ISSN 2320-0758
PRICE ₹ 50/-

MATERIALS MANAGEMENT REVIEW

Volume 17 - Issue 9 Date of Publication: 1-7-2021 No. of Pages: 1-60 July 2021

Overview of MSMEs in India

Sector Overview

- The number of MSMEs in India increased by a CAGR of 18.5% from 2019 to 2020.
- To boost the equity culture among SMEs (small and medium enterprises), the BSE SME exchange is actively initiating steps to collaborate with state governments and other professional networks to organise webinars.

Statutory Bodies

- The MSME Ministry heads five statutory bodies—KVIC, Coir Board, NSIC, NI-MSME and the MGIRI
- These bodies are responsible for aiding MSMEs with respect to government schemes and policies

Government Schemes

- In Union Budget 2021, the government announced funds worth Rs. 10,000 crore (US$ 1.36 billion) for 'Guarantee Emergency Credit Line' (GECL) facility to eligible MSME borrowers, giving a major boost to the sector.

Policy Support

- Budget allocation for MSMEs in FY22 more than doubled to Rs. 15,700 crore (US$ 2.14 billion) vis-à-vis Rs. 7,572 crore (US$ 1.03 billion) in FY21.

From the Desk of The National President

Dear Members,

Greetings from National President!!

India has taken a quantum jump in vaccination drive since 21st June 21. Last one week has seen the vaccination numbers galloping to average 70 lakh vaccination per day against average of 24 lakh vaccination per day prior to 21st. Central Government's decision to take up the vaccination drive under its fold has paid off. A real turnaround in the economic activity can happen only if sizable number of the population is vaccinated.

There was a V shaped recovery of the economy after the 1st wave. If such recovery has to happen, the positivity rate has to drastically reduce. Barring a few states, majority of the states have start registering high recovery rate and very few infection. However, we need to be extremely cautious and should take every measure to ensure that the 3rd stage does not come. With a predication of a normal monsoon this year, the level of economic activity will increase which will be driven by rural demand. The inflationary pressure created by increased crude oil prices will be offsetted by reduction in the food inflation.

With June end fast approaching, majority of the branches have completed the required membership strength of 25 to retain their branch status. Next milestone to be achieved is to complete the annual audit for the FY 2020-21. NHQ staff has periodically sent out communication to the branches to renew their membership which as really paid off. Very soon we will be starting our next admission session. I urge all the branches to put in every effort to increase the student enrolment.

I take this opportunity to wish all IIMMites and their family members a good health and a safe stay.

With Warm Personal Regards

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

From the Desk of Chief Editor

Dear Members,

Even before, Indian Economy, could manage to recover from the adverse economic effects of nationwide covid 19 crisis in 2020, the 2^{nd}covid 19 wave hit the country and this time, it was the Rural Economy which bore the brunt of Covid 19 leading to halt of supply of agricultural produce &commodities by creating supply chain bottlenecks and escalating the prices of the essential commodities.

We, as a country, are going through extremely difficult times and every sector is dealing with multiple challenges. Further to it, lockdown measures to prevent further spread of Covid 19 cases had disrupted already fragile supply chains and overburdened logistics sector which ultimately absorbed the wrath ofa lockdown economy where 'delivery timelines'became a priority.The last mile logistics sector had been playing a key role during the second wave.Times like these show the necessity for an efficient and much more resilient supply chain.

Past few decades have largely seen optimizing supply chain in terms of cost efficiency and best commercial gains. However, recent ongoing pandemic Covid 19 has demonstrated the importance of farsightedness, resilience and adaptability in to the modern supply chain. Advances in artificial intelligence and new technologies, such as blockchain are offering better opportunities for further supply chain innovation.

The COVID-19 pandemic has shown different ways, how a business entity can continue to effectively communicate and manage within a remote working environment. Indeed, supply chain operations with stronger digital infrastructure have fared better in the COVID-19 pandemic than those without.

India's supply chains are likely to go through huge transformations in the next few years as the impact of COVID 19 continues to challenge our demand and supply frameworks. The first and most important change will be the rise of domestic sourcing to make supply chains more local. This is reflected in the renewed focus of Central Govt. on Atmanirbhar Bharat, particularly in the defense sector. Extension of PLI scheme also reaffirms same commitment. Draft E-Commerce rules also indicative of the same thinking of Govt. Corporatization of Ordnance Factories of OFB will bring in more transparency, efficiency and decentralizing in defense supply chains.

As supply chains are getting reviewed in the wake of Covid 19 Pandemic, absorption of technology and sustainability of supply chain in the time of pandemic should also be considered. Besides treating the logistics providers as partners to secure and evaluate different routes to get the products to their customers would continue to be in focus.

Companies should multi-source strategic commodities or key components to reduce their dependence on one supplier. Procurement and supply chain executives need to closely review their materials and develop much more distinguished strategies for each sub-group of materials.It should not only analyze the supply pattern but also consider the demand pattern, which may vary drastically for longer period of time. The key here is to have a holistic approach and ensuring that many different perspectives are considered.

I hope government and industries will be able to better respond to likely 3^{rd} wave of Covid 19 and SCM Professionals will rise to the occasion.

H. K. SHARMA
mmr@iimm.org

IFPSM

IIMM is a charter member of International Federation of Purchasing & Supply Management

Correspondence :
MATERIALS MANAGEMENT REVIEW

Indian Institute of Materials Management
4598/12 B, Ist Floor, Ansari Road,
Darya Ganj, New Delhi - 110 002.
Phones : 011-43615373
Fax: 91-11-43575373
E-mail: iimmdelhimmr@gmail.com &
mmr@iimm.org
Website : www.iimm.org

Printed at :
Power Printers,
4249/82, 2 Ansari Road, Daryaganj,
New Delhi - 110002

MATERIALS MANAGEMENT REVIEW

Volume 17 - Issue 9 (July 2021)

CONTENTS

PAGE NO.

Edited, Printed & Published by :
INDIAN INSTITUTE OF MATERIALS MANAGEMENT
4598/12 B, Ist Floor, Ansari Road, Darya Ganj, New Delhi - 110 002.
Phones : 011-43615373 Fax: 91-11-43575373
E-mail: iimmdelhimmr@gmail.com & mmr@iimm.org
Website : www.iimm.org

INITIAL PROVISIONING OF MRO ITEMS (SPARES, CONSUMABLES & SUPPORT ITEMS) PART TWO – ITEM IDENTIFICATION

CL ROY B.SC(ENG.); MBA; CSCP[LIFE TIME DESIGNATION], LIFE MEMBER - IIMM (BANGALORE), CHIEF CONSULTANT, RA CONSULTING, BANGALORE

roycl@raconsulting.co.in

1.0. INTRODUCTION

MRO Materials Management (MRO-MM) coordinates all the functions responsible for the systematic flow of MRO materials in a manufacturing organization. The main functions are Planning, Implementing, Monitoring and Controlling of the complete cycle of flow of MRO Materials from Sourcing through Storing to Issuing them to Operations and Maintenance when needed in required quantities. This flow of Materials at macro level has four major processes namely Supplier Relationship Management (SRM), Inventory Control & Management (ICM), Warehousing & Logistics Management (WLM) and Customer Relationship Management (CRM). These processes have to manage the three flows of Information, Materials and Fund across the Organization to form the MRO Materials Supply Chain. It is simply called the **MRO Supply Chain (MRO – SC)** in this article. The existence of flow of Materials is responsible for the other two flows to revolve around it to form MRO Supply Chain. Logically it can be said that MRO Material Flow is the foundation on which MRO Supply Chain is built.

MRO Supply Chain is defined as the combination of network of Suppliers, Transporters, Warehouses, Internal Customers, People plus the three Flows of Material, Information and Fund, involved in Procuring, Storing, Preserving, Supplying MRO Materials to Operations and Maintenance departments of a Manufacturing Organization, when needed in required quantities and Disposing of unwanted MRO Items. The three flows keep the partners of the MRO Supply Chain intertwined for a sustainable relationship. Flow of materials is the primary one which necessitates the other two to follow suit. As Material is the crux of all these flows and operations, all stakeholders should be able to **Identify** the Materials in all respects, for managing them properly for achieving the right level of **responsiveness** for MRO Supply Chain. To be specific, all items in the flow has to be identified uniquely as each and every one is responsible for generating its own Supply Chain. In reality **Item Identification,** the very footing on which the responsive MRO Supply Chain is built, will be described later in this article.

The macro level major processes have several sub processes. Supplier Relationship Management (SRM) is responsible for Supplier Management, Purchasing, Supply Agreements, Supplier Rating etc., Inventory Control & Management (ICM) takes care of Material Cataloguing, Selection of Inventory Items, Preparing Purchase Request, Forecasting etc., Warehousing & Logistics Management (WLM) carries out Inspection & Quality Control, Receiving & Issuing, Material Handling, Stores Management, Stock Accounting, Stock Checking & Inventory Accuracy etc. and Customer Relationship Management (CRM) executes Maintenance Material Planning, MRP Analyses, Material Issue Requests, Payment, Costing, Budgeting etc. The four major processes spread across various departments and or sections. Individual departments and sections are responsible for sub processes. This leads to the fact that there are several stakeholders for MRO Materials. And these stake holders have to uniquely identify and completely understand the materials handled by them to make MRO Supply Chain really **Responsive**. Buying Specification, Logistical Data, Technical Data and Matrix Bill Of Materials related to items are the Four Factors to facilitate this highly important activity of Item Identification.

1.1.0. BUYING SPECIFICATION

At this moment, it is quite opportune to refer the meaning of **Specification** as given in Oxford dictionary: 1] an act of **identifying** (italicized boldface letters by this author) something precisely or of stating a precise requirement and 2] a detailed description of the design and materials used to make something. It clearly states that the Materials can be identified by Specification. Collins dictionary states that " A **specification** is a requirement which is clearly stated, for example about the necessary features in the design of something".

So, to understand and identify the MRO Materials for their effective management, it is mandatory to prepare the Buying Specification accurately & completely and to update it timely. In practice, the mere Buying Specification alone will not help all the stakeholders as they have to carry out different operations. What is really required, in fact, is the right Purchasing or Buying Description. Another important fact is that there is no need to have complete Technical Specification for buying the Materials. However, Buying Description (a term preferred by this author with the short form of **Buy-Desc**) contains that part of Technical Specification which is mandatorily required for purchasing the material and is termed Buying Specification, plus other information such as Packaging and Packing details, guidelines for Transportation, Handling, Safe Operation, long period Storage, details of Manufacturer, Supplier etc. Regarding quality of preparation and presentation of Specification, we can follow the advice by Nick Helm, Freelance Writer, TenPoint Ltd, Wellington: "It (specification) must be specific and not simply present a range of options or generic statements... Like any good technical document, a specification should be clear, concise, correct and complete".

Buying Description (Buy-Desc) and Purchasing Description are used interchangeably as these are synonymous for all practical purposes in the context of this article. Also the term product is used to include service.

2.0. MRO SUPPLY CHAIN MANAGEMENT (MRO-SCM)

The below shown figure 2.0.a. shows a typical MRO Supply Chain with major processes at macro level and the sub processes within each major process.

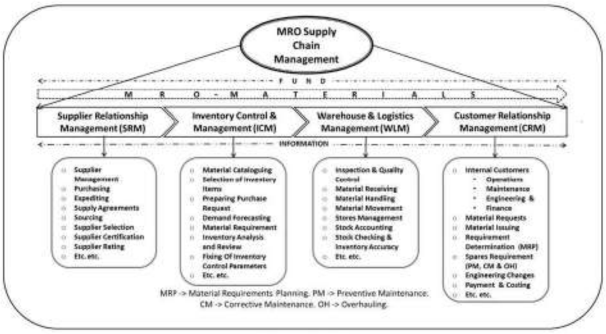


Figure: 2.0.a.

From figure 2.0.a, it can be surmised that the Partners of MRO Supply Chain are departments or sections of the manufacturing organization including the Internal End Users. As stated earlier, the flow of Materials is responsible for the very existence of the other two, to revolve around it. The partners of MRO-SC have to manage the three flows of Materials, Information and Fund among themselves, by Planning, Implementing, Monitoring and Controlling them to form the MRO Supply Chain. It is quite important to note that MRO Supply Chain should always be **Responsive** type only. For MRO-SC to be responsive, the partners of Supply Chain (SC) should **identify** and know each and every MRO Item, so as to execute their functions properly and effectively. In short, the SC Partners should be able to follow the framework of **Item Identification** easily and objectively to comprehend the uniqueness of each and every MRO Item so as to provide differentiated treatment as needed to have required level of **Responsiveness.** It is to be noted that the SC Partners are the stake holders of Item Identification Process.

ITEM IDENTIFICATION

At this juncture, the term **Item** has to be defined clearly so that all the stake holders understand the term in the same manner. The explanations of Material (Page 7) and Item (Page 6) in the manufacturing environment are best elucidated in the book **Service Parts Management** by Joseph D. Patton, Jr., 1984. And they are given below:

Material: "Metal, wood, lubricants, cloth and other hard goods generally purchased in bulk and used in smaller, variable quantities; also all **items** used or needed in any business, industry or operation as distinguished from personnel". Another definition given in Page 5 of Inventory Control and Management by Donald Waters, 2003, is a highly practical statement: "For simplicity, we will use the general term 'material' for anything that is kept in stock". These lead to the generic definition of material: The term **Materials** in a manufacturing organization stands for all the inanimate things and objects purchased and or produced for Current Operations and or kept in Stock for Future Sales and or Captive Consumption.

Item: "Generic term used to identify a specific entity. Items may be parts, components, assemblies, subassemblies, accessories, groups, parents, equipments or attachments".

Cambridge Dictionary defines **Item** in three contexts as given below**:** 1] "something that is part of a list or group of things".

2] "one thing that is a part of a list or a collection of things".

In the first two instances, it simply states that the term **Item** is used to point out a particular type of thing (object) from a list or collection or group of diverse or assorted types of things. If the list contains diverse types of materials, the term **Item** indicates a particular type of material in the list. Example given in figure 3.0.a.

Material Group (Item) Code	Material Group (Item) Description
21	Machine Tools, accessories and attachments
22	Pneumatic tools and accessories
23	General workshop equipment and accessories
42	Electric motors, parts and accessories
43	Wires, cables, connecting and terminating materials
44	Lamps, lighting control gears
45	Electric Fuses, MCCs, OCBs protection gears
61	***Bearings and Accessories***
62	Belts and Accessories
63	Couplings and accessories

Figure 3.0.a.

Bearings and Accessories is a type of materials with group code 61 and is an Item with respect to this particular list. Within the framework discussed above, it can be seen that **Material** and **Item** are synonymous in this particular situation.

3] "an item is also a particular thing considered as one among others of its type".

In the third example, the term **Item** stands for one specific thing with all its quantity, selected from the group of **like** or **similar** things of the same type. In case, the list contains SKUs (Stock Keeping Units) of various types of material, the term **Item** denotes one particular SKU selected from a particular type of material. In this case, the term is applied to pick out an entity (a particular thing) with all its quantity, from the group of SKUs. This is clearly shown in figure 3.0.b. below:

SKU (Item) Code	Stock Keeping Unit (Item) Short Description	Category
61-12-65-1203	Bearings, ball, double row, ang contact, light type, SKF 3203A, 17d x 35D x 17.5W	Like Items
61-12-65-1204	Bearings, ball, double row, ang contact, light type, SKF 3204A, 20d x 47D x 20.6W	
61-12-65-1205	***Bearings, ball, double row, ang contact, light type, SKF 3205A, 25d x 52D x 20.6W***	
61-12-65-1206	Bearings, ball, double row, ang contact, light type, SKF 3206A, 30d x 62D x 23.8W	
61-12-65-1207	Bearings, ball, double row, ang contact, light type, SKF 3207A, 35d x 72D x 27.0W	
61-12-65-1208	Bearings, ball, double row, ang contact, light type, SKF 3208A, 40d x 80D x 30.2W	
61-12-10-2203	Bearings, ball, double row, **self align** , medium type, SKF 1303E, 17d x 47D x 14W	Unlike Items
61-12-10-2204	Bearings, ball, double row, **self align** , medium type, SKF 1304E, 20d x 52D x 15W	
61-12-10-2205	Bearings, ball, double row, **self align** , medium type, SKF 1305E, 25d x 62D x 17W	
61-12-10-2206	Bearings, ball, double row, **self align** , medium type, SKF 1306E, 30d x 72D x 19W	
61-12-10-2207	Bearings, ball, double row, **self align** , medium type, SKF 1307E, 35d x 80D x 21W	
61-12-10-2208	Bearings, ball, double row, **self align** , medium type, SKF 1308E, 40d x 90D x 23W	

Figure: 3.0.b.

SKU with code 61-12-65-1205 is **a particular thing considered as one among others of its type** (“angular contact, light type” ball bearings with SKU numbers ranging from 61-12-65-1203 to 61-12-65-1208) that can be termed **Like Items** (resembling items and not identical ones) because the variations are at the minor level attribute of dimensions only. Thus the particular SKU is distinguishable by itself from others of the same type. Also it is again distinguishable from the SKUs of another type – “self align, medium type” known to be **Unlike Items** having the variation at a higher level attribute**.**

It is natural now, to refer to the definition, relevant to MRO environment given in the Glossary linked to Guide to Materials Management (GMM) of Shell IPM BV, which is presented below:

Item: “A single item is all that quantity of material of the same specification which is held in a particular store or described on a document. Distinguish carefully between ‘item’ and ‘quantity’. Many valves of the same specification held in stock constitute one item”. Also the following definition of SKU is worth analyzing in this particular situation: “Reference that designates each SKU from others according to shape, size, color, fragrance, strength, reliability, or other characteristics. An SKU inventory means the stock of an individually described SKU that may contain any quantity of units” (#3 Joseph D. Patton, Jr. 1984, Page 15). This makes it clear that the sum of all SKUs make up a total inventory for a Store or Company. In this circumstance, **Item** and **SKU** are synonyms.

The examples detailed above prove that the term **Item** gets its meaning based on the context in which it is used. In the term **Item Identification,** Item stands for Stock Keeping Unit in the MRO Supply Chain Environment. In this definition, an **Item** can be an **SKU** of physical materials such as equipment, tools, implements, instruments, devices, sets, kits, outfits, fittings, trimmings, assemblies, subassemblies, components or parts.

Item Identification can be defined as the process of accurately and completely identifying that set of unique data elements which differentiates a specific MRO Item from other similar or dissimilar ones and enables an effective Item management in the Responsive MRO Supply Chain. This process is the foundation of and is highly crucial for the successful implementation of an effective MRO Item Management from Sourcing to Disposal.

The stake holders of the **Item Identification Process** are: Sourcing, Purchasing, Material Planning, Inventory Control, Warehouse, Logistics, Operations, Maintenance, Engineering, Accounting, Costing and Quality Control. In addition to the above, Supplier and Manufacturer are also stake holders.

DATA ELEMENTS REQUIRED FOR ITEM IDENTIFICATION

Major Data elements required for Item Identification and their sources are given in the list below:

- **Buying Specification**

☐ Item Description: One line Nomenclature as given by the Actual Manufacturer.

☐ Technical and Manufacturing Data:

→ Design and Construction Type and Standards.

→ Characteristics: Physical, Chemical and Visual Properties and Quality Control Standards.

→ Dimensions and Weight with Tolerances – their Standards.

→ Performance with Standards, Inspection, Calibration, Testing Standards and Testing Equipment.

→ Manufacturing: Processes, Materials, Quality Control and Testing - Standards and Practices.

→ Material Safety Data Sheet (MSDS).

→ Hazardous and Safety compliance data, Preservation & Special Environment Requirement details.

→ Life Expectancy Data: Date of Manufacture, Expected Life and Date of Expiry.

→ Reliability Data.

☐ Manufacturer’s Data:

→ Manufacturer’s Name & Authorized Supplier.

→ Manufacturer’s Model Number, Batch / Lot number, Part Number, Serial Number, Traceability Data.

- **Logistical Data**

☐ Packaging Data:

→ Purchase Unit Of Measure (P-UOM), Issue I-UOM, Accounting A-UOM and Normal Issuing Quantity.

→ Packaging preferably based on I-UOM, Protection of Item, Items per Carton, Master Carton Quantities, Cartons / Master Cartons per Pallet.

→ Labelling: Manufacturer's description, Product description, Bar Code, Quantity, Safety & Handling Signs and Instructions including handling constraints.

☐ Warehousing Data:

→ Size and Type of Carton / Master Carton.

→ Protection during Storage – Material of Cartons, Metal Stillage, Rolling Cage etc.

→ Size (length x width x height) and Type of Pallets (Euro pallets, Euro Box Pallet, Reusable Container, UK pallet, two-way / four-way pallets)

→ Palletized or non-palletized delivery.

☐ Transportation Data:

→ Protection, Mode of Transport and Transit packaging – Cardboard, Plastic, Pallets, Metal Stillage, Rolling Cage etc.

→ Delivery Frequency and Quantity per Delivery.

- **Technical Data**

☐ Technical Information Required:

→ Parts List

→ Drawings and Technical literature of Equipment and Parts.

→ Instructions and Manuals related to Transportation, Storage, Installation, Commissioning, Operation, Maintenance etc. of Equipment and Parts.

☐ Manufacturer & Supplier Data:

→ Unique (Captive) Part / Standard Part / Commercial Part

→ Original Equipment Manufacturer (OEM) details and Original Component Manufacturer (OCM) details

→ Original Supplier Details, Supplier's Part No

→ Original Contract / Purchase Order (PO).

→ Date of Original / First Receipt of Item with Quantity.

- **Matrix Bill Of Materials**

☐ Parent Equipment (End Item / Facility):

→ Parent Equipment – Name, Name Plate Details (Actual Manufacturer, Type, Model, Batch / Lot Number, Serial Number, etc.)

→ Parts List with Manufacturer's Recommendation.

☐ Tag Number (Location in the Plant and the Process) wise Data:

→ Per Tag Number: Number of Installed Equipment with Model / Type.

→ Per Tag Number: Number of Equipment with Model / Type needed for Full Load Operation.

→ Per Tag Number: Equipment Redundancy data.

☐ Parts Data:

→ Part Name, Part Number - Equipment with its Model number in which the Part is installed **[Part Number – Equipment Link]**, the Quantity of the Part installed in the Equipment, Number of identical Equipment purchased as per the PO and the Total Quantity of the Part number Installed in the Part Number – Equipment Link. Here, Equipment stands for Equipment and its Model.

→ For each and every Part Number – Equipment Link, the above process has to be repeated to get Grand Total number of Identical Part Installed in Equipment purchased as per one PO.

→ If there exists, Part variation at Serial Number level, it has to be considered separately. In this case, Equipment means Equipment and its Model with Serial Number.

→ Original Equipment Manufacturer (OEM) and Original Component Manufacturer (OCM).

→ Lead Time.

→ Unit Price.

☐ Manufacturer's Recommendation:

→ Insurance Parts / Items.

→ Recommended Parts with Quantities for Commissioning, Operation in the Initial Period and Insurance Stock, as applicable.

The process of Item Identification can be represented pictorially as in figure 3.1.0.a.

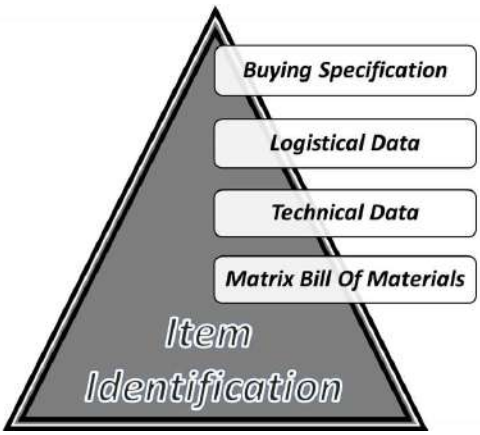


Figure 3.1.0.a.

THE NEED FOR ITEM IDENTIFICATION

MRO Supply Chain Management is all about the Planning, Implementing, Monitoring and Controlling of Sourcing, Purchasing, Acquisition, Storage, Preservation, Issue and Disposal of **Items** (SKUs of MRO materials). These Items are used for smooth operation and maintenance of Plant and Equipment. So logically it is required to have a system for complete and accurate **Item Identification** and capture of complete, accurate and up to date records of all the three flows of Material, Information and Fund timely,

preferably online to achieve the highest level of **RESPONSIVENESS** at the **OPTIMUM COST**. Responsiveness can be described as the capability of MRO Supply Chain to provide needed Items to the End Users (Operations and Maintenance departments) when needed in required quantities.

This highest level of responsiveness can be feasible, only when the following tasks can be achieved effectively:

¨ Developing **MRO SCM Strategy** for achieving the highest level of **Responsiveness.**

¨ Initial Provisioning of **Right Quality (Genuine)** materials in **Right** quantities. This will prevent:

o Entry of **fake** materials into inventory

o Creation of **unwanted** and **obsolete** materials at a later date

Þ **Supplier Relationship Management - SRM:**

o Sourcing

o Supplier Selection and Certification

o Purchasing

o Supplier Rating etc.

Þ **Inventory Control and Management – ICM:**

o Material Classification and Codification

o Right Categorization of MRO Items:

§ **Insurance, Extremely Critical, Critical** and **Normal** items

o Material Demand Forecasting

o Material Requirement Determination (MRP)

o Fixing Inventory Control Parameters

o Dynamic Inventory Control System

o Prevention of **shortage** of Critical Spares

o Prevention of purchase of **excess** quantity of materials

o Prevention of purchase and or acceptance of **wrong** materials etc.

Þ **Warehouse and Logistics Management – WLM:**

o Receiving of Materials

o Inspection and Quality Assurance of Materials

o Transportation and Material Handling

o Stores Management

o Storage and Preservation of Materials

o Storage and handling of Hazardous Materials

o Stock Check and Inventory Accuracy

o Stock Accounting

o Management of Repairable Materials

o Surplus, Salvage and Scrap

o Prevention of **theft** and or **loss** of Critical materials etc.

Þ **Customer Relationship Management – CRM:**

o Processing of Issue of Materials

o Return of Issued Materials

o Costing

o Invoicing and Payment etc.

This puts onus on the stake holders to have perfect **Item Identification** to Understand all the relevant Information including Characteristics, Consumption and Demand Patterns related to the SKUs, for their effective Inventory Management in a typical MRO Supply Chain.

References

1 Douglas K. Orsburn, 1991, Spares Management Handbook, 1st Ed, McGraw-Hill, Inc. # 2 Philip Slater, 2017, Spare Parts Inventory Management, 1st Ed, Industrial Press, Inc.

