chain, offering an integrated view of supply, demand, production capacity, and transportation across both internal manufacturing operations and the operations at suppliers and service providers.

Work with Logistics Providers in Real Time: A world-class inbound supply process will also need a highly capable transportation management capability with end-to-end, real-time visibility for material, and logistics planners. It will need to integrate materials management and logistics for inbound, outbound, international, domestic, and cross-border transportation, offering consolidated views that eliminate the need to manually track shipments via email and phone. Logistics features will need to include global trade document and milestone management, multi-modal and multi-leg shipment visibility, global milestone management, alerting, and third- or fourth-party logistics integration services

Source: SupplyChain247

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WTO UPDATE

TRADE POLICY REVIEW: INDIA

The seventh review of the trade policies and practices of India takes place on 6 and 8 January 2021. The basis for the review is a report by the WTO Secretariat and a report by the Government of India.

Concluding remarks by the Chairperson

The seventh Trade Policy Review of India has given us a good opportunity to gain a better understanding about the trade, economic, and investment policies adopted by India since its previous Review in 2015, and the challenges that it continues to face. The statement from the head of India's delegation, Mr Anup Wadhawan, Commerce Secretary, greatly facilitated our discussion. As did the thoughtful remarks from our discussant, Ambassador Sunanta Kangvalkulkij of Thailand.

I would like to thank India for its active engagement in this review process, despite all the constraints posed by the COVID-19 pandemic. The large number of interventions made at this meeting (52 delegations) is an illustration of the high importance attached by Members to India's trade and investment policies and practices.

Members commended India on its strong economic growth during the review period, particularly in the services sector, allowing India to become one of the world's largest economies. Members believed that the continuous economic reforms focussed on increasing efficiency and inclusiveness contributed to these positive developments and led to an improvement in socio-economic indicators, such as per-capita income and life expectancy. Members expected that this positive economic performance would help to further integrate India into the global economy and make a larger contribution to world trade.

Members noted that India had adopted a comprehensive stabilization and stimulus package to deal with the impact of the pandemic. They encouraged India to ensure that these measures are designed and implemented in a transparent manner and meet legitimate policy goals without unduly restricting trade.

In this regard, as at the time of the last Review, Members reminded India of the importance of providing sufficient information to guarantee transparency on the implementation of its regulations in order to avoid an unnecessary burden on economic operators. Members also urged India to submit notifications on a regular basis to the WTO, especially those related to export subsidies for agricultural products.

Members noted that India, as a founding Member of the WTO and a major trading nation, had benefitted from the rules-based multilateral trading system. In this context, India was urged to play a constructive role in ongoing negotiations and reform efforts. Members invited India to participate in the new Informal Working Group on Trade and Women's Economic Empowerment. Likewise, Members encouraged India to join initiatives such as the Informal Working Group on Micro, Small and Medium-sized Enterprises as well as the three Joint Statement Initiatives on e-commerce, services domestic regulation, and investment facilitation.

Regarding regional trade agreements, Members noted that during the review period India did not conclude any broad-based trade agreement and that it had withdrawn from the RCEP. Some Members urged India to finalize ongoing RTA negotiations and encouraged India to consider simplifying its rules of origin requirements. Members thanked India for providing duty free and quota free access for LDC exports.

Members commended India's measures to improve its business and investment environment, which included raising foreign equity limits in some sectors, opening up others, and facilitating investment procedures. Members took note of the programmes put in place to promote foreign direct investment and local manufacturing, and to further integrate into global supply chains such as Make in India, Digital India, Start-up India, Skill India and Self-Reliant India.

They welcomed these initiatives, while raising concerns about the possible trade restrictions they could introduce, urging India to be mindful of any trade implications.

Members welcomed India's adoption of trade facilitation measures resulting from the implementation of the Trade Facilitation Agreement (TFA). Nevertheless, Members noted that India's trade policy had remained largely unchanged since the previous Review, with continued heavy reliance on instruments such as the tariff, export taxes, minimum import prices, import and export restrictions, and licensing. On the tariff, concerns were expressed with respect to its complexity and uncertainty, the increase in tariff rates, tariff preferences, and tariff concessions. Members welcomed the implementation of the Goods and Services Tax which replaced several indirect taxes and would result in increased transparency in India's taxation system.

Highlighting that India was an active user of trade remedies, Members asked India to take a more cautious approach in applying anti-dumping and safeguard measures and emphasized that all relevant investigations should be conducted in conformity with WTO provisions. Some Members raised concerns about India's use of technical regulations and SPS measures, including compliance with international standards.