3 Joseph D. Patton, Jr. 1984, Service Parts Management, 1st Ed, Instrument Society of America.

4 Bhardwaj MK, 2002, Glossary of Purchasing and Materials Management, 2nd Ed, Indian Institute of Materials Management.

5 James F. Cox III and John H. Blackstone Jr., 1998, APICS Dictionary 9th Ed.

6 Rajiv Bhandari, Impact of Technology on Logistics and Supply Chain Management, IOSR Journal of Business and Management, PP 19-24

7 Sunil Chopra et al, 2013, Supply Chain Management, 5th Ed, PEARSON

8 Kenneth Lysons et al, 2006, Purchasing and Supply Chain Management, 7th Ed, Prentice Hall (F T)

9 David N.Burt, et al, 2003, World Class Supply Management: The Key to Supply Chain Management, 7th Ed, Tata McGraw-Hill Publishing Company Ltd.

#10 Guide to Materials Management – Glossary, 1992, SIPM BV.

#11 Donald Waters, 2003, Inventory Control and Management, 2nd Ed, John Wiley and Sons Ltd. #12 Mike Buchanan, 2009, Profitable Buying Strategies, 1st Ed, Kogan Page Ltd.

#13 Gwynne Richards, 2011, Warehouse Management, 1st Ed, Kogan Page Ltd.

#14 Donald J. Bowersox et al, 2000, Logistical Management,1st Ed, TATA McGraw-Hill Pub. Co Ltd.

●●●

TO BE SUPER PURCHASER - LEARN FROM CORONA -

RAJIV GOEL, VICE PRESIDENT, HINDUSTAN COMPOSITES LTD.
goel@hindcompo.com

There is a saying that every incident, every person, every entity and every occasion teaches us something or other. Teachings and/or learnings can be both positive and negative. As human beings and most intelligent living being, we are always encouraged to find and learn positives, and to ignore negatives.

And here comes the ever popular saying that – "every cloud has a silver lining". So what we can learn from the on-going corona pandemic.

With so much of losses, pain and suffering surrounding all of us; it is very difficult to divert our mind and soul towards positive aspects of this on-going crisis. However, there are positives and we need to identify, highlight and learn from them. I have made a very small effort towards the same.

Value Chain - Value Chain of any company or economic entity consists of three components.

Value Addition / Manufacturing

Demand Chain

Supply Chain

Supply Chain principally consists of 1) Purchasing & 2) Inward Logistics. And, similarly Demand Chain consists of 1) Sales & 2) Outward Logistics.

With the advancement of time, changing business environment and accompanying technological advancements, many new and additional components have got added to both Supply Chain and Demand Chain. However the core steps remain the same. I am focusing or restricting my presentation to the 1st component of the Supply Chain, which is Purchasing.

I. Be Half Visible

Corona Virus - The core of any living being is the "Genes", which define all the characteristics and features of that particular living being. As we all know by now, the gene structure of the corona virus has RNA (RiboNucleic Acid) structure. RNA is a single helix polymeric molecule.

On the other hand, the gene structure of we all human beings are having DNA (DeoxyriboNucleic Acid) structure. DNA is a double helix polymeric molecule. We are having technology and know-how to study genes, based on their DNA structure.However, we do not have know-how to study RNA based gene structure.

The single helix RNA nature of corona has made it difficult for us to identify and understand its nature. Presently, the corona virus is studied through RT-PCR (reverse transcription PCR) way, where RNA is converted into DNA

Purchaser - A person should only reveal or state half of his personality to the seller/other entity. Thus, the other entity should be aware of only half of your strengths and weaknesses. This shall be usefull to a Purchaser during all his negotiations, discussions, points, counter-points, actions, counter-actions and other traits of the purchasing process.

Any purchasing process is usually a long drawn affair, which involves multiple interactions and meetings. During the said processboth purchaser and the seller or the other entity try to know each-others' maximum possible traits or features or nature. As a purchaser, our efforts shall always be to reveal less or at the most half of our features.

Thus, we should reveal less of our existing suppliers, existing purchase prices, existing stock details, your current urgency for the particular purchase, your actual quantum of current requirement, your time-line of purchase, your payment plan, and so on. This shall help us as a Purchaser to negotiate and strike a successful deal from a point of strength, rather than falling into a weak and surrendering position.

This "half-rule" shall not only apply to our weakness, but also to our strengths. We should not only hide weakness, but also our strength. Many times the seller devise their strategy based on our strengths; and hence in such cases not revealing all our strengths serves our purpose and strengthens our position in long runs.

Thus Not Letting the other person to know your full or true nature is your biggest strength in any purchase-negotiation situation.

II. Influence the core or the chief person

Corona Virus - Corona lives in our lungs, and the respiratory system is central to our life. Thus, corona is capable of influencing our core survival system. And this has made corona such a lethal entity, and we all fear for corona for our lives.

Purchaser -As a purchaser, our effort should always be to reach to the core orto the chief person at theseller-side entity. Please note that the initial interaction for any purchasing process can and shall start at any level of the sales-hierarchyat the seller-end. We should not get bogged-down or disheartened by the situation, where the position/level/hierarchy of the seller-side is lower than our own. In fact, we should start with a low position level at the seller-end, and slowly and steadily build up the relationship at their higher level. Please note that in most of the situations, the true and actual information is passed and shared at lower level only; and not at the top or higher levels.

It is an open secret that in most situations the actual information is obtained through the field sales person or the dispatch person at the seller-end. And similarly, on the buyer-side, such valuable information is shared by the stores person or stores security who handles all the documents in the factory.As a purchaser we should explore such things on the seller-side and be cautious of such things on the buyer-side.

Moving back to the point of core person, we should try to slowly move up the hierarchy on the seller-side, and ultimately establish and develop relationship at the Head-of-Sales, MD or the Owner level at the seller-side.

At lower levels, we shall get current information and updates, however the future course and the strategic inputs can be get only at the core or top level. Having relationship at the top level on the seller-side shall always come handy in case of crisis or economic-stress situations.

III. Be Mutant capable

Corona Virus - Corona is frequently changing its nature, and mutating fast. By the time we develop a vaccine for corona, the corona develops into a new mutant. Mutant variant of corona is making it difficult for us to control and neutralize it.

Purchaser - As an efficient and smart purchaser, we should always be ever ready to change as per evolving economic and market conditions. The economic and market conditions keep on changing, and these factors make the market buyer-driven or seller-driven as per situation.

As a Purchaser we should change our positions by tweaking our strengths and weakness. This shall always give us upper-hand or equal-hand in dealing with the seller-sides. Let us take an analogy from the current Indian market condition.

Past >>In February-March 2021 period, the Indian economy was experiencing fabulous growth. The demand was outpacing supply making it a seller-driven market. And, the ever increasing commodity prices (steel, non-ferrous metals, petroleum, petrochemicals, rubber and so on) was making the situation further difficult and harsh for a Purchaser. On top of these adverse scenarios was the delayed import shipping line schedules. All these had pushed the purchaser on the back-foot. In such a scenario, those Purchaser were able to manage who had realized the situation and giving more importance to securing supply linesand less to price negotiations.

Present >>Come May 2021 month, and the cycle has changed, though only a little. There is lockdown in multiple states and overall market demand has come down. This has eased off the commodity price pressure on the Purchaser to some extent. But the situation has not changed completely in favour of the Purchaser. Corona pandemic has also made worker availability a major issue and the on-going oxygen related crisis has made the operations of many factories and companies difficult. So although there is very small cooling on the commodity prices, the supply-chain pressure remains as many of the suppliers are not able to work or are working at reduced capacities. Now, the focus of the Purchaser has changed to negotiating and bringing down prices, and also to ensure supplies.

Future >> in June-July 2021 months, the scenario shall change again. Hopefully the corona situation shall be subdued (my personal hope and prayer), which shall allow everybody to operate their factories or manufacturing operations at full capacity. However, there shall be less demand or demand shall be slow to pick-up as general public shall be economically bruised and scared. This shall make a buyer-driven market. Here the Purchaser has to again change his roles and has to give focus on hard-core price negotiations, since supply-lines shall be fairly smooth.

Thus, as you can see, within a short span of 6 months, as a Purchaser we have to change our roles and priorities multiple times. And, in order to play our roles effectively during all the above mentioned three phases, we have to play with our strengths and weakness vis-à-vis the seller-side.

IV. Be Super-Spreader

Corona virus - Corona spreads among all and in all conditions. The virus spreads equally among all citizen segments and also along different geographic locations of urban, semi-urban, rural and remote areas.

Purchaser - A purchaser should have no reservation in dealing with different types of people in different seller organizations.

As stated in previous paragraphs, in many cases as a Purchaser we may have to start with a junior or lower level sales person in an organization, and then slowly we have to move ahead in the seller-side hierarchy. By this I also mean that as a purchaser we should not carry our ego or status or position on our sleeves, and deal with any person as per situation.

This kind of approach from a Purchaser side, shall allow whoever person is there on seller-side to become comfortable andeasy. This approach shall allow a Purchaser to get required information and inputs from the seller-side, as and when the situation arises.

V. Be Resilient and Invincible

Corona virus - The corona virus is becoming invincible or is hard to conquer. In spite of the availability of so many vaccines, we are not sure if the virus has been contained. There are also incidents of virus relapsing.

Purchaser - A purchaser should also be invincible or hard to be won (or convinced). A seller shall and may deploy many options and way-outs, however as a purchaser we should always get away easily, without getting caught or won.

As a purchaser we should always deploy multiple options or way-outs to counter or neutralize the ways and means of a seller-side. Resilience is a trait which always pays in long-run. Additionally, a Purchaser should also have relapsing nature. Which means that even if a seller convinces or wins you in one round or incident that does not mean that as purchaser, we should surrender or forgo our rights entirely.

Purchasing is an on-going and long-drawn process. Thus there shall always be multiple occasions, when a Purchaser can regain his position or negotiation power. As they say, what goes up, also comes down. Hence, as a Purchaser we should wait for that one opportunity when we can regain our strength and negotiation power. And any purchase process shall bring multiple such occasions.

I shall end with :

“Life must go on”. And so we have to keep the human spirit alive by finding and learning from the positives that this corona pandemic is throwing at us.

●●●

ENTREPRENEURSHIP IN SUPPLY CHAIN AND VALUES OF NOBEL LAUREATE DR. RABINDRA NATH TAGORE POEM.

DR.GARAPATY RAMA PRASAD
HYDERABAD, CONSULTANT, SUPPLY CHAIN, PHARMA INDUSTRY,
MENTOR AND ADVISER, CARGOMEN LOGISTICS
LIFE MEMBER , IIMM, gbrkprasad@gmail.com
DR.BHAVANNARAYANA K, PRINCIPAL I/C. & PROFESSOR,
V.P AGBA SOUTHERN INDIA, HYDERABAD, TELANGANA STATE, INDIA
dr.bhavan@pimhyd.ac.in

ABSTRACT : These days startups and entrepreneurship companies and promoters make it to big news depending on topic of current scenario either due to high valuations these companies receive thru funding from venture capitalists, PE firms etc. While some startup companies are really in advanced technologies , most others which have become a BIG BRAND in areas of B2C segment serving diverse and varying customer tastes and liking. To Name a few, Amazon, Alibaba etc have built their empires on making technology serve customer and fulfil their needs. These entrepreneurs have built their companies and brand mostly on similar approach and philosophy advocated by Dr.Rabindranth Tagore in his poem in Gitanjali , namely, Where the Mind is without Fear etc. Not only these entrepreneurs are without fear of unknown , and have built lasting empires in their lifetime with their business vision and dynamism. This article explores philosophy of Dr. Tagore applying it to these companies and finds what is to be learnt from this poem in this modern business world. (167 words)

Keywords: Entrepreneurship, Value systems, India, Startups, Venture Capitalists.

PAPER: Great Companies are built thru the dedicated efforts of all stakeholders employees, top management, shareholders, customers , suppliers etc. Companies like General Electric, Dupont etc have evolved due to personal vision and dedication of Leaders and history has chronicled their developments. Due to Developments in Technology, we are also fortunate enough to witness Growth of Google, Apple, Amazon etc in the past twenty years. What differentiates these companies , is the thinking power of their key employees to spot a technology and how easy it can serve a customer. Web based ordering built Amazon to such great heights and its growth story still continues.

The author, is trying to put India and its poet Nobel Laureate Dr.Rabindranath Tagore and his poem and its applicability to Business world and management literature in particular. The poem is reproduced here and how it can guide Startups and entrepreneurs in their search of building a modern world on sound value system based foundation.

"Where the mind is without fear and the head is held high

Where knowledge is free

Where the COMPANY has not been broken up into fragments

By narrow domestic walls

Where words come out from the depth of truth

Where tireless striving stretches its arms towards perfection

Where the clear stream of reason has not lost its way

Into the dreary desert sand of dead habit

Where the mind is led forward by thee

Into ever-widening thought and action

Into that heaven of freedom, my Father, let Corporate Sector awake. "

Source : Poem 35 of Nobel Prize winning Anthology " GITANJALI", Indian Society, London, 1912.

True the Management Litearature is full of stories of entrepreneurs how they did it and how their mind and value system operated when they took up this task of building a great empire. None of these entrepreneurs have fear of unknown and they operated and built their companies with true dynamism and a vision of future to serve society and the world at large. Imagine Amazon building its supply chain fulfilling their customers expectations of service , price , quality etc.

Dr. Tagore visualized in 1912 itself, a world where knowledge is free. All of you have seen how difficult to get info in 1910 to 1920 . How Internet changed this game, you all experienced, and vouch for it. So What will you call Dr. Tagore , a Management Visionary or author who could see how future should happen. It took technology 80 years later to make this dream come true. So it has now become imperative and valid that individual effort with knowledge available, sky is the limit to achieve. You can see the examples of Amazon, Alibaba promoters and how they have gone about building their companies from strength to strength.

As large companies become big and size is so vast that the next sentence highlights and cautions to take that Large corporations are not departmentalized but focused on company goals achievement. Departmental interests and feuds have caused many big companies to slow down and go under. However, companies which kept customers at heart and not looking after narrow mindedness interests have become great companies where they leverage available technology to harness and serve society at large.

The next sentence " Where words come out from the depth of truth " , is a reflection of value systems of entrepreneurs and their companies. Transparency, Honest deals, respect for each others etc. are true hallmarks of a great companies.They take the extra mile to make sure that these values are adhered , followed , and implemented by one and all.

"Where tireless striving stretches its arms towards perfection" , do we see this in great companies, business is executed flawlessly and the results of Companies like GE, Microsoft, apple, reflect that they aim and will be excellent companies , their systems and process are best in class. These companies have become an example for others to emulate and copy them. No wonder, how these companies go around building their businesses from small scale to big scale , is a story to unfold and m any case studies have come into management literature and the students of MBA programme have read and discuss these case studies in all schools of management where they studied.

Next line in the poem harps on one important aspect, namely

"Where the clear stream of reason has not lost its way

Into the dreary desert sand of dead habit"

That dead habits and old habits do not kill initiative and common sense, prevails to get better business decisions coming from clear reasoning and business sense. We have seen how companies become monotiths and become bureaucratic and we have been doing this for past so many years is the common word in some organisations. Resistance to change etc is the main cause and maintaining status quo is important. Business sense and priorites are the order of day in startups and build foundation for great companies.

" Where the mind is led forward by thee

Into ever-widening thought and action

Into that heaven of freedom, my Father, let Corporate Sector awake. "

This is a very important aspect of entrepreneurship where two forces have to combine for results to show. Namely thought process and executive actions. It is realized and agreed that Organisations put importance to strategic insight and thought as well as practical executive skills to implement and achieve success in business. Dr. Tagore prayed to ALMIGHTY that his mind and everyone's mind is taken to that freedom and heaven is the result so that His country at that time which is having its own problems comes out of that phase. The author took the liberty to say that the corporate sector be taken to that heaven of freedom so that there is prosperity all around and harmony all around in this world and the world order becomes smooth and nice.

Bibliography:

1. www.zomato.com and various articles that appeared in news papers.

2. A Rabindranath Tagore poem and its relevance to Corporate World by Dr. G. Bala Raama Krishna Prasad, October – December 2017, HRM Review by IUP Publications.

●●●

SUPPLY CHAIN PLANNING OF PROJECTS AND OPERATIONS

C K KUMARAVEL, CPM – USA, LIFE MEMBER IIMM CHENNAI

KumaravelKrishnamorthy@yahoo.com

Supply chain planning is critical for correct and timely execution of projects and operations achieving planned goals and objectives. Basically supply chain planning is about getting right the 4W plus 2 H variables i.e. What to buy or purchase, When to buy, Where to supply, From who or which source to buy, How much to buy and How to buy using what policies/ strategies/ processes/ standard operating procedures/ contracts &agreements/ key performance indicators etc..

Clarity on all the above parameters and criteria upfront helps to avoid many issues, scope changes, problems & delays down the line and later in the procurement life-cycles. Since money and funds allocated to projects and operations have some constraints and limits, it is not possible to accommodate endless changes and problems within planned budgets and there needs to be some planning and control on changes and variations in requirements and deliverables of the projects or operations.

What to buy: In these days of engineering developments and availability of newer and better materials / equipment/ technologies/ manufacturing and construction processes and so on, it is imperative that the scopes of supplies and services are finalized after much planning and consideration of available options and also giving due importance to lead times of supply, availabilities in the market, technological superiority, cost compliance to budget, risks involved and other related variables.

When to buy: This is a key step and needs to be fixed properly considering both contractor or supplier lead times and project or operational constraints including times required for subsequent activities and milestones. Proper 'required at site or factory' dates need to be incorporated in the procurement and sourcing plans. Progress of supply contracts needs to be closely monitored and controlled to achieve these target dates. These would have impacts on cash flows and inventory costs.

Where to supply: Contractual requirements and locations of project sites or manufacturing sites where materials and services are to delivered need to be made clear without ambiguity. Some projects may be executed at multiple sites and may require partial deliveries at multiple locations or repeated batch deliveries in different months at the same location. These contractual requirements need to be clarified and captured in the contract at the sourcing stage.

From where to source: In these days of strategic and global sourcing, multiple sourcing options are available. So decisions like single source or multiple sources, global or national sources, purchasing through intermediaries, share of business to each source need to be made upfront and tendering and contracting procedures tailored suitably. Multiple sources reduce risks and improve flexibilities, subject to cost and price constraints. Global sources may push up freight costs but may offer better prices or volumes or quality levels or technologies.

How much to buy: This has implications on cash flows and budgets and depends on production or project volumes and activity levels. To optimize inventories without sacrificing responsiveness and customer service levels, some careful planning is required in this area to get right the delivery schedules and quantities. Adequate warehouse and storage spaces plus material handling facilities are to be considered at this stage.

How to buy: Detailed organization specific process flow charts and procedure manuals need to be developed and used to get this right inclusive of supply chain policy, source selection criteria, risk evaluation and mitigation processes, new source qualification criteria, bid or proposal evaluation criteria, model contracts for materials and works, contract administration procedures, changes & claims management processes, cost and budget control procedures, contract closeout procedures and so on.

As outlined above, proper supply chain planning helps to get clarity on requirements and execute efficient contract negotiation procedures. In the post-award stage, this helps to execute the contract administration procedures to ensure contract compliance & effectiveness and fully realize the benefits planned at the sourcing & contracting stages.

Efficient supply chain planning reduces number of changes required in the contract execution and administration phase and makes budget and schedule adherence goals easier to achieve, thus contributing towards timely completion of projects and operation to realize business objectives and customer satisfaction levels.

●●●

COVID 2ND WAVE HAS BROKEN LOGISTICS SECTOR THAT WAS ON ITS WAY TO RECOVERY: ANJANI MANDAL, CEO, FORTIGO LOGISTICS

TARUN BHARDWAJ

The Indian road transport sector carries goods worth $150 billion a year, which means about $12 billion of business is done per month. The truck fleet utilisation had peaked to 85% in March, which was better than the pre-Covid levels, but has now dropped to 70%.

Infrastructure is the backbone of a nation's economy. It functions like arteries and veins in the body that keep the blood flowing throughout. Logistics sector can be that part of the infrastructure. Without a robust and efficient logistics infrastructure, industries will find it hard to ensure smooth movements of goods across the value chain. The trucking industry- considered to be the backbone of India's economy- has been battered by the imposed lockdowns at the onset of the second wave of the pandemic in India especially after seeing steady recovery over the last couple of months from the first wave. The fresh wave of Covid-19 cases sweeping the country and the resultant lockdown measures implemented by several states have already started hurting transporters. The trade is estimated to suffer $2.4 billion (Rs 17,800 crore) of revenue loss in April alone. This could also affect GDP growth, which is projected at 10.5% by the central bank for this fiscal year.

The Indian road transport sector carries goods worth $150 billion a year, which means about $12 billion of business is done per month. The truck fleet utilisation had peaked to 85% in March, which was better than the pre-Covid levels, but has now dropped to 70%. Truckers will be hard-pressed to pay back their EMIs. Transportation of goods through roadways slowed during April. The average number of daily e-way bills generated in April so far is around 2 million as compared to 2.3 million in March. These bills are necessary for moving goods from one state to the other via road. Besides goods, people's movement has also reduced. Organised Trucking can put together the pieces of a fragmented industry by augmenting performance and visibility through tech-infusion and bolster its credibility in the months to come.

In an exclusive conversation with the Financial Express Online **Anjani Mandal, CEO of Nandan Nilekani-backed startup 4TiGO Networks and Logistics** shares his insights into the ground realities of the infra and logistics industry as it stands, how the second wave has impacted business, projections for 2021 as well as the impact on truck drivers and fleet owners and how things were steering back to normal. Excerpts:

How was 2020 for the logistics industry? Can you trace the recovery post the initial lockdowns in 2020 up until March of 2021?

2020 has been one of the single most challenging periods for logistics in our collective memory. The year started with the cascading impact of the auto sector slow down of late 2019. Auto is one of the most critical sectors for the logistics industry because of the breadth of ancillary industries which feed into it and the vast geographic spread.

The focus shift to an organized sector by the Regulatory did not see many takers for transition from the unorganized sector. The pandemic was the last proverbial straw that saw total despondency among the small businesses. It helped temporarily that they had a moratorium for EMIs & Licenses till October and a couple of months additional while the matter was awaiting final ruling. Most small fleet-owners exited thereafter, sold off the trucks or just returned trucks to the Financier.

The Supply-Demand equation was completely altered by Dec 2020 – even as the small traditional Transporters continued to exit when they got an opportunity. Freight rates are up 30%+. Transition to Rail by many sectors is clearly building up – expected to be 50% from 30% pre-pandemic. The Punjab / Haryana Farmer blockade had a major impact in the North during Q1 2021. Recovery of organized players on most parts outside NCR commenced in Jan 2021 but came to a sharp drop by the middle of Mar 2021 as the pandemic rose to alarming levels in Maharashtra & Kerala.

How has the second wave impacted trucking and transportation? Will truckers be hard pressed to pay back EMIs?

This time Corporate is better prepared to handle labour shortage & increased incidences within the factory – process is defined & symptoms are known. However, the rapid spread has changed the priority of all – (a) employee safety dominates (b) even Drivers hesitate from undertaking long distance trips – due to risk, as well sudden lock-downs and absence of return load.

Consequently, Long-distance route trucks are in short-supply and this is not expected to change soon due to risk & lock-downs. Reduced capacity in factories at short-notice, which in turn is Covid related or labour shortage related, worsens the supply demand situation further. The regional concentration impacts all return loads to these regions.

The second wave has come in and broken a sector that was on the way to regrouping from the first wave. The set of small and medium players who managed to survive the first wave and stayed put, are being forced out of the sector for good this time. Truckers are hard pressed to pay back the EMI as the short term financial relief package for the sector is not present unlike the last time. Many are selling their trucks off at the first chance they get, or surrendering them to the finance companies. The follow on impact of this will be more of the loan origin companies who have no collateral to recover their investment from.

How have the new restrictions and lockdowns impacted Fortigo's business? What does Fortigo's growth look like this year?

As a Digital Logistics player, we had little impact in the 1st wave after the regulations for goods movement were in place by mid-May. However the case is different in the 2nd wave. We were on our way to grow 2.5x in the middle of 2019, but the slow down in the auto sector and lockdowns have reduced our pace. We are reassessing our growth numbers for the year as the severity of the second wave of lockdowns were not expected. Most Large customers have been rational and reasonable and have paused enforcement of negative contract terms for delays and non-placements. There has been a drastic adoption of digital technologies to enable no-touch and paperless operations. eGCN & eInvoices & ePoDs acceptance is not yet 100% but have been accepted by most reasonable customers. Driver shortage continues to be extreme across the country and several trucks engaged in medium-distance are also lying idle. April, which is usually weaker than March every year by 20% in terms of demand for trucks, was lower by 30%. May will be at 50% of March. The South and East are in complete lock-down for industry as well. The Punjab / Haryana Farmer blockade had a major impact in the North Since Q1 2021. Kerala has had relatively higher numbers through September to date except for three weeks in March after which it has risen sharply. Maharashtra has been in the grip of pandemic since 1st week of March and is finally recovering in May.

Have organized and unorganized players been impacted the same way?

All players are impacted, organized or unorganized. The organized players, as expected, always have an edge over the unorganized players but the impact has been distressing to all segments of Trucking outside of e-commerce.

How has Fortigo managed to pivot through this crisis? Are digital logistics solutions really the way forward for the industry?

With the strong relationships and the resilience we have, we were able to adjust our focus on sectors which were working and reduce our dependence on sectors which had reduced demand. We have set realistic expectations about fulfillment and supply-demand situations with our customers, and that is helping us continue our relationships. We are a technology enabled new age player in the industry. The pandemic showed how important building resilience into your operations is critical, and how digitisation is at the heart of it. From the first lockdown, it was clear that organisations who were digitised had a clear advantage over the others, and it has played out in the same manner through the first and second waves. Digital logistics adoption is now an inevitability for the industry.

Fortigo continues to be a Digital Logistics services provider (Tech-enabled). Two major initiatives have been added during the 'pandemic era': (a) New high-volume industry segments that are best facilitated with Technology enablement has been added (b) A separate entity providing Technology solutions for End-Customers / Shippers to Manage Transportation by integrating the Trucking eco-system digitally has been launched. The solution provides accessibility "AnyTime – AnyWhere" for every user through multiple mediums as appropriate – including from their mobile. It is a single integrated solution that enables Transacting, Controlling, Analyzing as well as Improving & Optimizing Logistics performance. This would be as much as 20% over the 1st few quarters of implementation.

What do the coming months have in store for logistics? By when do you see recovery and to what extent? Any expected trends?

The current situation is likely to continue till post-monsoon and is predicted to hit peak this month with a slow decline. Pent-up demand for all core-industry as well as for all sections of FMCG products – beyond essentials – will go through a sharp uptick. Tamil Nadu and West Bengal will in all likelihood have recoveries in a delayed cycle of 2-4 weeks owing to the pandemic situation. All our larger engagements in FMCG, Industrials & Core industry have given us advance intimation of such expected increases. Auto-industry recovery is however likely to be a laggard for a while.

Source : www.financialexpress.com

CHANGE MANAGEMENT METHODOLOGIES TO DRIVE PROJECT SUCCESS

SN PANIGRAHI, PMP, PROJECTS, LEAN SIX SIGMA, GST & FOREIGN TRADE CONSULTANT & TRAINER

snpanigrahi1963@gmail.com

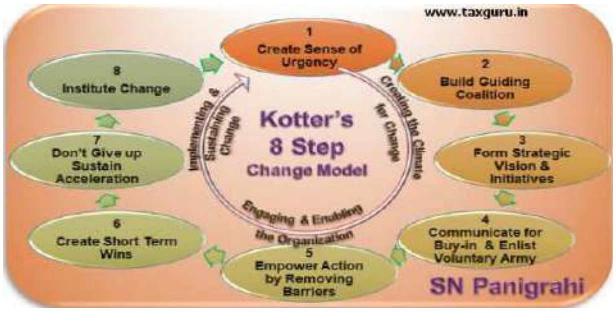
Change Drives Projects to Conceive and Projects Deliver Positive Change Outcomes or Results. Change is Essential to many aspects of business for remaining relevant in your business area and is imperative for companies for ever growing and adapting to different circumstances; important to keep Creative Ideas fresh & implemented and moving forward; **Adopt N**ew Technology and more Efficient and Economical Methods to perform work; Bridge **Performance Gaps &** increase its Business Competitiveness. Changes are also taken up because of government regulations, Improve shareholders value, changes in markets, and other factors in the organization's business environment.

Generally, Projects are Conceived to bring in Change that encourages Innovation, Transformation, Develop Competitive Edge and leads to many positive aspects like Improvement, Progress, Growth, move to Grab Opportunity or Overcome Obstacles or Problems. **Project-based works are like Propelling Engines that turns Ideas into Reality and generates major Changes & Accomplishments.**

While change may be Difficult & make us Uncomfortable many a times and despite facing Daunting Challenges, it can also be tremendously beneficial to business and Positively affect Profits, Productivity, Growth and Quality of Work. In business, no change happens without there being some business factor or benefit that would be gained by the organization. **Projects are Drivers of Change on the other hand Project Success in fact largely depends on how Change is Implemented.**

In a perpetually changing world, businesses must constantly reinvent themselves if they want to stay competitive. Change management is a very broad field, and approaches to managing change vary widely, from organization to organization and from project to project. Change management has become one of the most critical success factors for any Project and therefore "**Change Management is key to the Project Success**." In order to ensure a smooth transition from the current state to the desired state of business, you need the correct change management tools and resources at hand. Change Management is a systematic approach towards dealing with change. It's a structured way of applying tools, knowledge, and resources to effectively drive and ensuring that changes are thoroughly and smoothly implemented, and that the lasting benefits of change are achieved.There are different change management methodologies that have been developed and deployed, such as the **Kotter's 8 Step Change Model**, the **Lewin Change Theory Model**, **ADKAR Analysis, Force Field Analysis**, **McKinsey 7S Framework**, **Beckhard and Harris's Change Model**. All have worthwhile attributes that should be evaluated and executed in a structured fashion in order to deliver project success. Let's now briefly discuss these Methods.

Kotter's 8 Step Change Model : John Kotter (1996), a Harvard Business School Professor and a renowned change expert, in his book "Leading Change", introduced **8 Step Model of Change** which he developed on the basis of research of 100 organizations which were going through a process of change. The 8 Step Change Model is designed to bring lasting change to an organisation. The Model Described as below:

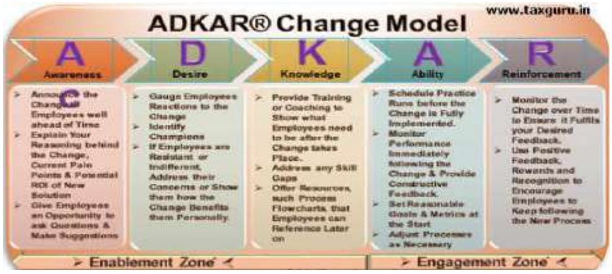


Lewin's Change Management Model

Kurt Lewin developed a change model involving three steps: **unfreezing**, **changing** and **refreezing**. The model represents a very simple and practical model for understanding the change process. For Lewin, the process of change entails creating the perception that a change is needed, then moving toward the new, desired level of behaviour and finally, solidifying that new behaviour as the norm. The model is still widely used and serves as the basis for many modern change models.

ADKAR® Model

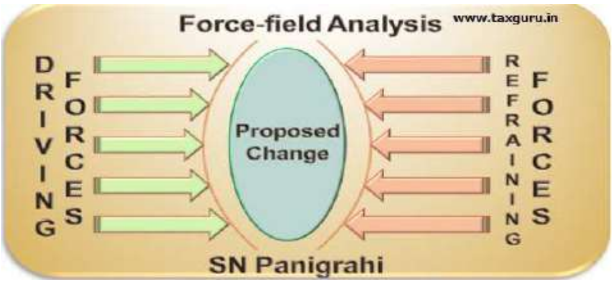
The ADKAR® Model of change is a well-known and widely used tool that helps you analyse your change and better understand it. The ADKAR model is a 5-step framework that helps deal with the people-aspect of change management. The methodology was developed by Jeffery Hiatt, a best-selling author and the founder of Prosci. The five **ADKAR** elements **A**wareness, **D**esire, **K**nowledge, **A**bility, and **R**einforcement—are the building blocks for creating change from the human perspective.



Force–field Analysis : Force Field Analysis was created by Kurt Lewin in the 1940s. Lewin originally used it in his work as a social psychologist. Today, however, it is also used in business, for making and communicating go / no-go decisions'

It provides a framework for looking at the factors (forces) that influence a situation, originally social situations. It looks at forces that are **either driving movement toward a goal (helping forces) or blocking movement toward a goal (hindering forces).**

Force field analysis is a basic tool for root cause analysis that can help you take action once the root cause has been identified. The technique is based on the assumption that any situation is the result of forces for and against the current state being in equilibrium.



McKinsey 7S Framework : The McKinsey 7S Framework is a management model developed by business consultants Robert H. Waterman, Jr. and Tom Peters in the 1980s. McKinsey 7s model is a tool that analyses firm's organizational design by looking at 7 Ss that are structure, strategy, systems, skills, style, staff and shared values in order to identify if they are effectively aligned and allow organization to achieve its objectives and understand the Relationship between Seven "**Hard**" and "**Soft**" aspects of Organizations.

Beckhard and Harris's Change Model

Giving another perspective on change, this describes how change initiatives require the pre-requisites of real dissatisfaction with the current state, a vision of why the new state will be better, and clear first steps towards getting there, to be successful.

Devised in the 1960s by David Gleicher then refined in the 1980s by Kathie Dannemiller, the formula for change was truly popularised by **Richard Beckhard and Reuben T. Harris** in 1987 in their book entitled "**Organizational Transitions: Managing Complex Change**".

The formula offers a simplified analysis of the conditions governing the potential success or failure of a given change initiative as follows:

The aim of the formula is to help those running transformation projects to take stock of the exact situation, in order to then make the right decisions in keeping with the final objective. In fact, the assessment made of the first three variables should be sufficiently accurate to ensure resistance to change is overcome, otherwise the success of any transformation project will be in jeopardy.

Change management mostly focuses on people, and ensures change thoroughly, smoothly and lastingly implemented. Following are some of Tips for brining Changes Successfully.

Typically, these will cover:

1. **Drive from Top:**ensuring there is active sponsorship for the change at a senior management level within the organization, and engaging this sponsorship to achieve the desired results.
2. **Consensus:**gaining buy-in for the changes from those involved and affected, directly or indirectly.
3. **Involvement:**involving the right people in the design and implementation of changes, to make sure the right changes are made.
4. **Impact:**assessing and addressing how the changes will affect people.
5. **Communication:**telling everyone who's affected about the changes.
6. **Readiness:**getting people ready to adapt to the changes, by ensuring they have the right information, training and help.

When your organization undertakes projects or initiatives to improve performance, seize opportunities or address key issues, they often require changes; Change Management provides a structured approach for supporting the individuals in your organization to move from their own current states to their own future states. Successful implementation of Change Management lead to Fruitful Closure of Projects. When change management is integrated into the project management steps, the efforts to manage the people side of change can identify and mitigate risks in a more proactive manner, address anticipated obstacles and resistance and build commitment and buy-in for the change.

●●●

SPEND ANALYTICS: SPEED UP YOUR DECISION MAKING

SARWESHWAR GOSAVI

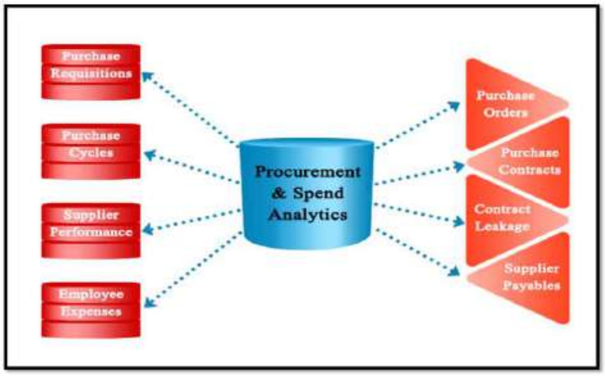
In one of the research, 53 percent of CPOs acknowledged that data visibility and analytical capabilities are still needed for establishing the next level of performance. The current pandemic has proven that procurement functions can deliver at speed. However, how can they also ensure that they are spending wisely? In this context, Spend Analytics becomes an important task to be carried out.

What is Spend Analytics?

Spend analytics is a process of gathering procurement data and organizing it so that it can be visualized and analyzed. Spend analysis deep dives into procurement and expense data to analyze and understand the spending patterns of any business. It helps organizations understand their supply base, track the metrics of procurement performance, and creates actionable insights for vendor consolidation to decrease procurement costs. Often the terms are used together because procurement teams review the analytics to complete their cost analysis.

Actions taken under Spend Analytics?

Spend analytics helps optimize the procurement performance of any organization by integrating information from spend data sources, cleaning it for accuracy, and categorizing it deeply. The business, operational managers, and procurement professionals are able to make better, actionable decisions for their organization using spend analysis software with reliable data with deep classifications. Cost savings are organizations' main goals in this process. Most organizations are increasing time spent analyzing the process of expense management to better understand their spending patterns and identify opportunities to save in the future.



Importance of Spend Analytics

Analytics is important so that organizations can identify and prioritize budget-saving opportunities now at the same time make better decisions in the future. It provides absolute visibility into an organization's procurement process, offering useful insights on expenditures. It can help improve the supply management process to consolidate spending or ensure compliance of any business or supplier.

Spend analytics improves the following:

- Increases procurement teams' visibility on spending and suppliers.
- Eases strategic sourcing.
- Mitigates risk management.
- Removes obstacles facing business units
- Nurtures and manages effective supplier relationships.
- Provides better oversight of supply chain processes.

There are three core areas to consider.

- What is the total spending of an organization?
- With whom is the organization spending money?
- Is the organization getting what has been promised for the purchase?

Spend analytics, in general, is viewed as a part of the large domain, which helps an organization to understand and identify the above-mentioned factors for the betterment of the organization.

Implementation of the Spend Analytics

To successfully execute the spend analytics process you need to consider the following steps.

- Retrieve spend data.
- Verify data accuracy – Clean data.
- Deeply classify the data.
- Use an analytics solution that provides good visibility and instant insights.
- Collaborate with other related departments within your organization to identify potential savings.

To benefit more from spend analysis; you have to spend more time sorting data to identify the flaws in the records. Using an AI-driven platform, cleaning and categorization time can decrease while data accuracy increases.

Source: sourcinganduplychain.com

COMPETITIVE PROCUREMENT THROUGH CATEGORY MANAGEMENT

AJAYA BABU CHAPARALA

Category Management is the concept of the Retail industry that helps for better management as well as sales of a similar category of product by bundling the same. Initially, it was deployed in the retail and sales end. Later on, it is categorically understood that for multiple sources of consumption or multi factory plants, sourcing a similar product by different persons may lead to consumption of more time, money, and resources.

Hence, buyers have also adopted the concept of suppliers to bundle the requirement of multiple locations and the similar product as a category to have a better understanding, control, and volume to negotiate. It results in specialization in category for a buyer and ends up in a better deal with saving time, resources, and money.

Unlike strategic sourcing, category management takes a proactive instead of a reactive approach to sourcing activity that provides detailed insight into factors affecting the price of a service or good. Strategic Category Management is simply category management in a strategic context.

Procurement is a highly analytical and structured process that is based on the **DMAIC – Define, Measure, Analyze, Improve, and Control**. There is a constant focus on understanding costs and value, and looking for ways to take cost out of the product.

Category strategy excellence is a powerful tool that should be at the core of the procurement team's work. It maximizes value, efficiency, quality, and innovation, as well as mitigating risk. The majority of category strategies fall short by not linking strategy proposals to the benefits and value that they can bring.

An effective strategy delivers value well beyond the cost reductions it can provide. It also improves speed to market, decreases supplier and pricing risks, and helps to enhance innovativeness and flexibility across the entire organization.

Category strategy can be defined as a plan of action to map each spending category's most cost-effective and efficient procurement plan. But true category strategy excellence requires a refined multiyear plan built on a complete understanding of category needs, agility to adapt to marketplace and technology changes, and clearly defined actions to create category savings in the near and far future.

Generally, Category strategy starts with category profiling in any organization considering the factors as Business impact and Market complexity.

Business Impact – Total Purchase Cost of the category as % of Total Spend
Market Complexity – Positioning of Buyer vs Sellers relative to each other in the marketplace.

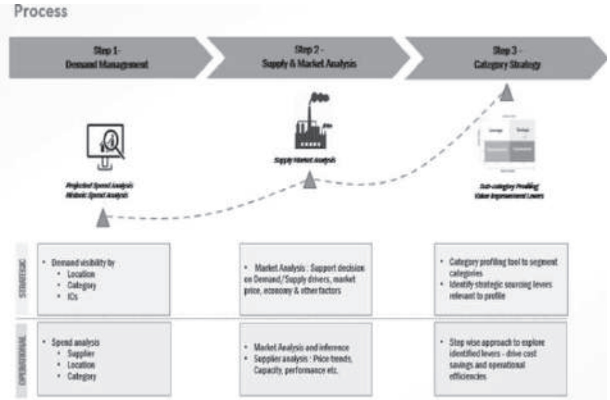
Let's understand with an example through Category Profiling for a product category "ZINC Ingots" for a manufacturing company having production plants in multiple locations.

It's a high-expenditure product having higher commercial involvement and significant business impact. Thus, it needs a meticulous plan for category excellence as well as strategic sourcing which profitably ensures quality and timely supply.

The category Management process is a three-step process;

1. Analysis of Internal Factors – Demand Management and spend analysis
2. Analysis of External Market Factors – Supply and Market analysis
3. Develop Category Strategy

The art of succeeding Category strategy excellence lies in understanding and aligning the internal factors with external market factors to develop and implement the right category strategy.



Process for Category Management

It works both in terms of strategic and operational points of view as shown in the above figure. The entire process has been followed categorically to derive the final category profile and device strategy for strategic sourcing of "Zinc".

Step 1 – Analysis of Internal Factors – Demand Management & Spend Analysis

Demand management

It is to identify the requirement of a particular product and decide the annual volume for buying based on the forecast received from the Demand Management team and based on the derived volume targeted spend for the particular category can be estimated.

To initiate the process, a month-wise demand forecast of Zinc for various plants has been carried out to derive the annual aggregate demand of the product for FY 2020-21. It is given in the below table.

Demand Forecast for FY 20-21

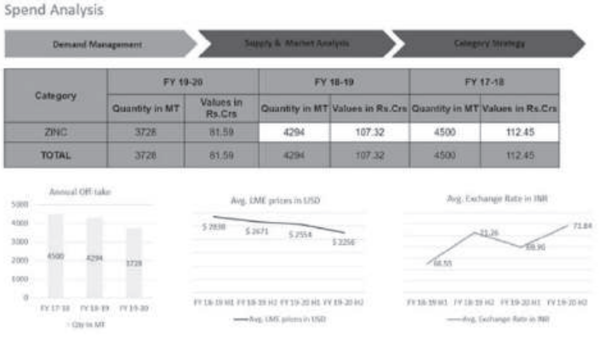
Factory	Month wise Demand in MT												
	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Total
Plant A	94	151	151	151	151	151	151	151	151	151	151	168	1601
Plant B	54	80	127	127	127	127	127	127	127	127	127	121	1280
Plant C		40	117	117	117	134	134	134	134	134	134	169	1196
Total	147	271	395	395	395	412	412	412	412	412	412	457	4077

MonthwisePlantwise Demand in MT

Spend analysis

It is a process for analysing the historical spend (purchasing) data to understand the spending baseline and its evolution over time. But gaining an understanding of what will drive future spending can be a game-changer.

The below data shows the last 3 years' spend analysis based on quantity and value spent and the influencing factors on that spent, which is average LME and average exchange rate derived based on detailed analysis on monthly off-take quantity plant wise & vendor wise LME & exchange rates.

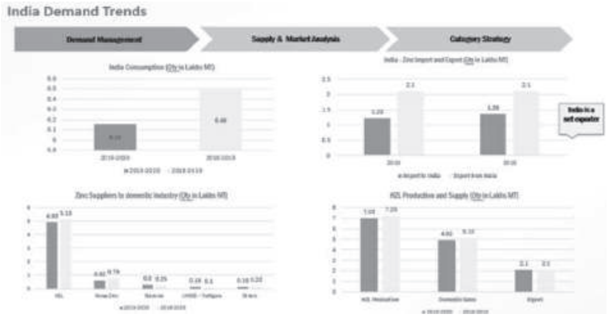


Spend Analysis Data

Step 2 – Analysis of External Market Factors – Supply and Market analysis

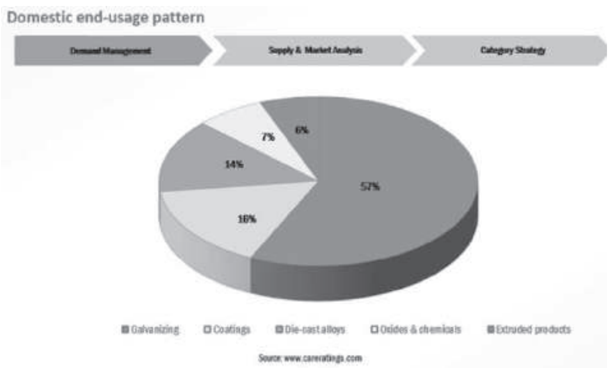
Supply and market analysis

It is the process of collecting and collating the data of key drivers that impact the supplies as well as product prices. We identified five important key drivers which are Demand, Supply, Market Price, Economy or regulations, and other miscellaneous factors. Data collected and collated as displayed in the below analysis.



Demand Trends – India

Further, zinc is also utilized in many other use cases, so end-usage pattern understanding is also an important criterion to look at while you want to see the scenario in totality.

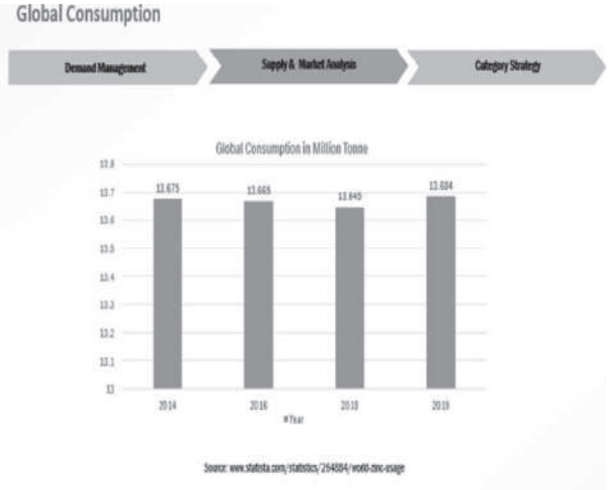


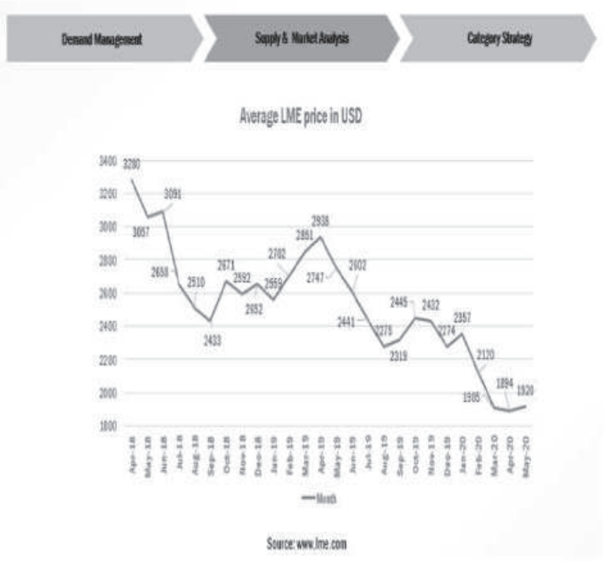
Domestic End Usage Pattern

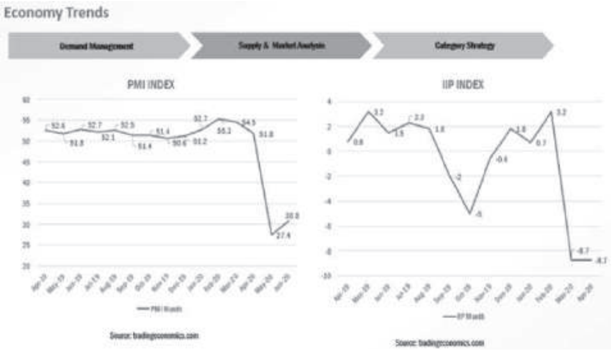
Apart from above, data collected for national and global level demand and supply too.

Supply and Demand Trends – In Lakh MT

Global Consumption AnalysisMarket Price and LME Warehouse StocksZinc Average LME Price TrendEconomy TrendsGlobal Zinc ProductionTop 10 Global Zinc Suppliers Data







The impact from each of the key driver is evaluated in the below-mentioned decision matrix table concerning Indicator, Key insights and their impact on product availability and prices as unfavourable, Favourable and Neutral.

Impact of Key Drivers

Unfavourable / Favourable / Neutral

Demand Management → Supply & Market Analysis → Category Strategy

Area	Description	Indicator	Key Insights	Availability	Price
Demand	Domestic Demand	Fall in Demand	• India's Domestic Demand dropped by 5.1% in FY19-20 to 6.19L MT compared to 6.49L MT in FY18-19 due to overall slow down in economy		
	Import to India	Fall in Demand	• Import to India dropped by 9.6% to 1.23L MT in FY19-20 compared to 1.36L MT FY18-19 due to lesser demand		
Supply	Global Consumption	Meagre increase in Consumption	• Global Consumption increased by 0.3% only to 13.68 Million MT in 2019 against 13.65 Million MT in 2018		
	LME Warehouse Stock	Steep increase in stocks	• LME warehouse stocks almost doubled to 91000 MT in average of Mar-May'20 from average stocks 53000 MT of Oct-Dec-19		
Market Price	LME Price movement	Fall in prices	• LME Yearly average price of Zinc is dropped by 12.8% in 2019 to $2546 per MT compared to $ 2921 per MT in 2018		
	Exchange Rate	Depreciating Rupee	• INR has depreciated w.r.t USD by 8.5% to 75.34 INR compared to Apr-19 69.41 INR		
Economy	PMI	Movement of Index	• PMI fell drastically in Apr/May-20 & slight improvement in May-20 but far behind FY19-20 figures		
	IIP		• IIP drastically came down in Mar-20		
Other Factors	Free Trade Agreement	Import from other countries	• Import from FTA countries for e.g Korea & Japan, 0 & 0.5% BCD respectively		
	COVID-19 Impact	Fall in Price, Higher Inventories, Lower Demand	• LME is expected to be at 2100 $ level for current year because of subdued demand and higher inventory		

Impact of Key Drivers

Step 3 – Category Strategy

Category Strategy is to develop an action plan based on data-driven interpretations. Accordingly below table shows the level of impact from each of the key drivers on the product pricing.

Categories	Zinc Price Drivers	Level of Impact
Demand Side	European Consumption	High
	Primary Demand	Very High
	Industry Demand	Very High
	Premiums	High
Supply Side	Mine Production	Very High
	Primary Production	Very High
	Total Exports and Imports	High
	Economies of Key Supplying Nations	Medium
	Inventories	Medium
Financial Markets	European Markets Analysis	High
	Volume Analysis	Medium
	Tensions on the Overall European Supply Side	Medium
Regulations	Any Imports and Exports Regulations	High
	USD, GBP Movement	Very High
Miscellaneous	Upcoming Events, Key ECB and European Union meetings	Medium

Impact of key drivers in Product Pricing

Developed strategy livers as shown below based on the impact on supplies and prices from various key drivers driving the decision-making process. The final decision would be on Commercial comparisons Local Vs Imports and other factors to arrive at TCO (Total Cost of Ownership) using the data points >> Average LME Price, Premium, Exchange Rate, Customs duty, Port handling charges & inland freight, Additional inventory carrying cost, etc.

Levers Used

Demand Management → Supply & Market Analysis → Category Strategy

Strategy	Indicator
Localization	HZL, the leading global local producer is our main supplier
Global & Low Cost Sourcing	Import from FTA countries, e.g Korea/Japan
Rate contract & Frame Agreement	Rate contract for one year
Volume Consolidation	One year demand is consolidated among all factory requirements
Fact based Negotiation	Subdued Economic Scenario emerging out of global pandemic, bulging LME warehouse inventories, less demand globally
TCO Analysis	LME, Exchange Rate, Premium, C&F charges, hedging cost, duty benefit, extended credit charges etc
Quantity linked Incentive	Incentivising higher volume with higher discount
New Supplier Development	Introduced new vendor
Working Capital Management - Extended Credit	Extended Credit period under revolving L/c or BG
Yield Improvement	Jumbos instead of smaller size ingots for safer & faster handling, less melting loss
Free Trade Agreement / Tax Optimisation	Import from Duty free countries

Livers used

Upon applying all these livers, the final decision is more focused on domestic sourcing from local vendors that have the following impact.

Advantages of Local Vendor:

- Lower inventory
- No "FOREX" involvement
- Supports Government initiative of "ATMA NIRBHAR" mission
- Will help in Vendor Managed Inventory (VMI)
- Continuity of supplies irrespective of market conditions

Disadvantages of Local Vendor:

- Might lead to a monopoly in future

Understanding the key drivers and analysis of impact from each of these drivers with the data-driven decision-making process and finally applying the right livers to find the most value is an art in Category Management.

Source: www.sourcingandsupplychain.com

●●●

CAN DIGITAL TECHNOLOGIES MAKE SUPPLY CHAINS MORE RESILIENT?