On other issues, some Members welcomed the modernization of the government procurement regime, but concerns were expressed regarding preferences granted to local suppliers. Members also noted the role of the state in several sectors, including the existence of state trading enterprises. Some Members welcomed the adoption of the National IPR Policy and India's efforts to improve its IPR regime; however, challenges to better protect and enforce IPRs were also noted.

Concerns were expressed about the high level of government intervention in the agriculture sector. Members recognized the importance of the sector in supporting livelihoods and food security; however, they urged India to reform its agricultural policies that continued to be based on significant levels of domestic and export support for key crops, including through subsidies for certain crops such as sugar, and to inputs.

Members recognized India's efforts to liberalize this sector, but believed that further liberalization would benefit India's consumers and producers. They also encouraged India to actively participate in the agricultural negotiations as well as in the fisheries negotiations.

Members noted that India's economic growth has been driven by the services sector, and welcomed India's further openness in several sectors. Relaxation of cabotage and developments in digitalization were also mentioned. Given the importance of the services sector, Members considered that India's active involvement in the ongoing WTO discussions, such as on services domestic regulations and e-commerce, would contribute to further India's economic development.

These points briefly cover the main topics addressed during this Review. Let me once again thank India, the discussant, and the rest of the Members for their valuable very positive and active contribution to our two days of discussions, which provided us with a better understanding of India's trade and related policies and practices and helped us identify the achievements accomplished since the last Review in 2015, and the challenges that remain ahead.

Members hoped that the Indian economy would soon return to its growth path following a stronger and more diversified integration into the world economy.

India received more than 1,000 advance written questions from 32 Members, and it has already responded to most of them. In a month's time, Members should receive replies to questions that are still outstanding, which will then mark the successful conclusion of India's seventh Review

Source: WTO Website

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TO BOOST EARNINGS, FOCUS ON SUPPLIER SPEND — NOT JOB CUTS

It's an area o en overlooked, even by senior business leaders. But employee costs are a relatively small portion of most big companies' budgets.

SIMON GEALE

This is a contributed op-ed written by Simon Geale, senior vice president of client solutions at Proxima Group. Opinions are the author's own. The pandemic has torn apart business revenue streams like never before and forced many companies to make difficult decisions to reduce or eliminate costs. Unfortunately, those costs sometimes include mass numbers of employees. Time and time again, we see that supplier spend is a much better place for companies to focus, rather than job cuts. It is often overlooked (even by senior business leaders) when employee costs are a relatively small portion of most big companies' budgets.

Cutting external supplier costs could boost EBITDA by three times more than cutting workforce costs by the same percentage, as shown by our research. A substantial increase to EBITDA can be associated with cutting supplier costs, with a 10% reduction generating a 32% surge in EBITDA. On average, three-quarters (75%) of Fortune 500 companies' costs go toward external suppliers, while the remaining 25% is spent on employment costs.

Sectors most impacted by labor costs : Companies are able to boost savings and strengthen their position to succeed with small strategies that they can launch now. Bringing down supplier spend is crucial for long-term success and will provide strategic headroom that will enable businesses to make better choices in the future. For many businesses, it may also provide workforce headroom that allows for staff retention where they may otherwise have had to let them go.

As business sectors struggle to boost earnings and continue to reduce the size of their workforces, they need to understand the percentage of supplier costs that account for total business expenditures.

"Bringing down supplier spend is crucial for long- term success."

Companies in information technology and financial services have the highest share of labor costs (38% and 45%, respectively). Relatively low wages in wholesale, retail, administrative and support service sectors show that labor costs make up only a small share of total costs among Fortune 500 companies.

High capital costs in the mining sector show that external supplier costs account for 82% of businesses' total expenditures. In the human health services sector, employment costs account for 51% of total spending, which is due to the large workforces and relatively low reliance on capital expenditures in this sector.

Short- and long-term xes

There are numerous short-term levers that can be pulled here — things like reducing consumption, negotiating prices, working capital or changing service levels. There are also many more strategic approaches, which are likely to take longer but deliver much more value as well as more immediate measures. Zero-based budgeting is one example, which can make a dramatic short-term impact but needs careful management in the mid to long term.

That is not to say that it is all about cost reduction. If the same logic is applied to growth, the supply base is going to be a richer source of research and development, innovation and acceleration than internal sources. So, optimizing spend means considering all angles from cost to growth, efficiency to flexibility.