CHIAREN CUSHING, EQUINIX

The COVID-19 pandemic made it clear that global supply chains must be more resilient. While the temporary shortages in toilet paper may seem to be of minor importance, scarcities in medical supplies for hospital staff aren't and they underscore a deeper challenge in today's supply chains.

Traditional supply chain management has focused on optimizing efficiencies with a just-in-time inventory framework that maintains only the stock needed to meet the current demand. And though most businesses have become adept at predicting just how much supply is needed to fulfill orders, those predictive models can fall short when it comes to anticipating unforeseen events such as a worldwide pandemic.

A recent survey found that 95% of companies report that they expect to or have already been impacted by COVID-19 supply chain disruptions, according to the Institute for Supply Chain Management. They also found that the average lead times are at least twice as long for domestically and internationally sourced inputs. As a case in point, several major automakers re-opened their plants after a two-month closure but are still having difficulties obtaining all the parts they need from suppliers.

On the demand side, buyers have largely shifted from in-person to online, resulting in softening demand and a shift toward contactless interactions across many industries. Similar unexpected impacts are happening across the entire supply chain, from manufacturers to distributors and suppliers to retail and more.

Digital transformation provides a path to resiliency

To address risks such as these, organizations must be able to pinpoint risks and potential breaks in the supply chain before they emerge and pivot quickly to maintain operations, whether that means purchasing from another supplier, changing the products and services offered, or selling to another buyer. While nobody can predict the future with 100% accuracy, digital technologies such as artificial intelligence (AI), cloud and edge computing, IoT and blockchain can help improve supply chain resiliency. A digital supply chain makes it easier for businesses to achieve the intelligence, agility, scalability and flexibility needed to adapt to a rapidly changing world.

For instance, Proctor & Gamble (P&G) deployed a cloud-based platform underpinned by AI and IoT to automate supply chain planning. As a result, the company was able to predict which suppliers, plants and distribution centers would be impacted by hurricanes, enabling the company to make the right decisions quickly and avoid the disruption and financial loss that other companies suffered.

This intelligence is also helping P&G plan for demand more accurately, improving productivity and operational efficiency. Recently the company reported its biggest sales increase in the U.S. in many years after rapidly mobilizing its manufacturing resources and supply chain to ramp-up production of cleaning products.

In fact, companies in the Consumer Packaged Goods industry can expect the following benefits from digitizing their supply chain, according to research by the Supply & Demand Chain Executive:

- 50% to 75% reduction in lost sales.
- 30% lower supply chain administrative costs.
- 30% reduction in logistics costs.
- 3% to 5% increment in annual earnings growth before interest and taxes.

Key considerations when digitizing the supply chain

Despite the benefits, many companies are just starting their journey toward a digital supply chain. Only a quarter of the companies surveyed in BCI's latest Supply Chain Resilience Report embed digital technologies across their end-to-end supply chain management. That being the case, here are a few key considerations to keep in mind when digitizing your supply chain:

1. **Keep redundancy in mind:** Resiliency goes hand in hand with redundancy. For each point in the supply chain, plan for contingent suppliers and partners and IT infrastructure, such as applications, clouds and networks, in other geographic locations. As an example, digital service providers Netflix, Zoom and Dropbox have all encountered unexpected surges in traffic from different locations in recent months. By having hybrid IT infrastructure distributed across different geographic locations, they have been able to scale quickly by adding bandwidth on the fly or re-routing traffic as needed to meet the demand.

2. Aim for agility and performance: Digitizing the buyer-supplier relationship is essential for building more robust and agile supply chains. A cloud-based digital supply chain interconnected across a rich IoT ecosystem of current and potential partners makes it easy to recruit new suppliers and IT providers, as well as automatically switch to alternative providers when regular suppliers face disruption. For example, by deploying a hybrid IT architecture adjacent to multiple cloud providers, Fung Group was able to digitize its supply chain ecosystem with the agility of multicloud connectivity while maintaining the performance, reliability and security of on-premises IT.

3. Ensure end-to-end visibility: To minimize vulnerabilities in the supply chain, exchanging data digitally is essential. Suppliers may be reluctant to share data for competitive advantage reasons, but trusted data exchange paired with blockchain can help ensure data privacy. However, successful data exchange can usher in its own challenges around data management.

For example, food distributor Sysco Corporation operates 330 distribution facilities in more than 90 countries and serves 600,000 customer locations. The company was faced with having to process a deluge of global data and make it available quickly to its sales and supply chain teams worldwide. By building a high-speed network backbone to interconnect disparate IT resources and gain greater access to the cloud, the company was able to improve data management, analytics, transfer and access for better end-to-end visibility.

Shifting gears for the new normal

While COVID-19 may be the catalyst for accelerating the digitization of global supply chains, some businesses have already been adapting more quickly to the new world. Whether providing new tools and resources to help combat the pandemic or switching production lines from consumer goods to medical supplies, the organizations making these changes understand the importance of instant end-to-end visibility, collaboration and responsiveness.

Digital technologies are enabling them to join forces with their suppliers and partners not only to help save lives, but also to minimize the impact of disruptions across their joint supply chain. And that's a win-win for everyone.

All IoT Agenda network contributors are responsible for the content and accuracy of their posts. Opinions are of the writers and do not necessarily convey the thoughts of IoT Agenda.

Source: internetofthingsagenda.techtarget.com

●●●

LOGISTICS SECTOR POISED FOR GROWTH, BUT BUY STOCKS SELECTIVELY: ANALYSTS

Analysts see the logistics sector as a big beneficiary of the 're-opening of the economy' theme, with pent-up demand expected to drive growth

SALONI GOEL

Even after a stupendous rally in the shares of logistics companies in the past year that saw stock prices of frontline players jump as much as 270 per cent, analysts have toned down their return expectation. While they remain bullish on the sector as they see it as a big beneficiary of the 're-opening of the economy' theme, with pent-up demand expected to drive growth, they suggest investors be choosy and buy stocks of companies that have revenue visibility and balance-sheet strength.

Besides traditional avenues for growth, cold chain supply solutions for the pharma and fast moving consumer goods (FMCG) sector can result in big opportunities for the space, they said.

"Vaccine partnerships will be a near-term booster for the sector and are sentimentally positive, but the real kicker is the sharp uptick in the economic activity, which will structurally drive the logistics sector," said Siddhartha Khemka, head of retail research at Motilal Oswal Financial Services.

The second wave of the pandemic is largely behind India with daily cases at two-month low. Given this, some of the states have started to unlock and the focus has now shifted to vaccinating citizens at an aggressive pace. As the economy opens, analysts believe pent-up demand for goods and services will play out.

"Whenever one talks about the boom in the logistic sector, it directly indicates an upshift in business growth and ultimately expectations of higher GDP. The pent-up demand in many sectors, especially manufacturing, agri, pharmaceuticals, chemicals and metals will require higher transportation of raw material, semi-finished and finished goods. This will become a major driving force for the sector," said Vishal Wagh, research head at Bonanza Portfolio.

New avenues

Growing demand for cold chain logistics has also become a boon for the sector, with companies foraying into new services that analysts say can result in a big boost to their business model.

The Indian cold supply chain sector, according to reports, is set to grow at a CAGR of 17-18 per cent till 2022. While growth will be driven by the government-led Covid immunisation programme, the growing e-commerce market for FMCG, dairy, meat and fish, will also help propel the sector significantly, given the ongoing virus threat, reports suggest.

To tap into this opportunity, TCI Express in the March quarter launched a 'Cold Chain Express Service'. Meanwhile, Snowman Logistics has already bagged a deal from DRL to provide temperature-controlled end-to-end logistics solutions for the delivery of the Sputnik Covid-19 vaccine. AC manufacturer Blue Star recently launched a new range of refrigeration products and solutions which it said are ideal for storing vaccines.

"Vaccination is a recurring theme and more players are seeking manufacturing opportunities. Currently, the market is small but the business is expected to increase going ahead. Logistics has been a key focus area of the government. GST, National Logistics Policy and other structural steps will lead to increase in market share of organised players and result in the long-term growth of the sector," said Ronald Siyoni, AVP- Sharekhan.

Cautious view

In this backdrop, many experts say while the valuations for the stocks look stretched after a 67-270 per cent surge in shares of key players in the last one year, some of the names can still make for good bets as the industry is expected to grow at a CAGR of 10.5 per cent between 2019-2025.

According to Alok Deora, a research analyst at YES Securities, TCI Express, Transport Corporation of India and Blue Dart are some of the top names investors can look to buy. "Their brand name and reach in remote parts of the country make them good bets. The stocks have run-up in the recent months, and the price may come off a bit but we are positive on them structurally," Deora said.

Wagh, meanwhile, recommends investors wait for a healthy correction to enter logistics stocks. GATI, TCI, and VRL are a few good stocks to invest in on correction, he said.

That said, Siyoni believes Snowman Logistic, TCI Express, Concor, Gateway Distriparks and Mahindra Logistics can be top bets from the space.

Source : Business Standard

LOGISTICS SECTOR RESILIENCE HOLDS KEY TO REVIVE THE ECONOMY POST COVID-19 ERA

PREM KISHAN GUPTA
CHAIRMAN & MANAGING DIRECTOR, GATEWAY DISTRIPARKS LTD.

The Union Budget 2021 promises increased spending on infrastructure, focusing on new and improved economic corridors, and road and railway infrastructure

What began as a health scare in China turned into a pandemic that has spread across every country in the world. In the last one year, the world has seen economic slowdowns, border restrictions, and disruptions in international trade and global supply ultimately leading to negative impact on consumer spending. India too witnessed its share of the viral ambush and its repercussions on the economy.

The logistics sector has been on the frontline since the beginning of the unprecedented crisis, ensuring supply of essential goods remain intact. From the early days of the lockdown, most if not all logistics facilities have remained operational and after some initial hiccups, road transportation also continued as before. While there was a sharp fall in freight availability due to restrictions on production of non-essential goods, at the same time logistics services were crucial for the distribution of many essential items. Warehousing demand shot up for products where manufacturers were unable to take delivery of raw materials in the pipeline. Most of the logistics industry functioned with energy and readiness to the challenges of Covid, balancing the peaks and drops in demand while protecting its staff and customers.

Two main forces that has helped logistics industry to overcome the ripple effect from the lockdown is major manufacturing hubs resuming production, and the rise in domestic consumption across all categories. These forces have triggered a ripple effect along the supply chain, affecting multiple sectors, most significantly for automotive, textiles, electronics, food and pharma. Businesses have realized that while the timeframe and extent of the COVID-19 impact are uncertain, and the consequences will continue to be felt even after the spread of the virus is contained, with proper supply chain planning they can mitigate their risk to a very large extent.

The Covid-19 pandemic has made users of logistics services realize how stretched their supply chain was and how it made them vulnerable to disruptions. This has led to many companies redesigning their supply chain network, building in redundancies for critical items, at the same time opting for a leaner just-in-time solution in other cases. Now more than ever, the industry will need to focus on ensuring efficient supply chains with quick delivery of goods across end points.

To achieve this, firstly focusing on Digitization is very essential. It has gained a significant importance during the pandemic. Big data analytics can assist firms in streamlining their supplier selection process, facilitate and manage supplier relationships, and logistics and freight processes can be boosted through automation and the internet of things. The logistics service providers have to integrate their operations with their customers and provide tailor made solutions on a case to case basis. Second important aspect is increased focus on warehousing. This needs to go beyond just infrastructure - sharper focus on quality of service, time defined and optimized services using enhanced technology will make a huge difference.

The third factor is to increase the adoption of multi-modal services. The pandemic has shown the need and opportunity to leverage both rail & road a lot more effectively and in conjunction with each other rather than viewing them as separate modes of transportation. Companies have realized the need for real-time visibility and first-last mile delivery to support large scale operations with maximum efficiency. Infrastructure development, accelerated regulatory support and a technology ecosystem will enable the same.

The Union Budget 2021 promises increased spending on infrastructure, focusing on new and improved economic corridors, and road and railway infrastructure. The Government's push to port, road and rail infrastructure through various investments, initiatives and projects will further add to the development of the logistics industry in India. With faster construction of the Dedicated Freight Corridors and road highways, not only will the logistics sector benefit, but it will be able to add strong support to our domestic manufacturing programs.

Disclaimer: The views expressed in the article above are those of the authors' and do not necessarily represent or reflect the views of this publishing house. Unless otherwise noted, the author is writing in his/her personal capacity. They are not intended and should not be thought to represent official ideas, attitudes, or policies of any agency or institution

Source: www.businessworld.in

●●●

GOVT CLOCKS RS 40,000 CR IN PUBLIC PROCUREMENT TRANSACTIONS THROUGH ONLINE MARKETPLACE GEM; EYES TO INCREASE TURNOVER TO RS 3 LAKH CR

Public procurement worth Rs 40,000 crore has taken place through the government's online marketplace GeM, Expenditure Secretary T V Somanathan. Public procurement worth Rs 40,000 crore has taken place through the government's online marketplace GeM, Expenditure Secretary T V Somanathan said on Monday.

Stressing that the focus of public procurement system is on economy, rigour, fairness and transparency, he said the efficiency of procurement makes a big difference to the fiscal discipline of government.

Towards this, the government has recently revised the general financial rules (GFR) and procurement manuals, and made advances in the use of technology in procurement. The Government e-Marketplace (GeM), an online platform for public procurement, was launched by the Commerce Ministry in August 2016 with the objective of creating an open and transparent procurement platform for government departments. Currently, 3.24 lakh vendors are registered on this platform.

"We have the GeM, central procurement portal, which currently has electronic bids of 1,00,000 tenders - including state government tenders. And we have (Rs) 18-19 lakh crore per annum, of tendering on central public procurement portal (CPPP)," Somanathan said while addressing the Global Procurement Summit 2020. "The government electronic marketplace established in 2016 for common used goods and services have clocked transaction of Rs 40,000 crore," he stated.

Finance Minister Nirmala Sitharaman, in her 2020-21 Budget speech, said the government is looking to increase the turnover of the GeM portal to Rs 3 lakh crore.

CPPP is operational since 2012 and hosts the Government eProcurement System.

Somanathan said global government procurement economy is estimated at $10 trillion in value; and in most countries, including India, it constitutes more than one-fifth of GDP taking into account central, state government and public sector undertakings.

He said the government needs to work on an "economy without delay" and rigour without rigidity.

Somanathan further said that public private partnerships (PPP) are important for infrastructure development across various sectors. PPP contracts are long-term contracts, and despite due diligence, it is rarely possible to anticipate every future eventuality or risk.

"One of the problems we continue to face in many of the PPPs is how do we deal with unanticipated risks and changes that are not specifically provided for in contracts," he said, adding that so far India has not been successful in using arbitration as a means of quick resolution of contract disputes.

Source: firstpost.com

●●●

COMMODITY INDEX

Commodities	Days's Index	Prev. Index	Week Ago	Month Ago
Index	3360.2	3357.6	3354.2	3340.9
Bullion	7672.5	7638.3	7683.9	7600.8
Cement	2463.7	2463.7	2463.7	2463.7
Chemicals	1658.7	1658.7	1658.7	1608.0
Edible Oil	2847.6	2861.5	2788.0	3142.5
Foodgrains	2424.4	2426.2	2422.3	2457.6
Fuel	3556.8	3556.8	3529.7	3400.4
Indl Metals	1919.8	1919.8	1919.8	1919.9
Other Agricom	2276.0	2272.4	2274.5	2305.1
Plastics	2687.1	2712.6	2654.8	2668.4

Source: ETIG Database dated 25th June 2021

ROLE OF LOGISTICS INDUSTRY IN REVIVAL OF POST-COVID ECONOMY

PRAVEEN VASHISTHA
FOUNDER & DIRECTOR OF GXPRESS

According to the reports of the Economic Survey, the country's logistics industry is expected to touch $215 billion by the end of 2020, growing at a CAGR of 10.5 percent. It provides employment to more than 22 million people. **Praveen Vashistha** of **Gxpress** is discussing why India's success and economic growth in the future is heavily dependent on the evolution of its logistics sector.

Introduction: The Covid-19 pandemic has brought the business world to a standstill. The virulent disease has spread across the globe at a rapid pace, disrupting and debilitating entire industries in its wake. India too is witnessing its share of the viral onslaught and has since effectively imposed a nation-wide lockdown to arrest the further dissemination of the lethal disease.

The logistics industry has been on the frontline since the beginning of the unprecedented crisis, ensuring that the supply chains remain intact. Since the manufacturing industries were severely hit due to the shortage of labour and the restrictions being imposed on the movement of goods and businesses, the supply has been disrupted. The logistics industry provides significant macro contributions to the national economy by creating employment and generating foreign investment influx. It currently contributes more than $200 billion to the economy and employs more than 40 million people. Thus, it holds critical importance as it connects various markets, suppliers and business areas like material handling, warehousing, packaging, supply chain management, procurement, and customs service dotted across the country.

Impact of lockdown on logistics sector : The immediate impact of the pandemic on the logistic sector has been a sharp fall in freight availability due to restrictions on the production of non-essential goods, and shortage of fleet for movement of goods owing to the dearth of drivers and a consequent spike in truck rentals and air freight prices. According to the Indian Chamber of Commerce (ICC), the lockdown logistics sector has lost about ?50, 000 crore which has also disrupted the business cycles and supply chains. More than 9 percent of the shipments were stuck, 21 percent of the orders were delayed and the delivery percentage has seen a clear decline of 19 percent, forcing the logistics sector to face the brunt of the crisis.

During the early stage, customers begin to ship more goods in anticipation of stronger business conditions. The rapid decrease in logistics demand signals the beginning of an economic slump. Also, logistics has a strong role as it is the key economic indicators including GDP and Unemployment. When the lockdown is lifted gradually and muted the recovery in industrial activity, the logistic sector, including warehousing, is likely to witness sharp demand contraction in the near-term.

Role of logistics sector to revive the economy : According to the reports of the Economic Survey, the country's logistics industry is expected to touch $215 billion by the end of 2020, growing at a CAGR of 10.5 percent. It provides employment to more than 22 million people. Rapid and technological advancements in digital technologies, changing consumer preferences due to e-commerce, government reforms, and shift in service sourcing strategies are expected to lead the transformation of the Indian logistics ecosystem. In the new normal, technology has proven its utility and adaptability. Strong market trends towards the e-commerce segment continue to transform how brands and consumers interact. The pandemic has brought an increase in the demand for essential items such as groceries, food, and pharmaceuticals. Many logistics companies cater to this demand whilst adhering to safety protocols with OTP-based contactless delivery of items. Leveraging state-of-the-art technology, logistics aggregators should focus on increasing the efficiency of services and optimizing cost.

Another method adopted by logistics aggregator brands is to help the MSMEs and align with the Government's self-reliant movement. For small-sellers who want to take their business online and increase their customer base, logistics aggregators have become the one-stop fulfilment solution. With automated warehousing and packaging services, they should ensure that there are minimal weight discrepancy and seamless post-order experience.

According to the National Skill Development Corporation (NSDC), the logistics sector has emerged as the top employment-generating sectors in India in the aftermath of the coronavirus disease. Logistics companies should design a strategic plan to prove their resilience and dynamism by helping the exporters and SMSEs to showcase their products overseas. This will help the MSMEs to revive production in full swing which will turbocharge them to shift to e-commerce completely. This is the time when companies shall assess their supply chain risks and proactively develop mitigation plans such as exploring alternate channels of transportation or combination of small trucks, three-wheelers, two-wheelers etc. for last-mile essential goods delivery.

Government' role in logistics segment : The Government is introducing measures under the Atmanirbhar Bharat and Made in India mission so that Micro, Small and Medium Enterprises (MSMEs) are back on track as they contribute to a one-third of the total economy. It is also helping by engaging with stakeholders involved in the delivery of essential services, e-commerce players in B2B and procurement domains which have been left stumped. RBI has also announced a moratorium on term loans, put off interest payment on working capital facilities and eased working capital financing. While these measures have given hope to the logistics sector, there are a few more initiatives that the government should take to provide aid to the ailing logistics industries such as delay MSME loan repayment or extended tenure, an exemption in GST, subsidised warehouse or inventory management facilities, measures to mitigate the impact on MSME labour workforce, enhance access to credit and defer utility and social security payments.

Digitalization will play an important role in the efficiency and performance in freight management and port operations. Automation in the warehouse will help achieve operational efficiencies to counter supply-chain cost pressures in the industry. Growth in the investment in infrastructure, last-mile connectivity, and emerging technologies are streamlining the logistics landscape in India. Country's GDP is expected to reach about $3.02 trillion in 2021, representing about 4 percent of the global GDP. Strong growth supported by government reforms, transportation sector development plans, growing retail sales, and the e-commerce sector is likely to be the key drivers of the logistics industry in India.

To sum up, India's success and economic growth in the future is heavily dependent on the evolution of its logistics sector. This is essential not only for generating employment or providing broad social benefits to farmers and low-income workers but also for competing with the rest of the world in terms of last-mile connectivity, efficient transportation, time of delivery, etc. This will give an overall boost to India's image as an attractive investment destination and facilitate India's manufacturing export performance.

Gxpress is a full-service global logistics company that offers the entire suite of logistics services: delivery, warehousing, distribution, labelling, retail management etc.

The views and opinions expressed in this article are those of the author and do not necessarily reflect the views of Indian Transport & Logistics News

Source:www.itln.in

WTO UPDATE

DDG ZHANG HIGHLIGHTS ROLE OF TRADE IN PROMOTING SECURITY, PEACE AND DEVELOPMENT

Trade plays a key role in producing economic opportunities, helping to create employment and strengthening institutions, which are indispensable factors for lasting peace and stability, Deputy Director-General Xiangchen Zhang said on 17 June. Speaking at the launch of the Global Peace Index 2021, DDG Zhang underlined the importance of the WTO's Trade for Peace Programme in emphasizing the linkage between trade and peace at a time when the COVID-19 pandemic has worsened fragility risks across the world, particularly in fragile and conflict-affected states. His remarks are below.

Thank you, Serge and greetings to all!

It is my great honour to take part in the launch of the 2021 Global Peace Index. I would like to convey sincere apologies from Director-General NgoziOkonjo-Iweala, who could not join you today. However, as I am settling in my new role as Deputy Director General, this event gives me a first hand opportunity to dive into the Trade for Peace topic — a very important subject, that is dear to my heart and one that is not enough talked about.

I am pleased to join a distinguished panel of speakers, including His Excellency Mr. Augusto Santos Silva, Foreign Minister of Portugal; Ambassador Thomas Greminger, Director of the Geneva Centre for Security Policy; and Mr. Steve Killelea, Founder and Executive Chairman of the Institute for Economics and Peace (IEP). I would also like to extend my special appreciation to our moderator Mr. Serge Stroobants, IEP's Director for Europe and Mena, for his great work.

I am particularly impressed by the work undertaken by the IEP on its annual Global Peace Indices — a body of work that provides a data driven analysis on trends in peace, its economic value, and how to develop peaceful societies. This work is crucial, especially now as the COVID-19 pandemic has worsened fragility risks across the entire world, while we are still waiting to see its full-fledged impact in the coming years. Now more than ever, we must combine resources, energy, and technical capacity to mitigate the economic fallout of the pandemic, particularly on fragile and conflict affected states.

At the WTO, we believe that economic reforms and institution-building play a key role in promoting stability. Trade in particular produces economic opportunities, helps create employment and strengthens institutions. These are indispensable factors for lasting peace and stability, and the underlying vision of the WTO's Trade for Peace Programme.

Allow me to take this opportunity to give you a brief background on the Trade for Peace Programme. The ideas behind the Programme, started in 2017 when a group called the "g7+ WTO Accessions Group" was established by seven conflict affected acceding and recently acceded LDCs in Buenos Aires on the margins of MC11 in December 2017. These countries are: Afghanistan, Comoros, Liberia, Somalia, South Sudan, Timor-Leste and Yemen. The Group has brought together, for the first time, fragile and conflict affected countries in the WTO. Their vision is to use trade and economic integration as a tool for building their nations to create greater peace and stability.

This vision has culminated into the Trade for Peace Initiative, which now became a Programme for a wider group of fragile and conflict affected countries in the process of joining the WTO, such as Iraq, Lebanon, Libya, Sudan and Syria. The programme aims at promoting the rules-based system as a peacebuilding process by highlighting the role of trade and economic integration in the security, humanitarian and development fields and emphasizing the linkage between trade and peace, which is often overlooked.

As my predecessor and my friend DDG Alan Wolff said, the Trade for Peace initiative reminded us why the multilateral trading system was created in 1947, following the aftermath of the Second World War, that is to promote a new world economic order through increased inter-connectedness to generate prosperity and prevent returning to inter-state conflicts. This was the noble cause which has delivered unprecedented levels of improved standard livings and poverty reduction for billions.

For many countries joined the GATT or the WTO including of RAMs like China the country I come from, The accession has been an indispensable journey for economic development, peace and prosperity which are being enjoyed by their people.

Fundamentally speaking, the purpose of war is nothing more than gaining honor and resources. The glory can be obtained from sports competitions, just like the European Cup that has just started, and resources can be exchanged by trade. The role of the WTO is also to provide a place for dispute settlement to avoid losing control of trade conflicts between countries. Although the WTO's dispute settlement mechanism has been hit, it is still the consensus among members that rules should be used to handle disputes instead of strength.

Over the last few years, Trade for Peace has brought together the trade, peace and humanitarian communities together, and has now formed the Trade for Peace Network in March this year. In inaugurating the Network, the Director-General said:

"I am no stranger to conflict. Growing up in the Southern Nigeria in the 1960s, I witnessed civil strife first-hand. The challenges of state fragility have figured prominently throughout my career, whether at the World Bank where I oversaw a landmark study on the most vulnerable economies or as Nigeria's Finance Minister.

Trade can help to break the vicious cycles of fragility, conflict and poverty. Trade can raise people's incomes and build interdependence between communities and countries contributing to shared prosperity and progress towards the Sustainable Development Goals."

I believe that she will bring a new vision and dynamism to Trade for Peace, by making the WTO play a greater role in contributing to peace and stability. Currently, various activities are taking place under four main pillars: (i) political engagement and institutional partnerships; (ii) outreach and dialogue; (iii) research; and (iv) training and capacity building.

I can say today that the results of the 2021 Global Peace Index further confirms the relevance of our work on peace. The fact that acceding governments continuously dominate the bottom of the peacefulness ranking should inject in all of us a sense of urgency to tackle fragility, using trade integration. I believe we all have a role to play in the fight against fragility. To deliver the peace dividends from trade integration, we must break silos and establish meaningful partnerships. This is why we are proud of the partnership we have established with the IEP, particularly on the research pillar of the Trade for Peace Programme, where our goal is to create a knowledge hub by gathering, generating, and deepening knowledge on the linkages between trade and peace. In this regard, we are particularly looking into the development of a Trade for Peace Index.

Let me end my intervention by saying that working towards achieving sustainable peace is a herculean endeavour. It can only be achieved if everyone does its part. IEP is doing its part by consistently providing much needed data, information, and knowledge on the state of peace. This work provides immense value to the peace-building community and the world at large. So, let me extend a big congratulations to IEP for its great work on peacebuilding and for the launch of the 2021 Global Peace Index. We look forward to our continuing collaboration.

Thank you and I wish you a very successful meeting!

Source: WTO Website

●●●

REDEFINING SUPPLY CHAIN MANAGEMENT IN MSMES: WHAT TO DIGITISE AND HOW TO

ARUN RAO, INDIA CHANNEL HEAD - SENIOR DIRECTOR,
STRATEGY AT DASSAULT SYSTÈMES

Synopsis : Improving performance, optimising profitability, securing a competitive edge is possible for millions of small businesses in the country.

The gradual adoption of **digital** routes by keeping customer experience at the center, is driving the industrial renaissance in supply chains worldwide. By optimizing the supply chain, custom goods can be manufactured and shipped at a rapid pace. However, the pandemic has exposed the numerous vulnerabilities of complex global supply chains. Covid induced disruptions across industries have caused disorder in productivity, demand and consumer spending habits. These changes are in uencing CXOs of companies to adopt complete **digitalization** of their supply chains to stay relevant in the evolving times amid global pandemic. However, the digitalization of the **supply chain** is still not among the top three priorities of **manufacturing** companies. A huge group of manufacturing companies are still seen struggling to implement digital projects beyond the test phase. Let's look at three things that **MSMEs** can adopt in the current circumstances to digitalize the supply chain.

Digital transformation of the supply chain: An integral strategy to digitize the supply chain is the basis for its successful implementation. Evaluating the process to date plays a major role to assess how sustainable and profitable a company will be in the future.

It is critical to focus on key performance indicators (KPIs) as reducing costs sustainably and optimizing processes. Evaluating parameters of service performance for the customer, optimization of machine workload, and retrofitting of a plant drives the digital adoption wave. It requires a technology-first approach to handle elements of product development, ranging from conceptualising, design, to the manufacturing of the defined components.

Secondly, a company must not immediately digitalize its entire supply chain. Often it is enough to optimize the supply chain at the right points first, to markedly improve the process overall. Another important aspect is the transparency of data. To provide important information accessible to everyone involved in the supply chain, creating data transparency, and optimizing the supply chain, these are the imperatives that a company has to consider before it sets up projects to digitise its supply chain.

Transparency and footing for long-term decisions : Deployment of a unified business platform involving all departments and offering a user-friendly interface plus a connected, interactive environment. The process is simplified further to create a transparent data pool available to all the departments, comprising centrally held company data which contributes to better decision-making accelerating the manufacturing processes.

Such integrated platforms are ideal for advancing the digital adoption of **supply chain management**. In addition to central data pool, it offers applications for computer-aided support in decision-making processes. Accelerating the process of a company to assess its supply chain from different angles and optimize it accordingly. The emphasis to date has been mostly on deciding between optimization costs and service to the customer. If service is a priority, for example, minimizing costs will tend to be the second priority. To sustain the reduction of costs, it is observed that quality services usually have to compromise.

Make-to-stock or make-to-order : How products are manufactured today will change increasingly. To date, there are two classic concepts in the supply chain: make-to-stock (MtS) and make-to-order (MtO). Depending on how a company manufactures its products, the so- called order penetration point varies in the supply chain.

MtO places a heavier demand on processes in a supply chain compared to Mts relying on order penetration on the general demand. And this is where the digitalization of the supply chain plays a substantial role. In planning the supply chain, many enterprises today must decide on a trade-off between costs and services. In the MtS domain, the costs are usually reduced maximally during the production process. Turning to MtO, individualization, and service to the customer is a priority over cost.

Customisation : The biggest challenge and focus area for companies today and even more so in the future, is to enhance customers' experience and sustain consumer engagement. Recently we have observed that the majority of consumers would purchase customised products with a fast delivery service, regardless of their location. That means the market offers a sizeable demand for companies and their supply chains. And this trend forecast illustrates why time is of the essence for companies to promptly address the digitalization of their supply chain.

Many companies today are at a cusp of digital transformation induced by the global pandemic. Future demands and needs can no longer be satisfied without an integral and digital adaptation of the supply chain. That means exploring, questioning, and optimizing processes that already exist can lead to becoming a market leader in the industry across sectors.

Processes can thus be planned and performed cross-enterprise, enabling holistic decisions. The global pandemic has vaulted five years forward in consumer and business digital adoption in a matter of around seven months. With the changing global landscape, businesses should focus on supply chain digital remodeling as one of the important pillars of their business dynamics.

Source : economictimes.indiatimes.com

INTEGRATING CSR STRATEGY WITH BUSINESS STRATEGY

Synopsis : The growth of CSR programmes has the potential to help both businesses and society if the corporations can make their CSR activities core part of their business strategy and company culture.

The growth of CSR programmes has the potential to help both businesses and society if the corporations can make t CSR activities a core part of their business strategy and company culture.

Social Responsibility (CSR), became mandatory for businesses in India a little over two years ago. The initial scramble to fulfil the letter of the law has given way to an attempt to really understand and embrace CSR initiatives with an eye to making it a part of the corporation's culture and dna. Acknowledging the next step in the evolution of CSR, Bennett University recently conducted the first workshop of the CSR Practitioner Series. This workshop was presented by Bennett University in partnership with The Economic Times and NextGen, which is a leading technology, based CSR management company. Hosted in Delhi, the workshop, which is a unique initiative aimed at decoding CSR for corporations and helping them understand and explore the ways in which they can integrate their CSR activities and programmes with their business itself.

The day-long workshop began with a welcome address by Anil S Kumar, Director - External Affairs, Bennett University. This was followed by a brief presentation by Amitabh Bhatnagar, vice president, Response, The Times Group, on the CSR programmes that The Times of India has initiated and how these initiatives are evolving and growing. These include the Teach India, through which over 45,000 underprivileged children have learnt English and many of whom have gone on to become employed; the TOI Green Drive in partnership with Hero MotoCorp , which is an annual tree plantation drive in Delhi; the TOI Organ Donation Drive and Road Safety initiatives. The workshop consisted of five sessions. Two of these sessions -'Creating A Winning Model in CSR: 1 Strategy & Society and 2 The Truth About CSR' were conducted Prof Saji Gopinath. Another two sessions - 'CSR & Functional Strategies of Business' and 'Societal Development for Competitive Advantage' were conducted by Prof. Anandakuttan B Unnithan. The fifth session was a presentation on 'Effective Implementation of CSR Schemes' by Abhishek Humbad, Co-Founder & Director, NextGen. This was followed by a question and answer session with Sibani Swain, Economic Advisor and Seema Rath, Deputy Director, Ministry of Corporate Affairs, GOI.

The crux of the workshop was combining a structural understanding of the business potential offered by CSR initiat Some of the common issues that every corporation looking to create its CSR portfolio needs to think about include - deciding what type pf CSR they want to practise, the internal and external challenges they will need to address, formulation of framework and implementation strategy, deciding whether CSR is core to the business itself or peripheral, etc. The workshop started by looking at CSR conceptually and discussing the different types of CSR that corporations can opt for and how to identify which is the right type for each corporation within its natural constraints of nature of business, interest areas of the business, infrastructure, social environment within which they operate, etc.

CSR, regardless of scale, scope and functional area is a three part process, comprising policy, plan and implementation. All three have to be formulated with clarity and coherence for a truly meaningful CSR engagement. The ultimate aim for any corporation is to engage in Transformational CSR, which enables a true social impact for the betterment of society. In the process it allows the business to become better in tangible and intangible ways.

Judging by the enthusiastic and vocal participation from all those who took part in the workshop and given the range of different types CSR experiences that were shared by all, it is clear that India Incorporated is looking to transform CSR activities in India into a meaningful medium of social change.

Quotes: Change doesn't come easily. It takes a lot of doing. Clean water owing from taps, electrification of rural and remote areas, empowerment that makes a difference, all of this is possible by making CSR an integral part of an organization's business philosophy and strategic planning. Sessions like these provide a direction to an organisation's CSR activities by helping them align with global perspectives in terms of development priorities.

- Anil S. Kumar Director - External Affairs, Bennett University

CSR is one of the last corporate functions untouched by technology. Whereas other functions like HR, Finance, Marketing, etc., have adopted automation tools since ages, CSR is still on pen and paper, excels and emails. With the CSR spend of companies rising, the spread and number of CSR projects increasing and the board being liable for the spend, there is a dire need for a ERP for the CSR function.

-Abhishek Humbad Co-Founder & Director, NextGen

CSR has to become a part of the business strategy itself especially since it is the Boards of the corporations that are now getting involved in CSR initiatives. Ultimately, CSR should be a win-win proposition for both Business and the cause of social development. But the final decision on what type of engagement to undertake belongs only to the Board and the company's CSR committee.

-Sibani Swain Economic Advisor, Ministry of Corporate Affairs, GOI

Source : The Economic Times

VALUE E-COMMERCE, MOST PROMISING GROWTH SEGMENT OF ONLINE MARKET: KUNAL BAHL, CEO OF SNAPDEAL

SANGEETHA CHENGAPPA K GIRIPRAKASH

'Offering users good quality merchandise at affordable prices, without requiring a trade-off between price and quality'

India's $210-billion value retail market (non-food, non pharma), which is growing at 9-11 per cent, represents a largely untapped online opportunity. Only 3 per cent of value merchandise is currently sold online, offering scope for rapid growth of value e-commerce. KunalBahl, co-founder and CEO, Snapdeal, tells BusinessLine how the marketplace with its 220 million-plus value products is tapping into this segment by catering to 60 per cent of Indian households with products they can afford. Excerpts:

When do you plan to raise another round of funding, and how much will it be?

At present, we are focussed on executing our plan with respect to customer experience, growth and profitability. Given the company's clear focus and leadership in the value e-commerce segment, investors keep reaching out to us to invest in the company and, at the right time, we will explore the same.

Your recent campaign focusses on value e-commerce. How different is it from regular e-commerce deals?

For a long time, India's e-commerce has been about brands on one hand and relatively low quality, low-priced items on the other. Value e-commerce is about offering users good quality merchandise at affordable prices, without requiring a trade-off between price and quality. Value e-commerce serves consumers who are primarily looking for affordable, lifestyle merchandise, and are not necessarily looking to buy brands at a discount. In India, a value-focussed platform has been a missing piece from India's e-commerce market. While a few platforms offer a limited selection of value items, at Snapdeal, we understand that a dedicated value shopping platform is key to reaching out to more than 90 per cent of online shoppers. Our efforts in the last four years have been focussed on building value e-commerce.

How is Snapdeal different from other e-commerce players who also have value offerings? Is there a parallel with value retailers such as DMart or Vishal Mega Mart?

Focus is the key success factor in an ultra-competitive e-commerce market. We have seen successful online businesses being built in categories such as cosmetics, eyewear, kids products.

The value retail segment is the largest chunk of Indian retail, and we are confident that the growth opportunity for a focussed value e-commerce leader such as Snapdeal is significant.

Well-established retail models such as DMart and Vishal Mega Mart are successfully serving this audience in physical markets. We are the first at-scale platform to build an online equivalent of these, with an exclusive focus on value-priced, good quality merchandise like daily wear clothes, everyday use kitchen items and home decor items.

How did Snapdeal carve out a positioning in value-driven e-commerce?

Striking a balance with good quality and affordable prices is not an easy task – it requires each part of the business to be optimised towards delivering value to the customers, given the low-basket sizes, while ensuring a consistent, good user experience.

For instance, in an industry-first, we offer free shipping on all orders, with no minimum order value requirement, ensuring that a great deal is not diminished by shipping charges. Working closely with our sellers, we have built an assortment that is broad enough to cater to the entire gamut of value needs.

For customerswho are primarily looking for affordable value merchandise in discretionary categories such as clothes, shoes, home decor, and kitchen needs, among others, we are able to satisfy all their requirements without them having to shop at local bazaars.

On Snapdeal, 100 per cent of the products are priced for value and affordability. Technology has allowed us to provide personalised feed to each customer; a friction-free customer experience to support ease of ordering, delivery, and also returns and refunds, which is very important for our customers who are mostly from small towns and are new to e-commerce.

Your latest campaign takes a dig at brand-oriented psyche. What is the thought process behind this campaign?

Seeking value is an integral part of an Indian customer's purchase consideration – both online or offline. Our latest campaign nudges consumers to look beyond sales talk to find the best value for their money and trust their wisdom to judge what's value versus hype.

While conducting research for the campaign, we interviewed hundreds of consumers who bought brands frequently and implicitly equated good quality with high prices. In blind trials, they were consistently surprised by how good the quality of the products is even when they were affordable products not from well-known brands. The campaign uses humour to disrupt the notion that only expensive brands offer good quality.

Source: thehindubusinessline.com

CONSUMER TRENDS DEMAND NEW SUPPLY CHAIN IDEAS

PHILIP STOTEN

ENTREPRENEUR LEADERSHIP NETWORK CONTRIBUTOR
MANUFACTURING INDUSTRY JOURNALIST & FOUNDER OF SCOOP

Brands will need to reimagine their supply chain to handle the wave of stay-at-home orders driven by direct-to-consumer e-commerce.

According to a recent white paper penned by PCH International Founder and CEO Liam Casey, enjoying the full benefits of the Direct-to-Consumer (D2C) channel requires brands and their supplier partners to overhaul their supply chain. The way brands sell to consumers has been changing for years, and stay-at-home orders driven by the pandemic have only accelerated the move to direct-to-consumer e-commerce.

For brands, the D2C channel offers new benefits — from brand loyalty and engagement to consumer data that provides real-time insight and optimizes operations, as well as the ability to produce highly targeted and differentiated products that drive brand affinity. A closer relationship with the final consumer allows a company to develop more tailored offerings, to better anticipate potential shifts in demand, and to optimize their operations accordingly.

Liam Casey and the team at PCH International understand that brands have a lot to gain and, as a result, offer a deep dive into how to design the right supply chain for D2C. The supply chains that successfully delivered large consignments to distribution centers and big-box retailers are not designed for the D2C model.

Reconfiguring supply chains is not for the faint-hearted. It requires deep domain expertise and experience. Supply chains suited to D2C require postponement and fulfillment to be located as close as possible to the manufacturing process. Postponement and fulfillment drive (via pull-through data) manufacturing operations, thereby controlling inventory and minimizing over-production and waste. They should be complemented by distribution facilities that, in turn, are close enough to the fulfillmentcenter to rebuild inventory with the fluctuations in demand quickly, and at the same time able to dispatch products to a much larger number of distributed customers and do so in a way that is fast and allows customers to monitor delivery progress.

Having data available from the sales channel through components, manufacturing, and logistics drive demand levers that improve operations. This data must be accurate, granular and real-time. The supply chain has many towers and layers, and, as we've seen recently in the semiconductor world, component shortages can be hugely disruptive.

Marketing and selling through the D2C channel is about more than just tweaks to the supply chain. It requires an integrated approach from the initial design to end-of-life. Designing a product for the D2C channel results in more supply chain flexibility, essential for making quick adjustments to market fluctuations and consumer demand. Moreover, the integrated approach and better data collection across all parts of the process allow a company to achieve a broader improvement in efficiency: it can identify bottlenecks and spot ways to coordinate different processes better to increase speed or reduce costs.

Transparency and tracking are also essential to consumers and this model. As consumers purchase directly from the brand, they want to track the process to their front door. They also increasingly want to know how the product is made, where it was made, and by whom. Transparency is key to the D2C model and sustainability, a growing requirement of brands. More and more, this kind of transparency is valued not only by consumers but also by investors, as well as governments (including at the local level) and other companies. Therefore, enhanced transparency can also translate into better access to capital and funding, better relationships with regulators and other relevant authorities, and other partners in a company's ecosystem.

In the direct-to-consumer world, the relationship between the brand and consumer is more intimate and engaged. This relationship promises to be more long-lasting and create brand ambassadors who provide product feedback, review products and recommend them. Moreover, companies that approach this transition with the right systemic and integrated approach can reduce costs and improve efficiency across several aspects of their operations. Finally, the reconfiguration of supply chains for a D2C approach comes at an opportune time, giving companies the ability to build in higher adaptability and resilience at a time when supply chains have become exposed to a wider range of potential disruptions, from trade tensions to shortages of key materials to pandemics. A transition to a D2C model can be the opportunity for a deep profit-enhancing transformation of a company's operations and approach. Brands have every reason to work with their supplier partners to achieve these and more benefits.

Opinions expressed by Entrepreneur contributors are their own.

Source: www.entrepreneur.com

AS DEMAND FOR CLOUD GROWS, HERE'S HOW TO MAKE SECURITY AN ESSENTIAL LINE ITEM

RON BENNATAN

KEYWORDS cloud migration / cloud security / physical security / physical security systems / security education / security operations / security training

Pre-pandemic, most organizations had digital transformation projects in place for migrating their workloads to more modern, cloud-based infrastructures. When the pandemic hit, these digital transformation projects didn't necessarily change. However, the onslaught of acute challenges brought on by the pandemic caused organizations to dramatically accelerate their digital transformation and infrastructure modernization plans. Suddenly grappling with the necessity of remote work, thinner operating margins and evolving customer needs, organizations recognized a savior in fast, nimble and relatively affordable cloud technology.

Accelerated infrastructure modernization is a positive side-effect of the pandemic. With rapid, widespread cloud adoption, more organizations gain the ability to bring new applications and services to market faster, reduce the cost and complexity of their database operations, and provide greater overall flexibility and accessibility. But it can also be a disaster if organizations, so motivated to accelerate their digital transformation projects as a result of the pandemic, neglect to also accelerate their security. Workload migration into the Cloud cannot be done without also migrating security controls and good security practices.

Today, organizations that modernized their infrastructure without also modernizing corresponding security, face chronic visibility, control, compliance and privacy issues. And these issues span beyond fundamental cybersecurity implications. When infrastructure modernization outpaces security, organizations' risk and resiliency as a whole are impacted. Chief Security Officers (CSOs), Chief Information Security Officers (CISOs) and other security leaders have learned this the hard way over the past 20 years and, as an industry, we have finally got to a point that security and privacy are not left to the last minute; we just need to make sure that in our scramble to accelerate everything we don't leave these controls behind.

4 best practices for closing the digital transformation security gap

To close the gap between digital transformation and security, cyber and physical security leaders (or a combination of the two) must work to make security an essential line item within their organizations. Below are four best practices for comprehensively improving enterprise risk and resiliency, and boosting security resource budgets:

1. **Understand who's responsible for securing what.** Security teams can't monitor and protect their organization's most valuable assets if they don't know the assets exist and/or if it's unclear where security responsibility lies. For example, nearly all cloud service providers follow an industry-standard shared responsibility model where service providers are responsible for securing the system and customer organizations are responsible for securing the data. If security teams are responsible for protecting their organization's cloud-based data, then in addition to owning that responsibility, they'll need to work closely with DevOps, a group who's constantly spinning up

new databases that require protection. It's impossible for security teams to secure data they're not aware of, so they'll require regular updates from DevOps teams on every database currently in use (even off-the-radar ones) and where the most sensitive and valuable data is being stored.

2. **Create a unified set of security policies.** To be able to quickly identify and respond to any unusual activity, security teams need to establish a baseline of what normal behavior looks like via a unified set of security policies. These policies should incorporate all facets of an organization's security, including which employees are allowed to access what data, how customer communication is dispersed in the event of a security breach and even how visitors or remote employees are granted access to physical properties, for instance. In addition to alerting security teams when any out-of-policy activity occurs, unified security policies are vital for demonstrating compliance during audits.

3. **Establish security representation in the boardroom**. The most direct way to rally greater support for security is to make sure security leadership is represented at all board meetings. Too often, security voices aren't heard (or even present) when a board of directors meets and as a result, security teams miss out on the opportunity to offer guidance on where investments need to be made. To ensure executive advocacy, security teams should appoint their CSO, CISO (or closet equivalent) to regularly liaise with their organization's board of directors. In particular, the CISO should make sure the board's efforts are aligned with existing and new regulations and client requirements, and that there's an appropriate level of urgency and funding to evaluate security risks around any new business project.

4. **Set expectations on security goals and ROI.** Given the myriad of different components involved, validating the success of security is highly nuanced. It's not nearly as straightforward as an auditor informing an organization that they've achieved compliance, so appropriate expectations and benchmarks need to be set. For example, in terms of data security, with unlimited time, budget and resources, any enterprise can achieve complete security coverage of all data sources and transform the raw data they collect into contextually rich information for security analytics. However, for most organizations, this is rarely reality or even a necessity. Security teams may want to set the goal of achieving 100% coverage of all databases and providing teams with ready-to-use data for analytics, however to bolster ROI and efficiency they should take advantage of automation tools and security controls orchestration. By starting small and gradually scaling their efforts to unify and secure all data sources, security teams can optimize their efforts and resources as time goes on.

Keeping pace with the risk climate

Too often, technological innovation, market disruptions and customer priorities take precedence over security. But the complexity and ubiquity of security risks in today's business landscape demand that security no longer be viewed as secondary. Long-term viability requires organizations to make security an essential line item and collective priority. By assigning clear responsibility, creating unified policies, ensuring representation in the boardroom, and setting expectations for goals and ROI, security leaders can remediate pandemic-induced digital transformation security gaps — and at the same time, prepare their organizations' security for whatever infrastructure modernizations the future may bring.

Source: www.securitymagazine,com

●●●

LENOVO INDIA'S ASHISH SIKKA ON CRISIS-PROOFING MSMES IN A PANDEMIC-IMPACTED MARKET

DIYA KOSHY GEORGE

Speaking at YourStory's MSME Week 2021, Lenovo India's Ashish Sikka said that digitally empowered SMEs had twice the revenue growth projections, compared to other SMEs.

According to India Brand Equity Foundation, an Indian government export promotion agency, there are approximately **6.3 crores of micro, small and medium enterprises (MSMEs)** in the country, contributing about 30 percent to the country's GDP through both domestic and global trade. The sector was witnessing steady growth in terms of the number of registered MSMEs, growing **18.5 percent YoY in 2020 from 2019**.

However, with the outbreak of the COVID-19 pandemic, MSMEs have been among the worst affected. An Indian Institute of Management, Bangalore, study attributes to various factors, including but not limited to the lockdowns resulting from the **COVID-19 pandemic** that substantially disrupted the sector's dependence on the cash economy, non-availability of workers, and disruptions across the supply chain – from the supply of raw materials to transport infrastructure.

To put the spotlight on this unforeseen crisis, and how the sector can navigate back onto the growth track, YourStory organised a 10-day virtual event **India MSME Summit 2021** to highlight important conversations through a series of incisive interviews, insightful panel discussions, and thought-provoking articles.

This year's event, on the theme of '**Roadmap for MSME Resilience and Recovery**', was attended by entrepreneurs, policymakers, technologists, investors, mentors, and business leaders.

Delivering the keynote address on how MSMEs should leverage tech to become crisis-proof, Ashish Sikka, Director of SMB and Channel at Lenovo India, highlighted the importance of digitally empowering the sector.

"The MSME sector in India is the second-largest employment generator after agriculture and acts as a breeding ground for entrepreneurs and innovators. It is the backbone of the business ecosystem and in addition to contributing about 30 percent to the country's GDP, also contributes 40 percent to exports. India's MSME **sector has still not adapted to its full potential**. And that is one of the reasons why government policies are now even more convergent towards building a resilient ecosystem with better depth and breadth," he said.

Digital empowerment is the answer

Citing a study by Google and KPMG, Ashish said that digitally-empowered SMEs had about twice the revenue growth projections, as compared to other SMEs.

"Digital transformation **needs to start with a solid strategy** in this rapidly changing world. It's important to understand the basics – whom you serve, what you provide, and what makes you different from your competitors. Research by the Boston Consulting Group has shown that SMEs adopting new technology have a 10-points higher job growth, and 11-points higher revenue growth than low-tech SMEs and small businesses," said Ashish, adding that brick-and-mortar stores showed more heavy losses during the lockdown because of unsold inventory, negligible sales, and lack of in-person traffic due to the pandemic.

He said that by integrating digital technologies into their daily operations, customer interactions, and sales models, they were able to give their **customers, local communities and partners** the best opportunity to not only survive but also thrive during these adverse times.

While stressing the importance of ecommerce ability for social selling, Ashish said that with entire companies working from home, choosing the right devices was important.

"We launched PC Pal as a brand agnostic service to help students, office workers, and small businesses choose the right device. We **revamped our demo programme from face-to-face to virtual**, thereby enabling our customers to understand the product features better before taking a buying decision. It also brought down the cost of doing business while enabling a better sales and customer experience," he said.

Work efficiently, listen to your customer

A global study conducted by Lenovo has shown that every year, 1.8 billion hours are wasted due to bad tech and 38 percent of employees blame tech issues for major distractions.

"The good news is that **77 percent of SMEs surveyed value and prioritise employee experience**. The young workforce is demanding a flexible collaborative workplace with reliable, well-supported technology, which matches their own tech, both in style and performance, along with tackling remote working and dynamic expectations of the modern workforce," said Ashish, while stressing the importance of building business agility and efficiency to retain competitive advantage.

He said that businesses need to ensure they had solutions in place to enable seamless collaboration and engagement. "Businesses need the ability to deploy, manage, maintain, and secure devices and data. They should also be able to look at their business models across functions and see what needs to change to meet the evolving demands created by the pandemic."

Ashish also spoke about the need to examine investment or change through a long-term lens. It was this perspective that was making SMEs realise that investing in technologies was not an expense, but something that would help them thrive and future-proof their business.

Future-proof your business

"Lenovo has been working and helping MSMEs become more productive and competitive during these tough times. SMEs need customised solutions and not sizing down these solutions, which are meant for large enterprises. **Our ThinkBook range is a perfect example of how we listened to our SME customers**, and created a product, which matches the needs of their employees and IT teams in one device. SMEs need a solution provider that can handle all the IT needs right – from hardware requirements to services and software solution requirements, all under a single roof," said Ashish, adding that Lenovo's end-to-end lifecycle solution for SMEs was created to cater to this.

"It comprises a wide array of offerings to help organisations plan, manage, and support their PCs and data centers, from **initial strategic planning to configuration, deployment, security, and more**. We have the solutions to help companies embrace new workplace technologies, along with end-to-end hardware and software solutions designed to help organisations thrive in a digital-first market," he explained.

"We, at Lenovo, look forward to partnering with the SMEs on this digital journey as they thrive and survive in this pandemic," said Ashish, in conclusion, adding that while navigating today's ever-changing business environment was challenging, the SME sector '**can and should adopt the latest technologies** that enable them to improve productivity, enhance flexibility, optimise costs, and increase profit margins'.

Source: yourstory.com

CHALLENGES IN INDIAN EDUCATION SYSTEM DUE TO COVID-19 PANDEMIC

VIBHUTI TANEJA, FOUNDER, EDCEL CONSULTING

The Covid-19 pandemic created a lot of challenges in the Indian education system. At such a time, understanding these challenges is key to solving them for better crisis management in education.