Suppliers are going to be key to accelerating out of the crisis and for future innovation and growth strategies.

"Optimizing spend means considering all angles from cost to growth, e ciency to exibility."

In some sectors, we are seeing a seller's market evolving, which means suppliers can be more selective with whom they choose to do business. In reality, businesses need to deeply understand the contribution of each dollar invested.

To "optimize" is not just about cuts, it is about making every dollar invested work for you in the way intended.

Working capital has become a main focus over the last several months. It is fair to say that in procurement, at least, working capital is used to focus on extending payment terms. In today's world, businesses value cash and debt differently. There is a greater focus on the cash position of trading partners and accounts receivables.

The new year and beyond

Businesses are quickly realizing that they need to ensure liquidity in the supply chain, whereas in the past, it was often about improving their own cash position. To target a more optimal performance, some should depend on liquidity in the supplier chain, rather than just protecting one's own position.

What are some key indicators that businesses should look for in their supply chain? Some may include:

How much cash organizations carry into future lockdowns.

How they have managed to reduce their overall cost base and fixed cost exposure.

How responsive their supply chain is to changing demand patterns.

With supplier cost accounting for about 70% of total costs, these last two points are key to be able to respond to customer demands, and not be burdened with unnecessary stock or debt.

It is important to recognize suppliers are an important source of innovation and delivery, as well as cost percentage, as such a high percentage of spend is going toward suppliers. Bringing down supplier spend for the future must be done in a professional and structured manner — identifying which suppliers are adding value and where excess spending can be cut. Entering the new year, businesses should identify current and future trends in their respective sectors to create long-term strategies. Depending on the opportunity, a proactive outlook on future goals and cost restructuring can prevent the harmful reduction of employee overhead and other valuable resources, impacting long-term success.

Source : Supply Chain Dive

EXECUTIVE HEALTH

HERD IMMUNITY TO COVID-19 IS STILL A LONG WAY OFF: HOW VACCINES CAN GET US THERE

Experts say achieving herd immunity to COVID-19 will be a step-by-step process that will rely heavily on how many people get vaccinated.

- **While the rollout of COVID-19 vaccines is encouraging, a small percentage of Americans have been vaccinated so far.**
- **Most models predict that a majority – 60 or 70 percent – of people in a population need to be vaccinated to achieve herd immunity.**
- **Herd immunity without vaccinations is possible, but it would cause millions of people to die as well as overwhelm the healthcare system.**
- **The path to normalcy will be gradual, but positive results will start to be seen as more people are vaccinated.**

If 2020 was the year that COVID-19 disrupted life as we know it, 2021 promises to be the year that vaccines start to bring things back to normal.

But there's still a long way to go. As of January, more than 17 million vaccinations have been given worldwide, with more than 6 million of those administered in the United States.

The U.S. figures represent less than 2 percent of the country's population, so that begs the question of when we'll start to round the corner.

Ask any expert in infectious disease and they'll tell you that halting the spread of disease comes down to one big factor: herd immunity.

"Herd immunity works because so many people 'in the herd' are immune to a disease that they act like a buffer for those in the same community that aren't immune and protect them," explained Dr. Shelley Facente, an infectious disease epidemiologist and founder of Facente Consulting, a public health consulting firm dedicated to under-resourced communities.

"For it to work, you really need a lot of immune people," she told Healthline. "Twenty or 30 percent of people in a community being immune isn't enough to protect those who are vulnerable. Given what we know about how easily COVID-19 spreads, most scientists estimate that between 60 and 70 percent of the entire community would have to be immune before we'd have herd immunity."

Herd immunity and vaccines

Even without a vaccine, COVID-19 would run its course and herd immunity would be achieved through mass infection.

But this would come at a deadly cost.

Dr. Casey Kelley, a physician who founded Case Integrative Health and has spoken at length about the virus, told Healthline that some groups have proposed simply letting the virus run its course.

"The problem with this idea is, of course, that the majority of the population would need to contract COVID-19," she explained. "The strain on the health system would undoubtedly risk thousands, if not millions, of lives."

This is why vaccines are important.

Kelley says that they're meant to help the body develop antibodies that can attack the virus.

She said that this should confer some, or all, of the benefits of natural immunity without having to actually contract the virus.

Playing the waiting game

Vaccines give us reason to be optimistic about the coming months.

But as case numbers continue to skyrocket, experts say it's important to be vigilant.