Let us begin with a fact: The plan to return students to physical classrooms has suffered a major setback in the last few weeks, with the country witnessing a second wave of Covid-19 cases that is worse than the peak in 2020. Another set of lockdowns seems imminent, with no telling when the situation will be back under control.

That said, there is a silver lining to this cloud. Eventually, the government and educational institutions do want to facilitate a return to offline pedagogy. The current delay gives them more time to formulate a better roadmap for ensuring a safer transition back to school-based learning.

Some may question whether a return is necessary. After all, e-learning has been on the rise during the pandemic and is being heralded as the future of education.

However, while online pedagogy does a great job of supplementing offline education, it does not serve as the latter's replacement. This holds especially true in a developing economy such as India for several reasons.

Why India cannot do without offline learning in the long run

To begin with, the digital medium can't replicate the interpersonal interactions that schools facilitate by bringing together young children from different backgrounds and cultures. In essence, they act as a melting pot of ideas and perspectives that serves to broaden the learners' perspective.

Interacting with their peers between classes also help students develop their social skills essential to their holistic growth and development.

Another aspect is that of equitable access. India is infamous for its wealth gap; a 2020 Oxfam report highlighted how the **country's richest 10% own almost three-fourths (74%) of its wealth.**

This means that, of the 320 million learners calling India home, a significant percentage does not have the same access to digital facilities as their more privileged peers do.

This disparity is further complicated by the digital divide between urban and rural India, leading to issues with consistency and quality of learning.

Even developed countries such as the US have faced challenges with ensuring quality education to learners during the pandemic; McKinsey estimated that **school closures until January 2021 would lead to an estimated 6-8 months of learning losses in the US**, with low-income, black, and Hispanic students disproportionately affected by it. India might fare even worse if offline learning isn't resumed soon, given the inequities, bottlenecks, and challenges that already plague its education ecosystem.

Challenges in and prospective solutions for a return to physical classrooms

However, going back to school will not be plain sailing. Stakeholders from government, educational institutions, and regulatory bodies will need to ensure that the return to physical learning does not jeopardise the health and safety of the students.

A phase-wise repopulation of the classrooms, with staggered and rotational rosters, could be a prospective solution; only a given number of students, in keeping with social distancing norms, would be present in the classroom on any given day, with the remaining students attending via live chatrooms.

This would help with a safer transition to an offline-led learning module without increasing the number of daily classes assigned to educators.

Central, state, and district-level governments could also partner with private players in the non-profit space to improve the access to digital learning solutions for less-privileged students to make this a reality.

Ultimately, we do not know when India will finally emerge from the pandemic's hold to resume offline learning.

However, stakeholders must prioritise the creation of a blueprint for the students' eventual return to school. For a majority of young schoolchildren across the country, it is not a luxury but a non-negotiable necessity.

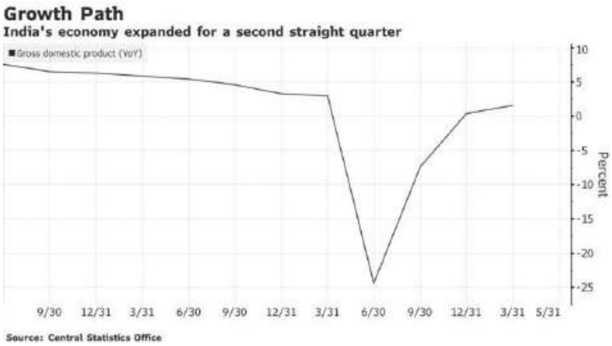
Source: www.indiatoday.in

INDIA'S ECONOMY SHOWED MOMENTUM BEFORE VIRUS CRISIS HIT HOME

VRISHTI BENIWAL

India's economy expanded faster than expected last quarter before a resurgent coronavirus pandemic unleashed a new wave of challenges.

Gross domestic product rose 1.6% from a year earlier in the three months ended March, the Statistics Ministry said Monday. That was faster than the 1% median estimate in a Bloomberg survey of economists.



The number marks the second straight quarter of expansion following a rare recession, which tipped the economy into an unprecedented 7.3% contraction for the full fiscal year ended March. That compares with a median 7.5% decline estimated in a Bloomberg survey.

Stocks jumped 1%, the biggest advance in 10 days, before the GDP numbers were published. The yield on the benchmark 10-year government bond rose two basis points to 6.02%, while the rupee slipped 0.2% ahead of the data.

KEY NUMBERS FROM QUARTERLY GDP PRINT:
January-March farm growth 3.1% from year ago·
Manufacturing growth 6.9%·
Finance, real estate sector growth 5.4%·
Construction growth 14.5%·
Trade, hotels, transport and telecommunications post 2.3% decline

While pent-up demand for everything from mobile phones to cars revived consumption in Asia's third-largest economy after it reopened last year from one of the strictest lockdowns that lasted more than two months, India's status now as the global virus hotspot could hurt those prospects. It could temper what will be the fastest pace of growth among major economies this year.

India's GDP will grow 10% in the year that began April 1, according to the median of 12 estimates compiled by Bloomberg News. That's after several economists downgraded their forecasts in recent weeks to factor in local curbs on activity, including in India's political and commercial hubs, and the tardy pace of inoculation.

What Bloomberg Economics Says...

"Greater vaccination coverage, increased public investment and improved export demand are likely to be key factors supporting a stronger rebound."

— Abhishek Gupta, India economist

Even the Paris-based Organization for Economic Cooperation and Development, which by far had the most optimistic forecast of 12.6% growth for India in its interim economic outlook in March, now sees a relatively modest yet world-beating 9.9% expansion.

The downgrades are a message to not take the economy's recovery for granted. Economists say the relaxation of restrictions across states will determine the strength of the rebound, while the willingness of consumers to spend — as they did last year when lockdown curbs were lifted — will also be key.

"Activity will improve only when sufficient number of people are vaccinated," said Devendra Kumar Pant, chief economist at India Ratings and Research, the local unit of Fitch Ratings. "So the risk as of now is the demand."

While virus cases have started receding and some parts of the country look set to reopen in June, consumers are unlikely to spend freely, given the economic uncertainties and unemployment at its highest level in a year.

Local Lockdowns Temper India's Economic Activity in April

The government on Sunday expanded a $41 billion emergency credit program to airlines and hospitals to cushion them from the impact of the pandemic. The central bank, which will review interest rates later this week, has kept monetary policy loose and injected liquidity into the system to support growth.

Source: www.bloomberg.com

●●●

FROM 1ST July 2021- NEW TDS PROVISION ON PURCHASES OF GOODS | SECTION 194Q | ANALYSIS OF SECTION 194Q

CA SUDHIRHALAKHANDI

A new provision of TDS is coming into force on the purchase of 'goods' with effect from 1st July 2021, under which the buyer of the goods has to deduct TDS from his seller at a certain percentage on the purchase of the goods. You will remember that last year the provisions of TCS on sale of goods came through section 206(C)(1H) and the provisions of TDS of 194Q are very similar to the provisions of these TCS. The buyer who has to deduct TDS and value of transaction on which deduction is to be made is clearly mentioned in the Section 194Q which we will see in this study.

Let us study these provisions under section 194Q applicable to TDS on Purchases of Goods from July 1, 2021 and let us try to understand what are these new provisions and whether there is any relation these provisions have with section 206(C)((1H) introduced last year only with respect to TCS on sale of Goods. We will also analyze that there may be a similarity which may have practical significance also. In some situations, there may be overlapping because in some situations both the provisions are applicable on a single transaction and this situation is really creating confusion in the mind of the taxpayers.

Let us try understand in very simple language the provisions of TDS of section 194Q on the purchase of goods with effect from July 1, 2021 so that these provisions can be followed after proper understanding of the same.

1. Section 194Q is applicable to which buyers: – The section 194Q of TDS is applicable only to those buyers whose turnover, gross receipt or sales in the previous year was more than Rs.10 crores hence in the financial year ended on 31st March 2021, the buyers whose turnover was more than Rs.10 crore in that year, they have to deduct TDS from their resident seller on the purchase of above Rs.50 lakh in the current financial year 2021-22. This TDS is to be deducted on the balance amount leaving the first Rs 50 lakh per seller and it is applicable from 1st. July 2021,

Therefore, if the turnover of a buyer is less than Rs.10 crore in the year ended March 31, 2021, he does not have to comply with this provision in current financial year, thus a large number of buyers will remain outside this provision of TDS. You can say that the provision is applicable on relatively big buyers.

2.From which Sellers to deduct TDS: – TDS at the rate of 0.1% is to be deducted on the amount exceeding Rs. 50 lakhs in any one financial year from one seller from whom the buyer as mentioned has purchased goods worth more than Rs. 50 lakhs. We should Keep in mind here that this seller should be a resident of India i.e., resident as per the Income Tax provisions.

3. On which amount TDS is to be deducted: – This TDS is to be deducted only on the amount above Rs 50.00 lakh in a financial year from one seller i.e., if the purchase is for Rs 67.00 lakh then the Buyer has to deduct TDS only on the amount above Rs 50 lakh i.e., on Rs 17.00 lakh. Keep in mind here that every year if TDS is to be deducted under this section, then for each seller, the buyer will have to deduct first Rs. 50 Lakhs then deduct TDS on remaining amount. This is one time seller wise deduction for each seller in every financial year.

For example, if a buyer buys goods from a particular seller worth Rs 70.00 lakh each 4 times, then in this way in a financial year, he bought a total of 280.00 lakhs, then now he has to deduct Rs 50.00 lakh from it and the TDS has to be deducted only on Rs.230.00.

Now one more thing to keep in mind that this limit of Rs 50 lakh is for one financial year for each seller, so now that this provision is applicable from 1st July 2021 then TDS you have to deduct only on purchases after 1st July 2021 but While ascertaining the limit of purchase Rs. 50.00 Lakhs , the purchases from April 1, 2021, the purchase will also have to be taken into account.

Examples 1: – X & Co. has made purchase from Y & Co. from 1st April 2021 to 30th June for Rs 40 lakhs and now on 1st July 2021 another purchase has been made from the same seller for Rs 30 lakhs, so now out of 30 lakhs on this purchase TDS has to be deducted on Rs 20 lakh after deducting Rs 10 lakh. The limit of a financial year is Rs 50 lakh per seller, so X & Company has already purchased Rs 40 lakh out of this limit before June 30, so now only Rs 10 lakh is left out of the limit of Rs 50 lakh. The TDS has to be deducted on the purchases made on or after 1st. July 2021.

Example 2: – X & Co. has made a purchase from Y & Co. from 1st April 2021 to 30th June for Rs 70 lakhs and now on 1st July 2021, another purchase has been made from the same c for Rs 30 lakhs, so now on this purchase for Rs 30 lakhs only. TDS is to be deducted. The limit of Rs. 50 lakh per seller is for a financial year and X & Co. has already exhausted this limit before 30th June.

Whether TDS is to be deducted while adding GST: – The reason for this controversy that the TCS to be deducted under section 206 (C) (1H) where the Central Board of Direct Taxes had clarified that TCS is to be deducted only on the entire amount received including GST.

206 (C) (1H) is related to the sale of goods, but the calculation of TCS on it is purely on the basis of "payment receipt", so there this clarification has been issued vide **circular number 17/2020 dated 29 September 2020**. That GST will be included while computing TCS.

But this is not the case with TDS under section 194Q, so there is a Board **Circular 23/2017 dated 19 July 2017** regarding TDS in respect of services where it is said that "TDS should be deducted while leaving GST". should be applicable. But keep in mind here that no such clarification has been issued with respect to the goods.

Explanation must be issued to end confusion and dispute If the intention of the government is something else, that is, it wants to deduct this TDS on the amount of GST as well, then Circular/instructions in this regard should be issued before July 1, 2021, so that this dispute also ends.

4. At what time TDS is to be deducted: – If all the conditions given in this section 194Q are satisfied, then this TDS is to be deducted at the time when such amount is credited to the seller's account or paid to him, whichever is earlier i.e. when the buyer while entering the purchase of goods, the account of the Goods is debited and credited to the account of the seller, at that time TDS is to be deducted, but in this regard the payment has already been made to the seller in the form of advance, then TDS is to be deducted at the time of payment itself. . Understand this in simple words, if you have not paid the advance amount, then you have to deduct this TDS at the time of purchase of goods and if you have made advance payment then you have to deduct this TDS at the time of advance payment. Here you should keep in mind that this TDS is to be deducted at the time of giving advance and the balance amount while purchasing the goods.

5. What will be the rate of TDS :- The rate of TDS will be 0.1% i.e., practically Rs.100 is to be deducted on Rs. 1.00 of eligible amount on which TDS is to be deducted. Here is an example of Rs.1 lakh just for an estimate. The amount is to be calculated at the rate of 0.1% of the exact eligible amount. Let us try to understand with the help of some examples.

Example -1 - For example, if the total purchase by the buyer in a financial year is 52,34,400.00 and all these purchases are made only after July 1, 2021, after deducting Rs 50 lakh, 2,34,400.00 is left, then the amount of TDS on this will be Rs 234.00.

Example-2: – If a buyer has purchased goods worth Rs 70 lakh from his seller, then he has to deduct the first Rs 50.00 Lakh from it as initial deduction as mentioned in the section then deduct TDS on remaining Rs 20 lakh 0.1% Rs 2000.00 TDS.

TDS rate 5% for non-delivery of PAN number – Section 206AA - If the seller does not give his PAN number to the buyer, then this rate of TDS will be 5% instead of 0.1% which is normal rate of TDS under this section 194Q. You can imagine yourself that this is a rarest of the rare situation because at this time almost all the dealers have the PAN number and it is practically impossible to do business without PAN. But if a buyer does not have the seller's **PAN** number, then the rate of this TDS will be 5 percent instead of 0.1%.

In the normal case, where the person whose TDS is to be deducted, there is a provision to deduct 20 percent TDS for not giving the PAN number, but under section 194Q, this rate will be 5 percent if the PAN number is not given. Here one should note that without PAN the rate of Tax is 20% in other cases but in case of Section 194Q the rate will be 5%.

Rate of TDS for Non-filers of ITR: – 206AB - A new category of "Specified Persons" whose TDS is to be deducted from 1st July 2021 has been mentioned under section 206AB for whom TDS is to be deducted at twice the regular rate or 5 percent, whichever is higher. These persons are categorized as the persons in whose case the TDS/TCS deducted from them from all the sources is high in but they are defaulters in filing their returns regularly. Here defaulters mean persons who are not filing their ITRs for continuous 2 years in spite of the fact that in each of both these 2 years the TDS/TCS deducted and/or collected is more than Rs.50000.00.

Let us try to understand this provision of higher deduction of TDS under section 206AB with the help of a case study on the date when the provision will be applicable i.e., on 1st. July 2021: –

X is a person whose TDS is to be deducted. During the Financial year ended on 31st March 2019 and 31st March 2020, in each year the TDS+TCS deducted/ Collected from X was more than Rs.50000.00. Please note that for both the financial years the TDS/TCS should be more than Rs. 50000.00. If in one year out of these two the TDS/TCS is less than Rs. 50000.00 then there is no need to for searching whether X is filing his return or not since the provision of section 206AB are not applicable in that case.

Since for both the years the TDS/TCS figures are more than Rs. 50000.00 then we have to see whether X has filed his ITR for the year ending on 31/03/2019 or not. If he has filed then since the return of one year is field out of these two years then again, the provisions of section 206AB are not applicable but if the ITR for the year ending on 31/03/2019 is not filed by X then we have to see the ITR for the year ending on 31/03/2020. If this return is filed then also the provisions of section 206AB will not be applicable and the rate of TDS will be normal but the if the return for the year ending with 31/03/2020 was also not filed then section 206AB is applicable and the rate of TDS will be twice the rate applicable or 5% whichever is higher.

Now precisely we have to go for two previous years for which the date of filing of return under section 139(1) is expired. Since the date of filing of ITR for the financial year ending 31/03/2021 is not yet expired then we have to go for financial years ending with 31/03/2019 and 31/03/2020 and if for these two years the TDS/TCS is more than Rs. 50000.00 in each of these two years and the person has not filed his ITRs for both of these two years then the rate of TDS will be increased. If return for one year out of these two is filed then the TDS rate will be normal rate.

Let us in this provision, when will be related to the return of assessment year 2021-22 i.e., the year ending 31st March 2021, then remember that on the day the date prescribed under section 139(1) of this return expires then financial years ending with 31st March 2020 31st March 2021 will be considered and the TDS/TCS deducted on these persons and ITRs filed for these two Financial Years will determine the rate of TDS for a particular person and the year of 31st March 2019 will be omitted from this calculation at that point of time.

Since at present the date under section 139(1) is not expired year hence at present we have to consider the TDS/TCS and ITRs for the Financial Years 31/03/2019 and 31/03/2020.

Please note that for categorizing the "specified person" for higher rate of TDS the date under section 139(1) is the criteria only for selection of financial year taken for consideration but if returns for that financial years are filed after that date will also make the filer eligible for Normal rate of TDS.

The same provision will now be applicable on TDS of section 194Q as well and in these circumstances the tax rate will be 5% instead of 0.1%.

6. When to deposit TDS: – This TDS has to be deposited by the 7th day of the end of the month in which the TDS is deducted. This provision is being implemented from 1st July 2021, so the first TDS of July 2021 is to be deposited by 7th August 2021 and after that till the 7th day of the next month after the end of every month.

One thing to remember here is that TDS for the month of March has to be deposited by 30th April. Failure to do so will result in payment of interest as per rules as is the case with late deposited TDS.

7. When to fill the return: – TDS return is to be filed in 26Q TDS Returns and it is to be filed on quarterly basis.

Let us see what is the due date of this TDS return: –

Quarter ending	Date of filing of Return
June	31 July
September	31 October
December	31st January
March	31st May

8. What will be the result of not deducting/depositing TDS: – As per section 40(ia) of the Income Tax Laws an amount has been paid to a resident on which TDS is to be deducted but not deducted and if deducted and the same is not deposited before the expiry of the time provided for furnish of ITR under section 139(1) then the 30% of the amount on which TDS is to be deducted and deposited will be added to the income of that person.

This provision will also be applicable to TDS falling under section 194Q of TDS so wherever the provisions of TDS are applicable, TDS must be deposited as the amount of purchase of goods is always very high and 30% of that is added back to the income of the Assessee then the tax on such amount will be very high. So be careful and deduct and deposit the TDS keeping in mind the provision of addition of this 30% to the income.

9. When not to deduct TDS: – In this regard, if all the conditions mentioned above are fulfilled, the buyer becomes liable to deduct TDS, even then he does not have to deduct this TDS and two such situations are there: –

(i). Where TDS is to be deducted on the transaction of this purchase under any other provision under the Income Tax Act.

(ii). When TCS is deductible under 206C (excluding TCS provisions applicable to sale of goods under section 206(C)(1H)) by the seller on that transaction, the provisions of TDS are not applicable.

Please Keep in mind here that TCS is to be deducted in any of the provisions of TCS in section 206C, except 206 (C) (1H), then TDS is not to be deducted under this section.

But this exception excludes TCS to be deducted on sale of goods which is mentioned in section 206C(1H) and this is where the relation of section 194Q and section 206C(1H) come into picture. it should be kept in mind that if any transaction on purchase of goods attracts TDS under section 194Q as well as under section

206(C)(1H), then only the buyer will deduct TDS on it and if he has deducted TDS the seller is not required to deduct TCS under section 206(C)(1H) on such transaction.

– Section 206C) (1H) of Second Proviso and Budget Memorandum Finance Bill 2021 page 76.

So please note where there is a transaction on which buyer and seller both are covered to deduct TDS and TCS respectively then it is only the buyer who has to deduct TDS and in all those cases all these buyers should inform the sellers that they are deducting the TDS and the seller should not collect the TCS on these types of transactions. The Liability of TDS is always there in this type of transaction even if the TCS is collected by the seller. So be careful in communicating properly and within time to your sellers in this situation.

Now let's look at some practical examples to understand the provisions of TDS on purchases of Goods under section 194Q: –

Example 1

X is a buyer who buys goods worth Rs 70 lakhs from a seller named Y. The annual turnover of X (buyer) in the year ended 31st March 2021 is Rs 15 crores but the annual turnover of Y (seller) is only Rs 5 crores in the same period. Payment for the goods is made after the goods are received.

-Only section 194Q is applicable on this transaction and X has to deduct 0.1% TDS from Rs.70 lakhs deducting Rs.50 lakhs in this transaction. After this, 0.1% TDS is to be deducted on every purchase made from Y till March 31, 2022, on the entire amount purchased since Rs. 50 Lakhs per dealer deduction is available only once a financial year.

Example-2

X is a buyer who buys goods worth Rs 70 lakhs from a seller named Y. The annual turnover of X (buyer) in the year ended 31st March 2021 is Rs.5 crores but the annual turnover of Y (seller) is only Rs.15 crores in the same period. Payment for the goods is made after the goods are received.

-194Q will not be applicable to this transaction because here the buyer's turnover for the year ended 31st March 2021 does not exceed Rs.10 crores but since the seller's turnover during the period was more than Rs.10 crores which is applicable under section 206C(1H) Therefore, on this transaction, at the time of payment of Rs 70 lakhs under this section, the seller will collect and deposit TCS under section 206C(1H) at the rate of 0.1% on Rs 20 lakhs after deducting Rs 50 lakhs.

Example-3

X is a buyer who buys goods worth Rs 70 lakhs from a seller named Y. The annual turnover of X (Buyer) for the year ended 31st March 2021 is Rs 15 crores and the annual turnover of Y (seller) is also Rs 20 crores in the same period. Payment for the goods is made after the goods are received.

-This is the only instance under which both the conditions of section 194Q and section 206C(1H) are satisfied because the turnover of both the buyer and the seller during the year ended March 31, 2021 was more than Rs.10 crore and the purchase of goods / The amount of payment is also more than Rs. 50 lakhs.

But keep in mind here that only TDS will be deducted on such transaction which is to be deducted by the buyer at the time of purchase of the goods. Where the provisions of TDS are applicable to the buyer and TDS is also deducted, the TCS applicable on the sale of goods under section 206C(1H) is not applicable.

One point we should keep in mind that where both the provisions are applicable under section 194Q and 206(1H) on a single transaction , as explained above then in that situation the practically the buyer should inform the seller that he is deducting the TDS under section 194Q and seller should not collect the TCS under section 206(C)(1H) on such transaction because if TCS is Collected by the seller even then Buyer will have to deduct the TDS since there is no exemption from TDS under section 194Q on the condition that the TCS is collected under section 206(C) (1H).

How it will affect the Dealers of Big Companies: –

Big Manufacturing companies are collecting TCS under Section 206 (C) (1H) from their dealers. See all the Automobile, Electronic and other Consumer Goods companies.

Now from 1st. July 2021 the situation will change since both companies and dealers are in big categories having turnover more than 10 Crores and all the transaction of sale and purchases is More than Rs. 50 Lakhs in a Financial Year to be covered under section 194Q and 206(C) (1H). Now dealers will have to inform to the companies that they are liable to deduct TDS so companies will stop collecting TCS and it will certainly shift the working capital burden from dealers to companies.

Note: – **From July 1, 2021, the new provision of TDS is being implemented, after the study done on it, we are sending you an article. All care has been taken while writing this article but since the topic is new, there is still a possibility of error in it. You are requested to read this article and feel free to send suggestions for improvement in it.**

Source: taxguru.in

●●●

CORONA VIRUS: A LESSON IN SUPPLY CHAIN RISK MANAGEMENT

MATT LEONARD REPORTER

This page contains highlights and deep dives from Supply Chain Dive's reporting on coronavirus. View all COVID-19 stories here.

The Chinese government notified the World Health Organization of an unusual illness in the city of Wuhan last December. This virus was later identified as a novel coronavirus, and the illness it caused was named COVID-19. Weeks later, as it spread and the death toll climbed, the Chinese government placed Wuhan under quarantine. Factories producing goods for thousands of global companies remained shut down past the Lunar New Year holidays as employees couldn't return to work. Rail, air and ocean shipments stopped moving through the affected region. Soon, firms in other countries began announcing plans to temporarily suspend production because they couldn't procure parts from suppliers in China.

With manufacturers not operating, or operating at reduced capacity, ocean carriers began to blank sailings as a result of the decreased demand. Importers began canceling supplier orders as customer demand waned.

Take a look below at Supply Chain Dive's coverage of the COVID- 19 pandemic and how companies are responding. You can view all news, analysis and reporting on coronavirus by clicking here.

Drop trailers provide exibility amid tight trucking capacity

By Amanda Loudin • May 24, 2021

The category o ers a cost-e ective way to keep up with demand, and it also helps mitigate some impacts of the driver shortage on shipping. Read the full article "'

Logistics meets marketing: Fast and free shipping promotions need supply chain on board

By Jen A. Miller • May 13, 2021

Data sharing between the departments maintains low costs and customer loyalty. Read the full article "'

Responsible sourcing is key to rid labor abuse from PPE supply chain

By Steve Ardagh • May 6, 2021

Legislation and governmental sanctions can help, but businesses must commit to ethical sourcing standards. Read the full article "'

Supply chains play inventory catch-up against a growing backlog of orders

By Matt Leonard • May 4, 2021

Clorox grew inventory 50% and 3M's grew 6% in a race to meet elevated demand. Read the full article "'

RFID's e-commerce growth spurt

By Deborah Abrams Kaplan • May 4, 2021

The need for visibility drove companies to invest in solutions for their complete supply chain while Adidas is using the technology to verify provenance. Read the full article "'

TMS integrations with digital freight brokers are gaining momentum

By Katie Pyzyk • May 4, 2021

The partnerships meld capacity, loads, real-time rates and booking into an all-in-one platform for shippers.

Read the full article "'

How construction is using technology to mitigate supply disruptions

By Joe Bousquin • April 30, 2021

Soaring material costs and supply chain woes threaten the industry's rebound. Read the full article "'

Warehouses turn to gami cation to level up productivity

By Gary Wollenhaupt • April 27, 2021

Supply chain leaders take a carrots-over-sticks approach to incentivizing warehouse labor as the industry struggles to recruit and retain workers. Read the full article "'

How the pandemic changed retail supply chains

By • April 26, 2021

Whether sales were up or down, retail supply chain leaders knew one thing was clear: Strategies had to change.

Read the full article "'

It's game on for packaging procurement as lead times lengthen

By Jen A. Miller • April 22, 2021

Stadiums and concessions anticipate surging demand as events resume. Can supplies keep up? Read the full article "'

How the pandemic impacted demand at FedEx, Clorox and C&S Wholesale

By Matt Leonard • April 14, 2021

Companies across industries began to shi operations in early 2020, as signs pointed to changes in demand and consumer habits. Read the full article "'

The pandemic brings supply chains out of the shadows and CSCOs into the spotlight

By Jen A. Miller • April 13, 2021

C-suites and boardrooms recognize how crucial the supply chain function is, which provides an opportunity for CSCOs to push for strategic value in their roles.

Read the full article ”’

How the pandemic drove retailers to on-demand warehousing

By Matt Leonard • April 12, 2021

Supply chains had a front-row seat to volatility over the last year, and a need for more exible operations.

Read the full article ”’

Supply chains do the math on reshoring’s pros and cons

By Deborah Abrams Kaplan • April 8, 2021

COVID-19 exposed risks and spurred conversations about moving manufacturing, but the pandemic is far from the only factor to consider. Read the full article ”’

The omnichannel age is here — and it’s expensive

By Ben Unglesbee • April 6, 2021

Pro t margins are o en lower for pickup than delivering from a warehouse, as retailers consider store costs, shipping expenses and channel-speci c overhead.

Read the full article ”’

Congested West Coast ports bring the heat to TL spot rates

By Jim Stinson • March 31, 2021

Delayed o the coast of the Golden State are a mix of consumer and industrial needs that are likely to keep capacity tight and truckers busy. Read the full article ”’

A ock of black swans hovers — and supply chains need to get ready

By Rich Weissman • April 1, 2021

Risk management should include planning, strategy and a bit of good luck. Read the full article ”’

Home Depot, Lowe’s build on supply chain foundations to make quick work of omnichannel

By Shefali Kapadia • March 29, 2021

When the pandemic arrived around the same time as the home improvement retailers’ busy spring season, they had to pivot to meet demand. Read the full article ”’

6 charts show how a pandemic upended retail supply chains

By Matt Leonard • March 22, 2021

Consumers moved online and retailers pivoted to move inventory locked in brick-and-mortar locations.

Read the full article ”’

Packaging automation hits fast track in 2021

By Jen A. Miller • March 16, 2021

Automated technology has matured to the point that using it for packaging is not just possible — it’s a necessity to keep up in the e-commerce era. Read the full article ”’

A tumultuous year of ocean shipping prompts a rethink of contracts

By Matt Leonard • March 10, 2021

Negotiations are taking place earlier than usual, with greater interest in two-way commitments and tiered pricing. But a focus on resiliency and capacity comes at a cost to shippers. Read the full article ”’

Coronavirus beams trucking, supply chain into an automated future

By Jim Stinson • March 3, 2021

XPO Logistics shipped ve times more units using robotic technology in 2020 than it did in 2019. Read the full article ”’

Cold storage construction heats up amid pandemic

By Kim Slowey • Feb. 26, 2021

Supply chain disruption, new competition and the need for specialty subcontractors are some of the challenges cold storage contractors face, but they aren’t slowing them down. Read the full article ”’

Packaging manufacturers compete for raw materials as takeout shakes up food service

By Jen A. Miller • Feb. 23, 2021

One company has seen its lead times double for the materials it needs to make packaging. Read the full article ”’

The PPE supply chain is a case of the ‘haves’ and the ‘have nots’

By Deborah Abrams Kaplan • Feb. 11, 2021

Gloves and masks are in short supply, and many organizations are blowing through their budgets as they attempt to source in-demand equipment.

Read the full article ”’

In ection point: Contract rates overtake spot rates

By Jim Stinson • Feb. 9, 2021

An ongoing driver shortage coupled with consumer demand will keep spot and contract rates elevated — and could make 2021’s rst half look a lot like the last half of 2020.

Read the full article ”’

Why the empty container math doesn’t add up in US exporters’ favor

By Matt Leonard • Feb. 3, 2021

What led to a global imbalance of available shipping containers? And what were the e ects on U.S. businesses? Read the full article ”’

Eager to innovate in pickup, retailers look to lockers and kiosks

By Sam Silverstein • Jan. 26, 2021

As retailers look to storage units to enhance omichannel and delivery service, they must grapple with limitations that could impede adoption. Read the full article ”’

The pandemic put supply chains front and center for retailers — perhaps for the rst time

By Ben Unglesbee • Jan. 25, 2021

Retail supply chains came under intense strain and went through wild convolutions last year. To weather the next storm, the industry must be agile and take risk seriously. Read the full article ”’

Pandemic parcel dynamics drive a new shipper hierarchy

By Emma Cosgrove • Jan. 25, 2021

In a world where parcel carriers choose which volume they carry, some shippers will win capacity and some will lose. Skill and investment will determine the winners.

Read the full article ”’

Gig economy emerges as key part of the parcel ecosystem

By Emma Cosgrove • Jan. 25, 2021

During the pandemic, Instacart, Postmates, Roadie, Shipt and others have moved into new roles, in many cases integrating into retailers’ parcel portfolios as an alternative to traditional carriers. Read the full article ”’

Making sense of the peak 2020 parcel mess

By Emma Cosgrove • Jan. 25, 2021

With peak 2020 in the past, parcel shippers are attempting to discern what led to degraded carrier service for some, but not all. Read the full article ”’

4 elements of the next phase of last-mile delivery

By Emma Cosgrove • Jan. 20, 2021

The technologies to move retail delivery forward already exist. The next step is fully weaving last-mile services into the retail landscape. Read the full article ”’

What does shipper of choice mean in 2021?

By Matt Leonard • Jan. 21, 2021

A history of short dwell times and consistent tendering behavior will be important as carriers prioritize freight in a tight market. Read the full article ”’

It’s time to hit reset on these 3 aspects of supplier management

By Rich Weissman • Jan. 21, 2021

Companies have had nearly a year to adapt their service levels to the pandemic, and workarounds should be baked into service blueprints. Read the full article ”’

How supply chains adjusted demand forecasts during the pandemic

By Matt Leonard • Jan. 19, 2021

Demand planners started to bring in data from Google Trends and Amazon marketplaces to better understand

unpredictable consumer buying habits. Read the full article ”’

How Dick’s and Wayfair connect consumers with real-time inventory data

By Emma Cosgrove • Jan. 19, 2021

The pandemic upped the stakes for data accuracy, as well as the velocity and volume at which it needed to ow.

Read the full article ”’

The evolving role of the chief procurement o cer

By Jen A. Miller • Jan. 14, 2021

The need for more — and more critically thinking — CPOs is accelerating. Read the full article ”’

Packaging, PPE and surgical supplies: How COVID- 19 is pushing hospitals to reduce waste

By Deborah Abrams Kaplan • Jan. 12, 2021

Some waste is inevitable, but supply chain leaders are

nding ways to reduce the quantity — reusing and recycling when possible and adjusting procurement and packaging. Read the full article ”’

Humanity drives these 4 procurement trends for 2021

By Rich Weissman • Jan. 7, 2021

We are fundamentally — professionally and personally — transformed because of COVID-19 pandemic experiences. Read the full article ”’

How COVID-19 is changing packaging

By Jen A. Miller • Jan. 5, 2021

The shi may nally get rid of the need to encase every item in impossible-to-open plastic. Read the full article ”’

The newest supplier KPI? Employee vaccination rate.

By Rich Weissman • Dec. 17, 2020

While it will take some time for the entire population to get vaccinated, incremental and growing business compliance will be a key performance indicator worth tracking.

Read the full article ”’

A tale of hand sanitizer: How the ethanol supply chain pivoted for COVID-19

By Deborah Abrams Kaplan • Dec. 3, 2020

Raw material inputs for hand sanitizer were plentiful. But manufacturing capabilities, government regulations, packaging and tankers are a di erent story.

Read the full article ”’

As food banks gear up for the holiday season, warehouse throughput is key

By Craig Guillot • Nov. 24, 2020

Volume and demand surged throughout the pandemic, pushing many food banks beyond their processing and packaging limits. Read the full article ”’

Ship from store makes sense in a pandemic. Does it make sense long term?

By Jen A. Miller • Nov. 17, 2020

Making the ful llment method work requires physical changes and a view of inventory down to the SKU level. Read the full article ”’

How 6 chains expanded grocery pickup during the pandemic

By Jeff Wells • Nov. 16, 2020

Some, including Walmart, have taken advantage of a large click-and-collect footprint. And some, such as Target, ramped up grocery pickup a er demand soared.

Read the full article ”’

The implications of shipping direct to consumer

By Caroline Jansen • Nov. 16, 2020

On top of high costs, fast and free delivery expectations, and returns, brands also put customer retention at risk by forfeiting control over the last mile. Read the full article ”’

Ahold Delhaize tackles a $480M supply chain overhaul during a pandemic — and Thanksgiving

By Emma Cosgrove • Nov. 12, 2020

The grocery group is forging ahead with an insourcing transformation amid a busy time in a tumultuous year. What could go wrong? Read the full article ”’

Take a dynamic approach to supply chain, US government.

By Nader Mikhail • Nov. 10, 2020

Federal lawmakers proposed a task force to fund a more “resilient” supply chain. But resiliency is not the answer for the future, the author writes. Read the full article ”’

Delays, surcharges and returns: Holiday shipping headaches have just begun

By Caroline Jansen • Nov. 9, 2020

In a season expected to produce more than $190 billion from online sales alone, retailers are pulling out all the stops to keep up with demand. Read the full article ”’

Sealed Air, packaging suppliers shi to serve e-commerce ‘mega trend’

By Matt Leonard • Nov. 4, 2020

Businesses said they’ve seen increased e-commerce tra c as a result of the pandemic, and they expect some of that volume to stick. Read the full article ”’

Virtual procurement is here to stay. And that’s not a bad thing.

By Rich Weissman • Nov. 5, 2020

Most of our vendor relationships have always been remote, and the use of virtual tools creates deeper relationships that improve the negotiation process. Read the full article ”’

Meat processors expedite robotics plans as pandemic ups pressure

By Lillianna Byington • Nov. 2, 2020

The future of meat manufacturing could include 3D scanners and automated cutting. Tyson, Smith eld, Cargill and JBS are looking to increase automation. Read the full article ”’

Mapping and charting the growth of regional parcel carriers

By Shefali Kapadia • Nov. 2, 2020

Alternatives to UPS and FedEx have brought on major retailers over the last several years, with expansion accelerating during the COVID-19 pandemic and resulting parcel boom. Read the full article ”’

Supply chains can use purchasing power to ght inequity

By Mary Beth Lang • Oct. 29, 2020

Spending more on local sourcing mitigates socioeconomic and health disparities, strengthens supply chain resilience and reduces carbon emissions, writes Kaiser Permanente’s supply chain and procurement chief.

Read the full article ”’

How COVID-19 changed warehouse management and design

By Jen A. Miller • Oct. 27, 2020

Warehouse managers are adjusting work ows to keep employees safe and distanced while also handling the new demand for e-commerce. Read the full article ”’

Is supply chain swallowing up procurement?

By Rich Weissman • Oct. 22, 2020

The pandemic thrust supply chain management and risk mitigation into the limelight. What happens to the procurement folks? Read the full article ”’

Truck vs. train: Which has the upper hand as spot rates soar?

By Jim Stinson • Oct. 15, 2020

Shippers consider lead times and freight types when selecting over-the-road, rail or intermodal.

Read the full article ”’

There is more than one way to move sourcing out of China in a post-pandemic world

By Kamala Raman • Oct. 15, 2020

Diversifying global supply chains is o en thought as an all- or-nothing action. It is not, writes a senior director analyst at Gartner Supply Chain Practice. Read the full article ”’

Supply chain pros embrace AI for forecasting, inventory despite limitations during pandemic

By Matt Leonard • Oct. 13, 2020

Rigid systems that don’t respond to rapid market shi s and a lack of reliable data frustrated respondents in a survey from Secondmind. Read the full article ”’

Microful llment centers are changing grocery e-commerce. But are they right for everyone?

By Sam Silverstein • Oct. 12, 2020

Grocers face unique e-commerce challenges that make deciding whether to automate ful llment operations a complex choice, experts say. Read the full article ”’

Battle of the forms: Protecting your business with

purchase order terms and conditions

By Rich Weissman • Oct. 8, 2020

The interpretation of COVID-19 in force majeure clauses is the crux of many legal battles between buyers and suppliers. Read the full article ”’

Warehouse employment is at an all-time high

By Matt Leonard • Oct. 6, 2020

The labor-intensive processes of picking, packing and shipping require supply chains to hire more workers as e- commerce sales reach record levels. Read the full article ”’

Coca-Cola’s approach to dedicated operations amid market swings

By S.L. Fuller • Sept. 23, 2020

When volumes tanked, the beverage maker found other ways to keep trucks moving. Read the full article ”’

Can procurement pros avoid passivity while working remotely?

By Rich Weissman • Sept. 24, 2020

Buyers must protect their organizational in uence while maintaining communication throughout the supply chain. Read the full article ”’

How the pandemic is changing supply chain education

By Matt Leonard • Sept. 22, 2020

Professors say students will need skills in supply chain mapping, manufacturing and risk management to meet the needs of a post-pandemic workforce. Read the full article ”’

Why zero-based category management is back in style

By Jen A. Miller • Sept. 17, 2020

The pandemic has driven rms to rethink how much product they’re buying and how much they’ll need to meet demand. Read the full article ”’

Robotics can help with pick speed and social distancing, but warehouse design is key

By Matt Leonard • Sept. 15, 2020

Labor-e cient picking can make up for hiring struggles, according to robotics rms. Read the full article ”’

Chewy’s new limited-SKU warehouse is just for volume surges

By Emma Cosgrove • Sept. 15, 2020

Chewy is banking on a new kind of ful llment center, plus automation, to keep lowering ful llment unit costs.

Read the full article ”’

5 charts show CPG inventory challenges

By Matt Leonard • Sept. 8, 2020

Stockouts plagued retailers and manufacturers in the early days of the pandemic. Recovery has not been the same across product categories. Read the full article ”’

3 ways to ght stockouts in the pandemic

By Jen A. Miller • Sept. 8, 2020

Historical data isn’t worthless, but it won’t work alone in times of unpredictable demand. Read the full article ”’

American Eagle takes on pandemic ful llment challenges with warehouse sort robots

By Craig Guillot • Sept. 1, 2020

The robots pick orders from bins and place them in a put wall, allowing retailers to handle high e-commerce volumes while maintaining safe distances between workers.

Read the full article ”’

How Sephora exed its warehouse network to prep for an e-commerce onslaught

By Emma Cosgrove • Aug. 25, 2020

The beauty retailer’s annual spring promotion led SVP for Supply Chain Mike Racer to elevate throughput as a measure of readiness years before the coronavirus pandemic hit. Read the full article ”’

Warehousing, manufacturing employment below pre-pandemic levels as peak nears

By Matt Leonard • Aug. 25, 2020

Employment in manufacturing dipped 10% year over year in April and 5% in warehousing during the same period.

Read the full article ”’

Stocked out: Why cleaning product supply chains struggle to meet demand

By Deborah Abrams Kaplan • Aug. 20, 2020

The disinfectant and cleaning product supply chain relies on a just-in-time approach, making it di cult to radically move the output meter in a short timeframe. Read the full article ”’

Peak season in a pandemic: What happens to freight rates and capacity?

By Matt Leonard • Aug. 20, 2020

Metrics and economic factors can help shippers gauge capacity and rates for air, ocean, trucking and rail heading into freight’s busy season. Read the full article ”’

Even post-pandemic, digital transformation will become more bullish

By Samantha Schwartz • Aug. 14, 2020

The pandemic is a pressure test for companies to sustain customer loyalty. Technology is the only way to ensure sustainability. Read the full article ”’

Blockchain’s fate under COVID-19

By Roberto Torres • Aug. 10, 2020

Funding for blockchain projects fell, but the crisis highlighted vulnerabilities and visibility issues in the supply chain that remain good use cases for the technology.

Read the full article ”’

Stores went dark. Online orders tripled. How Joann used its OMS to cope.

By Jen A. Miller • Aug. 11, 2020

The retailer de-stressed its technology, and employees, as online tra c tripled typical holiday volumes.

Read the full article ”’

Why cold chain tracking and IoT sensors are vital to the success of a COVID-19 vaccine

By Deborah Abrams Kaplan • Aug. 11, 2020

Technology-enabled tracking and monitoring sensors provide real-time visibility into a vaccine

shipment’s condition — and an opportunity to intervene before damage is done. Read the full article ”’

Retail suppliers are still under strain — and it could hurt everyone

By Ben Unglesbee • Aug. 10, 2020

Stores are open, but vendors face longer payment terms and nancial uncertainty, which could hit retail shelves just as the holidays ramp up. Read the full article ”’

Dear valued supplier: Don’t take advantage of the pandemic to raise prices

By Rich Weissman • Aug. 6, 2020

Nearly every cycle, some business condition creates cost challenges, with many price increases valid but others not. The goal is to separate fact from ction.

Read the full article ”’

Food distributors, restaurants reinvent business models in a scramble to survive

By Gary Wollenhaupt • Aug. 6, 2020

From wine bar to mini grocery store, from restaurant distribution to direct to consumer — food sector rms are pivoting operations to keep business owing.

Read the full article ”’

From visibility so ware to pallet picks: How Tillamook planned inventory as demand soared

By Shefali Kapadia • Aug. 4, 2020

The demand planning team credits so ware for its ability to adjust operations during the pandemic. Now the challenge is long range inventory planning, particularly for cheeses that require two years to age. Read the full article ”’

COVID-19’s urban exodus will force supply chains to adapt

By Aaron Terrazas • Aug. 4, 2020

The shi to working from home could cause a second slower-moving, but more enduring, demand shock that is just starting to unfold, writes Aaron Terrazas, director of economic research at Convoy. Read the full article ”’

Demand for partitions and face shields is booming. How a plastic fabricator is adapting its supply chain

By Jen A. Miller • July 30, 2020

Imaginative Materials leaned on supplier relationships and started buying larger sheets of material as customer calls for partitions rolled in. Read the full article ”’

How COVID-19 is challenging and changing medtech supply chain management

By Maria Rachal • July 27, 2020

Four experts share insights on the supply and demand hangups medtech companies have been working through during the pandemic, and a few early takeaways the industry can carry forward. Read the full article ”’

Grocery supply chains must invest in automation as delivery becomes the norm

By Ryan Yost • July 28, 2020

As grocers cut costs, smaller sta s will be stretched by increasing delivery demands. Technology can ll the gap, writes Avery Dennison VP Ryan Yost.

Read the full article ”’

Electronics supply chains are stuck between a pandemic and a trade war. Where do they go from here?

By Morgan Forde • July 23, 2020

Shi ing operations is a mammoth undertaking for the electronics industry due to China’s specialized production capacities, co-location of key suppliers and economies of scale. Read the full article ”’

4 ways to restore healthcare supply chains before COVID-19’s second wave hits

By Jeff Berman • July 20, 2020

Healthcare organizations shouldn’t try to restore supply chain service to pre-pandemic levels, rather, they should focus on greater cost-e ective and e cient operations, writes Je Berman, a principal at Grant Thorton.

Read the full article ”’

Conducting supplier audits in the era of COVID-19

By Craig Guillot • July 16, 2020

Buyers are leaning on contractual obligations and technology to curtail the use of physical audits.

Read the full article ”’

How a small-batch distillery improvised a hand sanitizer supply chain in 72 hours

By S.L. Fuller • July 14, 2020

When hand sanitizer was in short supply, nontraditional producers retooled operations and worked with suppliers to

ll the gap. Read the full article ”’

An insider’s look at how GM, Ventec ramped up ventilator production amid COVID-19

By Greg Slabodkin • July 13, 2020

The weight of the Defense Production Act was key in opening doors, said the CEO of the engineering rm contracted to test each of the 30,000 devices expected under the agreement.

Read the full article ”’

Unilever CSCO: Agility beats forecasting when the supply chain is stressed

By Emma Cosgrove • July 13, 2020

Every dollar spent on agility has 10 times the ROI compared to forecasting spend, according to Chief Supply Chain O cer Marc Engel. Read the full article ”’

Will sustainability take a backseat to COVID-19 challenges?

By Emma Cosgrove • July 9, 2020

Procurement leaders from Danone, PepsiCo, L'Oreal and more see the practices and tools gained through sustainability work as assets in the battle against pandemic supply chain disruptions. Read the full article ”’

Pandemic exposes need to automate nance function amid limited resources

By Robert Freedman • July 8, 2020

Finance automation has been practical for most organizations for 20 years, but only about 5% are fully vested so far. Read the full article ”’

3 applications for RFID in the ght against COVID- 19

By Deborah Abrams Kaplan • July 7, 2020

Microchips embedded in RFID tags can track and authenticate vaccines, test kits, medical equipment and PPE from manufacturing to clinic sites. Read the full article ”’

3 strategies for managing trucking RFPs in the pandemic

By Gary Wollenhaupt • June 9, 2020

Shippers chasing low spot rates in the short term may damage relationships with carriers in the long term.

Read the full article ”’

COVID-19 spurs a leap to digital supply chains

By Craig Guillot • June 9, 2020

Manufacturers who previously looked at data, analytics, IoT and robotics to drive e ciency now see them as tools to increase resiliency during uncertain times.

Read the full article ”’

An unexpected risk of COVID-19: Canceled supplier audits

By Sylvain Guyoton • June 4, 2020

While it's hard to fault a company for canceling audits during a pandemic, it's important to understand what's at stake, and have a plan in place to mitigate new risks, writes Sylvain Guyoton, SVP of research at EcoVadis.

Read the full article ”’

Now is the time to negotiate indirect spend

By Rich Weissman • May 28, 2020

Economic uncertainty will drive many businesses to slash indirect spend, but that's a missed opportunity to take greater control of the category during a buyer's market.

Read the full article ”’

How tari s ravaged the COVID-19 medical supply chain

By Deborah Abrams Kaplan • May 27, 2020

Months into the pandemic, the U.S. faces an ongoing shortage of PPE and some of it is still subject to tari s. Read the full article ”’

Canceled orders, delayed payments: How supplier collaboration could reverse apparel's nose dive

By Emma Cosgrove • May 21, 2020

Stakeholders envision a future where demand, not merchandisers, drive fashion supply chains, and buyers bring vendors into the planning process.

Read the full article ”’

Experts: 3 ways coronavirus has shi ed supply chains' focus

By Matt Leonard • May 20, 2020

Practitioners from across the industry came together at the U.S. Chamber of Commerce to discuss how the pandemic is a ecting their operations. Read the full article ”

COVID-19 may put industrial distribution back in the game

By Rich Weissman • May 19, 2020

Manufacturers may look to their industrial distribution network as an opportunity to satisfy more customers and rebuild their market share. Read the full article ”’

Coronavirus adds to complications heading into hurricane season

By Matt Leonard • May 19, 2020

Analysts anticipate risk to manufacturing and expect reduced trucking hours at ports to have a knock-on e ect on cargo movement. Read the full article ”’

Your business is essential. How do you protect workers during a pandemic?

By Matt Leonard • May 12, 2020

Cleaning should be much more regular, gloves don't do much to ght coronavirus and other tips from health experts. Read the full article ”’

Wearables could be key for worker safety as warehouses, manufacturers eager to reopen

By Jen A. Miller • May 5, 2020

Wristbands connected to the Internet of Things present a possible safety solution, as well as privacy concerns.

Read the full article ”’

Suppliers feel retail's pain

By Ben Unglesbee • April 29, 2020

As retailers cancel orders and hold payments, their vendors are stretched for cash, making hard decisions and worrying about what comes next. Read the full article ”’

Omnichannel comes to the fore as Texas launches plan to reopen retail

By Emma Cosgrove • April 21, 2020

Though many retailers have adopted BOPIS and other omnichannel strategies, those starting from scratch have a steep learning curve ahead as economic reopening plans attempt to limit retail foot tra c. Read the full article ”’

Carrier force majeure explained

By Emma Cosgrove • April 20, 2020

A basic understanding of force majeure — and the real reason carriers make the declaration — may help to lessen some of the panic they generate. Read the full article ”’

COVID-19 wreaks havoc on inventories

By Daphne Howland • April 14, 2020

Some retailers have asked vendors to hold shipments or stop production on summer and fall items, and put holiday planning on hold. Read the full article ”’

Navigating supplier relationships in the COVID-19 era

By Rich Weissman • April 16, 2020

Coronavirus-related ruptures in the supply chain are leading to canceled, invalidated or ignored contracts, emphasizing the importance of buyer-supplier relations.

Read the full article ”’

How medical supply chains can diversify beyond COVID-19

By Deborah Abrams Kaplan • April 15, 2020

Pharma and medical device buyers’ heavy reliance on global sourcing lowers costs but has created supply problems during the coronavirus pandemic. Read the full article ”’

To prepare for the next ‘black swan’ event, supply chains should rethink ‘lean’

By Yao Jin and Lisa Ellram • April 14, 2020

The coronavirus outbreak contains lessons that can help companies — and policymakers — better prepare for the next inevitable “black swan event,” if they are willing to take a less myopic approach, write Professors Yao Jin and Lisa Ellram of Miami University. Read the full article ”’

Why supply chain data is king in the coronavirus pandemic

By Deborah Abrams Kaplan • April 7, 2020

Healthcare systems, distributors and purchasing organizations rely on real-time data to manage supplies and model their equipment and sta ng needs.

Read the full article ”’

How the CARES Act will a ect supply chains

By Morgan Forde • April 1, 2020

The law o ers nancial relief to businesses weathering COVID-19 disruption and attempts to keep freight and last- mile cargo moving. Read the full article ”’

From Section 301 to COVID-19: How a volatile China changed supply chains

By Shefali Kapadia • March 31, 2020

An ongoing trade war, and now a global pandemic, pushed

U.S. businesses to diversify and raised the question: Are we too dependent on China? Read the full article ”’

What procurement managers should expect from a ‘bullwhip on crack’

By Matt Leonard • March 26, 2020

Slight variations in demand at the retail level grow larger until they reach the manufacturer. This bullwhip e ect is playing out in real-time in the COVID-19 pandemic.

Read the full article ”’

How health systems are responding as COVID-19 squeezes the medical supply chain

By Deborah Abrams Kaplan • March 25, 2020

Procurement of supplies will become more di cult if cases surge and federal stockpiles don’t trickle down to the state level quickly enough. Read the full article ”’

The apparel industry had an inventory problem before coronavirus. What now?

By Emma Cosgrove • March 24, 2020

With such an unprecedented set of restrictions and uncertainties, universal recommendations are hard to come by for “nonessential” retailers and wholesalers, but some trends are starting to surface. Read the full article ”’

‘We’re putting out res’: Companies adjust to online grocery surge

By Jeff Wells • March 19, 2020

Retailers are adding servers, hiring ful llment workers and trying to better sync inventory with their online platforms. Read the full article ”’

How a lab facing coronavirus supply shortage signals nationwide struggles

By Greg Slabodkin • March 18, 2020

The Western New York regional public health lab is a microcosm of the insu cient swab and reagent stocks labs face as they attempt to con rm COVID-19 cases and gauge the scope of the outbreak. Read the full article ”’

Supply chain managers can leverage Lunar New Year experience in coronavirus disruption

By Nate Evans • Feb. 10, 2020

This is a time when agility in the supply chain, speci cally having multiple suppliers in varying geographies, will be extraordinarily valuable, writes Nate Evans, co-founder and CXO at Fictiv. Read the full article ”’

Recommended Reading:

SUPPLY CHAIN DIVE

View all coronavirus stories

Source : www.supplychaindive.com

HOW TECHNOLOGY IS HELPING INDIA TO FIGHT COVID-19

SINDHU GANGADHARAN, SVP, SAP USER ENABLEMENT, AND MD, SAP LABS INDIA.