Dr. Philip Smith, a public health expert and assistant professor at Miami University in Ohio, served on the university's Safe Return to Campus Planning and Coordinating Committee.

He told Healthline that the pandemic has been a learning experience for those who work in the health field.

"We have learned so much from this past semester about what works and what needs improvement," Smith said.

"We know we can create safe environments," he added. "We have observed from the last semester that the risk of transmission is very low when all individuals in a setting are wearing masks and keeping distance – like in a classroom or office space – and when cases and contacts are quickly identified, then isolated or quarantined. We have also observed that COVID-19 can spread like wildfire when individuals do not take precautions, especially at social gatherings."

Until herd immunity starts to take root, Smith said it's crucial that institutions mandate mask and distancing policies, along with robust testing and contact tracing programs.

High risk individuals should stay home and be given options to engage remotely.

Skeptical?

The past two decades have seen an upswing in the number of people who are skeptical of vaccines, if not opposed to them entirely.

COVID-19 vaccines are new and came together quickly, which can lead to some degree of skepticism.

For those who have questions, experts say the best person to talk to is a trained medical professional, such as a family doctor.

Dr. William W. Li, author of "Eat To Beat Disease: The New Science of How Your Body Can Heal Itself," broke down what he tells his patients.

"As a physician, I always try to explain the need for medical treatments to my patients. If they are skeptical, giving them confidence in the treatment and understanding it can convince people to go forward with it," he told Healthline. "I sometimes will ask if someone has a friend or family member who has gotten the vaccine to help them feel like they are not the only ones getting it. Finally, I have photos of the damaged lungs of people who have been infected by COVID-19 and, just like the anti-smoking ads, the reality of the disease can sometimes help people make up their mind."

Experts say COVID-19 vaccines may be new, but it's important to remember that the science behind vaccines, and what makes them work, is ironclad.

Smith says that there are some unknowns surrounding whether COVID-19 can be eradicated or merely contained, but he points out that we've seen in the past what an effective vaccine can accomplish.

"There is a common ingredient in every single example of eradication in our history: herd immunity resulting from widespread vaccination," he said. "The extent to which we can return to normal will hinge completely on the extent to which people are willing to be vaccinated, and on the ability of nations to fairly and efficiently distribute the vaccine on a global scale. When anti-vaxxer sentiment and lack of vigilance impede herd immunity, disease incidence very predictably increases."

When will things return to normal?

Nearly a year into the pandemic, it would be comforting to know there's a certain date that things will return to a more normal setting.

It's impossible to pin down such a date, but with the rollout of vaccines, we're gradually getting closer to that time, whenever it may be.

Kelley says we'll need to see a large percentage of the population vaccinated before we start to round the corner. One metric to watch out for, she says, is R0 or R-naught.

"An R0 of 2 means that one infected person will pass COVID-19 to two other people," she explained. "There are lots of factors that go into this number, but basically an R0 greater than 1 means the virus is growing, an R0 of 1 means the virus is stable, and an R0 less than 1 means the virus is fading. As more people get the vaccine in a region, R0 for that region should start to fall dramatically."

Smith says it's important to be patient with what's going to be a step-by-step and not an instantaneous process.

"Returning to normal is not going to be an experience like one day we're in COVID-19-land, the next day things are the way they were before things started. The return to normalcy is going to be an inch-by-inch process where we gradually become more and more normal over time," he said.

"The meter for normalcy is going to be herd immunity, but not just of our own communities and our own nations," he added. "Our herd immunity is going to need to be global because we live in a global society. This is going to take a long, long time. With this said, as more people get vaccinated, the more we move the meter, and the more we can gradually move back to normal.

Source:www.healthline.com

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COMMODITY INDEX

Commodities	Days's Index	Prev. Index	Week Ago	Month Ago
Index	3236.3	3237.2	3246.3	3129.8
Bullion	7803.2	7830.2	7916.9	7910.1
Cement	2430.5	2430.5	2430.5	2463.7
Chemicals	1485.7	1485.7	1485.7	1494.3
Edible Oil	2536.9	2478.4	2498.5	2599.4
Foodgrains	2461.7	2455.0	2467.8	2258.3
Fuel	3109.5	3109.5	3066.7	3008.3
Indl Metals	1919.4	1919.4	1919.4	1919.4
Other Agricom	2178.4	2178.4	2181.3	2163.9
Plastics	2102.0	2102.0	2102.0	1642.9

Source: ETIG Database dated 28th January 2021

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