At the heart of the crisis-led watershed moment is an unprecedented scale of digital adoption across government agencies, industries, medical bodies, and enterprises.

Last March, the seismic shift caused by the Covid-19 pandemic brought the world to a screeching halt. In a matter of few months, the entire humanity rose to the occasion and reimagined every possible facet of our daily lives, healthcare infrastructure and business ecosystems to tide over the pandemic. At the heart of this watershed moment is an unprecedented scale of digital adoption across government agencies, industries, medical bodies, and enterprises. While the pandemic crippled the lives of both individuals as well as organisations, it also fast-tracked high technology adoption across the globe and fuelled a cultural transformation that otherwise would have taken another decade or more.

With multiple lockdowns, Indian masses soon switched to a digital lifestyle—be it for work, education, entertainment, or procurement of daily essentials. The local kirana stores shifted to online ordering and doorstep delivery as their primary business. Schools and colleges reconceptualised education with digital classrooms and online learning for millions of students across the length and breadth of the country. And, with doctors switching to teleconsultation and government bodies facilitating vaccinations and other Covid-19—related supplies through online platforms, digital disruption penetrated the common man's life like never before.

Track and trace with tech - While our medical staff tended to patients, senior government officials and experts leveraged surveillance technologies to deploy technology to cap the spread of the virus. In less than a month of the outbreak, India saw at least 19 new applications being used by state-central governments and even local civic bodies, with an estimated 10 million users, to manage the COVID-19 crisis. While ArogyaSetu remains the most popular app amongst Indians, many start-ups like Innefu and Qkopy found business opportunities through their tech offerings to manage the crisis. They developed Unmaze to help track quarantined individuals and GoK Direct-Kerala app to share latest health updates. Corona Watch, SMC-COVID Tracker, SAHYOG, and COVID19-Feedback are some other applications being leveraged by government authorities to control the spread, map affected citizens and geofence places with a large number of infections. The second wave of Covid-19 saw a second wave of innovation to manage the acute shortage of hospital beds, ventilators, oxygen supplies etc. A whole new range of applications and portals like Search My Bed, COVID SoS, Sprinklr now focused on locating emergency medical supplies. Moreover, Twitter emerged as the most effective solution to map Covid-19-related resources. The recently launched advanced search option makes it a seamless experience for distressed users to search for tweets with specific keywords, geo location and even dates.

'Hybrid' is the future - The Work From Home (WFH) economy is arguably one of the biggest transformation stories of the 21st century with a direct impact on almost half of the world's population. Interestingly, a report submitted by PwC India put India as the highest use of A.I. in 2020, with over 70% of Indian organisations deploying A.I. in more areas as compared to around 62 per cent in 2019. This is higher when compared to major economies like Britain, Japan, and the U.S. While WFH emerged as a household name in 2020, the shift to a more sustainable hybrid work model is inevitable. Forward- looking organisations like SAP are moving away from the desk-chair paradigm and leveraging technology to reimagine the office to create more collaborative and community-like spaces for employees on-site and those logging in from the comfort of their homes.

Tech for good - Technology and innovation should benefit the society at large, especially during a pandemic like this. Therefore, when the Indo German Chamber of Commerce approached us to build a marketplace to help facilitate the easy exchange of Covid-19 resources among member companies, we leveraged SAP JAM as a collaboration platform to onboard over 400 organisations in less than a week and help bridge the demand-supply gap, thereby accelerating the process and saving crucial time. We're also leveraging our in-house technology to build a solution for tracking the liquid medical oxygen in the country. The solution integrates directly with the Oxygen Digital Tracking System (ODTS) and will help monitor the measures to increase the availability of Oxygen, streamline the distribution and strengthen the oxygen storage infrastructure in the country.

Besides fostering collaboration and cohesion amongst individuals, enterprises and institutions, tech- based solutions have brought in a cultural revolution, especially in countries like India, where the pandemic has fast tracked digitalisation beyond boundaries, for the good.

Views are personal

Source: www.fortuneindia.com

भारतीय सामग्री प्रबंधन संस्थान

Indian Institute of Materials Management

NHQ: Plot No. 102 & 104, Sector-15, Institutional Area, CBD Belapur, Navi Mumbai-4 0 0 6 1 4
Ph: 022-27561754, 27565831, Fax: 022-27565741, email: iimmnhq55@gmail.com/ members@iimm.co.in

MEMBERSHIP CATEGORY

★Life Member ☐ Full Member ☐ Associate Member ☐

★(Send 1 additional photo for I-Card)

SERVICING BRANCH ______

No. ______

FOR OFFICE USE NHQ ONLY

Name ______ Sex: ☐ Male ☐ Female

Designation ______

Name of Organization ______

Office Address ______

______

Tel. & Mob: ______ email ______

Home Address ______

______

Tel. & Mob: ______ email ______

Educational Qualification ______

Work Experience (Start with present position)
(Please attach separate sheet where necessary)

Year	Year to	Position	Company / Organization

INDIVIDUAL FEES

Category	Entrance Fee	Annual Subscription
Life Member	Rs.500/-	Rs.12000/- (One Time)
Member	Rs.500/-	Rs.1000/- ★
★Also can avail 5 years membership by paying Rs.4000/-		
Associate	Rs.500/-	Rs.500/-

Membership of any other Professional organization

Your Blood Group ______ Your Date of Birth ______

Where will you like to receive the IIMM mail: ☐ OFFICE ☐ HOME

REMITTANCE DETAIL

I hereby enclose my Annual Subscription and Entrance Fees of Rs..................by way of Cheque / Demand Draft No............................ dt..........................drawn in favour of "Indian Institute of Materials Management"

UNDERTAKING

I wish apply for membership of the institute with appropriate status.
I certify that all information supplied in the application is true and correct.
I undertake to abide by all rules & regulations of IIMM as on date and to be revised in future.

Eligibility: Associate:
Others:

______
Applicant's Signature

Date: ______

REFERENCE

(From IIMM Member / your immediate senior organization where worked / working who have a personal knowledge of IIMM.

Signature 1st Referee ______
Name: ______
Designation & Company ______
Mobile: ______
Email: ______
Dated: ______

Signature 2nd Referee ______
Name: ______
Designation & Company ______
Mobile: ______
Email: ______
Dated: ______

BRANCH CHAIRMAN

Prepared by Sanjay-IIMM, Delhi Branch

EXECUTIVE HEALTH

PRIME MINISTER LAUNCHES M-YOGA APP ON 7TH INTERNATIONAL DAY OF YOGA 2021

GoI in collaboration with WHO has developed M-Yoga Mobile App

The Prime Minister of India, Shri Narendra Modi launched 'WHO M-Yoga' App while addressing on the occasion of 7th International Day of Yoga**.** M-Yoga app will provide many videos of Yoga training and practice based on common Yoga protocol in many languages. Terming this as a great example of fusion of modern technology and ancient science, the Prime Minister expressed the hope that M-Yoga app will help in spreading Yoga world over and will contribute to the efforts of 'One World,One Health'.

The Prime Minister said: "When India proposed the International Day of Yoga in the United Nations, the spirit behind it was to make this Yoga science accessible to the entire world. Today, India has taken another important step in this direction along with the United Nations and WHO.

Now the world is going to get the power of the m-Yoga app. In this app, many videos of Yoga training will be available in different languages of the world based on the common Yogaprotocol. It is also a great example of the fusion of modern technology and ancient science. I am sure the m-Yoga app will play a big role in expanding Yoga across the globe and making the efforts of One World, One Health a success."

This mobile app will be immensely helpful in the promotion of Yoga and wellness among people around the world, especially during the ongoing pandemic. It will play an instrumental role in re-rehabilitation of the health of the Covid patients who have recovered from Covid-19, the Prime Minister said.

Background: The Ministry of AYUSH and the World Health Organization (WHO) had jointly undertaken a project in mid 2019, focussingon **mobile-Yoga.** It envisaged the concept of the 'Be Healthy, Be Mobile' (BHBM) under the United Nations Sustainable Development Goals to achieve Universal Health Coverage by 2030. Be Healthy, Be Mobile (BHBM) initiative is a global partnership led by WHO which supports the scale up of mobile health (m-Health) technology within the scope of the National Health system to combat non-communicable diseases (NCDs).

In order to achieve the above objectives, a memorandum of understanding was signed in July, 2019 between WHO and the Ministry of AYUSH. The m-Yoga project focused on four areas:

(1) Common Yoga Protocol for GeneralWellness;

(2) Yoga for mental health and resilience;

(3) Yoga for Adolescents; and

(4) Yoga for pre - Diabetics.

Building upon this, a requisite handbook and mobile applications were to be developed by Morarji Desai National Institute of Yoga (MDNIY) in consultation with the WHO technology partners. The work on the handbook is in the final stages and the currently launched app is available in two of the six official languages of the UN i.e English and Hindi. In this work, Morarji Desai National Institute of Yoga (MDNIY) played a pivotal role to facilitate preparation of Common Yoga Protocol for General Wellness of various duration(45 minutes, 20 minutes and 10 minutes), Common Yoga Protocol booklets, video shoots, their translations in 6 major UN languages and designs of the booklets under the directives of Ministry of AYUSH, GOI.

Key initiatives on the occasion of 7th International Day of Yoga (IDY)

The seventh edition of International Day of Yoga (IDY) was observed across the world in solidarity, both through limited physical events, and at the homes of people where COVID restrictions continue to apply. IDY activities have also reached more than one lakh villages.

Prime Minister, Shri. Narendra Modi addressed the Nation on this occasion, emphasising the role of maintaining Health and well-being in our lives, especially as the world reels under COVID pandemic. He mentioned how Yoga has been a ray of hope during the pandemic across the world. Despite no large event being organised for IDY in the past two years, the fervour and enthusiasm the world has for Yoga has not reduced. Additionally, he highlighted the role that Yoga has played, and will play in the years to come in the adoption of a more holistic view of personal well-being, both physical and mental also enshrined in this year's theme (#YogaforWellness).

The Prime Minister also launched the "mYoga" application, developed by the Morarji Desai National Institute of Yoga, Ministry of Ayush in partnership with the World Health Organisation. The application will contain training and practice videos and audios based on Common Yoga Protocol which can be used by all—with the objective of promoting one world, one health.

Another noteworthy feature today was the observance of IDY in more than one lakh villages through Arogya Foundation of India and Common Service Centres. The Arogya Foundation had been training its volunteers in batches since May for IDY and today they accomplished the feat with the help of the wide network of EkalVidyalayas across the country.The IDY programmeorganised by Arogya Foundation through its EkalAbhiyan reached to more than 18 thousand villages in UP and to more than 8 thousand villages each in MP, Himanchal Pradesh and Jharkhand. States like West Bengal, Odisha, Chhattisgarh, J&K, Bihar and Assam also witnessed this activity in more than 4 thousand villages.

In view of the COVID-19 pandemic and the consequent restrictions in congregational activities, the lead event of the International Day of Yoga (IDY) 2021 was televised with the Prime Minister's address being the highlight—as the Ministry of Ayush has made a consolidated effort in coordination with its stakeholders to enable the observance of this day digitally. The event also included an address by the Minister of State for Ayush, Shri KirenRijiju and a live Yoga demonstration by the Morarji Desai National Institute of Yoga.

On this occasion, the Minister of State for Ayush, Shri KirenRijiju congratulated everyone on the observance of the 7th International Day of Yoga, and highlighted the gains it has made globally since its recognition in 2014. He mentioned how Yoga is not just seen as a practice native to India, but India's gift to the world, which has been accepted as their own by everyone.

After the addresses, a live demonstration of Common Yoga Protocol was performed by the experts of Morarji Desai National Institute of Yoga. The programme was televised on all the channels of Doordarshan. Globally also, IDY is being observed in various countries, and several countries will have local events as the day progresses. Various Indian missions across the world have been sharing and highlighting IDY observances organised by them in the presence of eminent personalities. Some of the countries include Jamaica, Japan, Guatemala, Nepal, Cambodia, Vietnam.

In many countries the IDY activities have started well before June 21st and will continue till June 24. At Times Square in New York city, IDY was celebrated and the Indian Embassy in Washington also observed IDY the same day. Similarly, events were organised at Tokyo, Riyadh, Telaviv, Abu Dhabi and Dubai in the Indian Embassy premises. In all, around 190 countries are expected to observe IDY activities during this period.

Many Yoga Gurus and exponents also shared their insights during the live programme on Doordarshan. This includes Shri HR Nagendra, Shri ShriRavishankar, SadguruJaggi Vasudeva, Swami ChidanandaSaraswati, Dr. Pranav Pandya, MaaHansa Ji, Dr. DV Hegde, Sister Shivani, Swami Bharti Bhusan, Dr. OP Tiwari, Shri Kamlesh Patel and many others.

Source: PIB

IIMM HEADQUARTERS AND BRANCHES

IIMM NHQ : Plot No. 102 & 104, Sector-15, Instl. Area, CBD Belapur, Navi Mumbai-400614. Tel.: 27561754 / 2756 5831, Fax : 022-27571022
E-mail NHQ : iimmnhq55@gmail.com, members@iimm.co.in E-mail Edu. Wing : iimmedu@iimm.co.in, Website : www.iimm.org

AHMEDABAD BRANCH
Indian Institute of Materials Management
C/o SaRaa Group of Companies
406, Kalasagar Shopping Hub,
Opp. Saibaba Temple, Near Sun N
Step Club, Sattadhar Cross Road,
Ghatiodia, Ahmedabad-380061, Gujarat
Cell: 91-9909996711
iimmahmedabad@gmail.com

ALWAR BRANCH
Indian Institute of Materials Management
15, Shopping Centre, Shanti Kunj,
Alwar - 301001 (Rajasthan)
Ph.: 09731245655/ 07877745655
Email: iimmalw@gmail.com

AURANGABAD BRANCH
Indian Institute of Materials Management
C/o. Training & Placement Cell
GF-19, JNEC Campus, CIDCO, N-6
Aurangabad - 431001. Ph : 0240-2473339
E-mail : iimmau@rediffmail.com

BANGALORE BRANCH
Indian Institute of Materials Management
304, A-Wing, III Floor, Mittal Tower # 6
M G Road, Bangalore - 560001
Ph.: 080-25327251/52
E-mail : iimmbg@airtelmail.in

BHARUCH BRANCH
Indian Institute of Materials Management
303, Vinay Complex, Near Dudhdhara
Dairy, Old NH Highway # 8, Bhaurch
Ph.: 02642-283223
E-mail : iimmbhaurch@gmail.com

BHILAI BRANCH
Indian Institute of Materials Management
Room No. 326, 3rd Floor, Ispat Bhawan,
Bhilai Steel Plant, Bhilai - 490001
Ph.: 0788-2892948/2222170

BHOPAL BRANCH
Indian Institute of Materials Management
4/9-B, Saket Nagar, Bhopal - 462024

BILASPUR BRANCH
Indian Institute of Materials Management
C/o. Gen. Manager (MM)
South Eastern Coalfields Ltd.,
Seepat Road, Bilaspur - 495006 (CG)
Ph.: 07752-241087/75014
E-mail : iimmbilaspur2015@gmail.com

BOKARO BRANCH
Indian Institute of Materials Management
Room No. B-237, Purchase Dept.,
Ispat Bhawan, Bokaro Steel City - 827001
Ph.: 06542-240263/280768
E-mail : iimmbokarobranch@gmail.com

BURNPUR BRANCH
Indian Institute of Materials Management
Matls. Dept. New Matls. Bldg.
IISCO, Burnpur Works
Burnpur - 713325 (West Bengal)
Tel: 0341-2240523/09434777116

CHANDIGARH BRANCH
Indian Institute of Materials Management
SCO 19-B, Swatik Vihar, Mansa Devi
Complex, Sector - 5, Panchkula - 134114
Ph. : 0172-2556646/4654205
E-mail : iimmchandigarh2@gmail.com

CHENNAI BRANCH
Indian Institute of Materials Management
4th Floor, Chateau D'Ampa, 110 (New #
37), Nelson Manickam Road
Aminjikarai, Chennai - 600029
Ph.: 044-23742195/23742750
E-mail : chn.iimm@gmail.com
iimmchennai@gmail.com

COCHIN BRANCH
Indian Institute of Materials Management
GCDA Shopping Complex, Kadavanthra
PO, Kochi - 682020 (Kerala)
Ph.: 0484-2203487/9400261874
E-mail : iimmkochi@bsnl.in

DEHRADUN BRANCH
Indian Institute of Materials Management
C/o. 30, Kalindi Enclave, Balliwala Chowk,
Lane No. 2, Dehradun - 248001 (U.K)
Ph.: 0135-2795486/9410397734

DHANBAD BRANCH
Indian Institute of Materials Management
O/o. GM (MM), B C C L, Koyla Bhawan
Koyla Nagar, Dhanbad - 826005
(Jharkhand) Cell # 09470595238
E-mail : iimmdhanbad@gmail.com

DURGAPUR BRANCH
Indian Institute of Materials Management
Office of ED (MM) 3rd Floor
Ispat Bhawan, SAIL, Durgapur Steel Plant
Durgapur - 713203
Tel: 0343-2574303

GANDHIDHAM BRANCH
Indian Institute of Materials Management
1,2,3, Plot # 356, Ward-12B, Tagore Road
Gandhidham -370201 (Kutch) Gujarat
Tel: 02836-231711/231745
E-mail : iimm_gim@rediffmail.com

GOA BRANCH
Indian Institute of Materials Management
S-6 & S7,2nd Floor, Vasco Citicentre
Opp: Canara Bank, Swantantra Path
Vasco-da-Gama, Goa - 403802

GREATER NOIDA BRANCH
Indian Institute of Materials Management
B-193, Swam Nagri, Opp: J P Golf Course
Greater Noida - 201308
E-mail : iimmgreno@gmail.com

HARIDWAR BRANCH
Indian Institute of Materials Management
C/o. 97-B, Vigyan Kunj, Indian Institute of
Technology, Roorkee, Haridwar - 247667
E-mail : iimmharidwar@gmail.com

HOSUR BRANCH
Indian Institute of Materials Management
Opp: Hosur Bus Stand, By Pass Road
Above Axis Bank, Palaniyappa Building
Hosur - 635109 (TN) Tel # 04344-240448
E-mail : iimmhosur1@gmail.com

HUBLI BRANCH
Indian Institute of Materials Management
Karnataka Chamber of Commerce of
Industry Building, 1st Floor, Jayachamaraj
Nagar, Nr. Nehru Ground, Hubli - 580020
Tel: 0836-2264699/09972703336

HYDERABAD BRANCH
Indian Institute of Materials Management
4-8-68/A/21, G.D Enclave, 3rd Floor, Rang
Mahal Road, Putli Bowli, KOTI, Hyderabad-
500095. Email: iimm.hyd1719@gmail.com,
TEL: 040-29558952, Mob.: 9866246796

INDORE BRANCH
Indian Institute of Materials Management
03, Rajmahal Colony, Ext Manik Bag Road,
Indore - 452007 (M.P)

JAIPUR BRANCH
Indian Institute of Materials Management
C/o. Mr. Purushottam Khandelwal
48, Mohan Nagar, Gopalpura Bypass,
Jaipur - 302018 Cell: 09799299157
E-mail : iimmjaipur1@gmail.com

JAMSHEDPUR BRANCH
Indian Institute of Materials Management
Room # 6, Russi Modi Centgre for
Excellence Jubilee Road,
Jamshedpur - 831001
Ph.: 0657-2224670/2223530
E-mail : iimm_jsr@yahoo.co.in

JAMNAGAR BRANCH
Indian Institute of Materials Management
C/o. Mr. Jayesh Joshi
Riddhi Engineering Works
111, Madhav Complex,
Opp: DKV Collage, Jamnagar - 361008
0288-2750171 / 9824263869
riddhieng@yahoo.com

KANPUR BRANCH
Indian Institute of Materials Management
C/o. IGM Computer Academy
Mallick Complex, Nr. Rama Devi
Chauraha, G T Road, Kanpur - 208007
Ph.: 0512-2401291
iimmkanpurbranch@gmail.com

K G F BRANCH
Indian Institute of Materials Management

KOLKATA BRANCH
Indian Institute of Materials Management
8/B, Short Street, Kolkata - 700017
Ph.: 033-22876971/22834963
E-mail : iimmcal17@gmail.com

LUCKNOW BRANCH
Mr. P.K.Bajpai
Indian Institute of Materials Management
2nd Floor, Mishra Bhawan, Jurian Tola,
Lal Kuan, Lucknow - 226018
Ph.: 9415752999, Res. 05222638264

LUDHIANA BRANCH
Indian Institute of Materials Management
C/o. Guru Nanak Industrial Corporation
Adj. Hero Cycle Ltd.,
G T Road, Ludhiana - 141010 (Punjab)
Ph.: 0161-5212268
E-mail : iimmldhbr@gmail.com

MUMBAI BRANCH
Indian Institute of Materials Management
2-A, Arihant Bldg, Above Bhandari Co-op
Bank Ltd., Goregaon (E) Mumbai - 400063
Ph.:022-26863376/26864528/26855645-46
E-mail : iimmbom@gmail.com

MUNDRA BRANCH
Indian Institute of Materials Management
C/o Paresh Satasiya
DURLABH SINGH KHALSA
No. B/04/03, Sanudra Township, Old Port
Road, Distt. Kutch, Mundra - 370421
(KUTCHH). paresh.satasiya@adani.com

MYSORE BRANCH
Indian Institute of Materials Management
Anubhav Udyog, K-64, Hootagalli Ind.
Area, Mysore - 570018 (Karnataka)
Ph.: 0821-4282124
E-mail : mysoreiimm@gmail.com

MANAGALORE BRANCH
Indian Institute of Materials Management
C/o. B Sandeep Naik, GM (Matls.)
MRPL, Materials Dept., PO: Kuthethur
Via: Katipalla, Mangalore - 575030. DK
Tel # 0824-2882203
Email: bsnaik@mrpl.co.in

NAGPUR BRANCH
Indian Institute of Materials Management
404, Suryakiran Complex-1, Bajaj Nagar,
Nr. VNIT Gate, Nagpur - 440010
Ph.: 0712-2229446
E-mail : iimmnagpur@gmail.com

NALCO NAGAR BRANCH
Indian Institute of Materials Management
Qtr. # C-352, Nalco Township, Nalco Nagar
- 759145 Dist: Angul, Orissa
Cell: 09437081126
Email: snbaghar@nalcoindia.co.in

NASIK BRANCH
Indian Institute of Materials Management
1, Parag Bldg, Patel Lane # 4
College Road, Nasik - 422005
Ph.: 0253-2314206
E-mail : iim_nsk@bsnl.in

NEW DELHI BRANCH
Indian Institute of Materials Management
U-135, Vikash Marg, Shakrapur
Near Laxmi Nagar Metro Stn,Delhi - 110092
011-41354969 / 9818664267
E-mail : iimm1delhi@gmail.com

PUNE BRANCH
Indian Institute of Materials Management
Pratibha Towers, Plot # 22, Old Pune
Mumbai Road, CTS # 15/2, Above TVS
Showroom, Wakdewadi, Pune - 411003
Ph.: 7276010854
E-mail : iimmpune1@gmail.com

RAE BARELI BRANCH
Indian Institute of Materials Management
497, Near CMO Office, Jail Road,
Rae Bareli -229001
iimmrbl@yahoo.com, iimmrbl@gmail.com

RANCHI BRANCH
Indian Institute of Materials Management
Gen Manager (MM) Office, Central
Coalfields Ltd.,Darbhanga House,
Ranchi - 834001
Tel.: 0651-2360716/2360198
E-mail : rajesh0021@yahoo.com

ROURKELA BRANCH
Indian Institute of Materials Management
TH-01(West) Sector - 4, Near Mahila Thana
Dist: Sundergarh, Rourkela-769002 (Odisha)
Cell: 08260711943/08895501056
Email: iimm.rourkela@gmail.com

SURAT BRANCH
Indian Institute of Materials Management
C/o. Mr. Dilip Dhabarde, Hony Secy.
Manager Matls, Krishak Bharati Co Ltd
PO: Kribhaco Nagar, Nr. Kawas Village
Suresh-394515, Tel: 0261-2802682
E-mail : dilipdhabarde@kribhco.net

TRIVANDRUM BRANCH
Indian Institute of Materials Management
TC-9/1447, 2nd Floor,Future House
Temple Road, Sasthamangalam
Thiruvanathapuram - 695010
Ph. : 0471-2724952
E-mail : iimmtvpm@gmail.com

UDAIPUR BRANCH
Indian Institute of Materials Management
2nd Floor, Above Manohar Furniture
Ashwini Marg, Udaipur - 313001
Ph.: 0294-2411969/2421530
E-mail : iimmudpr@sancharnet.in
iimmudpr@gmail.com

VADODARA BRANCH
Indian Institute of Materials Management
2nd Floor, Vishal Chambers, 34, Vishwas
Colony, B/h Alkapuri Shopping Centre,
Alkapuri, Vadodara - 390007
Ph.:0265-2359060/2353410/M: 7043959060
E-mail : iimmbrd@yahoo.co.in,
iimmvadodara@gmail.com
iimmbaroda@gmail.com,
www.iimmvadodara.org

VAPI BRANCH
Indian Institute of Materials Management
301, Fortune Mall, Above Vishal Mega Mart,
VIA Road, GIDC, Vapi - 396195
Ph.: 09825119364 / 08758294011
E-mail : iimmedu.vapi@gmail.com

VISAKHAPATNAM BRANCH
Indian Institute of Materials Management
C/o. A V Rajendra Kumar
Droo No. 39-8-34/4 & 5, Sector - 8,
Muralinagar, Visakhapatnam - 530007
Ph.: 0891-2704757 / 9701347694
E-mail : iimmvizag@gmail.com

V U NAGAR BRANCH
Indian Institute of Materials Management
Champs Engineering, 1-52, GIDC Estate
Vitthal Udyognagar - 388121
Tel: 02692-230440/ 09825028050
Email: harshad.champs@gmail.com

RNI NO. DELENG/2004/13227
POSTED AT LPC DELHI RMS
DELHI-110006, DATED 5/6/7

Postal Reg. No. DL(C)-01/1303/2019-21
L.No. U(C)-288/ 2019-21
Licensed To Post Without Pre Payment

Printed & Published by H.K.Sharma on behalf of Indian Institute of Materials Management, 4598/12-B First Floor, Ansari Road, Darya Ganj, New Delhi - 110002 and Printed at Power Printers, New Delhi-110002